Community Development Department
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Kennewick, WA 99338

Planning Division
(509) 786-5612
Planning.department@co.benton.wa.us

PCM 1.3

STAFF REPORT TO THE BENTON COUNTY PLANNING COMMISSION

FILE NO: 2026 Periodic Update- Benton County Comprehensive Plan (Vol I-II), including two (2) UGA Amendment Applications and the adoption of the County's 2026 Official Zoning Map
HEARING DATE: October 6, 2026
APPLICANT: Benton County Community Development- Planning Division
OWNER: N/A
LOCATION: Unincorporated Benton County
PROPERTY SIZE: N/A
LAND USE: N/A
COMP PLAN: N/A
ZONING: N/A
STAFF RECOMMENDATION: Positive recommendation subject to fourteen (14) finding of fact.

APPLICATION DESCRIPTION:

The State of Washington (RCW 36.70A.130) requires mandatory "periodic updates" of the entire comprehensive plan and development regulations every eight years for all "fully planning" cities and counties. Each Washington city and county must periodically review and, if needed, revise its comprehensive plan and development regulations to ensure that they comply with the GMA.

The County has engaged in a multi-year planning process to update the comprehensive plan and development regulations that includes the development of an environmental impact statement (EIS), multiple public comment periods, coordination with partner agencies, the hold of an open house, nine (9) public workshops, and upcoming public hearings.

The following is a general summary of the proposed updates to the County's Comprehensive Plan, including the proposed urban growth area amendments and the adoption of the 2026 official county zoning map:

1. Comprehensive Plan (Volume I) (PCM 1.5)

a. Volume I: Provides an overview of the County's land use and planning context. It contains the Comprehensive Plan's goals and policies and is organized into 8 plan elements as required by the GMA (Land Use, Natural Resources, Economic Development, Housing, Transportation, Parks and Recreation, Capital Facilities, Utilities, Climate)

b. Development of a Public Participation Program (PPP). (PCM 1.6)

- In the past 2 years, the Planning Commission has held nine (9) public workshops which are open to public and public comments are accepted. Also, held a public open house in May 2026 to accept additional comments.
- Held a workshop with the Board of County Commissioners on August 26, 2026.
- Coordinated with State agencies early in the process to obtain comments.
- Development and maintenance of interested parties list.
- Development and maintenance of a Comprehensive Plan webpage providing the most current updated information for the process.

c. Environmental Impact Statement (EIS) (PCM 1.7):

- EA 2025-006- The Plan's formal public review process was conducted under the State Environmental Policy Act (SEPA) (RCW 43.21C) including the development of a Programmatic EIS, EIS addendum, and associated public comment period.
- EIS Scoping was held in April 2026; Draft EIS was issued in May 2026; and Final EIS to be published on October 21,2026.

d. Developed a new climate element to the Comprehensive Plan to comply with the new GMA goal requirements for climate change and resiliency. (PCM 1.5, PCM 1.8)

- The Climate Element is supported by regional data, tools, and coordination led by the Benton-Franklin Council of Governments. Additional information, datasets, and technical appendices for the Climate Element can be found through Benton-Franklin Council of Governments at: https://www.bfcog.us/180/Climate-Change.

e. Proposed land use designation changes include a 1,297 acre industrial site near Plymouth that meets the suitability criteria and requirements of RCW 36.70A.365 as a Major Industrial Development (MID). Refer to the County's rationale and findings for site suitability in Volume II, Major Industrial Development Site Suitability; Addendum to Industrial Lands Inventory Memorandum. (PCM 1.9)

f. Conduct a full review of the existing Plan, reviewed and eliminate outdated information, and ensured consistency with RCW, WAC, BCC, and other codes and requirements.

g. Submitted a 60-day review with the State of Washington to comply with GMA requirements on May 19, 2026. (PCM 1.10)

2. Comprehensive Plan (Volume II) (PCM 1.11)

a. Volume II: Provides the technical appendices (memorandums and studies) for the comprehensive plan, including the following:

- Map Folio
- Public Participation Plan
- Benton County Countywide Planning Policies
- Population and Housing
- Agricultural Lands Analysis
- Transportation Planning Analysis – LOS/Inventory
- Industrial Lands Inventory Analysis
- Addendum to Industrial Lands Inventory for a 1,297-acre Major Industrial Development (MID) near Plymouth
- Agritourism Overview
- Energy Overlay Analysis
- Shrub Steppe Mitigation Program (Updated 9/2026) (PCM 1.15)
- Open Space Corridors Analysis
- Wildland/Urban Interface Analysis
- Urban Growth Area Application(s) Analysis; Richland and Benton City (Updated 9/2026) (PCM 1.13)
- Environmental Impact Statement (EIS)
- Public Comment Response Matrix (PCM 1.17)

3. City of Richland Urban Growth Area Amendment Application (PCM 1.12)

The application proposes to:

a. Remove approximately 140 acres of undeveloped land on Badger Mountain Preserve currently zoned UGAR from the Richland Urban Growth Area. Land is currently zoned Park in the County.

b. Add 190 acres currently zoned RL-5. This area is proposed for recreational purposes without a housing allocation.

c. Add 254 acres currently zoned RL-1 to the Urban Growth Area. This area would include land for a future school site and housing development density that would be consistent with the surrounding land use patterns.

Refer to the County's rationale and findings for the UGA amendment applications in Volume II Urban Growth Area Application(s) Analysis; Benton City and Richland.

4. Benton City Urban Growth Area Amendment Application (PCM 1.13)

The application proposes to:

a. Add 37.14 acres currently zoned RL-5 as infill UGA addition(s) for residential development.

b. Add 17.51 acres currently zoned Park to the Benton City Urban Growth Area which includes a WDFW owned park and KID right of way.

Refer to the County's rationale and findings for the UGA amendment applications in Volume II Urban Growth Area Application(s) Analysis; Benton City and Richland.

5. Unincorporated Benton County 2026 Official Zoning Map (PCM 1.14)

a. Re-adopt the County's official zoning map to be consistent with the 2026 Comprehensive Plan and future land use map.

PUBLIC NOTICE:

1. Legal notification for the Planning Commission open record hearing was published in the Prosser Bulletin on September 16, 2026. (PCM 1.1)
2. Notice of the Planning Commission open record hearing was emailed/mailed to those on the Public Participation Plan list September 17, 2026.

APPLICABLE STANDARDS/ORDINANCES:

1. Benton County Code: Chapter 16.14 Amendments to the County Comprehensive Plan.
2. Benton County Ordinance: County Wide Planning Policies, Ordinance 664 (2026).
3. RCW 36.70A: Growth Management Act.

CRITERIA FOR FINDINGS OF FACT:

1. RCW 36.70A.130 requires cities and counties planning under RCW 36.70A.040 (fully planning cities and counties) to complete a periodic update for their entire comprehensive plan and development regulations.
2. RCW 36.70A.040 requires the County to adopt a comprehensive plan and development regulations that are consistent.
3. In Benton County, development regulations include the following: zoning, subdivisions, shorelines, critical areas, and mineral resource lands.
4. Benton County is currently updating its comprehensive plan and development regulations in a periodic review and update process.

5. Comprehensive Plan amendments are reviewed under the requirements of the State Environmental Policy Act.

6. BCC 16.14.080 states- The Planning Division shall make a recommendation to the Planning Commission for approval or denial of an application. The Planning Commission will conduct at least one open record public hearing on the applications and forward a recommendation for approval or denial of each application to the Board. The Board of County Commissioners will conduct at least one open record public hearing on the applications prior to approving, approving with modifications and/or conditions, or denying the applications.

RECOMMENDATION

Benton County Planning Staff will assist the Planning Commission with the determination of findings of fact for the Periodic Update to the Benton County Comprehensive Plan.

The Benton County Planning Division recommends that the Planning Commission forward a **recommendation of approval** to the Benton County Board of Commissioners for the 2026 Periodic Update- Benton County Comprehensive Plan (Vol I-II), including two (2) UGA Amendment Applications and the adoption of the County's 2026 Official Zoning Map, with the following suggested findings of fact and motion.

SUGGESTED FINDINGS OF FACT:

1. The Planning Commission finds that RCW 36.70A.130 requires cities and counties planning under RCW 36.70A.040 (fully planning cities and counties) to complete a periodic update for their entire comprehensive plan and development regulations;

2. The Comprehensive Plan Update is consistent with the requirements of the Growth Management Act – RCW 36.70A including RCW 36.70A.030 (5);

3. The Comprehensive Plan Update is consistent with Ordinance 664 (2026), the County Wide Planning Policies;

4. The Comprehensive Plan Update is consistent with the Benton County Code, including Chapter 16.14, Amendments to the County Comprehensive Plan;

5. The Comprehensive Plan Update process has been consistent with and is in compliance with the public participation requirements in RCW 36.70A.035 and 140;

6. The application was submitted to the State of Washington's Department of Commerce for a required 60-day review in compliance with RCW 36.70A.106. The notice and documentation were accepted by the State in May 2026.

7. The Planning Commission received Staff Memo (PCM 1.3), dated September 29, 2026 that includes the amended comprehensive plan elements, appendices, map folio, Volume II, and staff recommendations and findings, and agrees with the information found in the staff memo;

8. The legal notification was given pursuant to RCW 36.70A.130 on September 16, 2026;

9. An open record hearing was held on October 6, 2026 in the 3rd Floor Hearing Room, Commissioners Hearing Room, 7122 W. Okanogan Pl., Bldg. E, Kennewick, WA 99336;

10. All those who testified and those public hearing exhibits that were received into evidence are identified in the minutes and are contained in the official record;

11. The 2026 Periodic Update of the Comprehensive Plan generally includes:

    a. Volume I: Provides an overview of the County's land use and planning context. It contains the Comprehensive Plan's goals and policies and is organized into 8 plan elements as required by the GMA (Land Use, Natural Resources, Economic Development, Housing, Transportation, Parks and Recreation, Capital Facilities, Utilities, Climate)

    b. Volume II: Providing the technical appendices (memorandums and studies) for the comprehensive plan, including the following:

        - Map Folio
        - Public Participation Plan
        - Benton County Countywide Planning Policies
        - Population and Housing
        - Agricultural Lands Analysis
        - Transportation Planning Analysis – LOS/Inventory
        - Industrial Lands Inventory Analysis
        - Addendum to Industrial Lands Inventory for a 1,297-acre Major Industrial Development (MID) near Plymouth
        - Agritourism Overview
        - Energy Overlay Analysis
        - Shrub Steppe Mitigation Program
        - Open Space Corridors Analysis
        - Wildland/Urban Interface Analysis
        - Urban Growth Area Application(s) Analysis; Richland and Benton City
        - Environmental Impact Statement (EIS)
        - Public Comment Response Matrix

    c. Development of a Public Participation Program (PPP). In the past two (2) years, the following public participation opportunities have been held:

- Nine (9) public workshops with the Planning Commission; public comments accepted;
- One (1) open house for the EIS and Comprehensive Plan; public comments accepted.
- One (1) public hearing with the Planning Commission on October 6, 2026; public comments accepted.
- One (1) public hearing with the Board of County Commissioners (to be held October 27, 2027); public comments to be accepted.
- The Board of County Commissioners held a workshop to discuss the changes in the Comprehensive Plan on August 26, 2026. This workshop was open to the public, but public comments were not accepted.

d. Development of an Environmental Impact Statement (EIS). The Plan's formal public review process was conducted under the State Environmental Policy Act (SEPA) (RCW 43.21C) including the development of a Programmatic EIS, EIS addendum, and associated public comment period. EIS Scoping was held in April 2026; The Draft EIS was issued in May 2026; and the Final EIS is to be published on October 21,2026.

e. Development of a new Climate Element to comply with the new GMA goal requirements for climate change and resiliency.

- The Climate Element is supported by regional data, tools, and coordination led by the Benton-Franklin Council of Governments. Additional information, datasets, and technical appendices for the Climate Element can be found through Benton-Franklin Council of Governments at: https://www.bfcog.us/180/Climate-Change.

f. Proposed land use designation changes include a 1,297 acre industrial site near Plymouth that meets the suitability criteria and requirements of RCW 36.70A.365 as a Major Industrial Development (MID). Refer to the County's rationale and findings for site suitability in Volume II, Major Industrial Development Site Suitability; Addendum to Industrial Lands Inventory Memorandum.

g. A full review of the existing Plan reviewed and eliminate outdated information, and ensured consistency with RCW, WAC, BCC, and other codes and requirements.

h. The approval and integration of urban growth area amendment applications. Refer to the County's rationale and findings for UGA amendment applications in Volume II, Urban Growth Area Application(s) Analysis; Benton City and Richland.

Specifically, the applications include:

- CPA 2026-001; Benton City Urban Growth Area Amendment Application; and

- CPA 2026-002; City of Richland Urban Growth Area Amendment Application.

i. The proposed changes from the Volume II Comment Response Matrix.

j. The 2026 Official Zoning Map that is consistent with the updated comprehensive plan and future land use map.

12. The Planning Commission considered all evidence and testimony submitted and after discussion voted in favor to recommend approval of Benton County's 2026 Periodic Update of its Comprehensive Plan, including two (2) UGA Amendment Applications and the adoption of the County's 2026 Official Zoning Map ;

13. The Planning Commission is entering its written findings, conclusions, and recommendations (PCM 1.2) concerning this matter, and is forwarding the same to the Board of County Commissioners;

14. The record indicates that approval of the proposed 2026 Comprehensive Plan Periodic Update would be in the public interest as the update provides compliance with the Growth Management Act (GMA) and ensures consistency between the updated Comprehensive Plan, Benton County Codes, and applicable state laws.

SUGGESTED MOTION:

I move that the Chairman, in conjunction with the Secretary of the Planning Commission, prepare and adopt written findings and conclusions reflecting the commission's recommendation for approval of the proposed 2026 Periodic Update of the Benton County Comprehensive Plan (Volumes I-II), which includes the urban growth area amendment applications CPA 2026-001 and CPA 2026-002 and the updated official County zoning map, that articulate and are consistent with the findings, conclusions and recommendations made by the Planning Commission tonight.

PCM 1.1

8808

AFFIDAVIT OF PUBLICATION

STATE OF WASHINGTON } ss.
County of Benton

Trisha Dodgson, being first duly sworn on oath, deposes and says that he is the Office Assistant of the PROSSER RECORD-BULLETIN, weekly newspaper. That said newspaper is a legal newspaper and has been approved as a legal newspaper by order of the Superior Court in the county in which it is published and it is now and has been for more than six months prior to the date of the publications hereinafter referred to, published in the English language continually as a weekly newspaper in Prosser, Benton County, Washington, and it is now and during all of said time was printed in an office maintained at the aforesaid place of publication of said newspaper. That annexed is a true copy of Benton County Notice of Public Hearing 2026 Comprehensive Plan Update

as it was published in regular issues (and not in supplement form) of said newspaper once a week for a period of 1 consecutive weeks commencing September 16, 20 26 ending September 16, 20 26 both dates inclusive and that such newspaper was regularly distributed to its subscribers during all of said period. That the full amount of the fee charged for the foregoing publication is the sum of $ 105.47, which amount has been paid in full.

Subscribed and sworn to before me this 16th day of September, 2026

Notary Public in and for the State of Washington, residing at Prosser, Washington

Notice

NOTICE OF PUBLIC HEARING

NOTICE OF PUBLIC HEARING BEFORE THE BENTON COUNTY PLANNING COMMISSION, in the matter of the 2026 Periodic Update of the County's Comprehensive Plan, development regulations and Draft Environmental Impact Statement pursuant to Washington State Growth Management Act (GMA) RCW 36.70A.130(4).

NOTICE IS HEREBY GIVEN that the Planning Commission will conduct an open record public hearing to consider the 2026 Comprehensive Plan update and proposed development regulations on Tuesday, October 6, 2026, at 6:00 p.m., in person and virtual meeting format in the meeting room of the administrative building, 7122 W. Okanogan Place, Building E. Room 303 Commissioners' Hearing Room, 3rd Floor, Kennewick WA. The Planning Commission will consider all comments received and make their recommendation to the Board of County Commissioners.

Information regarding this public meeting can be obtained from the Benton County Planning Division, by calling 786-5612 or by visiting https://tinyurl.com/2vbwdzhc. For information regarding virtual attendance please visit https://tinyurl.com/5zbjtfuh.

Dated this 11th day of September 2026

Damien Hooper, Manager
Planning Division

Published: Prosser Record-Bulletin
Published: September 16, 2026

ANNETTE C JONES
NOTARY PUBLIC #193643
STATE OF WASHINGTON
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JULY 10, 2029

Valley Publishing Co.
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Date	Invoice #
9/16/2026	8808BC

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Benton County Planning Dept.
102206 E. Wiser Parkway
Kennewick, WA 99338

P.O. Number

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PCM 1.2

RECOMMENDATION OF THE
BENTON COUNTY PLANNING COMMISSION

RE: In the Matter of County Planning: relating to the 2026 Periodic Update to the Benton County Comprehensive Plan including UGA Applications and Zoning Map

Planning File #Periodic Update
RECOMMENDATION
FINDINGS OF FACT
AND CONCLUSIONS

RECOMMENDATION

AN ORDINANCE relating to the Open Space Conservation District (OSC); adding a new zoning district in Benton County; and adding a new chapter to Title 15 of the Benton County Code.

RESOLUTION

WHEREAS, the legal notification for the open record public hearing was given pursuant to RCW 36.70.590 on September 16, 2026; and,

WHEREAS, an open record public hearing was held on October 6, 2026 at 6:00 p.m. in the 3rd Floor Hearing Room, Commissioners Hearing Room, 7122 W. Okanogan Pl., Bldg. E, Kennewick, WA 99336; and,

WHEREAS, the Planning Commission was available to receive public testimony, exhibits, and answer questions in the public portion of the hearing with the public being able to attend and comment through video and telephonic access to the meeting. The meeting was also broadcast through streaming video to allow the public to view the meeting; and,

WHEREAS, the following members attended the meeting, including, Dana Dollarhyde, Lloyd Coughlin, Robert Mendez, Brian Skeels, Kelly Hanson and Martin Sheeran; and,

WHEREAS, all those who testified and those public hearing exhibits that were received into evidence are identified in the minutes for the hearing on October 6, 2026; and,

WHEREAS, the Planning Commission at the open record public hearing considered the evidence submitted and voted six in favor with one vacancy to recommend approval with the findings of fact as outlined in the staff memo dated October 6, 2026; and,

WHEREAS, the Planning Commission is entering its written findings of fact, conclusions

and recommendations concerning this matter, and is forwarding the same to the Board of County Commissioners.

FINDINGS OF FACT

SUGGESTED FINDINGS OF FACT:

1. The Planning Commission finds that RCW 36.70A.130 requires cities and counties planning under RCW 36.70A.040 (fully planning cities and counties) to complete a periodic update for their entire comprehensive plan and development regulations;

2. The Comprehensive Plan Update is consistent with the requirements of the Growth Management Act – RCW 36.70A including RCW 36.70A.030 (5);

3. The Comprehensive Plan Update is consistent with Ordinance 664 (2026), the County Wide Planning Policies;

4. The Comprehensive Plan Update is consistent with the Benton County Code, including Chapter 16.14, Amendments to the County Comprehensive Plan;

5. The Comprehensive Plan Update process has been consistent with and is in compliance with the public participation requirements in RCW 36.70A.035 and 140;

6. The application was submitted to the State of Washington's Department of Commerce for a required 60-day review in compliance with RCW 36.70A.106. The notice and documentation were accepted by the State in May 2026.

7. The Planning Commission received Staff Memo (PCM 1.3), dated October 6, 2026, that includes the amended comprehensive plan elements, appendices, map folio, Volume II, and staff recommendations and findings, and agrees with the information found in the staff memo;

8. The legal notification was given pursuant to RCW 36.70A.130 on September 16, 2026;

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b. Volume II: Providing the technical appendices (memorandums and studies) for the comprehensive plan, including the following:

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- Open Space Corridors Analysis
- Wildland/Urban Interface Analysis
- Urban Growth Area Application(s) Analysis; Richland and Benton City
- Environmental Impact Statement (EIS)
- Public Comment Response Matrix

c. Development of a Public Participation Program (PPP). In the past two (2) years, the following public participation opportunities have been held:

- Nine (9) public workshops with the Planning Commission; public comments accepted;
- One (1) open house for the EIS and Comprehensive Plan; public comments accepted.
- One (1) public hearing with the Planning Commission on October 6, 2026; public comments accepted.
- One (1) public hearing with the Board of County Commissioners (to be held October 27, 2027); public comments to be accepted.
- The Board of County Commissioners held a workshop to discuss the changes in the Comprehensive Plan on August 26, 2026. This workshop was open to the public, but public comments were not accepted.

d. Development of an Environmental Impact Statement (EIS). The Plan's

formal public review process was conducted under the State Environmental Policy Act (SEPA) (RCW 43.21C) including the development of a Programmatic EIS, EIS addendum, and associated public comment period. EIS Scoping was held in April 2026; The Draft EIS was issued in May 2026; and the Final EIS is to be issued on October 20,2026.

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- The Climate Element is supported by regional data, tools, and coordination led by the Benton-Franklin Council of Governments. Additional information, datasets, and technical appendices for the Climate Element can be found through Benton-Franklin Council of Governments at: https://www.bfcog.us/180/Climate-Change.

f. Proposed land use designation changes include a 1,297 acre industrial site near Plymouth that meets the suitability criteria and requirements of RCW 36.70A.365 as a Major Industrial Development (MID). Refer to the County's rationale and findings for site suitability in Volume II, Major Industrial Development Site Suitability; Addendum to Industrial Lands Inventory Memorandum.

g. A full review of the existing Plan reviewed and eliminate outdated information, and ensured consistency with RCW, WAC, BCC, and other codes and requirements.

h. The approval and integration of urban growth area amendment applications. Refer to the County's rationale and findings for UGA amendment applications in Volume II, Urban Growth Area Application(s) Analysis; Benton City and Richland.

Specifically, the applications include:

- CPA 2026-001; Benton City Urban Growth Area Amendment Application; and
- CPA 2026-002; City of Richland Urban Growth Area Amendment Application.

i. The proposed changes from the Volume II Comment Response Matrix.

j. The 2026 Official Zoning Map that is consistent with the updated comprehensive plan and future land use map.

12. The Planning Commission considered all evidence and testimony submitted and

after discussion voted in favor to recommend approval of Benton County's 2026 Periodic Update of its Comprehensive Plan, including two (2) UGA Amendment Applications and the adoption of the County's 2026 Official Zoning Map;

13. The Planning Commission is entering its written findings, conclusions, and recommendations concerning this matter, and is forwarding the same to the Board of County Commissioners;

14. The record indicates that approval of the proposed 2026 Comprehensive Plan Periodic Update would be in the public interest as the update provides compliance with the Growth Management Act (GMA) and ensures consistency between the updated Comprehensive Plan, Benton County Codes, and applicable state laws.

NOW, THEREFORE BE IT RESOLVED BY THE BENTON COUNTY PLANNING COMMISSION, through its chairman as authorized by motion of the Board, that these findings of fact for the proposed 2026 Periodic Update of the Benton County Comprehensive Plan (Volumes I-II), which includes the urban growth area amendment applications CPA 2026-001 and CPA 2026-002 and the updated official County zoning map, be approved for transmittal to the Board of County Commissioners, with a recommendation to adopt the amendments.

_____

Martin Sheeran, Chairman DATE
BENTON COUNTY PLANNING COMMISSION

ORDINANCE NO._____

BEFORE THE BOARD OF COMMISSIONERS OF BENTON COUNTY, WASHINGTON IN THE MATTER OF COUNTY PLANNING: 2026 PERIODIC UPDATE TO THE BENTON COUNTY COMPREHENSIVE PLAN, INCLUDING TWO UGA AMENDMENTS AND THE OFFICIAL ZONING MAP.

BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF BENTON COUNTY, WASHINGTON:

The following ordinance is hereby adopted but will not be codified.

Section 1. Public Interest. The Board of County Commissioners find it to be in the public interest to adopt the 2026 Periodic Update to the Benton County Comprehensive Plan, Volumes I-II, associated Urban Growth Area Boundaries, and Official Zoning Map to ensure the Plan is consistent with the requirements of RCW 36.70A, the Growth Management Act.

Section 2. Update to Comprehensive Plan, associated Urban Growth Area Boundaries, and Official Zoning Map. The attached 2026 Periodic Update of the Benton County Comprehensive Plan is hereby adopted pursuant to RCW Chapter 36.70A as the Benton County Comprehensive Plan and supersedes all prior versions of the County's comprehensive plan. In addition, the attached Official Benton County Zoning Map, as also shown on the County's GIS System as of this date, is hereby adopted and supersedes all prior versions of the County's official zoning map.

Section 3. Severability. If any provision of this ordinance is declared unconstitutional, or the applicability thereof to any person or circumstance is held invalid, the constitutionality of the remainder of the ordinance and the applicability thereof to other persons and circumstances shall not be affected thereby.

Section 4. Effective Date. This ordinance shall take effect and be in full force upon its passage and adoption.

ADOPTED AND PASSED this _____day of _____, 2026.

_____
Chairman of the Board

_____
Chair Pro Tem

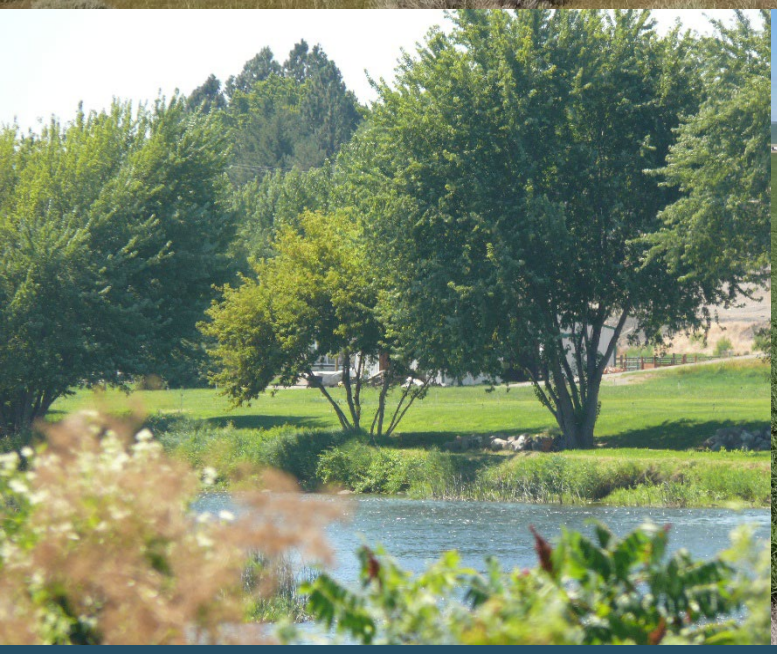
_____
Commissioner

Constituting the Board of County
Commissioners of Benton County
Washington.

Attest.....
Clerk of the Board

PCM 1.5







May, 13 2026

Benton County Draft Comprehensive Plan- Volume I

Updated by:
White Bluffs Consulting
1651 South Fescue Street
Kennewick WA 99338

BERK Consulting

AC Geo

Anchor QEA

JUB

Draft: May 13, 2026

Benton County Draft Comprehensive Plan
Volume I

Updated by:
White Bluffs Consulting with
BERK Consulting, Inc.
AC Geo, LLC
Anchor QEA, Inc.
J-U-B Engineers Inc.

Comprehensive Plan
FOR
BENTON COUNTY

Adopted on February 13, 2018
Ordinance #600
Resolution # 2018-137

AMENDMENTS:

Resolution # 2020-062	Ordinance #620 Effective Date:	January 14, 2020
Resolution # 2021-448	Land Use Designation Change	June 8, 2021
Resolution # 2021-449	Section 2.7, 6.2 & 6.4 Map Fig. 5	June 8, 2021
Resolution # 2021-450	Land Use Designation Change	June 8, 2021
Resolution # 2022-262	Land Use Designation Change	April 12, 2022
Resolution # 2022-263	Land Use Designation Change	April 12, 2022
Resolution # 2022-264	Land Use Designation Change	April 12, 2022
Resolution # 2022-265	Text Change/UGA Maps/Corrections	April 12, 2022
Resolution # 2024-0361	Text Change/UGAMaps	May 14, 2024
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ABBREVIATIONS

AADT	Annual Average Daily Trip
ADU	Accessory Dwelling Units
ALI	Arid Lands Initiative
AMI	Area Median Income
ARRA	American Recovery and Reinvestment Act
AVA	American Viticultural Area
BCC	Benton County Code
BCAA	Benton Clean Air Agency
Benton CD	Benton Conservation District
Benton PUD	Benton County Public Utility District
Benton REA	Benton Rural Electric Association
BFCOG	Benton-Franklin Council of Government
BFT	Ben Franklin Transit
BLM	Bureau of Land Management
BPA	Bonneville Power Administration
CAO	Critical Areas Ordinance
CEDS	2026-2030 Comprehensive Economic Development Strategy
CETA	Clean Energy Transformation Act
CIP	Capital Improvement Plan
CLUP	Hanford Comprehensive Land Use Plan
Comprehensive Plan	Benton County Comprehensive Plan Update
CU	Conditional Use
CVA	Climate Vulnerability Assessment
CWPP	Countywide Planning Policies
DAR	Dial-A-Ride
DNR	Washington State Department of Natural Resources
Du/acre	Dwelling Unit per Acre
Ecology	Washington State Department of Ecology
EFSEC	Washington State Energy Facility Site Evaluation Council
ENW	Energy Northwest
FEMA	Federal Emergency Management Agency
GHG	Greenhouse Gas
GMA	Washington State Growth Management Act
GMA AG	GMA Agriculture
HAPT	Washington State Department of Commerce Housing for All Planning Tool
HUD	U.S. Department of Housing and Urban Development

KID	Kennewick Irrigation District
LAMIRD	Limited Area of More Intense Rural Development
LID	Low-Impact Development
LOS	Level of Service
MPR	Master Planned Resort
NRCS	U.S. Department of Agriculture Natural Resources Conservation Service
OFM	Washington State Office of Financial Management
Parks Plan	Benton County Comprehensive Parks Plan
PBRS	Public Benefit Rating System
PHS	Priority Habitats and Species
PL	Public Lands designation
PNLL	Pacific Northwest National Laboratory
PTBA	Public Transit Benefit Area
REA	Benton Rural Electric Association
RCW	Revised Code of Washington
RM MSP	Red Mountain AVA Master Site Plan
RMSF	Rattlesnake Mountain Shooting Facility
Roza	Roza Irrigation District
RTP	Regional Transportation Plan
SECOMM	Southeast Communications System
SEPA	State Environmental Policy Act
SMA	Satellite Management Agency
SMP	Shoreline Master Program
SMR	Small Modular Reactor
SR	State Route
SSRT	Small-scale Recreational or Tourist
TCSA	Tri-Cities Shooting Association
TDM	Transportation Demand Management
TDP	Transit Development Plan
TIP	Transportation Improvement Plan
TRIDEC	Tri-City Development Council
UGA	Urban Growth Area
VMT	Vehicle Miles Traveled
VSP	Voluntary Stewardship Program
WAC	Washington Administrative Code
WAHCAP	Washington Habitat Connectivity Action Plan
WDFW	Washington Department of Fish and Wildlife

WRIA	Water Resource Inventory Area
WSDOT	Washington State Department of Transportation
WSRRI	Washington Shrubsteppe Restoration and Resiliency Initiative
WUI	Wildland-Urban Interface
WUTC	Washington Utilities and Transportation Commission
Yakima Integrated Plan	Yakima River Basin Integrated Water Resource Management Plan

1 Introduction

Washington State Growth Management Act (GMA), adopted by the state legislature in 1990, requires local governments to develop comprehensive plans to address local and statewide planning issues. "*The legislature finds that uncoordinated and unplanned growth, together with a lack of common goals expressing the public's interest in the conservation and wise use of our lands, pose a threat to the environment, sustainable economic development, and the health and safety, and high quality of life enjoyed by residents of this state*" (Revised Code of Washington [RCW] 36.70A.010).

The Benton County Comprehensive Plan Update (Comprehensive Plan) was developed to reflect the County's values and plan for future growth consistent with the GMA and guide County decisions on land use, transportation, infrastructure, housing, economic development, and the environment.



Benton County view from the Horse Heaven Hills towards the Columbia River

1.1 Purpose and Intent of the Benton County Comprehensive Plan

The County's Comprehensive Plan was originally developed in 1985 and comprehensively updated in 1998, 2006 and 2018, with more limited updates occurring in several other years. The Comprehensive Plan's purpose and intent is to provide for local needs for the use of land and infrastructure, including the protection of property and water rights, and in so doing, to meet the State's minimum planning law requirements. This Comprehensive Plan builds on the last update completed by the County in 2018 and subsequent limited amendments, the amended Hanford Comprehensive Land Use plan, and includes revisions to all plan elements. These updates address citizen input during the

plan update process, refine goals and policies, incorporate recent analyses and findings in applicable plan elements, and reflect changes to more fully address the latest GMA requirements.

This Comprehensive Plan seeks to preserve the natural environment, local customs, culture, and quality of life for County residents. Simultaneously, it seeks to facilitate and encourage economically productive use of the land and resources base to enable economic growth, prosperity, and enjoyment of a quality life.

Cities in Benton County have developed individual city comprehensive plans for their respective urban areas– Benton City, Kennewick, Prosser, Richland and West Richland. Each City's comprehensive plans implement the community visions and goals for the future for their areas. The Benton County Comprehensive Plan largely addresses planning in the unincorporated areas and communities, and urban areas that are not yet annexed to the cities. However, the Countywide Planning Policies (CWPP; see Section 1.5.1) address regional planning issues and coordinate growth among all jurisdictions.

1.1.1 Managing Growth: Plan, Prepare, and Facilitate

The Comprehensive Plan and adopted Land Use Designations Map (*see Volume II,* Appendix A: Map Folio, Figure 4 – Proposed Land Use Designations Map) provides a predictable and certain system upon which citizens, various business interests, special districts, and public entities can plan and invest their resources. The Plan and maps also support the rural and urban citizen and stakeholders' desired goals for growth and development.

The Comprehensive Plan coordinates land use, transportation, and capital facilities by focusing on planning, scheduling, financing, and construction provisions to provide the identified levels of service (LOS) in advance of development, or upon demand. The County must have the financial ability to provide these services as planned.

1.1.2 Goals and Required Elements

The GMA has planning goals and mandatory plan "elements" to guide the development of plans and regulations. The 15 GMA goals per RCW 36.70A.020 are as follows:

1. Urban Growth - Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner.
2. Reduce Sprawl - Reduce inappropriate conversion of undeveloped land into sprawling, low-density development.
3. Transportation - Encourage efficient multi-modal transportation systems based on regional priorities and coordinate with county and city comprehensive plans.
4. Housing - Encourage the availability of affordable housing to all economic segments of the population and consistent with the County/cities developed housing allocation plan. Promote a

variety of residential densities and housing types and encourage preservation of existing housing stock.

5. Economic Development - Encourage economic development throughout the state consistent with adopted comprehensive plans, promote economic opportunity for all citizens of the state, especially for the unemployed and the disadvantaged, and encourage growth in areas experiencing insufficient economic growth, all within the capacity of the state's natural resources, public services, and public facilities.
6. Property Rights - Private property shall not be taken for public use without just compensation. The property rights of landowners shall be protected from arbitrary and discriminatory action.
7. Permits - Maintain a permit review process that provides for integrated and consolidated review and are processed in a timely and fair manner to ensure predictability.
8. Rural and Resource Lands - Maintain and enhance natural resource-based industries, including productive timber, agricultural, and fisheries industries. Encourage the conservation of productive agricultural lands and discourage incompatible uses.
9. Open Space and Recreation - Encourage the retention of open space and development of recreation opportunities, conserve fish and wildlife habitat, increase access to natural resource lands and water.
10. Environment - Protect and enhance the environment and enhance the region's high quality of life, including air and water quality, and the availability of water.
11. Citizen Participation and Coordination - Encourage the involvement of citizens in the planning process and ensure coordination between communities and jurisdictions to reconcile conflicts.
12. Public Capital Facilities and Essential Public Facilities - Ensure that public facilities and services necessary to support development are adequate to serve the development at the time the development is available for occupancy and use, without decreasing the current service levels below locally established minimum standards.
13. Cultural and Historic Resources Protection and Preservation - Identify, preserve, and protect historic, cultural, and archaeological resources in collaboration with federally recognized Indian tribes and applicable federal, state and local agencies through land protection, avoidance, mitigation and other related strategies.
14. Climate Change and Resiliency - Ensure that comprehensive plans, development regulations, and regional policies, plans, and strategies adapt to and mitigate the effects of a changing climate; support reductions in greenhouse gas emissions and per capita vehicle miles traveled; prepare for climate impact scenarios; foster resiliency to climate impacts and natural hazards; protect and enhance environmental, economic, and human health and safety; and advance environmental justice.
15. Shoreline Management – Develop a Shoreline Master Program (SMP) pursuant to the Shoreline Management Act. The goals and policies of an SMP for a county or city approved under chapter 90.58 RCW shall be considered a part of the county or city's comprehensive plan.

County Comprehensive Plans must include the following required elements (RCW 36.70A.070):

- **Land Use Element** with designated land uses and intensities that all other elements must serve. Citizens and private and public-sector service providers can use this element to plan future uses of their properties and to project and meet future locational demands;
- **Housing Element** that integrates the rural housing supply with a variety of housing types and locational needs of rural land uses including agriculture, and within urban growth areas moderate density housing options including but not limited to duplexes, triplexes and townhomes. Makes adequate provisions for existing and projected needs of all economic segments of the community.
- **Capital Facilities Element** that identifies capital facilities project planning as well as funding mechanisms to construct necessary public services to meet the demands of the Land Use Designations Map as buildout in the County occurs;
- **Utilities Element** that enables utility providers to assess with certainty the location and intensity of future land use so that they may cost effectively plan, schedule, capitalize, and construct sufficient utility capacity;
- **Rural Element** that shows rural land use and densities for unincorporated lands outside of urban growth areas (UGAs) and agricultural lands designations;
- **Transportation Element** that provides public transportation facilities appropriately matched to the County's land use and density—as defined in the Land Use Element. This element must be monitored and maintained over time;
- **Economic Development Element** establishing local goals, policies, objectives, and provisions for economic growth and vitality and a high quality of life;
- **Parks and Recreation Element** that implements, and is consistent with, the capital facilities plan element as it relates to park and recreation facilities;
- **Climate Change and Resiliency Element** designed to result in reductions in overall greenhouse gas emissions and that must enhance resiliency to and avoid the adverse impacts of climate change, which must include efforts to reduce localized greenhouse gas emissions and avoid creating or worsening localized climate impacts to vulnerable populations and overburdened communities.

1.2 Planning Under the Growth Management Act

1.2.1 Growth Management and the State Environmental Policy Act

The GMA requires compliance with both the State Environmental Policy Act (SEPA) and GMA in the comprehensive planning process. Due to their similarities, integration of SEPA with GMA eliminates duplication of effort and ensures consistency between them.

The Comprehensive Plan Programmatic Environmental Impact Study provides an environmental analysis of three alternatives to support the Comprehensive Plan: a "No Action" alternative and two action alternatives.

Alternative 1, a "no action" alternative, would maintain the County's existing Comprehensive Plan without modifications. This means growth would be expected based on past trends, but no land use changes (densities, designations, etc.) or regulation changes (e.g., zoning) would occur to accommodate this growth. No changes to allowable housing density would occur in the unincorporated County, and no additional residential capacity would be created. Limited policy changes may be needed to maintain consistency with the GMA and the CWPPs. This action does not include the proposed UGA changes provided by Benton City and Richland. Under all Alternatives, major renewable energy projects, including a Wind Turbine Farm and a Major Solar Power Generator Facilities, would continue to be allowed as a conditional use permit in the Light and Heavy Industrial Zoning Districts, as well as within the Unclassified District within the U.S. Department of Energy's Hanford Site. Major renewable energy projects would continue to be a prohibited use in all other zoning districts including the County's designated agricultural zoned areas, such as the Growth Management Act Agricultural District and the Red Mountain Agricultural District.

Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry.

Alternative 2 would modify the Plan to accommodate the 20-year (2046) population projection for the County based on Washington State Office of Financial Management (OFM) forecasts refined in coordination with the cities. Growth would occur based on past trends, with additional higher-density housing allowed in designated Limited Areas of More Intensive Rural Development (LAMIRDs) and the designation of additional industrial areas around Plymouth, some of which were previously designated as industrial prior to the 2018 update.

Land use, policy, and regulatory changes would be implemented to maintain consistency with the GMA and CWPPs while accommodating growth. Minor adjustments would be made to the County's development regulations for internal consistency and addressing recently adopted state requirements.

Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry.

Alternative 3 would allow for changes in the Plan to accommodate the 20-year (2046) population growth projection for the County, as described in Alternative 2. This alternative would capitalize on other development opportunities with the addition of some industrial designated lands, but less than in Alternative 2 and changing the designation of lands along the Columbia River from industrial to public (open space). Additional higher density housing would not be provided in the unincorporated County under this alternative.

This alternative would also include a mitigation program to preserve shrubsteppe habitat and other priority habitats in the County. This alternative will also address other land use and policy changes to maintain consistency with the GMA and the CWPPs and to accommodate growth.

1.2.2 Public Involvement

The County updated its Public Participation Plan in 2024 (*see* Volume II, Appendix B). Cities and counties planning under the GMA must establish "…procedures providing for early and continuous public participation in the development and amendment of comprehensive land use plans and development regulations implementing such plans."

The County provided opportunity for public input in scoping the EIS alternatives (*see* EIS, Appendix A), in evaluating and pursing opportunities to protect open space and throughout the planning process at Planning Commission and other public meetings.

County priorities based on public input include preservation of rural character; protection of natural resources, hillsides, and open spaces; an increase in the number of quality parks; improved access to rivers; opportunities for more hiking and biking trails; improvements of rural facilities; maintenance of public safety; and opportunities for affordable housing. The public input also prioritizes limiting sprawl and protecting farmland.

1.3 Benton County Profile

Benton County is located in southeastern Washington and is bound by the Columbia River on three sides (north, east, and south). The County is bordered to the west by Klickitat and Yakima counties. Benton County consists of a total of 1,115,673 acres, or 1,743 square miles. Of this, 416 square miles of its northern portion, or 24 percent of Benton County, is occupied by the U.S. Department of Energy's Hanford Reservation (see Volume II, Appendix A: Map Folio, Figure 1 – General Overview Map and Figure 2 – Public Land and Parks Map).

The County is predominantly rural and agricultural in nature, with unincorporated areas making up most of the County territory. There are unincorporated communities with housing and industry in areas such as Plymouth, Paterson, and Finley. Incorporated cities include Benton City, Kennewick, Prosser, Richland, and West Richland. Each city has an assigned UGA in which the County retains governance until the area is annexed. The County coordinates planning in the UGAs with each city. The current population of Benton County, based on Washington State Office of Financial Management's (OFM) 2024 estimate, is 217,850. Population projection details are provided in Section 3.7.



Rural and agricultural lands in east Benton County

The County is located at the confluence of three rivers: the Columbia, Yakima, and Snake rivers. The Yakima River runs through the middle of the County, to its confluence with the Columbia River at Richland. The County also consists of mountains and ridges such as Horse Heaven Hills, Rattlesnake Mountain, Badger Mountain, and Candy Mountain.

The U.S. Bureau of Reclamation's Yakima Basin Project serves a portion of the agricultural economy of the County. In addition, Lake Wallula was created when the U.S. Army Corps of Engineers' McNary Dam was completed in 1954. As a result, irrigation now extends across a large portion of Benton County, helping the Tri-Cities region, which includes the cities of Richland and Kennewick in Benton County and the city of Pasco in Franklin County, grow as an agricultural center. The County economy was also enhanced by the Hanford Nuclear Reservation's operation, established in 1943 during World War II and Environmental restoration and cleanup of the Hanford site, which began in the late 1980s and continues today. Research and development at the Pacific Northwest National Laboratory and other facilities in the Hanford Reservation comprise a major employment source in the County.



Columbia River – Lake Wallula
Source: Washington State Department of Ecology

1.4 Plan Framework

The County's Comprehensive Plan is organized in two volumes. **Volume I** provides an overview of the County's land use and planning context. It also contains the Comprehensive Plan's goals and policies and is organized into the elements required by the GMA (e.g., Land Use, Housing, Natural Resources, etc.). **Volume II** includes supporting analyses and technical appendices. Benton County also produced an **Environmental Impact Statement (EIS)** as part of this update. Together, these materials provide both the data required by the GMA and the analytical foundation for County decisions reflected in the Plan.

Volume I of this Comprehensive Plan consists of 8 plan elements that address the vision, goals, policies, and analysis for plan elements.

The progression of each chapter generally flows in the following order:

- Introduction
- Existing Conditions
- Current Trends
- Future Considerations

Plan Elements

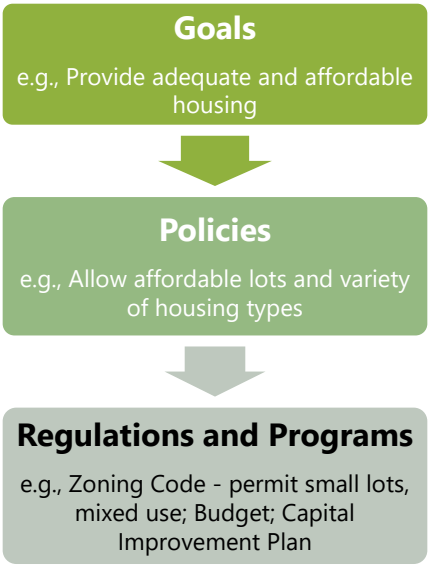
Land Use
Natural Resources*
Economic Development
Housing
Transportation
Parks and Recreation
Capital Facilities
Utilities
* non-mandatory element

This Comprehensive Plan is designed to be user-friendly and includes maps, figures, and an introductory outline of the County's goals and policies (Chapter 2).

1.4.1 Definition of Terms

In concert with the Future Land Use Designation Map (*see* Volume II, Appendix A: Map Folio, Figure 4 – Proposed Land Use Designations Map), the vision, goals, and policies within the Comprehensive Plan are the primary directives for land use decision-making and long-range planning and guide the development of regulations. These terms are generally defined as:

- **Vision** is a collective value and target of the County; it is what a county wants to become.
- **Goals** are broad statements of intent and philosophy expressing countywide values and attitudes. Goals are used as a general guide for action by the County. A goal may never be completely attained but is a target towards which to strive over time.
- **Policies** provide the basis for decision-making and specific courses of action, which move the County toward the attainment of its adopted goals. Policies have major influence because decisions, actions, and programs should neither conflict, nor be inconsistent with adopted policy. Policies should be operable on a continuous basis and applied consistently over time.
- **Regulations**, codes, and ordinances implement policies.



Vision, goals, and policies are also the principal directives to County decision-makers and staff relative to what planning and public works actions, studies, and other projects should be undertaken

during the plan's 20 year "horizon" to address current and future growth and development and resource issues.

1.5 Consistency and Relationship of the Plan to Other Documents

The GMA requires that the Comprehensive Plan be internally consistent across objectives, goals, policies, text, and maps. At the same time, the comprehensive plans of adjacent jurisdictions must also be consistent and capital budget decisions must conform to each jurisdiction's adopted comprehensive plan.

Consistency progresses from the broad goal, through its policies, and then to specific actions. The maps of the Comprehensive Plan augment the text, goals, and policies.

1.5.1 Countywide Planning Policies

Managing growth can be ineffective if it is carried out in a patchwork fashion. Therefore, the GMA provides a framework for regional coordination. Counties planning under the GMA prepare CWPP and establish UGAs. Cities and Counties are required to be consistent with the CWPP in their comprehensive planning. Benton County and the cities in the County coordinate their planning to avoid conflicts and ensure that infrastructures that cross jurisdictional boundaries are functionally integrated.

The County and Cities collaborated over the summer and early fall of 2025 to update the CWPPs to ensure the latest requirements are addressed. The cities adopted the CWPPs late in 2025 and the Benton County Board of Commissioners adopted the *Benton Countywide Planning Policies* in 2026 (*see* Volume II, Appendix C). This Comprehensive Plan, with associated goals and policies, maintains consistency with Benton County's adopted CWPP.

1.5.2 Shoreline Master Program

The County adopted an SMP update in 2014 pursuant to the Shoreline Management Act, and a limited review and update was completed in 2021. The goals and policies of the SMP are considered a part of the Comprehensive Plan's goals and policies included in Chapter 2 and along with the rest of the SMP are adopted by reference. The Policy Chapter provides the framework for future decision-making and is a guide for future development of lands within the County's shoreline jurisdiction boundaries. Detailed regulations are also included in the SMP.

1.5.3 Voluntary Stewardship Program

Benton County has an adopted Voluntary Stewardship Program (VSP) work plan and a VSP Workgroup in partnership with Benton Conservation District is implementing this work plan. VSP is a non-regulatory, incentive-based approach that balances the protection of critical areas on

agricultural lands, while promoting agricultural viability, as an alternative to managing agricultural activities in the County under the Critical Areas Ordinance (CAO). The VSP Work Plan is designed to protect critical areas, maintain and enhance agricultural viability, and promote voluntary enhancement of critical areas through the promotion of incentive-based measures.

1.5.4 Hanford Comprehensive Land Use Plan and Environmental Impact Statement

Although planning in the Hanford area is not under the County's jurisdiction, this federally funded and operated area largely influences the local economy and land use. A Comprehensive Land Use Plan and Environmental Impact Statement for the Hanford Site was prepared and adopted by the U.S Department of Energy in 1999, with participation by the County, state agencies, tribes, and other stakeholders. Several supplemental analyses and amendments have been approved since 1999, with the most recent in 2015. The plan includes Industrial-Exclusive, Industrial, Research and Development, High-Intensity Recreation, Low-Intensity Recreation, Conservation (Mining), and Preservation land uses. These land uses were identified by the public, cooperating agencies, and consulting Tribal governments as being important to the region (DOE 1999). The land use indicates Preservation lands on the north and south sides, Conservation lands and Industrial Exclusive lands at the center. Industrial and Research lands are located on the southern edge of the Hanford Site. New development in North Richland in recent years has occurred consistent with the Hanford Land Use Plan and the City's Comprehensive Plan. The unincorporated portion of the Hanford Site is designated as Unclassified in the County Comprehensive Plan.

1.5.5 Yakima River Basin Integrated Water Resource Management Plan

The Yakima River Basin Integrated Water Resource Management Plan (Yakima Integrated Plan) was developed by the U.S. Bureau of Reclamation and the Washington State Department of Ecology (Ecology) in conjunction with the Yakima Basin stakeholders and the Yakama Nation in 2011. The Yakima Integrated Plan addresses a variety of water resource and ecosystem concerns affecting fish passage and habitat and agricultural, municipal, and domestic water supplies within the Yakima Basin, which contains Benton County. See Section 4.5.5.2 for additional discussion on the relationship of Benton County water resources with the Yakima Integrated Plan elements.

1.5.6 Other Planning Documents in the County

The Benton County Comprehensive Plan maintains consistency with other planning and facilities documents and relies on the data and resources of some of these documents. These include the County's Biennial Budget document and other utilities and facilities inventories and plans.

County planning and facilities documents adopted by reference include:

- Red Mountain American Viticultural Area (AVA) Master Site Plan, 2012 (adopted by reference)

- Benton County Road Program, 2025 – 2030 and the most recently adopted Six-Year Transportation Improvement Programs.[1]
- Benton County Comprehensive Parks Plan (Parks Plan), 2025 (adopted by reference)
- Benton County Capital Improvement Plan (CIP), 2025 – 2030 (adopted by reference) and future amendments
- 2023 Benton County Comprehensive Solid Waste Management and Moderate Risk Waste Management Plan (adopted by reference)

Additionally, as referenced in Section 1.5.2 and Chapter 2, the goals and policies of the County's SMP are included as part of the Comprehensive Plan goals and policies.

1.5.7 Development Regulations

All development regulations within the County are required to be consistent with the Comprehensive Plan. These include, but are not limited to the zoning code, subdivision code, CAO, SMP, and permit review process. All codes related to traffic and utilities also implement the Comprehensive Plan goals and policies.

1.6 Concurrency

The GMA defines concurrency to mean that needed improvements for water, sewer, and transportation are in place at the time of development; or in the case of transportation, that a financial commitment exists to complete the improvements within 6 years.

There must be a baseline standard established to use when evaluating the anticipated impacts of new development to determine if concurrency can be met. The minimum acceptable performance level has been chosen as the baseline and is defined as the level of service (LOS). LOS should be realistic. Setting them too high could result in little or no growth and would be contrary to the GMA. Setting them too low could cause unmanaged growth without optimum service.

Based upon variables, including the projected levels of traffic from build-out of the Land Use Map, the County has designated LOS on its major traffic routes and programs its capital expenditures to maintain that LOS as traffic demand on those routes increases. LOS has also been established for County parks and recreation facilities, recognizing these standards serve more as guidelines than strict standards to meet.

[1] Available at: http://www.co.benton.wa.us/pview.aspx?id=10589&catid=0

1.7 Amendments to this Comprehensive Plan

Amendments to the Comprehensive Plan are legislative actions requiring County Commissioners' approval. Amendments must be approved as prescribed by the GMA. With a few exceptions, they cannot be considered more often than once per year and in accordance with specific procedures. Major updates occur by legislative action on a 10-year cycle as established by RCW 36.70A.130 (4)(c).

Amendments can be requested by the County or by private individuals. Multiple applications for amendments will be considered in a single legislative review process in order to evaluate the potential cumulative effect of the requests. All amendment requests require a public hearing with the Planning Commission, which then makes a recommendation to the County Commission. The County Commission will approve or deny the amendments in a public hearing. Public involvement with this process is required and encouraged through direction of the County Public Participation Plan.

Annual amendments will address the issues of major or minor land use classification changes; changes to the goals, policies, and text of the Comprehensive Plan; changes to supporting data and implementation; changes to the Land Use Maps; and changes to the inventories and technical documents.

Every 10 years, the annual amendment review may be combined with the required review of the UGAs to determine the next 20-years' anticipated growth. This review will use the County and individual City comprehensive plans and the permitted densities of the incorporated and unincorporated areas pursuant to RCW 36.70A.130(3).

Exceptions to the annual amendment limitation, according to RCW 36.70A.130, include the adoption of a subarea plan; the development of an initial subarea plan for economic development located outside of the 100-year floodplain in a county that has completed a state-funded pilot project that is based on watershed characterization and local habitat assessment; SMPs; or the amendment of the capital facilities element occurring concurrently with the adoption or amendment of the County's budget.

Counties are allowed under RCW 36.70A.130(2)(b) to consider emergency amendments that conform with Chapter 36.70A, after appropriate public participation has been observed, whenever an emergency exists. In Title 16.14.050, the County adopted a definition of emergency as, "The declaration by the Board of County Commissioners, based upon circumstances and facts at hand, that there is an eminent or expectant threat to one or more of: life, property, public health and safety, air or water resources, or the realization of economic objectives evident in the County Comprehensive Plan, and for which immediate action is necessary to end the threat." The procedure for both annual and emergency amendments is provided in Benton County Title 16.14.080.

2 Goals and Policies

2.1 Planning Process

PP Goal 1: Develop a Comprehensive Plan that reflects the community's vision and objectives, is consistent with the State's planning laws, and is implemented through various local development regulations.

Policy 1: Use zoning and subdivision ordinances, performance standards, and related measures to implement the plan.

Policy 2: Use and maintain County-wide resource inventories to assist in determining the suitability and capability of the land and its resources to support future development.

Policy 3: Make land use decisions consistent with the Land Use Map and with the inherent capability of the land to sustain uses without creating problems that require a publicly funded solution (e.g., flooding, landslides).

Policy 4: Coordinate the County's plans and programs with those at local, regional, and state levels.

PP Goal 2: Develop and maintain a Comprehensive Plan responsive to growth and economic trends which can be readily adapted to changing conditions.

Policy 1: Base amendments to the Comprehensive Plan on facts and findings that respond to public needs, are beneficial to the public interest, and are consistent with the vision and goals of the County.

Policy 2: Review and update the Comprehensive Plan according to the GMA.

PP Goal 3: Continue citizen involvement that ensures full citizen participation in public decision-making according to the County's adopted Public Participation Plan.

Policy 1: Maintain opportunities for citizen involvement and input on issues in advance of making land use decisions.

Policy 2: Provide information to citizens through the news media and other outreach processes as indicated in the Public Participation Plan to allow maximum citizen involvement.

2.2 Land Use

LU Goal 1: Ensure that land uses are compatible with surrounding uses that maintain public health, safety, and general welfare, and giving special consideration to advancing environmental justice.

Policy 1: Maintain a mix of land uses that allow for a variety of housing types while supporting the character of each rural community.

Policy 2: Promote compatible mixed uses of urban intensity that are appropriate and where community sewer and water are available or provided, including UGAs and designated Rural Community Center areas and Commercial zones.

Policy 3: Maximize the opportunities for compatible development within land use designations to serve a multitude of compatible uses and activities.

Policy 4: Establish regulations for site planning and design to avoid or reduce potential impacts associated with "land use incompatibility" of proposed non-farm developments on parcels adjacent to lands designated GMA Agriculture, Rural Resource, or adjacent to lands being farmed commercially within other rural designations.

Policy 5: Encourage multi-modal connectivity between land uses that enhances community access and promotes healthier and more active lifestyles for residents.

Policy 6: Plan compact development within incorporated UGAs where adequate infrastructure is available.

Policy 7: Consider identified patterns of development and likely future development pressure in areas when designating and maintaining UGAs.

Policy 8: Consider ways to advance environmental justice in land use planning designations and development regulations, including efforts to avoid creating or worsening environmental health disparities.

Policy 9: Encourage “green infrastructure” in new developments and redevelopments to address flooding and storm water runoff.

LU Goal 2: Follow controlling law and constitutional requirements, both state and federal, to ensure the appropriate protection of private property rights.

Policy 1: Prevent regulations that create undue adverse economic impacts or unnecessarily restrict the use of private property.

Policy 2: Monitor evolving state and federal statutory amendments and judicial precedent so that timely amendments or changes can be made in implementing Comprehensive Plan policies and development regulations.

2.2.1 Urban Growth

LU Goal 3: Concentrate urban development within urban growth areas.

Policy 1: Promote urban growth within the UGA and incorporated areas where urban services are available.

Policy 2: Encourage compact development of a wide variety of housing types and uses in UGAs to save taxpayers and ratepayers money, prevent disinvestment, conserve water, reduce water pollution, and support transit use.

LU Goal 4: Establish UGAs adjacent to incorporated areas, within which an orderly and cost-effective transition from rural to urban land uses and authority can be coordinated within the next 10 to 20 years.

Policy 1: Consider UGA expansions according to the process identified in the Benton CWPP.

Policy 2: Facilitate the realization of regional transportation and other infrastructure and public facilities plans.

Policy 3: Designate zoning and promote development on unincorporated lands within the UGAs consistent with the cities' Comprehensive Plan land use designations.

Policy 4: Promote outreach to established community interest groups regarding significant developments proposed within or adjacent to their communities.

2.2.2 Communities Outside UGAs

LU Goal 5: Identify the location, site planning, and density of new non-farm development outside of UGAs to protect existing agriculture from incompatible adjacent land uses.

Policy 1: Establish compatible land uses adjacent to areas designated as GMA Agriculture to minimize conflicts associated with farm activities such as spray, dust, noise, odors, and liability.

2.2.3 Rural Lands

LU Goal 6: Preserve rural lifestyles outside UGAs and incorporated areas while accommodating new population growth consistent with rural character.

Policy 1: Maintain overall residential densities within rural residential areas that protect surface and ground water, can be supported by available public services, provide rural housing types, reflect rural character as defined by the GMA, and are low enough to perpetuate rural

lifestyles characterized by a predominantly open landscape inhabited by households engaged in diverse and recreational land use activities related to livestock and crop production.

Policy 2: Support the protection of ground and surface water through large lots and less dense development in the rural areas.

Policy 3: Designated rural areas will be utilized to reduce the inappropriate conversion of agricultural lands, prevent sprawling low-density development, and assure that rural development is compatible with surrounding rural and agricultural areas.

Policy 4: Encourage low impact recreational uses and protect open spaces that preserve rural character.

Policy 5: Provide public services consistent with rural character. Rural developments should occur where adequate access to transportation systems, and rural levels of utilities and facilities, such as domestic water, power, and fire and police protection are available.

Policy 6: Rural development shall minimize potential adverse impacts to water quality, slope stability, vegetation, wildlife and aquatic life as implemented through the County's critical area regulations, shoreline master program, and hydrology manual.

Policy 7: Encourage long-term conservation, adequate water supply, and the wise stewardship of natural resources within Benton County for the benefit of current and future residents.

Policy 8: Encourage the continued communication with irrigation districts, legislature, and other responsible entities to ensure that adequate irrigation water is available for agricultural uses.

Policy 9: Limit impervious surface in rural lands by implementing maximum lot coverage in the development regulations.

Policy 10: Encourage the use of low-impact development (LID) measures in the Eastern Washington Low Impact Development Guidance Manual and their application to urban development, urban and rural subdivisions, and large rural developments in Benton County.

Policy 11: Support on-site infiltration in rural areas for new lots, subdivisions and developments by promoting storm water best management practices. Promote the retention of existing native vegetative cover in landscaping plans for areas zoned Rural Lands One Acre (RL-1), Rural Lands Five Acre (RL-5) and Rural Lands Twenty Acre (RL-20).

Policy 12: Encourage the reduction of fire risk and urban/wildland interface through fire-wise principles, prevention measures, and other programs. Apply best available wildfire hazard and risk maps to prioritize areas for risk reduction. Encourage landscape-scale fuel management, including strategically located fuel breaks. Incorporate best management practices and long-term maintenance into fuel break design to manage invasive annual grasses.

Policy 13: Support and encourage the use of and application of Firewise principles and other fire risk reduction measures consistent with the Benton County Natural Hazard Mitigation Plan and Community Wildfire Protection Plan in areas susceptible to wildfires. Encourage implementation of Firewise principles such as promoting defensible space standards, fuel reduction treatments, and fire-resistant vegetation, and support ongoing maintenance. Encourage long-term vegetation strategies, such as repeated application of pre-emergent herbicides, that transition fuels toward fire-resistant perennial species and reduce invasive annual grasses.

Policy 14: Encourage new rural development away from the 100-year floodplain, and as guided in the County's Flood Damage Prevention Ordinance, CAO, and SMP.

2.2.4 Master Plan Resorts and Small-scale Recreational or Tourist Use

LU Goal 7: Provide opportunities for Master Planned Resorts (MPRs) and Small-scale Recreational or Tourist (SSRT) uses consistent with the GMA.

Policy 1: Provide MPR and SSRT development regulations that are consistent with provisions of RCW 36.70A.360, the Comprehensive Plan, and County regulations.

Policy 2: Locate MPR and SSRT Uses outside the vicinity of UGAs according to the provisions of the GMA.

Policy 3: Develop a master site plan that functionally integrates various land uses with motorized and non-motorized circulation systems that are accessible to public transportation where available and connect with open spaces for public use.

Policy 4: Ensure that infrastructure, such as roads, water supply, and utility standards are consistent with rural densities and uses.

Policy 5: Prepare a capital facilities plan. Necessary capital facilities, utilities, and services may be provided to a MPR by service providers from outside the boundary of the MPR, including municipalities and special service districts, provided that all costs associated with service

extensions and capacity increases directly attributable to the MPR are fully borne by the resort.

Policy 6: Ensure that developments contain open space and open space amenities (paths, trails, scenic overlooks, and viewpoints) that are open to the public.

2.3 Natural Resource Lands

NR Goal 1: Conserve and maintain agricultural land of long-term commercial significance as the local natural resource most essential for sustaining the County's agricultural economy.

Policy 1: Conserve areas designated "GMA Agriculture" in the Comprehensive Plan for a broad range of agricultural uses to the maximum extent possible and protect these areas from the encroachment of incompatible uses.

Policy 2: In the event of a conflict between residential uses and normal and routine practices of commercial agriculture on lands designated as GMA Agriculture, support the agricultural use where it is evident that the agricultural practice is consistent with or equivalent to recognized Best Management Practices.

Policy 3: Recognize that only uses related or ancillary to, supportive of, complimentary to, and/or not in conflict with agricultural activities are appropriate in areas designated GMA Agriculture, and that these types of development should be encouraged to occur on lands with poor soils or lands otherwise not suitable for agricultural purposes.

Policy 4: Apply development standards that conserve water resources when reviewing proposed new non-agricultural developments to sustain the ability of the regional agricultural economy to expand and respond to new market conditions and opportunities, or drought, extreme heat, or other impacts of a changing climate.

NR Goal 2: Identify and protect mineral resource lands of commercial significance and from being significantly compromised by encroaching land uses that are incompatible with mining activity uses.

Policy 1: Protect mineral and aggregate resources of commercial significance from compromise by applying the County's Mineral Resources Protective Ordinance and BCC Title 15, Mineral Resource Lands when the owner of the resource requests such protection and use of the site has not already been compromised by incompatible adjacent land uses or development.

Policy 2: Discourage incompatible uses from encroaching upon and compromising the exploitation of protected mineral and aggregate resources.

Policy 3: Reclaim sites used for the extraction of mineral and aggregate resources in a manner consistent with applicable laws and ordinances.

2.4 Water Resources

WR Goal 1: Conserve, maintain, and manage existing ground and surface water resources to meet existing and future water supply needs for cities, farms, industry, and rural growth.

2.4.1 General Policies

Policy 1: Support efforts to secure long-term, sustainable water supplies that are consistent with the Benton County Comprehensive Land Use Plan or the Comprehensive Land Use Plans of the municipalities within Benton County.

Policy 2: Encourage water reuse, conservation, and responsible stewardship through the development of voluntary conservation programs, educational outreach, and alterations to current water policy that provide incentives for common sense approaches to stewarding water resources.

Policy 3 Support increasing water storage by increasing capacity in existing reservoirs, developing new above ground water storage capacity, and the development of storage capacity through aquifer storage and recovery, enhanced water recharge, and other groundwater management strategies.

Policy 4 Support ground water management strategies, including maintaining the County's Rural Water Supply Program, that permit the responsible development of ground water resources, while protecting the long-term sustainability of aquifers and considering trends for changes in precipitation and drought and how this impacts groundwater recharge.

Policy 5: Encourage water management practices that will allow and provide incentives for reclaiming water resources that retain economic and recreational resources. Such practices include reclaiming waters used for food processing to irrigate crops or reclaiming wastewater to support developed open spaces, such as parks or golf courses.

Policy 6: Encourage voluntary conservation of water resources through xeriscape (low water use landscape plantings) and other low water use methods.

Policy 7: Encourage water marketing, the trading of water rights as commodities, providing there are sufficient controls in place to protect the basic needs of Benton County citizens and industries.

Policy 8: Support the formation and utilization of Water Conservancy Boards to review water rights transfer applications.

Policy 9: Support selective continued issuance of new water rights from groundwater sources where new water rights will not impair existing rights and are consistent with the long-term sustainability of aquifers.

2.4.2 Municipal Water Supply Policies

Policy 1: Endorse responsible stewardship of municipal water supplies.

Policy 2: Work to identify opportunities for water conservation on County property and at County facilities.

Policy 3: Encourage the use of irrigation water for non-potable uses in housing units, parks, and other developed lands within water service areas.

Policy 4: Acknowledge that municipal governments and other water utilities, as applicable, are the best long-term water supply service providers within designated UGAs.

Policy 5: Consider existing public or private water purveyors first when the need arises for a rural domestic water supplier.

Policy 6: Look to Satellite Management Agencies (SMA) first for assistance with operations and management of failing or troubled water systems throughout the County. Encourage an increase in the number of approved SMAs in the County.

2.4.3 Rural Domestic Water Policies

Policy 1: Public and private purveyors, along with exempt wells operated by individual households, adequately provide for water needs in rural areas of the County. The County will not seek to become a residential water purveyor except where mandated by the state under RCW 43.70.195.

Policy 2: Recognize that new rural water right permit exempt wells are junior to senior surface and ground water rights and may have the potential to impair these water rights. Support the implementation of water management and mitigation strategies to avoid or offset impacts from exempt wells, as applicable, that allow for continued growth and development consistent with the land use plan.

Policy 3: Rural development shall provide adequate water for domestic use. When feasible, rural developments will be encouraged to utilize existing community systems with adequate availability for domestic water and sewage disposal.

Policy 4: New groundwater uses must provide evidence that the proposed water source is physically and legally available. Groundwater uses and withdrawals, including the issuance of building permits and the approval of land divisions, must be consistent with RCW 90.44.050, and with applicable rules adopted pursuant to RCW 90.22 and 90.54.

2.4.4 Industrial Policy

Policy 1: Support efforts to secure long-term sustainable water supplies sufficient to provide for industrial activity on the Hanford site, in the Finley area, and in other industrial designated areas.

2.4.5 Agriculture Policies

Policy 1: Support the availability of sufficient water to maintain the agricultural industry and agricultural processing and value-added manufacturing.

Policy 2: Support the withdrawal of additional water from the John Day and McNary pools, under reserved and new water rights, and water right changes and transfers, to service additional agricultural needs, including direct irrigation, food processing, and related ag-industrial needs.

Policy 3: Encourage the continued development of water transfers and changes to meet changing agricultural production needs.

Policy 4: Support strategies that improve water supply during drought conditions for irrigation districts and other water right holders on the Yakima River consistent with the Yakima Integrated Plan (Ecology and USBR 2011).

WR Goal 2: Protect and enhance surface and groundwater water quality for human health, drinking water supply, and to meet water quality standards.

Policy 1: Prohibit developments which have the potential for significant individual or cumulative impacts on ground and surface water quality; or alternatively, site and design developments to avoid or mitigate such impacts.

Policy 2: Protect surface and groundwater quality as a resource essential to the public health, safety and welfare, economic growth, and prosperity of Benton County.

Policy 3: Support development and management of County-owned storm water systems that protect surface and ground water quality consistent with local conditions.

Policy 4: Support the Benton-Franklin Health District to develop and implement septic tank and drain field standards that protect surface and ground water quality and human health.

Policy 5: Encourage educational programs and voluntary efforts of agricultural producers, processors, irrigation districts, and municipal users to responsibly manage return flows to improve surface and ground water quality.

Policy 6: Support application of state standards in a manner that reflects climate differences in Benton County compared to other regions of Washington State.

WR Goal 3: Support continued multi-purpose uses of the Columbia River.

Policy 1: Encourage use of the Columbia River and its reservoirs as a key element in ensuring long-term availability of water supply, barge transportation, power generation, and flood control and support for population growth, agricultural production, industry, fisheries, and economic development. Pursuant to the U.S. Army Corps of Engineers John Day reservoir drawdown study, the reservoirs should also be maintained to protect wildlife habitat.

Policy 2: Support the designation and allocation of reserved water for municipal, commercial, industrial, and irrigation use from the John Day and McNary pools as per the authority under the RCW (90.54) and Washington Administrative Code ([WAC]173-531A.040) to allocate Columbia River water resources.

Policy 3: Support water resource policy decisions based on defensible science to meet the needs of people and fish and wildlife. Evaluate strategies for challenging policies that may not be scientifically defensible.

Policy 4: Support off-stream reservoirs to augment river flows.

WR Goal 4: Protect and enhance surface water resources to support rivers, streams, and wetlands that support fish and wildlife species and associated habitats.

Policy 1: Support strategies that improve flows and habitat restoration for anadromous fish and other fish and wildlife during all types of water years on the Columbia and Yakima rivers, and for the lower Yakima River support Water Stargrass control, improved fish passage and survival actions consistent with the Yakima Basin Integrated Plan (Ecology and USBR 2011), as updated.

Policy 2: Promote a balanced response to listings of threatened and endangered species that provides improved conditions for species maintenance and recovery, while maintaining and allowing sustainable development of water resources for economic growth.

Policy 3: Equitably apply the Endangered Species Act by establishing specific, measurable recovery goals and addressing human factors, economic costs, and opportunity costs when preparing science-based species recovery and species protection plans.

Policy 4: Protect and enhance water quality to improve habitat conditions for salmonids.

2.5 Critical Areas

CA Goal 1: Protect the functions and values of critical areas within the county with land use decision-making and development review.

Policy 1: Apply standards, regulations, and mitigation strategies to development during the permitting and development approval process that protects critical areas functions and values.

Policy 2: Encourage new development and redevelopment in UGAs and large developments outside of UGAs to comply with low impact development standards as applicable.

CA Goal 2: Protect life and property and avoid or mitigate significant risks to public and private property and to public health and safety that are posed by frequently flooded, geologic hazard and fire risk areas.

Policy 1: Limit developments in areas with higher risk for natural disaster or geologic hazard unless it can be demonstrated by the project proponent that the development is sited, designed, and engineered for long term structural integrity and that life and property on- and off-site are not subject to increased risk as a result of the development. Additionally, establish development regulations that incorporate best practices for reducing the risk of wildfire, extreme heat, flooding, and other climate-exacerbated hazards. Require defensible space, fuel modification zones, and adequate emergency access for new development in High, and Very High wildfire hazard areas.

Policy 2: Prevent developments within floodways and inherently unstable slopes as they are not suitable for developments. Review required buffers and setbacks for steep slopes and floodways vulnerable to erosion exacerbated by climate change, and establish new minimums, if necessary, so that improvements are not required to protect structures during their expected life.

Policy 3: Locate and designate lands subject to natural disasters and current or future climate hazards for uses which avoid or minimize exposure of life and property to risk. Include mapped WUI and wildfire hazard severity areas in hazard designations.

Policy 4: Apply best available wildfire hazard and risk mapping to inform siting, design, and prevention/mitigation requirements. Incorporate vegetation management standards that address invasive annual grasses and fuel continuity across arid and semi-arid landscapes, including strategies and treatments that limit the dominance and spread of invasive annual grasses in fuel breaks.

CA Goal 3: Protect the County's natural areas, shorelines, and critical areas as unique assets to the community.

Policy 1: Use the CAO, SMP, SEPA, and other ordinances, as applicable, to designate and protect critical areas and the natural environment.

Policy 2: Identify and protect river, stream, wetlands, and fish and wildlife habitat conservation area functions and values.

Policy 3: Encourage development of water-oriented recreational, cultural, and commercial facilities in certain shoreline locations, consistent with SMP goals and policies and its criteria of no net loss of ecological functions, to enhance and diversify community recreational resources and its attractiveness to tourists.

Policy 4: Ensure public access to shorelines on public land, subject to regulations protecting public safety, sensitive habitat areas, and wildlife.

Policy 5: Encourage public agency acquisition of natural areas of scientific, research and educational significance for public benefit.

Policy 6: Identify and designate habitats of local importance to protect locally important habitats and species under the County CAO.

Policy 7: Any developments, uses, and/or activities in the channel migration zone should be consistent with the standards in the SMP.

Policy 8: Protections associated with landslide areas should be maintained according to the standards in the County CAO and SMP.

CA Goal 4: Sustain a diverse, productive, and high-quality natural environment for the use, health, and enjoyment of County residents.

Policy 1: Work with private and public property owners during development to ensure protection and appropriate use of the County's natural resources.

Policy 2: Integrate natural resources and critical areas such as rivers, creeks, ridges, and slopes into a linked pattern of open lands where feasible, to serve multiple open space functions such as buffers, visual resources, recreation, and wildlife habitat/corridors.

Policy 3: Provide necessary trails or linkages between natural features when feasible.

CA Goal 5: Achieve balance among economic uses of land and critical areas protection.

Policy 1: Work with state, federal, and local agencies and other County stakeholders regarding the application of environmental protection laws and regulations.

Policy 2: Maintain and enhance the viability of agriculture while voluntarily protecting and enhancing critical areas through the County VSP on agricultural lands.

Policy 3: Apply Best Management Practices and the conservation practices outlined in the County VSP Work Plan to lands historically and currently used for the production of food, agricultural products, and grazing of livestock.

Policy 4: Continue to consistently apply Best Management Practices to lands used for the extraction of minerals.

2.6 Economic Development

ED Goal 1: Create a balanced and diverse economy that provides an opportunity to make economic and lifestyle choices for Benton County residents.

Policy 1: Promote industries that are diverse and support an agriculture-based economy.

Policy 2: Promote and protect tourism related to viticulture and other agricultural activities.

Policy 3: Provide adequate, accessible commercial areas while minimizing impact on surrounding uses.

Policy 4: Facilitate economic growth and prosperity while preserving the existing rural quality of life and character, as it is defined by rural residents.

ED Goal 2: Expand employment opportunities in unincorporated Benton County.

Policy 1: Maintain and protect the agricultural economic base of Benton County.

Policy 2: Locate commercial retail and service activities serving urban and regional markets within UGAs. Commercial development serving rural communities is appropriate on commercially designated lands within or adjacent to the communities of Finley, Plymouth, Paterson, and Whitstran. Evaluate MPRs and tourist-oriented visitor destinations for appropriate siting countywide.

Policy 3: Develop commercial activities in “nodes” or clusters as opposed to strip-type configurations.

Policy 4: Designate uses within "Rural Commercial" areas as those which either serve interstate freeway traffic or are located at the center of rural communities to serve their needs.

Policy 5: Plan, construct, and landscape commercial developments to be visually and physically compatible with surrounding areas and uses.

ED Goal 3: Provide areas for the location of light and environmentally acceptable heavy industrial uses, while minimizing impacts on surrounding rural uses.

Policy 1: Establish industrial sites on lands designated for industrial use to protect from incompatible uses by using performance and/or site design criteria.

Policy 2: Do not locate non-agricultural related industry on "GMA Agriculture" designated land.

Policy 3: Locate industrial uses and activities where minimal environmental and social impact occurs. This includes appropriate buffers from critical areas and floodplains and also includes prohibitions on siting polluting industrial activities in or near overburdened communities.

Policy 4: Encourage light and heavy industrial uses to locate in areas where:

1. Access can be provided by major transportation networks such as road, rail, air, and water
2. Existing development is characterized by and/or compatible with industrial activity
3. Utilities, including electric, gas, water, and sewer, can be adequately provided, either as extensions of municipal facilities (e.g., by service contract) or by on-site facilities

2.7 Housing

HE Goal 1: Provide for a variety of residential uses in the unincorporated areas of the County consistent with the rural character and lifestyles and a choice of housing types for people of all income levels.

Policy 1: Include and preserve a variety of dwelling unit types and rural densities within the rural housing stock.

Policy 2: Allow and regulate manufactured homes in the same way as site-built homes.

Policy 3: Work with Cities to provide housing for all economic segments of the population and seek to create the conditions necessary for the construction of affordable housing at appropriate densities within city limits.

Policy 4: Follow RCW 36.70A.350 with regard to new fully contained communities when approving urban densities located outside of urban growth boundaries and outside of existing Rural Community Center areas, unless they are encompassed by the expansion of an existing UGA.

Policy 5: Allow residential development within unincorporated Urban Growth Areas at rural densities prior to the provision of urban infrastructure, provided that future development at urban densities is not precluded.

Policy 6: Locate higher than rural densities in the County's RL-1 areas and LAMIRD areas in the Rural Community Centers, mostly within the communities of Finley, Plymouth, Paterson, and Whitstran when rural infrastructure is available and has capacity to support additional development.

Policy 7: Keep plan provisions for the location of rural residential development while preserving agricultural lands and maintaining the rural lifestyles of the County while also minimizing conflicts with commercial agricultural activities.

Policy 8: Consider accessory dwelling units as an affordable housing option and look for flexible and innovative ways of integrating accessory dwelling units into single family residential zones.

HE Goal 2: Plan for and accommodate sufficient housing types that are affordable and available to meet the housing needs for the existing and projected population of all income groups.

Policy 1: Preserve various existing and viable residential areas and housing types protect them from incompatible land uses.

Policy 2: Allow new housing in the unincorporated County consistent with densities maintained in the Land Use Element and map.

Policy 3: Identify sufficient land countywide for existing and projected residential needs for all income groups.

Policy 4: Plan for and accommodate a variety of residential development types in rural areas, including detached single-family housing, cluster housing, duplexes and other adjoined unit housing, and manufactured homes in conjunction with commercial uses in rural commercial areas and Rural Community Center areas.

Policy 5: Plan for and accommodate a variety of residential developments in urban areas including, but not limited to, middle housing types, ADUs, housing for moderate, low, very low, and extremely low-income households, manufactured housing, multifamily housing, group homes, emergency housing, emergency shelters, and permanent supportive housing.

Policy 6: Countywide, ensure adequate zoning to support emergency and temporary housing for homeless as well as transitional and permanent supportive housing for formerly unhoused families and individuals.

HE Goal 3: Prevent discrimination and displacement in the development and maintenance of housing.

Policy 1: Evaluate the potential for displacement due to planning, public investments, redevelopment, and market pressures. Use strategies to mitigate displacement, as applicable.

Policy 2: Collaborate with the community to understand the drivers of displacement through involvement of community groups, organizations, and institutions in the affected areas.

Policy 3: Ensure that county regulations, and permit processes do not lead to displacement of marginalized populations.

Policy 4: Coordinate with housing authorities, public agencies, and private sector for housing developments.

2.8 Transportation Element

TE Goal 1: Provide safe, convenient, efficient, economic, and multi-modal transportation networks compatible with the rural character and which serve the transportation demands consistent with the Land Use Element, and all other relevant provisions of the Comprehensive Plan.

Policy 1: Provide adequate roads that safely handle anticipated traffic and serve a diversified area of industrial, agricultural, and residential uses.

Policy 2: Encourage transportation planning and projects that:

1. Conform with and serve the Land Use Element of the Comprehensive Plan
2. Facilitate the flow of people, goods, local products, and services to strengthen and assist the expansion of the local and regional economy
3. Enable the conservation of energy

Policy 3: Improve the cost effectiveness of capital spending by coordinating new road construction with all jurisdictions and service districts/providers.

Policy 4: Minimize the segmentation, loss, and compromising of agricultural lands and productivity resulting from new road construction.

Policy 5: Plan for the need to expand the existing road system to accommodate future growth in farm to market and industrial transport and overall traffic.

Policy 6: Use a frontage road or a circulation system, where practical, for commercial development to prevent the occurrence of numerous driveways opening onto arterial roadways.

Policy 7: Plan to expand transportation capacity by using existing facilities and rights-of-way, where practical and feasible.

Policy 8: Minimize the number of railroad crossings for public safety by using frontage roads, underpass installation, or signals.

Policy 9: Create an integrated network of safe pedestrian ways and/or bicycle routes along arterial and other roadways.

Policy 10: Construct pedestrian ways and bicycle routes in conformance with uniform design standards for trails and paths as described in the Washington State Department of Transportation (WSDOT) Design Manual or standards developed and adopted by Benton County.

Policy 11: Review new development under the County's designated LOS on County owned roads.

Policy 12: Support the development of a complete streets policy that would make accommodations for pedestrian, bicycle, and transit users on appropriate roadways.

Policy 13: Maintain location and alignment of all proposed streets within a subdivision compatible with existing and planned streets, topographical conditions, public convenience and safety, and the proposed uses of the land to be served by such streets. Limit dead-end streets to 600 feet in maximum length as a means of protection to property, owners, residents, and emergency personnel.

Policy 14: Encourage the use of the local road network for short-range local vehicular trips, and integrate multimodal transportation strategies that reduce pressure on state highways, promote system efficiency and ensure equitable access for all users.

TE Goal 2: Provide an integrated network of trails and paths for non-motorized circulation throughout rural areas connecting to urban trails and paths to promote active lifestyles.

Policy 1: Provide safe pedestrian ways and bicycle routes, separate from vehicle roadways where feasible.

Policy 2: Provide County road rights-of-way wide enough for off-road walking, jogging, bicycling, and horseback riding where feasible.

Policy 3: Include local resident needs for pedestrian, bicycle, and recreational, and equestrian travel when those needs are identified in the Comprehensive Plan.

TE Goal 3: Maintain the integrity of the transportation system while minimizing environmental and other impacts.

Policy 1: Avoid and/or minimize adverse social, economic, and environmental impacts and costs.

Policy 2: Avoid or mitigate conflicts and adverse impacts to rural character that may occur due to the transportation network and its improvements.

Policy 3: In consultation with WDFW, consider wildlife connectivity for new and upgraded bridges and culverts in rural areas, using the Washington Habitat Connectivity Action Plan (WAHCAP), PHS Biodiversity Areas and Corridors, and other related data sources.

TE Goal 4: Coordinate the transportation system with neighboring cities and other transportation providers.

Policy 1: Promote regional transportation plans that help to reduce VMT

Policy 2: Work with transit, rail, port authorities, and other transportation agencies to promote a coordinated transportation system.

TE Goal 5: Protect public safety and property by establishing development regulations that discourage the siting of incompatible uses and airspace obstructions adjacent to general aviation airports that serve the public.

Policy 1: Preserve, maintain, and develop air, barge, and railway transportation facilities which serve the County.

2.9 Parks, Recreation, Open Space, and Historic Preservation

PL Goal 1: Develop and maintain a park system for Benton County residents and visitors that provides a variety of recreational opportunities in regional and local parks and open space.

Policy 1: Develop and maintain a regional park and trail system integrated with city recreational resources.

Policy 2: Encourage the development of a system of bicycling, hiking, recreational, and equestrian trails in the County that coordinates with existing and/or proposed city systems.

Policy 3: Encourage developers of low density, large lot subdivisions and plats to provide access easements for bicycle and horse riding within and between contiguous developments, connecting to regional trails and to establish a means of maintaining such easements through coordination between the County, developers, and homeowners.

Policy 4: Offer a broad range of recreational opportunities for various abilities and needs of County residents (e.g., fishing, hiking, playfields).

PL Goal 2: Work with cities and agencies to protect greenways and open spaces along the riverine corridor of the lower Yakima River.

Policy 1: Identify and consider acquisition of natural open space preserves, wildlife corridors, and critical areas as part of the park system.

Policy 2: Work with cities to promote the protection of natural resources and open spaces to improve community and ecosystem resiliency.

PL Goal 3: Conserve visually prominent naturally vegetated steep slopes and elevated ridges that define the Columbia Basin landscape and are uniquely a product of the ice age floods.

Policy 1: Identify and preserve historically significant structures and sites whenever feasible.

Policy 2: Encourage the public and/or private acquisition of the prominent ridges within unincorporated Benton County as Open Space Conservation, in order to preserve views, protect native habitat, and provide for public access and recreation associated with these landscapes.

Policy 3: Pursue a variety of means and mechanisms such as the preparation of specific and area plans, conservation easements, clustered developments, land acquisitions and trades, statutory requirements to protect the natural landform and vegetative cover of the Rattlesnake uplift formation, notably Rattlesnake, Red, Candy, and Badger mountains and the Horse Heaven Hills.

Policy 4: Consider the preservation of the ridges and hillside areas through various development regulations.

PL Goal 4: Preserve significant historic structures, districts, and cultural resources that are unique to Benton County.

Policy 1: Coordinate with local tribes to protect historic and cultural resources, including from extreme weather and other natural hazards worsened by climate change.

Policy 2: Preserve archaeologically significant sites by siting and designing development to avoid or mitigate impacts.

PL Goal 5: Identify, preserve, and protect historic, cultural, and archaeological resources found to be significant by recognized local, state, tribal or federal processes.

Policy 1: Identify known, recorded archaeological, cultural, and historic resources.

Policy 2: Update and refine the local process for evaluating the significance of historic, cultural, and archaeological resources.

Policy 3: Preserve areas that contain valuable historical or archaeological sites of federal, state, tribal, or local significance including those maintained in the Department of Archaeology and Historic Preservation's database, areas known only to tribes and areas of higher risk potential. Maintain and enforce development code provisions that require conditioning of project approval on findings made by a professional archaeologist for development activities on sites of known cultural, historical, or archaeological significance.

Policy 4: Prior to demolition, moving, or alteration to any designated historic, cultural, and archaeological landmark, ensure that due consideration is given to its preservation or, at a minimum, documentation of its historic, cultural, or archaeological value.

2.10 Capital Facilities and Public Services

CF Goal 1: Anticipate the need and location of and plan for the timely and cost-effective provision of public facilities and services based upon the Land Use Element,

Policy 1: Ensure capital budget decisions are in conformity with this comprehensive plan and establish associated procedures for reviewing and updating the capital facilities plan if probable funding falls short of meeting existing needs.

Policy 2: Expand and diversify the rural economy and employment base by constructing public facility capacity to serve as a framework and incentive for rural development consistent with land use designations.

Policy 3: Plan for the location and protection of anticipated and existing public uses such as parks, playgrounds, schools, essential public facilities, and other public, state, or federal activities or facilities owned and operated for the benefit of the public. As part of planning, maintain an inventory through the County GIS platform of existing capital facilities owned by public entities, including green infrastructure.

Policy 4: Eliminate existing service level deficiencies in existing facilities before expending capital funds for new uses. Capital facilities planning should integrate all of the County's capital project resources (grants, bonds, general County funds, donations, real estate excise tax, conservation futures property tax, fees and rates for public utility services, and any other available funding).

Policy 5: Prioritize and evaluate public capital facilities annually for funding for capital projects that are necessary to accommodate existing and projected demands of the Land Use Element of the Comprehensive Plan. Consider equity and potential displacement impacts in the process.

Policy 6: Prioritize capital facilities planning and expenditures consistent with this Comprehensive Plan for projects that accomplish one or more of the following:

4. Are essential for public health, safety, and welfare
5. Address and/or improve the quality and level of regional government services
6. Maintain designated transportation LOS
7. Improve public and private sector productivity
8. Facilitate the maintenance and growth of the rural/agricultural economy

Policy 7: Consider capital facility needs of other public entities in the County as part of capital facilities planning, including special purpose districts, and coordinate with cities on capital plans for UGAs.

Policy 8: Explore public facilities and infrastructure investment options that use Hanford site resources and benefit the region beyond the Hanford area.

Policy 9: Promote compatible development of land adjacent to existing and proposed schools and other public facilities.

CF Goal 2: Provide for the siting of "Essential Public Facilities" using siting criteria that are consistent with statutory requirements applicable to these facilities and within appropriate land use designations,

Policy 1: Locate capital facilities identified as essential public facilities in a manner that will provide necessary service to intended users while minimizing the impact to surrounding land uses.

2.11 Utilities

UE Goal 1: Ensure utilities support the land use and economic development goals of the County.

Policy 1: Siting of proposed public facilities should be consistent with adopted land use policies.

UE Goal 2: Maintain public and private household water and sewer systems that are consistent with the rural character of the County.

Policy 1: Develop joint service agreements between special districts, counties, and cities for lands within UGAs.

UE Goal 3: Facilitate efficiency in utility land use and development.

Policy 1: Support development regulations that are flexible and receptive to innovations and advances in cellular technology and act upon the knowledge that moving information rather than people yields benefits of conservation and cost efficiencies.

Policy 2: Encourage multiple uses, including passive recreational use, in utility corridors where practical.

Policy 3: Facilitate maintenance and rehabilitation of existing utility systems and facilities and encourage the use of existing transmission/distribution corridors.

UE Goal 4: Develop and adopt provisions as necessary that support future demand for alternative energy vehicles.

Policy 1: Permit electric vehicle charging stations equipped with slow and medium speed charging equipment as an accessory or ancillary use to any principal use in all zoning districts.

Policy 2: Allow electric vehicle "rapid charging stations" designation in commercial, industrial, and agricultural zones as regulated in the zoning code and exclude in areas identified as critical resource areas.

2.12 Climate and Greenhouse Gas Emissions

The goals outlined below provide a general direction for building climate resilience in Benton County across sectors, including zoning and development, water resources, ecosystems, cultural resources and practices, agriculture resources and food systems, budling and energy, emergency management and community well-being, transportation, and communications and collaboration. These goals are based on the requirements of HB1181, which outlines specific criteria for addressing climate hazards that Benton County currently experiences and that are expected to worsen in the future.

2.12.1 Overarching Goals and Policies

Policies in this section apply to both the Climate Resilience and Greenhouse Gas Emissions Reductions Sub-Element.

CE Goal 1: Integrate climate resilience and GHG emissions reduction into local and regional planning, resource allocation, and overall strategy to ensure compliance with state guidelines and meaningful alignment with current and future priorities.

Policy 1: Develop and maintain staff expertise, skills, and capacity to implement Climate Element policies equitably across the region.

Policy 2: Strengthen and invest in regional capacity to track and report on climate resilience and GHG emissions reduction policy implementation across the County, including the Tri-Cities area. Develop and maintain shared progress reports, dashboards, and other tools to monitor and communicate progress on climate goals over time.

Policy 3: Comprehensive plan policies and implementing development regulations should be consistent with defensible science.

CE Goal 2: Build a Healthier and more resilient region by preparing for the impacts of climate change, protecting vulnerable communities and natural systems, supporting clean economic development, and strengthening agriculture, infrastructure, and emergency response.

2.12.2 Transportation, Buildings, Energy, and Land Use

CE Goal 3 Ensure policies and development regulations result in land use patterns and built environments that support resilience to extreme weather and climate-related impacts.

Policy 1: Support retrofitting homes with low-cost cooling solutions that meet current building standards, for example by exploring partnership and funding opportunities for programs to provide HVAC units and installation to residents most vulnerable to extreme temperature events (e.g., low- income seniors).

Policy 2: Monitor implementation of the state building code and consider whether additional development standards would be helpful to encourage the integration of exterior building features that reduce the impacts of extreme heat and precipitation.

Policy 3: Encourage local utilities and fire departments to implement wildfire mitigation best practices such as undergrounding and vegetation management in fire-prone areas.

Policy 4: Implement the BFCOG Metropolitan Transportation Plan and Active Transportation Plan as well as multimodal transportation plans developed by the cities and counties to enhance the safety and security of the region's transportation system, improve access for motorized and non-motorized users—especially currently underserved populations—and increase the resilience of the transportation network to climate hazards.

Policy 5: Explore ways to protect transit-users from extreme heat, such as working with Benton Franklin Transit to install shaded bus shelters and consider installing additional cooling features such as fans or misters.

Policy 6: Coordinate with utility providers and partners, such as TRIDEC Energy Forward Alliance, to encourage the expansion of non-emitting infrastructure that provides reliable and affordable power, diversifying sources of energy.

2.12.3 Water Resources, Ecosystems, Agriculture, and Food Systems

CE Goal 4: Protect the viability of the region's water resources, ecosystems, and agricultural economy by promoting resilience to extreme weather and climate-related hazards, while balancing regional water needs and ecosystem health.

Policy 1: Promote sustainable water storage, irrigation, and water practices that help agricultural producers adapt to changing conditions while balancing regional water needs. Consider operational modernization and enhanced water conservation strategies, such as those in the Yakima Basin Integrated Plan, and coordinate with conservation and irrigation districts. Continue to implement County's Rural Water Supply Program to benefit the Yakima Basin water supply.

Policy 2: Promote innovation, investment, and management regimes that address trends for reduced precipitation and increased extreme heat, drought, smoke, and extreme precipitation. This includes supporting research and partnerships on reducing input costs, energy demand, water demand, and greenhouse gas emissions, as well as plant varieties suited to changing weather conditions.

Policy 3: Encourage carbon sequestration and conservation of agricultural and open space land through existing programs such as the Open Space Taxation Program and Voluntary Stewardship Program, and consider new multijurisdictional tools such as conservation futures, transfers or purchase of development rights, or other strategies.

Policy 4: Identify compatible rural, urban and institutional lands for renewable energy infrastructure opportunities. Protect long-term viable agricultural lands and environmentally sensitive lands while allowing the least conflict with renewable energy siting.

Policy 5: Preserve or expand natural areas that help control flooding and provide shade, prioritizing projects for locations that frequently flood, have high heat conditions, or have community groups that are lower income or more sensitive to high heat (children, seniors, people with chronic health conditions).

Policy 6: Manage trees and other vegetation in both urban and rural areas to decrease risks from severe wildfires, preserving vegetation where possible and improving ecosystem health and habitat function.

Policy 7: Collaborate with partner agencies and groups to protect aquatic ecosystems and increase their resilience to extreme weather and climate- related impacts such as algal blooms and increased threat of invasive species.

Policy 8: Protect and enhance surface and groundwater quantity and quality, recognizing that water resources are essential to the public health, safety and welfare, economic growth, and prosperity of the Tri Cities Region and its jurisdictions, as well as the health of native fish.

Policy 9: Coordinate with regional, state, federal, and tribal partners on plans to manage water resources and hydropower generation in the Yakima River Basin and Columbia River Basin. Advocate for long-range planning that considers at least 20 years of projected demand, and needs for increased storage capacity given increasing trends in intense precipitation, reduced snowpack, and severe drought.

Policy 10: Ensure development regulations conserve water resources and support the Tri-Cities Region's ability to support a high quality of life and vibrant economy in a semi-arid climate. This includes implementing, monitoring, and possibly updating development regulations for water-efficient buildings, landscaping, irrigation systems, water systems, and stormwater management.

Policy 11: Allow and incentivize private water management practices that recycle water for uses that require less treatment than drinking water. This could include reclaiming waters used for food processing to irrigate crops or reclaiming greywater to irrigate landscaping or golf courses (greywater is used potable water from sources such as sinks that do not include toilet water).

Policy 12: Work with the Benton Conservation District to develop acceptable native plant species for new developments and restoration projects, to increase resilience and reduce maintenance costs and demand for irrigation water.

Policy 13: Provide outreach or incentive programs to promote voluntary water and energy conservation. This could include raising public awareness of best practices such as switching from lawns to drought- tolerant landscaping or working with utilities to explore demand pricing structures that do not unfairly burden low-income households.

Policy 14: Consider developing a comprehensive, local drought resilience strategy that complements state and federal water basin plans, factors in projected climate impacts, and sets action levels for different drought stages.

2.12.4 Economic Development and Cultural Resources

CE Goal 5: Ensure that the local economy, cultural resources, and cultural traditions are resilient to extreme weather and climate-related impacts.

Policy 1: Build on existing coordination with Tribal governments to strengthen community resilience and protect cultural resources from climate impacts. This includes supporting tribal efforts

to increase knowledge collection and sharing about ways to protect cultural resources and build climate-adaptive systems related to food, health, and the economy.

Policy 2: Collaborate with community partners to explore ways to expand entry level jobs and career development pathways in low-emission industries that align with the needs and strengths of Tri-Cities communities. Potential partners include local schools, labor unions, the Tri-City Development Council (TRIDEC), chambers of commerce, community-based organizations, and business leaders in light industrial uses and nuclear, solar, and hydropower energy.

Policy 3: Ensure regional multijurisdictional hazard mitigation plans for Benton and Franklin counties include information about the impacts of extreme weather and climate-related hazards, and mitigation strategies for preparing for and managing post climate disaster hazards to protect community health, economies, and ecosystems.

2.12.5 Health and Well-being, and Emergency Management

CE Goal 6: Protect community health and well-being and enhance emergency preparedness, response, and recovery from the impacts of climate-related hazards, focusing resources on the people and places most at risk to these hazards

Policy 1: Ensure critical infrastructure is resilient to natural hazards such as flooding and extreme heat and implement related area-wide and jurisdiction- specific mitigation actions in regional hazard mitigation plans.

Policy 2: Collaborate at the regional, state, and federal levels on updating floodplain maps to reflect best available information and update local development codes as needed to mitigate for impacts related to changes in the floodplain over time

Policy 3: Work with the community and funding partners to raise awareness of and expand programs that provide cooling and warming centers and other types of emergency shelter and resource distribution during extreme weather, focusing on supporting the people who are most at risk.

Policy 4: Continue to mitigate risk of wildfires in the Wildland-Urban Interface (WUI), consistent with regional multijurisdictional hazard mitigation plans for Benton and Franklin counties. This includes providing education and outreach to existing landowners in High and Very High wildfire hazard areas, providing information on ways they can reduce fire hazards and risk. Support wildfire risk reduction strategies in public land management practices and local development standards.

Policy 5: Evaluate and potentially expand community outreach and training programs focused on preparedness and response to floods, fire, poor air quality, extreme temperatures, and utility outages, and consistent with Firewise program.

Policy 6: Strengthen communication with non- English-speaking communities by continuing to build relationships with local groups and exploring the most effective methods for raising awareness of and engagement with climate issues.

Policy 7: Recognize that parks support climate resilience by providing public access to cool places, such as water or shaded areas, and by providing public gathering places where community members can connect and support each other. Promote equitable access to parks, creating inclusive and connected recreational spaces, and supporting culturally responsive, community-driven park development that reflects local needs and values.

Policy 8: Ensure all residents have access to information about climate impacts and an opportunity to participate in public decision-making processes related to plans and the use of public resources to address those impacts.

- Collaborate with community groups to connect local concerns with regional and statewide efforts and help guide policies, programs, and investments.
- Seek input from populations that are typically most at-risk to climate impacts such as seniors, children, low-income households, and those with chronic health conditions. Also seek input from community service providers regarding people who are homeless.

Policy 9: Protect the health and well-being of agricultural, construction, recreation, first responders, and other outdoor workers exposed to extreme heat, poor air quality, and other weather-related hazards. Coordinate with the Benton Franklin Health District, the State Department of Labor and Industries, and labor unions to consider strategies such as promoting awareness of worker protection laws and best practices such as scheduling heavy routine outdoor work during cooler times of day and providing breaks and shelter during extreme weather events.

2.12.6 GHG Goals and Policies

The following section presents GHG emissions reduction goals and policies. GHG emissions reduction goals and policies are organized by the following sectors:

- Buildings and energy;
- Transportation, zoning and development, and land use; and

- Waste management.

GHG Goal 1: Support clean growth and climate-smart development in the region by reducing greenhouse gas emissions across all sectors, advancing clean energy, and integrating sustainable land use and transportation strategies.

2.12.7 Buildings and Energy

GHG Goal 2: Improve building performance and energy resilience by reducing energy use, supporting cleaner energy choices, and making energy savings upgrades more accessible and affordable.

Policy 1: Follow state building and energy code development and implementation specific to decarbonization. Educate and support building officials, partners, and staff to integrate energy and building codes for new and remodeled buildings that reduce energy use, expand EV charging infrastructure, and support a variety of energy sources, including renewable sources.

Policy 2: Enhance energy resilience and reduce energy consumption in existing buildings by:

- Supporting public programs that incentivize or encourage energy efficiency retrofits for commercial and residential buildings.
- Advancing energy efficiency initiatives across residential, commercial, and municipal sectors, such as weatherization.
- Prioritizing programs that serve low-income, senior, and historically marginalized communities.

Policy 3: Promote the use of sustainable building materials to improve energy and environmental performance through:

- Incentivized green building certification.
- Building code and other development regulations.

Policy 4: Consider creating a regional resource hub of federal, state, county, and local incentives available to residents interested in building electrification, insulation, and weatherization, to improve energy efficiency, resilience, and affordability. Prioritize low- and no-cost home retrofit packages for low-income and marginalized communities.

2.12.8 Transportation, Zoning and Development, and Land Use

GHG Goal 3: Collaborate regionally to promote transportation and land use patterns that support reductions in emissions and vehicle miles traveled (VMT), aiming to reduce regional VMT by at least 5% below 2022 levels by 2050 by directing urban growth to cities and future annexation areas, on strategic updates to rural transportation systems, and on managing rural lands to support emissions reduction consistent with policies under CE Goal 4.

Policy 1: Foster higher-density, mixed-use development in urban areas and transit corridors by supporting transit-oriented development and aligning zoning and permitting processes to facilitate compact growth near transit and amenities.

Policy 2: Create a safe, well-connected, and attractive bicycle and pedestrian transportation network to encourage active transportation and improve street connectivity and walkability. Ensure improvements integrate with transit networks and increase accessibility for people with disabilities and the elderly.

Policy 3: Coordinate with Ben-Franklin Transit to prioritize, develop, and maintain mobility hubs in transportation-efficient locations, especially in overburdened communities experiencing a scarcity of transportation alternatives. Incorporate mobility choices (including multimodal transportation and rideshares) for people with special transportation needs, including persons with disabilities, the elderly, the young, and low-income populations.

Policy 4: Implement and seek alignment with the following plans to support regional transportation GHG emissions reductions, as required by the state: BFCOG Regional Active Transportation Plan; BFCOG Metropolitan Transportation Plan (Transition 2045); BFCOG Regional Bicycle Plan; BFCOG Comprehensive Economic Development Strategy; other Comprehensive Plan elements.

Policy 5: Support the improvement of transit speed, frequency, coverage, and reliability, including improving the number of destinations reachable by transit.

Policy 6: Encourage the private sector and public and non-governmental partners to provide opportunities for low-income residents to purchase or lease electric vehicles and bicycles. Encourage these partners to provide EV charging infrastructure, especially in areas that serve low-income populations and renters.

Policy 7: Encourage (or require when mandated by state building code) EV charging infrastructure in major building remodels and retrofits where feasible.

Policy 8: Encourage phasing out the use of gas-powered landscaping equipment and other off- or non-road vehicle and equipment types.

Policy 9: Promote local government leadership by:

- Converting vehicle fleet vehicles to low-emissions vehicles, where cost and technology allow.
- Developing and implementing programs that reduce staff commute VMT (e.g., provide free or subsidized transit passes, encourage ridesharing, explore options for telecommuting).

Policy 10: Coordinate regionally to track trends in GHG emissions and VMT for 5-year Comprehensive Plan progress reporting, including coordinating on how to allocate data from unincorporated UGAs.

Policy 11: Continue conducting joint-planning, where possible, between county and city governments for unincorporated Urban Growth Areas (UGAs). Waste Management

GHG Goal 4: Ensure that the community can reduce, reuse, and recycle waste materials sustainably.

Policy 1: Explore opportunities to expand communitywide waste reduction and recycling programs to divert recyclable waste from entering landfills. This could include investing in new waste management options, collaborating with neighboring jurisdictions, and exploring opportunities to make recycling and composting more affordable and feasible.

Policy 2: Provide public education to encourage residents to use waste management providers, rather than burn garbage, to improve air quality and reduce fire risk.

Policy 3: Expand communitywide waste reduction and recycling programs to divert 40% of community recyclable waste from entering landfills by 2029, in alignment with Solid Waste and Hazardous Waste Management Plan.

3 Land Use Element

3.1 Introduction

This Chapter contains the GMA required land use element to provide a framework for future growth and development consistent with community objectives and state law. Consistent with GMA requirements, the land use element designates the proposed general distribution, location, and extent of land uses for agriculture and other resource lands, housing, commerce, industry, recreation, open space, general aviation airports, public utilities, public facilities, and other functions, as applicable, and describes development densities and projections for future population growth.

Within all elements of the Comprehensive Plan, project planning, scheduling, and financing are targeted to provide the basic infrastructure services that correspond to the designated land use. The relationship between elements is one of functional interdependence and internal consistency, where the Comprehensive Plan Elements and land use designations are:

- Consistent with and carry forth the Comprehensive Plan's policies
- Depict scale and densities consistent with the carrying capacity of the land, surrounding area, and infrastructure
- Cost effective for the expenditure of public revenues to construct and maintain public infrastructure/service
- Reflect the suitability of the land for the designated land uses for capacity, compatibility, and availability of services

The land use element should undergo a major review every 10 years to reaffirm both the legitimacy of the "Vision" and to make necessary adjustments in response to new conditions or changing attitudes. Annual review enables the County to monitor the progress of meeting objectives and to keep objectives current relative to emerging issues and needs.

The purpose of the land use element, in conjunction with the rural element, is to:

- Provide a description of the outcomes the community expects from growth and development
- Provide certainty and predictability for development and financial interests, residents, and service providers
- Serve as the policy and regulatory framework which ensures that through the passage of time and successive political administrations the cumulative outcome of growth and development consistently moves toward that chosen by the rural community
- Demonstrate how local interests meet the mandates of state planning law and other requirements consistent with local needs and preferences

3.2 Existing Land Uses in the County

Benton County consists of over 1,715 square miles. The U.S. Department of Energy's Hanford Reservation occupies 416 miles, or 24 percent, of Benton County's northern area (*see* Volume II, Appendix A: Map Folio, Figure 2 – Public Land and Parks Map). An additional 93,299 acres are owned or managed by other public entities (port districts, state, federal, and local government lands). Total public ownership represents 33 percent of the acreage in Benton County.

The existing land use activities within unincorporated Benton County are principally agriculture, agricultural related industry, rural residential, rangeland, open space, and Hanford industrial uses (*see* Volume II, Appendix A: Map Folio, Figure 4 – Proposed Land Use Designations Map). The current allocation of land use within the County is presented in Table 3-1.

Table 3-1 indicates that GMA agriculture (irrigated and dryland) is the largest single land use within the County. It occupies approximately 59 percent of the total land area. Next largest is Hanford, which accounts for approximately 25 percent, followed by rural land uses (approximately 7 percent). The five cities and their UGAs occupy 72,245.37 acres (113 square miles), or over 6 percent of the total land area. (*see* Volume II, Appendix A: Map Folio, Figure 4 – Proposed Land Use Designation Map.



Dryland agriculture in Benton County

Table 3-1
Current Land Use in Benton County

Land Use Type	Acres	Square Miles	Percent
Cities and Urban Growth Areas	72,059	113	6.58
Hanford	265517	416	24.27
Hanford Reach	12,268	19	1.13
Unincorporated Area			
Growth Management Act Agriculture	647,107	1,011	58.96
Open Space Conservation	2,108	3	0.19
Public	15,163	24	1.38
Rural Lands 1	1,182	2	0.11
Rural Lands 1-3	318	0	0.03
Rural Lands 5	74,039	116	6.75
Rural Lands 20	1,813	3	0.17
Community Center	500	1	0.05
Community Commercial	26	0	0.00
Interchange Commercial	325	1	0.03
General Commercial	202	0	0.02
Light Industrial	1,333	2	0.12
Heavy Industrial	2,344	4	0.21
Total Unincorporated Area	746,460	1,166	68.01
Total County Area	1,097,860	1,715	100

Source: Benton County GIS data

3.2.1 Land Use Pattern and Compatibility

Benton County's land use can be described in broad categories: urban, rural, agricultural, industrial, public, and open space. Agriculture is the predominant land use in Benton County. Much of the urban land is concentrated in the eastern portion of the County which comprises the Tri-Cities area—



Rural residential area intermixed with open space and agriculture in Badger Canyon

Kennewick, Richland, and West Richland—with Benton City and Prosser comprising the urban land in central and western Benton County. The rural residential lands are mostly along the Interstate-82 corridor and in the urban fringes with some located in the Patterson and Plymouth areas. Industrial lands are minimal in the unincorporated County, located near Finley, Prosser and Plymouth. This is in part due to the ability to site agro-industrial uses within agricultural lands, with several agriculture related developments such as storage and product packing facilities located adjacent to production lands throughout the County. Other industrial lands are mostly located within the Hanford area or within the UGAs. Public and open space lands are located throughout the County.

Compatibility is based on the intensity of land uses. Generally speaking, the most intense use is industrial due to its operational impacts (e.g., noise, light, dust), supporting facility needs, and overall land impact. Natural areas are considered the least intense as there are no developments or improvements in these areas. Residential areas are not compatible next to heavy industry. Appropriately designed buffers, landscaping, and transition areas between uses should be considered between incompatible land uses.

3.2.1.1 Military Training Routes

When planning for new development within Benton County, it is important to consider the critical role of military training areas in support of national defense. Within Benton County there are several military training routes that function as 'highways in the sky' used by military aircraft to practice high- and low-altitude training exercises and to traverse between military installations. Any development or new construction that seriously impacts or hinders the military training routes' function and viability is considered incompatible land use. Future land use compatibility planning is an overarching goal of the Comprehensive Plan.

The GMA requires the County to provide notice to the military when it intends to amend its "comprehensive plan or development regulations to address lands adjacent to military installations to ensure those lands are protected from incompatible development." Per the RCW 36.70A.530:

1. Military installations are of particular importance to the economic health of the state of Washington. It is a priority of the state to protect the land surrounding military installations from incompatible development.
2. A comprehensive plan, amendment to a comprehensive plan, a development regulation, or amendment to a development regulation, should not allow development in the vicinity of a military installation that is incompatible with the installation's ability to carry out its mission requirements.

3.2.2 Population and Land Use Trends

Since the 1990s, there has been a condition of sustained population and economic growth in southeast Washington. The cyclic booms and busts in the local economy characteristic of the 1960s

through late 1980s have been replaced with a steady and prolonged period of population growth and conversion of raw land to agriculture and related industries, urban uses, and rural residential development.

Both the farm and construction/development sector of the non-farm economy of the county have enjoyed relatively favorable market conditions. The economy was less impacted by the recession in 2008 than the rest of the nation due to the increase in employment at the Hanford Site as part of the American Recovery and Reinvestment Act (ARRA) investment in expedited cleanup activities in 2009 and beyond. Like many other communities, the Covid-19 pandemic temporarily impacted the local Benton County economy, but it has since recovered. Table 3-2 indicates the historic population growth in Benton County by decades.

Table 3-2
Historic Population Growth in Benton County

Year	Benton County	% Change Benton County
1970	67,540	8.81%
1980	105,800	56.65%
1990	112,560	6.39%
2000	142,475	26.58%
2010	175,177	22.95%
2020	206,873	18.1%

Benton County's current population, based on the 2024 OFM data, is 217,5850. The unincorporated County population constitutes 37,805 persons, or approximately 17.4 percent of the total County population. Agriculture, food processing, health care, education, and research have all contributed to recent and substantial economic development in the County. At present, the agricultural sector is experiencing steady economic growth in the County, as the domestic and global market share for eastern Washington farm products continue to increase (Washington State ESD June 2025). At the local level, the commercial retail sector within the Tri-Cities has reached a scale of regional significance with new retail stores being constructed regularly and serving an area within an approximate 100-mile circumference of the Tri-Cities. A few renewable energy projects have been developed in recent years, and several others have been proposed within County-prohibited agricultural lands. Additional energy projects may be proposed in the future. Hanford Cleanup budgets continue to play a major role in supporting local economic and population growth, and this is expected to continue into the future.

The land use trend at the Hanford Site can be broadly described as gradual reintegration of major portions of Hanford's resources (land, water, and infrastructure) into the economy, custom and

culture, and regulatory authority of local jurisdictions. Today, the Hanford Site is being cleaned up for future uses that in addition to federal missions will likely include non-defense related private and public sector uses.

In 2016, 1,641 acres of Hanford land was transferred from the U.S. Department of Energy to the City of Richland, the Port of Benton, and Energy Northwest for industrial uses. A solar renewable energy project is located on this land, and additional future development is expected. The Hanford Reach National Monument, created by President Clinton in 1999, has also generated additional visitors and tourists to the site and the surrounding communities for water-related and upland recreation activities.

3.2.3 Future Considerations

Accommodating land use needs for both agricultural and non-agricultural uses, while maintaining the potential of all economic sectors, is important for Benton County. Key considerations for land use in the County are to preserve and protect agricultural and resource lands, allow rural lifestyle in rural lands, support ag-industrial and other industrial and associated commercial development in County opportunity areas, and allow growth where services are available, primarily in the urban areas. With the County situated at the confluence of three rivers and its mountainous and ridged geological characteristics, protection of the County's environmental resources is also an important aspect for future planning.

As the agriculture economy continues to grow in Benton County, properly locating sites and providing basic services for agriculture related industries, facilitating the growth of "agri-tourism" and "value-added" processing sectors continue to be important. In addition to preserving rural lands, the County also needs to provide space for industrial and agri-industrial development that supports the local economy. While much of this activity is located in designated industrial areas such as Prosser, Plymouth, and Finley, many agriculture-related industries are found within the GMA Agriculture District. These uses are often tied to farming and food production but can be large in scale and function much like industrial development. Allowing flexibility in zoning to support these facilities near farms, while making sure they are compatible with surrounding uses, is an important planning goal.

A review of industrial-scale activity in the County shows that the need for industrial land depends on factors such as access to infrastructure, nearby land uses, and development trends. Some areas, like Finley and Prosser, have an adequate supply of industrial land, while other areas have more specific needs. For example, Plymouth has demand for additional industrial land to expand the existing industrial park (major industrial development area) and support agriculture and transportation. In other cases, such as Port- or federally owned lands in Plymouth or parcels north of Prosser, industrial zoning is less suitable due to nearby land uses, environmental conditions, or landowner preferences.

Adjusting the supply of industrial land will help balance the County's land base, ensuring there is enough land available to support agricultural processing and distribution, and associated industrial development, while also protecting rural character and environmental resources.

Additionally, the County is planning for wildlife connectivity in a variety of ways, particularly in the rural areas, to preserve wildlife connectivity corridors. This includes the open space corridors identified in the open space memo, targeting shrubsteppe habitat conservation easements through the shrubsteppe mitigation program, and applying the County's critical areas code, which is being updated to address more specific habitat functions as provided in PHS, WSRRI and WAHCAP. GMA ag and RL-20 zoning helps to preserve corridors through larger lot sizes and lower intensity uses.

3.3 Land Use Categories

As noted above, land use in Benton County is organized into designation categories: urban, rural, agriculture, industrial, public, and open space lands. Some of these designations also have sub-categories. Table 3-3 indicates the proposed land uses and distribution of lands within Benton County (*see* Volume II, Appendix A: Map Folio, Figure 4 – Proposed Land Use Designations Map).

Table 3-3
Proposed Land Uses and Land Distribution in Benton County

Land Use Type	Acres	Square Miles	Percent
Cities and Urban Growth Areas	72,059	113	6.56
Hanford Site	265,517	415	24.18
Hanford Reach	12,268	19	1.12
Unincorporated Area			
Growth Management Act Agriculture	649,062	1,014	59.12
Open Space Conservation	2,169	3	0.20
Public	15,574	24	1.42
Rural Transition	3,601	6	0.33
Rural Remote	66,770	104	6.08
Rural Resource	7,136	11	0.65
Rural Community Center	450	1	0.04
Rural Commercial	468	1	0.04
Rural Industrial	2,786	4	0.26
Total Unincorporated Area	748,016	1,169	
Total County Area	1,097,860	1,715	100

Benton County implements its various land uses through zoning designations as shown in Table 3-4 below.

Table 3-4
Land Use Implementation by Zoning

Land Use	Zoning
Urban	Urban Growth Area Residential
Hanford	Unclassified
Hanford Reach	Unclassified
Growth Management Act Agriculture	Growth Management Act Agriculture, Red Mountain Agriculture
Open Space Conservation	Open Space Conservation
Public	Park District
Rural Transition	Rural Lands 1
Rural Remote	Rural Lands 5
Rural Resource	Rural Lands 20
Rural Community Center	Community Center Residential, Community Commercial
Rural Commercial	Interchange Commercial, General Commercial
Rural Industrial	Light Industrial, Heavy Industrial

Designations under each category are further discussed below.

3.3.1 Urban Lands

Urban lands are lands located within, adjacent to, or as in the case of existing unincorporated islands, surrounded by existing city limits.

A key component of the GMA and the Comprehensive Plan is to allow growth within the UGAs. These areas include cities and other areas characterized by urban growth or adjacent to such areas and are designed to accommodate the projected population growth for 20 years. The GMA further specifies that urban growth should first be located in areas that already have adequate existing public facilities and service capacity and second, be located in areas where such services if not already available, can be served adequately by a combination of both existing and future public and private sector facilities and services.

The CWPP establishes a process between the County and cities to manage development within the cities and their UGAs, and a process of annexation of UGAs into the cities.

3.3.1.1 Urban Land Use Designation

Urban lands in Benton County include land within the city limits and the UGAs. There are five designated and approved urban growth areas (UGA's) in Benton County: Benton City (*see* Volume II, Appendix A-Figure 21), Kennewick (*see* Volume II, Appendix A-Figure 23), Prosser (*see* Volume II, Appendix A-Figure 20), Richland (*see* Volume II, Appendix A-Figure 24), and West Richland (*see*

Volume II, Appendix A-Figure 22). The densities, uses, and development provisions allowed within this land use assures that development patterns are consistent with city comprehensive plans.

The UGAs for Benton City and Richland would be modified as provided in Volume II, Appendices D-1 and D-2 Benton City's UGA would be expanded to include nearly 55 additional acres in the west-central and southwest parts of the City. Richland would remove a portion of Badger Mountain from its UGA (146 acres) that will remain as public open space and add in three other areas – Harvest Ridge Addition (121 acres), Harvest Ridge Site/Kennewick School District Site (81 acres), and Dallas Road Recreation Center (190 acres), for a net UGA increase of 354 acres.

3.3.2 Rural Lands and Element

The GMA requires counties to include a rural element in their comprehensive plans to permit appropriate land uses that are compatible with the rural character of such lands and provide for a variety of rural densities. This element has been incorporated as a part of the land use element of the County's plan.



Rural lands in Benton County, just below the Horse Heaven Hills along the Yakima River near Yakitat Road

Rural lands are those areas outside of UGAs, excluding agricultural, public, open space, and other specifically designated lands in this Comprehensive Plan. Land uses in rural areas include a variety of densities for rural, commercial, and industrial use consistent with the rural character. Rural areas are traditionally used for small-acreage farms, orchards, agricultural crops, livestock, mineral extraction and processing, and low-density residential development. The low intensity use of rural land also provides fish and wildlife habitat, open space, and other environmental benefits. Recreational uses which preserve open space and protect the natural environment are encouraged in rural lands. The County's goals and policies, through the rural element in this Comprehensive Plan and associated development regulations, aim to identify and guide land use designation of rural lands in a manner that preserves rural character.

3.3.2.1 Rural Character

The rural areas of Benton County are places where open space, the natural environment, and vegetation dominate over the built environment. The rural area is a place where one can find wildlife habitats and a historic heritage characterized by low-intensity land uses that include large and small farms, scattered homesteads and smaller, higher density communities, residences along the rivers and hills with views and extensive areas of open space. Rural areas vary in Benton County and differ based on physical characteristics and community preferences based on their customs, culture, outlook, and living environments.

Rural character embodies a quality of life based upon traditional rural landscapes, activities, lifestyles, and aesthetic values. This includes more open landscapes where the setting is quiet, peaceful, and natural. The residents may enjoy a slower paced lifestyle, closeness with nature, and access to recreational opportunities, acknowledging that larger acreage areas may also require more time for maintenance and management of land, animals, and other responsibilities often associated with a more rural lifestyle. Rural areas are typically separated from urban areas.

3.3.2.2 Rural Communities

Rural communities, such as Paterson, Plymouth, Whitstran, and Finley are designated as Rural Community Centers to reflect a localized pattern of residences on less than 5-acre lots and a variety of small-scale local commercial service areas such as: grocery stores, service stations, eateries, taverns, post offices, and auto repair, that serve the surrounding rural population. The Comprehensive Plan Rural Community Center designation reflects this pattern and equals 1 to 3 dwelling units per acre (Du/acre). Rural Community Centers are "limited areas of more intensive rural development" (LAMIRDs) authorized by RCW36.70A.070 (5)(d). The County's RL-1 "Rural Lands One Acre District" lands are not LAMIRDs but may develop at an intensity similar to a LAMIRD based on historical development patterns and plats approved prior to the GMA. The size of the Rural Community Centers in Paterson, Plymouth, and Finley are 36, 89, and 189 acres, respectively. Whitstran Rural Community Center contains 67 acres. Paterson and Whitstran are almost completely built out per the current densities but could accommodate some ADUs, while Finley and Plymouth have more undeveloped and underdeveloped parcels that could accommodate additional residential growth.

Other areas that are considered the equivalent of limited areas of more intense rural development are pre-existing urban/suburban areas designated rural lands one acre (RL-1). These RL-1 areas are located throughout the County and are characterized by locations adjacent to major travel corridors (e.g., state routes); smaller parcel sizes relative to the GMA "rural" designation; cultures associated with "neighborhoods" or landowner associations; and densities that allow for infill that would not negatively impact adjacent rural or agriculturally designated lands.



Community of Whitstran

3.3.2.3 Rural Land Use Designations

Rural land designations are based upon a required "minimum" lot size. A larger than minimum lot size may be required, when necessary, to satisfy Washington State Department of Health requirements for water and domestic waste disposal and code requirements (e.g., setbacks, easements).

Rural Transition is designated to areas that are in close proximity to UGAs and have experienced steady growth in the last decade. The intent of the Rural Transition designation is to enable rural residential living in conjunction with providing a transition area between the rural and urban environments. These Rural Transition areas may be potentially suitable for future inclusion into UGAs. Maximum allowable density in this land use category is 1 Du/acre.

There are currently six areas in the County designated as Rural Transition. One is surrounded by Richland urban areas on all sides near the Columbia Park Trail. All other Rural Transition areas abut Kennewick, Richland, and Prosser UGAs on at least one side or adjoin a higher intensity land use between a UGA and the Rural Transition land use. A significant portion of the future population growth within the County is anticipated to occur in these areas.

Rural Remote is the predominant rural land use in the County. This land is located mostly between the agricultural lands (GMA Agriculture), Rural Transition, and the UGAs. Rural Remote land use is intended to enhance and preserve the County's rural character, which includes rural open space, low densities, wildlife habitat, public open space for outdoor recreational activities, and rural home sites on which a limited range of agricultural activities may be conducted. Allowable density in Rural Remote land use is 1Du/5acres.

Rural Resource is designated in areas where existing topography or geological conditions can be protected and where a very low density of residential or other uses may be allowed. It is designed to enhance and preserve Benton County's rural character, which includes rural open space, low densities, wildlife habitat, public open space for outdoor recreational activities; ridges, slopes, and bluffs; and rural home sites on which a range of agricultural activities may be conducted. Allowable density in Rural Resource 1Du/20acres.

Rural Community Center – see discussion in Section 3.3.2.2.

Master Planned Resorts per RCW 36.70A.360, MPRs are developments with urban characteristics that may be located outside of UGAs. A MPR is a fully integrated, self-contained planned unit development in a setting of significant natural amenities, with its primary focus on destination resort facilities consisting of short-term visitor accommodations and a range of developed on-site indoor and/or outdoor recreational facilities. Capital facilities, utilities, and services, including those related to sewer, water, security, fire suppression, and emergency medicine provided on-site shall be limited to meet the needs of the MPR.

The primary purpose of MPRs is to provide for carefully planned, self-contained, and integrated destination resort facilities and amenities that are centered upon unique and commanding natural resource settings. MPRs may be amended to the Comprehensive Plan as Sub Area Plans.

Small-scale Recreation or Tourist (SSRT) Use per RCW 36.70A.070 (5) (d) (ii) can be an intensification of recreation or tourist uses on existing lots, or new development of SSRT uses, including commercial facilities to serve those recreational or tourist activities that rely on a rural location and setting, but that do not include new residential development and are not intended to principally serve the existing or projected rural population. The County has identified additional flexibility for agri-tourism food service offerings, as described in more detail in Section 5.5.

Significant differences between the MPR and the SSRT uses are: scale, the MPR is perceived as a destination resort of potentially very large size whereas the SSRT is relatively small and concentrated; residents, the MPR can have them as a secondary use, but the SSRT cannot; municipal services, although MPRs can be outside of a UGA, at the developer's expense, a MPR can connect to city services, whereas the SSRT cannot.

Rural Commercial encompasses all commercial lands in Benton County. This includes general commercial uses and commercial areas primarily along Interstate 82 and within the Rural Community Centers discussed in 3.3.2.2. The purpose of this land use is to provide retail goods and services to regional trade areas, serve highway travelers, and provide convenience services to residents. Uses include motels, truck stops, service stations, convenience stores, restaurants, and fast food.

Rural Industrial includes both heavy and light industrial uses in the County. The primary purpose of Rural Industrial use is to provide land for industrial and supporting uses that will not present unmanageable conflicts with other land uses, that have access to necessary utilities and public facilities, and that have less environmental constraints. Some of the heavy industrial uses function at the fundamental economic level: rail transport and facilities operations, chemical products manufacturing and shipment for agriculture, sand and gravel operations for construction, raw products processing, and waste products recycling. The County has reviewed industrial lands in the entire County as part of the 2026 update and identified additional industrial land designation opportunity areas, primarily in the Plymouth area along State Highway 14, as part of a major industrial development area. Some existing industrial-designated lands could change to other designations.



Wind turbines, dryland wheat and shrubsteppe habitat

3.3.2.4 Agricultural Lands

Agricultural land is defined as land primarily devoted to the commercial production of horticultural, viticultural, floricultural, dairy, apiary, vegetable, or animal products or of berries, grain, hay, straw, turf, seed, Christmas trees, finfish in upland hatcheries, or livestock, and that has long-term commercial significance for agricultural production (RCW 36.70A.030(2)). Long-term commercial significance includes the growing capacity, productivity, and soil composition of the land for long-term commercial production, in consideration with the land's proximity to population areas, and the possibility of more intense uses of the land. GMA requires each county to designate appropriate agricultural lands that are not already characterized by urban growth and that have long-term

significance for the commercial production of food or other agricultural products (RCW 36.70A.170(1)(a)). Table 3-5 summarizes agricultural lands in the County by dryland, irrigated and rangeland.

Table 3-5
Agricultural Lands by Land Type

GMA Agriculture Land Type	Acres
Dry land	286,440
Irrigated	218,306
Rangeland	92,289

Source: WSDA 2024, AC Geo 2025

Dryland agricultural activities primarily consist of dryland wheat production, principally in the Horse Heaven and Rattlesnake Hills. Dryland production has an economy of scale requiring large operations, typically in the thousands of acres.

Crops grown in Benton County include "specialty" berries and orchard crops, mint, hops, and juice and wine grapes. Corporate acreages of asparagus, potatoes, wine grapes, and corn are grown in large operations under "circle" irrigation systems found throughout the County, but most notably on the south slope of the Horse Heaven Hills above the Columbia River. Significant acreages of hillside orchards are found in the Red Mountain/Badger Canyon and Kennewick/Finley areas.

Benton County designates agricultural land as GMA Agriculture based on primary factors below:

- Urban Growth. The land is not already characterized by urban growth.
- Production Capability. The land is used or capable of being used for agricultural production.
- Long-Term Commercial Significance. This is determined by classification of prime and unique farmland soils, availability of public facilities including roads used in transporting agricultural products, tax status, public service availability, proximity to UGAs, predominant parcel size, land use settlement patterns, intensity of nearby land uses, history of nearby land development permits, land values under alternative uses, and proximity to markets.



Irrigated agriculture in Benton County

3.3.2.5 Agricultural Land Use Designation

GMA Agriculture (GMA AG) includes agricultural land (such as dryland and irrigated land) identified by the County based on the criteria established by the GMA. A GMA Agricultural District zone conserves agricultural lands by establishing a 20-acre minimum parcel size and (with exceptions e.g., resort destinations, wineries) limits the range of other land uses to those which are dependent upon, supportive of, ancillary to, or compatible with, agricultural production as the principal land use. This land constitutes about 59 percent of the total land in Benton County as shown in Table 3-3.

The county-wide review and designation of these lands was updated in the 2018 Comprehensive Plan and updated via a supplemental analysis as part of the 2026 update, as described below.

As part of the 2018 Comprehensive Plan update, Benton County completed an updated county-wide review of agricultural resource land designations. This review was supplemented further with an additional review and addendum during the 2026 update. WAC 365-190-050(3) states that "lands should be considered for designation as agricultural resource lands based on three factors:" 1) specifically is not characterized by urban growth; 2) is used or is capable of being used for agricultural production; and 3) has long-term commercial significance for agriculture.

Per the first factor, the urban and UGAs mapped in the County were excluded from the agricultural resource lands analysis as by their definitions, as these are areas characterized by urban growth.

For the second factor, agricultural production capability was evaluated using the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) land-capability classification system.

Eight soil classes were grouped into "suitable," "suitable with management," and "non-suitable" categories. Both "suitable" and "suitable with management" lands were considered capable of sustaining agricultural use. Non-suitable areas were generally excluded unless they formed part of a larger, contiguous agricultural operation—such as draws or canyons interspersed among productive fields.

For the third factor, long-term commercial significance was assessed using criteria consistent with WAC 365-190-050(3)(c) and refined to reflect local conditions. Considerations included:

1 Water availability/precipitation
2 Parcel size
3 Nearby UGAs, settlement patterns, land use, land values, and development permits
4 Land in the Conservation Reserve Program or conservation land
5 Prime farmlands
6 Pesticide restrictions
7 Public facilities and proximity to markets
8 Tax status

Each of these considerations was reviewed on a county-wide, comprehensive basis of both existing GMA Agriculture and other lands to determine their relevance or contribution to long-term commercial significance of agriculture. Through this evaluation, multiple areas in the County were considered for reclassification.

In general, it was deemed important to maintain continuity in agricultural resource land designation; unless there are sufficient reasons that the agricultural resource land should be de-designated, land should remain as agricultural resource land to protect the resource.

The areas that were removed from agricultural resource land designation are areas south of Richland, Kennewick, and West Richland. These areas are near population centers, adjacent to growing areas, proximate to utilities and roads, have low precipitation without irrigation, are outside of AVAs, and follow the recent settlement pattern of the County. Some of these areas also have more restrictive pesticide regulations, making it more expensive to treat agricultural lands. Together these considerations threaten or have already reduced the viability for the long-term commercial significance of the land as agricultural land, which fits the considerations noted in *Lewis County v Western Washington Growth Management Hearings Board* (2006).

Lands added to agricultural resource land designation included areas south of Finley, west of Benton City, and near Prosser. These areas are currently farmed, are irrigated and often have permanent crops in place, are large parcels, exist outside of UGAs, and are near existing land that is already designated as agricultural resource land and other rural uses.



Agricultural lands above Lake Wallula (Columbia River)

The 2018 update resulted in 6,051 acres added and 4,565 acres removed from the GMA Agriculture designation. Additionally, 7,130 acres of higher-density Rural Residential lands were re-designated to Rural Resource to preserve these lands for potential agricultural uses such as rangelands, vineyards, and orchards.

As part of the 2026 Periodic Update, Benton County completed an addendum to the 2018 analysis to evaluate further needs for addition or removal of parcels from the GMA Agriculture designation. The addendum applied the same WAC 365-190-050 criteria through a set of sequential screening steps using current parcel data, aerial imagery, and input from County staff and landowners. The screening criteria included proximity to other zones, soil capability class, farmland classification, overlap with critical areas, and surrounding urban growth and development pressure.

The review identified 16 parcels totaling 1,248 acres where re-designation was warranted due to reduced agricultural suitability and land use incompatibility from adjacency to existing industrial or rural residential development. Approximately 973 acres were recommended for re-designation to Rural Industrial, and 250 acres to Rural Remote. No further additions to the GMA Agricultural zone were identified, indicating that the 2018 analysis adequately captured all parcels suitable for long-term agricultural use. The proposed designation changes from GMA Agriculture to Rural Industrial are further supported by a countywide review of industrial lands completed as part of the 2026 Update. This review showed localized needs for additional industrial lands near Plymouth as part of a

major industrial development area for value added processing, storage, and transport of agricultural products, all of which support agricultural viability in the surrounding region. The proposed changes from GMA Agriculture to Rural Remote remove parcels with limited agricultural suitability that are partially surrounded by more intensive growth, improving the consistency of land use boundaries and reflecting current growth patterns. Overall, these limited adjustments preserve the County's base of productive agricultural lands while improving alignment with recent development patterns and supporting localized industrial land needs.

3.3.3 Industrial Lands

Outside of the Hanford Site, there are currently 3,387 acres of industrially designated land within unincorporated Benton County. Though a broad range of industrial uses is appropriate for these lands, the principle current use is for agriculturally related industries such as chemicals processing and shipping, cold storage, and fruit and vegetable processing and shipping.

The Hanford Site has land suitable for industrial development, and the Hanford Comprehensive Land Use Plan (CLUP) includes areas zoned "Industrial" and "Industrial Exclusive." A percentage of this land will be developed to federally "programmed" industrial uses, including the Hanford industrial land recently transferred to the City of Richland, the Port of Benton, and Energy Northwest, as noted previously. The City of Richland and Port plan to market the property to industrial developers as "mega-sites" of 200 acres or larger (Oneza & Associates 2017). The proximity of this land to highways, rail, and utility services together with the large acreages available provide development opportunities for industries that exist in very few places throughout the Pacific Northwest. As a result, 901 acres of Hanford land was added to the Richland UGA. This and other industrial lands within the cities augment the County's supply of industrial designated lands.

Current industrial lands in unincorporated Benton County are located in the vicinities of Paterson and Plymouth, east and north of the City of Prosser on County Route 12, within the Community Center of Whitstran, and in the south Finley area.



Industrial development in Whitstran

Development of industrial land requires careful consideration of environmental constraints and mitigation strategies, availability of infrastructure and utility services and their capacity; access to rail, roads, and navigable water; proximity to the market, supplies, labor pool and other considerations.

An inventory of industrial lands in Benton County and surrounding communities was conducted as part of the 2026 Periodic Update, as described below and in more detail in Volume II, Appendix I. The inventory highlighted a significant supply of industrial-zoned lands across the region, with Richland, Pasco, and unincorporated Benton County with the largest concentrations. The assessment further refined industrial land supply estimates by segmenting industrial lands into categories based on their development status. Various future population and industrial sector growth projections were also reviewed, presenting a range of demand scenarios for industrial land. Supplementary data, including building and stormwater permits and aerial imagery, was also incorporated to assess industrial development trends. This highlighted the spatial patterns of industrial development on both agricultural and industrial-zoned lands. Industrial-scale storage and value-added processing of agricultural products —such as potato and onion sheds and fruit packing facilities— are often integrated with farming operations and occur in more dispersed, decentralized patterns.

Larger-scale industrial activities, including manufacturing plants, distribution centers, and warehouses, are more concentrated in industrial-zoned areas with utility infrastructure and

transportation connections. These larger hubs play a critical role in supporting agricultural activity by facilitating the storage, processing, and distribution of agricultural products to wider markets.

The criteria used to identify areas for potential industrial land use designations included local industrial buildout activity, proximity to transportation infrastructure, availability of utilities, and the presence of development constraints such as critical areas. Development trends in nearby areas outside the County, such as Pasco, Burbank, Umatilla and Morrow counties in Oregon, were also considered. The review also included collaborative discussions with Benton County planning staff, employees of Tri-County Development Council (TRIDEC), Benton Public Utility District (Benton PUD), Benton Rural Electric Association (REA), and industrial property owners.

Additional industrial land use designations are proposed near Plymouth based on the findings of the memo, and consistent with this identified major industrial development area. Plymouth has higher growth potential due to proximity to agricultural production, access to highways, rail, and waterborne transportation networks, and available utility infrastructure. This area supports the viability of surrounding agricultural operations by providing storage, processing, and transportation of agricultural products. Supporting industries such as metals fabrication and logistics/storage facilities may also be potential fits for this area.

The future demand for industrial land is further shaped by the emergence of new industries, including renewable energy, data centers, and large-scale warehousing. These industries typically require large parcels with direct access to energy transmission infrastructure, and growth in these sectors may drive changes in the industrial land supply, creating additional demand for lands dedicated to these uses in the county's long-term planning. Sectors may drive changes in the industrial land supply, creating additional demand for lands dedicated to these uses in the county's long-term planning.

Descriptions of the County's industrial land resources can be found in Chapter 5 (Economic Element).

Port Districts are major players in the industrial land base of Benton County. The industrially zoned acreage is predominantly owned by the Benton and Kennewick port districts, which are taxing districts under Washington State Law. Port districts are authorized to purchase lands for marketing, development, lease, and eventual sale to commercial interests with the objective of improving the local economy. Port district holdings include lands in the rural areas of Paterson, Plymouth, and Finley, and in or adjacent to the cities of Richland, Kennewick, Prosser, and Benton City.

Typical port enterprises include the construction of industrial and office space for start-up businesses; the lease of land or buildings to commercial enterprises, which may in turn purchase the real property from the Port; and facilitating the assemblage of major industrial/commercial projects requiring collaboration by numerous interests such as utilities, local and regional governments, and private enterprise.

Rural Industrial is intended for a wide range of industrial land uses including light and heavy industrial uses. These lands require access and infrastructure for heavy industrial uses; rail and waterborne transportation access are critical. Other important criteria include separation of such land from residential and commercial uses and availability of large acreages for outside storage and maneuvering of trucks and rail equipment. Industrial lands play a key role in the local and regional economy by offering manufacturing and various other types of jobs.



Industrial development in Plymouth

3.3.4 Public Lands Designation

The Public Lands (PL) designation is found throughout the County, but it is generally concentrated along the Columbia River corridor. Designated PL are intended for public uses such as parks, playgrounds, greenways, open spaces, and wildlife habitats owned and operated by a local, state, or federal government. There are approximately 15,563 acres of land currently designated PL in the Land Use Map. Though not specifically designated as PL, there are about 93,299 acres of additional land in Benton County currently owned by public entities, including the Washington Department of Fish and Wildlife, Bureau of Land Management, Department of Natural Resources, and U.S. Army Corps of Engineers. Publicly owned properties—particularly those managed by the Bureau of Land Management, Department of Natural Resources, or Benton County—often contain open space characteristics such as native shrubsteppe habitat, steep slopes, wetlands, or riparian corridors. In these cases, the Public Lands designation may serve as an appropriate mechanism to ensure long-term preservation of open space functions while accommodating compatible public uses such as recreation, education, and habitat management.

Designation of suitable public parcels as Public Lands rather than Open Space Conservation may simplify administration and reflect existing ownership and management intent, while still fulfilling the County's open space protection objectives under RCW 36.70A.160. In other cases, Open Space Conservation designations may be appropriate for privately owned lands or mixed-ownership areas where conservation easements are required to protect open space functions without public acquisition.



Rattlesnake, Candy and Badger mountains open space areas/preserves

3.3.5 Open Space Conservation

Open Space Conservation lands are areas that have been recognized as having critical resources and ecosystems with unique characteristics that support significant habitats for migratory birds, fish, and wildlife; natural riverine functions and aquatic environments; botanical inventory; water quality and flood retention. Open Space Conservation designated areas provide significant natural functions and benefits to natural resources and the public and should be protected from destruction, conversion, and encroachment by incompatible uses. These areas may also provide limited recreational and educational opportunities for the public. Open Space Conservation lands can be public or private property, and must be held under conservation easements with local, state, or federal agencies or land trusts. Open Space Conservation designations are voluntary in nature for property owners.



Geese along the Columbia River

Under RCW 36.70A.160, Benton County is required to identify open space corridors within and between urban growth areas, including lands useful for recreation, wildlife habitat, trails, and the connection of critical areas. The 2026 periodic update included an expanded focus on open space corridors within and between urban growth areas. These corridors serve multiple purposes, including recreation and trails, wildlife habitat, and the connection of critical areas. A GIS analysis was conducted to identify open space corridors within and between UGAs. The analysis incorporated data and guidance from parallel open space and habitat preservation efforts, including the Benton County Parks Plan, the Arid Lands Initiative (ALI), Priority Habitats and Species (PHS), the Washington Shrubsteppe Restoration and Resiliency Initiative (WSRRI), and the Washington Habitat Connectivity Action Plan (WAHCAP). The following datasets were used to identify open space corridors:

- **Habitat quality and connectivity:**
  - PHS habitats
  - Habitat cores and corridors (PHS, WSRRI, WAHCAP, and ALI datasets)
  - Shrubsteppe biodiversity potential modeling.
- **Critical Areas and Shorelines**
  - Wetlands
  - Streams
  - Floodplains
  - Shoreline environments
- **Infrastructure and access to multimodal transportation corridors**
  - County road and highway rights of way
  - Railroad rights of way
  - Canals
  - Trails

The analysis identified a network of primary open space corridors within and between UGAs and forming a broad network of interconnected open lands. Identified corridors include the Horse Heaven and Rattlesnake uplifts, the Yakima River valley, major ridgelines near Red, Badger, and

Candy Mountains, Amon Creek and Elliott Lake within the Richland and Kennewick UGAs, and shrubsteppe areas extending south from Kennewick along SR 397. These corridors provide the primary linkages between large habitat cores, critical areas, and recreation destinations throughout the County. Many overlap existing public lands and shoreline areas, supporting combined functions of habitat connectivity, flood storage, groundwater recharge, and non-motorized access. These identified areas overlap significantly with existing protected lands, including the U.S. Bureau of Land Management (BLM) and the Washington Department of Natural Resources (DNR) holdings, county parks, and other publicly owned open spaces.

Open space areas and corridors may occur on private or public lands, but the means of protection differ. Publicly owned lands managed by local, state, or federal agencies often already provide open space and habitat functions consistent with the intent of the Open Space Conservation designation. In such cases, the Public Lands (PL) designation may be equally appropriate to recognize and preserve open space values while reflecting the property's ownership and management intent. Application of the Public Lands designation to publicly owned parcels with significant habitat or recreation value — such as DNR, BLM, or County-managed properties— also supports long-term open space preservation. Together, the Open Space Conservation and Public Lands designations establish a complementary framework for protecting Benton County's network of natural and recreational lands.

Through the open space inventory and analysis, several parcels were identified for permanent protection to advance the County's long-term conservation goals. Three publicly owned parcels totaling approximately 457 acres were recommended for redesignation from Rural Remote to Open Space Conservation or Public Lands. These properties, managed by DNR and BLM, contain shrubsteppe habitat, scenic ridgelines, and other ecological features that align with the County's open space objectives.



Riparian habitat along the Columbia River near Plymouth

Through the 2026 Update, the County plans to implement an Open Space Taxation Program and Public Benefit Rating System (PBRS) and a Shrubsteppe Mitigation Program to further support countywide preservation of Open Space lands. (*see* Volume II, Appendix M).

The Open Space Taxation Program will be based on statewide authorization under RCW 84.34 to encourage the preservation of open space lands by allowing qualifying properties to be taxed based on their current use rather than full market value. The Benton County program includes a Public Benefit Rating System (PBRS) that assigns point values to open space resources such as shrubsteppe habitat, wetlands, floodplains, scenic ridgelines, and historic sites, and provides additional points for permanent protection through a conservation easement. Properties with higher scores receive greater tax reductions. High-priority resources—including WDFW biodiversity corridors and WSRRI shrubsteppe cores and linkages—may qualify for up to a 75 percent reduction in assessed value. This voluntary, incentive-based program enables private landowners to conserve important open space features while retaining ownership and compatible use of their land. Properties enrolled in the program that include permanent conservation easements may also be suitable for future Open Space Conservation designation.

The Shrubsteppe Mitigation Program complements these efforts by establishing a County-supported mitigation bank and in-lieu-fee framework, administered in partnership with the Benton Conservation District. The Program provides a mechanism for developers or project proponents to offset unavoidable impacts to shrubsteppe habitat through restoration, enhancement, and long-term protection of priority sites. Mitigation credits are generated from the preservation of high-quality shrubsteppe and open space corridors identified using the County's shrubsteppe biodiversity potential model. Lands protected under this Program are permanently conserved through recorded easements and may also qualify for Open Space Conservation designation as part of the County's long-term open space network.



Shubsteppe habitat in Badger Canyon

3.3.6 Energy

Renewable energy development in Benton County has increased significantly in recent years, driven by increasing energy demands, federal tax credits, and the state's clean energy goals. Several large-scale energy projects have been reviewed through the state's Energy Facility Site Evaluation Council (EFSEC) process. EFSEC coordinates the review and permitting of major energy facilities on behalf of the state, issuing a Site Certification Agreement that replaces local permits. These projects have primarily been located in the County's GMA Agricultural District, where the County prohibits energy

development projects. Heavy, light and unclassified zoning districts, through a conditional use (CU) process. Additional energy development has also occurred within the Hanford Site and industrial areas near Richland, which provide large tracts of land already designated for energy and industrial use. Other emerging energy technologies such as anaerobic digestors, small modular nuclear reactors, and battery energy storage systems may also factor into Benton County's energy landscape in the future. As energy development continues, careful planning is needed to protect agricultural lands, habitat and other critical areas, and rural character, consistent with the findings from the Energy Overlay Memorandum (*see* Volume II, Appendix J).

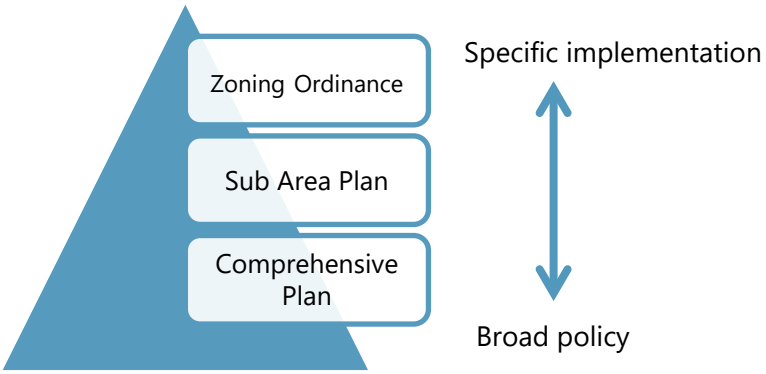
3.4 Sub Area Plans

The purpose of a sub area plan is to provide a framework for future decision-making for select and unique geographical areas within Benton County. These plans may regard areas with special features, such as shorelines that provide important functions and values or lands with exceptional soils and climate characteristics suitable for prime agricultural production, as valuable or unique for preservation, protection, or certain development. Sub area plans contain statements of guiding principles, recommendations for strategies to achieve desired goals and objectives, and a plan of action to guide future land use development decisions in the area. Sub area plans are prepared with substantial public involvement.

3.4.1 Hierarchy of a Sub Area Plan Document

A sub area plan document fits between the broad policies of the Benton County Comprehensive Plan and the Benton County Zoning Ordinance with specific implementation tools as shown in Figure 3-1 below.

Figure 3-1
Sub Area Plan



The following sub area plans are listed by their adopted title as found in the corresponding Benton County Planning Division files and are adopted by reference and incorporated as if fully set forth within.

3.4.2 Red Mountain American Viticultural Area Master Site Plan

The provisions of the Red Mountain AVA Master Site Plan (RM MSP; adopted by reference) represent many hours of effort by the Red Mountain Alliance and interested citizens who live and work or have a vested interest in the development of the area described by the RM MSP. Red Mountain's topography, soils, and solar aspect have made it suitable for viticulture, an important economic resource for the region.

The purpose of the RM MSP is to provide a "viticultural park" concept that reinforces the existing and future qualities of the Red Mountain AVA. The RM MSP and its provisions are advisory in nature and intended to guide future development of the Red Mountain site plan area.

3.4.2.1 How the Plan Is Organized

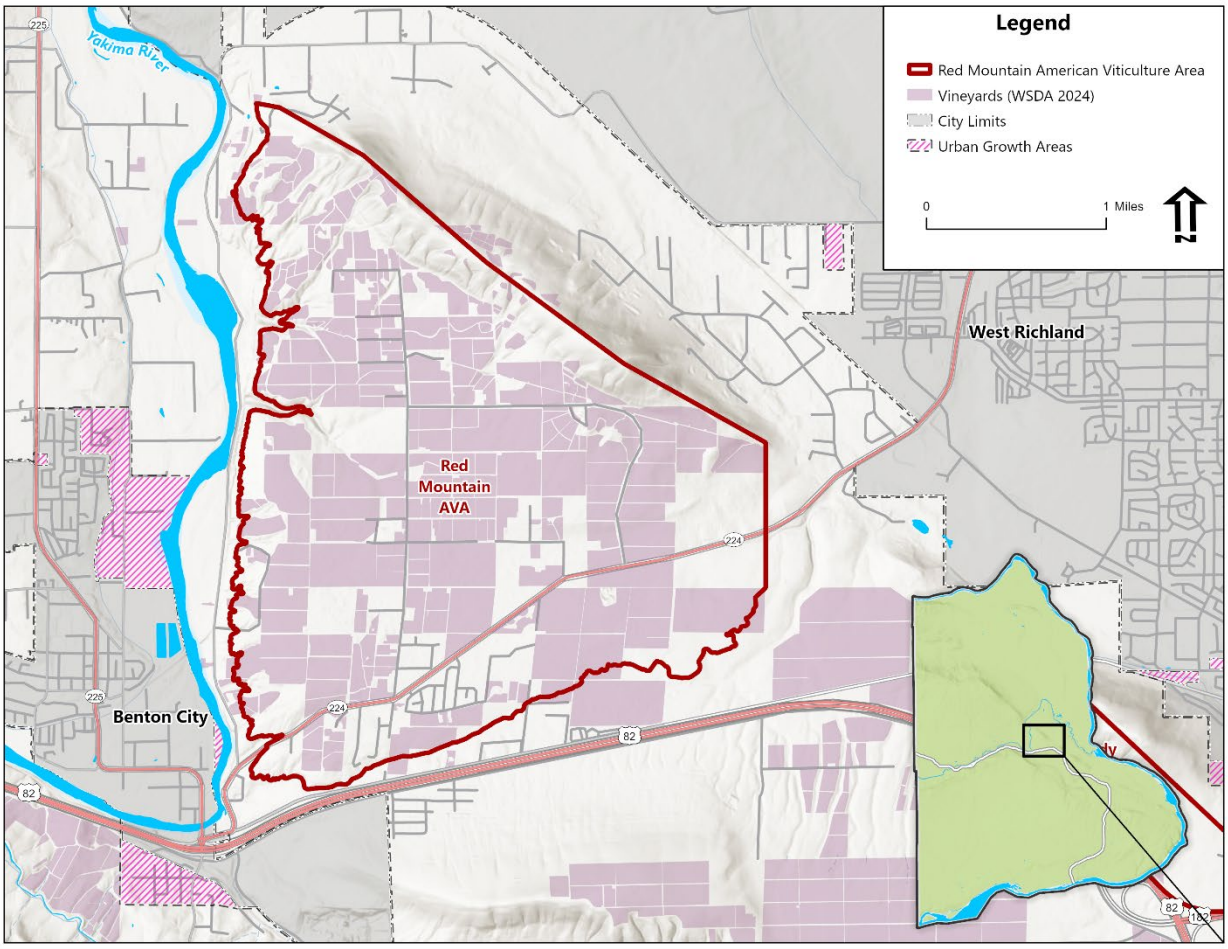
The RM MSP is divided into seven chapters that reflect the fundamental components of this Sub Area Plan. The chapters are as follows:

1. Introduction
2. Master Site Plan Elements
3. Visitor Projections
4. Design Guidelines
5. Steps toward Sustainability
6. Zoning
7. Next Steps

Each chapter refers to items and issues related to that category only. Endnotes and references are provided in Chapter 8, and an appendix follows.

The Red Mountain AVA Master Site Plan Map (RM MSP Map Figure 2-1) shows the boundaries of the RM MSP, the Red Mountain AVA boundary, existing vineyards and wineries, potential vineyards and wineries, existing roads, and other proposed infrastructure. The boundary of the Red Mountain AVA and existing vineyards are shown in Figure 3.2 below.

Figure 3-2
Red Mountain AVA Map



3.4.2.2 Land Use Designations

The land use designation in the current Comprehensive Plan shows the RM MSP area designated as GMA Agriculture, with the land bordering south of State Route 225 and land adjacent to the east side of Demoss Road designated for Rural Remote. Land characteristics include suitable soils, farmable topography, un-platted acreages of significant size, and existing or potential availability of water, suitable slope exposure, and the absence of existing land uses that are known to be incompatible with agricultural operations.

3.4.2.3 Proposed Uses

3.4.2.3.1 Red Mountain GMA Agricultural District

The area is planned to conserve and protect agricultural lands of long-term commercial significance as required by the GMA (RCW 36.70A) and more particularly to protect the unique agricultural

character and attributes of these lands on Red Mountain. This area is within the federally designated Red Mountain Viticulture Wine Appellation. Vineyards and wineries are the predominant uses within this area. The Red Mtn zoning district was created and implemented in December of 2018)

3.4.2.3.2 The Wine Village

Red Mountain's "Wine Village" will provide an interpretive center with welcoming, educational, recreation, and support functions. The Wine Village is designed to both welcome and introduce visitors to Red Mountain and prepare them for what they will see, experience, and enjoy, as well as offering other tourist-related support services. Allowed uses within the Wine Village include a visitor interpretive center, small restaurants, bistros, casual food shops, art studios and galleries, wine retail, antique shops, demonstration vineyards, wineries, gardens, and small lodging facilities. Under current planning law, these uses will most likely occur via an MPR designation.

3.4.2.3.3 Tourist Serving Area

In the southeast corner of the Red Mountain AVA, outside the AVA boundary and within the Rural Lands Five designation, the RM MSP identifies an important future entry way into the Red Mountain AVA area. A coordinated site-specific planning effort in this area is needed to provide a development plan that allows for a limited range of short-term “visitor serving” activities, recreational, commercial, and wine related conveniences for tourists and visitors to the vineyards and wineries of the Red Mountain AVA.

3.5 Countywide Planning Policies

Benton County and the five cities within it have jointly adopted a set of CWPPs (*see* Volume II, Appendix C), which form the framework for the preparation, implementation, and amendment of individual comprehensive plans. The CWPPs provide for integration and consistency among the County and city plans in terms of services, designations, and other elements as applicable.

The CWPPs include a uniform methodology to calculate the amounts of additional land needed by each city to accommodate the population growth projections provided by the OFM. Other CWPPs establish standards for selecting additional lands to be included within the UGAs and for joint county and city planning on lands within UGAs.

3.6 Expansion of Urban Growth Areas

There are two aspects that are important for UGA expansion: 1) meeting the required need for future land in urban areas and 2) maintaining low density land outside the UGA to enable logical and cost-effective expansion.

Within the Comprehensive Plan, four principal factors apply to future connections between cities and the County relative to the build-out of and expansion of UGAs. These include the availability of

vacant lands in the municipalities; urban densities within the cities and UGAs; appropriate sizing of UGAs compared to future population growth; and consideration of site planning that preserves rural lands outside of UGAs for future expansion.

For the 2026 update, Benton City and Richland have proposed to expand their respective UGAs. Benton City's UGA would be expanded to include nearly 55 additional acres in the west-central and southwest parts of the City. Richland would remove a portion of Badger Mountain from its UGA (146 acres) that will remain as public open space and add in three other areas – Harvest Ridge Addition (121 acres), Harvest Ridge Site/Kennewick School District Site (81 acres), and Dallas Road Recreation Center (190 acres), for a net UGA increase of 354 acres. (*See* Volume II, Appendices D-1 and D-2)

3.6.1 Total Vacant Land Within Benton County's Metropolitan Planning Area

The cities of West Richland, Richland, and Kennewick are contiguous. Some cities already have annexed unincorporated lands that are adequate to meet future demand. For instance, the City of Richland placed a significant amount of land within its UGA under the Urban Reserve land use category. West Richland also has extensive reserve lands within its city limits. Each City assesses their own land use demand based on vacant land and developable land to identify future needs before any UGA expansion is proposed.

The adoption of the County's Comprehensive Plan and the adoption of each of the cities' plans require that the expansion of urbanization, with its conversion of rural lands to urban uses, be an orderly, cost-efficient process, based on population projections and protection of rural neighborhoods and natural resource lands. The UGA process is intended to, and has, influenced a reduction of urban sprawl, increased annexation of unincorporated islands with the cities, and achieved greater cost effectiveness for development within UGAs.

3.6.2 Urban Densities within Cities and Their Urban Growth Areas

In response to market demands, the development of urban densities within UGAs is essential if the UGA is to function as a tool to achieve cost effective provision of urban services and to protect agricultural lands and the rural community outside of the UGAs. To achieve this, densities within the UGAs should be high enough and encourage infill of existing UGAs.

3.6.3 Objective Criteria for Determining When and How to Expand Urban Growth Areas

The CWPPs sets forth uniform criteria and methodology for calculating the amounts of land necessary in a UGA to accommodate projected population growth. The policies reflect

methodologies identified in current planning literature (as well as recent GMA Regional Hearings Board decisions) for identifying the appropriate size of UGAs relative to population projections. Other CWPPs direct how locations of new UGAs are to be selected to avoid rural communities and agricultural lands. Additionally, the Washington State Department of Commerce also provides guidance on UGA change proposals.

3.7 Population Projections for Benton County

From 2014 to 2024, the population in Benton County grew from 186,500 to 217,850 for a total increase of 16.8 percent. The 20-year projection (through 2046) for the total and unincorporated part of the County and each of the cities is provided in Figure 3-3.

Figure 3-3
Population Growth through 2046 in Benton County

Jurisdiction	2020 Population	2046 Population	Population Growth (2020-2046)
Benton City	3,479	4,985	1,506
Kennewick	83,921	108,989	25,068
Prosser	6,062	8,292	2,230
Richland	60,560	82,448	21,888
West Richland	16,295	26,387	10,092
Unincorporated	36,556	47,355	10,799
Total	**206,873**	**278,456**	**71,583**

Source: BERK, 2025 based on Commerce HAPT.

The latest population projections from OFM (2022), using the "middle" series estimates, indicate that Benton County can expect a population increase of 71,583 by 2046. This will result in a 20-year population of 278,456, which is an increase of 34.6 percent over the 2020 population of 206,873. The County will review the future growth trends and adjust population projections if necessary.

Approximately 18 percent of the total County population, or 36,556 people reside in the unincorporated area of Benton County. The 20-year OFM projection also indicates the unincorporated County population will grow to 47,355 persons in 2046. This will add 10,799 additional people in the next 20 years who are projected to seek housing in unincorporated areas of the County. This growth represents approximately a 30 percent increase over the current rural population. Growth projections effects on housing projections are provided in the Housing Element, Section 6.

4 Natural Resources Element

4.1 Introduction

This Chapter describes the physical and biological setting of the County, along with soils and agricultural, mineral and water resources. Critical areas (Wetlands, Critical Aquifer Recharge areas, Frequently Flooded Areas, Geologically Hazardous Areas and Fish and Wildlife Habitat Conservation Areas) within the County are identified, including their "functions and values," and the current trends associated with regulatory and voluntary protections for these resources.

4.2 Natural Setting of Benton County

The natural setting of Benton County typifies that of the larger Columbia Basin area. The County is located in southeastern Washington and encompasses approximately 1,715 square miles. The Columbia River borders the north, east, and south sides of the County and the Yakima River intersects the middle of the County, flowing from Prosser to its confluence with the Columbia River at Richland. The County contains portions of three Water Resource Inventory Areas (WRIAs), including the eastern portion of the Lower Yakima Watershed (WRIA 37), the Rock-Glade Watershed (WRIA 31), and the Alkali-Squilchuck Watershed (WRIA 40).

4.2.1 Climate

Benton County is located in the central part of the Columbia Basin, which is surrounded by the Cascade and Rocky Mountain ranges to the west and east, respectively. These ranges have a pronounced effect on the region's climate, which is dry and arid. The growing season in the region is approximately 185 days from mid-April to mid-October, with high temperatures exceeding 100 °F during the summer months and some years minus 20°F or colder for short spells during the winter months. Mean annual precipitation in the area ranges from 5 to 10 inches, with mean annual precipitation levels ranging from 10 inches or greater in discrete areas in Horse Heaven and Rattlesnake Hills (*see* Volume II, Appendix A: Map Folio, Figure 6 – Average Annual Precipitation Map). Approximately 70 percent of the precipitation in the region occurs between November and April with intermittent thunderstorms and other precipitation events occurring between March and October. Winter season snowfall accumulation ranges between 4 to 21 inches during the winter months, with snow melt and/or river icing during the winter and spring seasons occasionally causing flooding of the Yakima River.

4.2.2 Topography

The topography of Benton County is characterized by basin and valley lowlands, separated by the upland plateaus and ridges of the Yakima Folds Belt. The landscape is the product of seismic upheavals, volcanic eruptions, magmatic flows, glacial epochs, and cataclysmic floods. The legacy of

this history is the present geologic landscape that includes the Hanford area, productive soils on the flanks of anticlinal ridges, the Horse Heaven plateau, Rattlesnake Hills, Saddle Mountain, water resources of three major rivers, and the basaltic vertical columns and outcrops.



Exposed basalt layers near Benton City

A thin layer of biology has adapted to the area's geologic base. The layer is relatively sparse and fragile on the dry uplands of shrub-steppe and bunch grasses, but diverse and resilient along reaches of rivers, tributaries, and creeks that flow throughout the County. From north to south, the major topographic features of Benton County are as follows:

Pasco Basin. A basal plane that comprises most of what is now the Hanford Site. Topography is flat to hilly, with elevations ranging from around 300 feet in the east to nearly 1,000 feet at the base of Rattlesnake Mountain.

Rattlesnake Hills. This segment of the Yakima Folds separates the Pasco Basin from the Yakima Valley. The ridge extends in a southeasterly-northwesterly alignment from its beginning in eastern Yakima County to a point where it merges with the Horse Heaven Hills south of Finley. Rattlesnake Ridge is discontinuous through the middle of the County where it has been perforated by the Yakima River (resulting in Red, Candy, and Badger mountains) and contains Rattlesnake Mountain, the highest unforested “peak” in Washington State. At 3,629 feet, Rattlesnake Mountain is also the highest point in Benton County.

Yakima River. The river bisects the County into north and south portions and is responsible for much of the varied topography of central Benton County. The river has been cutting the valley sediments in this syncline that separates Rattlesnake Ridge from the Horse Heaven Hills for tens of thousands of years. The present valley floor ranges from about 300 feet above sea level, at its confluence with the Columbia River at the City of Richland, to around 700 feet at the Yakima County line.

Horse Heaven Hills. This plateau constitutes the southern half of Benton County. The elevations of the Horse Heaven Hills rise from the County's low point of 265 feet near Crow Butte to 1,600 to 2,200 feet along the ridgeline which overlooks the Yakima Valley and the Badger Coulee. The Horse Heaven Hills are unique among the Yakima Folds: it is the southern-most and longest running ridge in the system at some 60 miles; it is the most severely "lop-sided" of the ridges, becoming more of a monocline than an anticline in areas; and it takes a definitive, 90 degree turn to the south at Kiona, which is the geographic center of the County. The ridgeline is highest at Jump Off Joe Butte south of Kennewick, and the plateau slides southward toward the Columbia River.



Horse Heaven Hills near Prosser

4.3 Soils and Agricultural Resources

Benton County has highly productive agricultural soils with over $950 million generated by Benton County crops and livestock per year (BentonFranklinTrends.org 2022). Designated agricultural resource lands make up a majority of the County. (*See* Volume II, Appendix A: Map Folio, Figure 4 Proposed Land Use Designations Maps and Appendix L Agricultural Resource Land Reclassification Memorandum.) The soils in Benton County are generally suitable for both agriculture and structural development, with localized constraints relating to slope, geo-hydrology, and pockets of sandy soils and fines. Soils in the region are very susceptible to wind and water erosion once stripped of their natural cover. However, in undisturbed condition, the indigenous shrub-steppe and bunch grass vegetative cover has adapted to hold basin soils in place. When stripped of natural cover, prevention of erosion requires the application of deliberate and aggressive management techniques.

4.3.1 Agricultural Soils

Agricultural lands in Benton County are primarily used for dryland agriculture (48 percent), with the remaining areas used for irrigated agriculture (37 percent) and rangelands (15 percent; *see* Volume II, Appendix G). The primary crop by acreage in Benton County is dryland wheat and wheat fallow (*see* Volume II, Appendix G), which is generally planted higher-quality soils with sufficient natural precipitation. High-value irrigated crops such as vegetables, potatoes, and grapes are often grown on soils that require more management or receive lower rainfall, but have available water supplies generally, but with some notable localized exceptions, the addition of water and fertilizer to soils in Benton County will result in productive agriculture. The principal exceptions are on steep erosive slopes, in pockets of very sandy soils, or where near surface basalt formations are accompanied by thin soils and poor hydrologic conditions.

Agricultural lands of long-term commercial significance are located throughout Benton County. These lands are characterized in RCW 36.70A.030(10) as land that "includes the growing capacity, productivity, and soil composition of the land for long-term commercial production, in consideration with the land's proximity to population areas, and the possibility of more intense uses of the lands." As described in the Addendum to Agricultural Lands Reclassification Memorandum (*see* Volume II, Appendix G, these lands are determined by assessing a variety of factors including, but not limited to, classification of prime and unique farmland soils, proximity to urban areas, proximity to markets, and other factors. Areas containing soils of long-term commercial significance are described in more detail in Section 3: Land Use Element. Volume II, Appendix A: Map Folio, Figure 7 – Non-Irrigated Soil Capability Classification Map and Figure 8 – Irrigated Soil Capability Classification Map provide a generalized depiction of the soil types and their locations within Benton County.

Figure 9 in Volume II, Appendix G shows lands having a Prime Farmland designation, including farmland of statewide importance, farmland of unique importance, and prime farmland if irrigated.



Agricultural pastureland near Whitstran

4.3.2 Soil Construction Limitations

Development in Benton County is generally not constrained by soil types, with few exceptions. For the purposes of structural development, soil limitations and development in geologically hazardous areas are addressed in the County's CAO (BCC Title 15). The ordinance requires that developments avoid or maintain setbacks from potentially unstable areas or adequately assess the degree of instability and locate, design, and engineer the development to address the level of hazard.

Soil ratings developed by the Natural Resources Conservation Service are used to indicate the potential degree of limitations for different types of development on different soil types. For example, a soil type might be rated as having slight, moderate, or severe limitations for the development of roads or dwellings. A variety of criteria are used in making such determinations, including such factors as depth to bedrock, shrink-swell potential, permeability, and slope.

It should be noted that even a "severe" rating does not preclude construction from occurring. Rather, it means that the potential limitation should be recognized and that the construction techniques employed may have to take the special soil conditions into consideration. In all cases, Natural Resources Conservation Service emphasizes that an on-site inspection or soil survey would be necessary before it can be determined for certain if such soil characteristics are present.

4.3.3 Current Trends

Agricultural production is expected to continue to be a major activity and to play a vital role in the Benton County and Washington State economies. Population growth in the region will require proper management of soils and agricultural resources to protect them from development-induced erosion, contamination, and other impacts.

4.3.4 Future Considerations

Benton County currently requires a 150-foot setback for residential dwellings from agricultural districts to protect agricultural lands of long-term commercial significance and to avoid future land use conflicts. Because of their importance to the local and state economy, agricultural lands of long-term commercial significance should continue to be protected from future development. Additionally, the implementation of the VSP, a new, non-regulatory, incentive-based approach that balances the protection of critical areas on agricultural lands, while promoting agricultural viability, will encourage conservation practices such as erosion control measures that will protect and enhance agricultural soils.

4.4 Mineral Resources

4.4.1 Existing Conditions

In Benton County, mineral resources are aggregates (i.e., sand and gravel deposits and crushed quarry rock). Mineral resource areas in Benton County include lands with commercially viable mineral resource deposits. Most of the mineral resource areas in Benton County are located along the Columbia and Yakima rivers. Mineral resource lands are required to be protected under provisions of the GMA. Constraints for the extraction of these resources typically include incompatible land uses (e.g., residential or commercial) on adjacent lands or biologically sensitive areas.

The major use of aggregate resources is for urban and rural residential developments. Construction of both dwellings and road networks consumes substantial amounts of sand and gravel as well as quarried and crushed basalt, which is used in local landscaping. The Mineral Resource lands scattered throughout the County represent an important economic opportunity because sourcing these materials locally is more cost effective than importing them from other regions.

At the Hanford site, active borrow pits provide mineral resources used for remediation, restoration, and closure activities (DOE 2015). State law requires that such mineral resources of long-term commercial significance be protected from having their future exploitation affected by adjacent developments that may be incompatible with the mining and processing activities associated with these resources on the site.

4.4.2 Current Trends

Mineral resources in Benton County will continue to be responsibly extracted from commercially viable sites to support local business and development. Mineral resources at the Hanford site will continue to be used to support ongoing remediation, restoration, and closure activities. Based on DNR data, Benton County has 26 active permits for surface mining of aggregate resources, including rock, stone, sand, and gravel. These resources supply the concrete, asphalt, and construction industries, as well as the public transportation sector, including WSDOT and Benton County Public Works.

4.4.3 Future Considerations

The principal considerations for the future use of these resources are: i) the identification of additional sites; and ii) providing the owners of known commercially viable sites the opportunity to apply the provisions of the County's Mineral Resources Protection Ordinance in BCC Title 15 to the sites. Such protection can prevent the sites from having their future exploitation compromised by the location of incompatible land uses on adjacent lands. Mineral resource extraction on the Hanford Site will follow the U.S. Department of Energy *Hanford Industrial Mineral and Conservation Plan* (2020). DNR is completing additional mapping of statewide aggregate resources to provide more detailed information on the extent of resources, but the data is not yet available for Benton County. This information will be incorporated into Mineral Resource Lands designations as available. Water Resources

4.5 Water Resources

4.5.1 Introduction

Benton County includes portions of three major WRIAs: Rock-Glade Watershed (WRIA 31), Lower Yakima Watershed (WRIA 37), and Alkali-Squilchuck Watershed (WRIA 40). Water resources are a key component to maintaining a vibrant and growing county. As with much of the West, water in Benton County serves competing, and at times, conflicting uses. Securing certainty in the water supply is a major issue for the County for the foreseeable future. (s*ee* Volume II, Appendix A: Map Folio, Figure 9 – Water Resources Map).

Water is one of Benton County's most valuable natural resources. Reliable access to surface and ground water is necessary for household uses, irrigated agriculture, recreation, commercial and industrial development, and for fish and wildlife. Today, irrigated agriculture is the biggest user of water in the County, with supplies coming from the Columbia and Yakima rivers as well as from groundwater. The County's water resources also provide benefits for the natural environment and aesthetic amenities that contribute to the ambiance and lifestyle of the area. Water is a limited resource under numerous competing and changing demands, but improved management of the water resource system will allow for managed growth.



Irrigated agriculture in Benton County
Source: Washington State Department of Ecology

4.5.2 Existing Conditions

4.5.2.1 Surface Water

Benton County is located where the Snake and Yakima rivers flow into the Columbia River. Vast quantities of water, approximately 191,000 cubic feet per second or over 100 billion gallons each day, flow past Benton County on the way to the Pacific Ocean. This river system serves multiple uses, including power generation, fisheries, endangered species habitat, agriculture, and recreation. The system is culturally relevant for and connected to native and non-native Americans of the Pacific Northwest. The purpose of the following policies, however, is to focus on the needs of Benton County residents specifically.

Within the County, approximately 330 miles of shorelines meet the jurisdiction criteria of the Benton County SMP. The total acreage of upland shoreline area regulated by the SMP is approximately 15 square miles (The Watershed Company and BERK Consulting 2012). Critical areas within shoreline jurisdictions are also protected under the Benton County SMP.

The Columbia and Yakima rivers and their tributaries and creeks are the most prominent water resources within Benton County. Both rivers are classified as Shorelines of Statewide Significance by Washington State. The Columbia and Yakima rivers are directly related to critical area functions

throughout the County as a water source for critical aquifer recharge areas and provide floodplain, wetland, and fish and wildlife habitat. Within the central Columbia Basin's desert environment, it is estimated that up to 75 percent of indigenous wildlife species depend upon these riverine corridors for cover and other sustenance essential to their lifecycles.

A major overriding issue for both the Columbia and Yakima rivers is the survival of salmon and steelhead. The principal impacts to salmonids are:

- Water quality and habitat conditions within watersheds and estuaries
- Passage conditions and predation concerns at diversion dams
- Hydroelectric dams and pools on the Columbia which have an impact on out-migrating smolt mortality
- Fishing pressures in the ocean as well as the local river system

Pressures on salmon and other aquatic species may be further exacerbated as increased variation in both ocean and freshwater hydrologic conditions occurs from changes in climactic conditions.

Several anadromous species within the river system are listed as threatened, endangered, or candidates under the federal Endangered Species Act. Recovery efforts are ongoing to help reverse these trends, with many projects being implemented in both the Yakima and Columbia rivers to help improve passage, flow, and habitat conditions.

4.5.2.1.1 Columbia River

The Columbia River bounds the north, east, and south sides of Benton County, flowing through the Alkali-Squilchuck and Rock-Glade watersheds. Besides the Yakima River, tributaries within the County are primarily small, ephemeral streams that flow through confined canyons. In the mid-Columbia region, the Columbia River hydrology is regulated by dams, with the highest flows occurring between April and June. The McNary Dam, located along the County's southern boundary, is operated by the U.S. Army Corps of Engineers for navigation, hydroelectric power generation, recreation, and irrigation (The Watershed Company and BERK Consulting 2012).



Columbia River
Source: Washington State Department of Ecology

4.5.2.1.2 Yakima River

The Yakima River within the County flows east to west from the City of Prosser to its confluence with the Columbia River located on the southeast side of the City of Richland. Most of the streams within

the Yakima River watershed originate at elevations where annual precipitation is higher. Five major reservoirs and one smaller reservoir (Clear Creek) operated by the U.S. Bureau of Reclamation are located upstream of Benton County in the upper Yakima and Naches watersheds. These reservoirs contribute to recent higher summer flows in the Yakima River compared to historical conditions, particularly in the upper Yakima. Lower Yakima flows are often lower in the summer than historical conditions, primarily due to irrigation diversions. Backwater effects from the McNary Dam on the Columbia River limit channel migration on the Yakima River within Benton County (The Watershed Company and BERK Consulting 2012).


Lower Yakima River near Prosser

The current condition of the Yakima River, especially in its lower reaches in Benton County, is degraded and poor due to high ambient air temperatures, lower summer flows, non-point source pollution, and areas of higher water temperatures, all of which are functionally related. This condition jeopardizes both the native and anadromous fisheries, it threatens the long-term survival of the agricultural economy, reduces recreational opportunities, may lower real estate values of river front property, and limits the utility of the river for municipal and industrial uses.

4.5.2.2 Groundwater

Benton County is located in the central portion of the Columbia River flood basalt area, which includes basalt flow layers such as the Saddle Mountain, Wanapum, and Grande Ronde basalt layers (EA West 2017). The Columbia River basalts of the Columbia Plateau provide a locally important aquifer system, along with the unconfined, alluvial aquifers primarily along rivers and streams in the County, but also in sediments on top of the upper basalt layers. Groundwater production occurs in the sediments and the upper and lower basalt layers, which can often extend several hundred feet below ground.

Today, the reduction in flood frequency and floodplain connectivity resulting from reservoir management and diversion of irrigation water has altered the timing and character of streamflow and groundwater recharge through the Yakima watershed (The Watershed Company and BERK Consulting 2012). Additionally, nitrate groundwater contamination is a documented public health issue in Benton County (EA West 2017). The potential contaminant sources and pathways on the

County's groundwater supply have not historically been well characterized nor have their effects been fully understood. As a result, the Benton Conservation District has developed the *Benton County Groundwater Nitrate Monitoring Study* "to help develop an essential foundation for groundwater quality restoration in Benton County with regard to elevated nitrates" (Benton Conservation District 2015). This study was followed up with the 2017 *Groundwater Nitrate Characterization Report* (EA West), which includes a description of geology, hydrogeology, and elevated nitrate risk areas throughout Benton County, along with potential sources and suggested management and mitigation actions. Finally, this work led to the development and adoption of a Benton County Groundwater Nitrate Community Action Plan in 2018. This action plan includes the current understanding of the nature of the groundwater nitrate problem and sources that may contribute nitrate to groundwater in Benton County, recommended management strategies, and a process to implement the strategies and monitor their progress. The Action Plan contains specific goals used to guide the implementation of nitrate management strategies (Benton CD 2018).

4.5.3 Current Trends

4.5.3.1 Surface Water

Current trends regarding protection of rivers and creeks continue to improve. Regulatory requirements such as the GMA, Shoreline Management Act, and federal and state water quality laws require protection of these resources. Problems are recognized as essentially "watershed-wide," cumulative, and more complex than can be dealt with by the State unilaterally, or by individual jurisdictions, even if they "coordinate" efforts. Efforts continue both for the Columbia and Yakima river basins to address water management to meet in and out of stream needs and manage hydropower operation. The Columbia River Treaty renegotiations may further modify operations on the Columbia River, and this could impact river uses and how flow is managed for fisheries and out of stream water uses. Additionally, climatic variation could affect the levels of snowpack in the upper Columbia River and, in particular, in the lower elevation mountains of the Yakima River, and the associated timing of runoff, further potentially impacting the amount of water available for fish, farms and cities in the spring and summer months, and existing and future drought resiliency.

Required in the Yakima River Basin is an integrated plan covering all aspects of water and land use that potentially impacts water quantity and quality. In 2013, the U.S. Bureau of Reclamation signed a Record of Decision for the Yakima Integrated Plan, a 30-year, $3.8 billion program to restore the Yakima River System and accommodate agricultural, municipal, and domestic needs (USBR 2013). The Yakima River Basin occupies portions of Benton, Kittitas, Klickitat, and Yakima counties. Since that time, state and federal funding has been obtained to implement several projects to improve conditions within the Yakima River Basin under the Yakima Integrated Plan.

4.5.3.2 Groundwater

Regionally, the trend is one of declining ground water levels in lower aquifers and declining water quality in both the upper and some of the lower aquifers. This regional phenomenon is largely attributed to expansions in the amount of acreage under irrigated agricultural production, along with other anthropogenic factors. Specific areas are identified and evaluated in the 2017 study by EA West on groundwater conditions in Benton County and the associated Groundwater Nitrate Community Action Plan (Benton CD 2018).

4.5.4 Future Considerations and Water Resource Management

The protection and management of water resources is expected to continue under the County's CAO, SMP, and the VSP, along with regional management plans including the Yakima Integrated Plan and salmon recovery plans. Implementation of watershed-level management programs such as the Yakima Integrated Plan and the Rural Water Supply Program will help to address water supply issues in the lower Yakima, particularly during drought conditions, and improve flows and habitat conditions for fish.

The purpose of the water resource guiding principles, goals, and policies in this Comprehensive Plan are to guide Benton County as it interacts with the federal government, Washington State, external local government agencies, and residents throughout Benton County. The principles and policies herein will provide a guide for Benton County elected officials and staff in addressing water and water-related responsibilities and issues affecting Benton County.

It is the intent of Benton County to protect the quantity and quality of water resources for the many uses that make Benton County a desirable place to live, now and in the future.

4.5.4.1 Guiding Principles

Following are the guiding principles and beliefs the County will consider in addressing water resource issues:

1. Support and promote sustainable water resource management. Sustainable water resource management will allow for the preservation of current economies, population growth with improved quality of life, and future economic expansion and diversification, all while protecting the quality and quantity of water necessary to support and enhance native fish and wildlife.
2. Use water resources to promote economic and social well-being in concert with reasonable environmental objectives. There must exist a realistic balance among water use benefits and economic costs.
3. Focus on improving water resource management at all jurisdictional levels by supporting the efforts of municipal and special purpose governments within Benton County and a legislative agenda at the federal and state level. Though limited in some geographical areas, water resources physically exist within most areas in Benton County to meet current and future needs.

Effective water management and innovative strategies are required to allow beneficial use of these water resources.

4. Intervene in state and federal decision-making processes as required to promote the best interests of the citizens of Benton County. This intervention may include policy, planning, administrative, and legal processes.
5. Support sustainable water resource management in rural and municipal areas and take a leadership role in unincorporated areas. Work with municipalities to develop joint standards in unincorporated UGAs.
6. Maintain policies that support the belief that a water right is a property right.
7. Develop County regulations and policies in full consultation with local governments that support federal and state regulations where they meet the needs of the local population and municipalities.
8. Support securing long-term, sustainable water supplies sufficient to realize the build out of the land uses designated in the Comprehensive Plan as well as the Hanford Comprehensive Land Use Plan.
9. Maintain good working relationships with water users upstream and downstream from Benton County.

4.5.5 Focus on the Yakima River Basin

4.5.5.1 Yakima River Basin Water Rights

A large portion of the Benton County irrigated agriculture within the Yakima River Basin, including both the Kennewick (KID) and Roza (Roza) irrigation districts, receives irrigation surface water through the U.S. Bureau of Reclamation's Yakima Project. Roza and KID have 1905 water rights that are junior and subject to pro-rationing in droughts and other low water years. In years of drought these supplies are curtailed to an amount that is based upon total water supply available. Roza only received 47 percent of its supply in the 2015 drought, and KID also had a reduced supply. Additional droughts have occurred in recent years, also reducing water supplies at various levels. These reduced supplies can have significant impacts on crops and the regional economy.

The Yakima River Basin has been involved in a water rights adjudication process for more than 40 years. The adjudication and other state and federal court decisions have determined that water supply in the Yakima River Basin is over appropriated. Ecology settled with the U.S. Bureau of Reclamation and the Yakama Nation in the late 1990s over proposed groundwater permits in the Blackrock area and Rattlesnake Ridge. In September 2011, the U. S. Geological Survey released the final report of a 12-year, multi-million-dollar study confirming that some groundwater and surface water are directly connected, which means some groundwater withdrawals have the potential to impair senior surface water rights.

Ecology, in cooperation with the U.S. Bureau of Reclamation and the Yakama Nation, has determined that groundwater management in some areas may need to occur in order to protect senior water rights, flows for fish, and economic development. Ecology has stated they will seek solutions that address uncertainty and exposure faced by existing post-1905 groundwater users. In seeking water management solutions, Ecology will build upon the broad-based support for the Yakima Integrated Plan (Ecology 2017).

4.5.5.2 Yakima River Basin Integrated Water Resource Management Plan

The Yakima Integrated Plan (Ecology and USBR 2013) was developed by a diverse Work Group made up of tribal, federal, state, local, private, and nonprofit entities to address a variety of water resource and ecosystem problems affecting fish passage and habitat and agricultural, municipal, and domestic water supplies. The Yakima Integrated Plan provides a balanced approach to address water shortages through increased water storage, enhanced water conservation, water marketing, and better use of existing infrastructure. The Yakima Integrated Plan also improves the overall ecological integrity of the Yakima River Basin by protecting and enhancing riparian and headwaters habitat, providing fish passage at reservoirs, and making targeted land acquisitions on a willing-seller basis.

The Yakima Integrated Plan includes seven elements:

1) reservoir fish passage
2) structural and operational changes to existing facilities
3) surface water storage
4) groundwater storage
5) habitat/watershed protection and enhancement
6) enhanced water conservation
7) market reallocation

Benton County supports the seven elements of the Yakima Integrated Plan and efforts by Kennewick Irrigation District and Roza Irrigation District to secure water supply during drought conditions to reduce drought impacts. The County supports other efforts in the Yakima River Basin and in the lower Yakima River to improve water supply, flow, and habitat conditions, including improving water quality.



Prosser Dam on the Yakima River, where fish passage improvements are being planned

4.5.5.3 Addressing Exempt Wells to Meet Long-term Growth Needs

The County recognizes the need for developing and implementing a long-term strategy for addressing permit exempt wells needed to support rural development consistent with State law (RCW 19.27.097, RCW 58.17.110, and others), meet the goals of the Comprehensive Plan and Yakima Integrated Plan, and ensure future domestic water supplies (see Section 3.7 for Population Projections) are both physically and legally available for water withdrawal.

Demand for water to serve the County's growing urban and rural areas is projected to significantly increase. Since surface waters within the Yakima River Basin are over appropriated, dependence on groundwater for domestic uses is likely to continue. To sustain growth, residents of Benton County must meet the ongoing challenge of protecting and managing our water resources.

It is understood that some surface and ground water in the Yakima River Basin are hydrologically connected. Rural domestic water supply is generally provided from groundwater sources (i.e., private wells). The withdrawal of water from groundwater sources hydrologically connected to surface water may have an adverse impact on senior water rights established before and including 1905.

4.5.5.3.1 Exempt Wells Legal Framework

RCW 90.44.050 provides for the supply of rural domestic water through the use of "exempt wells," which can pump up to 5,000 gallons per day for residential use. The permit well exemption also allows pumping of 5,000 gallons per day for industrial use, 5,000 gallons per day for irrigation up to half an acre, and an unlimited amount for stock water purposes. Permit exempt groundwater withdrawals do not require a water right permit. However, to the extent the groundwater is

beneficially used, the water user withdrawing groundwater under the exemption establishes a water right that enjoys the same privileges as a water right permit or certificate obtained directly from Ecology. Though such withdrawals are “permit exempt,” they are still subject to Washington State law regarding the seniority of water withdrawals. Water use of any sort is subject to the "first in time, first in right" clause, originally established in historical western water law and now part of Washington State law. This means that a senior right cannot be impaired by a junior right. Seniority is established by priority date–the date an application was filed for a permitted or certificated water right or the date that water was first put to beneficial use in the case of claims and exempt groundwater withdrawals. Although exempt groundwater withdrawals don’t require a water right permit, they are subject to state water law.

In some instances, Ecology has had to regulate, stop, or reduce groundwater withdrawals when they interfere with prior or “senior” water rights, including instream flow rules. Recent state court decisions on the requirements of the GMA and County land use plans have resulted in a duty for Benton County to ensure that water for development is legally and physically available.

Closure of the portions of the Yakima River Basin to exempt well construction has already occurred in Kittitas County, which in turn has had effects on the development patterns and a large effect on the value and marketability of legal lots which can now only be developed with the use of a mitigation program for exempt wells operated by Kittitas County. Benton and Yakima counties face similar risks. Benton County is committed to taking the necessary steps to secure future domestic water supply and associated mitigation for projected rural population growth.

4.5.5.4 Rural Water Supply Program

Benton County understands that groundwater withdrawal has effects on Yakima River Basin senior water rights, including the Yakama Nation Water right for protecting fish. Effects of future groundwater withdrawals within the Yakima drainage on senior water users and habitat conditions are being addressed through the County’s Rural Water Supply program effective in 2020. The program was developed in coordination with Ecology, the Yakama Nation, the U.S. Bureau of Reclamation, and stakeholders in the County and Yakima River Basin.

The Benton County Rural Water Supply Program was established to provide mitigation for any new residential use within the Mitigation Area (a portion of the Lower Yakima Watershed known as WRIA 37, as shown on the official Benton County Mitigation Area Map) in the form of acquiring senior water rights in order to offset groundwater use and managing the metering of wells. To date the County has acquired 425 acre-feet of senior water rights for the Benton County Water Bank.

Applicants for a subdivision/short plat or a new building permit for a new dwelling unit within the mitigation area are required to purchase a mitigation certificate for each proposed lot (of a

subdivision/short plat) or building permit. Building permit applicants for a new dwelling unit must also purchase and install a meter for their residential well and report water use.

4.5.6 Columbia River

The County will comply with the 2018 law passed by the Washington State Legislature addressing rural exempt well development for the portion of the County that drains to the Columbia River.

4.6 Critical Areas

Critical areas include ecosystems, landforms, or processes that are protected or enhanced under the GMA for the biological or physical functions and values that they provide. Critical areas are located throughout Benton County.

According to RCW 36.70A.030, the five critical areas protected by the GMA include:

- Wetlands
- Critical Aquifer Protection Areas
- Frequently Flooded Areas
- Geologically Hazardous Areas
- Fish and Wildlife Conservation Areas

Many critical areas provide habitat for species listed as threatened, endangered, sensitive, or candidates by the federal or state government. Figures 9 through 14 of Volume II, Appendix A: Map Folio depict the general location of critical areas in Benton County. The key functions and values provided by the five critical areas in the County can be summarized into the following four major functions: 1) water quality; 2) hydrology; 3) soil; and 4) habitat. Each critical area provides one or more of these key functions and values, which are summarized in Table 4-1.

Table 4-1
Critical Area Functions

Critical Areas	Key Functions			
	Water Quality	Hydrology	Soil Health	Habitat
Wetlands	●	●		●
Critical Aquifer Recharge Areas	●	●		
Frequently Flooded Areas	●	●	●	●
Geologically Hazardous Areas (Erosion)	●	●	●	●
Fish and Wildlife Habitat Conservation Areas	●	●	●	●

The following includes a description, current trends, and future considerations for each of the critical areas. Section 4.6.6 includes additional information on the VSP and the intersection of critical areas with agricultural lands.

4.6.1 Wetlands

4.6.1.1 Existing Conditions



Wetland habitat along the Yakima River near Benton City

Wetlands in Benton County are concentrated within the floodplain of the Yakima and Columbia rivers. Similar to stream flows, irrigation drainage may contribute to wetland conditions in some areas where wetland conditions did not historically occur. Many wetlands have formed adjacent to irrigation conveyance systems and in low-lying areas where irrigation occurs (*see* Volume II, Appendix A: Map Folio, Figure 10 – Streams, Waterbodies and Wetlands). A wetland is considered artificial, and not subject to state or local regulation as a wetland, only if it meets both of the following characteristics:

- Intentionally created
- Formerly non-wetland (upland) site

In irrigated agricultural areas, wetlands can result from localized conditions (e.g., a leaking irrigation ditch) or from a region-wide rise in groundwater resulting from regional irrigation projects. These types of wetlands are regulated by state wetland law and cannot be filled or drained without appropriate permits and mitigation (Ecology 2010). However, if the irrigation practices that led to the incidental wetland creation are changed (for example through implementation of water conservation practices), and the wetland dries up and no longer performs wetland functions, then no mitigation is required (Ecology 2010).

4.6.1.2 Current Trends

The current regulatory trend is for the protection of wetlands as a resource vital to sustaining biological productivity and water quality.

Within Benton County, the most noticeable trend is the gradual loss of artificial wetlands resulting from water conservation projects by irrigation districts and more efficient irrigation practices by farmers. Though there is no clear evidence of it to date, if the result of these efforts is to leave more water in the rivers as instream flow, then the natural wetlands along the riverine corridor should benefit.

4.6.1.3 Future Considerations

By both policy and ordinance, the Comprehensive Plan protects natural wetlands from non-agricultural developments. It also protects previously unfarmed wetlands from new agriculture. It is expected that the database for wetlands within the County will be improved over time and that such resources will be protected consistent with the requirements of state law and local interest.

4.6.2 Critical Aquifer Recharge Areas

4.6.2.1 Existing Conditions

The Columbia River basalts of the Columbia Plateau provide a locally important aquifer system. Within the lower Yakima River Basin, from the western County border east to Horn Rapids, the mainstem channel of the river flows through a relatively narrow inner valley of basalt bedrock covered with an unknown thickness of coarse alluvium. Downstream from Horn Rapids, the river flows through the broad alluvial fill of the Columbia River.

Within Benton County, the majority of wells and wellhead protection areas (*see* Volume II, Appendix A: Map Folio, Figure 12 – Critical Aquifer Recharge Areas Map) are concentrated along the Yakima River Valley and in the incorporated cities of Richland and Kennewick. Other Group A water system wells are located near irrigated lands in the southern portion of the County near Paterson. Studies have found nitrate concentrations exceeding drinking water quality standards in shallow wells in eastern and southern Benton County (WSIGC 1996; Ecology 2016). Based on the number of wells and the percentage of wells exceeding 10 milligrams per liter of nitrate, Ecology identified eastern Benton County as one of the top ten nitrate priority area candidates for improved water management within Washington. Actions implemented under the VSP, along with other management measures can help to prevent further degradation and potentially improve conditions.

4.6.2.2 Current Trends

Nitrate contaminations occur principally in upper aquifer wells drilled in the lower lying areas of the County. The spatial correlation between elevated concentrations of nitrates in groundwater and

irrigated lands indicates that the major source of contamination is applied fertilizers on irrigated lands including crops, lawns, golf courses, and parks.

A complicating factor in the nitrate picture is evidence that suggests currently seepage from irrigation district canals actually serves to dilute what would otherwise be higher nitrate levels within groundwater (USGS 1993). As federal and State sponsored conservation projects reduce or eliminate this seepage, nitrate concentrations in the upper aquifer may actually rise.

4.6.2.3 Future Considerations

The protection and management of critical aquifer recharge areas in and around Benton County should continue to reduce pollution and maintain water storage levels for future use.

Benton Conservation District is also leading efforts to improve groundwater conditions through additional management measures. The Conservation District has been collecting sampling data from approximately 200 groundwater wells throughout the County to identify the influence of potential nitrate sources or nitrate dilution sources, as well as seasonal fluctuations in nitrate levels (Benton Conservation District 2015). These efforts are helping the County to build a more effective and targeted management program, including an established stakeholder group, a public health campaign and outreach activities, and implementing groundwater quality improvement efforts countywide, as documented in a 2017 report (EA West) and described in Section 4.5: Water Resources.

4.6.3 Frequently Flooded Areas

4.6.3.1 Existing Conditions

There are several types of landforms in Benton County that are subject to flood hazards. Most notably, the low-lying lands along the Yakima River flood significantly under varying winter and spring conditions. However significant flooding and flood damage can occur off the river as well in the Yakima's tributary streams, "dry" canyons, and other natural drainage features throughout the County, which are susceptible to "flash floods" or heavy run-off from snow melt.

The entirety of the Yakima River is mapped as a floodplain and floodway. The floodplain of the Yakima River is widest downstream (east) of Benton City. Floodplains are also mapped along the Columbia River, particularly in the northwest corner of the County, along the southeast near Kennewick and Richland, and along the south side of the County. Designated floodplains are shown in Volume II, Appendix A: Map Folio, Figure 11 – Floodplains Map.

Flood areas pose constraints to development because construction within them can put both life and property at risk and require frequent and recurring expenditures of public and/or private funds for the repair of public and private property.

The most damaging floods in Benton County are associated with the Yakima River. This is because Benton County is the most downstream county in the entire Yakima River drainage, which contains 6,155 square miles, or four million acres, and the basin has limited flood control facilities. Annually, the snowpack on the east side of the Cascade Range melts and passes through Benton County within a river channel ("floodway") that is in some places less than 60 feet across. Depending upon the size of the snowpack, the rate and timing of its melt, and the ground conditions within the watershed, the lower Yakima River floodway may or may not be sufficient to carry the flow. When it is insufficient to carry the flow, water leaves the floodway and moves overland onto the floodplain.

If the snowpack melts gradually over the spring months the river channel may be full, but not flood. However, if a warm Chinook wind melts a portion of the snowpack in January, while the river and ground in Benton County are still frozen, the melt water will reach its ice clogged channel and leave the river to spread overland; or if warm temperatures come suddenly in early spring the entire watershed may thaw simultaneously and inundate the lower river valley.

The areas along the lower Yakima in Benton County are especially vulnerable to flooding annually and extend from Benton City downstream through West Richland to the delta where the Yakima empties into the Columbia River. This area is characterized by low-lying river bottom lands and ancient river channels which are historically the river's natural floodway and floodplain.

4.6.3.2 Flood Management

One of the products of the Federal Emergency Management Agency's (FEMA) flood insurance program has been the mapping of flood hazard areas throughout the nation. The primary area of concern in this effort has been the 1% annual chance floodplain (formerly known as the 100-year flood hazard area). The 1% annual chance floodplain has been adopted by FEMA and, by extension, the County as the base flood for purposes of floodplain management measures.

Encroachment on floodplains, such as placing artificial fill, reduces the flood-carrying capacity and increases flood heights, thus expanding the area susceptible to flooding and increasing flood hazards in areas beyond the encroachment itself. One aspect of floodplain management involves balancing the economic gain from floodplain development against the resulting increase in flood hazard.

For purposes of the National Flood Insurance Program, the concept of a floodway is used as a tool to assist local communities in this aspect of floodplain management. Under this concept, the area of the 1% annual chance floodplain is divided into a "floodway" and a “floodway fringe.” The floodway is the channel of a river, plus any adjacent floodplain areas that must be kept free of encroachment to carry the 1% annual chance floodplain without substantial increases in flood heights. As a minimum standard, the Federal Insurance Administration limits such increases in flood heights to one foot, provided that hazardous velocities are not produced.

The area between the floodway and the boundary of the 1% annual chance floodplain is termed the "floodway fringe." The floodway fringe thus encompasses the portion of the floodplain that could be completely obstructed without increasing the water-surface elevation of the 1% annual chance floodplain more than one foot at any point.

4.6.3.3 Current Trends

The maximum known flood of the Yakima River occurred in December of 1933, with a depth of approximately 9.5 feet above the top of the riverbank at Benton City. Its estimated recurrence interval is approximately 170 years. Severe flooding of the Yakima River recently occurred in 1996, resulting in the largest and most devastating floods in recent history. More recently, flooding occurred in 2015,2017, and 2026 in parts of Benton County. The likely trend is for the frequency and magnitude of floods within the lower reaches of the Yakima River to stabilize or even reduce as the upper watershed restores natural storage capacity through levee setbacks, watershed restoration, and other measures.

4.6.3.4 Future Considerations

Any new development located within the floodway will be reviewed by Benton County to meet current FEMA and BCC Titles 3.26 (Flood Damage Prevention) and 15 (Critical Areas Protection) codes.

4.6.4 Geologically Hazardous Areas

4.6.4.1 Existing Conditions

Geologically hazardous areas encompass channel migration zones, steep slopes with moderate to severe erosion potential, landslide hazard areas, and seismic hazard areas. Channel migration in the Lower Yakima watershed is limited by a low gradient (average one percent gradient in the lower 47 miles of the river; BERK Consulting 2017) and geologic and structural controls in the eastern portion of Benton County. Similarly, the geology and topography of the Columbia River in Benton County, combined with dam regulations and shoreline stabilization measures, substantially limit channel migration.

Although the Department of Natural Resources identifies few landslide hazard areas within Benton County, steep slopes with erodible soils intersect agricultural areas along the northern face of the Horse Heaven Hills and eastern drainages within the Rock-Glade watershed, including along the Columbia River shoreline at Wallula Gap. Steep slopes with erodible soils are also mapped as intersecting rangelands in the northwestern (Blackrock) portion of the County. (*See* Volume II, Appendix A: Map Folio, Figure 13 – Geologically Hazardous Areas Map for steep slopes and erosion hazard areas mapped within Benton County).

Steep sloped areas have the potential for mass movement and slope erosion hazards. Mass movement is the movement of rock or soil material down slope in response to gravity. Slope erosion is the removal of soil or weathered bedrock that occurs as a result of sheet wash (no conspicuous channels), rill erosion (numerous small rivulets), or gully erosion (larger, more nearly permanent channels).

Steeply sloped and unstable geologic structures pose a constraint to development because associated developments require more expensive design and engineering work. Additionally, a much greater land area per structure is necessary on steep slopes. Left in their undeveloped condition, the opportunities provided by these resources range from aesthetic (visual) to open space (for recreation), and, for basalt outcroppings and steep canyons, and important habitats (nesting areas for birds of prey).

Slopes of fifty percent can be found in both the Rattlesnake and Horse Heaven Hills. Due to the unique problems inherent in developing steeply sloping areas, special care must be exercised in the planning and development of such areas.

4.6.4.2 Current Trends

As land use intensifies over the landscape with agriculture and residential developments competing for ground, and as higher income households target view lots on slopes and ridges, new residential developments will increasingly occupy the more geologically difficult terrain. These are the areas which present problems associated with geologic hazards.

4.6.4.3 Future Considerations

Future development should be consistent with the Benton County CAO in BCC Title 15.

4.6.5 Fish and Wildlife Conservation Areas

4.6.5.1 Existing Conditions



Shrub-steppe and riparian habitat

Due to the arid nature of Benton County, many streams classified by mapping as streams are dry washes that follow topographic lows and only transport water during large runoff events and therefore are not conducive to aquatic species habitat. Outside of irrigated areas, only streams modeled as greater than 7th order are likely to carry stream flow (even on an intermittent or ephemeral basis) and, in irrigated areas, streams that are greater than 3rd order are likely to carry at least ephemeral flows (BERK Consulting 2017). Often the source of water for flow in streams in the

County is from irrigation as many otherwise dry washes are used for irrigation water conveyance as part of an irrigation district system. Per RCW 36.70A.030(5), fish and wildlife habitat conservation areas do not include artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of and are maintained by a port district or an irrigation district or company. Field evaluation would still be necessary to verify stream occurrence at the site scale. Additionally, anadromous fish in Benton County use the Yakima and Columbia rivers to migrate, spawn, and rear. Anadromous salmon spawning is documented in some tributaries to the Yakima and Columbia rivers. (See Volume II, Appendix A: Map Folio, Figure 10 for a map of streams and rivers within the County).

Benton County contains protected habitats that are prioritized in various guidance and plans. WDFW's **Priority Habitats and Species (PHS)** Program provides key fish, wildlife, and habitat information to inform land use decisions. In addition to protecting individual habitat types, maintaining connectivity between habitats is important to sustaining ecological function. Habitat connectivity refers to the degree to which wildlife can move across the landscape to access food and shelter, migrate seasonally, establish new territories, and maintain healthy populations over time. Open space corridors that serve as biodiversity corridors and core habitat areas are mapped as PHS and play a critical role in maintaining ecological connectivity across the landscape WDFW's **Washington Habitat Connectivity Action Plan (WAHCAP)** is a statewide strategy (currently in draft status) that guides habitat connectivity planning by mapping key wildlife corridors and identifying priority areas to reconnect important landscapes, including shrub-steppe habitats.

Shrub-steppe habitat is identified as a state priority and locally important habitat in the County, and consists of sagebrush, bunch grasses and forbs (broadleaf flowering plants). Shrub-steppe habitat was historically present throughout the County, but agriculture and urban development has reduced much of this habitat. Large blocks remain on the Hanford Reservation, and it is still extensive throughout the County, but each year additional development impacts this habitat. The WDFW **Washington Shrubsteppe Restoration and Resiliency Initiative (WSRRI)** identifies core and corridor areas for shrubsteppe and other habitats. Shrub-steppe habitat and related WSSRI spatial priorities in the County are documented in Volume II, Appendix A, Map Folio Figure 19 and in the Open Space Corridors Memorandum developed to support the 2026 Comprehensive Plan update (*see* Volume II, Appendix M).

Several managed and protected fish and wildlife habitat areas are located in the County as described below:

Umatilla National Wildlife Refuge. The Umatilla National Wildlife Refuge is intensively managed to provide habitat for migratory birds and resident wildlife. Management practices include restoration of wetlands, manipulation of seasonal wetlands to encourage native food supplies, farming, prescribed burning, native planting in riparian areas, removal of exotic weed species, and planting

native grasses in upland areas. Approximately 1,400 acres of refuge lands are irrigated croplands which provide food and cover for wildlife. Local farmers grow corn, wheat, alfalfa, and other crops under a cooperative agreement whereby the refuge's share of the crop is left in the field for wildlife.

McNary National Wildlife Refuge. Established in 1956, the McNary National Wildlife Refuge was created to replace wildlife habitat lost to construction of the McNary Dam downstream. The 15,000 acres of sloughs, ponds, streams, and islands include islands north of the City of Richland. Seasonal wetlands are managed to promote diverse wetland plant growth. Upland areas are managed with prescribed burning, removal of exotic weed species, and planting of native grasses. Native willows and cottonwoods are planted in riparian areas. Approximately 700 acres of refuge lands managed in agriculture specifically provide waterfowl with winter forage opportunities.

Barker Ranch. Barker Ranch is approximately 2,400 acres of alluvial and glacial floodway and floodplain with extensive riparian shoreline and wetlands that are a product of variously applied water, upwelling from subsurface hydrology, and seasonal river flooding. The ranch is located within the Yakima River migration zone primarily on the north side of the river extending up and down river from the Twin Bridges and the intersection of Snively and Twin Bridges roads. The north boundary is the Horn Rapids Ditch; the south boundary is the ordinary high-water line at the north side of the Yakima River. Today under the federal Wetland Reserve Program easement, approximately 1,865 acres of the ranch is under permanent conservation easement, with waterfowl and habitat production the primary management objectives. Limited grazing continues under a grazing management plan that is wildlife and habitat driven rather than cattle driven.

Hanford Reach National Monument. In 2000, the Hanford Reach National Monument was established by Presidential Proclamation to protect, preserve, and expand critical shrub-steppe habitat and other cultural and biological resources. The National Monument and the Hanford Reservation provide the largest intact and connected shrub-steppe habitat area in the County.

4.6.5.2 Current Trends

The current trends relative to sustainability of fish and wildlife resources in Benton County are a mix of conditions. The Hanford site, occupying five percent of the County's land area is a large and functional habitat area of indigenous biological resources. Under federal ownership for the past 50 years, it has been left untouched by the far-reaching developments that have converted the off-site landscape. The shrub-steppe and wetlands complex of the Wahluke Slope to the north of the Columbia River and the U.S. Army's Yakima Training Facility to the west add hundreds of additional square miles of indigenous habitat, potentially "connectable" as a single unit.

Within the lower, flood prone reaches of the Yakima River, where private development is relatively sparse and large acreages are within local or federal ownership, a rich riverine environment of

islands, wetlands, braided channels, and back water provide lush habitat and breeding and nursery areas for aquatic species.

Additionally, shore lands owned by the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service in the south of the County along the Columbia river's hydroelectric pools provide significant fish and wildlife resources.

In contrast, biological resources generally found outside of the Hanford Site experience pressure from development, farming, recreation, and other activities, including native shrub-steppe habitat as discussed above. The County Voluntary Stewardship Program has measures to address preservation of shrubsteppe habitat, and the County is also taking steps to develop a mitigation program for ongoing development, as discussed further below.

Additionally, the Yakima River's anadromous and resident fisheries are threatened by low summer flows and river habitat that is being increasingly dominated by aquatic vegetation such as stargrass. Overall, outside of publicly held lands, the current regional and local trend further threatens biological resources and wet environments as habitat changes to a built environment through development and land conversion.

The continuing loss of biological resources is evidenced by fragmentation of natural habitat, declining water quality, and the growing number of terrestrial and aquatic species listed as candidate, threatened, and endangered by the federal and state governments.

Within the larger watershed, there are also sub-trends. For example, there are projects that continue to be implemented each year for the conservation of surface water resources by irrigation districts under federal and state sponsored water conservation projects. The typical project is the lining or piping of antiquated irrigation water delivery infrastructure to reduce leakage loss. Additional programs seek to reduce the total of "applied" water. These programs have improved flow and water quality in river mainstems and tributaries, while eliminating some of the significant acreage of wetlands created by conveyed or applied water run-off. Other areas have seen new wetland and riparian habitat emerge from additional irrigated agricultural development in the County (often converted from prior grazed land), particularly in the southern portion of the County.

4.6.5.3 Future Considerations

As the trend to convert raw land continues, fragmentation of natural habitats will further reduce biological productivity and diversity. Remaining productive terrestrial and aquatic habitats will be confined largely to floodways and floodplains, canyons, undevelopable terrain, undeveloped areas designated "Rural" on the Land Use Plan Map, and on lands in government ownership (other than Washington Department of Natural Resources).

Maintaining public holdings and encouraging conservation easements on larger private land holdings, because of their size and uncomplicated ownerships, holds promise for successfully protecting Benton County's remaining natural wildlife heritage. The acreage of these holdings may be augmented by additional private lands protected and enhanced through the VSP and other programs.



Mature shrubsteppe habitat

Actions for protecting habitats on public lands should be pursued under a federal, state, and local partnership, with non-impactive recreational uses a goal secondary to wildlife protection:

- Conserve suitable acreages of existing public lands for habitat purposes, augmented where needed by additional purchases, exchanges, conservation easements to "connect" large tracts of habitat into functional systems. Additionally, the County is using the 2026 update to develop and establish a shrub-steppe mitigation program (*see* Volume II, Appendix N) that seeks to preserve high quality habitat areas within the County that can help offset impacts to shrub-steppe habitat being lost through development through a common framework that all the cities and County can utilize. Benton CD is an important partner to the County and cities in implementing this program. WDFW has provided technical information and guidance during program development.
- Apply and monitor for effectiveness regulatory provisions to protect and enhance near-shore riverine and wetland environments.
- Apply water conservation standards to non-farm developments.
- Increase upper watershed storage capacity to provide additional low season flows and reduce the competition between in- and out-of-stream uses for available water supplies.
- Encourage land use practices that eliminate or significantly reduce non-point source pollution.
- In concert with state resources agencies, undertake local educational outreach programs including grant monies for demonstration projects on private lands associated with sensitive resource issues.

4.6.6 Voluntary Stewardship Program

In 2011, the Legislature amended the GMA with the intent to protect and/or voluntarily enhance critical areas in places where agricultural activities are conducted, while maintaining and improving the long-term viability of agriculture. This amendment established the VSP, a new, non-regulatory, and incentive-based approach that balances the protection of critical areas on agricultural lands, while promoting agricultural viability, as an alternative to managing agricultural activities in the County under the Critical Areas and Resources Protection Ordinance.



Cattle grazing below shrub-steppe and cliffs and bluff habitat

Agricultural lands mostly have small intersections with critical areas in Benton County. Frequently flooded areas, geologically hazardous areas, and wetlands all have less than a 2 percent intersection with agricultural lands. Most critical aquifer recharge areas have small intersects with agricultural areas (less than 2.5 percent of agricultural lands); only areas with alluvial parent material or hydrologic soil group A have a moderate intersect (12.7 percent of agricultural lands). Fish and wildlife habitat conservation areas have the largest intersect (22.1 percent of agricultural lands). The Benton County VSP Work Plan provides additional information regarding the intersect of agricultural lands with critical areas (BERK Consulting 2017) See for additional information - https://www.vsp.wa.gov/county/benton.

4.6.6.1 Future Considerations for Critical Areas Under the Voluntary Stewardship Program

Critical areas goals and protection benchmarks are included in the VSP Work Plan as measures that may be taken by agricultural producers to protect and/or enhance critical areas functions and values through voluntary, incentive-based measures. The plan is currently under development, and the draft goals and protection benchmarks are provided as future considerations for each of the critical areas below. These goals and protection benchmarks may be updated as the Work Plan is finalized with the Work Group in coordination with Benton County.

- Wetlands
    - Manage runoff and erosion associated with agricultural activities through voluntary maintenance of conservation practices.
    - Maintain riparian vegetation to support biofiltration and bank stability in areas of agricultural intersect through voluntary practices, including managing livestock access to streams and wetlands.
    - Manage invasive species in and around wetlands and maintain native species diversity.

    - Encourage voluntary enhancement of surface water quality in streams, wetlands, and agricultural drains in hydrologic study areas.
- Critical Aquifer Recharge Areas
    - Protect groundwater recharge in areas of declining water tables or where recharge can help maintain base flows for rivers and streams.
    - Maintain practices that limit leaching of nitrogen and other contaminants into groundwater.
    - Encourage implementation of groundwater recharge by passive infiltration or direct injection.
    - Promote voluntary on-farm water conservation practices, such as irrigation water management and efficient irrigation systems in areas with agricultural wells.
    - Promote voluntary conservation practices that minimize leaching of nitrogen and other contaminants into groundwater.
- Frequently Flooded Areas
    - Maintain floodplain connectivity in areas of agricultural intersect.
    - Maintain or reduce hazards to physical safety associated with flooding. New agriculture in floodplains should not require alterations that diminish floodplain functions or increase safety risks.
- Geologically Hazardous Areas
    - Maintain integrity of steep slopes in areas of agricultural intersect through the following:
        - Avoid increases in erosion
        - Avoid steep slopes or help to stabilize steep slopes where practical
        - Avoid irrigating unstable slopes
- Fish and Wildlife Conservation Areas
    - Maintain shrub-steppe habitat through voluntary management and protection measures, examples include, but are not limited to the following:
        - Timed/less intense grazing at appropriate times
        - Native vegetation propagation
        - Advanced fire protection strategies, including managed grazing and maintaining firebreaks
        - Voluntary protection of set-asides (e.g., easements, acquisition, federal conservation programs, and other strategies)
        - Supporting the County's shrub-steppe mitigation program
    - Manage invasive species on agricultural lands and maintain native species diversity.
    - Promote voluntary measures to enhance shrub-steppe habitat and shrub-steppe corridors with the first priority being basins where the benchmark of shrub-steppe protection of functions and values is at risk of degrading compared to baseline. Within

basins, enhancement opportunities should first include current blocks and currently utilized corridors and then historical or likely suitable corridors that could be established or renewed.

- Encourage diversity of native grasses in place of cheatgrass to promote resiliency.

5 Economic Development Element

5.1 Introduction and Purpose

The purpose of the Economic Development element is to provide context, economic development priorities and how and where they might occur, and summarizes the County's role in supporting economic development. A strong diversified economy provides a high quality of life for the citizens of Benton County and the region. This, in turn, generates the resources through which local governments provide for the health, safety, and welfare of its citizens. The Economic Development element has been designed consistent with other plan elements, goals and policies (Section 2.6), the Benton County Economic Development Plan (2024) and the *2026-2030 Comprehensive Economic Development Strategy* for Benton and Franklin counties (BFCOG 2025). The County Economic Development Plan, including future updates, is adopted by reference into the Comprehensive Plan. This element and the County's Economic Development Plan are designed to communicate a coherent and consistent message about the County's approach to sustainable community and economic development. The County's Economic Development Plan includes detail on projects funded in whole or in part by the County's "Rural County Capital Fund" along with other funding sources used by the County to support economic development and provides a comprehensive economic development strategy specific to the County. This strategy is part of the larger regional strategy outlined in the *2026-2030 Comprehensive Economic Development Strategy*. This regional strategy is designed to create employment opportunities, improve local conditions, foster more stable and diversified local economies, and provide a mechanism for guiding and coordinating the efforts of local organizations and individuals concerned with the economic development of this area. This Element integrates findings from the Benton County Industrial Lands Inventory to ensure that future development is strategically located to support economic resilience, maximize infrastructure investments, and protect agricultural and environmental resources.

While during World War II and the post-war years, the region's economy was largely dependent on federal funding for Hanford projects, it has since become a diverse center for agriculture, energy, advanced manufacturing, and transportation, as well as tourism (conferences, wineries, etc.) For the future economic growth of the county, there are seven key ongoing and planned areas for development, as outlined in BFCOG 2026-2030:

- The Horn Rapids Business Center and Industrial Park has an already existing infrastructure that is accessible for transport with efficient and lower-cost options for exports and transportation of goods. The Business Center houses battery manufacturing, nuclear component manufacturing, and storage (the country's largest fully automated freezer resides here) facilities. Agricultural companies have also expressed interest in the area.

- The I-82 South Sub Area and Lewis and Clark Ranch are both areas being transitioned from agricultural use to urban developments, both commercial and recreational.
- Kennewick's Historic Waterfront District has plans to revitalize the area and become a tourist destination for food, wine, and art with recreation, as well as some residential living.
- Similar plans have been made for the Southridge District, but with an added area for industrial use due to its easy interstate access.
- The Northwest Advanced Clean Energy Park in Richland is an industrial and technological development area and is set to include agriculture, advanced manufacturing and clean energy.
- Lastly, the land at Vista Field, formerly an airport, has an ambitious initiative to become a town center, drawing innovation with the intent to create high-wage jobs. This will be a community centered key location for the future of the county (BFCOG 2025).

While not called out specifically in the CEDS, the Plymouth/Patterson area in Benton County is also an important industrial development area. AgReserves and other businesses have made significant investments in recent years in agriculture products processing (onion packing and corn flaking facilities) and atmosphere-controlled storage facilities to help diversify the types of products the region can provide.



AgReserves Corn Flaking Facility

The strategic priorities for development in the region over the next five years are as follows:

Adequate and Resilient Infrastructure - A focus on maintaining natural and built assets, namely those for transportation and digital technology; energy innovation is key to attracting new industries. There is also an added focus on filling skill gaps in the workforce.

Economic Resilience and Disaster Preparedness - To ensure adaptability and recoverability from any potential economic harm (economic, environmental, tech changes, health crises, global market changes) the region must a have a proactive approach for as little disturbance as possible. This strategy must include collaboration between major stakeholders to share funding and assistance.

Efficient and Effective Collaboration - Unity of all interested parties in the county is an important resilience strategy for joint grants, shared data, and workforce partnerships.

Strengthen and Diversify Industries - An effort to decrease reliance on government jobs and expand and innovate will bring a diverse industry base. The region will seek to support entrepreneurship and small business growth competitiveness. Strengthening the connection between business/workforce/education is also vital in providing access to training for broad, transferable skills and digital literacy.

Workforce development - Seek to find and fill gaps in training and education by encouraging the creation of local workforce training programs, to ensure a skilled and adaptable workforce who can adjust to shifts in the industry

5.2 Hanford Nuclear Reservation

With the creation of the Hanford Reservation in 1943, the local economy became bimodal: pre-existing agriculture work outside the site and defense related construction and activities on the site. Due to the secret and hazardous nature of the site, it discouraged local private center investments and the region's economy remained stagnant for the next 50 years.

This situation remained until the end of the Cold War in the late 1980s, which enabled a new mission of cleanup of the Hanford Site. There has been a gradual reduction in the Hanford workforce over time. A Tri-Party Agreement was signed in 1989 by the State of Washington, the Environmental Protection Agency, and the U.S. Department of Energy which sets forth Site cleanup objectives, projects, and milestones. If funded by congress annually, it does extend but gradually reduces Hanford employment levels as cleanup is achieved over time. The current mission is fundamentally different in scope, purpose, and effect, driving new science and technologies that are often marketable worldwide, in effect creating a more diversified and resilient economy.

The local economy, while still dependent on Hanford, especially in the Tri-Cities area, has adapted and diversified its economy. Most recent data have indicated that economic conditions continue to improve with the growth of renewable energy projects, such as wind and solar energy, and a scaled down emphasis on agriculture and federal energy (BFCOG, 2025).

The Hanford area's B Reactor, consisting of historic facilities at Hanford, was authorized by Congress in December 2014 to be included in the Manhattan Project National Historical Park. The Hanford area and the Vernita Bridge area's public access to recreational facilities attract Hanford based tourism in the region. In 2025, the US House and Senate approved a continued nuclear energy tax credit for the Columbia Generating Station on the Hanford site. The station is crucial to the Northwest with a generating capacity of up to 1,207 megawatts, the equivalent of powering a million homes. This paves the way for new jobs and research and development opportunities for the region.

Energy Northwest (ENW) and X-Energy have also partnered to pursue permitting to develop smaller nuclear reactors at the Hanford site to help power Amazon data centers using clean energy. Advancements also continue to be made. The U.S Department of Energy identified PNNL as a strategic location for next-generation clean energy development and advanced computing infrastructure due to its proximity to existing transmission capacity, access to hydropower and nuclear power, and the potential deployment of small modular reactors (SMRs) to provide reliable baseload energy. The City of Richland currently holds 295 acres of federally transferred land reserved specifically for economic development to support these initiatives. PNNL's workforce, favorable climate conditions, and absence of major natural hazards position the region as a premier location for AI-driven data centers and energy-intensive research facilities. These national investments will drive future employment, infrastructure expansion, and energy system upgrades, reinforcing Benton County's role as a national hub for clean energy innovation, advanced manufacturing, and information technology.

5.3 Energy

Renewable energy continues to be a state priority, and energy infrastructure and innovation are central to Benton County's long-term economic competitiveness. Washington State has enacted comprehensive policies to transition toward renewable energy such as wind and solar. The Clean Energy Transformation Act (CETA)1 mandates that electric utilities achieve carbon-neutral electricity by 2030, and supply 100% renewable or non-emitting electricity by 2045. Additionally, the Energy Independence Act (RCW 19.285.040) requires large utilities to meet specific renewable energy targets (*see* Volume II, Appendix J).

Benton County's economy benefits from a growing renewable energy sector that complements the region's agricultural, industrial, and manufacturing activities.



Solar farm adjacent to power transmission lines in north Richland

With the recent global advancements in Artificial Intelligence and the growing demand for the country to stay at the forefront of this field, demand for reliable electricity is increasing rapidly. Major energy and technology initiatives have been proposed in the region due to its existing transmission infrastructure, availability of carbon-free power resources such as hydropower and nuclear energy, and access to a highly skilled workforce. As a result, Benton County and the surrounding region are expected to experience continued interest in energy-dependent industries such as data centers, advanced manufacturing, and research facilities. Many large data

centers have already been constructed across the Columbia River in Oregon, where access to transmission lines, tax increment financing, and industrial land has enabled co-location of energy generation, storage, and high-demand users. In Benton County, strategically co-locating energy generation with industrial uses in areas served by existing or planned infrastructure may help reduce pressure on agricultural lands, maximize grid efficiency, and support long-term economic resilience while remaining compatible with agricultural uses, environmental resources, and community values.

5.4 Existing Conditions

Benton County's economy is characterized by a diverse mix of traditional sectors such as agriculture, food processing, freight transportation, and federal employment, alongside growing sectors including health care, education, clean energy, advanced manufacturing, and professional and technical services. The Tri-Cities region continues to serve as a center for agricultural production, scientific research, energy generation, and regional trade. Economic diversification is occurring as new industries emerge in response to energy transition policies, infrastructure investments, and technological change.

Current trends at the regional level indicate growth and resurgence of the region's historic economies (agriculture and food processing, water and rail transportation for commerce). Additional trends that are related to historic activities and the natural resource base of this area are agri-tourism, anchored by an emerging viticulture (wine) industry and specialty crop farming and retailing, and visitor-serving commercial and recreational activities, with the center attractions being the riverine environments at the confluence of the Snake, Columbia, and Yakima rivers in the Tri-Cities. The trend on the Hanford Site has been to continue to open the site to a much broader range of uses and activities.

Agriculture in Benton County grew rapidly in the 1960s and 1970s as the Columbia Basin Project was completed, spurring growth in both agricultural production and value-added areas such as food processing and chemical fertilizer development. Agriculture and food processing remains a central part of Benton County's economy. The county grows more than 100 commercial crops including apples, sweet corn, potatoes, onions and grapes, which produces 900 million dollars in sales annually (Agriculture WSU 2025). The sector has increasingly diversified through value-added processing, controlled-atmosphere storage, and specialty crops that support both domestic and export markets. However, agriculture is also subject to challenges such as drought conditions, input costs, and labor constraints. Agri-tourism has emerged as an important component of this sector, with wineries, farm-based events, and specialty crop activities drawing regional and national visitors. Agricultural producers face increasing pressure from input costs, drought conditions, and labor availability, which affect long-term viability.



Agricultural orchard and crop lands and food processing facilities near Prosser

Industrial activities play an important role in the County's economy and include manufacturing, logistics, warehousing, clean energy technologies, and emerging energy-intensive uses. A substantial portion of industrial activity in the County supports agriculture through food processing, controlled-atmosphere storage, and crop transportation facilities. These agricultural-related industrial uses are strategically located near agricultural areas and transportation corridors, reinforcing the County's role as a hub for value-added agricultural processing and distribution.

The region's energy economy includes existing hydropower, nuclear, wind, and solar facilities, and is expected to expand as demand increases for clean energy generation, storage, and grid reliability. The region's existing clean energy programs include the Columbia Generating Station, the Nine Canyon Wind Project with a maximum potential of generating 95.9 megawatts, as well as the Juniper Canyon Wind Farm. Additional large-scale wind, solar, and nuclear energy projects have been proposed in County-prohibited agricultural lands but have not been completed.

The Port of Benton is also a mulitimodal transportation hub, offering systems for rail, barge, and two airports. Almost 400 million dollars in goods and services come in each year, creating more than 10,000 jobs ("Economic Development" Port of Benton). In 2025 the Port acquired 9.56 million dollars through the RAISE grant for improving the infrastructure and updating track on the industrial rail line connecting Kennewick and Richland.

Tourism remains a key contributor to Benton County's economy, generating more than $600 million in visitor spending in 2024 and supporting approximately 6,000 travel-related jobs in Benton and

Franklin counties. With more than 200 wineries within a 50-mile radius, wine-focused tourism continues to drive visitor spending and support hospitality-related jobs. The tourism sector is diversifying through agri-tourism, river recreation, event venues, and outdoor activities, helping to broaden the economic base. However, growth in tourism also presents challenges, including pressures on agricultural lands, increased demand for supporting infrastructure, and land use compatibility issues where tourism-related activities occur within working agricultural areas. Broader macroeconomic factors—such as fluctuations in agricultural markets, labor availability, and the cost of inputs—also influence the long-term viability of agriculture and related tourism activities.

The county has also made strides in areas of construction and advanced manufacturing, producing medical equipment and fabricating nuclear fuel. Construction jobs make up about 8% of employment. Healthcare is also a growing field. Though Benton and Franklin counties' largest single employer, as of 2023, the region is no longer as reliant as it once was on the Pacific Northwest National Laboratory and its direct ties to the Hanford projects and continues to make significant strides in economic diversification.

5.4.1 State and Regional Growth Trends

As required by state planning law, the focus within this Element is on "regional" and even global economic issues. The Pacific Northwest region of the country is experiencing rapid population and economic growth. The state of Washington has been growing at an average of over 90,000 persons per year in the last decade and is projected to continue growing over the next 20 years (OFM 2024). A regional growth trend can be seen in the Benton and Franklin counties' cumulative population growth shown in Figure 3-3. Benton County also continues to experience high levels of growth. In unincorporated Benton County, the farm economy has been very strong, with steady increases in "farm gate" and "value added" dollars, as well as employment numbers. Table 5-1 presents population and economic indicators in Benton and Franklin counties.

Table 5-1
Population Growth and Economic Indicators

	Population[1]		Civilian Labor Force[2] (% of total population)	
County	**2015**	**2024**	**2015**	**2024**
Benton	188,590	218,190	62.9	62.2
Franklin	87,150	101,238	75.0	66.1

Notes:

1. Washington State Office of Financial Management
2. U.S. Census Bureau

Notwithstanding the local effects from the Hanford Site, the regional focus is a natural one for the County, which is a "regional service provider." The local and regional economic history has been one of resource-based commodities trade (agriculture, minerals, and hydroelectric power), and related regional road, water, and rail transportation.

The economy is largely the same today, except that some technologies have evolved into their own industries (e.g., irrigation systems and technology), and productivity has increased. The transportation systems that move these products have also undergone changes in technology and scale; they now serve global markets.

Within the last decade there have been local economic spin-offs (e.g., agri-tourism) from these traditional economic activities and new regional economies (visitor-serving commercial and recreation), which have expanded economic opportunities locally.

Recent economic trends indicate a shift in Benton County's employment growth away from agriculture toward other sectors such as construction (+76%), health care (+38%), and leisure/hospitality employment (+33%). Comparatively, agriculture employment grew only around 10% over the last decade. The County has also seen an increase in transportation, warehousing, and utilities jobs. In the same time frame, there has been a decrease of jobs in manufacturing, retail trade, and government sectors. (BFCOG 2025). Top sectors for short and long-term future employment growth are summarized in Table 5-2 below.

Table 5-2
Fastest Growth in Employment

Major Growth Sectors	Growth Rate Short Term (2023-2028)	Growth Rate Long Term (2028-2033)
Arts, Entertainment, and Recreation	2.13	0.98
Transportation and Warehousing	2.13	0.50
Education Services	2.53	1.15
Professional, Scientific, and Technical Services	2.68	0.87
Health services and Social Assistance	2.33	1.35

Source: Washington State Employment and Security Department Projections (August 2025)

Based on the 2023 American Community Survey, the median household income in Benton County is $87,316 (U.S. Census Bureau 2024). The Washington State Employment and Security Department is forecasting all industries in Benton and Franklin counties to have a positive, though slowing, growth

rate between 2024 and 2034. Short term non-farm projected growth has decreased slightly from 1.31 percent between 2019 and 2024 to about 1 percent between 2025 and 2029 (BFCOG, 2025).

5.4.2 Economic Diversification

Economic diversification is essential to Benton County's long-term resilience. This includes both diversification within existing core sectors such as agriculture and the continued growth of expanding sectors such as tourism, renewable energy, and technology-based industries.

In recent years droughts in the central Washington area have been detrimental to agriculture. The Roza Irrigation District received only 42% of its water rights in 2025. Improved irrigation efforts continue, but they are costly and slow. Farm income dropped 42% across the state between 2022 and 2023, and the need to address immediate challenges leaves many farmers with limited capacity for long-term planning (Weaver, 2025). Viticulture and agri-tourism continue to grow in the agricultural economy and may be a path forward for struggling income. Agritourism and related enterprises such as winery experiences, farm-to-table events, and U-pick operations create opportunities to lighten the strain of reduced production. Value-added processing plants, along with new cold storage and transport facilities, have strengthened the County's agricultural supply chain and supported surrounding farm operations. Continued investment is needed to help producers grow high-quality crops that meet changing global consumer demands for sustainably produced, specialty, and premium products. Supporting infrastructure—such as advanced storage, processing, transportation, and marketing facilities—will be essential to maintain competitiveness in these markets. Benton County and its agricultural products remain strategically positioned to serve expanding Asian and international export markets.

There is a continued need to further diversify the local non-farm economy's dependence on federal funding of Hanford projects. This must be done before those projects begin to wind down as cleanup milestones are completed, or before congressional budgetary considerations negatively affect project outlays. Meaningful strides toward a diversified local economy, independent of federal budgets for Hanford, have been made and these efforts are expected to continue.

5.5 Summary of Economic Development Priorities



Vineyards in Benton County

Items 1 through 9 on the following pages are currently the highest priorities for the commitment of County resources toward the objective of economic growth and development.

Though the items are shown as discrete economic activities, many in fact are naturally interrelated. For example, agriculture, agri-tourism, and visitor-serving recreational and commercial activities are mutually supportive and related, especially when located in the same geographic area of the County (e.g., the Tapteal Greenway and Red Mountain Wineries). These symbiotic relationships should be identified, facilitated, and encouraged for economic growth.

Each of the priorities listed is a "regional" activity. For example, vineyards and wineries dot the regional landscape of Benton, Franklin, and Yakima counties. The Walter Clore Wine & Culinary Center, managed by the Port of Benton, is located in Prosser and showcases regional wines and wineries, could benefit from additional County support in the future.



Columbia Crest Winery in Benton County

All the priorities listed below should be pursued simultaneously, with the overall level of effort allocated to each at any point in time being a reflection of its timeliness and cost/benefit outlook. For example, the local opportunities and demands of an expanding rail and waterborne transportation system for global commerce, and linked to area agricultural commodities, is currently significant and will likely continue to increase.

Where appropriate, partnering with local jurisdictions and other private, public, and governmental entities for planning, public processes, and financing capital improvements is preferred.

1. Commodities, Trade, and Transport

Engage other public entities (e.g., the State of Washington, the federal government regarding Hanford and the Columbia River, and local port and utility districts) in planning for the provision of land and infrastructure capacities that anticipate the expanding demands of commerce, trade, and transport.

Locations: Opportunities for enhancing local employment through this economic sector exist in:

- The Ports of Benton and Kennewick properties and other properties within both urban and rural areas of the County
- The area in north Richland, recently transferred from the U.S. Department of Energy to the City of Richland, the Port of Benton, and Energy Northwest for industrial use

2. Agriculture, Processing, and Value-Added Industries

Assure through coordination with other public entities (e.g., the State of Washington, the federal government regarding Hanford and the Columbia River, and local port and utility districts) that the complexity of land and infrastructure resources necessary to support the expanding demands for agricultural products and food processing and value-added industries exists. Essential components are all season farm to market roads, utilities service, and multi-modal transportation access to

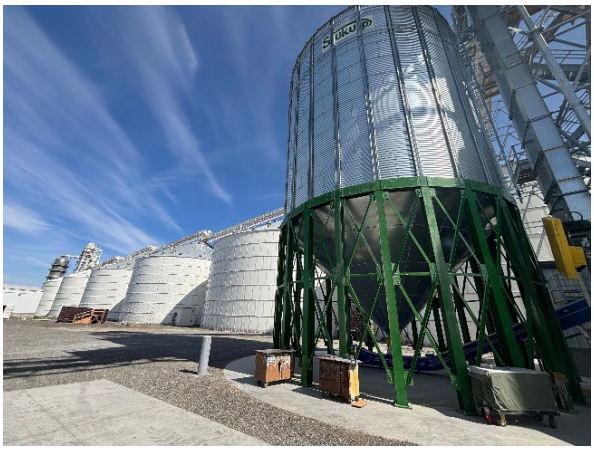
processing, shipping, and storage areas; water resources for irrigation and processing; and industrial waste disposal facilities.

Locations: Opportunities to meet these needs exist in:

- Prosser industrial area
- Plymouth industrial area – An emerging industrial area with significant crop storage infrastructure and access to railway transport. Recent development has included new atmosphere-controlled onion storage buildings and a commercial steam corn flaker, capable of making up to 800 tons of flaked corn daily (See photos below). The river, rail, and highway access, and proximity to Umatilla, Oregon, make Plymouth a key hub for processing and distribution of locally produced agricultural products to wider markets. The growth of industrial uses at the site is expected to continue over the next 20 years.
- Rural areas of the County next to agriculture production areas

Locational requirements that can be integrated with those of Priority No. 1 above should be fully maximized.





Plymouth Industrial Area

3. Agri-tourism

Work with agricultural and related interests whose focus is on visitors and tourism (e.g., specialty retail, wineries, breweries, bed and breakfasts, farmers markets) to assure that zoning, development standards, and improved road access facilitate such activities. As part of the 2026 update, the County has worked with local wineries and other agricultural businesses to identify additional opportunities for providing flexibility for agri-tourism activities that can occur within the constraints of existing state law. From these discussions, additional flexibility for onsite food service was identified as an important opportunity for highlighting local products paired with other local and regional products. As such, additional flexibility is being recommended in the County zoning code

related to onsite food services to promote agri-tourism. Overnight accommodations were also considered for modifications, but it was determined there is adequate flexibility to meet related lodging needs and opportunities (*see* Volume II, Appendix K).

Locations: Commercial agriculture in Benton County is ubiquitous over the landscape; any farmer or resident may seek to engage in agri-tourism enterprises. There are, however, locations that provide notable opportunities due to location and/or the stated intent of the farmers to engage in agri-tourism. These are:

- The Prosser area, Wine Country Road, and Wittkopf Loop
- East of Benton City, in the Red Mountain AVA vineyards and wineries
- South Finley vineyards and orchards
- Paterson area vineyards and wineries

4. Visitor-Serving Recreation and Commercial

Develop County owned recreational lands and facilities, and implement recreational plans of the Comprehensive Plan, which will improve the quality of life for local residents and "spin-off" economic benefits to the local community from the regional visitor-serving and recreational economic sectors. Integrate and connect County facilities with those of the cities, e.g., Rivershore Enhancement and the Tapteal Greenway.

Locations: Along over 100 miles of shoreline extending from the Vernita Bridge on the Columbia River and Benton City on the Yakima River to Hover Park in south Finley and further down river to Plymouth in south Benton County:

- The Tapteal Greenway in the lower Yakima River has the potential to connect Columbia Point to Benton City and Red Mountain via West Richland and Horn Rapids County Park (see discussion of the Tapteal Greenway in Chapter 8)
- Hover Park in South Finley, with intertie access, brings visitors to south Finley orchards and vineyards
- Badger and Candy Mountain hiking trails
- Two Rivers Park in Finley
- Vernita Terrace and through the Hanford Reach (Hanford Reach National Monument) and B Reactor Museum
- The island area partially owned by the Port of Kennewick off the rural community of Plymouth in the southern area of the County

5. Industrial Development

Work with the port and utility districts, WSDOT, and owners of industrially zoned land to provide lands zoned for industrial uses with transportation access and power (gas and electric). Work with municipalities or the state and local health districts to provide water and waste treatment capabilities sufficient to render industrial zoned lands marketable for industrial uses.

Locations: Notable locations of such lands in the unincorporated County are:

- All Rural Industrial lands
- The area in north Richland, recently transferred from the U.S. Department of Energy to the City of Richland, the Port of Benton, and Energy Northwest for industrial use
- Approximately 85 acres of industrial zoned land at the Interstate 82 and Badger Road interchange
- Rural Industrial lands by Paterson and Plymouth in the south County

6. Agricultural Water Resources

Maintain a primary support role in the implementation of the Yakima Integrated Plan, work with agricultural and other stakeholders to address future water needs, and work with the broad range of water using interests to identify and obtain additional supplies and improve water quality (see discussion on Water Resources, Section 4.5).

Locations: The geographic areas within which this effort should be pursued are as follows:

- Yakima River Basin in conjunction with Yakima and Kittitas counties

Within the rest of Benton County for those water supply and quality objectives that can be accomplished with County partners

7. Hanford Site Industrial

Energy, national defense, nuclear medicine, and more general industrial are among the opportunities on the Hanford Site:

Locations: Within the Industrial and Research & Development Zones of the Hanford Site, anchored by existing rail, road, energy, and nuclear infrastructure:

- Medical isotope production by the Fast Flux Test Facility in the Hanford Site's 400 Area
- Development of an industrial energy park in the recently transferred industrial land from the U.S. Department of Energy to the City of Richland, the Port of Benton, and Energy Northwest

8. Resource Use at Sustainable Levels

Coordinate with local jurisdictions and state and federal resource agencies to manage and conserve natural and biological resources at sustainable levels to sustain local economic growth. This requires that it be based on a broad array of sustained resources.

Locations: Generally within land features identified as "critical areas" (Chapter 4), but also relating to resource issues which transcend specific areas, such as ground and surface waters, air quality, and species survival:

- Along the mainstems and tributaries of the Yakima and Columbia rivers and their associated riverine wetlands and near-shore uplands
- Within the Hanford Reach and on the Hanford Site that combined represent a biological resources "bank" within Benton County
- Within Benton County's jurisdictional portion of the Yakima River watershed relative to conservation of ground and surface waters

9. Law and Justice

The quality of life and economic growth of an area are fundamentally influenced by the actual conditions and perception of public safety and welfare. These perceptions are held by residents, visitors, and prospective new business and industry. The expansion of public safety facilities is favorable to economic growth.

Locations: The County Justice Center in Kennewick

10. Education

Coordinate with educational institutions to maintain robust educational programs that are relevant to the regional economy. Although education constitutes a smaller share of the regional economy, this sector has seen more growth than other economic sectors in the region. Washington State University's research activities are also integrated with local economy, such as agriculture and wine-based research.

Locations: The Washington State University Richland Campus and the following:

- Washington State University Extension's agricultural and natural resource-based program unit, community and economic development program unit, and youth and family program unit
- Columbia Basin College's Richland campus expansion
- Other K-12 and vocational schools

5.6 The County's Role in Economic Development and Diversification

The County's role is identified in its vision and policy statements at the beginning of this Chapter; it promotes economic development by providing basic regional services and infrastructure, where such provisions will promote economic development, public health and welfare, and environmental quality.

Though the range of regional service responsibilities of the County is broad, within the context of economic development, the principal responsibilities are:

- Long range planning
- Productive coordination with other jurisdictions and interests
- Infrastructure necessary to support the current economic base and provide competitive advantages to attract new economic growth

Depending upon the circumstance, the County may fulfill these responsibilities on its own or in partnership with other entities such as the port districts, private industry and business, the state, or other local and regional political jurisdictions. For any given issue or project, the County's contribution may range from direct capital expenditures to in-kind services or coordination, integration, and/or facilitation.

6 Housing Element

6.1 Introduction

The Housing element is integrated with the other elements of the Comprehensive Plan.

The GMA planning goals for housing are as follows:

- Plan for and accommodate housing affordable to all economic segments of the population of this state
- Promote a variety of residential densities and housing types
- Encourage the preservation of existing housing stock



Housing west of Kennewick along Clodfelter Road

Changes to GMA in 2021 created new requirements for housing elements. In addition to providing an inventory and analysis of existing and projected housing needs within the County, housing elements must also:

- show there is sufficient land capacity to accommodate projected housing needs at each income level,
- make adequate provisions for existing and projected housing needs, and
- update policies and regulations to address racially disparate impacts, displacement, and exclusion.

These updated goals and policies are provided in Chapter 2 of the Comprehensive Plan A full understanding of the County's housing policy and plans should include a study of the elements referenced above.

6.2 Existing Conditions

6.2.1 Population and Households

In 2024, Benton County had a total population of 217,850, with 37,805 residents (17%) living in unincorporated areas.[2] The average household size in Benton County has remained fairly steady over the past two decades, increasing just slightly from 2.68 persons in 2000 to 2.71 in 2023.[3] In 2023, the total number of households countywide was 76,696.[4]

In 2023, the median household income for Benton County was $87,316.[5] Table 6-1 shows the proportion of the population within each income range.

Table 6-1
Percentage of Households by Income Range, Benton County (2019-2023)

Income Range	Percentage of Households
Below $25,000	11.4
Between $25,000 and $49,999	15.7
Between $50,000 and $99,999	29.7
Above $100,000	43.2

Source: US Census American Community Survey, 5-Year Estimates, 2019-2023

6.2.1.1 Special Housing Needs

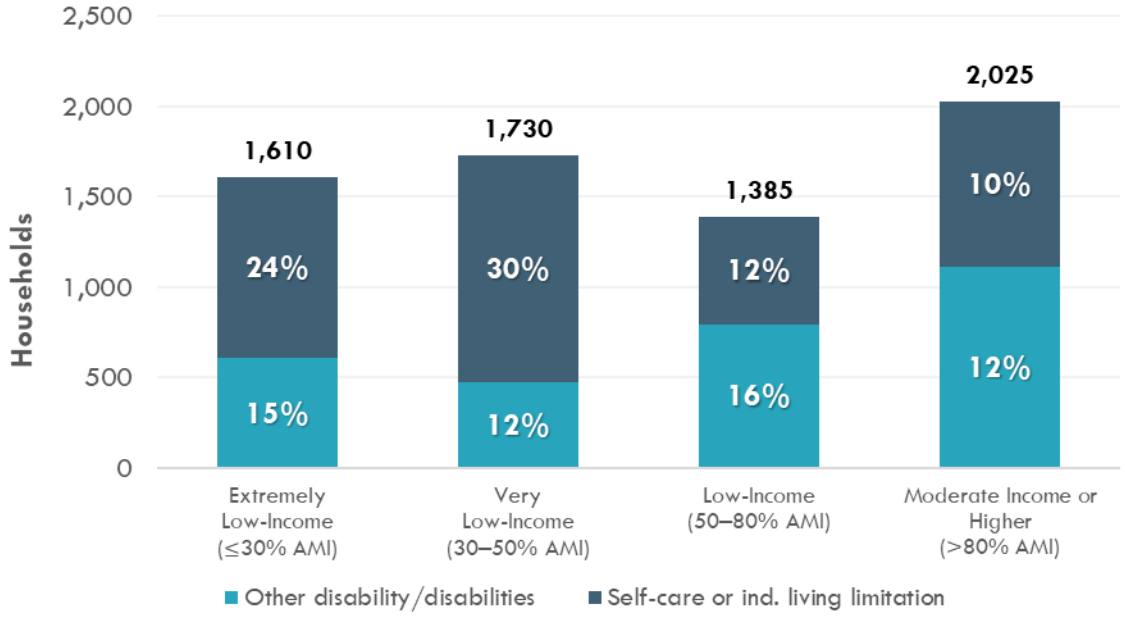
Citizens with special needs living in the county include those who require some assistance in their day-to-day living, such as the physically or mentally disabled, senior citizens, and institutional and group home residents. Social service programs and assisted housing in Benton County serve a portion of those with special needs.

6.2.1.1.1 Households with Disabilities

Figure 6-1 shows renter households in Benton County by disability status and income. While there are households with disabilities across the entire income spectrum, the overall proportions are lower for higher-income groups. For example, the percentage of households with an independent living/self-care limitation among households with extremely low incomes (24%) is more than double the percentage among households with moderate incomes or higher (10%).

[2] Source Washington State Office of Financial Management (OFM), 2024.
[3] Source: 2000 Census and the 2019-2023 American Community Survey (ACS) Five-year estimates.
[4] Source: 2019-2023 ACS Five-year estimates.
[5] Source: 2019-2023 ACS Five-year estimates.

Figure 6-1
Renter Households by Disability and Cost Burden, Benton County (2016-2020)



Sources: US HUD Comprehensive Housing Affordability Strategy (CHAS), 2016–2020; BERK, 2025.

6.2.1.1.2 Older Residents

Approximately 32,722 Benton County residents are age 65 or older, representing about 16% of the total population. An additional 24,571 residents are between the ages of 55 and 64, suggesting that the county's elderly population is likely to grow significantly in the coming decade.[6] Older adults have varying housing needs, but many depend on affordable and accessible options located in communities that support aging, including proximity to healthcare and essential services.[7] While some older residents in Benton County can afford suitable housing and care, many others have financial barriers that limit their housing options. This can result in greater isolation and significant challenges to accessing resources and care.

6.2.1.1.3 Group Quarters

The U.S. Census Bureau classifies all individuals not living in traditional housing units, such as houses, apartments, mobile homes, or rented rooms, as residing in group quarters. Group quarters are categorized into two types: institutional and non-institutional. Institutional group quarters include facilities such as correctional institutions, nursing homes, and mental health hospitals. Non-

[6] Source: 2019-2023 ACS Five-year estimates
[7] Source: Molinsky, J. (2022, August 18). Housing for America's older adults: Four problems we must address. *Harvard Joint Center for Housing Studies*. https://www.jchs.harvard.edu/blog/housing-americas-older-adults-four-problems-we-must-address

institutional group quarters include settings like college dormitories, military barracks, group homes, missions, and shelters. Benton County had a total group quarters population of 2,158.[8]

6.2.2 Housing Inventory

As of 2023, there were 81,792 housing units in Benton County, including both cities and unincorporated areas.[9] About 68.5 percent of the housing units are owner-occupied and 31.5 percent renter-occupied (Table 6-2).

Table 6-2
Housing Types and Occupancy, Benton County (2019-2023)

	Estimate in 2023	Percent
Total Housing units	81,792	100.0
Occupied housing units	76,696	93.8
Vacant housing units	5,096	6.2
Tenure		
Owner-occupied housing units	52,533	68.5
Renter-occupied housing units	24,163	31.5
Unit Type		
1-unit, detached	51,896	63.4
1-unit, attached	2,787	3.4
2 units	2,850	3.5
3 or 4 units	3,017	3.7
5 to 9 units	3,697	4.5
10 to 19 units	2,734	3.3
20 or more units	7,360	9.0
Mobile home	7,101	8.7
Boat, RV, van, and other	350	0.4

Source: US Census American Community Survey, 5-Year Estimates, 2019-2023

Single-family housing is the predominant housing type throughout the county. In 2024, 66 percent of all units were single family, 23 percent were multi-family dwellings, and 11 percent were manufactured homes. The unincorporated county also has a large number of manufactured homes, which approximately 37 percent of homes in the unincorporated county considered manufactured homes. (Table 6-3).

[8] Source: 2019-2023 ACS Five-year estimates.
[9] Source: 2019-2023 ACS Five-year estimates.

Table 6-3
Housing Mix, Benton County Jurisdictions (2024)

Jurisdiction	Single family	Multi-family	ADUs	Manufactured Homes	Total Dwellings[1]
Unincorporated	8,097	297	15	4,915	13,324
Kennewick	21,491	10,365	20	2,036	33,912
Richland	19,101	7,567	10	803	27,481
Prosser	1,768	581	1	234	2,584
West Richland	5,177	610	14	860	6,661
Benton City	1,132	111	2	290	1,535
Total	**56,766 (66.4%)**	**19,531 (22.8%)**	**62 (0.1%)**	**9,138 (10.7%)**	**85,497**

Notes: [1]Does not include RV, Boats, and Vans
Source: Office of Financial Management (OFM), 2024

Housing units with 2 or 3 bedrooms are the most common in Benton County, accounting for approximately 63% of all occupied housing units.[10] Table 6-4 shows the bedroom size composition for the entire county, along with a breakdown by individual cities.

Table 6-4
Number of Bedrooms, Benton County Jurisdictions (2019-2023)

	No bedroom	1 bedroom	2 or 3 bedrooms	4 or more bedrooms
Kennewick	798	3,272	19,912	7,033
Richland	450	2,294	14,538	7,333
Prosser	87	244	1,456	441
West Richland	44	76	3,525	2,077
Benton City	46	102	1,056	96
Benton County	**1,497**	**6,392**	**48,200**	**20,607**

Source: US Census American Community Survey, 5-Year Estimates, 2019-2023

As of early 2025, the typical home value was $439,460 for Benton County and the typical observed market rate rent was $1,692.[11]

6.2.3 Housing Production Trends

Table 6-5 represents the distribution of new housing growth across cities and unincorporated areas. Between 2010 and 2024, unincorporated Benton County experienced a 14% increase in housing units, significantly lower than the 27% growth observed in incorporated areas.

[10] Source: 2019-2023 ACS Five-year estimates.
[11] Source: Zillow, 2025.

Table 6-5
Housing Unit Growth by Jurisdiction (2010-2024)

Jurisdiction	2010	2024	Growth (%)
Kennewick	28,507	33,912	19%
Richland	20,876	27,481	32%
Prosser	2,129	2,584	21%
West Richland	4,298	6,661	55%
Benton City	1,162	1,535	32%
Total Incorporated	**56,972**	**72,173**	**27%**
Total Unincorporated	**11,646**	**13,324**	**14%**
Benton County (total)	**68,618**	**85,497**	**25%**

Source: Office of Financial Management (OFM), 2024

Table 6-6 shows the breakdown of production trends between 2020 and 2024 in Benton County's cities and unincorporated areas. Detached single-family units made up most permitted units, followed by manufactured homes. Across the county, the housing types with the highest number of permits included both single-family and multifamily units.

Table 6-6
Permitted Housing Units by Jurisdiction 2020-2024

Jurisdiction	Single-Family	Multifamily	ADU	Manufactured Home*
Kennewick	1,457	483	17	64
Richland	1,593	748	8	17
Prosser	189	48	0	5
West Richland	702	460	9	18
Benton City	137	12	2	9
Total Units Incorporated	**4,078**	**1,751**	**36**	**113**
Total Units Unincorporated**	**602**	**26**	**20**	**112**
Benton County (total)	**4,680**	**1,777**	**56**	**225**

* Note: OFM does not provide permit data for mobile homes. The figures shown represent a net new calculation based on the total number of mobile homes and those that have been annexed.
**Unincorporated Benton County includes rural areas as well as unincorporated urban growth areas outside of cities.
Source: Office of Financial Management (OFM), 2024

6.2.4 Affordability

The term affordable, when used regarding housing, is usually relative to a specific economic segment of the population. Families who pay more than 30 percent of their income for housing are considered cost burdened and may have difficulty affording necessities such as food, clothing, transportation, and medical care.

Approximately 17.6 percent of the county's owner-occupied housing units cost more than 30 percent of the owner's monthly income, while 45.1 percent of renter households are cost burdened.[12] In total, 26.3 percent of households in Benton County are housing cost burdened.

6.2.4.1 Subsidized Affordable Housing

Benton County had a total of 3,726 subsidized affordable housing units as of 2023.[13] These data do not indicate what affordability levels are served by these units. 3,491 of these units (94%) are in the cities of Kennewick and Richland. Data about the location of the remaining 235 units is unavailable.

6.2.5 Emergency and Supportive Housing Needs

Emergency and supportive housing are vital for those at risk of or experiencing homelessness. They help people who are homeless or are close to experiencing it. These individuals may become homeless due to affordability issues. Life events, such as domestic violence, racial discrimination, and mental and physical health problems also play a role. These specific types of housing typically support individuals and families with extremely low income. As of 2020, there were 168 emergency beds county-wide.[14]

Permanent supportive housing provides long-term rental assistance with voluntary supportive services. As of 2020, there were 145 permanent supportive housing beds in Benton County.[15]

6.2.5.1 Homeless Population and Trends

In July 2024, 2,791 individuals experienced homelessness or unstable housing countywide, with 1,827 of them being homeless only.[16] Table 6-7 provides a breakdown of unstably housed or homeless individuals by household type.[17] Adults without minors comprise approximately 48% of this population.

[12] Source: 2019-2023 ACS Five-Year Estimates.
[13] Source: Washington Center for Real Estate Research (WCRER), Subsidized Rental Housing Profile, 2023.
[14] Source: Washington State Department of Commerce, Housing for All Planning Tool (HAPT), 2024.
[15] Source: Washington State Department of Commerce, Housing for All Planning Tool (HAPT), 2024.
[16] Source: Department of Commerce, Snapshot of Homelessness in Washington State, July 2024.
[17] "Homeless or Unstably Housed" refers to households experiencing homelessness or housing instability (e.g., they are literally homeless/unsheltered, receiving housing services that indicate housing instability, residing in transitional housing, or couch

Table 6-6
Unstably Housed or Homeless Persons by Household Type, Benton County (2024)

Household Types	Homeless or Unstably Housed	Homeless Only
Minor Only, None under Age 12	<11	<11
Minor Only, at Least One under Age 12	<11	<11
Youth (18-24) w/o Minors	186	139
Adults (25+) w/o Minors	1,348	990
Single Parent with Minors	717	454
Two Parents with Minors	534	241
Unknown	<11	0
Total	**2,791**	**1,827**

Source: Snapshot of Homelessness in Washington State for July 2024. Washington State Department of Commerce, 2025

The most common and immediate cause of homelessness is the lack of affordable and available housing. With low vacancy rates in Benton and Franklin Counties, even individuals without significant barriers struggle to find affordable options. Landlords can be selective, and rising rents driven by inflation have forced many households to spend a larger share of their income on housing, straining other basic expenses. Many individuals experiencing homelessness face additional challenges such as prior evictions, legal issues, or behavioral health conditions. While rates of mental illness and substance use have remained relatively stable, a shortage of treatment options creates significant barriers to stability. Property damage caused by individuals with untreated behavioral health issues has also led to increased reluctance from landlords and hotel managers to accept program referrals, further limiting housing opportunities.[18]

6.3 Projected Housing Needs

Washington's Office of Financial Management (OFM) projects that the population of Benton County will grow to 278,456 by 2046. This is an increase of 71,583 residents between 2020 and 2046. The county needs to add an additional 38,260 net new units of housing to accommodate this growth and address current housing shortage.[19] Within the unincorporated rural areas, the county needs to add 4,974 new units. Commerce's Housing for All Planning Tool (HAPT) identifies the countywide housing needs by affordability level, consistent with new requirements in Washington's Growth Management

surfing). "Homeless Only" is a subset of the "Homeless or Unstably Housed" population and includes unsheltered clients/households who are literally homeless (i.e., lack a fixed nighttime residence, are living outside or in a shelter not fit for human habitation, or are living in emergency shelter).

[18] Source: Benton and Franklin Counties, 5-Year Homeless Housing Plan Annual Report, 2024.

[19] Source: Washington State Department of Commerce, Housing for All Planning Tool (HAPT), 2024.

Act. Table 6-8 shows the allocation of these projected housing needs by income level to cities and unincorporated rural Benton County. Income levels refer to AMI, or Area Median Income.[20]

Table 6-7
Allocation of housing needs by income level to jurisdictions, 2020-2046

Jurisdiction	Total Units Allocated	Housing Needs by Affordability Level (% of AMI)						
		0-30% Non-PSH	0-30% PSH	>30-50%	>50-80%	>80-100%	>100-120%	>120%
Benton City	765	97	61	152	107	59	67	222
Kennewick	12,626	1,597	1,007	2,513	1,772	974	1,104	3,659
Prosser	765	97	61	152	107	59	67	222
Richland	14,155	1,789	1,130	2,817	1,988	1,092	1,237	4,102
West Richland	4,975	629	397	990	698	384	435	1,442
Unincorporated Rural	4,974	0	0	0	0	384	435	4,155
Total	**38,260**	**4,209**	**2,656**	**6,624**	**4,672**	**2,952**	**3,345**	**13,802**

Note: PSH = Permanent Supportive Housing.
Source: Benton County Countywide Planning Policies. February 2026

6.3.1 Housing Types to Accommodate Projected Housing Needs

Not all housing types are appropriate for meeting all housing needs. Due to differences in land and construction costs per unit, the affordability of new housing depends in part on housing type. For instance, a new single-family home on a large lot is the most expensive type of home to produce per unit. Multifamily homes, such as apartment buildings, can be produced at a much lower cost per unit.

Accessory dwelling units (ADUs): ADUs have potential to increase the diversity of housing options within rural Benton County, where detached single-family homes predominate. ADUs can be attached or detached from a primary residence on a shared lot. Depending on the context, ADUs can be an affordable housing option for Low-Income (50-80% AMI), Moderate-Income (80-120% AMI) households, or higher-income households.

The zoning code permits the establishment of one attached or detached dwelling per lot in unincorporated areas zoned for single family residences. A conditional use permit is required for

[20] AMI is an estimate of the median income of all family households that is published by the U.S. Department of Housing and Urban Development (HUD) annually. In 2025, AMI for a 4-person household in Benton County was $105,600. HUD adjusts this value upwards or downwards based on household size when determining income limits that classify all households based on their income level.

detached ADUs. There are several requirements with regards to parking, occupancy, and use of these ADUs. Between 2020 and 2024, 11 ADUs were permitted in unincorporated Benton County.[21]

Manufactured homes: Factory Assembled Structures and mobile homes offer housing alternatives suitable to low-income and moderate-income groups as well as senior citizens. Factory assembled structures are designed, made off site, and assembled on site. This process helps reduce building material and construction costs. Quality Factory Assembled Structures can be placed on a parcel for approximately 70 percent of the cost of a comparably sized site-built structure. As technology improves, Factory Assembled Structures can be designed to closely resemble site-built homes. In addition, when placed in mobile home parks or subdivisions, Factory Assembled Structures can offer reduced land and infrastructure costs.

Factory Assembled Structures are a major source of affordable housing in Benton County. They meet Housing and Urban Development (HUD) standards, which make it possible for buyers to get loans to purchase with little or no down payment. This is a very attractive option for those with little savings to buy site-built homes.

Farm Labor Housing. The County recognizes that RCW 70.114A provides additional opportunities through the Washington State Department of Health for migrant and seasonal farm labor housing in Benton County.

Multiple Detached Dwellings. Under the current BCC, the Planning Administrator may approve up to four detached dwellings on an individual lot provided the proposed use complies with all applicable Benton Franklin Health District, Department of Health and Social Services, and Ecology requirements, as well as the density requirements of the Comprehensive Plan. The multiple dwellings provision allows for supervision of elderly or infirmed family members and other flexible living arrangements.

Temporary Dwellings. All residential and agricultural districts permit temporary dwellings. These types of housing are also approved with or without conditions by the Planning Administrator. They may be approved in cases of personal hardship and to suit the needs of the agricultural community on a temporary basis. Examples include temporary living arrangements for care giving person(s) to an elderly member of the family, agriculture worker living on the premises temporarily, owner or caretaker living during construction of the permanent home, etc. Because such hardships or needs are personal and generally transitory, it is determined that the approval of temporary dwellings do not constitute a long-term land use commitment that would conflict with the County's Comprehensive Plan.

[21] Source: BERK analysis of Benton County permit data, 2025.

6.3.1.1 Housing Production Trends by Housing Type

Table 6-9 lists three housing types that can be built in rural unincorporated Benton County. It also shows the typical affordability level of new units, based on BERK's analysis of local market conditions. These housing types and affordability assumptions are consistent with Commerce guidance for updating housing elements.

Table 6-8
Estimated Housing Production and Assumed Income Levels Served in Rural Benton County

Housing Type	Assumed Affordability Level	Estimated Production, 2020-2024	Average Annual Production
Detached Single family homes	Higher Income (>120% AMI)	892	223
Manufactured Homes	Moderate-Income (80-120% AMI)	229	57
Accessory Dwelling Units (ADUs)	Moderate-Income (80-120% AMI)	11	3

Sources: Washington Department of Commerce Guidance for Updating Your Housing Element, 2023; Benton County, 2025; BERK, 2025.

6.3.2 Land Capacity for Projected Housing Needs

Counties are not required to show capacity in rural areas for accommodating projected housing need for higher income (>120% AMI) households. However, analysis is required to show capacity for accommodating the allocated moderate-income (80-120% AMI) housing needs in rural Benton County. The Population and Housing Memorandum in Volume II, Appendix E, provides this analysis for rural Benton County. It begins by estimating how much of the housing need allocation has already been accommodated through new manufactured homes and ADUs built between 2020 and 2024. Subtracting this from the total allocation results in a remaining housing need of 579 units. Next, it compares the average annual need (approximately 28 units per year for 21 years) to the average annual production of these unit types (53 units per year for the previous 5 years). Given that historic average annual production is nearly double the average annual need, it is likely that continuation of these historic development trends in Benton County will result in enough new housing to accommodate moderate-income housing needs.

Table 6-9
Comparison of Allocated Housing Needs to Historic Production Trend, Rural Benton County

Affordability Level (% of AMI)	Housing Need Allocation, 2020-2046	Estimated Production, 2020-2024	Remaining Need, 2025-2046	Average Annual Need, 2025-2046	Average Annual Production, 2020-2024	Surplus or Deficit of Production Rate Compared to Need
>80-120%	819	240	579	28	60	2

Sources: Benton County, 2025; BERK, 2025.

6.4 Adequate Provisions

GMA requires that communities ensure that their Comprehensive Plan policies and regulations are designed to achieve housing availability for all community members at all income levels. The County does this by reviewing programs and actions, and then identifying gaps in local funding, barriers in development regulations, and other limitations with a course of action to correct.

6.4.1 Consideration for low, very low, extremely low, and moderate-income households

Rural Benton County's allocation of countywide housing needs includes moderate-income household (80-120% AMI). See the previous section for a discussion of permitted housing types that can meet these needs. Benton County's allocation of countywide housing needs addresses all low-income housing needs (0-80% AMI) within cities.

6.4.2 Programs and actions needed to achieve housing availability

Analysis of housing production trends detailed in the previous section indicates that there are no barriers to achieving housing availability for moderate-income households. However, the county does have some tools to encourage the production of housing needed to support affordability. These include encouraging the production of lower cost housing types (discussed above), density, and the development review process.

6.4.2.1 Density



Residential development in Finley, Washington

A range of residential densities is provided within the unincorporated County to provide broad affordability related to land costs and construction. Within the Rural Community Center areas in Paterson, Whitstran, Plymouth, and Finley, densities of up to 3 Du/acre may occur, including duplexes. Densities of 1 Du/acre are designated in Rural Transition areas due to their proximity to UGAs and adequate road capacity. These designations are considered limited areas of more intensive rural development enabled by RCW36.70A.070 (5)(d). The density of 1 Du/5 acres is the dominant rural density in Rural Remote areas. Low density residential uses are allowed in Rural Resource areas at 1 Du/20 acres. Minimum lot sizes in each land use and zoning district are identified in the zoning code Chapter 11 of BCC.

6.4.2.2 Development Review Process

In addition to land use policies, the County's development review process will be periodically evaluated for efficiency and customer service improvement opportunities. Periodic reviews to improve efficiency and service can help reduce housing development costs and may also encourage developers to use the policy and regulatory features of the Comprehensive Plan which is designed to encourage affordable housing.

6.4.3 Consideration of housing in relation to employment

As of 2022, there were an estimated 94,736 jobs located in Benton County. Leading sectors include health care and social assistance, administration & support, waste management and remediation, and retail trade.[22] Most jobs in the county are concentrated in its two largest cities, Kennewick and Richland, as well as along Interstate 82 (I-82), extending through Benton City and Prosser. Additional employment opportunities, such as agricultural work, exist in the rural areas of the county's southern region. Additionally, there are job opportunities across the river in Oregon, including data centers in Umatilla and Boardman as well as agricultural and construction work.

Most of the employed Benton County population drives to work. Approximately 75% drive alone and 10% carpool. The average travel time to work is 22 minutes.[23] The second most common practice is

[22] Source: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program, 2022.
[23] Source: 2019-2023 ACS Five-Year Estimates.

to work from home (11.6%). Benton County's allocation of projected housing needs emphasizes growth in cities with established employment centers and adjoining cities.

6.4.4 Consider the role of ADUs in meeting housing needs

This plan includes considerations for the role of ADUs in meeting housing needs. See discussion in previous section. It finds that ADUs have potential to help address housing needs for Low-Income (50-80% MFI), Moderate-Income (80-120% MFI) households, or higher-income households, depending on context. Encouraging ADU production in UGAs and rural community centers has potential to support meeting housing targets for these affordability levels.

6.5 Racially Disparate Impacts

Over the past two decades, the cost of buying or renting a home has risen sharply across Washington State, impacting communities statewide, including those in Benton County. While rising housing costs affect all households, communities of color are disproportionately burdened. These communities are more likely to spend a higher share of their income on housing, live in lower-quality homes, and face barriers to homeownership. As a result, they are often more vulnerable to housing shortages and escalating housing costs.

In alignment with the GMA amendments outlined in HB 1220, cities and counties have a responsibility to begin to undo the policies and practices that have contributed to racially disparate impacts, displacement, and exclusion in housing. They are also tasked with adopting policies that actively mitigate these impacts. Volume II, Appendix E presents evidence of racially disparate impacts, exclusionary patterns, and displacement risks within Benton County. Based on the findings of this analysis the County revised its Housing Goals and Policies to mitigate racially disparate impacts in housing outcomes. The County reviewed the policies based on the criteria such as:

- Effectiveness of the policies to accommodate housing for all
- Outcome of the policies such as who benefits and who is burdened by the policies
- Risk level of the policies, whether it increases the risk of displacement for the vulnerable communities

The County reviewed policies to ensure they didn't include any harmful bias associated with any groups. The Housing Goals and Policies section included new goals and policies to address racially disparate impacts such as displacement of housing due to planning, disinvestment, redevelopment, etc. Policies to provide a variety of housing types will also act to mitigate displacement and disparate impacts.

7 Transportation Element

7.1 Introduction

The Transportation element of the Comprehensive Plan describes the existing transportation network, Level of Service (LOS), planned improvements and financing, and intergovernmental coordination needs, as required under RCW 36.70A.070(6). A Climate Element of the Comprehensive Plan has also been prepared and is included to meet new requirements of the GMA. Collectively, these items help functionally integrate the transportation network with the Land Use Map (*see* Volume II, Appendix A: Map Folio, Figure 15 – Existing Transportation Facilities Map).

Under current local farm and non-farm economic growth conditions, the trend to convert raw land for agriculture, residential, commercial, and industrial land uses will continue. These conversions engender new land uses which drive maintenance and expansion of road capacity for commuter, "farm to market," leisure, recreation, business, and other vehicle trips. Transportation related land use demands ultimately manifest themselves as capital projects in the County's Six-Year Road Program. Benton County 2036 travel forecast and Level of Service are included in Volume II, Appendix H-1. Further information on the Washington State Highway System can be found in Volume II, Appendix H-2 (Washington State Highway Inventory within Benton County) and Volume II, Appendix H-3 includes the Washington State Highway 2036 Forecast and Level of Service Analysis.

7.2 Existing Transportation System

Transportation systems in Benton County form a multi-modal network that provides for the movement of people and goods locally. The systems connect to regional, state, national, and international systems. Transportation systems which comprise the local network include road, rail, air, waterborne, and non-motorized (bicycle, pedestrian) transit.

Efficient transportation links to regional, state, national, and global markets are essential to the maintenance and growth of the County's economic base. Additionally, the ease with which people can move throughout the County is an important quality of life factor.

7.2.1 Benton County Road System

Within and around the Metropolitan Planning Area (Kennewick, Richland, West Richland), the road system within Benton County is well developed with interstates, state highways, collectors, and local access routes. Improvements have been made to several roads to improve access to some of the outlying rural areas, such as Finley and in areas in southern Benton County. Road access for rural and agricultural areas is good and continues to be improved.

Peak hour congestion problems do exist within the urban areas, notably on routes such as State Route 240 and George Washington Way used by Hanford Site commuters, and on Columbia Center Boulevard related to the Columbia Center Commercial Retail complex in Kennewick.

However, congestion problems are absent on County roads serving rural or agricultural areas. Generally, principal road concerns in rural areas are "all weather" access for agricultural product transport and more direct "farm to market" routes for agricultural products. Several road improvements have been made in recent years to improve the rural road system within the County.

Benton County uses the federal functional classification system for categorizing County roads, including rural and urban local access roads, minor and major collectors, and arterials.



County Road off SR 397 in Finley, looking north

Local access roads. Their primary function is to provide direct access to individual land holdings and uses, whether they be residential, industrial, or agricultural. Local roads generally lead to collectors that collect or merge traffic. Local roads do not have a designated LOS.

Minor Collectors. Their primary function is to conduct traffic "intra-county" from local roads to major collectors and arterials. This function is often divided between movement and access to land uses. Minor collectors do not handle long thru-trips and are not continuous for any great length. Minor collectors do not have a designated LOS.

Major Collectors. Their primary function is to provide service to any county seat not on an arterial, or to towns or rural centers not served by an arterial, or to other traffic generators such as schools, shipping points, parks, or important agricultural areas. They collect large volumes of traffic from access roads and minor collectors and move it to major and minor arterials and between major

activity centers and traffic generators. Major collectors serve the volumes of traffic within areas that are not served by arterials. Major collectors have a designated LOS of "C" in the unincorporated portions of the County outside of UGAs.

Minor Arterials. These include state highways/routes and a few local routes, and their primary function is to serve as major carriers. They are woven through and fully integrated with local collectors and roads that reach beyond the local network to act as regional links and to bridge the distances between interstate corridors, to which they provide major connections for interstate travel.

Depending upon circumstances, access is provided in various configurations including at-grade intersections to local access roads and even private ingress and egress (with state granted encroachment permits). LOS are designated by WSDOT.

Major Arterials. These include the interstate and other highways with the primary function of moving large volumes of high-speed traffic for long distances. Access is generally provided only at spaced, grade-separated interchanges. Freeways are usually multi-lane, divided highways. They are the component of the road system which connects the regions within a state and across the states of the nation.

Figure 15 in Volume II, Appendix A: Map Folio depicts the major collectors, arterials, and interstate highways in Benton County.

7.2.2 Regional Rail System

Freight rail service to the Tri-Cities and Benton County, as well as surrounding counties, is provided by Union Pacific and Burlington Northern & Santa Fe Railroads as shown in Volume II, Appendix A: Map Folio, Figure 15 – Existing Transportation Facilities Map.



Railcars on rail siding in Finley

The Tri-Cities area is one of the few areas between the Rockies and the Cascade Range to be linked by more than one carrier. Vast tonnages of export and import products associated with seaports on both the Pacific and Atlantic coasts are moved through the area. Major quantities of agricultural products from the Midwest and the Pacific Northwest are also transported to the Puget Sound and Portland area for transshipment to Pacific Rim countries.

Passenger Rail Service. Rail passenger service is at Amtrak facilities at Pasco in Franklin County. Connections from Pasco are Spokane and Portland.

Tri-City Railroad. A Union Pacific affiliated rail handling carrier serves the area in and around Richland, operating out of former U.S. Department of Energy facilities in north Richland (TCR 2017). The Washington State Rail Plan 2019 – 2040 outlined a set of rail freight strategies for short line railroads that are applicable to Benton County. These include:

Addressing deferred maintenance and optimizing for economic sustainability

- Short line railroads and the state can work together to address deferred maintenance and compatibility with Class I railroads.
- WSDOT can continue to work to improve the condition of the PCC rail system.
- Congress can enhance the ability of short lines to invest in their infrastructure by making the Short Line Tax Credit permanent.

River Navigation

- WSDOT and short line railroads can monitor the Columbia River System Operations EIS process.

The County will continue to support plans, projects, and other activities that help meet these needs for the rail systems serving areas in the County. The Port of Benton is working to upgrade sections of its track through Richland to improve rail speeds and reduce street closures during a train event.

7.2.3 Air Transportation

Benton County (and the Tri-Cities) is served by three public airports as shown in Table 7-1.

Table 7-1
Public Airports Serving Benton County and the Tri-Cities

Name of Airport	Location	Classification (FAA)	Owner
Tri-Cities Airport	City of Pasco	"Air Carrier" (regional)	Port of Pasco
Richland Airport	City of Richland	"Commuter Service"	Port of Benton
Prosser Airport	City of Prosser	"General Aviation"	Port of Benton

The **Tri-Cities Airport** in Pasco serves as the major air carrier airport for both Benton and Franklin counties and the surrounding region in both Oregon and Washington. The airport has been expanded and upgraded its terminal facilities. The number of carriers serving the region has grown to six commercial airlines. Continued steady growth is expected, consistent with population growth in the region.

The **Richland Airport** provides most of the general aviation activities in the County, including recreation flying, flight training, charter flights, air taxi service, business flying, glider operations, and skydiving activities. Activities at the **Prosser Airport** include recreational flying, flight training, air charter, and agricultural application operations.

7.2.4 Water Transportation/The Columbia-Snake System

The Columbia and Snake rivers provide an inland commercial waterway consisting of navigational locks in eight dams over a length of 465 miles, extending from Astoria, Oregon, at the mouth to Lewiston, Idaho. Within this system, a navigational channel of 14 feet deep (minimum) is maintained for bulk commodity transportation by oceangoing barge. This inland waterway, which links the Pacific Ocean with the state's agricultural "Inland Empire," forms Benton County's eastern and southern boundaries. In addition to the Port of Benton facilities at Richland, barges can be loaded and unloaded at facilities in Kennewick and Finley.

The principal commodity shipped out of Benton County by barge is grain products. In fiscal year 2021 more than 5,652,975 tons of commodities passed through the navigation lock at McNary dam, consisting primarily of grains, petroleum products, fertilizer, wood products and miscellaneous cargo (US Army Corps of Engineers).

Agricultural products are shipped from privately owned docking facilities located at grain storage and industrial sites. Occasionally, special shipments of former nuclear components, such as submarine reactor hulls, destined for disposal at Hanford, are barged to the Port of Benton dock in Richland.

The demand for waterborne transport fluctuates with markets, commodity supply, and in relationship to the economics of transport by rail and overland truck. However, over the long term, because of its inherent efficiencies, waterborne transport will likely remain an integral part of the Inland Empire transportation system and will continue to play a vital and expanding role as global trade expands, balanced with associated river management strategies supporting salmon recovery efforts. Maintaining the existing water transportation system is an important priority for the County.

7.2.5 Pipeline Transport

7.2.5.1 Existing Conditions

Benton County has two interstate natural gas pipelines: Pacific Gas and Transmission Company and Northwest Pipeline Company. The Pacific Gas and Transmission Company line crosses the southeast corner of the County as it extends from Walla Walla County into Oregon. The Northwest Pipeline Corporation line runs up the Columbia River Gorge from Vancouver, Washington, to Plymouth. There it branches into two lines, one to the Yakima Valley and Wenatchee, the other serves the Tri-Cities

and Spokane. The system distributes natural gas to Washington's seven utility companies. The maximum pipe size is 30 inches.

7.2.5.2 Future Considerations

Gas energy from this distribution system directly serves the Plymouth and south Finley areas Industrial land use designations. Substantial undeveloped industrial designated land exists within these two areas. The presence of large acreages with gas energy and road, rail, and barge transport opportunities provides economic opportunities that should not be blocked by piece-meal developments. Proactive advanced planning should occur in these areas to preserve their future industrial/commerce values.

7.2.6 Public Transit Service, Park and Ride Lots, Bicycle Transport

Ben Franklin Transit (BFT). The Tri-Cities urban area, Prosser, and Benton City are served by several fixed routes operated by Ben Franklin Transit (BFT). BFT also provides a rideshare/vanpool program that operates throughout the region. BFT route headways are set and adjusted periodically based on ridership demand and market potential, using load factors, productivity, and development growth to inform the planning process. BFT distributes bus service so that the majority of all residents within the service area are within a 1/2-mile walk of bus service. Dial-A-Ride (DAR) paratransit service operates on an eligibility basis throughout the entire Public Transit Benefit Area (PTBA), at a regular rate when the origin and destination are within 3/4 of a mile of the service boundary, and at a premium rate when the origin or destination is beyond 3/4 of a mile from the service boundary.

Benton County sits on the Board for BFT and participates in their planning process as well. BFT regularly prepares a Transit Development Plan (TDP) which identifies improvements and expansions to the transit service provided in the region. Because of the nature of providing efficient transit service within budgetary limitations, transit services to unincorporated areas of Benton County are somewhat limited. However, coordination of appropriate services such as bus stops, park and rides and other services occurs with each update of the TDP. The current TDP is adopted by reference in the Comprehensive Plan.

Park and Ride Lots. There are currently 13 park and ride lots in Benton County which are owned by WSDOT, BFT, and the City of Kennewick and some leased lots.

7.2.7 Non-Motorized Transport

Bicycle paths have increased in the past several years, with a bike path that forms a loop around the urban areas of the Tri-Cities and a path north and west of Prosser. In addition, roads with lower traffic use in the County are often used by cyclists for recreational riding.

Benton County is an active participant in the regional transportation planning process that is coordinated by the Benton Franklin Council of Governments (BFCOG). As members, the County participates regularly on both the Technical Advisory Committee and the Policy Board to address numerous transportation issues in the region. The BFCOG has prepared the Regional Active Transportation Plan (2020), a Regional Bicycle Plan (2024), and a Regional Pedestrian Trails Plan (2026). As members of BFCOG these documents and their associated strategies and projects, are adopted and incorporated into the Benton County Comprehensive Plan by reference and are available on the BFCOG website.

7.2.8 Transportation Demand Management Strategies

As discussed above, Benton County is an active participant in the BFCOG. The Regional Transportation Plan, Transition 2045, includes a section that discusses Transportation Demand Management Strategies. TDM strategies should be pursued before roadway LOS approaches or drops below adopted standards included in the Comprehensive Plan. As members of BFCOG, all of these documents, and associated TDM strategies, are adopted and incorporated into the Benton County Comprehensive Plan by reference. These documents can be found on the BFCOG website.

NOTE: this section will be expanded to more specifically discuss TDM strategies applicable to Benton County and the timing of such activities.

7.3 Level of Service Analysis

Consistent with GMA, the County has adopted LOS as the standard of operating efficiency for the County-owned and maintained major collectors and arterials within the County transportation service system. Local roads and minor collectors do not have designated LOS. LOS for minor arterials are designated by WSDOT.

7.3.1 Benton County Level of Service

Benton County's designated LOS is "C" in rural areas and LOS "D" within Urban Growth Areas. When a roadway meets a LOS "C" standard, it means that the streams of traffic flow remain uninterrupted, even at peak hours, by congestion or delays related to traffic volume and road configuration.

County land uses are primarily rural and agricultural, and such uses typically generate new traffic demands gradually.

On rural roads with relatively light traffic volumes where flow is uncomplicated by frequent entry points and signalized intersections, a simple comparison of existing traffic counts and projected traffic counts compared to capacity gives a reasonable estimate of Level of Service (LOS). An LOS analysis was performed based on traffic volumes collected in 2024 by the Benton Franklin Council of Governments at 48 locations in unincorporated Benton County. The LOS for each of the roads evaluated was determined for existing volumes to be at a LOS A – very efficient flow of traffic without delays. Forecasts for year 2036 were prepared using the BFCOG regional travel demand model where available. In areas not covered by the regional model, the higher of either 1% per year growth or historic growth rate where data is available was used to be conservatively high. Volume II, Appendix H-3: Existing and Forecast Transportation Level of Service shows the current volumes of traffic at the 48 locations where traffic data was collected and the 10-year projected traffic volumes for year 2036. The LOS analysis indicates that every road segment is anticipated to still function at acceptable LOS of A except the road segment of Dallas Road south of I-182, which is forecast to function at LOS D, which is acceptable due to the fact that it is at the edge of the Urban Growth Area.

NOTE: Multi-modal Level of Service Standards (MMLOS) are in the process of being addressed along with the identification of specific actions necessary to meet those standards on locally owned arterials, transit routes and state highways. The only locally owned arterial roadways in College Place are outside city limits in Benton County are:

7.3.1.1 Level of Service on State-owned Facilities

The LOS for regional highways, including state roadways, is set through a coordinated process through BFCOG, the County's regional transportation planning organization, along with state, regional, and local input. The LOS for highways of statewide significance is set by the State in consultation with local jurisdictions, with the State having final authority to establish LOS and associated state and federal expenditures on the system.

An analysis was performed to determine Level of Service on state owned facilities. The Washington State Highway Inventory Matrix shown in Volume II, Appendix H-1, provides an inventory of state-owned facilities. Volume II, Appendix H-2 provides details on the analysis of LOS for current conditions as well as for year 2036. All state highway segments will function with acceptable Levels of Service with all but two segments forecast to be LOS "A" or "B". Those two segments, one on SR 240 west of Richland and one on SR 397 between Kennewick and Finley are forecast to be LOS "D" but are within the Urban Growth Area where LOS "D" is acceptable.

As mentioned in the Land Use and Housing Elements, much of the population growth within the unincorporated Benton County is anticipated to occur outside the city limits but within the Urban Growth Areas. The Level of Service analysis was conducted using the most recent traffic data available from WSDOT for the state highway system along with the BFCOG regional traffic model.

The regional model forecasts several different land uses throughout the region for the year 2040 to estimate future travel demand on functionally classified roadways. Benton County participates in the development of the model, including the preparation of population and employment forecasts for Transportation Analysis Zones supported by the modeling process. The land use assumptions of the model are included in the Appendix of the Regional Transportation Plan, are included here by reference. For areas not covered by the regional model, a discussion was held with WSDOT and it was agreed that traffic forecasts for these areas would be fairly represented using 1% per year growth in current volumes.

7.3.2 Future Considerations

Improve the Utility of the Transportation Network. The utility and adaptability of an area's transportation network is one of the primary characteristics upon which the "quality of life" is based. By in large, the road transportation network within the County and the Tri-Cities is an excellent and efficient one, consisting of interstate highways, state routes, and local arterials, collectors, and local access routes; it has well-defined and institutionalized mechanisms for eliminating its deficiencies and maintaining its high level of performance.

However, the existing transportation network is almost singularly dedicated to the personal automobile. This is not a fault, but rather a limitation to the larger community's realization of other land uses, commercial enterprises, human activity, and socioeconomic diversity.

A truly multi-modal transportation system invites increased personal mobility (via pedestrian, bicycle, equestrian, and transit modes); it energizes existing and fosters the creation of new activity centers; it melds business, casual, tourism, and recreational activities into a richer and more resilient community fabric.

Policy needs - there should be bicycle, pedestrian, and equestrian trails which connect the major urban and rural activity centers of the County.

Action - the County should initiate a cooperative effort with adjacent jurisdictions, relevant state agencies, business, private interest groups, and citizens to pull together the various bikeway and trail plans from each jurisdiction, into an integrated trail plan.

This integrated trail plan should use open space corridors, public lands, special district rights-of-way, existing public roads, and new acquisitions, to connect urban and rural residential, business, governmental, visitor, and recreational activity centers and amenities via a network of non-motorized travel corridors. The integrated trail plan should integrate with existing transit and automobile system components.

There should be an adopted implementation program and construction schedules for integrated trail plan components.

Agreement should be sought from participating jurisdictions to annually fund, either jointly or unilaterally, depending upon the nature of the project component, the construction of the integrated trail plan. Where feasible, the funding should be targeted so that it integrates functionally with other parks and recreational facilities or trail construction projects in the County or in other jurisdictions.

7.4 Planned Improvements and Financing

7.4.1 County Six-year Road Program

The County Road Program is the County's principal directive for "near term" capital expenditures to carry out the adopted Transportation Element as it relates to the construction of new facilities and preservation of existing corridors. The Road Program is updated annually by the County Road Department with each update approved by the Board of Commissioners. It is adopted with the Transportation Element of the Comprehensive Plan by reference. The purpose of the Road Program is to correlate funding sources to needed improvements and identify projects for dedicated revenues. It enables long range decision-making, helps assure the continuity of Commissioner goals and objectives, and helps to identify the impacts in future years of decisions made currently. It also identifies existing and future revenues, revenue sources, maintenance and operating costs, expenditure categories, and improvements for the transportation system.

The Road Program and this Transportation Element are coordinated with the transportation planning of other jurisdictions through the BFCOG. The County Road Department and the BFCOG cooperatively conduct traffic counts on the road network to record traffic volumes over time. The data from these recordings are factored into the annual update of the Six-year Road Program, which identifies capital projects to be carried out in the near term.

The "condition" of roadways is also monitored to assess their surface and bed condition and to indicate where the condition of a road is not sufficient to carry existing and projected volumes, as well as the volumes that would occur at the designated LOS. These data are also factored into the Six -year Road Program.

The current multi-year financing program for projects that are included in the Transportation Improvement Program (which is updated annually) that help to meet the requirements for capacity and multi-modal levels of service include: Badger Road rechannelization, County Route 12/Active Transportation path improvements, Adair Road Extension, Reata Road/Bermuda Road intersection improvements, Dallas Road multi-modal improvements, Two Rivers pathway extension.

Funding Sources – Projects included within the Road Program must have identified sources of funding. Under GMA, projects necessary to maintain designated LOS are a priority. A variety of local, state, and federal funding supports the Road Program, with a primary revenue source being the County Road Fund.



Old Inland Empire highway near Whitstran

7.4.2 Paths and Trails

In recent years, the County has placed increased emphasis on providing paths and trails as non-motorized travel routes for both commuting and recreation. There is growing citizen interest in bicycling, walking, running, and equestrian trails that connect activity centers.

Funding Sources – RCW 47.30 requires cities and counties to allocate one-half of one percent of the amount of funds received from the motor vehicle fund for trails and paths. In order to spend these funds on the construction of a trail or path, the trail or path must be included in a comprehensive trail plan adopted by the governing body. Additional planning and construction funds are available through various state and federal grants.

7.4.3 Concurrency - Pay As We Go

Under GMA, service capacity for a new project is supposed to be available "concurrent" with the approval of a new project, or when the project is occupied. This requirement for concurrency is intended to prevent existing residents from having to pay for new capital projects to serve new development. Concurrency is designed to prevent large deficits in capacity by adding capacity as growth occurs, instead of letting it build up.

Benton County reviews traffic volume information collected annually and incorporates this information into updates to the Six-year Road Program. This provides an ongoing assessment of the traffic volume compared to capacity conditions on individual sections of road. In this way, planning and funding of capital projects necessary to meet projected demands can occur in advance, or "concurrently" with the demands. The Road Program is designed to make a variety of improvements to the road network during the planning period to address incremental growth and other needs, as described previously.

Additionally, the principal mechanism for the review and mitigation of new development impacts on designated LOS for local streets, roads, and state highways, is the County's Environmental Policy (SEPA Ordinance). Under BCC Chapter 6.35, those projects that are not "categorically exempt" from SEPA review will address traffic generation in the SEPA Checklist, wherein project related trip generation is identified. Under the ordinance, projects that are categorically exempt are generally de minimis relative to traffic generation.

The Capital Facilities Element discussed in Chapter 9 of this Comprehensive Plan discusses the need to balance funding for capital facilities projects for transportation and parks to meet their associated Level of Service standards against other capital projects that do not have LOS standards. It discusses the relationship between land use and capital facilities, the Capital Improvement Program annual update process, project selection and LOS Standards, analysis of future development and siting of public facilities, as well as prioritizing public facilities projects and their financing and what will be considered when funding is not available.

7.5 Regional Transportation Plans

The BFCOG, as lead agency for the Regional Transportation Planning Organization, reviews each local jurisdiction's Land Use and Transportation Elements of their comprehensive plans to certify each plan is in conformity with the transportation provisions of the GMA and consistent with the regional transportation plan.

BFCOG melds the Transportation elements of local government's comprehensive plans into an integrated and internally consistent Regional Transportation Plan for certification consistent with the State Transportation Plan and system requirements. BFCOG provides a predictive Transportation Model to the County and other local jurisdictions that produces forecasted traffic demand/capacity analyses from which future transportation improvement planning and projects are identified for planning and funding. The current Regional Transportation Plan, *Transition*2045, is a long-range, multi-modal planning document that identifies transportation needs of the Benton-Franklin County region through 2045. It provides a regional framework and guide for the investment of anticipated federal, state, and local funds based on identified needs, goals, and objectives.

The five primary goals of the plan are:

1. **Preservation and Maintenance** - To maintain, preserve, and extend the life and utility of prior investments in transportation systems and services
2. **Multimodal Transportation Accessibility** - To improve the predictable movement of goods and people throughout the region.
3. **Freight Movement** - To promote and develop transportation systems that stimulate, support, and enhance the movement of people and goods to ensure a prosperous economy.
4. **Community and Environmental Sustainability** – Enhance the performance of the transportation system while protecting and enhancing the natural environment.
5. **Regional Consistency** – To provide consistent transportation planning at a regional level that provides for and improves the safety and security of all regional transportation users and the transportation system through design, operations, maintenance improvements and public information.

Benton County considers these goals and the associated objectives along with other information in planning for transportation system improvements to the County road system and in lending support to regional projects and programs. The Transition 2045 RTP is in the process of being updated to year 2050 and Benton County actively participates in that process.

7.5.1 Current and Future State Highway System Needs

Transportation elements of GMA comprehensive plans must include an identification of current and forecast needs, and a financial analysis of how an identified need might be addressed concerning the regional transportation system, including state highways.

Volume II, Appendix H-2 lists all-day and peak hour traffic volumes current and forecast 2036 peak hour traffic volumes for the state highway system in Benton County. The County is not responsible for traffic effects on highway segments in cities, and the WSDOT sets levels of service on Highways of Statewide Significance. When segments in cities and on the Highways of Statewide Significance are removed from that list a total of 56 segments on ten state highways: SR 14, 22, 24, 82, 182, 221, 224, 225, 240 and 397 remain and for which analysis was reported. That analysis, discussed earlier and included in Volume II, Appendix H-3, indicated that there were no state highway roadway segments in unincorporated Benton County that are anticipated to need capacity improvements.

A source for identification of current and forecast need on the transportation system is Transition*2045*, the Regional Transportation Plan adopted and prepared by the BFCOG with participation from all of the member jurisdictions in the region. Transition*2045* is a long-range, multi-modal planning document which identifies the mobility needs of the region, comprising both Benton and Franklin counties, through the year 2045. Section 4 of Transition*2045*, Funding for Our Transportation Future, includes a fiscally constrained list of capacity projects and a discussion of

investment strategies that implement the five goals presented earlier that have a priority of preservation and maintenance. A financial capacity analysis and funding assumptions are also discussed, including revenues and state funding programs.

In July 2024, WSDOT released the 2024 Project Delivery Plan, a detailed county-level six-year list of capital improvement and preservation (maintenance and operations) projects and costs for the years 2025 through 2030. Funding decisions at WSDOT are the responsibility of the Department, as are decisions on releasing information on funding sources. A background document companion to the project list discusses funding assumptions, stating the Delivery Plan aligns with legislative direction provided in the 2025-2027 Transportation Budget and is consistent with overall legislative investment expectations.

Noteworthy improvements listed in unincorporated Benton County include: SR 24/SR 240 to Vernita shoulder and centerline rumble strips, and the intersection of SR 224/SR 225 roundabout.

Significant preservation projects listed in the Project Delivery Plan include painting the SR 24/Columbia River Bridge at Vernita and painting the Interstate-82/Columbia River Bridge at Umatilla. Multiple paving projects on Interstate-82 in rural Benton County as well as chip seal projects on SR 22 and SR 24 are also listed.

7.5.2 2020 Regional Active Transportation Plan for Benton and Franklin Counties and Tri-Cities Urban Area

The *Regional Active Transportation Plan for Benton and Franklin Counties and Tri-Cities Urban Area* was approved by BFCOG in 2020 and is incorporated by reference in *Transition*2045. This document provides a status of bicycle and pedestrian planning and implementation, includes a review of bicycle and pedestrian policies and practices, and discusses active transportation safety issues. The plan notes that attention to bicycling and walking issues in Benton and Franklin counties has significantly increased in volume and importance in the last decade, with interconnected pedestrian and bike systems becoming a more critical component of the regional transportation network. Strong public support exists for improved bicycling and walking conditions through increased planning, funding, and implementation of shared use paths, sidewalks, and on-street facilities (BFCOG 2020). This document was also supplemented by the BFCOG Bike Plan, adopted in 2024 and the BFCOG Pedestrian Trails Plan, adopted in 2026.



Cyclists along SR-221 heading into Prosser

In addition to these regional plans the Benton County Comprehensive Plan includes goals, policies, and actions relevant to the development of bicycle and pedestrian facilities within the County in Chapter Two Goals and Policies and Chapter 8 Parks and Recreation. These goals and polices endorse the development of bicycle and pedestrian facilities and provide a public participation program for public involvement in the process. Chapter 8 Parks and Recreation also contains a map of existing and proposed trails.

8 Parks and Recreation Element

8.1 Introduction

This Parks and Recreation element, including parks and recreation goals and policies (see Section 2.9) and the County's Parks Plan (adopted by reference), are the long-range policy and planning documents for Benton County parks and recreation facilities and properties and future opportunities. The Parks Plan is part of the County's Comprehensive Plan and will guide future decisions related to the County's parks system and parks facilities, with input from the Benton County Park Board. The Park Board advises the County Commissioners on matters of policy, programs, and projects for the development and operation of Benton County's park system.

This Plan Element applies to a 20-year planning horizon, with major review for possible revisions occurring every 10 years as part of the overall review of the Comprehensive Plan. Review of the Parks Plan occurs every 6 years.



Two Rivers Park

8.1.1 Park Planning, Management, and Maintenance

Park maintenance is the responsibility of the County Parks Department. Park planning, capital facilities, and operations and maintenance are overseen by the Sustainable Development Manager, who provides administrative support to the seven-member Benton County Park Board that advises the Benton County Board of Commissioners.

After coordination with appropriate County departments, consultation user groups, partnering organizations, and the public, the Park Board submits its planning and capital projects to the County Board of Commissioners for adoption. Park budgets are the responsibility of the Board of Commissioners.

8.1.2 Washington State Requirements for Recreation Planning

The Washington State Recreation and Conservation Office is the state agency that manages grant programs for outdoor recreation opportunities. The County's Parks Plan (2014) was prepared in accordance with the requirements specified in the GMA (RCW 36.70A). Additionally, the Parks Plan must be updated every 6 years to remain eligible for funds requested through the Washington State Recreation and Conservation Office.

8.2 Existing Conditions

8.2.1 Inventory of County Park Facilities

Benton County currently owns, or operates under lease, ten park facilities on 2,384 acres providing outdoor recreational opportunities and amenities such as lawn activities and picnicking, water and swimming, natural open space and habitat conservation, boat launches, a model airplane facility, a recreational vehicle campground, an equestrian camp, developed shooting facility, and a pioneer cemetery. Benton County subleases all or portions of two parks to non-profit entities (*see* Volume II, Appendix A: Map Folio, Figure 2 – Public Land and Parks Map). The parks and recreation facilities are organized into the following:

- **Regional Parks** are intended for more diffuse and passive outdoor uses and serve a large region including rural county residents. These parks are meant to preserve large areas of natural open space and support types of recreation that require large areas or uncommon amenities, such as horse riding or miniature aircraft flying.
- **Natural Parks (Preserves) and Trails** are undeveloped areas mostly in their natural conditions that are managed for educational or recreational purposes. These trails preserve native plant and wildlife habitat and promote passive recreation, with established low-intensity use trails developed on many of these properties and future opportunities to promote trails between existing holdings.
- **Special Use** areas include sites that are either smaller and have focused uses or are managed for specific uses and may be subleased and managed by other organizations.

8.2.1.1 Regional Parks

The County owns or operates two regional parks.

Horn Rapids Park is located 6 miles north of Benton City and along over 5 miles of the north shore of the Yakima River, with about 565 acres of transitional river-to-upland shrub-steppe habitat nestled among other adjoining public lands. The park has an improved campground with full recreational vehicle hookups, showers, restrooms, a horse camp, a model airplane facility, a boat launch, and several miles of multi-use trails. Horn Rapids Park is also used as an outdoor educational center by area schools and community organizations. Via trails that continue off-site, visitors can travel up-and-down the Yakima River and hike or ride up onto the Rattlesnake Slope. The park may also become a key location for a future potential recreational trail through the Hanford Site.

Two Rivers Park lies on property leased from the U.S. Army Corps of Engineers about 2 miles east of Kennewick near the community of Finley. The developed portion of the park is centered around two large, sheltered lagoons on the west end, while the east end of the park features the 100-acre Rockwell Woods Natural Area consisting of beaver ponds, riparian woodlands, and marshes and bisected by a nearly mile-long nature trail. Two Rivers is home to the last downstream developed boat launch in the Tri-Cities area and is used heavily throughout the year. First developed in the late 1960s after the McNary Dam Project levees were built, the west end of the park features a playground, extensive picnicking areas, a disc golf course that was added in 2009, and recently upgraded restroom facilities.



Two Rivers Park Playground

8.2.1.2 Natural Parks and Trails

The County owns three preserves, with its most recent acquisition of Candy Mountain Preserve in June 2016. The County is pursuing a fourth preserve opportunity for state-owned land in Badger Canyon through the Washington State Department of Natural Resources Trust Land Transfer Program, as discussed further in Section 8.4.1.

Badger Mountain Centennial Preserve is located on the upper ridges and slopes of Badger Mountain in the south Richland area. Shrub-steppe vegetation, primitive trails, expansive views of the Columbia River Basin, and steep slopes characterize the property. The preserve was purchased in partnership with public, private, and state funds with the goals to preserve views, protect upland habitat, and provide for

hiking, biking, and horse-riding opportunities. Per Resolution 05-27 that created the preserve in 2005, the acreage is also "banked" by Benton County for possible use as mitigation for shrub-steppe disturbances that may occur elsewhere in the County. Additionally, there is opportunity to potentially connect the Badger Mountain Preserve with the Candy Mountain Preserve.

Candy Mountain Preserve is located north of Badger Mountain in the Goose Gap and upper slopes of the Candy Mountain. Added to the park system in 2016, the preserve includes a 1.7-mile trail to the summit with a parking area at the trailhead.



Candy Mountain Preserve

Wallula Gap Preserve is located in eastern Benton County above Lake Wallula and across from the 'Twin Sisters' feature in Walla Walla County. The park unit consists of three disconnected parcels that are approximately 110 acres that have remained unchanged since the properties were deeded over to the County in 1984 by the U.S. Department of the Interior. The parcels are remote and generally inaccessible, with one parcel consisting primarily of sheer basalt cliffs. Current legal access to the property is by water only, although the railroad corridor limits that access. In order to access the property by land, an easement would have to cross about 5 miles of privately owned property. The properties are managed as part of the National Natural Landmarks program of the National Park Service, and Benton County provides regular reports to the Park Service on the status and condition of the site.

8.2.1.3 Special Use Parks

The County owns or operates five special use parks, including two vista parks and a shooting facility.

Horse Heaven Cemetery was developed south of Benton City in the Horse Heaven Hills as a private pioneer cemetery beginning in 1893. The last burials were in the 1940s, and Benton County took possession of the parcel through a property foreclosure in 1954. Recent improvements include a perimeter driveway and fence, an interpretive sign, and some sitting benches.

Horse Heaven Vista, first developed in 1964, is located southeast of Prosser along State Route 221 on the crest of the Horse Heaven Hills overlooking the Lower Yakima Valley. The site offers a sheltered viewpoint, paved parking area, and restrooms.

Vista Park is located in the Tri-City Heights neighborhood of northwest Kennewick. It is a small neighborhood park with picnic tables and swing sets that was originally developed by the local Vista Junior Women's Club in 1970. County staff maintain the park including general repair of play equipment, irrigation, and general care of the park. It is the only small park owned by the County in an urban environment.

Rattlesnake Mountain Shooting Facility (RMSF) is located approximately 6 miles north of Benton City adjacent to Horn Road. RMSF is the County's largest park unit at about 740 acres. A portion of the property is owned by the State of Washington and used through an agreement with the Washington Department of Fish and Wildlife. The remainder of the property was formerly leased from the Bureau of Land Management but was purchased by the County in 2010. Benton County subleases the entire property to its concessionaire—the Tri-Cities Shooting Association (TCSA)—who has overseen maintenance, administration, and operations of the facility since the late 1980s. TCSA is responsible for all capital improvements, though the County occasionally assists financially with certain projects at the advisement of the Park Board. The RMSF is large enough to contain several discrete ranges designed and managed for different shooting disciplines. The RMSF also has the Benton County Sheriff Department's firearms training facility, which is a restricted area. The rest of the RMSF is open to the public several days per week.

Hover Park is located approximately 10 miles southeast of Kennewick along the Columbia River and downstream of Two Rivers Park on property leased from the U.S. Army Corps of Engineers. Presently undeveloped, this park has good potential for future use. It has a pleasant beach area in a protected lagoon. The Burlington Northern Railroad bisects the property. The area also has historical significance. The first wagon train to the area, the Longmire Wagon Train, crossed the Columbia River on rafts near the park in 1853. The first major ferry crossing from Wallula was in the vicinity, and the park is in proximity to the original Hover town site, established in 1898.

8.2.2 Other Park and Recreation Opportunities

In addition to County provided parks facilities, there are other facilities provided by state and local agencies such as Crow Butte and Plymouth parks. Also, some park facilities are provided by the cities,

but serve regionally, such as the Columbia Park located in Kennewick and Howard Amon Park in Richland.

Crow Butte Park is owned by the U.S. Army Corps of Engineers and operated by the Port of Benton. The park is located 15 miles west of Paterson on the historic Lewis & Clark Trail. It is also adjacent to the McNary National Wildlife Refuge, a wintering grounds for hundreds of thousands of migratory waterfowl each year. The 275-acre park provides camping areas, recreational vehicle sites, a marina, boat ramps, swimming, fishing, a bath house, and hiking trails, among other amenities.

Plymouth Park is located 1.2 miles west of the Umatilla Bridge on a near-shore in the Columbia River near the Town of Plymouth. The park is owned and operated by the U.S. Army Corp of Engineers. The campground offers 32 sites with electric hookups. Amenities include flush and pit toilets, showers, drinking water, a dump station, and playground. The day use area has a swim beach, boat ramp, flush toilets, vault toilet, and courtesy dock (Recreation.gov 2017).

Other Public Lands Many of the County's rural residents recreate in natural areas suitable for hunting, fishing, and hiking. In the more remote planning areas of the County, such as Paterson, Plymouth, and Finley, recreational opportunities are often provided by the federally owned waterfront lands that lie along the hydroelectric pools behind each dam.

8.2.3 Greenway Connections

Improved public recreational trails are lacking throughout most of the rural County; however, the Tapteal Greenway currently offers connections as discussed below.

Tapteal Greenway is a 35-mile corridor along and including the Yakima River extending from Kiona Bend at Benton City to the mouth of the river at Bateman Island in Richland. Recognizing that the Yakima River provides an entirely different kind of recreational experience than the Columbia, the Greenway corridor features a mixture of ecological landscape types and a relatively high percentage of public lands and public river access locations (Table 8-1).

Table 8-1
Public Rivershore Land Ownership

Agency	Acres	Linear miles
U.S. Army Corps of Engineers	292	13.5
Richland	236	2
West Richland	N/A	1
Washington Department of Fish and Wildlife	10	25
Benton County	784	5.1
Total	**1,322**	**21.85**

The Tapteal Greenway Plan seeks to link these ownerships with a system of river and shoreline trails and paths over the 30-mile stretch of river and to use or improve each public property according to an overall plan. The plan aims to connect public spaces in Benton City, West Richland, and Richland via a network of trails and parklands anchored by the Yakima River.

The Tapteal Greenway Plan was developed jointly during the mid-1990s through a planning effort involving local, state, and federal interests; and implementation of the Tapteal Greenway Association is the primary mission of the Tapteal Greenway Association[24].

8.3 Current Trends

8.3.1 Recreational Demand

Demand for public recreational opportunities and facilities is increasing and will continue to increase as both the urban and rural populations of the County grow and as the growth in overall state population results in "out of area" visitors looking for recreational opportunities (Washington population growth is 100,000 per year).

Based on Washington State Recreation and Conservation Office's 2013 State Comprehensive Outdoor Recreation Plan, walking and hiking continue to be popular activities in Washington. Outdoor team and individual sports (which includes fitness activities like jogging), nature activities, and picnicking and barbequing are also popular in the State.

8.3.2 Levels of Service and Park Management

The County's Parks Plan has adopted LOS standards that are meant to be used as guidelines only. The LOS identified in Table 8-2 is based on the four park types described above:

Table 8-2
Level of Service Standards

Park Type	Service Area	Level of Service
Regional	15-mile radius and within an hour drive	5 acres per 1,000 population
Natural	20-mile service radius	5 acres per 1,000 population
Trails	N/A	1.37 miles per 1,000 populations
Special Use	N/A	Case by Case

[24] Tapteal Greenway Association mission available from www.tapteal.org.

In addition to LOS designations, Benton County organizes its ten parks by "level of management," resulting in a two-tiered system.

- **Tier One** parks have daily operational oversight, either by an assigned County park ranger or by concessionaires or volunteers.
- **Tier Two** parks are smaller, have significantly less use overall, and do not have daily active management.

Table 8-3 provides specific information on ownership/lease, size, type, and level of management at each park. (*see* Volume II, Appendix A: Map Folio, Figure 2 – Public Lands and Parks Map.

Table 8-3
Types and Level of Management at Benton County Parks

Sites	Owner	Acres	Level of Management
Regional			
Horn Rapids Parks	County	564.5	Tier 1
Two Rivers Park	U.S. Army Corps of Engineers	159.0	Tier 1
Natural			
Badger Mountain Preserve	County	627.1	Tier 1
Candy Mountain Preserve	County	186.0	Tier 1
Wallula Gap Preserve	County	110.0	Tier 2
Special			
Horse Heaven Cemetery	County	2.0	Tier 2
Horse Heaven Vista	County	6.3	Tier 2
Hover Park	U.S. Army Corps of Engineers	175.0	Tier 2
Rattlesnake Mountain Shooting Facility	State and County	740.0	Tier 1
Vista Park	County	0.3	Tier 2

As mentioned, the LOS standards for parks are meant to be used as guidelines, not absolutes. The Parks Plan develops standards to fit with the current population and feedback during the workshop sessions and questionnaire.

According to the Parks Plan, the current park system does not meet the LOS standards by 374 acres and will need a total of 900 more acres of land to meet those standards 20 years from now (Table 8-4). This acreage analysis does not include special use parks, trail connections, or community

desire for preservation of open space lands in certain sensitive and view corridors. Local citizen requests and interest for improvements, whether they be federal- or County-owned lands, generally focus on improved vehicular and boat access. However, "natural area" recreation is only one type of opportunity. There is also an unmet demand for recreational opportunities that rely upon a higher level of facilities and improvements in more developed parks.

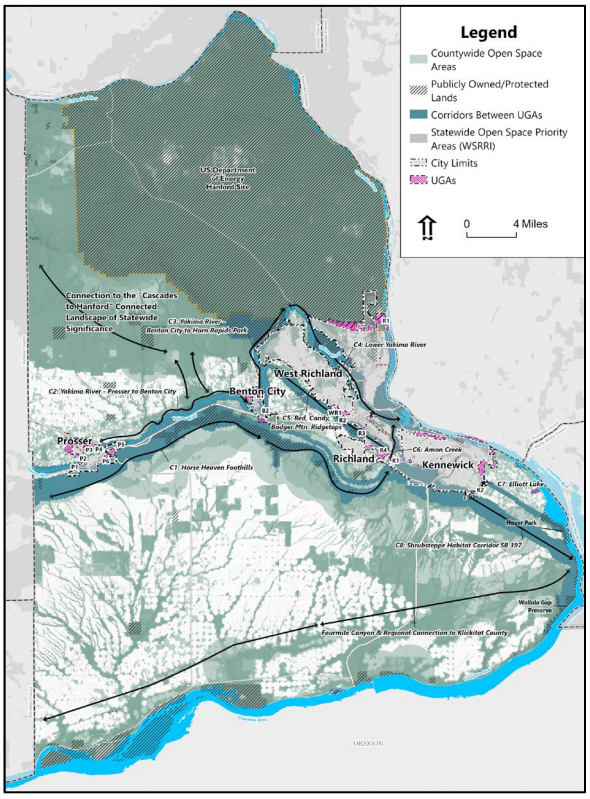
Table 8-4
County Parks Level of Service Requirement by 2035

Park Type	2014 Level of Service (Population 183,400)	2035 Level of Service (Population 236,007)
Regional	917 acres	1,180 acres
Natural	917 acres +	1,180 acres +
Special Use	Case by Case	Case by Case
Total Parkland to meet Level of Service	**1,834 acres**	**2,360 acres**
Trails	253 miles	323 miles

Source: Benton County (2014)

8.4 Future Considerations

8.4.1 Open Space Preservation



Overall Open Space Corridors Map

In accordance with Benton County's 2026 Comprehensive Plan and the GMA's requirement to identify open space corridors within and between urban growth areas, the Open Space Preservation memorandum was created to uphold the focus of safeguarding open space land. The Open Space Preservation memorandum details County priorities for protecting open space lands and corridors, and more specifically "naturally vegetated steep slopes and elevated ridges" and the lands surrounding these areas (*see* Volume II, Appendix M). It also reviews how the County currently meets these state mandates and evaluates the corridors' environmental and recreational uses. It recommends strategies that promote open space protection while working with county policies around recreation, wildlife habitat, and natural resource conservation. Benton County has mapped and identified priority open space corridors by focusing on key habitats, wetlands and floodplains, and linkage routes providing connections along rivers and ridgetops, and between larger spaces.

Rivers and ridges are essential characteristics of Benton County's landscape and are key elements of the open lands network. The Columbia, Yakima, and Snake rivers offer essential ecological functions along with the floodplains and wetlands which function for water quality, food storage, and habitat connectivity. The plan gives guidance on important shoreline vegetation conservation that preserves ecological functions and reduces flood risks. It provides instructions for conserving habitats and scenic resources that provide trails and public access recreation areas, as well as preserving additional area along the Horse Heaven Hills and Red Mountain ridges, to complement the open space areas already protected along Rattlesnake, Badger and Candy mountains. These ridges contribute to natural vistas and support the mostly undisturbed shrubsteppe habitat. Together with the above-mentioned rivers, they form the backbone of a connected open space network that connects urban growth areas and natural virtues.

The Open Space memorandum identifies an early opportunity to enhance open space in the County by acquiring lands in Badger Canyon for conservation purposes. The land is located north of the

Kennewick Irrigation District canal and extends along the hillside. This land contains valuable shrubsteppe habitat as well as opportunities for mountain biking, hiking and other low-intensity recreational activities. It is also next to federal land that could also be protected in the future as open space and support similar recreational activities.



DNR Land in Badger Canyon

8.4.2 Key Capital Improvements to Meet Demands

Capital expenditures to enhance recreational use of County parklands are developed as part of the Capital Facilities element, Chapter 9, and should be prioritized to focus first on locations that have current facilities deficits and/or on park lands where the provision of additional recreational facilities can leverage other recreation related economic and visitor benefits beyond the park itself. Major improvements considered in the Parks Plan are mentioned below.

Horn Rapids Park. Within the unincorporated area, the land and water resources of the park are the central element of the Tapteal Greenway Plan. Development of Horn Rapids Park according to its Master Plan would provide a regional destination point, as well as an activity center for the Greenway. The County 2025-2030 CIP identifies four projects for Horn Rapids Park: 1) expansion of the maintenance shop; 2) paving of the driveway to the office/maintenance area; 3) a parking lot improvement plan, and 4) a gardens renovation project.

Two Rivers Park. Improvements are needed for the boat launch, dock, nature trail (boardwalk addition), restroom facilities, and signage. The County CIP considers three major capital projects for

Two Rivers Park: 1) remodel of the boat launch, including replacement of all floating docks; 2) complete replacement of the main restroom at the central part of the park, and 3) rapidly replace the swimming boundary.



Badger Mountain Preserve

Improvements to Other Parks and Facilities. In the special use parks, trail and access improvements and maintenance are important. These improvements are done as funding becomes available and are based the County's Parks Plan and as prioritized by the Park Board. Some facilities are operated by County partners who are responsible for maintenance and improvements (e.g., RMSF is operated by the TCSA). Other improvements as indicated in the CIP are listed below:

- Horse Heaven Vista will have a large entrance sign and placement of two standard alert signs (one each direction) along the highway.
- Horse Heaven Cemetery will also have a large entrance sign as well as placement of a marker recognizing all known burials in the cemetery.
- Hover Park will add a dedicated, purpose-built parking area at the end of Hover Road, lined with barriers, and able to easily accommodate multiple horse trailers. The gravel lot will measure approximately 200 feet by 50 feet and will include appropriate vehicle access controls.

If the County is successful in acquiring the DNR property in Badger Canyon, then improvements for it may also be included in the CIP.

9 Capital Facilities Element

9.1 Introduction and Purpose

The Capital Facilities element identifies necessary and planned capital improvements, including transportation and other public facilities, improvement schedules, and funding resources that functionally integrate capital facilities into the Comprehensive Plan. For the purposes of this element, capital facilities are defined as the infrastructure the County is responsible for constructing, operating, and maintaining, and which enable the County to provide public services to County residents. This element provides the framework for the County's CIP (*see* Volume II, Appendix J) and adopts a 6-year CIP list of proposed projects and financing plan. It also requires coordination with the cities within the County for capital improvements and services within the UGAs.

This element is one of six mandatory planning elements that the GMA requires in the County's Comprehensive Plan (RCW 36.70A.070 (3)) and must identify specific facilities, include a realistic financing plan, and adjust the plan if funding is inadequate. WAC 365-196-415 provides requirements and recommendations for this element.

9.1.1 Relationship between Land Use and Capital Facilities

There is a direct relationship between the Capital Facilities and Land Use elements of the Comprehensive Plan. The Land Use element determines where and at what density population and employment growth will be located, including within the cities' UGAs. The Land Use element updates, including additional draft Industrial and Open Space designations and potential for higher density in the Finley and Plymouth Rural Community Centers will all be factored into the updated Capital Facility Plans (CIP). The CIP also reflects the latest residential growth projection in the unincorporated County, which is expected to occur at a reduced level compared to the 2018 projection. Recent permitting history also reflects this slowing in overall rural residential growth.

The Capital Facilities element identifies the thresholds of growth, when new and expanded public facilities will be needed, and indicates the County's priority system for constructing the identified public facilities. Although some public facilities are provided by other government agencies or private entities, the County must demonstrate these services are available.

Identified improvements to public facilities that are owned or operated by Benton County shall also be included in the County's annual budget. Any identified public facility improvements that are not owned or operated by the County should be included in the annual budgets and CIPs of the entities which provide those public facilities. State, local government, and district plans that are affected by proposed public facility improvements will be considered prior to inclusion of the improvements in the CIP. This includes considering a city's comprehensive plan when evaluating proposed improvements that affect that city's UGA.



Benton County Administrative Building

9.1.2 Capital Facilities Element Update Process

Consistent with established policies in Section 2.10, updates to the Capital Facilities element of the Comprehensive Plan are considered concurrently with other proposed amendments that are included in the annual Comprehensive Plan amendment review and this element and associated capital plans and procedures are reviewed and updated as part of the 10-year Comprehensive Plan update process. Benton County's CIP, adopted by reference, is a dynamic document that is updated annually to reflect new requirements, cost information, funding information, project list changes, and existing facility updates. The annual updates to the CIP will be done prior to the annual budget process so that CIP projects can be included in the County's annual budget.

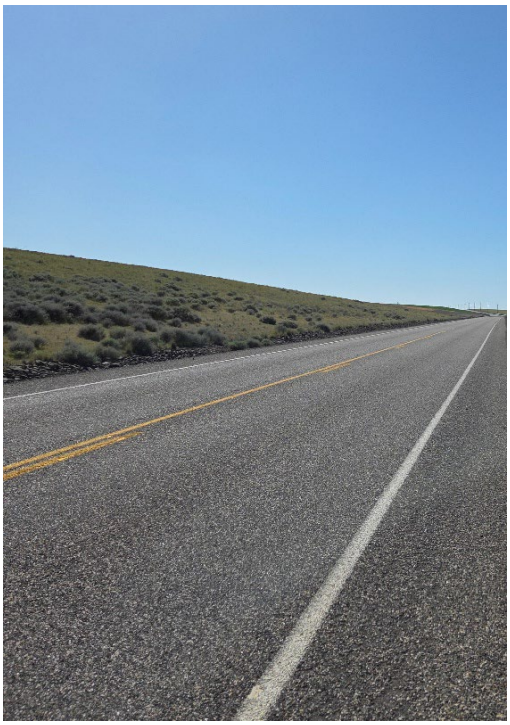
9.2 Capital Project Selection and Level of Service Standards

9.2.1 Level of Service

The County and public facility providers will use established LOS for identifying capital improvements, when applicable. For the County, two sets of LOS standards have been established: 1) C and D standards for County roads, as discussed in Section 7.3.1, and 2) Park standards as described in Section 8.3.2. These LOS standards, along with other factors considered for other County facilities are considered in identifying planned capital improvements. Other factors considered in planning these improvements include identifying projects that:

- Address existing deficiencies
- Preserve existing capacity

- Provide for new development
- Enhance quality of life
- Meet other County needs not related to growth



Locust Grove Road, east of I-82

The County will evaluate whether the County road and park system standards and other identified capital needs are being met when updates to the Comprehensive Plan are performed according to the deadlines in RCW 36.70A, when UGAs are reviewed according to RCW 36.70A.130(3), and when major changes are made to this element. If these standards are not being met and public facilities are inadequate, the County will consider one or more of the following strategies:

- Reduce public facility demand
- Reduce LOS standards
- Increase revenue
- Reduce the cost of the needed public facilities
- Reallocate or redirect population and employment growth to make better use of existing facilities
- Phase growth or adjust the timing of development, if the lack of public facilities is a short-term issue

The County will also evaluate if proposed development activities would reduce the LOS of public facilities below the adopted standards. If a proposal is expected to impact a transportation facility and cause it to fall below the LOS standard, or if additional parks and recreation facilities are needed to meet the applicable standards, then preliminary development approval would also need to include additional improvements or strategies made concurrent with the development that maintain these standards. All other types of public facilities do not have the specific concurrency requirement that transportation facilities have, but they do require the provision of adequate public facilities as a condition of project approval. Public facility improvements for maintenance or other needs and not targeted to maintain LOS may include:

- Facility repairs
- Remodels
- Renovation
- Replacement of obsolete or worn-out structures

- Improvements that do not reduce financing for other improvements needed to achieve or maintain LOS standards
- Improvements that do not contradict, limit, or substantially change the goals and policies of any element of this Comprehensive Plan

Public facility improvements may also provide capacity in excess of what would be required to achieve or maintain LOS standards (i.e., the minimum capacity of a capital project is larger than the capacity required to provide the LOS). Excess capacity is beneficial if it results in economies of scale making it less expensive than a comparable amount of capacity provided in the future. However, these projects may be given a lower priority than projects needed to maintain the LOS standard.

9.2.2 Analysis of Future Development

The County will estimate the type and amount of public facilities needed to accommodate future growth by evaluating previously issued development permits and determining future growth patterns. Future development will be required to pay its fair share of the capital improvements needed to address the impact of such development and the portion of the cost of the replacement of obsolete or worn-out facilities. The different methods of payment allowed for these capital improvements include:

- Voluntary contributions for the benefit of any public facility
- SEPA mitigation payments
- Dedications of land
- Provision of public facilities

Future development will not be required to pay fees for needed public facilities to reduce or eliminate existing deficiencies. The growth forecasts, to be used for planning purposes and the specific growth targets for each UGA, are developed using the Benton County population projections established by the OFM, as summarized in Section 3.7.

9.2.3 *Siting Public Facilities*

There are types of public facilities that cannot be located in rural areas of the County but must remain in cities or UGAs. These include new municipal urban public facilities for residential development such as sewage collection and treatment, urban street infrastructure, and storm water collection facilities. The County does not currently provide, nor does it plan to provide in the foreseeable future, sewer, water, or utility services. Accordingly, its capital facilities do not include processing or production plants and the distribution/collection systems typically associated with such services. The only exception to this general condition occurs when a private water or disposal system fails, whereupon if placed in "receivership" under state law the County must assume responsibility as an interim condition.

The County may coordinate planning and development of public facilities in UGAs with municipalities and public facility providers by entering into interlocal/joint planning agreements, contracts, memorandums of understanding, or joint ordinances. Capital facilities and utilities may be constructed and operated by outside public service providers on rural properties if they are within the boundaries of a MPR, or a Rural Community Center pursuant to County Comprehensive Plan policies and development regulations. Electric and natural gas transmission and distribution facilities may be sited throughout Benton County both inside and outside of municipal boundaries, UGAs, MPRs, and Rural Community Centers. The County will coordinate with the BFCOG and/or municipalities within the County when siting regional and community facilities. This coordination may include developing an inventory of essential facilities, determining a fair share allocation of essential facilities, conducting public involvement strategies, and assuring protections for the environment, public health, and public safety.



Benton County Corrections Facility

9.2.4 *Improvements to Public Facilities Identified in Other Plans*

Various plans-prepared by other public agencies have been reviewed by the County as part of this periodic Comprehensive Plan review and update. A summary of capital facilities forecasted for the next six years, along with the six-year financing plan, for these non-County operated facilities is

provided in Table 9-1. This non-County operated facilities forecast and financing plan, combined with the County CIP for County-owned facilities comprise the County's forecast of future needed public facilities and financing plan for the next 6 years, to support implementation of the Comprehensive Plan, including services within the UGAs. The County will review and revise this forecast and financing plan, as applicable, during plan implementation.

Table 9-1
Six-Year Capital Improvements Plan for Non-County Operated Facilities

Capital Facility Type	Providers (Location)	Existing Condition	Planned Improvements (Capacity)	Funding Source(s)	Estimated Cost/Date
School Districts	Kennewick School District	Aging facilities need updates. Capacity to meet school enrollment is adequate for several years.	Planned new or remodeled schools that are priority when funding becomes available: • Highlands Middle School • Washington Elementary School • Hawthorne Elementary School • Park Middle School • Vista Elementary School • Edison Elementary School • Horse Heaven Hills Middle School • Support and plan for state-fund core modernization project for Tri-Tech Skills Center to begin in 2025.	Potential bond	2027 or 2028
	Richland School District	Aging facilities need updates. Capacity to meet school enrollment is adequate for several years.	No planned improvements at this time but when they get funding, Chief Jo and Carmichael middle schools and River's Edge high school are critical needs.	Hoping levies pass February 2026 then they will know the path forward. No plans to run a bond	

Capital Facility Type	Providers (Location)	Existing Condition	Planned Improvements (Capacity)	Funding Source(s)	Estimated Cost/Date
				yet and their last bond failed.	
	Prosser School District	Aging facilities need updates. Capacity to meet school enrollment is adequate for several years.	No planned improvements at this time. Hope to remodel Housel Middle school over the next 10 years but have not had any community discussion yet.	SCAP WA State Funding, Local Bond, etc.	Not applicable
	Ki-Be School District	Aging facilities need updates. 2023 study and survey done to assess needs through OSPI and another one will be done in 2030	• Middle school circulation improvements • Replacement or addition/modernization of elementary school • High school CTE classroom addition • Middle school facility improvements	General fund/capital levy Bond issue Grant/general funds Bond issue	2024-2025 2025-2030 2025-2030 2030 - 2033
	Finley School District	Old elementary school needs demolished but don't have the funds until bond expires in 2035-2036 and hope to pass another at that time.	Making water and HVAC system updates	Leftover bond money from 2018	2025
	Paterson School District	Existing facilities adequate	None	Not applicable	Not applicable
	Grandview School District	Existing facilities within Benton County adequate	None	Not applicable	Not applicable
Water and Sewer	Cities and Towns in Benton County	Existing system plans with facilities inventories and capacities adopted by reference	6-year water system and sewer plans	Rates and development charges, grants and loans. Existing revenues and	See system plans, incorporated by reference, for these details

Capital Facility Type	Providers (Location)	Existing Condition	Planned Improvements (Capacity)	Funding Source(s)	Estimated Cost/Date
				planned rate increases will support system improvements, with growth paying for growth	
Plymouth Water District		Current capacity to serve 10 service connections and working with the state to serve 50 or more	New reservoir and two water lines planned		Over the next couple of years – one of the water lines over the next year
Power	Benton PUD	Existing system plans with facility inventories adopted by reference	Various improvements	Rates and development charges. Existing financial plans support system improvements, with growth paying for growth	See system plans, incorporated by reference, for these details
Transportation and Stormwater	Benton County, and Cities and Towns	Existing inventories adopted by reference	6-year transportation (including stormwater) improvement plans adopted by reference	County road fund, city revenue sources, grant and loans	See 6-year plans, incorporated by reference, for details
Fire Districts (see also associated narrative that follows for additional information on adequacy	District 1	Aging fire stations need replaced – Capital Facilities Plan will be updated later this year and shared	Plans to replace aging fire stations Purchase of two new fire engines	 Levy/Bond funds	Timeframe currently unknown $760,000/August 2025
	District 2	Main fire station is old and needs remodeled but do not have the funding due to low tax revenue.	None at this time		

Capital Facility Type	Providers (Location)	Existing Condition	Planned Improvements (Capacity)	Funding Source(s)	Estimated Cost/Date
of firefighting capabilities)	West Benton Fire Rescue	Some upgrades being made	Asphalt repair at two stations Purchase of two command vehicles Adding ventilation system at main station Adding self-contained breathing apparatus at station 310 in Prosser	State loan	$420,000 cost for all the improvements in 2025. Will wait 5 years until receiving another loan to make any other improvements.
	District 4	Left multiple messages to get information in June without response yet	Not available	Not available	Not available
	District 5	Submitted request by form email with no response yet and no phone number listed	Not available	Not available	Not available
	District 6	.	Planned new fire station in Plymouth on 5 acres. After 3 years, got WDOT access to Highway 14. Land is being deeded to the fire district. Increased staff to 7 Started paid on call program to help with staffing at times	Current and future donations – .5 million donated so far with $1.5 million estimate needed. A farm was donated worth $450,000 plus a PM to run it Hope for EMS levy to increase paid staff	Within two years

Notes: ADA – American Disabilities Act, EMS – Emergency Management System, FEMA – Federal Emergency Management Agency, USDA – U.S. Department of Agriculture

9.2.5 Prioritizing Public Facility Projects

Prioritization of projects and programs can be difficult, so the County has established the following general guidance in prioritizing public facility projects, from highest to lowest priorities they include:

1. Repair existing public facilities to achieve or maintain LOS
2. Construct new or expanded public facilities to achieve or maintain LOS
3. Repair existing public facilities or construct new public facilities to eliminate hazards
4. Construct new or expanded public facilities to achieve or maintain LOS and other needs as forecasted during the next 6-years
5. Repair existing public facilities or construct new public facilities to reduce the operating cost of providing a public service or facility
6. Construct new facilities to provide excess capacity that will be needed beyond the next 6 years
7. All other facilities the County is obligated to complete that do not meet the criteria above

9.2.6 Other Considerations

County strategic goals, key objectives, and financial policies provide the broad parameters for development of the annual CIP. Additional considerations include the following:

- Does a project support the County Commissioners' strategic goals?
- Does a project qualify as a capital project as defined in the County Budget Policy and have an expected useful life of at least 5 years?
- Does a project satisfactorily address all federal, state, and county legal and financial requirements?
- Does a project support the County's favorable investment ratings and financial integrity?
- Does a project support the County's goal of ensuring all geographic areas of the County have comparable quality in the types of services that are defined in the CIP?
- Does a project prevent the deterioration of the County's existing infrastructure and respond to and anticipate future growth in the County?
- Does a project encourage and sustain quality economic development?
- Is a project responsive to the needs of residents and businesses within the constraints of reasonable taxes and fees?
- Does a project leverage funds provided by other units of government where appropriate?

Master plans also help determine which projects should be included in the CIP, along with associated timeframes. Economic forecasts also inform the capital planning process.

9.3 Financing

9.3.1 Funding Sources for Public Facility Projects

Identifying funding sources for public facility projects is critical to the success of the Benton County's CIP. It requires coordination among County Departments and a thorough understanding of the fiscal capacity of the County to finance these facilities. Public facility projects are often very expensive, requiring multi-year commitments of financial resources. It is important to understand that a CIP does not represent a financial commitment or guarantee that the projects will be implemented. County approval does not automatically authorize funding. It does approve the program in concept and provides validity to the planning process. In an attempt to stretch money as far as possible, many different funding sources are considered. The financing of some projects relies on outside grant resources. If grants are not received, the projects may be delayed, removed, or financed with dedicated revenues, general revenues, excess surplus funds, or bond financing.





Constructing the new stands at the County fairgrounds arena

The County is guided by the following three principles in selecting a funding source for public facility improvements:

Equity. Whenever appropriate, the beneficiaries of a project or service will pay for it. For example, if a project is a general function of government that benefits the entire community, such as a public safety facility, the project will be paid for with general fund revenues or financed with general obligation bonds. If, however, the project benefits specific users, such as a road improvement district, then the revenues will be derived through user fees or charges, targeted taxes, and assessments.

Effectiveness In selecting a source or sources for financing projects, the County will select one or more that effectively funds the total cost of the project. For example, funding a capital project, or the debt service on a project, with a user fee that does not provide sufficient funds to pay for the project is not an effective means of funding the project.

Efficiency If grants or current revenues are not available to fund a project, the County will select a financing technique that provides for the lowest total cost consistent with acceptable risk factors and principals of equity and effectiveness. These methods currently consist of fixed-rate general obligation or revenue bonds issued by the County, special funding programs funded by state or federal agencies, or special pool financing. When public facility improvements are located both in a City and UGA, the County and City can jointly sponsor the formation of Local Improvement Districts, Road Improvement Districts, and other benefit areas for the construction or reconstruction of infrastructure to a common standard.

In making capital investments, the County will consider equity in the planning process and address any potential displacement impacts, as applicable.

9.3.2 When Funding is Unavailable

When funding is unavailable to meet existing needs and support plan implementation or as County priorities evolve, the capital facilities plan will be revised at the next annual amendment in one or more of the following ways, as applicable:

- Reduce the LOS for one or more public facilities
- Increase the use of other sources of revenue
- Decrease the cost, and therefore the quality of some types of public facilities while retaining the quantity of the facilities that is inherent in the standard for LOS
- Decrease the demand for and subsequent use of public facilities
- Reassess the land use element

9.3.3 Maintenance Financing

The County intends to set aside sufficient revenue to finance ongoing maintenance needs and to provide periodic replacement and renewal of public facilities. This is necessary to keep public facilities in good repair and to maximize their useful life. The County should not provide a public facility or accept the provision of a public facility by others, if the County or other provider is unable to pay for the subsequent annual operating and maintenance costs of the facility.

9.4 Existing Facility Inventory

Benton County maintains a comprehensive capital facilities inventory to meet insurance requirements that are incorporated by reference into the Comprehensive Plan and available upon request. The County's existing public facility inventory is updated annually. General capital facilities owned and maintained by the County include:

- County administrative office support including auditor, treasurer, assessor, prosecuting attorney, planning and building, coroner, facilities and recreation, and road
- Construction and maintenance of rural and "farm to market" roads

- Law and justice, including the operation and administration of the courts, jail, and sheriff's functions
- Juvenile justice facilities including detention
- Regional parks and recreational facilities
- Bi-county regional health and human services
- Drainage improvement districts for low lying areas along river mainstems
- Waste management
- Regional fairground facilities

9.5 Capital Improvement Plan



Two Rivers Park in Finley

The CIP is a 6-year list of projects updated at least biannually and is used by the County to identify, maintain, and pay for current and future infrastructure needs for services provided by the County. The CIP includes the County's 6-year TIP by reference along with County park improvements per the latest Parks and Recreation plan. The County prepares a comprehensive capital projects list that correlates funding sources to needed improvements and identifies project funding. The CIP is reviewed and updated in conjunction with the County budget process. Each update to the County's CIP is adopted by reference into the Comprehensive Plan. The County also considers the latest state requirements in preparing and updating its adopted CIP. Per the latest Washington State Department of Commerce GMA Fully Planning Update checklist, this includes:

- Funding strategies, public facilities and services to serve UGAs, in coordination with the cities
- Ensuring capital budget decisions conform with the current Comprehensive Plan
- Proposed locations and capacities of expanded or new capital facilities
- Updated inventory of facilities
- Forecast of capital needs, based on current Comprehensive Plan and adopted levels of service
- Proposed locations and capacities, as applicable of expanded or new capital, and with consideration of equity and potential displacement impacts, as applicable
- Funding plan for at least the next 6 years

Because the CIP is a working document regularly amended, it is not included in its entirety as a part of the Comprehensive Plan but is incorporated by reference.

9.6 Siting of Essential Public Facilities (RCW 36.70A.200)



Columbia Valley Center for Recovery – the Tri-Cities' first inpatient drug treatment center, offering medical detox and recovery housing services

The GMA requires that the comprehensive plans of each county and city include a process for identifying and siting essential public facilities. Essential public facilities include those facilities that are typically difficult to site, such as airports, state education facilities, state or regional transportation facilities, state and local correctional facilities, solid waste handling facilities, and inpatient facilities including substance abuse facilities, mental health facilities, group homes and secure community transition facilities. The OFM maintains a regional list of such facilities that are required to be built within the next 6 years. Because of their nature, these facilities may have large land parcel requirements and unique siting needs with regard to public services and transportation or produce noise and raise complex public health and safety concerns. These requirements and impacts would be imposed upon those living and working in the surrounding area of such facilities. Benton County shall provide land use zones that are compatible and development regulations that are consistent with the statutory requirements applicable to these facilities. The County uses a review process that allows citizen, city, and state agency input when such facilities are proposed. The siting process is summarized in Table 9-2: Essential Public Facilities Siting Matrix.

Airports and heliports operated for the benefit of the public must be appropriately planned to assure that adjacent land uses are compatible. The Benton County Zoning Ordinance shall provide development regulations that protect life, property, and prevent the establishment of airspace obstructions and other hazards which interfere with safe airport operations.

Table 9-2
Essential Public Facilities Siting Matrix

Use: Essential Statewide Facility	Zone	SEPA	Public Utilities		Reviewing Board		Responsible Jurisdiction (local/ federal/ state)	Benton County Permits	Special Siting Criteria
			Water	Sewer	PC/ BOCC	BOA[1]			
Airport[2]	RL 5, GMA-AG, LI, HI	Yes	X	X	A/H Overlay	X	RTPO/FAA/WSDOT/ Ecology	BC-Building	Transportation access public services
State Education	UGAR, RL 5, GMA-AG	Yes	X	X		X	Ecology/DOH	BC-Building	Transportation access public services
State & Regional Transportation	All Zones	Yes				X	Ecology/WSDOT/RTPO	BC-Building Structures only	Public services structures only
State Correctional	HI, GMA-AG	Yes	X	X		X	Ecology/DOH	BC-Building	Transportation access public services
Solid Waste Handling	LI, HI, GMA-AG	Yes	X			X	Ecology	BC-Building	Transportation access public services
In-patient Health[3]	UGAR, RL 5	DOS[4]	X	X		X	Ecology/DOH/DSHS	BC-Building	Transportation access public services
Secure Community Transition[5]	HI	DOS	X	X		X	Ecology/DOH/DSHS	BC-Building	SCTF's land and cell access, not in close proximity to risk potential activities
Others as listed by OFM[6]	TBD[7]	DOS	TBD	TBD	TBD	TBD	TBD	TBD	TBD

Notes:
Source: 2006 Benton County Comprehensive Plan, Appendix 4

1. Conditional Use Permit
2. Airport/Heliports are subject to the provisions of 11A.86
3. Substance abuse, mental health, and group homes
4. Depending on size of facility
5. SCTFs as required by RCW 36.70A.200 & RCW 71.09 (civilly committed sex offender housing)
6. Facilities listed by the OFM required or likely to be built within the next 6 years (RCW36.70A.200)
7. To be determined by Benton County Planning Department as projects are identified

A/H: Airport/Heliports
BC: Benton County
BOA: Board of Adjustment
BOCC: Board of County Commissioners
DOH: Department of Health
DOS: Determination of Significance
DSHS: Department of Social and Health Services
Ecology: Department of Ecology
FAA: Federal Aviation Administration
GMA-AG: Growth Management Act Agriculture
HI: Heavy Industrial
LI: Light Industrial
OFM: Office of Financial Management
PC: Planning Commission
RCW: Revised Code of Washington
RL: Rural Lands
RTPO: Regional Transportation Planning Organization
SCTF: Secure Community Transition Facility
SEPA: State Environmental Policy Act
TBD: To be determined
UGAR: Urban Growth Area Residential
WSDOT: Department of Transportation

10 Utilities Element

10.1 Introduction and Purpose

Utilities include the supply, treatment, and distribution, as appropriate, of domestic and irrigation water, sewage, storm water, natural gas, electricity, telephone service, cellular service, cable television and internet service, microwave transmissions, and streets. Such utilities consist of both the service activity along with the physical facilities necessary for the utilities to be supplied. Utilities are supplied by a combination of general-purpose local governments as well as private and community-based organizations.

The primary regulatory agency for most utilities in Washington State is the Washington Utilities and Transportation Commission (WUTC). The WUTC ensures that safe and reliable service is provided to customers at reasonable rates. The WUTC regulates the rates and charges, services, facilities, and practices of most of Washington's investor-owned gas, electric and telecommunication utilities. All utilities regulated by the WUTC are prohibited from passing the cost of new construction onto the existing rate base. Federal agencies also play a role in regulating some of these utilities. For example, the Federal Communications Commission regulates telecommunications. In addition, the Federal Energy Regulatory Commission, an independent commission with the U.S. Department of Energy, sets rates and charges for the transportation and sale of natural gas, the transportation of oil by pipeline, the transmission and sale of electricity, and the licensing of hydroelectric power projects. Local government, too, has a role in regulation for certain utilities, such as franchise agreements. However, the effort behind meeting GMA requirements is not primarily regulatory; rather, it is to promote coordination and cooperation among jurisdictions and utility providers.

The GMA has given local jurisdictions the obligation and requirement to plan for utilities including identification of utility corridors. The intent of this element is to support utility providers in meeting their public service obligations to provide service on demand to existing and future customers. It is also the intent to minimize negative impacts resulting from the provision of services on the residents, infrastructure, and environment of the County. The County's responsibilities for utilities range from regulating their land use to permitting their activities in public rights-of-way.

Virtually all land uses require one or more of the utilities discussed in this Chapter. Local land use decisions drive the need for new or expanded utility facilities. In other words, utilities follow growth. Expansion of the utility systems is a function of the demand for reliable service that people, their land uses, and activities place on the systems.

Existing and updated maps of utilities in Benton County are maintained by the County GIS to meet the requirements of the Utilities element as outlined in state law. In addition, Capital Facilities Plans of utility providers available in Benton County are hereby adopted by reference to meet the

requirements of identifying proposed facilities, along with information provided in Section 9.2.4. (*see* Volume II, Appendix A: Map Folio, Figure 16 –Utilities Map.

Information on other special service providers such as fire, port, and school districts is included in this chapter.

10.2 Electricity

10.2.1 Bonneville Power Administration

The Bonneville Power Administration (BPA) is an agency of the U.S. Department of Energy. It wholesales electric power produced at 29 federal dams located in the Columbia-Snake River Basin, as well as one non-federal nuclear plant. BPA does not own or operate any federal dams; however, it does sell the power produced by these dams and by the Energy Northwest-operated nuclear power plant located just north of Richland. The U.S. Army Corps of Engineers owns and operates Bonneville Dam, and Grand Coulee Dam is owned and operated by the U.S. Bureau of Reclamation. These two agencies run all of the dams whose power is sold by BPA.



Transmission line and tower in eastern Benton County

Electricity is purchased from the BPA and supplied to areas in unincorporated Benton County via two local public utilities: the Benton PUD and Benton Rural Electric Association (Benton REA).

10.2.2 Benton County Public Utility District

The Benton PUD was established by vote of the residents and began electric distribution operations in October 1946. The Benton PUD service area is entirely within Benton County and includes the cities of Kennewick, Benton City, Prosser, and portions of West Richland. Benton PUD serves Benton County except for the City of Richland, the U.S. Department of Energy's operations on the Hanford Reservation, and those rural areas of the County that are served by Benton REA. It maintains offices in Kennewick and Prosser.

10.2.3 Benton Rural Electric Association

Incorporated in 1937, Benton REA is a consumer owned rural cooperative, which serves portions of Benton, Lewis, and Yakima counties. Benton REA's 1,300 square mile territory extends from the Columbia River at Paterson, north to the Hanford Reservation, and west to White Pass in the Cascade Mountains.

Benton REA serves the rural areas of the Benton County and some urban areas. While Benton REA was originally set up to serve the rural customers of Benton and Yakima counties, the cooperative is becoming more of an urban player as the cities expand into rural areas. Benton REA also serves the community of West Richland and many parts of the UGA around Richland, Benton City, Prosser, and parts of the Hanford Reservation.

10.3 Wind Energy

The deregulation of the electric industry and evolving energy supply needs have increased demand for diverse, low carbon energy sources in the BPA service area, including wind power. Several "wind farms" have located in the County on privately owned agricultural land pursuant to leases between landowners and the project developer. Large turbines are strategically placed along the major ridges to capture wind and generate power which is fed back to BPA facilities through substations. Existing wind projects have contributed to Benton County's energy portfolio through utility-scale projects located on agricultural lands with access to transmission facilities. However, in recent years the pace of new wind development has slowed due to transmission constraints, land use compatibility concerns, and reduced viability compared to solar and battery storage alternatives.



Wind turbine in wheat fields

Large-scale wind proposals reviewed through the EFSEC, such as the Horse Heaven Wind Farm, have faced significant challenges related to scenic impacts, protected species, and agricultural land conversion, resulting in heightened public review and permitting complexity.

To help manage the siting of future energy facilities, the County has identified guidance it will use in EFSEC processes to protect County agriculture and other natural resources and habitats (*See* Volume II, Appendix J).

10.4 Solar Energy

Solar energy is an increasingly prominent component of Benton County's energy landscape due to the region's favorable solar exposure, available transmission infrastructure, and growing energy demands to support economic growth. Several utility-scale solar projects have been developed, and additional projects are in the state permitting process. Unlike large-scale wind projects, which typically require extensive, contiguous land areas, solar facilities can be adapted to smaller or previously disturbed sites and developed at utility, community, or distributed scales. Solar development supports energy reliability, particularly when paired with battery storage or integrated into industrial and agricultural operations.

10.5 Natural Gas

10.5.1 Williams Northwest

Williams Northwest Pipeline operates and maintains its natural gas pipeline that runs through Benton County near Plymouth. Virtually all natural gas is now transported through pipelines. "Gathering" lines collect and carry the natural gas from wells to transmission lines or plants for processing. A series of compressor stations propel the fuel long distances overland through major transmission pipelines to local distribution and service lines or storage facilities. A network of small-diameter distribution mains and service lines transport the gas to end-users. Related facilities include, but are not limited to cathodic protection stations, test posts, mile markers, meter stations, and valves.

Future pipeline safety concerns are related to the adverse impact and encroachment of development near transmission lines. With more people living and working near transmission lines, the severity of pipeline failures from all causes may increase.

10.5.2 Cascade Natural Gas

Cascade Natural Gas Corporation builds, operates, and maintains natural gas facilities serving Benton County. Cascade Natural Gas is an investor-owned utility serving customers in 16 counties in Washington State. The Pacific Northwest receives its natural gas from the Southwest United States, and from neighboring Canada. Natural gas is supplied to the entire region via two interstate pipeline systems. The Northwest Pipeline Corporation owns and operates the network that supplies natural gas to Benton County. Natural gas is stored in a facility in Plymouth.

10.6 Telecommunications

The Telecommunications Act of 1996 enacted into law the first comprehensive rewrite of the Communications Act of 1934. The act establishes national guidelines for enabling equitable competition in all telecommunication markets, including the local telephone market, and identifies respective roles of the Federal Communications Commission and the states to accomplish the transition. Several telephone companies supply local, long distance, and cellular service in Benton County.

10.7 Water and Sewer Systems

Benton County does not currently own, operate, or maintain a water or sewage treatment facility with the exception of occasional temporary responsibility for water systems under "receivership" per RCW 70.119A. Sources of water and sewer disposal for housing units are shown in Table 10-1.

Table 10-1
Sources of Water and Sewer Disposal

Source	How Served
Water	Public/Private System
	Private Well/Other
Sewer Disposal	Public System
	Septic Tank/Private

10.7.1 Existing Conditions

A public supply is generally defined as any system, excluding systems serving only one single-family residence that provides piped water for human consumption. Washington State Department of Health keeps an inventory of water systems in the County that includes a classification of systems according to type of system and number of customers served. The criteria used in establishing the classifications are described in Table 10-2.

Table 10-2
Washington State Department of Health Water System Criteria

Class	Water System Criteria
Group A	15+systems/ or serves 25+ people for over 60 days a year
Group B	System with 4+ service connections but <15, serving <25 people a day for over 60 days a year.

Washington State Department of Health defines a "community" water system as a public water system that serves a permanent or seasonal population (e.g., subdivisions, mobile home parks), and a "non-community" water system as a public water system that serves a transitory population (e.g.,

restaurant, motel). Benton County has Group A water systems, including both non-transient and transient (e.g., campgrounds) and Group B water systems.

The source of water supply is ground water for all these systems with the exception of the Cities of Kennewick and Richland, which in addition to ground water receive water from the Columbia River. Information for each city's water system, the population served, and the average daily amount of water used, can be found in each entity's comprehensive plans and water system plans.

Most rural residents rely on on-site septic tanks and drain fields for their wastewater system needs. While adequately designed and installed on-site septic systems can be appropriate for rural level development, maintenance of such systems varies from excellent to none at all. Poorly maintained septic systems are a source of ground and surface water pollution and have been identified both at the state and local level as significant contributors to high nitrate levels in soil and coliform bacteria in surface water. All on-site systems in the County are permitted and regulated by the Benton-Franklin Health District.

10.7.2 Current Trends

Living in rural areas continues as a lifestyle preference in today's society. The influx of people moving into newly developed areas of Benton County means more individual or community wells that depend on groundwater and an increased demand on the groundwater supply.

Under state law, all new public water systems must be owned or operated by a Satellite Management Agency or SMA. This ensures that the new system has sufficient management and financial resources to provide safe and reliable service to the system users.

If a SMA is not available to receive ownership/or operation of the system and Washington State Department of Health determines that the new system has met sufficient management and financial resource criteria to provide safe and reliable service, then the new system may be conditionally approved. The conditions may include future inclusion into a SMA, or findings that the system meets the Washington State Department of Health criteria for management and include an ongoing review of its operational history and status.

Currently the City of Richland and five other organizations are approved to operate SMAs in Benton County. If a system loses its owner/operator due to non-compliance, the system goes into "receivership." During receivership actions, Washington State Department of Health meets with water systems owners and users to discuss restructuring options. If no other SMA or person is willing to be named as a receiver, the court appoints the County as receiver.

State regulations include criteria for sewage treatment systems located in gravely or coarse sand soils such as minimum land area requirements, or special engineered systems (i.e., mound, sand line

trench systems). There are several areas in the County where these soils exist. The Benton-Franklin Health District oversees the placement and permitting of on-site sewer systems. Systems over 3,500 gallons per day are permitted through Ecology.

10.7.3 Future Considerations

On-site water and waste systems for multiple users may be a desirable alternative to the single user systems and the extension of municipal systems. The option to cluster development in Rural Community Centers opens the opportunities for the use of such systems.

In the rural communities of Whitstran, Paterson and Finley, some residents have expressed interest in being part of public water systems, which are perceived to be more affordable than individual wells. If such systems were to become a reality, the logical next step could be public waste disposal systems. The Plymouth Water District serves the Plymouth community with a public water system.

A water resource management program to conserve and maintain the County's groundwater supply may be necessary to provide a long-term dependable supply sufficient to sustain the future needs for potable water and water for agricultural purposes, as discussed further in Section 4.5.

10.8 Solid Waste

10.8.1 Existing Conditions

The *2013 Benton County Comprehensive Solid Waste Management and Moderate Risk Waste Management Plan* (2023 Plan) provides background and guidance for a long-term approach to solid waste and moderate risk waste management in the region. This 2023 Plan comprises the combined comprehensive solid waste management plan and Local Hazardous Waste/Moderate Risk Waste Plan for the incorporated and unincorporated areas of Benton County.

The purpose of the Plan is to serve as a roadmap to managing the comprehensive solid waste and moderate risk waste management systems in Benton County. The 2023 Plan was developed as a joint effort of Benton County and the cities of Benton City, Kennewick, Prosser, Richland, and West Richland. It is intended to provide citizens and decision makers in Benton County with a guide to implement, monitor, and evaluate future activities in solid waste for a 20-year period. The recommendations for the 2023 Plan not only guide local decision makers but substantiate the need for local funds and state grants to underwrite solid waste and moderate risk waste projects.

10.9 Special Service Providers

10.9.1 School Districts

The County is divided into seven school districts. All districts are located entirely within the County, with the exception of the Grandview District, which is principally located in Yakima County, but includes approximately 6 square miles of Benton County (stretching 3 miles north and south of Highway 12 at the Yakima County line).

All school districts offer kindergarten through twelfth grade education except the Paterson School District, which contracts sixth through twelfth grades (middle and high school levels) with the Prosser School District.

10.9.2 Higher Learning

Increasingly, education is the key to individual economic success. Frequently, this means a college degree. For counties, a well-educated population is also an ingredient in economic success.

Columbia Basin College, located at Pasco in adjacent Franklin County, is the primary college in the area; they also have a branch campus in Richland. Columbia Basin College is a two-year community college offering a wide range of academic, vocational, and night school programs.

Washington State University (Pullman) has a branch campus located in Richland, offering both graduate and masters education programs. This campus continues to grow in both facilities and programs offered, and Washington State University degree programs are often integrated with Columbia Basin College programs.

10.9.3 Library Districts

The Mid-Columbia Library includes both Benton and Franklin counties and is directed by a board of seven members appointed jointly by the Benton and Franklin County Commissioners. The district's main library is located in Kennewick, while branch libraries are located in towns in both counties. The rural areas are served by a bookmobile that maintains a scheduled route throughout the district. The City of Richland has its own city library.

10.9.4 Fire Districts

The five incorporated communities and portions of the remaining unincorporated area of Benton County are served by a mixture of municipal and rural fire departments. Richland and Kennewick municipal fire departments are manned by full-time firemen. Prosser, Benton City, and West Richland operate with full and part-time positions along with volunteer staff. The rural districts are principally manned by volunteer personnel. A mutual aid cooperative-agreement exists between Richland, Kennewick, Pasco, Benton City, Prosser, and the rural districts.

Long-range fire protection needs will also require increases in equipment and manpower to maintain an effective level of protection. With increased urbanization of the County, increased full-time employment due to increased LOS required by residents as opposed to volunteer service can be expected to occur in some of the County's fire protection organizations.

An additional factor is the integration of fire protection needs with long-range water needs. The source, storage capacity, and distribution systems of water systems, as well as fire hydrant placement in urban density developments, must be adequate to provide sufficient volume and pressure for firefighting needs.

10.9.5 Hospital Districts

General hospitals are located in Richland, Kennewick, and Prosser providing County residents with inpatient care. The Kennewick and Prosser hospitals are each operated by a public entity in the form of a hospital district directed by elected board members, while the Richland hospital is privately owned and operated. Benton County is also served by a variety of public and private medical clinics providing treatment for most medical concerns.

10.9.6 Benton-Franklin District Health

This regional health agency is responsible for a wide variety of health-related programs in Benton and Franklin counties. Some examples of its activities are in the environmental health division: solid waste, permitting community wells (2 to 4 hookups), approval of on-site sewage disposal systems, and restaurant inspections. The public health division serves the public with immunizations, tuberculosis and sexually transmitted disease clinics, and registration of birth and death certificates.

10.9.7 Benton Conservation District

Benton Conservation District is a non-regulatory organization established to provide landowners with technical and financial assistance and dedicated to the wise stewardship of soil, water, air, fish, and wildlife in Benton County. Benton Conservation District is funded by grants and a special assessment authorized by Benton County Commissioners.

10.9.8 Mosquito Control District

The Benton County Mosquito Control District is established to eradicate mosquitoes, particularly the mosquito *Culeax tarsalis*, which is a carrier of sleeping sickness. The district is administered by a manager, who is directed by a 12-member board appointed by the Commissioners of Benton and Yakima counties, and mayors from the respective city councils of the cities who are within the district (Kennewick, Benton City, Prosser, Richland, West Richland, Mabton, and Grandview). There are three board members representing the unincorporated area of Benton County. The district encompasses

354 square miles within the Yakima and Columbia River drainages, exclusive of the Horse Heaven and Rattlesnake hills, and the Hanford Reservation.

10.9.9 Benton Clean Air Authority

The Benton Clean Air Authority carries out the requirements of the Washington State Clean Air Act, RCW 70.94, within the boundaries of Benton County. The agency functions as a single county authority to control the emissions of air contaminants from all sources within the County. The agency is charged with implementing and overseeing agricultural and backyard burn programs; air quality monitoring; asbestos removal notifications and inspections; industrial and commercial air permitting; and enforcement of federal, state, and local air quality regulations.

10.9.10 Irrigation Districts and Private Irrigation Systems

Agricultural production that takes place across the midsection of the County, from the Yakima County line to the Finley area, is made possible by the Yakima Project developed by the U.S. Bureau of Reclamation, and by several large water rights on the Columbia River. The Yakima Project was developed primarily for the purpose of providing irrigation water for the fertile Yakima River Valley and consists of over 200 miles of canals and laterals. This project provides the water that enables the Yakima Valley, which extends into Benton County, to continually be one of the Nation's premier producers of such crops as apples, mint, hops, cherries, and grapes.

The irrigation district locations in Benton County are listed below:

- Roza District
- Sunnyside Valley Irrigation District
- Benton Irrigation District
- Kennewick Irrigation District
- Kiona Irrigation District
- Columbia Irrigation District
- Badger Mountain Irrigation District



Kennewick Irrigation District canal facility in Finley

10.9.11 Noxious Weed Control District

The Benton County Noxious Weed Control District is directed by a board of five members appointed by the County Commissioners. The intent of the district is to promote weed control by instituting a program that emphasizes education as a means to assist landowners in the identification and control of noxious weeds listed on the County's noxious weed list.

10.9.12 Port Districts

Ports can develop property for industrial use and can lease and sell land, buildings, and facilities to private industry in accordance with state laws. State laws specify that ports may acquire, construct, maintain, operate, develop, and regulate within the district harbor improvements; rail or motor vehicle transfer and terminal facilities; water transfer and terminal facilities; air transfer and terminal facilities; and other commercial transportation, transfer, handling, storage, and terminal facilities and industrial improvements.

Port districts are funded by revenues from the operation of terminals, the sale or lease of properties, and tax levies. A port district may incur debt including issuing general obligation bonds up to 0.25 percent of the assessed value of taxable property in the district without vote of the people. An additional 0.05 percent debt may be incurred if 60 percent of the electorate approves. Port districts also have the power to issue revenue bonds for the acquisition, construction, reconstruction, or extension of various improvements.

There are two port districts in Benton County: the Port of Benton and the Port of Kennewick. They are governed by a three-member elected board of commissioners who appoint the Executive Director.

The Port of Kennewick District was formed in 1915 and expanded to its current area in 1954, including Kennewick, south Richland, West Richland, south Benton City, and the southeast part of the County. The Port of Benton District was formed in 1958 and includes Prosser, central and north Richland, and the majority of Benton City, as well as Hanford and northwest Benton County.

11 Climate Element

11.1 Introduction

Benton County is incorporating a Climate Element into its Comprehensive Plan in accordance with the Growth Management Act (GMA) (RCW 36.70A) and House Bill 1181 (2023). This Element establishes goals, objectives, and policies to reduce greenhouse gas (GHG) emissions and to build resilience against climate-related hazards such as drought, wildfire, flooding, and extreme heat. The GMA sets the following goals for climate change and resiliency:

Ensure that comprehensive plans, development regulations, and regional policies, plans, and strategies adapt to and mitigate the effects of a changing climate; support reductions in greenhouse gas emissions and per capita vehicle miles traveled; prepare for climate impact scenarios; foster resiliency to climate impacts and natural hazards; protect and enhance environmental, economic, and human health and safety; and advance environmental justice. (RCW 36.70A.070(9)).

The intent of the Climate Element is not only to comply with state requirements, but also to safeguard Benton County's economy, environment, and public health for future generations. Planning for climate resilience allows the County to anticipate risks, strengthen infrastructure, and prepare its communities for changing conditions. At the same time, emissions reduction policies enable the County to contribute to Washington State's targets for carbon neutrality while promoting energy efficiency and innovation.

Another key component of the Climate Element is promoting equitable climate outcomes for community members, as not all climate impacts are experienced equally. Vulnerable populations are defined by HB 1181 as groups that are more likely to be at higher risk for poor health outcomes in response to environmental harms, which could be due to adverse socioeconomic factors (e.g., high housing and transportation costs relative to income, limited access to nutritious food and adequate health outcomes and increase vulnerability to the effects of environmental harms).

In alignment with these goals and requirements, the Climate Element addresses key climate issues facing Benton County community members to help build community resilience to climate change impacts. Benton County is also required to include a greenhouse gas (GHG) sub-element.

The issues in the Climate Element are complex and dynamic, and several other elements in the Comprehensive Plan interact with the Climate Element:

- **Land Use Element**: Assesses current and future land uses in Benton County, preserving rural lands and character, communities, natural spaces, and resource lands while meeting community growth and other needs. Land use and specifically land preservation can be used

to enhance climate resiliency and sequester carbon. See Section 2.2 for specific land use policies.

- **Natural Resources Element**: Protects a variety of environmental landscapes, biodiversity, and ecosystem functions in the county. Healthy functioning ecosystems can provide resiliency against climate impacts and work to mitigate against future climate impacts. Protects and enhances the function of county natural resource lands, bolstering resiliency and future yields. See Sections 2.3 to 2.5 for specific environmental protection policies.
- **Parks and Recreation Element**: Protects and expands parks and open spaces to provide for long-term agriculture and sustainable silviculture as well as great visual and direct access to open spaces for county residents and visitors. Encourages historical and cultural preservation. Open Spaces and parks provide carbon sequestration opportunities and can help mitigate against climate impacts such as extreme health and flooding. See Section 2.9 for related policies.
- **Transportation Element**: Identifies opportunities to enhance transportation system reliability and promotes multi modal transportation development that can reduce GHG emissions. See Section 2.8 for related policies.

11.2 Regional Approach

Five jurisdictions in the Tri-Cities Region – Benton County and the cities of Pasco, Kennewick, Richland, and West Richland, with the support of the Benton-Franklin Council of Governments – worked together on a regional approach address the new requirements of the GMA and HB 1181. These jurisdictions developed a collaborative regional strategy to address natural hazards related to climate and reduce GHG emissions. By collaborating as a region, Benton County benefitted from strong cross-regional governmental connection, collaboratively identifying areas of regional alignment across a highly interconnected region to address climate vulnerabilities and shared emissions sources. The Tri-Cities Regional Climate Action Plan, which informs and supports this Climate Element, is available through the Benton-Franklin Council of Governments.

11.3 Climate Resilience Sub-Element

This Climate Resilience Sub-Element summarizes the current and future state of climate impacts, vulnerabilities, and adaptation strategies to increase the region's resilience to climate impacts for its residents, ecosystems, and infrastructure. Steps one through four in Commerce's guidance build the foundation for step five: crafting goals and policies. Goals and policies in the Resilience Sub-Element must meet these requirements:

- **Requirement 1**: Address natural hazards created or aggravated by climate change, including sea level rise, landslides, flooding, drought, heat, smoke, wildfire, and other effects of changes to temperature and precipitation patterns;

- **Requirement 2**: Identify, protect, and enhance natural areas to foster climate resilience, as well as areas of vital habitat for safe species migration; and
- **Requirement 3**: Identify, protect, and enhance community resilience to climate impacts, including social, economic, and built-environment factors, which support adaptation to climate impacts consistent with environmental justice.

The analysis of current and projected climate conditions and vulnerabilities provides insight into local policy options for increasing climate resilience in Benton County. Vulnerabilities and the ability to increase climate resilience vary between urban and rural areas and are reflected in Climate Resilience Sub-Element goals and policies.

11.3.1 Climate Vulnerability Assessment Results

The Climate Vulnerability Assessment (CVA) analyzes historical and potential future impacts of key climate hazards on the people, industries, assets, and infrastructure of the Benton County. The vulnerability assessment utilized existing regional and jurisdiction planning documents, along with national, state, and local data sources—including hazard mitigation plans, comprehensive plans, transportation plans, and shoreline master programs to assess climate vulnerabilities. The CVA includes both regional and jurisdiction levels and utilizes national, state, and local data sources. The sectors identified are **community health and well-being**, **ecosystems** and **water resources**, **built infrastructure**, and **land use**.

The current and future climate conditions and vulnerabilities were assessed using:

- Climate Impacts Summary
- Vulnerability Assessment
- Tree Canopy Assessment

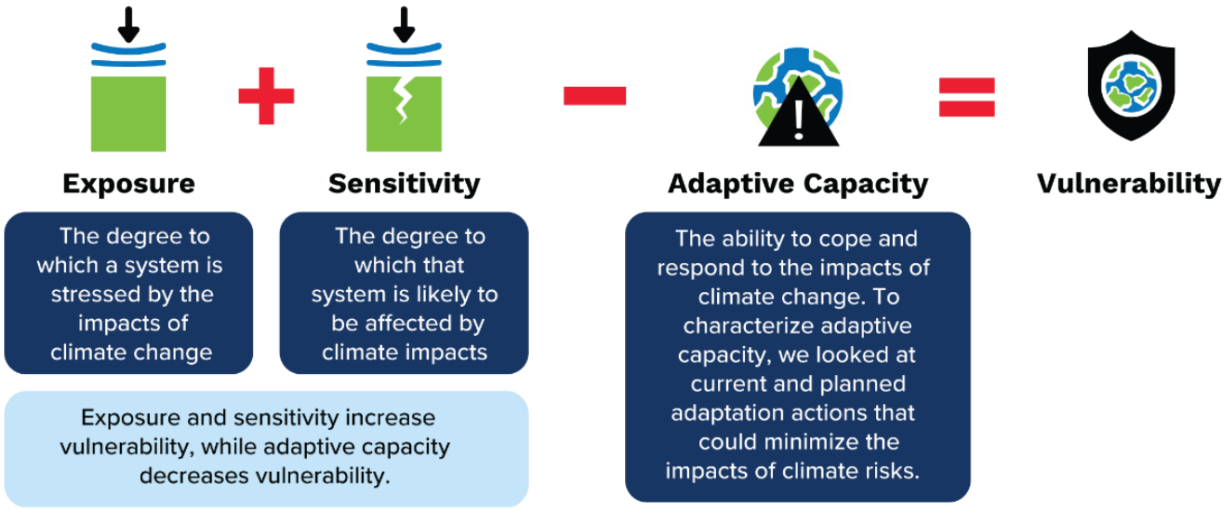
The purpose of the climate and vulnerability assessments are to:

- Ensure compliance with Washington Department of Commerce and GMA requirements
- Inform the Climate Element drafting process by identifying key climate impacts and vulnerabilities
- Ensure sensitivities, exposures, and adaptive capacities are addressed in the Climate Element Goals and Policies.

Climate vulnerability is the degree to which climate change stressors may harm a system or community (Figure 11.1). This assessment used the following definitions of climate exposure, sensitivity, and adaptive capacity to understand climate vulnerabilities in Benton County:

- ***Exposure*** is the degree to which a system is exposed to climate hazards. For example, low elevation coastal areas are more exposed to sea level rise and coastal flooding compared to higher elevation inland areas.
- ***Sensitivity*** is the degree to which that system is likely to be affected by climate change. For example, older adults are less able to regulate their body temperatures and are often more physically sensitive to extreme heat than younger people.
- ***Adaptive capacity*** is the ability to moderate the damage of, cope with, or adjust to climate change. For example, access to a vehicle and health insurance increases people's ability to manage health impacts from extreme heat, smoke, and any injuries related to climate hazards.

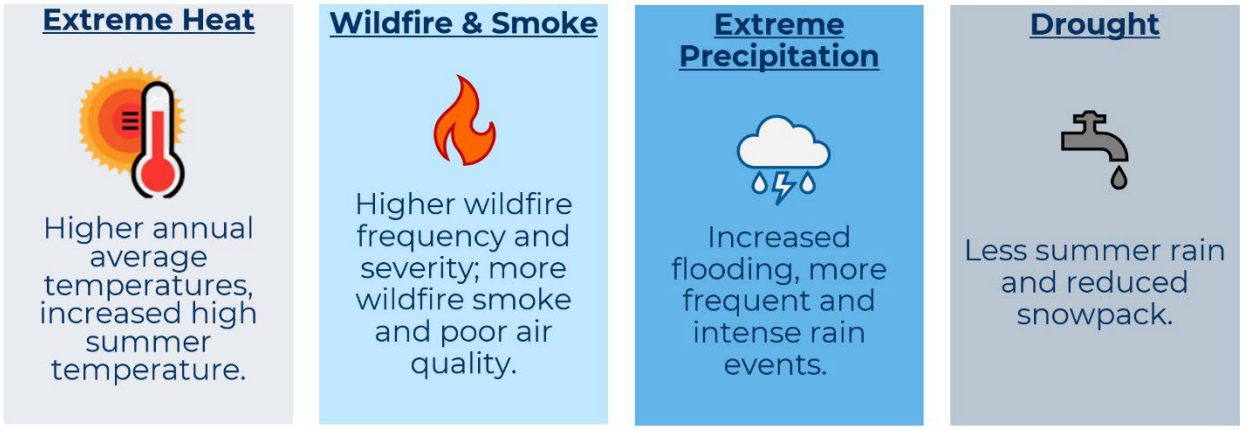
Figure 11-1
Climate Vulnerability Framework



11.3.2 Climate Impacts and Social Vulnerability

The CVA, assessed past, current, and future climate hazards for the region. The identified hazards (Figure 11.2) are the foundation for the goals and policies in the Benton County Climate Element. Benton County currently experiences impacts from several climate hazards, including drought, extreme heat, severe storms, wildfire smoke, and air and water quality issues. The following hazards are expected to become more frequent and severe from climate change:

Figure 11-2
Key Climate Hazards in Benton County

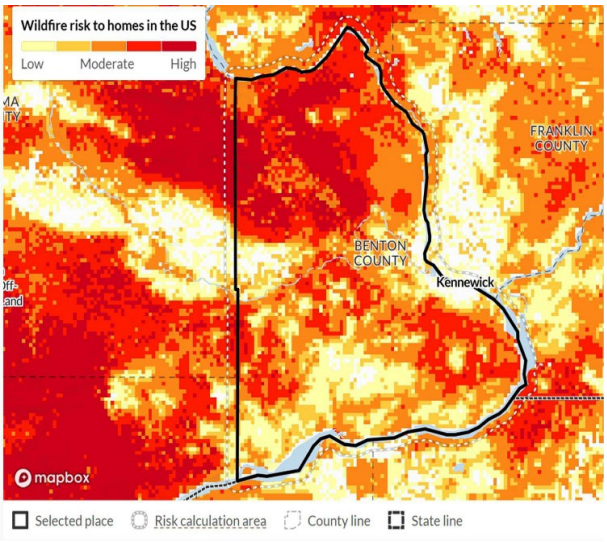


Benton County is likely to experience more extreme heat and wildfire risk days and variable precipitation by the end of this century. Much of Benton County has high wildfire risk (Figure 11.3).

- **Extreme heat:** Temperatures in Benton County have increased 2.9°F since 1895. Benton County is predicted to experience 34 days over 100°F by 2099, compared to just one day over 100°F in 2000 (Abatzoglou & Brown, 2012).
- **Precipitation and Flood Events**: Benton County can expect a slight increase in annual precipitation. Historical winter precipitation is just under three inches. By 2100, annual winter precipitation is expected to increase by a quarter of an inch. As it increases, so does the potential for flooding that can occur due to sudden rain events and snowmelt. By the end of century, winter precipitation is predicted to be around 4 inches, an increase of nearly 20 percent (Abatzoglou, 2013).
- **Drought**: Benton County can expect a decrease in summer precipitation of around 10 percent (Abatzoglou & Brown, 2012). Additionally, summer streamflows in the region will decrease because of smaller snowpacks and earlier snowmelt, contributing to lower water availability during warm months.

- **Wildfire**: Higher summer temperatures greatly increase the risk and severity of fire in Benton County. Benton County has very high fire danger expectations. By 2070, the city can expect 70 high fire danger days per year. Nearly nine in ten (87 percent) of properties in Benton County are at risk of wildfire damage in the next 30 years (First Street Risk Factor, 2025). Models cannot accurately predict wildfire risks beyond 2070, so they have been omitted from the summary table.

Figure 11-3
Benton County wildfire risk map.



Residents of Benton County face different degrees of exposure and sensitivity to climate hazards and have different levels of adaptation to reduce climate impacts. Key sensitivities across the region include poor physical health, asthma, diabetes, and COPD. Major exposures to key climate hazards include proximity wildfire risk areas, high summer temperatures, and potential future precipitation. Table 11.1 also summarizes the top three adaptive capacity variables for block groups with low or very low adaptive capacity compared to adaptive capacity in the city or county. In Benton County those groups include those living in poverty, with lack of transit access, and with limited English.

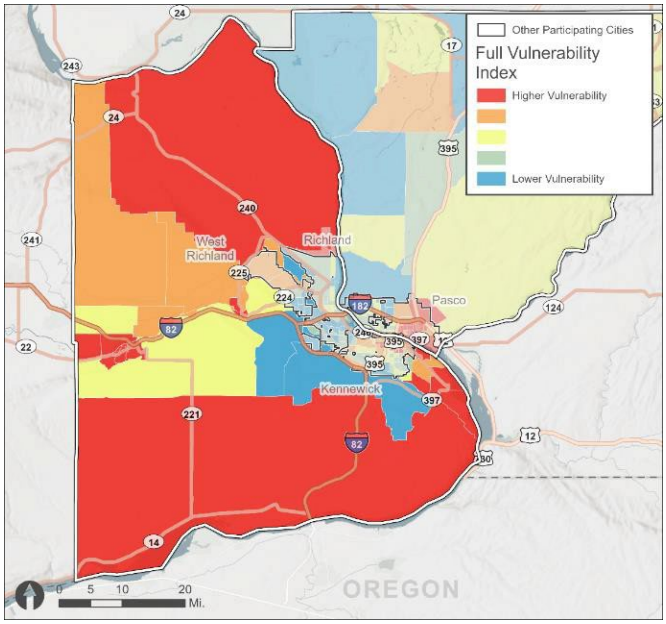
Table 11-1
Top three variables contributing to vulnerability in groups with very high and high sensitivity and exposure, and very low and low adaptive capacity in Benton County

Benton County		
Very High / High Sensitivity	**Very High / High Exposure**	**Very Low / Low Adaptive Capacity**
COPD	Wildland-Urban Interface	Living in poverty
CHD	Average summer high temperature	Transit access
Poor physical health	Future heavy precipitation	Limited English

11.3.3 Climate Vulnerability Key Findings

The CVA expands on the identified climate hazards and assesses their impact on the natural and built environments and residents in Benton County. Key findings for regional vulnerabilities are summarized below. Benton County is likely to experience more extreme heat and wildfire risk days and variable precipitation by the end of this century. Much of Benton County has high wildfire risk. Northeastern and southern Benton County have the highest vulnerability to climate hazards (see Figure 11.4). Vulnerabilities include flooding risk to roads, extreme heat impacts to agricultural lands and workers, and residents and communities in high wildfire risk areas. Vulnerabilities unique to rural Benton County include long emergency response times and the quantity of farmland susceptible to climate impacts.

Figure 11-4
Benton County Climate Vulnerability, Map by BERK



Extreme Heat:

- Buildings that lack adequate insulation, reflective roofing, or cooling systems will be less able to maintain safe indoor temperatures during longer and more intense heat events.
- Warmer temperatures can lead to higher health care costs associated with an increase in emergency room visits.
- Rising air and surface water temperatures are affecting some key species, and threatening access to vital cultural resources.
- Residential development is increasingly expanding into Wildland-Urban Interface (WUI) zones, increasing exposure and sensitivity to wildfire.
- Hotter summers will increase the demand for cooling, affecting homes and businesses that rely on air conditioning. Rising electricity costs could further burden low-income households.

Wildfires and Smoke:

- Wildfires can cause poor air quality which can contribute to respiratory problems, long-term health challenges, and increased healthcare costs. People who work outside are especially at risk of health issues due to extreme heat and poor air quality.
- Increases in the frequency and intensity of wildfires in high-risk areas like Badger Mountain and the Yakima Delta threaten historic sites, trails, and natural areas.

Extreme Precipitation and Flooding:

- Flooding is a risk to public health and can cause injury, death, and property loss and damages.
- Flooding presents a persistent and growing threat to buildings in the region. Since 2005, Benton County has had nine flooding events, two of which were declared federal disasters.
- Flooding can negatively impact agriculture by delaying planting timelines, impacting crops, increasing erosion, and increasing susceptibility to disease.

Drought:

- Reductions in snowfall will decrease the potential for groundwater recharge in aquifers.
- The risk of drought is increasing. Benton County is one of nine counties most vulnerable to drought in Washington.
- Drought can disrupt commerce through the closures of water-centered recreational businesses such as swimming pools and water parks.
- Benton County land is predominantly used for agriculture. Drought can threaten agricultural productivity and food processing, which impacts the people whose livelihoods depend on these industries.

Table 11-2
Key Climate Risks & Community Vulnerability in Benton County

Key Climate Risks & Community Vulnerability	
Flooding	**Extreme heat**
• Extreme precipitation and flooding can lead to washouts, erosion, slides, and undermining of county roads. • There is an increased flooding risk in spring from heavy rains melting the snowpack.	• Residents in southern Benton County are most vulnerable to extreme heat due to social vulnerability factors including lower incomes and chronic health conditions.
Drought	**Wildfire**
• Benton County's agriculture- centered economy and growing population are vulnerable to drought impacts. • Benton County has experienced a gradual loss of artificial wetlands because of water conservation projects.	• Residential and agricultural burns increase wildfire risk and contribute to poor air quality. • Benton County has a low number of Firewise Communities; there are many property owners within the Wildland-Urban Interface (WUI) that are not aware of the problems and threats they face.
Community Vulnerability & Adaptation	
• To further protect culturally important gathering spaces and areas of transport, Benton County incorporated a policy to create and maintain a regional park and trail system that is integrated with city recreational resources. • Rural communities in Benton County face longer emergency response times due to limited infrastructure and distance from services. • Over 63 percent of Benton County is agricultural lands. 94 percent of privately- owned land is in agriculture, over 703,000 acres.	

11.4 GHG Emissions Reduction Sub-Element

This Greenhouse Gas (GHG) Emissions Reduction Sub-Element summarizes the current and future state of GHG emissions and vehicle miles traveled (VMT) in the region and presents policies aimed at reducing these emissions and VMT while improving quality of life for residents and visitors. Goals and policies in the GHG Emissions Reduction Sub-Element must meet the following requirements to comply with HB 1181:

- **Requirement 1**: Result in reductions in overall greenhouse gas emissions generated by transportation and land use within the jurisdiction but without increasing emissions elsewhere in Washington.
- **Requirement 2**: Result in reductions in per capita vehicle miles traveled within the jurisdiction but without increasing greenhouse gas emissions elsewhere in Washington; and,
- **Requirement 3**: Prioritize reductions that benefit overburdened communities in order to maximize the co-benefits of reduced air pollution and environmental justice.

The analysis of current and projected GHG emissions and VMT provides insight into local policy options for reducing emissions in Benton County and the Tri-Cities Region.

- **Reducing energy consumption in new and existing residential, commercial, and industrial buildings** by supporting clean building energy sources and energy efficient building design and retrofits. Local actions for decarbonization and energy efficiency would reduce the Tri-Cities Region's buildings emissions, which made up 39% of 2022 communitywide emissions.
- **Reducing passenger vehicle travel** within the Tri-Cities Region, including through changes to land use, transportation infrastructure (transit, walking, bicycling), and commuting options/modes. A reduction in passenger VMT would reduce the Tri-Cities Region's communitywide on-road emissions from passenger vehicles, which made up 36% of 2022 emissions.
- **Facilitating the transition to electric vehicles** through expansion of reliable EV charging infrastructure and public education on EV options and available incentives/rebates. Local action to transition passenger and freight vehicles to electric would reduce Tri-Cities Region's passenger and freight vehicle on-road emissions, which made up 50% of 2022 communitywide emissions.

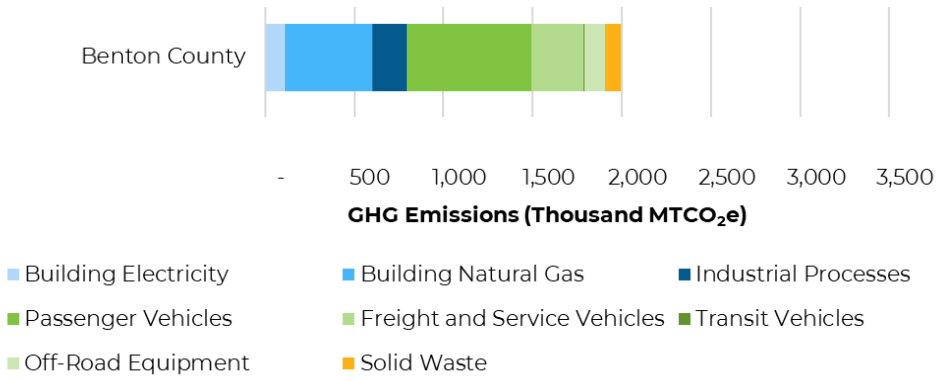
11.4.1 Current and Projected Greenhouse Gas Emissions and Vehicle Miles Traveled

Understanding Benton County and the region's current and projected GHG emissions and VMT helps policymakers set goals and create targeted policies to reach those goals.

11.4.2 Greenhouse Gas Emissions

The GHG emissions inventory identifies and quantifies GHG emissions from residents, businesses, and institutions in Benton County for the 2022 calendar year. The inventory includes a variety of emissions sources recommended by established protocols and relevant to local governments, including building energy consumption (electricity and natural gas), industrial processes, on-road and off-road transportation, and solid waste. The inventories serve as a baseline to support target setting, policy development, and future progress tracking. Results from the GHG emissions inventory suggested the largest sources of emissions were from **transportation** and **building energy use** (*See* Figure 11.5). For most jurisdictions, **on-road passenger vehicles** were the largest source of emissions, followed by **industrial natural gas consumption**.

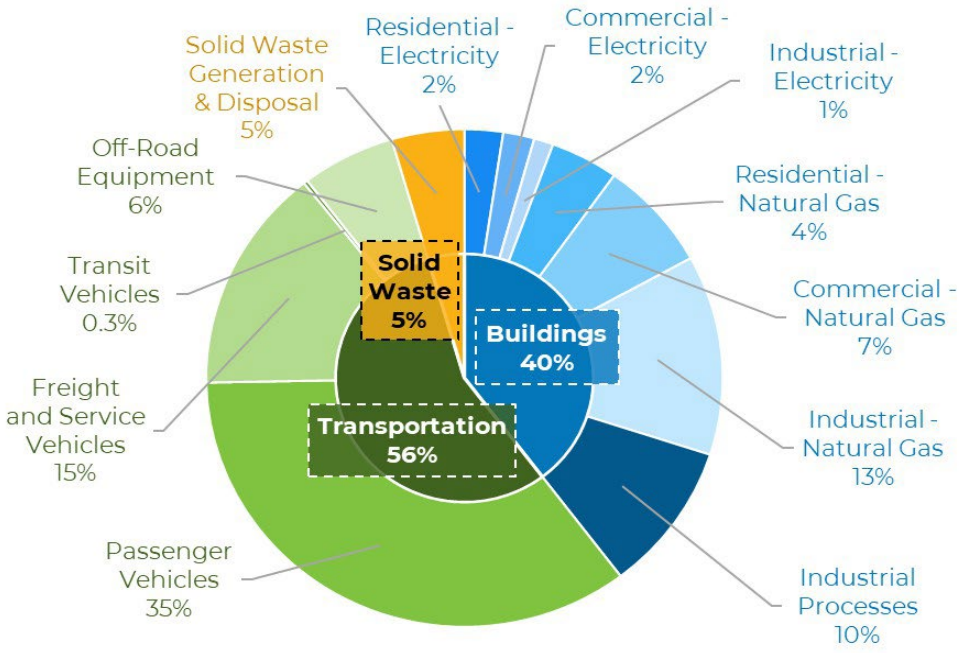
Figure 11-5
Total GHG Emissions in Benton County



Benton County includes all incorporated cities and unincorporated areas within its boundaries (including the cities of Kennewick, Richland, and West Richland). Findings from this GHG emission inventory suggest that Benton County's residents, businesses, and visitors generated an estimated 1,996,781 MTCO2e in 2022—or approximately 9.41 MTCO2e per capita.

In Benton County, on-road passenger vehicles contributed the most to 2022 communitywide emissions (35% of total emissions), followed by on-road freight and service vehicles (15% of total emissions). The next largest contributors to 2022 emissions were industrial natural gas (13%), commercial natural gas (7%), and off-road equipment (6%). Figure 11.6 shows the breakdown of communitywide GHG by source.

Figure 11-6
Benton County communitywide GHG emissions summary.



11.4.3 Greenhouse Gas Emissions Forecast

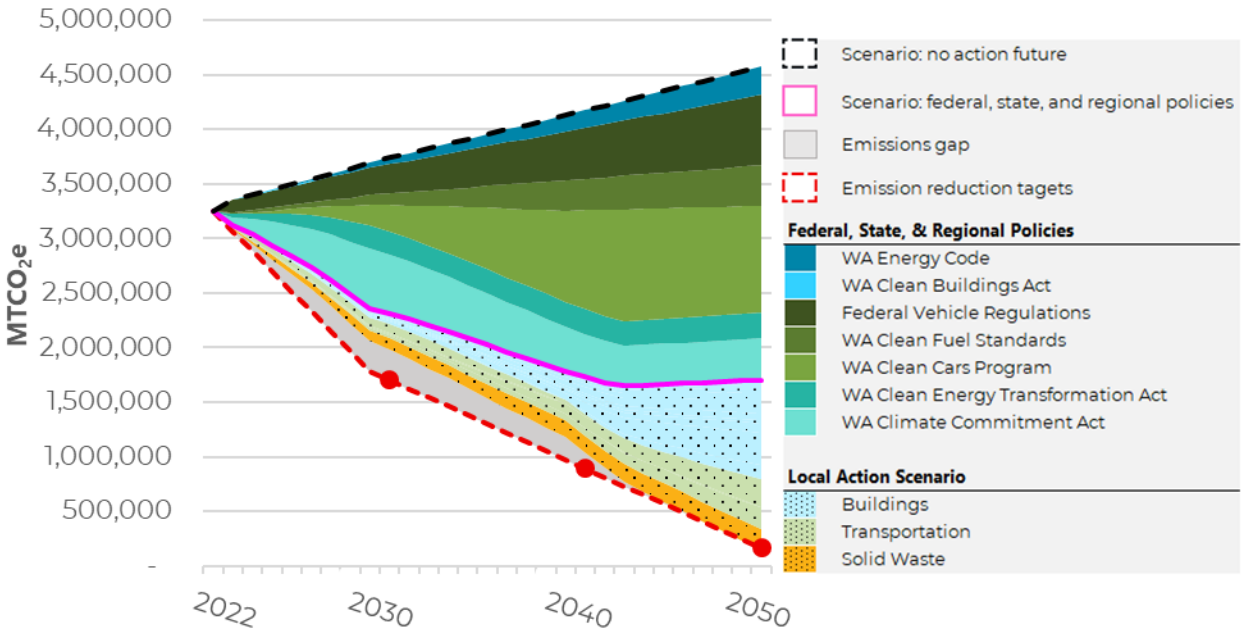
To inform the region's local GHG emission reduction targets and policies, results from the 2022 communitywide GHG inventory were used to forecast future emissions and emission reduction scenarios for Benton County. Specifically, the analysis forecasted communitywide GHG emissions to 2050 under three scenarios, as summarized in Table 11.3: The three scenarios are described in more detail below:

Table 11-3
Benton County findings from the emissions forecast and scenario analysis.

Scenario	% Change in GHG Emissions from 2022 Baseline				
	2030	2035	2040	2045	2050
No Action	+14%	+20%	+26%	+32%	+38%
State/Federal Policy	-28%	-36%	-45%	-49%	-48%
Local Action	-33%	-42%	-53%	-81%	-95%

- **No Action:** Without federal, state, or local climate action, Benton County's emissions will grow 38% by 2050 (compared to a 2022 baseline), as depicted by the dotted black line in Figure 11.7.
- **State/Federal Policy:** When considering the anticipated impacts of federal, state, and regional policies, communitywide emissions will decrease 48% by 2050 (compared to a 2022 baseline), as depicted by the pink line in Figure 11.7.
- **Local Action:** With the implementation of additional local action strategies, communitywide emissions could be reduced by an estimated 95% by 2050 (compared to a 2022 baseline), as shown by the Local Action scenario reductions in Figure 11.7.

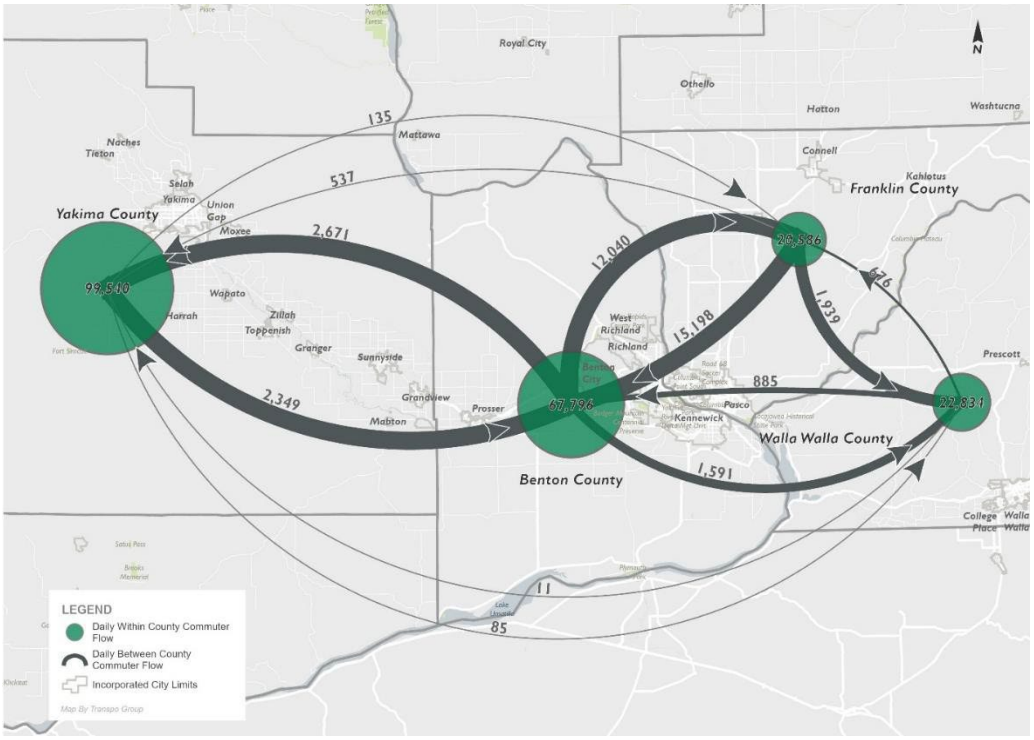
Figure 11-7
Benton-County forecast GHG emissions and reductions under three scenarios ($MTCO_2e$)



11.5 Vehicle Miles Traveled

Vehicle miles traveled (VMT) is a transportation metric that calculates the total travel distance of all vehicles in a specific geographic region over a given period. VMT is a key metric in transportation planning because it provides a measure of total travel that can be used to understand changes over time or differences amongst areas. The VMT study provides a VMT travel market assessment, analysis, and overview of potential reduction strategies for the Tri-Cities Region, including Benton County. Tri-Cities Region VMT includes travel to neighboring counties, including Yakima County and Walla Walla County (Figure 11.8).

Figure 11-8
County Level Daily Commute Trips. Source: Transpo Group, 2025.



Decreasing VMT per capita (population) contributes to reducing GHG emissions. VMT is a transportation metric that calculates the total travel distance of all vehicles in a specific geographic area over a given period. Table 7 summarizes the per-capita VMT for Benton County.

Table 11-4
Tri-Cities Region base and future annual per-capita residential VMT (1,000s)

Location	Base 2022	Future 2045
Unincorporated Benton County	3.98	3.98
Benton-Franklin Region	**6.52**	**7.25**

Table 11.4 shows that VMT increases as the region grows between 2022 and 2045. Per capita VMT without the implementation of reduction strategies will increase by 11% for the region. However, there is no change to VMT in Benton County between 2022 and 2045 due to the limited growth assumed. This limited growth is based upon 2022 population from the Washington State Office of Financial Management (OFM) and the projected population is based on adjusting 2046 Housing for All Planning Tool (HAPT) population projections provided by BERK Consulting to 2045.

While the table above indicates that the per-capita residential VMT growth does not occur in the unincorporated Benton County, Benton County will still work to implement strategies and policies to contribute to the overall VMT reduction targets as proposed in Table 11.5. The VMT target was determined based on coordination with agency staff and reduction strategies implemented through goals and policies in the Climate Element.

Goals and policies related to land use and transportation—including housing and job density, transit-oriented development, transportation management and commute trip reduction, street system connectivity and design, multimodal transportation design and options and parking—all impact VMT.

11.5.1 Regional Targets

Recommended short- and long-term targets for the Tri-Cities Region are presented in Table 11.5 below. These targets are based on state requirements, regional and peer jurisdiction context, and quantitative modeling.

Table 11-5
Proposed GHG emissions and per-capita VMT reduction targets for the Tri- Cities Region.

Category	2030	2035	2040	2045	2050	Notes
Communitywide GHG Emissions (% below 2022 levels)	36%	50%	64%	82%	95%	• Short-term (interim) targets are less aggressive than state targets to accommodate slow ramp-up and reflect local action assumptions • Long-term (2050) targets align with state targets
Per-Capita VMT (% below 2022 levels)	1%	2%	3%	4%	5%	• For review

11.6 Recommended Actions

Table 11.6 highlights recommended actions, not requirements; the County may take or support to implement the Climate Element over the next ten years and beyond, as applicable, with several in partnership with other entities.

Table 11-6
Climate Element and GHG Sub-Element Implementation Action Plan

Action	Sector Nexus	Related Goals & Policies	Description / Implementation Steps
Update zoning & development codes for heat, flood, and wildfire resilience	Land Use, Buildings & Energy, Emergency Mgmt	• CE-2.2 • CE-2.3 • CE-2.4 • CE-2.6 • CE-5.1	Integrate best-available climate data into site design and building standards; require wildfire-resilient siting/materials in WUI, shaded transit amenities, and passive survivability provisions in critical areas and subdivisions.
Retrofit assistance for vulnerable households (cooling & weatherization)	Buildings & Energy, Public Health	• CE-2.1 • CE-5.3	Launch/expand programs for HVAC/heat pumps, window shading, and weatherization; coordinate with utilities for rebates and prioritized outreach to seniors/low-income residents.
Update zoning & development codes for heat, flood, and wildfire resilience	Land Use, Buildings & Energy, Emergency Mgmt	• CE-2.2 • CE-2.3 • CE-2.4 • CE-2.6 • CE-5.1	Integrate best-available climate data into site design and building standards; require wildfire-resilient siting/materials in WUI, shaded transit amenities, and passive survivability provisions in critical areas and subdivisions.
Retrofit assistance for vulnerable households (cooling & weatherization)	Buildings & Energy, Public Health	• CE-2.1 • CE-5.3	Launch/expand programs for HVAC/heat pumps, window shading, and weatherization; coordinate with utilities for rebates and prioritized outreach to seniors/low-income residents.
Transportation resilience & mode shift package	Transportation, Land Use	• CE-2.4 • CE-2.5	Implement BFCOG MTP/ATP; add shade/air-quality features at transit stops; prioritize safe multimodal links serving overburdened areas; incorporate TDM in capital programming.
Non-emitting energy infrastructure coordination	Energy, Economic Dev.	• CE-2.6	With TRIDEC Energy Forward Alliance and utilities, identify grid upgrades, microgrids, and reliability nodes supporting essential services and growth centers.
Water-smart codes & conservation standards	Water Resources, Land Use	• CE-3.10 • CE-3.13	Update landscape and irrigation standards; encourage drought-tolerant species lists; align subdivision and building permits with high-efficiency fixtures and reuse.
Local drought resilience strategy	Water Resources, Agriculture	• CE-3.1 • CE-3.14	Define drought stages, triggers, and actions; coordinate with irrigation districts and Yakima/Columbia Basin

Action	Sector Nexus	Related Goals & Policies	Description / Implementation Steps
			planning. Implement Rural Water Supply Program.
Recycled/alternative water program	Water Resources	• CE-3.11	Establish policies/pilots for greywater/industrial reuse with health safeguards and simple approvals.
Native plant lists & green infrastructure toolkit	Water, Ecosystems, Land Use	• CE-3.12 • CE-3.5	Publish approved plant palettes and GI details for public/private projects; prioritize heat/flood hotspots.
Wildfire risk reduction in vegetation management	Ecosystems, Emergency Mgmt	• CE-3.6	Expand defensible-space education, roadside fuels management, and utility vegetation management in high-risk corridors.
Protect & expand natural cooling and flood-storage areas	Ecosystems, Water, Health	• CE-3.5	Prioritize riparian shade, park tree canopy, and floodplain reconnection projects in vulnerable areas.
Renewable siting compatibility mapping	Energy, Land Use, Agriculture	• CE-3.4	Identify least-conflict urban/institutional lands for renewables while avoiding sensitive habitat and prime ag.
Conservation tools for working lands	Agriculture, Ecosystems	• CE-3.3	Expand participation in Open Space Taxation, VSP; evaluate TDR/PDR and conservation futures.
Climate-ready ag technical assistance	Agriculture, Economic Dev.	• CE-3.1 • CE-3.2	Provide field days and grants for irrigation efficiency, drought-tolerant varieties, and low-emission equipment.
Critical infrastructure risk inventory & capital plan	Emergency Mgmt, Buildings	• CE-5.1 • CE-5.2	Map exposure for critical facilities; program relocation, elevation, cooling backup, and redundancy.
Cooling/clean-air centers & severe-weather sheltering	Health, Emergency Mgmt	• CE-5.3 • CE-5.9	Establish network of sites with HVAC and filtration; multilingual outreach and transit access.
Wildfire mapping, Firewise, and public outreach	Emergency Mgmt, Ecosystems	• CE-5.4 • CE-5.5	Update hazard maps; expand CERT/LTRG training; promote Firewise.
Regional climate coordination & reporting	Communications, All Sectors	• CE-1.1 • CE-1.2	Maintain shared dashboards and inter-jurisdictional climate workgroup.

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PCM 1.6

February 2025
Benton County Comprehensive Plan Update

WHITE BLUFFS CONSULTING

Public Participation Plan – Comprehensive Plan Update

Prepared for Benton County

Funded by a grant from Washington State Department of Commerce

FINAL

February 2025
Benton County Comprehensive Plan Update

Public Participation Plan

Prepared for
Benton County
102206 E. Wiser Parkway
Kennewick, WA 99338

Prepared by
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Kennewick, Washington 99338

FINAL

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FINAL

ABBREVIATIONS

County	Benton County
GMA	Growth Management Act
PPP	*Benton County Public Participation Plan*
RCW	Revised Code of Washington

1 Introduction and Overview

The Benton County Public Participation Plan (PPP) includes guidelines and procedures for early and continuous public participation related to the Growth Management Act (GMA; Revised Code of Washington RCW 36.70A) and Benton County's (County) planning processes for the periodic update of the County's Comprehensive Plan and Development Regulations. Common communication strategies are characterized, along with specific strategies, as applicable.

This PPP is intended to guide and form the basis for public participation. The County will comply with this PPP and the County's approved January 2024 PPP, which provides overall guidance to County public involvement efforts. This 2026 Comprehensive Plan PPP is consistent with the County's more general PPP but provides additional detail on recently updated state requirements and how outreach efforts will target input and participation from disadvantaged and underserved areas in Benton County. Updates and amendments to the Plan and development regulations are necessary to reflect current laws, local needs, new data, correct errors, and/or clarify intent.

As the planning process develops, it should be expected that deviations from the PPP may be warranted, and the GMA recognizes such deviation may occur per RCW 36.70A.140 provided the spirit and procedures of the PPP are observed.

The periodic update cycle was changed in 2022 by the Washington State Legislature by the approval of HB 1241 which changed the recurrence from eight to ten years after the 2024-2027 update cycle. Other new laws were passed by the State Legislature changing Growth Management Act planning and local regulation requirements that apply to the 2024-2027 and future periodic update cycle such as:

HB 1220 – Counties and cities/towns must plan for and accommodate, rather than encourage the availability of emergency and affordable housing

HB 1717 – New regulations for cities and counties to include local and regional tribes in planning processes and decisions

HB 2001 – Expands the ability to build tiny houses

SB 5042 – Changes the initial effective date of certain actions under the GMA

SB 5118 – Supports successful reentry for juveniles, amending the definition of "essential public facilities"

SB 5235 – Increasing housing unit inventory by removing arbitrary limits on housing

SB 5275 – Enhances opportunity in Local Areas of More Intense Rural Development or LAMIRDs

SB 5368 – Encourages rural economic development

SB 5593 – Allows a county to make revisions to a UGA boundary to accommodate patterns of development

SB 5818 – Promoting housing construction in cities through amendments to and limiting appeals under SEPA and GMA.

2 Public Participation Goals and Objectives

The County recognizes the importance of early and continuous public participation to adequately reflect the County's residents' input. The goal of the PPP is to make all residents of the County aware of the Comprehensive Plan update process and identify opportunities for providing public input. Taken individually, the activities are not expected to reach and inform each and every resident of the County. Collectively, however, the plan activities are designed to effectively and efficiently provide broad-based dissemination of information and maximize opportunity for resident involvement and comment.

The following goals for public input are incorporated into the decision-making process:

- Provide interested parties with timely information, an understanding of the process, and multiple opportunities to review and comment on proposed amendments to the Comprehensive Plan.
- Actively solicit information from residents, property owners, and stakeholders about their concerns, questions, and priorities for the 2026 Comprehensive Plan update process.
- Encourage interested parties to informally review and comment on proposed changes to the Comprehensive Plan throughout the process and provide those comments to decision makers.
- Provide forums for formal public input at project milestones prior to decision-making by local officials.
- Consult and consider input from neighboring jurisdictions; federal, state and local agencies; and Native American tribes.

3 Public Meetings and Communications

The following are key meetings, workshops, and open houses that will be hosted by the County and the Benton County Planning Commission to encourage outreach and public involvement throughout the Comprehensive Plan review process:

- **Open House.** Benton County will host one or two public open houses in 2025 to inform the public on the 2026 Comprehensive Plan review and update process, progress to date, and next steps.
- **Planning Commission Meetings.** Upon completion of preliminary drafts of updated Comprehensive Plan elements, the Benton County Planning Commission will receive presentations at one or more of their regular scheduled meetings on the updated information, typically at least quarterly. Opportunity for public questions and input will be provided at these meetings.
- **Coordination with State Agencies.** Coordination will be conducted with Washington State Departments of Commerce, Ecology, and Fish and Wildlife, and other interested tribes, and federal, state and local agencies to keep them informed of plan development progress and to solicit their comments early in the Comprehensive Plan periodic update process. Copies of the environmental review documentation, which will be a draft environmental impact statement (EIS), will also be provided to the public and affected tribes and agencies for review and comment as part of the plan review and adoption process.
- **Public Hearing and Formal Comment Periods.** Once the final draft Comprehensive Plan update elements are completed, a formal public review will be conducted under the State Environmental Policy Act (SEPA) (RCW 43.21C) including a draft SEPA EIS public comment period, local public hearing and then final action by the Board of Benton County Commissioners. All comments received during the public hearing and public comment period will be compiled and considered for inclusion in the Comprehensive Plan.
- **Develop and Maintain an Interested Parties List.** Identify interest groups such as the following and share information with these groups and others who request to be on the list:
  - Agencies and organizations included on the County's SEPA distribution list
  - Interested parties list from most recent Comprehensive Plan Update
- **Underserved and Disadvantaged Targeted Outreach Strategy.** Targeted outreach activities will include communications focused on disadvantaged community areas within Benton County. Communications will be provided in English and Spanish, and we will also seek to enlist the support of one or more community organizations to assist in getting the message out on opportunities to provide perspectives and input on the project elements and broader Comprehensive Plan update process-related questions and concerns, as applicable.

Benton County Planning Division staff will place legal notices of hearings and comment periods in the County's official paper, currently the Prosser Record Bulletin. Hearing notices will be published at least 15 days prior to the hearing and shall include the date, time, location and purpose of the hearing. Legal notifications notifying dates and times of open houses and public hearings and comment periods will be distributed to the public via email, and other public postings. Notices will also be provided on the Planning page of the County website and the Comprehensive Plan Update website: 2026 Comprehensive Plan Update - Benton County WA

The Planning Commission will be the primary forum for detailed review and recommendations to the Board of County Commissioners. Interested parties are encouraged to attend and provide comments during the Planning Commission/Board of County Commissioners workshops, open houses, and public hearings. All meetings and hearings before the Planning Commission and Board of County Commissioners will be audio recorded, and the audio recording will be available on the Planning Commission's Agenda page on the County's website. Meeting minutes also will be made available on the Planning Commission's Agenda page on the County's website.

Public workshops will be held generally quarterly in conjunction with the project, along with one or two public open houses. These public meetings will include sharing information on the draft Comprehensive Plan content along with other relevant and related information.

4 Public Involvement and Outreach Strategies

Described below are key strategies developed to encourage outreach and public involvement throughout the Comprehensive Plan update process. Implementation of these strategies is expected to generate meaningful public participation.

4.1 Website

The County's Comprehensive Plan page on the Planning Division's website: 2026 Comprehensive Plan Update - Benton County WA will include a Comprehensive Plan update page. This site will provide a public forum for obtaining Comprehensive Plan update information, including but not limited to the following:

- Status updates
- Meeting notices and agendas
- Draft documents and maps
- An email address for submitting public comments
- An interested party sign up link

4.2 Communications

An email distribution list will be maintained for individuals and groups who wish to receive periodic project announcements, public notices of upcoming public meetings, and other comprehensive planning and development codes update-related information. Those interested in being included on the email distribution list should contact the Benton County Planning Division. Additionally, the County will conduct the following activities:

- The Planning Division will issue news releases announcing the public meeting and hearing times, dates and locations to the local media.
- Public Notice of all public hearings and adoptions will be published under "legals" in the classified section of the Official County Newspaper at least 15 days in advance of the hearing.
- All meetings and hearings before the Planning Commission and Board of County Commissioners will be audio recorded.
- All people desiring to speak or submit written comments will be allowed to do so at all meetings and hearings before the Planning Commission and Board of County Commissioners or during designated comment periods.
- Benton County may utilize one- or two-page information sheets to facilitate the dissemination of public information.

4.3 Methods for Reaching Disadvantaged and Underserved Areas

Outreach to seek input and participation from disadvantaged and underserved areas in Benton County will be addressed as part of the planning process. A portion of Benton County's population are in disadvantaged communities because of climate change (including changes in wildfire risk), environmental health, affordable housing and potentially other factors (based on a national Climate Justice Screening Tool). This project will primarily focus on areas potentially impacted by climate change risks for disadvantaged communities. Notifications will be conducted through a variety of media to maximize awareness and details about public workshops and open house times and locations, and other opportunities for input.

Efforts to reach vulnerable populations:

- Provide Spanish language outreach materials to Hispanic communities.
- Spanish language interpreter at public open houses.
- Outreach to affected Tribes as applicable.
- ADA-compliant access at public meetings.
- When practical, make presentations, documents, and maps accessible to people with disabilities.

4.4 Work Products

The 2026 Comprehensive Plan website will be updated with documents as they become available. Hard copies will be available for the cost of reproduction upon request from the Benton County Planning Division.

4.5 Public Comment

Interested parties will be encouraged to provide comments to the County by letter or email. All comments will be forwarded to the Planning Commission and Board of County Commissioners. The 2026 Comprehensive Plan update webpage will be the central repository for information under consideration.

The Planning Commission will conduct a public comment period on the draft Comprehensive Plan and EIS and hold at least one public hearing to solicit input on the Plan update. The Board of County Commissioners will hold one public hearing before final adoption. The County will coordinate with the Department of Ecology on public notification of comment periods and hearings to take advantage of Ecology's optional Comprehensive Plan amendment process that allows for a combined state-local comment period (WAC 173-26-104).

5 Public Involvement, Implementation and Documentation

5.1 Public Participation Timeline

The following is a general timeline including anticipated public participation opportunities. Benton County will coordinate with the Washington State Department of Commerce throughout the process.

- Public Open Houses – Fall 2025
- Planning Commission workshops tentatively planned for every quarter
- SEPA Public Scoping Meeting – April 8, 2025, at the Planning Commission meeting
- Planning Commission Hearing with County/State combined public comment period on draft Comprehensive Plan Amendments/draft SEPA EIS – Spring 2026
- County Commission and State Agency adoption by June 30, 2026

5.2 Documentation

All public outreach efforts and the results of those efforts will be documented in the administrative record maintained by the County. Documentation will include invitation letters and responses, meeting and hearing notices, meeting materials, meeting notes with attendance and comments received, draft and final work products, and other information as applicable.

Community Development Department
102206 East Wiser Parkway
Kennewick, WA 99338

Planning Division
(509) 786-5612
Planning.department@co.benton.wa.us

PCM 1.7

May 19, 2026

Subject: Benton County Comprehensive Plan 2026 Periodic Update Draft Environmental Impact Statement Cover Letter (WAC 197-11-435).

Dear Reader:

Benton County invites you to comment on the Benton County Comprehensive Plan Draft Environmental Impact Statement (DEIS). The County is preparing its periodic Comprehensive Plan Update and updated development regulations as required in RCW 36.70A, the Growth Management Act (GMA).

The plan's purpose is to satisfy the State's minimum planning law mandates while providing for local needs, the use of land, infrastructure, and the protection of property and water rights.

The Benton County Comprehensive Plan was last broadly updated in 2018. The 2026 plan builds on the updates from 2018 to include incorporation of citizen input, refined goals and policies, incorporate recent analyses and findings related to applicable plan elements, and reflect changes in statutory requirements since the last update. Our plan seeks to preserve the natural environment, local customs, culture, and quality of life for County residents. Simultaneously, it seeks to facilitate and encourage economically productive use of the land and resources base to enable economic growth, prosperity, and enjoyment of a quality of life.

The DEIS considers three alternatives briefly outlined below:

Alternative 1 No Action: The County's existing plan and development regulations would be substantially maintained with only minor updates to maintain consistency with the GMA and Countywide Planning Policies (CWPPs).

Alternative 2 Aggressive Growth w/emphasis on Housing and Industry: Allows for changes in the Plan to accommodate the 20-year population growth projection for Benton County allocated by the Office of Financial Management (OFM) with an emphasis on higher density housing and industry. This alternative includes two Urban Growth Area (UGA)

amendments from the City of Benton City (City file number 20260012) and the City of Richland (City file number PLN-T1-2025-00378).

Alternative 3 Moderate Growth w/ more limited emphasis on Industry (Preferred Alternative): Also accommodates the 20-year growth projection but does not have an emphasis on higher density housing and more limited emphasis on industry. Alternative 3 includes consideration of a shrubsteppe mitigation program as well as the two UGA amendments from the City of Benton City (City file number 20260012/County file number CPA 2026-002) and the City of Richland (City file number PLN-T1-2025-00378/County file number CPA 2026-001).

This DEIS has been released following the issuance of a Determination of Significance on March 21, 2025 and subsequent public scoping meeting conducted by the Planning Commission on April 8, 2025. After conducting scoping, Benton County finalized the three alternatives to be analyzed during the development of the Comprehensive Plan and development regulation update.

Benton County is seeking public and agency input on the DEIS (EA 2025-006), draft 2026 Comprehensive Plan Update, draft development regulations, and UGA amendments CPA 2026-010 and CPA 2026-002. All comments on the DEIS must be submitted no later than 5pm on June 18, 2026. Written comments can be submitted by email to planning.department@co.benton.wa.us, or by U.S. mail, or at the May 27, 2026 public meeting being held in Room 303, Building E, 7122 W. Okanogan Place, Kennewick, WA 99336. The public meeting will provide information about the DEIS and the comprehensive plan update effort. Additional information can be found at the 2026 Comprehensive Plan Update webpage:

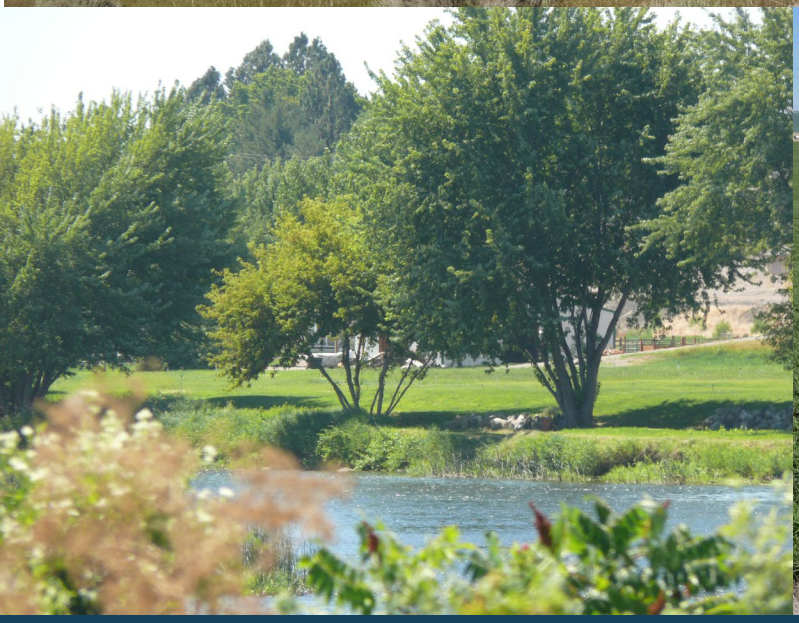
https://www.bentoncountywa.gov/departments/community_development/planning_division/long_range_planning/2026_comprehensive_plan_update.php

The DEIS is an important tool utilized by the County when considering the potential environmental impacts associated with the adoption of the Comprehensive Plan and implementing development regulations. Public involvement and input are critically important to this effort, and Benton County welcomes your participation.

Sincerely,

Greg Wendt
Community Development Director







May 13, 2026

Integrated Non-project Draft Environmental Impact Statement

Prepared by:
White Bluffs Consulting
BERK Consulting
J-U-B Engineers
AC Geo
GG Environmental
Anchor QEA

Draft: May 13, 2026

Benton County Integrated Non-project Environmental Impact Statement

Prepared for:

Prepared by:

White Bluffs Consulting

With assistance from:

AC Geo, LLC
Anchor QEA, Inc.
BERK Consulting
JUB Engineers, Inc
GG Environmental, LLC

Factsheet

Benton County (County) is updating its Comprehensive Plan (Plan) based on population growth projections. Three alternatives are evaluated in this Draft Environmental Impact Statement (EIS), including a No Action Alternative and two Action Alternatives.

Alternative 1: No Action

Alternative 1 would maintain the County's existing Plan and development regulations without modification. Growth would continue based on past trends, but no changes to land use designations or development regulations would be made to accommodate additional growth. Major renewable energy project siting would continue under current allowed uses for this and the two Action Alternatives. Limited policy updates may be required to maintain consistency with the Growth Management Act (GMA) and Countywide Planning Policies (CWPPs).

Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry

Alternative 2 would modify the Plan to accommodate the 20-year (2046) population projection for the County based on Washington State Office of Financial Management (OFM) forecasts refined in coordination with the cities. Growth would occur based on past trends, with additional higher density housing allowed in designated Limited Areas of More Intensive Rural Development (LAMIRDs) and the designation of additional industrial areas around Plymouth, some of which were previously designated as industrial prior to the 2018 update.

Land use, policy, and regulatory changes would be implemented to maintain consistency with the GMA and CWPPs while accommodating growth. Minor adjustments would be made to the County's development regulations for internal consistency and addressing recently adopted state requirements.

Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry (Preferred Alternative)

Alternative 3 would allow for changes in the Plan to accommodate the 20-year (2046) population growth projection for the County, as described in Alternative 2. This alternative would capitalize on other development opportunities with the addition of some industrial designated lands, but less than in Alternative 2 and changing the designation of lands along the Columbia River from industrial to public (open space). Additional higher density housing would not be provided in the unincorporated County under this alternative.

This alternative would also include a mitigation program to preserve shrubsteppe habitat and other priority habitats in the County. This alternative will also address other land use and policy changes to maintain consistency with the GMA and the CWPPs and to accommodate growth.

Lead Agency:

Benton County Community Development Department, Planning Division
102206 E Wiser Parkway
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State Environmental Policy Act Responsible Official:

Damien Hooper, Benton County Planning Manager
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102206 E Wiser Parkway
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EIS Contact Person:

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Phone: (509) 786-5612
E-mail: planning.department@co.benton.wa.us

Required Permits and/or Approvals:

Adoption of the Comprehensive Plan by the Benton County Board of County Commissioners; review by the Washington State Department of Commerce, as required by the GMA. Additionally, any approval of the Urban Growth Area expansions proposed by the cities of Richland and Benton City would be granted by the Benton County Board of County Commissioners. The Transportation Element will also be reviewed and is expected to be certified by the Benton-Franklin Council of Governments.

Authors and Principal Contributors:

This Integrated Non-Project Draft EIS was prepared under the direction of Benton County Community Development Department. Research and analysis were provided by:

- White Bluffs Consulting, Prime Consultant
- AC Geo, LLC
- BERK Consulting
- JUB Engineers, Inc.
- Anchor QEA, Inc.
- GG Environmental, LLC

Date of Draft EIS Issuance: May 19, 2026

Where to Obtain the Draft EIS:

Hard copy Draft EIS documents are available at Benton County Public Services Building, 102206 East Wiser Parkway, Kennewick, WA 99338

The Draft EIS is also available online at:
https://www.bentoncountywa.gov/pview.aspx?id=55732&catid=0

Commenting on the Draft EIS:

Public engagement is critical to the County's long range planning success, which means your feedback is very important. Use planning.department@co.benton.wa.us to: (1) add your email address to our distribution list so future notices are sent directly to you, or (2) provide comments to Benton County regarding this Draft EIS.

Date of Draft EIS Comments Due:

Comments on the Draft EIS are due by 5:00pm time on June 18, 2026.

Public Meetings:

The County is hosting an open house to inform the public about the 2026 Comprehensive Plan review and update process and the Draft EIS at 6:00pm on May 27, 2026.

Related Plans and Documents: Benton County Draft 2026 Comprehensive Plan Update (Volume I) and Technical Appendices (Volume II), and 2026 Environmental Impact Statement (EIS) Scoping Summary (Appendix A).

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Appendices

Appendix A- 2026 EIS Scoping Summary

Acronyms

ADU	accessory dwelling unit
AVA	American Viticultural Area
BAS	gest available science
BCAA	Benton Clean Air Agency
BCC	Benton County Code
BESS	battery energy storage system
BFT	Ben Franklin Transit
CAO	Critical Areas Ordinance
CARA	critical aquifer recharge area
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
County	Benton County
CWPPs	Countywide Planning Policies
DAHP	Washington State Department of Archaeology and Historic Preservation
DNR	Washington Department of Natural Resources
DOH	Washington State Department of Health
Ecology	Washington Department of Ecology
EHD	Environmental Health Disparities
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ESA	Endangered Species Act
GHA	geologically hazardous area
FEMA	Federal Emergency Management Agency
FWHCA	Fish and Wildlife Habitat Conservation Area
GHG	greenhouse gas
GMA	Growth Management Act
ILF	in-lieu-fee
LAMIRD	Limited Area of More Intensive Rural Development
LOS	Level of Service
MTCA	Model Toxics Control Act
$MTCO_2e$	Metric Tons of Carbon Dioxide Equivalent
NAAQS	National Ambient Air Quality Standards
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
OFM	Office of Financial Management

PHS	Priority Habitats and Species
Plan	Comprehensive Plan
PM	particulate matter
PNNL	Pacific Northwest National Laboratory
PUD	Public Utility District
RCW	Revised Code of Washington
RMP	Risk Management Plan
RMZ	riparian management zone
SEPA	State Environmental Policy Act
SMA	Shoreline Management Act
SMP	Shoreline Master Program
TMDL	Total Maximum Daily Load
TRI	Toxics Release Inventory
TRIDEC	Tri-City Development Council
UGA	Urban Growth Area
USGS	U.S. Geological Survey
VMT	vehicle miles traveled
VSP	Voluntary Stewardship Program
WAC	Washington Administrative Code
WAHCAP	Washington Habitat Connectivity Action Plan
WDFW	Washington Department of Fish and Wildlife
WRIA	Water Resource Inventory Area
WSDOT	Washington State Department of Transportation
WSRRI	Washington Shrubsteppe Restoration and Resiliency Initiative
WUI	Wildland-Urban Interface

1 Overview

1.1 Introduction

Benton County (County) is updating its Comprehensive Plan (Plan) consistent with the Growth Management Act (GMA; Revised Code of Washington [RCW] 36.70A). The updated Plan consists of goals, policies, and analyses of the following elements and sub-elements: land use, natural resources, economics, housing, transportation, parks and recreation, capital facilities, utilities, and climate resilience and greenhouse gas. Additionally, Benton County Code (BCC) Titles 3, 9, 11, 15, and 17 are being updated to be compliant with the latest state requirements, strengthen critical area protections and mitigation options, and clarify local requirements and uses allowed in various zones.

The updated Plan and development regulations seek to preserve the natural environment, local customs, culture, and quality of life for County residents, while facilitating productive use of the land and resources to enable economic growth, prosperity, and quality of life. The Plan and development regulations primarily apply to the areas of Benton County that are unincorporated or urban areas that are not yet annexed into the cities. The Plan is designed to help the County meet its long-term growth target as allocated by the Office of Financial Management (OFM). The Plan is also required to be consistent with the Countywide Planning Policies (CWPPs) established for the County. (*see* Volume II, Appendix C). Cities in the County have developed individual comprehensive plans for urban area planning on a similar schedule. These comprehensive plans implement the city-specific and community visions and goals for the future.

Every 10 years, the County is required to update its Plan. Pursuant to the GMA, the County was to complete the update by the target date of December 31, 2026; this Plan is expected to be completed by fall 2026.

The County has determined this proposal is likely to have a significant adverse impact on the environment. An Environmental Impact Statement (EIS) is required under RCW 43.21C.030(2)(c). (*see* Appendix A). This EIS evaluates the potential impacts of three alternatives.

The cities of Benton City and Richland have proposed changes to their Urban Growth Areas (UGAs) (*see* Volume II, Appendices D-1 and D-2). The cities have undertaken separate public comment periods and associated environmental reviews and determinations on these proposals. The County has incorporated these proposed modified UGAs into Alternatives 2 and 3 descriptions for reference purposes.

1.2 Background Information on GMA

In 1990, the Washington State Legislature recognized that uncoordinated and unplanned growth was reducing the quality of the environment and of life in many areas of the state and adopted the GMA as a result. The overall goal of this legislation is to provide a managed framework for growth and development throughout Washington State. There are 15 goals in GMA, which are abbreviated as follows:

- Urban Growth: Encourage development in urban areas.
- Reduce Sprawl: Reduce inappropriate conversion of undeveloped land.
- Transportation: Encourage efficient multimodal transportation systems.
- Housing: Plan for and accommodate housing affordable to all economic segments of the population.
- Economic Development: Encourage economic development throughout the state.
- Property Rights: Private property shall not be taken for public use without just compensation having been made.
- Permits: Applications should be processed in a timely and fair manner.
- Natural Resource Industries: Maintain and enhance natural resource-based industries.
- Open Space and Recreation: Retain open space and enhance recreational opportunities.
- Environment: Protect the environment and enhance the state's high quality of life, including air and water quality, and the availability of water.
- Citizen Participation and Coordination: Encourage the involvement of citizens.
- Public Facilities and Services: Ensure that those public facilities and services necessary to support development shall be adequate.
- Historic Preservation: Identify and encourage preservation.
- Climate Change and Resiliency: Ensure that comprehensive plans, development regulations, and regional policies, plans, and strategies adapt to and mitigate the effects of a changing climate.
- Shoreline Management: Incorporate the goals and policies of the Shoreline Master Program (SMP) into the Plan.

In order to attain these goals, cities and counties planning under the GMA are required to develop comprehensive plans addressing land use, transportation, housing, utilities, and capital facilities for the next 20 years. These plans are required to be updated every 10 years.

1.3 What is an Integrated SEPA/GMA document?

In 1995, the Washington Department of Ecology (Ecology) adopted amendments to the Washington State Environmental Policy Act (SEPA; Washington Administrative Code [WAC] 197-11-210) to authorize cities and counties planning under the GMA to integrate the requirements of SEPA and the GMA. These new rules (WAC 197-11-210 through 235) allow the environmental analysis required under SEPA to occur concurrently with and as an integral part of the planning and decision making under the GMA. The County has decided to follow this course and incorporate the SEPA EIS discussion of the impacts of the Plan into the Plan itself.

The integration of SEPA and GMA results in improved planning and project decisions from the environmental perspective. Just as the GMA goals cannot be addressed without consideration of environmental factors, the goals of SEPA are benefited by the examination of the "big picture" and identification of mitigation to address cumulative development impacts.

1.4 What is an EIS?

An EIS is required under SEPA and evaluates the possible impacts of a proposed action. Several different ways of achieving the goal must be explored and contrasted before a final option/alternative is chosen. The EIS alternatives provide a framework for analyzing impacts and making comparisons among different land use options.

This document discusses the current state of the County, presents two Action Alternatives and one No Action Alternative for the future of the County, and analyzes expected changes under each alternative. No alternative should be considered definitive. The EIS will allow decision makers, with input from residents and key stakeholders, the opportunity to incorporate features of each alternative (if appropriate) into a recommended Plan.

1.5 What Process Was Followed to Develop the Comprehensive Plan Updates and this EIS?

On March 21, 2025, the County issued a Determination of Significance for the Comprehensive Plan update with a requirement to prepare an EIS. (*see* Appendix A)

Agencies, affected tribes, and members of the public were invited to comment on the scope of the EIS. The *Request for Comment on Scope of Programmatic EIS for the Periodic Update to the Benton County Comprehensive Plan* was published on March 26, 2025, and ran through April 25, 2025. A public hearing on the scoping process was held in Prosser, Washington, on April 8, 2025. During the EIS scoping comment period, three comments were received (Appendix A). All three comments were made by agencies and were incorporated into the Draft EIS, as appropriate.

The County adopted a Public Participation Plan to broadly disseminate information and provide awareness to the residents of the County about the Comprehensive Plan update process and identify opportunities for providing public input. The County provided multiple opportunities for public involvement through a public scoping meeting for the EIS, Planning Commission workshops with opportunity for public comment, and draft planning documents available for review on the County's website.

Additionally, the County received requests from and met with several stakeholder organizations during the Plan update process and held a public meeting on proposed open space land changes in Badger Canyon, where unanimous support was expressed for keeping this land public and having it be transferred from state to County ownership.

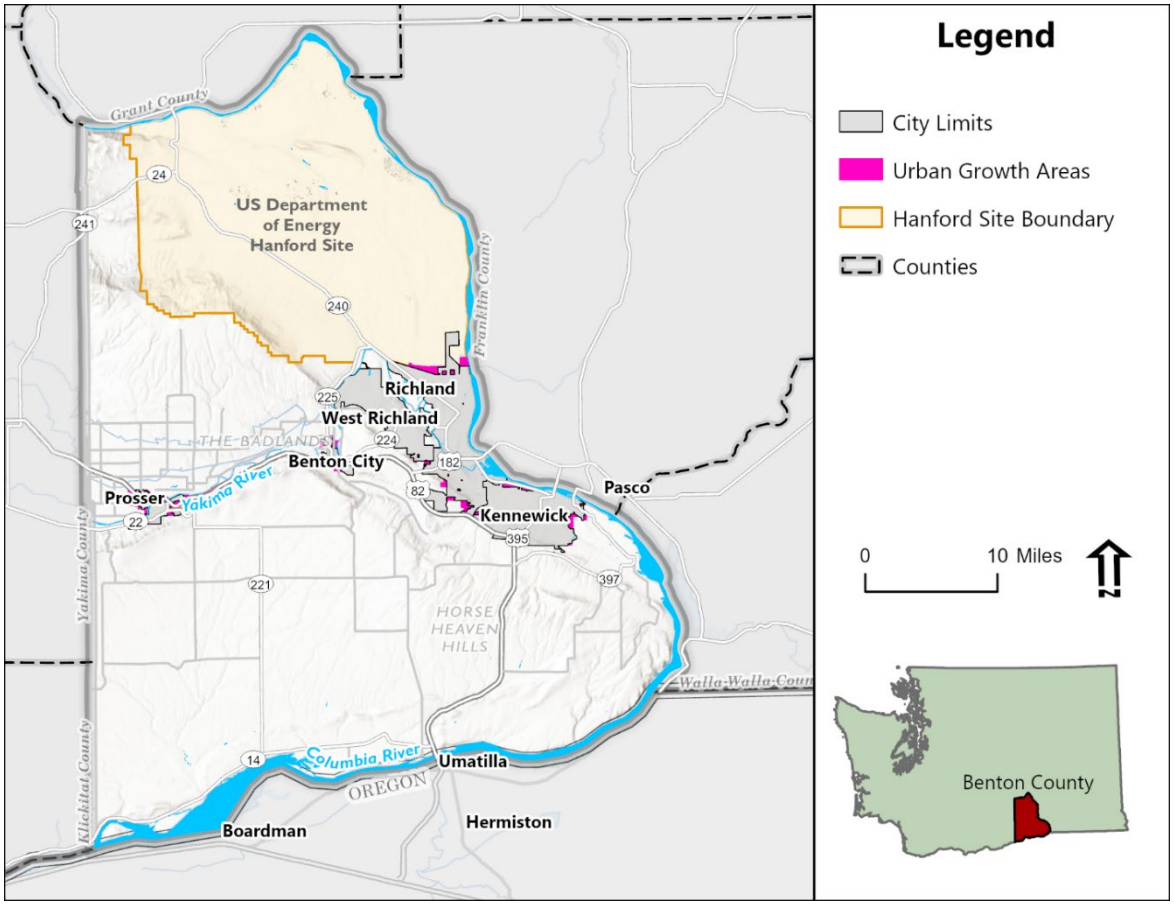
The County has coordinated with state agencies, including but not limited to, the Washington State Departments of Commerce, Ecology, Fish and Wildlife; interested tribes; and federal, state, and local agencies to keep them informed of Plan development progress and to solicit comments throughout the Plan update process. The County developed and maintained an interested parties list to share information and updates on the progress of the Plan. Finally, the County performed targeted outreach and communications focused on disadvantaged community areas within the County.

1.6 Location

The proposal includes the unincorporated areas of the County, located in southeastern Washington (Figure 1-1). The County is located at the confluence of the Columbia, Yakima, and Snake rivers. The Columbia River curves along the borders of the County to the north, south, and east, in the geographic region known as the Mid-Columbia Basin. The Yakima River runs eastward through the middle of the County to its confluence with the Columbia River at Richland. The Snake River joins the east bank of the Columbia River near Kennewick. Mountains and ridges such as Horse Heaven Hills, Rattlesnake Mountain, Badger Mountain, and Candy Mountain are also key features of the County. Klickitat and Yakima counties lie to the west.

The County consists of 1,743 square miles. Of this, 416 square miles of its northern portion, or 24% of the County, is occupied by the U.S. Department of Energy's Hanford Reservation. The County is predominantly rural and agricultural in nature, with unincorporated areas making up most of the County territory. Despite its rural nature, Kennewick and Richland, both in the County, and Pasco, in neighboring Franklin County, are commonly called the Tri-Cities. The Tri-Cities area is the largest metropolitan area between Spokane, 145 miles to the northeast, and Seattle, 220 miles to the northwest. Boise, Idaho, is situated 300 miles southeast of Tri-Cities. Because of its location, the Tri-Cities metro has become a major transportation and commercial hub for travelers and commodities in the Pacific Northwest. Figure 1-1 shows the County regional context.

Figure 1-1. Overview Map



1.7 Summary of the Proposal

The County is updating its Plan and development regulations consistent with the GMA. The updated Plan consists of goals, policies, and analyses of the following elements and sub-elements: land use, natural resources, economics, housing, transportation, parks and recreation, capital facilities, utilities, and climate resilience and greenhouse gas. Additionally, BCC Titles 3, 9, 11, 15, and 17 are being updated to comply with the latest state requirements, strengthen critical area protections and mitigation options, and clarify local requirements and uses allowed in various zones.

The updated Plan and development regulations seek to preserve the natural environment, local customs, culture, and quality of life for County residents, while facilitating productive use of the land and resources to enable economic growth, prosperity, and quality of life. The Plan and development regulations primarily apply to the areas of the County that are unincorporated or urban areas that are not yet annexed into the cities. The Plan is designed to help the County meet its long-term growth target as allocated by OFM. The Plan is also required to be consistent with the CWPPs established for the County.

In 2024, the population of the County (including all cities) was estimated to be 217,850 (OFM 2025). The population of the County is expected to reach 278,456 by 2046, an increase of 60,606 persons over the 2024 population (*see* Table 1-1). To accommodate the population growth, the County will need 38,260 additional housing units, with 4,974 of those units designated in the unincorporated County.

Table 1-1. Projected Population Growth and Housing Needs

	Population in Benton County
2024 estimated population	217,850
2046 projected population	278,456
Projected population growth 2024-2046	60,606
Projected population growth 2024-2046 in Unincorporated Benton County	10,799
Additional Housing Units needed in Unincorporated Benton County by year 2046	4,974
Additional housing units needed in Benton County by the year 2046	38,260

Source: OFM, 2025; Washington State Dept. of Commerce, 2024.

1.8 Scope of Review

This Integrated EIS analyzes, at a programmatic level, the potential impacts on the following elements of the environment identified through the scoping process:

- Earth
- Water
- Plants and Animals
- Land Use
- Environmental Health
- Air Quality/Greenhouse Gas
- Shoreline Use
- Population, Housing, and Employment
- Parks and Recreation
- Transportation
- Public Services and Utilities
- Heritage Conservation

2 Alternatives

The County is proposing three alternatives based on projected future growth patterns:

- **Alternative 1, No Action**, calls for keeping the County's existing Plan without modifications.
- **Alternative 2, Aggressive Growth Target with Emphasis on Housing and Industry,** allows for changes in the Plan to accommodate the 20-year population growth projection for Benton County allocated by the OFM with an emphasis on higher density housing and industry .
- **Alternative 3, Moderate Growth Target with More Limited Emphasis on Industry (Preferred Alternative)** also accommodates the 20-year growth projection but does not have an emphasis on higher density housing and has a more limited emphasis on industry; it also includes a shrubsteppe mitigation plan.

Suggested land use designation changes in Alternatives 2 and 3 were developed at a countywide scale based on existing development patterns, trends, and needs in a way that avoids conversion of agricultural lands and open space, focuses more intensive uses around existing developed areas, and minimizes impacts to critical areas and sensitive habitats. For greater detail *see* the technical memoranda appendix in the *Benton County Draft Comprehensive Plan Volume II*.

Descriptions of each alternative with maps are provided below.

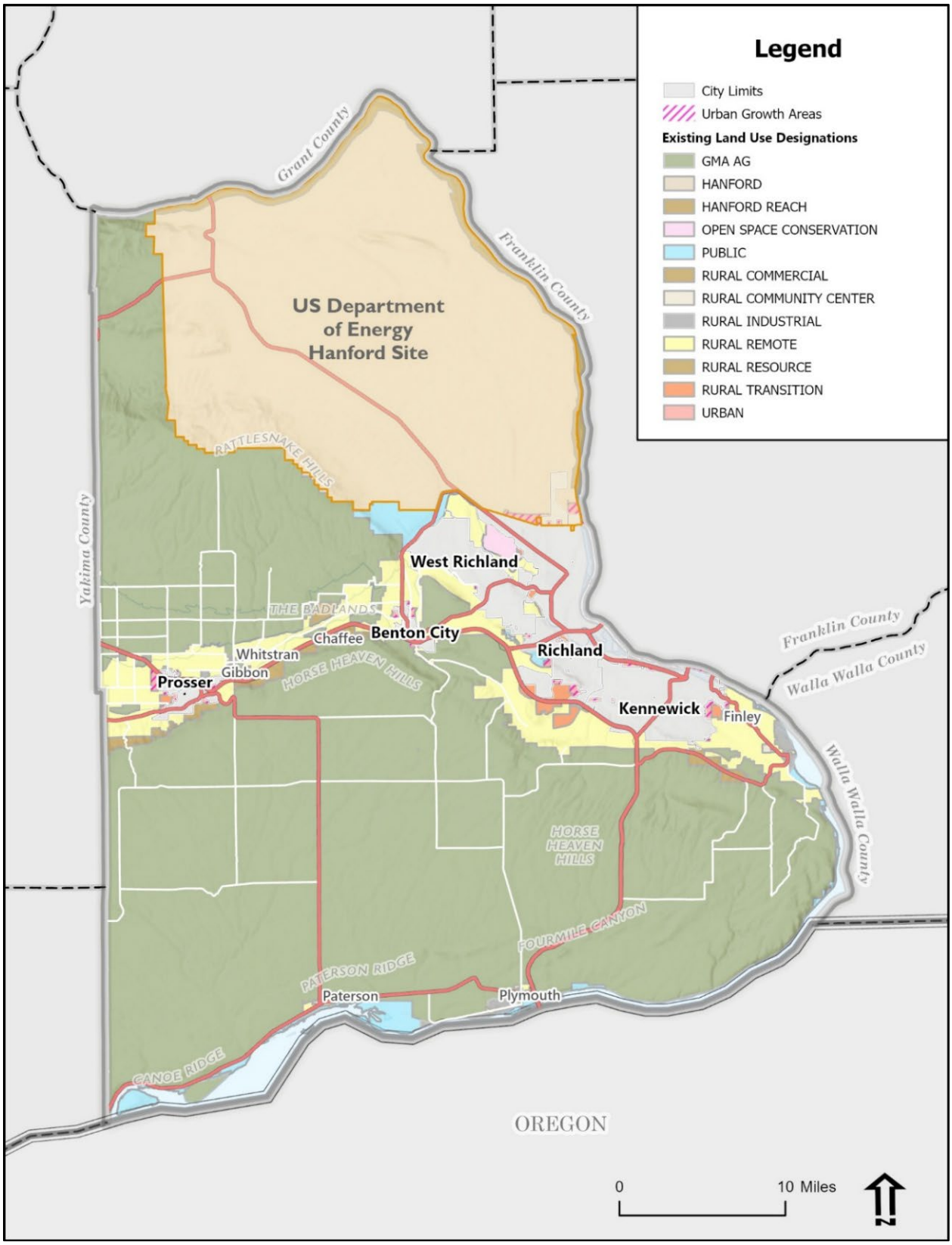
2.1 Alternative 1: No Action

Alternative 1, the No Action Alternative, would maintain the County's existing Comprehensive Plan without modifications. This means growth would be expected based on past trends, but no land use changes (densities, designations, etc.) or regulation changes (e.g., zoning) would occur to accommodate this growth. No changes to allowable housing density would occur in the unincorporated County, and no additional residential capacity would be created. Limited policy changes may be needed to maintain consistency with the GMA and the CWPPs. This action does not include the proposed UGA changes provided by Benton City and Richland. The existing land use distribution in the County is shown in Figure 2-1 and described in Table 2-1.

Table 2-1. Alternative 1 Existing Land Use Acreage

Land Use Type	Alternative 1
Cities and Urban Growth Areas	72,059
Hanford Site	265,517
Hanford Reach	12,268
Unincorporated Area	
GMA Agriculture	649,062
Open Space Conservation	2,169
Public	15,574
Rural Transition	3,601
Rural Remote	66,770
Rural Resource	7,136
Rural Community Center	450
Rural Commercial	468
Rural Industrial	2,786
Total Unincorporated Area	748,016
Total County Area	1,097,860

Figure 2-1. No Action Alternative Land Use Designations



Under all alternatives, major renewable energy projects, including a Wind Turbine Farm and Major Solar Power Generator Facilities, would continue to be allowed as a conditional use permit in the Light and Heavy Industrial Zoning Districts, as well as within the Unclassified District within the U.S. Department of Energy's Hanford Site. Major renewable energy projects would continue to be a prohibited use in all other zoning districts including the County's designated agricultural zoned areas, such as the Growth Management Act Agricultural District and the Red Mountain Agricultural District.

2.2 Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry

This alternative allows for changes in the Plan to accommodate the 20-year (2046) population growth projection for the County allocated by the OFM, as refined in coordination with the cities. In this alternative, growth would occur based on the past trends but also includes changes to land use patterns, including a focus on modifying and expanding rural industrial areas as part of a major industrial development and increasing residential density in the Finley and Plymouth Rural Community Centers. Rural Community Centers are "limited areas of more intensive rural development" (LAMIRDs) authorized by RCW 36.70A.070 (5)(d) (see Comprehensive Plan Section 3.3.2.2 for additional information).

Additionally, the UGAs for Benton City and Richland would be modified (see Volume II, Appendices D-1 and D-2). Benton City's UGA would be expanded to include nearly 55 additional acres in the west-central and southwest parts of the city. Richland would remove a portion of Badger Mountain from its UGA (146 acres) that will remain as public open space and add in three other areas – Harvest Ridge Addition (121 acres), Harvest Ridge Site/Kennewick School District Site (81 acres), and Dallas Road Recreation Center (190 acres), for a net UGA increase of 354 acres.

Table 2-2 summarizes acreage by land use type for Alternative 2, and the proposed changes are shown in Figure 2-2.

Table 2-2. Alternative 2 Land Use Acreages

Land Use Type	Alternative 2	Net Change
Cities and Urban Growth Areas	72,413	+354
Hanford Site	265,517	
Hanford Reach	12,268	
Unincorporated Area		
GMA Agriculture	647,365	-1,697
Open Space Conservation	2,169	
Public	16,161	+587
Rural Transition	3,346	-255
Rural Remote	66,598	-172
Rural Resource	7,136	
Rural Community Center	450	
Rural Commercial	553	+85
Rural Industrial	4,113	+1,327
Total Unincorporated Area	747,662	
Total County Area	1,097,860	

= areas with designation changes

Alternative 2 proposes to redesignate 1,372 acres of GMA Agriculture to Rural Industrial – primarily surrounding the Plymouth Industrial Park (a major industrial development area) and extending west and including some lands that were previously designated industrial before 2018. This represents a significantly larger industrial expansion than Alternative 3. Other changes under Alternative 2 include the following:

- 85 acres GMA Agriculture to Rural Commercial
- 240 acres GMA Agriculture to Rural Remote
- 45 acres Rural Industrial to Rural Remote
- 457 acres Rural Remote to Open Space/Public
- 146 acres Urban to Public (removed from Richland UGA)

Figure 2-2. Alternative 2 Land Use Designation Changes



Alternative 2 also increases housing density in the Plymouth and Finley Rural Community Centers, from 3 units/acre up to 8 units/acre. Land capacity analysis indicates that vacant and underdeveloped parcels in Plymouth and Finley could support up to 364 additional housing units in Finley and 185 additional units in Plymouth. Maps showing the development status of parcels in the Finley and Plymouth Rural Community Centers are shown in Figures 2-3 and 2-4, respectively.

Figure 2-3. Finley Rural Community Center Land Capacity

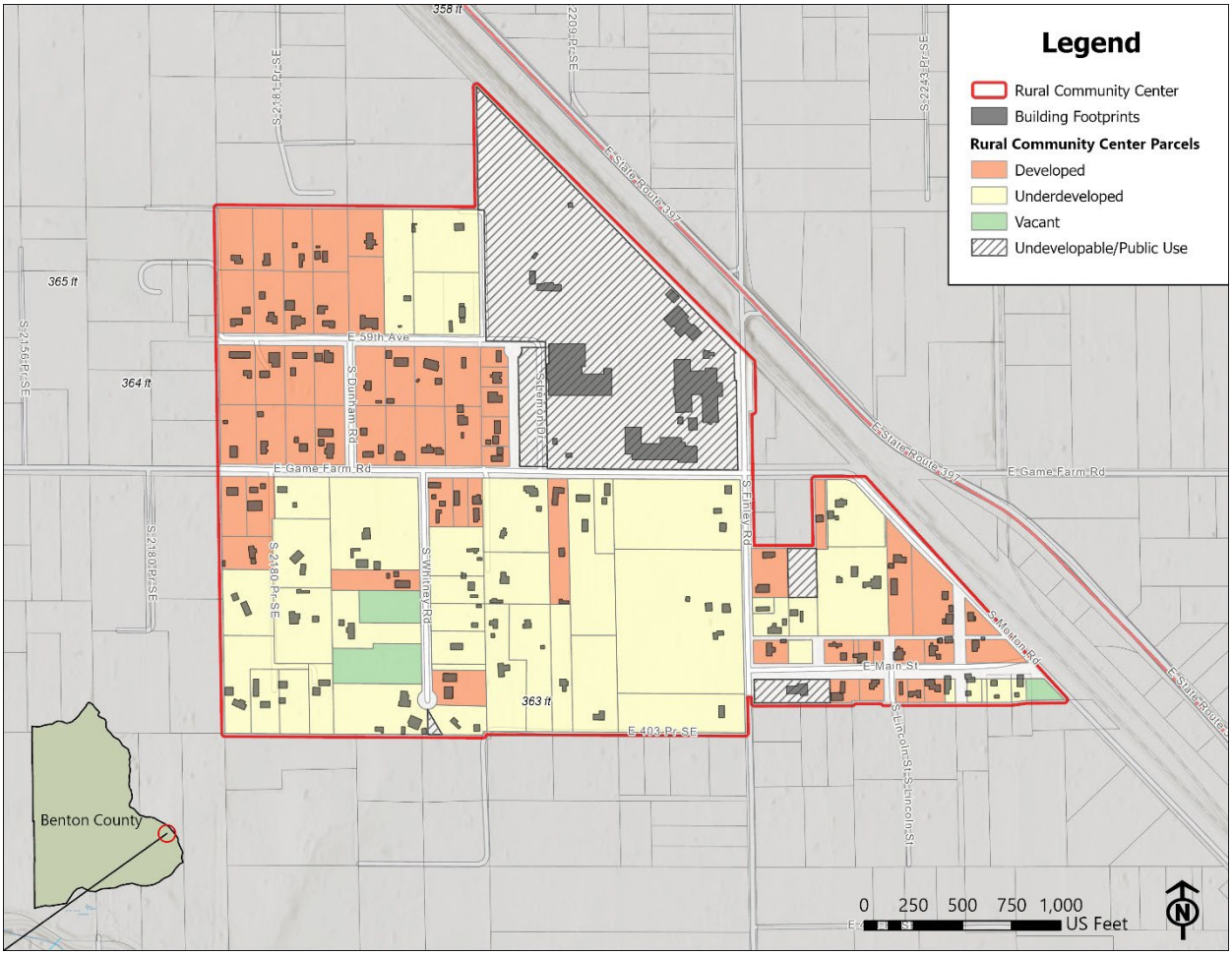
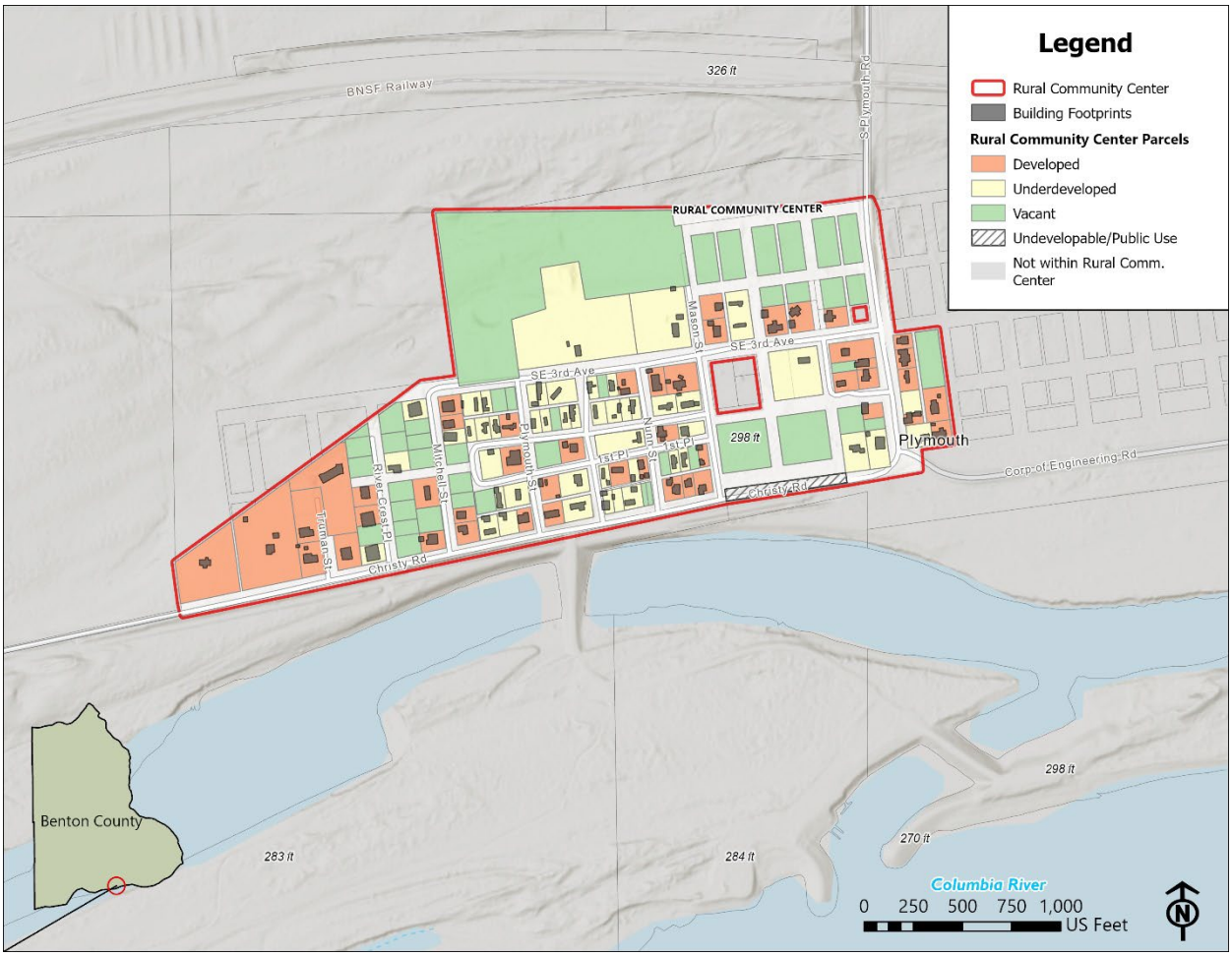


Figure 2-4. Plymouth Rural Community Center Land Capacity



Minor adjustments are proposed for the County's development regulations, including clarifications to BCC Titles 9 (Subdivisions) and 17 (Permit Review Process) to comply with state updated permitting timelines, and updates to Title 11 (Zoning) to clarify allowed and conditional uses and associated development standards in various zones, to provide more flexibility for accessory onsite food services to promote agri-tourism, and other miscellaneous consistency changes. Accessory dwelling unit (ADU) requirements are being revised to comply with state requirements and make other clarifications (BCC 11.42 General Use regulations) and the County is also adjusting requirements for meter placement in Title 15.18 (Rural Water Supply). Additionally, the County is updating Title 15 (Critical Areas; BCC 15.02, 15.04, and 15.14 and Best Available Science sources) to include current local and state requirements.

2.3 Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry (Preferred Alternative)

Alternative 3 allows for changes in the Plan to accommodate the 20-year population growth projection for the County allocated by the OFM. Alternative 3 provides a more limited approach that adds industrial capacity while reducing impacts to agricultural lands, and increasing protection of public shoreline and sensitive habitats.

Alternative 3 would convert 744 acres of GMA Agriculture to Rural Industrial as part of a major industrial development area (some of which was previously designated industrial before the 2018 update), and remove 367 acres from Industrial to Public along the shoreline in Plymouth as discussed in more detail below. Similar to Alternative 2, Alternative 3 also proposes the following land use changes:

- 85 acres of GMA Agriculture to Rural Commercial
- 240 acres of GMA Agriculture to Rural Remote
- 45 acres of Rural Industrial to Rural Remote
- 457 acres of Rural Remote to Open Space/Public
- 146 acres Urban to Public (removed from Richland UGA)

Table 2-3. Alternative 3 Land Use Acreages

Land Use Type	Alternative 3	Net Change
Cities and Urban Growth Areas	72,413	+354
Hanford Site	265,517	
Hanford Reach	12,268	
Unincorporated Area		
Growth Management Act Agriculture	647,993	-1,069
Open Space Conservation	2,169	
Public	16,528	+954
Rural Transition	3,346	-255
Rural Remote	66,369	-401
Rural Resource	7,136	
Rural Community Center	450	
Rural Commercial	553	+85
Rural Industrial	3,118	+332
Total Unincorporated Area	747,662	-354
Total County Area	1,097,860	

= areas with designation changes

Alternative 3 also includes the proposed Benton City and Richland UGA changes as described in Alternative 2.

Alternative 3 changes 367 acres of Rural Industrial to Public along the shoreline in Plymouth to protect shoreline functions, sensitive habitats, and prevent potential cultural resource impacts. Alternative 3 does not propose any changes to rural residential densities in Finley and Plymouth Rural Community Centers.

Table 2-3 shows land use acreages in Alternative 3, and the land use changes are shown in Figure 2-5.

Alternative 3 will also address other land use and policy changes to maintain consistency with the GMA and the CWPPs and to accommodate growth.

Figure 2-5. Alternative 3 Land Use Designation Changes



Alternative 3 includes all the updated development regulation provisions as described in Alternative 2 along with a new shrubsteppe mitigation program to offset future urban and rural development impacts and preserve shrubsteppe habitat and connection corridors in the County. The County and the Benton Conservation District are working together to develop a shrubsteppe mitigation bank and in-lieu-fee (ILF) program to allow compensatory mitigation for shrubsteppe impacts through a structured crediting system. The Benton Conservation District has created a shrubsteppe biodiversity potential model to prioritize shrubsteppe habitat for protection and restoration to inform the mitigation program and other protection efforts. (*see* Volume II, Appendix N) In addition to Benton Conservation District, this program is being developed in coordination with the cities, Washington Department of Fish and Wildlife, and other stakeholders.

2.4 Evaluation of Alternatives Relative to GMA Goals

Table 2-4 summarizes how the three alternatives address each of the GMA goals discussed in Section 1.2.

Table 2-4. Summary of Land Use Alternatives and GMA Land Use Goals

GMA Goals	Alternative 1: No Action	Alternative 2: Aggressive Growth with Emphasis on Housing and Industry	Alternative 3: Moderate Growth with More Limited Emphasis on Industry
Urban Growth: Encourage development in urban areas	• Maintains current UGAs • No additional residential capacity; growth occurs without land use changes	• Encourages higher density development in LAMIRDS • Modification of UGAs for Benton City and Richland	• Accommodates OFM population growth projections without increasing rural residential densities • Modification of UGAs for Benton City and Richland
Reduce Sprawl: Reduce inappropriate conversion of undeveloped land	• No change to rural growth patterns	• Encourages higher density development in LAMIRDS • Encourages higher intensity development in designated industrial areas • Modification of UGAs for Benton City and Richland	• Encourages higher intensity development in more limited designated industrial areas • Modification of UGAs for Benton City and Richland
Transportation: Encourage efficient multimodal transportation systems	• Retains current Transportation Plans with limited improvements	• Retains current Transportation Plans with limited improvements	• Retains current Transportation Plans with limited improvements

GMA Goals	Alternative 1: No Action	Alternative 2: Aggressive Growth with Emphasis on Housing and Industry	Alternative 3: Moderate Growth with More Limited Emphasis on Industry
Housing: Plan for and accommodate housing affordable to all economic segments	• No additional housing capacity created	• Encourages higher density development in LAMIRDS	• OFM population growth projections accommodated without creating additional housing capacity
Economic Development: Encourage economic development throughout the state	• Current economic development trends continue • Employment to occur in the existing commercial and industrial areas	• Additional employment may occur in the industrial sector	• Additional industrial areas will accommodate more employment, but less than Alternative 2
Property Rights: Private property shall not be taken for public use without just compensation having been made	• Maintain existing entitlements	• Expands development options, including industrial lands	• Moderately expands industrial lands
Permits: Applications should be processed in a timely and fair manner	• Renewable energy projects remain permitted as CUP in Heavy Industrial, Light Industrial, and Unclassified zones and prohibited in all other zones • Permitting process via Title 17 of BCC	• Renewable energy projects remain permitted as CUP in Heavy Industrial, Light Industrial, and Unclassified zones and prohibited in all other zones • Permitting process via Title 17 of BCC	• Renewable energy projects remain permitted as CUP in Heavy Industrial, Light Industrial, and Unclassified zones and prohibited in all other zones • Permitting process via Title 17 of BCC
Natural Resources: Maintain and enhance natural resource-based industries	• Maintain existing agricultural-designated lands and mineral areas	• Reduce designated agricultural lands by removing lands with more marginal soils and often surrounded by more developed land uses	• More moderately reduce designated agricultural lands by removing lands with more marginal soils and often surrounded by more developed land uses

GMA Goals	Alternative 1: No Action	Alternative 2: Aggressive Growth with Emphasis on Housing and Industry	Alternative 3: Moderate Growth with More Limited Emphasis on Industry
Open Space and Recreation: Retain open space, enhance recreational opportunities	• Maintain existing parks and natural open space • Recreation opportunities will be provided based on the County's adopted Level of Service	• Designation of 457 acres near Badger Canyon and Candy Mountain to public improves recreational opportunities and preserves open space	• Shrubsteppe mitigation program enhances long-term habitat conservation • Designation of 457 acres near Badger Canyon and Candy Mountain to public improves recreational opportunities and preserves open space
Environment: Protect the environment and enhance the state's high quality of life, including air and water quality, and the availability of water	• Environmental qualities are protected based on the current regulations and development pattern • Not designating specific areas for higher levels of development could result in more widespread impacts to air and water as current development patterns continue	• Environmental qualities are protected based on updated development regulations • Residential and industrial growth more concentrated in designated areas could slow or limit impacts to air and water across the County	• Environmental qualities are protected based on updated development regulations, including a shrubsteppe mitigation bank • Similar to Alternative 2 with no designated area for increased housing density, potentially allowing air and water quality impacts due to residential development to be more widespread
Public Facilities and Services: Adequate public facilities to serve the development	• Public facilities continue to serve the current development pattern	• Public facilities continue to serve the more expanded development pattern	• Public facilities continue to serve the limited expansion development pattern
Historic Preservation. Identify and encourage preservation	• Historical or archaeologically significant sites or structures are protected under the current regulations during project construction	• Historical or archaeologically significant sites or structures are protected under the current regulations during project construction	• Historical or archaeologically significant sites or structures are protected under the current regulations during project construction
Shorelines Management: Incorporate the goals of the SMP	• No additional shoreline protections	• No additional shoreline protections	• Conversation of Rural Industrial to Public along shoreline enhances shoreline function protection

GMA Goals	Alternative 1: No Action	Alternative 2: Aggressive Growth with Emphasis on Housing and Industry	Alternative 3: Moderate Growth with More Limited Emphasis on Industry
Climate Change & Resiliency: Ensure that comprehensive plans, development regulations, and regional policies, plans, and strategies adapt to and mitigate the effects of a changing climate	• No changes to address climate change and resiliency	• Development of a Climate Element and related goals and policies, including a Climate Resiliency Sub-Element and GHG Sub-Element, support efforts to adapt to and mitigate climate effects, such as fire risk reduction, conservation to reduce drought impacts, etc.	• Same as Alternative 2

3 Affected Environment, Impacts, and Mitigation Measures

3.1 Earth

The geology, soils, and topography of Benton County reflect a complex geologic history shaped by Miocene-era basalt flows, Pleistocene glacial outburst flooding, and subsequent wind and water erosion. These features have significantly influenced the County's landforms, soil development, and geologic hazards. For additional details, see Chapter 4, Natural Resources Element, of the *Benton County Draft Comprehensive Plan* (Benton County, 2026).

3.1.1 Affected Environment

3.1.1.1 Geology and Topography

The bedrock of the County is primarily the Columbia River Basalt Group, a series of flood basalts formed between about 6 and 17 million years ago (Reidel, 2002). In many areas these basalts are overlain by loess—fine windblown silt and sand deposited during the late Pleistocene and Holocene (Grolier, 1978). Loess deposits are prominent on uplands such as the Horse Heaven Hills and contribute to productive agricultural soils, though they can be susceptible to wind erosion and slope instability.

The County's modern landscape was strongly shaped by the Missoula Floods, which occurred between about 18,000 and 13,000 years ago. These glacial outburst floods carved channels and deposited large amounts of gravel, sand, and silt across the Columbia Basin, forming the scablands, terraces, and flood deposits present today (Bretz, 1923; Waitt, 1985). Along the Yakima and Columbia rivers, broad alluvial floodplains consist of permeable sediments that support groundwater recharge and irrigated agriculture.

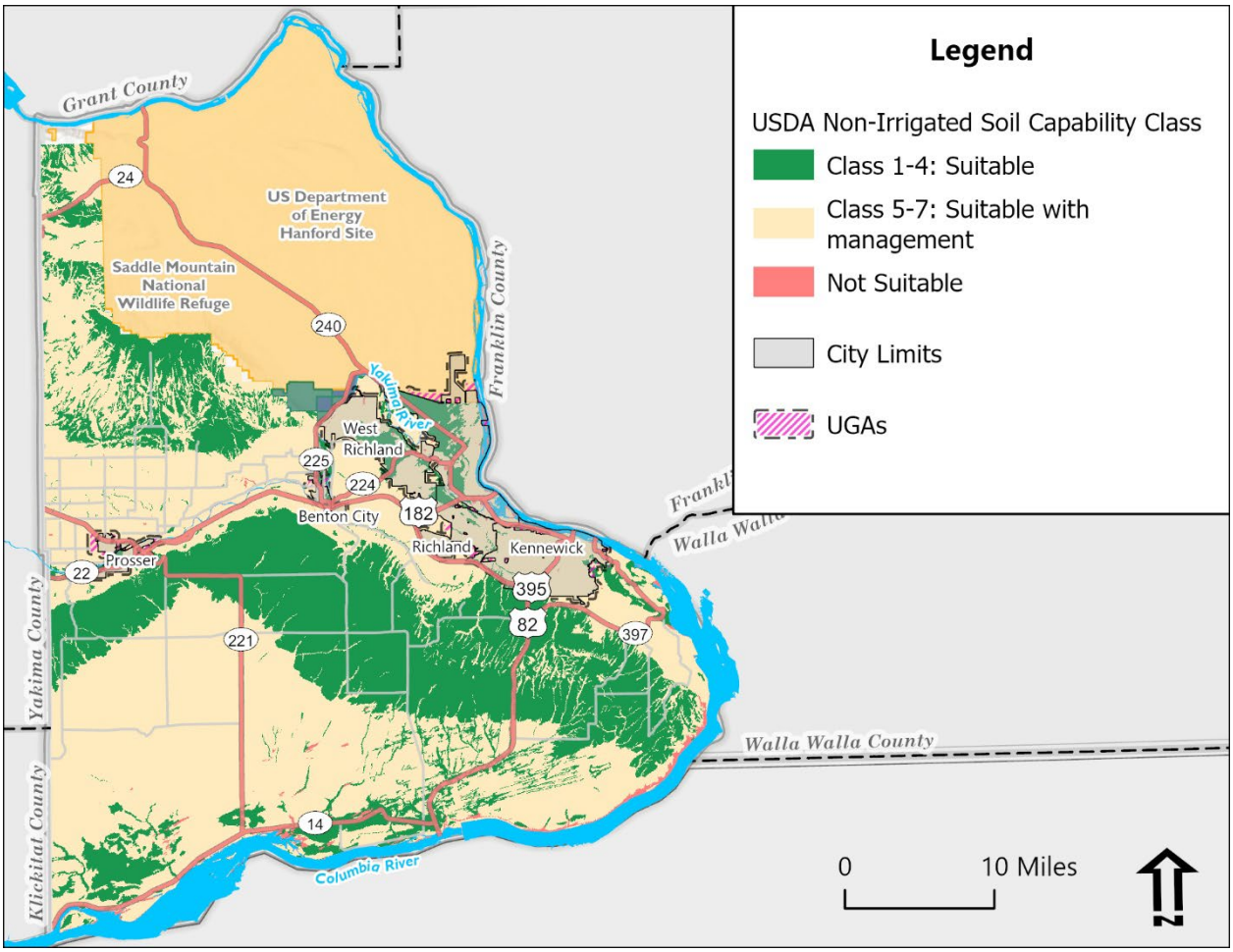
3.1.1.2 Soils

Benton County's soils are classified primarily as loess-derived silt loams in upland areas and alluvial soils along river valleys. Upland soils, such as those mapped in the Warden, Ritzville, and Prosser soil series, are generally well-drained and suitable for dryland agriculture but may be susceptible to wind and water erosion where vegetation is sparse (USDA NRCS, 2024). In contrast, the alluvial soils along the Columbia and Yakima rivers have high infiltration rates and are commonly used for irrigated agriculture. Much of the County also contains soils classified by the Natural Resources Conservation Service (NRCS) as Prime Farmland where irrigation water is available. Generally, with irrigation water and fertilizer these soils are highly productive for agriculture. Localized limitations occur on steep erosive slopes, in areas with very sandy soils, or where shallow soils over basalt create poor growing conditions and limited water retention.

NRCS land capability classes are commonly used as a general indicator of a soil's suitability for agricultural production. Under the Washington Administrative Code (WAC 365-190-050), these capability classes are one factor used in identifying agricultural lands of long-term commercial

significance, with Classes 1–4 generally considered most suitable for agriculture. Soils in the County range from capability classes 2-8, with most irrigated and dryland agricultural lands falling within capability classes 3-6. Non-irrigated farmland capability classes are shown in Figure 3-1.

Figure 3-1. Non-Irrigated Soil Capability Classes



3.1.1.3 Geologic Hazards

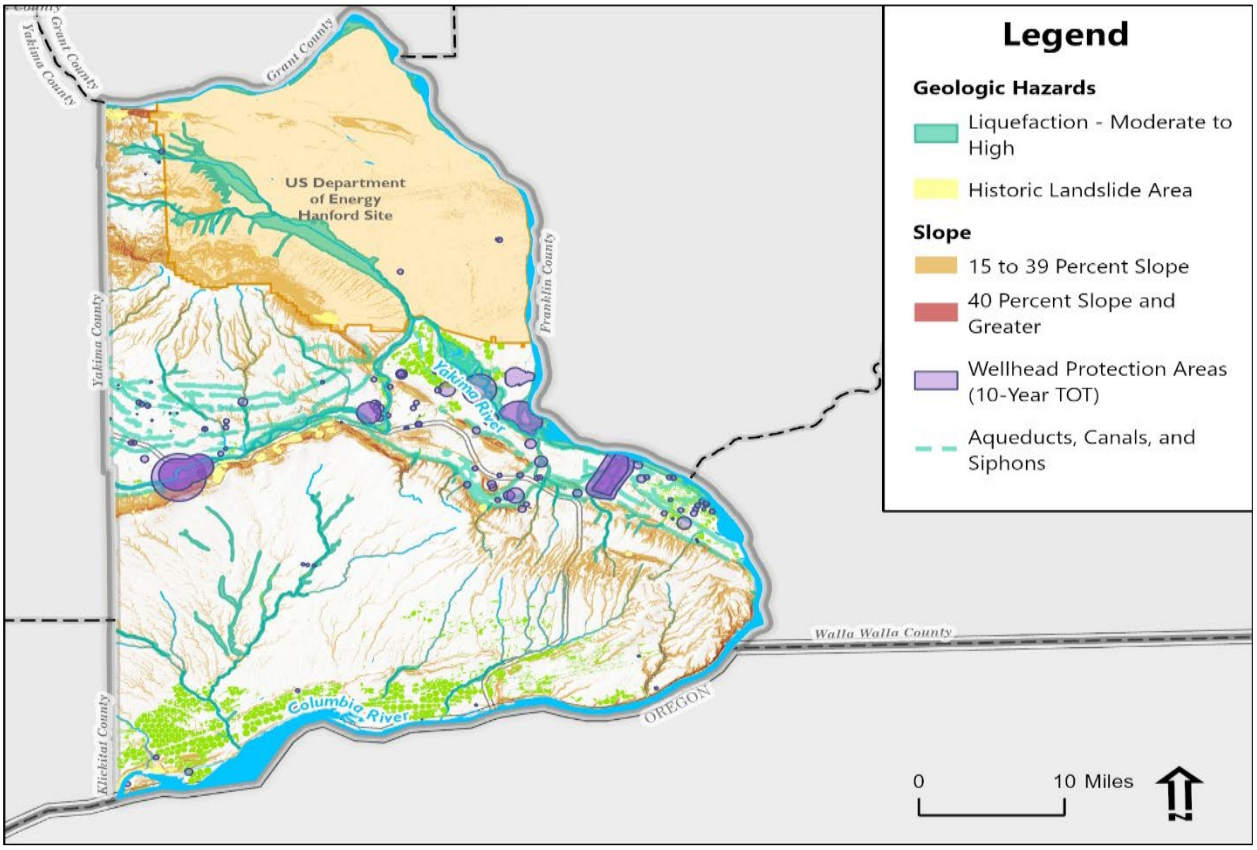
Geologically hazardous areas (GHAs) are lands subject to risk from erosion, landslides, seismic activity, mine-related hazards, or liquefaction. These hazards are recognized under the County's critical areas code, BCC Chapters 15.02 to 15.14, and are addressed through land use and shoreline regulation and development standards. Surficial geology is shown in Figure 3-2 and described below:

- Erosion Hazards: Wind erosion risk is elevated in upland areas with sandy loess soils, especially in the Horse Heaven Hills and along the Yakima River canyon slopes. Water erosion is more likely in areas with steep topography or limited ground cover, such as gullied rangelands or disturbed construction sites (NRCS, 2024).
- Landslide Hazards: While the County generally lacks the steep topography necessary for large-scale landslides, localized slope instability occurs in areas where loess overlays steeper basalt

slopes, such as Badger Canyon and Rattlesnake Hills. Areas with slopes exceeding 15% and loose or weathered surficial material may be susceptible to shallow failures, especially during heavy precipitation events (DNR, 2022).

- Seismic Hazards: The County lies within a region of low to moderate seismic risk. Fault systems include the Rattlesnake Hills, Horse Heaven, and Wallula Fault Zones. There are no anticipated seismic hazards associated with the surface faults within the County, but the region is susceptible to seismic shaking from distant faults further west (DNR, 2014). The U.S. Department of Energy has evaluated ground motion risks at the Hanford site and surrounding areas due to sensitive infrastructure.
- Mine Hazards: The County includes active surface mining operations for sand and gravel, which support construction and infrastructure development. Localized slope stability concerns are subject to reclamation requirements under Washington Department of Natural Resources regulations (DNR, n.d.). There are no known underground mine hazards or abandoned mine shafts in the County.
- Liquefaction Susceptibility: Soils with a high water table and loose alluvial deposits, particularly in the Columbia River floodplain, may be susceptible to liquefaction during seismic events. These conditions are commonly associated with unconsolidated sediments and shallow groundwater. (DNR, 2023).

Figure 3-2. Geologic Hazards & Wellhead Protection Areas



3.1.2 Planning and Regulatory Context

The GMA requires counties to designate and protect critical areas, including GHAs (RCW 36.70A.170). The GMA directs local governments to adopt development regulations that rely on best available science (BAS) to reduce risks from landslides, erosion, and seismic hazards while protecting public safety and property. These regulations must also prevent development from being located in areas where GHAs pose a substantial risk and ensure the maintenance of natural geologic and hydrologic functions, consistent with RCW 36.70A.030(10), RCW 36.70A.060, and the BAS mandate in RCW 36.70A.172.

In addition, the GMA emphasizes reducing sprawl and directing growth to areas with suitable physical characteristics, which provides the overarching policy context for managing development in geologically constrained areas. The *Benton County Draft Comprehensive Plan* (Benton County, 2026) contains policy direction for reducing geologic hazard risk and ensuring development is compatible with underlying soil and slope conditions in its Land Use, Water Resources, and Critical Areas Elements. Critical areas, including GHAs, are also governed by:

- Washington Department of Natural Resources (DNR) administers statewide geologic mapping, fault characterization, landslide inventories, and seismic hazard assessments. DNR's geologic data informs local hazard designations and public safety planning.
- International Building Code/Washington State Building Code contains structural design requirements for seismic loads, soil stability, foundation design, and geotechnical investigation thresholds—critical for safe construction in GHAs.

Relevant Benton County Code sections include:

- Critical Areas Ordinance (BCC15.08)
- Shoreline Master Program (BCC 15.04)
- Building Code (BCC 3.04)

Other relevant County and regional plans and standards include:

- Multi-Jurisdictional Hazard Mitigation Plan
- Voluntary Stewardship Program (VSP)

3.1.3 Probable Environmental Impacts

Land use changes and industrial expansion can influence soil stability, erosion potential, and geologic conditions through site preparation and ongoing operations. At a programmatic scale, earth-related impacts could occur during development and operational activities involving clearing, grading, excavation, and other site-disturbing actions. Such activities have the potential to increase erosion, compaction, and contamination of soil resources, particularly where development intensity increases or where sensitive geologic conditions are present. Infill and new development near steep slopes

across all alternatives could increase the potential for surface instability and localized erosion. Potential impacts include:

- Increased soil disturbance from clearing, grading, trenching, and excavation associated with industrial development.
- Expanded impervious surface coverage, which can alter soil permeability, reduce infiltration, and increase erosion potential in adjacent undeveloped areas.
- Accelerated erosion and sedimentation, particularly on or near steep slopes, unstable soils, or areas with sparse vegetation cover.
- Soil compaction from construction equipment and long-term site use, reducing soil productivity and infiltration capacity.
- Potential contamination of soils from industrial operations, hazardous material handling, fuel storage, or accidental releases.
- Encroachment into geologically sensitive areas, including landslide-prone slopes, erosion hazard areas, and other geologic hazards identified in the County.

These impacts would generally be localized and would be further evaluated and mitigated through project-level review and compliance with the County critical areas regulations, grading standards, and erosion and sediment control requirements.

3.1.3.1 Alternative 1: No Action Alternative

Alternative 1 does not make any changes to land use designations. Industrial and agricultural development patterns would continue under current zoning. Soil disturbance, grading, and erosion risks from ongoing agricultural and rural development would continue but be managed through existing permitting and critical area protections, including the County's VSP. Under Alternative 1, impacts to soils, geologic hazards, or landform stability would be expected to continue at levels consistent with current development patterns.

Under this and the other alternatives, impacts to earth resources would be localized at project sites. Construction of wind and solar facilities in Light and Heavy Industrial districts and within the Unclassified District at the U.S. Department of Energy's Hanford Site would require grading, excavation, access roads, and equipment installation. These activities can increase soil erosion, cause soil compaction, and generate dust, especially in areas with sandy or highly erodible soils. Ground disturbance may also alter slopes and drainage patterns, increasing runoff and sediment movement in the short term. However, limiting these projects to industrial and designated areas—and prohibiting them in agricultural zones such as the Growth Management Act Agricultural District and Red Mountain Agricultural District—avoids impacts to Prime Farmland and long-term soil productivity. Standard erosion control and stormwater requirements would reduce the severity and duration of these impacts.

3.1.3.2 Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry

Expanded industrial growth under Alternative 2 is expected to occur around the Plymouth Industrial Park, where approximately 1,372 acres would be redesignated from GMA Agricultural to Rural

Industrial as part of a major industrial development area. About 115 acres of this total intersect with mapped GHAs, including slopes greater than 15% and soils with moderate to high liquefaction susceptibility. Development activities such as grading, vegetation clearing, and construction could increase erosion, dust generation, and sediment movement to nearby low areas. However, much of the activity is expected to occur within previously disturbed areas.

While the proposed industrial land use changes in the Plymouth Industrial Park area and near Prosser would impact some soils in NRCS capability classes 1–4, a majority of the soils within the affected parcels are in classes 5-8, which is considered less suitable for agriculture.

Alternative 2 would redesignate approximately 457 acres from Rural Remote to Open Space/Public in the Candy Mountain and Badger Canyon areas, including approximately 449 acres of mapped GHAs. This redesignation would reduce the potential for development in geologically sensitive areas and help protect steep slopes and erosion-prone landscapes by limiting site disturbance.

Overall, Alternative 2 presents the greatest potential for impacts to earth resources because of its broader geographic extent and overlap with GHAs. However, regulations—including the *Benton County Draft Critical Areas Ordinance or CAO* (Benton County, 2026), Building Code (BCC Title 3), SEPA review, and grading and construction standards—would help ensure that site-specific hazards are identified and addressed, reducing the likelihood of significant adverse impacts.

3.1.3.3 Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry, Preferred Alternative

Under Alternative 3, industrial expansion in the Plymouth area would be approximately 744 acres redesignated from GMA Agricultural to Rural Industrial, compared to 1,372 acres under Alternative 2. Some of these lands intersect with mapped GHAs, including steep slopes and soils with moderate to high liquefaction susceptibility. Industrial development could involve grading, vegetation clearing, and construction that may increase erosion, dust, and sediment movement. However, most development is expected to occur within or near previously disturbed areas, and the concentration of industrial uses in the Plymouth area focuses these activities within an existing major industrial area rather than allowing them to disperse across the wider agricultural zone.

The proposed industrial redesignation near Plymouth under Alternative 3 would affect soils within NRCS capability classes 1–4. However, the affected parcels were selected to minimize impacts to the most productive soils. Countywide analysis indicates that a majority of soils within the redesignated parcels are in capability classes 5–8.

Alternative 3 also includes redesignating approximately 215 acres near Prosser from GMA Agricultural to Rural Remote. This change would shift these parcels to a lower intensity rural designation that is more compatible with surrounding land uses. Soil analysis indicates that these parcels contain a majority of soils outside NRCS capability classes 1–4, minimizing impacts to the most productive agricultural soils while recognizing existing development patterns and site constraints.

Alternative 3 also reclassifies approximately 367 acres of shoreline-adjacent Rural Industrial land to Public near the Plymouth community along the Columbia River, of which approximately 19 acres intersect with GHAs. This change reduces the potential for future development along erosion-prone river bluffs and floodplain areas and limits grading, vegetation removal, and slope disturbance in geologically sensitive shoreline environments.

As with Alternative 2, approximately 457 acres in the Candy Mountain and Badger Canyon areas would be redesignated from Rural Remote to Open Space/Public. About 449 acres intersect with steep slopes and mapped GHAs. This redesignation reduces the potential for development on steep slopes and helps protect erosion-prone landscapes.

Alternative 3 also includes development of a shrubsteppe mitigation program. This program would help protect intact shrubsteppe landscapes and maintain soil stability by avoiding disturbance in high-quality habitat areas. Conservation and restoration actions, including native vegetation establishment and invasive species control, would help reduce wind and water erosion and support long-term soil productivity.

Overall, Alternative 3 would result in a lower level of potential impacts to earth resources than Alternative 2 due to its reduced industrial conversion area and conversion of some industrial lands to public open space. Existing regulatory requirements under the *Benton County Draft CAO* (Benton County, 2026), SEPA, and County construction standards would further reduce site-specific risks.

3.1.4 Mitigation Measures

3.1.4.1 Regulatory Standards and Planning Policies

Application of regulatory standards and County planning policies to future development projects will help to reduce the impacts to soils and GHAs discussed previously.

Enforcement of the *Benton County Draft CAO* (Benton County, 2026) (BCC Title 15), Benton County SMP (BCC 15.04), Benton County Flood Damage Prevention Code (BCC 15.04A), Building Codes, and environmental review requirements will help to avoid and minimize potential impacts to GHAs. BCC 15.08 addresses GHAs in the County and provides parameters for development in and near these areas through regulatory, review, and permitting processes. It also provides the designation and classification of GHAs (BCC 15.08.440), determination (BCC 15.08.450), and detailed study requirements (BCC 15.08.460 and BCC 15.08.470) for activities that occur in or near GHAs. Development that is consistent with the CAO would avoid, minimize, or mitigate potential impacts to earth resources under the three alternatives.

Under the *Benton County Draft CAO* (Benton County, 2026), development proposed within or adjacent to GHAs—including steep slopes, erosion hazard areas, landslide hazard areas, and seismic hazard areas—is subject to the Critical Area Project Review Process (BCC 15.02.170) and Critical Area Identification Process (BCC 15.02.180). Where GHAs may be affected, applicants are required to submit

a Critical Area Report prepared by a qualified professional (BCC 15.02.190), which must include field verification of hazard boundaries, assessment of slope stability and erosion risk, evaluation of cumulative impacts, and application of mitigation sequencing to avoid, minimize, and mitigate impacts (BCC 15.02.220). Development approvals may require setbacks, limits on grading and vegetation removal, erosion and sediment control measures, drainage controls, slope stabilization techniques, and long-term monitoring consistent with Mitigation Requirements (BCC 15.02.210 - 230) and Review Criteria (BCC 15.02.240). Consistent application of these requirements would reduce erosion, landslide risk, and soil instability associated with steep slopes and other geologic hazards.

Compliance with Benton County's Zoning and Development Regulations (BCC Title 11), including the conditional use permitting provisions in BCC 11.50.040 and BCC 11.50.050, together with Subdivision and Building Codes, and SEPA environmental review requirements would also help to avoid and minimize potential impacts associated with land use changes and future development under all alternatives.

The *Benton County Draft Comprehensive Plan* (Benton County, 2026) encourages consistency with the CAO and provides goals and policies related to natural resources, including protection goals for property and people near GHAs. The following goals and policies should be considered for future development:

- PP Policy 3: Make land use decisions consistent with the Land Use Map and with the inherent capability of the land to sustain uses without creating problems that require a publicly funded solution (e.g., flooding, landslides).
- Rural LU Policy 6: Rural development shall minimize potential adverse impacts to water quality, slope stability, vegetation, wildlife and aquatic life as implemented through the County's critical area regulations, shoreline master program, and hydrology manual.
- CA Goal 2: Protect life and property and avoid or mitigate significant risks to public and private property and to public health and safety that are posed by GHAs.
    - CA Policy 1: Limit developments in areas with higher risk for natural disaster or geologic hazard unless it can be demonstrated by the project proponent that the development is sited, designed, and engineered for long term structural integrity and that life and property on- and off-site are not subject to increased risk as a result of the development. Additionally, establish development regulations that incorporate best practices for reducing the risk of wildfire, extreme heat, flooding, and other climate-exacerbated hazards.
    - CA Policy 2: Prevent developments within floodways and inherently unstable slopes as they are not suitable for developments. Review required buffers and setbacks for steep slopes and floodways vulnerable to erosion exacerbated by climate change, and establish new minimums, if necessary, so that improvements are not required to protect structures during their expected life.

- CA Policy 3: Locate and designate lands subject to natural disasters and current or future climate hazards for uses which avoid or minimize exposure of life and property to risk.

For consistency with the Comprehensive Plan, future development under Alternatives 2 and 3 should be sited and designed to respond to existing topography and soil conditions and should incorporate construction techniques and best management practices that minimize earth-related impacts, particularly in areas subject to geologic hazards.

Collectively, these policies and regulations encourage avoidance of geologic hazards, maintenance of natural soil and slope stability, and application of hazard-informed siting and design standards.

3.1.4.2 Other Mitigation Measures

Where soils may be disturbed under Alternatives 2 and 3, additional mitigation measures could be applied to reduce erosion, siltation, and slope instability. These measures may include:

- Stage construction to retain as much existing vegetation as possible.
- Encourage cluster housing and other housing types in Rural Community Centers.

3.2 Surface and Groundwater

3.2.1 Affected Environment

Benton County is bordered by the Columbia River and crossed by the Yakima River. These rivers, along with associated tributaries and upland aquifers, are the primary components of the County's surface and groundwater systems. Large quantities of water, approximately 191,000 cubic feet per second or over 100 billion gallons each day, flow past the County on the way to the Pacific Ocean (USACE, 2020).

The County contains portions of three Water Resource Inventory Areas (WRIAs): WRIA 31: Rock Glade Watershed, WRIA 37: Lower Yakima River Watershed, and WRIA 40: Alkali-Squilchuck Watershed (Benton County, 2026).

The Columbia and Yakima rivers supply a water source for critical aquifer recharge areas (CARAs) and provide floodplain, wetland, and fish and wildlife habitat. Within the central Columbia Basin's desert environment, it is estimated that up to 75% of indigenous wildlife species depend upon these riverine corridors for cover and other sustenance essential to their lifecycles (Benton County, 2026). Fish and wildlife are discussed in Section 3.3.

3.2.1.1 Surface Water

Major surface water bodies in the County include the Columbia River, the Yakima River, and Lake Wallula—a reservoir on the Columbia River impounded by McNary Dam. The Columbia River, as it passes through the County, is heavily regulated by upstream dam operations, particularly the McNary and Priest Rapids Dams, which stabilize water levels and reduce flooding potential (U.S. Army Corps of Engineers (USACE), 2020). The Yakima River, which flows into the Columbia River near the City of

Richland, is similarly regulated by a series of upstream reservoirs and diversions managed for irrigation and municipal supply by the U.S. Bureau of Reclamation (U.S. Bureau of Reclamation, 2023).

The Columbia River is monitored at U.S. Geological Survey (USGS) gages #1251400 and #12514400, which record water surface elevations (USGS, n.d.). The Yakima River is tracked at multiple gages, including USGS stations near Kiona and Prosser (USGS, n.d.). Flooding in the County is infrequent due to extensive levee systems and dam regulation; however, designated frequently flooded areas exist along both major rivers and are classified as critical areas under Chapter 15.08 of the *Benton County Draft CAO* (Benton County, 2026).

3.2.1.2 Groundwater

Groundwater in the County is part of the Columbia Plateau Regional Aquifer System, which consists of layered basalt flows of the Columbia River Basalt Group, overlain in many areas by Quaternary alluvial and loess deposits (USGS, 2015). Groundwater recharge occurs through infiltration of precipitation, irrigation return flow, and hydraulic connectivity with surface waters—especially near the Yakima and Columbia rivers (USGS, 2015). The USGS estimates mean annual groundwater recharge in the County ranges from less than 1 inch to approximately 2 inches per year, depending on local soil, slope, and land use conditions (USGS, 2015).

Groundwater supports extensive agricultural, residential, and municipal water use in the County (see Section 3.2.1.5).

3.2.1.3 Frequently Flooded Areas

Frequently flooded areas are regulated by the County's critical areas ordinance (BCC 15.08) and flood damage prevention code (BCC 3.26). These areas encompass the river channel or floodway and the 100-year floodplain. The County relies on Federal Emergency Management Agency (FEMA) mapping to determine the floodplain boundaries.

Frequently flooded areas in the County are primarily associated with the Columbia River, the Yakima River, and adjacent low-lying floodplains, as well as localized areas subject to high groundwater conditions. Floodplain extents along the Columbia and Yakima rivers are influenced by upstream dam operations and levee systems, including McNary and Priest Rapids Dams on the Columbia River and upstream reservoir management on the Yakima River, which reduce the frequency and magnitude of flooding compared to unregulated river systems (U.S. Bureau of Reclamation, 2023).

3.2.1.4 Water Quality

Portions of the Columbia and Yakima rivers are included on the Washington Department of Ecology's 303(d) list of "impaired" waters. In the County, the Columbia River is listed for high temperature and total dissolved gas (primarily nitrogen and oxygen) (Ecology, 2025); the river is also listed as a "water of concern" for pH under Section 305(b) of the Clean Water Act (Ecology, 2022). The Yakima River is also listed as impaired for temperature and dissolved oxygen in several segments (Washington State Department of Ecology, 2022). Total Maximum Daily Loads (TMDLs) have been established for some

of these impairments. TMDLs, established by the Clean Water Act, determine the maximum amount of a specific pollutant a waterbody can receive while still meeting applicable water quality standards.

Localized groundwater contamination concerns have been identified in parts of the County. Areas of shallow groundwater near the Yakima River have shown elevated nitrate concentrations due to historic agricultural practices and on-site septic systems. Monitoring for groundwater quality is conducted by the Washington Department of Health, Ecology's Environmental Information Management System, and the USGS Ambient Groundwater Monitoring Program (Ecology, n.d.; DOH, n.d.; (USGS, n.d.).

3.2.1.5 Water Use and Water Rights

Municipal water systems operated by the Cities of Richland, Kennewick, Benton City, and West Richland use both surface and groundwater supplies. Agricultural irrigation is supported by water rights administered through the Yakima Project and local irrigation districts (Ecology, n.d.). Private wells, Group B systems, and exempt wells serve rural development in unincorporated areas. Irrigation districts such as the Kennewick and Benton Irrigation Districts rely on a combination of Columbia River diversions and deep wells to deliver water across agricultural lands (Columbia-Snake River Irrigators Association, 2006).

The same factors that impact groundwater and surface water quality and availability can also affect water supply. Water rights in the County are a critical and often contentious issue due to the region's arid climate, dependence on irrigation for agriculture, and increasing municipal and industrial demand. Many agricultural operations rely on water rights associated with irrigation districts, which are subject to seasonal and legal constraints on diversion. Additionally, the proliferation of exempt wells in rural residential areas has raised concerns about cumulative impacts on groundwater resources and instream flows, particularly in closed or limited basins. The state's water resources program requires coordination among users, enforcement of permit conditions, and integration of water availability into land use planning, which can pose an ongoing challenge as the County experiences continued population growth and land conversion. Climate variability and droughts have further stressed the system, reducing streamflows and increasing competition among users.

The County lies within the Columbia River and Yakima River basins, both of which are subject to complex water rights adjudications and allocation challenges. In particular, the Yakima Basin has undergone decades of legal proceedings to resolve senior and junior water rights, with priority often given to senior agricultural users and tribal water claims under federal treaties (Ecology, n.d.). Surface water rights in the Yakima Basin are fully allocated, and future growth relies on water right transfers, conservation, and management strategies.

Benton County's Water Conservancy Board reviews and makes recommendations on water rights applications, including changes to existing water rights. Groundwater rights are regulated under the Columbia River rule (WAC 173-563) and the Yakima adjudication process (Ecology, n.d.).

In 2020, Benton County adopted its Rural Water Supply Program which addresses the effects of future groundwater withdrawals within the Yakima drainage on senior water users and habitat conditions (Benton County, 2026). The program was developed in coordination with Ecology, the Yakama Nation, the U.S. Bureau of Reclamation, and stakeholders in the County and Yakima River basin. It was established to provide mitigation for any new residential use within the Mitigation Area (a portion of the Lower Yakima Watershed known as WRIA 37) through acquiring senior water rights to offset groundwater use and managing the metering of wells. To date the County has acquired 425 acre-feet of senior water rights for the Benton County Water Bank (ibid.). Applicants for a subdivision/short plat or a new building permit for a new dwelling unit within the Mitigation Area are required to purchase a mitigation certificate for each proposed lot (of a subdivision/short plat) or building permit. Building permit applicants for a new dwelling unit must also purchase and install a meter for their residential well and report water use.

3.2.2 Planning and Regulatory Context

Surface and groundwater resources in the County are governed by a combination of state water law, federal protections, watershed management plans, and County-level policies and regulations. These frameworks guide the protection of water quality and quantity, ensure sustainable water use, regulate flood and drainage hazards, and maintain hydrologic and ecological functions that support public health, agriculture, habitat, and long-term development.

The GMA requires counties to designate and protect critical areas—including CARAs and frequently flooded areas—under RCW 36.70A.170. The goals of the GMA include protecting the environment and enhancing the state's high quality of life, including air and water quality, and the availability of water, and ensuring that public facilities and services necessary to support development are adequate and properly managed. Together, these provisions reinforce the requirement to protect surface water and groundwater resources as essential components of public health and environmental protection.

Water-related development regulations must also be based on best available science, and counties must ensure that new development is supported by adequate potable water as required by RCW 19.27.097 and RCW 90.44.050. The GMA further directs counties, through comprehensive planning, to prevent groundwater depletion, contamination, and excessive stormwater runoff. These GMA directives form the foundation for the County's surface and groundwater planning. Chapter 4, Critical Areas Element, of the *Benton County Draft Comprehensive Plan* (Benton County, 2026) contains numerous directives related to water supply, water quality, drainage, septic systems, groundwater protection, and watershed-scale hydrology.

Climate change is also an important consideration in surface and groundwater planning, as projected changes in precipitation patterns, snowpack, and extreme weather events affect water availability, flood risk, and groundwater recharge. Best available science indicates increased hydrologic variability, including higher winter runoff, reduced summer baseflows, and more frequent drought and intense

precipitation events. State guidance under the GMA recognizes climate change as a factor affecting the long-term function of CARAs and frequently flooded areas.

Along with the GMA, state and federal regulatory frameworks govern surface and ground water, including:

- Washington Department of Ecology, which regulates water quantity and water quality under:
    - RCW 90.54 – Water Resources Act
    - RCW 90.44 – Groundwater Protection
    - RCW 90.48 – Water Pollution Control Act
    - National Pollutant Discharge Elimination System (NPDES) stormwater permitting
    - Well construction and decommissioning standards (WAC 173-160)
    - Stormwater Management Manual for Eastern Washington
    - State groundwater antidegradation policies
    - Floodplain and flood hazard area standards (WAC 173-158)
- Washington State Department of Health (DOH) oversees Group A public water systems, source protection, sanitary control areas, and drinking water standards.
- Federal Environmental Protection Agency (EPA) implements elements of the Clean Water Act, NPDES permitting, and groundwater protection standards.
- FEMA floodplain mapping influences local regulation of surface-water related hazards, groundwater/surface-water interactions, and flood-storage functions.
- Federal NPDES regulations as well as County stormwater regulations require stormwater quantity and quality controls.
- U.S. Army Corps of Engineers regulates activities affecting wetlands and water bodies under Section 404 of the Clean Water Act of 1972.

Relevant Benton County Code sections include:

- Critical Areas Ordinance (BCC Title 15)
- Flood Damage Prevention (BCC Chapter 3.26)
- Public Health Codes (BCC Title 6)
- Shoreline Master Program (BCC 15.04)

Other relevant County and regional plans and standards include:

- Watershed Plans (WRIA-level)
- Benton County Rural Water Supply Program
- Flood Hazard Management Plans
- Irrigation District Plans
- Multi-Jurisdictional Hazard Mitigation Plan
- Public Water System Plans

3.2.3 Probable Environmental Impacts

Land use changes, energy development, and industrial expansion can influence hydrologic function, stormwater quality and quantity, groundwater recharge, and contamination risk. At a programmatic scale, potential impacts include:

- Changes to impervious surface coverage, influencing stormwater runoff, infiltration, and pollutant transport.
- Risk of groundwater contamination from industrial activities, hazardous materials storage, or increased reliance on on-site wastewater systems.
- Alterations to surface water quality from erosion, sedimentation, dust deposition, or stormwater discharge.
- Potential encroachment into riparian buffers, wetlands, floodplains, and CARAs.
- Water supply demands associated with industrial or energy development, particularly in the southern part of the County, which may require new withdrawals, water rights transfers, or system extensions.
- Changes in shoreline conditions where land use intensity shifts near the Columbia River or Yakima River.
- Projected population growth that could increase water demand and therefore impact groundwater resources.

3.2.3.1 Alternative 1: No Action Alternative

Under Alternative 1, existing land use designations would remain in place. As a result, no substantial changes to surface water or groundwater conditions are anticipated beyond those associated with development already allowed under current zoning and regulatory frameworks.

Under this and the other alternatives, impacts to surface water and groundwater resulting from major renewable energy projects would be localized and mainly occur during construction. Grading, road building, and soil disturbance for wind and solar facilities in Light and Heavy Industrial districts and within the Unclassified District at the U.S. Department of Energy's Hanford Site can increase runoff, erosion, and sediment in nearby surface waters, and may temporarily alter drainage patterns. New impervious surfaces can reduce infiltration and increase stormwater runoff. Groundwater impacts are expected to be minor but could include reductions in recharge from soil compaction and low risk of contamination from fuels or materials if not properly managed. Limiting development to industrial and designated areas avoids impacts to irrigated agricultural lands. Standard stormwater controls and spill prevention measures would minimize these impacts. Overall, Alternative 1 would result in minimal additional impacts to surface water and groundwater, with conditions largely governed by ongoing land use trends and existing regulatory requirements.

3.2.3.2 Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry

Alternative 2 includes the most extensive industrial expansion, with approximately 1,372 acres of GMA Agricultural land redesignated to Rural Industrial, primarily in the Plymouth area and along the corridor between Plymouth and Paterson. Increased industrial development may result in greater impervious surface coverage, which may accelerate stormwater runoff, reduce groundwater recharge, and increase

the transport of pollutants to surface water systems. Industrial operations may also increase the risk of surface water and groundwater contamination from hazardous materials, fuel storage, chemical handling, and outdoor equipment areas if not properly managed. Expanded industrial buildout may also increase water supply demands, particularly for water-intensive industrial uses, potentially requiring new withdrawals, system extensions, or water rights transfers which would need to be addressed by the landowner. Expanded industrial buildout may also increase fire flow requirements at industrial sites, which in some locations may require large-scale on-site or standby water storage to meet fire protection standards.

Under Alternative 2, approximately 46 acres of mapped floodplain may be affected by proposed changes from GMA Agriculture to Industrial in Plymouth and along SR 14 near Paterson. Development in these areas may influence flood storage, conveyance, and water quality if not sited outside the floodplain and with sufficient setbacks from surface water.

Alternatives 2 and 3 include approximately 240 acres redesignated from GMA Agricultural and Rural to Rural Remote in the Prosser (215 acres) and Finley (25 acres) areas, as well as approximately 45 acres redesignated from Rural Industrial to Rural Remote near Prosser. These changes are generally consistent with surrounding land use patterns and reflect a shift toward lower-intensity rural residential development. Development under Rural Remote zoning may result in dispersed residential uses reliant on individual wells and on-site wastewater systems, which may incrementally affect groundwater quantity and quality if not properly managed.

The proposed changes from GMA Agriculture to Industrial in Plymouth intersect with 711 acres of CARAs, primarily associated with Hydrologic Soil Group A soils and irrigated agricultural lands, which support high infiltration and groundwater recharge. Development within these areas may reduce recharge capacity and increase contamination risk if not adequately managed.

Overall, Alternative 2 presents the highest potential impacts to surface water and groundwater due to the scale and geographic extent of industrial expansion, floodplain intersections near Paterson, and development within CARAs. However, regulatory and environmental review processes would reduce the potential for these impacts. Project-level review under the *Benton County Draft CAO* (Benton County, 2026) and SEPA, including application of mitigation sequencing, is expected to avoid, minimize, or mitigate site-specific impacts where development occurs. Projects proposed within flood hazard areas would also be subject to Benton County's Flood Damage Prevention Code and be required to avoid floodways and comply with elevation, siting, and design standards to minimize flood risk and maintain floodplain function. Health, building, and stormwater codes would continue to apply and are expected to manage site-specific risks associated with rural residential development. Impacts to CARAs would be mitigated through compliance with the CAO, which requires mitigation sequencing to protect groundwater quality and recharge functions.

3.2.3.3 Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry, Preferred Alternative

Alternative 3 includes a reduced level of industrial expansion compared to Alternative 2, with approximately 744 acres of GMA Agricultural land redesignated to Rural Industrial as part of a major industrial development area, primarily in the Plymouth area. As a result, increases in impervious surface coverage would be more limited in extent. Industrial development under Alternative 3 may pose localized risks to surface water and groundwater quality as discussed for Alternative 2. Water supply demands would increase to a lesser degree than under Alternative 2, and any required new withdrawals, system extensions, fire flow requirements, or water rights transfers would need to be addressed by the landowner.

Under Alternative 3, there would be no intersection between the industrial redesignation and floodplains. Approximately 367 acres of shoreline-adjacent Rural Industrial land near the Plymouth community would be reclassified to Public, including approximately 159 acres of mapped floodplain, resulting in long-term protection of floodplain areas along the Columbia River. This reclassification would reduce industrial development pressure in flood-prone areas and limit grading, fill, and impervious surface expansion within floodplains, thereby preserving flood storage, conveyance, and water quality functions.

Alternative 3 includes approximately 240 acres redesignated from GMA Agricultural and Rural to Rural Remote in the Prosser (215 acres) and Finley (25 acres) areas, as well as approximately 45 acres redesignated from Rural Industrial to Rural Remote near Prosser. These changes are generally consistent with surrounding land use patterns and reflect a shift toward lower-intensity rural residential development. Development under Rural Remote zoning may result in dispersed residential uses reliant on individual wells and on-site wastewater systems, which may incrementally affect groundwater quantity and quality if not properly managed.

The proposed changes from GMA Agricultural to Rural Industrial under Alternative 3 intersect approximately 328 acres of CARAs (approximately half the area of Alternative 2), primarily associated with Hydrologic Soil Group A soils and irrigated agricultural lands that support high infiltration and groundwater recharge. Development within these areas may reduce recharge capacity and increase contamination risk if not adequately managed.

Overall, Alternative 3 presents lower potential impacts to surface water and groundwater than Alternative 2 due to its reduced industrial conversion and protection of floodplain and shoreline-adjacent lands in the Plymouth area. Project-level review and permitting would reduce potential impacts as discussed for Alternative 2.

In addition, Alternative 3 includes development and implementation of a shrubsteppe mitigation program, which benefits water resources by reducing disturbance in areas that support natural infiltration, groundwater recharge, and watershed function. Avoidance and conservation of intact

shrubsteppe would help maintain native vegetation and soil structure that slow runoff, reduce erosion, and limit sediment delivery to surface waters. Restoration actions, including native revegetation and invasive species control, further improve infiltration and reduce flashy runoff conditions associated with disturbed lands. Collectively, these measures would help protect water quality, support baseflow conditions, and maintain more natural hydrologic function across shrubsteppe landscapes in the County.

3.2.4 Mitigation Measures

3.2.4.1 Regulatory Standards and Planning Policies

Application of regulatory standards and County planning policies to future development projects will help to reduce the impacts to water resources discussed previously. Applicable code requirements include but are not limited to those for protection of frequently flooded areas, CARAs, and Fish and Wildlife Habitat Conservation Areas in the *Benton County Draft CAO* (Benton County, 2026) as well as the Flood Damage Prevention code (BCC 3.26), Benton County SMP (BCC 15.04), building and health codes, and the best management practices outlined in the Ecology Stormwater Management Manual for Eastern Washington. Additionally, the County is incorporating BAS, as available/applicable, into the *Benton Couty Draft CAO* (Benton County, 2026)to mitigate impacts to surface and groundwater.

Development approvals may require buffers and setbacks, stormwater treatment and infiltration measures, limits on impervious surfaces, protection of groundwater recharge areas, erosion and sediment control, compliance with floodplain siting and elevation standards, seasonal construction restrictions, and long-term mitigation monitoring, consistent with mitigation requirements and review criteria. Development proposed within or adjacent to wetlands, streams, shorelines, frequently flooded areas, CARAs, and Fish and Wildlife Habitat Conservation Areas is subject to critical area identification and review, including preparation of a Critical Area Report by a qualified professional where required (BCC 15.02.170–190; BCC 15.14.030). Projects are also required to undergo SEPA review. Consistent application of these requirements would reduce risks to water quality degradation, groundwater recharge impairment, flood storage loss, and alteration of hydrologic and aquatic functions.

Compliance with Benton County's Zoning and Development Regulations (BCC Title 11), including the conditional use permitting provisions in BCC 11.50.040 and BCC 11.50.050, together with Subdivision and Building Codes, and SEPA environmental review requirements would also help to avoid and minimize potential impacts associated with land use changes and future development under all alternatives.

The *Benton County Draft Comprehensive Plan* (Benton County, 2026) also provides direction for water quality protection, water availability for growth, and maintenance of hydrologic function. Collectively, these policies establish the County's commitments and obligations to protect water quality, ensure

water availability for growth, and maintain hydrologic functions. Relevant goals and policies that should be considered for future development include:

- WR Goal 1: Conserve, maintain, and manage existing ground and surface water resources to meet existing and future water supply needs for cities, farms, industry, and rural growth.
- WR Policy 4: Support groundwater management strategies that allow responsible development while protecting long-term aquifer sustainability and considering changes in precipitation and drought.
- WR Policy 9: Support selective issuance of new groundwater rights where they will not impair existing rights and are consistent with long-term aquifer sustainability.
- LU Goal 6, Policy 1: Maintain rural densities that protect surface and groundwater and can be supported by available services.
- LU Policy 2 (Goal 6): Support the protection of ground and surface water through low-density rural development.
- LU Policy 15: Encourage new rural development away from the 100-year floodplain, and as guided in the County's Flood Damage Prevention Ordinance, CAO, and SMP.
- CA Goal 2: Protect life and property and avoid or mitigate significant risks to public and private property and to public health and safety that are posed by frequently flooded areas and other natural hazards.
- CA Goal 2, Policy 2: Prevent developments within floodways and inherently unstable slopes as they are not suitable for developments. Review required buffers and setbacks for steep slopes and floodways vulnerable to erosion exacerbated by climate change, and establish new minimums, if necessary, so that improvements are not required to protect structures during their expected life.

For consistency with the Comprehensive Plan, future development under all alternatives should be sited and designed to respond to existing drainage patterns, floodplain conditions, groundwater recharge characteristics, and aquatic habitat needs, and should incorporate design techniques and mitigation measures that minimize impacts to surface water, groundwater, and fish and wildlife habitat resources, particularly in areas subject to flooding, aquifer sensitivity, or riparian habitat constraints.

Collectively, these policies and regulations encourage avoidance of flood-prone and water-sensitive areas, protection of groundwater recharge and water quality, and application of hydrologically and ecologically informed siting and design standards.

3.2.4.2 Other Mitigation Measures

For Alternatives 2 and 3, the mitigation measures described in Section 3.1.4 for reducing impacts to earth resources should also be employed to reduce potential impacts to surface waters and groundwater. These measures may include:

- Encourage cluster housing and other housing types in Rural Community Centers.
- Encourage incorporating low impact development principles into development design.

3.3 Plants and Animals

3.3.1 Affected Environment

3.3.1.1 Regional Ecological Setting

The County is located within the Columbia Plateau ecoregion of south-central Washington. The County's landscape is characterized by arid uplands, shrubsteppe vegetation, irrigated agricultural lands, and major river corridors associated with the Columbia and Yakima rivers.

The dominant native vegetation type in the County is shrubsteppe, an arid ecosystem characterized by big sagebrush , native bunchgrasses, and a variety of drought-adapted forbs. This vegetation provides habitat for a unique community of wildlife including sensitive species (WDFW, 2022). Large contiguous blocks of shrubsteppe remain on lands managed by state and federal agencies, such as Rattlesnake Mountain and Hanford Reach, while remnant patches persist on private lands, steep ridges, and roadless areas. In addition to upland shrubsteppe ecosystems, riparian corridors, wetlands, and agricultural landscapes provide important habitat for fish and wildlife throughout the County.

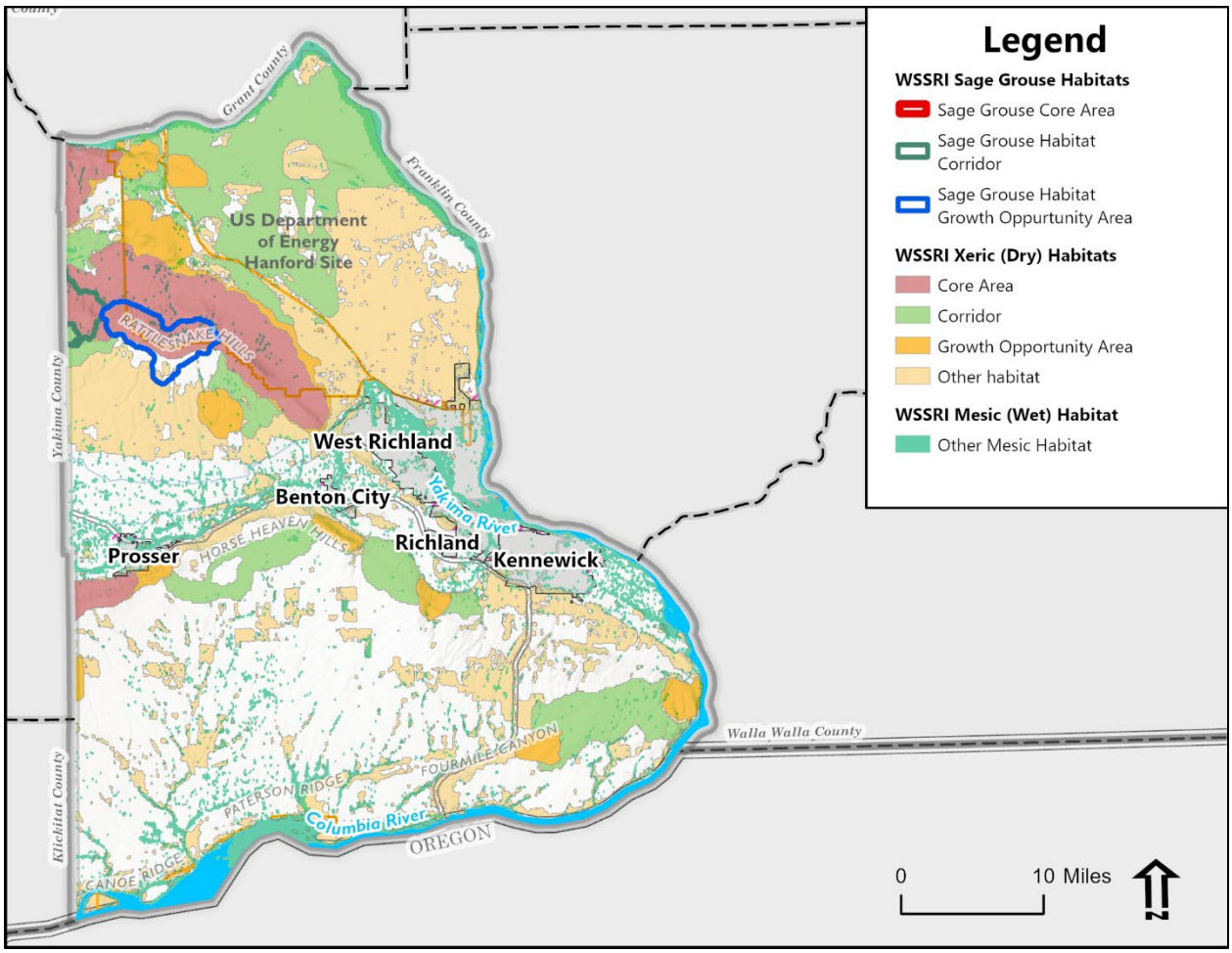
3.3.1.2 Shrubsteppe Habitats

Shrubsteppe habitat covers approximately 378,110 acres of the County (WDFW, 2025) (Figure 3-3). The spread of invasive species such as cheatgrass, Russian thistle, and Russian olive has significantly reduced native species diversity and altered fire regimes. The displacement of shrubsteppe plant species by invasive species increases fire intensity and frequency. In addition to the hazards this creates for humans and wildlife, this also impacts shrubsteppe which provides key habitat for rare birds such as the greater sage grouse (WDFW, 2022).

The Washington Shrubsteppe Restoration and Resiliency Initiative (WSRRI) was established to address widespread loss and degradation of shrubsteppe habitats. Its core components include community engagement, land protection, habitat restoration, and long-term management and monitoring. This initiative prioritizes conserving critical wildlife corridors, implementing restoration practices such as reseeding native plants and controlling invasive species, and ensuring resilience of working lands that support both agriculture and wildlife (WDFW, 2022).

WSRRI highlights southeastern Benton County as an area of high biodiversity potential and restoration opportunity due to the intersection of intact habitat, conservation priority species, and climate resilience potential (WDFW, 2022). WSRRI identifies priority shrubsteppe habitats in the County, including xeric, mesic, and sage-grouse habitat types, to guide conservation and restoration efforts that support regional biodiversity and working lands (WDFW, 2022). The distribution of WSRRI shrubsteppe habitat areas within the County is shown in Figure 3-3.

Figure 3-3. WSRRI Shrubsteppe Habitat Mapping



3.3.1.3 Riparian Management Zones

Riparian management zones (RMZs) along the Columbia and Yakima rivers support willow and cottonwood-dominated forests and function as linear wildlife corridors, offering food, cover, and water in an otherwise arid environment. Habitat characteristics of healthy RMZs include a functional corridor for fish and wildlife movement, vegetation types adapted to wetter soils, occasional flooding, and natural disturbance regimes. Riparian areas also support species that inhabit shrubsteppe habitat in providing a source of water as well as forage, refuge, and nesting sites. For many species, RMZs provide critical winter habitat and typically support larger flocks and a greater density of upland birds than shrubsteppe habitat due to the greater production of biomass and the more complex mosaic of vegetation (Stinson & Schroeder, 2012).

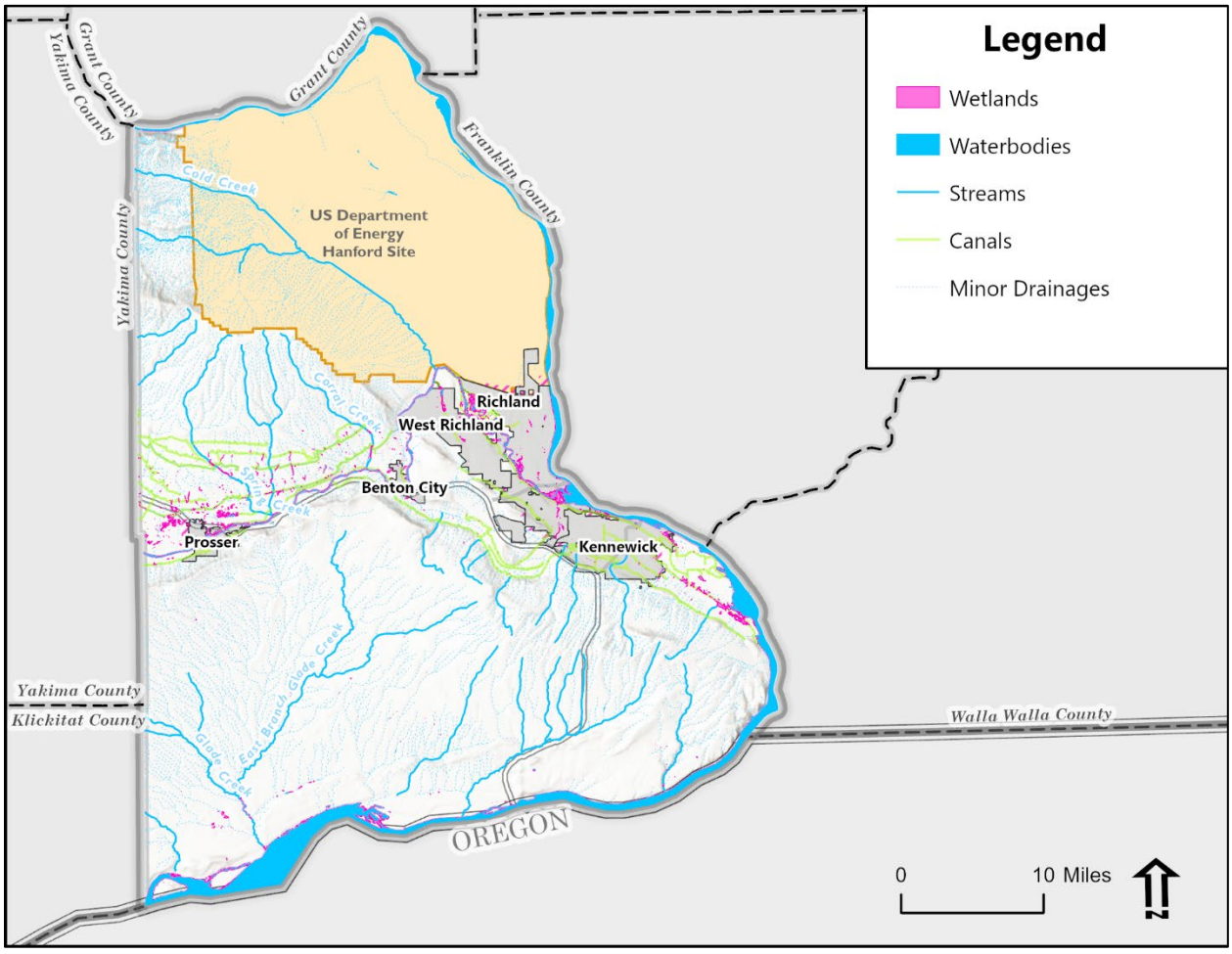
Levees, grazing, and shoreline development have fragmented many riparian zones and reduced their ecological function (Ecology, 2025). The WSRRI and Washington State Priority Habitats and Species

(PHS) programs both emphasize the importance of riparian zones and associated wetlands for maintaining ecosystem connectivity across fragmented landscapes.

3.3.1.4 Wetlands

Wetlands, including seasonally inundated basins, alkali flats, and irrigation-created wetlands, are located along riparian areas and are also scattered throughout the County, often supported by nearby upland irrigation. The County's wetlands cover approximately 7,478 acres (excluding the Columbia River), providing breeding and migratory stopover habitat for amphibians, shorebirds, and waterfowl. Wetlands, waterbodies, streams, and canals are shown in Figure 3-4.

Figure 3-4. Mapped Wetlands



3.3.1.5 Fish and Wildlife Species

Several managed and protected fish and wildlife habitat areas are located across the County, such as the Umatilla National Wildlife Refuge, McNary National Wildlife Refuge, Barker Ranch, and Hanford Reach National Monument. With the Yakima and Columbia rivers, aquatic habitat supports numerous resident and anadromous fish, aquatic invertebrates, and migratory bird species.

The Columbia River Basin supports 61 fish species, both native and introduced (Northwest Power and Conservation Council, 2021). Resident fish include, but are not limited to, a mix of native and non-native species, such as smallmouth bass, largemouth bass, walleye, northern pikeminnow, yellow perch, sculpin, mountain whitefish, sturgeon, and catfish. The Columbia River, Yakima River, and their tributaries serve as vital aquatic habitat for Endangered Species Act (ESA)-listed anadromous fish, including spring and fall Chinook salmon, steelhead, sockeye salmon, and bull trout (WDFW, 2021). Coho salmon are rare but may occur through reintroduction programs underway in the Yakima River Basin; this population segment is not ESA-listed. These waterways also support the culturally significant Pacific lamprey, which has experienced declines due to dam passage barriers and habitat loss (USFWS, 2012).

The RMZs and shoreline areas of the rivers support concentrations of migratory birds, including Canada goose, mallard, and great blue heron, particularly during winter months. Nesting often occurs in less-developed riparian areas and agricultural wetlands. The Columbia River also provides breeding areas for long-billed curlew and a variety of gulls, as well as limited nesting habitat for great blue heron and great egret (WDFW, 2023). The County lies within the Pacific Flyway and is part of the broader Columbia Basin bird migration route used by nearly 350 bird species (USFWS, n.d.). RMZs also provide breeding and foraging grounds for amphibians, songbirds, raptors, and mammals.

Common bird species that utilize shrubsteppe habitat include sparrows, magpie, robins, and various hawk species. Shrubsteppe is essential for ground-nesting birds such as horned larks, sagebrush sparrows, and loggerhead shrikes, and serve as nesting habitat for species of conservation concern, including the ferruginous hawk, Washington ground squirrel, and burrowing owl—all of which are listed as threatened or candidate species by the state (WDFW, 2023). These species are highly sensitive to habitat fragmentation and are focal targets of WSRRI's conservation strategies (WDFW, 2022).

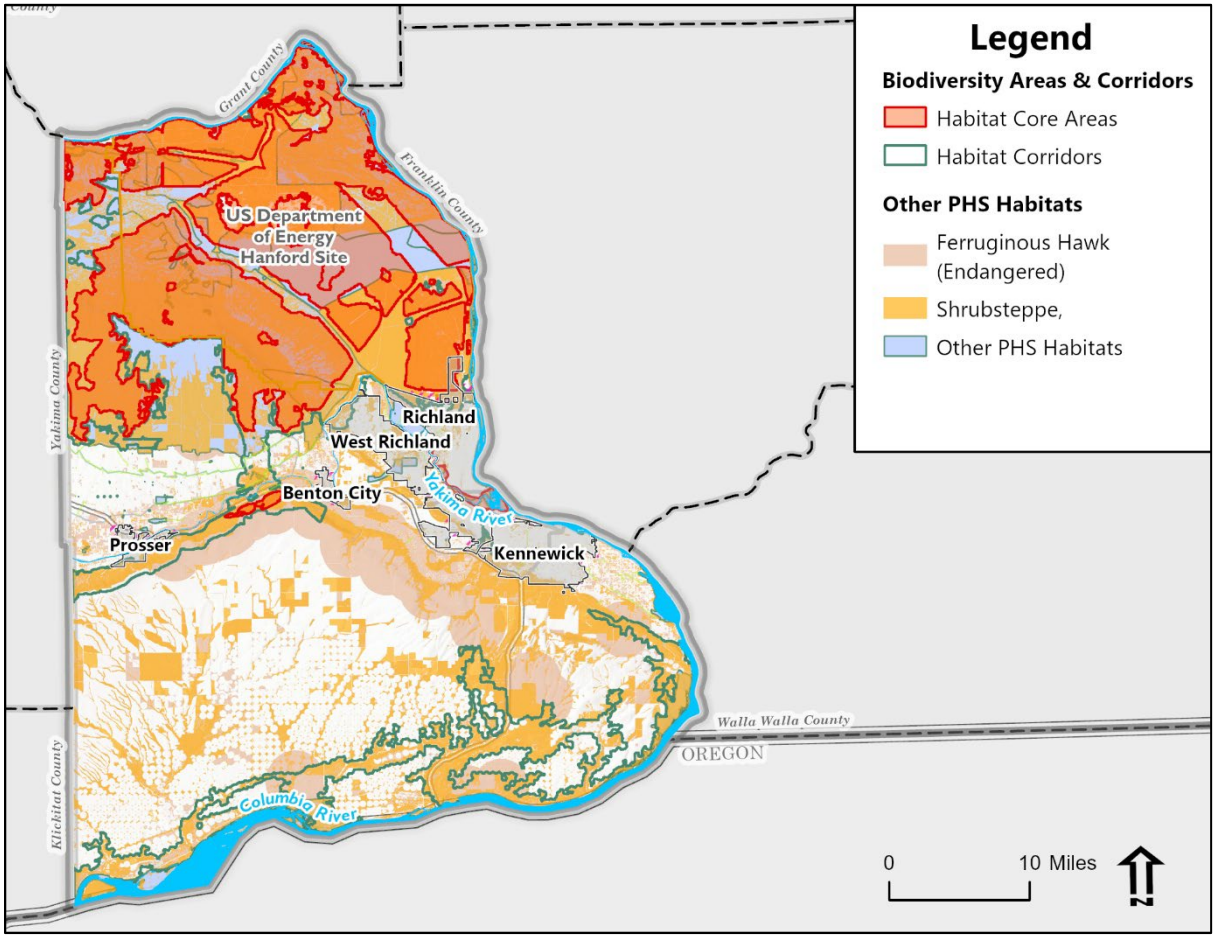
Large game mammals are also part of the wildlife community in the County and are closely tied to shrubsteppe, riparian areas, and nearby agricultural lands. Mule deer and white-tailed deer are common and widely distributed (WDFW, 2023). Mule deer are most closely associated with shrubsteppe and grasslands and often forage in adjacent agricultural areas, while white-tailed deer are more commonly found along riparian corridors and irrigated lands near the Columbia River and its tributaries (WDFW, 2023; (Northwest Power and Conservation Council, 2020). Elk are also present and move seasonally between open foraging areas and areas with more cover; elk grazing and browsing can influence vegetation over large areas (Northwest Power and Conservation Council, 2020). Predators such as cougar and coyote are present and help regulate deer and elk populations (Northwest Power and Conservation Council, 2020). Together, these species play a key role in shaping vegetation and maintaining ecosystem balance.

3.3.1.6 State Priority Habitats and Species

The Washington Department of Fish and Wildlife (WDFW) identifies critical habitat and species areas through the PHS program, which maps occurrences of species and habitats that are priorities for conservation (WDFW, 2023). These designations are advisory and do not carry regulatory authority but are considered during SEPA review. The GMA requires local governments to protect priority species and habitats through their critical area ordinances (RCW 36.70A.172). Figure 3-5 shows the extent of listed PHS habitat extents within the County, including biodiversity areas and corridors, ferruginous hawk habitat, and "other" PHS habitats.

"Other" PHS areas in Benton County include a diverse set of site-specific habitats and species use areas. These include unique landscape features such as cliff and talus slope habitats that support nesting raptors and upland birds, active dune and sand systems with specialized plant communities, and habitats associated with species use—such as burrowing owls, mule deer, elk, and various waterfowl and shorebird concentration areas. The PHS map information is based on data and observations by WDFW staff (WDFW, 2023) and has not been confirmed on the ground as part of this EIS.

Figure 3-5. WDFW Priority Habitats & Species



3.3.1.7 Habitat Corridors and Linkages

Connectivity between shrubsteppe and riparian habitats is important for seasonal wildlife movement, providing access to water, forage, and nesting areas across the County's arid landscape. Conversion of shrubsteppe to roads, urban development, and agricultural uses has fragmented these habitats and reduced their ecological function. Climate change also makes connectivity even more important for maintaining healthy wildlife populations. New state initiatives are underway to address these issues.

WDFW recently convened a technical working group to refine its mapping of biodiversity areas and corridors in the Columbia Basin. These areas are considered and mapped as a type of PHS (Figure 3-5). Biodiversity areas provide large blocks of unfragmented and relatively undisturbed habitat for sensitive species and those requiring large ranges, as well as supporting more resilient populations. Biodiversity corridors may contain lower quality habitat but serve to connect the biodiversity areas. Based on the updated mapping, the County provides 258,965 acres of biodiversity areas and 210,604 acres of biodiversity corridors (WDFW, 2023).

In addition, WDFW's Washington Habitat Connectivity Action Plan (WAHCAP) is a statewide strategy that guides habitat connectivity planning by mapping key wildlife corridors and identifying priority areas to reconnect important landscapes. It incorporates WDFW PHS data as well as information from another program, the Arid Lands Initiative. These programs identify priority areas for landscape-scale conservation and restoration within the Columbia Plateau Ecoregion, including "Priority Core Areas" and "Priority Linkage Areas". The County includes priority core areas and priority linkage areas that generally mirror the mapped WSRRI priority areas previously shown in Figure 3-3.

3.3.2 Planning and Regulatory Context

The GMA mandates the identification of open space corridors within and between UGAs. Identification and protection of open space supports the protection and linkage of habitats and other critical areas, promotes outdoor recreation, preserves rural character, and conserves unique scenic landscapes. Counties are also required to adopt critical areas regulations that include wetlands and Fish and Wildlife Habitat Conservation Areas (FWHCAs).

Chapter 4, Natural Resources Element, of the *Benton County Draft Comprehensive Plan* (Benton County, 2026) contains goals and supporting policies addressing environmental protection and restoration, salmonid recovery, protection of water quality/quantity and aquatic habitat, and adherence to the *Benton County Draft CAO* (Benton County, 2026) and Benton County SMP. The draft CAO (BCC Chapter 15.02.070) includes an expanded definition of FWHCAs to include Washington State PHS, as well as other habitats. These may include rare or vulnerable ecological systems, communities, and habitats.

The most recently updated SMP was locally adopted in 2021 and approved by Ecology in 2022 (Benton County, 2022). The goals and policies of the SMP are adopted by reference into the Comprehensive Plan's goals and policies.

Other relevant Benton County Code sections include:

- Chapter 15.02: General Provisions
- Chapter 15.04: Wetlands
- Chapter 15.14: Fish and Wildlife Habitat Conservation Areas

Other relevant County and regional plans and standards include:

- Shoreline Master Program (Benton County 2022)
- Yakima Basin Integrated Plan (USBR 2013, YBIP 2025)
- Voluntary Stewardship Program (VSP) (Benton County 2025b)

3.3.3 Probable Environmental Impacts

Under all three alternatives, development would continue to occur throughout the County for rural and urban uses as well as energy, commercial, and industrial development. These activities could impact a range of habitats, including previously disturbed areas, recovering habitat areas, and undisturbed areas, consistent with County land use designations.

Common to all alternatives, construction can disturb wildlife or result in avoidance behavior. The effects of construction on nesting birds and other wildlife would depend on project-specific factors, including but not limited to seasonal timing, noise levels, and duration. Impacts to surface waters from increased impervious surface and erosion, as described in Section 3.2, can impact fish and wildlife habitat. Fish spawning and rearing areas are particularly vulnerable to turbidity, poor water quality, and flashy stormwater flows.

Development may directly impact habitats for sensitive and common species by removing vegetation, particularly in riparian, wetland, and shrubsteppe habitats. Development of currently vacant or underdeveloped parcels could lead to fragmentation of existing wildlife habitats, further reducing connectivity.

Following construction of a project, indirect effects to wildlife may continue as a result of increased light, vehicle movement, noise, stormwater runoff, and other human disturbances. Additional traffic would likely increase wildlife mortality on roadways. Loss of trees would reduce shade and increase temperatures in localized areas. If this occurs near a stream, increased water temperatures would degrade habitat for fish that require colder waters.

Under all alternatives, impacts to plants and animals would be localized and generally less severe than if these uses were allowed in agricultural or open space areas. Construction of wind and solar facilities in Light and Heavy Industrial districts and within the Unclassified District at the U.S. Department of Energy's Hanford Site may still result in vegetation removal, habitat fragmentation, and temporary wildlife disturbance. However, directing development to industrial and already-designated areas—

rather than agricultural zones—helps avoid conversion of working lands and reduces impacts to broader, more intact habitat areas.

3.3.3.1 Alternative 1: No Action Alternative

Under Alternative 1, development would continue within existing land use designations. Agriculture-related industrial development would occur in a more dispersed manner on GMA Agriculture-designated lands, as it has historically, and could impact habitat for species that use croplands and pastures as in Figure 6 of the *Industrial Lands Inventory* (*see* Volume II, Appendix I). Other industrial development could occur on existing industrial-designated lands, often mostly disturbed properties but with surrounding aquatic and riparian habitat areas such as in Finley or Plymouth areas. Shrubsteppe habitat and ferruginous hawk habitat would potentially be impacted under this alternative for existing lands in Badger Canyon and near Candy Mountain currently designated as Rural Remote, if this land were to develop consistent with the existing designation.

3.3.3.2 Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry

Under the 20-year population growth projection for the County, Alternative 2 would provide the greatest increase of potential buildable area for future development, potentially resulting in the greatest habitat impacts.

Redesignation of GMA Agriculture land to Rural Industrial (1,372 acres), Rural Commercial (85 acres), and Rural Remote (240 acres) would allow more intensive development of these properties. While some of the existing GMA Agriculture lands that would be redesignated under Alternative 2 are already disturbed and provided limited habitat values, they provide resources for some species that could be lost or further impacted by site development. However, providing for more clustered industrial development under this alternative could potentially limit the spread of additional industrial development and retain these habitat values on GMA Agriculture lands that are not redesignated.

GMA Agriculture lands proposed for industrial designation under Alternative 2 generally include a mix of native and non-native grasses, limited sagebrush, and invasive weeds such as Russian thistle and tumbleweeds. Shrubsteppe habitat quality is higher on lands between Plymouth and Patterson, along SR 14, while the land closer to the I-82 and Plymouth has lower quality habitat. Much of this land has been intensively cultivated in recent years and is also used for equipment storage. Agri-industrial development, which is allowed on GMA Agriculture lands, has also occurred on these lands, further limiting existing habitat values. However, this area supports foraging for ferruginous hawk (a PHS species) and other raptors, which would likely be reduced as development occurs. The Rural Commercial area that would be redesignated next to I-82 is recovering shrubsteppe with limited raptor forage that has been intensively grazed for the past several decades.

North of Prosser there are two GMA Agriculture areas with parcels totaling approximately 215 acres that would be designated Rural Remote under both Alternatives 2 and 3. The parcel farthest to the west does not have any designated PHS habitat, while the other area supports ferruginous hawk and

other raptor foraging. Another 45-acre parcel adjacent to the northern boundary of the City of Prosser would change from Rural Industrial to Rural Remote and has PHS shrubsteppe habitat; evidence of drainage and Russian olive trees could indicate that wetlands may be present. All three areas are highly disturbed with current and past development and land cultivation.

A single 25-acre parcel in Finley would also change from GMA Agriculture to Rural Remote under both Action Alternatives. This parcel, which has been partially cultivated, has ferruginous hawk and other raptor foraging habitat and adjacent shrubsteppe habitat.

The change in development patterns under Alternatives 2 and 3 from undeveloped and irrigated to developed lands would alter the landscape, potentially reducing habitat provided by open tracts of land. Although intensive agriculture practices impact habitats, such areas can provide pockets of semi-natural habitat among the more intensively cultivated ground.

Alternatives 2 and 3 would redesignate 457 acres in Badger Canyon and Candy Mountain from Rural Remote to Public (Open Space). This would permanently preserve existing higher quality shrubsteppe habitat while providing public access for low-impact recreation activities such as hiking and mountain-biking.

Overall, Alternative 2 presents the highest potential impacts to fish and wildlife habitats due to the scale and geographic extent of industrial and residential designations. However, regulatory and environmental review processes would reduce the potential for these impacts. Project-level review under the *Benton County Draft CAO* (Benton County, 2026) and SEPA, including application of mitigation sequencing, is expected to avoid, minimize, or mitigate site-specific impacts where development occurs. This process requires applicants to meet stream and wetland buffer requirements, apply mitigation sequencing, implement erosion and stormwater controls, and demonstrate no net loss of critical area functions and values. These site-level requirements would direct development toward previously disturbed areas and reduce long-term impacts to fish and wildlife.

3.3.3.3 Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry, Preferred Alternative

Under the 20-year population growth projection for the County, Alternative 3 would provide more potential buildable area for future development than Alternative 1 and less than Alternative 2.

Alternative 3 land use changes and associated impacts would be similar to Alternative 2, except that potential industrial development would occur on 627 acres less than Alternative 3, with less GMA Agriculture land converted and associated shrubsteppe and raptor foraging habitat impacts also reduced.

Alternative 3 would also increase open space compared to Alternatives 1 and 2 by redesignating 367 acres along the Columbia River from Rural Industrial to Public to protect shoreline riparian functions. As a result, total additional open space would be 1,109 acres in Alternative 3.

Alternative 3 includes the establishment of a shrubsteppe mitigation program, which would provide a coordinated framework for conserving and restoring shrubsteppe habitat in the County. The mitigation program could offset habitat loss associated with future development by directing mitigation resources to high-priority conservation areas, restoring degraded habitat, and supporting long-term management of protected lands.

Overall, Alternative 3 would result in a lower level of potential impacts to fish and wildlife than Alternative 2 due to its reduced industrial conversion area and conversion of some industrial lands to public open space. Existing regulatory requirements under the *Benton County Draft CAO* (Benton County, 2026) and SEPA would further reduce site-specific risks.

3.3.4 Mitigation Measures

3.3.4.1 Regulatory Standards and Planning Policies

Application of regulatory standards and County planning policies to future development projects will help to reduce the impacts to fish and wildlife discussed previously.

Compliance with Benton County's Zoning and Development Regulations (BCC Title 11), including the conditional use permitting provisions in BCC 11.50.040 and BCC 11.50.050, together with the *Benton County Draft CAO* (Benton County, 2026) (BCC Title 15, including 15.02 General Provisions, 15.04 Wetlands and 15.14 Fish and Wildlife Conservation Areas), Subdivision and Building Codes, and SEPA environmental review requirements would help to avoid and minimize potential impacts associated with land use changes and future development. Development that is consistent with these requirements would avoid, minimize, or mitigate potential species and habitat impacts under all three alternatives.

The *Benton County Draft CAO* (Benton County, 2026) includes requirements to maintain no net loss of ecological functions and values and to provide wider RMZs designed to strengthen water quality protections. Mitigation sequencing is required, whereby applicants must demonstrate that impacts have been avoided and minimized. Unavoidable impacts to habitats, including RMZs and buffers, as authorized under the code, are to be minimized and mitigated to prevent a net loss of ecological functions. For direct impacts on habitats, compensatory mitigation is required to ensure equivalent or greater habitat functions.

The *Benton County Draft Comprehensive Plan* (Benton County, 2026) includes Natural Resources and Critical Areas policies to prevent encroachment into riparian areas, habitat, and aquifer recharge zones. The following goals and related policies should be considered for future development:

- WR Policy 3: Support water resource policy decisions based on defensible science to meet the needs of people and fish and wildlife. Evaluate strategies for challenging policies that may not be scientifically defensible.
- Water Resources Goal 4: Protect and enhance surface water resources to support rivers, streams, and wetlands that support fish and wildlife species and associated habitats.
- Critical Areas Goal 3: Protect the County's natural areas, shorelines, and critical areas as unique assets to the community.
- CA Policy 1: Use the CAO, SMP, SEPA, and other ordinances, as applicable, to designate and protect critical areas and the natural environment.
- CA Policy 2: Identify and protect river, stream, wetlands, and fish and wildlife habitat conservation area functions and values.
- CA Policy 6: Identify and designate habitats of local importance to protect locally important habitats.

Under Alternative 3, the County has also worked with the Benton Conservation District to develop a shrubsteppe mitigation program to allow compensatory mitigation for shrubsteppe impacts through a structured crediting system. Shrubsteppe habitat impacts from development occurring within the cities or the County would be determined and then credits purchased through the mitigation program to offset these impacts.

3.3.4.2 Other Mitigation Measures

For Alternatives 2 and 3, the mitigation measures described in Sections 3.1.4 and 3.2.4 for reducing impacts to earth and water resources should also be employed to reduce potential impacts to fish and wildlife.

The County's Open Space Taxation Program and Public Benefit Rating System can also be used as tools to preserve habitat areas and protect them from future development impacts.

3.4 Land Use

3.4.1 Affected Environment

The County encompasses a diverse and evolving land use pattern shaped by urban growth in the Tri-Cities metropolitan area and communities in the western part of the County, longstanding agricultural operations, regional industrial infrastructure, and a growing emphasis on open space conservation. The County's land base includes incorporated cities such as Kennewick, Richland, West Richland, Prosser, and Benton City, as well as extensive unincorporated rural lands designated for agriculture, resource protection, and limited development.

The County is projected to experience continued population growth over the next 20 years. According to OFM, the County's population will increase by approximately 60,606 residents by 2046, with approximately 10,800 of those projected to live in the unincorporated County. This growth will increase demand for housing, employment, infrastructure, and public services and will influence patterns of land use and development. The *Benton County Draft Comprehensive Plan* (Benton County, 2026) establishes land use designations and policies that guide where and how this growth is accommodated while supporting resource lands and protecting critical areas.

3.4.1.1 Existing Land Use Patterns

According to the County's current land use inventory, the predominant land use designation countywide is Agriculture, which accounts for approximately 59% of total acreage (Benton County, 2026). These lands support irrigated and dryland farming operations in the Yakima Valley, Horse Heaven Hills, and along the Columbia River. Agricultural lands of long-term commercial significance are protected under GMA requirements and designated as GMA Agriculture, based on parcel size and irrigation access.

Urban areas are concentrated within the cities of Benton City, Kennewick, Prosser, Richland, and West Richland, and around the UGAs of these cities. Residential development is the largest land use within the city UGAs, accounting for a significant portion of urban expansion. Kennewick's UGA, for example, includes a mix of low-, medium-, and high-density residential designations, as well as commercial corridors and regional employment centers near I-82 and SR 397. Land use within and surrounding the Richland and West Richland UGAs also includes large tracts of open space and public lands associated with the Yakima River and Rattlesnake Mountain.

Designated industrial lands in the County are located primarily near regional transportation corridors such as the BNSF rail line, SR 397, and I-82, as well as near the Port of Benton, Kennewick Industrial Area, and Horn Rapids Industrial Park. These lands support manufacturing, processing, logistics, and energy-related uses, including solar energy facilities and biofuel production. Agriculture-related industrial uses also occur in the GMA Agriculture zone to support large-scale farming operations. These activities are found dispersed across the agricultural landscape and at concentrated hubs to support processing, storage, and transportation of agricultural products.

Commercial lands are focused in urban centers and key transportation interchanges. Commercial development includes retail centers, service hubs, and mixed-use corridors, particularly in central Kennewick, South Richland, and along Bombing Range Road in West Richland.

Public/quasi-public lands, including schools, fire stations, utility facilities, and government offices, are interspersed throughout the urban and rural fabric. These uses typically follow population trends and infrastructure investment.

Open space and natural lands occur both as standalone land use designations and embedded within residential and agricultural zones. Open space corridors include riparian buffers, uplands along slopes,

designated critical areas, and parklands. These areas are guided by both land use designations and *Benton County Comprehensive Parks Plan* (2025) and Benton County's SMP among others. The *Benton County Final Draft Memorandum Re: Open Spaces Corridor Memorandum* details open space strategies, with datasets such as WSRRI and PHS informing long-term protection priorities. (*See* Volume II, Appendix M.)

3.4.1.2 Land Use Designation Summary

The *Benton County Draft Comprehensive Plan* (Benton County, 2026) includes the following general land use categories:

- **Agricultural**–lands protected for long-term farming and ranching, with limits on non-agricultural development.
- **Urban**–lands within the city limits and the UGAs. Urban lands include varying intensities of residential development, typically based on urban services, sewer availability, and proximity to cities.
- **Rural**–lands outside of UGAs, excluding agricultural, public, open space, and other specifically designated lands in the Plan. Land uses in rural areas include a variety of densities for rural residential and commercial use consistent with the rural character.
- **Industrial**–lands used for manufacturing, logistics, energy production, and transportation-oriented land uses. The principal current use for industrial lands is for agriculturally related industries such as chemical processing and shipping, cold storage, and fruit and vegetable processing and shipping.
- **Public**–lands intended for public uses such as parks, playgrounds, greenways, open spaces, and wildlife habitats owned and operated by a local, state, or federal government. Public lands include civic, utility, school, and other publicly owned or operated uses.
- **Open Space**–critical areas, parks, wildlife corridors, and riparian buffers prioritized for conservation and passive recreation.

Table 3-1 provides the acreages for each of these land use types under existing conditions.

Table 3-1. Existing Land Use Designations

Land Use Type	Acreage
Cities and Urban Growth Areas	72,059
Hanford Site	265,517
Hanford Reach	12,268
Unincorporated Area	
GMA Agriculture	649,062
Open Space Conservation	2,169
Public	15,574
Rural Transition	3,601
Rural Remote	66,770
Rural Resource	7,136
Rural Community Center	450
Rural Commercial	468
Rural Industrial	2,786
Total Unincorporated Area	748,016
Total County Area	1,097,860

3.4.2 Planning and Regulatory Context

The GMA directs counties to plan for land use in a coordinated, comprehensive manner. The GMA requires the County to designate UGAs, protect critical areas and natural resource lands, reduce sprawl, encourage efficient land use patterns, and provide for predictable, coordinated growth. GMA establishes the following land use goals:

- Concentrate urban growth within UGAs.
- Maintain and enhance natural resource industries such as agriculture.
- Protect the environment and high-quality rural landscapes.
- Ensure adequate public facilities and services.
- Encourage sustainable economic development.

Building off the GMA land use goals, the *Benton County Draft Comprehensive Plan* (Benton County, 2026a) contains several chapters that directly guide land use policy and frame the alternatives evaluated in this EIS.

The Land Use Element of the County's Comprehensive Plan establishes goals and policies that guide countywide population and employment growth and direct land use patterns, densities, and development standards across urban, rural, agricultural, and resource lands. The Rural Element further defines desired land use patterns outside UGAs, including rural densities, resource land protection,

and land use compatibility standards. The Natural Resources and Critical Areas chapters of the Plan identify environmental constraints—such as riparian corridors, shrubsteppe habitat, floodplains, and aquifer recharge areas—that shape where future land use intensification may occur.

The Plan is coordinated with applicable CWPPs adopted by the County and its cities. These policies emphasize directing higher-intensity development to areas with adequate infrastructure and public services, maintaining rural development patterns consistent with service capacity and environmental constraints, and phasing growth in a manner that minimizes impacts to natural resources. Together, the Plan and CWPPs provide the planning framework for balancing growth with protection of agricultural lands, critical areas, and public infrastructure capacity throughout Benton County while accommodating for planned growth.

The Benton County code provisions collectively ensure that land use patterns remain consistent with the Comprehensive Plan and state GMA requirements.

Relevant Benton County Code sections include:

- Zoning (BCC Title 11)
- Critical Areas Ordinance (BCC Title 15)
- Public Nuisance Noise (BCC 6A.15)
- Subdivision Regulations (BCC Title 11)
- Shoreline Master Program (BCC 15.04)
- Building and Fire Standards (BCC Title 3 and adopted fire codes)

Other relevant County and regional plans and standards include:

- Countywide Planning Policies
- Transportation and Infrastructure Plans: Include roadway functional classifications, capital facility plans, and utility coordination documents that establish the service capacity and infrastructure context for future land use patterns.
- State and Federal Technical Guidance**:** Documents such as Ecology's *Stormwater Management Manual* and WDFW's *Priority Habitats and Species (PHS)* program inform development standards and identify environmental constraints that influence project siting and design.
- Red Mountain American Viticultural Area (AVA) Master Site Plan: A master planned "viticultural park" that reinforces the existing and future qualities of the Red Mountain AVA through a cohesive overall vision supported by design guidelines and zoning.

3.4.3 Probable Environmental Impacts

Implementation of any of the alternatives would allow for future development and redevelopment that could result in a range of land use impacts depending on location, intensity, and type of use. Potential impacts generally include conversion of undeveloped or underutilized lands to more intensive uses; increased industrial, commercial, or residential activity in designated growth areas; and changes to the

visual and functional character of developed and transitioning areas. Construction and operational activities associated with new development may generate noise, light and glare, traffic delays, and localized changes in views or aesthetic character. These activities would remain subject to applicable local, state, and federal regulations, including Chapter 6A.15 BCC (Public Nuisance Noise).

Across all alternatives, the land use framework is intended to support long-term compatibility by directing more intensive uses toward areas with existing infrastructure and transportation access while maintaining protections for agricultural, rural, and resource lands. The designations are intended to support more predictable development patterns consistent with the GMA, reduce dispersion of incompatible uses, and provide greater certainty for landowners, resource industries, and future development.

Under all alternatives, the County's land use designations would be able to accommodate the expected population growth. Over the next 20 years, the unincorporated County is projected to add about 10,800 people, creating demand for roughly 5,000 new housing units. Under existing zoning, much of this growth will occur in Rural Remote designated lands, with 5-acre minimum lots (RL-5). This could translate to approximately 25,000 acres of new residential development, plus additional land for infrastructure. While some growth will be accommodated in designated Rural Community Centers (e.g., Paterson, Whitstran, Plymouth, and Finley) at varied densities per acre based on alternative, and in Rural Transition areas at about 1 dwelling unit per acre due to their proximity to urban services, the majority of new housing is expected to occur in Rural Remote and Rural Resource areas. In these areas, zoning typically limits development to 1 dwelling unit per 5 acres (RL-5) or 1 dwelling unit per 20 acres (RL-20), resulting in larger lot sizes and a more dispersed development pattern across the landscape. All alternatives include a range of land use designations to accommodate this growth, but it will still result in an expanded rural development footprint.

Under all alternatives, major renewable energy projects would be directed to Light and Heavy Industrial districts and the Unclassified District at the U.S. Department of Energy's Hanford Site, where large-scale infrastructure is more consistent with existing uses. While these projects may introduce visual change and increase industrial activity at specific sites, they would not displace agricultural production or conflict with established agricultural uses. Prohibiting these facilities in the Growth Management Act Agricultural District and Red Mountain Agricultural District helps preserve working lands and maintain long-term agricultural viability. Overall, this approach reduces land use conflicts by concentrating development in areas already planned for industrial use.

3.4.3.1 Alternative 1: No Action Alternative

Under Alternative 1, the County would retain existing land use designations. Because no new development capacity would be added through designation changes, existing development patterns would continue.

3.4.3.2 Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry

More industrial lands adjacent to existing agricultural uses would increase the potential for dust, noise, access, and land management conflicts. Industrial expansion near Plymouth and SR 14 would increase potential conflicts with irrigation infrastructure, Columbia River shoreline resources, and transportation corridors.

In Alternative 2, redesignating 1,372 acres of GMA Agricultural to Rural Industrial (1,211 acres near Plymouth Industrial Park; 161 acres along SR 14 near Paterson) would consolidate industrial development in areas already influenced by existing industrial uses, transportation corridors, and available infrastructure, reducing pressure to site industrial uses in dispersed agricultural or rural areas and improving long-term land use compatibility. Concentrating industrial uses in planned locations supports overall agricultural viability by preserving larger, contiguous blocks of farmland and reducing land use conflicts, consistent with the Plan's agricultural and rural land use goals and the GMA requirement to protect agricultural resource lands.

However, designating more industrial lands adjacent to existing agricultural and rural residential uses would increase the potential for dust, noise, access, and land management conflicts, which may require site-specific mitigation measures such as increased setbacks, fencing, noise, and dust abatement measures as appropriate. Industrial expansion may also place additional pressures on irrigation infrastructure, Columbia River shoreline resources, and transportation corridors requiring site-specific mitigation measures.

Alternative 2 also increases housing density in the Plymouth and Finley Rural Community Centers, up to 8 units/acre. Land capacity analysis indicates that vacant and underdeveloped parcels in Plymouth and Finley could support up to 364 additional housing units in Finley and 185 additional units in Plymouth.

Alternatives 2 and 3 would convert 240 acres of GMA Agricultural to Rural Remote (215 acres in Prosser; 25 acres in Finley). Redesignation to Rural Remote reflects existing development patterns and supports lower-intensity rural residential use where long-term agricultural viability is constrained by lack of suitable soils and surrounding residential growth. Potential impacts may include incremental increases in rural housing, reliance on individual wells and on-site septic systems, and localized changes to rural character. However, the proposed changes are consistent with surrounding patterns and would occur on lands with limited suitability soils, making them unlikely to conflict with adjacent agricultural activities.

Alternatives 2 and 3 would also convert 45 acres of Rural Industrial to Rural Remote near Prosser. This change reduces industrial development potential in an area more appropriate for low-intensity rural residential use, improving compatibility with surrounding land uses and limiting infrastructure demands. Potential impacts associated with rural residential development may include minor increases

in traffic, domestic water use, and dispersed development patterns; however, these effects are expected to be limited by low allowable densities and existing rural development standards.

Alternatives 2 and 3 would redesignate 85 acres of GMA Agricultural to Rural Commercial near Plymouth. This change aligns the designation with the majority use of an existing split-zoned parcel and takes advantage of the site's location near a highway interchange, supporting limited rural commercial uses that are compatible with nearby industrial activity and travel patterns. Limited rural commercial development in this location may introduce increased traffic, lighting, and changes to visual character; however, these impacts will be localized within an area already impacted by a highway interchange.

Alternatives 2 and 3 would also convert 457 acres of Rural Remote to Public (37 acres adjacent to Candy Mountain; 421 acres in Badger Canyon). Redesignation to Public protects open space, recreation, and habitat areas by removing residential development potential in locations with valuable shrubsteppe habitat, steep slopes, and high recreational or conservation value. Increased public use could result in localized land use impacts such as trail use, traffic, and parking demand. These effects are typically managed through site-specific planning, resource management strategies, and applicable environmental regulations.

Overall, Alternative 2 presents the greatest potential for land use impacts because of its broader geographic extent. Impacts would be reduced through project-specific environmental reviews and compliance with County zoning, critical areas, and other applicable codes.

3.4.3.3 Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry, Preferred Alternative

Beside the differences listed below, the land use changes and potential impacts proposed in Alternative 3 are the same as Alternative 2.

Alternative 3 proposes to limit the conversion of GMA Agriculture to Rural Industrial, only converting 744 acres near Plymouth. Relative to Alternative 2, this change includes 467 fewer acres of GMA Agricultural redesignated to Rural Industrial in Plymouth, and no designation change from GMA Agricultural to Industrial in Patterson.

Alternative 3 also redesignates 367 acres of Rural Industrial to Public along the Columbia River near Plymouth. This change affects land in public ownership that is unlikely to support industrial development due to shoreline constraints, environmental sensitivity, and limited infrastructure suitability. Redesignation to Public would reduce shoreline-adjacent industrial development potential, protect shoreline functions and shrubsteppe habitat, and preserve areas with potential cultural resource value.

Project-specific review and permitting would serve to reduce potential development impacts as discussed for Alternative 2.

3.4.4 Mitigation Measures

3.4.4.1 Regulatory Standards and Planning Policies

Mitigation for land use impacts focuses on ensuring compatibility between land uses, protecting rural and agricultural character, avoiding conflicts with natural resource lands, and guiding development to locations where infrastructure and environmental conditions support long-term growth. Application of regulatory standards and County planning policies to future development projects will help to reduce the potential land use impacts discussed previously.

Enforcement of Benton County's Zoning and Development Regulations (BCC Title 11), including the conditional use permitting provisions in BCC 11.50.040 and BCC 11.50.050, together with the *Benton County Draft CAO* (Benton County, 2026) (BCC Title 15), Subdivision and Building Codes, and SEPA environmental review requirements would help to avoid and minimize potential impacts associated with land use changes and future development. These provisions establish parameters for allowable uses, development intensity, site design, and land use compatibility through zoning standards, conditional use review, and permitting processes. Development that is consistent with these requirements would avoid, minimize, or mitigate potential land use conflicts and adverse compatibility effects under all three alternatives.

Consistent application of these conditional use standards, together with SEPA review and applicable critical area and development regulations, provides a mechanism to impose site-specific conditions related to access, buffering, screening, operational characteristics, and mitigation of visual, noise, traffic, and infrastructure impacts. Through this process, potential land use impacts associated with future development under the alternatives would be evaluated and mitigated at the project level, reducing the likelihood of incompatible land uses and adverse effects on agricultural operations, rural character, and community aesthetics.

Additionally, the goals and policies in the *Benton County Draft Comprehensive Plan* (Benton County, 2026) direct where and how growth should occur, protect sensitive natural resources, and ensure that development is supported by adequate public facilities and transportation systems. These include Land Use and Rural Element policies that focus growth into cities and UGAs, preserve agricultural and rural character, and avoid land-use conflicts; Natural Resources and Critical Areas policies that prevent encroachment into riparian areas, habitat, and aquifer recharge zones; and Capital Facilities and Transportation policies that link land use intensity to available infrastructure capacity. The following goals and related policies should be considered for future development:

- LU Goal 1: Ensure compatible land uses that maintain public health, safety, and general welfare.
    - LU Policy 3: Maximize the opportunities for compatible development within land use designations to serve a multitude of compatible uses and activities.
    - LU Policy 4: Establish regulations for site planning and design to avoid or reduce potential impacts associated with "land use incompatibility" of proposed non-farm developments on parcels adjacent to lands designated GMA Agriculture, Rural

Resource, or adjacent to lands being farmed commercially within other rural designations.

- LU Goal 3, Policy 1: Concentrate growth where urban services are already available.
- LU Goal 5, Policy 1: Establish compatible land uses adjacent to areas designated as GMA Agriculture to minimize conflicts associated with farm activities such as spray, dust, noise, odors, and liability.

3.4.4.2 Other Mitigation Measures

For all alternatives, the following mitigation measures could also be implemented to reduce impacts to land uses in and adjacent to the planning areas:

- The County's Open Space Taxation Program and Public Benefit Rating System can also be used as tools to protect key ecological corridors, groundwater recharge areas, and scenic landscapes.
- Continue to support implementation of the VSP to protect ecological functions on agricultural lands.
- Encourage public access planning to support recreation opportunities where appropriate.

3.5 Environmental Health

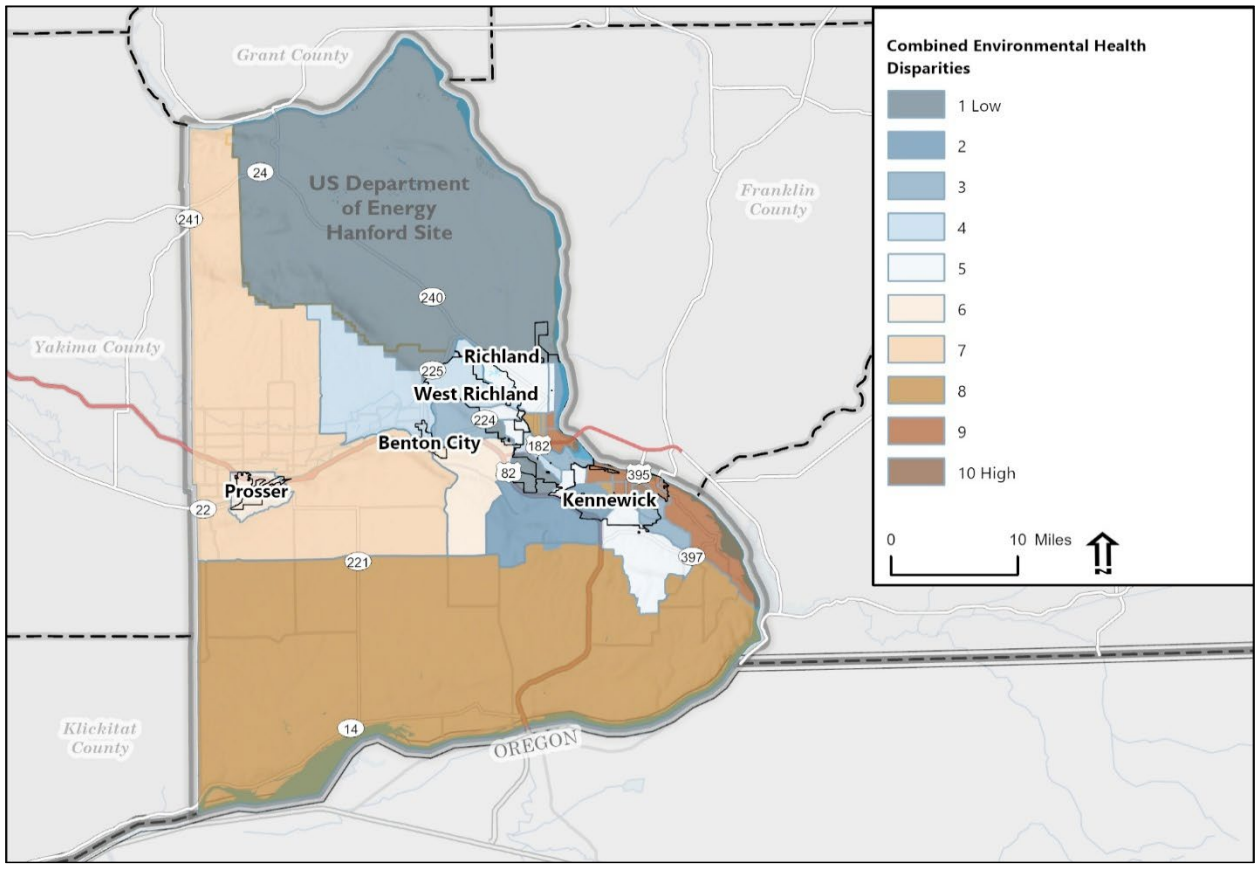
3.5.1 Affected Environment

Environmental health in the County encompasses conditions that influence human wellbeing, including air quality, exposure to hazardous materials, noise and odor, proximity to industrial facilities, water quality, soil contamination, and environmental justice–related disparities.

The Washington Environmental Health Disparities (EHD) Map ranks all census tracts in Washington from 1 (lowest impact) to 10 (highest impact) based on a combination of 19 environmental and socioeconomic indicators. These indicators of environmental health include exposure to diesel emissions, proximity to hazardous waste facilities, housing affordability, race, and other socioeconomic factors (DOH, n.d.).

According to the Washington EHD Map (Figure 3-6), the County includes 10 census tracts that score in the 9 to 10 range, which places those tracts among the state's most environmentally impacted communities (DOH n.d.). These census tracts are primarily located in the incorporated cities of Richland and Kennewick and in the unincorporated area of Finley. The southern portion of the County, including Patterson and Plymouth, received a score of 8 due to its proximity to agricultural and industrial uses and its vulnerable population, including people without a high school diploma and people of color.

Figure 3-6. Environmental Health Disparities



Source: Washington Department of Health, Accessed 2025

Environmental effects that rank the highest in the environmentally impacted census tracts in the County include lead risk from housing, wastewater discharge, and proximity to "risk management plan" facilities (DOH, n.d.). Facilities that use highly toxic substances or substances with flammable or explosive potential are required to prepare and submit a Risk Management Plan (RMP) to the U.S. Environmental Protection Agency (EPA) pursuant to Clean Air Act Section 112(r) (40 CFR Part 68). In the event of an accident, communities in close proximity to RMP facilities may be exposed to increased levels of toxic releases (Elliott, Wang, Lowe, & Kleindorfer, 2004). Studies have shown facilities with an RMP site are more likely to be near communities of color (Elliott, Wang, Lowe, & Kleindorfer, 2004).

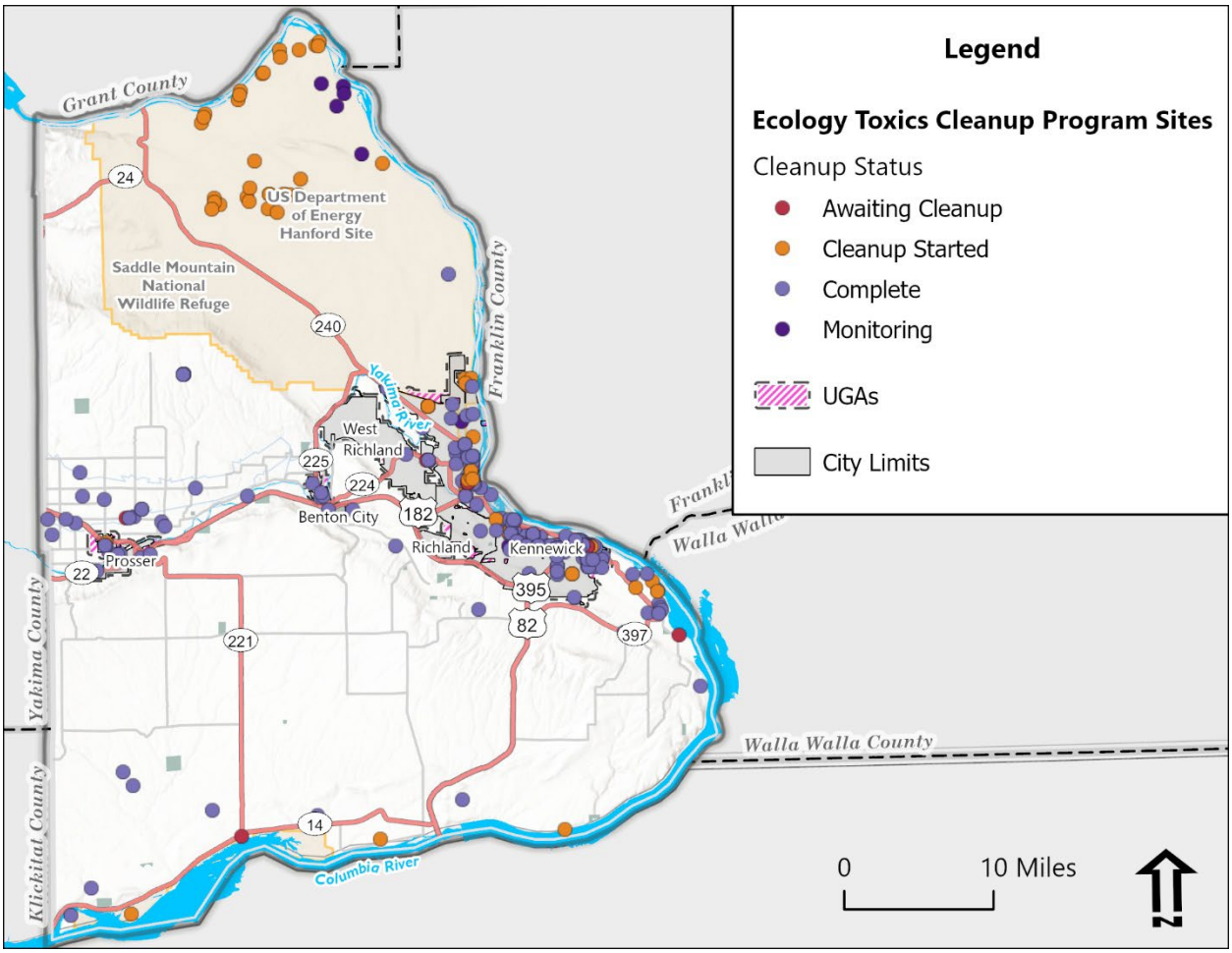
The Finley area, located southeast of Kennewick along the Columbia River, experiences environmental health disparities and potential land use–related exposures. According to the EHD Map, census tracts encompassing Finley rank 9, or in the 90th percentile or higher statewide, for cumulative environmental and demographic vulnerability. These tracts experience elevated exposure to ozone, diesel particulate matter, and toxic releases, likely influenced by proximity to industrial facilities, agricultural operations, and regional transportation corridors. Residents in the area may face health risks from airborne

pesticides, agricultural dust, and nitrate leaching into groundwater, compounded by limited access to healthcare and transportation services.

Agricultural land use and associated industrial development, such as agricultural processing and packing, are extensive throughout the County. Especially in the southern part of the County, these activities contribute to both direct and indirect environmental health exposures. Communities near active farmland may be exposed to dust, pesticide drift, and diesel exhaust from equipment use, particularly during planting and harvest seasons. Farmworkers and rural residents—many of whom are from historically marginalized populations—face heightened risk due to prolonged outdoor exposure and limited access to healthcare or protective infrastructure (CDC, 2021). In parts of the Columbia Basin, nitrate contamination from fertilizer and manure application has impacted groundwater quality, though detailed monitoring for the County is limited (Ecology, 2019). These conditions highlight the importance of addressing agricultural-related exposures as part of broader efforts to reduce environmental health disparities in the region.

The County includes several properties that are regulated under the Washington State Model Toxics Control Act (MTCA). These sites are tracked in Ecology's cleanup site inventory and are subject to cleanup standards based on current and potential future land use, helping ensure long-term protection of human health and the environment in areas undergoing redevelopment or continued industrial and commercial use. Figure 3-7 shows the extent of MTCA-regulated contaminated sites in the County.

Figure 3-7. Ecology Toxics Program Cleanup Sites



Source: Washington Department of Ecology

Additionally, the Hanford Nuclear Reservation, located in northern part of the County, is one of the nation's most complex hazardous waste cleanup sites. Hazardous materials regulation falls under the jurisdiction of the EPA and Ecology for the Hanford Site Cleanup Program. Legacy contamination includes radionuclides and chemical waste resulting from Cold War-era plutonium production (Sun, 2024). The site is managed under federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) authority (also known as Superfund) and much of the site is not open to public access. Ongoing monitoring and cleanup activities are designed to reduce risk to surrounding areas from exposure to unsafe levels of radiation or chemical discharge.

3.5.2 Planning and Regulatory Context

The planning and regulatory context for environmental health is shaped by federal and state environmental laws, Washington Department of Health (DOH) public health frameworks, local planning policies, and County development regulations.

The GMA provides the overarching framework for environmental health protections through goals and mandatory comprehensive plan elements, including protecting the environment and enhancing quality of life through land use decisions that minimize pollution and public health risks and ensure adequate public services to protect community health, including drinking water, wastewater, and solid waste systems. The GMA's mandatory plan elements (land use, housing, transportation, capital facilities, utilities, and environment) collectively support environmental health through pollution prevention, safe infrastructure, compatible land uses, and resource protection.

The *Benton County Draft Comprehensive Plan* (Benton County, 2026) does not include a specific chapter for environmental health but recognizes the need to:

- Address environmental risks disproportionately affecting vulnerable populations
- Integrate health and equity considerations into planning
- Use tools such as the Washington EHD Map to identify areas of elevated exposure and cumulative risk

Federal and state regulatory frameworks include:

- DOH regulates community health protection, including:
    - Water system standards (in coordination with Ecology and DOH's Office of Drinking Water)
    - Nitrate exceedance monitoring and groundwater safety
    - Public health surveillance and environmental determinants of health
- Ecology administers most environmental health–related protections in the state:
    - Air quality regulation, including ozone, particulate matter (PM2.5, PM10), and industrial emissions
    - Hazardous waste management (toxics reduction, dangerous waste)
    - Water quality protection, including NPDES permits
    - Soil and groundwater cleanup under MTCA
    - Spill prevention and emergency response
    - Enforcement of surface and groundwater antidegradation standards
- Washington State Department of Agriculture regulates pesticide use, drift prevention, and agricultural chemical storage.
- EPA regulatory responsibilities include:
    - Clean Air Act and National Ambient Air Quality Standards (NAAQS)
    - Clean Water Act, including NPDES and stormwater requirements
    - Toxics Release Inventory (TRI) reporting requirements
    - RMP facilities using hazardous substances

- Emergency planning and community right-to-know

RMP facilities, hazardous waste generators, and TRI sites in the County fall under EPA oversight. Environmental health conditions in the northern part of the County are shaped by the Hanford Federal Facility Cleanup Agreements. Although outside County regulatory control, these frameworks are critical to countywide environmental health management.

The Washington state MTCA (Chapter 70A.305 RCW) establishes requirements for investigating and cleaning up contaminated soil, groundwater, and sediment. Ecology oversees MTCA site assessment and cleanup actions and sets cleanup standards based on current and potential future land uses.

CERCLA (42 U.S.C. § 9601 et seq.), or Superfund, provides the federal framework for identifying and remediating sites with hazardous substance releases. CERCLA is typically applied to large or complex sites, including those with federal involvement or legacy contamination. Together, MTCA and CERCLA establish the primary structure for site identification, cleanup responsibility, remediation standards, and long-term environmental health protection in the County.

Benton County Code

- Public Health and Sanitation (BCC Title 6)
  - Drinking water protection
  - Septic and wastewater standards
  - Solid waste collection and disposal
  - On-site stormwater and drainage standards
  - Environmental health enforcement authority
- Zoning (BCC Title 11) controls the siting of industrial uses, hazardous material facilities, and incompatible land uses to reduce exposure risks.

Other County and Regional Plans

- Multi-Jurisdictional Hazard Mitigation Plan
- Solid Waste Management Plan
- Benton County Community Wildfire Protection Plan
- Public Water System Plans & Wellhead Protection Plans

3.5.3 Probable Environmental Impacts

Development accommodated under all alternatives may generate both construction-related and long-term operational environmental health impacts. Construction impacts include temporary increases in dust, noise, vehicle emissions, and fuel handling. Long-term impacts may include pollutant exposure associated with expanded industrial uses; increased impervious surfaces contributing to stormwater runoff and water quality degradation; disturbance of groundwater recharge areas; incremental exposure to noise, lighting, and airborne particulates; and increased risks associated with handling and

storage of fuels, chemicals, and other hazardous materials. These activities may contribute to localized air quality concerns, nuisance conditions, and increased risk of accidental releases if not properly managed.

3.5.3.1 Alternative 1: No Action Alternative

Under Alternative 1, existing land use designations and zoning would remain in effect, and properties would continue to be developed and used consistent with current County regulations. Agricultural, residential, and industrial land uses would continue to dominate the landscape, and future development would occur incrementally under existing zoning, the existing Critical Areas Ordinance, and public health requirements. Existing federal, state, and local regulatory frameworks—including public health regulations, environmental review requirements, and County development codes—would continue to provide baseline protections related to air quality, water quality, on-site wastewater systems, stormwater management, and hazardous conditions.

In areas with existing industrial zoning, vacant or underutilized parcels could be developed over time, potentially increasing exposure to noise, air emissions, traffic, and other operational impacts in nearby communities. This includes locations near Plymouth, Finley, and other rural industrial areas where residential uses, agricultural operations, and industrial activities already occur in close proximity. In agricultural areas, continued agricultural intensification or development of agricultural processing, storage, or support facilities could also contribute to localized environmental health risks, such as dust, pesticide exposure, truck traffic, or impacts to air and water quality. Some of these areas overlap with census tracts that exhibit higher concentrations of sensitive populations, including lower-income households and farmworker communities, which may experience disproportionate exposure.

3.5.3.2 Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry

Alternative 2 includes the largest extent of industrial and commercial land use changes, increasing the potential for environmental health hazards associated with more intensive development patterns. Conversion of GMA Agricultural land to Rural Industrial and Rural Commercial designations would increase the likelihood of new industrial and commercial uses near rural residential areas and agricultural operations, particularly near Plymouth and along SR 14. The proposed changes may alter existing exposure patterns for nearby communities including vulnerable populations.

Alternative 2 would increase allowed residential densities within the Finley and Plymouth Rural Community Centers, enabling development of up to eight housing units per acre. These changes would occur within census tracts identified as having higher environmental health disparities and concentrations of vulnerable populations. Higher residential densities in areas already experiencing elevated environmental health burdens may also increase exposure to localized stressors, including traffic, noise, light, and proximity to industrial or transportation-related activities.

Additional risks stem from the increased storage and handling of hazardous materials at energy facilities. Hazardous material storage associated with energy facilities may include battery energy

storage system (BESS) electrolytes and cooling fluids; fuels such as diesel, gasoline, or natural gas for backup generation; transformer insulating oils; lubricants and hydraulic fluids; and small quantities of solvents and maintenance chemicals. Risks include accidental spills or leaks to soil and groundwater, stormwater transport of contaminants to surface waters, fire or thermal runaway events (particularly for BESS facilities), and localized air quality impacts during fires or equipment failures. Potential exposure pathways include worker contact, groundwater impacts to drinking water wells, surface water contamination, and short-term air quality effects during release or combustion events.

Overall, Alternative 2 would result in greater potential environmental health impacts compared to Alternative 3 due to a larger area of industrial land conversion and new residential density increases,. Potential impacts would continue to be evaluated and mitigated through project-level permitting, conditional use review, and SEPA environmental review, providing mechanisms to address site-specific environmental health concerns as development occurs.

3.5.3.3 Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry, Preferred Alternative

Under Alternative 3, potential environmental health impacts associated with land use designation changes would be similar to but more limited than under Alternative 2 due to the substantially smaller extent of industrial conversion and a more targeted development pattern. Approximately 744 acres of GMA Agricultural land would be redesignated to Rural Industrial, reducing the overall area where new industrial activity could occur and limiting the geographic extent of potential exposure to industrial emissions, hazardous material handling, construction-related dust, and operational noise.

Unlike Alternative 2, Alternative 3 does not include changes to residential zoning or increases in housing density. As a result, potential environmental health impacts associated with increased residential exposure or intensified land use in community centers would not be expected under this alternative.

In addition, 367 acres of shoreline-adjacent Rural Industrial land would be redesignated to Public ownership, removing industrial development potential in these areas and reducing the likelihood of environmental health risks associated with industrial activity near sensitive landscapes and communities.

Overall, Alternative 3 would result in fewer and more localized environmental health impacts compared to Alternative 2 due to reduced industrial land conversion and elimination of new residential density increases. Potential impacts would continue to be evaluated and mitigated through project-level permitting, conditional use review, and SEPA environmental review, providing mechanisms to address site-specific environmental health concerns as development occurs.

3.5.4 Mitigation Measures

3.5.4.1 Regulatory Standards and Planning Policies

Application of regulatory standards and County planning policies to future development projects will help to reduce the environmental health impacts discussed previously.

Enforcement of Benton County's Zoning and Development Regulations (BCC Title 11), *Benton County Draft CAO* (Benton County, 2026) (BCC Title 15), Public Health regulations (BCC Title 6), Building and Fire Codes, and SEPA environmental review requirements would help to avoid and minimize exposure to environmental health hazards associated with land use changes and future development. Together, these regulations establish standards for land use compatibility, hazardous material handling, noise and nuisance control, sanitation, drinking water safety, on-site wastewater management, and solid waste disposal. Development that is consistent with these requirements would reduce the likelihood of adverse environmental health effects under all three alternatives.

Where industrial, commercial, or energy-related uses are proposed—particularly in and around the Finley and Plymouth areas, which include census tracts with higher concentrations of sensitive populations—zoning and conditional use permit requirements provide mechanisms to evaluate and address potential environmental health risks at the site-specific level. These processes allow the County to consider proximity to residences, schools, and community facilities; operational characteristics; access and circulation; buffering and screening; and compatibility with surrounding land uses, and to impose conditions intended to limit exposure to noise, emissions, hazardous materials, traffic, and other public health stressors. SEPA review further supports identification and mitigation of project-specific environmental health risks prior to development approval.

The *Benton County Draft Comprehensive Plan* (Benton County, 2026) includes goals and policies that support avoidance of incompatible land uses, protection of vulnerable populations, and reduction of cumulative environmental health risks as growth occurs. The following goals and related policies should be considered for future development:

- LU Goal 1: Ensure compatible land uses while maintaining public health, safety, and general welfare, with special consideration for environmental justice.
    - LU Policy 8: Consider ways to advance environmental justice in land use planning designations and development regulations, including efforts to avoid creating or worsening environmental health disparities.
- ED Goal 3, Policy 3: Locate industrial uses and activities where minimal environmental and social impact occurs. This includes appropriate buffers from critical areas and floodplains, and also includes prohibitions on siting polluting industrial activities in or near overburdened communities.

Taken together, the Comprehensive Plan policies and County regulations work in concert to guide development toward appropriate locations, apply site-specific review and conditions, and reduce

potential environmental health exposures for existing and future residents. Zoning and conditional use permit requirements provide mechanisms to evaluate and address potential environmental health risks at the site-specific level.

3.5.4.2 Other Mitigation Measures

For Alternatives 2 and 3, the mitigation measures described in Sections 3.1.4, 3.2.4, 3.4.4, and 3.6.4 for reducing impacts to earth and water resources, land use, and air quality should also be employed to reduce potential environmental health impacts. In addition, the County can continue to promote its household hazardous waste management program to ensure these materials are either recycled or safely disposed of at licensed facilities.

3.6 Air Quality/Greenhouse Gas

3.6.1 Affected Environment

3.6.1.1 Air Quality

Ambient air quality in the County is monitored through a network of stations operated by the Washington State Department of Ecology and the Benton Clean Air Agency. Key monitoring locations include the Kennewick–Metaline Avenue monitoring site ($PM_{2.5}$ and PM_{10})[1], the Kennewick–South Clodfelter Road monitoring site ($PM_{2.5}$ and ozone), and the Benton City monitoring site ($PM_{2.5}$). These stations provide real-time and historical data used to evaluate compliance with the National Ambient Air Quality Standards (NAAQS) and to characterize long-term pollutant trends in the region (Schulte, 2025).

Available monitoring data indicates that the County generally meets NAAQS for criteria pollutants under typical conditions. However, the area experiences episodic increases in pollutant concentrations associated with wildfire smoke, windblown dust, and seasonal ozone formation. During regional wildfire events, fine particulate matter ($PM_{2.5}$) concentrations can increase rapidly, resulting in temporary air quality degradation and associated public health risks (DOH, 2021) (EPA, 2023).

Ozone monitoring is typically conducted from May through October. While seasonal and annual averages typically remain within regulatory standards, short-term ozone elevations may occur during periods of high temperatures and strong solar radiation, which contribute to ground-level ozone formation from precursor pollutants such as nitrogen oxides and volatile organic compounds (EPA, 2023; Ecology, 2025).

The Washington State Department of Ecology's Ambient Air Monitoring Network Assessments indicate that the monitoring network serving the County is sufficient to support regulatory compliance determinations and regional air quality trend analysis (Ecology, 2025). Overall, monitoring data and

[1] $PM_{2.5}$ and PM_{10} refer to particulate matter consisting of different particle sizes (2.5 and 10 micrometers, respectively).

regulatory compliance history indicate that the County's baseline air quality generally meets federal and state standards, although conditions are sensitive to episodic wildfire smoke events, seasonal dust generation, and meteorological conditions that influence pollutant formation and transport (Ecology, 2025; EPA, 2024).

3.6.1.2 Greenhouse Gas

Local emissions from transportation, industry, and agriculture combine with regional influences—especially wildfire smoke—to shape baseline greenhouse gas (GHG) conditions. The Tri-Cities GHG Emissions Analysis provides a complete communitywide inventory for the County, including both incorporated and unincorporated areas. In 2022, the County produced 1,996,781 $MTCO_2e$, or approximately 9.41 $MTCO_2e$ per capita (Benton County, 2026).[2]

This forms the baseline for GHG analysis in the County. The County's largest sources of GHG emissions in 2022 were:

- Transportation – 56% of total emissions
- Buildings – 39% of total emissions
- Solid Waste – 5% of total emissions

Transportation and other mobile sources generated approximately 1,113,850 $MTCO_2e$, of all emissions in the County, which include passenger vehicles (35%) and freight and service vehicles (15%). (Benton County, 2026). This distribution reflects regional commuting patterns, limited transit mode share, and reliance on personal vehicles in rural areas. The County also generated 792,037 $MTCO_2e$ from buildings in 2022, representing approximately 39% of communitywide emissions (Benton County 2026). The largest contributor within the buildings sector was industrial natural gas, accounting for 13% of total countywide emissions (Benton County, 2026).

Decreasing vehicle miles traveled (VMT) per capita (population) contributes to reducing emissions. VMT is a transportation metric that calculates the total travel distance of all vehicles in a specific geographic area over a given period. The VMT metric can be used to understand changes over time. The GHG Emissions Inventory uses regional on-road VMT, which includes all vehicle travel on roads within the region. This accounts for local trips as well as through trips that do not have an origin or destination in the community. The total VMT will increase as the region's population grows unless VMT reduction strategies are undertaken. However, in the Tri-Cities Region the annual per capita VMT (1,000) in the unincorporated County is not projected to increase from the 2022 baseline through 2045 (Benton County, 2026).

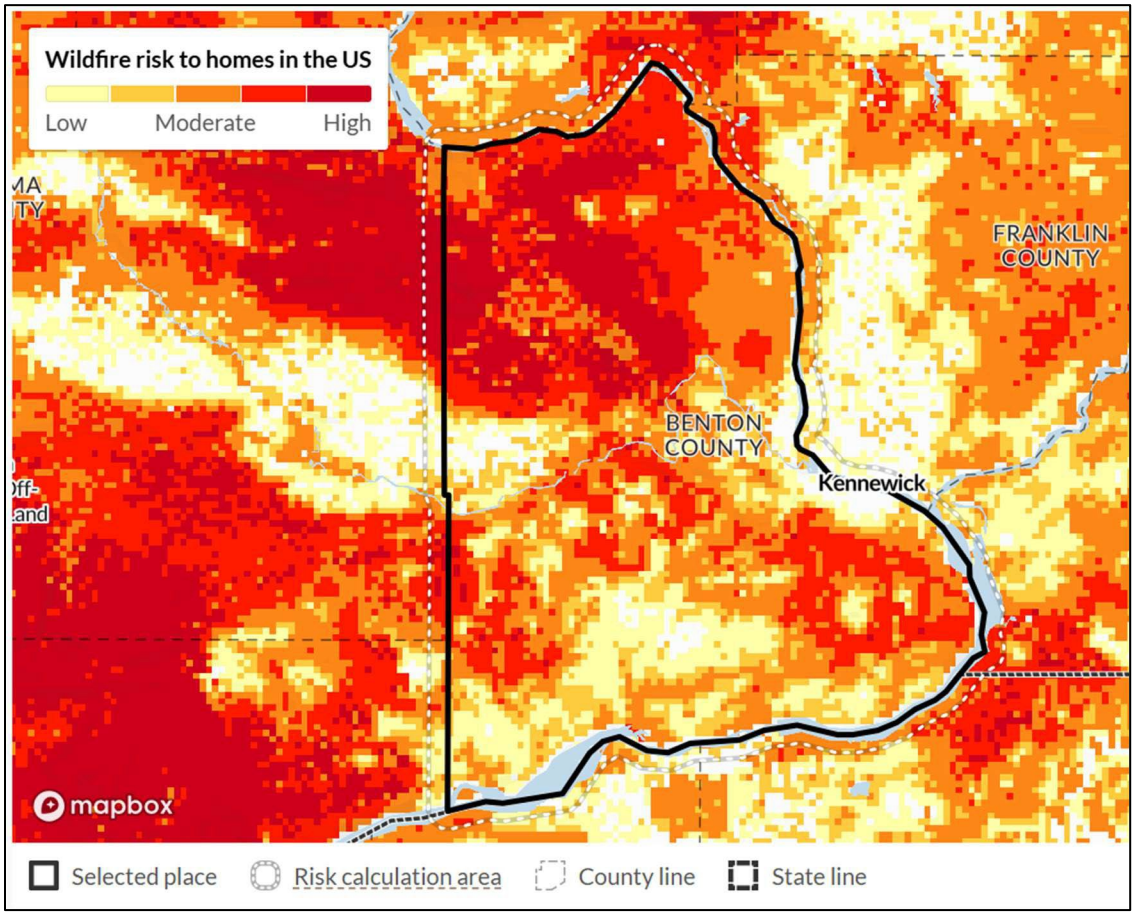
[2] $MTCO_2e$ refers to Metric Tons of Carbon Dioxide Equivalent. It is the standard unit used to measure and compare the emissions of various greenhouse gases based on their global warming potential.

3.6.1.3 Climate-Related Air Quality Stressors

Wildfire smoke is one of the most significant drivers of degraded air quality in the County. The County contains extensive areas within the Wildland-Urban Interface (WUI). The WUI includes areas where human development meets or mixes with vegetative fuels like forests, grasslands, and shrublands, leading to conditions with increased risk of wildfire and potential damage to structures and infrastructure.

The northeastern and southern parts of the County show the highest climate vulnerability due to combined wildfire exposure, existing health sensitivities, and social vulnerability indicators (Benton County, 2026). Figure 3-8 illustrates wildfire risk mapping for the County and adjacent areas. These areas are expected to experience increasing smoke exposure and associated air-quality degradation. Longer and more intense fire seasons are expected to increase concentrations of fine particulate matter in the air during summer and early fall. People with chronic respiratory illness, seniors, outdoor workers, and low-income residents experience disproportionate impacts from poor air quality (Benton County, 2026).

Figure 3-8. USFS Wildfire Risk to Homes



Source: wildfire risk map. wildfirerisk.org; accessed 7 August 2025.

In the coming years, the County is likely to experience more frequent and intense extreme heat events, increasing risks related to heat exposure, energy demand, and air-quality deterioration through ground-level ozone formation (Benton County, 2026). Heat-related air quality challenges disproportionately affect communities with limited tree canopy and residents with pre-existing health conditions. The County is also expected to experience an increasing drought frequency, which is projected to contribute to soil drying, dust generation, and particulate emissions, particularly in agricultural areas (Benton County, 2026). Drought also increases wildfire risk, indirectly worsening smoke-affected air quality.

For more information see Chapter 2, Goals and Policies for updates and additional WUI-related policies and Chapter 11, Climate Element, of the *Benton County Draft Comprehensive Plan* (Benton County, 2026).

3.6.2 Planning and Regulatory Context

Air quality and GHG emissions in the County are regulated through a combination of federal, state, regional, and local frameworks, including the Washington Clean Air Act (Chapter 70A.15 RCW), SEPA (Chapter 43.21C RCW), and Benton Clean Air Agency regulations that govern particulate emissions, dust control, combustion sources, and industrial air permits. At a federal level, the Federal Clean Air Act (42 U.S.C. § 7401 et seq.) and National Ambient Air Quality Standards (40 CFR Part 50) establish the federal regulatory framework and health-based pollutant thresholds that provide the planning, analysis, and compliance context for evaluating air quality conditions and potential impacts in the County.

Development activities must also comply with the Benton County Code, building codes, and the Eastern Washington Stormwater Manual, all of which contain provisions that indirectly support air quality protection by reducing soil disturbance, limiting fugitive dust, and maintaining vegetative cover and natural hydrologic functions.

In 2021, the Washington Legislature amended the GMA through House Bill 1181, adding a Climate Change and GHG Reduction Element and a Climate Resiliency Sub-Element to RCW 36.70A.070. These amendments require counties planning under the GMA to:

1. Reduce GHG emissions and VMT through land use, transportation, and development strategies.
2. Plan for climate resilience, including extreme heat, wildfire smoke, drought, flooding, and air-quality events.
3. Integrate climate considerations into land use, capital facilities, and environmental review processes.

The *Benton County Draft Comprehensive Plan* (Benton County, 2026) incorporates these requirements through its Climate and GHG Sub-Element, which establishes goals and policies to reduce emissions from land use patterns, support renewable energy in appropriate locations, encourage low-carbon

building and infrastructure design, and improve community resilience to air-quality hazards such as wildfire smoke, dust, and extreme heat. These policies complement existing Land Use, Rural Lands, and Natural Resources policies by promoting compact development, protecting vegetated open spaces, reducing dust-generating land disturbance, and supporting energy-efficient development that lowers operational GHG emissions.

The Benton County Community Wildfire Protection Plan (2018) was prepared in compliance with FEMA requirements for Hazard Mitigation Plans as well as the National Fire Plan, Healthy Forests Restoration Act, DNR Wildfire Strategic Plan, and other applicable state and federal requirements and guidance. It is intended to be compatible with the goals and objectives of the County's Comprehensive Plan. Additionally, as part of this Plan update, the County has developed a Wildlands Urban Interface memorandum that identifies additional policies and actions the County can take to further reduce wildfire risk (*see* Volume II, Appendix O).

3.6.3 Probable Environmental Impacts

Air quality and GHG emissions may be affected by both construction and long-term operational activities associated with land use change and energy development. Construction impacts include temporary emissions from heavy equipment, dust generation from soil disturbance—particularly in shrubsteppe areas prone to wind erosion—and combustion emissions from trucks and generators. Long-term impacts may include increased VMT, industrial process emissions, operational dust and particulate matter from disturbed soils, and GHG emissions associated with power needs for new facilities.

Between 2022 and 2045, per capita VMT is forecasted to increase by 11% for the region without the implementation of reduction strategies. Between 2022 and 2024, the annual residential VMT (in 1,000s) for the County increased from 149,017 to 186,723, but the per capita VMT remained constant at 3.98 due to limited growth (Benton County, 2026). Annual VMT on the County's roads from 2022 to 2025 increased by 33.1% for cars and 38.3% for trucks, which would result in higher total emissions.

Large-scale renewable energy development can reduce regional GHG emissions by displacing fossil-fuel generation, although construction and material production produce short-term emissions. The degree and nature of air quality and GHG impacts differ among alternatives based on the scale of industrial development .

3.6.3.1 Alternative 1: No Action Alternative

Under Alternative 1, no new land use designation changes would occur. Air quality impacts would result primarily from ongoing agricultural activities, incremental development under existing zoning, and emissions from vehicle travel and construction on a project-by-project basis. No additional countywide increase in air pollutant emissions or GHG output is expected beyond existing trends because the land use map remains unchanged.

3.6.3.2 Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry

Alternative 2 may result in the greatest potential air quality and GHG impacts among the alternatives due to expanded industrial land designations and increased development intensity.

Conversion of approximately 1,372 acres of GMA Agricultural land to Rural Industrial near Plymouth and Paterson may increase industrial activity, contributing to higher emissions from construction equipment, stationary sources, and truck traffic. Land clearing, grading, and increased vehicle activity may generate fugitive dust and particulate matter, particularly during dry and windy conditions. Additional disturbed soils and impervious surfaces may further contribute to localized dust generation if not properly managed. Industrial and commercial uses may incrementally affect air quality in nearby communities with existing environmental health disparities.

Alternative 2 includes redesignation of approximately 457 acres in the Candy Mountain and Badger Canyon areas from Rural Remote to Public. This change removes residential development potential in these areas and would reduce future construction-related emissions, vehicle trips, and localized air quality impacts that could otherwise occur under existing zoning.

Overall, Alternative 2 would result in greater potential air quality and GHG impacts compared to Alternative 3 due to a larger area of industrial land conversion and new residential density increases. Potential impacts would continue to be evaluated and mitigated through project-level permitting, conditional use review, and SEPA environmental review, providing mechanisms to address site-specific environmental health concerns as development occurs.

3.6.3.3 Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry, Preferred Alternative

Alternative 3 would result in lower potential air quality and GHG impacts than Alternative 2 due to reduced industrial land conversion and would not increase housing density in Plymouth and Finley. Conversion of fewer acres of GMA Agricultural land to Rural Industrial (744 vs. 1,372) near Plymouth would limit the extent of new industrial activity relative to Alternative 2. This would result in lower emissions from construction equipment, stationary sources, and truck traffic. Fugitive dust and particulate matter generated during construction and site preparation would be more localized and less extensive.

Alternative 3 also includes redesignation of approximately 367 acres of Rural Industrial land to Public, which removes future industrial development potential in these areas and would eliminate construction-related emissions, vehicle trips, and localized air quality impacts associated with future industrial buildout.

As with Alternative 2, impacts would be reduced through project-level permitting, conditional use review, and SEPA environmental review.

3.6.4 Mitigation Measures

3.6.4.1 Regulatory Standards and Planning Policies

Application of regulatory standards and County planning policies to future development projects will help to reduce the air quality and GHG impacts discussed previously.

Enforcement of County air quality regulations, building codes, stormwater and erosion control requirements, and SEPA environmental review would avoid and minimize potential air quality and GHG impacts associated with construction, industrial development, and renewable energy facilities.

The Benton Clean Air Agency (BCAA) is also responsible for enforcing Federal and State Clean Air Acts. BCCA Regulation 1 was created to establish technically feasible and reasonably attainable standards for the control or prevention of the emission of air contaminants (BCCA Regulation 1.02(B)).

The County's adoption of the Eastern Washington Stormwater Manual, dust control requirements under state and regional air quality regulations, and project-level SEPA review collectively establish parameters for limiting fugitive dust, reducing combustion emissions, and preventing long-term degradation of air quality. These regulatory tools require development proposals to incorporate best available control technologies, implement dust suppression and soil stabilization, minimize vegetation removal, and design stormwater systems that prevent the mobilization of pollutants. Consistent application of these requirements would help avoid, minimize, or mitigate potential air quality and GHG impacts under all three alternatives.

The *Benton County Draft Comprehensive Plan* (Benton County, 2026) reinforces these regulatory protections and establishes County policy direction for reducing emissions, supporting climate adaptation, and ensuring clean air for residents. It identifies strategies for lowering community-wide emissions, promoting energy-efficient development patterns, and supporting renewable energy deployment while avoiding disproportionate air-quality burdens in Finley and other areas identified previously.

The following goals and policies from the Comprehensive Plan should be considered in evaluating and conditioning future development:

- LU Policy 9: Encourage "green infrastructure" in new developments and redevelopments to reduce runoff, support natural infiltration, and protect vegetated systems that help suppress dust and improve local air quality.
- Rural LU Policy 6: Require rural development to minimize impacts on water quality, slope stability, vegetation, wildlife, and aquatic life—protections that indirectly reduce dust and particulate emissions by preserving groundcover and healthy ecological systems.
- LU Goal 1**:** Ensure land uses maintain public health, safety, and welfare, with special consideration for environmental justice, including avoiding disproportionate pollutant exposure for historically overburdened communities.

- WR Policy 6**:** Encourage xeriscaping and other low-water-use landscaping that stabilizes soils and reduces wind-borne dust emissions while conserving water.
- CA Policy 2 (Goal 3): Identify and protect wetland, stream, riparian, and habitat functions, maintaining vegetated buffers that improve air filtration, stabilize soils, and provide carbon sequestration benefits.
- Climate and GHG Sub-Element Policies: Support compact, energy-efficient development patterns; reduce transportation-related emissions; promote low-carbon construction practices; expand renewable energy in appropriate locations; and integrate climate risk considerations into land use and capital planning.

Together, these policies support minimizing soil disturbance, protecting natural vegetation, reducing pollutant emissions, and incorporating climate-informed design into development review. For consistency with the updated Plan, future development under Alternatives 2 and 3 should incorporate low-carbon construction methods, minimize extensive grading or vegetation clearing, restore native groundcover following disturbance, and design buildings and infrastructure for energy efficiency and reduced operational emissions. Renewable energy and industrial facilities should further implement dust suppression, air-quality monitoring, and GHG reduction measures, ensuring that project-level development aligns with County objectives for clean air, climate resilience, and long-term emissions reduction established in Chapter 11, Climate Element and Greenhouse Gas Sub-Element, of the *Benton County Draft Comprehensive Plan* (Benton County, 2026).

3.6.4.2 Other Mitigation Measures

For Alternatives 2 and 3, the mitigation measures described in Sections 3.1.4, 3.2.4, and 3.4.4 for reducing impacts to earth and water resources and land use should also be employed to reduce potential air quality impacts. The following additional mitigation measures could also be considered:

- Reductions in traffic congestion through encouraging alternative modes of transportation such as transit and bicycles or walking may help offset any potential localized increase in emissions.
- On a regional basis, the EPA's vehicle and fuel regulations (coupled with ongoing future fleet turnover) should, over time, cause significant reductions in region-wide air quality levels. Ongoing EPA motor vehicle regulations have caused steady decreases in tailpipe emissions from individual vehicles, and it is possible that those continuing decreases from individual vehicles could offset the increase in vehicle traffic.
- Support State and EPA efforts to reduce ozone levels during hot summer days where levels might increase due to limited wind.
- Continue to support hydropower electrical general facilities in the region that do not contribute to greenhouse gas emissions.
- Support regional VMT reduction strategies, such as increasing residential density, increasing job density, providing transit-oriented development, and implementing commute trip reduction and demand management programs.

3.7 Shoreline Use

3.7.1 Affected Environment

The Washington State Shoreline Management Act (SMA), Chapter 90.58 RCW, establishes statewide requirements for managing and protecting shorelines of statewide significance, including the Columbia and Yakima rivers within the County. The SMA's core goals—to prioritize water-dependent uses, protect ecological functions, and promote public access—form the legal basis for the Benton County SMP (BCC Chapter 15.04).

The area of shorelines regulated by the SMP extends 200 feet landward of the ordinary high water mark and includes the 100-year floodplain and associated wetlands. The Columbia and Yakima rivers are the primary shoreline waterbodies in the County, covering approximately 15 square miles of upland shoreland area, floodplains, and associated wetlands over a linear distance of 330 miles.

The County's shoreline areas include a mix of open space, public access, agricultural, and industrial uses. Much of the shoreline open space is managed by the U.S. Army Corps of Engineers, Washington State Parks, Bureau of Land Management, or local jurisdictions for recreation, wildlife habitat, and flood risk reduction (Benton County, 2022, BERK, 2013)

Under the SMA, the Columbia and Yakima rivers are classified as "shorelines of statewide significance," subject to more stringent planning priorities that emphasize long-term protection of ecological function, public access, and water-dependent uses. Benton County's SMP, last updated in 2021, governs shoreline use and includes shoreline environment designations, development standards, critical areas regulations, and public access provisions (Benton County, 2022).

As of the most recent shoreline inventory, over 50% of the land within shoreline jurisdiction is classified as Open Space, with industrial shoreline lands concentrated near the Kennewick Waterfront, Finley, Twin Bridges, and Horn Rapids areas. Residential shoreline development is largely limited to West Richland and areas adjacent to the Yakima River, where setback and vegetation conservation standards apply (Benton County, 2022).

3.7.1.1 Existing Shoreline Uses

The Columbia River forms the County's southern and eastern boundaries and provides the most significant concentration of shoreline-related land uses.

Significant segments of the County's shoreline are publicly owned and managed for recreational use. Key facilities include Columbia Park, Two Rivers Park, and the McNary Dam area, offering boat launches, trails, fishing access, and interpretive features (BERK, 2013). The Sacagawea Heritage Trail, a 23-mile paved trail system along the Yakima River, provides public access and non-motorized connectivity (Benton County, 2022).

In addition, the Tapteal Greenway along the Yakima River provides access to natural shoreline corridors and riparian forests, including areas of high habitat value. Public access along shoreline parks and trails is encouraged under the SMP and must be incorporated into all major new shoreline developments, where feasible (RCW 90.58.100) (Benton County, 2022).

Another shoreline-related used in the County is agriculture, primarily irrigated row crops and orchards, particularly near Finley, East Kennewick, and Prosser. These lands are often designated Rural Conservancy and are allowed to continue under SMP provisions, although many are classified as nonconforming uses if established prior to the establishment of the SMP (BERK, 2013).

Additional water-dependent and water-related agro-industrial uses are concentrated along the Columbia River near Finley and the Port of Benton. These areas support bulk material transfer, shipping, and storage operations and are designated High Intensity shoreline environments to facilitate economic development while requiring mitigation for adverse ecological impacts (BERK, 2013).

Finally, low-density residential development occurs along shoreline segments of the Yakima River, especially in areas such as Snively Road and West Richland. These areas are generally designated Shoreline Residential, with development subject to vegetative buffers, impervious surface limits, and setbacks to protect shoreline function (BERK, 2013).

3.7.1.2 Shoreline Environment Designations

Shoreline environment designations are applied to specific reaches or segments of the shoreline, depending on existing uses and other considerations. Benton County's SMP applies the following shoreline environment designations based on the shoreline analysis and inventory:

- Natural: Assigned to relatively undisturbed shorelines with intact riparian vegetation and high ecological value. Only low-impact uses like restoration and passive recreation are permitted (BERK, 2013).
- Rural Conservancy: Applied to shorelines in agricultural and low-density residential areas, supporting working lands with environmental safeguards. Permits agricultural uses, conservation practices, and limited residential development with critical area protection (Benton County, 2020a).
- Shoreline Residential: Designates existing residential communities along the Yakima River and parts of the Columbia River with policies to maintain ecological function while accommodating continued residential use (Benton County, 2020a).
- High Intensity: Applies to shorelines with industrial, port, or commercial uses; water-dependent uses are prioritized, and restoration or mitigation is required for new development (Benton County, 2020b).

3.7.2 Planning and Regulatory Context

The County adopted an SMP update in 2014 pursuant to the SMA, and a limited review and update was completed in 2021 and approved by Department of Ecology in 2022. The goals and policies of the SMP are considered a part of the Comprehensive Plan's goals and policies included in Chapter 2 and

along with the rest of the SMP are adopted by reference. The Policy Chapter provides the framework for future decision-making and is a guide for future development of lands within the County's shoreline jurisdiction boundaries. Detailed regulations are also included in the SMP.

The *Benton County Draft Comprehensive Plan* (Benton County, 2026) includes policies that complement the SMP by shaping long-term shoreline use. Chapter 3 Land Use Element, Chapter 4, Natural Resource Element, and Chapter 8 Parks and Recreation Element, include provisions to:

- Protect riparian corridors and shoreline ecological functions.
- Concentrate intensive uses away from sensitive shoreline environments.
- Support water-dependent economic development in appropriate locations.
- Preserve scenic, cultural, and recreation values along the Columbia and Yakima rivers. Policies emphasize aligning shoreline land uses with ecological constraints and regional access goals identified in the SMP.

In addition to the SMP, shoreline-related land use is shaped by:

- Critical Areas Ordinance (BCC Title 15)
- Zoning (BCC Title 11)

Other relevant County and regional plans and standards include:

- Flood Hazard Management Plans and FEMA flood maps (regulated under Flood Damage Prevention (BCC 03.26)
- Watershed and basin plans developed with Ecology
- Benton County Comprehensive Parks Plan (2025)
- WDFW Priority Habitats and Species (PHS) guidance
- Ecology's Stormwater Management Manual, which provides technical standards that support riparian and aquatic habitat protection

3.7.3 Probable Environmental Impacts

Under all alternatives, shoreline impacts would be minimal. None of the proposed land use changes occur within shoreline jurisdiction except for the redesignation of approximately 367 acres of Rural Industrial land to Public near Plymouth on the Columbia River. This change would reduce development potential and support long-term protection of shoreline ecological functions and public values. However, as the County's population grows, demand for shoreline access and use—including recreation, residential development, and infrastructure—will likely increase, placing additional pressure on shoreline habitats and resources.

3.7.3.1 Alternative 1: No Action Alternative

Under Alternative 1, no land use designation changes would occur. Existing shoreline lands would retain their current land use designations. Shoreline ecological functions would continue to be governed by existing shoreline regulations.

3.7.3.2 Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry

Under Alternative 2, no land use designation changes would occur within shoreline jurisdiction. Existing land use designations and shoreline regulations would continue to be implemented.

3.7.3.3 Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry, Preferred Alternative

Alternative 3 reclassifies 367 acres of Rural Industrial along the Columbia River in Plymouth to Public to protect shoreline functions and cultural resources. Reclassifying industrial shoreline lands to Public reduces the risk of shoreline development and supports recreation, conservation, port planning, and shoreline protection goals. The shift of industrial to Public also lowers long-term disturbance potential and reduces conflicts with riparian areas, floodplains, and PHS habitats.

3.7.4 Mitigation Measures

3.7.4.1 Regulatory Standards and Planning Policies

Mitigation measures for shoreline use focus on enforcing and ensuring consistency with the SMP goals, including achieving no net loss of shoreline ecological functions, avoiding land use conflicts in shoreline jurisdiction, and protecting public access, water-dependent uses, and shoreline habitat. Relevant SMP policies that mitigate potential shoreline impacts and should be considered in future development include:

- No net loss of ecological function under BCC 15.04.100, including avoidance, minimization, and compensatory mitigation for vegetation removal, hydrologic alteration, habitat impacts, and water quality degradation.
- Water-dependent use priority and environment-specific development standards under BCC 15.04.140–15.04.260 ensure that development intensity matches shoreline sensitivity.
- Shoreline habitat protection requirements under BCC 15.04.270 require retention or restoration of native vegetation within shoreline buffers to stabilize banks, filter pollutants, moderate microclimates, and maintain habitat continuity.
- Public access mandates under BCC 15.04.440 provided for substantial shoreline developments unless demonstrated infeasible, mitigating impacts related to shoreline privatization and ensuring equitable enjoyment of shoreline resources.
- Shoreline modification controls under BCC 15.04.350–390; 15.04.430 require: (i) demonstration of need, (ii) soft stabilization approaches where feasible, (iii) siting that avoids critical habitat and floodways, and (iv) minimization of in-water work.

Additional mitigation measures include enforcement of the *Benton County Draft CAO* (Benton County, 2026) (BCC 15.08), which applies within shoreline jurisdiction, providing additional mitigation of hydrologic, ecological, and hazard-related impacts of shoreline uses through:

- Wetland protections
- Fish and wildlife habitat conservation measures
- Flood hazard standards
- Aquifer recharge protections

Mitigation measures for shoreline-related land use impacts can also be drawn directly from the Comprehensive Plan's goals and policies. These measures ensure development maintains ecological function, protects water quality, supports compatible shoreline uses, and provides safe, sustainable public access. Implementation of these goals and policies, highlighted below, provides a framework for reducing or avoiding impacts across the alternatives.

- CA Goal 3: Protect the County's natural areas, shorelines, and critical areas as unique assets to the community.
    - Policy 3: Encourage development of water-oriented recreational, cultural, and commercial facilities in certain shoreline locations, consistent with SMP goals and policies and its criteria of no net loss of ecological functions, to enhance and diversify community recreational resources and its attractiveness to tourists.
    - Policy 4: Ensure public access to shorelines on public land, subject to regulations protecting public safety, sensitive habitat areas, and wildlife.

3.7.4.2 Other Mitigation Measures

For Alternatives 2 and 3, the mitigation measures described in Sections 3.1.4, 3.2.4, 3.3.4, and 3.4.4 for reducing impacts to earth, water, plants and animals, and land use should also be employed to reduce potential impacts to shoreline ecological functions.

3.8 Population, Housing, and Employment

3.8.1 Affected Environment

3.8.1.1 Population and Housing

In 2024, the County had a total population of 217,850, with 37,805 residents (17%) living in unincorporated areas (OFM, 2024). By the year 2046, the countywide population is expected to grow to 278,456, an increase of over 60,000 residents (OFM, 2022).

As of 2024, there were 85,497 housing units in the County, including both cities and unincorporated areas (OFM, 2024). About 68% of the housing units were owner-occupied and 32% renter-occupied (U.S. Census Bureau, 2024). Within the unincorporated County, most homes are either detached single family dwellings (61%) or manufactured homes (37%) (ibid).

From 2010-2024, there were 1,288 new homes completed in the County, of which 13% were built in unincorporated areas (OFM, 2024). To meet the housing needs of all current and projected future residents through 2046, an additional 38,260 housing units will need to be constructed in the County (Commerce, 2024). Within the unincorporated rural areas, the County needs to add 4,974 new units (*see* Volume II, Appendix E).

Housing affordability is a significant challenge across the County. As of 2021, over 26% of all households were cost burdened (HUD, 2024). This means they spend more than 30% of their income on housing costs, limiting their ability to afford other essentials like food, transportation, and healthcare. The problem of housing cost burden is most acute among renter households, 45% of whom are cost burdened. This is compared to just 18% of homeowners. As of 2024, there were 13,320 housing units in the unincorporated County. Most of these units are in rural areas, as shown in Table 3-2 (OFM, 2024). Over a third of the homes in the unincorporated County are manufactured or mobile homes (ibid). These homes can be significantly less expensive to produce and often provide relatively lower-cost housing compared to traditional site-built homes.

Table 3-2. Summary of Housing Units, 2024

Area	Housing Units
Unincorporated Urban Growth Areas (UGAs)	2,283
Rural	11,037
Total	**13,320**

Source: OFM, 2024; BERK, 2025.

Within the County, there are four Rural Community Centers: Finley, Paterson, Plymouth, and Whitstran. These centers include 283 housing units, as shown in Table 3-3. Many of these units are on smaller parcels than typical in rural areas, and therefore can provide relatively lower-cost options. Additionally, these areas provide some diversity of housing options, including manufactured and mobile homes, as well as duplex and triplex (small multifamily buildings). Rural Community Centers are designated as Limited Areas of More Intensive Rural Development (LAMIRDs), which allow for somewhat higher density development (1-3 housing units per acre) compared to most rural areas that are limited to 5-acre lots.

Table 3-3. Housing Types in Rural Community Centers

Rural Community Center	Single Family	Duplex/Triplex	Manufactured and Mobile Homes	Total
Finley	**87**	**7**	**11**	**105**
Paterson	14	0	27	41
Plymouth	47	2	42	91
Whitstran	38	2	6	46
Total	186	11	86	283

Source: Benton County, 2025.

3.8.1.2 Economy, Employment, and Economic Development

Between 2019 and 2023, the County saw substantial economic growth in agriculture, food processing, healthcare, education, and research, particularly at the Hanford Site (ESD, 2025) As of December 2025, the County's civilian labor force included approximately 105,162 individuals, with an unemployment rate of 5.6%, slightly higher than the statewide rate of 5.3% (ESD, 2025). The labor force participation rate stood at approximately 63%, and educational attainment levels are higher than in many rural counties, particularly due to the concentration of scientific and technical employment in the broader Tri-Cities area (ESD, 2025).

The County's labor profile reflects both rural and urban influences, with employment centers concentrated in the Tri-Cities metropolitan area—Richland, Kennewick, and West Richland—and in rural communities such as Prosser and Benton City. Major employment sectors in the County include:

- **Professional, Scientific, and Technical Services**: Anchored by the Hanford Site and the Pacific Northwest National Laboratory (PNNL), this sector employs a large share of the workforce in Richland. Hanford-related activities account for over 11,000 direct jobs in environmental cleanup, project management, and radiological health services (DOE, 2023).
- **Health Care and Social Assistance**: Healthcare providers such as Kadlec Regional Medical Center and Trios Health are among the largest private employers in the County (ESD, 2025).
- **Agriculture and Agri-business**: The County ranks among Washington's top producers of wine grapes, apples, hops, and hay. In 2022, agricultural production in the County was valued at over $1.3 billion, with more than 2,000 farms operating on 585,000 acres of farmland (USDA National Agricultural Statistics Service, 2022).
- **Retail Trade and Accommodation**: Retail and service-related jobs account for a significant portion of employment in urban centers and are responsive to fluctuations in local population growth and tourism.
- **Construction and Manufacturing**: The construction industry is supported by both residential development and public infrastructure projects, while manufacturing is led by food processing, equipment fabrication, and energy-related subcontracting.

Benton County's gross regional product exceeds $13.5 billion, led by government services, energy research, healthcare, and agriculture (Washington State Employment Security Department, 2025). The County's economic growth has remained steady over the past decade, largely insulated from national recessions due to the stabilizing effect of long-term federal investment in the Hanford cleanup program. Additionally, roughly one in five of the estimated 104,000 jobs in the County are for large employment firms or agencies, with the top five including research and development, health services, engineering and construction, food processing, and education (TRIDEC, n.d.).

The median household income in the County was $87,316 in 2023, above the state median for non-metropolitan counties (U.S. Census Bureau, 2024). However, wage disparities are evident. Median earnings for scientific and technical occupations exceed $100,000 annually, while workers in agriculture, retail, and hospitality often earn less than $40,000 (ESD, 2025). The continued employment

growth at the Department of Energy Hanford Nuclear Reservation, PNNL, Energy Northwest and the Office of River Protection will continue to support the growth of the County's population. This growth is expected to attract new residents to the County and provide opportunities for younger residents to remain in the County and earn a living wage.

The County partners with organizations such as the Benton-Franklin Council of Governments, the Port of Benton, and the Tri-City Development Council (TRIDEC) to support infrastructure development, business recruitment, and workforce training. Current initiatives include broadband expansion, clean energy investment, and industrial land development in areas near Highway 240 and I-82 (Port of Benton, 2023). The County is also positioned to benefit from investments in clean energy research and climate resilience, including hydrogen production and solar energy development. Agricultural value-added processing and agritourism continue to offer rural economic opportunities.

Despite ongoing economic growth, key challenges remain, including addressing workforce gaps in healthcare and construction trades, managing rapid urban growth, and ensuring equitable access to employment opportunities in rural communities. Additional information on population, housing, and employment can be found in the *Benton County Draft Comprehensive Plan* (Benton County, 2026).

3.8.2 Planning and Regulatory Context

3.8.2.1 Population and Housing

The GMA directs counties to "Plan for and accommodate housing affordable to all economic segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock" (RCW 36.70A.020 (4)). Changes to the GMA in 2021 created new requirements for housing elements. In addition to providing an inventory and analysis of existing and projected housing needs within the County, housing elements must also show there is sufficient land capacity to accommodate projected housing needs at each income level, make adequate provisions for existing and projected housing needs, and update policies and regulations to address racially disparate impacts, displacement, and exclusion.

Each of these requirements is addressed in Chapter 6, Housing Element, of the *Benton County Draft Comprehensive Plan* (Benton County, 2026). The Benton County Code provisions collectively ensure that housing is consistent with the Comprehensive Plan and state GMA requirements through zoning (BCC Title 11) and subdivision regulations (BCC Title 11).

The GMA also requires counties and cities to collaboratively develop CWPPs to set the general framework for coordinated land use and population planning between a county and its cities to ensure comprehensive plans are consistent with each other (RCW 36.70A.210). The role of the CWPPs is to coordinate comprehensive plans of jurisdictions in the same county regarding regional issues and issues affecting common borders (RCW 36.70A.100). A CWPP is required to include the following related to housing and population:

- Policies that consider the need for affordable housing, such as housing for all economic segments of the population and parameters for its distribution (RCW 36.70A.210).
- Policies for joint county and city planning within urban growth areas.

The CWPP includes these GMA policies. The County and all cities worked together to address the need to provide housing for all economic segments. The Comprehensive Plan addresses these requirements in the Housing Element.

3.8.2.2 Economy, Employment, and Economic Development

Economic development planning in the County is guided by the GMA requirement to include an economic development element that supports job creation, economic diversification, and coordination with land use, housing, and infrastructure planning under RCW 36.70A.070. At the local level, economic development policy is implemented through the *Benton County Draft Comprehensive Plan* (Benton County, 2026), land use and zoning regulations, and coordination with regional economic development organizations such as the Tri-City Regional Chamber of Commerce and TRIDEC. Additional planning documents—including the County's Capital Facilities Plan, Transportation Improvement Program, and other sector-specific plans—help guide infrastructure investments and land use decisions that support employment growth, industrial development, agricultural viability, and research-based economic activity.

3.8.3 Probable Environmental Impacts

Following recent trends, population is expected to grow under all three alternatives. Housing and employment growth are also expected and would be accommodated under each alternative. This growth is expected to increase demand for housing, employment opportunities, services, and infrastructure. Housing and employment growth are also expected and would be accommodated under each alternative.

Impacts to population, housing, and employment would occur if there are inadequate existing facilities or insufficient future development capacity to accommodate growth in areas with adequate public services. Population growth will also increase demand for employment opportunities in sectors such as agriculture, healthcare, energy, government services, and manufacturing.

Consistent with recent growth trends, the County has allocated about 13% of projected housing needs through the year 2046 to be accommodated in unincorporated rural areas. This amounts to 4,974 net new housing units. Many of these homes will be built in rural areas with limited services. However, some housing could be accommodated in Rural Community Centers, which offer a greater range of services in proximity to homes. Table 3-4 shows the capacity for new housing growth in two Rural Community Centers, by alternative. The other centers, Paterson and Whitstran, would not have significant capacity for housing growth in any alternative.

Table 3-4. Capacity for Housing Growth by Rural Community Centers

Rural Community Center	Alt 1. No Action	Alt 2. Aggressive Growth	Alt 3. Moderate Growth
Finley	107	364	107
Plymouth	51	185	51
Total	158	549	158

Source: AC Geo, 2025

3.8.3.1 Alternative 1: No Action Alternative

Alternative 1 would not change allowed density in Rural Community Centers. As a result, there would be limited capacity for new housing production in these centers: about 107 units in Finley and 51 units in Plymouth. The remainder of growth would need to occur in other rural areas, farther away from local services. Zoning in most of these rural areas requires at least 5 acres per unit as well as private wells and septic, which can increase the cost of housing per unit when compared to providing housing in Rural Community Centers.

Any new housing development in Rural Community Centers would be limited to no more than 3 units per acre. While this is a much higher density level than allowed in other rural areas, developing new homes in these centers would still be at a relatively higher cost per unit than urban areas which provide services and allow for higher density development.

Economic activity and employment growth would likely continue at a pace consistent with recent trends, driven by regional population growth, agricultural production, and major employers such as the Hanford Site, healthcare systems, and regional service industries. Agricultural and food-processing sectors would remain key components of the local economy, supported by irrigated agriculture and related supply chains.

3.8.3.2 Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry

Alternative 2 would change the zoning in the Finley and Plymouth Rural Community Centers to allow for up to 8 units of housing per acre. This significantly increases the capacity for new housing growth in these centers when compared to Alternative 1: about 364 units in Finley and 185 units in Plymouth. With the revised zoning, it may become feasible to build small multifamily housing such as duplexes or triplexes on some parcels. These kinds of housing are less expensive to build on a per unit basis when compared to detached single-family homes. Additionally, the higher allowed density reduces the land cost per new housing unit. As a result, this alternative provides the best potential for supporting the production of relatively lower cost homes and increasing the diversity of housing options available in the unincorporated County, when compared to Alternative 1.

This alternative also has the potential to focus more rural housing growth within established Rural Community Centers. This could enable more rural residents to live closer to local services, reducing their transportation costs and time spent on the road.

In addition to increased housing capacity, Alternative 2 provides more opportunities for economic development through expanded industrial land capacity. This alternative would redesignate

approximately 1,372 acres of GMA Agricultural land to Rural Industrial, primarily in areas surrounding the Plymouth Industrial Park and west along the SR 14 corridor near Paterson, increasing the County's total Rural Industrial designation from about 2,786 acres to approximately 4,112 acres. These areas are located near existing transportation corridors and industrial development, which may make them attractive for logistics, manufacturing, , and other employment-generating uses.

3.8.3.3 Alternative 3: Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry, Preferred Alternative

Alternative 3 makes no changes to zoning in Rural Community Centers. Therefore, impacts on population and housing would be the same as expected under Alternative 1.

Alternative 3 would provide additional opportunities for economic development through a smaller expansion of industrial land. This alternative would redesignate approximately 744 acres of GMA Agricultural land to Rural Industrial, primarily near the Plymouth Industrial Park and along the SR 14 corridor near Paterson. These changes would support job creation and economic development similar to Alternative 2, but at a more moderate scale due to the smaller amount of industrial land conversion.

3.8.4 Mitigation Measures

3.8.4.1 Population and Housing

The *Benton County Draft Comprehensive Plan* (Benton County, 2026) identifies several new policies and updates to existing policies to support production of a variety of housing types and affordability. These changes address recent state law (House Bill 1220) to accommodate housing at different affordability levels and reduce racially disparate impacts. The Comprehensive Plan provides goals and policies to accommodate population, housing, and employment growth. The following goals and related policies should be considered for future development:

- HE Goal 1: Provide for a variety of residential uses in the unincorporated areas of the County consistent with the rural character and lifestyles and a choice of housing types for people of all income levels.
- HE Goal 2: Plan for and accommodate sufficient housing in types that are affordable and available to meet the housing needs for the existing and projected population of all income groups.
- HE Goal 3: Prevent discrimination, address displacement, and mitigate past harm in the development and maintenance of housing.

Housing policies to focus rural growth in LAMIRDS should be considered as well. Policy 6 (Goal 1) states:

- Locate higher than rural densities in LAMIRD areas in the Rural Community Centers, mostly within the communities of Finley, Plymouth, Paterson, and Whitstran when rural infrastructure is available and has capacity to support additional development.

The County's development code will address potential housing development impacts during the project and permit review processes. County development regulations for Community Center Residential Districts (BCMC 11.06) set property development standards that would apply to new housing developments in the LAMIRDS. Regulations such as lot coverage, vegetative cover, impervious surfaces, and lot setbacks are expected to mitigate on-site development impacts.

In addition, to accommodate future population growth, the County could consider ways to make unincorporated UGAs and Rural Community Centers more attractive through infrastructure investment and infill incentives.

3.8.4.2 Economy, Employment, and Economic Development

The *Benton County Draft Comprehensive Plan* (Benton County, 2026) includes goals and policies intended to support economic growth while maintaining the County's agricultural base and rural character. The following goals and related policies should be considered for future development:

- Planning Policy Goal 2: Develop and maintain a Comprehensive Plan responsive to growth and economic trends which can be readily adapted to changing conditions.
- Economic Development Goal 1: Create a balanced and diverse economy that provides an opportunity to make economic and lifestyle choices for Benton County residents.
    - Policy 1: Promote industries that are diverse and support an agriculture-based economy.
    - Policy 4: Encourage light and heavy industrial uses to locate in areas where:
        1. Access can be provided by major transportation networks such as road, rail, air, and water
        2. Existing development is characterized by and/or compatible with industrial activity
        3. Utilities, including electric, gas, water, and sewer, can be adequately provided, either as extensions of municipal facilities (e.g., by service contract) or by on-site facilities

The following additional measures could also be considered to accommodate future economic growth.

- Continue to maintain adequate land supply that supports economic employment uses while protecting the agricultural economic base.
- Support economic diversification and job growth.
- Coordinate economic development with infrastructure planning.
- Direct economic growth to appropriate locations.
- Coordinate with regional economic development partners.

3.9 Parks and Recreation

3.9.1 Affected Environment

The County supports a network of parks, trails, and open space. Recreation and open space planning in the County is collaborative. Park and recreation services in the County are provided by local jurisdictions—including the cities of Kennewick, Richland, West Richland, and Benton City—as well as Benton County Parks, Washington State Parks, and the U.S. Army Corps of Engineers. The Tri-Cities Metropolitan Area benefits from shared trail systems and riverfront amenities that span multiple jurisdictions *Benton County Comprehensive Parks Plan* (Parks Plan) (2025). The Benton-Franklin Council of Governments, Port of Kennewick, and Mid-Columbia River Refuge Office contribute to planning and funding of inter-jurisdictional facilities. The County also partners with school districts to expand recreational access via shared-use agreements for playgrounds, fields, and indoor recreation spaces. Collectively, the parks and open spaces serve a growing population and support a variety of outdoor activities including hiking, biking, water access, wildlife viewing, and organized sports (Benton County 2023).

As of the most recent inventory in the Parks Plan, the County currently owns, or operates under lease, 10 park facilities on 2,384 acres providing outdoor recreational opportunities and amenities such as lawn activities and picnicking, water and swimming, natural open space and habitat conservation, boat launches, a model airplane facility, a recreational vehicle campground, an equestrian camp, developed shooting facility, and a pioneer cemetery. The County's system also benefits from proximity to federal and state-managed open space, including the Hanford Reach National Monument, Rattlesnake Mountain, and Columbia River shoreline lands. The Parks Plan contains the long-range policy and planning documents for the County parks and recreation facilities and properties and future opportunities. The Parks Plan is incorporated into the County's Comprehensive Plan and will guide future decisions related to the County's parks system and parks facilities.

3.9.1.1 Park Classification and Access

The *Benton County Draft Comprehensive Plan* (Benton County, 2026) categorizes its parks and recreation facilities as Regional Parks, Natural Parks (Preserves) and Trails, and Special Use areas. Figure 3-9 illustrates the locations of key parks facilities in the County.

Regional Parks are intended for more diffuse and passive outdoor uses and serve a large region including rural County residents. These parks are meant to preserve large areas of natural open space and support types of recreation that require large areas or uncommon amenities, such as horse riding or miniature aircraft flying. Regional Parks in the County include:

- Horn Rapids Park, located north of Benton City and along the north shore of the Yakima River
- Two Rivers Park, leased from the U.S. Army Corps of Engineers east of Kennewick near the community of Finley

Natural Parks (Preserves) and Trails are undeveloped areas mostly in a natural condition that are managed for educational or recreational purposes. These areas preserve native plant and wildlife habitat and promote passive recreation. Low-intensity use trails have been established on many of these properties, and there are future opportunities to promote trails between existing holdings (Benton County, 2026). These areas include:

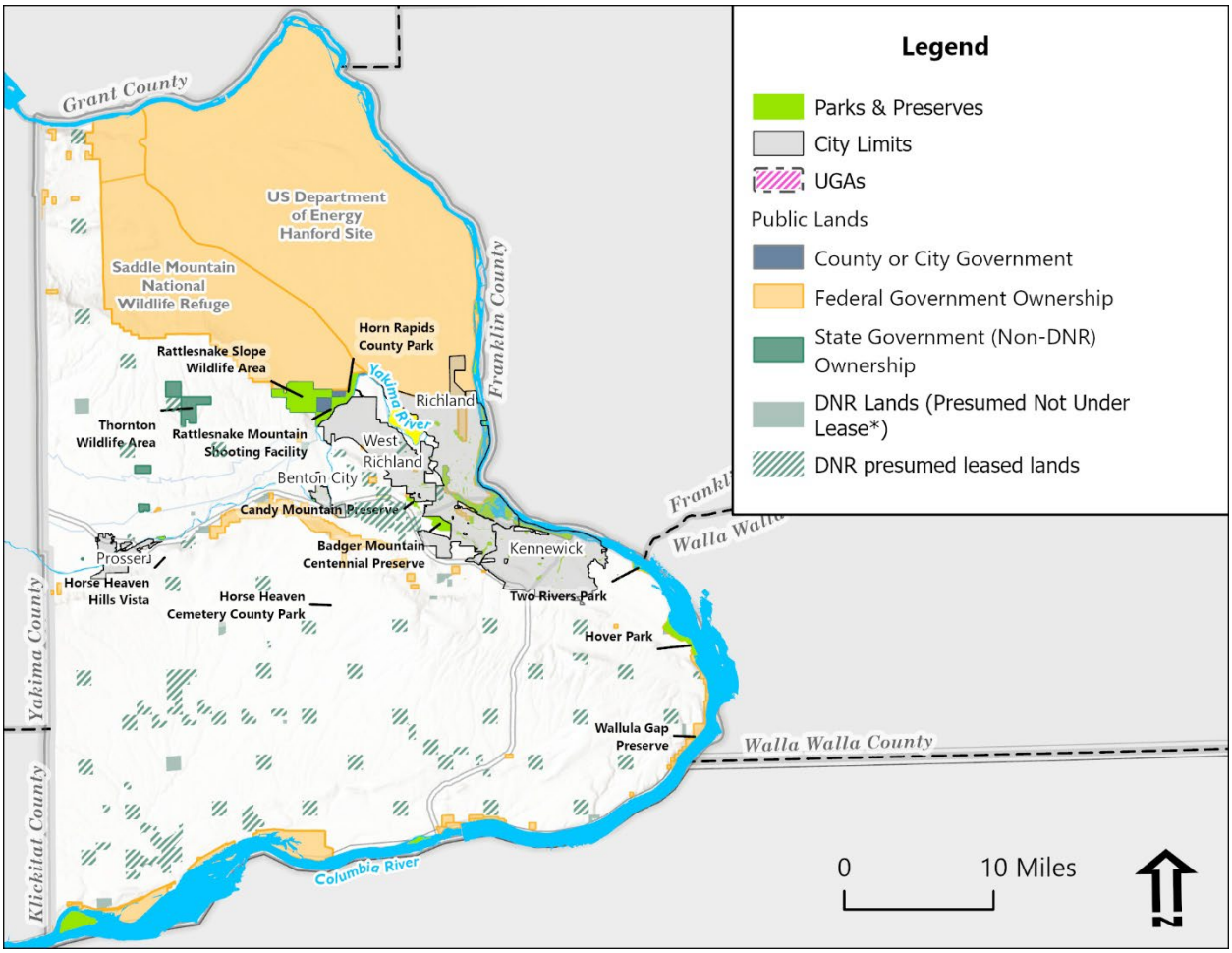
- Badger Mountain Centennial Preserve is located on the upper ridges and slopes of Badger Mountain in the south Richland area. Shrubsteppe vegetation, primitive trails, expansive views of the Columbia River Basin, and steep slopes characterize the property.
- Candy Mountain Preserve is located north of Badger Mountain in the Goose Gap and upper slopes of Candy Mountain. The preserve includes a 1.7-mile trail to the summit with a parking area at the trailhead.
- Wallula Gap Preserve is located in eastern part of the County above Lake Wallula and across from the Twin Sisters feature in Walla Walla County. The park consists of three disconnected parcels that are approximately 110 acres. The parcels are remote and generally inaccessible, with one parcel consisting primarily of sheer basalt cliffs.

Special Use areas include sites that are either smaller and have focused uses or are managed for specific uses and may be subleased and managed by other organizations. These areas include:

- Horse Heaven Cemetery
- Horse Heaven Vista
- Vista Park
- Rattlesnake Mountain Shooting Facility
- Hover Park

Additionally, there are other park and recreation opportunities in the County provided by state and local agencies, such as Crow Butte and Plymouth Park. Other parks facilities are provided by the cities in the region. For a more in-depth discussion see Chapter 8, Parks and Recreation Element, of the *Benton County Draft Comprehensive Plan* (Benton County, 2026) and the *Benton County Comprehensive Parks Plan* (2025).

Figure 3-9. Existing Parks and Open Space



3.9.1.2 Shoreline Recreation

The Columbia River and Yakima River corridors provide key access points for boating, paddling, fishing, and riverfront recreation. The County also supports portions of the Tapteal Greenway, a riparian trail corridor along the Yakima River providing hiking and birdwatching access (Benton County, 2026). Shoreline access in the unincorporated areas of the County is largely provided through Corps of Engineers-managed lands along Lake Wallula and by Washington State Parks, including Sacajawea State Park, which is located on the eastern shoreline at the confluence of the Columbia and Snake rivers. These lands support both passive open space and active recreation opportunities . For an in depth discussion of shoreline uses in the County see Section 3.7.

3.9.1.3 Open Space

The County's parks plan emphasizes preservation of natural open space and riparian corridors for both climate resilience and habitat connectivity, aligning with regional efforts such as the WSRRI and PHS discussed in Section 3.3 (WDFW, 2023) (WDFW, 2022). These priorities inform the County's open space acquisition strategies and guide park design in environmentally sensitive areas.

The *Final Draft Memorandum Re: Open Space Corridors* identifies priority open space corridors, gaps in public access, and opportunities to better connect parks, trails, habitat areas, and river corridors across the County. It also highlights the importance of protecting shrubsteppe habitat, river-adjacent lands, and trail connections in areas experiencing development pressure, while also improving recreational access in underserved communities (*see* Volume II, Appendix M). The County intends to use this analysis to guide future strategies for open space protection, park acquisition, and the provision of recreation opportunities that balance ecological function with public access. Planned investments prioritize trail expansions, increased river access, and targeted acquisition of properties within identified open space corridors to support both recreational connectivity and long-term protection of natural systems.

3.9.2 Planning and Regulatory Context

The GMA Open Space and Recreation Goal (RCW 36.70A.020(9)) directs counties to encourage retention of open space, development of recreation opportunities, conservation of fish and wildlife habitat, and increased access to natural resource lands and water. The GMA also requires local governments to prepare a Parks and Recreation Element (RCW 36.70A.070(8)) that implements and is consistent with the Capital Facilities Plan, ensuring that park and recreation facilities are planned and financed to accommodate existing and future needs.

The *Benton County Draft Comprehensive Plan* (Benton County, 2026) includes a dedicated Parks and Recreation Element and corresponding goals and policies to guide County decisions regarding park development, trail connectivity, recreation programming, open space preservation, and public access to natural resources, including shorelines. These policies collectively guide the planning and management of County parks, regional recreation facilities, trails, and waterfront access points.

Relevant Benton County Code sections include:

- Zoning (BCC Title 11)
- Critical Areas Ordinance (BCC Title 15)
- Shoreline Master Program (BCC 15.04)

Other relevant County and regional plans and standards include:

- Benton County Comprehensive Parks Plan (2025)
- Benton County Road Program (2025–2030)
- Regional transportation plans developed by Benton-Franklin Council of Governments

State and federal recreation and resource guidance includes:

- Washington State Recreation and Conservation Office planning standards
- WDFW Priority Habitats and Species for habitat protection within parklands
- U.S. Army Corps of Engineers and Bureau of Reclamation coordination for parks along federally managed water bodies

3.9.3 Probable Environmental Impacts

Short-term, construction-related impacts could occur during future development as a result of construction noise, traffic, changes in views, or restricted access affecting recreational facilities. Long-term impacts could occur if changes in land use are incompatible with values people associate with parks and recreational activities; for example, increased operational noise, traffic, air pollution or changes in views. Population growth is likely to result in more demand for parks, potentially resulting in increased crowding unless additional recreational facilities are developed.

3.9.3.1 Alternative 1: No Action Alternative

Under Alternative 1, existing land use patterns would remain unchanged. Impacts on parks and recreation would be minimal and generally limited to existing growth trends and project-level development. Demands on existing parks and recreational facilities are expected to increase as the population grows. Fragmentation of open space in rural areas would continue.

3.9.3.2 Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry

Alternative 2 proposes the largest extent of rural industrial expansion, including 1,372 acres of GMA Agriculture converted to Rural Industrial—primarily near the Plymouth Industrial Area and areas west along SR 14. Converting agricultural lands to Rural Industrial may reduce the rural open-space character in areas used for dispersed recreation.

Under Alternatives 2 and 3, approximately 457 acres would be redesignated from Rural Remote to Open Space/Public in the Badger Canyon and Candy Mountain areas, providing a net benefit to the County's recreation and open space network by preserving low-density lands under a long-term conservation-oriented designation. This change supports the broader system of interconnected open space corridors and prominent ridgetops identified in the *Final Draft Memorandum Re: Open Space Corridors* (*see* Volume II, Appendix M and *Benton County Comprehensive Parks Plan* (2025)), including the linked landscapes of Rattlesnake, Red, Candy, and Badger Mountains and the Horse Heaven foothills. Protecting these areas from future residential development enhances opportunities for passive recreation, scenic landscape preservation, and long-term continuity of regionally significant open space features.

3.9.3.3 Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry, Preferred Alternative

Alternative 3 includes more limited industrial land use changes, with 744 acres of GMA Agriculture converted to Rural Industrial in Plymouth. A lower level of impacts on rural scenic character and dispersed recreation would occur.

Alternative 3 redesignates 367 acres of Rural Industrial to Public in Plymouth along the Columbia River. This would enhance the protection of shoreline access, ecological function, and scenic integrity. There is also an indirect recreation benefit from strengthened open-space continuity along the Columbia River.

Alternative 3 also includes the same 457-acre conversion from Rural Remote to Open Space/Public with the same positive impacts described in Alternative 2.

Alternative 3 includes implementation of a shrubsteppe mitigation program, which is intended to preserve and enhance shrubsteppe habitat, associated priority habitats, and key connectivity corridors across the County. The program would establish a structured mitigation framework to offset impacts from development by directing mitigation investments toward large, contiguous shrubsteppe landscapes and areas identified as high value for ecological function and habitat connectivity. In addition to supporting habitat conservation goals, the shrubsteppe mitigation program would contribute to long-term open space preservation by protecting lands from future development and, where appropriate, coordinating with public access and recreation objectives consistent with the County's parks and open space planning efforts.

3.9.4 Mitigation Measures

3.9.4.1 Regulatory Standards and Planning Policies

Application of regulatory standards and County planning policies to future development projects will help to reduce the impacts to parks and recreation discussed previously.

Zoning and development standards in BCC Title 11, the *Benton County Draft CAO* in BCC 15.08, and the Shoreline Master Program (BCC 15.04) guide compatible siting of development near parks and open space, protect ecological features that support recreation, and require sensitive shoreline design and public access where feasible (BCC 15.04.440; BCC 15.04.270). Long-term provision of recreation facilities is further supported through County capital facilities planning, including the Parks and Recreation component of the Capital Facilities Plan and the *Benton County Comprehensive Parks Plan* (2025), which establish funding priorities and level-of-service standards consistent with GMA requirements (RCW 36.70A.070(3) and (8)).

Under Alternative 3, the shrubsteppe mitigation program provides additional protection by preserving large, connected open space areas that support habitat, scenic values, and passive recreation.

Together, the Parks Plan, Comprehensive Plan policies, and County regulations provide an integrated framework for avoiding, minimizing, and mitigating impacts to parks, recreation facilities, and open space resources. The *Benton County Draft Comprehensive Plan* (Benton County, 2026) includes goals and policies that function as the primary framework guiding mitigation for parks and recreation impacts:

- PL Goal 1: Develop and maintain a park system for Benton County residents and visitors that provides a variety of recreational opportunities in regional and local parks and open space.
    - Policy 1: Develop and maintain a regional park and trail system integrated with city recreational resources.

    - Policy 3: Encourage developers of low density, large lot subdivisions and plats to provide access easements for bicycle and horse riding within and between contiguous developments, connecting to regional trails and to establish a means of maintaining such easements through coordination between the County, developers, and homeowners.
    - Policy 4: Offer a broad range of recreational opportunities for various abilities and needs of County residents (e.g., fishing, hiking, playfields).
- PL Goal 2: Work with cities and agencies to protect greenways and open spaces along the riverine corridor of the lower Yakima River.
    - Policy 1: Identify and consider acquisition of natural open space preserves, wildlife corridors, and critical areas as part of the park system.
    - Policy 2: Work with cities to promote the protection of natural resources and open spaces to improve community and ecosystem resiliency.
- PL Goal 3: Conserve visually prominent naturally vegetated steep slopes and elevated ridges that define the Columbia Basin landscape and are uniquely a product of the ice age floods.
    - Policy 2: Encourage the public and/or private acquisition of the prominent ridges within unincorporated Benton County as Open Space Conservation, in order to preserve views, protect native habitat, and provide for public access and recreation associated with these landscapes.
    - Policy 3: Pursue a variety of means and mechanisms such as the preparation of specific and area plans, conservation easements, clustered developments, land acquisitions and trades, statutory requirements to protect the natural landform and vegetative cover of the Rattlesnake uplift formation, notably Rattlesnake, Red, Candy, and Badger mountains and the Horse Heaven Hills.
    - Policy 4: Consider the preservation of the ridges and hillside areas through various development regulations.

3.9.4.2 Other Mitigation Measures

The mitigation measures described in Sections 3.1.4, 3.2.4, 3.3.4, and 3.4.4 for reducing impacts to earth, water, plants and animals, and land use would also serve to avoid and minimize impacts on parks and recreation resources.

3.10 Transportation

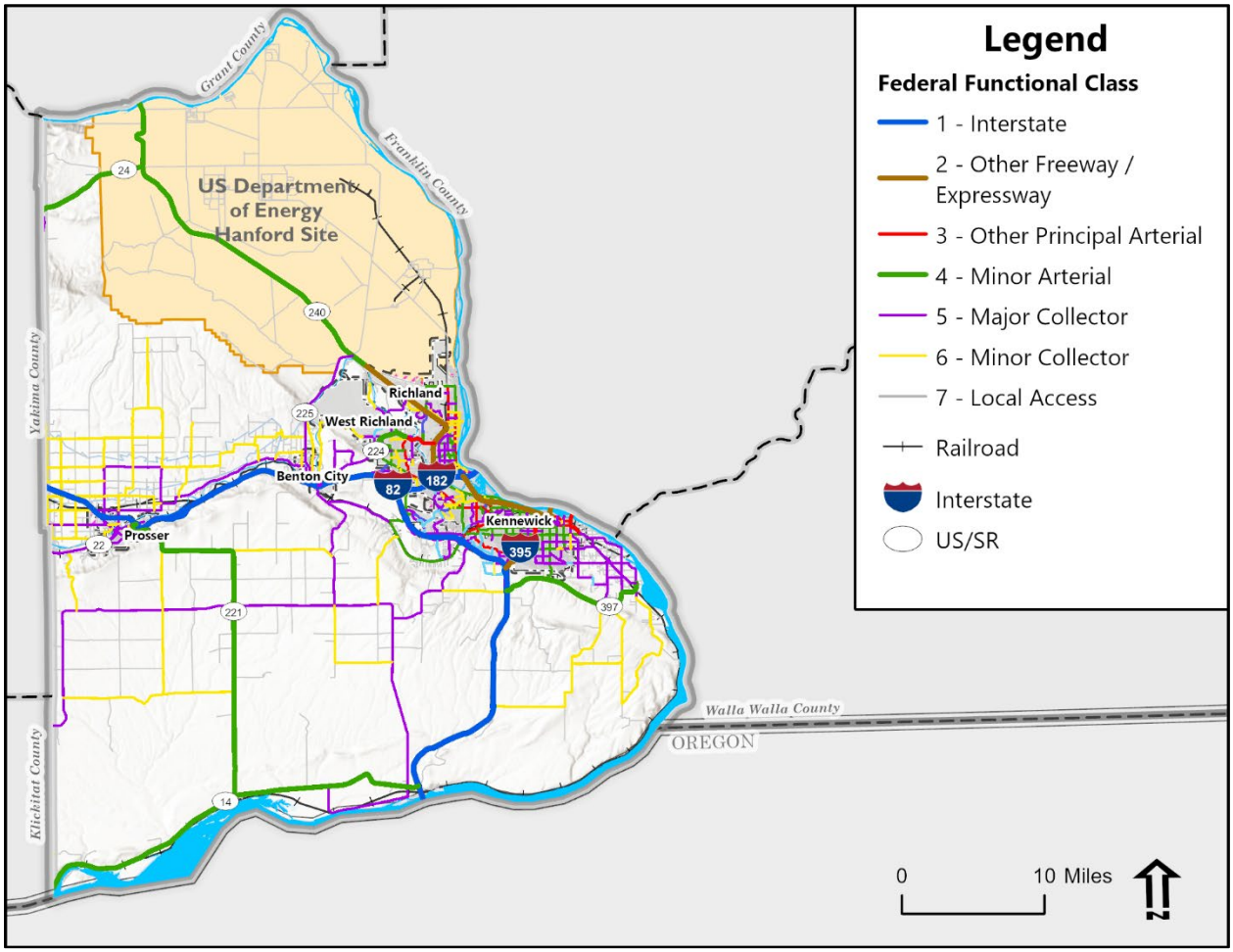
3.10.1 Affected Environment

The Tri-Cities area, situated in Benton and Franklin counties, is the largest metropolitan area between Spokane to the northeast, Seattle to the northwest, Portland to the west, and Boise to the southeast. Because of its location, the Tri-Cities is a major transportation hub for travelers and commodities in the Pacific Northwest. As part of the Tri-Cities, the County has direct access to all modes of commercial transportation services including trucking, rail, barge, and air. Throughout the next 20 years, the County

is projected to experience approximately a 27% increase in population. This growth will result in an increase in traffic volumes to, from, though, and within the County.

Figure 3-10 shows the transportation network in the County. The Tri-Cities are connected to the interstate highway system. I-82 passes through the County and links the Tri-Cities metropolitan area to I-90 to the northwest, through Yakima, and to I-84 to the south, in northern Oregon. I-82 is primarily a major four-lane freeway that travels through the County from the Yakima County line on the west, providing connections to Prosser, Benton City, Richland, and Kennewick and turning south to the county line and into Oregon. I-182 is a six-lane freeway that also passes through the County and links to I-82 on the west and US 395 to the east and provides access to Walla Walla and other southeastern Washington locales. The Washington State Department of Transportation (WSDOT) is responsible for maintaining an adequate level of service on these highways.

Figure 3-10. Transportation Network Map



Benton County has developed a street classification system network with arterial and collector roadways that serve rural areas, provide farm-to-market connections, and serve rural developments.

The limited-access interstates serving the Tri-Cities carry between 40,000 and 60,000 vehicles per day. During peak transportation hours, congestion occurs within urban areas of the Tri-Cities, notably on routes such as SR 240 and George Washington Way, used by Hanford Site commuters, and on Columbia Center Boulevard related to the Columbia Center Commercial Retail complex in Kennewick. However, traffic congestion is generally absent on County roads serving rural or agricultural areas (Benton County, 2026).

The Tri-Cities, Prosser, and Benton City are also served by fixed public transportation routes operated by Ben Franklin Transit (BFT). BFT also provides a rideshare/vanpool program throughout the region. BFT distributes bus service so that a majority of residents within the service area are within a half-mile walk of bus service. There are also currently eight park-and-ride lots in the County, which are owned by WSDOT, BFT, and the City of Kennewick (Benton County, 2026).

The County's transportation network also includes a mix of rail, air, water, and non-motorized systems that support regional mobility and economic activity. Rail infrastructure includes active freight lines operated by BNSF Railway and Union Pacific Railroad, with major intermodal and agricultural shipping connections located near Finley and the Port of Benton (Benton County, 2026). Air transportation is anchored by the Tri-Cities Airport in Pasco—located in neighboring Franklin County—which provides commercial passenger and cargo service, while the Prosser and Richland Airports offer general aviation facilities serving local business, agricultural, and emergency uses (Benton County, 2026). Waterborne transportation is supported by navigable segments of the Columbia River, which enable barge shipping of agricultural and industrial commodities through the McNary Pool and Ice Harbor Lock and Dam system. Shoreline infrastructure near Finley and the Port of Kennewick supports multimodal transfer (Benton County, 2026).

Non-motorized transportation includes regional trail and bicycle systems such as the Sacagawea Heritage Trail—a 23-mile paved path connecting Kennewick, Richland, and Pasco—as well as the Tapteal Greenway along the Yakima River, both of which enhance recreational access and alternative commuting options (Benton County, 2026).

The County's multimodal transportation framework is coordinated through regional partners and supports both economic development and access to natural shoreline areas and open space throughout the County. For further discussion, see Chapter 7, Transportation Element, in the *Benton County Draft Comprehensive Plan* (Benton County, 2026).

3.10.2 Planning and Regulatory Context

The GMA requires that cities and counties coordinate transportation and land use elements of their comprehensive plans. It also requires the transportation element to be consistent with applicable state plans and programs. Cities and counties must provide transportation networks and maintain capital

facilities, programs, and policies that define and provide acceptable Levels of Service (LOS). The GMA requires specific actions and requirements for bringing into compliance transportation facilities or services that are below an established multimodal LOS standard. Concurrency requirements, with respect to transportation, means that improvements or strategies are in place at the time of development, or that a financial commitment is in place to complete the improvements or strategies within six years. These state requirements are implemented locally through Chapter 7, Transportation Element, of the *Benton County Draft Comprehensive Plan* (Benton County, 2026) and related goals and policies.

Applicable Benton County Codes include:

- Subdivision Regulations, Design and Improvements (BCC 9.09)
- Traffic and Roads (BCC Title 10)
- Critical Areas Ordinance (BCC Title 15)

The Six Year Transportation Improvement Program and County Road Program are additional documents that provide planning context. Other regional plans include several plans produced by the Benton-Franklin Council of Governments:

- Regional Transportation Plan
- Active Transportation Plan
- Transportation Improvement Program
- Congestion Management Process
- Comprehensive Safety Action Plan

3.10.3 Probable Environmental Impacts

Transportation and transit facilities demands throughout the County would continue to increase due to future population and employment growth under all alternatives. Continued maintenance of these facilities would occur on a regularly scheduled or as-needed basis. For transit operations, the additional demand could increase hours of operations and the need for some capital facilities such as park-and-ride lots. This includes projects under the regional *2026-2029 Transportation Improvement Program* developed by the Benton-Franklin Council of Governments for the Tri-Cities Metropolitan Planning Organization and Benton-Franklin Regional Transportation Planning Organization.

Growth in population and employment levels would also increase the demand for additional non-motorized facilities such as trails and bikeways. These bicycle and trail facilities may be located along roadways as bike lanes/sidewalks or as separated facilities and would provide opportunities for recreational and commuter users.

An intensification of urban uses and densities will increase traffic congestion, and rail and airport use could also increase. Rail facilities would be affected by an increase in commerce associated with

employment growth. Airport activity would also increase as recreational activities and employment increase.

General construction as well as road construction and maintenance would have impacts on the transportation network and travel in general under all alternatives. These impacts would shift from one location to another over time, resulting in traffic delays, noise, vibration due to heavy equipment, dust, and potentially traffic detours.

The major facilities affected by the forecasted growth in the County under all alternatives are primarily within the urban areas of the Tri-Cities and its periphery. In the rural areas the most notable increases are anticipated on I-82, I-182, SR 240 serving the Hanford Area, SR 397 serving the Finley area, and SR 14 in the Plymouth area, along with other state highways that currently carry higher traffic volumes than the county roads.

3.10.3.1 Alternative 1: No Action Alternative

Future traffic was evaluated as part of update to the Comprehensive Plan assuming existing land use and traditional growth trends. Although most transportation facilities are expected to experience increased traffic volumes, as described and evaluated in the Transportation Element, there are no county roads or state highways that are forecast to fall below LOS standards during the planning horizon of the next 10 years.

3.10.3.2 Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry

For both Alternatives 2 and 3, the changes from GMA Agriculture to Rural Remote and from Rural Remote to Public are likely to have insignificant effects on transportation. Public uses can create focused travel demand around scheduled events. However, individual or small group recreation activities are not likely to generate significant traffic volumes during peak times. The change from Rural Industrial to Rural Remote would be expected to have less impact.

In the Plymouth area, the conversion of 85 acres of existing GMA Agriculture land to Rural Commercial would have focused impacts in the vicinity of the I-82/SR 14 interchange. Little new regional traffic would be generated from this conversion, as most trips would originate from I-82 or already be destined for Plymouth The I-82/SR 14 interchange has low current levels of traffic and is unlikely to experience LOS issues under Alternative 2 or Alternative 3.

Also in the Plymouth area, the conversion of nearly 1,372 acres from GMA Agriculture land to Rural Industrial would create an increase in traffic volumes if the area were fully developed. The specific type of development would affect the amount of traffic generated, with the potential for travel delays at some intersections including SR 14 and I-82. There is significant capacity available on SR 14 that would provide the major access to this area, and it is not anticipated that any segments of SR 14 would fall below the LOS standard. There may be a need to provide turn lanes and traffic control at some intersections on SR 14, depending on the specific development proposals.

3.10.3.3 Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry, Preferred Alternative

The types of impacts described under Alternative 2 also apply to Alternative 3, except that the changes in the Plymouth area with respect to converting GMA Agriculture land to Rural Industrial are approximately half of Alternative 2 (744 acres compared to 1,372 acres). Therefore, the impacts to the transportation network would be less than Alternative 2 but more than those in Alternative 1.

3.10.4 Mitigation Measures

3.10.4.1 Regulatory Standards and Planning Policies

Application of regulatory standards and County planning policies to future development projects will help to reduce the transportation impacts discussed previously.

The *Benton County Draft Comprehensive Plan* (Benton County, 2026) transportation goals and policies encourage providing an efficient and multimodal transportation network to support the County's land use vision and existing needs. The following goals and policies should be considered for future development:

- TE Goal 1: Provide safe, convenient, efficient, economic, and multi-modal transportation networks compatible with the rural character and which serve the transportation demands consistent with the Land Use Element, and all other relevant provisions of the Comprehensive Plan.
- TE Goal 3: Maintain the integrity of the transportation system while minimizing environmental and other impacts.
- TE Goal 4: Coordinate the transportation system with neighboring cities and other transportation providers.

3.10.4.2 Other Mitigation Measures

The following additional measures could be employed to further reduce impacts to the transportation network:

- Review development proposals in coordination with WSDOT and applicable cities within the County and require that new development pays for impacts to the transportation system.
- Continue to participate in the regional transportation planning process with the Benton-Franklin Council of Governments.
- Prior to construction activities, work with applicants to oversee appropriate coordination with affected agencies and property owners. This includes providing appropriate public notification and detour routes.

3.11 Public Services and Utilities

3.11.1 Affected Environment

The County is served by a network of public services and utilities including water supply, wastewater treatment, solid waste disposal, stormwater management, energy and telecommunications, emergency services, and schools. These systems are essential to public health, safety, and quality of life and are planned in coordination with the County's Capital Facilities Plan and the GMA (RCW 36.70A.070(3)).

3.11.1.1 Water Supply

Water service in the County is provided by multiple public utility districts, municipal water systems, and private wells. The cities of Benton City, Kennewick, Prosser, Richland and West Richland operate Class A public water systems that source water from the Columbia River or deep wells tapping into the Columbia Plateau aquifer system (USGS, 2011). These systems are regulated under the Safe Drinking Water Act.

Rural unincorporated areas primarily depend on individual exempt wells and Group B water systems. Growth in these areas is constrained by water availability and the County's critical area regulations to protect groundwater recharge and water quality. Areas near Finley, Badger Canyon, and Red Mountain have seen increasing demand on small water systems, prompting concerns about water right availability and infrastructure capacity, as discussed in greater detail in Section 3.2.

3.11.1.2 Wastewater and Septic Systems

Wastewater collection and treatment is provided in urban areas by municipal treatment plants. The Kennewick Wastewater Treatment Plant and Horn Rapids Regional Water Reclamation Facility serve much of the County's population, providing primary and secondary treatment before discharging effluent to the Columbia River under NPDES permits (Ecology, 2023).

Rural and low-density development areas typically rely on on-site septic systems, which are regulated by the Benton-Franklin Health District. Improperly functioning septic systems have been identified as a contributor to groundwater nitrate contamination in portions of the lower Yakima Valley and Finley areas (Ecology, 2019a). The County's Comprehensive Plan identifies a need for increased septic inspection, education, and monitoring in sensitive aquifer areas.

3.11.1.3 Stormwater Management

Urban stormwater infrastructure is managed by the County and cities through Municipal Separate Storm Sewer Systems (MS4) and local drainage systems. The County is subject to the Eastern Washington Phase II Municipal Stormwater Permit, which requires implementation of low impact development practices, pollution prevention, and public education programs (Ecology, 2024). Many rural and agricultural areas rely on roadside ditches, infiltration basins, and irrigation return flows for stormwater conveyance.

3.11.1.4 Solid Waste and Recycling

The *2025 Benton County Comprehensive Solid Waste Management and Moderate Risk Waste Management Plan* (Benton County, 2025) combined a comprehensive solid waste management plan and a local hazardous waste/moderate risk waste plan for both the incorporated and unincorporated areas of the County. Solid waste collection in the County is provided by Waste Management, Basin Disposal, and city public works departments. Collected waste is transferred to the Horn Rapids Landfill or regional transfer stations. The County also operates a Household Hazardous Waste Facility near Richland for safe disposal of paints, batteries, and solvents (Benton County,2026). Recycling services are limited in rural zones. Public education campaigns and grant-funded recycling programs have been implemented to increase participation and reduce illegal dumping.

3.11.1.5 Energy and Telecommunications

Electrical power is distributed by Benton Public Utility District (PUD), Franklin PUD, and Pacific Power, with generation supplied from hydropower, wind, and natural gas sources. Several solar energy facilities have been permitted in the Horse Heaven Hills and Red Mountain areas, and utility-scale renewable energy development is expected to expand in response to state energy mandates (Commerce, 2022).

Telecommunications infrastructure—including fiberoptic, broadband internet, and cellular networks—is provided by a mix of public and private entities. Gaps in broadband service remain in unincorporated areas, particularly south of Kennewick and east of Benton City. The County is actively pursuing broadband expansion grants to improve service for underserved communities. (Benton County, 2024)

3.11.1.6 Emergency Services

Emergency services in the County are provided by fire protection districts, municipal fire departments, Benton County Sheriff's Office, municipal police departments, and Benton County Emergency Services. Fire Districts #1, #2, and #4 serve large rural portions of the County and maintain mutual aid agreements with urban fire departments.

Medical services are provided through regional hospitals including Kadlec Regional Medical Center in Richland and Trios Southridge Hospital in Kennewick, supported by emergency medical services agencies and ambulance providers. The County operates an Emergency Operations Center and coordinates regional planning for wildfire response, hazardous materials, and disaster recovery (Benton County, 2024a).

3.11.1.7 Schools

The County is served by seven public school districts that provide K–12 education across urban, suburban, and rural areas, including Kennewick, Richland, and Prosser School Districts. These districts operate numerous elementary, middle, and high schools, with the largest concentrations of enrollment in the Kennewick and Richland areas, which are also experiencing the most rapid population growth.

In addition to public schools, there are private and parochial institutions, charter schools, and educational programs affiliated with tribal communities and alternative learning centers.

Educational facilities are typically located within incorporated areas, but some rural schools serve agricultural communities in outlying parts of the County. School district boundaries often extend across municipal and County lines, requiring coordination for transportation and land use planning. The County also hosts higher education facilities, including a branch of Washington State University in Richland and Columbia Basin College satellite programs, which support workforce development and continuing education (Benton County, 2026). Access to safe school routes—especially for walking and biking—is supported through local and regional transportation plans, which identify critical infrastructure needs around school zones and emphasize multimodal safety improvements (Benton County, 2026).

3.11.2 Planning and Regulatory Context

The *Benton County Draft Comprehensive Plan* (Benton County, 2026) provides policy direction for all public service and utility systems throughout the County. The Capital Facilities Element identifies current and future facility needs for County buildings, law enforcement, detention, emergency management, solid waste, transportation, and park facilities. LOS standards inform mitigation requirements for development that increases demand. The Utilities Element addresses electric power, natural gas, telecommunications, water systems, wastewater systems, reclaimed water, septic systems, and solid waste. It also guides the siting of utility corridors, substations, and system expansions to minimize land use conflicts and environmental impacts and provides direction for improving system resiliency and redundancy.

Relevant Benton County Code sections include:

- Public Services and Health (BCC Title 6)
- Zoning (BCC Title 11)
- Critical Areas Ordinance (BCC Title 15)
- Shoreline Master Program (BCC 15.04)

Other relevant County and regional plans and standards include:

- Fire District Capital and Strategic Plans
- Law Enforcement and Emergency Services Planning
- City and District Utility Plans

3.11.3 Probable Environmental Impacts

All alternatives would increase demand for public services and utilities through varied population growth and distribution, industrial activity, infrastructure requirements, and development patterns. An intensification of urban uses and densities will increase traffic congestion, park requirements, police and fire requirements, and other public service demands and fiscal impacts. Additional urban

development could further tax the County's fiscal and public service resources, potentially leading to a dilution of the service levels or capabilities provided to current residents. Additionally, inadequately located or designed urban infrastructure including roads, parking lots, and other improvements that are not properly sited could create stormwater runoff, erosion, and other environmental hazards affecting neighboring properties and public services. Changes to utility system resiliency could occur, particularly where energy development alters load, access, or operational needs.

The degree of impact would vary based on the magnitude and location of land use changes, industrial expansion, and renewable energy development.

3.11.3.1 Alternative 1: No Action Alternative

Alternative 1 would maintain existing land use designations, industrial patterns, and utility service areas. No new housing densities would be introduced, and no additional Rural Industrial or Rural Commercial areas would be designated. Increases in service demand would occur due to continued population growth within existing UGAs and rural communities, as planned by service providers, and increased individual facilities provided by individual landowners (primarily wells and septic systems, with solar systems also expected to increase as well).

Demand for fire, emergency medical services, and sheriff's service districts would increase consistent with population projections.

Energy projects siting in industrial zones may require transmission line extensions and connections that would be considered along with other infrastructure needs during project-level environmental review.

Overall, Alternative 1 would maintain current levels of service and infrastructure obligations in the County.

3.11.3.2 Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry

Alternative 2 includes the most extensive shifts in land use designation with, among other changes, 1,372 acres of GMA Agriculture converted to Rural Industrial. With the expanded Rural Industrial area, there is a potential increased demand on fire protection and emergency services. The Rural Industrial area may house higher-hazard industrial facilities, hazardous materials storage or RMP facilities, and larger structures requiring specialized fire suppression capabilities (see Section 3.5). As such, rural fire districts may require equipment upgrades, additional personnel, or extended response coverage. Additionally, there may be increased law enforcement demand in areas with more industrial activity, trucking, and general workforce presence. Water and wastewater infrastructure would be required and provided by developers.

Alternative 2 would increase residential density in the Finley and Plymouth Rural Community Centers, which could result in increased attendance in the Plymouth School District.

Construction-related impacts to utilities and public services would occur. Increased coordination with utilities would be needed for interconnection, transmission lines, and substation upgrades.

3.11.3.3 Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry, Preferred Alternative

Alternative 3 would reduce Rural Industrial expansion compared to Alternative 2 and shift land use in ways that improve compatibility with public service capacities. The more limited expansion to Rural Industrial would reduce demand on fire services compared to Alternative 2. Fewer industrial acres would likely reduce the risk of high-hazard structures and hazardous materials incidents. Impacts to other emergency response such as law enforcement as well as utilities (water, sewer and power systems) would also be less due to reduced and more concentrated industrial development.

Compared to Alternative 2, Alternative 3 would have lesser utility expansion needs and reduce the level of added service demand.

3.11.4 Mitigation Measures

3.11.4.1 Regulatory Standards and Planning Policies

Application of regulatory standards and County planning policies to future development projects will help to reduce the public services and utilities impacts discussed previously.

Mitigation measures for public services and utilities would ensure that development under the alternatives is supported by adequate infrastructure, maintains levels of service, protects public health and safety, and reduces environmental impacts. These measures rely on existing County requirements—including siting, buffering, and compatibility standards for public and utility facilities under BCC Title 11; critical area protections and mitigation sequencing under the *Benton County Draft CAO* (BCC 15.08); shoreline-specific utility siting and ecological protection requirements in the Benton County SMP (BCC 15.04); stormwater treatment, flow control, erosion prevention, and LID standards under the Eastern Washington Stormwater Manual; sanitation, septic, and solid waste regulations in BCC Title 6; and fire, building, and emergency codes that govern access, water supply, hydrant spacing, and utility safety. Together, these regulatory measures ensure that future growth occurs in a manner that is serviceable, environmentally responsible, and protective of community health and safety.

The *Benton County Draft Comprehensive Plan* (Benton County, 2026) includes numerous goals and policies that support mitigation efforts for public services and utilities under all alternatives by ensuring adequate facilities, coordinated utility systems, and resilient public-safety services are available to support current and future development. Collectively, the goals and policies below establish a framework for mitigation public service and utility impacts under all EIS alternatives:

- CF Goal 1: Anticipate the need and location of and plan for the timely and cost-effective provision of public facilities and services based upon the Land Use Element.

    - Policy 3: Plan for the location and protection of anticipated and existing public uses such as parks, playgrounds, schools, essential public facilities, and other public, state, or federal activities or facilities owned and operated for the benefit of the public. As part of planning, maintain an inventory through the County GIS platform of existing capital facilities owned by public entities, including green infrastructure.
    - Policy 6: Prioritize capital facilities planning and expenditures consistent with this Comprehensive Plan for projects that accomplish one or more of the following:
        - Are essential for public health, safety, and welfare
        - Address and/or improve the quality and level of regional government services
        - Maintain designated transportation LOS
        - Improve public and private sector productivity
        - Facilitate the maintenance and growth of the rural/agricultural economy
    - Policy 9: Promote compatible development of land adjacent to existing and proposed school and other public facilities.
- CF Goal 2: Provide for the siting of "Essential Public Facilities" using siting criteria that are consistent with statutory requirements applicable to these facilities and within appropriate land use designations.
    - Policy 1: Locate capital facilities identified as essential public facilities in a manner that will provide necessary service to intended users while minimizing the impact to surrounding land uses.
- UE Goal 1: Ensure utilities support the land use and economic development goals of the County.
    - Policy 1: Siting of proposed public facilities should be consistent with adopted land use policies.
- UE Goal 2: Maintain public and private household water and sewer systems that are consistent with the rural character of the County.

3.11.4.2 Other Mitigation Measures

The mitigation measures described in Section 3.4.4 for reducing land use impacts would also serve to avoid and minimize impacts on public services and utilities.

3.12 Heritage Conservation

3.12.1 Affected Environment

Benton County is in the Southern Plateau, part of the larger Columbia Plateau culture area. The Southern Plateau stretches from southern Okanogan County in the north to the northern border of the Great Basin to the south.

The Tri-Cities region as a whole is within territory inhabited traditionally by Native people represented today by the Confederated Tribes and Bands of the Yakama Nation, Confederated Tribes of the Umatilla Indian Reservation, and Wanapum Band of Priest Rapids. All are Sahaptin-speaking Plateau

people. The County is also in the 1855 ceded lands of the Yakama Nation, which is composed of the Kah-milt-pah, Klickitat, Klinquit, Kow-was-say-ee, Li-ay-was, Oche-chotes, Palouse, Pisquose, Se-ap-cat, Shyiks, Skinpah, Wenatshapam, Wishram, and Yakama people (CRITFC, 2025). The Confederated Tribes of the Umatilla Indian Reservation include the Cayuse, Umatilla, and Walla Walla people (CTUIR 2025).

3.12.1.1 Precontact Cultural History

Archaeological evidence suggests early mobile foragers were present in the Columbia Plateau at least 11,000 years ago. This earliest recorded human occupation was followed by a brief but widespread Clovis occupation, and a "broad-spectrum" hunter-gatherer culture developed in the Columbia Plateau region and persisted until the middle Holocene, around 5,300 years ago (Chatters and Pokotylo 1998).

A shift toward more permanent settlement began around 6,000 years ago, characterized by intensive salmon fishing and associated storage features, social inequality, large permanent winter villages, and diverse tool assemblages (Chatters and Pokotylo 1998; Ames et al. 1998).

Traditional Plateau cultures were based on a seasonal round that took advantage of fish runs, game, and root resources, as well as trade, kinship ties, and intermarriage among groups (Walker 1998). Prior to historic resettlement, permanent winter villages anchored the seasonal round (Boyd and Hajda 1987). Fishing activities revolved around an early salmon run in March and a second, larger run in June (Schuster 1998). Gathering activities took place throughout the year. Although salmon were a key staple, plant foods also made up a significant portion of the diet (Hunn 1981). Large permanent villages were located in prominent locations (Walker, 1998), such as at the confluence of the Columbia River (Nch'i-Wana) and the Yakima River (Koots Koots A Min Ma) (Hansen and Darby 2018).

3.12.1.2 Post-Contact Cultural History

By the time of the first sustained contact between the tribes of the Benton County area and non-native settlers in the mid-1800s, tribal life had already been significantly impacted. Introduced diseases decimated the population (Vibert 1997:50) and the introduction of the horse altered social and economic activities.

The Lewis and Clark expedition recorded the first description of the Yakima-Columbia River confluence area in 1805, and David Thompson passed through in 1811 (Nisbet 2005). The area was rarely visited, and several early attempts at settlement (a mission, a group of cattle ranchers) failed (Kershner 2008). However, by the 1890s, settlers had established an agricultural economy and built irrigation systems (Kershner 2008).

In 1853, Washington became a territory separate from Oregon and, by the next year, Governors of both the territories began pursuing treaties that relegated tribes to reservations (Wilma 2003).

The arrival of the Northern Pacific Railroad in 1884 established the Tri-Cities as a major junction between rail lines serving Seattle, Tacoma, Spokane, and Portland. This project, in turn, spurred

agricultural growth for the entire region thanks to irrigation from nearby rivers. World War II had a significant impact that is still felt in the region because of the development of the Naval Air Station Pasco flight training facility (later the Tri-Cities Airport), the Hanford Nuclear Reservation, and the Manhattan Project. These events (rail, irrigation, air transportation, and nuclear energy) continue to influence the cultural environment of the County today.

3.12.1.3 Recorded Cultural Resources

The Yakima-Columbia River confluence has a rich archaeological record, with sites in the area attributed to all of the Southern Plateau cultural phases. The area has been "occupied more or less continuously for the last 10,000 years" (Western Heritage 1983). There are 32 recorded archaeological sites within 1 mile of the confluence.

Over 2,000 archaeological sites, Native American traditional places, and historical structures related to the area's cultural history have been recorded in the County. Recorded and dated archaeological sites in the County range from 11,000 years ago into the historic period. A cursory review of mapped prior investigations reveals that less than a quarter of the County has been surveyed. Ephemeral settlements associated with early settlement may also be encountered. Existing structures, including barns that were historically significant to local development, may also be present within and near individual projects. Several historic houses, government buildings, and bridges are located across the County. The absence of recorded archaeological sites may not correspond with an absence of resources.

3.12.1.4 Previously Conducted Cultural Resources Review

The Washington State Department of Archaeology and Historic Preservation (DAHP) Statewide Predictive Model categorizes most of the County as very high risk to low risk for encountering cultural resources. Many of the categorized "low risk" areas are within upland portions of the County. The DAHP Statewide Predictive Model heavily relies on distance to water and does not account for nearby sites, and as such has classified the upland areas as lower risk than lands closest to the rivers. Despite this, based on review of site forms and previous cultural resource assessments for these areas, a number of recorded precontact sites are either deeply buried or eroded due to dynamic alluvial processes during flooding events in the upland areas. This means there is high potential for the presence of archaeological resources in the region that could be disturbed or otherwise impacted by development.

3.12.2 Planning and Regulatory Context

The GMA has a goal to identify and encourage the preservation of lands, sites and structures that have historical or archaeological significance. This goal is reflected in Chapter 7, Parks and Recreation Element, of the B*enton County Draft Comprehensive Plan* (Benton County, 2026), which discusses historic resources protected in several parks around the County, as well as in the new Climate and Greenhouse gas element. The Comprehensive Plan includes goals and policies to identify, preserve, and protect historic, cultural, and archaeological resources by coordinating with tribes; identifying valuable resources; siting and designing development to avoid or mitigate impacts; and enforcing

development code provisions to condition project approval based on professional archaeologist findings.

Additional relevant County planning documents include:

- The Benton County Shoreline Master Program includes a goal to encourage the protection of shoreline areas and sites having historic, cultural, educational or scientific value. See Section 3.7 for further discussion of shoreline use.
- The *Benton County Comprehensive Parks Plan* (2025) generally addresses the identification and preservation of historic resources along with providing recreational opportunities. See Section 3.9 for further discussion of recreation.

Several existing regulations govern the identification and treatment of cultural and historic resources:

- Section 106 of the National Historic Preservation Act and its implementing regulations at 36 Code of Federal Regulations 800, which apply to projects that are federally funded or approved.
- Governor's Executive Order 05-05, which applies to projects that use State of Washington capital funds.
- RCW 27.53 (Archaeological Sites and Records), which prohibits the unpermitted removal of archaeological materials and establishes a permitting process.
- RCW 27.44 (Indian Graves and Records), which describes how human remains must be treated.
- RCW 68.60 (Abandoned and Historic Cemeteries and Historic Graves), which provides for the protection and preservation of abandoned and historic cemeteries and historic graves.
- RCW 42.56.300 (Public Disclosure Exemptions), which aims to protect sensitive information about archaeological, historic, and cultural sites from public disclosure, thereby preventing looting, vandalism, or other forms of depredation. RCW 42.56.300 is enforced through a combination of agency compliance, legal obligations, and procedural safeguards under Washington State's Public Records Act.
- BCC Chapter 89 (Historic Preservation) establishes the Benton County Historic Resources Commission, creates the Benton County Register of Historic Resources, and codifies the review process and criteria for proposed exterior alteration or demolition of historic structures or sites listed on the County's register or in the National Register of Historic Places.

3.12.3 Probable Environmental Impacts

Generally, the potential for impacts to cultural resources is proportional to the intensity of construction for new development or redevelopment. The greater the horizontal and vertical extent of ground disturbance, the more likely that a development will impact archaeological materials, historic structures, or traditional cultural properties. Ground disturbance during construction is likely to impact unrecorded archaeological resources because of the high potential for the presence of these resources and because most of the County has not been archaeologically surveyed.

Development activities could also indirectly affect the tribes' use of their cultural sites through impacts on visual quality, increased noise, or access limitations. If development allows more public access to currently inaccessible areas, this could result in more potential for looting or vandalism of cultural resources.

3.12.3.1 Alternative 1: No Action Alternative

Alternative 1 would result in a continuation of current zoning and land use designations. Future residential, industrial, and energy development would not be focused in designated areas, potentially resulting in more widespread impacts in rural areas. Construction could potentially impact cultural resources, including recorded and unrecorded archaeological sites, as previously discussed. The highest potential to impact unrecorded cultural resources is construction near riverine environments. Long-term, indirect effects on cultural and historic resources (e.g., visual changes or increased potential for public access and vandalism) are possible.

Development of solar and wind energy projects in allowed zones would include typical ground-disturbing construction activities, as well as potential for construction of new site access roads, security fencing, and electrical lines to connect each energy project to the grid. Unrecorded archaeological sites could be affected in these areas.

Potential impacts would be minimized through application of federal, state, and County regulatory requirements to protect cultural and historic resources. Through these regulatory requirements, a project could best minimize impacts by having formal archaeological surveys in conjunction with coordination and feedback from associated tribes.

3.12.3.2 Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry

Compared to Alternative 1, land use patterns under Alternative 2 would increase in intensity in designated areas. New development and redevelopment would involve demolition of some existing structures, site preparation, infrastructure installation, and construction of new buildings. Some of these developments would likely include disturbance of previously undisturbed soils for building foundations, utilities, roadways, and other infrastructure.

Redesignation of GMA Agriculture land to Rural Industrial (1,372 acres), Rural Commercial (85 acres), and Rural Remote (240 acres) would allow more intensive development of these properties. These higher intensity designations would facilitate larger scale construction projects with associated ground disturbance that could affect previously unrecorded cultural resources. There is a higher potential to adversely impact unrecorded cultural resources in sites that are currently undeveloped. Additionally, projects along the Columbia River and other riverine environments would have a higher potential to impact buried cultural resources.

Long-term, indirect effects on cultural and historic resources (e.g., visual changes or increased potential for public access and vandalism) are possible for large-scale residential or industrial projects proposed near these resources.

Alternative 2 would reduce the potential for intensive development and ground disturbance by redesignating 45 acres Rural Industrial to Rural Remote and 457 acres Rural Remote to Open Space/Public. The potential for impacts on unrecorded cultural resources would be reduced in these areas.

As with Alternative 1, potential impacts to cultural and historic resources would be minimized through application of federal, state, and County regulatory requirements, formal archaeological surveys, and coordination with tribes.

3.12.3.3 Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry, Preferred Alternative

The types of construction and operational impacts described for Alternative 2 would be similar but less intensive under Alternative 3 because smaller areas of the County would be designated for higher intensity zoning. However, unrecorded archaeological sites could still be affected in these areas.

Alternative 3 would convert a smaller area of existing GMA Agriculture to Rural Industrial (744 acres) compared to Alternative 2. As with Alternative 2, 85 acres of GMA Agriculture would change to Rural Commercial and 240 acres to Rural Remote. These higher intensity zones would facilitate larger scale construction projects with associated ground disturbance that could affect previously undocumented cultural resources. There is a higher potential to adversely impact unrecorded cultural resources in sites that are currently undeveloped. Additionally, projects along the Columbia River and riverine environments would have a higher potential to impact buried cultural resources.

Alternative 3 would reduce development potential across 45 acres of Rural Industrial land that would change to Rural Remote, and on 457 acres that would change from Rural Remote to Open Space/Public. Removing 367 acres along the river shoreline in Plymouth from potential industrial use and changing it to Public would be especially beneficially because of the high potential to encounter unrecorded cultural resources in shoreline areas.

The shrubsteppe mitigation program under Alternative 3 could also benefit cultural resources by protecting native vegetation and preventing future ground disturbance in shrubsteppe habitats.

As with Alternatives 1 and 2, potential impacts to cultural and historic resources would be minimized through application of federal, state, and County regulatory requirements, formal archaeological surveys, and coordination with tribes.

3.12.4 Mitigation Measures

3.12.4.1 Regulatory Standards and Planning Policies

Application of regulatory standards and County planning policies to future development projects will help to reduce potential impacts to cultural and historic resources discussed previously.

National Historic Preservation Act Section 106, Washington State Executive Order 05-05, and RCW 27.53, among other regulations, require impacts to cultural resources to be mitigated. Mitigation is developed on a project-by-project basis, in consultation with Native American Tribes, DAHP, and other interested parties.

The *Benton County Draft Comprehensive Plan* (Benton County, 2026) goals and policies encourage the preservation of structures, districts, and cultural resources unique to the County. The following goals and policies should be considered for future development:

- PL Goal 4: Preserve significant historic structures, districts, and cultural resources that are unique to Benton County.
- PL Goal 5: Identify, preserve, and protect historic, cultural, and archaeological resources found to be significant by recognized local, state, tribal or federal processes.

3.12.4.2 Other Mitigation Measures

The mitigation measures described in Sections 3.3.1 and 3.3.4 for reducing impacts to earth, plants, and animals would also serve to avoid and minimize impacts on cultural resources by protecting soils and native species.

The County's Open Space Taxation Program and Public Benefit Rating System could also be used as tools to preserve historic sites and protect them from future development impacts.

4 Environmental Review Summary

4.1 Impacts and Mitigation Summary

Table 4-1 at the end of Chapter 4 summarizes the impacts of each alternative for each of the resource areas discussed in this EIS. All three alternatives, including Alternative 1 (No Action), would have some level of impact on all resource areas related to background population growth, continuation of current development trends, and development of renewable energy projects under current zoning patterns. In general, Alternative 2 is expected to have the greatest potential impacts of the alternatives because it encompasses the largest areas for industrial and residential land use redesignations. Alternative 3 proposes industrial land use redesignations but across smaller land areas than Alternative 2, therefore resulting in lower levels of anticipated impacts.

Both Action Alternatives include redesignating some lands to Open Space/Public, which could reduce overall impacts by removing or lowering future development potential in these areas. Alternative 3 also proposes a shrubsteppe mitigation program that would benefit native vegetation and wildlife by protecting areas of higher quality habitat.

Alternative 2 is the only alternative that adds housing capacity in Benton County by increasing allowed residential densities in specific areas.

4.1.1 Summary of Planning and Regulatory Requirements

As discussed in each resource section of Chapter 3, future projects will be required to comply with Benton County, regional, state, and local plans, policies, standards, and regulations, which include but are not limited to the following:

Regional and Special District:

- Watershed and Basin Plans
- Flood Hazard Management Plans
- Irrigation District Plans
- Multi-Jurisdictional Hazard Mitigation Plan
- Yakima Basin Integrated Plan
- Benton-Franklin Council of Governments:
    - Regional Transportation Plan
    - Active Transportation Plan
    - Transportation Improvement Program
    - Congestion Management Process
    - Comprehensive Safety Action Plan
- Solid Waste Management Plan
- Public Water System Plans
- Wellhead Protection Plans

- Fire District Capital and Strategic Plans
- Law Enforcement and Emergency Services Planning
- City and District Utility Plans

Benton County:

- Benton County Comprehensive Plan
- Countywide Planning Policies
- Benton County Shoreline Master Program
- Benton County Code
- Benton County Rural Water Supply Program
- Voluntary Stewardship Program (VSP)
- Benton Clean Air Agency Regulations
- Benton County Community Wildfire Protection Plan
- Benton County Comprehensive Parks Plan (2025)
- Benton County Road Program
- Six Year Transportation Improvement Program
- Capital Facilities Plan

Washington State:

- Growth Management Act
- Washington State Department of Ecology regulations for water quantity, water quality, and hazardous waste cleanup
- Washington Clean Air Act
- Washington State Department of Health regulations for drinking water
- Requirements for protection of historic and cultural resources
- Ecology's Stormwater Management Manual for Eastern Washington
- WDFW's Priority Habitats and Species program
- Washington State Department of Agriculture regulations for pesticide use, drift prevention, and agricultural chemical storage
- Washington State Recreation and Conservation Office planning standards

Federal:

- Regulations for clean water, stormwater, floodplains, wetlands protection, and endangered species
- Regulations for consultation with Native American Tribes and protection of cultural and historic resources
- Clean Air Act and National Ambient Air Quality Standards (NAAQS)
- Clean Water Act, including NPDES and stormwater requirements
- Regulations and reporting for toxic materials and Superfund cleanup

- U.S. Army Corps of Engineers and Bureau of Reclamation coordination for parks along federally managed water bodies

4.1.2 Summary of Additional Mitigation Measures

Beyond these planning and regulatory requirements, Chapter 3 of this EIS also includes the following additional mitigation measures that Benton County could consider to further reduce impacts:

Earth:

- Stage construction to retain as much existing vegetation as possible.
- Encourage cluster housing and other housing types in Rural Community Centers.

Plants and Animals:

- Use the County's Open Space Taxation Program and Public Benefit Rating System as tools to preserve habitat areas and protect them from future development impacts.

Land Use:

- Use the County's Open Space Taxation Program and Public Benefit Rating System as tools to protect key ecological corridors, groundwater recharge areas, and scenic landscapes.
- Continue to support implementation of the VSP to protect ecological functions on agricultural lands.
- Encourage public access planning to support recreation opportunities where appropriate.

Environmental Health:

- Continue to promote the Benton County household hazardous waste management program to ensure these materials are either recycled or safely disposed of at licensed facilities.

Air Quality/Greenhouse Gas:

- Reductions in traffic congestion through encouraging alternative modes of transportation such as transit and bicycles or walking may help offset any potential localized increase in emissions.
- On a regional basis, the EPA's vehicle and fuel regulations (coupled with ongoing future fleet turnover) should, over time, cause significant reductions in region-wide air quality levels. Ongoing EPA motor vehicle regulations have caused steady decreases in tailpipe emissions from individual vehicles, and it is possible that those continuing decreases from individual vehicles could offset the increase in vehicle traffic.
- Support State and EPA efforts to reduce ozone levels during hot summer days where levels might increase due to limited wind.
- Continue to support hydropower electrical general facilities in the region that do not contribute to greenhouse gas emissions.

- Support regional VMT reduction strategies, such as increasing residential density, increasing job density, providing transit-oriented development, and implementing commute trip reduction and demand management programs.

Population, Housing, and Employment:

- Continue to maintain adequate land supply that supports economic employment uses while protecting the agricultural economic base.
- Support economic diversification and job growth.
- Coordinate economic development with infrastructure planning.
- Direct economic growth to appropriate locations.
- Coordinate with regional economic development partners.

Transportation:

- Review development proposals in coordination with WSDOT and applicable cities within the County and require that new development pays for impacts to the transportation system.
- Continue to participate in the regional transportation planning process with the Benton-Franklin Council of Governments.
- Prior to construction activities, work with applicants to oversee appropriate coordination with affected agencies and property owners. This includes providing appropriate public notification and detour routes.

4.2 Future Environmental Review

This EIS evaluates impacts at a programmatic level only. The County will require environmental review and permit compliance for future development at an individual project level. Project impacts will be reduced through application of existing and updated County codes and Comprehensive Plan goals and policies, as detailed in the previous resource sections of this EIS. Applicants are required to demonstrate that projects are designed and implemented to avoid and minimize impacts to sensitive resources, and compensatory mitigation is required for unavoidable project impacts.

4.3 Significant Unavoidable Adverse Impacts

The Benton County Comprehensive Plan update is not anticipated to result in significant unavoidable adverse impacts. With application of project-specific environmental review, mitigation sequencing, and compliance with applicable codes, the impacts of future development projects are expected to be reduced and mitigated to be less than significant.

4.4 Cumulative Impacts

SEPA requires a range of impacts to be evaluated as part of environmental review including direct, indirect, and cumulative impacts and associated mitigation measures (WAC 197-11-060 and WAC 197-11-792). Cumulative effects are those that could result in the combination of effects from individual project actions occurring over time. If left unmitigated, the cumulative or incremental effects of these actions have the potential to result in significant environmental impacts.

The potential for cumulative impacts to natural resources and the human environment is mostly likely to result from background population growth combined with industrial, higher density residential, and renewable energy development.

For example, if multiple construction projects are occurring in the same area, this could result in more traffic, noise, dust, and stormwater impacts compared to a single project. While construction projects are generally completed within a matter of months, residents near these areas could experience a noticeable level of impact, and wildlife may be more likely to avoid these areas. Development often results in conversion of native vegetation to buildings, paved areas, or ornamental landscaping. While individual projects may not remove large areas of native vegetation, the combination of multiple projects could reduce or fragment native habitats across the County.

The purpose of the Benton County Comprehensive Plan update is to continue managing anticipated development and to avoid the cumulative effects that may result from poorly managed growth. The County will continue to implement its own plans and regulations for projects over which it has review and permitting authority. The County will also continue to communicate with other agencies and regional entities to ensure that growth is coordinated and cumulative impacts are minimized.

4.5 Areas of Uncertainty and Controversy

The County has not identified any major areas of uncertainty or controversy related to the alternatives evaluated in this EIS.

Table 4-1. Summary of Impacts by Alternative

Topics/Impacts Common to All Alternatives	Alternative 1: No Action Alternative	Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry	Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry, Preferred Alternative
3.1. Earth			
• Construction ground disturbance could result in erosion or effects on slope stability. • Development may expand impervious areas and increase stormwater runoff and sediment transport. • Construction or operation using hazardous materials increases potential for soil contamination. • Potential impacts highest where ground disturbance occurs within geologically hazardous areas and for larger scale and industrial developments.	• Development patterns remain largely unchanged. Soil disturbance occurs primarily from existing agricultural and rural development activities. • Limiting energy projects to industrial and designated areas avoids impacts to Prime Farmland and long-term soil productivity.	• Largest potential ground disturbance of the alternatives due to expanded industrial areas. • Increased potential for erosion, soil disturbance, and exposure to geologic hazards. • Industrial development would occur largely on areas less suitable for agriculture. • Redesignating land from Rural Remote to Open Space/Public in Candy Mountain and Badger Canyon protects geologic hazard areas, steep slopes, and erosion-prone landscapes by limiting site disturbance.	• Reduced potential soil disturbance and exposure to geologic hazards compared to Alternative 2 because of smaller area designated for industrial development. • Industrial development would occur largely on areas less suitable for agriculture. • Redesignation of land from Rural Remote to Open/Space public same as Alternative 2. • Reclassifying Rural Industrial land to Public along Columbia River limits future disturbance of shoreline. • Shrubsteppe mitigation program maintains soil stability and reduces erosion.

Topics/Impacts Common to All Alternatives	Alternative 1: No Action Alternative	Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry	Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry, Preferred Alternative
3.2. Surface and Groundwater			
• Development activities may cause erosion or increase impervious surfaces that could discharge contaminated or sediment-laden water to nearby surface waters. • Risk of groundwater contamination from industrial activities, hazardous materials storage, or increased reliance on on-site wastewater systems. • Development could reduce groundwater recharge and potentially reduce baseflow to nearby surface waters. • Potential encroachment into riparian buffers, wetlands, floodplains, and CARAs. • Changes in population and increased development could limit the availability of water supplies.	• Surface and groundwater conditions remain similar to existing trends. • Development projects may affect water demand and stormwater management. • County's Rural Water Supply Program offsets impacts to Yakima River water through surface water rights preservation.	• Expanded industrial development may increase impervious surfaces, stormwater runoff, and risk of surface water and groundwater contamination. • Expanded industrial buildout may increase water supply demands and fire flow requirements. • Industrial expansion area overlaps mapped floodplain and CARAs, potentially affecting flood storage/conveyance and groundwater recharge. • Development in redesignated Rural Remote areas could result in more reliance on individual wells and on-site wastewater systems, which may incrementally affect groundwater quantity and quality.	• Similar impacts as Alternative 2 but reduced due to smaller industrial footprint that does not overlap with mapped floodplains. • Smaller area of industrial land overlap with CARAs compared to Alternative 2. • Shrubsteppe mitigation program reduces disturbance of areas that allow natural infiltration and groundwater recharge.

Topics/Impacts Common to All Alternatives	Alternative 1: No Action Alternative	Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry	Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry, Preferred Alternative
3.3. Plants and Animals			
• Habitat disturbance and fragmentation from development and infrastructure expansion. • Removal of native vegetation reduces wildlife habitat quality. • Construction and operation of new developments may increase disturbance of wildlife due to noise, lights, roadway mortality, and other increased human activity. • Loss of trees from riparian areas may increase water temperatures and degrade fish habitat.	• Impacts to habitat continue to follow existing development trends. • Agriculture-related industrial development would continue to occur in a more dispersed manner on GMA Agriculture-designated lands, affecting habitat for species that use croplands and pastures. • Shrubsteppe habitat and ferruginous hawk habitat would potentially be impacted at Badger Canyon and near Candy Mountain if this area develops consistent with the existing designation.	• Greatest potential habitat impact of the alternatives due to extent of land redesignation. • More clustered industrial development could limit impacts to wildlife habitat on remaining GMA Agricultural lands that are not redesignated. • Redesignating land in Badger Canyon and Candy Mountain from Rural Remote to Public would permanently preserve existing higher quality shrubsteppe habitat.	• Smaller area redesignated for industrial use, with less GMA Agriculture land converted and lower habitat impacts than Alternative 2. • Shrubsteppe mitigation program reduces habitat impacts. • Redesignation of Industrial lands to Public along Columbia River provides more protection for shoreline habitat.

Topics/Impacts Common to All Alternatives	Alternative 1: No Action Alternative	Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry	Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry, Preferred Alternative
3.4. Land Use			
• Continued conversion of rural lands to developed uses associated with population and economic growth. • Development may result in increased noise, light and glare, traffic delays, and localized changes in views or aesthetic character. • Approximately 25,000 acres of new residential development anticipated, plus additional land for infrastructure. • Most residential development expected to be dispersed across Rural Remote and Rural Resource areas. • Major renewable energy projects limited to specific zoning districts.	• Existing land use patterns remain mostly unchanged. • Growth occurs within existing land use designations.	• Largest land use changes, including industrial expansion and higher residential densities in Rural Community Centers. • Concentrating industrial uses in planned locations would support agricultural viability by preserving larger, contiguous blocks of farmland. • Conflicts between industrial and existing agricultural/rural residential uses may require site-specific measures to reduce noise, dust, and other disturbances. • Other proposed land use changes would be more consistent with surrounding land uses and take advantage of transportation infrastructure. • Redesignating land in Badger Canyon and Candy Mountain from Rural Remote to Public would preserve shrubsteppe habitat, steep slopes, and land with high recreational value.	• Moderate land use changes with reduced industrial expansion compared to Alternative 2 and no increase in rural housing density. • Redesignation of Industrial lands to Public along Columbia River provides more protection for shoreline habitat in an area that is unlikely to support industrial development.

Topics/Impacts Common to All Alternatives	Alternative 1: No Action Alternative	Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry	Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry, Preferred Alternative
3.5. Environmental Health			
• Development may result in increased human exposure to noise, hazardous materials, and industrial or transportation emissions to air, soil, or water.	• Environmental health conditions follow existing trends associated with population growth. • In industrial areas, development of vacant or underutilized parcels could increase exposure to noise, air emissions, traffic, and other operational impacts in nearby communities. • Continued agricultural intensification or development of agricultural processing, storage, or support facilities could contribute to localized environmental health risks. • Sensitive populations, including lower-income households and farmworker communities, may experience disproportionate exposure.	• Largest extent of industrial, residential, and commercial land use changes among the alternatives, increasing the potential for environmental health hazards associated with more intensive development patterns. • Higher residential densities in areas already experiencing elevated environmental health burdens may increase exposure to localized stressors (e.g., traffic, noise, light, and proximity to industrial or transportation-related activities). • Potential for elevated exposure risks near energy facilities where hazardous materials are used.	• Similar impacts to Alternative 2, but generally lower due to smaller industrial area. • Potential environmental health impacts associated with increased residential exposure or intensified land use in community centers would not be expected. • Redesignating shoreline areas from Rural Industrial to Public would reduce environmental health risks associated with industrial activities in this area.

Topics/Impacts Common to All Alternatives	Alternative 1: No Action Alternative	Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry	Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry, Preferred Alternative
3.6. Air Quality/Greenhouse Gas			
• Increased vehicle travel and energy use associated with population and employment growth. • Potential for short-term dust and equipment exhaust emissions during construction. • Large-scale renewable energy development may reduce regional GHG emissions by displacing fossil-fuel generation but would produce short-term emissions during construction and material production.	• Emissions trends remain similar to existing patterns, with air quality impacts due primarily to agriculture, incremental development, construction, and vehicle travel.	• Greatest potential air quality and GHG impacts among the alternatives due to expanded industrial land designations and increased development intensity. • Increased industrial activity may contribute higher emissions from construction equipment and truck traffic. • Land clearing, grading, and increased vehicle activity may generate fugitive dust and particulate matter, particularly during dry and windy conditions. • Redesignation of land from Rural Remote to Public in Candy Mountain and Badger Canyon would remove potential future residential development and associated air quality impacts.	• Similar impacts to Alternative 2, but smaller scale due to reduced development footprint. • Redesignating shoreline areas from Rural Industrial to Public would eliminate construction-related emissions, vehicle trips, and localized air quality impacts associated with future industrial buildout in this area.
3.7. Shoreline Use			
• Increased demand for shoreline access and use as a result of population growth places additional pressure on shoreline habitats and resources.	• Shoreline land use designations remain unchanged.	• Shoreline land use designations remain unchanged.	• Conversion of shoreline-adjacent Rural Industrial land to Public improves shoreline protection and habitat conservation.

Topics/Impacts Common to All Alternatives	Alternative 1: No Action Alternative	Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry	Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry, Preferred Alternative
3.8. Population, Housing and Employment			
• Population growth is expected to continue, with increased demand for housing, jobs, services, and infrastructure.	• Population growth occurs but housing capacity in Rural Community Centers remains limited. • Continued reliance on housing development on large lots in rural areas can increase per unit housing cost. • Economic growth follows existing trends, driven by regional population growth, agricultural production, and major employers (e.g., Hanford, healthcare systems, regional service industries).	• Higher housing densities allowed in Rural Community Centers. • Small multifamily housing units may be possible in Rural Community Centers, reducing cost per unit. • Focusing housing growth in Rural Community Centers could bring rural residents closer to local services. • Expanded industrial land capacity could increase opportunities for economic development.	• No changes to Rural Community Center housing density. • Potential for economic development through industrial land redesignation, at a smaller scale than Alternative 2.

Topics/Impacts Common to All Alternatives	Alternative 1: No Action Alternative	Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry	Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry, Preferred Alternative
3.9. Parks and Recreation			
• Increased demand for parks, trails, and recreational facilities due to population growth. • Potential short-term impacts on recreation facilities (e.g., noise, traffic, access) during future development projects.	• Parks and recreation system continues to serve population growth based on current standards. • Demands on existing parks and recreational facilities are expected to increase as the population grows. • Fragmentation of open space in rural areas would continue.	• Converting agricultural lands to Rural Industrial may reduce the rural open-space character in areas used for dispersed recreation. • Redesignation of land from Rural Remote to Public in Candy Mountain and Badger Canyon would support interconnected open space corridors and enhance opportunities for passive recreation.	• More limited industrial land use changes and impacts on dispersed recreation than Alternative 2. • Same benefits of Public land redesignation at Candy Mountain and Badger Canyon. • Added recreational benefits from shrubsteppe mitigation program and redesignation of shoreline area as Public along Columbia River.

Topics/Impacts Common to All Alternatives	Alternative 1: No Action Alternative	Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry	Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry, Preferred Alternative
3.10. Transportation			
• Demand on transportation and transit facilities would increase commensurate with population and employment growth. • Growth in population and employment levels would increase demand for additional non-motorized facilities such as trails and bikeways. • Traffic congestion, rail, and airport use may also increase. • Construction of transportation projects would have short-term impacts (e.g., delays, noise, and detours) near work sites.	• Transportation patterns remain consistent with current trends. • County roads and state highways are expected to continue with an acceptable level of service over the next decade.	• Increased industrial development may generate an increase in traffic volumes and potential for delays at some intersections. • SR 14 has sufficient capacity to provide the major access to the industrial area; some traffic control improvements may be needed depending on specific development proposals.	• Similar transportation impacts to Alternative 2 but at a smaller scale due to the reduce area of industrial land redesignation.

Topics/Impacts Common to All Alternatives	Alternative 1: No Action Alternative	Alternative 2: Aggressive Growth Target with Emphasis on Housing and Industry	Alternative 3: Moderate Growth Target with More Limited Emphasis on Industry, Preferred Alternative
3.11. Public Services and Utilities			
• Increased demand for utilities and public services such as water, sewer, fire protection, emergency response, and solid waste due to population growth.	• Public service demand increases gradually with population growth. • Energy projects siting in industrial zones may require transmission line extensions and connections that would be considered along with other infrastructure needs during project-level environmental review.	• Expanded industrial development may increase demand for utilities, emergency services, fire protection, and utility infrastructure capacity. • Increased residential density in Rural Community Centers could result in increased attendance in the Plymouth School District.	• Similar but more moderate increases in demand compared to Alternative 2.
3.12. Heritage Conservation			
• Potential disturbance of cultural or historic resources during development. • Development activities could indirectly affect the tribes' use of their cultural sites through impacts on visual quality, increased noise, or access limitations. • Increased public access to currently inaccessible areas could result in potential for looting or vandalism of cultural resources.	• Potential impacts commensurate with existing growth and construction patterns.	• Redesignation of land would allow more intensive development, potentially increasing ground disturbance impacts to previously unrecorded cultural resources. • Projects along shorelines have a higher potential to impact buried cultural resources. • Large-scale residential or industrial projects could indirectly impact tribal use of cultural sites. • Redesignation of land from Rural Remote to Public would reduce potential for impacts.	• Smaller development footprint and reduced impacts compared to Alternative 2. • Redesignation of Columbia River shoreline reduces potential disturbance in an area with high potential to encounter unrecorded cultural resources. • Shrubsteppe mitigation program would prevent future ground disturbance impacts in some shrubsteppe habitats.

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Appendix A - 2026 Environmental Impact Statement (EIS) Scoping Summary

WHITE BLUFFS CONSULTING

1651 South Fescue Street
Kennewick, Washington 99338
Phone 509.539.3366
www.whitebluffsconsulting.com

MEMORANDUM

To:	Greg Wendt and Michelle Mercer, Benton County	**Date:**	May 13, 2025
From:	Cara Cares, AC Geo and Ben Floyd, White Bluffs Consulting	**Project:**	Benton County Comprehensive Update
Cc:			
Re:	2026 Environmental Impact Statement (EIS) Scoping Summary		

Introduction

The purpose of this document is to summarize the comments received during the State Environmental Policy Act (SEPA) public scoping period of the 2026 Comprehsnive Plan and Development Regulations Update Environmental Impact Statement (EIS), and to identify the EIS alternatives and areas of investigation that will be included in the EIS. Attachment B lists the comments received during the scoping period.

Description of Proposal

Benton County is undertaking a Comprehensive Plan and Development Regulations Update (the "Plan") to cover the 20-year period through 2046, in accordance with the Growth Management Act (GMA). The Plan is Benton County's primary policy document for guiding growth and development in unincorporated Benton County and consists of goals, policies, and analyses of the following elements and sub-elements: land use, natural resources (water, resource lands, critical areas, and shorelines), economics, housing, transportation, parks and recreation, capital facilities, and utilities. Benton County is required to complete its review and update of the Plan elements, development regulations, and Urban Growth Areas (UGAs) by June 30, 2026. As part of the periodic update, Benton County must evaluate how it can achieve its growth targets for population, housing units, and employment. The updated Plan will contain vision, goals, and policies; analyses of future growth for residential, commercial, industrial, and new energy facilities; and updates to the elements previously described to comply with GMA. Additionally, Benton County will formulate a new climate change and resiliency element into the Plan. Development regulations may also be amended as necessary.

Environmental Review of the Proposal

Benton County has determined that the proposed Plan update and UGA review may have significant adverse impacts on the environment. Therefore, an EIS will be prepared. Benton County is the lead agency for SEPA review within the unincorporated County.

Planning Level Review: An EIS that evaluates planning-level proposals, such as changes to a comprehensive plan or development regulations, is referred to as a programmatic or non-project EIS. It does not evaluate impacts associated with a specific development project. Because implementation of land use plans, policies, and regulations can result in a range of impacts to the built and natural environment from development occurring consistent with them, a programmatic EIS focuses on order-of magnitude analyses. The Plan EIS will contain a programmatic analysis of potential environmental impacts associated with each of the proposed alternatives.

Benton County, in coordination with the cities, will allocate growth to UGAs and to unincorporated County lands located outside UGAs in the Plan update process. Growth patterns across the county and cities will be reviewed in the EIS. The EIS analysis will consider cumulative growth patterns impacts across the county, including within UGAs. The amendment of Benton County's plans and regulations, and their effect on unincorporated areas, will also be reviewed.

Scoping Process

Agencies, affected tribes, and members of the public were invited to comment on the scope of the EIS. The Request for Comment on Scope of Programmatic Environmental Impact Statement (EIS) for the Periodic Update to the Benton County Comprehensive Plan is attached as Attachment A. Comments were requested on alternatives, mitigation measures, probable significant adverse impacts, and licenses or other approvals that may be required. The scoping comment period ran from March 26, 2025 through April 25, 2025. A scoping public hearing was held on April 8, 2025 at 6:00 PM in Prosser, WA at the Benton County Courthouse. Benton County and the consultant team provided background on the EIS and the drafted alternatives. Members of the public were given opportunities to provide oral testimony and written comments on the scope of the EIS.

Scoping Comments Received

The following is a general summary of comments received during the EIS scoping comment period. A list of all comments and Benton County's responses can be found in Attachment B. A total of three comments were received during the comment period. Two comments were received by email, and one person provided oral testimony at the scoping public hearing. All comments were provided by agencies:

- Comments on alternatives related to shrub steppe protection, restoration, and resiliency
- Comments on using latest agency guidance documents for updating critical area code elements (wetlands, frequently flooded areas and fish and wildlife habitat conservation areas)
- Comments on how low-income housing will be expanded in the unincorporated County
- Comments related to renewable energy, including incorporation of agency landscape tools to ensure protection of priority fish and wildlife species and their habitats.
- Comments on the interaction between open space and critical areas to encourage development away from critical areas
- Comments on using latest agency guidance documents for designating and updating Riparian Management Zones (RMZ) and RMZ widths

Comparative Alternatives. A comparative evaluation of alternative courses of action will be included in the EIS. The alternatives include a no-action alternative and two other alternatives that would consider different growth levels and/or patterns. These alternatives are slightly updated from the description provided in the county-published SEPA scoping notice, to reflect scoping comments received.

Alternative 1, No Action/No Change in Current Growth Patterns: This alternative would maintain the County's existing Comprehensive Plan without modifications. This means growth would be expected based on past trends, but no land use changes (densities, designations, etc.) or regulation changes (e.g., zoning) would occur to accommodate this growth. Additional affordable housing would not be provided in the unincorporated

County. This alternative 1 plans for approximately half of the renewable energy projects approved or under review by the Energy Facility Siting Evaluation Council (EFSEC) for Benton County. Limited policy changes may be needed to maintain consistency with the GMA and the Countywide Planning Policies.

Alternative 2, Aggressive Growth Target with Emphasis on Affordable Housing, Industry, and Energy: This alternative would allow for changes in the Plan to accommodate the 20-year (2046) population growth projection for Benton County, based on Washington State Office of Financial Management (OFM) projections as refined in coordination with the cities. In this alternative, growth would occur based on past trends plus additional multi-family housing/more affordable housing in higher density designated areas and UGAs to meet housing requirements, and the designation of several additional industrial areas. This Alternative would plan for robust renewable energy growth and designate an Energy Overlay Zone. All of the renewable energy projects planned for Benton County through the EFSEC review and approval process would be planned for and included in this alternative, along with smaller-scale energy projects permitted outside the EFSEC process. This alternative will consider land use, policy, and regulatory changes to maintain consistency with the GMA and the Countywide Planning Policies, and to accommodate growth. Minimization and mitigation would be required, as applicable, for all project impacts to shrub-steppe and other critical areas on a project by project basis, and the County would not establish a shrub-steppe mitigation program.

Alternative 3, Moderate Growth Target with More Limited Emphasis on Industry and Energy: This alternative would allow for changes in the Plan to accommodate the 20-year (2046) population growth projection for Benton County, based on Washington State Office of Financial Management (OFM) projections as refined in coordination with the cities. This Alternative would capitalize on other development opportunities for smaller renewable energy projects and some additional Industrial designated lands (but less than in Alternative 2). Additional affordable housing would not be provided in the unincorporated County, including UGAs, under this alternative. Approximately half of the renewable energy projects planned for Benton County and approved or going through the Energy Facility Siting Evaluation Council (EFSEC) approval process, but not yet under construction would be included in this alternative. This alternative will include a shrub-steppe mitigation program

to preserve this shrubsteppe habitat and other priority habitats and connection corridors in the County. It will also address other land use and policy changes to maintain consistency with the GMA and the Countywide Planning Policies and to accommodate growth.

EIS Topics (unchanged from what was proposed): Topics and potentially significant impacts that will be addressed related to these alternatives are anticipated to include Earth; Surface Water; Plants and Animals; Land Use; Environmental Health (Land and Air Quality); Shoreline Use; Population, Housing, and Employment; Parks and Recreation; Transportation; Public Services and Utilities; and Heritage Conservation (cultural and historic resources).

Attachment A

The Request for Comment on Scope of Programmatic Environmental Impact Statement (EIS) for the Periodic Update to the Benton County Comprehensive Plan

Community Development Department
Prosser Office:620 Market Street, 1st Floor
Kennewick Office: 102206 East Wiser Parkway

Planning Division
(509) 786-5612
planning.department@co.benton.wa.us

STATE ENVIRONMENTAL POLICY ACT
DETERMINATION OF SIGNIFICANCE (DS) and
Request for Comments on Scope of Programmatic Environmental Impact Statement (EIS)
for the Periodic Update to the Benton County Comprehensive Plan

Date: March 21, 2025
Lead agency: Benton County Community Development Department, Planning Division
Agency Contact: Michelle Mercer, Planning Manager
Agency File Number: EA 2025-006

Description of Proposal:
Benton County is undertaking a periodic update to its Comprehensive Plan ("Plan") to cover the 20-year period through 2046, which per RCW 36.70A.130(5)(c) must be completed by June 30, 2026. The Plan is the County's primary policy and planning document for guiding growth and development in unincorporated Benton County. The current Plan consists of goals, policies, and analyses of the following elements and sub-elements: land use, natural resources (water, resource lands, critical areas and shorelines), economics, housing, transportation, parks and recreation, capital facilities and utilities. Each of these elements will be updated along with the addition of a new element – climate change/climate resiliency.

As part of the periodic update, the County must evaluate how it can achieve its 20-year (2046) growth targets for population, housing units and employment. These growth targets are based on guidance from the Washington State Department of Commerce and developed following a collaborative process with the cities. The updated document will contain vision, goals and policies; analyses of future growth for residential, commercial, industrial, and new energy facilities; and updates to the elements described above to comply with the GMA. The Plan is also required to be consistent with the Countywide Planning Policies.

Location of Proposal: Not applicable; non-project

Applicant/Proponent:
Benton County Community Development
Planning Division
102206 E Wiser Parkway
Kennewick, WA 99338

Programmatic EIS Required: Benton County has determined that this proposal is likely to have a significant adverse impact on the environment. A programmatic environmental impact statement (EIS) is required under RCW 43.21C.030 (2)(c) and will be prepared. A programmatic EIS is different from a project-specific EIS. In a programmatic EIS for the Plan, there is not a specific development proposal being evaluated in detail; rather, different alternatives that represent potential future development patterns are qualitatively evaluated based on several different factors to determine which alternatives have more or less impact on the affected environment. More detailed environmental evaluation of development projects would build off the Plan programmatic evaluation and occur at the time of application.

Preliminary Draft Alternatives:
The County has formulated three preliminary draft alternatives for evaluation based on future growth expectations.

Alternative 1, No Action/No Change in Current Growth Patterns: This alternative would maintain the County's existing Comprehensive Plan without modifications. This means growth would be expected based on past trends, but no land use changes (densities, designations, etc.) or regulation changes (e.g., zoning) would occur to accommodate this growth. Additional affordable housing would not be provided in the unincorporated County. Alternative 1 plans for approximately half of the renewable energy projects approved or under review by the Energy Facility Siting Evaluation Council (EFSEC) for Benton County. Limited policy changes may be needed to maintain consistency with the GMA and the Countywide Planning Policies.

Alternative 2, Aggressive Growth Target with Emphasis on Affordable Housing, Industry and Energy: This alternative would allow for changes in the Plan to accommodate the 20-year (2046) population growth projection for Benton County, based on Washington State Office of Financial Management (OFM) projections as refined in coordination with the cities. In this alternative, growth would occur based on past trends plus additional multi-family housing/more affordable housing in higher density designated areas and UGAs to meet housing requirements, and the designation of several additional industrial areas. This Alternative would plan for robust renewable energy growth and designate an Energy Overlay Zone. All the renewable energy projects planned for Benton County through the EFSEC review and approval process would be planned for and included in this alternative, along with smaller-scale energy projects permitted outside the EFSEC process. This alternative will consider land use, policy and regulatory changes to maintain consistency with the GMA and the Countywide Planning Policies and to accommodate growth.

Alternative 3, Moderate Growth Target with More Limited Emphasis on Industry and Energy: This alternative would allow for changes in the Plan to accommodate the 20-year (2046) population growth projection for Benton County, based on Washington State Office of Financial Management (OFM) projections as refined in coordination with the cities. This alternative would capitalize on other development opportunities for smaller renewable energy projects and the addition of some industrial designated lands (but less than in Alternative 2). Additional affordable housing would not be provided in the unincorporated County under this alternative. Approximately half of the renewable energy projects planned for Benton County and approved or going through the Energy Facility Siting Evaluation Council (EFSEC) approval process, but not yet under construction would be included in this alternative. This alternative will include a shrubsteppe mitigation program to preserve shrubsteppe habitat and other priority habitats in the County. It will also address other
land use and policy changes to maintain consistency with the GMA and the Countywide Planning Policies and to accommodate growth.

Topics and potentially significant impacts that will be addressed related to these alternatives are anticipated to include Earth; Surface Water; Plants and Animals; Land Use; Shoreline Use; Population, Housing, and Employment; Parks and Recreation; Transportation; Public Services and Utilities; Climate, Air Quality/GHG, and Heritage Conservation (cultural and historic resources).

Benton County will determine the full scope of the EIS, including the range of alternatives to be analyzed, at the end of the scoping period after comments are received and reviewed. Elements of the environment are listed in the SEPA rules (WAC 197-11-444). Not all elements of the environment outlined in WAC 197-11-444 are expected to be included in the study.

This scoping period, beginning on the publish date of March 26, 2025, provides an opportunity for the public to help shape the topics that are covered and the alternatives that are evaluated in the EIS.

Scoping: Agencies, affected tribes, and members of the public are invited to comment on the scope of the EIS. You may comment on alternatives, mitigation measures, probable significant adverse impacts, and licenses or other approvals that may be required. The method and deadline for giving us your comments is:

Deadline for Comments:	Comments will be accepted through April 25, 2025. Mailed comments must be postmarked on or before April 25, 2025.
Mailing address:	Benton County Planning Division 102206 East Wiser Parkway Kennewick, WA 99338
Email address for comments:	Planning.Department@co.benton.wa.us

The county will be holding a public scoping meeting on April 8, 2025, at 6 PM in Prosser, WA at 620 Market Street (first floor of the Benton County Courthouse) to solicit comments on the alternatives and scope of the EIS. The county also anticipates holding additional public meetings following the development of the EIS alternatives in the fall of 2025/early 2026. Dates, times and locations will be available at http://tinyurl.com/BCpublicnotice.

Appeals: You may appeal this determination to the Benton County Planning Division no later than April 11, 2025, by written notice to 102206 E Wiser Parkway, Kennewick WA 99338. The fee for a threshold determination appeal is $800.00. An appeal of the determination must be made in writing to the Benton County Planning Division and a public hearing will be scheduled and the appellant will be notified of the date, time, and place of said hearing. You should be prepared to make specific factual objections. Contact the Planning Division to read or ask about the procedures for SEPA appeals.

Michelle Mercer, Benton County Planning Manager
102206 E Wiser Parkway
Kennewick WA 99338
(509) 786-5612
planning.department@co.benton.wa.us

Signature: Michelle Mercer Date: 3/26/2025

Attachment B

Benton County 2026 Comprehensive Plan Update – EIS Scoping Comment Response Matrix

Benton County 2026 Comprehensive Plan Update – EIS Scoping Comment Response Matrix

Comment No.	Commenter	Comment	Response
EIS Alternatives			
1	Evan Edwards, Benton PUD	*Renewable Energy* How much of the renewable power generated would stay locally? Benton PUD doesn't buy any of it; they buy from BPA. The initial construction and permits are what generate the money up front. The efficacy factor of a windfarm in this part of the state is about 8 megawatts per year, although the capacity might be up to 10 times that amount PUD has to be involved since they provide retail service. The PUD did submit comments to EFSEC against the wind farms project.	Thank you for the comments. We will consider this input as we summarize existing conditions and plan how and where renewable and other future energy projects might be considered in the County, and identify associated impacts.
2	Evan Edwards, Benton PUD	*Housing* I am more along the lines of Alternative 3 and am curious how low-income housing will expand outside unincorporated parts of the cities and county.	Thank you for the comment. Opportunities and challenges for low-income housing in unincorporated Benton County will be characterized in the Housing Section of the EIS.
3	Emily Adkins,	*Wetland Guidance for Critical Areas Ordinance (CAO) Updates*	Benton County has updated its CAO in accordance with the latest Ecology guidance from October 2022,

Comment No.	Commenter	Comment	Response
	Department of Ecology	In October 2022, Ecology published a document providing guidance and example language for updating the wetland chapter of your Critical Area Ordinance. It includes: • An updated and expanded minimization measures table for use with the buffer tables • Improved correlation between the discussion and the sample regulations • A new section on functionally disconnected buffers • Clarification on corridor requirements and expanded applicable • Recommendations from the 2021 interagency wetland mitigation guidance document.	including the referenced provisions for wetlands. Benton County will further consult the guidance to ensure consistency with Ecology's recommendations.
4	Emily Adkins, Department of Ecology	*Washington State Rating Systems* Ecology has updated the Washington State Wetland Rating Systems for western Washington. The western Washington rating system was amended in 2023. The eastern Washington rating system is currently waiting to be amended. The current version of the eastern Washington rating system (Ecology Publication #14-06-030) remains valid. These amendments provide a more accurate characterization of wetland functions based on the most recent science. If citing the Ecology document publication number for western Washington's rating system, please use Ecology Publication #23-06-009. If your CAO requires the use of the 2004 rating systems, you may want to consider updating your CAO to require the use of the 2014 version as revised.	*Washington State Rating System* Benton County has updated its CAO to incorporate the 2014 eastern Washington Wetland Rating System (Ecology Publication #14-06-030). Therefore, no additional updating of the rating system is necessary at this time. Benton County will incorporate the latest eastern Washington Wetland Rating System, as applicable, in the future.

Comment No.	Commenter	Comment	Response
5	Emily Adkins, Department of Ecology	*Determining Wetland Buffers* For the 2024-2027 GMA update cycle, we are not proposing any changes to the recommended wetland buffer widths but have clarified some suggested criteria such as habitat corridors and minimization measures associated with buffer reductions. Buffer tables can be found in our most current CAO guidance document: Wetland Guidance for Critical Area Ordinance (CAO) Updates: Western and Eastern Washington	Benton County has updated its CAO in accordance with the latest Ecology guidance, including the Wetland Guidance for Critical Area Ordinance Updates: Eastern Washington. Benton County will coordinate with Ecology to evaluate proposed changes to ensure consistency with this guidance.
6	Emily Adkins, Department of Ecology	*Mitigation Tools* In coordination with the U.S. Army Corps of Engineers and the Environmental Protection Agency, Ecology has recently updated Part 1 of Wetland Mitigation in Washington State (insert publication number). Ecology has also developed a number of mitigation tools since the first publication of Wetland Mitigation in Washington State Parts 1 and 2 in 2006. Ecology has developed a credit-debit tool for calculating when a proposed wetland mitigation project adequately replaces the functions and values lost when wetlands are impacted. This optional tool is designed to provide an objective method for assessing mitigation adequacy for both regulators and applicants during the mitigation process. You may want to include language that allows the use of the credit-debit method in your CAO. The federal rule on compensatory mitigation requires that some type of watershed approach be used in siting mitigation. Ecology, the US Army Corps of Engineers, and the Environmental Protection Agency	Benton County will review and incorporate the suggested mitigation guidance documents as applicable, including the credit-debit method for calculating adequate wetland mitigation for impacts to functions and values, as referenced in Part 1 of Wetland Mitigation in Washington State. Additionally, Benton County will review the referenced document Selecting Wetland Mitigation Sites Using a Watershed Approach (Western Washington) and incorporate as appropriate. Benton County will review and consider including language in the CAO regarding the applicability of the use of wetland banks and in-lieu fee (ILF) programs as compensation for unavailable wetland impacts in coordination with Ecology.

Comment No.	Commenter	Comment	Response
		have developed guidance to help applicants select potential off-site mitigation sites. To download a copy of Selecting Wetland Mitigation Sites Using a Watershed Approach (Western Washington), (Ecology Publication #09-06-032, December 2009), please seehttps://fortress.wa.gov/ecy/publications/summarypages/0906032.html. Referring to this guidance in your CAO would assist applicants proposing mitigation for development projects. You should consider including language in your CAO that allows the use of wetland banks and in-lieu fee (ILF) programs as compensation for unavoidable wetland impacts. To learn more about these approaches to mitigation, see Ecology's website at https://ecology.wa.gov/water-shorelines/wetlands/mitigation. Ecology, WDFW, and the US Army Corps of Engineers have developed guidance to help applicants develop advance mitigation proposals. Advance mitigation is used only by a single applicant to compensate for a specific project (or projects) with pre-identified impacts to wetlands. To download a copy of Interagency Regulatory Guide: Advance Permittee-Responsible Mitigation (Ecology Publication #12-06-015, December 2012), please seehttps://fortress.wa.gov/ecy/publications/SummaryPages/1206015.html. Your CAO could reference this guidance to assist applicants who are considering this option.	Benton County will review and consider including, as relevant, the referenced Interagency Regulatory Guide: Advance Permittee-Responsible Mitigation in relevant county guidance for applicants.
7	Emily Adkins,	*Small Cities Option to Adopt County CAO* In 2023 SB 5374 was passed, which allows cities with populations under 25,000 to adopt the county's critical area ordinance by	Benton County will share this comment with the small cities, so they are aware of the opportunity to work

Comment No.	Commenter	Comment	Response
	Department of Ecology	reference as long as the CAO is not under appeal. Once adopted by reference, the city is not required to take further action during future GMA periodic updates. Counties are entitled to a portion of the city's grant funding that otherwise would have been used to update their CAOs. The cities must still submit their adoption by reference through Department of Commerce for 60-day review. For more information please reach out to the Department of Commerce. *Small Cities Guidance* In the past, Ecology provided separate guidance for wetland CAO's in small cities. This guidance was incorporated into our 2022 Wetland Guidance for Critical Areas Ordinance (CAO) Updates	with Ecology to address and incorporate latest wetland guidance for small cities, as applicable.
8	Emily Adkins, Department of Ecology	*Frequently Flooded Area* Ecology's regional floodplain specialists are available to provide assistance to local governments with Frequently Flooded Areas (FFAs). The attached PDF shows a map of the state with the names, contact information, and county assignments for each of our five our regional floodplain specialists. Please reach out to your assigned specialist if you have any questions regarding FFAs.	Benton County will collaborate with Ecology's regional floodplain specialists to assist with Frequently Flooded Areas (FFAs), as applicable.
9	Scott Downes, Washington Department of Fish and	*Riparian Management Zones (RMZ)* WDFW recommends designating these areas Riparian Management Zones (RMZs) rather than buffers as currently written. WDFW appreciates that some updates to the RMZ widths were made in 2021. WDFW notes that according to WDFW's Riparian Ecosystem, Volume 2: Management Recommendations, the RMZ should be	Buffers in the draft Benton County Code have been designed to protect existing ecological functions and values based on locally developed Best Available Science (BAS) studies in 2021. Benton County will further evaluate its RMZs and the information provided

Comment No.	Commenter	Comment	Response
	Wildlife (WDFW)	defined as the greater of either Site Potential Tree Height (SPTH) at 200 years or where SPTH is less than 100-foot, a minimum of a 100-foot width for pollutant removal for all naturally occurring water bodies (streams and ponds) with the Columbia Basin Ecosystem (which includes all of Benton County). WDFW recommends two changes to the existing RMZ widths. The first recommended change is some streams are within the range where Black Cottonwood can reach a mature height greater than 100-foot. WDFW recommends increasing the RMZ in these areas to the SPTH of Black Cottonwood. The second recommended change is WDFW notes that while it is appreciated that steeper slope (>10%) areas for both fish-bearing and non-fish-bearing streams have an RMZ of 100-foot and that recognizes the higher potential for pollutant run-off in steeper slopes, steam banks of less than 10% particularly in areas of high development such as urban or agricultural can be also be subject to pollutants. We recommend increasing these stream reaches to a minimum of 100-f00t RMZ as well. WDFW recognizes that in some instances the already built environment in these RMZs may encumber full protection of the RMZs. WDFW recommends that the RMZ widths be identified in these areas and management tools such as buffer averaging, variances, vegetation management plans etc., can be used to manage appropriately in these urban environments. As noted in WDFD Riparian Guidelines, Volume 2, designation of these RMZs are the first	in the WDFW-referenced BAS sources, and prepare a BAS memo addendum describing in more detail how we are applying BAS to Benton County conditions, including additional detail on what specific provisions were considered in applying BAS to updated buffers, including reasoned application of BAS for County conditions. We will coordinate with WDFW during this process.

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		step and some management to facilitate development while still maintaining RMZ function is appropriate. WDFW would be happy to work with Benton County through some of these more challenging scenarios.	
10	Scott Downes, Washington Department of Fish and Wildlife (WDFW)	*Shrubsteppe mitigation* WDFW notes that only Alternative 3 lists a shrubsteppe mitigation program to preserve shrubsteppe habitat and other priority habitats in the county. WDFW recommends that this program be included in any alternative developed by the county. A mitigation program should be designed to follow mitigation sequencing of avoid, minimize and ultimately mitigate impacts that cannot be avoided or minimized. Development of such a mitigation program will be vital to help achieve the no-net loss ecosystem standard set in WAC 365-196-830. WDFW encourages Benton County to apply this program to all impacts to shrubsteppe habitat, not just renewable energy projects. WDFW welcomes the opportunity to work with the county to develop the program and to identify areas to prioritize for compensatory mitigation.	Benton County will collaborate with WDFW to incorporate the latest guidance for shrubsteppe mitigation and also in identifying specific properties to target for long-term protection. Further, Alternative 2 will be updated to include reference to minimization and mitigation for all project impacts to shrubsteppe and other critical areas on a project by project basis. However, Alternative 2 will still differ from Alternative 3, as Alternative 3 will include a specific county-wide shrubsteppe mitigation program.
11	Scott Downes, Washington Department of Fish and Wildlife (WDFW)	*Renewable Energy Overlay Zone* A renewable energy overlay zone is proposed under Alternative 2. There are several landscape tools that WDFW recommends that Benton County use in the development of the zone to ensure protection of priority fish and wildlife species and their habitats. Least Conflict Solar Siting is a landscape evaluation tool that includes many of the WDFW PHS layers under the Conservation Values mapping	In developing potential renewable energy overlay zones in Alternatives 2 and 3, Benton County has reviewed and incorporated the referenced Least Conflict Solar Siting landscape tool, including the Conservation Values spatial layers. Benton County has met with WDFW renewable energy program staff to

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		exercise. Washington Shrubsteppe Restoration and Resiliency Initiative (WSRRI) developed spatial priorities to prioritize both shrubsteppe restoration goals along with areas determined to warrant priorities for preservation (labeled as core areas on the maps). Finally, Washington State is developing a Habitat Connectivity Action Plan (WAHCAP), to be finalized in June 2025 where wildlife habitat connectivity priorities are identified for protection, restoration and enhancement. WDFW recommends incorporating these landscape level tools into the overlay process, and we would welcome the ability to work with the county on how best to incorporate these layers into the process to avoid impacts to priority habitats and species to the highest degree possible. The overlay zone should incorporate an analysis of the maximum area that could be permitted within the zone and include the area within that zone where projects could be permitted within critical area impacts, particularly priority habitat and species areas. The analysis should also include whether there are available resources and areas within Benton County available to mitigate critical area impacts with a full build out of the energy overlay zone. This analysis should ensure that the impacts to priority habitats and species are able to be mitigated through the associated mitigation program. In addition to the landscape tools described above, WDFW PHS program has several management guidelines regarding shrubsteppe or shrubsteppe priority species that can be relevant in assessing these impacts; PHS Shrubsteppe Management Recommendations and PHS	review and incorporate applicable PHS habitat and WSRRI layers into the development of the energy overlays. Once available, Benton County will review the information found in the Habitat Connectivity Action Plan and incorporate the information into potential renewable energy overlay zone, as applicable. Benton County's review of potential renewable energy overlay zones will include analysis of the area within any proposed zone that intersects with applicable critical areas, including PHS. Consideration of any renewable energy overlay zones will be included within Benton County's mitigation programs and/or site-specific project requirements Benton County will also review and incorporate the information found in the upcoming WDFW Solar and Wind Guidelines as part of its development of energy overlays, as available. Benton County will continue to engage with WDFW in the development of its renewable energy overlays.

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		Management Recommendations for Ferruginous Hawk (State Endangered Species). In addition to the overall zone process, WDFW is preparing Solar and Wind Guidelines to help inform these projects on how to avoid, minimize and mitigate impact to fish and wildlife species. These guidelines should be published in 2025. WDFW recommends that Benton County includes a provision in the Comprehensive Plan that any solar or wind projects permitted at the county level should be consistent with WDFW Solar and Wind Guidelines.	
12	Scott Downes, Washington Department of Fish and Wildlife (WDFW)	*Washington State Habitat Connectivity Action Plan* WDFW in cooperation with Washington State Department of Transportation (WSDOT) is developing WAHCAP that outlines priority locations and actions for terrestrial wildlife species at both a transportation and landscape level scale. In addition to incorporating the plan into renewable energy zoning described above, WDFW also recommends incorporation of the plan into the Goals and Policies of various elements of the Comprehensive Plan such as Land Use, Natural Resource Lands, Critical Areas, Transportation Element and Parks, Recreation, Open Space element. WDFW appreciates that the county has already incorporated wildlife connectivity into several elements of the existing plan such as Goals and Policies within the Critical Areas and Parks, Recreation and Open Space elements. WDFW would be happy to work with the county to further incorporate relevant aspects of WAHCAP after it is finalized in June	Benton County will review and incorporate, when available, the WAHCAP as part of the development of its renewable energy overlay zones. Benton County will also review the WAHCAP and collaborate with WDFW to continue to strengthen its wildlife habitat protection and connectivity strategies as part of the Comprehensive Plan and associated development regulation updates.

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		2025, including but not limited to incorporation into various Goals and Policies and designation of priority areas on relevant maps.	
13	Scott Downes, Washington Department of Fish and Wildlife (WDFW)	*Washington Shrubsteppe Restoration and Resiliency Initiative* Washington State published the long-term strategy of WSRRI in March 2024. The strategy was focused on both preserving existing priority shrubsteppe areas and restoring areas that had been degraded in the past due to fire or other elements. WDFW recommends incorporating elements of WSRRI into several elements of the Comprehensive Plan update. In addition to using the spatial mapping to help designate appropriate areas for renewable energy zoning, these spatial maps and associated language can also be used to give guidance on appropriate areas for further development in the county that will not have substantial impacts on the shrubsteppe environment. Elements of the strategy also speak to both climate and fire that can be used in the climate resiliency element of the Comprehensive Plan update and the Wildfire Protection Plan. Currently the Wildfire Protection Plan does not address fire impacts to species and habitats and WDFW believes that incorporating elements from WSRRI could help strengthen those connections.	Benton County will collaborate with WDFW to incorporate the long-term strategy of WSRRI into its shrubsteppe protection and mitigation strategies.. Additionally, Benton County will coordinate with Cascadia Consulting (Climate Resiliency lead) on how to consider WSRRI data to enhance the climate resiliency element of the Comprehensive Plan as well as the Wildfire Protection Plan.
14	Scott Downes, Washington Department of Fish and	*Open Space and Critical Areas Interaction* WDFW encourages Benton County to include Goals and Policies in the Comprehensive Plan that encourage development away from critical areas and when there are critical areas within the subject parcels, using elements such as cluster development or Transfer of Development Rights to preserve critical areas through open space.	Benton County will review its Goals and Policies in the Comprehensive Plan update related to open space within and between UGAs. This will include review of critical areas and connections between critical areas. A component of this review will utilize landscape tools, such as WSRRI and WAHCAP (once available). Benton

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	Wildlife (WDFW)	Landscape tools such as WSRRI and WAHCAP can help to identify areas to preserve open space. While open space can serve many roles from recreation to wildlife habitat, WDFW recommends a natural open space designation where these areas overlap with critical areas, particularly fish and wildlife habitat areas. WDFW believes this is consistent with the current Parks and Open Space Goal 2, Policy 1. Some limited recreation can be consistent within habitat areas, but heavy recreational use can lead to avoidance of wildlife using these areas. Adding in a policy that if fences are placed into these natural open space designated areas, using wildlife friendly fencing is encouraged to facilitate unencumbered wildlife movement.	County will consider various open space and critical area interactions in reviewing its land use designations and any policy updates as identified by WDFW.
15	Scott Downes, Washington Department of Fish and Wildlife (WDFW)	*Water Conservation and Native Plantings* Benton County is part of the Yakima River Basin watershed that is currently in its third consecutive year of drought. Water conservation can help to alleviate conflicts between irrigation needs and instream flows for fish. WDFW encourages incorporation of Goals and Policies that encourage water conservation. These elements are likely also applicable under the Climate Resiliency element. An element that can lead to water conservation and improve habitat for wildlife is to encourage native plants, suited for the Columbia Basin for both developed areas and open space areas whenever possible.	Benton County will address ways to further promote water conservation in the plan.
16	Scott Downes, Washington Department	*Urban Growth Area (UGA) Modifications* WDFW would like Benton County to clarify in the EIS if any modifications (expansions, contractions or swaps) to UGAs within Benton County are planned. Identifying if any modifications are	Benton County has learned recently that Benton City is considering a potential UGA change and will coordinate with the City on their proposal and see that

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	of Fish and Wildlife (WDFW)	planned to accommodate changes in growth and development would be applicable to identify within this EIS and subsequently if any of those changes would potentially result in impacts on critical areas.	this is also shared with WDFW. No other cities are proposing UGA changes that we are aware of.

Benton County 2026 GMA Periodic Update and EIS Distribution List

Tribes and Federal Agencies:

Yakama Nation
Confederated Tribes of the Umatilla Indian Reservation
U.S. Army, Corps of Engineers
U.S. Department of Energy
Pacific Northwest National Laboratory

State Agencies:

Department of Commerce
Washington State Department of Health
Department of Archaeology and Historic Preservation
Department of Ecology
Department of Fish and Wildlife
Department of Transportation
Department of Natural Resources

Local Governments and Public Agencies:

Benton County:
- Board of County Commissioners
- Capital Facilities
- Prosecuting Attorney
- Public Works
- Sustainable Development

City of Kennewick
City of Richland
City of West Richland
City of Benton City
City of Prosser
City of Pasco
Yakima County
Franklin County
Klickitat County
Walla Walla County
Benton Conservation District
Benton-Franklin Health District
Benton Clean Air Authority

Ben Franklin Transit
Tri-City Development Council
Benton PUD
Benton Rural Electric Association
Port of Benton
Port of Kennewick
Fire District 1
Fire District 2
Fire District 3
Fire District 4
Fire District 5
Fire District 6
Kennewick School District
Richland School District
Prosser School District
Kiona-Benton City School District
Finley School District
Paterson School District

Irrigation Districts:
Kennewick Irrigation District
Badger Mountain Irrigation District
Sunnyside Valley Irrigation District
Roza Irrigation District
Benton Irrigation District
Kiona Irrigation District
Columbia Irrigation District

Interested Parties:
Futurewise
Sharon Penly
Debbie Berkowitz
Brent Jordan
Lora Rathbone
Carryn Vandegriend
Debbie Muller
Jim Coleman
Phil Perser

Taylor Haines
Bill Barlow
Daniel Tissell