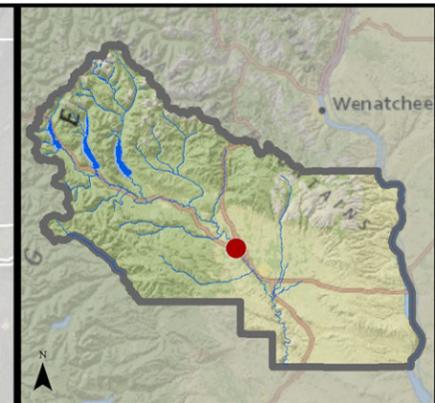
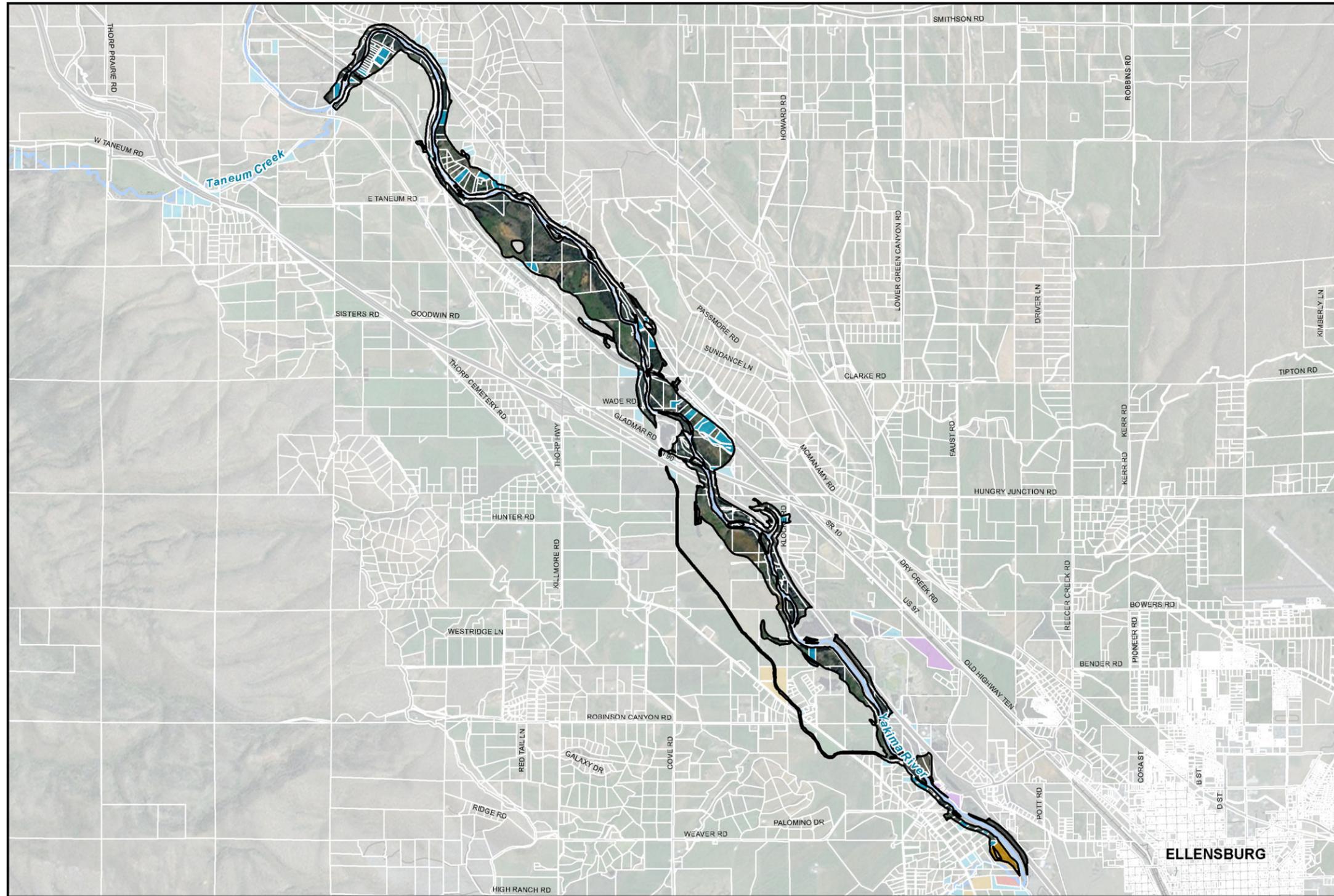
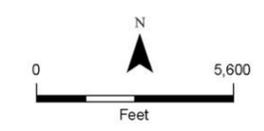


Yakima River, Reach 4– Rural Conservancy SED



- Legend**
- Build Out Analysis Category**
- Vacant Dividable
 - Vacant Non-dividable
 - Occupied Dividable
 - Commercial/Industrial
 - Unlikely to Develop
- Other**
- Parcels
 - Shoreline Jurisdiction
 - City Limits
 - UGA Boundaries



Kittitas County Regional SMP Update
 Cumulative Impacts Analysis
 Yakima River Reach 04
 Rural Conservancy



Yakima River, Reach 4– Rural Conservancy SED

Existing Conditions (By ecological function)	Foreseeable Future Development	Potential Risks to Ecological Functions	SMP Provisions Addressing Functions at Risk		Anticipated Future Performance
			Protection (Proposed SMP regulations with reference by SMP section number)	Restoration (Final Restoration Plan)	
<p>Water Quality</p> <p>The reach is listed by Ecology (2008) for low dissolved oxygen levels, fecal coliform, pH, and elevated water temperatures. A TMDL has been implemented for temperature. Despite these listings, the water quality within the reach is adequate to support a large wild trout fishery.</p> <p>There is minimal functional buffer located within the reach; the river is bordered by agricultural fields, rural residential development, and roads (including I-90).</p>	<p>According to the build-out analysis, there is potential for approximately 42 new single family residences on existing lots (ranging in area from approximately 2 to 8 acres), with another 3 residences/lots created by subdividing existing parcels into 5-acre lots, per current zoning regulations.</p> <p>Additionally, property owners may wish to construct hard armoring in the future to protect structures built close to the shoreline.</p>	<p>Clearing vegetation for home sites within the riparian zone would reduce water shading, and could exacerbate water temperature problems. An increase in impervious surfaces, resulting from new roofs and pavement, could increase sediment and pollutant runoff to the stream. Use of fertilizers and herbicides within new landscaping areas could also degrade water quality.</p>	<p>Residential development is a permitted use in Rural Conservancy SED. Structural shoreline stabilization requires a conditional use permit (Section 3.10).</p> <p>A 100 foot buffer from the ordinary high water mark is required for all new uses and development. A 15 foot building setback from the buffer is also required (Sections 4.5.B and 5.21).</p>	<ul style="list-style-type: none"> • Revegetate disturbed riparian areas, where practical (<i>no identified sponsor</i>). • Investigate opportunities for floodplain reconnection and setting-back of hydromodifications (<i>no identified sponsor</i>). • Explore restoration of former gravel pits to create more natural floodplain and riverine habitat (<i>no identified sponsor</i>). • Kittitas Reach Habitat Protection (Sponsors: Kittitas County, Forterra, and others) 	<p>New residential development, with modern septic systems, would be unlikely to significantly degrade the water quality of the river. In addition, the presence of a wide CMZ along the creek will likely result in large setbacks from the river. No anticipated cumulative impacts to water quality are anticipated.</p>
<p>Habitat</p> <p>The reach provides habitat for a variety of salmonid species, including spawning and rearing habitat for spring Chinook and summer steelhead. Patches of riparian shrub and forest cover remain in the reach, but much of the riparian area has been disturbed by agriculture, rural residential development, and roads (including I-90).</p> <p>Priority mule deer winter range habitat is mapped at the upstream end of the reach.</p>	<p><i>See above</i></p>	<p>Clearing vegetation for home sites within the riparian zone could reduce large woody debris recruitment, stream shading, and wildlife habitat. These impacts are generally more pronounced for development within floodplains.</p> <p>An increase in shoreline armoring may impact fish habitat and habitat-forming processes within the river.</p>	<p>Shoreline buffers must be maintained in a predominately well-vegetated condition. Clearing not associated with an allowed use or development is not allowed. (Section 4.5.B Regulation #4).</p> <p>New residential development, including lot creation, must not require structural flood hazard reduction measures within the floodway or shoreline stabilization measures during the life of the development/use (Section 5.14.B. Regulations #1 and 2).</p>	<p><i>See above</i></p>	<p>The presence of a wide CMZ along the river will likely result in large building setbacks, which would minimize the amount of potential forest cover loss within shoreline jurisdiction. There is potential for new armoring along existing residences, but this would require mitigation under the SMP. Therefore, no anticipated cumulative impacts to habitat are anticipated.</p>

Yakima River, Reach 4– Rural Conservancy SED

Existing Conditions (By ecological function)	Foreseeable Future Development	Potential Risks to Ecological Functions	SMP Provisions Addressing Functions at Risk		Anticipated Future Performance
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<p>Hydrology</p> <p>The hydrology of the Yakima River is highly controlled by three upstream reservoirs, operated to store and supply water for irrigation purposes. A wide floodplain and channel migration zone is present along the majority of the reach. The channel is constrained along most of its length by roads, the John Wayne trail, and other linear hydromodifications.</p>	<p><i>See above</i></p>	<p>Construction of new homes and hard armoring within the active channel migration zone could alter stream conditions, as well as increase downstream flood, sedimentation, and erosion patterns. New structures built within the floodplain could increase downstream flooding problems.</p>	<p>The development must be located landward of the channel migration hazard area or the applicant must submit documentation that demonstrates the parcel is effectively protected or has minimal risk of channel migration (Section 4.2.P, Regulation #7).</p> <p>Subdivisions must have lots that contain at least one site, including access and utility locations that is suitable for use or development and is not located entirely within a floodway or channel migration zone,. The new lots must adhere to the standard shoreline buffer without buffer averaging or reduction (Section 4.2.C, Regulation #7).</p> <p>New uses must not reduce the effective flood storage volume within frequently flooded areas. Compensatory storage must be provided if grading, fill or other activity will occur within a frequently flooded area (Sections 4.2.R, Regulation #2, 4.2.T, Regulation #1).</p>	<p><i>See above</i></p>	<p>The presence of a wide CMZ along the creek will likely result in large building setbacks. New structures may be constructed in the floodplain, but compensatory floodplain storage would be required. There is potential for new armoring along existing residences, but this would require mitigation under the SMP. Therefore, no cumulative impacts to hydrology are anticipated.</p>