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 The Evergreen State College  
 Thurston Conservation District  
 Thurston Economic  
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**MEMORANDUM**

**TO:** Brad Medrud, Deputy Community Development Director  
 City of Tumwater Community Development

**FROM:** Michael Ambrogi, Senior Planner  
 Thurston Regional Planning Council

**DATE:** February 26, 2025

**SUBJECT:** Tumwater Land Use Alternatives Analysis

**OVERVIEW**

The City of Tumwater is examining three different land use alternatives to meet its responsibilities to plan for how to accommodate new housing types and targets by affordability and determine the level of public services and facilities required to serve the increased population of the City by 2045. Three land use alternatives are identified:

- Alternative #1: No change to existing land use designations and related zoning requirements.
- Alternative #2: Moderate increase land use designation capacity and range of housing types.
- Alternative #3: Substantial increase in land use designation capacity and range of housing types.

The City requested TRPC conduct an analysis of the three alternatives' impacts on land developable for residential uses, land developable for commercial or industrial uses, and capacity for future dwelling units.

**BACKGROUND**

Thurston Regional Planning Council (TRPC) maintains a land capacity model for Thurston County. This database was used to develop TRPC's population and employment forecast (2018 update) and the 2021 Buildable Lands Report for Thurston County. The model includes multiple metrics, including acres of developable land and "residential capacity," the theoretical maximum number of dwellings that could be built on a parcel. In general, the actual number of dwellings constructed over a 20-year time period will be less than the capacity as not all property owners will choose to develop their land, even if they could do so, or because there is less demand for new housing in some areas.



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The inputs to the land capacity model include:

- **Existing land use and development.** Some land uses — like churches or parks — are unlikely to further develop in the future even if there is developable land on a parcel.
- **Vested subdivision plans.** Projects that have recently been approved will develop as permitted, even if zoning or development regulations are later changed.
- **Zoning.** Zoning informs the type of future development — whether residential, commercial/industrial, or a mix of both — and the density of future residential development.
- **Average development densities.** In zones that allow a range of uses and housing densities, historical trends inform what is likely in the future.
- **Critical areas and environmental constraints.** Wetlands, steep slopes, and other constraints limit the amount of future development.
- **Ownership.** For Port, tribal, and many government-owned properties, capacity is determined on a case-by-case basis in consultation with staff.

Documentation for the land capacity model is available at <https://www.trpc.org/236> (See “Population and Employment Land Supply Assumptions”).

The City of Tumwater requested an analysis showing the effects of three different land use alternatives. The alternatives are being considered as part of the City’s periodic Comprehensive Plan update, due by December 31, 2025.

## ASSUMPTIONS

The model used for the land use alternatives analysis is consistent with those used in the *2021 Buildable Lands Report for Thurston County*<sup>1</sup>. The buildable lands model assumptions and the baseline outputs were reviewed by an advisory committee consisting of jurisdiction staff, members of the real estate and development community, and citizen representatives.

For the city of Tumwater’s land use alternatives analysis, the following changes were made to the model:

- Existing land use was updated to account for development completed, approved, or under review as of February 24, 2025.
- The land use alternative uses zoning as of February 2025
- Changes were made to mixed use development assumptions and residential density assumptions. While the Buildable Lands model uses average residential densities observed over the past ten to 20 years (“achieved densities”), the land use alternatives generally uses the highest allowed density.
- Parcels in the City’s unincorporated urban growth area use the zoning assumptions of the equivalent incorporated city zone.

Table 1 shows the mixed use and residential density assumptions used in the analysis.

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<sup>1</sup> <http://www.trpc.org/164>

**Table 1: Mixed Use and Residential Density Assumptions for Land Use Alternatives**

Zone	Zone Name	Percent Residential	Alt. #1 Units/Acre	Alt. #2 Units/Acre	Alt. #3 Units/Acre
ARI	Airport Related Industry	0%	0	0	0
BD	Brewery District: Bates North	25%	20	20	20
BD	Brewery District: Bates South	25%	8	8	8
BD	Brewery District: Bluff	25%	10	10	10
BD	Brewery District: Deschutes	25%	20	20	20
BD	Brewery District: Knoll	25%	30	30	30
BD	Brewery District: Triangle	25%	20	20	20
BD	Brewery District: Valley	0%	0	0	0
CBC	Capitol Boulevard Community	50%	30	30	30
CS	Community Services	0%	0	0	0
GC	General Commercial	30%	40	40	40
GB	Greenbelt	0%	0	0	0
HI	Heavy Industrial	0%	0	0	0
HC	Historic Commercial	0%	0	10	10
LI	Light Industrial	0%	0	0	0
MHP	Manufactured Home Park	100%	9	9	9
MU	Mixed Use	30%	14	14	20
MFH	Multifamily High Density Residential	100%	29	30	30
MFM	Multifamily Medium Density Residential	100%	15	15	19
NC	Neighborhood Commercial	20%	8	8	9
OS	Open Space	0%	0	0	0
R/SR	Residential/Sensitive Resource	100%	4	4	4
SFL	Single-Family Low Density Residential	100%	7	9	9
SFM	Single-Family Medium Density Residential	100%	9	9	9
TC	Town Center: Civic	0%	0	0	0
TC	Town Center: Mixed Use	5%	30	30	30
TC	Town Center: Multifamily Residential	80%	20	20	20
TC	Town Center: Professional Office	0%	0	0	0

Note: "Percent Residential" refers to the estimated share of land that will develop for residential uses in mixed-use zones. "Unit/Acre" is assumption for net dwelling units per acre on developable residential land.

In some cases, a parcel's ownership or current land use may override these assumptions. For example, on parcels where the current use is a school or church, the model assumes that the parcel is already fully developed, with no additional developable residential land in the future, even if the underlying zoning is residential.

### *Land Capacity Model Limitations*

TRPC's land capacity model does not address bulk and dimensional standards such as lot sizes, building setbacks, or building heights that might limit future capacity. These were not included in the analysis.

For the purposes of this analysis, residential capacity does not take into account reductions due to non-residential uses in residential zones (such as schools, parks, and churches), or capacity for accessory dwelling units. These types of capacity are included in the *2021 Buildable Lands Report*.

TRPC's land capacity model uses general assumptions intended for regionwide analyses. How many dwelling units can be built or how many acres can be developed for a particular parcel is determined by jurisdiction planning or building department staff as part of the development review process. Their determinations may vary from this analysis.

### ANALYSIS

The land use alternatives analysis estimates that 2,560 acres of land in Tumwater are developable under current conditions (Alternative #1), of which about 70% is likely to develop for residential uses. Total developable land would increase by less than ten acres in Alternatives #2 and #3.

Tumwater currently has capacity for an estimated 12,138 additional dwelling units on vacant or infill properties, plus 770 dwelling units on redevelopable properties. Capacity on vacant or infill lots would increase by 1,224 units in Alternative #2 and 1,685 units in Alternative #3. Alternative #3 would also increase the estimated capacity on redevelopable lots by 12 units.

Tables 2 and 3 provide a summary of land use alternative analysis. Estimates for each zone are in Tables 4 to 7.

**Table 2: Developable Land by Land Use Alternative, Tumwater City and UGA**

Type of Development (Acres)	Alternative #1	Alternative #2	Alternative #3
Residential	1,806.7	1,811.4	1,812.0
Commercial/Industrial	754.0	754.0	754.3
<b>Total</b>	<b>2,560.7</b>	<b>2,565.3</b>	<b>2,566.3</b>

**Table 3: Residential Capacity by Land Use Alternative, Tumwater City and UGA**

Type of Capacity (Dwelling Units)	Alternative #1	Alternative #2	Alternative #3
Vacant/Infill Lots	12,138	13,362	13,823
Redevelopment Lots	770	770	782
<b>Total</b>	<b>12,908</b>	<b>14,132</b>	<b>14,605</b>

**Table 4: Estimated Acres of Land Developable for Residential Uses**

<b>Zone</b>	<b>Zone Name</b>	<b>City/UGA</b>	<b>Alternative #1</b>	<b>Alternative #2</b>	<b>Alternative #3</b>
ARI	Airport Related Industry	City	—	—	—
BD	Brewery District: Bates North	City	—	—	—
BD	Brewery District: Bates South	City	0.1	0.1	0.1
BD	Brewery District: Bluff	City	0.8	0.8	0.8
BD	Brewery District: Deschutes	City	0.5	0.5	0.5
BD	Brewery District: Knoll	City	0.1	0.1	0.1
BD	Brewery District: Triangle	City	< 0.1	< 0.1	< 0.1
BD	Brewery District: Valley	City	—	—	—
CBC	Capitol Boulevard Community	City	3.0	3.0	3.0
CS	Community Services	City	—	—	—
GC	General Commercial	City	27.1	27.1	27.1
GC	General Commercial	UGA	7.2	7.2	7.2
HI	Heavy Industrial	City	—	—	—
HI	Heavy Industrial	UGA	—	—	—
HC	Historic Commercial	City	—	—	—
LI	Light Industrial	City	—	—	—
LI	Light Industrial	UGA	—	—	—
MHP	Manufactured Home Park	City	0.9	0.9	0.9
MU	Mixed Use	City	5.2	5.2	5.2
MU	Mixed Use	UGA	0.6	0.6	0.6
MFH	Multifamily High Density Residential	City	10.7	10.7	10.7
MFM	Multifamily Medium Density Residential	City	63.8	63.8	64.0
MFM	Multifamily Medium Density Residential	UGA	117.9	117.9	118.4
NC	Neighborhood Commercial	City	—	—	—
NC	Neighborhood Commercial	UGA	—	—	—
R/SR	Residential/Sensitive Resource	City	159.8	159.8	159.8
R/SR	Residential/Sensitive Resource	UGA	28.1	28.1	28.1
SFL	Single-Family Low Density Residential	City	477.1	479.8	479.8
SFL	Single-Family Low Density Residential	UGA	541.7	543.6	543.6
SFM	Single-Family Medium Density Residential	City	257.8	257.8	257.8
SFM	Single-Family Medium Density Residential	UGA	104.0	104.0	104.0
TC	Town Center: Civic	City	—	—	—
TC	Town Center: Mixed Use	City	—	—	—
TC	Town Center: Multifamily Residential	City	0.3	0.3	0.3
TC	Town Center: Professional Office	City	—	—	—
—	<b>Tumwater City and UGA</b>	<b>Total</b>	<b>1,806.7</b>	<b>1,811.4</b>	<b>1,812.0</b>

**Table 5: Estimated Acres of Land Developable for Commercial/Industrial Uses**

<b>Zone</b>	<b>Zone Name</b>	<b>City/UGA</b>	<b>Alternative #1</b>	<b>Alternative #2</b>	<b>Alternative #3</b>
ARI	Airport Related Industry	City	6.7	6.7	6.7
BD	Brewery District: Bates North	City	0.1	0.1	0.1
BD	Brewery District: Bates South	City	0.2	0.2	0.2
BD	Brewery District: Bluff	City	2.5	2.5	2.5
BD	Brewery District: Deschutes	City	1.6	1.6	1.6
BD	Brewery District: Knoll	City	0.2	0.2	0.2
BD	Brewery District: Triangle	City	0.1	0.1	0.1
BD	Brewery District: Valley	City	4.0	4.0	4.0
CBC	Capitol Boulevard Community	City	5.1	5.1	5.1
CS	Community Services	City	0.4	0.4	0.4
GC	General Commercial	City	80.9	80.9	80.9
GC	General Commercial	UGA	29.6	29.6	29.6
HI	Heavy Industrial	City	—	—	—
HI	Heavy Industrial	UGA	—	—	—
HC	Historic Commercial	City	0.5	0.5	0.5
LI	Light Industrial	City	256.3	256.3	256.3
LI	Light Industrial	UGA	215.3	215.3	215.3
MHP	Manufactured Home Park	City	—	—	—
MU	Mixed Use	City	21.7	21.7	21.8
MU	Mixed Use	UGA	17.7	17.7	17.9
MFH	Multifamily High Density Residential	City	—	—	—
MFM	Multifamily Medium Density Residential	City	10.2	10.2	10.2
MFM	Multifamily Medium Density Residential	UGA	11.3	11.3	11.3
NC	Neighborhood Commercial	City	2.1	2.1	2.1
NC	Neighborhood Commercial	UGA	1.2	1.2	1.2
R/SR	Residential/Sensitive Resource	City	—	—	—
R/SR	Residential/Sensitive Resource	UGA	—	—	—
SFL	Single-Family Low Density Residential	City	2.4	2.4	2.4
SFL	Single-Family Low Density Residential	UGA	18.1	18.1	18.1
SFM	Single-Family Medium Density Residential	City	35.9	35.9	35.9
SFM	Single-Family Medium Density Residential	UGA	—	—	—
TC	Town Center: Civic	City	—	—	—
TC	Town Center: Mixed Use	City	29.0	29.0	29.0
TC	Town Center: Multifamily Residential	City	0.9	0.9	0.9
TC	Town Center: Professional Office	City	—	—	—
—	<b>Tumwater City and UGA</b>	<b>Total</b>	<b>754.0</b>	<b>754.0</b>	<b>754.3</b>

**Table 6: Capacity for Future Dwelling Units on Vacant or Infill Lots**

<b>Zone</b>	<b>Zone Name</b>	<b>City/UGA</b>	<b>Alternative #1</b>	<b>Alternative #2</b>	<b>Alternative #3</b>
ARI	Airport Related Industry	City	—	—	—
BD	Brewery District: Bates North	City	—	—	—
BD	Brewery District: Bates South	City	—	—	—
BD	Brewery District: Bluff	City	8	8	8
BD	Brewery District: Deschutes	City	10	10	10
BD	Brewery District: Knoll	City	602	602	602
BD	Brewery District: Triangle	City	1	1	1
BD	Brewery District: Valley	City	—	—	—
CBC	Capitol Boulevard Community	City	390	390	390
CS	Community Services	City	—	—	—
GC	General Commercial	City	1,230	1,230	1,230
GC	General Commercial	UGA	290	290	290
HI	Heavy Industrial	City	—	—	—
HI	Heavy Industrial	UGA	—	—	—
HC	Historic Commercial	City	—	—	—
LI	Light Industrial	City	—	—	—
LI	Light Industrial	UGA	—	—	—
MHP	Manufactured Home Park	City	8	8	8
MU	Mixed Use	City	42	42	62
MU	Mixed Use	UGA	8	8	11
MFH	Multifamily High Density Residential	City	304	316	316
MFM	Multifamily Medium Density Residential	City	634	634	793
MFM	Multifamily Medium Density Residential	UGA	1,118	1,118	1,397
NC	Neighborhood Commercial	City	—	—	—
NC	Neighborhood Commercial	UGA	—	—	—
R/SR	Residential/Sensitive Resource	City	486	486	486
R/SR	Residential/Sensitive Resource	UGA	76	76	76
SFL	Single-Family Low Density Residential	City	2,098	2,620	2,620
SFL	Single-Family Low Density Residential	UGA	2,699	3,389	3,389
SFM	Single-Family Medium Density Residential	City	1,547	1,547	1,547
SFM	Single-Family Medium Density Residential	UGA	581	581	581
TC	Town Center: Civic	City	—	—	—
TC	Town Center: Mixed Use	City	—	—	—
TC	Town Center: Multifamily Residential	City	6	6	6
TC	Town Center: Professional Office	City	—	—	—
—	<b>Tumwater City and UGA</b>	<b>Total</b>	<b>12,138</b>	<b>13,362</b>	<b>13,823</b>

**Table 7: Capacity for Future Dwelling Units on Redevelopment Lots**

<b>Zone</b>	<b>Zone Name</b>	<b>City/UGA</b>	<b>Alternative #1</b>	<b>Alternative #2</b>	<b>Alternative #3</b>
ARI	Airport Related Industry	City	—	—	—
BD	Brewery District: Bates North	City	3	3	3
BD	Brewery District: Bates South	City	—	—	—
BD	Brewery District: Bluff	City	—	—	—
BD	Brewery District: Deschutes	City	4	4	4
BD	Brewery District: Knoll	City	2	2	2
BD	Brewery District: Triangle	City	21	21	21
BD	Brewery District: Valley	City	—	—	—
CBC	Capitol Boulevard Community	City	338	338	338
CS	Community Services	City	—	—	—
GC	General Commercial	City	306	306	306
GC	General Commercial	UGA	18	18	18
HI	Heavy Industrial	City	—	—	—
HI	Heavy Industrial	UGA	—	—	—
HC	Historic Commercial	City	—	—	—
LI	Light Industrial	City	—	—	—
LI	Light Industrial	UGA	—	—	—
MHP	Manufactured Home Park	City	—	—	—
MU	Mixed Use	City	25	25	35
MU	Mixed Use	UGA	12	12	13
MFH	Multifamily High Density Residential	City	—	—	—
MFM	Multifamily Medium Density Residential	City	—	—	—
MFM	Multifamily Medium Density Residential	UGA	—	—	—
NC	Neighborhood Commercial	City	2	2	3
NC	Neighborhood Commercial	UGA	1	1	1
R/SR	Residential/Sensitive Resource	City	—	—	—
R/SR	Residential/Sensitive Resource	UGA	—	—	—
SFL	Single-Family Low Density Residential	City	—	—	—
SFL	Single-Family Low Density Residential	UGA	—	—	—
SFM	Single-Family Medium Density Residential	City	—	—	—
SFM	Single-Family Medium Density Residential	UGA	—	—	—
TC	Town Center: Civic	City	—	—	—
TC	Town Center: Mixed Use	City	5	5	5
TC	Town Center: Multifamily Residential	City	33	33	33
TC	Town Center: Professional Office	City	—	—	—
—	<b>Tumwater City and UGA</b>	<b>Total</b>	<b>770</b>	<b>770</b>	<b>782</b>



*Bush Prairie Habitat Conservation Plan.*

The City of Tumwater and the Port of Olympia are working on a habitat conservation plan (HCP) to mitigate the impacts of development on four species protected or likely to be listed under the Endangered Species Act. The latest draft of the Bush Prairie HCP identifies significant mitigation within Tumwater's city limits. Therefore, the land use alternatives analysis reduced capacity in the zones where mitigation is most likely to occur by the acreage shown in Table 8. The estimated acres removed for mitigation were provided by Tumwater staff.

The analysis showed that mitigation will likely reduce land developable for residential use by 156 acres and land developable for commercial/industrial uses by 33 acres (Tables 9 and 10) across all three alternatives. Mitigation would likely reduce the capacity for future dwelling units by 852 units in Alternative #1, 973 units in Alternative #2, and 1,028 units in Alternative #3. The analysis assumed that mitigation would not occur on redevelopable parcels.

**Table 8: Capacity Reductions for Future HCP Mitigation**

<b>Zone</b>	<b>Zone Name</b>	<b>Acres Removed for Mitigation</b>
MFH	Multifamily High Density Residential	5
MFM	Multifamily Medium Density Residential	30
MU	Mixed Use	30
SFL	Single-Family Low Density Residential	190
SFM	Single-Family Medium Density Residential	40
—	<b>Total</b>	<b>295</b>

Note: Acres removed for mitigation provided by Tumwater staff. Reduction only applied to capacity on vacant parcels.

**Table 9: Reduction in Acres of Land Developable for Residential Uses Due to HCP Mitigation**

<b>Zone</b>	<b>Zone Name</b>	<b>Alternative #1</b>	<b>Alternative #2</b>	<b>Alternative #3</b>
MFH	Multifamily High Density Residential	-3.7	-3.7	-3.7
MFM	Multifamily Medium Density Residential	-13.3	-13.3	-13.3
MU	Mixed Use	-5.8	-5.8	-5.8
SFL	Single-Family Low Density Residential	-110.3	-110.3	-110.3
SFM	Single-Family Medium Density Residential	-23.0	-23.0	-23.0
—	<b>Total</b>	<b>-156.1</b>	<b>-156.1</b>	<b>-156.1</b>

**Table 10: Reduction in Acres of Land Developable for Commercial/Industrial Uses Due to HCP Mitigation**

<b>Zone</b>	<b>Zone Name</b>	<b>Alternative #1</b>	<b>Alternative #2</b>	<b>Alternative #3</b>
MFH	Multifamily High Density Residential	-7.8	-7.8	-7.8
MFM	Multifamily Medium Density Residential	-13.5	-13.5	-13.5
MU	Mixed Use	-5.4	-5.4	-5.4
SFL	Single-Family Low Density Residential	-6.9	-6.9	-6.9
SFM	Single-Family Medium Density Residential	0.0	0.0	0.0
—	<b>Total</b>	<b>-33.6</b>	<b>-33.6</b>	<b>-33.6</b>

**Table 11: Capacity for Future Dwelling Units on Vacant or Infill Lots**

<b>Zone</b>	<b>Zone Name</b>	<b>Zone Name</b>	<b>Alternative #1</b>	<b>Alternative #2</b>
MFH	Multifamily High Density Residential	-106	-110	-110
MFM	Multifamily Medium Density Residential	-127	-127	-159
MU	Mixed Use	-50	-50	-73
SFL	Single-Family Low Density Residential	-433	-549	-549
SFM	Single-Family Medium Density Residential	-137	-137	-137
—	<b>Total</b>	<b>-852</b>	<b>-973</b>	<b>-1,028</b>