

3. Planning and mining

All land uses present some combination of benefits and costs to a community. A new shopping center may benefit a city's economy by providing new jobs, but it also may cause traffic congestion. A new factory may produce a vital new medicine but also emit noxious smells and chemicals.

Aggregate mining is no different. It typically brings both benefits and costs to the community. The mining provides an important product we all use and need, it creates jobs, and it adds money to the local economy. But it also is likely to generate certain costs or side effects, such as noise, dust, and truck traffic. For such reasons, people are likely to object to having a mine near their homes or schools or places of work. Mining operators can and do take many steps to reduce or eliminate objectionable side effects. The promise of such mitigation, however, often fails to allay the concerns of neighbors, who may simply oppose mining in any form.

The solution to such land use conflicts might seem simple: just prohibit mining in areas close to urban areas and farms, and get aggregate in remote places where mining won't conflict with other land uses. That works for some natural resources, such as timber. Why not do the same with aggregate? There are two main answers to that question.

First, aggregate deposits aren't always located just in remote areas. In fact, the largest deposits of high-grade aggregate tend to be found in the same areas best suited for human settlement and agriculture: our river valleys. Aggregate thus is different from timber, which grows best in higher elevations, on land far from urban areas and farms.

Second, aggregate is a heavy, low-value product that usually cannot be transported long distances economically. Although local market conditions vary greatly, it's generally not cost-effective to haul aggregate more than 20 miles from the site where the rock is mined. Its price becomes prohibitive at distances much beyond that. Here, too, aggregate differs from wood, a relatively lightweight, high-value product that can be hauled profitably over long distances to its markets.

Aggregate mining therefore poses a dilemma. On one hand, everyone needs and uses aggregate. Moreover, it can be obtained at reasonable cost only at sites close to the urban centers where most of it is

used. On the other hand, aggregate mining may often generate significant side effects on nearby land, roads, and communities. That creates conflict among land uses. The challenge for planners, local officials, miners and others is how to resolve those conflicts and still enable aggregate to be produced.

How does planning deal with conflicts among land uses?

Eliminating or reducing conflicts among land uses is one of the main purposes of land use planning. The planner's primary tool for such conflict resolution is zoning. The idea behind it is simple enough: just divide a community into different districts or "zones" where some land uses are allowed to develop and others are not.

This simple segregation of land uses works well to reduce conflicts among broad, discrete categories of development such as "residential" and "commercial" use. But it doesn't work very well with aggregate mining, for several reasons.



First, mining occurs only where suitable deposits of the resource exist, and planners often lack precise information about the location of such deposits. The planners can't zone effectively for aggregate mining without knowing where those deposits are.

Second, aggregate mining is not a single, homogenous land use. For example, some mines have rock crushers, while others do not. Some produce concrete and asphalt (a process called *batching*); others don't. Some drill and blast bedrock; others do not. A large gravel pit might generate 500 truckloads of rock a day; a small quarry, 500 truckloads a year. Because of these differences, it's hard to write uniform policies and regulations for mining.

Third, aggregate mining operations vary over time: they expand, contract, discontinue, and resume. One of the most common land use problems occurs when a long-dormant quarry suddenly resumes production. That may come as quite a surprise to landowners who built homes in the area without knowing a quarry was nearby.

Fourth, most mines are temporary or short-term operations, when compared to other land uses. A mining site is used for some limited period of time, ranging from a few months to several decades. Mining lasts until the aggregate supply at the site is exhausted or demand for it from nearby markets drops off. At that point, extraction ceases (although a site may continue to be used for processing and stockpiling.) The question of "end use" then becomes

important: what will the site be used for after the mining is done?

Finally, aggregate mines are a specialized, intensive form of land use. In Oregon, they take only a few thousand acres of land, a miniscule fraction of the state's total land area. In a typical year, only a few hundred mines are active, and many are small operations involving just a few acres. But a mining operation may cause dramatic alterations of the landscape at the mining site and also have significant effects on surrounding lands and uses.

All these factors make it hard to plan where aggregate mining should occur or to confine it to zones where it is segregated from other land uses. Instead, proposals to mine generally must be considered one case at a time. In Oregon, such case-by-case analysis is done through a "conditional use permit" (CUP) or a "post-acknowledgment plan amendment" (PAPA).

What is a "conditional use"?

A conditional use is a land use that *may* be allowed in a given zone under certain conditions. For example, in a standard residential zone, schools often are listed as a conditional use. Development officials might allow a new school to be built on a site in that zone, but only under certain conditions. Schools aren't prohibited in the zone but neither are they allowed automatically, as houses would be. The CUP process is a way for proposals for new schools to be decided case-by-case. Proposals for aggregate mining often are handled the same way.

What is a "post-acknowledgment plan amendment" (PAPA)?

Under Oregon's planning laws, every city and county in the state has a local comprehensive plan and land use regulations to carry out the policies in that plan. All of these local plans have been reviewed against state standards: the 19 statewide planning goals, related administrative rules, and statutes on land use. When the Land Conservation and Development Commission completes such a review and finds a plan (and its related ordinances) to be in compliance with those state standards, the plan is said to be "acknowledged."

But plans sometimes need to be amended. Under Oregon law, acknowledged local plans can be amended in two ways: through "periodic review" or through a "post-acknowledgment plan amendment" (PAPA). When a local government proposes a PAPA, the Department of Land Conservation and Develop-

ment reviews it to see whether it complies with state standards. In the case of PAPA's that involve aggregate resources, the key standards are Statewide Planning Goal 5 and its related rules.

Applicants for mining permits in Oregon often have a choice: file for a CUP, or seek a PAPA. The CUP typically is used for smaller operations. The conditional use permit process generally is simpler and cheaper, but a CUP often is more vulnerable to legal challenge through appeals. That is because the criteria used to approve CUP's typically are vague and general, and hence are subject to more than one interpretation. Moreover, a CUP offers little protection from future development around the mine. For example, if houses are permitted to develop close to a quarry, their owners may eventually pressure local officials to close the mine, even though it was there first. A PAPA under Goal 5 reduces the risk of losing an appeal, and it can protect an aggregate mine from new development on nearby land.

The PAPA process for aggregate resources and the rules that govern it are the main subject of this guide. The next two chapters describe that process and those rules. To fully understand them, it is necessary to understand the basic features of Oregon's statewide planning system. A complete description of those features would exceed the scope of this guide, but there is a short overview of Oregon's planning system in Appendix A. It will be useful to readers who would like to learn more about *periodic review* and *plan amendment review*.



4. Goal 5 and its rules

The policy foundation of Oregon’s planning system is a set of 19 statewide planning goals. All of them have been adopted as administrative rules (OAR Chapter 660, Division 15), and all have the force of law.

The main goal addressing aggregate resources and surface mining is Goal 5, *Natural Resources, Scenic And Historic Areas, And Open Spaces*.

Goal 5 calls for local governments “to protect natural resources and conserve scenic and historic areas and open spaces.” It also declares: “Following procedures, standards, and definitions contained in commission rules, local governments shall determine significant sites for inventoried resources and develop programs to achieve the goal.” “Mineral and aggregate resources” are one of a dozen resource categories covered by the goal.

The related rules for Goal 5 are found in two divisions of Oregon’s administrative rules. OAR Chapter 660, Division 016, is widely known as “the old Goal 5 rule” (although technically it is a division containing six rules). LCDC adopted it in 1981. OAR Chapter 660, Division 023, is the “new rule,” adopted in 1996. It, too, is actually a division, containing 25 separate rules.

The old Goal 5 rule still applies to some aggregate mining situations. Most, however, are subject to the new rule, which is written so that it eventually will replace the old rule entirely. For those reasons, this guide focuses on the new rule.

How did the Goal 5 Rule originate?

Goal 5 is unique among Oregon’s 19 statewide planning goals in its breadth. The resources it addresses are quite diverse, and that caused some problems in the early days of the statewide planning program. The goal offered little direction to local governments on just how they were to plan and zone land in such a way as to protect all those resources.

LCDC responded to that problem by adopting a set of detailed administrative rules in 1981. Together, the goal and rules established a “Goal 5 process” described in Appendix D. The process basically required local government officials to inventory the Goal 5 resources in their city or county and then apply appropriate policies and land use regulations to the important resource sites.

That inventory requirement presented a big problem when it came to aggregate resources, which usually lie hidden from view beneath a layer of soil. Few local governments had the money and technical resources to conduct a citywide or countywide survey. Without an adequate inventory of the resources, the Goal 5 process could not be completed.

LCDC resolved that problem and others in 1996, when it overhauled Goal 5 and wrote the new Goal 5 rule. Among other things, the new rule eliminated the requirement for local planners to inventory aggregate resources throughout a city or county.

How did the 1996 revisions affect the rules for aggregate?

The 1996 rule brings more detail to what had been a broadly defined process. The new rule defines many key terms, such as *conflicting use*. It clarifies procedures for some important steps in the Goal 5 process, such as analyzing conflicts. It establishes clear and objective standards for some procedures, especially those involving aggregate resources.

The 1996 rule gives special attention to aggregate resources, adding many new provisions on that topic. Those new provisions, OAR 660-023-0180, can be found in Appendix C of this guide.

The 1996 rule did not eliminate the old Goal 5 rule. Rather, the new rule's "Applicability" section (OAR 660-023-0250) provides for a transition from old to new. Section 0250 requires all local governments with aggregate resources to update their plans and land use regulations to comply with the new Goal 5 rules on aggregate at the next periodic review following LCDC's adoption of the new rule. That raises a question: many years elapse between periodic reviews (and many smaller local governments are exempt from periodic review), so which rules apply in the meantime? The answer depends on the local plan and on what is proposed.

If a local government receives an application for a permit (usually a conditional use permit) to mine aggregate at a site, and the proposal doesn't involve a plan amendment, then the local plan and land use regulations govern the application. They govern even if they haven't been acknowledged to comply with the new Goal 5 rule. A recent Land Use Board of Appeals (LUBA) case, *Jorgensen et al. v. Union County*, 37 Or LUBA 738 (2000), provides an example of that.

If a local government receives a proposal to add an aggregate resource site to the comprehensive plan's inventory of Goal 5 resources, the process and

The new Goal 5 rule's aggregate provisions were challenged in court soon after LCDC adopted them. In *Port of St. Helens v. LCDC*, 165 Or App 487 (2000), the Court of Appeals found the new provisions to be a valid exercise of LCDC's rule-making authority.

standards for review depend on when the local plan was acknowledged. There are three possibilities:

1. Plan not acknowledged under new rule

The most common situation is one in which the local plan and land use regulations have not yet been acknowledged to comply with the new Goal 5 rule. In such cases, adding the site to the plan’s inventory involves a post-acknowledgment plan amendment. The new rule applies directly to that.

2. Plan acknowledged under new rule

If the local plan and land use regulations have been acknowledged to comply with the new Goal 5 rule, they (not the rule) apply to the PAPA.

3. Plan recently acknowledged under Goal 5

Finally, if the local plan and land use regulations contain “specific criteria” for adding significant sites to a plan’s inventory, and if those criteria were acknowledged after 1989 but before September 1, 1996, they (not the rule) apply. This special provision is found in 0180(7)(a) and (b). It was added to recognize some extensive work on aggregate provisions done by a few local governments in the years just before the new rule was adopted.

Linn County is a good example of a local government that has updated its land use regulations to address aggregate mining under the new Goal 5 rule. A copy of the county’s new surface-mining ordinance is posted on DLCDC’s website, at www.lcd.state.or.us.

What are the main provisions for aggregate in the new rule?

The new rule provisions for aggregate resources are in the seven sections of OAR 660-023-0180. The next few paragraphs summarize those sections. The following chapter explains in some detail key issues and nuances associated with these provisions.

0180(1): Definitions

Eleven key terms regarding the application of Goal 5 to aggregate resources are defined. *Conflicting use* is especially important. It is a broader definition than the one applied to other Goal 5 resources. It includes uses that would interfere with mining *and* those that would “be adversely affected by” mining. For other resources, a conflicting use is defined to be one that would harm the Goal 5 resource.

0180(2): Inventorying aggregate resources

Goal 5’s inventory requirement is made optional for aggregate resources. If a local government chooses to conduct such an inventory, it must do so in accordance with the new rule. If it receives an application for a post-acknowledgment amendment involving aggregate resources, it must follow the requirements of the new rule in processing it until it adopts its own surface-mining ordinances and gets them acknowledged under the new rule.

The 2 main criteria for significance of an aggregate site:

- In the Willamette Valley, more than **2 million tons**
- Outside the valley, more than **100,000 tons**

The new rule may require two “ESEE (*economic, social, environmental, and energy*) analyses.” The first provides information needed to decide whether to allow mining. It is intended to answer this question: Would mining conflict with nearby land uses? **Note: This first ESEE analysis is done only if all identified conflicts cannot be minimized by the mine operator.**

Once a decision has been made to allow mining, a different (possibly second) ESEE analysis deals with this question: If any new uses are allowed nearby, would they conflict with the mining?

0180(3): Determining which sites are significant

Goal 5 and the new rule apply only to “significant” resource sites. This section of the new rule specifies criteria for deciding whether an aggregate resource site is “significant.” The main criterion has to do with quality and quantity of the resource.

Generally, a site in the Willamette Valley must be considered significant if it has more than two million tons of aggregate meeting ODOT standards for quality. Outside the valley, a site is significant if it has more than 100,000 tons of aggregate that meets the ODOT standards.

This section also contains a key provision to protect farmland. It says certain sites cannot be counted as “significant” if they have a specified amount of high-quality soils. See Chapter 7, “Aggregate and Agriculture,” for details.

0180(4): Deciding whether to allow mining

For most readers, this will be the most important section of the rule. It lays out steps a local government is to take in deciding whether to allow mining of a significant aggregate site. It also specifies that those steps must be completed within 180 days.

This section focuses on “conflicts”—adverse effects on nearby land uses that might occur if mining were allowed. It specifies types of conflicts to be addressed and the “impact area” in which they are to be analyzed. It limits the extent of that analysis to land uses that already exist in the impact area or that have been approved for development there.

Section 4 also calls for local governments to “determine reasonable and practicable measures” that could be taken to reduce conflicts. If no conflicts exist or if they can be minimized, mining must be allowed. If conflicts do exist and they can’t be minimized, the next step is an “ESEE analysis.” The four letters stand for *economic, social, environmental and energy*. Local officials use that analysis to weigh the ESEE consequences of allowing, limiting, or not allowing the mining.

0180(5): Analyzing ESEE consequences of new uses

If a local government chooses to allow mining at a certain site, then it must consider whether to limit any new conflicting uses that might occur in the impact area. It must conduct an ESEE analysis, to weigh the consequences of allowing, limiting, or prohibiting the new conflicting uses. This “ESEE analysis of conflicts” is standard procedure for many other Goal 5 resources. The steps in such analysis are described in OAR 660-23-0030 and -0050.

0180(6): Applying for a plan amendment

This section specifies five categories of information an applicant must submit in proposing a PAPA that deals with aggregate resources. It says a submittal is to be considered “adequate” if it contains the requisite information. This provision limits the amount of data and research that can be required of an applicant.

0180(7): Applying the new rule

Section 7 says that at their next periodic review, local governments must amend their plans to incorporate the new rule’s procedures for PAPA’s that involve aggregate resources. Until that happens, the provisions of the new rule apply directly to all aggregate resource PAPA’s. (The one exception to that is when a local plan already contains “specific criteria” for such PAPA’s and those provisions were acknowledged after 1989. In that case, the local government may use the local provisions until its next periodic review.)

What are the main steps for an “aggregate PAPA”?

When LCDC wrote its new Goal 5 rule in 1996, Oregon’s 276 local governments had been applying Goal 5 to aggregate resources for two decades. LCDC wanted to preserve as much of that work as possible. The commission therefore had to write a rule that encompassed a wide variety of situations.

The result is a complex rule that’s not easily summarized. But most of the rule’s provisions for aggregate deal with one basic scenario: a person coming to local officials with a request to amend the local plan and land use regulations to allow for aggregate mining at a certain site. The process defined by the rule for handling such PAPA’s has eight basic steps. The steps are summarized in the table on the next page.

8 Steps in Reviewing a PAPA To Mine Aggregate:

Aggregate:

- Determine significance
- Define impact area
- Identify conflicts
- Minimize conflicts
- Evaluate ESEE consequences of mining (only if all identified conflicts cannot be minimized)
- Decide whether to allow mining
- Evaluate ESEE consequences of new uses
- Amend plan



The 8 Main Steps in Reviewing a Proposed Plan Amendment for an Aggregate Mining Site Under the New Goal 5 Rule

1. Determine significance.

Determine whether the aggregate resource site is significant enough to merit inclusion in the plan's inventory of aggregate resources.

2. Define impact area.

If the site is found to be significant, define the "impact area" where mining, if allowed, might conflict with "existing or approved" land uses.

3. Identify conflicts.

Within the impact area, identify conflicts (situations where noise, dust, traffic, etc., from the mining would adversely affect nearby land uses).

4. Identify ways to minimize conflicts.

Identify "reasonable and practicable measures" that could be used to minimize such conflicts.

5. Evaluate ESEE consequences of mining.

If conflicts exist and cannot be minimized, analyze economic, social, environmental and energy (ESEE) consequences of allowing, limiting, or not allowing the mining.

6. Decide whether to allow mining.

Based on the ESEE analysis, decide whether to allow the mining.

7. Evaluate ESEE consequences of new uses.

If mining is allowed, evaluate the ESEE consequences of allowing, limiting, or not allowing new conflicting uses in the impact area.

8. Amend the plan.

If mining is allowed, amend the local plan and land use regulations to reflect that decision and to protect the site for mining.