



MEMORANDUM

Preliminary Residential Buildable Land Inventory Clatsop County Comprehensive Housing Study

DATE January 23, 2019
TO Clatsop County Housing TAC
FROM Matt Hastie and Jamin Kimmell, Angelo Planning Group
CC File

The purpose of this memo is to summarize the methodology and initial results of a Geographic Information Systems (GIS)-based analysis of residential lands in Clatsop County. The analysis is part of the Clatsop County Housing Study. The results may inform the strategies and approaches that may be effective and appropriate for increasing the supply or configuration of buildable residential land, which can lead to greater overall housing supply. The memo summarizes the methodology of the analysis, then presents the results in a series of tables and maps.

METHODOLOGY

Step 1 – Identify Environmental Constraints

In order to estimate lands that may be buildable for residential uses, it is necessary to remove any lands where development is constrained by environmental resources or hazards. The following environmental constraints were identified based on City and County zoning regulations. GIS data on location of these constraints was obtained from Clatsop County GIS and other local sources.

- FEMA Floodplain Areas: All areas designated in the floodplain or floodway, based on the most recent version of FEMA floodplain maps released in July of 2018.
- National Wetland Inventory: All wetlands mapped by the U.S. Department of Fish and Wildlife, except where a jurisdiction has adopted a local wetland inventory.
- Local Wetland Inventory: The local wetland inventories of the cities of Warrenton, Cannon Beach, and Gearhart. Only wetlands deemed locally significant were identified as not buildable areas.
- Active Dune Overlay: The portion of the Beach and Dune Overlay where development is restricted on active dune areas in order to conserve and protect these areas.
- Steep Slopes: Data from the National Elevation Dataset (NED) was used to estimate the amount of land that is unavailable for development due to slopes of over 25 percent. The amount of buildable land in each parcel was adjusted if it contains steep slopes. This

adjustment was not applied to Astoria or Seaside, as these cities had previously completed a BLI that included slope data.

These lands were combined and then overlaid with County taxlots to estimate the amount of land in each parcel where development is limited by these environmental constraints. These constrained areas were deducted from the total area of the parcel to estimate the portion of the parcel that is potentially buildable.

Step 2 – Classify Parcels by Development Status

Each parcel in the county was classified based on the potential for new development on the parcel. This classification is intended to separate parcels that have capacity for development from those that do not. The classification is based on the amount of potentially buildable area on the parcel and the valuation of improvements (buildings, other structures). Improvement values are sources from Clatsop County Assessor data. The following four categories were used to classify parcels:

- **Developed:** Parcels that have an improvement value of more than \$10,000, but do not meet the definition of Partially Vacant or Constrained.
- **Constrained:** Parcels with less than 5,000 square feet unconstrained land. These parcels are assumed to not be developable due to the small area on the lot that is potentially buildable.
- **Partially Vacant:** Parcels that meet the state definition as partially vacant under the “safe harbor” provisions for residential buildable land inventories.¹ These parcels are at least a half-acre in size and have an existing single-family dwelling. Due to the lack of a sewer system and existing development patterns, parcels in the City of Gearhart were classified as Partially Vacant if they were at least one acre in size and had an existing single-family dwelling. A quarter-acre was removed from the buildable area of these parcels to account for the existing dwelling. Parcels with an existing multi-family residential use or other non-residential use were all classified as Developed.
- **Vacant:** Parcels with more than 5,000 square feet of unconstrained land and improvement value less than \$10,000. These parcels have sufficient area for development and little to no improvements. In the City of Gearhart, parcels must have at least 10,000 square feet of unconstrained land to be classified as Vacant.

¹ OAR 660-024-0050, Land Inventory and Response to Deficiency

(2) As safe harbors, a local government, except a city with a population over 25,000 or a metropolitan service district described in ORS 197.015(13), may use the following assumptions to inventory the capacity of buildable lands to accommodate housing needs:

(a) The infill potential of developed residential lots or parcels of one-half acre or more may be determined by subtracting one-quarter acre (10,890 square feet) for the existing dwelling and assuming that the remainder is buildable land;

(b) Existing lots of less than one-half acre that are currently occupied by a residence may be assumed to be fully developed.

Step 3 – Incorporate Local Buildable Land Inventories for Seaside and Astoria

Two Clatsop County jurisdictions had completed a BLI recently, and these inventories were incorporated into this analysis. The City of Seaside completed a BLI in 2013 that identified vacant and redevelopable parcels. Parcels classified redevelopable were classified as Partially Vacant for this analysis. The City of Astoria completed a BLI in 2011 that included detailed assessment of all parcels that were vacant or partially vacant. For partially vacant parcels, the BLI estimated the amount of the parcel that was buildable, given a range of constraints. For this analysis, both the classification of parcel and the amount of buildable land in each parcel was updated to align with this 2011 BLI. However, parcels that were developed between 2011 and 2018, and no longer had capacity for additional development, were classified as Developed.

Step 4 – Estimate Potentially Buildable Lands and Housing Unit Capacity

Lands were classified by zone type (residential, commercial, etc.) to estimate the amount of land that is potentially developable that is zoned for residential uses. To do this, all City and County zoning designations were classified into generalized zone types, and each parcel was assigned a zone and zone type. Where parcels span multiple zones, the parcel was assigned the zone that covers the centroid (center point) of the parcel.

To estimate the capacity for development of new housing units on each parcel, the acres of potentially buildable land on each parcel was multiplied by the maximum density (housing units per acre) of the parcel based on its current zoning designation. The assumed maximum density of each zone is shown in Table 4. Due to the lack of a sewer system, the maximum density of any parcel in the City of Gearhart was limited to 4.35 units per acre (10,000 square foot per unit), except if the maximum density of the zone is less than 4.35 units per acre.

Housing unit capacity on each lot was rounded down to whole number of units. For example, if the maximum density standard would permit 1.8 units on the lot, then the capacity was rounded down to 1.0 units based on the assumption that a variance or adjustment would be necessary to build 2.0 units on that lot. Thus, the housing unit capacity represents the capacity that is permitted outright in the zone without any variances or adjustments.

RESULTS

The results of the analysis are presented in Tables 1-4 below. In total, the County has 8,690 acres of land zoned for residential uses that is potentially buildable. The zoned capacity of new housing units on that land totals 18,076 units. As shown in Table 2, there is also capacity for new housing units to be developed on land in commercial zones that allow multifamily development. There is capacity for 1,033 housing units in these commercial zones.

Table 1. Summary of Potentially Buildable Lands and Housing Unit Capacity, Residential Zones

Parcel Status	Total Parcels	Total Acres	Constrained Acres	Potentially Buildable Acres	Housing Unit Capacity
Constrained	2,463	1,344	1,238	-	-
Developed	15,059	9,344	2,110	-	-
<i>Total Not Buildable</i>	<i>17,522</i>	<i>10,688</i>	<i>3,348</i>	<i>-</i>	<i>-</i>
Partially Vacant	1,055	4,169	349	3,496	4,407
Vacant	3,992	7,260	1,707	5,202	13,669
Total Potentially Buildable	5,047	11,429	2,056	8,698	18,076

Table 2. Summary of Potentially Buildable Lands and Housing Unit Capacity, Commercial Zones that Permit Multifamily Development

Parcel Status	Total Parcels	Total Acres	Constrained Acres	Potentially Buildable Acres	Housing Unit Capacity
Constrained	577	180	162	-	-
Developed	1,721	642	195	-	-
<i>Total Not Buildable</i>	<i>2,298</i>	<i>821</i>	<i>357</i>		
Partially Vacant	40	39	2	30	146
Vacant	311	262	36	226	887
Total Potentially Buildable	351	301	38	257	1,033

Table 3. Potentially Buildable Lands and Housing Unit Capacity by Jurisdiction, Residential Zones

Jurisdiction	Potentially Buildable Acres		Housing Unit Capacity	
	Partially Vacant	Vacant	Partially Vacant	Vacant
Astoria	22	331	524	4,943
Cannon Beach	37	86	123	329
Clatsop County	3,239	4,175	2,054	1,806
Gearhart	71	146	249	452
Seaside	15	69	136	469
Warrenton	113	392	1,321	5,670
Grand Total	3,496	5,200	4,407	13,669

Figure 1. Housing Unit Capacity by Jurisdiction, Residential Zones

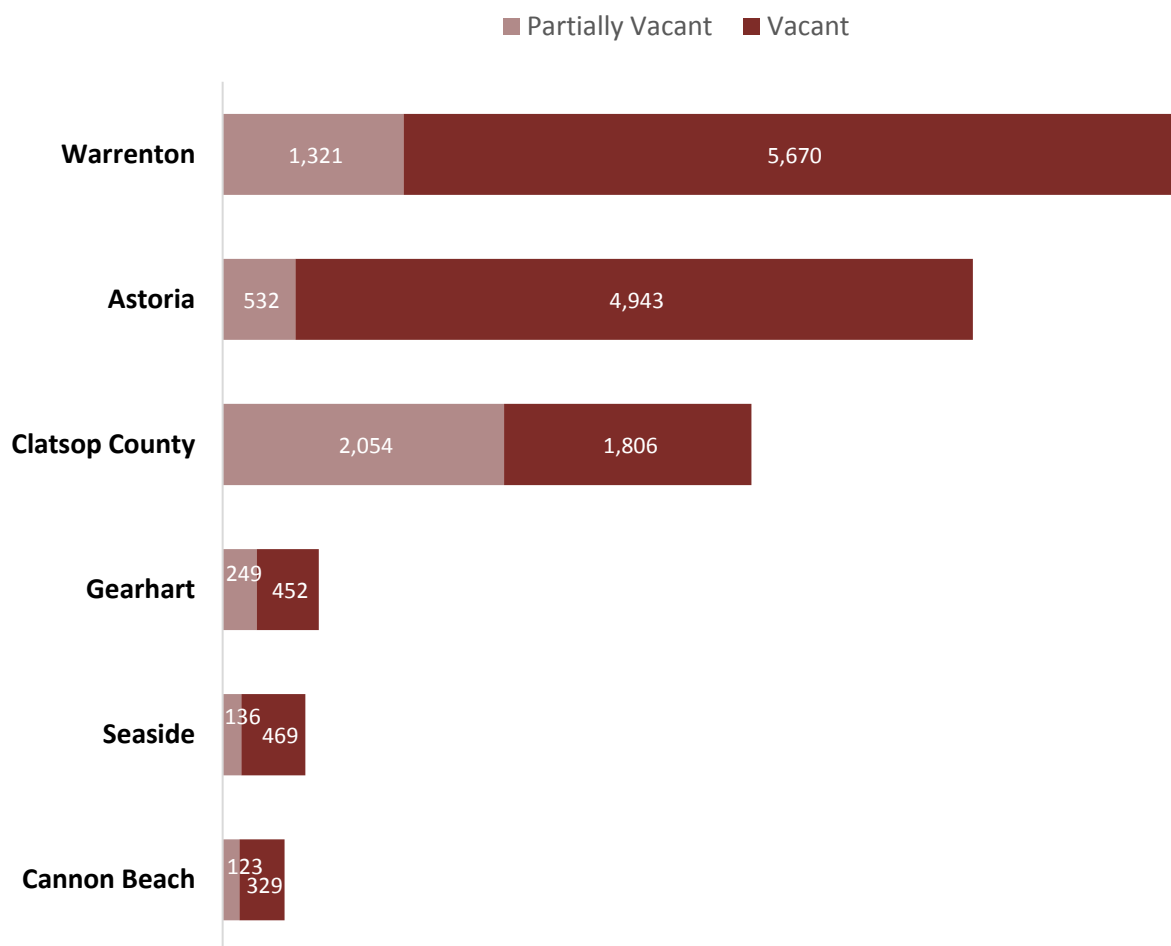
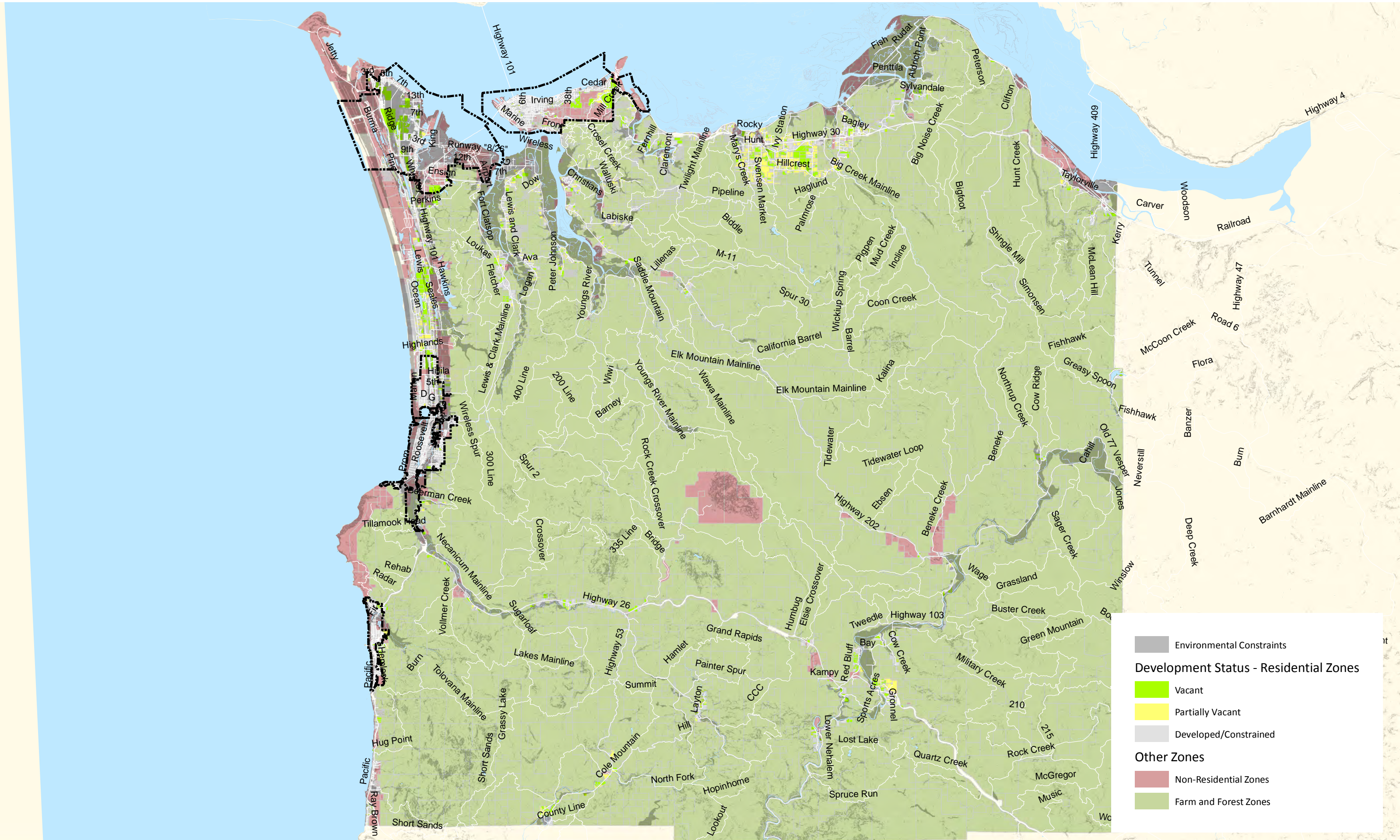
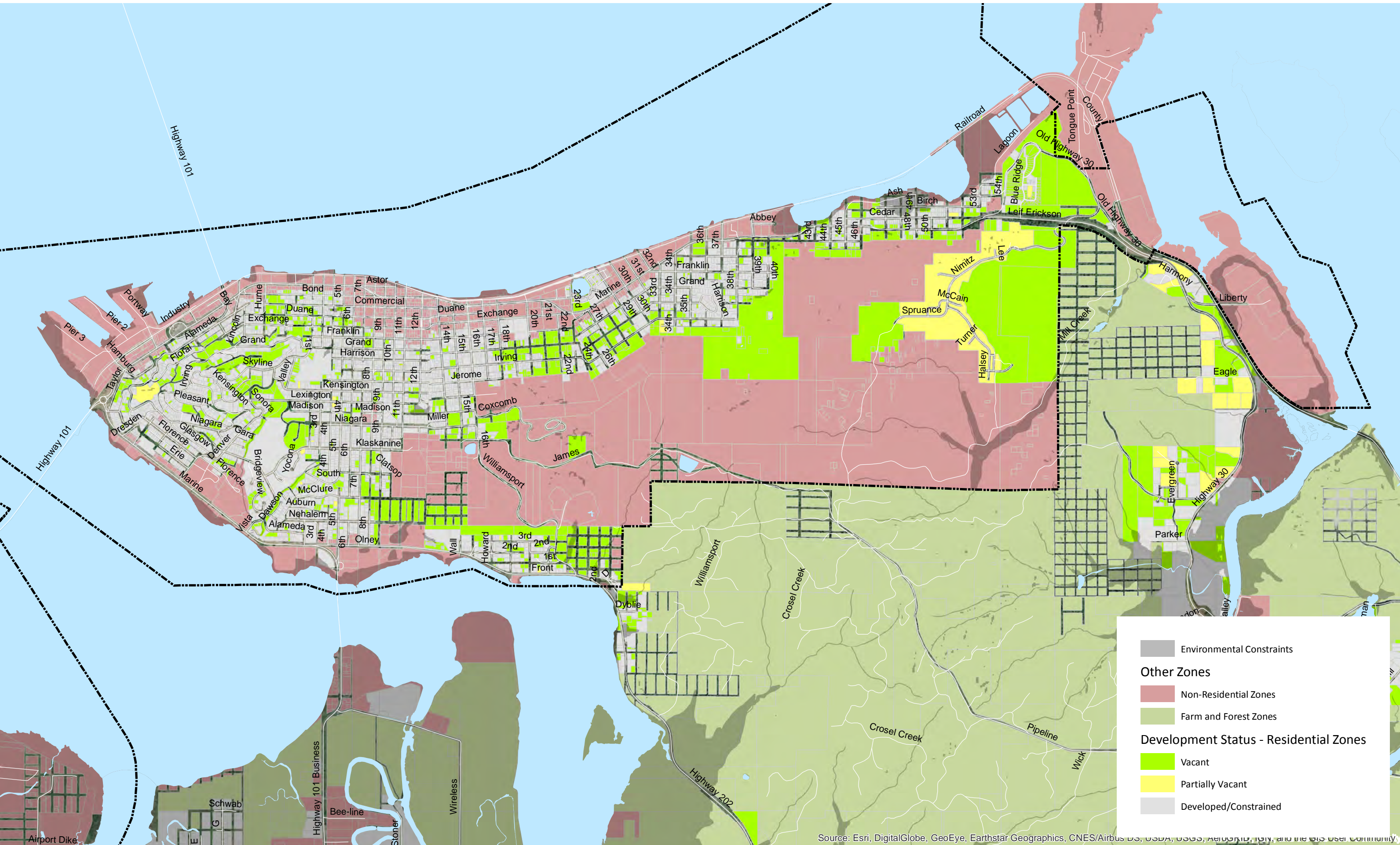


Table 4. Potentially Buildable Lands and Housing Unit Capacity by Zone, Residential Zones

Zone	Potentially Buildable Acres		Maximum Density (units/acre)	Housing Unit Capacity	
	Partially Vacant	Vacant		Partially Vacant	Vacant
Astoria					
AH-MP		1	25.0		74
R1	1	48	8.7	2	183
R2	2	128	15.4	20	1,147
R3	20	153	25.7	502	3,539
Subtotal	22	331	--	524	4,943
Cannon Beach					
MP	1		8.7	4	
R1	1	8	8.7	8	50
R2	1	9	8.7	6	48
R3		2	15.4		21
RAM		4	15.4		52
RL	24	39	4.4	96	133
RM		1	15.4		6
RVL	10	24	1.0	9	19
Subtotal	37	86	--	123	329
Clatsop County					
CBR	52	56	1.0	43	33
CR	13	60	2.2	21	77
KS-RCR	454	305	1.0	390	241
RA-1	314	548	0.5	122	116
RA-2	1,272	1,011	0.5	532	358
RA-5	945	1,971	0.2	161	236
RC-MFR	3	4	8.7	25	30
RCR	120	78	5.8	658	427
RSA-SFR	11	45	5.8	57	229
SFR-1	55	96	1.0	45	59
Subtotal	3,239	4,175	--	2,054	1,806
Gearhart					
R1	54	110	4.35	221	390
R2	5	6	4.35	19	18
R3		1	4.35		5
RA	12	19	1.0	9	9

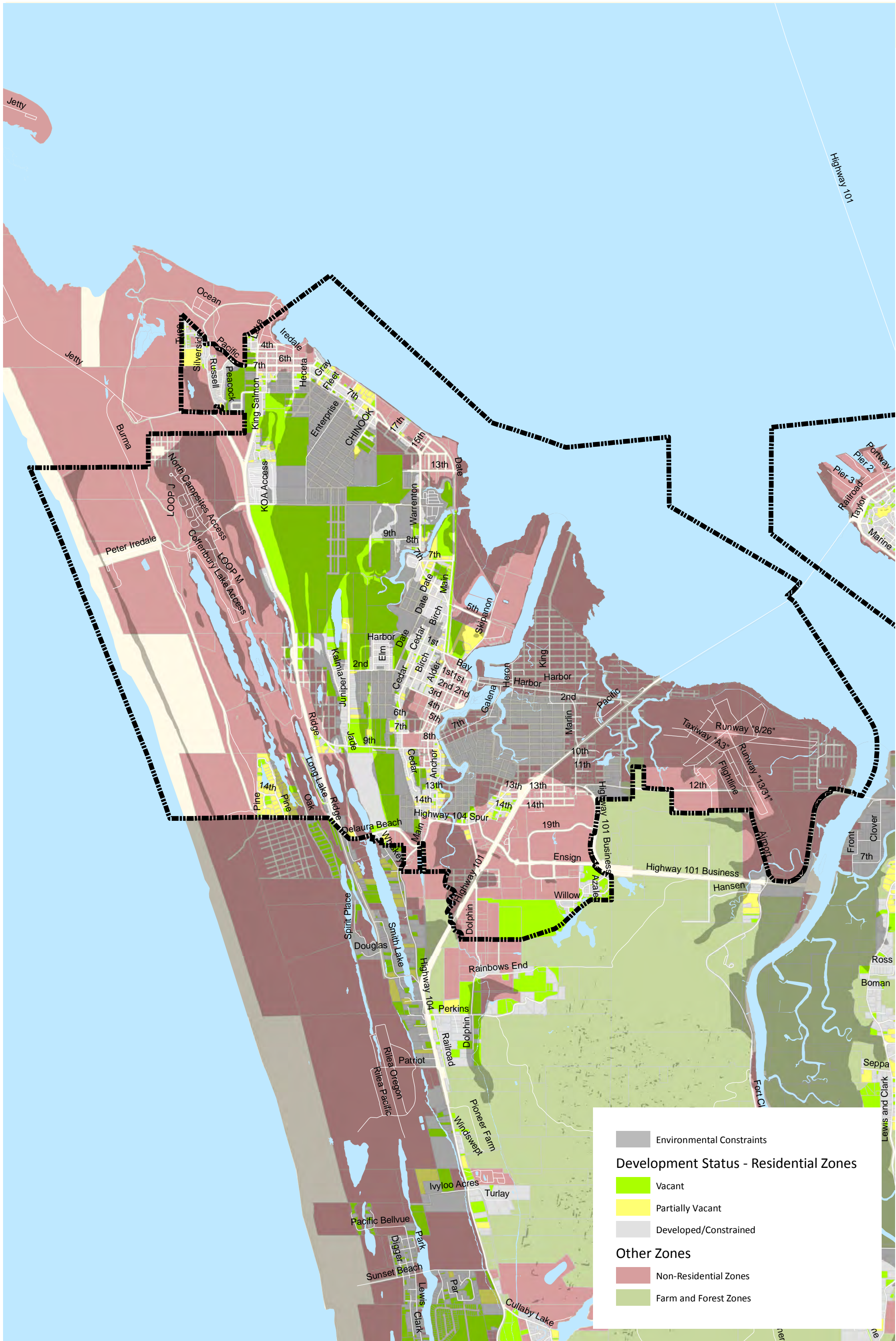
Zone	Potentially Buildable Acres		Maximum Density (units/acre)	Housing Unit Capacity	
	Partially Vacant	Vacant		Partially Vacant	Vacant
RCPD		10	4.35		30
Subtotal	71	146	--	249	452
Seaside					
R1	3	34	4.4	10	92
R2	7	27	10.0	61	235
R3	3	6	20.0	61	105
RR		1	10.0		36
SR	1	1	30.0	4	1
Subtotal	15	69	--	136	469
Warrenton					
R10	23	66	4.4	92	229
R40	41	40	4.4	151	147
RGM		106	8.7		906
RH	27	134	27.3	729	3,611
RM	21	46	17.4	349	777
Subtotal	113	392	--	1,321	5,670
Grand Total	3,496	5,195	--	4,407	13,350

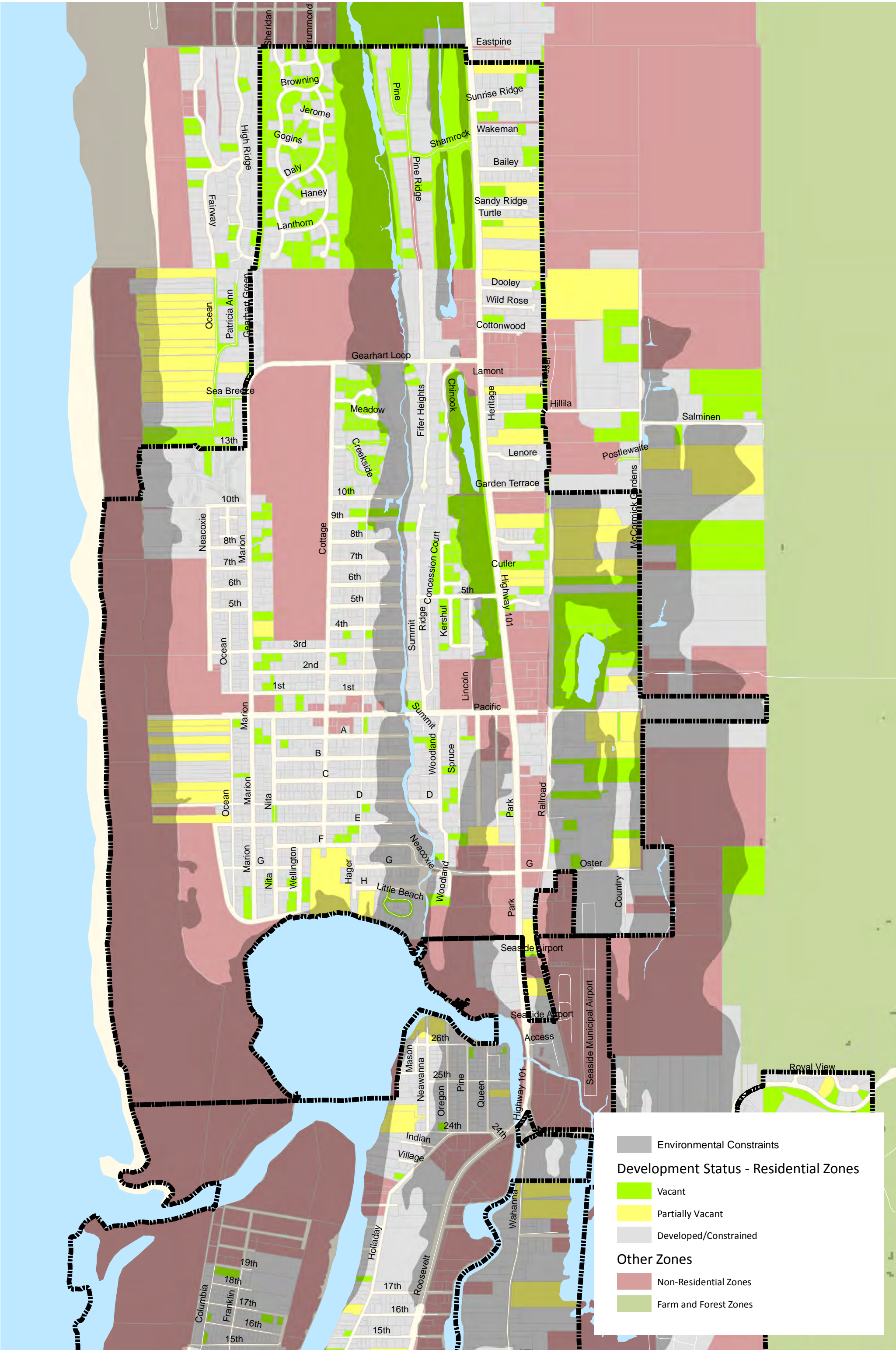


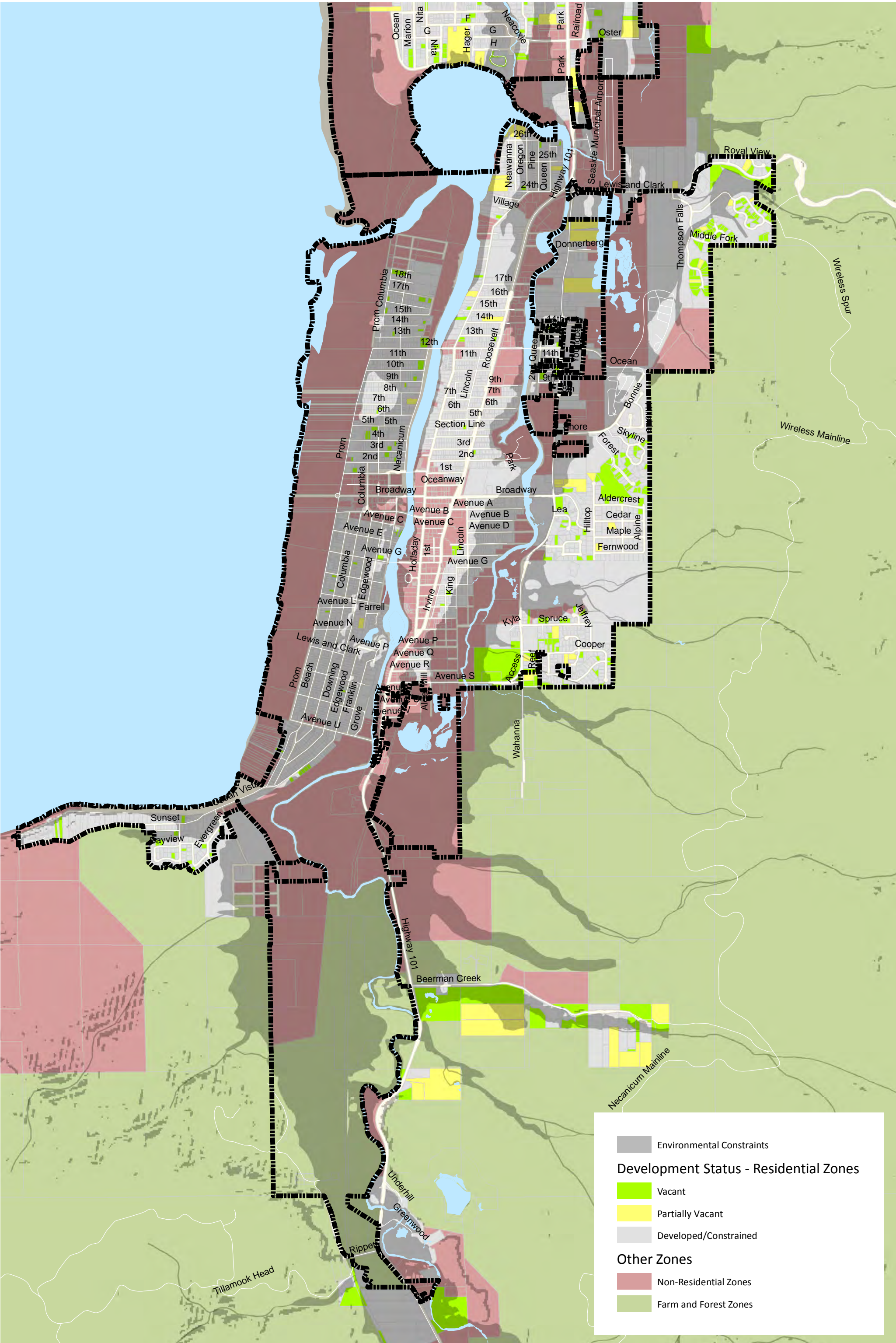


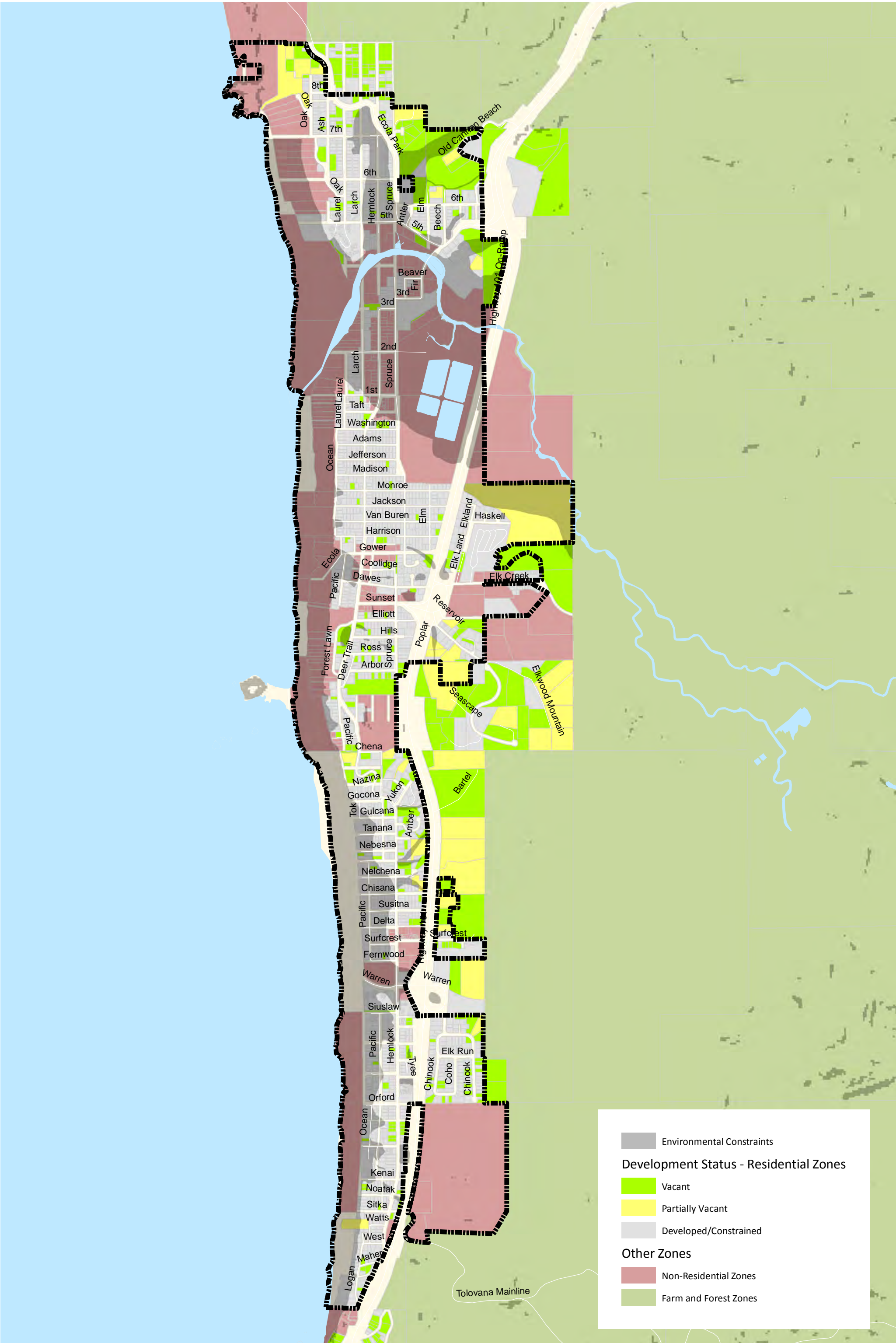
Environmental Constraints
Other Zones
 Non-Residential Zones
 Farm and Forest Zones
Development Status - Residential Zones
 Vacant
 Partially Vacant
 Developed/Constrained

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community









Environmental Constraints

Development Status - Residential Zones

- Vacant
- Partially Vacant
- Developed/Constrained

Other Zones

- Non-Residential Zones
- Farm and Forest Zones