Conflicts in Resource Zones

January 2015

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One of the primary goals of Oregon’s land use planning program is to preserve and maintain agricultural lands and conserve forest lands (also known as resource lands). Historically, the land use program has been effective in protecting farm and forest lands. Reducing conflicts on farm and forest lands is important to ensure these goals continue to be met. Today, the discussions about conflicts center around the ever expanding list of allowable uses on farm and forest lands. These include nonfarm uses, special events attracting urban residents, and the scale of industrial uses such as wind farms, solar energy facilities, mining, and regional transmission lines.

Many thanks to those who provided insight and feedback for this paper:
Katherine Daniels, Farm and Forest Lands Specialist, Department of Land Conservation and Development
Gary Hewitt, Senior Planner, Clackamas County
Tamra Mabbott, Planning Director, Umatilla County
Mike McCallister, Planning Director, Clackamas County
Becky Steckler, AICP, Program and Policy Manager, Oregon Chapter of the American Planning Association
Why resources zones are important in Oregon

Oregon’s landmark land use laws, SB 100 and SB 101, enacted in 1973, were intended to protect resource lands. Resource lands discussed in this paper is shown in dark green (privately owned forest) and beige (agriculture) in Figure 1. Agriculture and affiliated processing is the second largest economic sector in Oregon and accounts for 12% of employment in the state.\(^1\) When all the related businesses (such as farm equipment and seed suppliers, veterinary services, etc) are taken into account through the economic multiplier effect, this increases to 20%.\(^2\) In 2012, 16.3 million acres of land is in farms, which accounts for just over 25% of the non-federal land in Oregon.\(^3\) This represents a 1.4 million acre decline since 1997.\(^4\)

Agricultural productivity depends on specific characteristics of the land—most importantly the soil type and water—and therefore cannot simply relocate as other industries do. There is a limited amount of high value soil in Oregon, much of it located in the Willamette Valley. When farm land is developed or otherwise converted to a non-agricultural use, the agricultural attribute of the land is lost forever. The Willamette Valley, which has some of the best farming soil in the state, is also the most densely populated, creating constant pressure to convert farm land to residential, industrial and commercial uses. Land in eastern Oregon is equally important particularly for land intensive types of agriculture.

Oregon remains the nation’s number one producer of lumber. This is in part due to the fact that 10.4 million acres of non-federal land in Oregon is zoned for forest or mixed farm/forest uses.\(^5\) Statewide, three percent of employment is in the forest products industry, although in some counties it is closer to 20%.\(^6\) Of the land that was in forest cover in 1850, an impressive 92% is still forested today.\(^7\) Of that land, 20% is in industrial ownership, 15% is owned by smaller private landowners and the remaining 65% is publicly owned.\(^8\) Many industries generate greater economic return than farming or forestry, at least in the

Figure 1: Oregon Land Use 2009

short term. For the long term however, agriculture and forestry provide a better return on investment.

**A framework for thinking about conflicts in resource zones**

**Types of Conflict**

Conflicts can be broken into three different types: (1) physical land conversion to non-resource uses, (2) the “shadow effect” (additional impacts on adjacent lands due to conversion), and (3) the emergence of non-farm activities. Physical land conversion is the transition of land from agriculture or forestry to any type of residential, industrial, or commercial use. Land conversion can be controversial and is at the heart of many conflicts.

The pattern of land use changes dating back to 1974 is shown in Figure 2. The effectiveness of SB 100 and Oregon’s comprehensive land use planning program is apparent in the dramatic decrease in the rate of change after the 1974-84 period. By 1985, all county comprehensive plans and land use regulations had been “acknowledged” or approved by DLCD. In recent years, there has been a general trend towards higher annual land use changes particularly when looking at agriculture and new development in surrounding rural residential zones, with the exception of a drop in changes following the 2008 recession. While the statewide planning program provides a solid foundation, its impact has apparently been somewhat undermined through approval of nonfarm and non-forest uses in EFU and forest zones. Examples include the cumulative effects of non-farm dwellings and commercial uses in EFU zones.

This trend of approving nonfarm uses in the EFU and forest zones is compounded by the fact that over the same period of time, the density increased in nearby rural residential zones. For example, in the forest zone, the density increased from 61.3 in 1974 to 106.6 in 2009, a 57% increase. Increase in population density on lands adjacent to agricultural and forest zones will continue to create conflicts and will further increase the pressure to convert land to non-farm uses.

The second category of conflict is land conversion which creates what is known as the “shadow effect,” referring to the emergence of new impacts on adjacent lands. When one parcel of land is converted to a non-farm use, there are indirect impacts on surrounding land and new conflicts can emerge — increased traffic from agri-tourism, or between the farmer spraying his crops early in the morning and residents of new single-family homes who do not want to be exposed to pesticides. These small

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*Figure 2: Average Annual Change in Land Uses, Oregon 1974-2009*

*Source: Forest, Farms and People (ODF) http://www.oregon.gov/odf/state_forests/frp/docs/forestfarmspeople2009.pdf*
impacts can erode agricultural and timber productivity and expedite the eventual conversion of the land. This is particularly the case when large tracts of productive farm land become fragmented. The shadow effect can contribute to challenges for shared farm infrastructure, force changes in agricultural practices, discourage commercial farming, and raise the price of farmland, etc.

Many recent conflicts fall into the third category: the emergence of non-farm and non-forest activities, particularly events such as weddings, mass gatherings, festivals, runs, and other activities which attract the public into resource zones. The expansion of these uses is both a symptom and a result of the continual pressure to develop resources lands. While zoning regulations in the “exclusive farm use” and “timber resource” zones are generally restrictive, the list of allowable uses in these zones has grown over time and now hovers over 50 in the EFU zone and over 40 in forest zones, as listed in the Appendix. This means that even without any zoning changes, a parcel of land designated EFU might host several residential dwellings, large events, or an aggregate mining operation. The result is an overall decrease in the acreage of land available to produce crops or grow timber. Additionally, changes of this type are often missed in data collection, making them difficult to track and quantify, thus resulting in an overall underestimation of negative impacts to the farm economy.

Scale of Conflict
In order to understand what is happening on the ground and to craft effective policy, it is necessary to recognize not just the different types of conflicts but the scales at which they take place. While large-scale impacts may be more visible, conflicts from small-scale and less intrusive uses may result over time in the slow erosion of resource land and increased conflicts to farm and forest uses. Planners and policy-makers must address both scales at every level of resource management.

Large-scale use changes impact the land use pattern in immediate ways. First, they directly take land out of farming and forestry, representing a significant loss of acreage. For example, a reclamation plan is required as part of the initial permitting process for aggregate operations, however, it is not mandated that the land be returned to crop production, and studies have found this difficult to accomplish. Additionally, both agriculture and forestry benefit from having large areas of contiguous farm or forest land in production. The fragmentation of parcels and disruption of the land use pattern by large-scale changes represents a threat to surrounding landowners’ ability to productively manage their own land. Incidental impacts—such as noise, smell, dust, etc.—may also be more significant due to the size of the operation.

Less clear-cut are the cumulative impacts of multiple small-scale uses in farm and forest land. The impact of small-scale changes should not be underestimated and pose threats to the protection of productive resource land. Small-scale changes are particularly important to consider in light of the long list of uses that are now allowable in resource zones. For example, there are several ways to meet the requirements for a dwelling in EFU and forest zones and over time the number per square mile (density) has added up. Likewise, the number of structures (mostly dwellings) per square mile across all rural land use categories continues to increase steadily. While one dwelling situated in a 2,000 acre tract of farm land might not have a measureable impact, several dwellings and other allowable non-farm structures situated within a couple hundred acre tract would have a greater impact on the overall productivity of the farm economy.

What have we been doing so far?

Policy Framework
The policy framework for the management of resource lands is in the Statewide Planning Goals and Guidelines. These include Goal 3: Agricultural Lands and Goal 4: Forest Lands, as well as Goal 5: Natural Resources, Scenic, and Historic Areas and Open Spaces. These three goals occasionally conflict with goals related to housing and economic development. There are also sometimes conflicting priorities within the three resource management goals. Issues arise from some of the uses that are allowed on farm and forest lands. For example, aggregate mining is allowed on EFU land. In Oregon, there are more than 5,000 inactive and active aggregate sites. The Willamette Valley, where the majority of prime farmland is located, is also the location of 60-65% of Oregon’s commercial aggregate mines. Other uses include wind farms, solar energy farms, transmission lines and facilities. While these uses may conflict with the preservation of farm and forest land they in many cases can only be located on resource land. The conflicting priorities are no different than other Statewide Planning Goals, which require balancing one or more goals. This is a positive policy framework which provides flexibility for local governments to address local needs and priorities.

Most non-farm and non-forest uses are subject to approval criteria that require findings demonstrating the proposed use...“will not significantly increase the cost of or require a change in farm and forest practices on
adjacent lands” (See ORS 215.296). These review criteria provide a tool for local governments to evaluate real or potential impacts and to deny or condition certain land uses in order to mitigate significant impacts.

**Policy Changes and Recent Legislation**

Several policy decisions have been aimed at reducing conflicts on timber land. These include a pilot program to facilitate the transfer of development rights in forest zones with the goal of incentivizing owners to maintain forest land. In the same vein, in 2010 the Board of Forestry created the “no net loss” policy, which pertains to non-federal forest land with less than five structures per square mile. Although these policies are recent, they may be models for a “cap and trade” strategy for how to deal with various aspects of conflicts in resource zones, particularly those relating to cumulative small-scale impacts.

Over the past three years, several bills relating to conflicts in resource zones have been introduced in the Oregon State Legislature. These include bills aiming to reduce conflicts, such as more closely regulating the creation or restoration of wetlands in EFU zones or limiting new mining operations. Other bills have been adopted that could potentially generate increased conflicts, including bills expanding agri-tourism uses on farms and at wineries.

There are multiple paths to get approval for agri-tourism and other commercial events and activities in farm zones. One is through SB 960, which went into effect in 2011 and is optional for counties to adopt, and which clarifies the number and size of allowable agri-tourism and commercial events that are allowed on farms.

SB 841 is a comprehensive winery land use bill that was passed in 2013. It allows up to 18 days of agri-tourism or other commercial events annually. It also specifies that non-wine income make up no more than 25% of on-site retail wine sales. The impacts to agriculture, both direct and indirect, will be important to monitor.

The issue of aggregate mining on farmland was addressed in 2013 with HB 2202. The bill “prohibits issuing permit for aggregate mining in Willamette Valley on any tract of land that includes five acres or more of a combination of Class I and Class II soils.” Class I and Class II soils are considered the best for farming. The exception is where the applicant can show that mining cannot take place on land that is classified in the relevant comprehensive plan as being non-resource or exception land, or in a UGB. The bill only affects mining operations permitted after it went into effect.

**Review Processes**

While the higher level, broader policy issues are important, it is also important to not overlook the manner in which a landowner actually works with local planners to obtain (or be denied) a permit. Some allowable uses have review criteria built into the permit process but some mandated reviews are not consistent amongst different types of uses. For example, few permitted uses in EFU and forest zones require an assessment of cumulative impacts. Nonfarm dwellings and agri-tourism as permitted in SB 960 may be the only permitted uses that require a cumulative impact assessment. Where no cumulative impact assessment is required, It is unclear whether the regulatory framework effectively protects the resource ground.

**Emerging Trends and Changes**

Several ongoing pressures fuel conflict in resource zones. These include steadily increasing population growth and expanding urbanization. That being said, growing demand in specific niches does contribute to conflicts in ways not seen previously. Interest in local food sheds and buying locally grown produce contributes to an increased local market for Oregon-grown food, intensifies the desire to protect farmland, and at the same time generates interest in agri-tourism and other events that take place on farms themselves. The increase in wineries over the past 20 years has added to that pattern, as has the subsequent interest in wine tastings, food pairings, and special events. While these activities support Oregon agriculture, it also creates an incentive for working farms to dedicate more resources to hosting events than farming and may result in additional conflicts to nearby farm and forest operations.

Another new market has been created for wetland creation and restoration in the form of wetland mitigation banking. While not currently using a significant number of acres, 72% of the wetland mitigation bank land in Oregon had formerly been agricultural land. It must be noted, however, that a substantial amount of wetlands had previously been converted to upland agriculture.

Global climate change is somewhat outside the scope of this paper but any discussion of the future of our natural resources and productive lands must acknowledge its importance. While the precise nature and scale of future impacts on Oregon farm and forest lands are unknown, climate change cannot be ignored. At a minimum, we can expect that temperature and precipitation shifts will impact crop choice, forest cover, and patterns of flood and fire.
Small Scale Cumulative Impacts Case Study: Sauvie Island Agriculture and Events

Sauvie Island is minutes away from downtown Portland but is home to many working farms. This proximity recently prompted the Sauvie Island Community Association to pose the question, “are we being loved to death?” Sauvie Island is approximately 80% public land, 20% private but 90% of the private land on Sauvie Island is zoned for exclusive farm use. There has been a dramatic increase in agri-tourism on the island in recent years through the approval of farm stands and related promotional activities, which has brought both profits to local farms as well as challenges, including a recent lawsuit. Issues include increased traffic, infrastructure, and quality of life concerns as well as concern about how to support the long-term future of working farms on Sauvie Island.

Farm-related events and activities include visits to farm stands, you-pick berry patches, petting zoos, and corn mazes, while activities such as weddings, banquets, and food carts fall into the more nebulous category of “other commercial events and activities.” There has been an increase in these types of attractions on Sauvie Island over the last decade, the impact of which is compounded by a simultaneous increase and interest in attractions on public land including hiking, bird watching, biking, and kayaking.

A major concern to island residents is traffic and transportation-related conflicts. They cite an increase in altercations between cars, pedestrians, bicyclists, and farm vehicles. This is of particular concern because of the lack of infrastructure and services expected in more densely populated areas—a volunteer fire department is responsible for all emergency services. Parking is already scarce on the island and increased visitors create back-ups on the narrow roads.

These issues came to a head in 2013 when a Sauvie Island resident filed suit against a farm near his home. The farm had moved beyond a corn maze and viewing platform to hosting regular events including farm-to-plate dinners, races, bimonthly festivals, and private birthday parties, all as part of “fee-based activity to promote the sale of farm crops” at a farm stand. The farm applied to the County to host 150 guests at farm-to-plate dinners held 45 times per year, which the Multnomah County hearings officer limited to 75 guests, 20 times per year.

On one side stands the neighbor, who is quoted as saying, “more and more farms [are] becoming event centers.” On the other side, are people arguing that agri-tourism is the type of entrepreneurship local government should be encouraging and that it is a welcome new income stream for rural communities.

A Court of Appeals decision found that outdoor farm-to-plate dinners may be considered to be an authorized farm stand use. An earlier related LUBA decision found that while small farm-themed birthday parties are allowable, wedding parties are not and food carts should be classified as structures and limited to selling farm products.

The issues highlighted in the case, including what classifies as a structure, and the definition of “fee-based activity to promote the sale of farm crops” will continue to be contentious both on Sauvie Island and around the state. The number of conflicts is likely to increase, due to interest in farm and nonfarm related activities intended to attract urban populations into natural resource zones.
Large Scale Impacts Case Study: Grand Island Aggregate Mining and Agriculture

Grand Island in Yamhill County, which has some of the most productive soil in Oregon, sits in the Willamette River floodplain and is split between EFU and public land. In 2010 an application was submitted for a 175-acre aggregate mining operation, which would be the second on the island. The site is 224 acres, and zoned EFU with both Floodplain and Willamette River Greenway Overlay Zones. Although reclamation is required as part of aggregate mining permits, the operation is predicted to last 30 years and local farmers are skeptical about whether the agricultural value of the high quality soil could ever be reclaimed.

Neighbors came together in opposition to the application, forming a group called Protect Grand Island. The dispute has gone back and forth several times since the original application was filed and showcases Oregon’s approach to aggregate mining and the potential conflicts between agriculture and aggregate on farmland.

The farmers’ concerns include the loss of farm land, increased traffic and the safety of the single bridge, floodwater, dust, and the impact on surrounding wells. There are several shallow irrigation and residential wells not far from the site and the community is concerned about potential negative impacts on the ground water. The Protect Grand Island group also suggests that the study area was insufficient and that the mining company has not demonstrated a market need, which is mandated by the county zoning code. The site is upstream from most of the island, compounding neighbors’ desire to avoid or mitigate any impacts.

The first hurdle for the mining company was to show that the aggregate resources at the site met the State’s standard for being a “significant resource” under Goal 5. To meet this standard, the average thickness of the aggregate layer must be at least 25 feet. In this case there are two layers of aggregate, which together add to 44 feet but do not separately meet the standard. The Planning Commission voted 6-1 that the site is a significant resource and added it to the County’s Goal 5 aggregate inventory and approved continuing the Goal 5 process. At the same time, however, it voted 5-2 against authorizing extraction.

Neighbors appealed to the Land Use Board of Appeals (LUBA) arguing that a single layer of aggregate must average 25 feet, maintaining that the standard would be meaningless if aggregate layers could be counted together to infinite depths. The County’s decision was upheld by LUBA and the Oregon Court of Appeals in 2012. Still unsatisfied, the Protect Grand Island group went to the Oregon Supreme Court but the court declined to take the case.

In a further blow to the community group, in 2012, county commissioners approved an extraction permit 2-1. However, Protect Grand Island continued its effort to block the mining operation and appealed to LUBA again, this time arguing that the company will be unable to mitigate the negative impacts of gravel mining on agricultural resources.
Challenges and Opportunities

Planners and policy-makers are fortunate in Oregon not to be starting from scratch with regard to protecting resource zones. The foundation of Oregon’s land use planning program is working to protect farmland, however there continues to be an annual net loss of land in farm production. Since 1974, the rate of land conversion away from farms has slowed however Figure 5 shows that the rate of loss has increased over the past 15 years. The rate of loss plateaued following the economic recession in 2008, but as the recovery continues, the rate of loss of land in farms may revert to pre-recession levels.

There are several specific points of friction in the ongoing tension between resource lands and development. These include determining at what level of government decisions should be made, where to set thresholds for cumulative impacts, and how to define contentious uses.

A significant challenge faced by policymakers and planners is how to measure and set thresholds to fit both single large-scale uses and multiple incremental uses. For example, outdoor gatherings in rural areas with under 3,000 people are currently not land use decisions, which means that no entity measures, regulates, or mitigates the repeated events of 500 or 1,000 people which can have on nearby working farms and forest landscapes.37 The minimum scale of an event, building, or use change that would trigger a local review should be carefully considered. Also important is the scale at which the impact will be measured (local, regional, or statewide).

Another aspect for local planners to address is that a landowner can pursue multiple avenues for increasing the number and type of activities allowed on their land. The DLCD suggests that counties track the total number of events allowed on a site and not let it exceed the total allowed through any individual path.38

Conclusion

Conflicts to farm and forest uses and operations are fueled both by large, intensive industrial uses which remove land from resource productions and alter the land use pattern, by the cumulative impacts of nonfarm and non-forest uses and conflicts from individual uses and expansion of non-resource related uses allowed in resource zones.

There are challenges resolving types and scale of conflicts, with disagreements ranging from what is permissible to what and how to measure or mitigate impacts. To minimize future conflicts and provide a stable climate for investment, local governments should continue to be provided with the flexibility in interpreting the laws to meet local needs and priorities. Additionally, cumulative impacts standards should be improved and implemented in order to be consistent and to enable future evaluations using sound quantitative methods.

Overall, pressure to convert resource lands and conflicts on resource lands continues to grow. Oregon’s statewide planning program has worked to protect Oregon’s farm and forest lands but a continued increase in allowed new and nonfarm uses has the potential to undermine the intent of Goals 3 and 4. The laws should not be so restrictive that they cut off farm and forest lands from revenue streams that sustain them. Where to draw the line and how to balance the standards and process is at the heart of the disputes regarding conflicts to farm and forest lands. However, to insure that Oregon’s agricultural and forest lands remain intact, healthy, and productive in perpetuity, it is essential that Oregon’s program continue to pursue the long-term vision and ensure planning and policy making are doing what makes sense for the state as a whole. This includes a recognition of future changes in the types and scale of agriculture, changes in farm and forest practices and technology, and sound policies to balance the need to allow industrial uses (mining, energy, etc.) and preserve farm and forest land.
Uses Allowed on Farmland

This is a summary of the uses listed under ORS 215.283 and does not include all the conditions for each use given in the law.

The following uses may be established in any area zoned for exclusive farm use:

- Churches and cemeteries
- The propagation or harvesting of a forest product
- Utility facilities
- A dwelling for farm use or occupation by a relative
- Primary or accessory dwelling in conjunction with farm use
- Operations for the exploration for and production of geothermal resources
- Operations for the exploration for minerals
- Climbing and passing lanes
- Reconstruction or modification of public roads
- Temporary public roads
- Minor betterment of existing public roads
- Replacement dwellings
- Wineries
- Farm stands
- Alteration, restoration, or replacement of a lawfully established dwelling
- A site for the takeoff and landing of model aircraft
- A facility for the processing of farm crops, or the production of biofuel
- Fire service facilities
- Irrigation reservoirs, canals and delivery lines
- Utility facility service lines
- Land application of reclaimed water
- County law enforcement facility

The following nonfarm uses may be established, subject to the approval of the governing body:

- Commercial activities in conjunction with farm use
- Operations conducted for mining and processing of geothermal resources, aggregate, and other mineral resources
- Private parks, playgrounds, hunting and fishing preserves, and campgrounds
- Parks and playgrounds
- Community centers
- Golf courses
- Commercial utility facilities
- Personal-use airports
- Home occupations
- Facilities for the primary processing of forest products
- Site for solid waste disposal
- One manufactured dwelling or recreational vehicle
- Transmission towers
- Dog kennels
- Residential homes
- Propagation, cultivation, maintenance and harvesting of aquatic species
- Additional passing and travel lanes
- Reconstruction or modification of public roads
- Improvement of public road related facilities
- Destination resorts
- Room and board arrangements for up to five unrelated persons
- Operations for the extraction and bottling of water
- Expansion of existing county fairgrounds
- A living history museum
- An aerial fireworks display business
- A landscape contracting business
- Public or private schools
ENDNOTES


2. Ibid.


4. Ibid.


8. Ibid.


14. Ibid.


18. 77th Oregon Legislative Assembly Staff Measure Summary HB2202 https://olis.leg.state.or.us/liz/2013R1/Downloads/MeasureAnalysisDocument/19064.

19. Ibid.

20. Ibid.


22. Local Wetland Inventories (DSL) http://www.oregon.gov/dsl/WETLAND/Pages/lwi_disclaimer_agreed.aspx

Wetland and Land Use Change in the Willamette Valley (DSL and US Fish and Wildlife December 2010).