MANZANITA UGB: BUILDABLE LANDS INVENTORY

October 10, 2019

Table of Contents

Overview

In accordance with OAR 660-008-0005 (2), an estimate of the buildable residential lands within the Manzanita UGB's Urban Growth Boundary (UGB) was completed with guidance provided by the Department of Land Conservation and Development (DLCD). The residential Buildable Lands Inventory (BLI) uses the most current Geographic Information Systems (GIS) data available for the Manzanita UGB's UGB (specific GIS data sources are shown in Table 1), and was verified through input received from Manzanita UGB staff and Planning Commission.

Buildable Lands Inventory Methodology

The objective of the residential BLI is to determine the amount of developable land available for future residential housing development. The steps taken to perform this analysis are as follows:

1. Create a unified environmental constraints layer. These are areas where land is unsuitable for development due to natural hazards

2. Generate the residential land base by identifying all taxlots that are zoned to allow residential development (either permitted outright or as a conditional use)

3. Subtract all environmentally constrained land from the residential land base

4. Classify land by development category (vacant, partially vacant, or redevelopable)

5. Calculate total net buildable acres by netting out land needed for public facilities such as roads and utility infrastructure and factoring a redevelopment rate for parcels deemed redevelopable

6. Apply a housing development factor for buildable land zoned commercial / mixed use

Table 1. Manzanita UGB BLI Data Sources

Dataset Name	Type	Description	Source
Zoning and Development Data			
Zoning	GIS Layer	Zoning designations for all of Manzanita UGB	Tillamook County
Taxlots	GIS Layer	All taxlots in Manzanita UGB	Tillamook County
Assessment and Taxation	GIS Layer	Assessed and market values for all taxlots in Manzanita UGB	Tillamook County
Building Footprints	GIS Layer	All building footprints in Manzanita UGB	Microsoft
Environmental Constraints Data			
Parks and Open Space	GIS layer	Parks and protected areas classified by agency in charge	USGS
Floodway	GIS layer	Floodways as defined by FEMA	Tillamook County
Slope	GIS layer	100' contour lines	Tillamook County
Wetlands	GIS layer	Wetland polygon features	Tillamook County
Streams	GIS layer	Lakes, streams, and other water bodies	Oregon Spatial Data Library

1. Environmental Constraints

The BLI methodology used to identify and remove development constraints for the Manzanita UGB is consistent with state guidance on buildable land inventories per OAR 660-008-0005(2) and DLCD's publication *Planning for Residential Growth guidebook*.
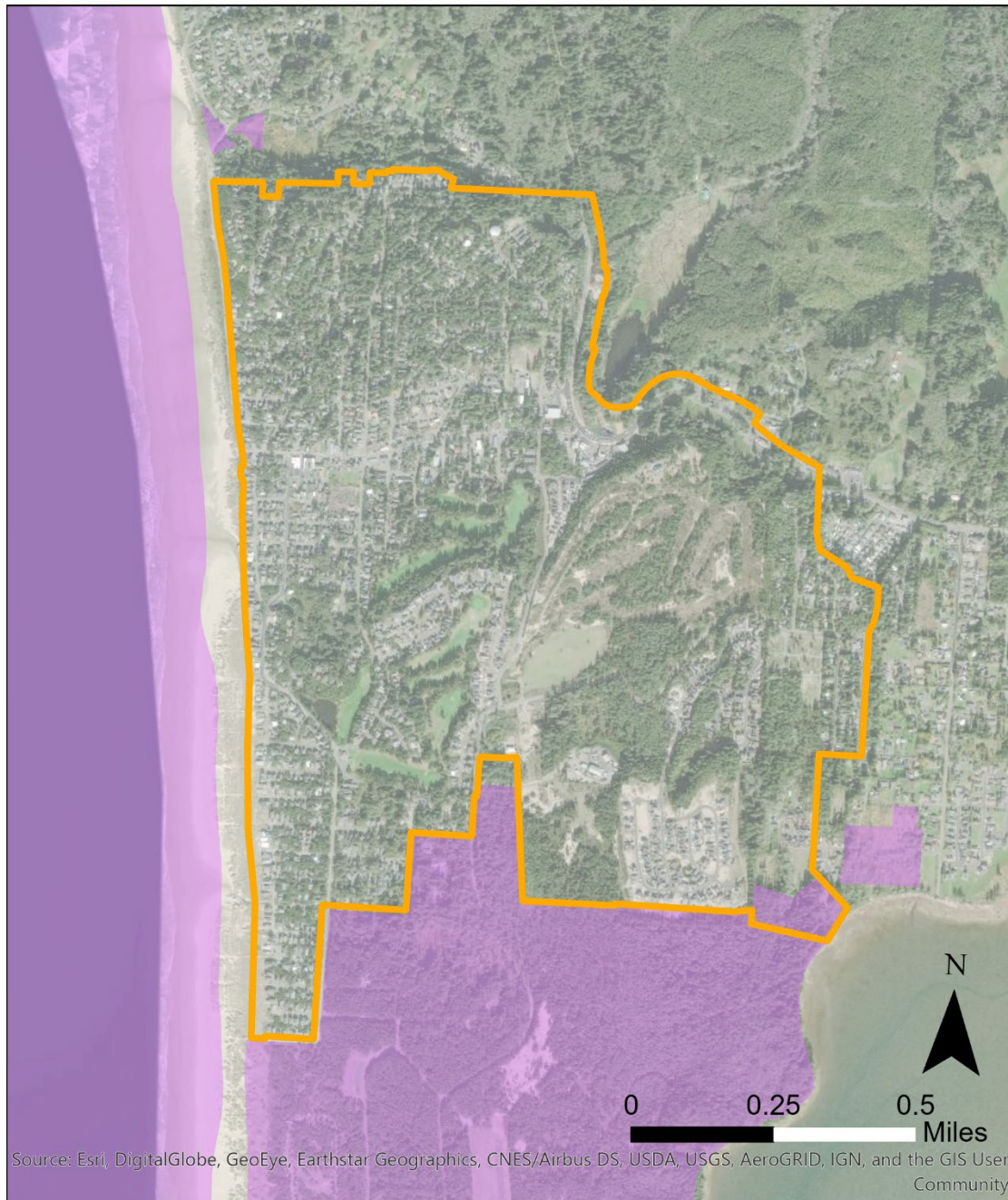
"Buildable Land" includes residential designated land, including vacant, partially vacant and land that is likely to be redeveloped. Public-owned land is generally not considered to be available for residential use unless the underlying zoning permits housing.

Land is considered to be "suitable and available" unless it is severely constrained by natural hazards listed below:

- Land identified as federal, state, or county protected lands. This includes any parks, open space, and public land. Agencies that overlook these lands are both public and private entities

- Land within floodways

- Land with slopes greater than 25%

- Land within wetlands. This includes areas identified as significant wetlands by the County

- Land within streams, rivers, and other water bodies. Guidance was followed from Article 4.140 (Requirements for Protection of Water Quality and Streambank Stabilization) under the City of Tillamook Land Use Ordinance

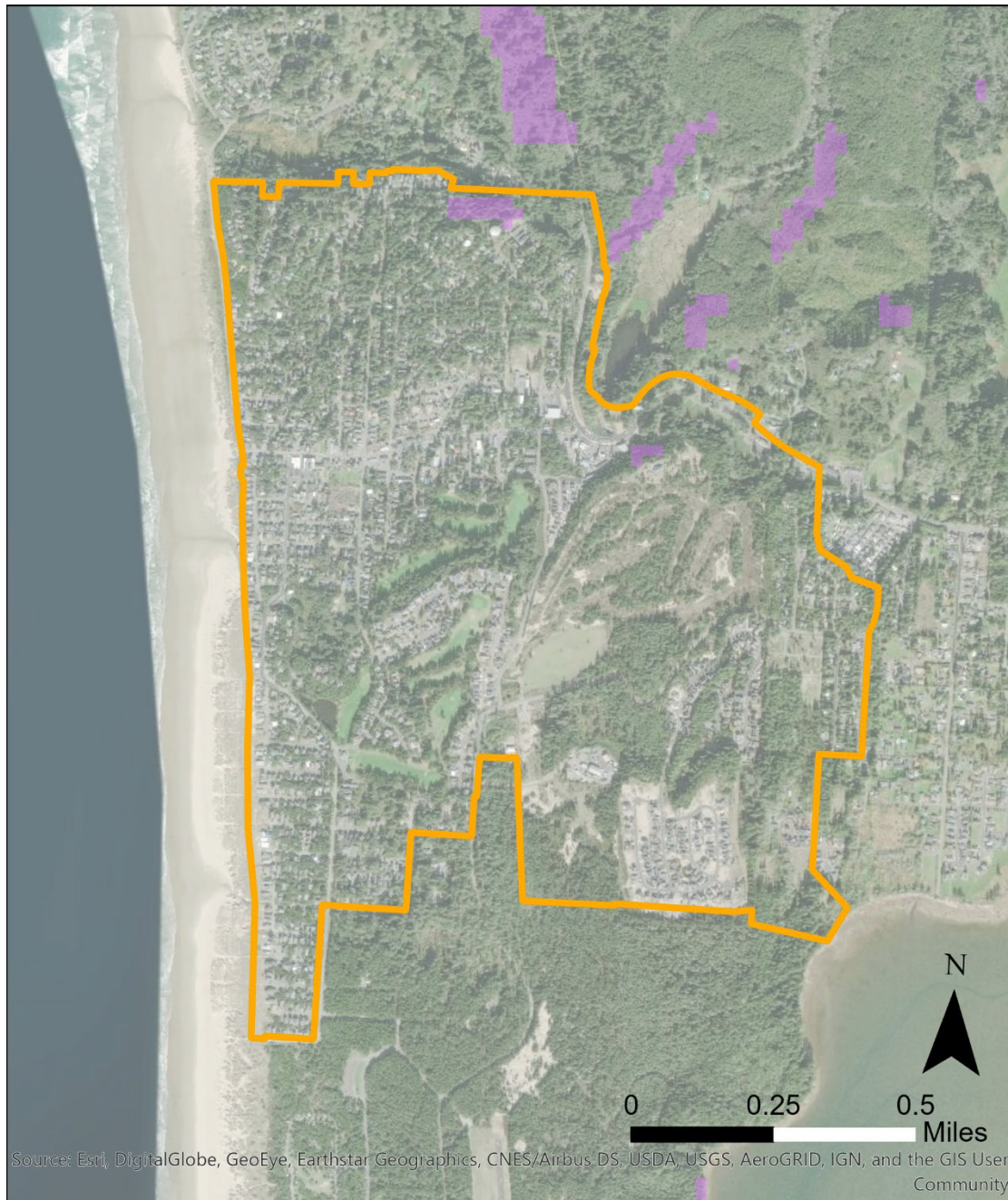Maps 1 - 5 illustrate these types of "environmental" constraints.

Map 1. Federal, State, and County Protected Lands, Manzanita UGB 2019

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

**City of Manzanita
Buildable Lands Inventory
2019**

Manzanita   Constraints

Protected Lands

0   0.25   0.5
Miles

N

Map 2. Slopes over 25%, Manzanita UGB 2019

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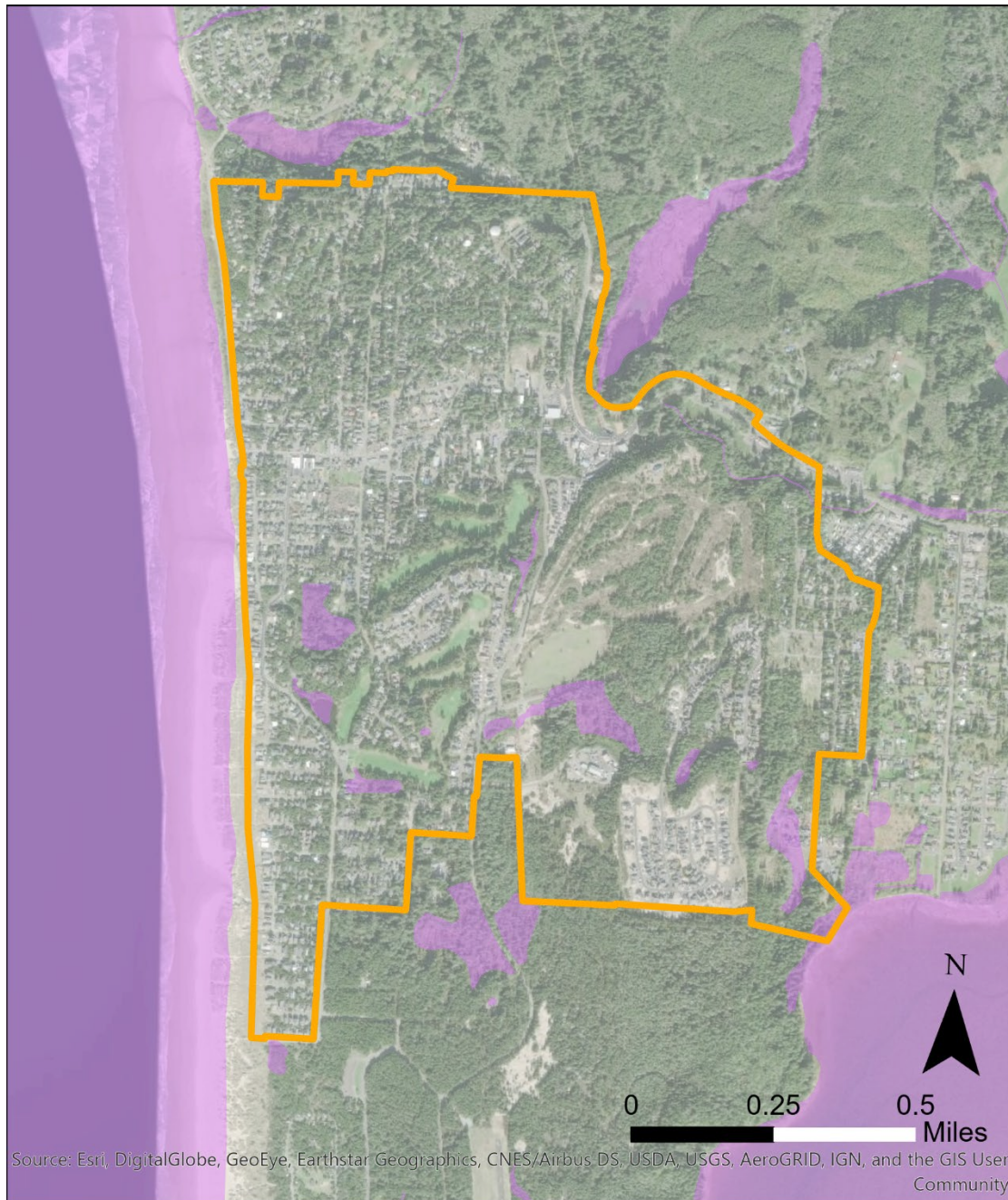
N

0   0.25   0.5
Miles

**City of Manzanita
Buildable Lands Inventory
2019**

Manzanita   Constraints

Slopes >25%

Map 3. Wetlands, Manzanita UGB 2019

City of Manzanita
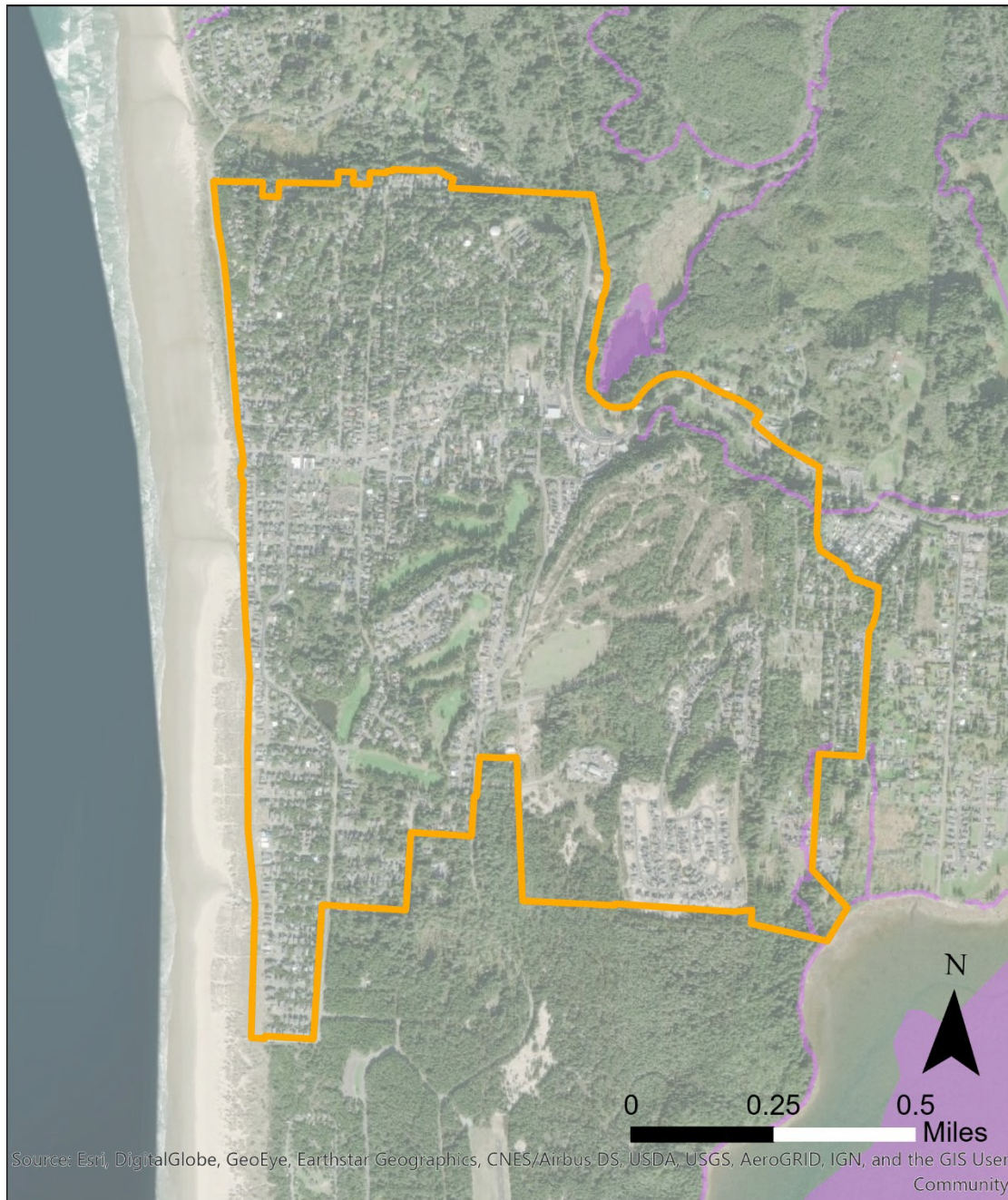Buildable Lands Inventory
2019

Map 4. Streams and Water Bodies, Manzanita UGB 2019

City of Manzanita
Buildable Lands Inventory
2019

Manzanita   Constraints

Streams and
Water Bodies

Map 5. All Constraints, Manzanita UGB 2019

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

N

0   0.25   0.5
Miles

**City of Manzanita
Buildable Land Inventory
2019**

Manzanita   Constraints
         All Constraints
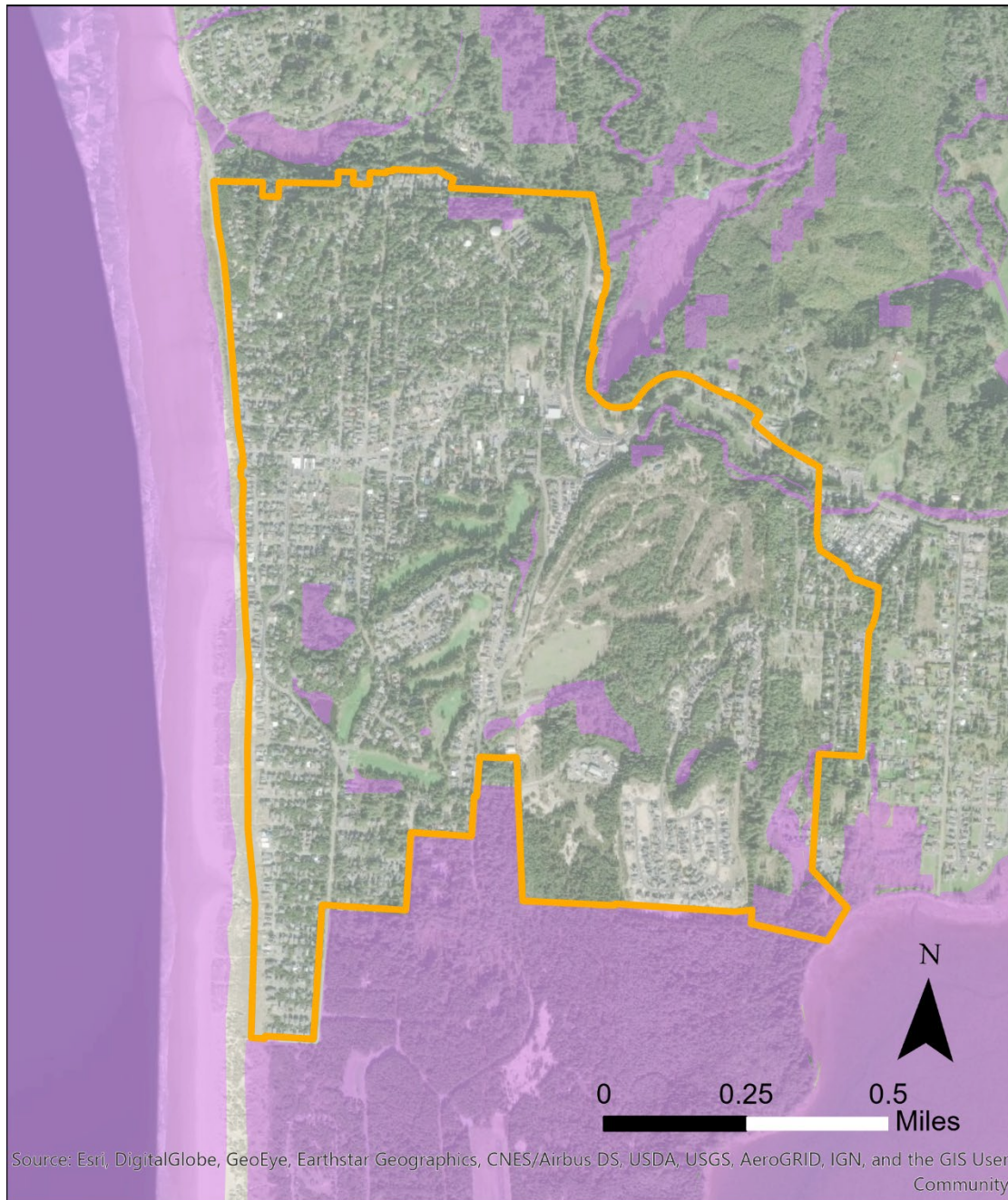
2. Residential Land Base

The residential land base is composed of lands that are zoned to allow residential uses by right or as conditional uses. This det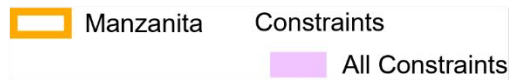ermination was made based on anlaysis of current Manzanita UGB zoning regulations. Properties that were considered to be within the residential land base include the following Manzanita UGB zoning classifications:

Table 2: Residential Land Base Zones

Zone	Description	Type
R-2	Medium Density Residential Zone	Residential
R-3	High Density Residential Zone	Residential
R-4	High Density Residential / Limited Commercial Zone	Residential
SR-R	Special Residential / Recreational	Residential
RMD	Residential Manufactured Dwelling	Residential
C-1	Commercial Zone	Commercial
LC	Limited Commercial Zone	Commercial

Generalized Zoning Designations

For analysis purposes, each of these zoning classifications were grouped into generalized zoning designations that represent the expected density of development based on the housing types/densities that are permitted by the county (housing types must be permitted outright or by conditional development approval). This includes: low, medium and high density residential categories (calculated based on unit per acre maximums or minimum lot sizes); as well as a commercial/mixed use category that encompasses all commercially zoned land that allows residential as a permitted or conditional use.

Table 3. Residential Development Intensity Categories

| Housing Categories	Definition
Low Density Residential	2 – 5 units per acre
Medium Density Residential	5 – 8 units per acre
High Density Residential	8 – 14 units per acre
Commercial / Mixed Use	Parcels with commercial zoning that allow housing

Acres by Generalized Zone

As noted above, the residential land base for the BLI includes all tax lots in Manzanita UGB with residential as a permitted or conditional use (see Table 2.). A summary of the land base by generalized plan designation is provided in Table 4.

Table 4: Gross Acreage in Residential Land Base, Manzanita UGB

Housing Category	Total Gross Acres	Percent
Low Density Residential	-	0.0%
Medium Density Residential	158	21.1%
High Density Residential	544	72.9%
Commercial / Mixed-use	45	6.0%
Total:	746	100%

Map 6. Residential Land Base (Includes Constrained Land), Manzanita UGB 2019
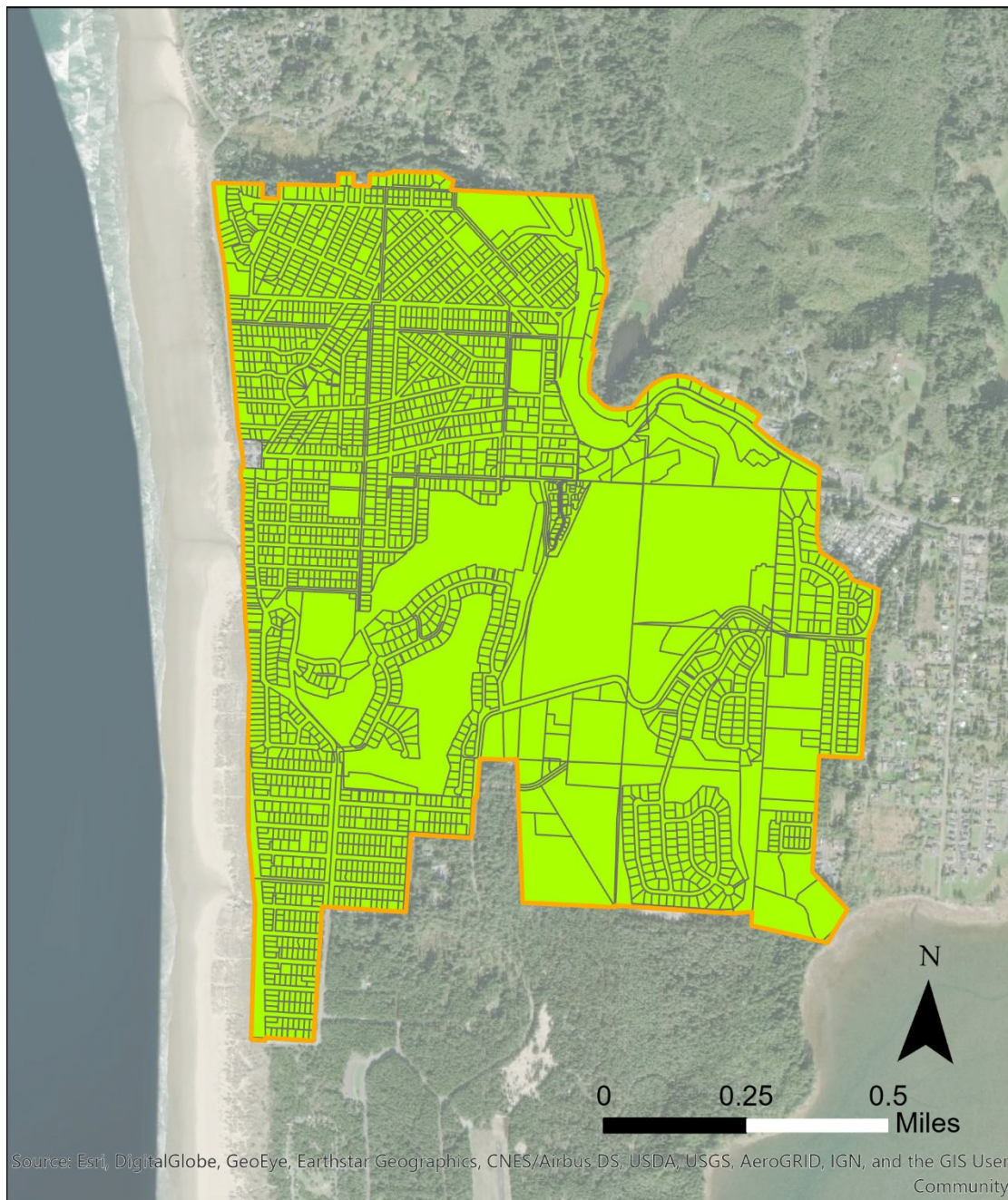
City of Manzanita
Buildable Land Inventory
2019

Manzanita Boundary
RLB Before Constraints

3. Removal of Environmental Constraints

The next step in the BLI involves removing all environmentally constrained lands from the residential land base. Based on the unified constraints dataset described in section 1, roughly 20% of all land in the residential land base was categorized as environmentally constrained and therefore unbuildable. Table 5 below summarizes buildable and unbuildable acreage by generalized zone.
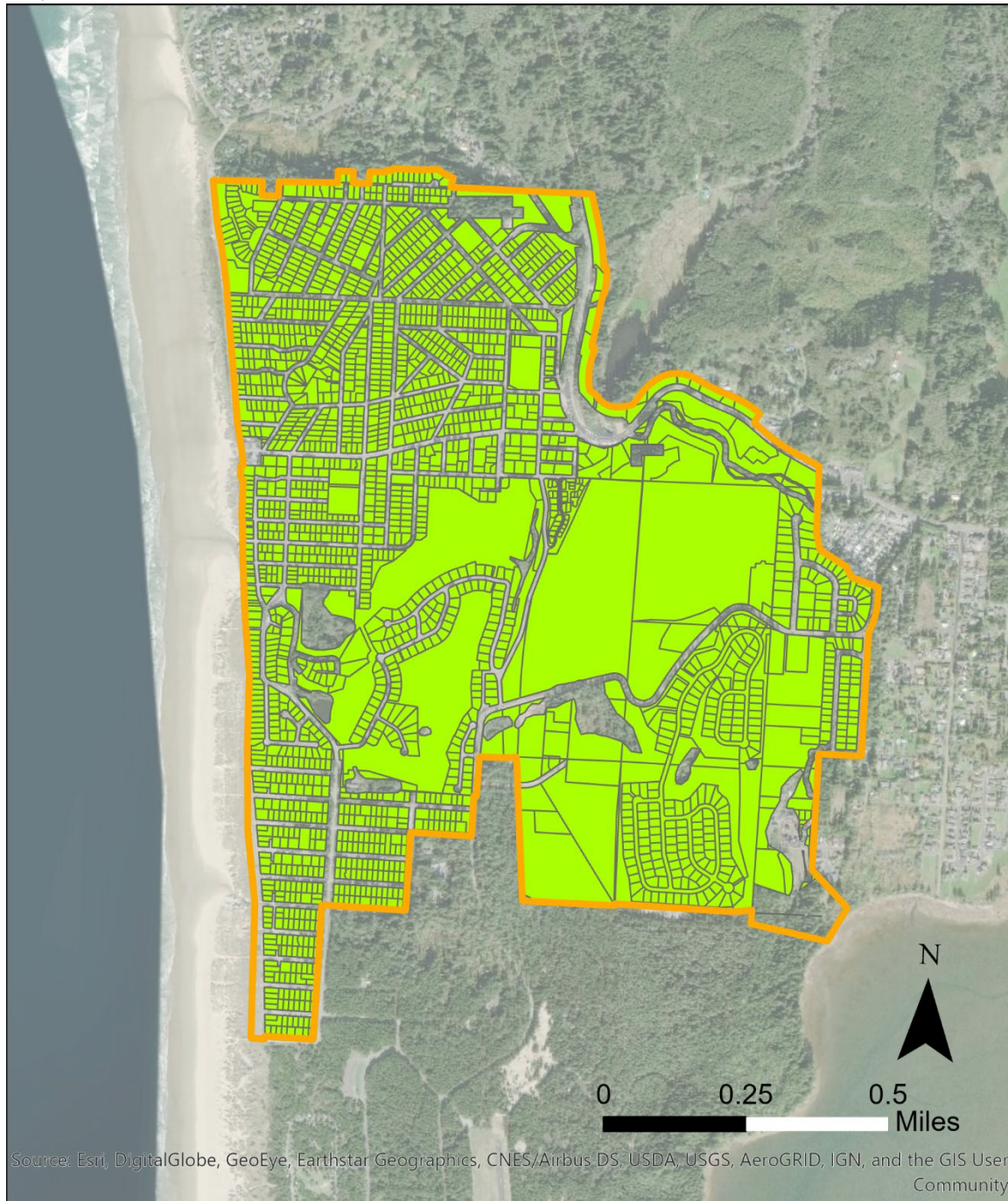
Table 5. Buildable Acreage in Residential Land Base, Manzanita UGB

Housing Category	Total Gross Acres	Environmentally Constrained	Environmentally Unconstrained
Low Density Residential	-	-	-
Medium Density Residential	157.71	21.22	136.49
High Density Residential	543.69	125.78	417.91
Commercial / Mixed-use	44.75	10.19	34.57
Total:	746.15	157.19	588.97

Map 7. Residential Land Base (Constrained Land Removed), Manzanita UGB 2019

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

N

0   0.25   0.5
                          Miles

**City of Manzanita
Buildable Land Inventory
2019**

☐ Manzanita
🟩 RLB After Constraints

4. Available Land Classification

The next step in the BLI process involves classifying each tax lot (parcel) into their respective development status categories listed below.

Vacant land: Properties with no structures or with very low value improvements (less than $10,000) were considered vacant. These lands were also reviewed using aerial photography; and if the land is in a committed use such as a parking lot, an assessment was made to determine if it is to be classified as vacant, part vacant or developed.

Partially vacant land: Properties that are occupied by a use (e.g., a home or building structure with value over $10,000) but have enough land to be subdivided without the need for rezoning. This determination is made using tax assessor records and aerial photography. A visual scan was conducted to determine the amount of buildable area available. Only parcels larger than ¼ acre were included in the analysis.

Redevelopable land: Properties where the total market value of improvements are less than the land value of the parcel. Due to the discrepancy between land and improvement value, there exists the strong likelihood that existing development will be converted to more intensive residential uses during the planning period. This determination is made using tax assessor records and aerial photography. Only parcels larger than ¼ acre were included in the analysis.

Developed & Non-Residential Land Base: Properties unlikely to yield additional residential development for one of two reasons: they possess existing building structures at densities that are unlikely to redevelop over the planning period; or they include parcels with land use designations that do not permit housing development.

Public and Constrained (unbuildable) land: Properties which are regarded as unlikely to be developed because they are restricted by existing uses such as: environmental constraints, public parks, schools, ballfields, conservation easements, roads and public right-of-way (ROW); common areas held by Home Owners Associations, cemeteries; and power substations. In cases where public-owned land does not fall into one of the above mentioned categories and is planned or zoned to allow housing, those tax lots are included in the vacant or part-vacant residential land inventory.

These tax lot classifications were validated using aerial photos, building permit data, and assessor records. Preliminary results were refined based on City staff and public input received.

After classifying the residential land base by development status, unavailable areas were removed. These include parcels that were not classified as vacant, partially vacant or redevelopable – in most cases, these were parcels that were already developed. Several rounds of feedback were carried out with the City staff and the general public to vet the final list of parcels included in the buildable lands inventory.

Table 6. Buildable Land by Housing Category, Manzanita UGB 2019

Housing Category	Environmentally Unconstrained (acres)	Environmentally Unconstrained (Unbuildable) acres	Buildable Land		
			Vacant (acres)	Partially Vacant (acres)	Redevelopable (acres)
Low Density Residential	-	-	-	-	-
Medium Density Residential	136.49	129.30	7.20	-	-
High Density Residential	417.91	296.92	118.85	1.33	0.80
Commercial / Mixed-use	34.57	27.94	5.82	0.75	-

Map 8. Manzanita UGB Buildable Lands Inventory
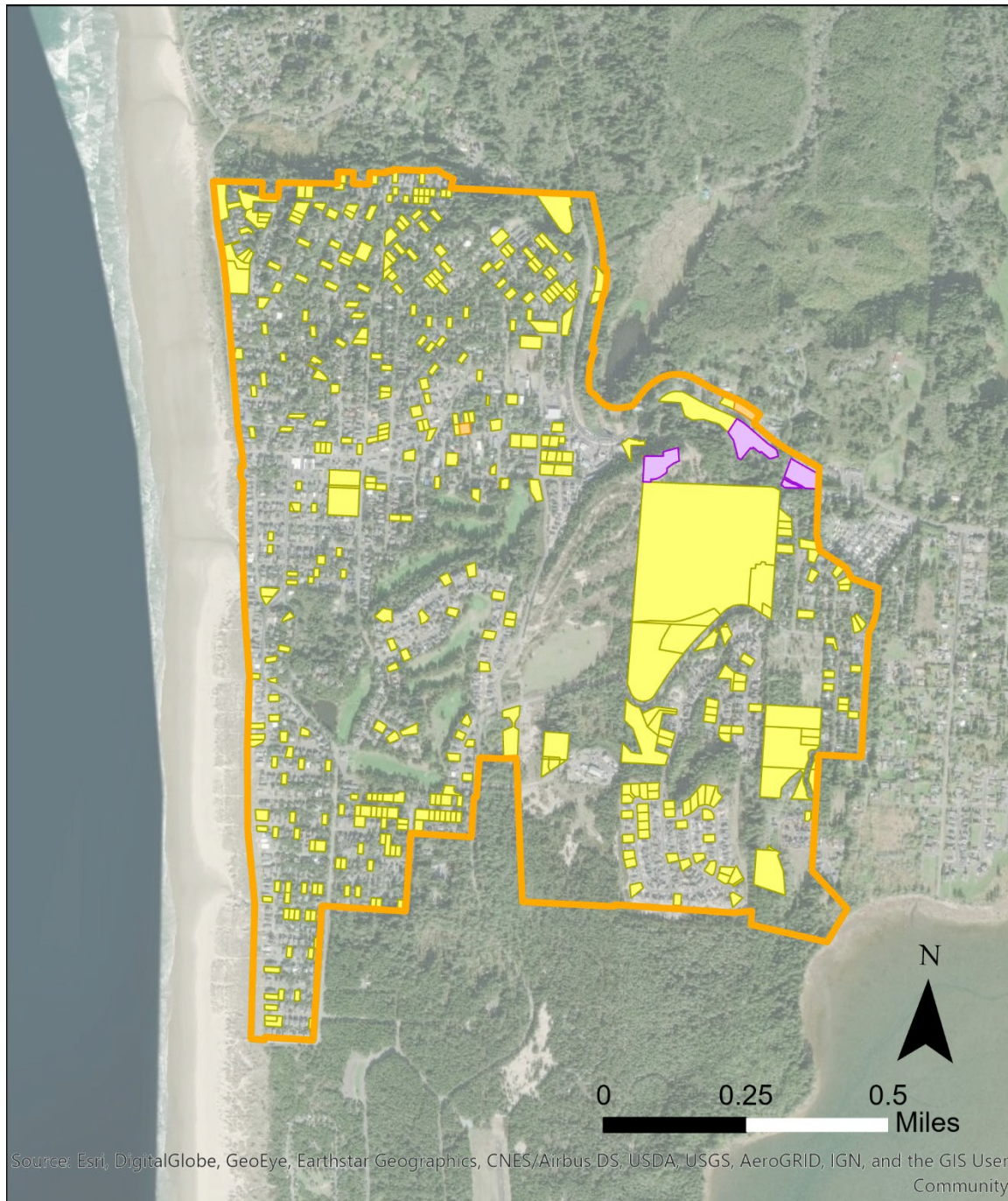
City of Manzanita
Buildable Land Inventory
2019

Manzanita

Development Status

Vacant

Partially Vacant

Redevelopable

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

N

0   0.25   0.5
                    Miles

5. Public Facilities and Redevelopment Assumptions

The final step in the BLI process involves the removal of land area necessary for public facilities on vacant and partially vacant parcels, and 2) setting assumptions for the rate at which existing developed land will redevelop.

For vacant and partially vacant parcels, future development warrants some dedication of space for public facilities, including: future streets, schools, parks, utility infrastructure, etc. Under DLCD guidance, 25% of the total land categorized as vacant and partially vacant was removed to account for land area occupied by these public facilities.

For redevelopable parcels that are currently developed, the analysis assumes a 3% redevelopment rate to approximate the likelihood of redevelopment in Manzanita UGB over a 20-year planning period. This factor was applied to all existing developed parcels identified as redevelopable to determine the net redevelopable land to be included in the Manzanita UGB BLI (Table 7).

Table 7. Buildable Land Reduction for Public Facilities and Redevelopment Rate Assumptions, Manzanita UGB 2019

Housing Category	Less Future Public Facilities (25%)		Redevelopment Rate (3%)
	Vacant (acres)	Partially Vacant (acres)	Redevelopable (acres)
Low Density Residential	-	-	-
Medium Density Residential	1.80	-	-
High Density Residential	29.71	0.33	0.02
Commercial / Mixed-use	1.46	0.19	-

6. Housing Development Factor

The final step in the BLI process is to apply a housing development factor to parcels with commercial / mixed-use zoning. Due to the fact that not all commercial and mixed-use development result in residential development, a 10% housing development factor was applied for parcels in commercial / mixed-use zones that permitted residential development outright, and a 3% housing development factor was applied for parcels in commercial / mixed-use zones that conditionally allowed residential development (Table 8). These rates are used to assume the development of new housing in commercial / mixed-use zones in the Manzanita UGB over the next 20 years.

Because all commercial / mixed-use zones within the BLI allow residential outright, a 10% flat rate was applied to all parcels within the housing category.

Table 8. Housing Development Factor for Commercial / Mixed Use Land, Manzanita UGB 2019

Housing Category	Buildable Land		Housing Development Factor	Total Buildable Residential Land
	Vacant & Partially Vacant	Redevelopable		
Low Density Residential	-	-	100%	-
Medium Density Residential	5.40	-	100%	5.40
High Density Residential	90.14	0.02	100%	90.16
Commercial / Mixed-use				
Residential permitted outright	4.93	-	10%	0.49
Residential conditionally approved	-	-	3%	-

Summary of Residential Buildable Lands Inventory

Approximately 96 acres of land are available in the residential BLI. It may seem surprising that most of the land available falls under high density residential zoning (roughly 94%), but this is partially explained by the fact that R-2 medium density residential (the most populous zone) is technically classified as high density residential as it allows more than 8 units per acre given a minimum lot size of 5,000 square feet per unit. In fact, there are no zones classified as low density residential given our criteria. Medium density residential and commercial / mixed-use make up 5.6% and 0.5% of the residential BLI respectively.

Vacant land represents by far the largest opportunity for development, comprising almost 99% of the land available in the buildable lands inventory. While less partially vacant and redevelopable land is available, the location of specific parcels are important as they may represent geographies where development is highly desired (ie. Areas close to commercial cores) or where infrastructure (water and sewer) is available.

Table 9: Summary of Residential Buildable Lands Inventory, Manzanita UGB, 2019

Housing Category	Vacant (acres)	Partially Vacant (acres)	Redevelopable (acres)	Total Buildable (acres)
Low Density Residential	-	-	-	-
Medium Density Residential	5.40	-	-	5.40
High Density Residential	89.14	1.00	0.02	90.16
Commercial / Mixed-use	0.44	0.06	-	0.49
Total:	94.97	1.06	0.02	**96.05**