

## Natural Landscape Features Inventory



Environmental quality and access to nature play key roles in how the citizens of the region define livability. The purpose of the natural features inventory was to identify features of the landscape that are important in terms of ecological function or that influence the sense of place for the greater region, and that should thus help to define the region's future urban form. The inventory was based on two key questions:

- What natural resources are essential to the health and welfare of the region?
- What landscape features define the sense of place for residents of the region?

To answer these questions, Metro staff compiled various maps and data sets in a Geographic Information System database; consulted with a team of ecology and park professionals; and conducted a natural landscape features charette with participants selected for their intimate knowledge of the regional landscape, their grounding in ecological principles, and their familiarity with Metro's regional growth management and greenspaces programs.

Factors considered in identifying key natural landscape features included:

- A variety of habitats needed to protect the region's biological diversity
- Opportunities to consolidate and connect existing or potential natural areas
- Critical river and stream corridors
- Natural connections between watersheds at their headwaters
- Geographic features that define and distinguish the region.

### Results

The final product was a map identifying 26 landscape features that affect the region's sense of place, embody resource values at a larger

landscape and ecosystem scale, and should inform discussions over where future growth should and should not occur. Common themes in the area descriptions were floodplains, wetlands, drinking water, habitat corridors, canyons/topographic features, healthy fish and wildlife populations, and habitat for rare/threatened species.

Features linked to the "health and welfare of the region" included healthy stream corridors and forested areas as well as natural hazard areas such as floodplains, wetlands, and steep slopes. Examples include the East Buttes, Clear Creek Canyon, the Sandy River Gorge, the Clackamas River watershed, and the floodplain of the Willamette River.

Features linked to defining a regional sense of place included views to mountains and hills, natural areas that are easily accessible to the public, and large parks and open spaces in public ownership. Examples include the Columbia River Gorge and the Columbia River islands, the Cascade foothills and the Chehalem Mountains, Sauvie Island and Forest Park as well as Willamette Narrows to Canemah Bluffs and the Clackamas River Bluffs and Greenway.

### Conclusions and Recommendations

- Establishing rural reserves can be a useful strategy for the protection of important natural features.
- Further research is needed to determine which types of natural features make good boundaries or edges; to address the relationship between agricultural lands and natural landscape features; and to consider the relationship between rural reserves and other tools such as willing-seller land acquisition programs (e.g., Metro's Natural Areas acquisition program).



The Shape of the Region work program encompassed three elements to address the balancing of urban, agricultural and natural landscape needs. The project yielded three major products: an analysis of the components necessary for development of great communities completed by a consultant team led by Cogan Owens Cogan, an agricultural land inventory and analysis completed by the Oregon Department of Agriculture, and a natural landscape features inventory completed by Metro staff.

# The Shape of the Region

## Supporting Agriculture, Protecting Natural Areas, Creating Great Communities

In recent years, few participants in the growth management process in the Portland metropolitan region have been happy with the longstanding system for managing the region's urban growth boundary (UGB). The system has long been dominated by arbitrary timelines and land supply requirements rather than by rules that are more responsive to the aspirations of the region. The existing rules have offered the region no way to protect critical farmland or natural resources over the long term, yet they have also failed to adequately consider factors related to efficient and effective urbanization when deciding where to expand the UGB.

As a result, the rules governing regional growth management have increasingly led to UGB expansions where they are not wanted and prevented expansions where they might be appropriate and desirable. For this reason and others, these rules have led to conflict, uncertainty, and frustration for local governments, farmers, businesses, and individual citizens.

Moreover, new forecasts show that within 25 years about one million more people will live in the Portland metropolitan region. This rapid growth brings jobs and opportunity, but it also creates new challenges. The region's long-range plan, the 2040 Growth Concept, calls for efficient development within the existing urban area, but it is inevitable that over time the region will need to bring new land into the UGB.

### The Shape of the Region Project

In order to better inform the region's approach to growth management and future urban expansion, Metro joined Washington, Multnomah, and Clackamas counties, as well as the Oregon Department of Land Conservation and Development (DLCD) and the Oregon Department of Agriculture (ODA), to conduct the "Shape of the Region" project (known colloquially as the "ag-urban study"). This project examined land outside Metro's UGB and asked three broad questions:

- What lands are functionally critical to the region's agricultural economy?
- What natural landscape features are important in terms of ecological function and defining a sense of place for residents of the region?
- What attributes allow lands to most efficiently and effectively be integrated into the urban fabric of the region to create sustainable and complete communities?

The answers to these questions highlighted the disconnect between existing land use laws governing regional growth management and the region's goals, both for efficient urbanization and for protection of areas that should not be urbanized. However, the study's findings have also helped pave the way for the development of new and better ways to manage the region's growth.

The successful completion of the Shape of the Region project in early 2007 provided the impetus for a remarkable regional coalition to come together to support a common legislative agenda. The result was the passage of House Bill 2051 (providing a one-time, two-year extension of the five-year UGB cycle) and Senate Bill 1011 (creating new rules for the designation of urban reserves and rural reserves). The findings of this project will underlie the designation of reserves pursuant to this legislation.

What follows is a summary of each of the study's elements.



## Great Communities Analysis



The purpose of the Great Communities study was to identify and define community characteristics that should be considered in urbanization decisions to create great communities in the region. The study focused on characteristics related to land use, governance, urban services infrastructure, and finance.

The study was composed of two parts. Phase one was devoted to research aimed at defining the characteristics of “great communities,” both domestic and international. Phase two applied a refined set of these characteristics to three test areas in the region in order to identify attributes that are most important to effective urbanization.

### Results

The final report identified eight characteristics of great communities that should be considered when the region creates urban reserves and adds lands to the urban growth boundary. The successful application of these characteristics increases the likelihood that expansion areas (as well as existing communities) can develop into great communities.

Below are definitions for each of the eight characteristics.

- 1. Community Design:** Consider urban reserve and UGB additions where there will be good community design, as defined by specific levels of density, walkability, connectivity and legibility. For example, an area should feature sufficient density and diversity of uses within a quarter-mile radius of centers of activity. Areas that have rich, distinctive, and site-specific characteristics, such as views or significant landmarks, should be capitalized upon to emphasize a community’s unique features.
- 2. “Complete Communities”:** Consider urban reserve and UGB additions that fill a recognized need to help existing communities become (or create new communities that can be) complete and sustainable urban communities.
- 3. Ecological Systems:** Consider urban reserve and UGB additions that can be designed to preserve and enhance natural ecological systems within urban communities. Opportunities to utilize sustainable infrastructure and integrate natural ecological services should be maximized.

- 4. Public Investments:** Consider urban reserve and UGB additions that optimize existing and planned future infrastructure investments in transportation, sewers, water systems, utility infrastructure, parks, and open spaces.
- 5. Governance:** Consider urban reserve and UGB additions in areas that have a vision in place and service providers and local governments willing and able to provide urban-level services.
- 6. Finance:** Consider urban reserve and UGB additions where financially capable local government(s) exists; where the costs of providing needed infrastructure services are known and reasonable; and where a plan to finance infrastructure capital costs has been prepared.
- 7. Economy:** Consider market-responsive urban reserve and UGB additions where realistic and reasonable market demand already exists or will develop in the foreseeable future.
- 8. Education and Workforce Development:** Consider urban reserve and UGB additions that address land needs for school facilities (including post-secondary schools) that can serve as building blocks of the local community.

### Conclusions and Recommendations

- Urbanization decisions will involve as much art as science; it is impossible to know with any level of certainty whether a given area will develop into a “great community.” Regional partners will need to reconcile the theoretical (i.e., the characteristics listed above) with the practical (the on-the-ground realities of the region’s urbanization decision-making process).
- Many of the costs of creating great communities must be borne up front, while benefits are spread out over a longer time frame compared to other types of development. A regional financing strategy may be needed to provide the infrastructure necessary to accommodate growth in an efficient and cost-effective manner.
- A greater level of planning is needed prior to all urbanization decisions, from the designation of urban reserves to the inclusion of areas in the UGB.

## Agricultural Land Inventory and Analysis



The purpose of the agricultural land assessment conducted by the Oregon Department of Agriculture (ODA) was to consider factors that affect the ability of an area to successfully conduct commercial agricultural operations over an extended period of time and to develop an inventory of lands surrounding Metro’s UGB based on their long-term agricultural viability.

The key factors that ODA employed to evaluate agricultural lands can be separated into two categories: “capability” and “suitability.”

- Capability** refers to the physical ability of land to produce an agricultural product, based primarily upon quantity and quality of soils and availability of water.
- Suitability** refers to the ability of any given tract of land to be utilized for farm use over the long term based on other factors, including whether the land is part of a large block of agricultural land, the potential of surrounding uses to create conflicts, availability of agricultural infrastructure, etc.

### Results

Based upon these factors, ODA’s inventory and analysis led to the development of a hierarchy of three levels of agricultural lands: “Foundation,” “Important,” and “Conflicted.”

- Foundation agricultural lands** are highly productive lands that provide the core support to the region’s agricultural base. These lands have the attributes necessary to sustain current agricultural operations and to adapt to changing technologies and consumer demands. They incubate and support the larger agricultural industry and are vital to its long-term viability.
- Important agricultural lands** are suited to agricultural production and contribute to or have the capacity to contribute to the commercial agricultural economy over the long term. They have the potential to be foundation lands, but tend not to be utilized to their full potential. Trends in regional agriculture could lead to greater development of the agricultural capacity of these areas.
- Conflicted agricultural lands** are lands whose agricultural capability (soils/water) may be excellent but whose suitability is questionable. These lands are influenced by external factors (i.e., adjacent land use patterns) that raise questions about their long-term viability. The resulting uncertainty, in turn, tends to discourage investment in agricultural operations by area farmers. However, these lands could become Important agricultural lands with changes

in circumstances and industry trends. There may be individual or multiple operations within these areas that are conducting efficient and viable operations.

The ODA assessment identified some areas as Foundation lands that would normally be considered to have low capability and questionable suitability. One example is the Clackanomah area southeast of Gresham, where numerous small parcels zoned for rural residential use are mixed in with large parcels zoned for exclusive farm use (EFU) to create a formidable block of high-value nursery operations.

On the other hand, some areas may have high capability but be less suitable for agricultural use due to external factors. For example, a 640-acre tract of high-value EFU-zoned land south of Hillsboro is almost completely surrounded by urbanization and isolated from a large block of agricultural land to the southwest. Despite its excellent soil, this land is identified as Conflicted in the ODA assessment.

These two examples highlight the need for a process that goes beyond traditional soil-based zoning of resource and non-resource land to assess the on-the-ground nature of agricultural activities and the outside influences that make an area more or less viable for long-term farm use.

### Conclusions and Recommendations

- The use of rural reserves to protect lands that are functionally critical to the agricultural economy could go a long way toward providing stability to agriculture in the region.
- Consideration should be given to identifying “hard edges” and buffers between agricultural and urban areas, either through designation of land as rural reserves or through other tools such as conservation easements and setbacks.
- Better analysis is needed during the UGB expansion process to account for the impact of urban development on agriculture. For example, UGB expansions should not create protrusions of urban land into agricultural lands or situations where urban lands have multiple edges with agricultural lands.
- While the current focus of the region’s agricultural industry is on production for export markets, certain current trends (e.g., uncertainty about long-term energy supplies) suggest the lands not always considered to be important to the region’s agricultural base may in the future merit greater consideration. In making today’s decisions we should be careful not to foreclose tomorrow’s opportunities or needs.