



City of Longview

1525 Broadway
Longview, WA 98632
www.ci.longview.wa.us

Agenda

Planning Commission

Wednesday, February 7, 2024

7:00 PM

City Hall

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1. ROLL CALL

2. APPROVAL OF MINUTES

24-00135 Planning Commission minutes of January 3, 2024

3. AUDIENCE PARTICIPATION OF CORRESPONDENCE

4. DECLARATION OF EX-PARTE COMMUNICATIONS AND APPEARANCE OF FAIRNESS

5. PUBLIC HEARINGS

6. NON-PUBLIC HEARING ITEMS

24-00128 Data Center Developments Minimum Standards

Recommended Action: Discussion, bring back Public Works/Utility Minimum Standards at next PC meeting

7. OTHER BUSINESS

24-00127 Buildable Lands Inventory - CWCOC

Recommended Action: Discussion

8. PLANNER'S REPORT

9. ADJOURNMENT



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Minutes

Agenda

Planning Commission

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7:00 PM

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1. **ROLL CALL**

Chairman Collins called the meeting to order at 7:00 p.m.

Present: Member Craig Collins, Member Trey Davis, Member Jeff Rauth, Member Ramona Leber, Member Joanna Lee, Member Alison Moss

Absent:

Staff Present: Mac Kosar, Planner; Sam Barham, City Engineer; Lisa Vertrees, Administrative Assistant

2. **APPROVAL OF MINUTES**

23-001861 PC Minutes of December 6, 2023

A motion was made by Member Joanna Lee, seconded by Member Ramona Leber, to approve the minutes of the December 6, 2024 regular Planning Commission meeting. The motion passed unanimously.

3. **AUDIENCE PARTICIPATION OR CORRESPONDENCE**

None at this time.

4. **DECLARATION OF EX-PARTE COMMUNICATIONS AND APPEARANCE OF FAIRNESS**

Read in to record.

5. **PUBLIC HEARINGS**

23-001863 PC 2023-14 5024 Ocean Beach Hwy Rezone

Recommended Action: Motion to approve staff's recommendation and forward a recommendation of approval to city council

Member Trey Davis recused from this item.

Mr. Kosar reviewed the staff report.

Planning Commission members discussed lot size, number of units per lot, and the vacancy rate data, and the number of mobile home parks recently.

Chairman Collins opened the public hearing.

The following citizens spoke:

Carter M. - applicant

Hearing no further speakers, Chairman Collins closed the public hearing.

A motion was made by Member Ramona Leber, seconded by Member Jeff Rauth, to approve staff's recommendation and forward a recommendation of approval to City Council for the proposed Comprehensive Land Use Map and Zoning Map amendments concurrently with review of the annexation. The motion passed unanimously.

23-001864 PC 2023-17 Totem-Ocean Beach Hwy Rezone

Recommended Action: Motion to approve staff's recommendation and forward a recommendation of approval to city council

Mr. Kosar reviewed the staff report.

Chairman Collins opened the public hearing.

The following citizens spoke:

E. Carmen Mihai-Lazar, applicant

Hearing no other speakers, Chairman Collins closed the public hearing.

A motion was made by Member Ramona Leber, seconded by Member Alison Moss, to approve staff recommendations and forward a recommendation of approval to the City Council for the proposed Comprehensive Plan Future Land Use Map and Zoning Map amendments. The motion passed unanimously.

6. NON-PUBLIC HEARING ITEMS**23-001862 Pc 2023-8 1145 33rd ave preliminary plat application**

Recommended Action: hold a public hearing february 7th for consideration of approval and recommendation to city council

Deferred

7. OTHER BUSINESS

Chairman Collins mentioned the annual Chair/Vice Chair nominations or changes. The Planning Commission made no changes, retaining Mr. Collins as Chairman.

Member Alison Moss asked if there is a log of inconsistencies between the zoning map and the comprehensive plan. Member Ramona Leber asked if the City could contract with someone for updated housing inventory/vacancy rate data. Mr. Kosar said the Planning Commission can send a recommendation/request to the City Council. The Planning Commission unanimously agreed with that.

8. PLANNER'S REPORT

** Cottage housing was approved by City Council*

** Shared driveway ordinance goes before Council January 11, 2024*

** Sunrise Village - approved*

** Environmental review complete for Kelso at Catlin and Main. Can now request funding*

- * *Fill and Grade permit for 150 acres on Weyerhauser lot a the Mint Farm*
- * *Divert is moving along*

Public Works

- * *Fishers Lane demo complete*
- * *Traffic safety project*
- * *Washington Way project awarded*
- * *Wrapping up two pump station projects*
- * *Update on 46th Avenue project*

9. ADJOURNMENT

The next regular Planning Commission is scheduled for February 7, 2024.

With no further business to discuss, Chairman Collins adjourned the meeting at 7:36 p.m.

Lisa Vertrees, Recorder



Chapter 19.53

DATA CENTER MINIMUM STANDARDS

Sections:

- 19.53.010 Title.
- 19.53.020 Purpose and intent.
- 19.53.030 Applicability.
- 19.53.040 Authority and administration.
- 19.53.050 Development standards and requirements.
- 19.53.060 Enforcement.
- 19.53.070 Severability.

19.53.010 Title.

This chapter shall be known and may be cited as the “City of Longview Data Center Minimum Standards Ordinance.” [Ord. XXXX]

19.53.020 Purpose and intent.

It is the intent of this chapter to:

- A. Support the city’s goals for economic development and associated businesses;
- B. Encourage the efficient use of land in areas of existing public services;
- C. Provide diverse business options;
- D. Encourage affordability, creativity and variety in business design and site development;
- E. Promote a variety of business choices to meet the needs of a population with a variety of individual needs;

19.53.030 Applicability.

The regulations contained in this chapter shall apply in areas classified as “Residential” in the Longview Comprehensive Plan. [Ord. XXXX.]

19.53.040 Authority and administration.

All applications under this chapter shall be made to the City of Longview Building and Planning/Community Development department. The Director or his/her designee shall administer, interpret, and enforce the provisions of this chapter and shall provide such forms and establish such procedures as may be necessary to administer this chapter. [Ord. XXXX.]

19.53.050 Development standards and requirements.

A. Data Center developments shall be in accordance with International Building Code. These facilities shall be classified Business Group B occupancies as defined by the International Building Code as adopted and amended by the State of Washington and the City of Longview. Requirements for these facilities shall comply with all applicable Building and Fire Codes in effect at the time of their construction.

B. Data Center developments shall operate utilities

C. Cryptocurrency Mining & the like operations shall not be permitted in or as part of a Data Center.

19.53.060 Enforcement.

City of Longview Department of Building and Planning/Community Development is hereby charged with enforcement of this chapter. [Ord. XXXX.]

19.53.070 Severability.

If any section, subsection, clause, phrase or word in this chapter is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such section shall be deemed a separate provision and such holding shall not affect the validity of the remaining portion of this chapter. [Ord. XXXX.]

DRAFT



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Revised recommended amendments to Chapter 19.58 Industrial Zoning Districts Data Centers & Cryptocurrency Mining

Currently the Longview Municipal Code Chapter 19.58.020-1 'Industrial District Uses' table doesn't include Cryptocurrency mining but is often attempted to fit under the use of Data Centers which is permitted in all Industrial Districts.

Title 19 ZONING Ch. 19.58 INDUSTRIAL ZONING DISTRICTS			
	Help	Text Size: -A +A	SHARE
Use	LI-A & B	HI	C/I
Building material wholesale and retail sales, including incidental sales of white goods	P	P	P
Research, development, and testing services	P	P	P
Data centers	P	P	P
Veterinary offices and clinics requiring outside animal runs and dog kennels/boarding	P		P

The City of Longview Planning Commission at the April 5th, 2023, regular meeting, gave staff direction to prepare language removing Data Centers and Cryptocurrency Mining from the permitted uses in Longview City Limits. At the April 25th City Council Public Hearing councilors gave direction to staff to revise the recommendation to still permit data centers, but better define cryptocurrency mining.

Since Cryptocurrency Mining is not currently listed in the 19.58.020 'Uses' table, it would be beneficial to add it, including that it is not permitted in the listed LI-A & B, HI, and C/I district. The language in the Use table could be 'Cryptocurrency Mining' or 'Cryptocurrency Mining Facility' depending on Council/Planning Commission direction.

Table 19.58.020-1. Permitted uses in industrial zones.

Use			
	LI-A & B	HI	C/I
<u>Cryptocurrency Mining Facility</u>			

Staff also believes it would be beneficial to add definitions to the Zoning chapter '19.09 Definitions' for Cryptocurrency, Mining, and Data Centers, since they are not currently defined.

The National Institute of Science and Technology (NIST) Computer Security Resource Center (CSRC) provides an overview on Blockchain Technology, which includes definitions for Cryptocurrency and Mining and has been adjusted below in *italics*:

Cryptocurrency: A digital asset/credit/unit within the system, which cryptographically sent from one blockchain user to another. In the case of cryptocurrency creation (such as the reward for mining), the publishing node includes a transaction sending the newly created cryptocurrency to one or more blockchain network users. These assets are transferred from one user to another by using digital signatures with asymmetric-key pairs.

Cryptocurrency Mining: The act of solving a puzzle within a proof of work consensus model, *proof of stake, and/or similar processes now known and in the future for which the end product or payment for such mining is a Cryptocurrency.*

Data Center: any facility *that may include, but is not limited to*, that primarily contains electronic equipment used to process, store, and transmit digital information, which may be-

- (a) A free-standing structure: or
- (b) A facility within a larger structure, that uses environmental control equipment to maintain the proper conditions for the operation of electronic equipment.

Examples of Data Centers include but are not limited to Enterprise (on-premises) data centers, Public cloud data centers, Managed data centers and colocation Facilities.

Cryptocurrency Mining Facility:

IBM has a webpage on Data Centers including definitions, types of data centers and other information on the subject. <https://www.ibm.com/topics/data-centers>

IBM defines a data center as “a physical room, building or facility that houses IT infrastructure for building, running, and delivering applications and services, and for storing and managing the data associated with those applications and services”.

Types of data centers-IBM

There are different types of data center facilities, and a single company may use more than one type, depending on workloads and business need.

Enterprise (on-premises) data centers

In this data center model, all IT infrastructure and data is hosted on-premises. Many companies choose to have their own on-premises data centers because they feel they have more control over information security, and can more easily comply with regulations such as the European Union General Data Protection Regulation (GDPR) or the U.S. Health Insurance Portability and Accountability Act (HIPAA). In an enterprise data center, the company is responsible for all deployment, monitoring, and management tasks.

Public cloud data centers

Cloud data centers (also called cloud computing data centers) house IT infrastructure resources for shared use by multiple customers—from scores to millions of customers—via an Internet connection.

Many of the largest cloud data centers—called hyperscale data centers—are run by major cloud service providers like Amazon Web Services (AWS), Google Cloud Platform, IBM Cloud, Microsoft Azure, and Oracle Cloud Infrastructure. In fact, most leading cloud providers run several hyperscale data centers around the world. Typically, cloud service providers maintain smaller, edge data centers located closer to cloud customers (and cloud customers' customers). For real-time, data-intensive workloads such as big data analytics, artificial intelligence (AI), and content delivery applications, edge data centers can help minimize latency, improving overall application performance and customer experience.

Managed data centers and colocation Facilities

Managed data centers and colocation facilities are options for organizations that don't have the space, staff, or expertise to deploy and manage some or all of their IT infrastructure on premises—but prefer not to host that infrastructure using the shared resources of a public cloud data center.

In a managed data center, the client company leases dedicated servers, storage and networking hardware from the data center provider, and the data center provider handles the administration, monitoring and management for the client company.

In a colocation facility, the client company owns all the infrastructure, and leases a dedicated space to host it within the facility. In the traditional colocation model, the client company has sole access to the hardware and full responsibility for managing it; this is ideal for privacy and security but often impractical, particularly during outages or emergencies. Today, most colocation providers offer management and monitoring services for clients who want them.

Managed data centers and colocation facilities are often used to house remote data backup and disaster recovery technology for small and midsize businesses (SMBs).

Washington State Department of Ecology – Data Centers

“We issue air quality permits to data centers to limit the air pollution that comes from diesel-powered backup generators. We also keep track of the combined impacts from the diesel exhaust that may occur from these generators.

Data centers, sometimes called server farms, house the servers that manage email, store data, and run computer applications. If you shop on the web or use popular social media sites, your information is routed through a data center”.

At the September 6, 2023, Planning Commission meeting, Commissioners directed staff to further investigate possible conditions and/or requirements for a proposed Data Center to differentiate from a Cryptocurrency Mining Facility.

Conditions/Standards for Data Centers:

Building/Fire: “These facilities shall be classified Business Group B occupancies as defined by the International Building Code as adopted and amended by the State of Washington and the City of Longview. Requirements for these facilities shall comply with all applicable Building and Fire Codes in effect at the time of their construction.”

Utilities/Water Consumption: Still in research...

Sources

Blockchain technology overview - NIST. (n.d.). Retrieved April 25, 2023, from <https://nvlpubs.nist.gov/nistpubs/ir/2018/NIST.IR.8202.pdf>.

Legal Authority 42 U.S.C. § 17112(b) Link 42 U.S.C. § 17112(b). (n.d.). *Definition of Data Center*. Federal Laws and Requirements Search | Definition of Data Center. Retrieved April 25, 2023, from [https://www7.eere.energy.gov/femp/requirements/laws_and_requirements/definition_data_center#:~:text=\(1\)%20Data%20center%20The%20term,a%20free%2Dstanding%20structu,re%3B%20or](https://www7.eere.energy.gov/femp/requirements/laws_and_requirements/definition_data_center#:~:text=(1)%20Data%20center%20The%20term,a%20free%2Dstanding%20structu,re%3B%20or)

Thank you,

McAllister Kosar, Planner

Cowlitz Buildable Lands Inventory Model

The Buildable Lands Inventory (BLI) Model was developed as a planning tool to evaluate the amount of suitable residential, commercial, and industrial land available for future housing and employment needs and to help plan for a future transportation system that can accommodate that growth. Uses of the model include future growth inputs to the CWCOC's travel demand model and transportation planning; housing needs assessments; determining how much land capacity there is for future residential and employment growth to ensure sufficient land is available for the amount of growth predicted in long range plans. The model can also assist economic development agencies inventory lands available for development to share with prospective businesses looking to locate or expand in our area. The model can help utilities, schools, and fire districts identify areas to best locate future capital projects.

The BLI Model is a Geographic Information System (GIS) based model that relies on data from the County Assessor's database and GIS layers from multiple sources. The GIS model is built using ESRI's ModelBuilder, a visual programming language for geoprocessing workflows.

The modeling process includes:

1. Collection of Assessor, land use, and environmental spatial data
2. Classifying lands by status and use
3. Summarizing lands by residential, commercial, and industrial classifications
4. Calculating buildable lands potential capacity based on planning assumptions
5. Summarizing buildable lands capacity by cities and the unincorporated area of the county and other districts.

The model classifies lands into three land use categories – residential, commercial, and industrial based on zoning classifications in the incorporated areas and for county designated urban lands. The model uses comprehensive plan designations to classify the rural area since most of the rural area is not zoned. Lands classified as historic, church owned, non-profit, publicly owned, or the entire parcel is designated forest land are excluded from available land

calculations. Land use designations are classified into general categories for modeling purposes. A breakdown of the general land use codes is in table 1.

Table 1.

LU Class Code	LU Class	LU Class Description
10	AG	Agriculture
11	FR	Forest - Recreation
12	Remote	Remote
13	SmallHolding	Small Holding
14	Suburban	Suburban
19	RR-2	Rural Residential - 2
20	RR	Rural Residential - 1
21	LDR	Low Density Residential
22	MDR	Medium Density Residential
23	HDR	High Density Residential
30	COM	Commercial
40	IND	Industrial
50	MU-CI	Mixed Use - Commercial/Industrial
51	MU-RC	Mixed Use - Residential/Commercial
52	Urban	Urban
60	OS	Open Space
70	Public	Public/Institutional
80	ERL	Economic Resource Land

The model classifies each parcel as built, vacant, partial-built, or underutilized as well as some ancillary classes for the three land use categories. Additionally lands with mapped environmental concerns and/or geologic hazards, as consistent with the applicable sections of the Cowlitz County and each cities municipal codes, are classified as constrained lands by parcel.

Data Collection

Assessor data

The Assessor's database includes key information needed as inputs into the model. This includes the assessor use code that indicates the current use of the property including identification of vacant properties. Other assessor data includes property ID, number of multi-family units, exempt status, and parcel size. The assessor use codes are generalized for use in the model. Table 2 provides a list of the general use codes.

Table 2.

General Use Code	General Use Code Description
1	Low Density Residential
2	Medium Density Residential
3	High Density Residential
4	Commercial
5	Industrial
6	Agriculture and Natural Resources
7	Open Space
8	Public
10	Utilities
11	Right of Way
12	Railroad
13	Airport
90	Vacant or Unused
95	Outbuildings
100	Other

Land use data

Land use GIS data layers are collected for each city and for Cowlitz County. The layers are added to a geodatabase topology to ensure the boundaries match city limits and they did not have any gaps or overlaps. In addition to collecting GIS

layers, information from the county and cities land use and development codes are reviewed and documented. The land use data is used to classify parcels into the general land use codes. The land use classifications and development codes are used to create planning assumptions regarding future housing and employment densities, constrained lands, and mixed use.

Environmental data

GIS data for environmentally constrained lands and geologic hazards from federal, state, and local agencies are combined into a single environmentally constrained lands layer. Information from the county and cities critical area codes are reviewed and documented to determine the constrained lands that are included in the model. This includes buffers and other restrictions. Data is broken down by each jurisdiction where different restrictions apply.

Environmentally constrained lands data used in the model include:

- FEMA's National Flood Hazard Layer
- US Fish and Wildlife National Wetlands Inventory
- Washington State Shoreline Management Act data layers
- Washington State Fish and Wildlife habitat, species, and riparian areas
- Washington State Department of Natural Resources water body and water course layers
- Washington State Department of Natural Resources geologic hazards information including steep slopes and landslide information.
- Additional sources as noted in critical area codes were included

Land Classification

Existing Land use

To assess what lands could accommodate future growth a general classification of existing property uses is needed. The Cowlitz County Assessor's database includes a use code that classifies property use for each parcel in the county. The use codes are determined by the assessor's office based on the primary use of the land. For modeling purposes, the detailed use codes were generalized. The use code is used to determine which lands are classified as vacant. A list of the use codes by the general use code used in the model is shown in Table 3.

Table 3.

Assessor Use Code	Use Code Description	General Use Code	LU Description
100	100 - MOBILE HOME	1	Low Density Residential
101	SINGLE FAMILY RES	1	Low Density Residential
102	DUPLEX/TRIPLEX	1	Low Density Residential
104	4-5 UNIT APARTMENT	2	Medium Density Residential
106	6-12 UNIT APARTMENT	2	Medium Density Residential
107	13-20 UNIT APARTMENT	3	High Density Residential
108	21 AND OVER UNIT APT	3	High Density Residential
111	RES WITH MH AS ALT PAR	1	Low Density Residential
114	CONDOMINIUM	3	High Density Residential
115	MOBILE HOME PARK/COURT	1	Low Density Residential
116	HOTELS/MOTELS	4	Commercial
117	INSTITUTIONAL LODGING	3	High Density Residential
119	VACATION HOME/CABIN	1	Low Density Residential
120	MOBILE HOME ON LAND	1	Low Density Residential
121	PARCEL W/OUTBUILDING ONLY	95	Outbuildings
221	FOOD AND KINDRED PROD	4	Commercial
224	LUMBER/WOOD PROD ETC	5	Industrial
225	FURNITURE AND FIXTURES	4	Commercial
226	PAPER AND ALLIED PROD	5	Industrial
228	CHEMICALS	5	Industrial
229	PETROLEUM REFINING ETC	5	Industrial
230	MOBILE HOME MANUFACTURE	5	Industrial
231	RUBBER/MISC PLASTIC PROD	5	Industrial
232	STONE/CLAY/GLASS PROD	5	Industrial
233	PRIMARY METAL INDUSTRIES	5	Industrial
234	FABRICATED METAL ETC	5	Industrial
236	EXPORTING LOGS/WOOD CHIP	5	Industrial
237	ASPHALT/CONC MANUFACT	5	Industrial
238	GRAIN ELEVATORS	5	Industrial
239	MISC MANUFACTURING	5	Industrial
401	RAILROAD RIGHT OF WAY	12	Railroad
403	AIRPORT	13	Airport
405	HIGHWAY/STREET ROW	11	ROW
444	WATERBORNE TRANS(PORTS)	5	Industrial
446	AUTO PARKING	4	Commercial

448	UTILITIES	10	Utilities
449	RADIO/TV COMMUNICATION	10	Utilities
450	DIKING RIGHT OF WAY	11	ROW
500	CONDOS OTHER THAN RES	4	Commercial
501	WAREHOUSE	5	Industrial
502	WHOLESALE	4	Commercial
503	RETAIL STORE	4	Commercial
504	FOOD MARKET	4	Commercial
505	AUTO SALES	4	Commercial
508	FAST FOOD RESTAURANT	4	Commercial
509	DINING RESTAURANT	4	Commercial
510	TAVERN	4	Commercial
601	BUSINESS/PROF OFFICE	4	Commercial
604	REPAIR SERVICE	4	Commercial
607	GOVT SVC (POLICE/FIRE ET	8	Public
608	EDUCATIONAL SERVICE	8	Public
609	SERVICE STATION	4	Commercial
610	CEMETERY	100	Other
702	PUBLIC ASSEMBLY (CHURCH)	100	Other
704	RECREATIONAL	7	Open Space
705	RESORT OR GROUP CAMP	100	Other
706	PARK	7	Open Space
707	PRIVATE ORGANIZATION	100	Other
708	THEATERS	4	Commercial
803	AGRICULTURE (OPEN SPACE)	6	Agriculture and Natural Resources
804	FISHING ACTIVITIES	6	Agriculture and Natural Resources
806	FORESTLAND (PTN ONLY)	6	Agriculture and Natural Resources
808	OPEN SPACE-OPEN SPACE	6	Open Space
810	ENTIRE PARCEL DFL	5	Agriculture and Natural Resources
901	0 - 1.00 ACRE	90	Vacant or Unused
902	1.01 - 3.00 ACRES	90	Vacant or Unused
903	3.01 - 5.00 ACRES	90	Vacant or Unused
904	5.01 - 10.00 ACRES	90	Vacant or Unused
905	10.01 - 20.00 ACRES	90	Vacant or Unused
906	20.01 - 50.00 ACRES	90	Vacant or Unused
907	50.01 ACRES AND OVER	90	Vacant or Unused
908	TIDELANDS	100	Other
909	BARE LAND W/HOMESITE	90	Vacant or Unused

Future land use

Future land use is determined by county and city land use classifications. Zoning classifications are used for the cities and the unincorporated urban area of the county. While comprehensive plan designations are used for the rural areas of the county that are not zoned. The land use classifications determine the permitted uses and types of development that can occur on properties. Land use classes by the general land use class code developed for the model are shown in Table 1.

Environmental constraints

Each jurisdiction maintains a critical area ordinance that identifies environmentally sensitive areas that need to be protected and require additional land use controls which will impact the types and amount of development that can occur. To account for these additional land use controls, environmentally constrained lands, as mapped based on available data, are included as part of the modeling process. The types of constrained lands that are included are listed below. Constrained lands that do not limit development are excluded from the model.

Flood

- National Flood Hazard Layer- FEMA

For modeling purposes areas identified as part of the Special Flood Hazard Area (SFHA) are included. The SFHA is the area where the National Flood Insurance Program's (NFIP's) floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies. Flood areas are also included as part of the shoreline management area.

Wetlands

The primary sources for wetlands used in the model are:

- National Wetlands Inventory- U.S. Fish and Wildlife

The US Fish and Wildlife Service National Wetlands Inventory (NWI) is a publicly available resource that provides detailed information on the abundance, characteristics, and distribution of US wetlands.

- Washington State Modeled Wetlands Inventory from the Washington State Department of Ecology.

The purpose of this inventory is to inform likelihood of wetland and assess areas for potential wetland impacts, mitigation, or restoration.

Wetlands layers are combined into a single layer and a 100-foot buffer is applied for use in the model.

Shoreline Management Areas

Shorelines include:

- Streams and rivers with greater than 20 cubic feet per second mean annual flow
- Lakes 20 acres or larger
- Upland areas called shorelands that extend 200 feet landward from the edge of these waters
- Biological wetlands and river deltas connected to these water bodies
- Some or all of the 100-year floodplain, including all wetlands

The primary sources for shorelines used in the model are:

- Washington State Shoreline Management Area Jurisdiction Lakes
- City of Kelso Shorelines
- City of Woodland Shorelines
- City of Longview Shorelines
- City of Kelso Shorelines
- Cowlitz County Shorelines: WSShoreline and WSShoreline_SED

Priority Habitat and Species (PHS) Areas

PHS information is used by cities and counties to implement and update land use plans and development regulations. The primary resources available from Washington State Department of Fish and Wildlife for PHS data used in the model are:

- Priority Wildlife Survey Data Management point/polygon
- Priority Habitat and Species Polygons – Elk, deer, and geese habitat areas are excluded from the model since development can occur in these areas.

Riparian areas

Riparian areas are unique because they are the transition between terrestrial (land) and aquatic (water) ecosystems. Riparian areas are along rivers, perennial or intermittent streams, seeps, and springs. The primary sources for riparian areas used in the model are:

- Wchydro – Water course layer from Washington State Department of Natural Resources, Forest Practices Division
- Wbhydro – Water body layer from Washington State Department of Natural Resources, Forest Practices Division

Each jurisdiction applies buffers to riparian areas based on stream types. The buffer widths used in the model are based on each jurisdiction's critical area code and are listed below:

Castle Rock

Streams	Buffer Widths
Type F – Fish-bearing streams	250 feet
Type Np – Non-fish bearing streams - perennial	200 feet
Type Ns - Non-fish bearing streams - seasonal	150 feet

Kalama

Streams	Buffer Widths
Type F – Fish-bearing streams	150 feet
Type Np – Non-fish bearing streams - perennial	100 feet
Type Ns - Non-fish bearing streams - seasonal	50 feet

Kelso

Streams	Buffer Widths
Type F – Fish-bearing streams	150 feet
Type Np – Non-fish bearing streams - perennial	50 feet
Type Ns - Non-fish bearing streams - seasonal	50 feet

Longview

Streams	Buffer Widths
Type F – Fish-bearing streams	150 feet
Type Np – Non-fish bearing streams - perennial	100 feet
Type Ns - Non-fish bearing streams - seasonal	50 feet

Woodland

Streams	Buffer Widths
Type F – Fish-bearing streams	250 feet
Type Np – Non-fish bearing streams - perennial	225 feet
Type Ns - Non-fish bearing streams - seasonal	225 feet

Cowlitz County

Streams	Buffer Widths
Type F - Fish-bearing streams	100 feet
Type Np – Non-fish bearing streams - perennial	50 feet
Type Ns - Non-fish bearing streams - seasonal	50 feet

Notes:

Type S – shorelines of the state waterbodies and watercourses are accounted for in the Shoreline Management areas and are not buffered for riparian area purposes in the model.

Waterbodies and watercourses classified as ditches by DNR are not buffered in the model.

Steep Slopes

As part of landslide hazard areas, slopes that are above a certain percentage along with other criteria are considered a concern. The percentage varies by jurisdiction. The primary source for steep slopes used in the model is:

- Slopes derived from LiDAR data compiled from multiple sources by Cowlitz County GIS. Slopes were only applied to the urban area for the model. This was due to processing issues with a large data set and that typically on larger rural lots a suitable building footprint can be found.

Slope areas mapped for the model are 15% or greater for all urban areas except Kelso, which is 12% or greater. Slopes 80% or greater were included for the rural area in the model.

Landslide Hazards

The primary sources for landslide hazards used in the model are:

- 1:24,000- Scale landslides from geologic mapping - Washington State Department of Natural Resources, Division of Geology and Earth Resources
- 1:100,000- Scale landslides from geologic mapping - Washington State Department of Natural Resources, Division of Geology and Earth Resources
- Digital Landslide Inventory for the Cowlitz County Urban Corridor, a.k.a., Wegmann maps- Washington State Department of Natural Resources, Division of Geology and Earth Resources

Classifications and Planning Assumptions

Planning assumptions are applied to the buildable land classes in order to quantify the potential for housing and job growth. Assumptions are based on land use classes, assessor information, and constrained lands.

Residential Class

Resclass	Description
0	Not Residential
1	Built
2	Vacant
3	Partial-built
4	Underutilized
5	Vacant Constrained
6	Partial-built Constrained
7	Underutilized Constrained
8	Exempt
10	Forestlands
99	Unknown

Residential Class Assumptions

Vacant Criteria

- Includes parcels with land use classes based on Zoning (comprehensive plan for rural Cowlitz County) that allow residential use
 - 10 - Agriculture
 - 11 – Forest
 - 12 – Remote
 - 13 – Small Holding
 - 14 – Suburban
 - 19 – Rural Residential - 2
 - 20 – Rural Residential - 1
 - 21 – Low Density Residential
 - 22 – Medium Density Residential
 - 23 – High Density Residential
 - 51 – Mixed Use - Residential/Commercial

- 52 – Urban
- 80 – Economic Resource Land
- Parcel is considered vacant based on the following Assessor Use Codes
 - 901 - 0 - 1.00 Acre
 - 902 - 1.01 - 3.00 Acres
 - 903 - 3.01 - 5.00 Acres
 - 904 - 5.01 - 10.00 Acres
 - 905 - 10.01 - 20.00 Acres
 - 906 - 20.01 - 50.00 Acres
 - 907 - 50.01 Acres and over
 - 909 - Bare land w/homesite
- Not tax exempt based on taxable status
- Not a park or open space based on assessor use codes
- Not a utility, right of way, or easement based on assessor use codes
- Not public use based on assessor use codes
- Not an airport based on assessor use codes
- Not commercial timber lands with a parcel size over 20 acres
 - Comprehensive Plan = ERL_FOR or assessor use code = 810 – Entire Parcel DFL

Partial-built Criteria

- Includes parcels with land use classes based on Zoning (comprehensive plan for rural Cowlitz County) that allow residential use
 - 10 - Agriculture
 - 11 – Forest
 - 12 – Remote
 - 13 – Small Holding
 - 14 – Suburban
 - 19 – Rural Residential - 2
 - 20 – Rural Residential - 1
 - 21 – Low Density Residential
 - 22 – Medium Density Residential
 - 23 – High Density Residential
 - 51 – Mixed Use - Residential/Commercial
 - 52 – Urban
 - 80 – Economic Resource Land

- The parcel's existing use is considered residential based on the following Assessor Use Codes
 - 101 - Single family residential
 - 102 - Duplex/Triplex
 - 104 - 4-5 Unit apartment
 - 106 - 6-12 Unit apartment
 - 107 - 13-20 Unit apartment
 - 108 - 21 and over unit apartment
 - 111 - Residential with MH as alt parcel
 - 114 - Condominium
 - 119 - Vacation home/cabin
 - 120 - Mobile home on land
- Existing residential unit density is less than density allowed by future land use
- Parcel size ≥ 0.5 acres
- Mobile home parks are excluded

Underutilized Criteria

- Zoned (comprehensive plan for rural Cowlitz County) for residential use
- Assessor use code not equal to residential vacant or partially utilized use criteria. These are lands designated residential but are currently used for commercial, industrial, or resource purposes
- Parcel size ≥ 0.5 acres

Constrained lands by Residential Class

The constrained land portions of properties that are classified as vacant, partial-built, or underutilized classes are classified as constrained lands

Environmental Constraints percent buildable for Residential Class

It is assumed in the model that 50% of constrained lands will develop in the future. This is to account for lands classified as constrained but are determined not constrained after more detailed environmental review required at the time of development and potential mitigation at the site.

Mixed Use

Residential development can occur on some mixed-use zoned lands. In the model the residential mixed-use lands are assumed to have medium residential densities and a ratio of residential to employment development is applied. The model uses 20 percent residential for Castle Rock and Kalama mixed uses and 40 percent residential is used for commercial/residential mixed use in Longview. In addition, commercial designated lands are assumed to have 10% residential development to account for residential units allowed above commercial activities.

Housing densities

The following tables list the residential densities per acre used in the model.

Castle Rock

Land Use	Density per Acre
21 - Low Density Residential	7
22 - Medium Density Residential/51 - Mixed Use Residential/Commercial	11
23 - High Density Residential	11

Kalama

Land Use	Density per Acre
21 - Low Density Residential	5
22 - Medium Density Residential/51 - Mixed Use Residential/Commercial	12
23 - High Density Residential	25

Kelso

Land Use	Density per Acre
21 - Low Density Residential	6
22 - Medium Density Residential/51 - Mixed Use Residential/Commercial	18
23 - High Density Residential	32

Longview

Land Use	Density per Acre
21 - Low Density Residential	6
22 - Medium Density Residential/51 - Mixed Use Residential/Commercial	30
23 - High Density Residential	30

Woodland

Land Use	Density per Acre
21 - Low Density Residential	6
22 - Medium Density Residential/51 - Mixed Use Residential/Commercial	25
23 - High Density Residential	35

Cowlitz County

Land Use	Density per Acre
10 - Agriculture	0.2
11 - Forest	0.2
12 - Remote	0.1
13 - Rural Residential – 5, Small Holding	0.2
14 – Suburban	2
19 – Rural Residential 2	0.5
20 - Rural Residential - 1	1
21 - Low Density Residential	7
22 - Medium Density Residential/51 - Mixed Use Residential/Commercial	24
23 - High Density Residential	33

80 – Economic Resource Land

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Commercial Class

Comclass	Description
0	Not Commercial
1	Built
2	Vacant
3	Partial-built
4	Underutilized
5	Vacant Constrained
6	Partial-built Constrained
7	Underutilized Constrained
8	Exempt
99	Unknown

Commercial Class Assumptions

Vacant Criteria

- Includes parcels with land use classes based on Zoning (comprehensive plan for rural Cowlitz County) that allow commercial use
 - 30 - Commercial
 - 50 – Mixed Use - Commercial/Industrial
 - 51 – Mixed Use - Residential/Commercial
- Parcel is considered vacant based on the following Assessor Use Codes
 - 901 - 0 - 1.00 Acre
 - 902 - 1.01 - 3.00 Acres
 - 903 - 3.01 - 5.00 Acres
 - 904 - 5.01 - 10.00 Acres
 - 905 - 10.01 - 20.00 Acres

- 906 - 20.01 - 50.00 Acres
- 907 - 50.01 Acres and over
- 909 - Bare land w/homesite
- Not tax exempt based on taxable status
- Not a park or open space based on assessor use codes
- Not a utility, right of way, or easement based on assessor use codes
- Not public use based on assessor use codes
- Not an airport based on assessor use codes

Partial-built Criteria

- Includes parcels with land use classes based on Zoning (comprehensive plan for rural Cowlitz County) that allow Commercial use
 - 30 - Commercial
 - 50 – Mixed Use - Commercial/Industrial
 - 51 – Mixed Use - Residential/Commercial
- The parcel's existing use is considered commercial based on the following Assessor Use Codes
 - 116 – Hotels/Motels
 - 117 – Institutional lodging
 - 121 – Parcel with outbuilding
 - 446 – Auto parking
 - 500 – Condos other than residential
 - 502 - Wholesale
 - 503 – Retail store
 - 504 – Food Market
 - 505 – Auto sales
 - 508 – Fast food restaurant
 - 509 – Dining restaurant
 - 510 – Tavern
 - 601 – Business/Professional office
 - 604 – Repair shop
 - 609 – Service station
 - 705 – Resort or group camp
 - 707 – Private organization
 - 708 - Theaters

- Ratio of improvement value to total market value is 50 percent or less
- Parcel size ≥ 1 acre

Underutilized Criteria

- Zoned (comprehensive plan for rural Cowlitz County) for commercial use
- Assessors use code not equal to commercial vacant or partially utilized use criteria. These are lands designated commercial but are currently used for residential, industrial, or resource purposes
- Minimum parcel size ≥ 1 acre
- Market value less than or equal to \$300,000

Constrained lands by Commercial Class

The constrained land portions of properties that are classified as vacant, partial-built, or underutilized classes are classified as constrained lands

Environmental Constraints percent buildable for Commercial Class

It is assumed in the model that 75% of constrained lands will develop in the future. This is to account for lands classified as constrained but are determined not constrained after more detailed environmental review required at the time of development and potential mitigation on or off site.

Mixed Use

Commercial development is allowed in mixed use zoned lands. In the model the commercial mixed-use lands are assumed to have a ratio of 60 percent commercial development for Mixed Use - Residential/Commercial and for Mixed Use – Commercial/Industrial.

Employment densities

Commercial employment densities per acre used in the model are 15.

Partial-Built development factor

The model assumes 60% of available commercial lands that are partially built will further develop.

Industrial Class

Inclass	Description
0	Not Industrial
1	Built
2	Vacant
3	Partial-built
4	Underutilized
5	Vacant Constrained
6	Partial-built Constrained
7	Underutilized Constrained
8	Exempt
99	Unknown

Industrial Class Assumptions

Vacant Criteria

- Includes parcels with land use classes based on Zoning (comprehensive plan for rural Cowlitz County) that allow industrial use
 - 40 - Industrial
 - 50 – Mixed Use - Commercial/Industrial
- Parcel is considered vacant based on the following Assessor Use Codes
 - 901 - 0 - 1.00 Acre
 - 902 - 1.01 - 3.00 Acres
 - 903 - 3.01 - 5.00 Acres
 - 904 - 5.01 - 10.00 Acres
 - 905 - 10.01 - 20.00 Acres
 - 906 - 20.01 - 50.00 Acres
 - 907 - 50.01 Acres and over

- 909 - Bare land w/homesite
- Not tax exempt based on taxable status
- Not a park or open space based on assessor use codes
- Not a utility, right of way, or easement based on assessor use codes
- Not public use based on assessor use codes
- Not an airport based on assessor use codes

Partial-built Criteria

- Includes parcels with land use classes based on Zoning (comprehensive plan for rural Cowlitz County) that allow Industrial use
 - 40 - Industrial
 - 50 – Mixed Use - Commercial/Industrial
- The parcel's existing use is considered industrial based on the following Assessor Use Codes
 - 221 – Food and kindred products
 - 224 – Lumber/Wood products etc.
 - 225 – Furniture and Fixtures
 - 226 – Paper and allied products
 - 228 – Chemicals
 - 229 – Petroleum refining etc.
 - 230 – Mobile home manufacturing
 - 231 – Rubber/Misc plastic products
 - 232 – Stone/Clay/Glass products
 - 233 – Primary metal industries
 - 234 – Fabricated metal etc.
 - 236 – Exporting logs/wood chips
 - 237 – Asphalt/Concrete manufacturing
 - 238 – Grain elevators
 - 239 – Misc Manufacturing
 - 444 – Waterborne Trans(ports)
 - 501 - Warehouse
- Ratio of improvement value to total market value is 50 percent or less
- Parcel size $\geq$ 1 acre

Underutilized Criteria

- Zoned (comprehensive plan for rural Cowlitz County) for industrial use
- Assessors use code not equal to industrial vacant or partially utilized use criteria. These are lands designated industrial but are currently used for residential, commercial, or resource purposes
- Minimum parcel size ≥ 1 acre
- Market value less than or equal to \$300,000

Constrained lands by Industrial Class

The constrained land portions of properties that are classified as vacant, partial-built, or underutilized classes are classified as constrained lands

Environmental Constraints percent buildable for Industrial Class

It is assumed in the model that 50% of constrained lands will develop in the future. This is to account for lands classified as constrained but are determined not constrained after more detailed environmental review required at the time of development and potential mitigation on or off site.

Mixed Use

Industrial development is allowed in mixed use zoned lands. In the model the Mixed Use – Commercial/Industrial lands are assumed to have a ratio of 20 percent industrial development.

Employment densities

Industrial employment densities per acre used in the model are 10.

Partial-Built development factor

The model assumes 35% of available industrial lands that are partially built will further develop.

Model Results

Results of the model are summarized by jurisdiction. The summary includes a count of potential housing units and employment that could be created from development based on the model inputs and assumptions.





