October 20, 2026

Integrated Non-project Final Environmental Impact Statement

Prepared by:
White Bluffs Consulting
BERK Consulting
J-U-B Engineers
AC Geo
GG Environmental
Anchor QEA

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With assistance from:

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Factsheet

Benton County (County) is updating its Comprehensive Plan (Plan) based on population growth projections. Three alternatives are evaluated in this ~~Draft~~ Final 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
Kennewick, WA 99338

State Environmental Policy Act Responsible Official:

Damien Hooper, Benton County Planning Manager
Benton County Community Development Department, Planning Division
102206 E Wiser Parkway
Kennewick, WA 99338

EIS Contact Person:

Damien Hooper, Benton County Planning Manager
Benton County Community Development Department, Planning Division
102206 E Wiser Parkway
Kennewick, WA 99338
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~~ Final 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
- J-U-B Engineers, Inc.
- Anchor QEA, Inc.
- GG Environmental, LLC

Date of Draft EIS Issuance: May 19~~3~~, 2026

Date of Draft EIS Comments Due: June 18, 2026

Public Meeting: May 27, 2026

Date of Final EIS Issuance: October 20, 2026~~7~~

Where to Obtain the ~~Draft~~ Final EIS:

Hard copy ~~Draft~~ Final EIS documents are available at Benton County Public Services Building, 102206 East Wiser Parkway, Kennewick, WA 99338

The ~~Draft~~ Final EIS is also available online at: https://www.bentoncountywa.gov/departments/community_development/planning_division/long_range_planning/2026_comprehensive_plan_update.php#doc_center_0_panel_0~~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 July 13, 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 Final 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 Environmental Impact Statement (EIS) Scoping Summary
Appendix B - 2026 Environmental Impact Statement (EIS) Comment and Response Matrix

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
Hanford Site	U.S. Department of Energy Hanford Site
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
NEPA	National Environmental Policy Act
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, rural, 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~~Rural and Resource Lands: Maintain and enhance natural resource-based industries.
- Open Space and Recreation: Retain open space and enhance recreational opportunities.
- Environment: Protect and enhance the environment and enhance the ~~state's~~ region'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 Capital Facilities and ~~Services~~Essential Public Facilities: Ensure that those public facilities and services necessary to support development shall be adequate.
- Cultural and Historic Resources Protection and Preservation: Identify, preserve, and protect ~~and encourage preservation.~~ historic, cultural, and archaeological resources in collaboration with federally recognized Indian tribes and applicable federal, state and local agencies.
- 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 and Final 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.

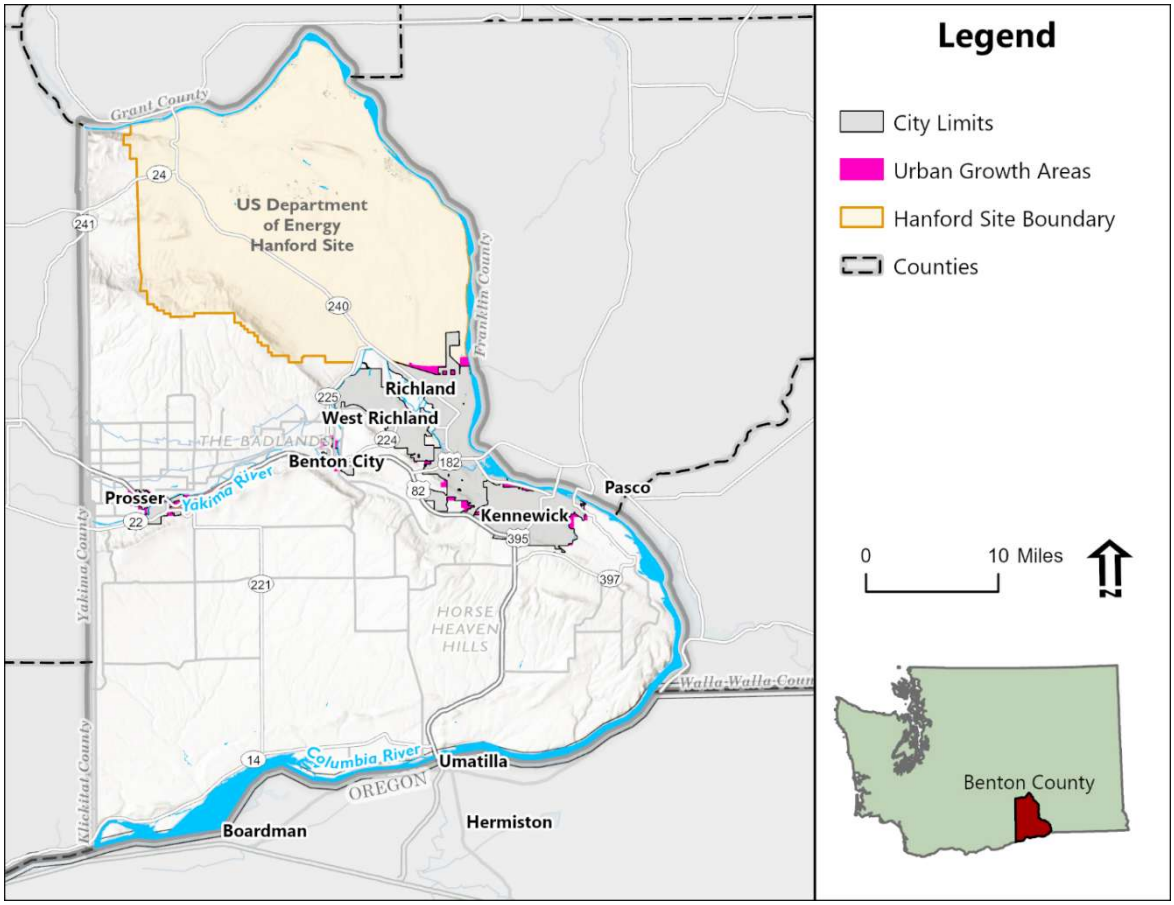
The Draft EIS was issued on May 19, 2026, initiating a public comment period that remained open through June 18, 2026. The County also held a public meeting on May 27, 2027 to provide information on the Draft EIS and receive public input. Comments received during the Draft EIS review period were considered in preparation of this Final EIS. The comments and the County's responses are provided in Appendix B.

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~~Site (Hanford Site). 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 Final Draft Comprehensive Plan Volume II*.

Descriptions of each alternative with maps are provided below.

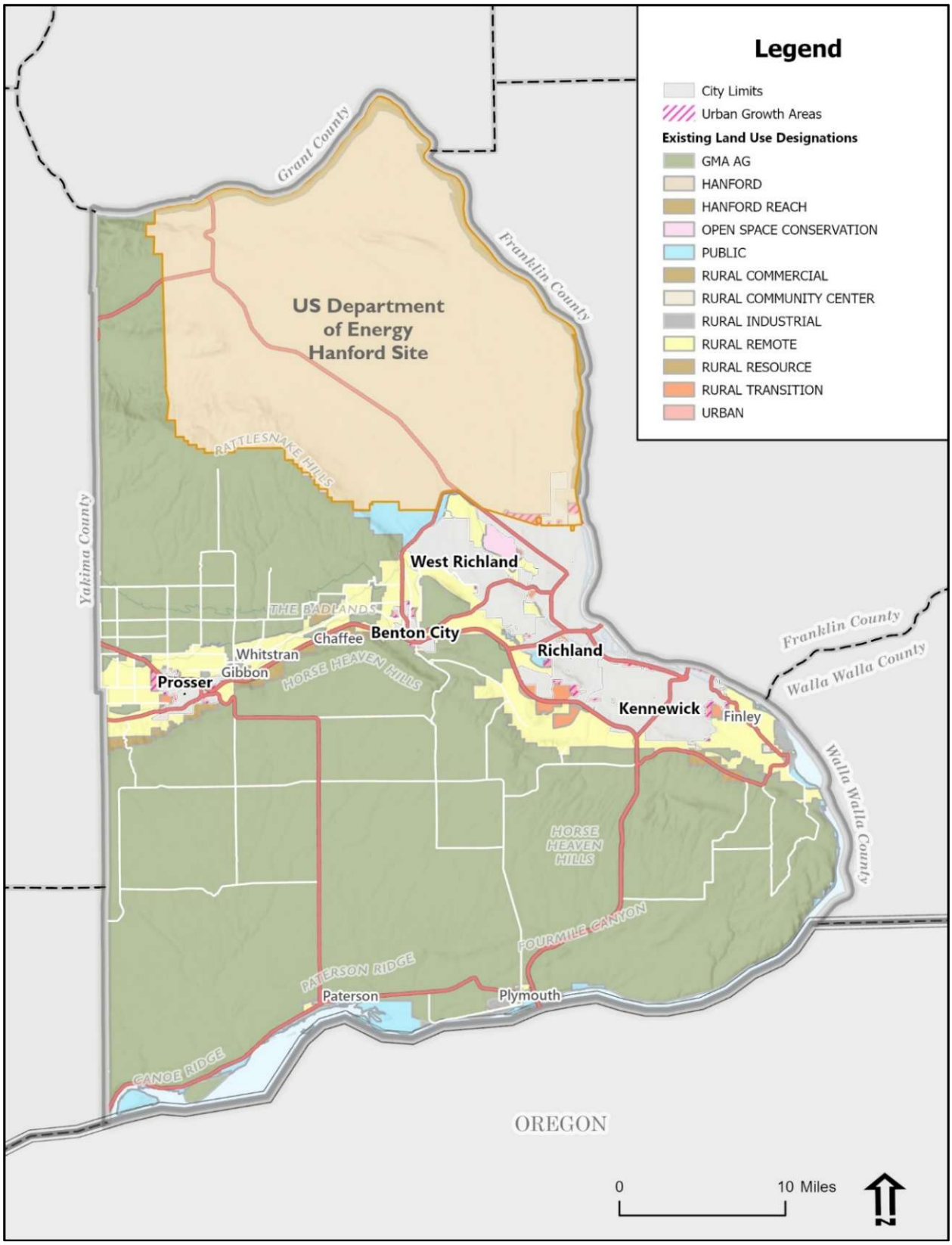
2.1 Alternative 1: No Action

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.~~ The U.S. Department of Energy may also allow renewable energy projects to be developed on the Hanford Site within the Unclassified Zoning District, which would be evaluated through the NEPA process. 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 2-3~~2~~.

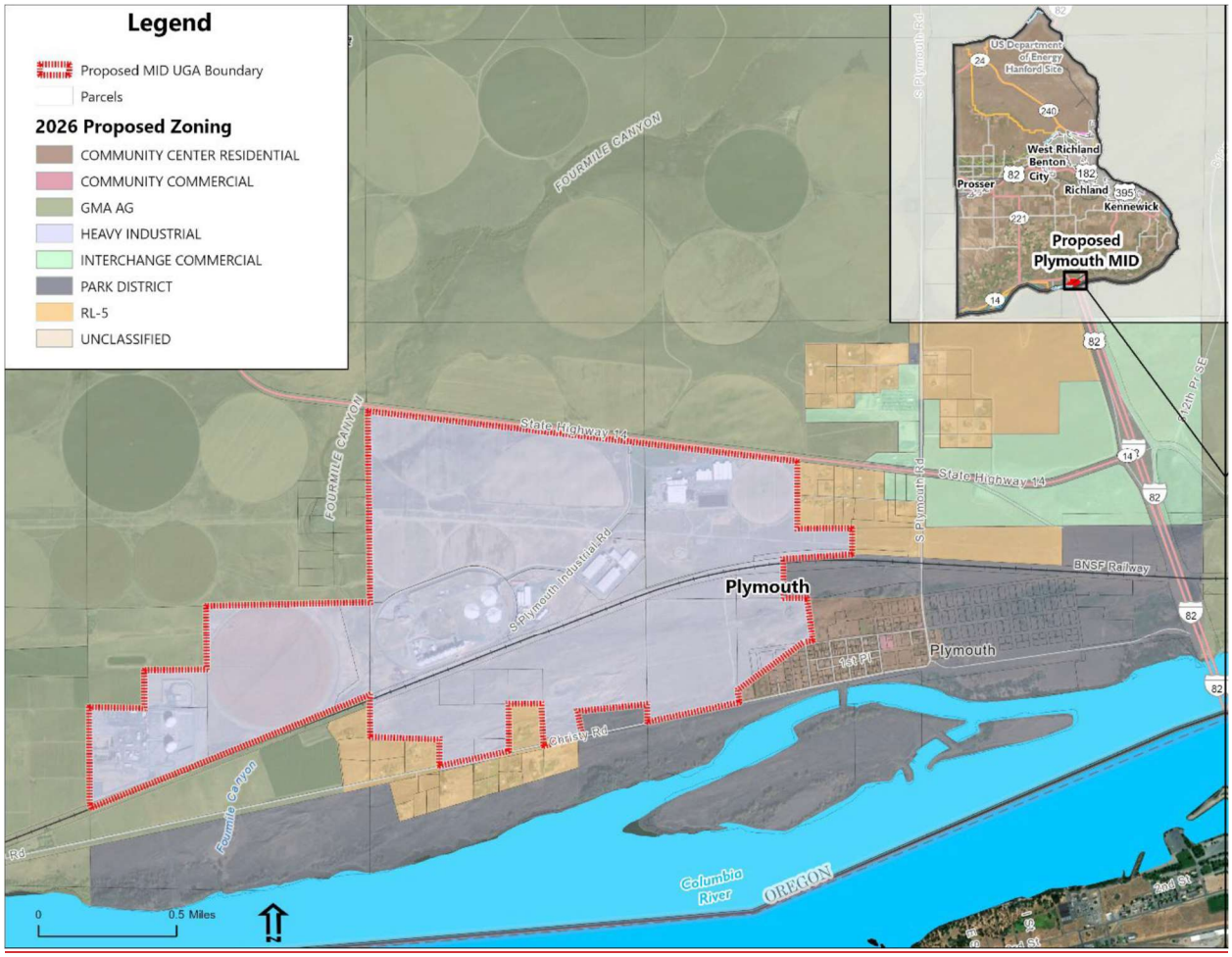
Table 2-2. Alternative 2 Land Use Acreages

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 change also included designating~~ed~~ the industrial development ~~site~~ area near Plymouth as a Major Industrial Development (MID) established by RCW 36.70A.365. The proposed Plymouth MID UGA is shown in Figure 2-2 below. This represents a significantly larger industrial expansion than Alternative 3.

Figure 2-2. Plymouth MID UGA Boundary



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 2-32. 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 2-4~~3~~ and 2-5~~4~~, respectively.

Figure 2-4~~3~~. Finley Rural Community Center Land Capacity

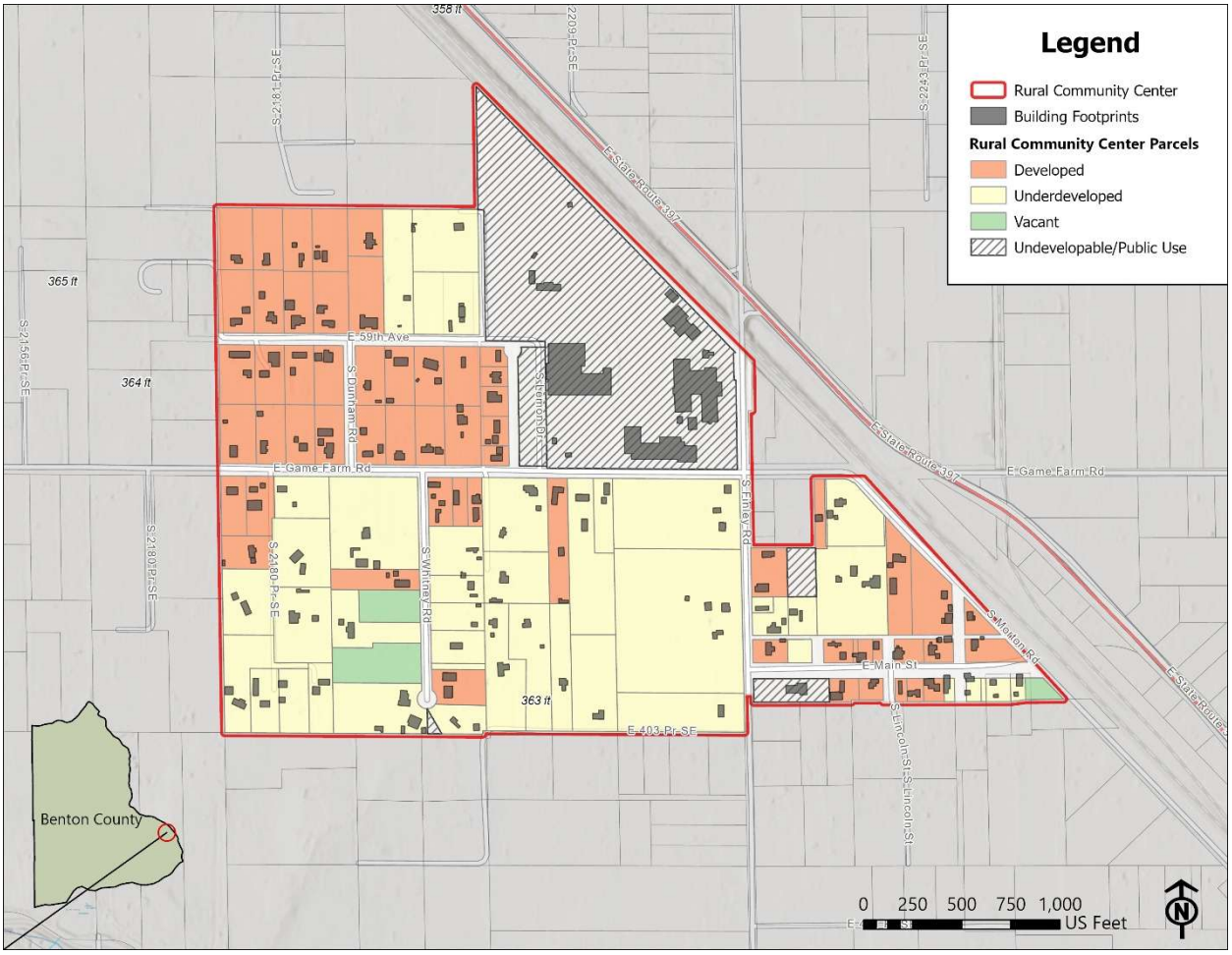
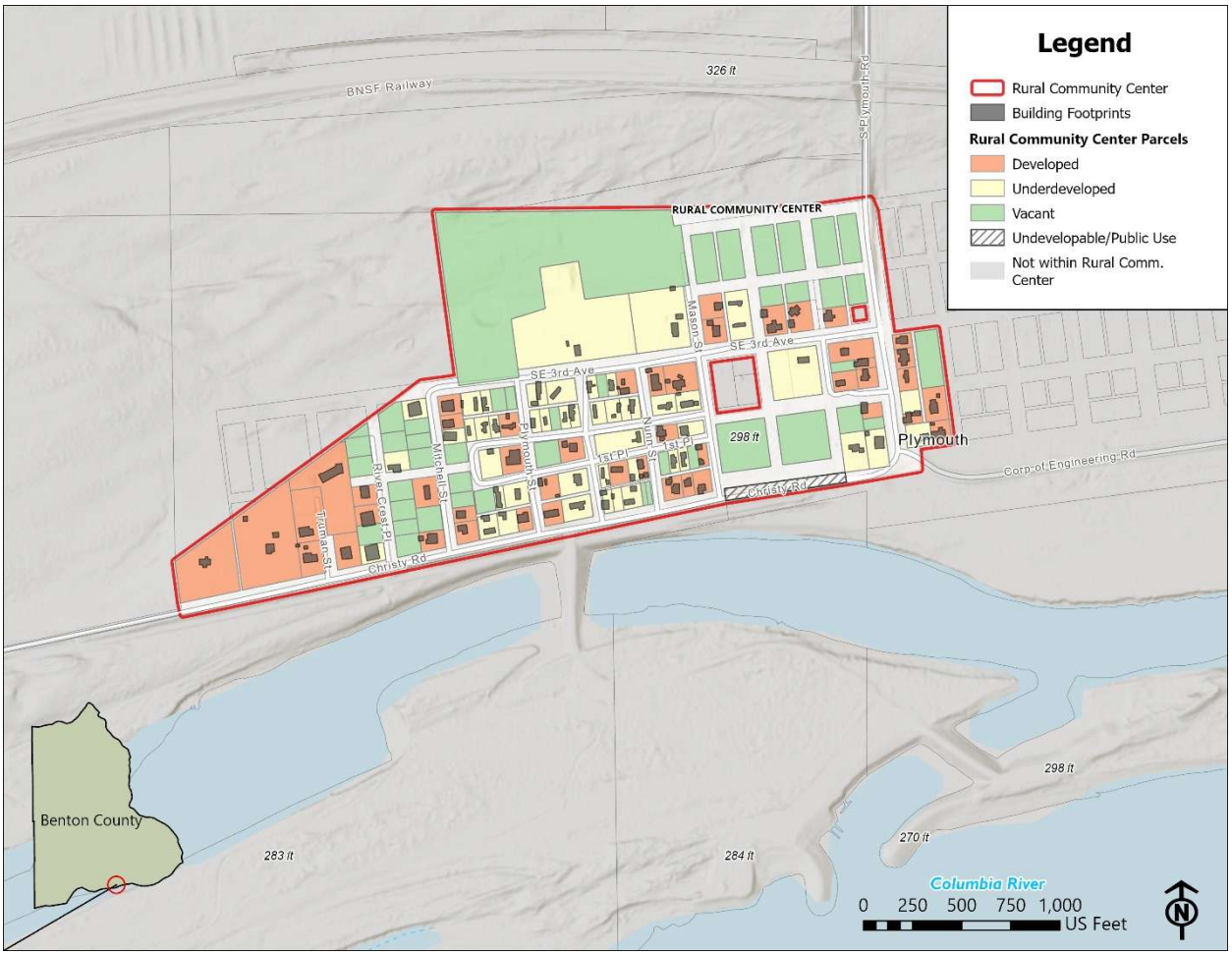


Figure 2-54. Plymouth Rural Community Center Land Capacity



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. Additionally, the County is limiting in this and Alternative 3 any future Rural Transition, Rural Commercial and Rural Industrial zoned lands outside of UGAs. 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 designates the Plymouth MID UGA. 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 2-6~~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-~~65~~. 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. Additionally similar to Alternative 2, Alternative limits any future Rural Transition, Rural Commercial and Rural Industrial zoned lands outside of UGAs.

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 Final 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.

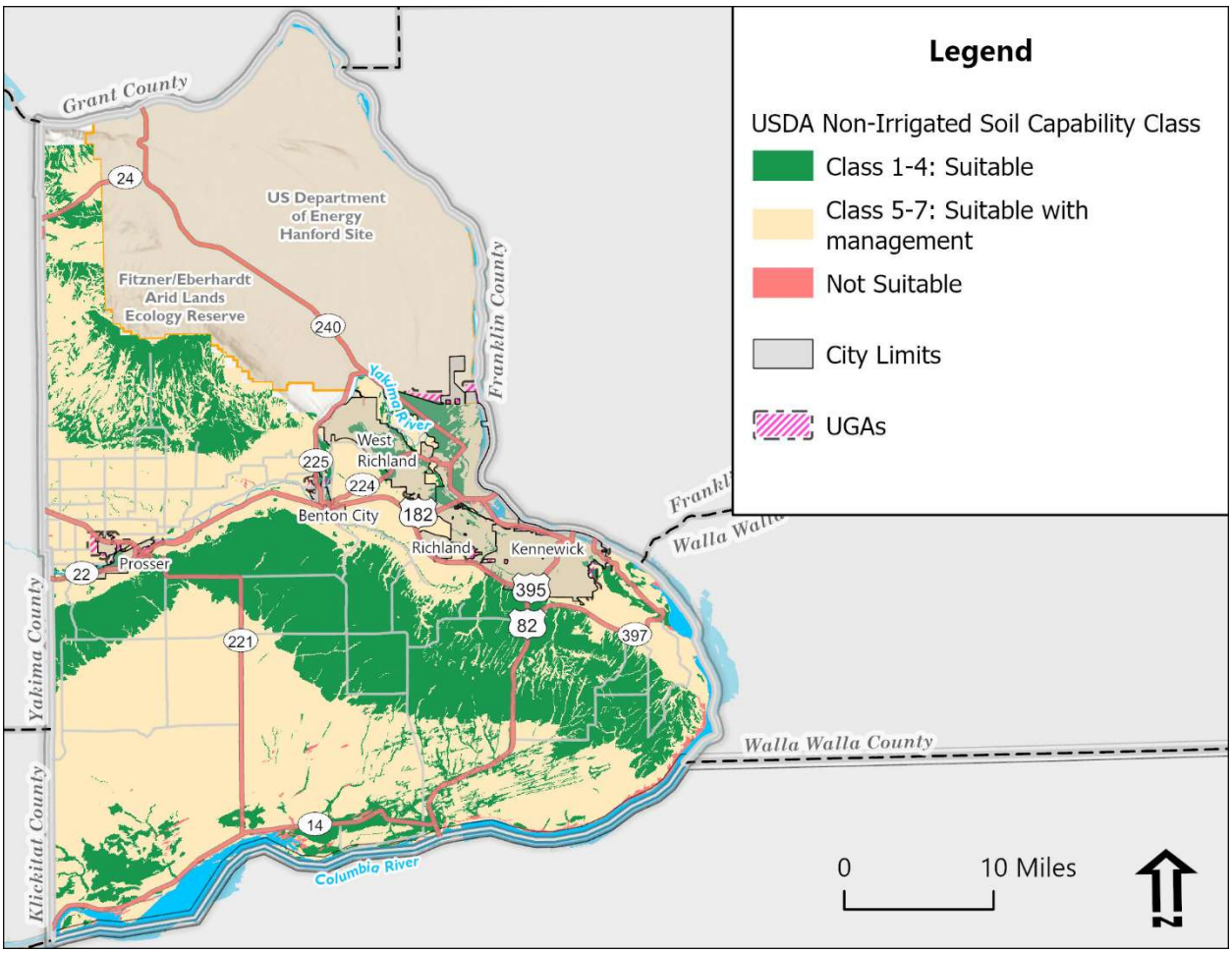
3.1.1.2 Soils

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

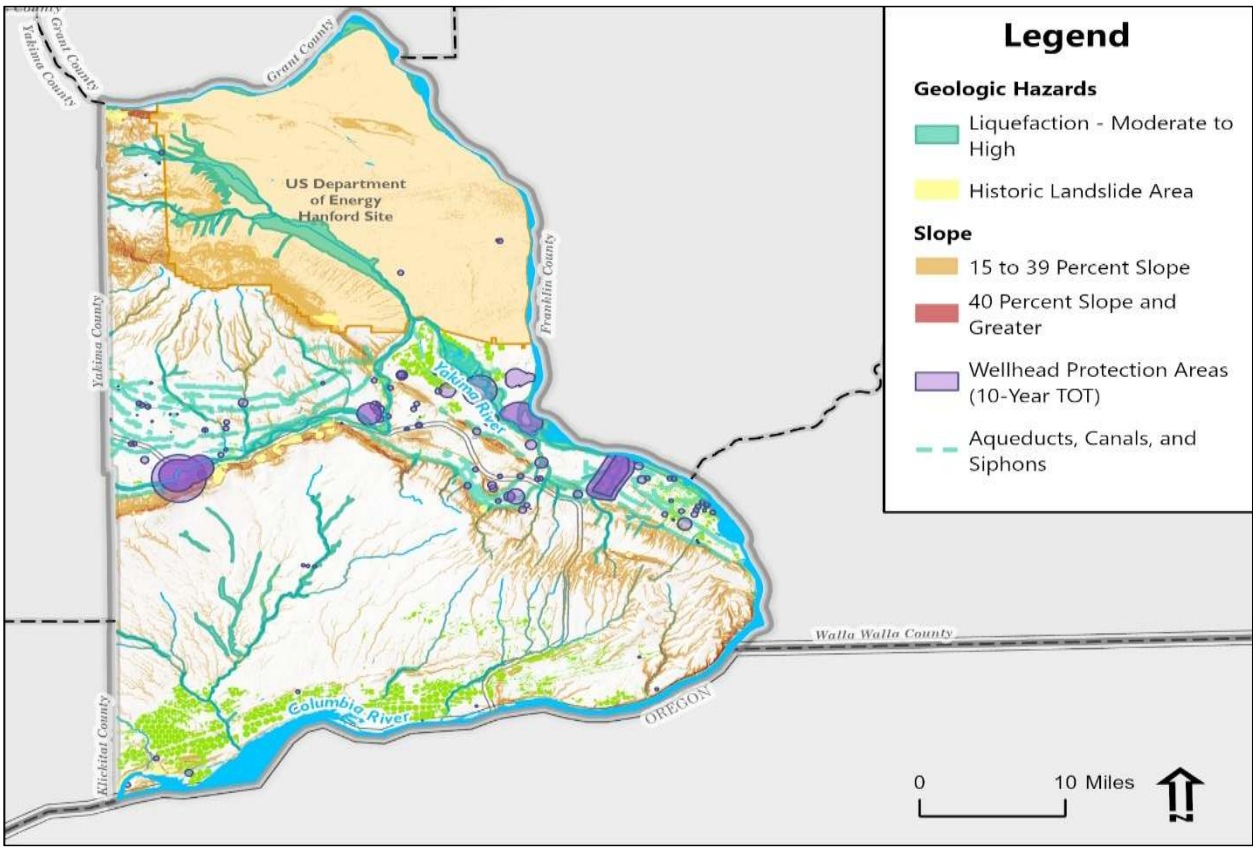
Geologically hazardous areas (GHAs) are lands subject to risk from erosion, landslides, seismic activity, mine-related hazards, or liquefaction. These hazards are recognized under the County's critical areas code, BCC Chapters 15.02 to 15.14, and are addressed through land use and shoreline regulation 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 Ssite 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 Final 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. In addition, the U.S. Department of Energy may also allow renewable energy projects to be developed on the Hanford Site, which would be evaluated through the NEPA process.

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 in and around the Plymouth Industrial Park MID UGA, 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~~MID UGA 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 Final 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 Final 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 Final 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 Final 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 Final 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 Final 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~~ Yakima 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 Final 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.
- Withdrawal from wells with no replenishment depletes the shallow aquifer.

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. In addition, the U.S. Department of Energy may also allow renewable energy projects to be developed on the Hanford Site, which would be evaluated through the NEPA process. 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 Final 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 Final 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 County Final 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 Final 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~~Site, 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

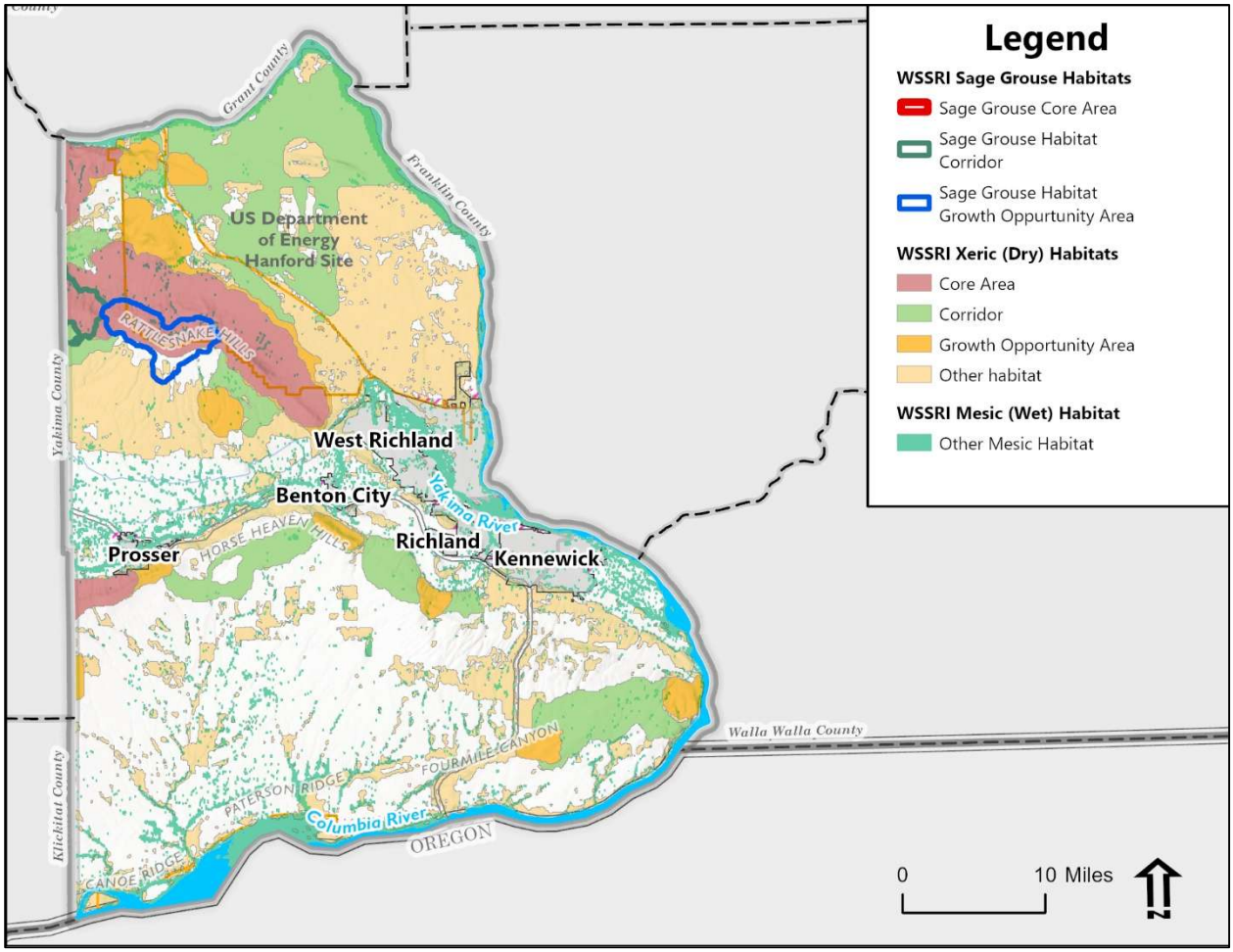
Shrubsteppe habitat covers approximately 378,110 acres of the County (WDFW, 2025) (Figure 3-3). The spread of invasive species such as cheatgrass, Russian thistle, and Russian olive has significantly reduced native species diversity and altered fire regimes. The displacement of shrubsteppe plant species 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).

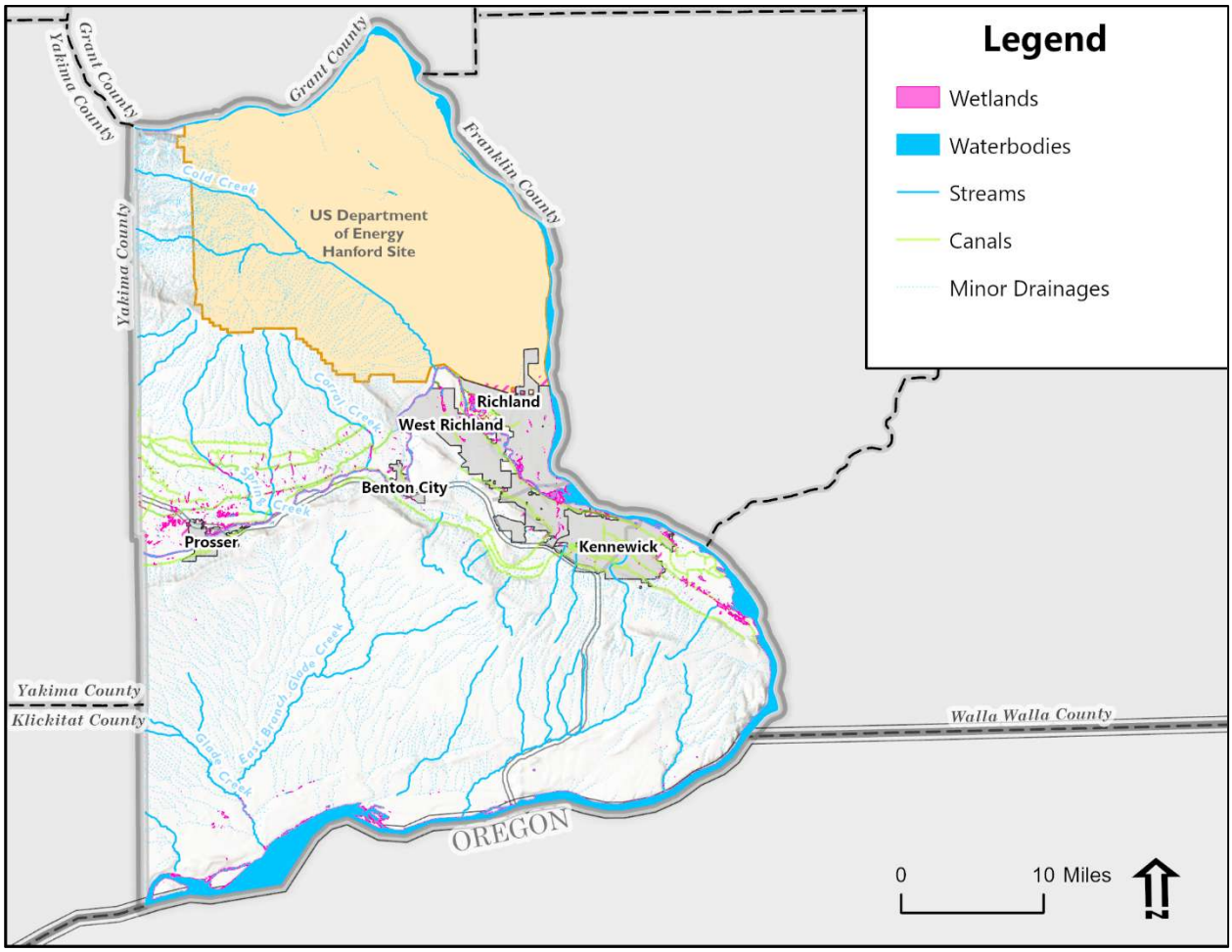
Levees, grazing, and shoreline development have fragmented many riparian zones and reduced their ecological function (Ecology, 2025). The WSRRI and Washington State Priority Habitats and Species

(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).

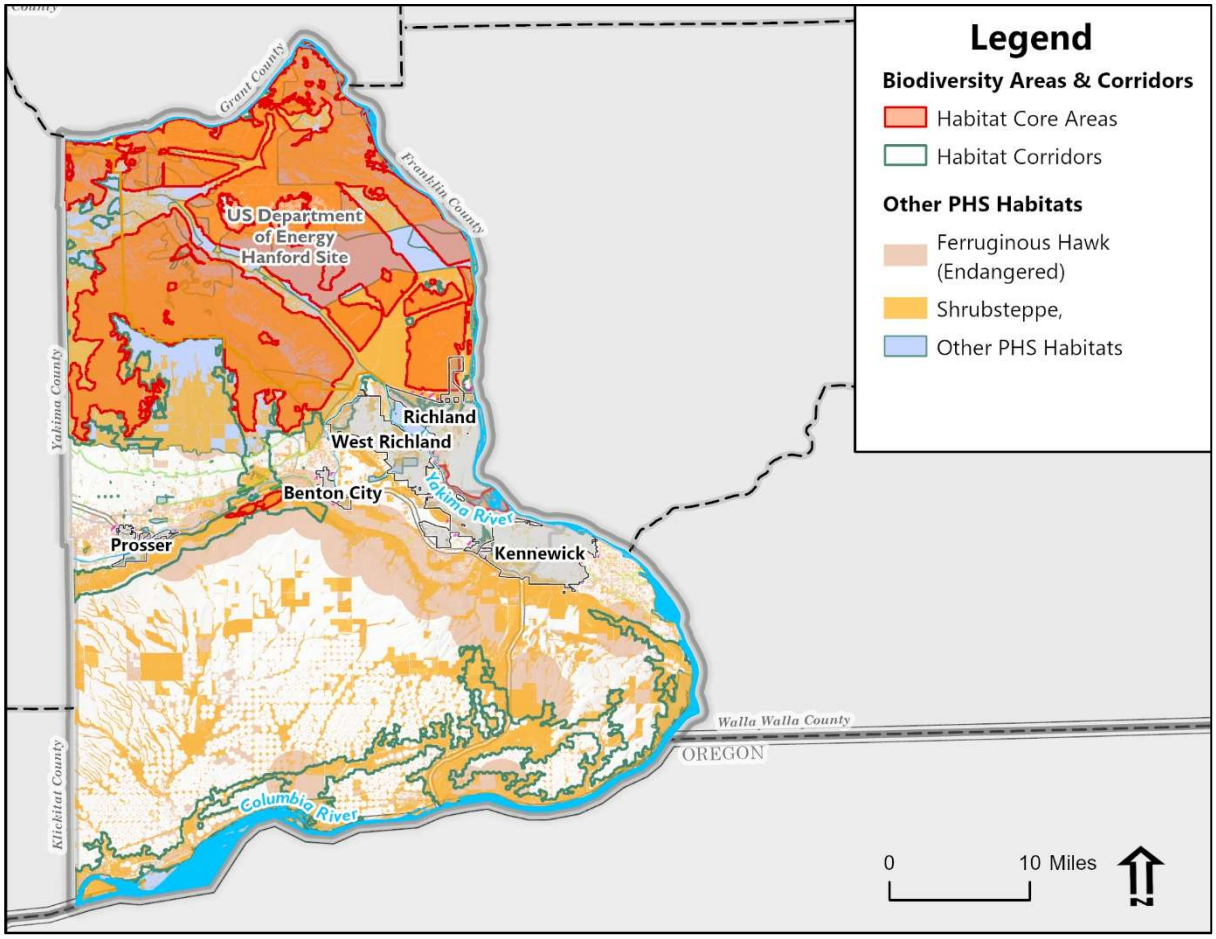
Large game mammals are also part of the wildlife community in the County and are closely tied to shrubsteppe, riparian areas, and nearby agricultural lands. Mule deer and white-tailed deer are common and widely distributed (WDFW, 2023). Mule deer are most closely associated with shrubsteppe and grasslands 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 Final 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 Final Draft CAO* (Benton County, 2026) and Benton County SMP. The final 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. In addition, the U.S. Department of Energy may also allow renewable energy projects to be developed on the Hanford Site, which would be evaluated through the NEPA process.

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 Final 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 Final 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 Final 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 Final 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 Final 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 will monitor development trends during plan implementation over the next few years in and around wildlife connectivity corridors and see whether zoning changes might be warranted in certain areas. County Planning staff will also coordinate with County Public Works in transportation improvements planning to consider ways to preserve wildlife corridors.

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 Final 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 Final 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 Final 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. where large-scale infrastructure is more consistent with existing uses. In addition, the U.S. Department of Energy may also allow renewable energy projects to be developed on the Hanford Site, which would be evaluated through the NEPA process. ~~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 and including the MID UGA; 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 Final 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 Final 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, giving special consideration to advancing environmental justice, and provide for fish and wildlife habitat and wildlife connectivity.
    - 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: Reduce urban sprawl and preserve rural character by promoting urban growth, including new urban-scale commercial and industrial development, within designated UGAs and incorporated areas where adequate urban services, such as public facilities, utilities, transportation infrastructure, and services are available or can be efficiently provided.~~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

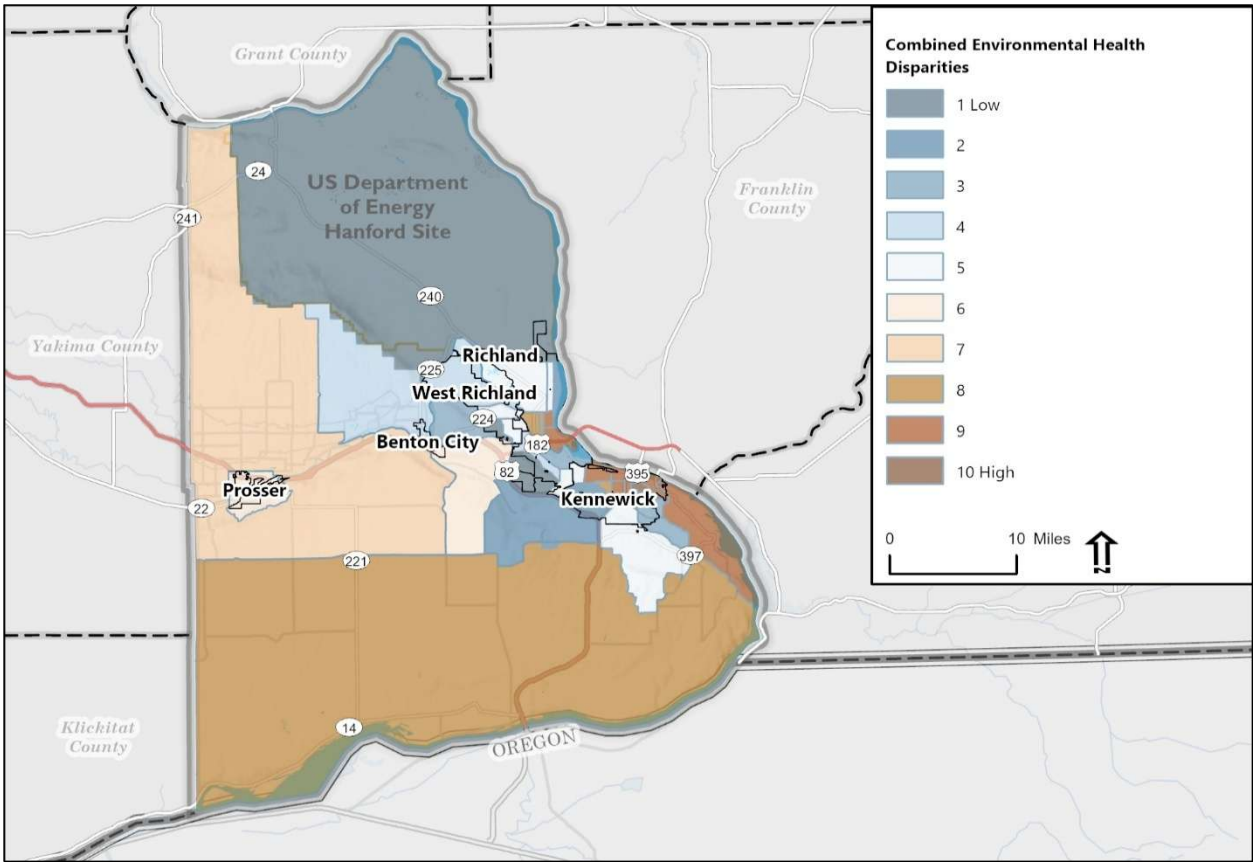
3.5.1 Affected Environment

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

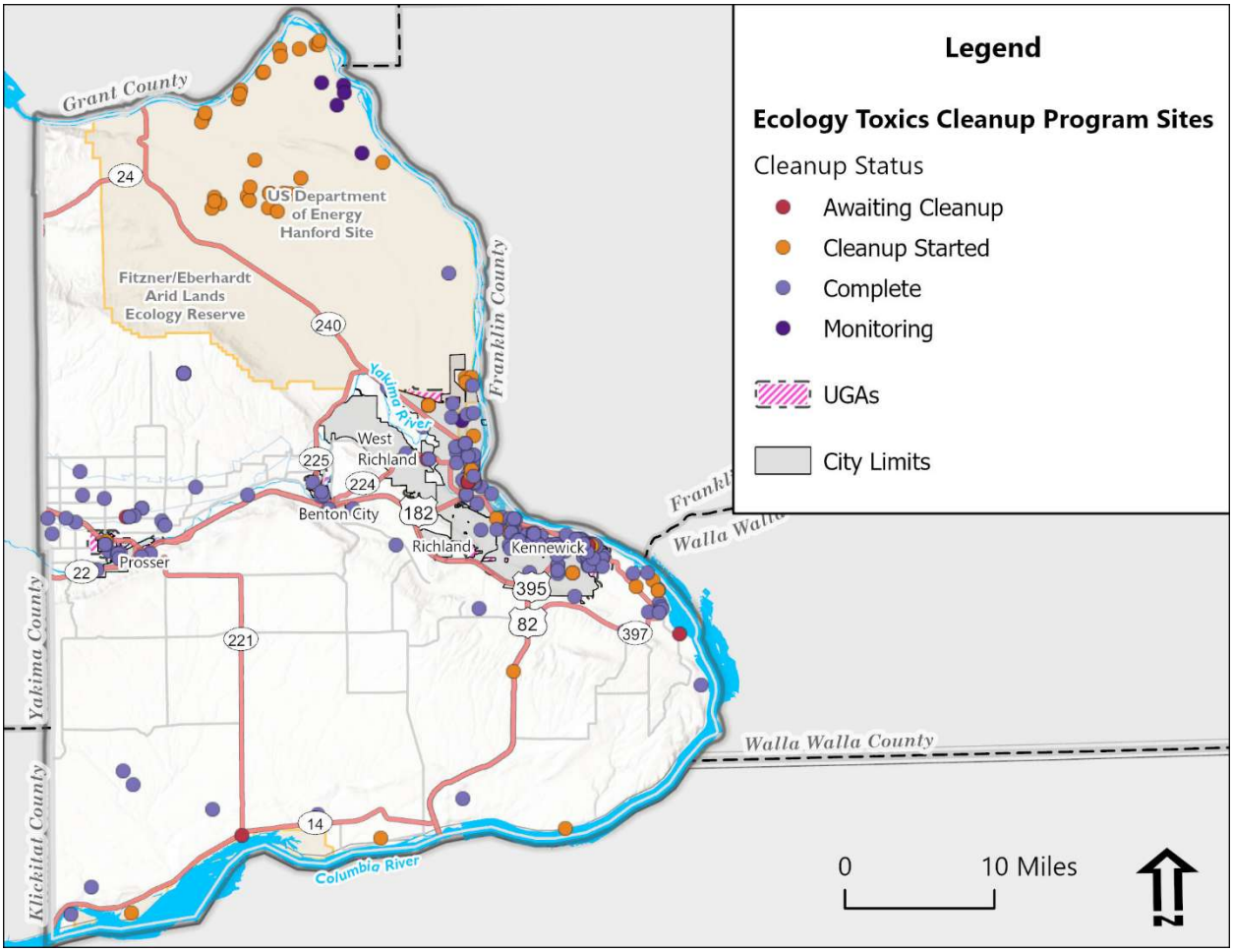
Environmental effects that rank the highest in the environmentally impacted census tracts in the County include lead risk from housing, wastewater discharge, and proximity to "risk management plan" facilities (DOH, n.d.). Facilities that use highly toxic substances or substances with flammable or explosive 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~~Site, 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 Final 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 Final 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 Final 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 that land uses are compatible with surrounding uses that maintain public health, safety, and general welfare giving special consideration to advancing environmental justice, and provide for and fish and wildlife habitat and wildlife connectivity. ~~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.

- 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.

- CE Goal 6, 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.

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

[1] $PM_{2.5}$ and PM_{10} refer to particulate matter consisting of different particle sizes (2.5 and 10 micrometers, respectively).

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 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

[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.

largest contributor within the buildings sector was industrial natural gas, accounting for 13% of total countywide emissions (Benton County, 2026).

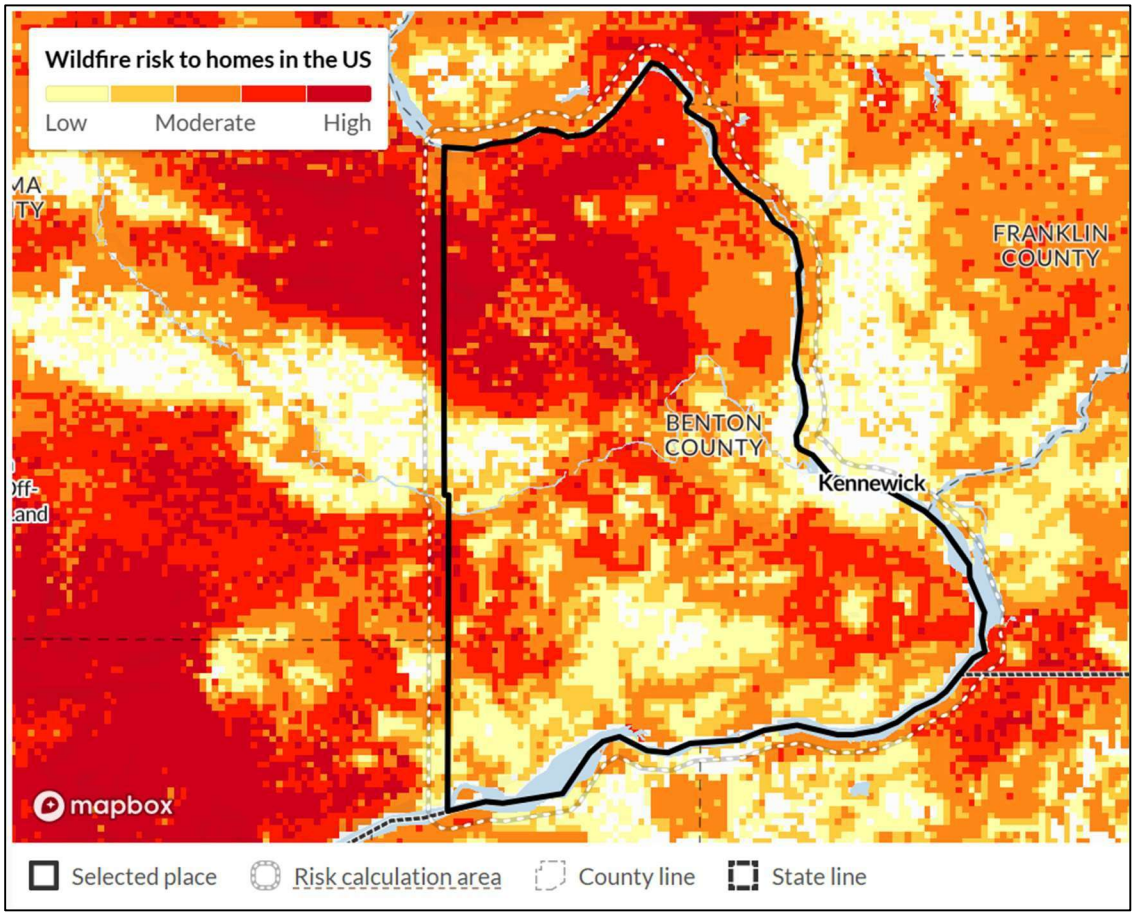
Decreasing vehicle miles traveled (VMT) per capita (population) contributes to reducing emissions. VMT is a transportation metric that calculates the total travel distance of all vehicles in a specific geographic area over a given period. The VMT metric can be used to understand changes over time. The 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).

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 Final 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 Final ~~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 Final 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.~~
- 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.
- 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 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.

- 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.

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 Final 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. Additionally, electric vehicle (EV) popularity is expected to continue to increase, which will also reduce air pollution. The County should consider supporting the location of additional EV charging infrastructure through future grant applications.

- 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 Final 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 Final 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

Table 3-3. Housing Types in Rural Community Centers

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.

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 Site 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 Site~~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 Final 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 Final 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 Final 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~~ within the Plymouth Industrial Park MID UGA ~~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 Final 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 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.

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

- 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 Final 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.

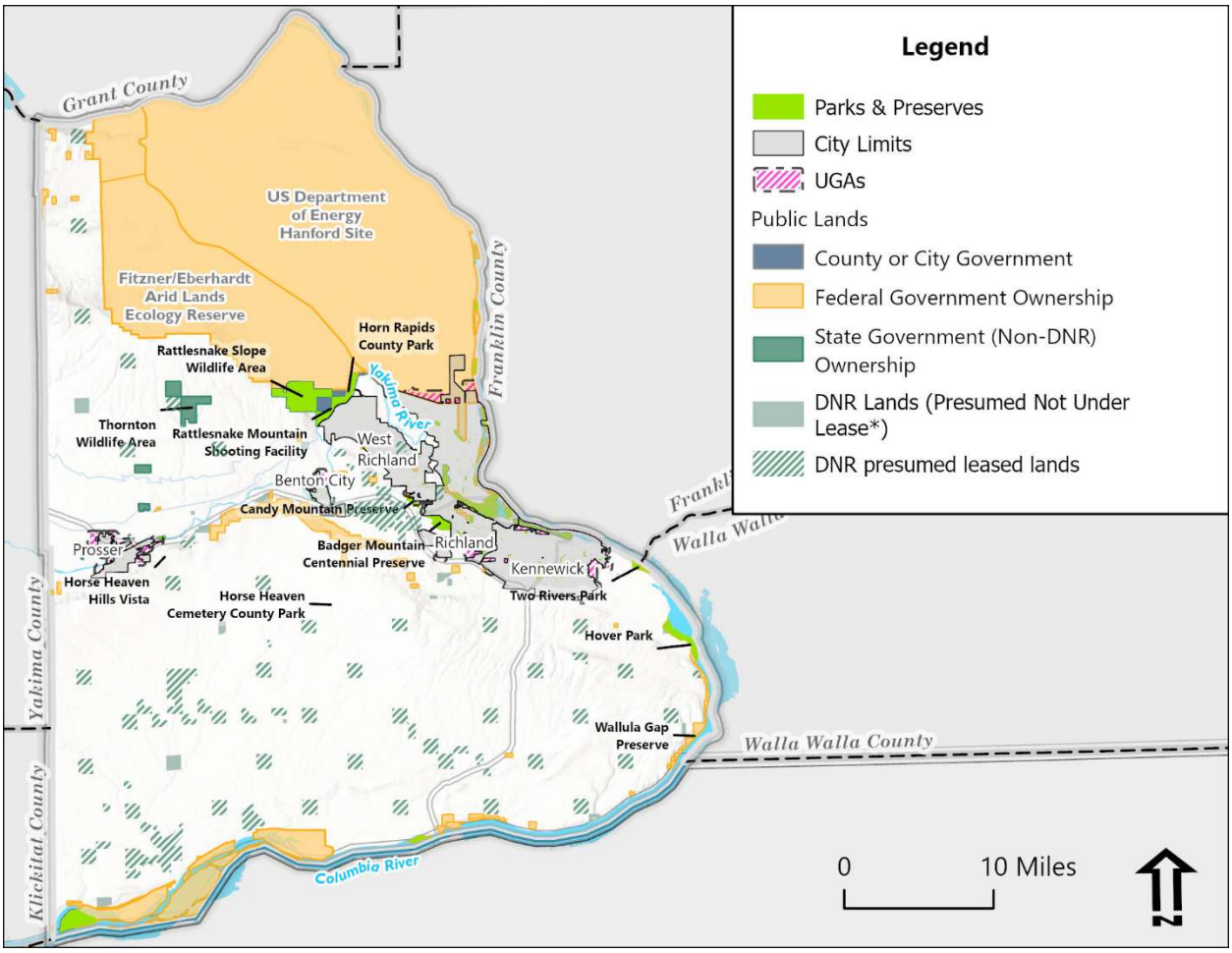
Special Use areas include sites that are either smaller and have focused uses or are managed for specific uses and may be subleased and managed by other organizations. These areas include:

- 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 Final 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 Final 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 MID UGA 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 Final 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 Final 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). Coordinate with local Irrigation Districts when considering Canal ~~ROWs~~right-of-ways for trail purposes.
- 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, and shrubsteppe habitat 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. The County is also pursuing a fourth preserve opportunity for state-owned land in Badger Canyon through the Washington State Department of Natural Resources Trust Land Transfer Program.

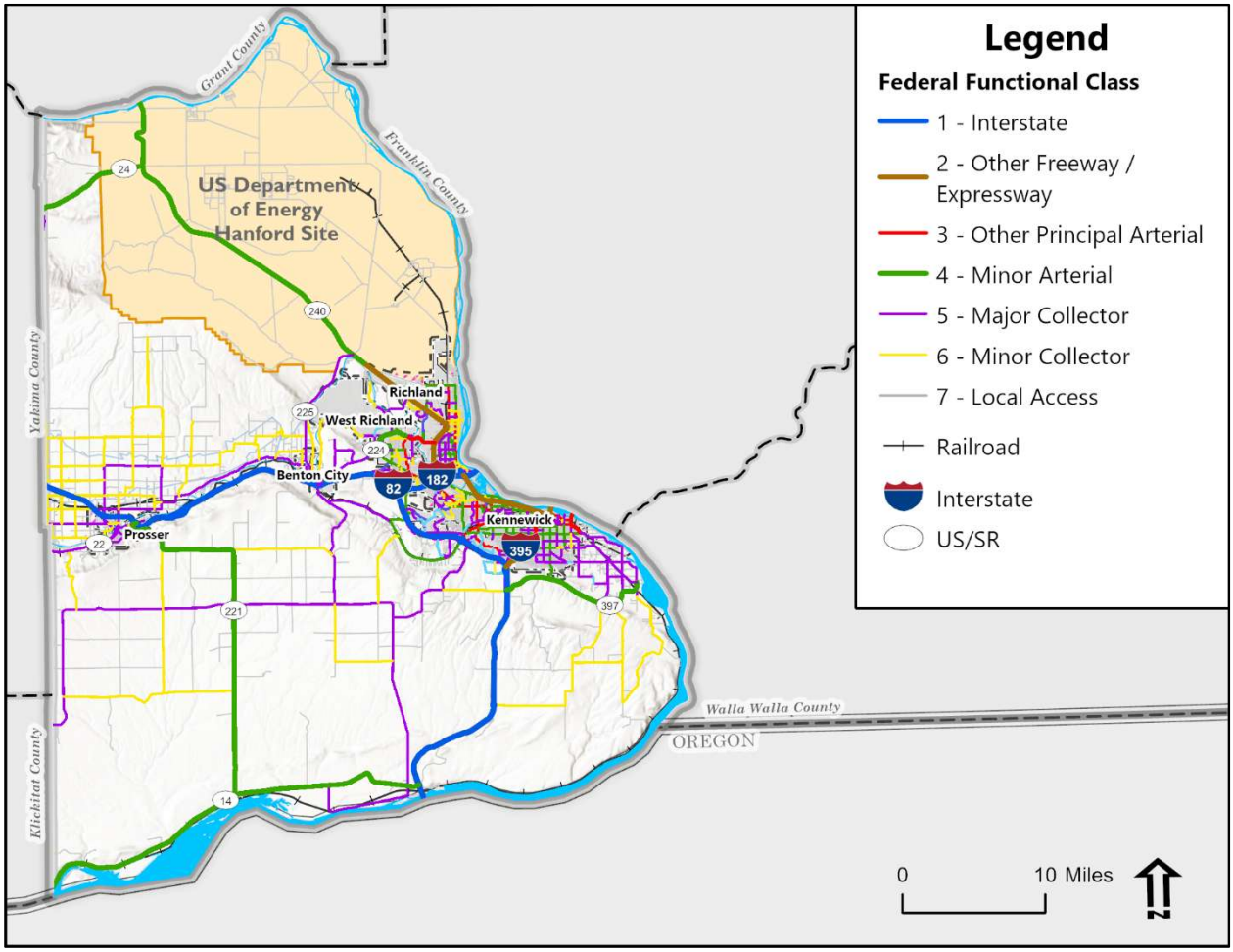
3.10 Transportation

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 Final 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 Final 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~~Site, 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 Final 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.
- Although there are no Tier 1 or Tier 2 Congestion Management Corridors in the County, Transportation Demand Management (TDM) strategies can be implemented that can assist in reducing congestion in the Tri-Cities region by promoting other modes. These strategies include provision of pathways and trails, carpool and vanpool programs, as well as incentives for working remotely. It is also recognized that other strategies are more applicable to the urban areas and Benton County will continue to support efforts by the cities and large businesses to use other strategies such as flexible work hours and parking management.
- ADA Transition Plan as required by the Americans with Disabilities Act of 1990 (ADA), that includes a self-evaluation of current facilities relative accessibility requirements of the ADA and a plan to address any deficiencies. Although the County has not as yet adopted an ADA Transition Plan, it has established an Accessible Community Advisory Committee and has begun the process to prepare and ADA Transition Plan.

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)~~ (Benton County, 2023) 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 Final 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 Final 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 Final 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~~Site, 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 Final 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 Final 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.
- TDM strategies including provision of pathways and trails, carpool and vanpool programs, as well as incentives for working remotely. It is also recognized that other strategies are more applicable to the urban areas and Benton County will continue to support efforts by the cities and large businesses to use other strategies such as flexible work hours and parking management.
- ADA Transition Plan as required by the Americans with Disabilities Act of 1990 (ADA), that includes a self-evaluation of current facilities relative accessibility requirements of the ADA and a plan to address any deficiencies.
-

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

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.

Comment No.	Commenter	Comment	Response
		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

Comment No.	Commenter	Comment	Response
		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.

Comment No.	Commenter	Comment	Response
		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.

Comment No.	Commenter	Comment	Response
		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

Comment No.	Commenter	Comment	Response
	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

Comment No.	Commenter	Comment	Response
	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.

Appendix B - 2026 Environmental Impact Statement (EIS) Comment and Response Matrix

Comment No.	Commenter	Section No.	Page No.	Comment	Response
1	Dept. of Energy 6/17/26	Figure 3-1,	21	HFO cannot guarantee the factual accuracy of the Hanford information throughout the document including figures depicting the Hanford Site. One example of a change would be to correct all DOE Hanford Site maps that label the area south of State Highway 240 as the Saddle Mountain National Wildlife Refuge to read Fitzner-Eberhardt Arid Land Ecology Reserve. Basis -Saddle Mountain is located on the north side of the Columbia River, outside of Benton County. There is no Saddle Mountain National Wildlife Refuge.	Understood. We will consider these updates and make appropriate corrections based on this input.
2		General		Recommend that language describing renewable energy projects on Hanford not use the word "allowable" in this context. Instead, update wording to reflect that DOE itself may allow renewable energy projects to be developed on Hanford. "In addition, the U.S. Department of Energy may also allow renewable energy projects to be developed on the Hanford Site, which would be evaluated through the NEPA process." Basis - The current wording may be interpreted as allowing or disallowing the development of renewable energy projects on the Hanford Site, which is outside the scope of the EIS.	Update as suggested
3		General maps and text		The identification of Hanford itself is inconsistent (i.e. Hanford Area vs. Hanford Site vs. Hanford Reservation vs. Hanford Nuclear Reservation vs Hanford Reach, etc.) Basis - Edit all documents and maps for consistency and identify as the Hanford Site and the river portion as the Hanford Reach.	Update as suggested

4	General maps	The county did not coordinate with HFO in the development of the Hanford relevant portions of the document and while HFO has provided come comments and proposed edits based on it it's review, HFO cannot guarantee the factual accuracy of the Hanford information throughout the document including figures depicting the Hanford site. Basis - Specific input on notable map inconsistencies are provided as separate comments. However, there may be additional items that were not addressed with these comments.	Understood. We will consider these updates and look for any additional inconsistencies that might exist.
5	Table 11.05.020-1, Zoning District, Page 11-37, or 42 of PDF.	The "Unclassified" zoning district has no definition. As a zoning district that's wholly on the Hanford Site, it should be described as such and noted that it is governed by the Department of Energy and its regulations.	Purpose statement in Zoning describes "Unclassified as does the comprehensive plan. The County permits uses other than USDOE on Hanford, including all non-federal activities.
6	General	Any proposed land use identified in this plan for property previously transferred from the U.S. Department of Energy to the community should be consistent with all deed restrictions and environmental covenants established at the time of transfer. These long-term institutional controls are intended to ensure continued protection of human health and the environment.	Understood

7	WDFW Scott Downes 6/11/2026			SUBJECT: WDFW comments on Benton County draft 2026 Comprehensive Plan Environmental Impact Statement (EIS) Dear Mr. Wendt, Thank you for the opportunity to review the Benton County draft 2026 Comprehensive Plan Environmental Impact Statement (DEIS). The Washington Department of Fish and Wildlife (WDFW) has reviewed the DEIS and its supporting elements and appendices. We appreciate that many positive aspects have been included in the plan for the protection of fish and wildlife habitats, including incorporating wildlife connectivity into various elements including transportation and open space planning. Alternative 3 in the DEIS presents a balance of resource and habitat protection with moderate growth protections, particularly focusing on growth within the urban growth areas while trying to preserve open space and critical habitats. WDFW is pleased to work with the county on the development of the shrubsteppe mitigation bank to conserve high value shrubsteppe habitat while providing a path for development and offsetting the losses to shrubsteppe from those developments. We also appreciate that Alternative 3 converts some of the industrial shoreline areas to public use, enhancing ability for shoreline protections. From a fish and wildlife habitat viewpoint, WDFW recommends adoption of Alternative 3 in the DEIS.	Thank you for this input on the DEIS and expressed support for Alternative 3
8	KID July 2, 2026	3.2.1.5 Water Use and Water Rights	30	Last sentence in first paragraph - Irrigation districts such as the Kennewick and Benton Irrigation Districts rely on a combination of “Yakima” River instead of Columbia	Update as suggested

9	KID July 2, 2026	3.2.3 Probable Environmental Impacts	33	First paragraph last bullet add - withdrawal from wells with no replenishment depletes the shallow aquifer.	Update as suggested