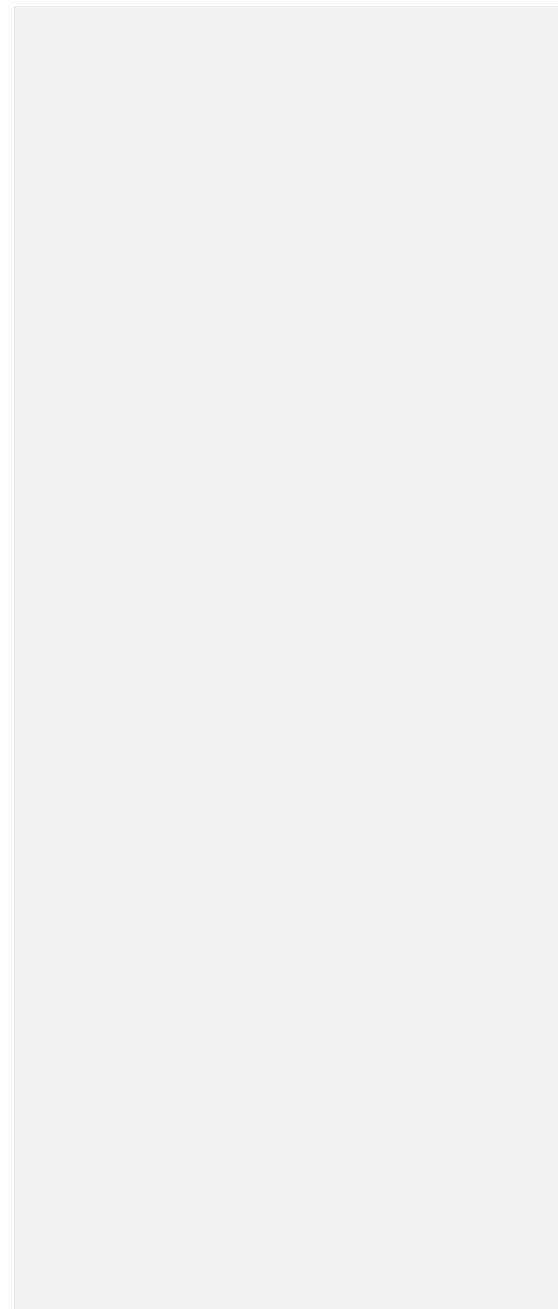


SCTF: Secure Community Transition Facility
SEPA: State Environmental Policy Act
TBD: To be determined
UGAR: Urban Growth Area Residential
WSDOT: Department of Transportation



910 Utilities Element

9.110.1 Introduction and Purpose

Utilities include the supply, treatment, and distribution, as appropriate, of domestic and irrigation water, sewage, storm water, natural gas, electricity, telephone/~~cellular service~~, cable television ~~and internet service~~, microwave transmissions, and streets. Such utilities consist of both the service activity along with the physical facilities necessary for the utilities to be supplied. Utilities are supplied by a combination of general purpose local governments as well as private and community based organizations.

The primary regulatory agency for most utilities in Washington State is the Washington Utilities and Transportation Commission (WUTC). The WUTC ensures that safe and reliable service is provided to customers at reasonable rates. The WUTC regulates the rates and charges, services, facilities, and practices of most of Washington's investor-owned gas, electric and telecommunication utilities. ~~As defined by the WUTC, some utilities are considered a critical service, namely electricity and standard telephone, and must be provided "upon demand." In order to fulfill public service obligations, these utility providers must plan to extend or add to their facilities when needed. On the other hand, natural gas is not considered a necessity, but rather a utility of convenience.~~ All utilities regulated by the WUTC are prohibited from passing the cost of new construction onto the existing rate base. Federal agencies also play a role in regulating some of these utilities. For example, the Federal Communications Commission regulates telecommunications. In addition, the Federal Energy Regulatory Commission, an independent commission with the U.S. Department of Energy, sets rates and charges for the transportation and sale of natural gas, the transportation of oil by pipeline, the transmission and sale of electricity, and the licensing of hydroelectric power projects. Local government, too, has a role in regulation for certain utilities, such as franchise agreements. However, the effort behind meeting GMA requirements is not primarily regulatory; rather, it is to promote coordination and cooperation ~~between among~~ jurisdictions and utility providers.

The GMA has given local jurisdictions the obligation and requirement to plan for utilities including identification of utility corridors. The intent of this element is to support utility providers in meeting their public service obligations to provide service on demand to existing and future customers. It is also the intent to minimize negative impacts resulting from the provision of services on the residents, infrastructure, and environment of the County. The County's responsibilities for utilities ~~ranges range~~ from regulating their land use, to permitting their activities in public rights-of-way.

Virtually all land uses require one or more of the utilities discussed in this Chapter. Local land use decisions drive the need for new or expanded utility facilities. In other words, utilities follow growth. Expansion of the utility systems is a function of the demand for reliable service that people, their land uses, and activities place on the systems.

Existing and updated maps of utilities in Benton County are maintained by the County GIS to meet the requirements of the Utilities element as outlined in state law. In addition, Capital Facilities Plans of utility providers available in Benton County are hereby adopted by reference to meet the requirements of identifying proposed facilities, along with information provided in Section 9.2.4. See Appendix A: Map Folio, Figure 16-XX – Public Utility and Rural Electric Association Service Areas.

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Information on other special service providers such as fire, port, and school districts, is included in this chapter.

9.2.10.2 Electricity

~~9.2.10.2.1~~ *Bonneville Power Administration*

The Bonneville Power Administration (BPA) is an agency of the U.S. Department of Energy. It wholesales electric power produced at 29 federal dams located in the Columbia-Snake River Basin, as well as one non-federal nuclear plant. BPA does not own or operate any federal dams; however, it does sell the power produced by these dams ~~as well as power produced and~~ by the Energy Northwest-operated nuclear power plant located just north of Richland. The U.S. Army Corps of Engineers owns and operates Bonneville Dam, and Grand Coulee Dam is owned and operated by the U.S. Bureau of Reclamation. ~~Between them, t~~hese two agencies run all of the dams whose power is sold by BPA.

Electricity is purchased from the BPA and supplied to areas in unincorporated Benton County via two local public utilities: the Benton County Public Utility District (Benton PUD) and Benton Rural Electric Association (Benton REA).

~~9.2.10.2.2~~ *Benton County Public Utility District*

The Benton PUD was established by vote of the residents and began electric distribution operations in October 1946. The Benton PUD service area is entirely within Benton County and includes the cities of Kennewick, Benton City, Prosser, and portions of West Richland. Benton PUD serves Benton County except for the City of Richland, the U.S. Department of Energy's operations on the Hanford Reservation, and those rural areas of the County that are served by Benton REA. It maintains offices in Kennewick and Prosser.

~~9.2.10.2.3~~ *Benton Rural Electric Association*

Incorporated in 1937, Benton REA is a consumer owned rural cooperative, which serves portions of Benton, Lewis, and Yakima counties. Benton REA's 1,300 square mile territory extends from the Columbia River at Paterson, north to the Hanford Reservation, and west to White Pass in the Cascade Mountains.

Benton REA serves the rural areas of the Benton County and some urban areas. While Benton REA was originally set up to serve the rural customers of Benton and Yakima counties, the cooperative is becoming more of an urban player as the cities expand into rural areas. Benton REA also serves the community of West Richland and many parts of the UGA around Richland, Benton City, Prosser, and parts of the Hanford Reservation.

9.310.3 Wind Energy

The deregulation of the electric industry and evolving energy supply needs have increased demand for diverse, low carbon energy sources in the BPA service area, including wind power. Deregulation of the electric industry and subsequent energy supply issues have emphasized the need for new and diverse energy sources in the BPA's service area. Wind is a renewable resource that provides an environmentally friendly (or green) source of energy and allows BPA to diversify its energy sources. Several "wind farms" have located in the County on privately owned agricultural land pursuant to leases between landowners and the project developer. Large turbines are strategically placed along the major ridges to capture wind and generate power which is fed back to BPA facilities through substations. Existing wind projects have contributed to Benton County's energy portfolio through utility-scale projects located on agricultural lands with access to transmission facilities. However, in recent years the pace of new wind development has slowed due to transmission constraints, land use compatibility concerns, and reduced viability compared to solar and battery storage alternatives. Large-scale wind proposals reviewed through the Washington State Energy Facility Site Evaluation Council (EFSEC), such as the Horse Heaven Wind Farm, have faced significant challenges related to scenic impacts, protected species, and agricultural land conversion, resulting in heightened public review and permitting complexity. To help manage the siting of future energy facilities, the County has adopted an Energy Overlay that identifies areas where renewable energy development may be more compatible with existing land uses and infrastructure. These areas are generally limited to smaller or previously disturbed sites, which are less suitable for large turbine arrays, which may limit the feasibility of new large-scale wind projects in the County outside of the EFSEC process.

Commented [BF89]: @Adam Cares - can you discuss here how wind energy development is tapering?

Commented [GW90]: I like this addition!



Wind turbine in wheat fields

10.4 Solar Energy

Solar energy is an increasingly prominent component of Benton County's energy landscape due to the region's favorable solar exposure, available transmission infrastructure, and growing energy demands to support economic growth. Several utility-scale solar projects have been developed, and additional projects are in the permitting process through EFSEC. Unlike large-scale wind projects, which typically require extensive, contiguous land areas, solar facilities can be adapted to smaller or previously disturbed sites and developed at utility, community, or distributed scales. This flexibility allows solar development to align with the lower conflict areas identified in the County's Energy Overlay, which are intended to minimize impacts on agricultural production and critical areas. Emerging approaches such as agrivoltaics, which co-locates solar energy with agricultural production, may also provide opportunities to support both energy generation and agricultural viability in appropriate locations. Solar development supports energy reliability, particularly when paired with battery storage or integrated into industrial and agricultural operations. Discuss existing conditions and energy overlay.

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9.410.5 Natural Gas

9.4.110.5.1 Williams Northwest

Williams Northwest Pipeline operates and maintains its natural gas pipeline that runs through Benton County near Plymouth. Virtually all natural gas is now transported through pipelines. "Gathering" lines collect and carry the natural gas from wells to transmission lines or plants for processing. A series of compressor stations propel the fuel long distances overland through major transmission pipelines to local distribution and service lines or storage facilities. A network of small-diameter distribution mains and service lines transport the gas to end-users. Related facilities include, but are not limited to cathodic protection stations, test posts, mile markers, meter stations, and valves.

Future pipeline safety concerns are related to the adverse impact and encroachment of development near transmission lines. With more people living and working near transmission lines, the severity of pipeline failures from all causes ~~are likely to~~ may increase.

9.4.210.5.2 Cascade Natural Gas

Cascade Natural Gas Corporation builds, operates, and maintains natural gas facilities serving Benton County. Cascade Natural Gas is an investor owned utility serving customers in 16 counties in Washington State. The Pacific Northwest receives its natural gas from the Southwest United States, and from neighboring Canada. Natural gas is supplied to the entire region via two interstate pipeline systems. The Northwest Pipeline Corporation owns and operates the network that supplies natural gas to Benton County. Natural gas is stored in a facility in Plymouth.

9.510.6 Telecommunications

The Telecommunications Act of 1996 enacted into law the first comprehensive rewrite of the Communications Act of 1934. The act establishes national guidelines for enabling equitable competition in all telecommunication markets, including the local telephone market, and identifies respective roles of the Federal Communications Commission and the states to accomplish the transition. Several telephone companies supply local, long distance, and cellular service in Benton County.

9.610.7 Water and Sewer Systems

Benton County does not currently own, operate, or maintain a water or sewage treatment facility with the exception of occasional temporary responsibility for water systems under "receivership" per RCW 70.119A. Sources of water and sewer disposal for housing units are shown in Table 10-1.

Table 10-1
Sources of Water and Sewer Disposal

Source	How Served
Water	Public/Private System
	Private Well/Other
Sewer Disposal	Public System
	Septic Tank/Private

9.6.110.7.1 Existing Conditions

A public supply is generally defined as any system, excluding systems serving only one single-family residence that provides piped water for human consumption. Washington State Department of Health keeps an inventory of water systems in the County that includes a classification of systems according to type of system and number of customers served. The criteria used in establishing the classifications are described in Table 10-2.

Table 10-2
Washington State Department of Health Water System Criteria

Class	Water System Criteria
Group A	15+systems/ or serves 25+ people for over 60 days a year
Group B	System with 4+ service connections but <15, serving <25 people a day for over 60 days a year.

Washington State Department of Health defines a “community” water system as a public water system that serves a permanent or seasonal population (e.g., subdivisions, mobile home parks), and a “non-community” water system as a public water system that serves a transitory population (e.g., restaurant, motel). Benton County has Group A water systems, including both non-transient and transient (e.g., campgrounds) and Group B water systems.

The source of water supply is ground water for all these systems with the exception of the Cities of Kennewick and Richland, which in addition to ground water receive water from the Columbia River. Information for each city’s water system, the population served, and the average daily amount of water used, can be found in each entities’ comprehensive plans [and water system plans](#).

Most rural residents rely on on-site septic tanks and drain fields for their wastewater system needs. While adequately designed and installed on-site septic systems can be appropriate for rural level development, maintenance of such systems varies from excellent to none at all. Poorly maintained septic systems are a source of ground and surface water pollution and have been identified both at the state and local level as significant contributors to high nitrate levels in soil and coliform bacteria

in surface water. All on-site systems in the County are permitted and regulated by the Benton-Franklin Health District.

9.6.210.7.2 Current Trends

Living in rural areas ~~has become~~continues as a lifestyle preference in today's society. The influx of people moving into newly-developed areas of Benton County means more individual or community wells that depend on groundwater and an increased demand on the groundwater supply.

Under state law, all new public water systems must be owned or operated by a Satellite Management Agency or a SMA. This ensures that the new system has sufficient management and the financial resources to provide safe and reliable service to the system users.

If a SMA is not available to receive ownership/or operation of the system and Washington State Department of Health determines that the new system has met sufficient management and financial resource criteria to provide safe and reliable service, then the new system may be conditionally approved. The conditions may include future inclusion into a SMA, or findings that the system meets the Washington State Department of Health criteria for management, and include an ongoing review of its operational history and status.

Currently the City of Richland and ~~an entity named Water System Management~~five other organizations are approved to operate SMAs in Benton County. If a system loses its owner/operator due to non-compliance, the system goes into "receivership." During receivership actions, Washington State Department of Health meets with water systems owners and users to discuss restructuring options. If no other SMA or person is willing to be named as a receiver, the court appoints the County as receiver. ~~At present the County is in receivership of one such water system, with the City of Richland SMA operating the system.~~

State regulations include criteria for sewage treatment systems located in gravelly or coarse sand soils such as minimum land area requirements, or special engineered systems (i.e., mound, sand line trench systems). There are several areas in the County where these soils exist. The Benton-Franklin Health District oversees the placement and permitting of on-site sewer systems. Systems over 3,500 gallons per day are permitted through Ecology.

9.6.310.7.3 Future Considerations

On-site water and waste systems for multiple users may be a desirable alternative to the single user systems and the extension of municipal systems. The option to cluster development in Rural Community Centers opens the opportunities for the use of such systems.

In the rural communities of Whitstran, Paterson, ~~Plymouth~~, and Finley, ~~some there is a desire among~~ residents have expressed interest in being part of a for public water systems, which are perceived to

be more affordable than individual wells. If such systems were to become a reality, the logical next step could be public waste disposal systems. [The Plymouth Water District serves the Plymouth community with a public water system.](#)

A water resource management program to conserve and maintain the County's groundwater supply ~~will~~ may be necessary to provide a long term dependable supply sufficient to sustain the future needs for potable water and water for agricultural purposes, as discussed further in Section 4.5.

9.7.10.8 Solid Waste

9.7.10.8.1 Existing Conditions

The *2013 Benton County Comprehensive Solid Waste Management and Moderate Risk Waste Management Plan* (20~~13~~ Plan; ~~Appendix K~~) provides background and guidance for a long-term approach to solid waste and moderate risk waste management in the region. This 20~~13~~ Plan comprises the combined comprehensive solid waste management plan and Local Hazardous Waste/Moderate Risk Waste Plan for the incorporated and unincorporated areas of Benton County.

The purpose of the ~~2013~~ Plan is to serve as a roadmap to managing the comprehensive solid waste and moderate risk waste management systems in Benton County. The 20~~13~~ Plan was developed as a joint effort of Benton County and the cities of Benton City, Kennewick, Prosser, Richland, and West Richland. It is intended to provide citizens and decision makers in Benton County with a guide to implement, monitor, and evaluate future activities in solid waste for a 20-year period. The recommendations for the 20~~13~~ Plan not only guide local decision makers, but substantiate the need for local funds and state grants to underwrite solid waste and moderate risk waste projects.

9.8.10.9 Special Service Providers

9.8.10.9.1 School Districts

The County is divided into seven school districts. All districts are located entirely within the County, with the exception of the Grandview District, which is principally located in Yakima County, but includes approximately 6 square miles of Benton County (stretching 3 miles north and south of Highway 12 at the Yakima County line).

All school districts offer kindergarten through twelfth grade education except the Paterson School District, which contracts sixth through twelfth grades (middle and high school levels) with the Prosser School District.

9.8.210.9.2 Higher Learning

Increasingly, education is the key to individual economic success. Frequently, this means a college degree. For counties, a well-educated population is also an ingredient in economic success.

Columbia Basin College, located at Pasco in adjacent Franklin County, is the primary college in the area; they also have a branch campus in Richland. Columbia Basin College is a two-year community college offering a wide range of academic, vocational, and night school programs.

Washington State University (Pullman) has a branch campus located in Richland, offering both graduate and masters education programs. This campus continues to grow in both facilities and programs offered, and Washington State University degree programs are often integrated with Columbia Basin College programs.

9.8.310.9.3 Library Districts

The Mid-Columbia Library includes both Benton and Franklin counties and is directed by a board of seven members appointed jointly by the Benton and Franklin County Commissioners. The district's main library is located in Kennewick, while branch libraries are located in towns in both counties. The rural areas are served by a bookmobile that maintains a scheduled route throughout the district. The City of Richland has its own city library.

9.8.410.9.4 Fire Districts

The five incorporated communities and portions of the remaining unincorporated area of Benton County are served by a mixture of municipal and rural fire departments. Richland and Kennewick municipal fire departments are manned by full-time firemen. Prosser, Benton City, and West Richland operate with full and part-time positions along with volunteer staff. The rural districts are principally manned by volunteer personnel. A mutual aid cooperative-agreement exists between Richland, Kennewick, Pasco, Benton City, Prosser, and the rural districts.

Long-range fire protection needs will also require increases in equipment and manpower to maintain an effective level of protection. With increased urbanization of the County, increased full-time employment due to increased LOS required by residents as opposed to volunteer service can be expected to occur in some of the County's fire protection organizations.

An additional factor is the integration of fire protection needs with long-range water needs. The source, storage capacity, and distribution systems of water systems, as well as fire hydrant placement in urban density developments, must be adequate to provide sufficient volume and pressure for firefighting needs.

9.8.510.9.5 Hospital Districts

General hospitals are located in Richland, Kennewick, and Prosser providing County residents with inpatient care. The Kennewick and Prosser hospitals are each operated by a public entity in the form of a hospital district directed by elected board members, while the Richland hospital is privately owned and operated. Benton County is also served by a variety of public and private medical clinics providing treatment for most medical concerns.

9.8.610.9.6 Benton-Franklin District Health

This regional health agency is responsible for a wide variety of health-related programs in Benton and Franklin counties. Some examples of its activities are in the environmental health division: solid waste, permitting community wells (2 to 4 hookups), approval of on-site sewage disposal systems, and restaurant inspections. The public health division serves the public with immunizations, tuberculosis and sexually transmitted disease clinics, and registration of birth and death certificates.

9.8.710.9.7 Benton Conservation District

Benton Conservation District is a non-regulatory organization established to provide landowners with technical and financial assistance and dedicated to the wise stewardship of soil, water, air, fish, and wildlife in Benton County. Benton Conservation District is funded by grants and a special assessment authorized by Benton County Commissioners.

9.8.810.9.8 Mosquito Control District

The Benton County Mosquito Control District is established to eradicate mosquitoes, particularly the mosquito *Culex tarsalis*, which is a carrier of sleeping sickness. The district is administered by a manager, who is directed by a 12-member board appointed by the Commissioners of Benton and Yakima counties, and mayors from the respective city councils of the cities who are within the district (Kennewick, Benton City, Prosser, Richland, West Richland, Mabton, and Grandview). There are three board members representing the unincorporated area of Benton County. The district encompasses 354 square miles within the Yakima and Columbia river drainages, exclusive of the Horse Heaven and Rattlesnake hills, and the Hanford Reservation.

9.8.910.9.9 Benton Clean Air Authority

The Benton Clean Air Authority carries out the requirements of the Washington State Clean Air Act, RCW 70.94, within the boundaries of Benton County. The agency functions as a single county authority to control the emissions of air contaminants from all sources within the County. The agency is charged with implementing and overseeing agricultural and backyard burn programs; air quality monitoring; asbestos removal notifications and inspections; industrial and commercial air permitting; and enforcement of federal, state, and local air quality regulations.

~~9.8.10~~9.10 *Irrigation Districts and Private Irrigation Systems*

Agricultural production that takes place across the midsection of the County, from the Yakima County line to the Finley area, is made possible by the Yakima Project developed by the U.S. Bureau of Reclamation, and by several large water rights on the Columbia River. The Yakima Project was developed primarily for the purpose of providing irrigation water for the fertile Yakima River Valley and consists of over 200 miles of canals and laterals. This project provides the water that enables the Yakima Valley, which extends into Benton County, to continually be one of the Nation's premier producers of such crops as apples, mint, hops, cherries, and grapes.

The irrigation district locations in Benton County are listed below:

- Roza District
- Sunnyside Valley Irrigation District
- Benton Irrigation District
- Kennewick Irrigation District
- Kiona Irrigation District
- Columbia Irrigation District
- Badger Mountain Irrigation District

~~9.8.11~~9.11 *Noxious Weed Control District*

The Benton County Noxious Weed Control District is directed by a board of five members appointed by the County Commissioners. The intent of the district is to promote weed control by instituting a program that emphasizes education as a means to assist landowners in the identification and control of noxious weeds listed on the County's noxious weed list.

~~9.8.12~~9.12 *Port Districts*

Ports can develop property for industrial use and can lease and sell land, buildings, and facilities to private industry in accordance with state laws. State laws specify that ports may acquire, construct, maintain, operate, develop, and regulate within the district harbor improvements; rail or motor vehicle transfer and terminal facilities; water transfer and terminal facilities; air transfer and terminal facilities; and other commercial transportation, transfer, handling, storage, and terminal facilities and industrial improvements.

Port districts are funded by revenues from the operation of terminals, the sale or lease of properties, and tax levies. A port district may incur debt including issuing general obligation bonds up to 0.25 percent of the assessed value of taxable property in the district without vote of the people. An additional 0.05 percent debt may be incurred if 60 percent of the electorate approves. Port districts also have the power to issue revenue bonds for the acquisition, construction, reconstruction, or extension of various improvements.