

# THURSTON COUNTY COMPREHENSIVE PLAN UPDATE

PLANNING COMMISSION – DECEMBER 06, 2017



## Mineral Resource Lands: Supply and Demand

Land Use



Natural Resources



Housing



Transportation



Utilities



Economic Development



Environment



Capital Facilities

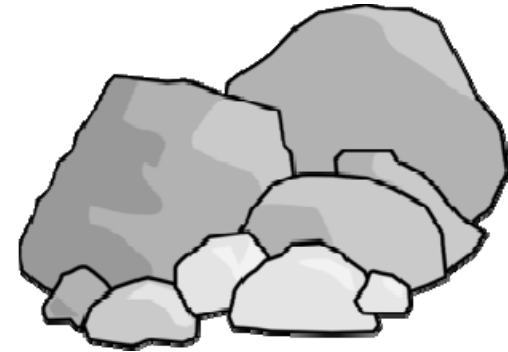


Health



## OVERVIEW

- Supply and Demand Considerations
- Planning Commissioners Feedback on Draft Map Options (11/15/2017 materials)



Staff have requested a recommendation from the Planning Commission on the scope of the Mineral Lands Designation Criteria and Map.

# MINERAL RESOURCE LANDS

## Project Steps for Mineral Resource Lands

<b>1. Identify and classify</b>	Develop a countywide inventory based on geologic data on the location and extent of mineral deposits, existing land uses, and other factors. These areas are categorized based on their quality, using available data from DNR, USGS, and others
<b>2. Designate</b>	Identify priority areas where high quality mineral resources are available and compatible with existing land use patterns and other criteria.
<b>3. Conserve</b>	Establish policies that ensure future land uses will be compatible with mineral extraction in designated areas.
<b>4. Permit</b>	New mining operations planned in areas designated as mineral resource lands will still need to be reviewed before they are permitted to operate. Mining activities must abide by all relevant state and local regulations, including environmental rules.



Comp Plan Update

## SUPPLY AND DEMAND - AGGREGATE

### Sand and Gravel (Aggregate)

- Supply

- Inventory Total = 6.1 billion tons<sup>^</sup>

- Demand

- 3,782,100 tons per year<sup>^</sup>
- 13.5 tons per person/per year<sup>\*</sup>

“In designating mineral resource lands, counties and cities should determine if adequate mineral resources are available for projected needs from currently designated mineral resource lands.”

- WAC 365-190-070

<sup>^</sup> Source: AESI (2017), “Thurston County Mineral Lands – Geologic Inventory and Classification Study.”

<sup>\*</sup> Source: Pacific Lutheran University (2003), “The aggregates industry in Washington.”

## SUPPLY AND DEMAND - AGGREGATE

### Sand and Gravel (Aggregate)

#### ■ Thurston Co. Population Estimate

- 2035 (~20 years): 370,600\*
- 2067 (50 years): 710,000^

#### ■ Aggregate Demand Estimate

- In 2067: 9.8 million tons
- 20-year, cumulative (2017-2037): 88,427,354 tons
- 50-year, cumulative (2017-2067): 261,725,603 tons

“Counties and cities may consider the need for a longer planning period specifically to address mineral resource lands, based on the need to assure availability of minerals for future uses, and to not inadvertently preclude access to available mineral resources due to incompatible development.”

- WAC 365-190-070

\* Source: TRPC Small Area Population Estimated and Population and Employment Forecast, 2014. Total Thurston County population estimate.

^ Source: Office of Financial Management, high-range estimate. Note: This is a more extreme estimate than Thurston County typically uses.

## SUPPLY AND DEMAND – BEDROCK / QUARRY ROCK

- Supply
  - Can't be estimated because depth of resource is unknown
- Demand
  - Columbia Quarry produces a unique, high-density material used for jetties (gabbro)
    - 665,280 tons sold, 1999-2017
    - Est. 1.5 million tons required to repair Columbia River jetty
  - Other local material mostly doesn't meet WSDOT specifications, but is used for other projects



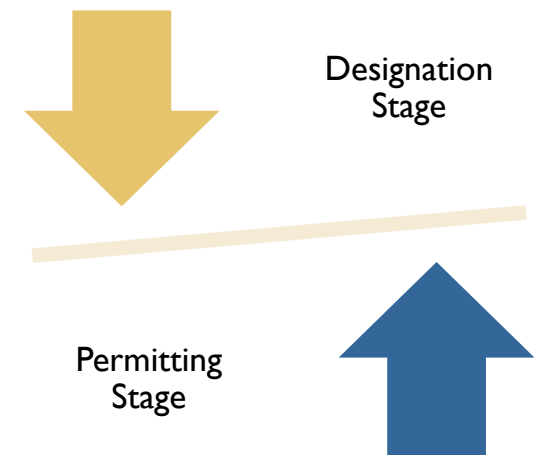
## SUPPLY AND DEMAND

Is Thurston County a net importer or exporter of mineral resources?

- Hard to say – information not readily available, and often proprietary
- Likely a net exporter of aggregate; net importer of quarry rock
- December 20<sup>th</sup> speakers to address regional market considerations

# DESIGNATION CRITERIA OPTIONS

- Draft Mineral Resource Lands Designation Options
  - Map 1. Broad approach
    - Map 1. Current Criteria in Comprehensive Plan
    - Map 1a. Co-designates Agricultural Lands
  - Map 2. Narrow approach
    - Excludes ALL criteria that have been discussed
  - Map 3. Blended
    - Designation area is the same as Map 1
    - Identifies “review area” that may overlap with critical areas and other criteria
  - Map 4. 2004 Mineral Lands Task Force Criteria





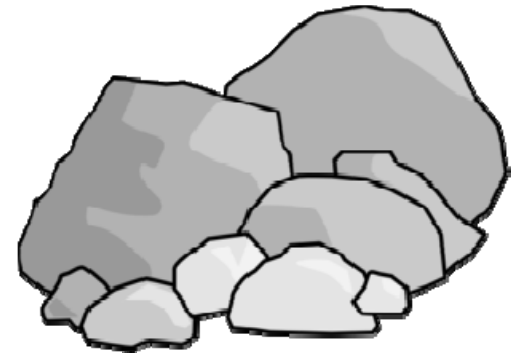
## DESIGNATION CRITERIA OPTIONS

	Current MRL Designation	2017 Inventory	Map 1	Map 1a	Map 2	Map 3	Map 4
	Maps some mine parcels	Maps resources based on geology	Current Comp Plan Criteria	Also includes LTA	Excludes all critical areas, historic sites, LAMIRDs, etc	Shows Map 2 exclusionary criteria as a “review area”	2004 MRL Task Force Criteria
<b>Total Acres</b>	<b>5,623</b>	<b>189,475</b>	<b>141,554</b>	<b>143,776</b>	<b>104,502</b>	<b>141,554</b>	<b>161,752</b>
% of Inventory	n/a	-	75%	76%	55%	75%	85%
Aggregate supply est*. (billion tons)	-	6.1	2.8	2.9	0.8 (826 million)	2.8	4.3
Years supply	-	600	285	295	84	285	438

\*Very rough estimate – uses an average estimate to convert cubic yards of material to tons

## NEXT STEPS

- Refine MRL Map Options based on Planning Commission feedback
- December 20<sup>th</sup> speakers
  - DNR – John Bromley
  - County Current Planning – Tony Kantas
  - Washington Aggregate and Concrete Association – Bruce Chattin
- Set a public hearing



# Questions?

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# EXISTING DESIGNATION CRITERIA: TC COMPREHENSIVE PLAN

## Minimum Designation Criteria: Chapter 3

Minimum Designation Criteria: Chapter 3		
1. <u>Mineral Deposits</u>	Should contain deposits based on USGS maps, DNR permits, or site specific geologic information	This information is being provided/updated in the inventory
2. <u>Location</u>	<p>Not adversely impact nearby land uses, public health or safety</p> <p>1,000 ft from</p> <ul style="list-style-type: none"> <li>• public preserves,</li> <li>• urban growth areas (UGAs)</li> <li>• residential areas with existing densities &gt; 1/5</li> </ul> <p>60% of area within 1,000 ft of a proposed site must have parcels of 5 acres or larger (excludes applicant)</p>	
3. <u>Minimum Site Size</u>	5 acres	
4. <u>Marketability</u>	Mineable, recoverable, marketable	
5. <u>LTA and Historic</u>	Long-term agriculture lands and historic/cultural sites are excluded	
6. <u>LTF</u>	Long-term forestry lands may be co-designated	

## EXISTING DESIGNATION CRITERIA: TC CODE (20.30B)

### Minimum Designation Criteria: 20.30B TCC

Most Criteria are the same as in the Comprehensive Plan

#### EXCEPTION Critical Areas

- Site does not contain the following critical areas: Zone 1 or Zone 2 areas for Group A public water systems, Class 1 or 2 wetlands or their buffers, FEMA 100-year floodplains, habitat areas for threatened or endangered species or their buffers
- Site is located away from geologically hazardous areas (steep slopes)

A full critical area review is done at the time of application.