

3.8 LAND USE

This section describes the existing and future land uses and recreation areas in Benton County; the City of Umatilla; the site area; and the Proposed Action plant site and infrastructure corridors. It also addresses the consistency of the proposed project with the *Benton County Comprehensive Land Use Plan*, the Benton County Zoning Ordinance, the *City of Umatilla Comprehensive Plan* (1977), the Umatilla County Zoning Ordinance, the Shoreline Management Act of 1971, the *Benton County Shoreline Management Master Plan*, and the Farmland Policy Protection Act 1981. This section assesses the impact of the project on land use, recreation, and farmland in the area.

3.8.1 AFFECTED ENVIRONMENT

3.8.1.1 Regional Area

3.8.1.1.1 Benton County

Existing Land Use

According to the *Benton County Comprehensive Land Use Plan* (Benton County n.d.a), Benton County (the County) has an area of 1,095,910 acres (1,712 square miles). Of this, 25 percent in the northern portion of the County is occupied by the U.S. Department of Energy's Hanford Nuclear Reservation (Hanford Site). Another approximately 31 percent of the acreage in the County is owned or managed by public entities including port districts, and the federal, state, and local government. The remaining 44 percent of land in the County is in private ownership.

As presented in Table 3.8-1, existing land use activities in Benton County are primarily agriculture, rural residential, rangeland and open space, agricultural-related industry, and industrial uses associated with the Hanford Site. A small proportion of the County is used for other purposes such as mineral and aggregate resource extraction, and commercial development.

**Table 3.8-1
Existing Land Use In Benton County**

Land Use Type	Acres
Incorporated Area	
Cities and Urban Growth Areas (UGAs)	65,339
Hanford Site	277,016
Unincorporated Area	
Irrigated agriculture	189,711
Dryland agriculture	334,971
Rangeland and undeveloped	207,091
Residential (rural)	13,266
Public	5,947
Commercial	1,012
Industrial	609
Mineral and aggregate	372

Table 3.8-1 (Continued)
Existing Land Use In Benton County

Land Use Type	Acres
Unbuildable	576
Total County area	1,095,910

Source: Benton County Comprehensive Land Use Plan (Benton County n.d.a)

A brief description of some of the land uses identified in Table 3.8-1 is provided below:

- **Cities.** The largest urban areas in Benton County are West Richland, Richland, and Kennewick. Smaller urban areas include Prosser and Benton City.
- **Hanford Site and Other Industrial Land.** The Hanford Site consists of large industrial areas and associated infrastructure including rail and road transportation systems, water pumping and distribution systems, nuclear reactors, hazardous waste storage, disposal and processing facilities, and other high-tech facilities such as science laboratories (Benton County n.d.a). The Hanford site also has vacant land suitable for future industrial development. A vitrification plant for converting hazardous waste into glass is currently under construction at the Hanford Site. In addition to the Hanford Site, approximately 627 acres of land have been developed for industrial purposes in the County. Industrial uses in the County are typically related to agriculture and include chemical processing and shipping, cold storage, fruit and vegetable processing, and shipping (Benton County n.d.a). Benton County and Kennewick Port Districts own a large portion of the industrial land base in the County including property in and around Plymouth.
- **Agriculture.** Areas of irrigated agriculture are located throughout the County. Crops grown include specialty berries, orchard crops, mint, hops, juice and wine grapes, asparagus, potatoes, and corn.
- **Rangeland and Undeveloped.** Rangeland and undeveloped lands are located throughout the County.
- **Residential.** Rural residential areas, such as Plymouth and Paterson that typically have populations of a few hundred people, are scattered throughout the County.
- **Public.** Public lands designated for public use are found throughout the County but are generally located along the Columbia River. They typically consist of parks, playgrounds, greenways, open spaces, and wildlife habitats, and are owned and operated by government agencies (Benton County n.d.a). A more detailed description of recreation areas in the County is provided in Section 3.8.1.2.
- **Commercial.** Several types of commercial centers exist in Benton County. Commercial centers that service day-to-day needs of small rural communities are

located in towns such as Paterson and Plymouth. Examples of the types of commercial establishments in these smaller towns include grocery stores, taverns, and restaurants. Larger commercial centers with grocery stores, motels, truck stops, restaurants, and fast food establishments are located near state and federal highways, and in areas that attract tourists such as areas adjacent to the Columbia and Yakima Rivers (Benton County n.d.a).

- **Mineral and Aggregate Resources.** Lands containing sand, gravel, and basalt resources are ubiquitously spread throughout the County.

Future Land Use

The *Benton County Comprehensive Land Use Plan* identifies a number of significant land use trends in Benton County. These trends are summarized as follows:

- **Agriculture.** There is a trend in the County of expanding agricultural acreage and converting undeveloped or rangeland to dryland/irrigated crop production. There is also a trend of increased agriculture-related tourism, construction of agriculture-related industrial facilities and farm worker housing, and expansion of rail and water transportation systems for agricultural products.
- **Commercial.** There is a trend in the County of developing commercial uses at highway interchanges.
- **Industrial.** There is an ongoing interest in developing well-situated and large, light and high-tech industrial sites in the County.
- **Visitor/Tourism.** There is interest in providing waterfront developments that serve visitors along the Columbia River and lower Yakima River. There is also interest in developing convention facilities, residential/golf course communities, and regional public recreation and access facilities.
- **Rural Residential.** There is a trend in the County of rural population growth.
- **Urban Growth Areas (UGAs).** The phenomenon of the enlargement and expansion of city boundaries into rural County lands will continue with the growth of population.

Farmland

Farmland Protection Policy Act

The purpose of the Farmland Protection Policy Act (the Act) of 1981 is “to minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses, and to assure that Federal programs are administered in a manner that, to the extent practicable, will be compatible with State, units of local government, and private programs and policies to protect farmland.” The Act classifies farmlands as either prime, unique, or of statewide or local importance. Compliance with the Act is necessary because the

project falls under federal jurisdiction as a result of its interconnection with Bonneville Power Administration (BPA) transmission lines.

Farmland Types

According to the Federal Register (1978), definitions of prime and unique farmlands and farmlands of statewide or local importance are provided below:

- **Prime Farmlands.** Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and that is also available for these uses (the land could be cropland, pastureland, rangeland, forest land, or other land but not urban or built-up land or water areas). It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops in an economic manner when treated and managed according to acceptable farming methods. In general, prime farmlands have an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable levels of acidity or alkalinity, an acceptable content of salt and sodium, and few or no rocks. They have soils that are permeable to water and air. Prime farmland is not excessively erodible or saturated with water for a long period of time, and it either does not flood frequently or is protected from flooding.
- **Unique Farmlands.** Unique farmland is land other than prime farmland that is used for the production of specific high-value food and fiber crops. It has the special combination of soil quality, location, growing season, and moisture supply needed to produce a sustained high quality and/or high yields of a specific crop in an economic manner when treated and managed according to acceptable farming methods. Examples of such crops are citrus, tree nuts, olives, cranberries, fruit, and vegetables. Specific characteristics of unique farmland consist of the following: it is used for a specific high-value food or fiber crop; it has a moisture supply that is adequate for the specific crop; and it combines favorable factors of soil quality, growing season, temperature, humidity, air drainage, elevation, aspect, or other conditions, such as nearness to market, that favor the growth of a specific food or fiber crop.
- **Farmland of Statewide Importance.** This land, in addition to prime and unique farmlands, is of statewide importance for the production of food, feed, fiber, forage, and oilseed crops. Criteria for defining and delineating this land are to be determined by the appropriate state agency or agencies. Generally, additional farmlands of statewide importance include those that are nearly prime farmland and that produce high yields of crops in an economic manner when treated and managed according to acceptable farming methods. Some may produce as high a yield as prime farmlands if conditions are favorable. In some states, additional farmlands of statewide importance may include tracts of land that have been designated for agriculture by state law.

- Farmland of Local Importance.** In some local areas there is a need for certain additional farmlands for the production of food, feed, fiber, forage, and oilseed crops, even though these lands are not identified as having national or statewide importance. Where appropriate, these lands are to be identified by the local agency or agencies concerned. In places, additional farmlands of local importance may include tracts of land that have been designated for agriculture by local ordinance.

According to the Natural Resources Conservation Service (NRCS), an agency of the U.S. Department of Agriculture, Benton County (excluding the area occupied by the Hanford Site) has a total of 365,887 acres of prime farmland when this land is irrigated, 36,200 acres of unique farmland, and 123,437 acres of farmland of statewide importance. The total area of farmland of local importance in Benton County was not available. There are also areas in Benton County that are not important farmland. The NRCS identifies prime and unique farmland and farmland of statewide or local importance by soil type.

Recreation

Existing Recreation Areas

Table 3.8-2 provides a description of the existing recreation areas in Benton County based on the information provided in the *Benton County Comprehensive Land Use Plan*.

**Table 3.8-2
 Existing Recreation Areas In Benton County**

Recreation Area	Location	Type of Recreation Activities/Facilities	Size (acres)	Area Developed (acres)
Horn Rapids Parks	6 miles downstream of Benton City on the north shore of the Yakima River.	Boating and fishing; however, the majority of the park is undeveloped.	784	0
Columbia Park	City of Kennewick.	Golf course, RV parking, playground, boat launch and parking, fishing, and other water-related activities.	433	310
Vista Park	Tri-City heights residential area.	Neighborhood park with a playground.	0.5	0.5
Two Rivers Park	2 miles east of Kennewick near Finley.	Picnicking, swimming, and boating.	210	17
Horseheaven Vista	On SR 221 southeast of Prosser.	Overlook and picnicking.	2.3	1.8
Pioneer Vista	South of Kennewick on Owens Road.	Overlook.	5	-
Wallula Gap Overlook Park	Above Lake Wallula.	Overlook.	163	-
Rattlesnake Mountain Shooting Range	6 miles north of Benton City adjacent to Horn Road.	Shooting.	1,100	600+

**Table 3.8-2 (Continued)
 Existing Recreation Areas In Benton County**

Recreation Area	Location	Type of Recreation Activities/Facilities	Size (acres)	Area Developed (acres)
Plymouth Park	South of Plymouth on the Columbia River.	Boating, camping, picnicking, and swimming.	-	-
Crow Butte	15 miles west of Paterson.	Boating, camping, fishing, picnicking, sightseeing, swimming, waterskiing, windsurfing, and birdwatching.	1,312	-

Note: - = information was not available

Source: *Benton County Comprehensive Land Use Plan* (Benton County n.d.a) and Benton County Planning Department

Future Recreation Areas

The demand for public recreational opportunities and facilities in Benton County has been increasing as the rural and urban population continues to grow. Areas that have either been identified as suitable for future recreation use, or have already been designated for future recreation use but have not yet been developed for these purposes, are shown in Table 3.8-3.

**Table 3.8-3
 Future Recreation Areas In Benton County**

Recreation Area	Location	Type of Recreation Activities/Facilities	Size (acres)
Horn Rapids Parks	6 miles downstream of Benton City on the north shore of the Yakima River.	The park is currently used for boating and fishing; however, the majority of the park is undeveloped.	784.0
Bateman Island	-	-	173.0
Hover Park	10 miles southeast of Kennewick along the Columbia River.	The entire park area is undeveloped.	145.0
Tapeal Greenway	The park would extend for 30 miles along the lower Yakima River from Bateman Island to Benton City.	It is proposed that this area would have a network of trails and bike paths.	-

Note: '-' = information was not available

Source: *Benton County Comprehensive Land Use Plan* (Benton County n.d.a)

Shoreline Development

The Columbia River is a “shoreline of state-wide significance” as defined in the Shoreline Management Act of 1971 (SMA), and land that extends 200 feet from the banks of the river is the “shoreland area.” All development on shorelands or shoreland areas must be consistent with the policy of the SMA and shoreline master programs, which set out goals and development

standards consistent with SMA policy. The *Benton County Shoreline Management Master Plan* (Benton County n.d.a) applies to the proposed project.

Phase II in the Shoreline Management Master Plan is the Master Program Regulations. Section 8.09 of these regulations relates to utilities and states that transmission lines, gas pipelines, and power generation plants are conditional uses in the shoreline area within the urban, rural, conservancy, and natural environments. The alternate Benton Public Utility District (PUD)/BPA transmission interconnection is the only portion of the proposed project that would be located within the shoreland area of the Columbia River. Normally, the transmission line is a conditional use, which would be permitted when a conditional use permit from Benton County is obtained. However, it is assumed that BPA would construct the Columbia River crossing portion of any upgraded transmission lines required by the alternate Benton PUD/BPA transmission interconnection. In this circumstance, a shoreline conditional use permit may not be required.

Section 8.09 of the Shoreline Management Master Program Regulations also contains the following general utilities use regulations:

- A. *All transmission lines for power, gas, sewage, communications, oil, water, etc. shall be underground, wherever feasible.*

The alternate Benton PUD/BPA transmission interconnection would involve rebuilding or replacing the existing BPA Franklin 230-kV transmission line in the shoreland area and over the Columbia River to the McNary Substation in Umatilla County in Oregon. Given that it would replace the existing aboveground transmission line and use the existing transmission towers, it is not feasible nor desirable to place the interconnection underground when the existing structures can be used. Construction activities to place the alternate transmission interconnection underground would unnecessarily disturb the shoreland area.

- B. *After location of utilities, the area shall be returned to its natural state as much as possible.*

Given that the alternate Benton PUD/BPA transmission interconnection would utilize the existing transmission towers in the shoreland area, ground disturbance would be avoided.

- C. *Utilities shall be designed and installed in such as way as to minimize damage to the scenic view or aesthetic qualities of the shoreline area.*

Given that the alternate Benton PUD/BPA transmission interconnection would only replace existing conductors, and that installation of the line would not disturb the shoreline area, neither the scenic view nor the aesthetic qualities of the shoreline area would be damaged.

3.8.1.1.2 City of Umatilla

The alternate Benton PUD/BPA transmission interconnection would connect to the McNary Substation in Umatilla, Oregon.

Existing Land Use

According to the *City of Umatilla Comprehensive Plan* (City of Umatilla 1977), the city has an area of approximately 6,720 acres within its Urban Growth Area (UGA). The UGA encompasses Umatilla, the McNary Substation, and surrounding areas. Approximately 1,535 acres of land within the UGA is used for residential purposes, approximately 134 acres are used for commercial purposes (such as grocery stores, restaurants, gas stations, and hotels), approximately 210 acres are used for manufacturing, and approximately 567 acres are used for community facilities/services. The remaining land area in the UGA is used for agriculture, government purposes, roads, or is not suitable for development.

Future Land Use

Personnel at the City of Umatilla have advised that future development proposals in the UGA are primarily for residential developments. There are several areas in the UGA that have been subdivided for small residential developments, and one larger area near Umatilla River (approximately 300 acres) that is proposed to be developed primarily for residential purposes. The proposal also includes a small commercial center, a school, and park (Claucus 2002).

Recreation

Existing Recreation Areas

Many of the recreation activities in Umatilla are directly or indirectly associated with the Columbia and Umatilla Rivers (City of Umatilla 1977). The types of recreational opportunities associated with the rivers include waterskiing, swimming, sailing, windsurfing, canoeing, fishing, and boating. There is a small marina located west of I-82 and a campground located immediately south of the marina. Other recreation areas include neighborhood parks, and playgrounds and equipment associated with schools.

Future Recreation Areas

The only known future recreation area proposed to be developed in the City of Umatilla UGA is the park associated with the proposed 300-acre residential development near Umatilla River.

3.8.1.2 Site Area

3.8.1.2.1 Land Use

The existing land use in the site area is shown in Figure 3.8-1.

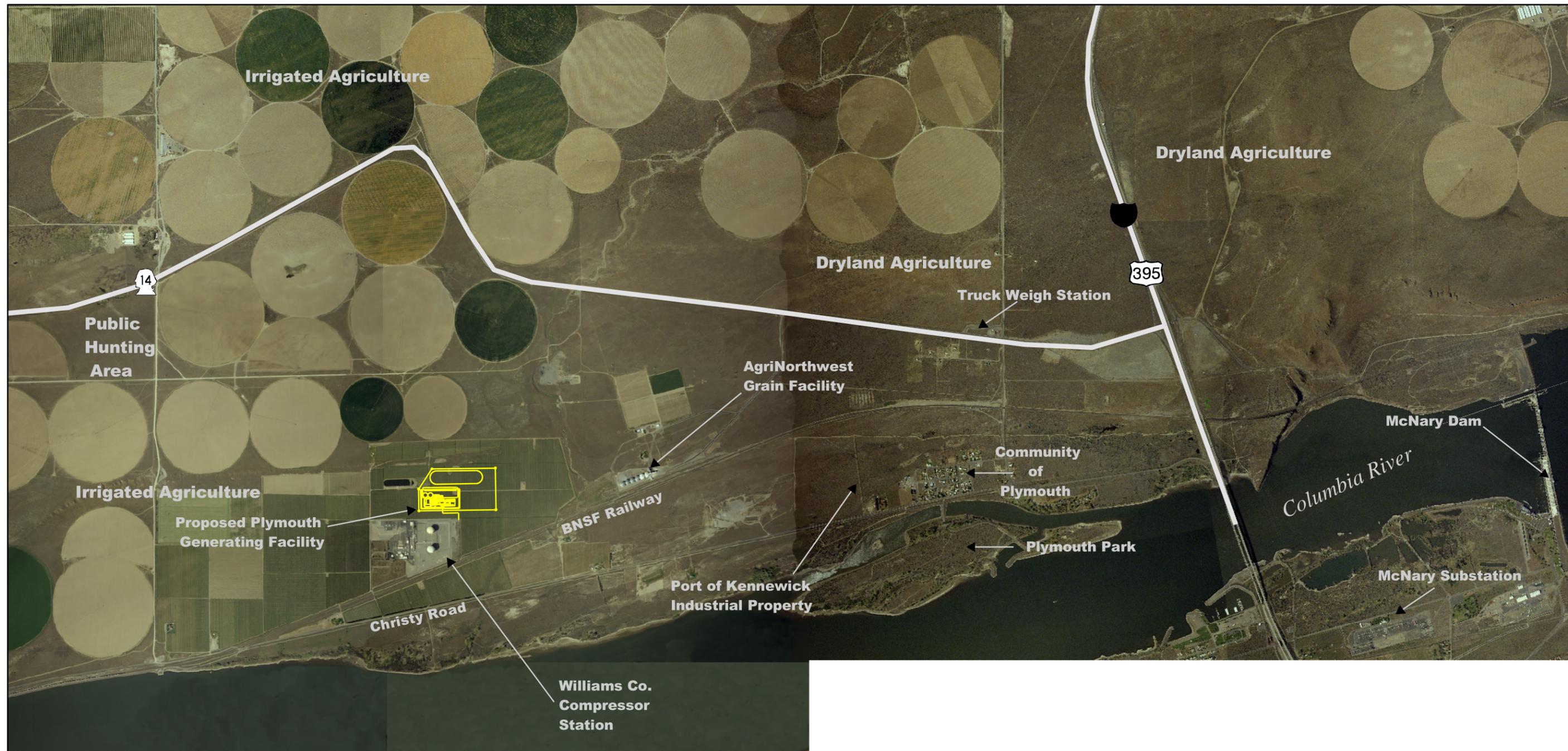


Figure 3.8-1
Existing Land Use in the Site Area
 Plymouth Generating Facility
 Plymouth, Washington

Figure 3.8-1 (Continued)

Existing and Future Land Use in and Around Plymouth

The largest category of existing land use in the site area is agriculture. Over the past decade there has been a major trend to convert dryland and rangeland to irrigated agriculture. This increase in irrigated crop acreage has influenced the development of new agricultural industries such as storage and processing facilities for onions, corn, and potatoes. Development of apple and cherry orchards are recent trends (Benton County n.d.a). There is also cattle grazing in the area.

The rural community of Plymouth has a small population at present but has potential for growth. The community center has very little commercial development, with only a post office, a tavern, a small unused school, a fire station, and a truck transportation business. There are approximately 70 residential dwellings in Plymouth, which consist primarily of trailer homes, although there are some larger homes under construction near Plymouth on Christy Road, overlooking the Columbia River. A local realtor, Court Street Realty, has advised that an additional nine homes will be constructed in this area in the future (Taylor, 2002) (see Section 3.13, Socioeconomics, for more information).

Plymouth has approximately 1,628 acres of industrial land, the majority of which remains undeveloped. Existing nearby industrial developments include the Williams Northwest Gas Pipeline Company (Williams Co.) compressor station and the AgriNorthwest grain facility, which are located approximately 2.5 miles and 1.5 miles west of Plymouth, respectively, on land zoned GMA Agricultural. The Port of Kennewick industrial property located approximately 0.5 mile west of Plymouth and less than 1 mile to the southeast of the AgriNorthwest grain facility is available for industrial development in the future. The *Benton County Comprehensive Land Use Plan* indicates that land surrounding the Kennewick industrial property and the AgriNorthwest grain facility, between Christy Road and State Route (SR) 14, is available for future industrial development.

The Plymouth area has river (Columbia River), rail (Burlington Northern Santa Fe [BNSF] railway), and state and federal highway access. A truck weigh station is located on SR 14 to the north of Plymouth. Other infrastructure in the area includes natural gas pipelines, transmission lines and associated substations, and the McNary Dam to the east of I-82 and SR 395.

There are also recreation areas and small mineral/aggregate extraction areas located around Plymouth, which are detailed in Sections 3.8.1.2.3 and 3.5, Energy and Natural Resources, respectively.

Existing and Future Land Use Around the McNary Substation

The McNary Substation is bordered by the Columbia River to the north, the McNary Dam to the east, SR 730 to the south, and I-82 to the west. There are also residential areas further to the east and south of the substation. Future development in this area includes an area approximately 0.5 mile to the east of the substation that has been subdivided for residential development (Claucus 2002).