Thurston Cty.. Mineral Lands

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Improving the designation of Sand and Gravel facilities

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Designating Resource Lands

- First requirement of GMA. RCW 36.70A.170
- Designations and development regulations were due by Sep. 1, 1991.
- Development regulations can’t prohibit existing uses.
- Development regulations must assure adjacent land uses do not interfere with resource activities.
- Periodic review required- RCW 36.70A.131
- Some jurisdictions only designated existing uses
Designating Resource Lands: Based on fundamental planning- The land speaks first

- Knowing where MRL, critical and natural resource lands are allows for smart planning; A fundamental intent of GMA
- Enables continued access to valuable minerals and avoid land use conflicts from poorly sited development
- Incompatible zoning IS the bigger issue and contributes to conflicts
- Designating only active mines doesn't’t meet GMA compliance, doesn't conserve the resource & will increase future land use conflicts.
- A purpose of designation is identifying and communicating MRL of LTCS to the public for their planning
- Designation does NOT indicate or assure a permit will be issued, but the land may be used as intended in the future.
WA Consumption Factors in Designation

- Transportation 51.7%
- Public constr. 7.5%
- Residential 23.5%
- Commercial 17.6%
- Office 3.5%

60+% use by cities, counties, state - Our largest consumer
2 questions asked:

• #1 Market for sand and gravel?
  very high, finite resource, Cty. projections confirm and support strong & continued demand. S&G likely used in 90% of the construction aggregate applications.

• Population growth
• Transportation / Infrastructure rebuild projects
• Capital projects to support state govt.
• Schools, shopping, hospitals etc.
WASHINGTON POPULATION PLUS SAND & GRAVEL PRODUCTION REQUIREMENTS

Sand and gravel production and consumption parallels the population increase.
Thurston County Population projections

• 1993- 177,058
• 2004- 223,065 +25.9% *
• 2017- 276,900 +24.1% *
• 2025- 352,652 +27.4% *
• 2035- 410,199 +16.3% *

• 1993 – 2035 = 232% increase in growth
• Cty. 2003 estimate tons / person annually 13.5-

• ** OFM GMA projections- December 2017
Construction
Aggregates used in Residential via Jobs & Economic Development

- Snohomish cty example:
- By 2025 over 92,000 NEW jobs will be added; (4,350 new jobs / year)

- State capitol and agencies, non profit organizations will continue to assure new state and related workers.
- Thurston Cty. new households: 2025 = 14,406
- 40% increase countywide housing units 2016 – 2035
- Approx. 250 tons per house typical consumption
Projected Housing Consumption

- 1993- 73,293 units
- 2004- 93,727 +27.8 %
- 2016- 115,370 + 23.1%
- 2035 TRPC estimate - 160,250 +39.9%

@ 250 tons of aggregate products used / house:
- 1993: 18,323,250 tons
- 2035: 40,062,500 tons +218%
Aggregates in Transportation / Snohomish Cty. example- 2005

- County Overlay program: Historically, County resurfaces an AVERAGE of 100 miles of Roadways / Year = **70,000 Tons/Year**
- 2005 Transportation Project List: Over $22.6M in State Hwy Corridor Improvement projects, “High priority” City & Cty. Arterial Improvements, HOV & Transit projects
- Average ANNUAL County Aggregate Consumption (last 5-7 years): **1,085,00 TONS / YR**
- Cty. Road Dept. Road maintenance usage - **135,000 tons / year**
- Major PW Road Projects (2.6 miles)- **160,000 tons / year** (61.5 tons per mile)
- New Residential Subdivision Road (13.4 miles / yr.)- **720,000 tons / Yr.** (53.7 tons / mile)
- By 2025 at least 650 ACRES of new parking spaces will be needed
- 31,000 new vehicle trips / day
- **Annual estimated general calculations: 2,170,000 tons per year**
Partial Thurston Cty. estimated Transportation considerations

- RCW 36.81.121- 6 year Comp Improvement Plan
- 2018 – 2023- Projected **35 Priority Projects** + 10 County program projects
- **2018 Road fund:** Road, bridge, maintenance & preservation = $12,381,676
- **2021- 2023 Road Fund = $40,507,787  + 327%**
Designation of known and viable mineral resources- Location matters
Classification Matrix

• Similar as used by Snohomish Cty.- identifies resource quality and location. Good tool...

• 2005 = 3,254 acres = 71.7% S&G permits, 24.3% Hard Rock, 3.9% Other

• 2006 Comp Plan designated: 141,928 acres BUT; 81.6%- Designated Bedrock, 6.6% Type A-1,2 S&G

• Caution on making same mistake of not permitting what you are consuming.

• Insure you are permitting A&B classified sources to meet WSDOT specifications
Large designations, fewer permits
Thurston County Aggregate permits

- DNR reports: Current active permits- **31** (2005- 41)
- Terminated permits since 1995- **2**
  
  *others may be depleted but reclamation plan is not completed or bond released*
- Permits since 1995- **7** over 22 years
- 1995- 186,419 // 2015- 266,224 = +43.8%
- Recommended to use a 50 yr. vs. 20 yr. estimate
- Takes 7-10 years to get a permit / moratoriums
- *Thurston has many thin deposits, large areas vs. competing overlays restricts permitting*
2002 Designation lessons

• County established prohibit designation of…. Criteria
• Cty. didn’t recognize dual classification of Forest and Mineral lands- Cty. failed to adopt this task force recommendation
• Only established a MRL overlay- only 14 of 46 sites were formally designated need for investment and certainty
• Relied on estimates of available materials versus GMA guidance for designation

• 2002 survey of designated sites: 5 of 17 reported nearing depletion
• 2005 survey: survey of existing sites: 33/41 responded 17/33 reported stages of depletion 24 said other plans

*** Mineral resources = Construction Aggregates
Question  #2

Is Thurston Cty. a importer or exporter?

• Yes & No

• 2 cited examples: Cty. report large amounts of S&G exported from Skookumchuck to Centralia coal mines- no longer occurring / private use- almost sole source supply

• Hard Rock- “Gabbro rock” Cowlitz County source depleted. Thurston Cty source exported by Army Corp of Eng. for high quality rip rap.

• 2002- Cty estimated need for 27M cy of “rock” and falls short of this supply...... importer

• 2002- Reported only 10% of gravel is exported
Question #2

Is Thurston Cty. a importer or exporter?

- Adjacent counties permitting & supply - Do they?
- Results in Regional materials due to non permitting practices
- Supply & demand, transportation costs, proximity to project will dictate sources of supply
- Good hard rock resource exported (Type A erosion control): good material to meet narrow specs will be exported. Steilacoom exported to Brazil
- CA (LA & SFO) gets aggregate supply from Vancouver BC King Cty...

Exporting isn’t exploitation...... economics & supply...... all counties import and export.