

MINING 101: The Goal 5 Process for Aggregate Resources

The 10 Steps of Decision Making

Background

- Statewide Planning Goal 5 – Natural Resources
- Goal 5 Resources include:
 - Riparian corridors, wildlife habitat, scenic rivers, groundwater resources, mineral and aggregate resources
- Goal 5 Review Process
 - Criteria and Decision Making Process specified in Oregon Administrative Rules
 - Specific rules for mining on EFU-zoned lands
 - Significance of the resource / allow or not allow mining
 - Comprehensive Plan Amendment / Add to Inventory
 - Zone Change to Apply Mineral Aggregate Overlay MAO
 - Public Hearing- Planning Commission / Recommendation
 - Public Hearing – BCC / Final Decision

Step 1: Complete Application Determination

- Complete Application must include:
 - Quality, Quantity and Location of the Resource
 - Conceptual Site Reclamation Plan
 - Traffic Impact Assessment
 - Proposals to minimize impacts (conflict analysis)
 - Site plan, operational characteristics, proposed mining uses
- Final Decision within 180 days.

Step 2: Determine if Site is “Significant”

- A site is “Significant” if:
 - Quantity Standard - 2,000,000 tons of aggregate material (in Willamette Valley)
 - Quality Standard – Meets ODOT specifications for base rock
 - Location – Site Characteristics, thickness of aggregate layer, soil characteristics

Step 3: Identify Conflicting Uses

- Determine Impact Area: 1,500 feet
- Identify existing and approved uses
- Identify potential conflicts
 - Noise, Dust, Other Discharges
 - Conflicts to local roads
 - Safety conflicts with existing public airports
 - Conflicts with other Goal 5 resources
 - Rivers, streams, historic resources, etc.
 - Conflicts with agricultural practices

Step 4: Conflict Analysis

- Determine whether identified “conflicts” can be minimized
- “Minimize a conflict” – to reduce a conflict to a level that is no longer significant or ensure conformance to a local, state or federal standard
- Noise – Equipment, rock crushers, blasting
- Groundwater Impacts – Domestic wells, water quality, changes in aquifer

Step 4: Conflict Analysis (Cont'd)

- Natural Features – Rivers, streams, wetlands
- Dust – Mining, truck traffic, rock crushers, mining characteristics (wet mining vs. hard rock)
- Traffic – Truck traffic, capacity of road system, safety, weight limitations
- Impacts on Agricultural Operations (ORS 215.296)
- If conflicts minimized, allow mining
- If one or more conflict not minimized, analyze ESEE consequences

Step 5: Analyze ESEE Consequences

- ESEE- Economic, Social, Environmental and Energy Consequences (positive and negative)
- Balancing Test
 - Degree of adverse affect on existing land uses
 - Reasonable and practical measures to reduce adverse effects
 - Duration of mining operation and post-mining use

Step 6: Allow or Not Allow Mining

- Mining allowed if:
 - all conflicts are minimized (Step 4) or:
 - ESEE Consequences warrants mining
- If Mining is not allowed:
 - No further analysis required
 - Site may still be deemed a “Significant” site

Step 7: Determine Post- Mining Use

- Reclamation Plan Required
- Post-mining use must be consistent with Comprehensive Plan and Zoning Ordinance
- Reclamation administered by Department of Geology and Mineral Industries (DOGAMI)

Step 8: Identify Future Conflicting Uses

- Identify future off-site conflicting uses in the impact area (MAO)
- New uses allowed by underlying zoning district (dwellings, agricultural uses, etc.)

Step 9: Allow or Not Allow Conflicting Uses

- Complete ESEE Analysis addressing future conflicting uses
- Based on ESEE Analysis, decide to:
 - Allow conflicting use
 - Limit conflicting use
 - Prohibit conflicting use

Step 10 (Finally!): Amend the Plan

- Amend the Comprehensive Plan to carry out the decision
 - Add site to Goal 5 inventory of significant sites
- Implementing measures / conditions must be clear and objective
- Mining is not allowed to commence until a MAO district site plan review application is approved

The Record: What You Will See and Hear

- Application materials
- Staff Report Findings and Recommendation
- Complete Record (All exhibits, etc)
- Conflicting Expert Testimony (verbal and written)

Decision Matrix: Goal 5 Process for Aggregate Resources/ Application of Mineral & Aggregate Overlay (MAO)

File Nos./ Application name: _____

Step		OAR	Standard (generally)	Notes
1.	Determine completeness of application	660-023-0180(8)	(1) Information regarding location, quality, quantity of resource; (2) conceptual site reclamation plan; (3) traffic impact assessment within 1 mile of entrance; (4) proposals to minimize conflicts in impact area; (5) site plan and operational details	
2.	Determine if site is "Significant" <i>Note: does not include alternative under 660-023-0180(4)</i>	660-023-0180(3)	Location, quality and quantity: <ul style="list-style-type: none"> • >2,000,000 tons of material; • representative sample meets ODOT specifications (generally determined by testing lab) Avg. thickness >25 feet (if >35% of mining area contains Class I, Class II and/or unique soils)	
Decision #1: Is this site "Significant"? If YES, go to Step 3. If NO, STOP.				
3a.	Identify impact area (1,500 ft) Impact area is for purpose of identifying conflicts.	660-023-0180(5)(a)	Large enough to include existing or "approved land uses" that would potentially be impacted by mining and processing operations Limited to 1,500 feet from mining area unless factual information indicates significant potential conflicts beyond that distance	
3b.	Identify (existing or "approved") conflicting uses in impact area	660-023-0180(5)(b)	"Approved land uses" defined as "dwellings allowed by a residential zone of existing platted lots and other uses for which conditional or final approvals have been granted"	

Decision Matrix: Goal 5 Process for Aggregate Resources/ Application of Mineral & Aggregate Overlay (MAO)

File Nos./ Application name: _____

Step		OAR	Standard (generally)	Notes
4.	Decide whether conflicts can be "minimized"	660-023-0180(5)(b) (A-F)	Noise: impacts and recommended mitigation generally determined through a noise study completed by certified engineer; noise sensitive uses must be considered (homes, schools, etc)	
			Dust: impacts may occur from all aspects of mining operation (overburden and aggregate extraction; processing; on-and-off site truck and equipment movement; etc.)	
			Other discharges: may include <ul style="list-style-type: none"> • diesel emissions; • discharges into groundwater; • stormwater; etc 	
			Local roads used for access and egress, within 1-mile of entrance (unless farther to the nearest arterial)	
			Safety conflicts with airports, specifically due to bird attractants (i.e. open water impoundments)	
			Other Goal 5 resources: <ul style="list-style-type: none"> • Historic • MAO • Rivers/streams 	
			Agricultural practices: will not (1) force a significant change in or (2) significantly increase cost of accepted farm and forest practices in surrounding lands	
			Other for which consideration necessary to carry out ordinances that supersede DOGAMI regulations	
Decision #2: Can all conflicts be minimized? If YES, ALLOW MINING and go to Step 6. If NO, go to Step 5.				

Decision Matrix: Goal 5 Process for Aggregate Resources/ Application of Mineral & Aggregate Overlay (MAO)

File Nos./ Application name: _____

Step		OAR	Standard (generally)	Notes
5.	Analyze ESEE consequences	660-023-0180(5)(d)	Determine Economic, Social, Environmental and Economic (ESEE) consequences of allowing, limiting or not allowing mining on the site	
Decision #3 (if needed): Does ESEE analysis warrant mining? If YES, ALLOW MINING and go to Step 6. If NO, STOP - no further analysis needed, application will be denied.				
6.	Allow mining	660-023-0180(5)(e)	Limits/conditions may be put on the mining so as to protect some of the conflicting uses; must be clear and objective	
7.	Determine post-mining use of site	660-023-0180(5)(f)	<ul style="list-style-type: none"> • Reclamation Plan required • Post-mining use must be consistent with County Comp Plan and ZDO – must be an allowed use under current zoning Reclamation administered by DOGAMI (needs reclamation permit)	
Decision #4: Is the Reclamation Plan acceptable? If YES, go to Step 8. If NO, STOP - applicant will need to revise Reclamation Plan.				
8.	Identify future conflicting uses in impact area (MAO)	660-023-0180(7)	If MAO boundary does not extend past the subject property, due to mitigation of potential conflicts, analysis includes only uses on subject property(ies)	
Decision #5: Does an ESEE analysis need to be completed for future uses within the impact area? If YES, go to Step 9. If NO, go to Step 10.				

Decision Matrix: Goal 5 Process for Aggregate Resources/ Application of Mineral & Aggregate Overlay (MAO)

File Nos./ Application name: _____

Step		OAR	Standard (generally)	Notes
9.	Analyze ESEE consequences (if needed) to determine whether to allow conflicting uses	660-023-0180(7)	Determine Economic, Social, Environmental and Economic (ESEE) consequences of allowing, limiting or not allowing new uses within Impact Area	
10.	Amend the Plan to carry out decision – clearly identify boundary for the MAO	660-023-0180(9)	<ul style="list-style-type: none"> • Add Site to Comprehensive Plan, as a significant mineral and aggregate Goal 5 resource (Table III-2) • Amend zoning map to apply MAO Implementing measures must be clear and objective	
<u>NOTE: Mining is not allowed to commence until a MAO District Site Plan Review application is approved.</u> If applicant has submitted an application, go to Step 11.				
11.	Complete Site Plan Review for proposed mining operations Subject to (at a minimum) Sections 708, 1006, and 1010 of the County’s Zoning & Development Ordinance (ZDO)	---	ZDO Section 708 (Mineral & Aggregate Overlay) <ul style="list-style-type: none"> • Specific uses allowed; • Development standards– access, noise, screening, water and air quality, hours of operation, drilling and blasting, etc; • Reclamation plan; • Process ZDO Section 1006 (Water Supply, Sanitary Sewer, Surface Water, & Utilities Concurrency) ZDO Section 1010 (Signs)	
Decision #6: Does the proposal meet all the requirements for the Site Plan Review? If YES, APPROVE application and allow mining to commence, subject to conditions If NO, DENY the Site Plan Review application and do not allow mining to commence; Site will remain on inventory as a “significant” Goal 5 resource.				