

PC DRAFT

Horizon 20460

Utilities Element

TABLE OF CONTENTS

1	CHAPTER 9. UTILITIES ELEMENT	1
3	9.1 INTRODUCTION/PURPOSE	1
4	9.2 GROWTH MANAGEMENT ACT REQUIREMENTS	1
5	9.3 MAJOR ISSUES/OPPORTUNITIES	3
6	9.3.1 Service Provision	4 <u>3</u>
7	9.3.2 Coordination Among Service Providers	4 <u>3</u>
8	9.3.3 Concurrency and Implications for Growth	5 <u>4</u>
9	9.3.4 Environmental Sensitivity	5 <u>4</u>
10	9.4 WATER AND SEWER CONSIDERATIONS	6 <u>5</u>
11	9.4.1 Water and Sewer	6 <u>5</u>
12	9.4.2 Water and Sewer Systems	7 <u>5</u>
13	9.5 DOMESTIC WATER	7 <u>6</u>
14	9.5.1 Potable Water Supply	7 <u>6</u>
15	9.5.2 Satellite Management Agencies (SMA)	7 <u>6</u>
16	9.5.3 County-Owned Water Supply Systems	8 <u>7</u>
17	9.5.3.1 Group A and B Water Supply Systems	8 <u>7</u>
18	9.5.3.2 Yakima County Water Resource Systems (YCWRSS)	11 <u>9</u>
19	9.5.4 Independent Public Water System - Nob Hill Water Association	11 <u>10</u>
20	9.5.5 Existing Water Sources	12 <u>10</u>
21	9.6 SEWER	13 <u>12</u>
22	9.6.1 County-Owned Sewer/Sanitation System	13 <u>12</u>
23	9.6.2 Sewer Districts	14 <u>12</u>
24	9.6.3 Cowiche Sewer District	14 <u>12</u>
25	9.6.4 Terrace Heights Sewer District	15 <u>13</u>
26	9.6.5 Port of Sunnyside	15 <u>13</u>
27	9.7 SOLID WASTE SYSTEM	16 <u>14</u>
28	9.7.1 Collection System	16 <u>14</u>
29	9.8 WATER, SEWER, AND SOLID WASTE LEVELS OF SERVICE	17 <u>15</u>
30	9.8.1 Existing County Water, Sewer, and Solid Waste Facilities	18 <u>15</u>

May 1997 – GMA Update June 2017December 2026

Chapter 9 | i

PC DRAFT

PC DRAFT

Horizon 2040₆
Utilities Element

31	9.8.2 Future Satellite Wastewater and Water Systems	<u>19</u> <u>17</u>
32	9.8.3 LOS Thresholds	<u>19</u> <u>17</u>
33	9.8.4 Water and Sewer Facilities	<u>19</u> <u>17</u>
34	9.8.5 Solid Waste Facilities	<u>20</u> <u>17</u>
35	9.9 IRRIGATION.....	<u>20</u><u>18</u>
36	9.9.1 Upper Yakima Planning Area	<u>21</u> <u>18</u>
37	9.9.2 Lower Yakima Planning Area	<u>21</u> <u>18</u>
38	9.9.3 Irrigation Water	<u>22</u> <u>19</u>
39	9.9.4 Irrigation Districts	<u>22</u> <u>19</u>
40	9.10 ELECTRICAL.....	<u>23</u><u>20</u>
41	9.10.1 Pacific Power and Light Company (PP&L)	<u>23</u> <u>21</u>
42	9.10.2 Benton Rural Electric Association (Benton REA)	<u>24</u> <u>21</u>
43	9.10.3 Yakama Power	<u>24</u> <u>21</u>
44	9.11 NATURAL GAS	<u>25</u><u>22</u>
45	9.11.1 Northwest Pipeline	<u>25</u> <u>22</u>
46	9.11.2 Cascade Natural Gas	<u>25</u> <u>22</u>
47	9.12 TELECOMMUNICATIONS.....	<u>27</u><u>24</u>
48	9.12.1 Telephone	<u>27</u> <u>24</u>
49	9.12.2 Cellular Telephone.....	<u>28</u> <u>24</u>
50	9.12.3 Cable Television	<u>28</u> <u>25</u>
51	9.13 UTILITIES GOALS AND POLICIES.....	<u>29</u><u>25</u>
52		

PC DRAFT

Horizon 20460

Utilities Element



53
54
55

56 CHAPTER 9. UTILITIES ELEMENT

57
58

59 9.1 INTRODUCTION/PURPOSE

60 County residents rely on a number of basic services, or utilities, that help define their quality of
61 life and maintain their health and well-being. Water supply and sewage waste disposal
62 ~~involving~~involves more than one user, and the delivery of natural gas, electricity, and
63 telecommunication services are considered utilities. Yet without coordination and conscientious
64 planning for future growth, service may be interrupted, inadequate, or prohibitively expensive.

65
66 This Utilities Element was developed to be consistent with Section 36.70A.070 of the Growth
67 Management Act (GMA) to address utility service issues in Yakima County through the year 2040.
68 Coordinating its goals and policies with the other **Horizon 2040-2046** elements should ensure
69 adequate and cost effective utility service for all County residents.

70
71 The Utilities Element has been developed in accordance with the County-wide Planning Policies
72 and is integrated with all other planning elements to ensure consistency throughout the
73 comprehensive plan. Maps of utilities in Yakima County are maintained and updated by the
74 County Geographic Information Systems (GIS). In addition, County Utility Plans are hereby
75 adopted by reference to meet the requirements of including capacity data; identifying existing
76 and proposed facilities; and to be inconsistent with the County's GMA Update Schedule. All plans
77 have been reviewed and can be provided upon request.

78
79

80 9.2 GROWTH MANAGEMENT ACT REQUIREMENTS

81 State laws RCW 36.70A.070~~70~~(4) and WAC 365-196-420 ~~requires~~require a Utilities Element that
82 includes the general location, proposed location, and capacity of all existing and proposed
83 utilities, including, but not limited to, electrical lines, telecommunication lines, and natural gas
84 lines.

85

May 1997 – GMA Update ~~June 2017~~December 2026

Chapter 9 | 1

PC DRAFT

PC DRAFT

Horizon 2040 Utilities Element

86 The GMA Procedural Criteria define "utilities" or "public utilities" as enterprises or facilities
87 serving the public by means of an integrated system of collection, transmission, distribution, and
88 processing facilities through more or less permanent physical connections between the plant of
89 the serving entity and the premises of the customer. Included are systems for the delivery of
90 natural gas, electricity, telecommunications services, and water, and for the disposal of sewage
91 (WAC 365-195-210-(36)). The **Horizon 2040-2046** Utilities Element includes domestic water,
92 irrigation, sewer, solid waste, electrical, natural gas, and telecommunications. Some of these
93 utilities may also require capital facilities.
94

95 In order to meet these requirements, **Horizon 2040-2046** compares the location and capacity of
96 existing and proposed utility facilities with the Land Use Element, and asks the following
97 questions: Is ~~the~~ capacity sufficient to serve the expected growth for the next 20 years? Where should
98 utility lines and facilities be placed to serve the anticipated needs?
99

100 The Washington Administrative Code (WAC) recommends a common-sense approach to
101 developing criteria for siting utilities. A key consideration is whether a siting proposal is consistent
102 with the locations and densities for growth identified in the Land Use ~~e~~Element. Another
103 consideration is the public service obligations of the utility involved. The element must also
104 consider how the siting decision will affect the utility's ability to provide service. Finally, local
105 design considerations must be balanced against the need for system uniformity.
106

107 The Utilities Element should also call for effective coordination of transportation projects and
108 permits. Joint use of transportation right-of-way and utility corridors are recommended.
109 Interested utilities should be notified of road construction projects, maintenance, and road
110 upgrade projects to facilitate public and private utility trenching activities. Whenever possible, a
111 proposed project and its utility permits should be approved simultaneously.
112

113 Finally, the element needs to address coordination among adjacent planning jurisdictions to
114 ensure the consistency of each jurisdiction's utilities element and regional utility plans. The
115 element's goal is to develop a coordinated process for siting regional utility facilities in a timely
116 manner.
117

118 Washington State's **Growth Management Act** (GMA) contains 13 goals for the purpose of guiding
119 the development of comprehensive plans and development regulations. The following GMA
120 goals (goals 1, 2, 5, 6, and 12) specifically relate to utilities:
121

122 (1) Urban growth. Encourage development in urban areas where adequate public facilities
123 and services exist or can be provided in an efficient manner.

PC DRAFT

Horizon 2046

Utilities Element

124 (2) Reduce sprawl. Reduce the inappropriate conversion of undeveloped land into
125 sprawling, low-density development.

126 (5) Economic development. Encourage economic development throughout the state that is
127 consistent with adopted comprehensive plans, promote economic opportunity for all
128 citizens of this state, especially for unemployed and for disadvantaged persons, promote
129 the retention and expansion of existing businesses and recruitment of new businesses,
130 recognize regional differences impacting economic development opportunities, and
131 encourage growth in areas experiencing insufficient economic growth, all within the
132 capacities of the state's natural resources, public services, and public facilities.

133 (6) Property rights. Private property shall not be taken for public use without just
134 compensation having been made. The property rights of landowners shall be protected
135 from arbitrary and discriminatory actions.

136 (12) Public facilities and services. Ensure that those public facilities and services necessary to
137 support development shall be adequate to serve the development at the time the
138 development is available for occupancy and use without decreasing current service
139 levels below locally established minimum standards.

9.2.1 Summary of Existing and Proposed Utility Facilities

141 To satisfy RCW 36.70A.070(4), this Utilities Element identifies the general location, existing
142 capacity, and planned future capacity of all major utility systems serving Yakima County, including
143 water, sewer, solid waste, irrigation, electrical power, natural gas, and telecommunications.
144 Existing utility facilities are mapped or described in Sections 9.4 through 9.12, including service
145 areas for public water systems, sewer districts, solid waste facilities, irrigation districts, electrical
146 service territories, and natural gas transmission and distribution systems.

147
148 Proposed future utility improvements and expansion areas are identified through adopted water,
149 sewer, and utility system plans, which are incorporated by reference. These plans guide future
150 facility locations and capacity upgrades needed to serve the anticipated 2046 growth.
151 Telecommunication utilities, including telephone, cellular, and broadband providers, operate
152 throughout the County using existing electrical corridors, wireless communication facilities, and
153 fiber or cable systems. Future telecommunication facility expansion is expected in areas of new
154 residential and commercial development based on market demand and federal licensing.

155
156 Contact information for all public utility providers and special-purpose districts referenced in this
157 chapter is included in Appendix II.

9.3 MAJOR ISSUES/OPPORTUNITIES

Commented [OS1]: Checklist item A. This section clearly identifies where the plan addresses the general location, existing capacity, and future expansion of all utilities, creating an explicit statement of compliance with RCW 36.70A.070(4). It ties together the dispersed utility information in Chapter 9 and confirms inclusion of telecommunications as required by the checklist.

Commented [OS2]: Checklist item B. Appendix II, which provides a comprehensive list of all public entities owning utility systems in Yakima County, including updated facility data, service areas, planned projects, and publicly available contact information.

PC DRAFT

Horizon 2040₆ Utilities Element

161 Recognizing the major issues is the first step in creating the utilities plan agenda. Once challenges
162 have been identified in an orderly and meaningful fashion, a plan of action can be created. This
163 section identifies issues that will be addressed through **Horizon 2040's 2046's** Utilities Element.
164

9.3.1 Service Provision

166 As growth occurs, utilities will need to be extended or developed. For water and wastewater, if
167 no public system exists in the vicinity, satellite systems may need to be constructed, as noted in
168 the County's 1988 Rural Water and Sewer General Plan, and 2010 Water System Satellite
169 Management Plan. These systems provide greater protection of groundwater supplies than a
170 proliferation of individual wells and septic systems, allowing for a clustered land use pattern that
171 facilitates eventual connection to a larger system. Within UGAs, the city, town, special purpose
172 district, or regional comprehensive plan should be first consulted to determine service providers
173 and timing of service. Utility services must be based on the **Horizon 2040-2046** Level of Service
174 (LOS) standards. The following questions help to determine the desired **level of service LOS**:

- 176 • What **level of service LOS** is appropriate for each type of utility in urban and rural areas?
- 177 • What type of water and wastewater facilities are desirable in which locations? Who (i.e.,
178 what institution, municipality, public or private entity, or other service provider) should
179 provide them? Who should own them and be responsible for their operation?
- 180 • In what ways, does development of land within an irrigation district affect the supply of
181 potable ground water, the availability of surface water for commercial agriculture (as
182 opposed to weeds, pasture, or lawns), and efficient irrigation system management?

184 As development expands within Urban Growth Areas and rural communities, future water,
185 sewer, natural gas, electrical, and telecommunication facilities will generally follow areas
186 designated for residential, commercial, and industrial growth in the Land Use Element. Future
187 utility extensions will occur along established transportation corridors, consistent with utility
188 system plans, interlocal agreements, and adopted LOS standards.

Commented [OS3]: Checklist item A. This clarifies the general location of proposed future utility extensions by linking them to planned growth areas and transportation corridors, directly satisfying the requirement to identify proposed utility locations.

9.3.2 Coordination Among Service Providers

191 The County must coordinate with service providers of water and sewer in order to provide
192 efficient service, solve utility problems, and accommodate growth. The County's role in providing
193 these utility services needs to be redefined through the development of consolidated water
194 systems plans and a sewerage general plan. The responsibility for the implementation of these
195 plans would be defined through interlocal agreements between the County and the service
196 providers. Where urban services cannot be provided by the municipality or district economically
197 or equitably, the County may need to become a service provider.
198

PC DRAFT

Horizon 20460

Utilities Element

9.3.3 Concurrency and Implications for Growth

As development occurs, system and facility improvements must keep pace to meet the higher demand. The improvements must take place within ~~in~~ a certain time frame while maintaining appropriate ~~levels of service LOS~~. Establishing common-use corridors is an important element in meeting these requirements. The following factors may be taken into account:

- At what density or level of development is it feasible to provide each type of utility (water, sewer, telephone, natural gas, electricity, cellular phone access, and solid waste disposal)? Is there a public cost, as well as a private cost, when these services are provided (e.g., aesthetic damage, obstruction of views, environmental damage, odor)?
- What is the County's role in assuring that the ~~level of service LOS~~ provision is appropriate to the type and density of development that is occurring? Should the County require that certain services be available before development can occur in certain areas, or at certain densities?

9.3.4 Environmental Sensitivity

Important environmental issues associated with planned utility improvements must be addressed. They include the following utilities:

- Sewer: What are the impacts associated with pipeline construction? How can the specialized wastewater requirements of different industrial and commercial operations be accommodated?
- Water: What is the cumulative effect of 8-inch lines, which are exempted from SEPA requirements? What are the water withdrawal impacts of well development?
- Solid Waste: What impacts are associated with management of the solid waste system, siting of new transfer stations, and bio-solids management, and how can they be addressed?
- Satellite Systems: How can satellite water and wastewater systems be used to support clustered development? What incentives can the County offer to make satellite systems financially viable, given the state regulatory framework?
- Aesthetics: How can views be protected from excessive numbers of unsightly towers and lines? When (or in which areas) should the County require what types of utilities to be buried?

The answers to these questions will affect the feasibility of future plans for land use, housing, economic development, capital facilities, transportation, and even parks and open space.

PC DRAFT

Horizon 2040
Utilities Element

237
238
239

240 9.4 WATER AND SEWER CONSIDERATIONS

241 9.4.1 Water and Sewer

242 Cities are the main service providers for water and sewage disposal within their boundaries.
243 Outside of the cities, water and sewage disposal can be provided in various ways: extension of
244 city services; extension of lines by existing water companies, water districts, and sewer districts;
245 creation of new water and sewer districts; city-operated satellite water and/or sewer systems;
246 County-operated rural domestic water systems, satellite water and/or sewer systems; water
247 and/or septic systems (serving new structures and 2 to 9 or more units); or on-site water and/or
248 septic systems. Some types of utilities are better suited than others to each of the zoning
249 designations: 1) Urban Growth Areas, 2) Resource Areas, and 3) each of the five types of rural
250 area zones.

251
252 In deciding which type of service is appropriate in each area, we need to consider development
253 density (number of houses per acre), configuration of housing units, and environmental
254 constraints (soils, depth to water table). Other considerations include quality of drinking water,
255 quality of sewage effluent produced, availability and capacity of existing systems, government
256 policy (e.g., not serving areas outside municipal limits), ease of maintenance, public liability for
257 non-County systems, and financial feasibility. The water and sewer policy matrix from Yakima
258 County Code (YCC), Title 19, Unified Land Development Code (Table 19.25-1 Water and 19.25-2
259 Sewer) summarizes these considerations for each zoning designation and system type.
260

261 Some service types may not be desirable in any area. For example, if a private water company or
262 district cannot meet state or federal standards, and is forced into bankruptcy, the provider of last
263 resort is the County in unincorporated areas. The County could end up owning a number of small
264 water systems of varying quality, with no standardization of parts, making maintenance difficult
265 and costly. If the County were able to design and be responsible for the systems from the
266 beginning, it could have greater control over quality and require standardization. For these
267 reasons, additional private water companies, water districts, and sewer districts are not favored.
268 Yet existing systems, regardless of ownership, typically provide safe drinking water (or, in the
269 case of sewage, properly treated effluent) at a reasonable cost to users, and should be used
270 where they are available.

271
272 Within a land use area (e.g., rural settlement), the specific location, size, and financial and
273 technical feasibility of a proposed development would determine the appropriate water and
274 sewage system.
275

May 1997 – GMA Update ~~June 2017~~ December 2026

Chapter 9 | 6

PC DRAFT

PC DRAFT

Horizon 20460

Utilities Element

276 **9.4.2 Water and Sewer Systems**

277 Water and sewer system improvement needs to handle anticipated growth are similar under all
278 land use alternatives. It should be noted that current and future deficiencies for sewer facilities
279 within Urban Growth Areas are not listed since the respective city or town's comprehensive plan
280 should address these service issues and establish LOS. Where the cities or special purpose
281 districts either cannot or will not address sewer service deficiencies, it may be necessary for
282 another service provider to step in, to maintain equitable access to service within the UGAs. A
283 Comprehensive Sewer Plan for the urban areas of Yakima County will help establish service
284 deficiencies and prospective means for their solution.

285

286

287 **9.5 DOMESTIC WATER**

288 **9.5.1 Potable Water Supply**

289 More people moving to newly-developed areas means more demand on the ground water
290 supply. As new residents install individual or community wells or connect to existing systems that
291 rely on ground water, concerns about available (legal and physical) ground water grow. Residents
292 of the West Valley, Wenas, North Selah, and Terrace Heights areas have already voiced their
293 concern about declining well production.

294

295 While the quality of ground water in Yakima County ~~is~~ generally excellent, high concentrations
296 of iron and manganese affect the taste in some areas. Local land use impacts have degraded
297 water quality in a few locations.

298

299 The Washington State Wellhead Protection Program, adopted in 1994, requires all Group A public
300 water systems (those serving at least 15 connections or 25 people) to develop a wellhead
301 protection program to prevent contamination of groundwater used for drinking. The systems
302 must delineate wellhead protection areas, inventory potential contaminant sources, and manage
303 wellhead protection areas to prevent pollution. The Washington State ~~Department of~~
304 ~~Health(DOH)~~ is responsible for enforcement. Yakima County is one of eight purveyors in the
305 Upper Valley and ~~a~~ member of the Regional Wellhead Protection Committee (RWPC) through an
306 interlocal agreement.

307

308 **9.5.2 Satellite Management Agencies (SMA)**

309 ~~Satellite Management Agencies~~**SMA** are authorized and approved entities by the Washington
310 State ~~Department of Health~~**DOH** under WAC 246-295-001 and RCW 70.119A.060 to own ~~and/or~~
311 manage and operate public water systems. Group A is regulated by Chapter 246-290 WAC Public
312 Water Supplies and Group B by Chapter 246-291 WAC Public Water Systems. Yakima County has
313 five approved agencies to operate and manage public water systems (see Table 9.5.2-1).

314

May 1997 – GMA Update ~~June 2017~~**December 2026**

Chapter 9 | 7

PC DRAFT

PC DRAFT

Horizon 2040 Utilities Element

Table 9.5.2-1 Washington State [Department of Health \(DOH\)](#) - Yakima County Approved [Satellite Management Agencies \(SMA\)](#)

1. Evergreen Valley Utilities SMA #149
2. Nob Hill Association SMA #109 - Limited Service Area: Within Nob Hill's Service Area Boundary
3. Northwest Water Systems SMA #119
4. Valley Water Services SMA #155
5. Yakima County Public Works Department SMA #117 - Limited Service Area: All of Yakima County except incorporated areas, the Yakima Firing Center, and certain areas of the Yakama Indian Nation.

*Eligible Systems: Within the Urban Growth Area, systems with 3 or more connections. Outside the Urban Growth Area, systems with 5 or more connections.

Source: Washington State [Department of Health \(DOH\)](#)

315

9.5.3 County-Owned Water Supply Systems

9.5.3.1 Group A and B Water Supply Systems

318 Yakima County owns and operates four Group A and twenty-five Group B water systems (see
319 Table 9.5.3.1-1). The County assumed the management and planning role for these systems.
320 Maps 9.5.3-1, 9.5.3-2, 9.5.3-3, and 9.5.3-4 [shows](#) [show](#) the locations of Group A systems. The
321 inventory of the Group A Water Systems [are](#) [is](#) outlined in Table 9.5.3.1-2. The location of Group
322 B systems can be seen in Maps 9.5.3-5 and 9.5.3-6.

323

Table 9.5.3.1-1 Yakima County Water Systems (Group A and B)

Number of Systems	Group A Water Systems	Location	Existing Number of Customers	Maximum Number of Customers
1	Buena	Buena	145	160
2	Crewport	Crewport	48	60
3	Gala*	N. of Selah	37	44
4	Terrace Heights	Terrace Heights	1530	Unspecified
		Total	1760	
Number of Systems	Group B Water Systems	Location	Existing Number of Customers	Maximum Number of Customers
5	Beckon Ridge	W. of Selah	8	8
6	Bittner	Terrace Heights	1	4
7	Bonair	Buena	6	6
8	Buchanan	N. of Selah	8	8
9	Fairway Estates	S.E. of Sunnyside	10	12
10	Gibson	Wenas	6	6
11	Heysman	N. of Selah	8	8
12	Horizon View	Terrace Heights	0	8
13	Kodi South 1	N. of Selah	8	8
14	Kodi South 2	N. of Selah	8	8
15	Meadowbrook	W. of Union Gap	6	8
16	Nagler	N. of Selah	7	7
17	Norman	Terrace Heights	4	8

May 1997 – GMA Update [June 2017](#) [December 2026](#)

Chapter 9 | 8

PC DRAFT

PC DRAFT

Horizon 20460

Utilities Element

18	Oliver	Terrace Heights	1	4
19	Pleasant Hill	Selah	4	8
20	Raptor	Terrace Heights	0	6
21	Ray Symmonds	E. Selah	6	6
22	Speyers	N. of Selah	6	7
23	Star Crest	Terrace Heights	4	4
24	Stein Lower	West Valley	7	8
25	Stein Upper	West Valley	7	8
26	Wenas-Button	Wenas	4	4
27	Wenas-Huntzinger	Wenas	4	4
28	Wendt Road	Terrace Heights	1	8
29	Wiseacre	E. Selah	7	7
Total		131	173	

*Gala Water System will not be expanding.

Source: Yakima County Utilities Division

324
325
326

Table 9.5.3.1-2 Yakima County Group A Water Systems

System Feature	Buena	Terrace Heights	Gala Estates	Crewport
Number of Customers (Original)	102	Terraced Estates: 277 Country Club: 520	11	45
Date of Startup	(1986)	Terraced Estates: (4/1/91) Country Club: (1994)	(1995)	(3/12/01)
Current (5/20/16)	145	1530	37	48
Number of Wells	2	6	1	2
Gallons per year delivered	14 million	238 million	2.78 million	7.1 million
Distribution pipe	3.5 miles	31 miles	1.4 miles	5,025 feet
Estimated peak hour demand	260 gpm	2,450 gpm	12 gpm	36 gpm
Storage Capacity (in gallons)	157,000	Res. #1: 1,500,000 Res. #2: 60,000 Res. #3: 88,000	73,000	173,000
Current Level of Service LOS				
Minimum Fire Flow	500 gpm for 30 min	Existing Residence: 500 gpm for 30 min New Residence: 1,000 gpm for 30 min Industrial area: 2,250 gpm for 60 min	Not required due to lot size	1000 gpm for 30 min
Minimum Pressure	30 psi	30 psi	30 psi	30 psi
Potential Number of Connections*	160	Unspecified	44	60

*Estimated based on existing water rights.

May 1997 – GMA Update June 2017 December 2026

Chapter 9 | 9

PC DRAFT

PC DRAFT

Horizon 2040
Utilities Element

Source: Buena, Terrace Heights, Gala Estates, and Crewport Water Systems Plans

327
328 Washington State defines public water systems as all systems serving more than one single family
329 residence. Group A systems serve 15 or more connections, or 25 or more people per day, for 60
330 or more days per year. Group B water systems are all the smaller systems that serve more than
331 one single family residence but are not large enough to fit into the Group A category.

332
333 The state [Department of Health \(DOH\)](#) in Spokane maintains a comprehensive list of all
334 community water systems for the counties in eastern Washington. Group A water systems are
335 required to develop a water system plan to be approved by the DOH and updated every six or
336 ten years. The purpose of a plan is to evaluate the water system facilities and operations, and to
337 develop an improvement plan to meet future needs for 6 and 20-year planning periods.

338
339
340
341
342
343
344
345 The DOH list of water systems for Yakima County is summarized in Table 9.5.3.1-3.
346

Table 9.5.3.1-3 Yakima County Water Systems

System Type	Number of Systems
Group A, Community, Residential, Unincorporated	78
Group A, Community, Incorporated	14
Group A, Non-transient, Non-community	31
Group A, Transient, Non-Community	72
Group B	741
Total Number of Listings	936

Source: Washington State [Department of Health \(DOH\)](#), <https://fortress.wa.gov/doh/eh/portal/odw/si/Intro.aspx>

347
348 Group A, Community, Residential, Unincorporated systems serve residences in unincorporated
349 areas while Group A, Community, Incorporated systems serve incorporated areas. Group A,
350 Transient and Non-transient, Non-community systems serve hotels and other businesses that
351 cater to people who do not live permanently at the site. Transient systems serve operations that
352 experience intermittent use such as campgrounds and other seasonal businesses. Non-transient
353 systems include businesses and other operations serving nonresidents more than six months out
354 of the year.
355

PC DRAFT

Horizon 20460

Utilities Element

356 The first category listed includes those systems that are clearly distinguishable as residential and
357 not associated with a city or town's water supply. The largest of these independent water
358 systems is the Nob Hill Water Association [\(Nob Hill Water\)](#).
359

360 State Health Regulations now require new public water systems serving three or more
361 connections to be operated by a Satellite Management Agency, where one is available. The DOH
362 has approved Nob Hill Water ~~Association~~ and Yakima County as SMAs.
363

9.5.3.2 Yakima County Water Resource Systems

364 On December 10, 2013, the Yakima County Board of Commissioners adopted Resolution 399-
365 2013, "In the Matter of the Formation of the Yakima County Water Resource System" which
366 required the Director of the Public Services Department to develop and organize a water system
367 to address a County-wide rural-domestic water supply to be available to those who would
368 otherwise rely on the "exempt" well strategy offered by RCW 90.44.050. As part of the initial
369 development of the water resource system a technical report called, "Assessment of the
370 Availability of Groundwater for Residential Development in the Rural Parts of Yakima County,"
371 was developed to provide an assessment of potential mitigation strategies for providing rural
372 domestic water in Yakima County. The report identifies mitigation strategies for providing water
373 for rural development, while avoiding impacts to flows in main stem reaches and tributaries. The
374 two primary mitigation strategies are: a) the purchase of main stem surface water rights where
375 they are available and identified, and b) the establishment of well depth standards consistent
376 with the hydrologic connectivity between the groundwater body and the senior surface water
377 rights obtained. There is a strong emphasis on the development of ~~wells~~well depth standards in
378 the tributary basins, and the purchase of senior water rights mostly in the main stem reaches.
379 The report identifies measures to mitigate domestic groundwater development on the vast
380 majority of currently undeveloped rural residential parcels in Yakima County.
381

382 The Yakima County Water Resource System (YCWRS) was developed in accordance ~~to~~with the
383 strategies identified in the report. All new rural domestic water users, prior to the land use
384 approval or the issuance of a building permit must obtain a rural domestic water right certificate
385 from the YCWRS (we need to also recognize that an applicant may have their own water right).
386 ~~The Yakima County Public Services Department is currently in negotiations for the purchase of~~
387 ~~senior surface water rights to provide at least a five-year supply of rural domestic water for~~
388 ~~anticipated rural domestic land development.~~ As funds become available, YCWRS will continue
389 to purchase the necessary senior water rights to adequately supply rural domestic water to rural
390 land developers through the life of this plan. Details regarding the funding sources and operation
391 of the YCWRS can be found in Yakima County Code Title 12.08 – Water System.
392

9.5.4 Independent Public Water System - Nob Hill Water ~~Association~~

PC DRAFT

Horizon 2040
Utilities Element

395 **Nob Hill Water Association** (Nob Hill Water) is an independent public water system that serves
396 the West Yakima area with drinking water. Its system lies both within the corporate limits of the
397 City of Yakima and in unincorporated Yakima County. Nob Hill Water currently has 11,326 service
398 connections and serves a population of approximately 27,837 people. The **Department of**
399 **HealthDOH** has approved Nob Hill Water for 11,951 connections, resulting in 625 Equivalent
400 Residential Units (ERUs) additional connections available. Storage is currently the limiting factor.
401 If storage capacity can be redistributed through the use of existing booster pumps,
402 enhancements and operations (e.g. Pressure Reducing Valves (PRV's)), then source capacity will
403 become the limiting factor instead. This would then increase the approved number of
404 connections to 12,607. Nob Hill Water will also need to reduce their its Distribution System
405 Leakage (DSL), which consumes 2,381 ERUs, or construct new facilities for source, storage, etc.,
406 during the next couple of years in order to accommodate projected growth. The **Nob Hill 2015-**
407 **2035 planning period** projects a population of 51,536 people and 22,226 ERUs.
408

409 Nob Hill Water was incorporated under the laws of the State of Washington on December 26,
410 1908, as a private non-profit organization. In 1983, it was converted from a private non-profit
411 corporation to a (private non-profit) association.
412

413 Its initial source of water supply was the Pacific Power and Light Company (**PP&L**) which, at that
414 time, owned the water system for the City of Yakima. In the 1940s, the City of Yakima took over
415 ownership of the local water system from **Pacific PowerPP&L**. Shortly thereafter, Nob Hill Water
416 drilled its own well, becoming independent of the City of Yakima in 1946. Nob Hill Water has
417 grown and expanded to become the largest private water system in the Yakima Valley except for
418 the City of Yakima.
419

420 **9.5.5 Existing Water Sources**

421 The water supply for the Nob Hill Water **Association** comes from 5 wells (Map 9.5.5-1). Specific
422 characteristics of each of the wells are detailed in Table 9.5.5-1.
423

Table 9.5.5-1 Nob Hill Water Supply Wells

	Well 1	Well 2	Well 3	Well 4	Well 5	Well 7
Year Drilled	1945	1961	1970	1987	1985	1983
Static Level (feet)	160	166	392	277	0	50
Pumping Level (feet)	350	325	398	483	410	160
Pumping Capacity (gpm)	1,400	800	2,200	350	2,350	1,300
Horsepower	200	125	350	100	600	300
Type Pump	Turbine	Turbine	Turbine	Submerged	Turbine	Turbine
Well Depth (feet)	1,624	500	1,051	1,812	850	700
Treatment	Chl/Aer	Chl/Aer	Chl	Chl	Chl	Chl
Chl = Chlorination Aer = Aeration						
Source: Nob Hill Water System Plan						

May 1997 – GMA Update ~~June 2017~~ December 2026

Chapter 9 | 12

PC DRAFT

PC DRAFT

Horizon 20460

Utilities Element

424

425

426

427

428

429

430

431

432

433

434

435

436

437

438

439

440

441

442

The total production capacity from the six wells is 12,000 gallons per minute (gpm) or 17.28 million gallons per day (mgd). In 2002, a change in the original water rights certificate consolidated withdrawals from Wells 1 and 6 for a total capacity of 1,600 gpm or 980 acre-feet per year. However, Well 1 is primarily used to meet high summer demands and a backup source in the winter because of its hydrogen sulfide content. Well 6 is inactive and not necessary in backing up Well 1 as intended. When both wells are removed, the maximum capacity of Wells 2, 3, 4, and 5 is 10,400 gpm, 7,902 acre-feet per year, or 14.98 mgd, as indicated on an approved Department of Ecology 2003 change in application.

Water Association records show a daily per capita use of 144 gallons of water. Maximum day per capita usage was 302 gallons (2015 data). Peak day usage is typically higher in the summer than in the winter due primarily to local summer irrigation needs.

Storage for the system is provided by six reservoirs serving three distinct pressure zones. The reservoirs are located at four different sites, two of the sites containing contain two reservoirs each (see Table 9.5.5-2). Total storage is 4.23 million gallons. The distribution system comprises 165 miles of pipe.

Table 9.5.5-2 Nob Hill Water Reservoir Characteristics

Characteristic	Minnesota Reservoir No. 1	Westbrook Reservoir No. 2	Minnesota Reservoir No. 3	Hayes Reservoir No. 4	Westbrook Reservoir No. 5	Barrett Reservoir No. 6
Location	56th Ave & Englewood Dr.	8001 Poplar View Way	56th Ave & Englewood Dr.	8403 Scenic Drive	8001 Poplar View Way	12900 Barrett Rd.
Status	Active	Active	Active	Active	Active	Active
Date Constructed	1947	1952	1955	1967	1974	1998
Storage Capacity (gallons)	150,000	276,400	1,000,000	1,000,000	803,100	1,000,000
Pressure Zone	Low	Low	Low	High	Low	Intermediate

Source: Nob Hill Water System Plan, 2015

443

444

445

9.6 SEWER

446

9.6.1 County-Owned Sewer/Sanitation System

447 Most rural residents rely on on-site septic tanks and drain fields for their waste water system needs. If residences are not served by a collection sewer, they're considered to be using an on-

PC DRAFT

Horizon 2040 Utilities Element

449 site system. All on-site systems in the County are permitted and regulated by the County Health
450 District, which promulgates threshold standards for these systems.

451
452 Currently, the County-owned collection systems consist of the Buena, Fairway Estates, and Mtn.
453 Shadows Sewer Systems. Maps 9.6.1-1, 9.6.1-2, and 9.6.1-3 ~~shows~~ show the Yakima County
454 Department of Public Works three systems.

455
456 Table 9.6.1-1 shows the location and current number of existing and maximum number of
457 connections.

458

Table 9.6.1-1 Wastewater Systems			
Systems	Location	Existing Number of Customers	Maximum Number of Customers
Buena	Buena	282	390
Fairway Estates	S.E. of Sunnyside	10	12
Mtn. Shadows	West Valley	8	11
	Total	300	413

Source: Yakima County Utilities Division

459
460 Urban area residents receive sewer service either from a municipality, or in the greater Yakima
461 Urban Area, from the regional wastewater system established under the three-party agreement
462 between the cities of Yakima ~~and~~ Union Gap, and the Terrace Heights Sewer District. Service
463 outside city limits may be provided subject to outside utility agreement (to annex) according to
464 the jurisdiction's policies.

465
466 **9.6.2 Sewer Districts**
467 The two sewer districts in the County are the Cowiche Sewer District and Terrace Heights Sewer
468 District. Together, they serve approximately 6,470 people in two distinct areas. In addition, the
469 Port of Sunnyside owns and operates its own industrial sewer system. Details of these three
470 systems are listed in Table 9.6.4-1.

471
472 **9.6.3 Cowiche Sewer District**
473 The Cowiche Sewer District (Map 9.6.3-1) was built in 2001 and came online the same year.
474 Cowiche-Tieton Regional Wastewater Treatment Plant is owned and operated as a joint effort
475 with both entities being involved in the building of the plant monetarily. The treatment plant also
476 provides services to the city of Tieton through an interceptor line that runs down Summitview
477 Road. The district currently has 142 connections in Cowiche and 435 connections in Tieton, all
478 inclusive of commercial, industrial, and residential customers. The plant is at 35 percent capacity
479 and estimated to reach capacity by 2040. The wastewater treatment plant consists of two sewage

PC DRAFT

Horizon 20460

Utilities Element

480 ponds, four basins, and cooled by wetlands. Comprehensive land use planning for the sewer
481 district is dependent on the County commissioners.

482 9.6.4 Terrace Heights Sewer District

483 Terrace Heights Sewer District (Map 9.6.4-1), serves about 2,500 units with a collection system
484 that discharges to the city of Yakima collection system and treatment plant. The system was built
485 in 1953 and is under continuous expansion as new residents move to the area. The system's
486 current service level is 2,700 equivalent residential units (ERUs). One ERU = 760 Cubic
487 feet/month. Improvements to the system completed in 2008 include a new lift station and
488 pipeline that will last 50 years.

489

490

Table 9.6.4-1 Sewage Collection and Treatment

Agency	Population Served	Average, Annual Flow (mgd)	Treatment	Discharge
Cowiche S.D.	1,470	0.144	WWTP Lagoon	North Fork Cowiche Creek
Terrace Heights S.D.	5,000±	0.6	Yakima WWTP	Yakima R.
Port of Sunnyside	NA ¹	2	Aerated Lagoon, Anaerobic Lagoon, & Sequencing Batch Reactors	Surface Water & Land Application

Note: 1 - Industrial Wastewater only

Source: Cowiche Sewer District, Terrace Heights Sewer District, and Port of Sunnyside

491
492 The three-party agreement between Yakima, Union Gap, and the Terrace Heights Sewer District
493 coordinates sewer services among the jurisdictions. Moxee has a separate agreement with
494 Terrace Heights and limits the amount of sewage both can dispose of at the regional wastewater
495 treatment plant to 4 percent of the capacity of the treatment plant (currently 850,000 gpd).
496 Terrace Heights Sewer District is well within capacity averaging 600,000 gallons per day. No
497 further improvements will be needed. A new pipeline and lift station was just installed and
498 will last until 2080.

499

500 9.6.5 Port of Sunnyside
501 The Port of Sunnyside owns and operates an industrial wastewater treatment system serving the
502 industrial facilities within the city of Sunnyside. The industries are primarily food processing
503 industries. The largest industry discharging to the Port treatment works is a dairy processor
504 producing cheese, whey powder, and infant formula. Other industries are primarily fruit and
505 vegetable processors. The treatment system consists of two aerated lagoons, one anaerobic
506 lagoon, two sequencing batch reactors, a storage lagoon, and a land application system. The total
507 capacity of the storage lagoon is nearly 150 million gallons. The Port has a National Pollutant
508 Discharge Elimination System (NPDES) permit which allows the treatment plant to discharge
509 treated effluent both to surface water and to its land application system. In 2016, the

PC DRAFT

Horizon 2040
Utilities Element

510 Washington State Department of Ecology approved capacity of the treatment works ~~is~~was 2.0
511 million gallons per day.

512
513
514 **9.7 SOLID WASTE SYSTEM**

515 Yakima County owns and operates the Terrace Heights Landfill and Transfer Station; Cheyne Road
516 Landfill and Transfer Station; and Lower Valley Transfer Station. The Anderson Limited Purpose
517 Landfill and Caton Limited Purpose Landfills are privately-owned and operated, and are open to
518 the public. The Yakima Waste Systems transfer station is also a privately-owned facility which
519 serves self-haulers primarily from the Yakama Nation and vicinity. Yakima Training Center Limited
520 Purpose Landfill operates a facility restricted to military use only. Map 9.7-1 provides the location
521 and county service areas.

522
523 The County's solid waste system is a countywide, coordinated effort. The County and all the
524 incorporated cities work together through a Solid Waste Interlocal Agreement. The County's
525 service area includes all incorporated cities and the unincorporated area outside the Yakama
526 Indian Reservation, the U.S. Military installation, and the Wenatchee and Snoqualmie National
527 Forests.

528
529 State law has directed the County's solid waste programs. Yakima County's Solid Waste and
530 Moderate Risk Waste Management Plan (Plan) is the guiding document that provides the details
531 required by RCW 36.70A.070 (4) and WAC 365-196-420. The goals of the Plan seek to achieve
532 convenient and reliable services; promote innovative and economical waste handling; and
533 reduce environmental impacts associated with disposal and illegal dumping. The plan recognizes
534 **Horizon 2040-2046** as the policy framework for development and seeks consistency to
535 incorporate policies. The Plan addresses the challenges with waste management through
536 alternatives, while maintaining a list of implementation status of recommendations from
537 previous solid waste management plan(s).

538
539 **9.7.1 Collection System**
540 Table 9.7.1-1 shows the collection services for all the municipalities in the County. In Yakima
541 County, four of the 14 municipalities operate their own garbage collection systems. City, Basin
542 Disposal Inc., and Yakima Waste Systems collect both residential and commercial waste.
543 Commercial accounts in the City of Yakima are collected by Yakima Waste Systems.

PC DRAFT

Horizon 204~~60~~ Utilities Element

549
550
551
552
553
554
555
556

Table 9.7.1-1 Yakima County SWMP Collection Services in Incorporated Areas		
Incorporated Areas	Collection Service	Mandatory Service
Grandview	City	Yes
Granger	City	Yes
Harrah	Yakima Waste Systems	Yes
Mabton	Yakima Waste Systems	Yes
Moxee	Basin Disposal Inc.	Yes
Naches	Yakima Waste Systems	Yes
Selah	Basin Disposal Inc.	Yes
Sunnyside	Yakima Waste Systems	Yes
Tieton	Yakima Waste Systems	Yes
Toppenish	City	Yes
Union Gap	Basin Disposal Inc.	Yes
Wapato	Basin Disposal Inc.	Yes
Yakima	City, Yakima Waste Systems	Yes
Zillah	Yakima Waste Systems	Yes
Unincorporated Areas	Basin Disposal Inc., Yakima Waste Systems	No

Source: Yakima County Solid and Moderate Risk Waste Management Plan, 2010

557
558 Residents living in the County's unincorporated areas are served by three garbage haulers: Basin
559 Disposal LLC, Rabanco, and Yakima Waste Systems, Inc. Each hauler is certified by the Washington
560 Utilities and Transportation Commission (WUTC).
561
562 According to the Yakima County Solid Waste Division, the Terrace Heights Landfill will reach
563 capacity in 2027 and will then be closed. It will remain open as a transfer station to take in
564 hazardous waste and recycling to be transferred to the Cheyne Landfill & Transfer Station. The
565 permitted capacity of Cheyne is projected to the year 2053.

566
567
568 **9.8 WATER, SEWER, AND SOLID WASTE LEVELS OF SERVICE**

569 The purpose of LOS standards is to adequately serve both current and future residents without
570 compromising the service they receive.
571

PC DRAFT

Horizon 2040 Utilities Element

572 ~~Levels of service (LOS) are is~~ established for the following Yakima County owned and operated
573 utilities:

574 • Buena, Crewport, Gala, and Terrace Heights water systems;
575 • Buena, Fairway Estates, and Mtn. Shadows sewer systems;
576 • Potential future satellite water and sewer systems; and
577 • County-wide solid waste system.

9.8.1 Existing County Water, Sewer, and Solid Waste Facilities

580 LOS standards focus on present needs and future growth. The first step is to study the capacity
581 of existing facilities and assess the need for facility improvements in order to accommodate
582 growth. This is accomplished through capacity analysis, which estimates the number of years
583 before improvement is required.

584 This approach is well suited to the County's water, wastewater, and solid waste utilities since
585 they must already meet specific and stringent federal, state, and local standards for service,
586 capacity, and development. It also addresses the County's on-site septic systems, which are
587 considered a type of wastewater facility. Capacity LOS for water and wastewater facilities rates
588 the unused capacity of each system component, using an A-through-F rating system, where the
589 A-level rating indicates a large amount of unused capacity (see Tables 9.8.1-1 and 9.8.1-2).
590

Table 9.8.1-1 Percent of Capacity (Operation) LOS for Water System Facilities						
System Element	Parameter Defining LOS	Definition of Letter Rating (Percent of Capacity Used)				
		A	B	C	D	E
Supply Wells	Total Supply Capacity	0-20	21-40	41-60	61-84	85-100
Pump Stations	Peak Pumping Rate	0-20	21-40	41-60	61-84	85-100
Pipelines	Peak Flow Rate	0-20	21-40	41-60	61-84	85-100
Reservoirs	Total Capacity	0-20	21-40	41-60	61-84	85-100
Water Treatment Facilities	Treatment Capacity	0-20	21-40	41-60	61-84	85-100

Table 9.8.1-2 Percent of Capacity (Operation) LOS for Wastewater Treatment Facilities						
		A	B	C	D	E
Pipelines	Peak Flow Rate	0-20	21-40	41-60	61-84	85-100
Pump Stations	Peak Pumping Rate	0-20	21-40	41-60	61-84	85-100
Wastewater Treatment Facilities/Liquid Stream	Hydraulic Loading or Organic Loading (whichever is limiting)	0-20	21-40	41-60	61-84	85-100
Wastewater Treatment Facilities/Solid Stream	Hydraulic Loading or Solids Loading (whichever is limiting)	0-20	21-40	41-60	61-84	85-100

593 May 1997 – GMA Update ~~June 2017~~[December 2026](#)

Chapter 9 | 18

PC DRAFT

PC DRAFT

Horizon 2046

Utilities Element

594 The capacity LOS for solid waste facilities (see Table 9.8.1-3) examines the availability of different
595 system components. For example, how available are landfill sites, transfer stations, and recycling
596 facilities? What are the collection days for waste pickup? Another important consideration is the
597 geographical distribution of facilities. Future additional transfer stations, for instance, need to be
598 sited near population ~~center~~centers where they are needed. Appropriate siting is an important
599 part of capacity LOS and future development of facilities.
600

Table 9.8.1-3 LOS Standards for Solid Waste Management Facilities and Services			
Facility/Service	Letter Rating for LOS		
	A	B	C
Regional Landfills (Number of Facilities)	2	1	0
Regional Limited Purpose Landfills (Number of Facilities)	2	0	0
Regional Transfer Station (Number of Facilities)	4	1	0
Garbage Pickup (Pickup Days Per Month)	20	2	1
Curbside Recycling Pickup (Pickup Days Per Month)	10	2	1
Rural Recycling Centers (Number of Facilities)	4	0	0

Source: Yakima County Solid Waste Division

601
602
603 **9.8.2 Future Satellite Wastewater and Water Systems**
604 Under **Horizon 2040**2046, LOS standards must be adopted for future satellite systems that the
605 County will manage. YCC, Title 19, Tables 19.25-1 Water and 19.25-2 Sewer ~~provides~~provide the
606 system options in order of priority for the zoning and number of lots/connections. All systems
607 will be required to meet established County and state standards for design, construction, and
608 performance. Water systems will be subject to State Health SMA requirements.
609

610 **9.8.3 LOS Thresholds**
611 Establishing LOS thresholds means that a base standard is applied to each County system. These
612 thresholds provide the standards against which existing and new systems can be evaluated.
613 System evaluations identify deficiencies, which can be remedied with facility upgrades or new
614 construction. Assessing each system's needs will lead to realistic recommendations for necessary
615 improvements. Then these improvement needs will be incorporated into the finance portion of
616 this element.
617

618 **9.8.4 Water and Sewer Facilities**
619 Thresholds for both water and sewer facilities were established to identify deficiencies in the
620 system that must be corrected in order to meet ~~Growth Management Act~~GMA requirements (see
621 Table 9.8.4-1). These standards represent the proposed ~~level of service~~LOS the County would
622 provide to residents for each type of facility. A facility with an LOS rating worse than the threshold
623 is considered deficient and in need of improvement.
624

Table 9.8.4-1 Thresholds LOS for Water and Sewer/Sanitary Facilities

May 1997 – GMA Update ~~June 2017~~December 2026

PC DRAFT

Horizon 2040
Utilities Element

Type of Water Facility	Percent-of-Capacity LOS
Supply Wells	D
Pump Stations	D
Pipelines	D
Reservoirs	D
Water Treatment Facilities	E
Type of Sewer Facility	Percent-of-Capacity LOS
Pipelines	D
Pump Stations	D
Wastewater Treatment facilities – Liquids Stream	E
Wastewater Treatment facilities – Solids Stream	E

625
626 These threshold LOS standards are to be applied to the existing systems and to future system
627 growth anticipated under each land use alternative for the **years 2015 and 2040** in order to
628 identify facility needs.

629
630 **9.8.5 Solid Waste Facilities**
631 Thresholds for solid waste facilities are shown in Table 9.8.5-1. LOS threshold standards are used
632 to identify deficiencies in the system that must be corrected to meet **Growth Management**
633 **ActGMA** requirements. Future solid waste facility upgrades will be based on the LOS ratings
634 thresholds established in this section.

Table 9.8.5-1 Threshold LOS for the Solid Waste System	
Facility	LOS
Regional Landfills	B
Regional Transfer Stations	B
Garbage Pickup	B
Curbside Recycling Pickup	B
Rural Recycling Centers	B

635
636
637
638 **9.9 IRRIGATION**
639 The Yakima Project is an irrigation system that uses water developed by the Bureau of
640 Reclamation to irrigate about **464,000 acres of land extending 175 miles** along both sides of the
641 Yakima River. The Yakima Project consists of an extensive system of reservoirs, canals, and
642 laterals, five diversion dams, three hydroelectric power plants, transmission lines, and pumping
643 plants, which supply irrigation water for most of the irrigated land in the Yakima River Basin. Over
644 **90% of the harvested cropland** is located in Yakima County and Kittitas County, about half of
645 Benton County, and a small area in Klickitat County.

PC DRAFT

Horizon 204~~60~~

Utilities Element

647 Within Yakima County, the Yakima Project is divided by Union Gap into upper and lower planning
648 areas. As reported by the Bureau of Reclamation, the Yakima Project consists of the Tieton, Roza,
649 Sunnyside, and Wapato Irrigation Divisions. ~~Private interests not included with the four Divisions~~
650 ~~contract their services with the Bureau of Reclamation.~~ Private interests not included with the
651 four Divisions contract their services with the Bureau of Reclamation. Irrigation Districts are
652 governed by RCW Title 87. The Storage Division has supervision over the entire Yakima River
653 water supply, both natural riverflow and the stored water in six reservoirs. The reservoirs have a
654 total active capacity of 1,065,400 acre-feet. Map 9.9-1 provides the locations and service areas
655 of Yakima County Irrigation Districts.
656

657 **9.9.1 Upper Yakima Planning Area**
658 The Tieton Division is west of Yakima between the Naches River and Ahtanum Creek and covers
659 28,000 acres. Irrigation waters for the district are diverted from the Tieton River via the Tieton
660 Diversion Dam (a concrete weir, five feet high with an embankment wing, eight miles
661 downstream from Rimrock Lake), and the Tieton Canal (capacity 347 cubic feet per second). The
662 Tieton ~~Division~~ and its facilities are operated by the Yakima-Tieton Irrigation District.
663

664 Other irrigation districts within the Upper Yakima Planning Area include the Naches-Selah,
665 Moxee-Selah, Terrace Heights, Union Gap, and city of Yakima. There are two irrigation districts
666 in this area which are not part of the Yakima Project: the Wenas and Ahtanum Districts.
667

668 **9.9.2 Lower Yakima Planning Area**
669 The Lower Yakima Area is south of Union Gap and is heavily agricultural. It consists of Wapato,
670 Sunnyside, and Roza Divisions. *Wapato Division* is the largest project operated by the Bureau of
671 Indian Affairs. It receives its water supply from the Yakima Project and irrigates more than
672 136,000 acres. ~~Its~~ service area is in the Lower Valley, West of Interstate 82 from Parker to
673 Highway 240 on the Yakama Reservation, covering more land west of U.S. Route 97 and State
674 Route 22. The following details for Sunnyside and Roza irrigation divisions were assembled from
675 the Bureau of Reclamation website for the Yakima Project – Lower Yakima Planning area.
676

677 The *Sunnyside Division* consists of 103,000 acres north of the Yakima River, extending from the
678 Sunnyside Diversion Dam, a concrete weir near Parker (eight feet high with an embankment
679 wing), and flows through the Sunnyside Canal to the vicinity of Benton City. Four irrigation
680 districts in the Sunnyside Division pump water to their lands by hydraulic turbine pumps at drops
681 along the canal. The Sunnyside Division and its facilities are operated by the Sunnyside Valley
682 Irrigation District.
683

684 The *Roza Division* spans 72,500 acres north of the Yakima River, from Pomona to Benton City.
685 The distribution system is supplied by the Roza Canal (capacity 2,200 cubic feet per second),
686 which originates at the Roza Diversion Dam (a concrete weir, movable crest structure that is 67

PC DRAFT

Horizon 2040
Utilities Element

feet high) on the Yakima River about ten miles north of Yakima. The Roza Power plant develops and delivers 12,937 kilowatts of power to pumping plants within the division along 70 miles of transmission lines. The Roza Division and its facilities are operated by the Roza Irrigation District. The other district within the Division is Buena.

The demand for irrigation water continues to grow. The need for irrigation water is likely to continue even when some land converts to non-agricultural uses. Gardens and lawns will also require water. Irrigation districts must be notified of proposed subdivisions, and the subdivision plat must be recorded and filed with the district, showing how the water is to be delivered to the irrigable acres in the subdivision. Under state law, an irrigation district must review each proposed subdivision within its boundaries. The district can require an internal distribution system as a condition of approval. The district must approve extensions of service to subdivided units, and can require the extensions of service to subdivided lots at the landowner's expense. The irrigation district's responsibility for delivering water ends at the established point of delivery.

If a farm is subdivided within an irrigation district, the developer must show how the water is to be delivered to the irrigable acres in the subdivision (as per RCW 58.17.310). Extensions of service to subdivided units are at the landowner's expense. The district's responsibility ends at the established point of delivery. The Project is not responsible for operation and maintenance of systems to serve the subdivided properties (see 25 CFR Ch. I, 171.6). While some of the County's irrigation districts have policies requiring the developer to install an internal irrigation water distribution system to serve the new parcels, others do not.

The Yakima County Treasurer's office provides billing services for 16 irrigation districts in the County (Table 9.9.4-1). Other districts provide their own billing services.

Table 9.9.4-1 Yakima County Irrigation Districts
Ahtanum Irrigation District*
Buena Irrigation District*
Naches/Selah Irrigation District*
Naches Union Irrigation District*
Roza Irrigation District
Selah & Moxee Irrigation District*
South Naches Irrigation District*
Sunnyside Valley Irrigation District

PC DRAFT

Horizon 20460

Utilities Element

Terrace Heights Irrigation District*
Union Gap Irrigation District*
Wenas Irrigation District*
Yakama Reservation Irrigation District*
Yakima City Irrigation
Yakima-Tieton Irrigation District
Zillah Irrigation District*
*County Treasurer provides billing service.
Source: Yakima County Treasurer & Utilities

717

718

9.10 ELECTRICAL

720 Yakima County's electricity is provided by ~~Pacific Power & Light Company (PP&L)~~, the Benton
721 Rural Electric Association (Benton REA), and Yakama Power (see Map 9.10-1). These utilities are
722 part of a regional power system. PP&L and Benton REA continually research means to expand
723 supply and upgrade equipment since the law requires utilities to service all customers requesting
724 service. Both power companies have a territorial agreement that minimizes duplication of
725 service areas and promotes coordination of line extensions, looping of facilities, and other facility
726 improvements.

727

728 System planners for utilities design and build their systems to follow population and employment
729 growth projections based on County and ~~e~~City plans. The electricity load is determined from
730 these plans and projections. An electric system plan is then developed to serve those loads at the
731 reliability level prescribed by the individual utility, taking into account environmental, economic,
732 financial, and operational factors. Utility construction is coordinated with the appropriate
733 jurisdictions and agencies and is typically phased in as actual growth occurs.

734

735 Future electrical service plans are not only designed to provide for future growth and
736 accommodate new and increased load. They also include changes to the existing systems to
737 improve reliability, power quality, and looping of the system for redundancy backup service.

738

739 Electrical utilities serving Yakima County, plan system capacity based on adopted population
740 projections and anticipated land use patterns. PP&L, Benton REA, and Yakama Power maintain
741 adequate transmission and distribution capacity to serve existing customers and planned 2046
742 growth. System capacity is expanded through phased upgrades to substations, transformers, and
743 transmission lines as growth occurs.

744

745 **9.10.1 Pacific Power and Light Company (PP&L)**

Commented [OS4]: Checklist item A. This addition provides the required description of electrical system capacity and how utilities plan for future demand, satisfying the checklist requirement to address both existing and proposed capacity for electrical utilities.

May 1997 – GMA Update ~~June 2017~~ December 2026

Chapter 9 | 23

PC DRAFT

PC DRAFT

Horizon 2040 Utilities Element

746 Most of Yakima County is served by [PP&L Pacific Power & Light](#). PP&L builds, upgrades, operates,
747 and maintains the electrical system serving [approximately 105,500 accounts](#) throughout the
748 greater Yakima Valley area. The electrical utility has a very well developed backbone transmission
749 system with major load centers near Grandview, Sunnyside, Toppenish, Wapato, Wiley Area,
750 Tieton-Cowiche, Naches, Selah, Wenatchee, and White Swan.

751
752 Electric power reaches the Yakima Valley via five transmission lines, three [supplying 230,000 volts](#)
753 each and two [providing 115,000 volts each](#). The three large services are connected to Wanapum
754 Dam on the Columbia River, the Bonneville Power Administration's (BPA's) Midway substation
755 near Priest Rapids Dam on the Columbia River, and BPA's Outlook substation northwest of
756 Sunnyside. The two smaller transmission lines are connected to BPA's substations at Moxee and
757 Grandview.

758
759 These transmission lines form an interconnected open access network across the western states.
760 Consequently, Yakima County customers have access to [PP&L's Pacific Power's powered power](#)
761 generation plants in Washington, Oregon, California, Wyoming, Utah, and Montana. In addition,
762 the network provides a connection to [over 50 other electrical purveyors](#), allowing exchanges of
763 power, if the need arises.

764
765 The utility takes a proactive approach to system capacity, developing its system in anticipation of
766 eventual growth. PP&L is very supportive of economic growth and diversification and tries to
767 avoid being an impediment to the area's economic growth and vitality. Existing facilities place no
768 restrictions on normal residential, commercial, or industrial growth, and major industries and
769 institutions can be readily accommodated. While the utility has an abundant supply of energy, its
770 demand-side resource management policy encourages conservation to assure continued
771 availability of power to accommodate new growth and keep the cost low.

772
773 Transmission for [a 115,000-volt system](#) can be accommodated on a single pole structure that
774 uses the road right-of-way. A substation capable of serving [10,000 residential customers](#) typically
775 requires no more than 2 acres, and is compatible with most adjacent land uses.

776
777 **9.10.2 Benton Rural Electric Association (Benton REA)**
778 [Benton Rural Electric Association](#) [Benton REA](#) provides electrical service to commercial/industrial
779 users and residences in Yakima County. Its service is concentrated in the Lower Yakima Valley,
780 south of Union Gap, although it draws some of its power from the Tieton Reservoir, northwest
781 of Yakima. Benton REA service extends east to the Richland area in Benton County. Benton REA
782 mainly serves the rural [areas](#) and the outskirts of cities.

783
784 **9.10.3 Yakama Power**

PC DRAFT

Horizon 20460

Utilities Element

785 The following information comes directly from the [Yakima-Yakama](#) Power website. Yakama
786 Power is owned and operated by the Yakama Nation. Electrical services are only provided on the
787 Yakama Reservation. The Wapato Irrigation Project is ~~the~~a renewable energy source between
788 Drop 2 and 3 with three generators that have the capacity to produce 4.2 MW. Between them all
789 ~~1000Kw=1MW is produced~~. 1MW of electricity can supply energy to power 1000 homes.
790

791 Yakama Power's overall mission is to provide employment with a local workforce, training, and
792 eventually affordable and reliable electrical energy throughout the entire reservation. Growth
793 and expansion of Yakama Power ~~is~~are dependent upon the qualifications of their employees.
794 Yakama Power took on its first ~~prospective~~ customer, Legends Casino, on March 24, 2006.
795

796 The system's capacity can deliver 16 million kilowatts of electricity or power 700 homes for one
797 year, which makes ~~it~~ 7th out of eight Tribal Utilities in the United States. The approximate average
798 usage is 4 megawatts. Yakima-Yakama Power is at the final stage of providing retail electricity to
799 retail, commercial, and industrial end users. Other renewable energy sources the Tribe ~~are~~is
800 pursuing include solar, woody biomass, hydroelectric, wind, and geothermal.
801

802 The existing infrastructure consists of over 25,000 feet of underground conduit and vaults
803 installed at the Tribal Campus. The purchases of existing ~~utilities~~utility infrastructure will provide
804 initial service in Toppenish. New distribution lines will be built to adjacent sovereign loads in
805 White Swan and Wapato.
806
807

9.11 NATURAL GAS

809 Yakima County is served by two natural gas companies, Northwest Pipeline (NWP) and Cascade
810 Natural Gas (CNG).
811

9.11.1 Northwest Pipeline

812 Williams Northwest Pipeline LLC is a natural gas transmission company which wholesales gas to
813 local distribution companies. It owns and operates main feeder lines in Grandview, Sunnyside,
814 Zillah, Moxee, Yakima, Selah, and the Yakima Training Center. Its major customer in Yakima
815 County is ~~Cascade Natural Gas~~CNG. Occasionally, ~~Northwest Pipeline~~NWP receives a request
816 from a private industrial operation for a direct hook-up to their network. After ~~Northwest~~
817 ~~Pipeline~~NWP provides a cost estimate for the construction of the pipeline, valves, and other
818 facilities necessary to deliver gas to the industry requesting service, the industry can decide
819 whether the cost savings of direct supply will offset the cost of the hook-up improvements. In
820 the future, however, applicants may have to fund all necessary improvements. Granting of future
821 or pending requests may be contingent upon the grantee funding all necessary improvements.
822
823

9.11.2 Cascade Natural Gas

824 May 1997 – GMA Update ~~June 2017~~December 2026

Chapter 9 | 25

PC DRAFT

PC DRAFT

Horizon 2040
Utilities Element

825 ~~Cascade Natural Gas~~(CNG) is an investor-owned utility serving customers in sixteen counties
826 within the State of Washington. This section describes CNG's existing system within Yakima
827 County.

828
829 Washington, Oregon, and Idaho receive natural gas from the southwestern United States and
830 Canada. Natural gas is applied to the entire region via two interstate pipeline systems, Pacific Gas
831 Transmission Company and Northwest Pipeline Corporation. Both own and operate their
832 respective regional pipeline networks.

833
834 System components include gate stations high pressure lines, pressure reduction stations and
835 distribution mains. The gate station is the delivery point of natural gas from the upstream
836 interstate pipeline to CNG's system. Gate stations normally include metering stations, odorizing
837 stations and pressure reduction stations. High pressure lines transport gas to district regulators
838 throughout CNG's service area. High pressure line mains may vary in size from 2 to 20 inches and
839 in pressure from 150 to 600 pounds per square inch. Pressure reduction stations are installed at
840 the point of delivery of natural gas from the high-pressure lines to the lower pressure distribution
841 systems. Distribution system mains vary in size from 2 to 16 inches.

842
843 ~~Cascade Natural Gas~~CNG serves areas along I-82 and most of the cities in Yakima County. The
844 natural gas supply system meets existing demands of residential, commercial, and public
845 customers. CNG builds, operates, and maintains natural gas facilities serving Yakima County. CNG
846 should be consulted for any proposed development that will require natural gas. The developer
847 should not assume that service is available without checking with the local utility. CNG will build
848 to any customer in its service area that meets the criteria in its financial feasibility formula.
849 Additional customers can be served if they are willing to contribute to the cost of extending the
850 lines. If additional customers connect to the same main, part of the contribution may be
851 reimbursed. The utility that wants to serve development outside its service area must apply for
852 a "certificate of convenience" from the Public Utilities Commission.

853
854 To accommodate future demand, the maximum capacity of the existing distribution system can
855 be increased as required by one or more of the following:

856
857 • Increasing distribution and supply pressures in existing lines
858 • Adding new distribution and supply mains for reinforcement
859 • Increasing existing distribution system capacity by replacement with larger sized mains.
860 • Adding district regulators from supply mains to provide additional intermediate pressure
861 gas sources to meet the needs of new development.

PC DRAFT

Horizon 20460

Utilities Element

863 Future utility needs should be anticipated and planned for in advance. Yet connection to CNG's
864 distribution system is driven by demand. This means that connections cannot be planned in
865 advance. New customer hookups to the distribution system ~~is-are~~ governed by CNG's tariffs as
866 filed with and approved by the WUTC.
867

868 Developers should consult ~~Cascade Natural Gas~~[CNG](#) if their proposed development will require
869 natural gas. The developer should not automatically assume that service is available without
870 checking. CNG will build to any customer in its service area provided they meet its financial feas-
871 ibility formula criteria. CNG will serve other customers if they are willing to contribute to the cost
872 of extending the lines. Those contributions may be refundable; if additional customers connect
873 to the same main, part of the contribution may be reimbursed. To serve development outside its
874 service area, the utility will apply for a "certificate of convenience" from the Public Utilities
875 Commission to include the area within its service area, if the proposed development meets the
876 financial feasibility criteria.
877
878

9.12 TELECOMMUNICATIONS

880 The rapidly changing telecommunications industry has transformed the way service is delivered.
881 Cellular and fiber optics are blurring the distinctions that separate data, video and voice
882 technologies. As a result, assessing the future configuration of telecommunications service is very
883 different.
884

885 Telecommunications is the transmission of information by wire, radio, fiber optics, elec-
886 romagnetic or other similar means. In Yakima County, telecommunication utilities include,
887 telephone, cellular telephone, satellite and cable television.
888

9.12.1 Telephone

889 The telephone exchange companies serving Yakima County that are registered and regulated by
890 ~~the Washington Utilities and Transportation Commission (WA-UTC)~~ include the Ellensburg
891 Telephone Company, Frontier Communications Northwest, Inc., CenturyTel of Cowiche, Inc. –
892 ~~d/b/a CenturyLink, CenturyTel of Washington – d/b/a, CenturyLink, Qwest Corporation – d/b/a~~
893 CenturyLink QC, and United Telephone Company of the Northwest (see Map 9.10-1). Tele-
894 communication services delivery doesn't always coincide with the exact location of customers.
895 As a result, many of the telecommunication facilities are co-located with those of the electrical
896 power provider.
897

898 Non-regulated services consist of cable, internet, wireless phones, and Voice over Internet
899 Protocol (VoIP). Most ~~of~~ if not all ~~of~~ telecommunications companies also provide internet services.
900 Many public areas offer access to free or paid Wi-Fi hotspots for laptops, personal devices ~~or cell~~
901

PC DRAFT

Horizon 2040
Utilities Element

902 phones. People have become linked to the devices which require the constant exchange of
903 electronic data whether for business, education, or pleasure.

905 Telecommunications providers maintain system capacity through upgrades to fiber
906 infrastructure, wireless communication facilities, and switching equipment. Capacity expansion
907 occurs in response to new development, population growth, and increases in data demand.
908 Although providers do not publish specific system capacities, they maintain sufficient bandwidth
909 and coverage to serve existing users and planned future development within Yakima County.

Commented [OS5]: Checklist item A. This statement documents how telecommunication systems maintain and expand capacity to meet current and future needs, ensuring the element explicitly addresses capacity for telecom utilities as required by the checklist.

911 9.12.2 Cellular Telephone

912 Yakima County is now served by a variety of wireless communication service providers including,
913 but not limited to U.S. Cellular, AT&T, Sprint, T-Mobile, and Verizon. Cellular telephone
914 companies are regulated by the Federal Communications Commissions (FCC) because they use
915 radio signals rather than lines for communications. Siting and design of towers are regulated by
916 the Federal Aviation Administration (FAA). Wireless Telecommunications technology and
917 expanded FCC licensing will result in significant changes in this service over the life of **Horizon**
918 **20402046**.

919 Cellular telephones require a network of receivers such as a cell site or wireless communication
920 facility. Cell sites are placed on tall poles, lattice-type towers, or existing buildings. The County
921 currently **has 118 wireless communication facilities**, with multiple carriers per facility. As the
922 demand for wireless service increases and as development moves to more remote areas of the
923 County more wireless facilities are to be expected. Local residents sometimes object to cell sites
924 in their neighborhoods. If siting is a problem, it may be worth considering using the special
925 process developed for siting Essential Public Facilities. Local governments provide input to the
926 siting process through their approval and conditioning responsibilities within their jurisdictions.
927 Siting issues are expected. Siting and design of towers is regulated by the **Federal Aviation**
928 **Administration (FAA)** and local zoning authority.

931 Each cell site has a coverage area of several miles, depending on topography and number of
932 customers. As the cellular telephone user moves **form from** one cell to the next, the call is passed
933 to an open channel at an adjacent cell site. Transmission quality and dialing of cellular telephones
934 are comparable to that of conventional wireline telephones.

936 9.12.3 Cable Television

937 Charter Communications serves the Yakima region. Cable generally follows electrical and
938 telephone lines. Only easements are needed, and are not usually a problem. Anyone within 200
939 feet of the cable can hook up; otherwise, there would be an additional charge to the customer.

PC DRAFT

Horizon 2046

Utilities Element

941 Wireless cable is regulated by the FCC, and does not come under local regulation since it does
942 not use public rights-of-way. Direct TV (a subsidiary of AT&T) and DISH Network are the two
943 satellite cable providers for the county ~~and a great choice for rural internet~~. Satellite cable is
944 virtually available everywhere if customers have a clear view of the southern sky.

945
946

9.13 UTILITIES GOALS AND POLICIES

948 The goals and policies listed in this element that apply throughout Yakima County are identified
949 as follows:

950
951 • County-wide Utilities Goals and Policies – UT X.XX

952
953 The policy incorporated from the West Valley Neighborhood Plan that apply throughout Yakima
954 County is identified with a superscript as follows:

955
956 • West Valley Neighborhood Plan –WVNP ~~WVNP~~

957
958 The goals and policies incorporated from the Yakima Urban Area Comprehensive Plan 2025 that
959 only apply to the Yakima UGA are identified as follows:

960
961 • Yakima UGA Urban Land Use Goals and Policies – YKUT X.XX

962
963
964
965

GENERAL UTILITY:

PURPOSE STATEMENT UT 1

966 The County must plan for the utility and land use needs in a consistent manner, to ensure that
967 growth occurs in areas which can be served by necessary utilities. This requires coordination with
968 service providers for the location and timing of utility installation. This goal and its policies define
969 how the coordination should take place.

970
971 **GOAL UT 1:** Ensure that necessary and adequate utilities are provided to all development
in Yakima County in a cost effective manner consistent with *Horizon*
~~2040~~2046.

POLICIES:	
UT 1.1	Adopt and implement separate utility level of service <u>LOS</u> standards for urban and rural areas.
UT 1.2	Ensure consistency of utility elements and utility plans by coordinating plans among adjacent jurisdictions.

May 1997 – GMA Update ~~June 2017~~December 2026

PC DRAFT

Horizon 2040
Utilities Element

UT 1.3	Develop interlocal agreements to coordinate procedures and standards in urban growth areas.
UT 1.4	Develop a coordinated process for siting regional utility facilities in a timely manner.
UT 1.5	Consult with service providers as part of the process of identifying land useful for future planned development and for the sharing of utility corridors.
UT 1.6	Coordinate the installation of utility facilities among utility service providers and with other infrastructure providers.
UT 1.7	Provide the private utilities with up-to-date County planning materials such as land use categories, population forecasts, etc., so that their utility delivery plans are accurate.

972

973 PURPOSE STATEMENT UT 2

974 *Utility corridors, especially above-ground utilities, can have an impact on the natural*
975 *environment. Camouflaging or screening utility structures and opening up utility corridors for trail*
976 *or other recreational use can lessen the utilities' visual and physical impact on the natural*
977 *environment. This goal and its policies describe steps that can be taken to lessen the impact of*
978 *utilities.*

GOAL UT 2:	Reasonably protect the physical and natural environment while providing utilities.
-------------------	--

POLICIES:	
UT 2.1	Whenever possible, utility corridors should be made available for recreational use when such use does not negatively impact adjacent land uses and does not pose a public health or safety hazard, or result in property damage on adjacent lands.

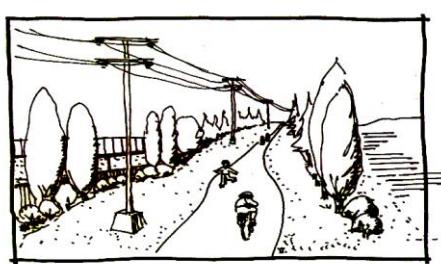


Figure 9.13-1 Recreational Use in a Utility Corridor. (UT 2.1)

UT 2.2	Encourage private utility structures (e.g., electric substations) to have design and screening that is compatible in bulk and scale with surrounding land uses.
---------------	---

PC DRAFT

Horizon 2046

Utilities Element

UT 2.3	Assist and facilitate the siting of linear transmission facilities and utility-related infrastructure in a manner consistent with Horizon 2040-2046 through land use planning and development review policies and procedures.
UT 2.4	Encourage energy resource development in locations within Yakima County that take advantage of the County's energy resources, existing infrastructure, and also are sited to minimize environmental impacts.
UT 2.5	Consider low impact development and other appropriate "green" building standards and guidelines to comprehensively address design elements such as transportation and storm water management utility infrastructure, in order to reduce costs and retain natural hydrology and processes, using appropriate techniques such as limiting impervious surfaces, clustering, and preserving open spaces and forests.

979

PURPOSE STATEMENT UT 3

980 *Utility services are costly to the community. To the extent that location and timing of utility service*
981 *installation can be coordinated, the community will save on the cost of utility provision. This goal*
982 *and its policies suggest coordination methods that may be cost effective over the long term.*

GOAL UT 3: Ensure cost effective provision of utility services.	
POLICIES:	
UT 3.1	Utility services should be provided in accordance with approved utility comprehensive plans that are consistent with future population projections and the preferred land use categories defined by Horizon 2040-2046 .
UT 3.2	Solicit community input prior to county approval of private utility facilities which may significantly impact the surrounding community.
UT 3.3	Support electricity, natural gas, and water efficiency programs that include quantitative objectives for reducing energy and water consumption, specific programs to achieve objectives (including regular audits of facilities), a time schedule for implementation, identification of responsible departments, energy accounting, and identified sources of funding.
UT 3.4	Require timely and effective notification of interested utilities of road construction projects, and of maintenance and upgrades of existing roads to facilitate coordination of public and private utility trenching activities.
UT 3.5	Require that utility permits be considered simultaneously with the proposals requesting service and, when possible, approval of utility permits when the project to be served is approved.
UT 3.6	Preserve right-of-way needed for irrigation system maintenance.

984

985

WATER SUPPLY AND SEWAGE DISPOSAL:

May 1997 – GMA Update ~~June 2017~~[December 2026](#)

Chapter 9 | 31

PC DRAFT

PC DRAFT

Horizon 2040
Utilities Element

987
988

PURPOSE STATEMENT UT 4

Horizon 2040 should define where water and sewer systems are appropriate.

GOAL UT 4:	Ensure that water supply and sewage disposal facilities throughout the County support the desired land use, and are consistent with other goals, policies and objectives of Horizon 2040.
POLICIES:	
UT 4.1	Follow the guidance in YCC, Title 19, Tables 19.25-1 Water and 19.25.2 Sewer to ensure that the level of water and sewer service is appropriate and consistent with the land use goals and policies for each area of the County.
UT 4.2	Specific physical location and site suitability should determine which of the "required" water and sewer utilities listed in YCC Title 19, Tables 19.25-1 Water and 19.25-2 Sewer is the most appropriate.
UT 4.3	Utilities for master planned resorts and new communities should be consistent with the guidance in YCC, Title 19, Tables 19.25-1 Water and 19.25-2 Sewer for the zoning designations in which they are located.
UT 4.4	Existing water companies, water districts, and sewer districts should be used if they have capacity to serve.

989
990
991
992

PURPOSE STATEMENT UT 5

These policies develop guidelines to promote a checks and balances system while encouraging efficient water use and water resource planning.

GOAL UT 5:	Ensure that future development does not exceed the available amount of raw water.
POLICIES:	
UT 5.1	Encourage water resource planning to promote more efficient management of both ground and surface water resources.
UT 5.2	Develop specific guidelines for determining the adequacy of water supplies proposed to serve new parcels and new structures and uses on existing parcels.
UT 5.3	In conjunction with the irrigation districts, evaluate the implications of the use of irrigation water for residential landscaping.
UT 5.4	File on unappropriated water rights within urban growth and transitional areas.
UT 5.5	Develop a water resource system that addresses the need for domestic water for development in unincorporated Yakima County that meets the water availability requirements of state law.

993
994
995
996

PURPOSE STATEMENT UT 6

Rural area residents depend on groundwater as their source of drinking water. Groundwater contamination is a major concern in the County. The purpose of this section is to minimize the

May 1997 – GMA Update ~~June 2017~~ December 2026

Chapter 9 | 32

PC DRAFT

PC DRAFT

Horizon 204~~60~~

Utilities Element

997 risk to groundwater for new development, and to identify and mitigate existing threats to the
998 quality of groundwater.

GOAL UT 6: Protect the quality of groundwater used for domestic water supplies.

POLICIES:

UT 6.1	Develop existing regulations regarding well construction standards
UT 6.2	Implement a long-term groundwater quantity and quality monitoring program for basins that provide domestic water supplies.
UT 6.3	Minimize impacts of development and agricultural practices on groundwater supplies.
UT 6.4	Maintain and enforce a wellhead protection program.

PURPOSE STATEMENT UT 7

1000 The city of Yakima takes most of its drinking water from the Naches River, just below the town
1001 of Naches. To protect this important source of drinking water, Yakima County should ensure
1002 that land use in the Naches and Tieton watersheds does not impact water quality in the
1003 tributaries that drain into the Naches River.

GOAL UT 7: Protect the quality of surface water used for potable water supply.

POLICIES:

UT 7.1	Support cooperation with other governmental agencies in conducting source identification studies in the Lower Naches River watershed (all lands draining into the Naches River below the confluence with the Tieton River) to determine the cause of elevated pH levels and water temperature.
UT 7.2	Encourage the use of best management practices in the Lower Naches River watershed, especially those targeted to reducing pH and temperature levels.
UT 7.3	Support cooperative efforts to develop and implement a comprehensive water quality monitoring program for the Upper Naches River (above the confluence of the Naches and Tieton rivers).
UT 7.4	Support water quality monitoring efforts in the Upper Naches River and Tieton rivers, and make information available for these purposes.
UT 7.5	Participate with other agencies to develop and implement water quality information and educational programs for recreational users of the Upper Naches and Tieton River watersheds.
UT 7.6	Participate in cooperative forest watershed management programs designed to protect water quality.
UT 7.7	Participate in cooperative programs to educate recreational users and residents in the Naches and Tieton River watersheds about proper sanitary practices.

PURPOSE STATEMENT UT 8

1005 May 1997 – GMA Update ~~June 2017~~[December 2026](#)

1006 Chapter 9 | 33

PC DRAFT

PC DRAFT

Horizon 2040
Utilities Element

1007 A key component of water quality management is to ensure the health, safety and welfare of
1008 Yakima County residents. To this end, existing problems must be mitigated, and new water and
1009 sewer systems must be installed in a manner which minimizes the risk to public health and
1010 safety. This goal and its policies encourages water quality management to meet this objective.

GOAL UT 8: Ensure the safety of public and private potable water systems.	
POLICIES:	
UT 8.1	Implement a satellite management program for new or failing water systems.
UT 8.2	Ensure that water service for new development complies with all applicable laws and regulations, including operating under an approved water system plan.
UT 8.3	Review water plans to ensure that they are compatible with land use planning.
UT 8.4	Require water systems to satisfy current regulations when expanding service to additional customers, with the new customers paying for their fair share of the cost of meeting current standards or reducing the level of service LOS available to existing customers (e.g., provide funds for future replacement of undersized lines, looping systems to increase fire flow pressure, loss in pressure on maximum demand day).
UT 8.5	Support the efforts of privately-owned public water systems to bring systems up to public standards, at which point the County will consider owning and operating them, if requested.

1011
1012 **PURPOSE STATEMENT UT 9**
1013 Water conservation should play a major role in a community's water resource management.
1014 Two ways to meet this goal are educational training on voluntary water use reduction and
1015 requiring the installation of water conserving devices in new construction. This goal and its
1016 policies describe these methods and encourage them as part of a water conservation program.

GOAL UT 9: Promote water conservation.	
POLICIES:	
UT 9.1	Encourage water purveyors to create and implement water conservation education programs.
UT 9.2	Promote water conserving fixtures in new buildings.
UT 9.3	Promote the use of water conserving landscaping.

1017
1018 **PURPOSE STATEMENT UT 10**
1019 In order to reduce wastewater and the costs associated with treating it, water conservation
1020 should play a major role in a community's water resource management.

GOAL UT 10: Minimize the amount of wastewater that requires treatment.	
POLICY:	

PC DRAFT

Horizon 2046

Utilities Element

1021	UT 10.1 Follow policies UT 9.1-9.3, which are designed to conserve domestic water.
------	---

PURPOSE STATEMENT UT 11

1022 *To protect the health, safety and welfare of its citizens, Yakima County should ensure the*
1023 *quantity and quality of its water resources. This goal and its policies addresses this issue by*
1024 *requiring specific development standards for water and sewer services throughout the County.*

GOAL UT 11: Protect surface and ground water quality and quantity.	
POLICIES:	
UT 11.1	Development proposed for individual wells and septic systems should be allowed only at densities which meet self-sufficiency standards.
UT 11.2	The intensity to which a specific parcel can be used should be determined, to a large degree, by regulations pertaining to environmental, health, and safety concerns.
UT 11.3	In urban areas where sewer is not currently available but may be available in the future, developers shall be required to sign sewer hookup covenants and install dry lines from the septic systems to the future sewer easement.
UT 11.4	Encourage the appropriate use of community/public water and sewerage systems in Rural Transitional and Rural Settlement areas and other areas where small lots are allowed.
UT 11.5	Require urban density development within the urban growth area to be served by public sewer service.
UT 11.6	Municipal Public sewer service should not be extended outside the urban growth area unless: <ul style="list-style-type: none">Public sewer service will remedy an existing ground water contamination or other health problem by replacing septic systems and community on-site sewage systems; orA formal binding agreement to service an approved planned development was made prior to the establishment of an Urban Growth Area; orIt is mandated by the State Department of Health DOH, Ecology, or other regulatory agency with jurisdiction over local ground water quality.
UT 11.7	Interim on-site approved septic systems may be permitted within the urban growth area if public sewer service is not available, only if: <ul style="list-style-type: none">Ground water protection policies are enforced; andThe design incorporates stub-outs to facilitate future hook-up; andThe applicant agreed not to object to future Local Improvement Districts (LID) or hook-up actions; andLand use densities and soil conditions allow for safe operation of the septic system.
UT 11.8	Sewage system expansion must be consistent with Yakima County's Horizon 2046 and other land use planning documents, as well as the sewage treatment plant capacity.

May 1997 – GMA Update ~~June 2017~~ December 2026

PC DRAFT

Horizon 2040
Utilities Element

UT 11.9	Review current local planning and interlocal service agreements and restructure governmental and financing mechanisms as needed to ensure timely, scheduled access to regional sewer services.
----------------	--

1025

URBAN WATER:

PURPOSE STATEMENT UT 12

1028 *To protect the health, safety and welfare of its citizens, Yakima County should ensure the quantity
1029 and quality of its water resources. This goal and its policies ~~addresses~~address this issue by
1030 requiring specific development standards for water and sewer services in unincorporated urban
1031 areas.*

GOAL UT 12:	Ensure protection of public health, safety and welfare by safeguarding surface and groundwater resources.
--------------------	--

POLICIES:

UT 12.1	Require all new urban development to connect to public drinking water supplies, or provide proof of water availability, both legal and physical, prior to the County's land use or building permit approval.
UT 12.2	Encourage use of community (public) water supply wells where area wide public water supply systems are not available.
UT 12.3	Establish well location and construction standards that will facilitate future interconnection with other public water supply systems.
UT 12.4	Encourage development or consolidation of public water supplies through: <ul style="list-style-type: none">• County application for water rights from the state for cluster development;• Developing financing mechanisms for public water supplies;• Establishing latecomer agreements to compensate and encourage use of existing public water supplies.

1032

1033

RURAL WATER:

PURPOSE STATEMENT UT 13

1034 *To protect the health, safety and welfare of its citizens, Yakima County should ensure the
1035 quantity and quality of its water resources. This goal and its policies ~~addresses~~address this issue
1036 by requiring specific development standards for water and sewer services in rural areas.*

GOAL UT 13:	Ensure groundwater resources are safeguarded to protect public health and welfare.
--------------------	---

POLICIES:

UT 13.1	Limit <u>the</u> number of wells penetrating the aquifer to protect groundwater quality and supply.
----------------	---

May 1997 – GMA Update ~~June 2017~~December 2026

Chapter 9 | 36

PC DRAFT

PC DRAFT

Horizon 204~~60~~

Utilities Element

UT 13.2	Encourage use of community (public) water supply.
UT 13.3	Encourage development and consolidation of community water supplies through: <ul style="list-style-type: none">• County application for water rights for cluster development;• Establishing financing methods for public water supply;• Developing latecomers' fees to compensate/encourage use of existing public water supplies.

1039

NATURAL GAS:

PURPOSE STATEMENT UT 14

Natural gas can supplement electric power needs in the County. This goal and its policies encourages its use through cooperation with the utility provider in the installation of new lines in conjunction with road improvement or new construction projects.

GOAL UT 14:	Coordinate natural gas service within Urban Growth Areas that have or desire service.
POLICIES:	
UT 14.1	Foster the extension of natural gas distribution lines to and within Urban Growth Areas.
UT 14.2	Coordinate land use and facility planning to allow eventual siting and construction of natural gas distribution lines within rights-of-way which are being dedicated or within roads which are being constructed or reconstructed.

1045

1046

SOLID WASTE:

PURPOSE STATEMENT UT 15

This goal and its policies encourage continued improvements in methods of reducing landfill waste and recognizes that planning for future land needs is an important cost-control method.

GOAL UT 15:	Manage the solid waste system in a manner that cost effectively preserves the environment and protects the public health.
POLICIES:	
UT 15.1	Identify and adopt measures to improve the energy efficiency of recycling and trash collection, and implement feasible and effective measures.
UT 15.2	Review and revise the County Solid and Moderate Risk Waste Management Plan at least every five years; continue to assess the need for solid waste transfer facilities, recycling centers, and materials recovery facilities, identifying potential locations and suggesting revisions to the zoning code as needed.

May 1997 – GMA Update ~~June 2017~~[December 2026](#)

Chapter 9 | 37

PC DRAFT

PC DRAFT

Horizon 2040
Utilities Element

UT 15.3	Provide an environmentally safe bio-solids management program to provide for present and future bio-solids utilization needs.
----------------	---

1051
1052
1053
1054

PURPOSE STATEMENT UT 16

In order to reduce the amount of waste that ends up in landfills, this goal and its policies encourages recycling and educational programs designed to reduce and minimize waste.

GOAL UT 16: Improve existing waste reduction/recycling programs.	
POLICIES:	
UT 16.1	In developing and implementing waste reduction/recycling programs, strive to maximize the use of local markets, capabilities, and resources.
UT 16.2	Establish requirements for the use of recycled and used materials in construction activities undertaken by the County or its contractors.
UT 16.3	Provide convenient recycling opportunities to the public to maximize participation in waste reduction/recycling programs.
UT 16.4	Encourage owners of new and existing multifamily, commercial and industrial buildings to provide space for separating and storing recyclable materials.
UT 16.5	Encourage recipients of construction and demolition permits to separate, recycle, and/or reuse demolition debris.
UT 16.6	Encourage applicants for construction permits to use recycled and used materials, where practicable. <ul style="list-style-type: none">• Provide information on how and where to obtain used and recycled materials.• Assess the economic, legal, and technical feasibility of requiring the use of specific recycled or used materials in certain types of construction.

1055
1056

ELECTRICITY:

PURPOSE STATEMENT UT 17

System planners for electrical utilities design and build their systems to follow population and employment growth projections. The electrical system is planned and designed to serve the electrical loads that are projected, based on county and city plans. Construction is typically phased in as growth actually occurs. Future electrical service plans are designed for not only the new and increased load from future growth, but changes to improve reliability and power quality. Availability of low cost, reliable electrical power is an important consideration for many industries. Transmission lines are typically sited on a single pole, located within the road right-of-way. Electrical substations are fenced, are generally impenetrable, are not energized below nine feet, and are generally compatible with most other land uses.

PC DRAFT

Horizon 204~~60~~

Utilities Element

GOAL UT 17:	Promote the delivery of electrical services, on demand, within the County consistent with utility's public service obligations.
POLICIES:	
UT 17.1	Yakima County and the utilities should identify and preserve corridors to accommodate future electric power transmission and distribution lines. Corridors designation should include: <ul style="list-style-type: none">• Identification of appropriate shared uses;• Recognition of County roads as utility corridors; and• Evaluation of proposed facility plans on a system-wide basis, rather than project by project.
UT 17.2	When new, expanded or upgraded transmission is required, use of existing corridors should be evaluated first. Yakima County should facilitate appropriate corridor sharing among different utility types and owners.
UT 17.3	Yakima County should encourage underground placement of existing distribution lines through such tools as local improvement districts.
UT 17.4	Install new utilities lines underground where feasible. WAVNP
UT 17.5	Work with electrical utility providers and neighboring jurisdictions to meet regional service needs and to accommodate future facility improvements.
UT 17.6	Ensure there are sufficient electric utility facilities that are sufficient to support economic development. Foster cooperation among private enterprise, the County, and the utility provider.

1068

1069

1070 **TELECOMMUNICATIONS:**

1071 PURPOSE STATEMENT UT 18

1072 *Telecommunications are important to Yakima County's economic future. This goal and its*
1073 *policies ~~supports~~support the installation of telecommunication systems, ~~encourages~~encourage*
1074 *coordination with service providers, and ~~seeks~~seek to reduce telecommunications' impact on*
1075 *the physical and natural environment.*

GOAL UT 18:	Promote reliable and cost-effective telecommunication systems to facilitate communication among members of the public, public institutions, and business.
POLICIES:	
UT 18.1	The County's development regulations should be flexible and receptive to innovations and advances in telecommunications technology.
UT 18.2	Minimize visual impacts when authorizing the siting of new telecommunication facilities by requiring low visibility technology, including: <ul style="list-style-type: none">• Reduced heights;• Low mass/slender profile poles;• Use of existing towers and buildings;

May 1997 – GMA Update ~~June 2017~~December 2026

Chapter 9 | 39

PC DRAFT

PC DRAFT

Horizon 2040
Utilities Element

	<ul style="list-style-type: none">• Co-locating multiple users on a single site/facility; and,• Requiring removal of abandoned telecommunication sites when new replacement site approvals are authorized.
--	---

1076

1077

1078 **YAKIMA URBAN GROWTH AREA UTILITIES GOALS AND POLICIES:**

1079 ***Water***

GOAL YKUT 1	Provide adequate water services within the urban area in a manner that is environmentally sensitive, safe and aesthetically compatible with surrounding land uses.
POLICIES:	
YKUT 1.1	Coordinate with other jurisdictions and suppliers in the Urban Area to ensure a reliable, economic source of water and to address the long-term regional water demand needs of all of the area's agencies and suppliers.
YKUT 1.2	Encourage the conservation of water resources and undertake actions, when possible and appropriate, to conserve water and water resources.

1080

1081

1082

1083 ***Wastewater***

GOAL YKUT 2:	Protect public health and environmental quality through appropriate and efficient design, installation and maintenance of sanitary sewer facilities.
POLICIES:	
YKUT 2.1	Work with adjoining jurisdictions ⁷ and local purveyors to manage, regulate and maintain the regional sewer systems.

1084

1085

May 1997 – GMA Update ~~June 2017~~[December 2026](#)

Chapter 9 | 40

PC DRAFT