

Appendix L  
Agricultural Land Reclassification  
Memorandum (2018)

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# Memorandum

January 1, 2018

To: Jerrod MacPherson, Benton County Planning Department

From: Adam Hill and Ben Floyd, Anchor QEA

**Re: Agricultural Resource Land Reclassification**

## Introduction

Benton County is amending their Comprehensive Plan through a comprehensive 2017 plan update. As part of these amendments, it was determined that a county-wide review of agricultural resource lands be completed, as the designated lands had not been reviewed and updated for several years, and to confirm a more complete set of designation factors are addressed in the updated analysis. This memorandum describes work completed as part of this review and analysis process, including the elements necessary to consider for agricultural resource land classification, findings from the review, and recommended changes to agricultural resource lands in Benton County.

## Agricultural Resource Land Considerations

Benton County is required to implement a comprehensive plan under Revised Code of Washington (RCW) 36.70A.040. As part of this requirement, “the county...**shall designate** critical areas, **agricultural lands**, forestlands, and mineral resource lands, and **adopt development regulations conserving these designated agricultural lands**, forestlands, and mineral resource lands and protecting these designated critical areas” (emphasis added) (RCW 36.70A.040(3)(b)).

Agricultural land is defined as “**land primarily devoted to the commercial production** of horticultural, viticultural, floricultural, dairy, apiary, vegetable, or animal products or of berries, grain, hay, straw, turf, seed, Christmas trees..., finfish in upland hatcheries, or livestock, **and that has long-term commercial significance for agricultural production**” (emphasis added) (RCW 36.70A.030(2)). Long-term commercial significance “includes the **growing capacity, productivity, and soil composition of the land** for long-term commercial production, in consideration with the land’s proximity to population areas, and the possibility of more intense uses of the land” (emphasis added) (RCW 36.70A.030(10)). Additionally, in *Lewis County v Western Washington Growth Management Hearings Board* (2006), it is noted that “[i]f the farm industry cannot use land for agricultural production due to economic, irrigation, or other constraints, the possibility of more intense uses of the land is heightened. RCW 36.70A.030(10) permits such considerations in designating agricultural lands.”

Further, each county “shall designate where appropriate [a]gricultural lands that are not already characterized by urban growth and that have long-term significance for the commercial production of food or other agricultural products” (RCW 36.70A.170(1)(a)). A county “may use a variety of innovative zoning techniques in areas designated as agricultural lands of long-term commercial significance.... The innovative zoning techniques should be designed to conserve agricultural lands and encourage the agricultural economy” (RCW 36.70A.177(1)).

Washington Administrative Code (WAC) 365-190-050 establishes minimum guidelines to assist counties in classifying and designating agricultural lands. The following sections go through the minimum guidelines in WAC 365-190-050 and the approach being used to follow the guidelines.

### **Classification/Designation Approach**

WAC 365-190-050(1) states that “counties must approach the effort as a county-wide or area-wide process. Counties...should not review resource lands designations solely on a parcel-by-parcel process. Counties...must have a program for the transfer or purchase of development rights prior to designating agricultural resource lands in urban growth areas. Cities are encouraged to coordinate their agricultural resource lands designations with their county and any adjacent jurisdictions” (WAC 365-190-050(1)).

The first part of this guideline (county-wide/area-wide process) is met because analyses and approaches developed in the following sections of this memorandum are applied county-wide as part of the review process to determine if agricultural land designations need revisions. Individual parcels are not evaluated in this process. Figure 1 shows the existing agricultural resource land designations of Benton County.

No lands are being designated as agricultural resource lands in urban growth areas, so a program to transfer or purchase development rights is not required by Benton County.

Several cities are adjacent to Benton County planning jurisdictions. Figure 1 also shows the delineation of city limits and urban growth areas within Benton County.

### **Development Regulations**

WAC 365-190-050(2) states that counties “must adopt development regulations that assure the conservation of agricultural resource lands” (WAC 365-190-050(2)). Benton County has adopted regulations to meet this guideline; these regulations are coded in Benton County Code (BCC) Chapter 11.18. These regulations discuss allowable uses, uses requiring permits, and building requirements.

Additionally, coordination with the Benton Conservation District (CD) Board of Supervisors and staff occurred over two meetings in preparing this memorandum, one with the District Manager on

May 19, 2017, and another with the Board on June 14, 2017. The CD inquired about a setback or buffer zone between Growth Management Act (GMA) agricultural resource land and residential development, to further protect agricultural lands of long-term commercial significance, and to avoid future land use conflicts. The County confirmed a 150-foot setback is in place to perform these functions. Additionally, the Conservation District suggested opportunities for strengthening the analysis to the findings and conclusions, and provided other comments on evaluation criteria, how to incorporate Conservation Reserve Program (CRP) lands and other topics. Revisions to this memorandum were made to address these comments.

## **Designation Factors**

WAC 365-190-050(3) states that "lands should be considered for designation as agricultural resource lands based on three factors:" 1) specifically is not characterized by urban growth, 2) is used or is capable of being used for agricultural production, and 3) has long-term commercial significance for agriculture. Each of these factors are described in more detail and analyzed below.

### *Urban Growth*

WAC 365-190-050(3)(a) states that lands should be considered for agricultural resource designation if "the land is not already characterized by urban growth" (WAC 365-190-050(3)(a)). Urban growth areas are characterized in WAC 365-196-310. Figure 2 shows the areas in Benton County already characterized by urban growth.

These urban growth areas mapped in Figure 2 were not under consideration as agricultural resource lands for this analysis.

### *Production Capability*

WAC 365-190-050(3)(b) states that lands should be considered for agricultural resource designation if "the land is used or capable of being used for agricultural production. This factor evaluates whether lands are well suited to agricultural use based primarily on their physical and geographic characteristics" (WAC 365-190-050(3)(b)). Production capability is described in further detail, stating that lands currently used or capable to be used for agricultural production "must be evaluated for designation" (WAC 365-190-050(3)(b)(i)), and that counties "shall use the land-capability classification system of the United States Department of Agriculture Natural Resources Conservation Service [NRCS] as defined in relevant Field Office Technical Guides" (WAC 365-190-050(3)(b)(ii)).

The NRCS land-capability classification divides soil types into eight classes. Classes 1 through 4 are generally suitable for cultivation, while Classes 5 to 8 are generally not suitable for cultivation. However, with certain types of land management, Classes 5 to 7 could be used for agriculture (Duncan 2017). Classes are different for the same soil type for irrigated and non-irrigated lands. An analysis was done using Benton CD data to determine land that is irrigated; the remaining land is

assumed to be non-irrigated. Figure 3 maps the NRCS land-capability classification for Benton County, splitting the classes into suitable, suitable with management, and non-suitable land for cultivation.

Figure 3 shows that there are some areas currently designated as agricultural resource lands that are not well suited to agricultural use, areas that can be suitable for agricultural use with certain types of land management, and other areas not designated as agricultural resource lands that may be well suited to agricultural use. Figure 4 highlights these areas. Of the areas highlighted, areas near the fringe of the current areas designated as agricultural land (along the freeway corridor and along the Columbia River) will be more likely considered for designation changes from agricultural resource lands as these areas are nearer to population centers and would have the possibility of more intense uses of the land in the long-term. Additionally, in some instances these are also the more marginal lands, particularly when considering dryland production areas.

This mapping procedure is done as an initial step to check the potential for areas to be well suited for addition or removal from agricultural resource land designation, as one consideration in the evaluation process.

### *Long-Term Commercial Significance*

WAC 365-190-050(3)(c) states that lands should be considered for agricultural resource designation if “the land has long-term commercial significance for agriculture” (WAC 365-190-050(3)(c)). As part of determining this, counties should consider classification of prime and unique farmland soils, availability of public facilities including roads used in transporting agricultural products, tax status, public service availability, proximity to urban growth areas, predominant parcel size, land use settlement patterns, intensity of nearby land uses, history of nearby land development permits, land values under alternative uses, and proximity to markets (WAC 365-190-050(3)(c)). In addition to the factors listed in WAC 365-190-050(3)(c), considerations for long-term commercial significance in Benton County include water availability/precipitation, enrollment in CRP/conservation land, and pesticide restrictions. The considerations employed in this analysis are described in the following order:

- Water availability/precipitation
- Parcel size
- Nearby urban growth areas, settlement patterns, land use, land values, and development permits
- Land in CRP or conservation land
- Prime farmlands
- Pesticide restrictions
- Public facilities and proximity to markets
- Tax status

## **Water Availability/Precipitation**

One of the main considerations in Benton County for long-term commercial significance is water availability. Water availability can either come from irrigation or precipitation. If there is insufficient water available, lands cannot be commercially significant in the long-term.

To assist in determining water availability for dryland production areas, an analysis of precipitation was completed using data from Washington State University's AgWeatherNet, a network of weather stations throughout Washington State (including Benton County) that monitor several weather aspects, including precipitation. The mean (average) annual precipitation was collected from the AgWeatherNet web site and averages over the past 5 years, 9 years, and over the period of record (up to 24 years) were compared for the 32 stations in Benton County. Most stations (27 of the 32) had at least 5 years of records, and over half had at least 9 years of records. The 9-year average was also similar to the period of record for stations with longer records, so for purposes of this analysis, a 9-year annual average was used. Precipitation was estimated for most of Benton County using an inverse distance weighted interpolation that was log-normalized and back-transformed through GIS analysis. Figure 5 shows the results of this analysis.

The precipitation analysis is compared against non-irrigated lands that are suitable for cultivation in Figure 6. This figure highlights lands that would typically be suitable but may not be getting sufficient water to be long-term commercially significant. For this analysis, it was assumed that less than 6.5 inches (annual average) was not sufficient. This is based on information provided by John Christensen, a Benton County producer, who has records of yield and net profits or losses information for dryland farming at various annual precipitations and elevations. Lower precipitation areas had significant net losses while higher precipitation areas had net profits. Specifically, areas with mean annual precipitations of 4 to 6 inches had net losses of \$13 to \$62 per acre for continuous crops and net losses of \$68 to \$118 per acre for summer/fallow crops. Areas with mean annual precipitation of 9 to 11 inches had net profits of \$90 to \$118 per acre for continuous crops and net profits of \$41 to \$69 per acre of summer/fallow crops (Christensen 2016).

The areas that fit into non-sufficient precipitation and dryland farming include land immediately south of the Richland/Kennewick border, areas in Finley, and areas south of Prosser on the Horse Heaven Hills. In communications with the CD Board of Supervisors, the Board identified that most of the lands with lower yields are enrolled in CRP, or were enrolled historically, with many of these lands left uncultivated after CRP contracts expired.

Elevations in Benton County were also briefly reviewed to note any relationship between elevation and precipitation in Benton County. Generally, precipitation increased as elevations increased. The low-lying areas near Richland and Kennewick had a much lower average annual precipitation than most areas in the Horse Heaven Hills in the southeastern area of the county, except as noted above.

These analyses are meant to give a general idea of precipitation in Benton County. Some areas may have more precipitation than modeled and some areas may have less precipitation than modeled. Findings from precipitation analysis are considered sufficiently accurate to draw conclusions for long-term commercial significance determinations.

### **Parcel Size**

Agricultural lands must be large enough in area to have long-term commercial significance. An analysis was completed that compares parcel size to land use designation with a threshold of 10 acres—the threshold assumed to be needed for land to be long-term commercially significant, acknowledging as pointed out by the CD that smaller acreages may be adequate for certain high value crops such as tree fruits or wine grape vineyards. County land use designations for smaller parcels allow for development of these higher value crops, as desired. Figure 7 highlights the large parcels outside of agricultural resource land designation and small parcels inside of agricultural resources designation that may have potential for change based solely on parcel size. Capability class is also included in Figure 7 for reference.

Lands that have parcel sizes below the 10-acre threshold that are currently designated as agricultural resource lands include areas southwest of Richland and southeast of Benton City, and areas south of West Richland and northeast of Benton City.

Lands with parcel sizes above the 10-acre threshold and not currently designated as agricultural resource lands include areas east of Paterson, areas north of Plymouth, and land throughout the highway corridor. Many of these lands do not have suitable soils for cultivation without management, or they are already reserved as public or open spaces.

### **Nearby Urban Growth Areas, Settlement Patterns, Land Use, Land Values, and Development Permits**

Some areas were included as agricultural lands when these lands included irrigation systems, permanent crops, and other evidence of ongoing agricultural land use, if they were larger parcels, and had a mix of rural residential and smaller agricultural operations around them with no clear land use settlement or higher intensity uses nearby. These lands were often adjacent to other agricultural lands. Other areas, including larger parcels in some cases, were considered for reclassified from GMA Agriculture to other designations if they were more marginal farm ground (typically dryland) and adjacent to areas developing that had experienced recent or ongoing higher intensity or urban land use settlement, associated higher land values, and also had roads and utilities in relative close proximity, as described further below. The areas demonstrating this kind of growth and development/intensity of nearby land uses to agricultural lands are the Southridge area, Badger Canyon, higher intensity residential development in Finley, and development south of Badger Mountain in South Richland.

### **Land Enrolled in Conservation Reserve Program or Conservation Land**

Land in CRP or conservation land may or may not mean that a land has long-term commercial significance. In some cases, land may return from CRP or conservation and have long-term commercial significance; in other cases, the land is in CRP or conservation because it is not viable to farm the land. Figure 8 maps the land noted as CRP or conservation land in Benton County.

### **Prime Farmlands**

Some farmlands are designated as farmland of statewide importance or farmland of unique importance. These areas are mapped in Figure 9. Statewide important and unique important farmland are reviewed with previous elements listed to determine if any areas should be designated as agricultural resource land.

Some areas near Finley, areas south of Richland, and areas between the northern area of West Richland and Richland are noted as farmlands of statewide importance.

### **Pesticide Restrictions**

Benton County has restrictions to certain pesticide applications. Some areas have more stringent restrictions than others, which include prohibition of aerial application of insecticides labeled with the signal words "danger/poison" and restricted use herbicides (WAC 16-230-810). These areas are specifically located in the Northeast Horse Heaven Hills and reduce the potential of being long-term commercially viable due to the potential of added costs of hand-applying pesticides or reduced yield from not applying pesticides. While as a stand-alone factor, this may not result in removal of land classified as long-term commercially significant, it can be one additional factor in areas where lower yields typically occur could tip the balance away from designating an area as long-term commercially significant.

### **Public Facilities and Proximity to Markets**

Most areas in Benton County have sufficient facilities available to the public for transportation of agricultural goods such that they are not limiting to long-term commercial significance. Some areas were considered for reclassification from GMA Agriculture to other designations if they had public facilities such as urban water and sewer systems nearby and available, and a relatively dense network of public roads also available. These areas include the Southridge area, Badger Canyon, and the area south of Badger Mountain.

In terms of proximity to markets, most areas are relatively close to markets such that this element does not limit an area's long-term commercial significance.

## **Tax Status**

Tax status for lands analyzed were unremarkable. The tax status for the areas reviewed and considered for agricultural land removal includes residential vacant lots, limited use areas, mobile homes, rural residential, dry agricultural land, and pasture.

## **Food Security**

WAC 365-190-050(4) states that "counties may consider food security issues, which may include providing local food supplies for food banks, schools and institutions, vocational training opportunities in agricultural operations, and preserving heritage or artisanal foods (WAC 365-190-050(4)).

Benton County does not explicitly consider food security issues as Benton County is a net exporter of agriculture; however, this element was reviewed to ensure food security is not a concern for the area.

## **Sufficiency**

WAC 365-190-050(5) states that "the process should result in designating an amount of agricultural resource lands sufficient to maintain and enhance the economic viability of the agricultural industry in the county over the long term; and to retain supporting agricultural businesses, such as processors, farm suppliers, and equipment maintenance and repair facilities" (WAC 365-190-050(5)).

In addition to agricultural resource land, Benton County has proposed adding a new land designation called Rural Resource land. This land is less dense than previous land designations (typically changing from 5-acre to 20-acre minimums), preserving agriculture and range lands generally on steeper and north-facing sloped lands, and expanding the areas where agriculture production can occur. This new designation is a variation of an innovative zoning approach as referenced in introductory information above.

To ensure the sufficiency of agricultural resource lands, an area comparison will be made of agricultural resource areas designated for removal and new agricultural resource area designations.

## **Local Importance**

WAC 365-190-050(5) states that "counties...may further classify additional agricultural lands of local importance. Classifying additional agricultural lands of local importance should include, in addition to general public involvement, consultation with the board of the local conservation district and the local committee of the farm service agency" (WAC 365-190-050(5)).

Benton County has two American Viticultural Areas (AVAs) fully within the county boundaries and two AVAs partially located in the county boundaries. Figure 10 maps the AVAs located fully within Benton County.

Much of the AVAs are already designated as agricultural resource lands; it is recommended that these areas not be removed from designation.

## **Findings and Conclusions**

Using the information presented in the previous sections, multiple areas in the County may be considered for reclassification. In general, it is important to maintain continuity in agricultural resource land designation; unless there are sufficient reasons that the agricultural resource land should be de-designated, land should remain as agricultural resource land to protect the resource. Therefore, many areas that may not be as suitable as agricultural land may remain within agricultural resource land designation due to its proximity to lands of other types.

Additionally, there are many areas that have potential to be removed from designation in some analyses, but not others. For example, there are several areas north of Prosser that have small parcel sizes but are currently designated as agricultural resource land. However, these areas are irrigated lands with suitable soils, so it would not be appropriate to remove them from agricultural resource land designation.

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

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

Additionally, approximately 7,130 acres are proposed to be changed from higher density current designations to Rural Resource. This change in designation will preserve these lands for rangeland uses and agricultural production opportunity areas, such as vineyards and orchards. This can be considered an innovative zoning technique that fits RCW 36.70A.177(1) as being designed to conserve agricultural lands and encourage the agricultural economy.

Based on the information and analyses in the previous sections, some areas are proposed to be added to the agricultural land designation, some areas are proposed to be removed from the agricultural land designation. The changes are shown in Figure 11. Details of areas proposed to be added are summarized in Table 1. Details of areas proposed to be removed are summarized in Table 2.

**Table 1**  
**Agricultural Resource Lands Proposed Additions**

<b>Township/Range/Section</b>	<b>Area (acres)</b>	<b>Previous Land Use Designation</b>	<b>Reason(s) for Addition</b>
T09N R24E S20,29	67	General Commercial	Irrigated land, suitable soil type, large parcel size
T09N R24E S24	171	Light Industrial	Irrigated land, large parcel size, farmland of statewide importance
T09N R24E S29,30	68	Rural Lands 5	Irrigated land, suitable soil type, large parcel size
T09N R26E S10,11,14,15,17,20,24 T09N R27E S19,30	1,160	Rural Lands 5	Irrigated land, suitable soil type, large parcel size, farmland of statewide importance
T08N R30E S34	144	Rural Lands 5	Irrigated land, suitable soil type, large parcel size
T09N R24E S24,28 T09N R25E S19,20,28,29,33,34 T09N R26E S04,05,07,17,18,19,20 T10N R26E S26,35	2,338	Rural Lands 5	Irrigated land, suitable soil type, large parcel size, farmland of statewide importance
T08N R24E S07,08,09	457	Rural Lands 5	Irrigated land, suitable soil type, large parcel size
T07N R30E S12	20	Rural Lands 5	Irrigated land, suitable soil type, large parcel size, farmland of statewide importance
T08N R30E S28,29,30	588	Rural Lands 5	Irrigated land, suitable soil type, large parcel size, farmland of statewide importance
T09N R26E S02,11	555	Rural Lands 5	Irrigated land, suitable soil type, large parcel size
T05N R27E S01 T05N R28E S06	483	Heavy Industrial	Irrigated land, suitable soil type, large parcel size
<b>Total area (acres)</b>	<b>6,051</b>		

**Table 2**  
**Agricultural Resource Lands Proposed Removals**

Township/Range/Section	Area (acres)	New Land Use Designation	Reason(s) for Removal
T06N R30E S13,23,24,26,27 T06N R31E S07,18	122	Public	Not suitable soil type, public access to river
T08N R27E S30	2	Public	Small parcel size, public
T08N R27E S02 T08N R28E S27 T08N R30E S32 T09N R27E S21	797	Rural Remote	Parcel size, non-irrigation with low precipitation, near population center/urbanizing areas, follows settlement patterns extending to south and west of Tri-Cities, next to areas increasing in property value
T08N R28E S13,24 T08N R29E S17,18,19,20,22,23,26,27	3,644	Rural Remote	Non-irrigation with low precipitation, near population center/urbanizing areas, follows settlement patterns extending to south and west of Tri-Cities, next to areas increasing in property value
<b>Total area (acres)</b>	<b>4,565</b>		

Areas proposed for addition include areas that are currently farmed, are irrigated, have a suitable soil type, and are large enough to be commercially viable in the long-term. They are generally located on the border of the existing designated agricultural resource land. Areas proposed for removal are generally located near population centers, transportation systems, and public services, and have potential for more intense use.

As shown in Table 1, the areas proposed to be added to agricultural resource land designation total about 6,050 acres, while Table 2 shows the areas proposed to be removed from agricultural resource land designation total 4,565 acres. This is a net increase of approximately 1,500 acres of designated agricultural resource land. Lands added are larger in size and are already irrigated on suitable soils, while lands removed have either small parcel size, are public access, or are non-irrigated with low average annual precipitation.

In addition to the net increase of 1,500 acres of designated agricultural resource land, about 7,130 acres are designed to be changed from denser land uses to rural resource land, which (as noted

previously) is less dense than previous land designations that can be used for farms, orchards, and other agricultural land use to preserve agricultural lands.

These recommended changes follow the goals of the GMA in regard to agricultural lands. As noted in *Clark County v. Western Washington Growth Management Hearings Board* (2011), “[a] significant goal of the GMA is to identify, maintain, enhance, and conserve agricultural lands. See RCW 36.70a.020(8).” With the increase in agricultural resource land designation, removal of land that does not have long-term commercial significance, and a new land designation of rural resource land, these changes help maintain the GMA goals for agricultural lands.

## References

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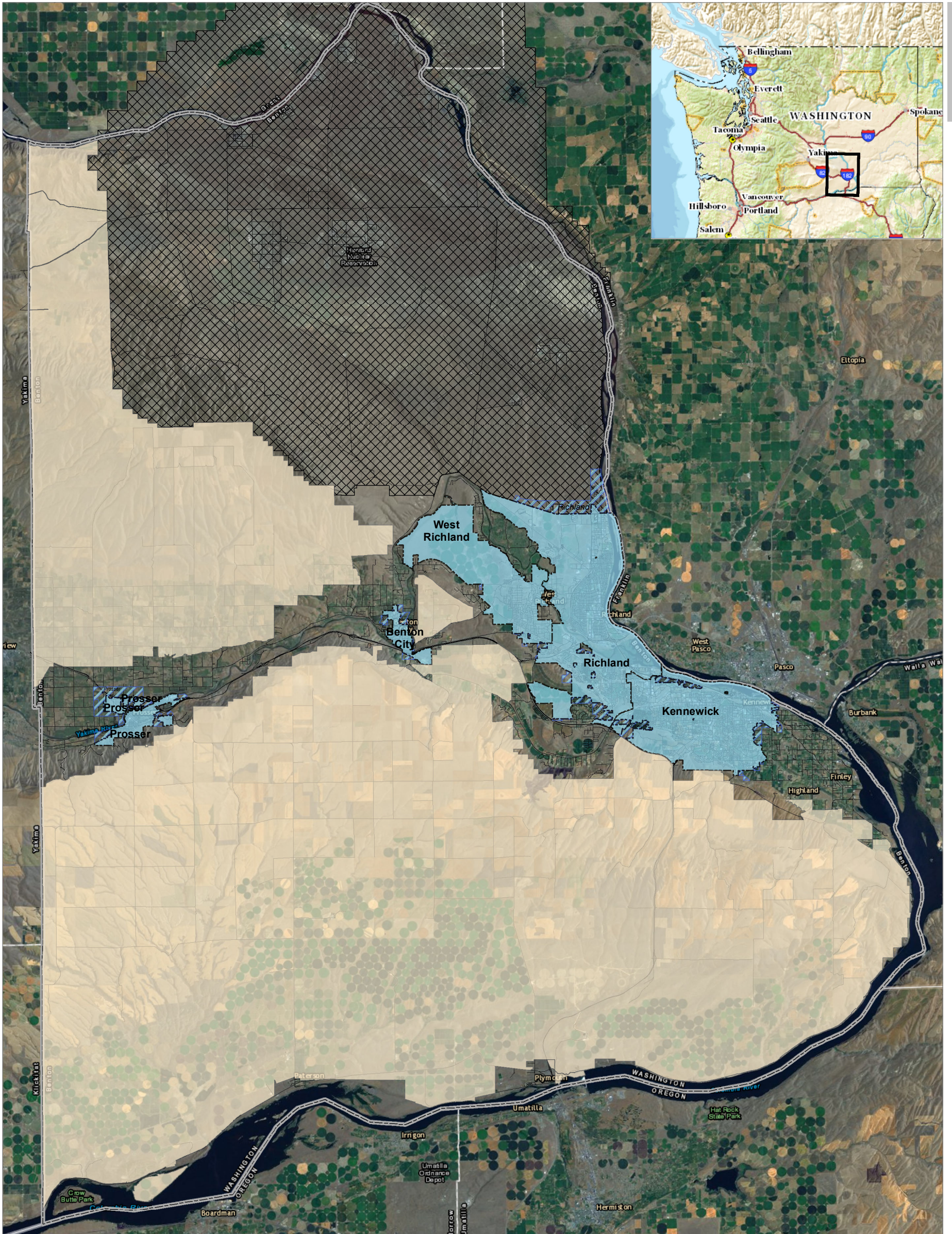
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## Figures

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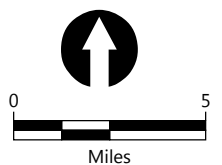


**LEGEND:**

- Roads
- City Limits
- UGA
- County Boundary
- Hanford Site

- Land Use (2011)**
- District**
- GMA AG

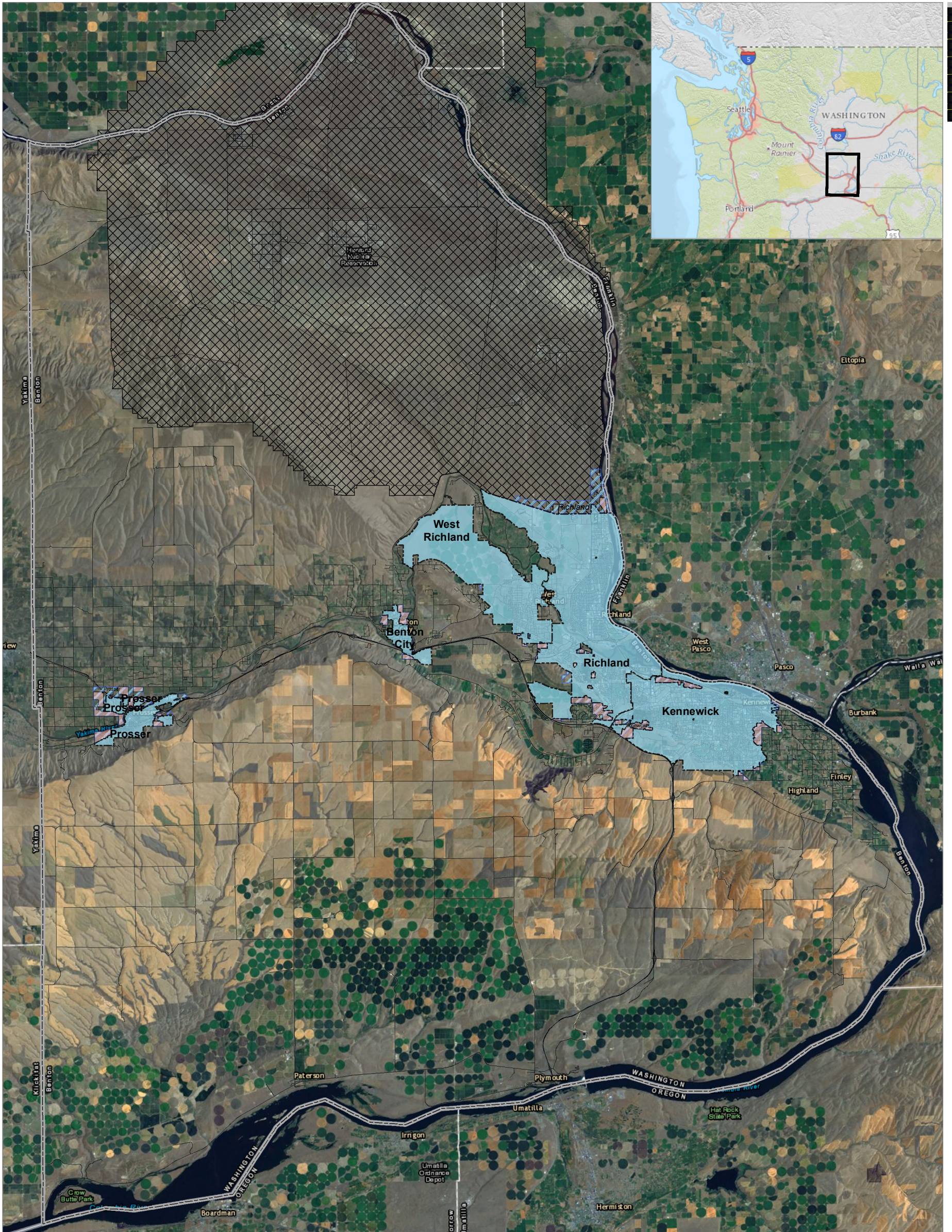
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**Figure 1**  
**Existing Designated Agricultural Resource Lands and City Planning Areas**  
 Benton County  
 Agricultural Resource Land Reclassification



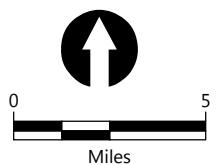
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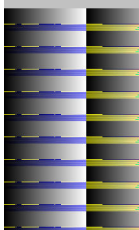
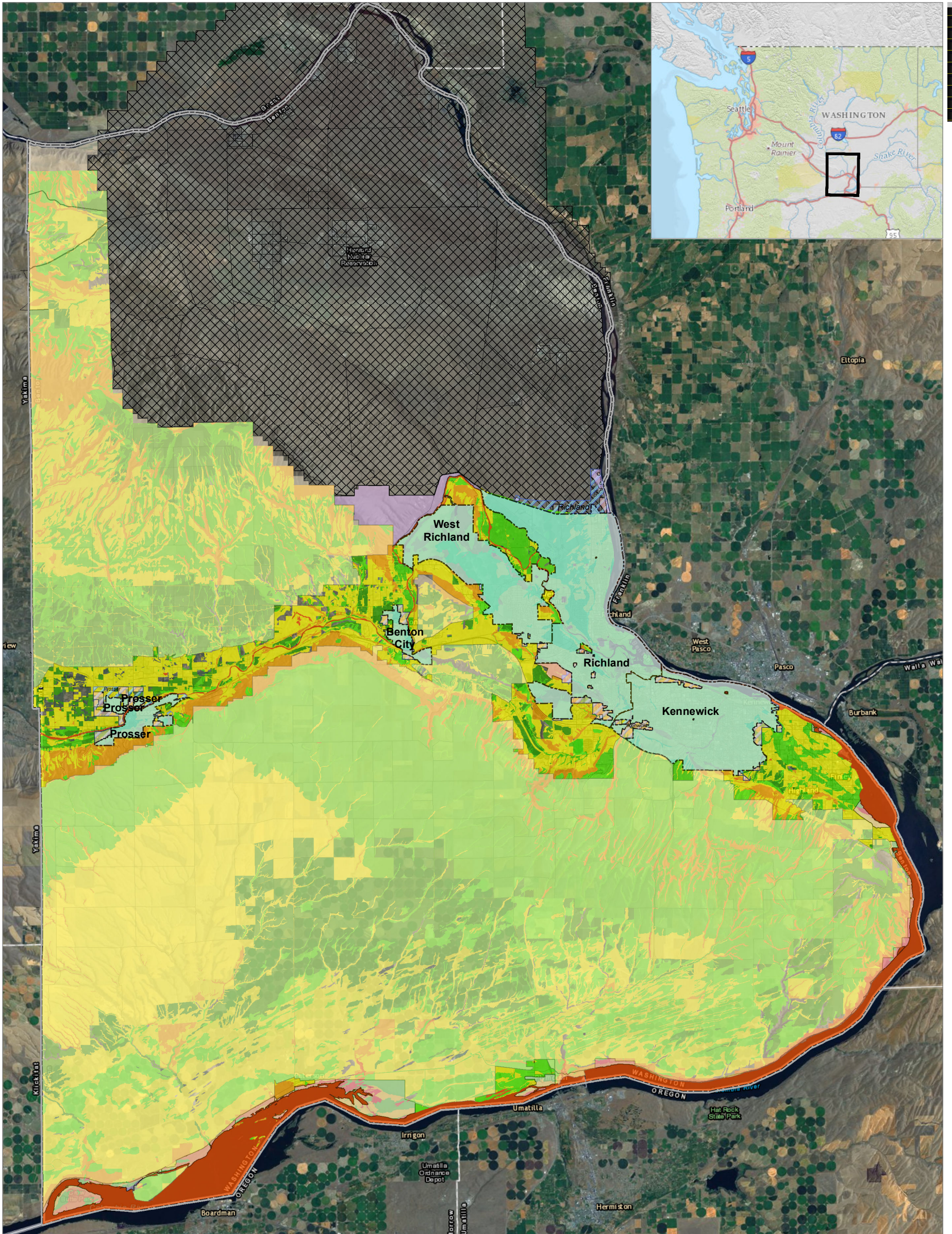
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**Land Use (2011)**

- District
- UGA

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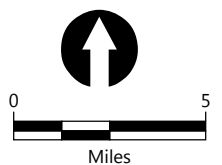
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- Roads
- City Limits
- UGA
- County Boundary
- Hanford Site

- Land Use (2011)**
- District**
- PARK DISTRICT
  - UGA
  - GMA AG

- Capability Class**
- Suitable - Class 2
  - Suitable - Class 3
  - Suitable - Class 4
  - Suitable with Management - Class 6
  - Suitable with Management - Class 7
  - Non-suitable - Class 8

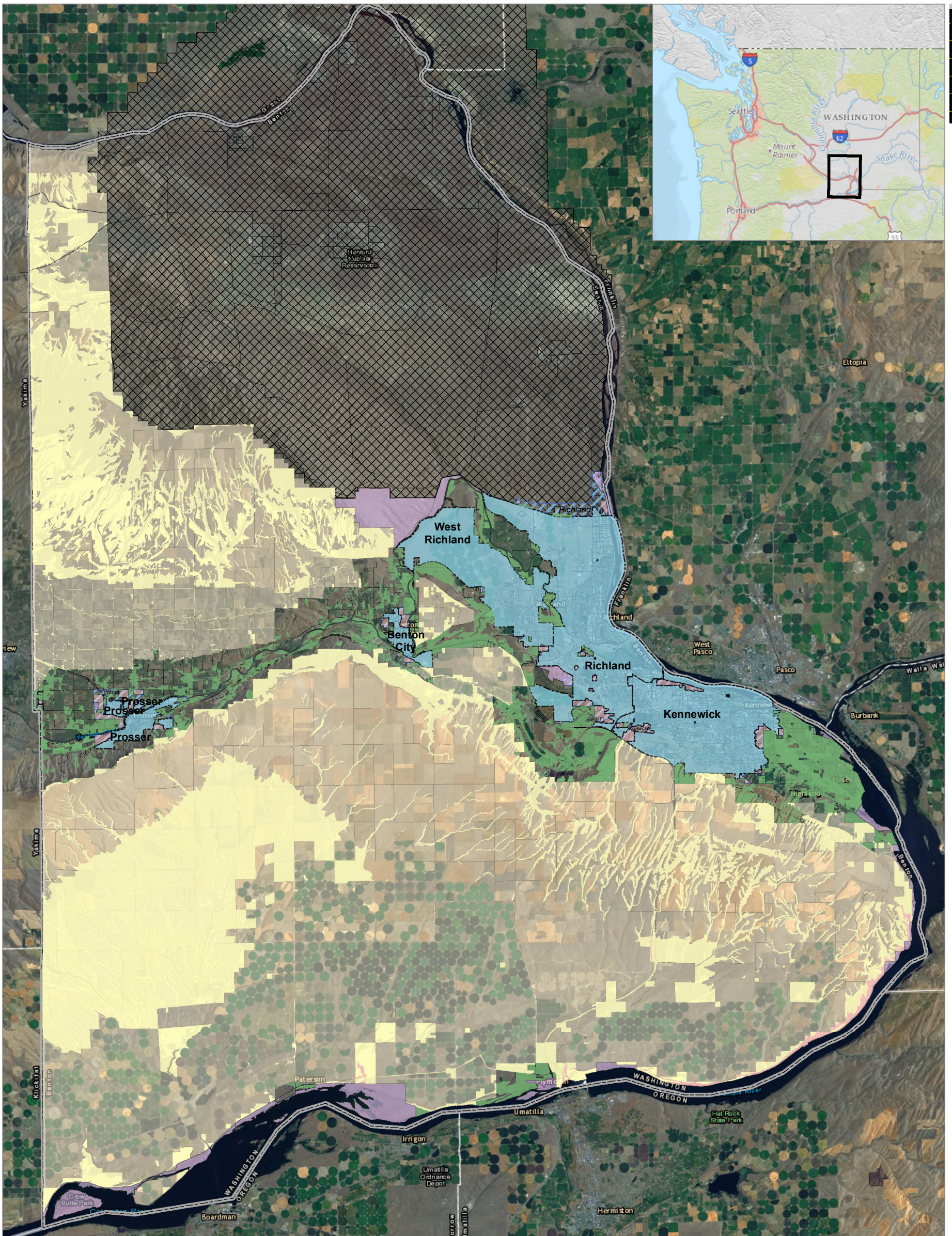
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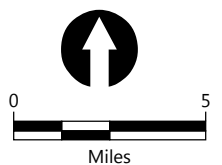


**Figure 3**  
**NRCS Capability Class**  
 Benton County  
 Agricultural Resource Land Reclassification



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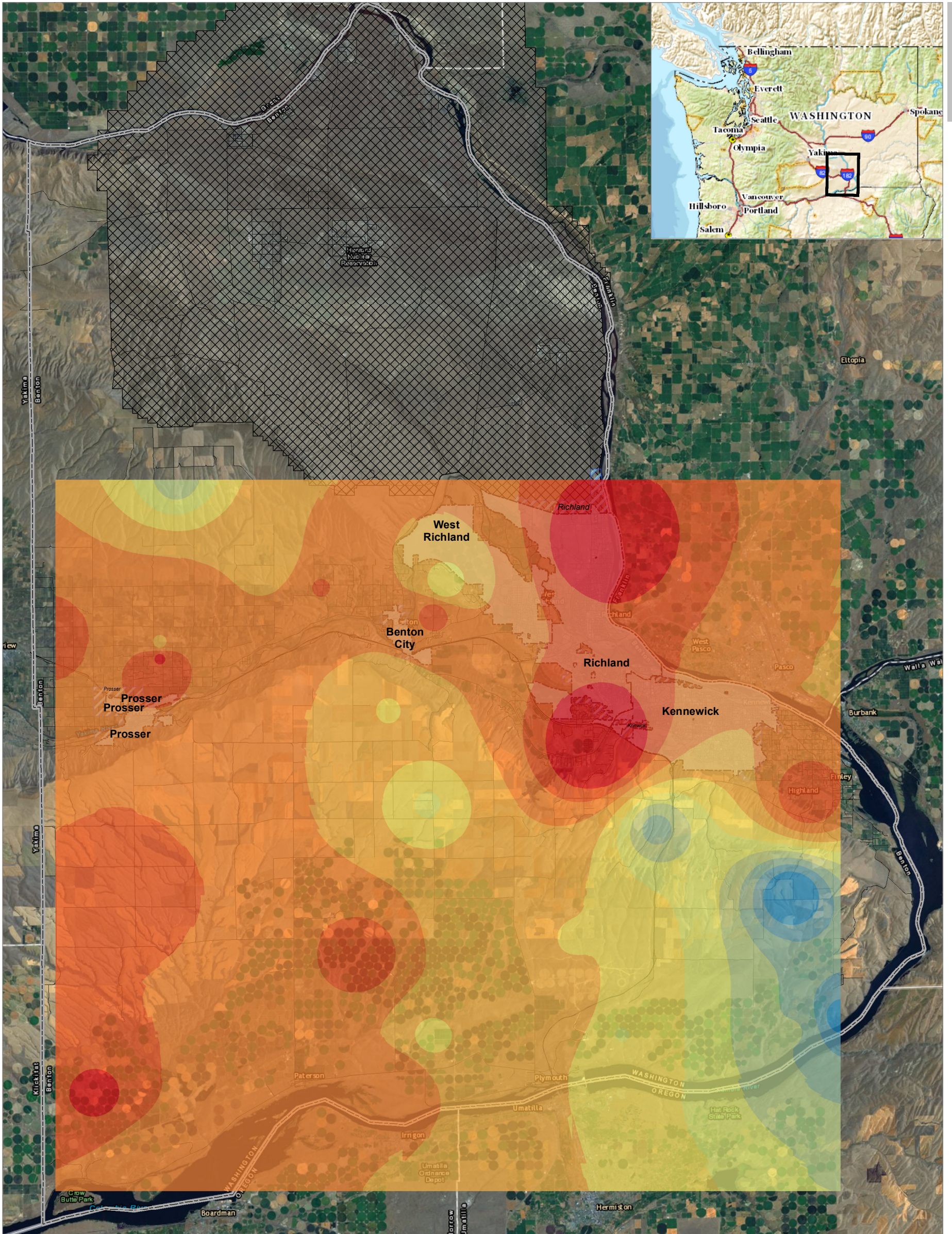
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| — Roads           | <b>Land Use (2011)</b> | ■ Suitable capability not in GMA AG             |
| ■ City Limits     | <b>District</b>        | ■ Suitable capability with management in GMA AG |
| ■ UGA             | ■ PARK DISTRICT        | ■ Non-suitable capability in GMA AG             |
| ■ County Boundary | ■ UGA                  |   |
| ■ Hanford Site    | ■ GMA AG               |   |



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**Figure 4**  
**Capability/Land Use Potential Mismatch Areas**  
 Benton County  
 Agricultural Resource Land Reclassification

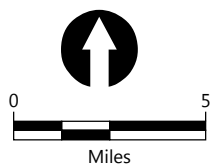


LEGEND:

- Roads
- City Limits
- UGA
- County Boundary
- Hanford Site

Interpolated Annual Precipitation (9-Year Average)

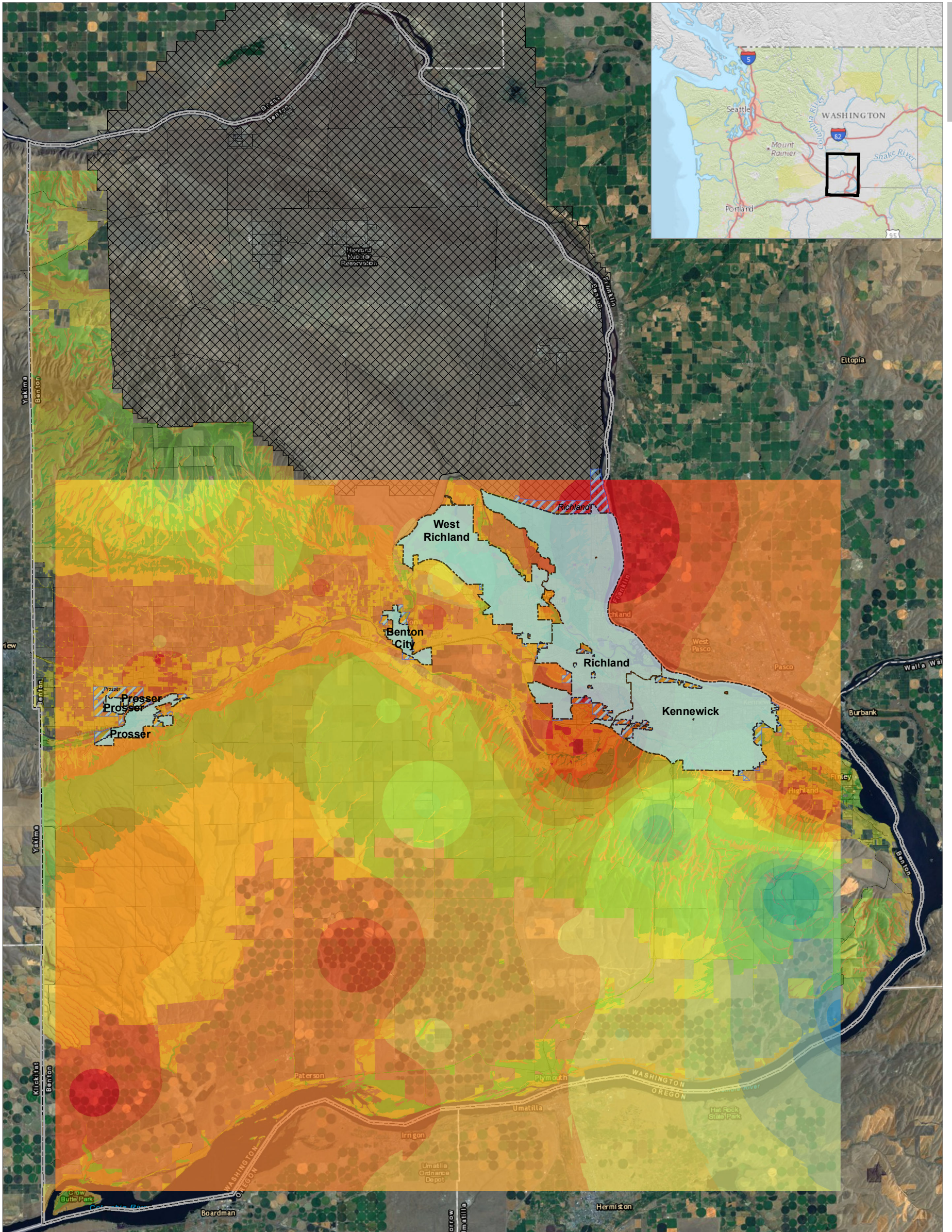
- less than 6"
- 6-6.5"
- 6.5-7"
- 7-7.5"
- 7.5-8"
- 8-8.5"
- 8.5-9"
- 9-9.5"
- 9.5-10"
- above 10"



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 Filepath: I:\Projects\Benton County\Comprehensive Plan Update\Data\Fig5-PrecipitationInterpolation.mxd



**Figure 5**  
**Annual Average Precipitation Analysis**  
 Benton County  
 Agricultural Resource Land Reclassification



LEGEND:

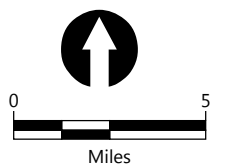
- Roads
- City Limits
- UGA
- County Boundary
- Hanford Site

**Non-irrigated Land Capability**

- Suitable - Class 2
- Suitable - Class 3
- Suitable - Class 4
- Suitable with Management - Class 6
- Suitable with Management - Class 7

**Interpolated Annual Precipitation (9-Year Average)**

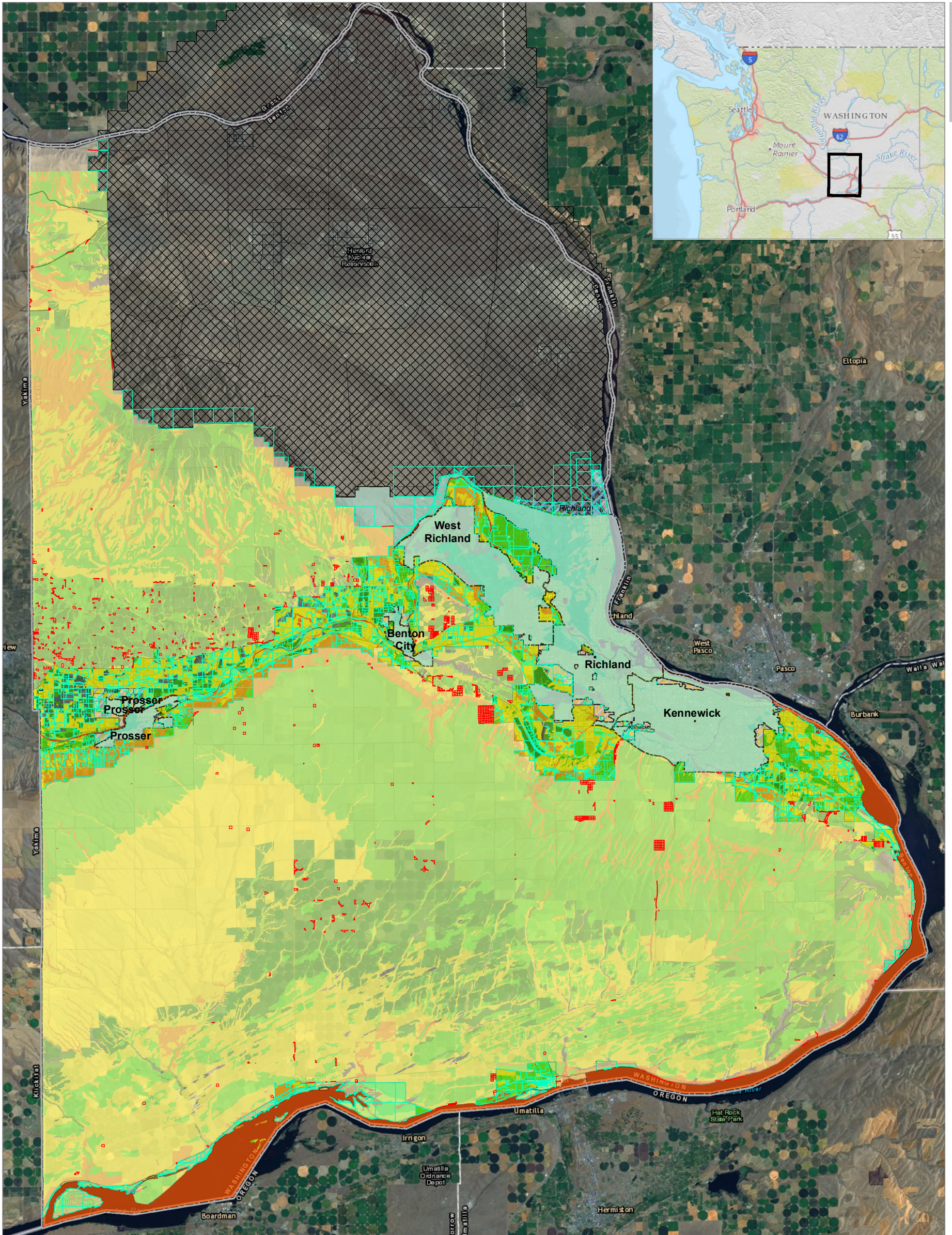
- less than 6"
- 6-6.5"
- 6.5-7"
- 7-7.5"
- 7.5-8"
- 8-8.5"
- 8.5-9"
- 9-9.5"
- 9.5-10"
- above 10"



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 Filepath: I:\Projects\Benton County\Comprehensive Plan Update\Data\Fig6-Precipitation-NonIrrigatedSuitable-2017\_07\_12.mxd



**Figure 6**  
**Precipitation and Non-irrigated Lands Suitable for Cultivation**  
 Benton County  
 Agricultural Resource Land Reclassification



**LEGEND:**

- Roads
- City Limits
- UGA
- County Boundary
- Hanford Site
- Parcels below 10 acres in GMA AG
- Parcel above 10 acres not in GMA AG

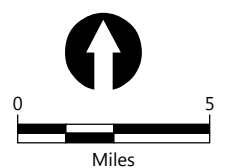
**Land Use (2011)**

- District**
- PARK DISTRICT
  - UGA
  - GMA AG

**Capability Class**

- Suitable - Class 2
- Suitable - Class 3
- Suitable - Class 4
- Suitable with Management - Class 6
- Suitable with Management - Class 7
- Non-suitable - Class 8

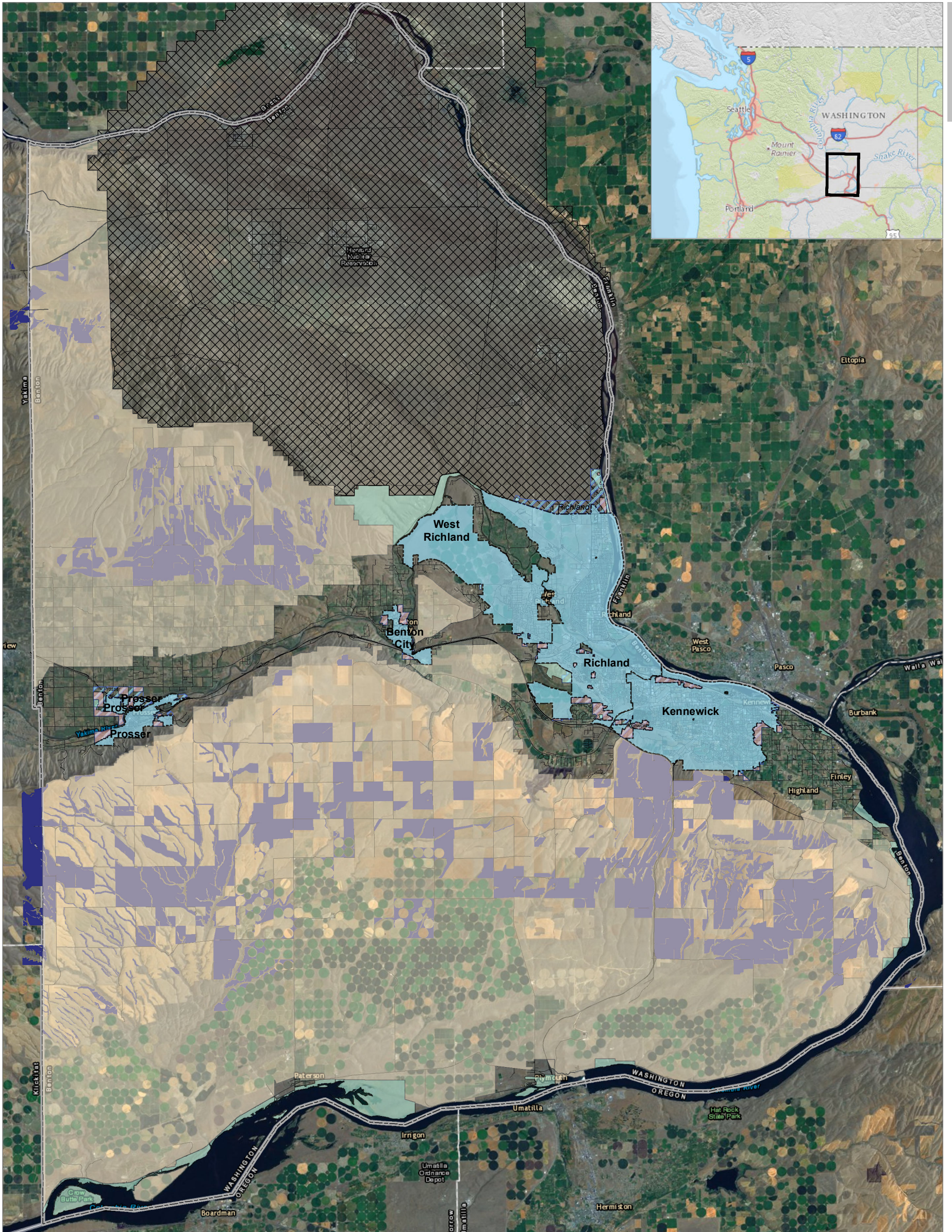
**NOTE(S):**



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 Filepath: I:\Projects\Benton County\Comprehensive Plan Update\Data\Fig7-ParcelSize\_LandCapability-2017\_07\_12.mxd



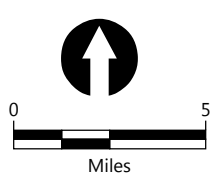
**Figure 7**  
**Parcel Size Analysis**  
 Benton County  
 Agricultural Resource Land Reclassification



- LEGEND:**
- Roads
  - City Limits
  - UGA
  - County Boundary
  - Hanford Site
  - Crop Type**
  - CRP/Conservation

- Land Use (2011)**
- District**
- PARK DISTRICT
  - UGA
  - GMA AG

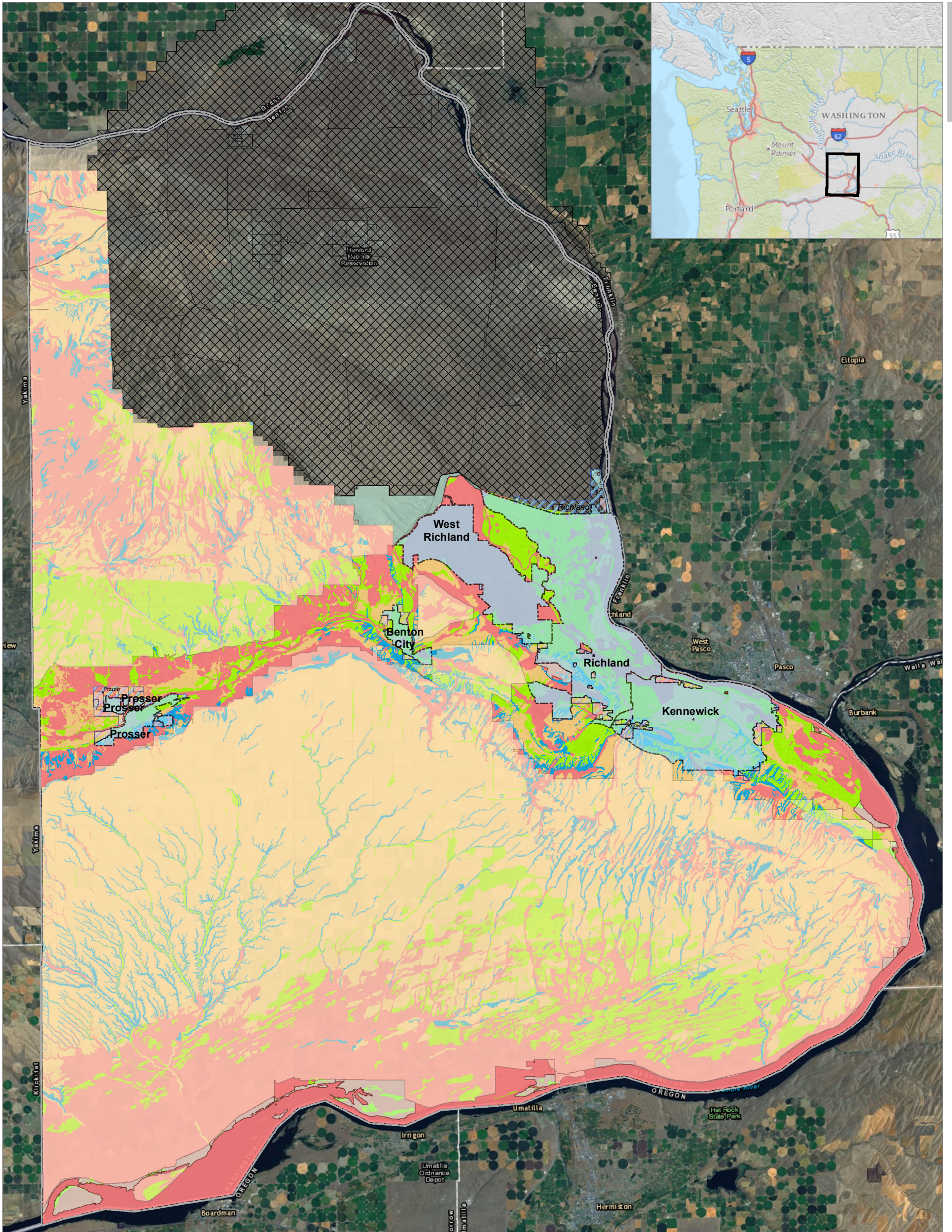
**NOTE(S):**



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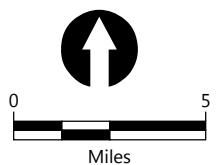


**Figure 8**  
**Lands in CRP/Conservation**  
 Benton County  
 Agricultural Resource Land Reclassification



**LEGEND:**

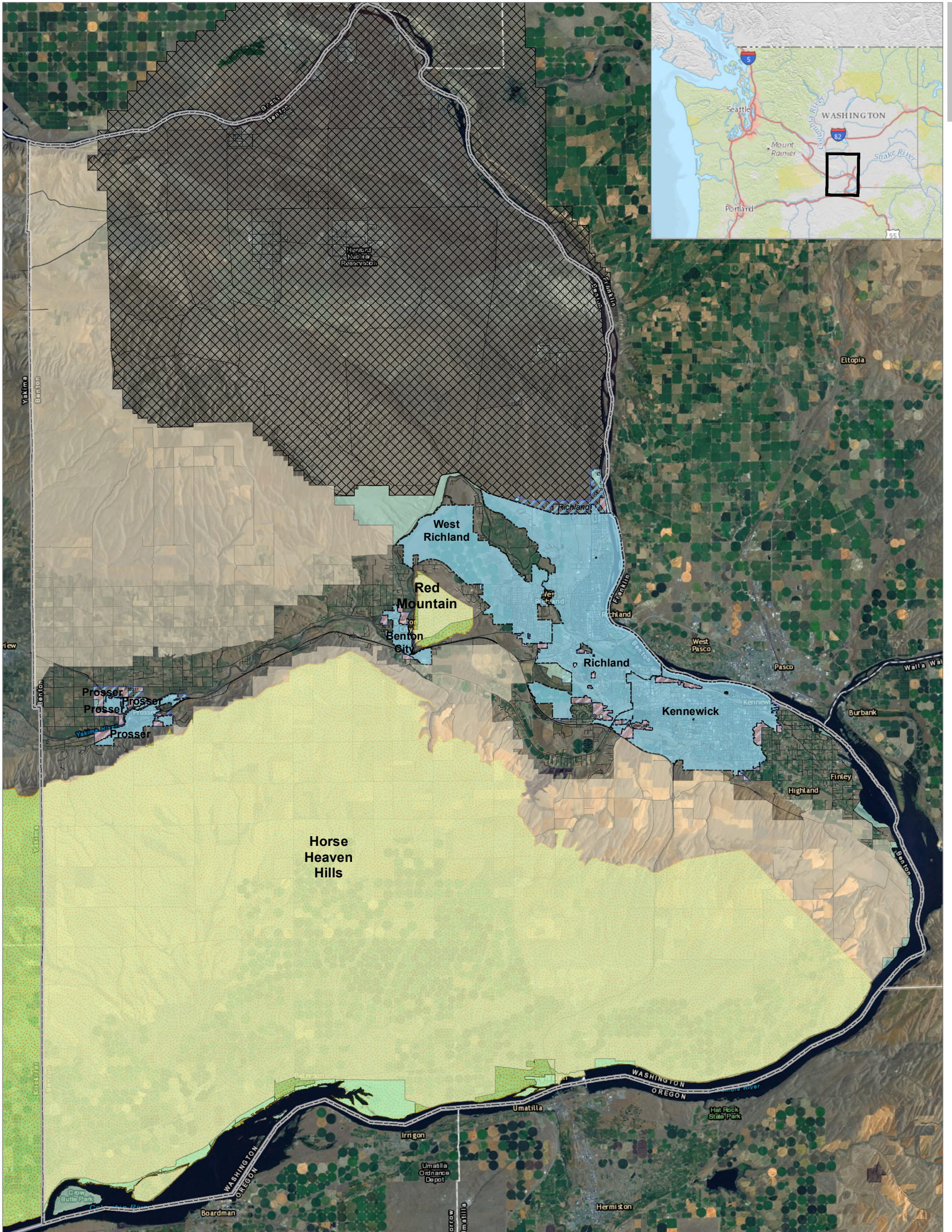
- |                 |                        |                                     |
|-----------------|------------------------|-------------------------------------|
| — Roads         | <b>Land Use (2011)</b> | <b>Soils - Farmland Designation</b> |
| City Limits     | <b>District</b>        | Farmland of statewide importance    |
| UGA             | PARK DISTRICT          | Farmland of unique importance       |
| County Boundary | UGA                    | Not prime farmland                  |
| Hanford Site    | GMA AG                 | Prime farmland if irrigated         |



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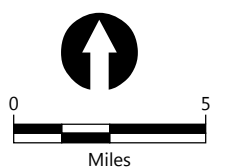
**Figure 9**  
**Prime Farmland Designation**  
 Benton County  
 Agricultural Resource Land Reclassification



**LEGEND:**

- Roads
- City Limits
- UGA
- County Boundary
- Hanford Site
- American Viticultural Area (AVA)

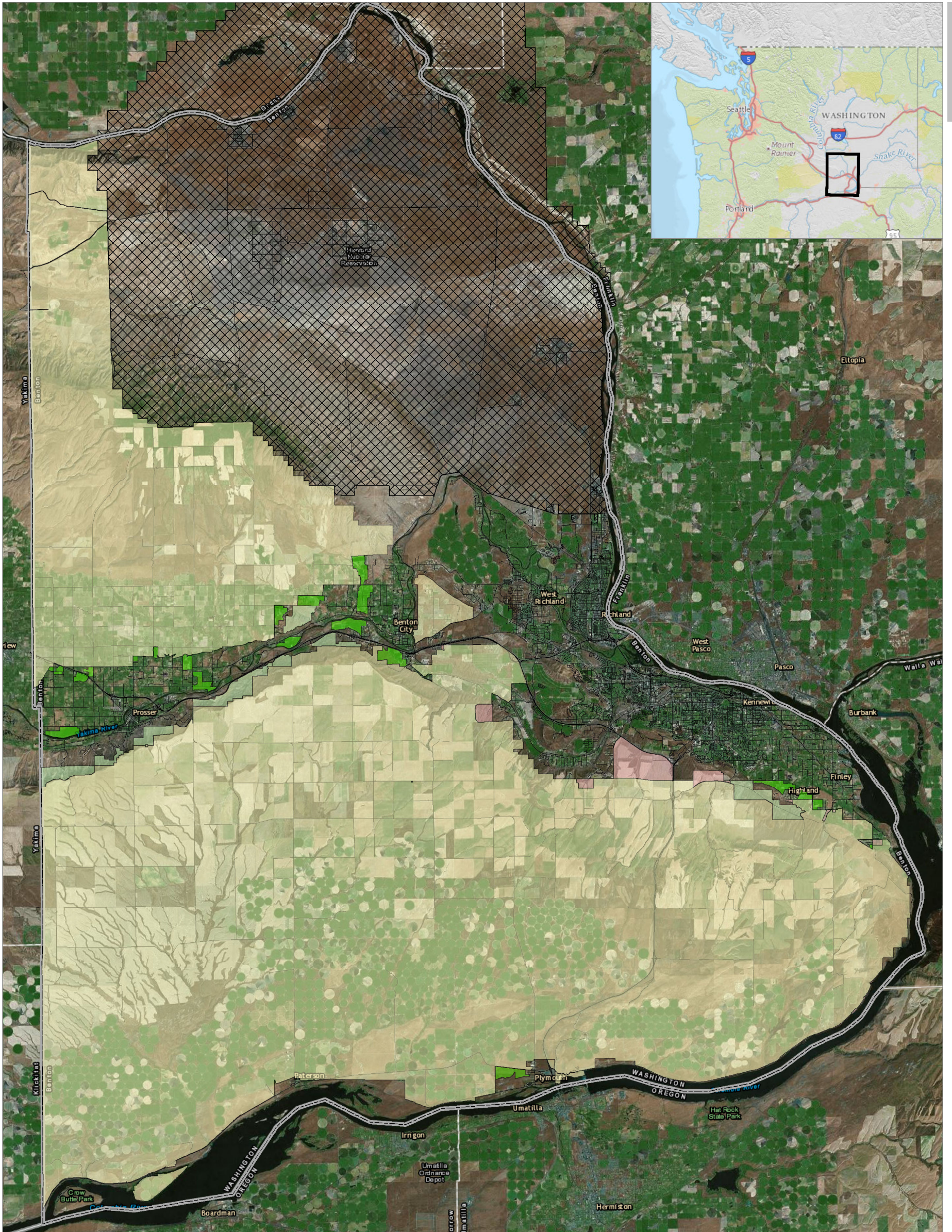
- Land Use (2011)**
- District**
- PARK DISTRICT
  - UGA
  - GMA AG



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 Filepath: I:\Projects\Benton County\Comprehensive Plan Update\Data\Fig10-AVA.mxd



**Figure 10**  
**American Viticultural Areas**  
 Benton County  
 Agricultural Resource Land Reclassification

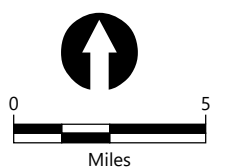


**LEGEND:**

- Roads
- ▭ County Boundary
- ⊠ Hanford Site

**Change to Agricultural Resource Land Designations**

- Addition
- No change
- Rural Resource
- Removal



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 Filepath: \\fuj\Anchor\Projects\Benton County\Comprehensive Plan Update\Data\Fig11-Changes.mxd



**Figure 11**  
**Proposed Changes to Agricultural Resource Land Designations**  
 Benton County  
 Agricultural Resource Land Reclassification