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MULTNOMAH COUNTY West of Sandy River Transportation and Land Use Plan



**MULTNOMAH
COUNTY**

Parametrix

West of Sandy River Plan Area

Images



Multnomah County
West of Sandy River Rural Area
Transportation and Land Use Plan

Prepared for

Multnomah County Oregon
Transportation and Land Use Planning Divisions
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EXECUTIVE SUMMARY

The West of Sandy River Transportation and Land Use Plan is a rural area plan that is intended to guide development in the area over the next 20 years. In 1993, the Multnomah County Board of Commissioners initiated a Rural Area Planning Program for five areas of rural Multnomah County in order to recognize community needs and values as they relate to land use issues. This plan represents the fourth rural area plan, and contains policy direction intended to support realization of the community Vision.

The West of Sandy River plan area is located between the Sandy River and the east edge of the cities of Gresham and Troutdale. The landscape consists of gently sloping open land that becomes steeper along the Beaver Creek and Johnson Creek drainages near the cities. The land flattens out toward the east presenting scenic vistas of hills and farms against the backdrop of Mt. Hood, before dropping abruptly down into the forested Sandy River canyon. The area has historically been used for farming, and the high quality soils continue to support cultivation of berries and nursery stock. It is part of a larger nursery growing area that extends southward into Clackamas County, and is the center for nursery farming in Multnomah County.

The plan area is significant in that it has the Multnomah County portion of the Sandy Wild and Scenic River along the east edge, and contains the two rural unincorporated communities of Orient and Pleasant Home. Oxbow Regional Park and Camp Collins are popular attractions for people from all over the region who come to the river for recreation, camping, and nature study. The Orient and Pleasant Home communities, which were first settled in the 1850's, contain a number of old structures and continue to provide services to the rural area. Orient is the larger of the two communities. It is connected to the City of Gresham on the west, has two schools, a fire station, feed store, lumber yard, and several retail nursery businesses.

The West of Sandy River plan addresses a number of needs and mandates. The plan area is adjacent to the growing Gresham-Troutdale urban areas, and is experiencing some impacts from urbanization. Protection of farming in the area from urban influences emerged as an important issue during the planning process. The streams in the plan area do not have the fish and wildlife habitat protection measures found in other areas of the county. This is important because the streams contain or support habitat for salmon which have been designated as threatened under the federal Endangered Species Act. In addition, Title 3 of the Metro 2040 Functional Plan contains mandates to protect water quality which must be met for a large portion of the area. The county must also develop a plan for the Orient and Pleasant Home rural communities in order to continue to allow development there that is more intensive than is otherwise allowed in rural areas. And finally, the county is meeting its responsibility for transportation system planning with the plan.

The plan document is organized into the four subject areas of Environment and Natural Resources, Land Use, Rural Center, and Transportation System Plan. The policies that are within these sections have been consolidated into the following list. They are intended to both implement the community vision and to provide the framework for a zoning ordinance specific to the West of Sandy River area. The policies are organized into the subject areas of:

- Goal 5 - Wildlife habitat and riparian corridors in Policies 1 - 5;
- Water quality – Title 3 in Policies 6 – 8;

EXECUTIVE SUMMARY

- Policies for the various zones beginning with Exclusive Farm Use in Policies 11 – 15;
- Parks and open spaces in Policies 16 – 19;
- Flood hazard areas in Policy 20;
- The Orient and Pleasant Home rural communities in Policies 21 – 27;
- Transportation system in Policies 28 - 38.

West of Sandy River Vision

The citizen task force created a vision to help guide the planning process, as follows:

As residents and landowners in the area between the cities of Gresham and Troutdale and the Sandy River, our vision is that we will continue to enjoy our rural lifestyle. We value all of the features that make this a rural place including the quiet open spaces, vistas of productive farm and forest lands and of Mt. Hood, country roads, healthy air, soils and streams, and a night sky where we can clearly see the stars.

We envision that the Orient and Pleasant Home rural centers will continue to prosper within defined areas in order to provide for the needs of residents and visitors. We want our roads to continue to serve as the transportation network for the area, while remaining usable for people enjoying the country and accessing the Sandy River, with opportunities for exercise by walking, running, bicycling and horseback riding.

In order to maintain this vision, we recognize that the planned density of residential development must not increase, that the agricultural economy of the area must remain strong, and that development of new non-agricultural businesses should serve the needs of the local area. This plan is intended to help us in our stewardship of the environment, our lifestyle, and our community over the next 20 years.

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West of Sandy River Transportation and Land Use Plan

List of Policies and Strategies approved by the Board of County Commissioners,
December 12, 2002

THE POLICIES AND STRATEGIES INCORPORATED INTO THE WEST OF SANDY RIVER TRANSPORTATION AND LAND USE PLAN ARE ONLY APPLICABLE TO THE WEST OF SANDY RIVER PLANNING AREA. IN CASE OF LAND USE ACTIONS WHERE ANY CONFLICT OCCURS BETWEEN THE FRAMEWORK PLAN AND THE WEST OF SANDY RIVER PLAN POLICIES, THE WEST OF SANDY RIVER POLICIES WILL PREVAIL.

POLICIES AND STRATEGIES

Goal 5 Policies

Policy 1

Multnomah County recognizes the importance of identifying and protecting natural resources in order to promote a healthy environment and natural landscape that contribute to the livability of the West of Sandy River Rural Area.

Strategies:

- 1.1 Multnomah County shall prepare and maintain an inventory of the location, quality, and quantity of wildlife habitat areas and riparian corridors within the West of Sandy River Rural Area. This inventory should include the riparian corridors associated with the rural eastside streams of Beaver Creek, Johnson Creek and Kelly Creek that are listed in Framework Plan Policy 16G as either significant or potentially significant.
- 1.2 Multnomah County shall utilize the Statewide Wetlands Inventory to identify the general location of wetlands within the West of Sandy River Rural Area.

Policy 2

Multnomah County shall designate selected riparian corridors and wildlife habitat areas as significant natural resources pursuant to Statewide Planning Goal 5.

Strategies:

- 2.1 Those wildlife habitat areas that have been rated as “high” value for at least one of the following ecological functions shall be designated as “significant”:
 - Wildlife Habitat,
 - Water Quality Protection,
 - Ecological Integrity,
 - Connectivity, and
 - Uniqueness.

- 2.2 Those riparian areas that have been rated as “high” value for at least one of the following ecological functions shall be designated as “significant”:
- Fish Habitat
 - Wildlife Habitat,
 - Water Quality Protection,
 - Ecological Integrity, and
 - Connectivity.

Policy 3

Multnomah County shall protect significant riparian corridors and associated impact areas and limit conflicting uses within these areas in the West of Sandy River Rural Area. In considering the protection of these resources, the County shall emphasize an ecosystem based, watershed approach.

Strategies:

- 3.1 Multnomah County shall implement this policy with amendments to the Multnomah County Zoning Code, Significant Environmental Concern Zoning Overlay District for riparian corridors and water resources within the West of Sandy River Rural Area. The protection measures that are incorporated into the SEC Overlay District ordinance will utilize the measures that protect water quality under Policy 6 as one tool to protect riparian corridors and associated impact areas.
- 3.2 This overlay district shall be applied to both the resource and its impact area and shall include areas within 200 feet of each significant stream as measured from top of bank. As stated in Section 6.4 of the *West of The Sandy River Rural Area Transportation and Land Use Plan Natural Resource Inventory and ESEE Report*, this distance is based in the science of the functions and values of riparian corridors. The weight of the science indicates that a significant measure of the functions of riparian corridor habitat exists within the distance that is defined by one potential tree height (PTH) from a stream. The US Fish and Wildlife Service suggests that 200 feet is the appropriate potential tree height (PTH) for Multnomah County based on soils and native trees (Metro, 1999). In addition, the County needs to adopt a Title 3 Water Quality and Floodplain ordinance that can include regulated areas up to 200 feet wide.
- 3.3 The limitation on conflicting uses in this district shall apply to those uses that are regulated by the County and shall allow for conflicting uses within the district if an alternatives analysis demonstrates that no reasonable alternative exists. The standards shall be most protective of the riparian corridor itself and may allow more flexibility for areas outside the corridor but within the impact area.
- 3.4 The County should investigate and consider whether the overlay district ordinance should have as a primary objective, maintaining the Properly Functioning Condition of the riparian corridors and impact areas of significant streams in order to support maintenance and recovery of fish in the area.

- 3.5 Streams in the study area have been significantly impacted by clearing and development. The County should investigate and consider development of a restoration program for study area streams in order to restore fish habitat.

Policy 4

Multnomah County shall protect significant wildlife areas and will limit conflicting uses within these significant natural resource areas and their associated impact areas in the West of Sandy River Rural Area. In considering the protection of these resources the County shall emphasize an ecosystem based, watershed approach.

Strategies:

- 4.1 Multnomah County shall implement this policy by establishing a specific Multnomah County Zoning Code Significant Environmental Concern Zoning Overlay District for wildlife resources within the West of Sandy River Rural Area.
- 4.2 This district shall be applied to areas designated as significant wildlife resources in *West of the Sandy River Rural Area Transportation and Land Use Plan Natural Resource Inventory and ESEE Report* and associated impact areas.

Policy 5

Multnomah County recognizes the need to protect the outstanding public values for which sections of the Sandy River have been designated a National Wild and Scenic River and a State Scenic Waterway.

Strategy:

- 5.1 Work with State Parks and other agencies to review development standards in the County Significant Environmental Concern provisions and in the Oregon Administrative Rules specific to the designated areas.

Water Quality Policies (Title 3, Goal 6)

Policy 6

Multnomah County recognizes the importance of protecting the water quality within the West of Sandy River Rural Area and shall adopt standards to protect the water quality resources from the impacts of development pursuant to the requirements of Title 3 of the *Metro Urban Growth Management Functional Plan (3.07.340)*.

Strategies:

- 6.1 Multnomah County shall implement this policy by establishing a specific Multnomah County Zoning Code Significant Environmental Concern Zoning Overlay District for riparian corridors and water resources which substantially complies with the water quality standards of *Title 3 of the Metro Urban Growth Management Function Plan*.
- 6.2 Standards adopted to protect water quality shall preserve the water quality related functions and values of primary and secondary protected water features:

- Primary protected water features shall include: Title 3 wetlands, rivers, streams, and watercourses downstream from the point at which an area of 100 acres or more is drained to that water feature (regardless of whether it carries year-round flow); streams that carry year-round flow; springs which feed streams and wetlands and have year-round flow; and natural lakes.
- Secondary protected water features shall include intermittent streams, watercourses, and seeps downstream of the point at which 50 acres are drained and upstream of the point at which 100 acres are drained to that water feature.

6.3 Standards adopted to regulate the water quality impacts of “development” shall apply to the following:

- “Development” means any man-made change defined as buildings or other structures, mining, dredging, paving, filling, or grading in amounts greater than ten (10) cubic yards on any lot or excavation. In addition, any other activity that results in the removal of more than 10 percent of the vegetation in a protected water feature or its vegetated corridor on a lot is defined as development.
- Development shall not include the following:
 - Stream enhancement or restoration projects approved by cities and counties;
 - Farming practices as defined in ORS 30.930 and farm use as defined in ORS 215.203, except that buildings associated with farm practices and farm uses are subject to the requirements of Title 3; and
 - Forest practices conducted under an Oregon Department of Forestry permit.

Policy 7

Multnomah County recognizes that it is important to protect vegetated corridors in order to maintain their water quality functions including the following:

- Separation of protected water features from development;
- Maintaining or reducing stream temperatures;
- Maintaining natural stream corridors;
- Minimizing erosion, nutrient and pollutant loading into water;
- Filtering, infiltration and natural water purification; and,
- Stabilizing slopes to prevent landslides contributing to sedimentation of water features.

Strategy:

7.1 Require that new development or redevelopment maintain vegetated corridors along primary and secondary water features whenever feasible. The width of the vegetated corridors shall be based on the type of water resource and the slope of the adjacent banks.

- The width of vegetated corridors adjacent to primary protected water features shall be 50 feet from the top of bank or ravine. The top of the ravine is the break in the greater than or equal to 25% slope. The starting point for measurements shall be the top of bank, which is the same as “bankful stage” defined in OAR 141-85-010(2).

- The width of vegetated corridors adjacent to secondary protected water features with slopes less than 25% shall be 15 feet and where slopes are greater than or equal to 25%, the vegetated corridor shall be 50 feet.
- In no case shall the width of the vegetated corridor be required to exceed 200 feet from top of bank.

Policy 8

Multnomah County shall take steps to limit visible and measurable erosion from development throughout the West of Sandy River planning area in accordance with the water quality standards of *Title 3 of the Metro Urban Growth Management Function Plan*.

Strategies:

Multnomah County shall implement this policy by establishing standards that:

- 8.1 Apply erosion and sediment control regulations to all development activities that may result in visible or measurable erosion. Visible or measurable erosion includes, but is not limited to:
 - Deposits of mud, dirt sediment or similar material exceeding one-half cubic foot in volume on public or private streets, adjacent property, or onto the storm and surface water system, either by direct deposit, dropping discharge, or as a result of the action of erosion.
 - Evidence of concentrated flows of water over bare soils; turbid or sediment-laden flows; or evidence of on-site erosion such as rivulets on bare soil slopes, where the flow of water is not filtered or captured on the site.
 - Earth slides, mudflows, earth sloughing, or other earth movement that leaves the property.
- 8.2 Help prevent erosion by requiring the use of prevention practices such as non-disturbance areas, construction schedules, erosion blankets and mulch covers. To the extent that erosion cannot be completely prevented, sediment control measures are to be designed to capture, and retain on site, soil particles that have become dislodged by erosion.
- 8.3 Adopt a limited construction season for development within primary and secondary water feature corridors to allow disturbance to occur during dry parts of the year and limit it during wet seasons.
- 8.4 Control stormwater from developed areas in a manner that does not increase runoff, and does not contribute to increased flow in area drainages and creeks. Investigate how runoff could be reduced from parking and maneuvering areas through use of pervious materials.
- 8.5 Require that stream crossings be avoided where possible, and when unavoidable, require maintaining watershed function in development of regulations for stream crossings, e.g. crossing does not disturb the bed or banks of the stream, is of the minimum width necessary to allow passage of peak winter flows, etc.

Other General Policies

Policy 9

Regulations to protect natural resources and water quality should allow changes to existing development when the overall resource value of the property is improved.

Strategy:

- 9.1 Include language in natural resource protection and water quality standards that allows changes to existing development which result in a net benefit to the protected resource.

Policy 10

Multnomah County shall continue to make information about other agency programs and educational materials available to the public at the planning counter and on the internet.

Strategy:

- 10.1 Multnomah County will work with the East Multnomah Soil and Water Conservation District, the Oregon Department of Agriculture, the County Assessor, the U.S. Natural Resources Conservation Service and others to provide landowners with information about various agency programs. Programs may include property tax deferral and exemption programs available for stream enhancement and agricultural plans to protect streams and their watersheds.

Policies and Strategies for EFU Lands

Policy 11

The County's policy of the West of Sandy River rural area is to help ensure a viable farm economy in the area by preserving agricultural lands for farm uses.

Strategies:

- 11.1 Multnomah County generally does not support zone changes that remove productive agricultural land from the protection afforded under Goal 3 of the Oregon Statewide Planning Program (Farm Lands).
- 11.2 Continue to require approval of dwellings and other development to be contingent upon compliance with Lot of Record standards as contained in the existing EFU zoning code.
- 11.3 Include provisions in the zoning code that limit new non-agricultural uses, and expansion of existing non-agricultural uses, in both type and scale to serve the needs of the local rural area. This will result in a farm protection program for the area that is more restrictive than what state statutes and rules require.

Policies and Strategies for CFU Lands

Policy 12

Maintain existing forestlands from further parcelization that detracts from forest operations and incidental protection of open space, wildlife habitat, and rural community values.

Strategy:

- 12.1 Multnomah County generally does not support zone changes that remove productive forest land from the protections of Goal 4 of the Oregon Statewide Planning Program (Forest Lands).

Policy 13

Allow new dwellings and other development on lands designated for commercial forest use consistent with state requirements, and will be permitted when upon demonstration that they will have no significant impact upon farm or forest management.

Strategies:

- 13.1 Continue to require that applications for new development comply with Lot of Record standards described in the existing CFU zoning code.
- 13.2 Continue to allow new template dwellings under the current standards of the CFU zone that are more restrictive than state requirements.

Policies and Strategies for MUA-20 Lands

Policy 14

Protect farm land from encroachment by residential and other non-farm uses in a manner that is consistent with the existing Framework Policy 10 Multiple Use Agricultural Land Area and the associated strategies.

Strategies:

- 14.1 Ensure that new, replacement, or expanding uses minimize impacts to farmland by requiring “right to farm” measures to be implemented. This shall be accomplished by requiring recordation of a covenant that recognizes the rights of adjacent farm managers to farm their land.
- 14.2 New non-agricultural businesses should be limited in scale and type to serve the needs of the local rural area through provisions in the zoning ordinance.

Policies and Strategies for RR Lands

Policy 15: Protect farmland from encroachment by residential and other non-farm uses that locate in the RR zone.

Strategies:

- 15.1 Ensure that new, replacement, or expanding uses minimize impacts to farm land by requiring “right to farm” measures to be implemented. This shall be accomplished by requiring recordation of a covenant that recognizes the rights of adjacent farm managers to farm their land.
- 15.2 New non-agricultural businesses should be limited in scale and type to serve the needs of the local rural area through provisions in the zoning ordinance.

Policies and Strategies for Parks and Open Spaces

Policy 16

Publicly owned parks are a significant resource for the region. The County’s policy is to support maintenance and upgrading of park facilities consistent with the character of the rural areas in which they are located.

Strategies:

- 16.1 Work with Metro to investigate development of an ordinance to implement a park zone for Oxbow Park.

Policy 17

Multnomah County recognizes and supports the Management Goals, Standards and Guidelines of the Sandy Wild and Scenic River and State Scenic Waterway Management Plan (1993). The County will continue to play the regulatory role described in the zoning and land use authority section of the plan, and as prescribed in state law. The Sandy River Management Plan recommendations are intended to protect and enhance the following outstandingly remarkable values: scenic, recreation, wildlife habitat, water quality and quantity, fisheries, geological, botanical/ecological and cultural.

Strategy:

- 17.1 Multnomah County will work with State Parks and Metro to develop a park zone to facilitate recreational development consistent with the County Comprehensive Framework Plan, zoning ordinance, rural area plan, and the Sandy Wild and Scenic River and State Scenic Waterway Management Plan.
- 17.2 Work with State Parks, BLM, Metro, Clackamas County and other agencies to review and update design strategies and development standards that protect scenic, wildlife, geological, water quality and quantity, fisheries, botanical/ecological and cultural resource values in designated sections of the river.

Policy 18

Open space in the area is maintained through parks and trails and through rural, farm and forest zoning that works to protect the rural character.

Strategy:

- 18.1 Ensure that any zone changes do not detract from the open spaces and rural character of the area.

Policy 19

State and regional parks that are primarily intended to protect and conserve important natural resources and provide primarily natural resource based recreation and education opportunities for the benefit of all residents of the County will most likely need to be located in areas possessing unique or desirable natural resource values.

Policies and Strategies for Flood Hazard Areas

Policy 20

Multnomah County will regulate flood management areas consistent with the requirements of Title 3 of the Metro Functional Plan in order to reduce the risk of flooding, prevent or reduce the risk to human life and property, and maintain functions and values of floodplains such as allowing for the storage and conveyance of stream flows through existing and natural flood conveyance systems.

Strategy:

20.1 Multnomah County shall implement this policy by establishing standards to reduce the risk of flooding and maintain the functions and values of floodplains pursuant to *Title 3 of the Metro Urban Growth Management Function Plan*, including:

- Establishing a definition of “flood management areas” which includes the area of inundation for the February 1996 flood, as well as all lands within the 100-year floodplain, flood areas and floodways as shown on the Federal Emergency Management Agency Flood Insurance Maps.
- Requiring development, excavation and fill within flood management areas be performed in a manner to maintain or increase flood storage and conveyance capacity and not increase design flood elevations.
- Requiring all fill placed at or below the design flood elevation in flood management areas be balanced with at least an equal amount of soil material removal. Excavation shall not be counted as compensating for fill if such areas will be filled with water in non-storm winter conditions.
- Requiring temporary fills permitted during construction be removed.
- Prohibiting areas of unconfined hazardous materials as defined by DEQ in the Flood Management Areas.

Orient and Pleasant Home Rural Communities

Policy 21

The County’s policy is to plan for the Orient and Pleasant Home Rural Communities to provide for community development that is consistent with and implements the Community Vision. Key elements of the vision are to maintain the rural character of the communities, to support the agricultural economy of the area, and to ensure that new non-agricultural businesses primarily support the needs of residents and tourism.

Strategies:

- 21.1 The County should adopt plan policies and ordinances that meet the state Unincorporated Community Rule codified as Oregon Administrative Rule OAR 660-022-0000 through 0070.
- Orient should be designated and planned as a Rural Community because it is composed primarily of residential uses.
 - Pleasant Home should be designated and planned as a Rural Service Center in order to allow the maximum flexibility in location of uses in the limited land area.
 - Revise the RC zoning ordinance to reflect the needs of the Pleasant Home community consistent with the Division 22 OAR for Unincorporated Communities.
- 21.2 Ensure that new or expanding uses minimize impacts to EFU zoned land that is adjacent to the RC zone by requiring “right to farm” measures to be implemented. These measures can be in the form of maintaining a larger setback between the new development and the zone boundary, and/or requiring recordation of a covenant that recognizes the rights of adjacent farm managers to farm their land.

Commercial and Industrial Development

Policy 22

New commercial and industrial uses within the Orient Rural Community will be small-scale and low impact in nature as defined by the State Unincorporated Communities Rule. These uses will not adversely impact agriculture or forestry uses and will reinforce the rural nature of the Orient Rural Community and the Pleasant Home Rural Service Center.

Strategies:

- 22.1 Multnomah County will update the Community Development Ordinance to implement the Unincorporated Communities Rule for small-scale, low impact commercial and industrial uses. Due to the proximity of the communities to the Urban Growth Boundary, the plan does not attempt to justify new uses that are larger than the small-scale, low impact limits in the Rule.
- Existing commercial uses may expand up to the small-scale, low impact limit of 4,000 square feet subject to approval criteria in the ordinance.
 - Expansion of existing industrial uses shall be subject to the small-scale, low impact limit of 10,000 square feet and to approval criteria in the ordinance.
- 22.2 Multnomah County will update its implementing regulations to ensure that new or expanded commercial and industrial uses will not result in public health hazards or adverse environmental impacts.
- 22.3 Multnomah County will update its implementing regulations to ensure that new or expanded commercial and industrial development will not exceed the carrying capacity of the soil or of the existing water supply and waste disposal services.

- 22.4 Ensure that new and expanded commercial or industrial uses are subject to Design Review in order to ensure compatibility with the community character.
- 22.5 Develop zoning ordinance standards for lot coverage of commercial and industrial development that allow adequate development area while ensuring the rural character of these areas is retained.

Residential Development

Policy 23

New residential development within the Orient Rural Community and the Pleasant Home Rural Service Center will not increase the number of dwellings that would be allowed in the community under the existing zoning ordinance, and will continue to reinforce the rural nature of the areas through the zoning code.

Strategies:

- 23.1 Multnomah County will update the zoning ordinance to implement the Unincorporated Communities Rule for residential development
- 23.2 Include provisions in the residential zone that allow for Type A home occupations outright, and Type B home occupations through an administrative review process and design review.
- 23.3 The zoning code will require that new residential parcels in the Rural Center will be at least one acre in size in order to not increase residential density and to ensure that the carrying capacity of public services and the environment is not exceeded.

Design

Policy 24

Accommodate the changing conditions within the Orient Rural Community and the Pleasant Home Rural Service Center while preserving their rural function and appearance.

Strategies:

- 24.1 Multnomah County should develop and adopt design standards regulating commercial and industrial development which reflect and enhance the rural character of the Orient Rural Community.
- 24.2 Multnomah County should allow flexibility of setback and parking requirements to accommodate irregular lots and existing development to help preserve the rural character of the area.

Protection of Views

Policy 25

Multnomah County shall help preserve critical viewsheds in the Orient Rural Community and Pleasant Home Rural Service Center and balance protection of scenic views with flexibility of use by property owners. The county shall rely on education – i.e. providing information regarding identified viewsheds to property owners – rather than regulations to implement this policy.

Policy 26

Enhance all modes of travel in a manner consistent with the rural character of the Orient Rural Community and Pleasant Home Rural Service Center.

Strategies:

- 26.1 Provide pedestrian and bicycle access to schools, transit and commercial activities within the Orient Rural Community and Pleasant Home Rural Service Center, consistent with the rural character of the area.
- 26.2 Review the existing parking standard for schools to ensure sufficient parking is provided to meet demand.

Preservation of the Night Sky

Policy 27

In keeping with the rural nature of the Orient Rural Community and Pleasant Home Rural Service Center, Multnomah County will require lighting in these areas to be low intensity and designed in a manner that minimizes the amount of light pollution.

Strategy:

- 27.1 Multnomah County will update the Community Development Ordinance to insure that new development meets lighting standards that minimize the amount of light pollution in the Orient Rural Community and Pleasant Home Rural Service Center.

Transportation System

Policy 28

Implement a balanced transportation system that is safe and efficient in meeting the needs of all modes of travel for area residents and those traveling through the area by improving roadways to provide safe conditions for motorized and non-motorized travel.

Strategies:

- 28.1 Monitor crash rates for all modes of travel, and focus safety improvement resources on the locations with high rates and/or severity of crashes.

- 28.2 Implement operational improvements within budgetary constraints.
- 28.3 Apply the County's access management and driveway spacing standards for proposed new access locations.
- 28.4 Implement feasible and cost-effective intersection consolidations to reduce potential conflict points.
- 28.5 Consolidate driveway access points in the rural center through the land development process and other appropriate methods.
- 28.6 Coordinate with Metro to identify potential improvements to the roadways providing direct access to Oxbow Regional Park.
- 28.7 Ensure that the County's Capital Improvement Plan evaluation criteria adequately considers the needs of the West of Sandy River Rural Area.
- 28.8 Update County ordinances to meet the requirements of the Transportation Planning Rule.

Policy 29

Actively support safe travel speeds on the transportation system.

Strategies:

- 29.1 Support speed limit enforcement.
- 29.2 Apply design standards that encourage appropriate motor vehicle and truck speeds.

Policy 30

Provide safe facilities for bicyclists and pedestrians.

Strategies:

- 30.1 Make intersection and minor realignment improvements focusing on safety, sight distance, and efficiency.
- 30.2 Widen and pave shoulders to safely accommodate vehicular, bicycle, and pedestrian needs.
- 30.3 Maintain safe conditions for pedestrians and bicyclists during roadway maintenance and improvement work.

Policy 31

Encourage mobility for the transportation disadvantaged.

Strategy:

- 31.1 Work with public transportation providers and other non-profit groups to monitor and encourage the provision of transportation service for the transportation disadvantaged.

Policy 32

Develop a transportation system that supports the surrounding rural character and land use designations of rural Multnomah County west of the Sandy River by discouraging through traffic on local rural roads.

Strategies:

- 32.1 Reduce conflicts between street classification and street use, by providing appropriate traffic control devices.
- 32.2 Periodically review and update functional classification of traffickways in rural Multnomah County.
- 32.3 Coordinate with ODOT, Metro and Clackamas County in efforts to implement "Green Corridor" policies along US 26.

Policy 33

Balance the need of roadway users with potential impacts to the environment, fish, wildlife and agricultural resources and users when applying roadway design standards.

Strategies:

- 33.1 Develop a program for retrofitting drainage facilities in conformance with requirements adopted by the National Marine Fisheries Service and the U.S. Fish and Wildlife Service.
- 33.2 Secure funding for identification, prioritization and remediation of all deficient stream crossings for fish and wildlife passage.
- 33.3 Develop and adopt drainage system design guidelines and standards to accommodate fish passage where appropriate.
- 33.4 Develop and implement standards for all transportation projects with regard to water quality treatment and detention of runoff from existing and new impervious surfaces to avoid further degradation of water quality as well as fish and wildlife habitats.
- 33.5 Develop and implement standards for all transportation projects with regard to protection of existing, and restoration of deficient, riparian buffers where waters of the state border current and future road and path segments.
- 33.6 Identify and protect critical fish and wildlife migration corridors to prevent the further fragmentation of existing habitats by future project alignments.

Policy 34

Encourage preservation of critical view sheds by placing new pipelines and transmission lines in existing rights-of-way whenever possible.

Strategy:

- 34.1 Enhance and preserve the rural character and scenic qualities of the area by placing utilities underground when possible.
- 34.2 Coordinate street improvements with utility improvements whenever possible to minimize cost, visual impact and disruption to traffic flow.

Policy 35

Coordinate transportation improvements with appropriate regulatory agencies to meet federal, state and regional air, noise and water standards.

Strategies:

- 35.1 Obtain permits as necessary for transportation improvement projects and maintenance activities.
- 35.2 Develop closer working relationships with regulatory agencies by providing opportunities for participation and input at the project development phase of projects.
- 35.3 Encourage transportation staff to attend programs regarding regulatory processes such as the Endangered Species Act, The Clean Water Act and Metro's Green Streets Program.

Policy 36

Provide ongoing coordination with state, regional, and local business interests to assure efficient movement of goods and services to support a healthy rural economy.

Strategies:

- 36.1 Support north/south arterial improvements between I-84 and US-26 in the East County urban area.
- 36.2 Coordinate with ODOT to ensure continued safe access onto and across US-26.
- 36.3 Review truck weight and size restrictions based on new roadway improvements and current state law.

Policy 37

Provide a transportation system that ensures economically viable transportation of goods from farm to market.

Strategies:

- 37.1 Evaluate and implement safety improvements for trucks on rural arterials.
- 37.2 Seek funding for improvements to rural arterials.

Policy 38

Maximize cost-effectiveness of transportation improvements using the Capital Improvement Plan process and maintenance program.

Strategies:

- 38.1 Coordinate intersection improvements as appropriate through the County's Capital Improvement Plan and the County's maintenance program.
- 38.2 Provide minor improvements during maintenance projects where possible.

INTRODUCTION

CONTEXT

The West of Sandy River Rural Area Plan is an integrated land use and transportation plan that builds upon the County's Comprehensive Framework Plan. Upon adoption by the Board of County Commissioners, it will constitute an official element of the Framework Plan. The Plan contains specific policy direction and implementation measures for the West of Sandy River area. The County began the planning effort for the West of Sandy River area in October of 1998 with a Community Open House to identify issues and opportunities in the study area. This "scoping phase" began the planning process and included a scoping report that was adopted by the Board of County Commissioners. During this time, a group of Portland State University Students developed a planning document for the Orient and Pleasant Home Rural Centers.

After adoption of the Scoping Report in 1999 the Multnomah County Chair appointed the West of Sandy River Area Task Force, consisting of thirteen citizens from the area. One Planning Commissioner, a representative of the elected County Commissioner from the area, and a representative from the Sandy River Basin Watershed Council all served liaison roles during the planning process. The Committee held monthly meetings between September 1999 and November 2001 to review all elements of the plan. The Committee's role was to review and comment upon materials prepared by Planning Division staff, make policy recommendations to the Multnomah County Planning Commission and Board of Commissioners, and provide a forum for additional public involvement in the preparation of the West of Sandy River Rural Area Plan.

Planning and Zoning History

Planning in the study area began in 1958 when zoning was first introduced with the application of a range of zoning categories. Areas in the vicinity of Orient and Pleasant Home were designated with zones appropriate for urban development including a 10,000 square foot parcel size for residential uses, and designation of land into commercial and manufacturing zones. Land surrounding the rural communities was zoned with the "SR" designation that allowed a range of parcel sizes from 40,000 down to 10,000 square feet. The east and northern areas along the Sandy River were zoned for a minimum of 2 acre parcel sizes.

A draft area plan, *Framework Plan for East Central Area of Multnomah County*, was completed in November of 1974, but was apparently not adopted. The coverage area of this plan was between SE 162nd Ave. and the Sandy River, and the Multnomah – Clackamas County line and the Columbia River. This area included land within the five local government jurisdictions of Fairview, Gresham, Troutdale, Wood Village, and Multnomah County. The plan did distinguish between rural and urban land, and contains a Sewerage Service area boundary map that closely matches the current UGB location.

In October 1977, the original zoning categories were updated to meet the requirements of the new statewide planning system. Primary objectives of this effort were to separate urban and rural land, and to decide which lands should be protected for farm or forest resource use, and which were committed to non-resource uses to comply with Statewide Planning Goals. This was a county-wide effort, and resulted in new zones including EFU-38, CFU-38, MUF-20, MUA-20, RR, RC, and SEC (Goal 5 natural resources overlay zone). All land outside of Urban Growth Boundaries or cities was assumed to be rural resource land unless the County was able to show why an "exception" to the use requirements of Goal 3

(farmland) or Goal 4 (forest land) was justified. The adopted ordinances, plan, and zoning maps were subject to review and acknowledgement by the Land Conservation and Development Commission. The County plan was acknowledged by LCDC in June of 1980, after zoning designations for some properties were changed to either include them as exception land or resource land.

Multnomah County followed up the 1977 comprehensive rezoning of the County with a study of all of the rural communities. The planning staff at that time produced a draft *Rural Centers Plan*, dated September 1981, that analyzed the eight communities that had received Rural Center (RC) zoning in 1977. The study noted that the policy for RC areas that was adopted in the 1977 Comprehensive Framework Plan was to limit the “intensity and types of uses in the rural centers ...to be appropriate for a rural community.” The study identified several planning issues that affected the Orient and Pleasant Home communities including proximity to the urban services in Gresham, limitations of the soils for septic systems, use of urban standards for design review, and zoning for residential, commercial, and industrial uses. These are among the issues that are addressed in the proposed West of Sandy River plan.

In October of 1983, the County completed a process that included additional analysis of some parcels to determine whether they could be rezoned as exception rather than resource land. Parcels totaling 4,100 acres in 42 locations county wide were successfully changed from the resource designations of EFU and MUF to exception land zones MUA-20 and RR through this process. Land within the West of Sandy River area was rezoned during this process. The October 1983 changes marked the end of the County’s efforts to distinguish between resource and exception land. The 1987-98 Periodic Review process included changes to the County plan and ordinances, most of which had little if any affect on land in the study area.

COUNTY APPROACH TO RURAL AREA PLANNING

The County Framework Plan contains policies and strategies intended to guide development county wide. Policy 1, Plan Relationships, sets out how the county wide Framework Plan policies relate to the community plan policies. The policies in the West of Sandy River Rural Area Plan should be designed to be consistent with the Framework Plan. The provisions of the community plan are intended to prevail over any conflicting provisions of the Framework Plan.

The Rural Area Planning Program, of which this plan is a part, was initiated in 1993 by Multnomah County. With the annexation of urban unincorporated communities and the increasing land use issues faced in the rural areas of Multnomah County, the Board of Commissioners directed the creation of five rural area plans in order to address land use issues in and community needs and values in these areas. The other four rural areas and plan adoption dates are:

- West Hills Rural Area Plan (adopted October, 1996)
- Sauvie Island/Multnomah Channel Rural Area Plan (adopted October, 1997)
- East of Sandy River Rural Area Plan (adopted July, 1997)
- Columbia Gorge Rural Area Plan (planning process is pending)

Tables 1 and 2 are intended to compare the West of Sandy River plan area to the other completed rural area plans. The numbers in Table 1 show that the WSR plan area is the smallest of the four plan areas so far with over 5,000 acres less than the next largest plan area, Sauvie Island. It is also a distant second to Sauvie Island in the amount of farmland in the EFU zone, but it has a significantly larger amount of land in the EFU than either West Hills or East of Sandy River. A very small amount of land is in the CFU zone relative to both the West Hills and East of Sandy River plan areas, and nearly all of this is located

along the Sandy River. The plan area also has a significantly larger amount of RC zoning than any of the other plan areas, and this is located primarily within the Orient rural community.

Table 1: Acreage in Zones-Rural Plan Areas

	EFU	CFU	MUA-20	RR	RC	Total
West Hills	1,820	15,110	280	2,090		19,300
East of Sandy River	2,017	21,871	626	724	73	*25,311
Sauvie Island	11,800		3,600		3	15,400
West of Sandy River	3,691	2,008	3,170	590	151	9,610

*Total acreage does not include 53,920 acres in National Forest.

**Data sources are the listed RAP's.

Table 2: Farmland and Dwelling Comparisons

	Land in Farm Zones*	Total Dwellings	Acres of Land per Dwelling
West Hills	11%	920	21.0
East of Sandy River	10%	731	34.6
Sauvie Island	99.99%	270	57.0
West of Sandy River	70%	1,234	7.8

*Land in Farm Zones includes both EFU and MUA-20

In Table 2, the column, "Land in Farm Zones," represents the amount of land in the plan areas that is in both the EFU and MUA-20 zones combined. Farming occurs on land in both the EFU and MUA-20 zones in the Sauvie Island plan area as well as in WSR. Staff presents this information in this way because of the significant amount of MUA-20 land in the WSR plan area that is being farmed. Approximately 56% of the MUA-20 acreage in the WSR plan area is either in farm deferral or is confirmed to be growing crops, mostly nursery stock (see Table 3).

The comparison of the number of acres of land per dwelling shows that there is a significantly higher gross density of dwellings in WSR plan area compared to the other areas. This, coupled with the amount of land in farm use, supports the characterization of the plan area as supporting significant farm activity that occurs in relatively close proximity to residential uses. Additional related data is included in Tables 3, 4, and 5.

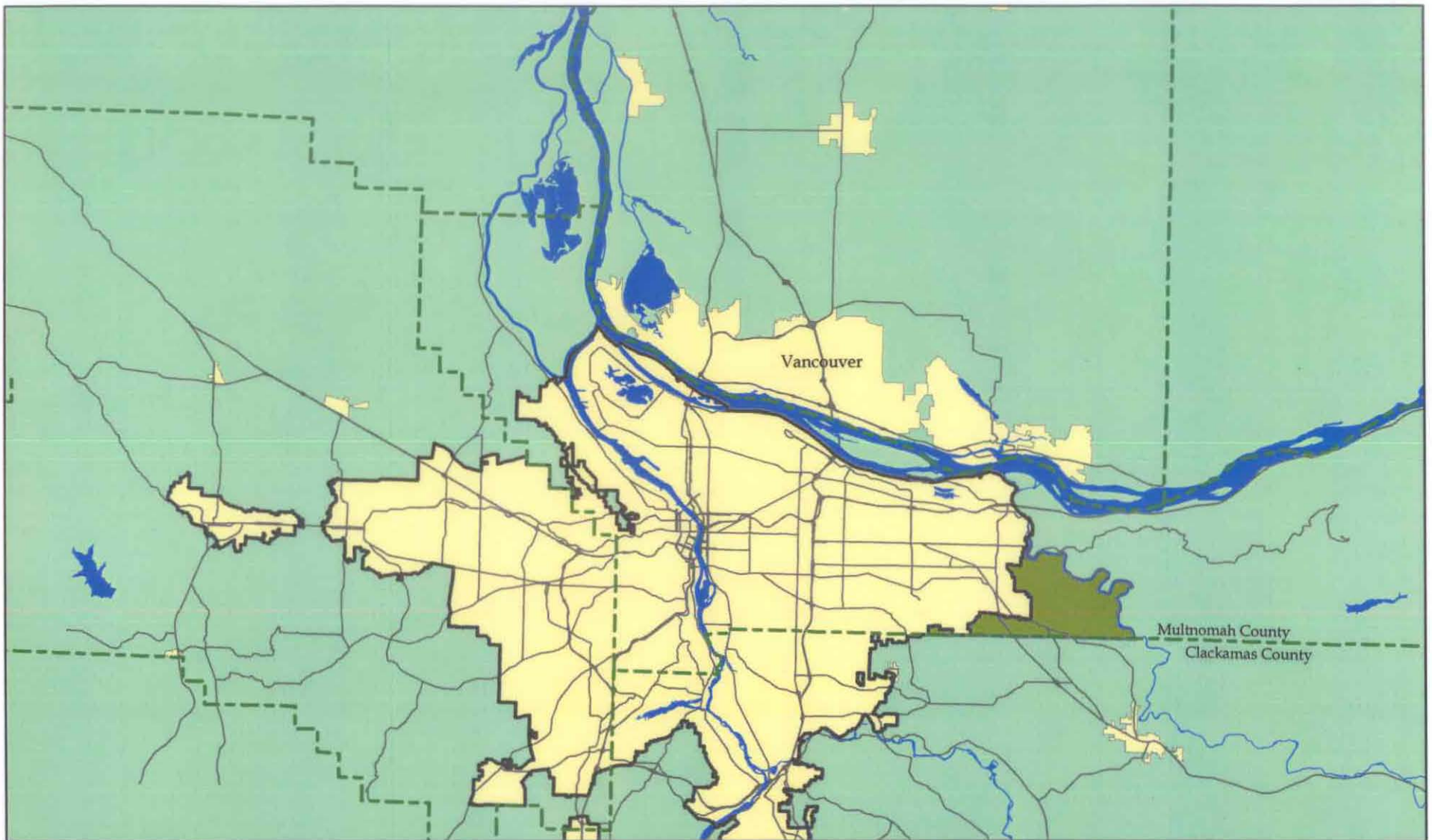
STUDY AREA

As shown in Figure 1, the West of Sandy River rural area is bounded on the east and north by the Sandy River, on the south by Clackamas County, and on the west by the city limits of Gresham and Troutdale. The area includes a narrow western leg bounded on the north and west by the city limits of Gresham and on the south by Clackamas County, and in island of rural land along Rodlun Road between Gresham and the County line. The area is open to urban influence to a greater degree than the other plan areas due to its proximity to the existing UGB and the planned Metro 2040 Town Center of Damascus , and due to a lack of physical barriers, such as the steeper topography of West Hills, and the limited access to Sauvie Island and the East of Sandy River area.

Two unincorporated rural communities, Orient and Pleasant Home, are located in the south central part of the plan area immediately north of Clackamas County. US 26 traverses diagonally for a distance of a little over one mile through the western leg of the area. The plan area encompasses approximately 9,610 acres, including 219 acres in the Rodlun Road area.

The plan area is characterized by rural agricultural land bisected by several riparian corridors. The predominant land uses in the plan area are nurseries, berry farms and pastures. The plan area is located in two major drainage basins, the Sandy River and the Willamette River. Three large riparian systems are present : Beaver Creek, which flows northwest through the central portion of the area to the Sandy River; Johnson Creek, which flows west along the southern portion of the area; and the Sandy River, which forms the north and east plan area boundary. Kelly Creek North (a tributary to Beaver Creek) and Kelly Creek South (a tributary to Johnson Creek) as well as many unnamed tributaries to Beaver Creek, Johnson Creek and the Sandy River are present in the plan area.

The east edge of the plan area is defined by approximately 11 miles of the Sandy River canyon. It contains large expanses of native upland forest habitat within Oxbow Park, forest land in private ownership, and also some land owned by the Nature Conservancy. Smaller blocks of forest exist along portions of the Beaver Creek drainage area. Connectivity between the riparian corridors in the study area and these blocks of upland forest increases the wildlife habitat value of both the riparian corridors and adjacent upland forest resources.



West of Sandy River Rural Area Plan

Figure 1

Study Area Vicinity





-  West of Sandy Study Area
-  Urban Areas
-  County Lines
-  Metro Urban Growth Boundary



Figure 1: Vicinity Map

PUBLIC INVOLVEMENT AND AGENCY COORDINATION

Task Force

The citizen Task Force was the key component of the public involvement and outreach efforts. The Task Force met 16 times over the life of the planning effort. The Task Force meetings were open to the public and time was reserved at each meeting for public comments. Public announcements of Task Force meetings were sent to all residents in the Orient and Pleasant Home areas and to people who indicated an interest in Task Force meetings. This list grew to over 210 people by the end of the Task Force meetings. Task Force meetings were held in the study area whenever possible. Meeting locations in the study area included Sam Barlow High School, Orient Middle School, Multnomah Grange, and the J. Frank Schmidt Nursery.



Task Force members and staff discuss maps.

The Task Force provided input and direction on all major policy decisions in the plan, from transportation improvements to new zoning in the Orient rural center. The Task Force operated on a consensus basis and worked through any disagreements before recommendations were made.

Technical Advisory Committee

Three Technical Advisory Committee (TAC) meetings were held during the planning process. Meetings were held to review transportation, land use and environmental work. The TAC reviewed the same material that the Task Force reviewed, but from the perspective of the agencies and organizations they represent. Agencies and organizations that were invited to comment and attend the meetings included the Department of Land Conservation and Development, Oregon Forestry Board, Oregon Association of Nurserymen and Oregon Department of Fish and Wildlife. A full list of TAC members is in the Appendix.

Open Houses

Two open houses were held to obtain broad public input on the creation of the plan. The first open house was held as part of the scoping phase on October 14, 1998. This open house was designed to identify issues to be addressed during the planning process. Approximately 1,100 mailers that included a questionnaire were sent to property owners in the study area resulting in over 100 attendees at the open house and 45 returned questionnaires. The results of this effort were compiled into the Scoping Report, which was adopted by the Board of County Commissioners on January 12, 1999.

The second open house was held on June 28, 2001 at the Multnomah County Yeon Shops (due to the unavailability of space in the study area). The purpose of the open house was to solicit input on the range of policies and implementing actions recommended by the Task Force. Notices were sent to all property owners in the study area as well as to people who indicated an interest in the project. The open house included displays of transportation improvements, zoning changes in Orient and areas recommended for environmental protections. There were opportunities to discuss and provide input on the proposals with project staff. An exit questionnaire also was available for those wishing to express their opinions in that

manner. Approximately 30 people attended the open house with the majority of comments being made verbally to staff. There were very few comments about the plan recommendations. Those comments that were about the plan were supportive, particularly of the transportation improvements. A number of people at the open house asked about future urban growth boundary expansions.

Landowner Meetings and Outreach

Two meetings were held for landowners potentially impacted by new environmental regulations proposed in the West of Sandy River Rural Area Plan. The landowner meetings were held before regularly scheduled Task Force meetings on May 24 and June 21, 2001. Notices were sent to all landowners who had a portion of their property near an identified natural resource, such as a stream, based on the initial resource mapping. Approximately 900 of these notices were mailed in this outreach effort. The meetings included a brief presentation about the process being used to determine the appropriate environmental protections and then a general open house where landowners had an opportunity to discuss their situation with staff and make comments on the mapping of natural resources.

Approximately 30 people attended the first land owner's meeting and about 10 people attended the second meeting. A list of common questions that were asked by participants was compiled and presented to the Task Force for their consideration. Those questions were generally about farming regulations and the County's role in regulating farming practices.

In addition to the two landowner meetings regarding Goal 5, a brief telephone survey of eight nursery operators in the study area was conducted by County staff. The survey was used to identify issues to be addressed and was focused on farming in the plan area. The responses were used to draw a general picture of some characteristics of nursery farming in the area and are discussed in more detail in the Land Use portion of this plan.

Orient and Pleasant Home Involvement

Portland State University Planning Effort

Graduate planning students, beginning in October 1998, conducted a separate planning process for the Orient and Pleasant Home Rural Centers. This process included open houses at the East Orient School on January 19, and February 9, 1999. Fliers were sent to all landowners in the Orient and Pleasant Home areas inviting them to the meeting. Thirty-eight citizens attended the first open house and shared their concerns and goals for the Rural Center.

Based on comments from the first open house and additional research, the students drafted a set of "solutions" for the issues identified by residents. The second open house was used to discuss the proposed solutions. Thirty-two people attended this meeting. The students drafted a plan based on this involvement and their research and presented it to County staff. The majority of the recommendations from that plan are incorporated in the West of Sandy River Rural Area Plan.

Business Owner Meeting

A special meeting was held on July 26, 2001 to solicit the input of business owners in the Orient and Pleasant Home rural centers. Task Force members and staff were concerned business owners in these areas might need an additional opportunity to discuss with staff, the recommended zoning changes required by the state Unincorporated Communities Rule. Notices were sent to all 27 businesses that had been identified in Orient and Pleasant Home. Six people attended this meeting and two other property owners followed up with staff individually.

Scoping Report

The Scoping Report is an adopted County document that guided the completion of this plan. The project team frequently referred to the Scoping Report during the planning process and made every effort to address all of the issues raised in that report.

PLAN ORGANIZATION

This plan is organized by four major topic areas:

- Environmental and Natural Resources
- Land Use
- Rural Center
- Transportation

Within each of these sections there are generally three major categories:

- Introduction
- Inventory and Analysis
- Findings and Conclusions
- Policies and Strategies

The findings and conclusions are the results of the inventory and analysis and include recommended implementing actions such as updates to the specific land use codes for the West of Sandy River Rural Area.

The policies and strategies also are specific to the study area and are intended to guide future development and County decisions in the study area.

The Appendix of this plan includes detailed information not appropriate for the body of the plan, such as the detailed land use code recommendations, the detailed environmental work and the public involvement and outreach details.

ENVIRONMENT AND NATURAL RESOURCES

INTRODUCTION

The environmental and natural resources work for the West of Sandy River Rural Area Plan is guided by two significant requirements; Statewide Planning Goal 5 and its administrative rules, and Title 3 of Metro's Urban Growth Management Functional Plan. There are a number of other state and federal environmental laws and regulations that impact the protection of natural resources in the study area, most notably the Endangered Species Act (ESA). The ESA was not directly addressed as part of this planning effort since the County is undertaking a countywide response to the ESA. However, environmental information collected as part of this effort will be useful in the County's ESA efforts.



Sandy River at Oxbow Park

Statewide Planning Goal 5: Riparian Corridors and Wildlife Habitat

Goal 5 requires "local governments to adopt programs that protect natural resources...for present and future generations." Prior to this planning effort, the Sandy River was designated as a Goal 5 scenic and wildlife habitat resource and was protected with the Significant Environmental Concern (SEC) overlay zone. Portions of Beaver Creek, Kelly Creek, and Johnson Creek were listed in Framework Plan Policy 16-G as significant water resource and wetland sites, but since the ESEE process had not been completed, they were not protected. The watersheds of these creeks are also recognized in Policy 16-G as potentially significant. This plan extends protection to these streams and watersheds.

The implementing rules for Goal 5 require the County to either follow the "safe harbor" guidelines described in the rules or conduct an Economic, Social, Environmental and Energy (ESEE) analysis. The County chose to conduct an ESEE analysis to develop an environmental protection program specific to the resources and development found in the West of Sandy River area. This is consistent with the County's approach in the other rural area plans. This ESEE document is an appendix to this plan. The goal of the ESEE analysis was to assess the economic, social, environmental, and energy effects of regulating or not regulating development that could impact significant wildlife habitat and riparian corridors (Goal 5 resources).

Goal 5 requires the following steps to perform the ESEE analysis:

- Identify conflicting uses;
- Determine the impact area;
- Analyze the ESEE consequences

The results of the ESEE evaluation were used to develop a protection program composed of policies and a zoning ordinance (SEC) to meet Goal 5. The Goal 5 process and results are summarized in detail below and the entire ESEE analysis is adopted as part of this plan and included in the Appendix.

Metro Title 3

Title 3 of the Metro Urban Growth Management Functional Plan requires local jurisdictions to adopt ordinances to regulate development in “water quality and flood management areas.” A significant portion of the West of Sandy River Study is within the Metro Boundary and must therefore comply with Metro’s requirements. In order to provide one set of regulations within the Rural Area these standards have been applied consistently throughout the entire West of Sandy River Rural Area. An official map must be adopted, and specific performance standards for water quality and flood management must be implemented. Title 3 setbacks from streams and wetlands vary from 15 to 200 feet, based on site-specific conditions. The requirements of Title 3 have been met in this planning process through the resource protection program that regulates development near Goal 5 stream corridor resources. The protection program completed for the West of Sandy River area includes a 200 foot riparian protection area to protect the functions and values of the riparian resource while also meeting the requirements of Title 3. In addition, the mapping completed for Goal 5 to identify the natural resources in the study area meets the requirements of Metro’s Title 3.

INVENTORY AND ANALYSIS

The inventory and analysis of wildlife habitat and riparian corridors in the West of Sandy River area was done in accordance with the requirements of Goal 5. The Goal requires an inventory of the quantity, quality and location of the natural resources of interest. As permitted by Goal 5, only riparian corridors and wildlife habitat were inventoried and evaluated in the study area. Wetlands outside of riparian corridors were not inventoried for the plan and will continue to be subject to state regulation based on the Statewide Wetland Inventory (SWI) mapping.

The second step in the process was to determine the significance of those resources. Significance was determined by evaluating the quality, quantity and location information for each resource. Upon determining which resources are significant, the land uses that could conflict with Goal 5 resources were identified. Next, the environmental, social, economic and energy (ESEE) consequences of allowing or not allowing the conflicting uses in the study area were considered.

The key questions asked during this analysis were what would be the environmental, social, economic and energy impacts of:

- Allowing conflicting uses,
- Limiting conflicting uses,
- Prohibiting conflicting uses.

Based on this analysis and input from the Task Force, a recommendation was made to limit conflicting uses within the study area.

The following sections describe the inventory process for riparian corridors and wildlife habitat, how resources were determined to be significant and the methods for reaching a conclusion on how to treat conflicting uses.

Riparian Corridor and Wildlife Habitat Inventory

The natural resource inventory identified the riparian corridor and wildlife habitat resources that are to be considered for protection under Oregon’s Statewide Planning Goal 5.

The inventory methodology consisted of identifying resources by reviewing aerial photos and then field verifying those resources. The field observations were made from public rights-of-way, and the work was completed by trained ecologists. Because of the many roads crossing streams and the accessibility of

many of the wildlife habitat areas this method resulted in an accurate inventory upon which to base the ESEE analysis.

In order to make the inventory and analysis more efficient, the riparian corridors were mapped in combination with wildlife habitat (forests) adjacent to streams. As a result, some of the larger riparian corridor units are a combination of riparian corridor and adjacent upland forested wildlife habitat. The areas within the Sandy River canyon are an example of this. Other riparian corridor segments are mapped as just the stream channel. These segments have adjacent agricultural or other land uses to the top of the stream bank, and no riparian vegetation was apparent on the aerial photos or during the fieldwork. Examples of these conditions are found along segments of Beaver Creek and Johnson Creek.

Assessment sheets were prepared for each riparian corridor and wildlife habitat site based on the aerial photo work and the field observations. The assessment sheets include the site name, site code, location, drainage basin (riparian corridor sheets only), adjacent land use, Township, Range, and Section location, map sheet number, date(s) of field work, general description, stream information, dominant vegetation, functions, significance determination, and recommendations for enhancement.

Determination of Significance

After the inventory was completed, a determination of significance was made to decide whether or not the resource site should be considered for protection through the ESEE analysis. The determination of significance was based on the quality, quantity, and location of the resource. The data sheet assessed the conditions of each site. Each site was then rated high, medium or low for five core ecological functions of:

- Wildlife Habitat
- Water Quality Protection
- Ecological Integrity
- Connectivity
- Uniqueness/Fish Habitat

The core functions represent the basic ecological functions of the resources and are considered as a minimum for any valid and defensible ranking.

Twenty riparian corridor units were inventoried and assessed (see Figure 2). The corridors were determined to be significant when they scored high in one or more of the core ecological functions: fish habitat, wildlife habitat, water quality protection, ecological integrity, or connectivity. Fish listed under the ESA are known to be present in Johnson Creek, Beaver Creek, and the Sandy River; therefore, riparian corridors of these streams rate high for fish habitat. All streams within the study area are either tributaries to Johnson Creek, Beaver Creek, or the Sandy River, and all of these tributaries have the potential to provide fish habitat, or to affect fish habitat downstream (i.e. water quality). Therefore, all riparian corridors in the study area rate high for fish habitat.

Twenty-nine wildlife habitat units were inventoried and assessed, of which nineteen are stream-associated and nine are isolated upland areas (see Figure 2). All stream-associated wildlife habitat units were determined to be significant based upon scoring high in one or more of the following core functions: wildlife habitat, water quality protection, ecological integrity, connectivity, or uniqueness. Five of the isolated wildlife habitat units were determined to be significant (see U1, U2, U3, U6, and U9 – on Figure 2). These isolated wildlife habitat units provide good small bird and mammal habitat; however, these units do not provide as valuable wildlife habitat as the stream-associated wildlife habitat units. Four isolated wildlife habitat units were determined to not be significant. Factors contributing to a determination of non-significance include **poor vegetation structure and diversity**, no adjacent permanent

or seasonal water, small forest size, no connectivity to riparian corridors due to paved roads or adjacent agricultural land use, grazing disturbance, and high occurrence of invasive species.

West of Sandy River

Significant Goal 5 Resources and Impact Areas

Figure 2

Goal 5 Resource Inventory Sites	
Beaver Creek	B
Beaver Creek Tributaries	BT
Johnson Creek	J
Johnson Creek Tributaries	JT
Kelly Creek North	KN
Kelly Creek South	KS
Sandy River Tributaries	ST
Uplands (Significant and Not Significant)	U

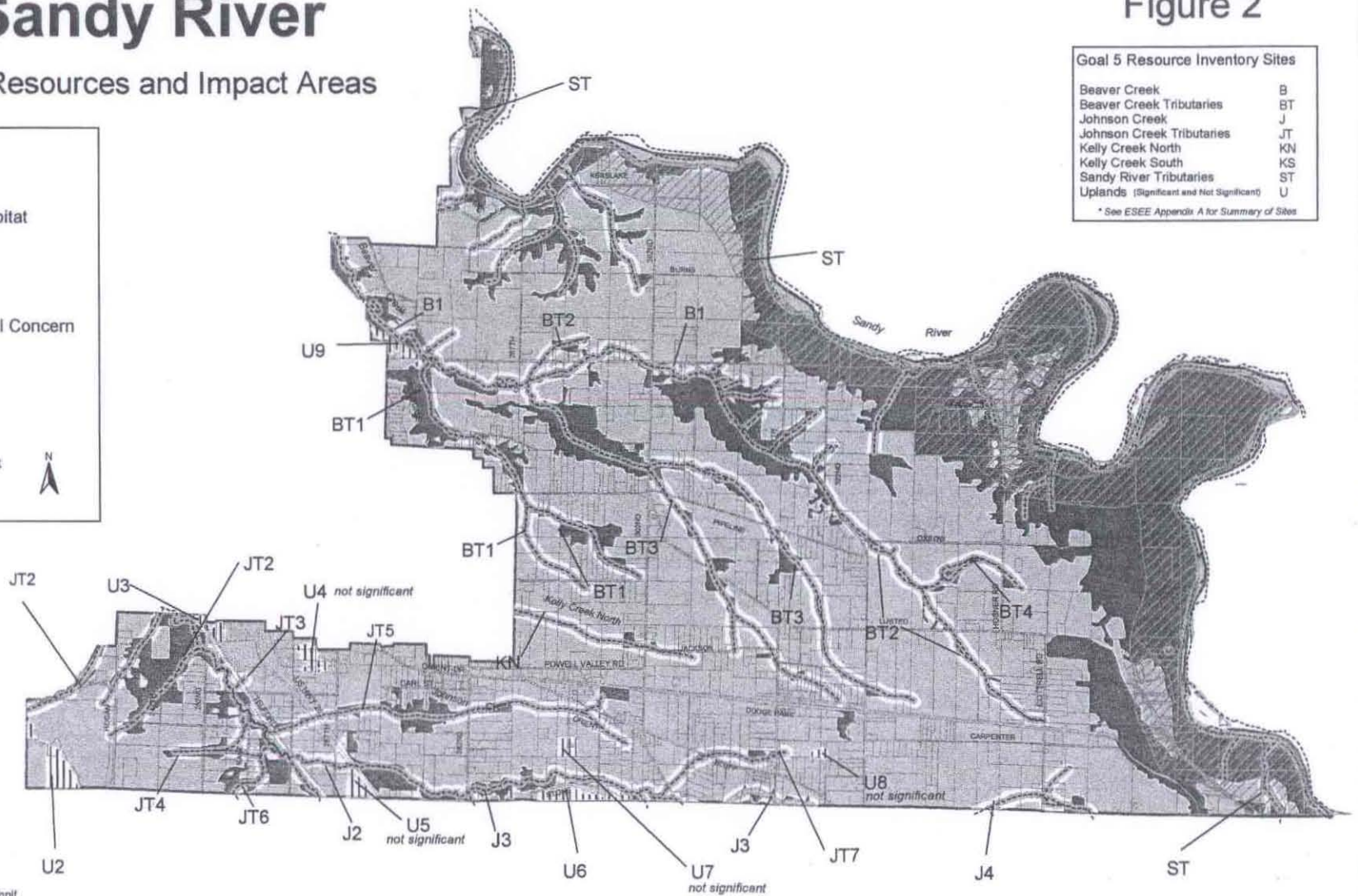
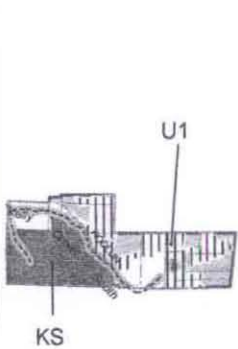
* See ESEE Appendix A for Summary of Sites

Legend

- Riparian Corridors
- Riparian and Wildlife Habitat
- Impact Areas
- Isolated Uplands
- Significant Environmental Concern
- WSR Plan Area
- Tax Lot Boundaries
- Streams

1000 0 1000 2000 3000 4000 Feet
1" = 3000'

N



Determination of Impact Area

Local governments must determine an impact area for each significant resource site. The impact area is the area where development allowed in the underlying zone could adversely affect the identified resource. The impact area defines the geographic limits within which to conduct an ESEE analysis for the identified significant resource site.

It is the area that is regulated to protect the resource.

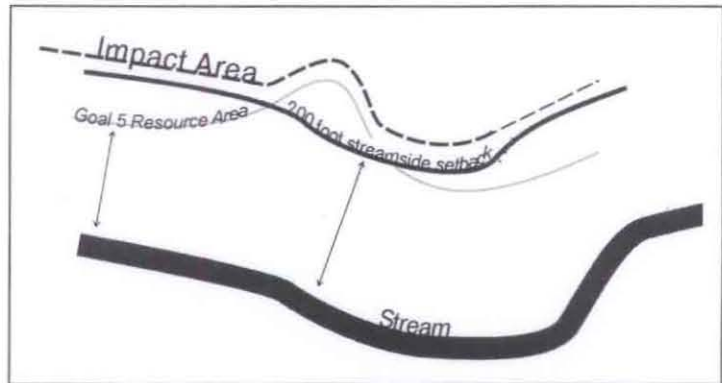


Figure 3: Example of an Impact Area

As shown in Figure 3, the size of the impact area varies with each natural resource. The first boundary is the outline of the entire resource area, which may include both riparian areas as well as wildlife habitat areas. This is illustrated by the “Goal 5 Resource Area” line in Figure 3. A 25 foot impact area is added to this boundary to protect the root zone of forest resources. The “200 foot streamside setback” boundary was drawn to provide a minimum protection of the riparian corridor. This width is based both in the science of the functions and values of riparian corridors. The USFWS suggests that 200 feet is appropriate for Multnomah County based on soils and native trees (Metro, 1999). In addition, the County needs to adopt a Title 3 Water Quality and Floodplain protection ordinance that may include riparian corridors up to 200 feet wide. The final impact area is the most inclusive of these boundaries, and is used in the ESEE analysis.

Conflicting Uses

Goal 5 directs local governments to identify conflicting uses that exist, or could occur within the impact area of significant Goal 5 resource sites. The conflicting uses defined as those land uses that are allowed outright or conditionally in the underlying zone of a resource site or its impact area. As allowed by Goal 5, the conflicting uses in the study area were grouped into broad categories for efficient analysis. The following paragraphs describe those broad categories.

Agriculture

Agriculture uses are permitted outright in all zones in the study area except Rural Residential, where “Limited Farm Use” is permitted as a primary use. The study area includes numerous agricultural uses with nursery and berry farming, and pastures predominating. There is at least one small sheep raising operation, and there may be other small livestock farming uses as well. There are several possible conflicts between farm uses and wildlife habitat. Wildlife connectivity often suffers from the presence of large areas of cultivated land enclosed by fencing that prevents the migration of animals from various areas within their range. The use of pesticides and fertilizers that often accompanies farm uses may discourage native species from flourishing and limit the nature of forage for other species. This impacts both native plant and animal species.

Some farm practices can impact riparian corridors. Livestock found at the edge of a stream can destroy riparian vegetation and trample stream banks. Unfiltered runoff from areas used by livestock can get into the stream and often contributes elevated levels of nitrogen and other nutrients that can impact both fish habitat and native plant habitats.

Although farm use may have impacts upon natural resource values, the County does not regulate most farm practices, therefore the associated impacts are not carried forward into the ESEE analysis. The County does regulate uses associated with agriculture, such as dwellings, roads, commercial activities and structures, and the impacts associated with these uses are analyzed in the ESEE.

Forest

Forest uses are permitted outright in all zones in the study area. The forest land in the study area is found primarily along the Sandy River. Steep forested slopes and broad-forested benches and floodplains characterize the corridor. Generally, the forested areas are not in commercial forest production due to the physical constraints of the study area.

Typical forestry involves the cutting of timber, clearing the site, and then replanting the site with a single commercial species. These disturbances cause a range of impacts to habitat from fragmentation to the loss of native plant and animal species. Much of the forested lands in the plan area are on steep slopes, and commercial forest practices on steep slopes often results in erosion of disturbed soils and can cause geologic instability due to road construction and loss of the root structure that holds fragile soils together. This may lead directly to the deposition of sediments into riparian areas, resulting in the loss of habitat due to the sedimentation of gravels and pools that fish depend upon, as reduced water quality through increased sediment loading.

Typical forest practices often involve the application of chemicals to encourage the growth of commercial tree species. By encouraging the growth of a single tree species, the wide range of other plant species that would otherwise be present is reduced or eliminated. As a result, the structure of the forest is changed from one with a developed duff, shrub, hardwood, and evergreen layer, to one with a single canopy. The wildlife habitat typically found within the structure is thereby eliminated.

The State of Oregon regulates forest practices under the Forest Practices Act; therefore the associated impacts to habitat are not carried forward into the ESEE analysis. As is the case with agriculture, the County does regulate accessory forestry uses and will limit these uses through a protection program.

Residential

Residential uses are permitted outright in the RR, MUA-20 and RC zones, and are permitted subject to standards in the EFU and CFU zones. The study area contains a diverse mix of small lot rural residential use, to larger lot hobby farm residences. Rural residential uses in the area typically rely upon septic systems to provide sanitary sewer, and wells are used for water service in some areas. In high densities, septic systems can infiltrate groundwater and the use of wells can impact the level of the water table. Density varies but residential density in the area increases to one dwelling per acre in the Orient Rural Center area. There are no sanitary sewers in the area, and the roadside stormwater system has limited capacity.

Rural residential development often results in the fragmentation of habitat. Large lawns and landscaped areas, long graveled or paved driveways, stream crossings, and multiple buildings with large areas of impervious surface all contribute to this fragmentation. Increased impervious surface, soil compaction and loss of tree cover contribute to increased stormwater runoff and to stream temperatures too high for healthy habitats. Large lawns and landscaped areas are often treated with fertilizers and pesticides that can end up in adjacent streams and wetlands. Common residential landscaping as well as the removal of native vegetation reduces natural resource values. Landscaping often includes invasive and other non-native species that compete with native vegetation.

Commercial

Commercial uses are currently allowed only as a conditional uses in the EFU, MUA-20, RC and RR zones. Commercial uses are generally characterized by a high level of disturbance. Existing non-farm commercial uses in the area are concentrated in the Orient and Pleasant Home Rural Centers. Smaller scale home occupations and farm related commercial uses exist in limited numbers throughout the study area. Disturbances include site clearing, large building footprints, and large parking areas. These large impervious areas result in alteration of area hydrology, increased stream temperatures and decreased water quality due to runoff from these areas flowing into local wetlands, riparian areas and streams. Storage of chemicals and other toxins related to the commercial uses is also an area of concern. Common attributes include gas tanks, motor oil, and other lubricants and solvents associated with commercial maintenance and repair facilities. If unconfined these products may find their way into local resource sites as stormwater carries them away.

Commercial activities are usually conditional uses under the County zoning code, and the County may place appropriate conditions of approval to limit their impact upon resource functions and values when the County zoning code provides for this.

Industrial

Industrial use is generally considered the most intensive level of development. Industrial uses are generally the most intrusive on the landscape due to large areas of impervious surfaces and clearing, large parking and loading areas, and well as potential sources of toxic run-off, effluent, and other factors that are generally detrimental to significant natural resource sites.

Public Facilities and Community Service Uses

Public facilities and community service uses generally consist of a wide range of uses from building pump stations, schools, etc. The impacts from these uses are highly variable and specific to the individual developments.

Construction of roads results in concentration of surface water, compaction of soils and the resulting loss of water absorption and higher runoff rates, alteration to groundwater recharge (alteration of area hydrology), erosion of side slopes, ditches, and the surface of unpaved roads. Installation of a drinking water pipeline and associated facilities could disrupt the functions and values of the natural resources along its path.

Due to the highly variable nature of the public facilities, it is difficult to assess the impact that *could* take place. In addition, most of the public infrastructure needed to serve the West of Sandy area is already in place. Generally, any implementation of a natural resource program should include a mechanism for the review of the impact these developments may have to the natural resource functions and values, and the projects designed to maintain or replace any disturbed natural resource values.

Summary of Recommended Zoning Code Changes

The protection program proposed by this plan is to limit the potential impacts to habitat areas that could occur during development associated with the uses allowed in the various zones in the plan area. It builds on the County's existing Significant Environmental Concern (SEC) Zoning Overlay District to establish protection standards for both water resource (under Goal 5 and Goal 6) and wildlife habitat (under Goal 5). The expansion of the SEC overlay to include Goal 6 (Water Quality) and Metro's Title 3 is unique to the West of Sandy River area. In other area plans the SEC Overlay is limited to Goal 5 implementation, and the provisions of Title 3 have not been applicable. However, other elements of the

proposed West of Sandy River area SEC Overlay District would be similar to the regulatory approach taken in other areas (e.g., the West Hills area), including:

- Requiring an SEC Permit for regulated development within the SEC Overlay District; and
- Establishing base standards that apply to the entire Overlay District with special standards for specific resources.

The recommended West of Sandy River Rural Area protection program includes two different SEC designations, one for habitat (SEC-h) and one for water resources areas (SEC-wr). The water resources protection zone is focused on riparian resources such as streams, and is more restrictive closer to the resource. The habitat protection zone includes the same level of requirements through the entire area designated as wildlife habitat. For a more detailed description of the recommended zoning code changes see the Appendix under “Environmental Protection Program Code Concepts”.

POLICIES AND STRATEGIES

Goal 5 Policies

Policy 1

Multnomah County recognizes the importance of identifying and protecting natural resources in order to promote a healthy environment and natural landscape that contribute to the livability of the West of Sandy River Rural Area.

Strategies:

- 1.1 Multnomah County shall prepare and maintain an inventory of the location, quality, and quantity of wildlife habitat areas and riparian corridors within the West of Sandy River Rural Area. This inventory should include the riparian corridors associated with the rural eastside streams of Beaver Creek, Johnson Creek and Kelly Creek that are listed in Framework Plan Policy 16G as either significant or potentially significant.
- 1.2 Multnomah County shall utilize the Statewide Wetlands Inventory to identify the general location of wetlands within the West of Sandy River Rural Area.

Policy 2

Multnomah County shall designate selected riparian corridors and wildlife habitat areas as significant natural resources pursuant to Statewide Planning Goal 5.

Strategies:

- 2.1 Those wildlife habitat areas that have been rated as “high” value for at least one of the following ecological functions shall be designated as “significant”:
 - Wildlife Habitat,
 - Water Quality Protection,
 - Ecological Integrity,
 - Connectivity, and
 - Uniqueness.
- 2.2 Those riparian areas that have been rated as “high” value for at least one of the following ecological functions shall be designated as “significant”:
 - Fish Habitat
 - Wildlife Habitat,
 - Water Quality Protection,
 - Ecological Integrity, and

- Connectivity.

Policy 3

Multnomah County shall protect significant riparian corridors and associated impact areas and limit conflicting uses within these areas in the West of Sandy River Rural Area. In considering the protection of these resources, the County shall emphasize an ecosystem based, watershed approach.

Strategies:

- 3.1 Multnomah County shall implement this policy with amendments to the Multnomah County Zoning Code, Significant Environmental Concern Zoning Overlay District for riparian corridors and water resources within the West of Sandy River Rural Area. The protection measures that are incorporated into the SEC Overlay District ordinance will utilize the measures that protect water quality under Policy 6 as one tool to protect riparian corridors and associated impact areas.
- 3.2 This overlay district shall be applied to both the resource and its impact area and shall include areas within 200 feet of each significant stream as measured from top of bank. As stated in Section 6.4 of the *West of The Sandy River Rural Area Transportation and Land Use Plan Natural Resource Inventory and ESEE Report*, this distance is based in the science of the functions and values of riparian corridors. The weight of the science indicates that a significant measure of the functions of riparian corridor habitat exists within the distance that is defined by one potential tree height (PTH) from a stream. The US Fish and Wildlife Service suggests that 200 feet is the appropriate potential tree height (PTH) for Multnomah County based on soils and native trees (Metro, 1999). In addition, the County needs to adopt a Title 3 Water Quality and Floodplain ordinance that can include regulated areas up to 200 feet wide.
- 3.3 The limitation on conflicting uses in this district shall apply to those uses that are regulated by the County and shall allow for conflicting uses within the district if an alternatives analysis demonstrates that no reasonable alternative exists. The standards shall be most protective of the riparian corridor itself and may allow more flexibility for areas outside the corridor but within the impact area.
- 3.4 The County should investigate and consider whether the overlay district ordinance should have as a primary objective, maintaining the Properly Functioning Condition of the riparian corridors and impact areas of significant streams in order to support maintenance and recovery of fish in the area.
- 3.5 Streams in the study area have been significantly impacted by clearing and development. The County should investigate and consider development of a restoration program for study area streams in order to restore fish habitat.

Policy 4

Multnomah County shall protect significant wildlife areas and will limit conflicting uses within these significant natural resource areas and their associated impact areas in the West of Sandy River Rural Area. In considering the protection of these resources the County shall emphasize an ecosystem based, watershed approach.

Strategies:

- 4.1 Multnomah County shall implement this policy by establishing a specific Multnomah County Zoning Code Significant Environmental Concern Zoning Overlay District for wildlife resources within the West of Sandy River Rural Area.

- 4.2 This district shall be applied to areas designated as significant wildlife resources in *West of the Sandy River Rural Area Transportation and Land Use Plan Natural Resource Inventory and ESEE Report* and associated impact areas.

Policy 5

Multnomah County recognizes the need to protect the outstanding public values for which sections of the Sandy River have been designated a National Wild and Scenic River and a State Scenic Waterway.

Strategy:

- 5.1 Work with State Parks and other agencies to review development standards in the County Significant Environmental Concern provisions and in the Oregon Administrative Rules specific to the designated areas.

Water Quality Policies (Title 3, Goal 6)

Policy 6

Multnomah County recognizes the importance of protecting the water quality within the West of Sandy River Rural Area and shall adopt standards to protect the water quality resources from the impacts of development pursuant to the requirements of Title 3 of the *Metro Urban Growth Management Functional Plan (3.07.340)*.

Strategies:

- 6.1 Multnomah County shall implement this policy by establishing a specific Multnomah County Zoning Code Significant Environmental Concern Zoning Overlay District for riparian corridors and water resources which substantially complies with the water quality standards of *Title 3 of the Metro Urban Growth Management Function Plan*.
- 6.2 Standards adopted to protect water quality shall preserve the water quality related functions and values of primary and secondary protected water features:
- Primary protected water features shall include: Title 3 wetlands, rivers, streams, and watercourses downstream from the point at which an area of 100 acres or more is drained to that water feature (regardless of whether it carries year-round flow); streams that carry year-round flow; springs which feed streams and wetlands and have year-round flow; and natural lakes.
 - Secondary protected water features shall include intermittent streams, watercourses, and seeps downstream of the point at which 50 acres are drained and upstream of the point at which 100 acres are drained to that water feature.
- 6.3 Standards adopted to regulate the water quality impacts of “development” shall apply to the following:
- “Development” means any man-made change defined as buildings or other structures, mining, dredging, paving, filling, or grading in amounts greater than ten (10) cubic yards on any lot or excavation. In addition, any other activity that results in the removal of more than 10 percent of the vegetation in a protected water feature or its vegetated corridor on a lot is defined as development.
 - Development shall not include the following:
 - Stream enhancement or restoration projects approved by cities and counties;

- Farming practices as defined in ORS 30.930 and farm use as defined in ORS 215.203, except that buildings associated with farm practices and farm uses are subject to the requirements of Title 3; and
- Forest practices conducted under an Oregon Department of Forestry permit.

Policy 7

Multnomah County recognizes that it is important to protect vegetated corridors in order to maintain their water quality functions including the following:

- Separation of protected water features from development;
- Maintaining or reducing stream temperatures;
- Maintaining natural stream corridors;
- Minimizing erosion, nutrient and pollutant loading into water;
- Filtering, infiltration and natural water purification; and,
- Stabilizing slopes to prevent landslides contributing to sedimentation of water features.

Strategy:

- 7.1 Require that new development or redevelopment maintain vegetated corridors along primary and secondary water features whenever feasible. The width of the vegetated corridors shall be based on the type of water resource and the slope of the adjacent banks.
- The width of vegetated corridors adjacent to primary protected water features shall be 50 feet from the top of bank or ravine. The top of the ravine is the break in the greater than or equal to 25% slope. The starting point for measurements shall be the top of bank, which is the same as “bankful stage” defined in OAR 141-85-010(2).
 - The width of vegetated corridors adjacent to secondary protected water features with slopes less than 25% shall be 15 feet and where slopes are greater than or equal to 25%, the vegetated corridor shall be 50 feet.
 - In no case shall the width of the vegetated corridor be required to exceed 200 feet from top of bank.

Policy 8

Multnomah County shall take steps to limit visible and measurable erosion from development throughout the West of Sandy River planning area in accordance with the water quality standards of *Title 3 of the Metro Urban Growth Management Function Plan*.

Strategies:

Multnomah County shall implement this policy by establishing standards that:

- 8.1 Apply erosion and sediment control regulations to all development activities that may result in visible or measurable erosion. Visible or measurable erosion includes, but is not limited to:
- Deposits of mud, dirt sediment or similar material exceeding one-half cubic foot in volume on public or private streets, adjacent property, or onto the storm and surface water system, either by direct deposit, dropping discharge, or as a result of the action of erosion.
 - Evidence of concentrated flows of water over bare soils; turbid or sediment-laden flows; or evidence of on-site erosion such as rivulets on bare soil slopes, where the flow of water is not filtered or captured on the site.
 - Earth slides, mudflows, earth sloughing, or other earth movement that leaves the property.
- 8.2 Help prevent erosion by requiring the use of prevention practices such as non-disturbance areas, construction schedules, erosion blankets and mulch covers. To the extent that erosion cannot be completely prevented, sediment control measures are to be designed to capture, and retain on site, soil particles that have become dislodged by erosion.

- 8.3 Adopt a limited construction season for development within primary and secondary water feature corridors to allow disturbance to occur during dry parts of the year and limit it during wet seasons.
- 8.4 Control stormwater from developed areas in a manner that does not increase runoff, and does not contribute to increased flow in area drainages and creeks. Investigate how runoff could be reduced from parking and maneuvering areas through use of pervious materials.
- 8.5 Require that stream crossings be avoided where possible, and when unavoidable, require maintaining watershed function in development of regulations for stream crossings, e.g. crossing does not disturb the bed or banks of the stream, is of the minimum width necessary to allow passage of peak winter flows, etc.

Other General Policies

Policy 9

Regulations to protect natural resources and water quality should allow changes to existing development when the overall resource value of the property is improved.

Strategy:

- 9.1 Include language in natural resource protection and water quality standards that allows changes to existing development which result in a net benefit to the protected resource.

Policy 10

Multnomah County should continue to make information about other agency programs and educational materials available to the public at the planning counter and on the internet.

Strategy:

- 10.1 Multnomah County will work with the East Multnomah Soil and Water Conservation District, the Oregon Department of Agriculture, the County Assessor, the U.S. Natural Resources Conservation Service and others to provide landowners with information about various agency programs. Programs may include property tax deferral and exemption programs available for stream enhancement and agricultural plans to protect streams and their watersheds.

LAND USE

INTRODUCTION

This section provides a description and inventory of the existing land use patterns in the West of Sandy River Plan area's five zoning districts.

One of the primary objectives of the inventory and analysis was to measure and describe the role of farm and forest uses in the plan area. In keeping with this, the area's Exclusive Farm Use (EFU), Multiple Use Agriculture (MUA-20) and Commercial Forestry Use (CFU) zones are analyzed in some detail. An inventory of the Rural Residential (RR) zone is also included in this section. Planning for the Rural Communities of Orient and Pleasant Home is also a significant element of the Plan. This work is included in the following section entitled Rural Center.



Nursery farm on MUA-20 land along SE 262nd Ave.

The Agricultural Economy in the West of Sandy Area

In recent years, the state's nursery industry has grown at almost twice the rate of the industry nationwide. Much of this activity has been focused in and around the Portland metropolitan area. In fact, over 80 percent of the state's nursery output comes from the Portland Metro area counties and Marion County combined. Together, these areas contain about 1,000 small locally owned firms, employing over 10,000 workers. In 1997, there were 205 nursery farming operations in Multnomah County, and they generated \$32,000,000 in gross sales. There were 2,900 acres in nursery production, and the gross sales per acre were \$11,103 (source: Oregon Nursery Greenhouse Survey, 1997). Based on 1999 figures from the Oregon Agricultural Statistics Service, approximately 70% of the total \$59.3 million dollar value of farm crops produced in Multnomah County was from nursery and berry crops.

One significant cluster of nursery activity is situated in the area that contains and surrounds the West of Sandy River study area. The area also continues to support berry farming, although the acreage dedicated to this crop has been decreasing. Several characteristics of this area explain the relative strength of its nursery cluster. First is its proximity to the metropolitan area. Location allows these farms access to transportation wholesalers, saving time and cost in the transport of nursery stock. In addition, this location allows nursery owners closer connections to suppliers and the urban labor force, an essential component of an industry dependent upon seasonal labor.

The cluster of nursery businesses stimulates competitive practices and innovation, and at the same time, promotes cooperation among farms in resolving common concerns. Within the West of Sandy River area, there are approximately 130 Oregon Department of Agriculture licenses for nursery-related operations. These operations include cash buyers, Christmas tree growers, greenhouse growers, nursery stock growers, nursery dealers and landscape contractors, and wholesale produce dealers. Nursery stock growers constitute the bulk of nursery-related businesses found in the study area.

The nursery cluster in the West of Sandy River area has also stimulated the development of a network of support industries. This area contains not just nursery and farming operations, but over 20 businesses that

focus specifically on agricultural and farm services, nursery supplies, feed stores, landscaping, trucking and warehousing, food processing and farm production/raw materials. Working together, all of these businesses contribute to the continued strength of a strong community network.

Telephone interviews with local nursery owners confirmed that the study area includes a vital cluster of nursery activity. Nursery owners indicated that the proximity of other nurseries in the area results in a mutual support network. The farmers in the area commonly share trucking services, and labor when it is mutually beneficial. Some of the farmers indicated that they also share equipment and consult with each other. The availability of equipment and supplies was generally described as adequate with the exception of a large producer who felt a co-op is needed and the area could use more equipment dealers and vendors. A major area of nursery support is located in the Canby/Woodburn area and daily delivery services come from there.

Most farmers in the area employ both full and part-time workers, many of whom are of Hispanic descent. The eight farms contacted report a total of 100 full-time and 115 part-time workers. Part-time jobs can be described as jobs that are seasonal over several months rather than partial days, and work seasons vary by crop type. For example, production cycles for evergreen trees are different than for bare-root trees. Many of the workers go to Mexico from November to February, and some work other jobs in the area when they are not working in nurseries. Several farmers noted that some of the farm workers have settled in the area, purchasing homes and raising families.

Most nursery farmers interviewed lease parcels in addition to their own holdings. The usefulness of a parcel for growing nursery stock depends on size and its location relative to other land being farmed by the operator. If the parcel is adjacent to existing farmed areas, parcels of 1 – 2 acres or less are useful. For stand alone parcels, most respondents stated that 4 – 5 acres was the minimum size needed to manage effectively. The location of existing development on parcels was also cited as potentially having an effect on the ability to use the parcel. The consensus is that the soils in the study area that are not too steep are generally very good for nursery stock.

Nursery farm management in the area has been affected by the relatively close proximity of dwellings and urban areas. Most of the farmers contacted reported some kind of impacts, including conflicts with traffic on area roads, complaints from residents, and a need to limit some management activities. A majority said that moving farm equipment on roads can be a problem due to the increasing traffic on area roads that do not have adequate shoulders or turn-outs. The need to move equipment around the area is driven by the relatively high parcelization in the area, the common practice of leasing parcels that are not contiguous to the main farm operation, and the competition for production land.

INVENTORY AND ANALYSIS

This section includes an inventory and analysis of the following zoning districts:

- EFU (Exclusive Farm Use)
- CFU (Commercial Forestry Use)
- MUA-20 (Mixed Use Agriculture – 20 Acre)
- RR (Rural Residential).

This section also includes information regarding parks and open spaces, public facilities and natural hazards. The rural centers of Orient and Pleasant Home are discussed in the following section. Each subsection includes its own inventory and analysis followed by findings and conclusions and finally a description of new policies recommended through this planning process.

A map of zoning districts within the West of Sandy River study area is provided in Figure 4. As shown on the map, the West of Sandy River planning area is heavily focused on agriculture. The EFU zone and the MUA-20 zones contain the bulk of the area's agricultural uses, and comprise approximately 70 percent of the acreage in the study area. An additional 20 percent of the acreage is in the CFU zone, primarily along the Sandy River.

Table 3 below indicates the five zoning districts within the West of Sandy River area, showing the amount of land in each zoning district that is in active farm or forestry use. The table includes both lands shown as tax deferred by the County Assessor as well as land that is being used for agricultural production, but not included as tax deferred.

Table 3 : Total Acres by Zone and Farm/Forest Use

Zoning Designation	In farm or forest use	Not in farm or forest use	Total Acres
EFU	3,284	389	3,673
CFU	772	1,236	2,008
MUA-20	1,780	1,391	3,170
RR	248	342	590
RC	16	135	151
Total Acres	6,115	3,495	9,610

Table 4: Number of Vacant and Improved Parcels by Zone

Vacant Status	Zoning Designation					Total Parcels
	CFU	EFU	MUA-20	RC	RR	
Dwelling	78	205	767	68	116	1,234
Vacant	43	96	172	30	35	377
Other Imp	45	5	13	38	103	
Total	166	306	952	136	155	1,715

*The term "other imp" represents non-residential improvement.

A comparison of the number of vacant and improved parcels by zone shows that a significant number of new dwellings are possible in the MUA-20 zone because they are an outright use.

Table 5: Size of Parcels by Zone

Parcel Size Class in Acres	Zoning Categories					Total
	CFU	EFU	MUA-20	RR	RC	
0-3	52	89	648	81	128	998
3-5	26	44	158	34	3	265
5-10	33	52	103	35	2	225
10-20	29	68	29	2	3	131
20-50	19	48	13	3		83
50-200	7	5	1			13

* Source: RLIS database.

Exclusive Farm Use Lands (EFU)

Statewide Goal 3 addresses agricultural lands, and is intended to protect farming lands and farm uses. Agricultural lands are designated with respect to an area's underlying soil type. In western Oregon, land with predominantly class I – IV soils and that is located in EFU zones, is considered agricultural land.

State statutes for Goal 3 outline procedures for counties to designate agricultural lands as EFU areas in their comprehensive plans and zoning ordinances.¹ State administrative rules give more specific guidelines on the activities that counties may allow, or must prohibit, in these areas.² Counties have the option of being more restrictive than the state, but they may not be less restrictive. Generally speaking, EFU areas throughout Oregon may include activities such as farm stands, wineries and other commercial uses that occur in conjunction with farm uses (e.g., fertilizer sales, food processing). Home occupations and utility facilities are also allowed in EFU areas. Non-farming activities are only allowed in EFU areas when counties can show that they won't have a negative effect on surrounding farm uses.

Overview of Land Uses in the West of Sandy River EFU Zone

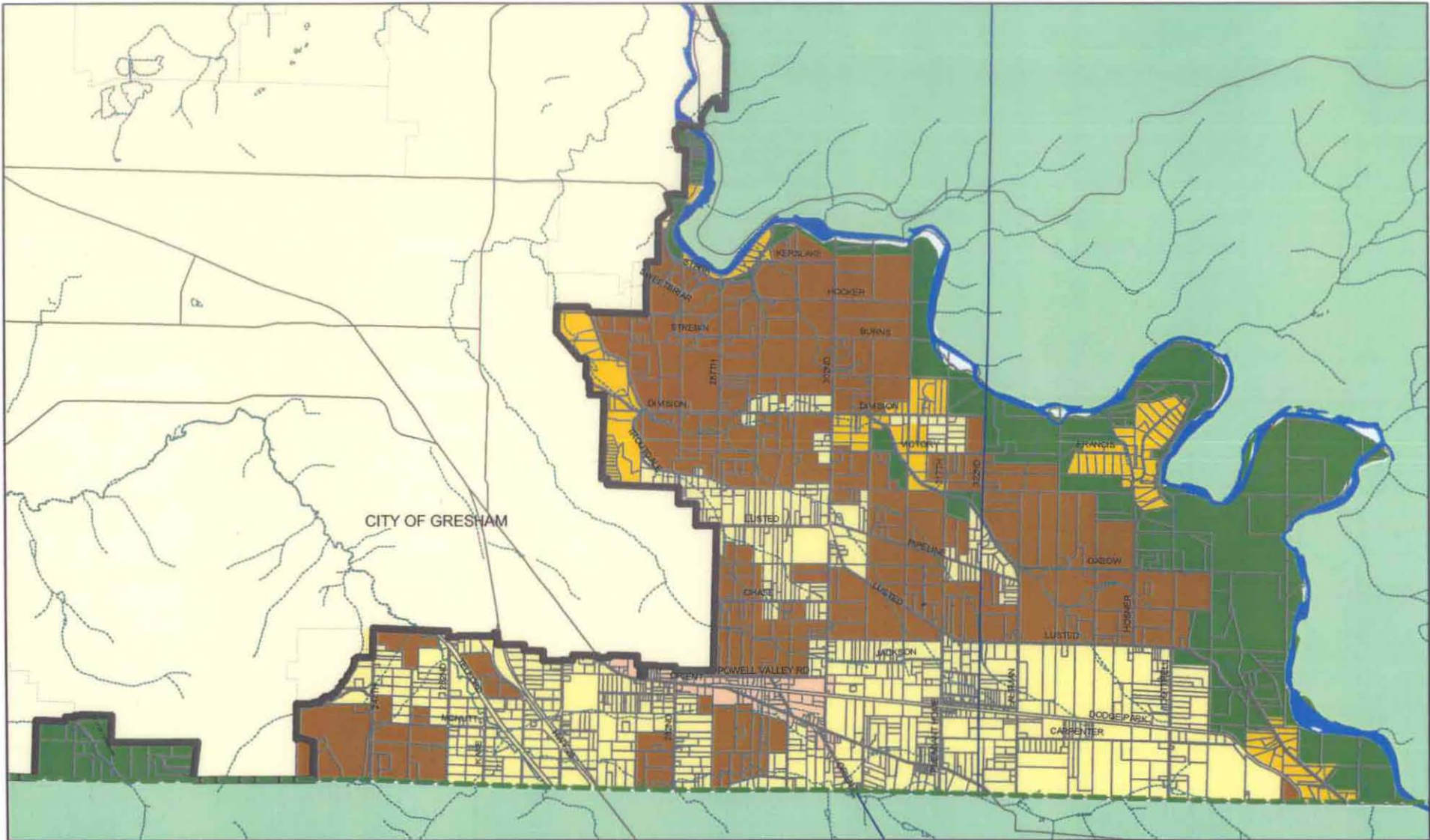
The following points provide a general description of land use activities occurring in the EFU zone. Please refer to the land use map (Figure 4) and Tables 3 and 4, which contain data that provided the basis for this analysis.

- EFU land totals approximately 3,673 acres in 306 parcels. The parcels that range in size from less than one-quarter acre to 102 acres, and the average parcel size is 11 acres. Table 5 shows the range of parcel sizes by zone in the plan area.
- 89% of the EFU zoned land in the study area is in farm use as indicated by Table 3
- There are about 1,095 acres of vacant EFU-zoned land in 96 parcels. Most of these parcels are still in active farm use. Some may be components of a tract (e.g., contiguous parcels under common ownership). In addition, about 208 parcels in the EFU zone are classified as being in single-family use.
- Roughly 110 acres of land in the EFU zone is in use as parks or open space.
- There have been about 11 new residential building permits in the EFU zone over the past ten years.

There are approximately 96 vacant parcels in the EFU zone. Four are greater than 40 acres; 12 are between 20 acres and 40 acres, the remaining are smaller than 20 acres. New development in this zone is subject to income test requirements required by the state. This zone also allows for lot-of-record provisions as provided by County regulations. There are opportunities for owners who are raising commercial farm products, especially nursery stock, to seek dwelling approvals in this zone.

¹ Please see ORS 215.203, Exclusive Farm Use Zones.

² Please see OAR 660-033, Agricultural Land.



West of Sandy River Rural Area Plan

Figure 4
Current Zoning

- CFU (Commercial Forestry Use)
- EFU (Exclusive Farm Use)
- MUA20 (Mixed Use Agriculture - 20)
- RR (Rural Residential)
- RC (Rural Center)

- City Limits
- Metro Jurisdictional Boundary
- County Lines
- Urban Growth Boundary



Map by Parametrix. Data source: Metro RLIS

Multnomah County's provisions for permitted and prohibited uses in the EFU zone are generally similar to those provided by the state. Multnomah County's required minimum parcel sizes in EFU areas follow the state guidelines of 80-acre minimum parcel sizes. It should be noted that in the West of Sandy River study area, there are no parcels large enough to partition into 80-acre tracts.

In a few cases, the County has chosen to be more restrictive than the state. One example is the existing Lot of Record provisions that require contiguous parcels under same ownership to be held together in 19 acre blocks. Restrictions also apply to less common uses, such as mining, processing of aggregate and mineral resources, personal use airports, firearm facilities, on-site filming, and destination resorts. These are uses that the county either does not allow, or allows only with specific conditions.

State guidelines require counties to determine allowable uses based on the Soil Conservation Service mapping of soil types as high value farmlands. A subset of agricultural lands, high value farmlands are areas of soil classes I and II, as well specific soil types within classes III and IV in Willamette Valley³. Most of the EFU-zoned land in the West of Sandy River study area consists of Powell series soils that meet the description of high value farmland.

In most cases, state planning regulations for high value farmlands are more strict than those regulations pertaining to non-high value agricultural areas. In particular, applications for new dwellings on tracts comprised of high value farmlands must show that farm sales have generated at least \$80,000 of gross farm income during each of the last two years, or during three of the previous five years.⁴ Based on the statewide average gross sales receipts for nursery stock of \$11,103 (1997), this threshold can be met on less than eight acres.

To help illustrate the extent of farming activity in the West of Sandy study area, the project team drew from several sources of information to inventory current land uses activities. Assessment records were first consulted to track the number of properties with farm tax deferred status.⁵ A field investigation was also conducted to complete these records, as this study area contains many properties without tax-deferred status that are in farm use. Table 3 shows the total acreage in each of the study area's zones that are estimated to be in active farm use. Additionally, Figure 5 illustrates lands in the West of Sandy River area in active farm or forestry use. This figure shows the significant use of both EFU and MUA-20 zoned land for farming.

Existing Policies and Strategies for EFU Lands

The County's existing Framework Plan policies for EFU areas are contained in Policy 9: Agricultural Land. They generally provide that the County will:

- Maintain those areas that are most appropriate for farming. Such areas must meet the prescribed soil classifications, contain parcel sizes suitable for commercial agriculture, and be in agricultural use.
- Prevent agricultural areas from being impacted by urban services,
- Designate non-agricultural areas surrounded by agriculture as agricultural to prevent impacts on the surrounding farmlands.

Framework Policy 9 also lists the County's strategies for achieving the above policies. These strategies generally provide for the following:

³ Please see OAR 660-033-0020.

⁴ Different requirements apply to requests for dwellings where the applicant has owned their land since January 1, 1985.

⁵ Farms that are being used and have been used during the previous year exclusively for farming qualify for farm use assessment.

- A base minimum lot size for agricultural lands
- Allowing farms as primary uses and non-farm uses as conditional
- Allowing retail sales of farm products
- Providing for aggregation of contiguous substandard lots under single ownership (tracts)
- Providing for lot-of-record provisions for existing parcels
- Use of special conditions to permit most types of dwellings.

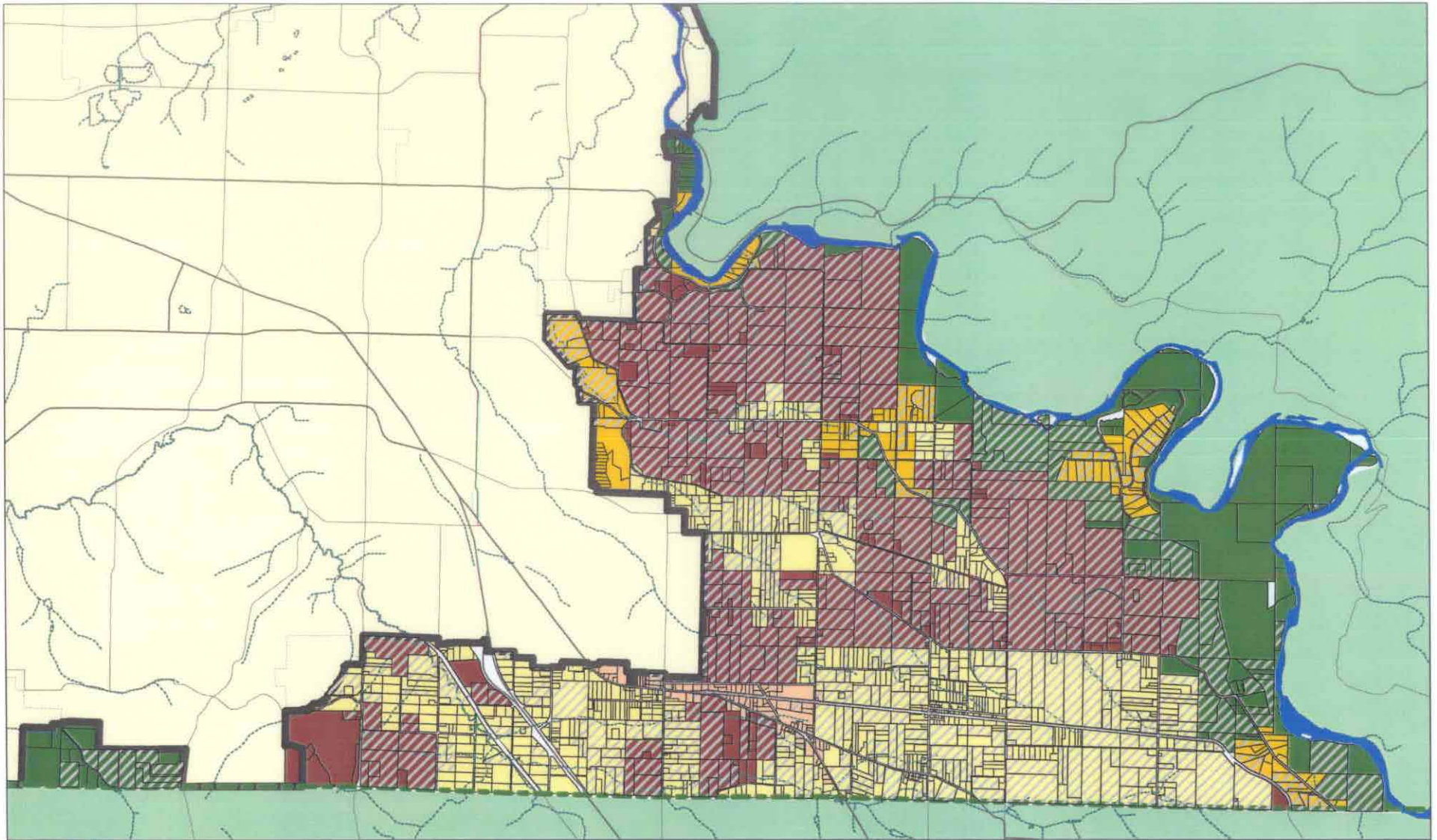
Policies and Strategies for EFU Lands

Policy 11

The County's policy of the West of Sandy River rural area is to help ensure a viable farm economy in the area by preserving agricultural lands for farm uses.

Strategies:







- 11.1 Multnomah County generally does not support zone changes that remove productive agricultural land from the protection afforded under Goal 3 of the Oregon Statewide Planning Program (Farm Lands).
- 11.2 Continue to require approval of dwellings and other development to be contingent upon compliance with Lot of Record standards as contained in the existing EFU zoning code.
- 11.3 Include provisions in the zoning code that limit new non-agricultural uses, and expansion of existing non-agricultural uses, in both type and scale to serve the needs of the local rural area. This will result in a farm protection program for the area that is more restrictive than what state statutes and rules require.

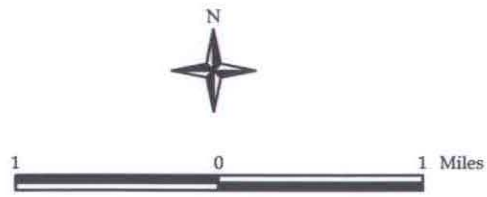


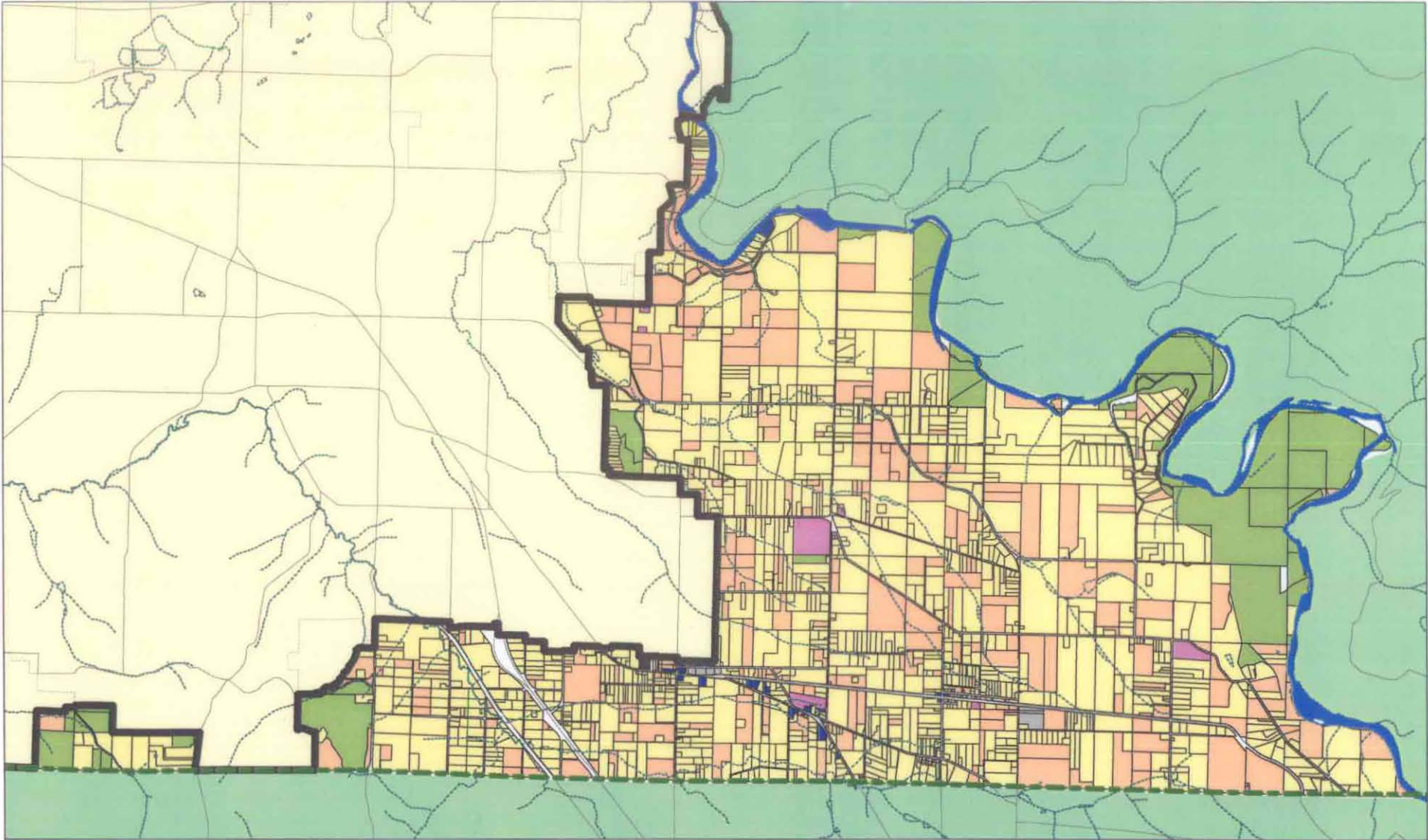
West of Sandy River Rural Area Plan

Figure 5

Lands in Farm and Forestry Use

-  Farm or Forestry Use
-  CFU (Commercial Forestry Use)
-  EFU (Exclusive Farm Use)
-  MUA20 (Mixed Use Agriculture - 20)
-  RR (Rural Residential)
-  RC (Rural Center)





West of Sandy River Rural Area Plan

Figure 6
Current Land Uses

- Public Facility
- Commercial
- Industrial
- Residential/Related Structures
- Vacant
- Parks/Open Space

County Lines Urban Growth Boundary



1 0 1 Miles

Map by Parametrix. Data source: Metro RLIS

Forestry/Commercial Forest Use (CFU) Zone

Multnomah County's CFU zone is intended to preserve forestland for forest resource use pursuant to the provisions of Statewide Planning Goal 4. As with agricultural lands, the State has outlined a number of activities that counties may choose to permit in forest areas, as well as some activities that counties must prohibit. The State allows counties to permit uses such as forest operations and forest products processing, conservation activities, communication towers, mining and aggregate resource uses, temporary forestry operation structures, farm uses, utility lines, private hunting and fishing, labor camps and destination resorts. Multnomah County has chosen to permit most of these uses.

The County's CFU provisions for new dwellings are more restrictive than state rules in that two of the three dwelling opportunities are included in the current zoning code for the area. The CFU zone provides for large acreage (160 acres or larger) and template dwellings, but does not provide for lot of record dwellings (Heritage Tract). The template dwelling provisions also limit the circumstances under which a parcel qualifies more stringently than state law requires. In addition, the ordinance contains an aggregation requirement similar to that used in the EFU zone that is not required by state law.

Overview of Land Uses in the West of Sandy River CFU Zone

The following provides a general description of land use activities occurring in this zone. Please refer to Figure 6, and Table 3, which contain data that provided the basis for this analysis.

Multnomah County's parcel size provisions require 80-acre minimum lot sizes for new parcels created, with a variety of provisions for template dwellings and lot of record provisions.

- CFU lands in the West of Sandy River area comprise approximately 2,008 acres. Parcels in this zone, of which there are approximately 166, average about 11.5 acres apiece.
- Predominant land uses include parks and open spaces (primarily Oxbow Regional Park). About 989 acres of land is classified in this category.
- There are about 290 acres of vacant CFU land, and about 714 acres of land, consisting of about 78 parcels, classified as single-family residential use. About 15 acres are in use as public facilities.
- There have been about 8 new residential building permits in this zone over the past ten years.
- As noted earlier, a good portion of land in the West of Sandy River CFU zone is under public ownership. While Multnomah County's provisions for new dwelling units in this zone are stricter than those of the state, the high level of parcelization in the area may allow owners to seek building permits through the County's template provisions. In addition, there are not a great number of parcels in this category that appear to be part of a tract.

Existing Policies and Strategies for CFU-Zoned Lands

The County's Framework Plan policies for CFU zoning countywide are contained in Policy 11: Commercial Forest Land Area. They generally provide that the County will:

- Designate and maintain commercial forestry areas that are suitable for commercial use and woodlot management, as well as potential reforestation areas, and in particular, areas not impacted by urban services. Protection of large parcels necessary for watershed protection, or that may be subject to environmental damage, and potential recreation areas or areas of scenic significance.

The implementing strategies are:

- Require 80-acre minimum lot sizes, and aggregation of lots in single ownership.
- Permit farm and forestry uses permitted as primary uses
- Opt for stricter standards than those provided by the State for large acreage dwellings and template dwellings.
- Allow for mortgage lot provisions and lot of record provisions.

Given the restrictive nature of the CFU zone, and the fact that much forestland is under public ownership, the existing policies and regulations generally appear appropriate for maintaining the area's rural character. Two new policies and three associated strategies are recommended to further protect the area's rural character and to protect the existing farm and forest operations in the study area.

Policies and Strategies

Policy 12

Maintain existing forestlands from further parcelization that detracts from forest operations and incidental protection of open space, wildlife habitat, and rural community values.

Strategy:

- 12.1 Multnomah County generally does not support zone changes that remove productive forest land from the protections of Goal 4 of the Oregon Statewide Planning Program (Forest Lands).

Policy 13

Allow new dwellings and other development on lands designated for commercial forest use consistent with state requirements, and will be permitted when upon demonstration that they will have no significant impact upon farm or forest management.

Strategies:

- 13.1 Continue to require that applications for new development comply with Lot of Record standards described in the existing CFU zoning code.
- 13.2 Continue to allow new template dwellings under the current standards of the CFU zone that are more restrictive than state requirements.

Multiple Use Agriculture Lands

The MUA-20 zone contains the areas for which the County has justified an exception to either Goal 3 or Goal 4 Agricultural Lands and Forest Lands. Because of this, many of the restrictions on new dwellings and other uses that apply in EFU and CFU zoned areas do not apply to the MUA-20 zone. New residential uses are permitted outright. Wholesale and retail sales of farm and forest products grown in the vicinity are permitted, under prescribed conditions, and a wider range of commercial and retail activities are permitted as conditional uses.

The Framework Plan description of the MUA land classification as contained in Policy 10 states that it is intended to conserve land that is not predominately Agricultural Land as defined by Statewide Planning Goal 3, and that has been impacted by non-farm uses. The plan states that conservation of these areas provides for diversified agricultural and other uses, and protects adjacent EFU lands. The soils in the zone are predominately the same type and class as are the high-value soils in the EFU zone. Data about farm use indicates that nearly half of the MUA-20 land area is in farm use (see Figure 5 and Table 3). For the West of Sandy River plan area, the main difference between EFU and MUA-20 land appears to be parcel size.

Overview of Land Uses in the West of Sandy River MUA-20 Zone

The following points provide a general description of activities occurring in this area. Please refer to Figure 6 (Land Use) and Tables 3 and 4, which contain data that provide the basis for this analysis.

- The MUA-20 zoned land in the plan area is roughly 3,167 acres. It contains approximately 952 parcels ranging in size from less than one-quarter acre to 56 acres, and averaging 3 acres in size.
- A large portion of this zone, comprising approximately 2,381 acres in 767 parcels, is classified as single-family residential.
- There are about 717 acres of MUA-20 land classified as vacant. Approximately one-half of this land is in farm deferral indicating farm use, the remaining half is non-deferred.
- Other uses in this zone consist of public facilities and forest deferred lands.
- About 54 new residential building permits were issued in this zone during the past ten years. In addition, approximately 30 businesses such as nurseries, contracting and construction, food processing and a variety of home occupations are currently operating in the MUA-20 zone.
- The MUA-20 zone contains about 172 vacant parcels. Only about seven parcels are larger than the 20-acre minimum lot size outlined in the zoning codes, though the zoning code does allow for lot-of-record provisions. Discounting parcels under public ownership or parcels that are right-of-way strips, there could be about 140 parcels/property owners seeking permits for new construction in this area.

Existing Policies and Strategies for MUA-20 Lands

The County's Framework Plan policies for these areas are contained in Policy 10: Multiple Use Agricultural Land Area. They generally provide that the County will:

- Designate and maintain those lands that are generally agricultural in nature, though more characteristic of small-scale farm use than commercial agricultural use.
- Provide for a higher level of services than EFU areas.
- Restrict the uses permitted in MUA-20 areas to those that are compatible with EFU areas.

The County's strategies for this zone are:

- Provisions for minimum lots sizes
- Varied uses such as farming and forestry, residential, commercial and tourist uses
- Lot-of-record provisions and mortgage lot provisions

This area has experienced more marked change in recent years, though the area still contains a good deal of farm use. Development pressures are most likely to occur within this area due to the approximately 170 parcels that are vacant and the zoning regulation that allows dwellings. The zone also provides for a wide range of conditional uses and community service uses that have the potential to impact farm use in the plan area. One new policy and two associated strategies are recommended to help curtail the types of development that may have a negative impact on farm uses in the area.

Policies and Strategies for MUA-20 Lands

Policy 14

Protect farm land from encroachment by residential and other non-farm uses in a manner that is consistent with the existing Framework Policy 10 Multiple Use Agricultural Land Area and the associated strategies.

Strategies:

- 14.1 Ensure that new, replacement, or expanding uses minimize impacts to farmland by requiring “right to farm” measures to be implemented. This shall be accomplished by requiring recordation of a covenant that recognizes the rights of adjacent farm managers to farm their land.
- 14.2 New non-agricultural businesses should be limited in scale and type to serve the needs of the local rural area through provisions in the zoning ordinance.

Rural Residential (RR) Zone

The intent of the Rural Residential zone is to provide for rural residential development in areas which are not suitable for commercial farm or forest operations because of the existing land use pattern of development, small parcel sizes, non-aggregated ownership, and largely non-commercial resource uses. Small-scale agriculture and forestry operations may occur and are, in fact, considered to be an integral part of the rural residential environment. Such uses as wholesale and retail sales for agricultural products grown on the premises, limited forest product processing, cottage industries, limited rural service commercial and tourist commercial may be developed as conditional uses in accord with established criteria.

Overview of Land Uses in the West of Sandy River RR Zone

There is a relatively small amount of Rural Residential land in the study area (680 acres). This zone is dispersed in about five separate clusters across the study area, reflecting the location of older rural subdivisions. The minimum lot size for Rural Residential is five acres and the primary permitted uses include:

- farm use,
- propagation or harvesting of forest products,
- single family residential, and
- public and private conservation areas.

The following are some of the general characteristics of the Rural Residential zone in the West of Sandy River study area.

- Lands in the Rural Residential zone comprise about 590 acres. Parcels in this zone, of which there are about 155, average about 3.5 acres apiece.
- The predominant land use in this zone is single-family residential. There are approximately 35 vacant parcels in the zone.
- There are about 250 acres of land in farm use, and about 50 acres of land in this zone is in use as parks or open space use.
- Approximately 8 new residential building permits have been issued in the RR zone in this study area over the past 10 years.

Existing Policies and Strategies

The County's Framework Plan policies for this area are contained within Policy 8: Rural Residential Areas. They provide that the County will designate as Rural Residential those areas that:

- Are outside of farm and forest resource areas, and significant parcelization has already occurred,
- Are compatible with adjacent farm or forest uses,
- Have no physical development limitations that would make the areas hazardous for development,
- Have access to limited, but adequate services, including on-site water and sewage disposal, as well as off-site services such as schools, fire protection and police protection.

Strategies for achieving these policies include:

- Minimum lot size provisions (five acres, with exceptions).
- Residences, agriculture and forestry operations as primary uses. Wholesale and retail sales, community facilities, cottage industries and extractive industries or tourist uses as conditional uses.
- Lot of record provisions.
- Minimum lot sizes based on a variety of factors, including environmental features, existing characteristics of the area, road access, water supply and public services available.

The Rural Residential areas in the West of Sandy area are clustered, and generally located away from active farming and forestry operations. While some development activity may occur in these areas, a good deal of additional activity is not likely due to the fact that this zone contains much of the steeply-sloped land within the West of Sandy study area. One policy intended to protect farm uses on EFU land adjacent to the Rural Residential zone is proposed.

Policies and Strategies for RR Lands

Policy 15: Protect farmland from encroachment by residential and other non-farm uses that locate in the RR zone.

Strategies:

- 15.1 Ensure that new, replacement, or expanding uses minimize impacts to farm land by requiring "right to farm" measures to be implemented. This shall be accomplished by requiring recordation of a covenant that recognizes the rights of adjacent farm managers to farm their land.
- 15.2 New non-agricultural businesses should be limited in scale and type to serve the needs of the local rural area through provisions in the zoning ordinance.

Parks and Open Spaces

About 1,161 acres within this study area are classified as parks and open spaces. The majority of this land consists of Oxbow Regional Park, running along the Sandy River, and the eastern edge of the study area. The other public park in the area is the Springwater Corridor which follows SE Telford Road for a little over a mile within the study area. Other publicly owned open spaces include playing fields surrounding the area's schools.

Private open spaces include the Persimmon Country Club golf course, in the southwestern portion of the study area, and a larger tract of land owned by the Nature Conservancy, just south of Oxbow Park.

Parks and open spaces are illustrated in the land use map in Figure 6.

Oxbow Regional Park

Oxbow Regional Park is a facility that has been providing recreational opportunities to the public since 1963. The park is over 1,040 acres in size, is owned by multiple agencies, and was visited by over 219,000 people in 1996. Management responsibility of the park was turned over to Metro by Multnomah County in 1994. Metro adopted a Master Plan in October of 1997, after a planning process that included a number of public meetings and testimony from interest groups.

The Oxbow Park Master Plan includes provisions for management of the park and for development of replacement and new facilities. Management objectives include maintenance and enhancement of the park's natural habitat, more efficient use of the existing developed areas, and limitations on use of park properties north and east of the Sandy River to approximately current levels, maintenance of the Ancient Forest area for habitat and ecological studies, and management of Elk Meadow as migratory elk habitat. The Master Plan envisions an approximately one percent increase in peak visitor capacity.

Improvements to the park facilities are intended to make up for wear and tear from use, to upgrade sanitation and water facilities, and to support greater seasonal use and other management objectives. The basic facilities upgrades include improved water filtration and replacement of the old outhouses with new vault toilets and shower buildings with flush toilets. Improvements also include reopening 20 campsites with 12 of those developed with yurts to encourage greater seasonal use, improvements to group picnic and camping areas, road realignments, a new environmental education building, and others.

Metro Regional Parks and Greenspaces Department has outlined several difficulties the organization has experienced during implementation of the Oxbow Park Master Plan. These are a priority due to the location of the park in a forest resource (CFU) zone. Development, including parks, located in this zone is subject to state mandated rules that do not always allow improvements to be located in a way that best fits park management objectives, or may not allow uses that support park program objectives.

Existing Policies and Strategies for Parks and Open Space Lands

The County's Framework Plan policies for these uses are contained in Policy 39: Parks and Recreation Planning, and Policy 40: Development Requirements.

Policy 39 states that the County's policy is to operate its established Parks and Recreation Program to the degree fiscal resources permit, and to:

- Work with interest groups to identify park needs.
- Secure funding for the parks program through federal, state, and local agencies and sources.
- Encourage development of recreation opportunities by other public/private entities.
- Support the publicly owned portions of the 40-mile loop trail.

The implementing strategies include:

- A description of duties for the County Parks Commission.
- Direction to update the Community Plans by identification of recreation needs.

Policy 40 defines the County's policy as to:

- Require dedication of pedestrian and bicycle path connections between public and community facilities as appropriate and where designated in the Bicycle Corridor Capital Improvements Program and map.
- Require landscaped areas in commercial, industrial and multi-family developments.
- Require areas for bicycle parking where appropriate.

- Based on the above analysis and discussion with the Task Force, three new policies and four associated strategies are proposed.

Polices and Strategies for Parks and Open Spaces

Policy 16

Publicly owned parks are a significant resource for the region. The County's policy is to support maintenance and upgrading of park facilities consistent with the character of the rural areas in which they are located.

Strategies:

- 16.1 Work with Metro to investigate development of an ordinance to implement a park zone for Oxbow Park.

Policy 17

Multnomah County recognizes and supports the Management Goals, Standards and Guidelines of the Sandy Wild and Scenic River and State Scenic Waterway Management Plan (1993). The County will continue to play the regulatory role described in the zoning and land use authority section of the plan, and as prescribed in state law. The Sandy River Management Plan recommendations are intended to protect and enhance the following outstandingly remarkable values: scenic, recreation, wildlife habitat, water quality and quantity, fisheries, geological, botanical/ecological and cultural.

Strategy:

- 17.1 Multnomah County will work with State Parks and Metro to develop a park zone to facilitate recreational development consistent with the County Comprehensive Framework Plan, zoning ordinance, rural area plan, and the Sandy Wild and Scenic River and State Scenic Waterway Management Plan.
- 17.2 Work with State Parks, BLM, Metro, Clackamas County and other agencies to review and update design strategies and development standards that protect scenic, wildlife, geological, water quality and quantity, fisheries, botanical/ecological and cultural resource values in designated sections of the river.

Policy 18

Open space in the area is maintained through rural, farm and forest zoning that works to protect the rural character.

Strategy:

- 18.1 Ensure that any zone changes do not detract from the open spaces and rural character of the area.

Policy 19

State and regional parks that are primarily intended to protect and conserve important natural resources and provide primarily natural resource based recreation and education opportunities for the benefit of residents of the County will most likely need to be located in areas possessing unique or desirable natural resource values.

Public Facilities

The West of Sandy River study area contains approximately 75 acres of land classified as public facilities. These lands are owned by a variety of quasi-public entities and special districts, including the Lusted Water District, the Pleasant Home Water District, the Powell Valley Water District, the City of Portland, Portland General Electric, the City of Gresham and the Rural Fire Protection District. Land owned by school districts and churches has also been classified in this category.

Public facilities uses are noted in the land use map in Figure 6.

Statewide Planning Goal 11 prohibits the extension of public facilities outside of the urban growth boundaries or unincorporated communities. This requirement limits the amount of development that can occur in the West of Sandy River area and will help preserve the rural lifestyle.

Existing Policies and Strategies for Public Facilities

The County's Framework Plan Policies for these uses are contained in Policy 37: Utilities, and Policy 38: Facilities.

Policy 37 contains requirements for development including adequate potable water and sewage disposal, drainage and stormwater runoff controls, and energy and communications availability. Policies of note for the rural area include requirements to ensure that:

- Development can be served with water, and connected to an on-site sewer system.
- Stormwater runoff can be contained on site.
- Stormwater runoff will not adversely affect the water quality in adjacent streams, ponds, lakes, or alter the drainage on adjoining lands.

Policy 38 addresses schools, fire protection, and police protection, and additionally provides for the County to ensure that:

- School districts may comment on development proposals when appropriate.
- Development is served by a fire district and that the district be able to review and comment on proposals, and that there be adequate water to fight fires.
- Police protection is adequate.

These two policies contain provisions applicable to both urban and rural development and the policies that fit rural development and adequately apply to the West of Sandy River area so no policies specific to the study area are required.

Natural Hazards

Statewide Planning Goal 7 addresses natural hazards. This goal contains a few general requirements and several suggestions for local communities as they address elements such as flooding, ground water, erosion, landslides and earthquakes. Some of the elements that are addressed under Goal 7 are also pertinent to Goal 6, Air Water and Land Quality. For example, floodplain areas and erosion control have applicability under both goals. Title 3 of Metro's Functional Plan, has implementation requirements for both water quality (erosion) and floodplains.

Goal 7 requires that local communities plan all development that may be prone to damage or loss of life outside of known natural hazard areas unless appropriate safeguards accompany them. In addition, this goal requires that local plans be based upon an inventory of known natural hazard areas.

This section gives a brief description of flooding areas, landslide areas and relative earthquake hazard areas that are within the West of Sandy River planning area.

Overview of Potential Hazards

Flooding Areas

Goal 7 requires cities and counties to encourage low density and open space uses in flood areas. It also encourages cities to qualify for inclusion in the National Flood Insurance Program, requiring that development in flood-prone areas be appropriate to the probability of flood damage.

Portions of the West of Sandy River study area are located within the FEMA 100-year floodplain. These areas include most of the Sandy River as well as the area containing Johnson Creek in the southern portion of the study area, and Beaver Creek in the central northern portion of the study area. The West of Sandy River study area was not seriously impacted by the February 1996 flood event, but there was flooding on the Sandy River and some slides in Oxbow Park.⁶

Chapter 29.6 Flood Hazard Regulations, of the Multnomah County code contains provisions relating to flood hazard areas. These provisions are applicable to all areas in Multnomah County that fall within the 100-year floodplain. Most types of construction and alterations within the 100-year floodplain must obtain a floodplain development permit from the County. In addition, specific development standards apply to new development within the 100-year floodplain, which include the use of building materials resistant to flood damage. All new construction must be at least one foot above the base flood elevation. Finally, new water and on-site disposal systems should be designated to minimize infiltration, discharge, and contamination during flooding events.

A map of areas subject to natural hazards, which includes areas within the 100-year floodplain, is shown in Figure 7.

Landslide Areas

Goal 7 contains no provisions that are specific to landslide areas, but notes that such areas should be evaluated in order to determine whether and to what extent development limitations should exist. The Framework Plan implements Goal 7 through Policy 14, Development Limitations, and Goal 6 through Policy 13, Air, Water, and Noise Quality.

Records from the 1996 flood event include an inventory of known landslides through the Metro region.⁷ These records indicate that some landslides did occur in and around the West of Sandy River study area in the following areas:

- On Wilson Road, approximately 1,000 feet south of Kerslake Road, in the northern section of the study area. About 150 feet in length, this landslide has been characterized as mainly earth flow along a steep slope. The contributing factors are mainly natural rather than caused by humans.

⁶ Source: Metro Regional Land Information System.

⁷ Source: Metro RLIS, Earthquake Hazards and Landslide database.

- Along SE Stark Road, about ½ mile west of the bridge at Sandy River. This event has been characterized as a debris slide along a steep slope. About 35 feet, the contributing factors for this event are mainly human-caused, due to slope cutting.

In addition to these events, several landslides occurred just north of the study area, along Historic Columbia River Highway. These landslides consisted mainly of rockfall along very steep slopes. The major contributing factors for these events have been assessed as human disturbances from slope cutting. 1996 landslide areas are shown in Figure 7, some of which are outside the study area.

Chapter 11.15.6700 Hillside Development and Erosion Control of Multnomah County's code, is the primary implementing ordinance for Statewide Goal 7 and County Policy 14. The Hillside Development ordinance was first adopted in 1990. The provisions contain a number of exemptions that can result in development being permitted in hazardous areas without implementing the assessment and mitigation measures in Policy 14. The exemptions allow development to proceed without a hazard permit on land that slopes less than 25% and when the developer does not store 50 cubic yards of earth materials on site. This situation can occur on development sites that are flat, but are below a steep hillside or bluff that has a history of failure. These kinds of areas within the West of Sandy River Plan Area exist primarily within the Sandy River canyon.

Chapter 29.3 Grading and Erosion Control, of Multnomah County's code addresses grading and erosion control provisions for the entire county. These provisions are intended as a response to applicable requirements of Statewide Goal 6, but also apply to Goal 7. These provisions require applicants to obtain grading permits for development that would disturb more than 50 cubic yards of soil, as well as a variety of measures to minimize cut and fill activities that could result in erosion. These elements may help to mitigate the effects of landslide events in the study area.

Earthquake Hazard Areas

Earthquake hazard areas have been evaluated for this study area. Metro's natural hazards database was used for this component of the study. This information describes the relative degree of earthquake hazard across the Metro region. Generally, there are three factors which contribute to an area's response during an earthquake event. These factors include:

- Amplification of ground shaking, due to the existence of a "soft" soil column.
- Liquefaction of water-saturated sand, and
- Slope instability, usually triggered by shaking that occurs during the earthquake event.

Hazard areas have been classified according to the interaction of these three factors, and classified in categories A-D. Areas labeled "A" are the most likely to show a response during an earthquake event.

There are limited sections of the West of Sandy River study area that have been classified with the highest relative earthquake hazard rating. This area runs along the steeply sloped portions of the Sandy River. As earthquake hazards have been mapped only to the Metro Jurisdictional Boundary, the inventory does not cover the entire West of Sandy study area. As the conditions along the Sandy River are similar through most of the study area, it can be assumed that a higher relative earthquake hazard rating would also apply along the entire length of the Sandy River.

Existing Policies and Strategies for Natural Hazard Areas

Policy 14 of Multnomah County's Framework Plan addresses Development Limitations. This policy generally provides that the County will direct development away from areas with steep slopes, severe soil erosion potential, areas within the 100-year floodplain, and areas with a high seasonal water table, a fragipan less than 30 inches from the surface, and lands subject to slumping, earthslides or movement.

Strategies for achieving these policies include provisions for limited development in the 100-year floodplain; conditional uses which help limit hazardous development conditions. In addition, development standards should include provisions for sediment and erosion control as well as drainage and preservation of vegetation in habitat areas.

Flooding areas have also been addressed in the environmental section of this plan, as part of the County's effort to comply with Statewide Goal 6 and Metro's Title 3 requirements for flood management and water quality. In addition, provisions currently within the County's Code (Ch 29.6), such as setting a minimum base elevation for new development within the floodplain, should help to mitigate effects on property from flooding events.

Two landslides from the 1996 event have been documented in this study area. One of these landslides has been attributed to natural causes and one was attributed to human causes. Provisions for erosion control contained within Multnomah County's Code (Ch 29.3 and 11.15.6700) should help to prevent landslides from occurring. The existing County policy adequately addresses most of the natural hazard issues, however the exemptions allowed in the existing Hillside Development ordinance should be reviewed to ensure that review of development on hazardous sites occurs. One additional policy is recommended to meet Metro requirements for floodplains.

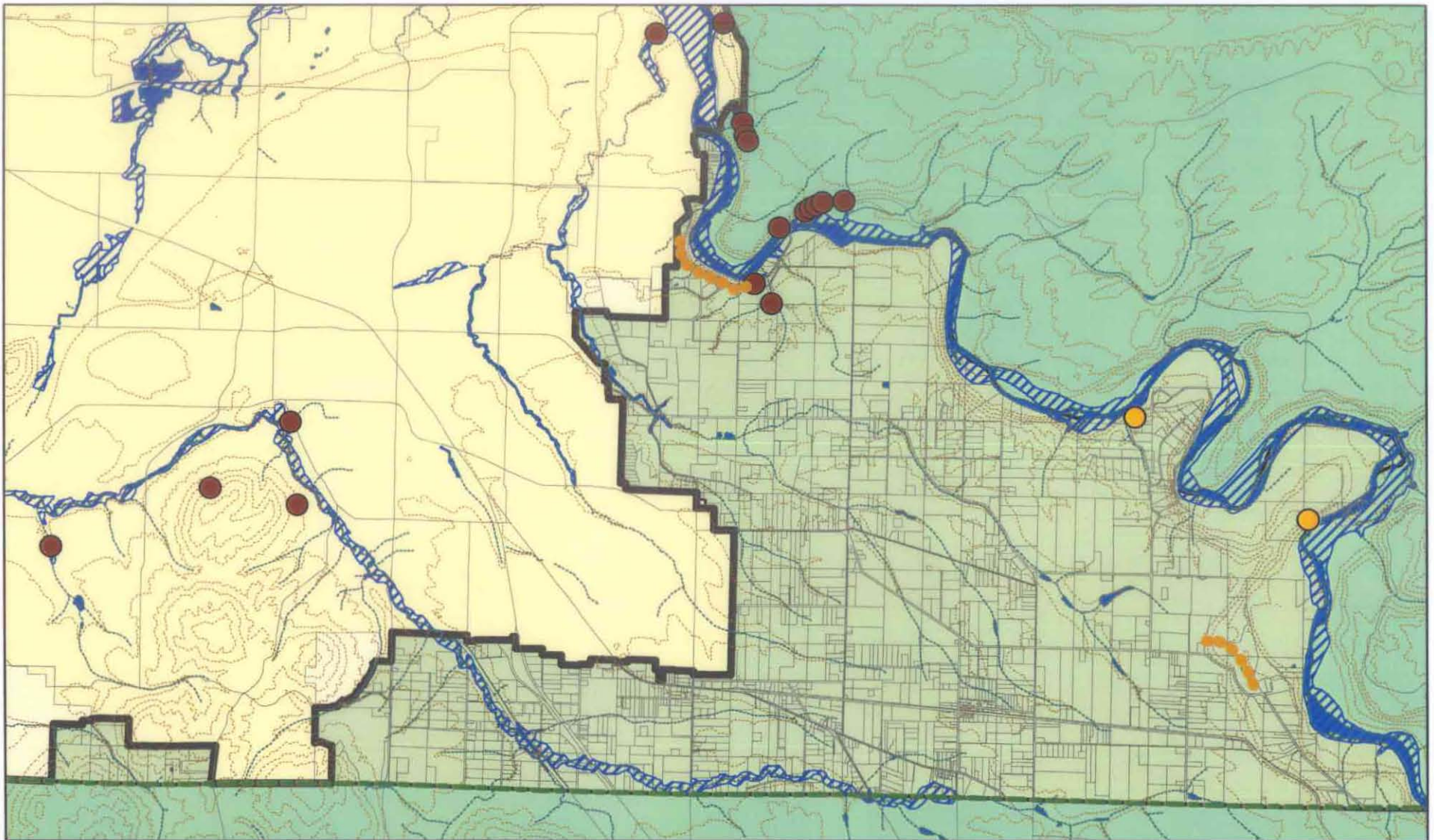
Policies and Strategies for Flood Hazard Areas

Policy 20

Multnomah County will regulate flood management areas consistent with the requirements of Title 3 of the Metro Functional Plan in order to reduce the risk of flooding, prevent or reduce the risk to human life and property, and maintain functions and values of floodplains such as allowing for the storage and conveyance of stream flows through existing and natural flood conveyance systems.

Strategy:

- 20.1 Multnomah County shall implement this policy by establishing standards to reduce the risk of flooding and maintain the functions and values of floodplains pursuant to *Title 3 of the Metro Urban Growth Management Function Plan*, including:
- Establishing a definition of "flood management areas" which includes the area of inundation for the February 1996 flood, as well as all lands within the 100-year floodplain, flood areas and floodways as shown on the Federal Emergency Management Agency Flood Insurance Maps.
 - Requiring development, excavation and fill within flood management areas be performed in a manner to maintain or increase flood storage and conveyance capacity and not increase design flood elevations.
 - Requiring all fill placed at or below the design flood elevation in flood management areas be balanced with at least an equal amount of soil material removal. Excavation shall not be counted as compensating for fill if such areas will be filled with water in non-storm winter conditions.
 - Requiring temporary fills permitted during construction be removed.
 - Prohibiting areas of unconfined hazardous materials as defined by DEQ in the Flood Management Areas.



- February 1996 Landslides
- Other Landslides - Local Inventories
- General Landslide Areas - Local Inventories
- Contour Lines (100 foot)
- All Streams
- 100 Year Floodplain
- County Lines Urban Growth Boundary

West of Sandy River Rural Area Plan
Figure 7
 Areas Prone to Natural Hazards



RURAL CENTER

INTRODUCTION

The Orient area was first settled by pioneers in the early 1850's and was known for agriculture and timber production. Two competing theories exist regarding how the area became known as Orient. One theory is that the community took its name from the Orient Steam Sawmill, the other speculates that the community acquired its name from the local school, which was so named because it was the eastern-most school in the region.

Remnants of the turn of the century community can still be found in the historic structures that are located in and around Pleasant Home and Orient. This grouping of old homes, farm buildings, and the Pleasant Valley Church make up a concentration of old structures that is unique in Multnomah County. The area was considered as a potential Rural Historic District under Statewide Planning Goal 5 prior to changes to the implementing rules that no longer required protection of significant historic resources. The church was designated as a significant resource in July of 1980. A description of the potential historic district and map are included in the appendix.



Pleasant Home Church and Mt. Hood from Dodge Park Blvd.

Despite once being connected to Gresham by an electric streetcar system, the Orient area has always remained rural with a large number of farms. Berry farms and other agricultural uses were common throughout the area and each spring migrant workers came to prepare the fields for the harvest that would commence in mid-May. Today, nursery operations have replaced the berry farms, but migrant workers still travel to the area and commercial and community uses are found in the Orient Rural Center.

Despite once being connected to Gresham by an electric streetcar system, the Orient area has always remained rural with a large number of farms. Berry farms and other agricultural uses were common throughout the area and each spring migrant workers came to prepare the fields for the harvest that would commence in mid-May. Today, nursery operations have replaced the berry farms, but migrant workers still travel to the area and commercial and community uses are found in the Orient Rural Center.

Unincorporated Communities Rule

The Orient and Pleasant Home areas are zoned as the Rural Centers for this area of Multnomah County (see Figure 8). New State rules affecting the Rural Center have been implemented since the County's last plan was prepared. These new regulations are referred to as the Unincorporated Communities Rule⁸.

Through the Unincorporated Communities Rule, the State has acknowledged that some concentrated areas of residential and commercial activity have come to exist outside of urban growth boundaries. State guidelines for these areas have been constructed to help counties plan without having to fulfill a stringent "exceptions" process in their efforts.⁹ The rule requires that counties identify and designate such areas, plan for permitted and prohibited uses, and anticipate current and future facilities needs. According to the criteria within the rule and discussions with state land use staff, the Orient area is designated as a Rural Community and Pleasant Home is designated as a Rural Service Center.

⁸ For details on this rule, please refer to OAR 660-022, or Division 22

⁹ Please see Statewide Goal 2 for details.

INVENTORY AND ANALYSIS

The Orient Rural Center contains about 168 acres. It is centered at the fork of Orient Drive and Dodge Park Boulevard. It contains about 123 parcels and 62 dwellings, and lies roughly east of SE Anderson Road, and west of 302nd Avenue. The northwestern section of this area is adjacent to the Metro urban growth boundary for an approximately ¼-mile stretch. The area is long and narrow in its configuration, differentiating it from the characteristics of a more traditional, clustered rural community. Orient Drive is also used as an alternative to US 26 for those traveling to Sandy, though traffic volumes are generally low.

The Pleasant Home Rural Center is comprised of about 3 acres. It contains 13 parcels, 6 dwellings, and is situated at the intersection of Pleasant Home Road and Dodge Park Boulevard. Pleasant Home is much smaller than the Orient area and is clustered around a single intersection.

The Rural Center contains residential uses, some vacant parcels in farm use, commercial and industrial uses, and a limited number of publicly owned parcels with public facilities, such as the Orient Elementary and Middle Schools. There are also a few parcels with dual residential-commercial use.

Development activity in the Rural Center has generally been light. Over the past ten years, only three new residential building permits have been issued in the Orient area. All have been issued since 1998.

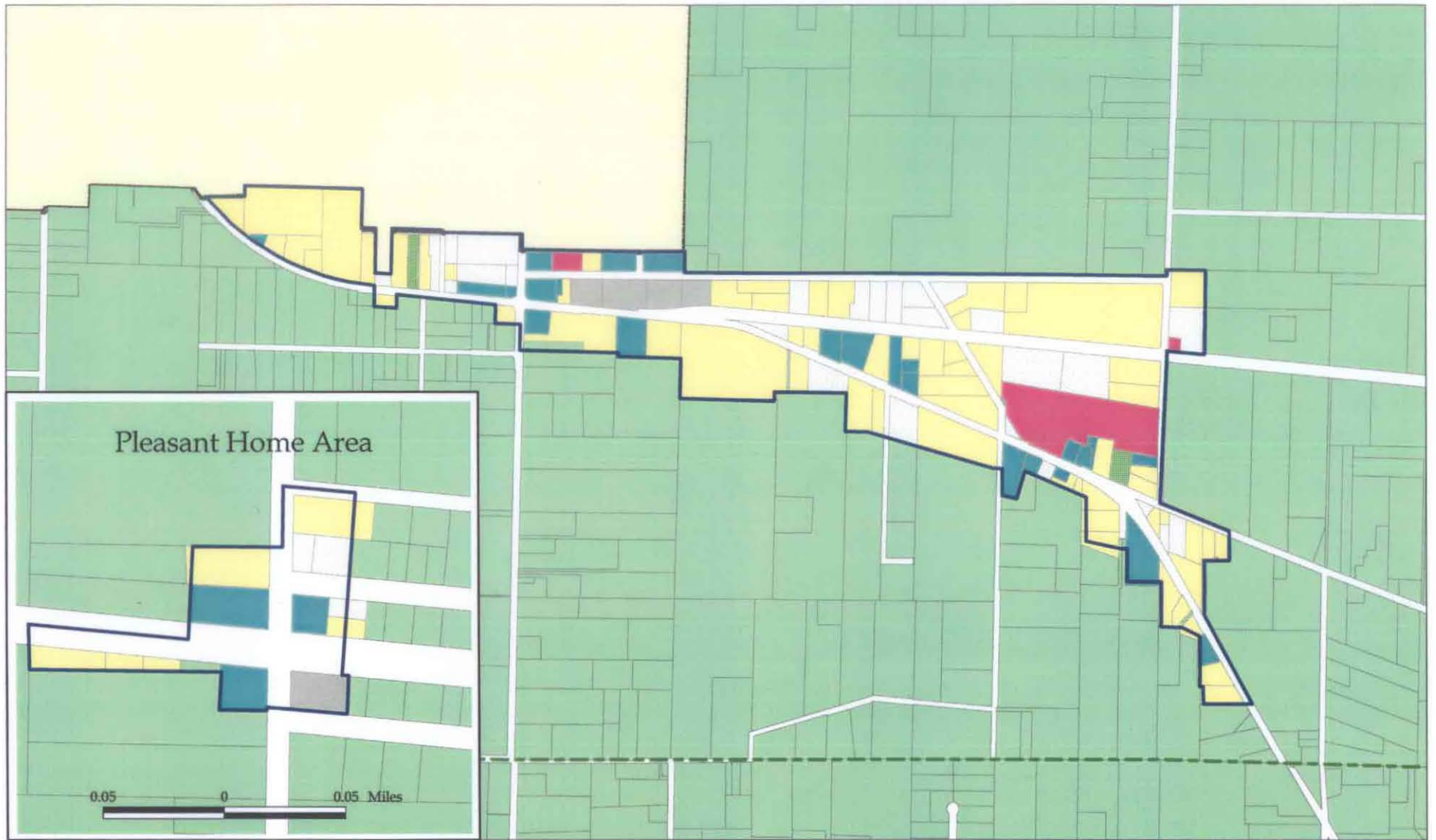
In order to determine the appropriate designations for both parts of the current Orient Rural Center area, a parcel-by-parcel inventory of both the Orient section and the Pleasant Home section was conducted. The inventory included site visits, inspections of aerial photographs and assessor data, and a recent inventory of area businesses. The findings from this inventory are illustrated in Figure 8. Information on land uses is also provided in Table 2, which illustrates the types and acreage of land inventoried.

Land Use Classifications	Orient Section		Pleasant Home Section	
	Number of Parcels	Acres of Parcels	Number of Parcels	Acres of Parcels
Residential	62	98	6	2
Commercial	24	20	3	1
Residential/Commercial	2	2	0	0
Industrial	4	6	1	.5
Public Use	4	13	0	0
Vacant	27	29	3	.3
TOTAL	123	168	13	4

Source: Metro RLIS database combined with local site inventories. Acreage figures include only the portions of split parcels that are inside of the Rural Center boundary. These estimates do not include land in public right-of-way.

As illustrated in Table 6, the predominant use category in both sections of the current Rural Center is residential use, with a good portion of commercial uses in the Orient area. Based on this land use analysis and discussions with State planning staff the Orient area was designated a Rural Community and the Pleasant Home area was designated as Rural Service Center. The most significant outcome of this decision is that the Orient area is required to have new zoning requirements and a new zoning map to

meet State requirements (described below). The zoning in the Pleasant Home area remains largely the same.



- Urban Growth Area
- Commercial
- Commercial/Residential
- Industrial
- Public
- Residential
- Vacant

West of Sandy River Rural Area Plan
Figure 8
 Rural Center Land Uses



Transportation Capacity

State requirements for Rural Communities/Service Centers are that zoning must ensure that new uses do not exceed the capacity of the transportation system. The transportation section of this plan identifies improvements needed in the Orient area based on projected land use patterns. These projections are based on the current zoning in the Rural Center and include improvements to the intersection of Orient Drive and Dodge Park Boulevard for safety reasons and to the 302nd Avenue/Orient Drive/Bluff Road intersection also for safety reasons. Changing the zoning in the Orient area to potentially allow more commercial development is likely to increase the amount of future trips in this area. Increased trips will likely require the addition of a signal at the 302nd Avenue/Orient Drive/Bluff Road intersection by the year 2020. The Task Force agreed to the recommendation for a signal when warranted even though this is a more urban-type facility. A signal already exists at the intersection of Dodge Park and Troutdale Roads. In addition, the Task Force recommended lowering the transportation level of service in the Orient area from level of service C to level of service D. This will reduce the likelihood of a signal being required in the near term and recognizes that the Orient Rural Community will continue to be an area with more intensive development.

Public Facilities

The Pleasant Home Water District serves most of this area, though there are also some homes served by wells. The water district is a wholesale customer of the City of Portland. It purchases water that is pumped from the Bull Run Reservoir, and stored in a 600,000-gallon holding tank. This district serves primarily residential uses, with a few agricultural and commercial uses. A few years ago, the district placed a cap on further irrigation permit sales to allow enough capacity for future residential needs.

Most of the homes and businesses in this area are served by on-site septic systems. The Orient schools, however, use temporary holding tanks. The waste from these holding tanks, including the tank serving Sam Barlow High School, is transported to Gresham seven or eight times each day according to the school district. Reports from the Portland Office of Sanitation Permits indicate that this area has experienced a fairly high number of septic failures in recent years. This is due, in part, to the area's soil classification. Powell soils, while favorable for farming, tend to accompany a high water table. Some recent applications for partitioning have been denied by the Portland Office of Sanitation Permits because of inadequate discharge capacity.

State Guidelines

The Unincorporated Communities Rule requires counties to adopt public facilities plans for unincorporated communities over 2,500 in population. As the current Rural Center area is significantly smaller than this, this criterion does not apply.

In addition to this criterion, however, sewer and water community public facility plans are required in any of the following circumstances:

- Existing sewer/water facilities are insufficient, or may become insufficient to meet demand
- The current plan provides for growth that cannot be served with existing systems
- The community relies on groundwater and is in a groundwater critical area
- Land in the community has been declared a public health hazard.

To gauge the development potential of the Orient Rural Center area and to determine if public facility plans were required an analysis of the area's maximum build-out capacity was conducted using the following assumptions:

- A minimum parcel size of one acre for new residential units.
- Partitioning of developed residential parcels to the maximum extent permitted by zoning.

- New zoning designations for the proposed Rural Community that follow the zoning concept illustrated in Figure 9.

This analysis revealed that, at maximum, about 80 new dwelling units could be constructed in the Orient Rural Center. Each of these residential properties would have to be served with on-site septic and stormwater control systems. There are two factors that will determine the future residential build out of this area, the desire of the property owner to subdivide or partition, and the ability to pass a percolation test for an on-site system and to control stormwater. Given that partitioning may not occur on all lots with development potential, and given the need for testing and approval for septic systems on soils with limiting characteristics, it is not likely that maximum will be realized.

For the following reasons a determination was made that a public facility plan is not needed for this area. First, because of the long and narrow configuration of the Orient section, the extension of sewer facilities into this area would be very costly – serving a relatively small number of persons given the area’s size. Second, because the Portland Office of Sanitation Permits currently issues or denies new building permits based on site inspections and percolation tests, meaning that the area’s carrying capacity is already being determined and regulated on a site-by-site basis. The County plan currently contains provisions that are intended to manage stormwater. Third, the area is not served by groundwater. Finally, the conversion to sewer, and the urbanization that may accompany it, would not be in keeping with the vision established by the community as part of this planning process, which is to maintain the rural character of the area.

Residential Uses

Residential uses are permitted by right in the County’s current Rural Center (RC) zone and comprise the majority of the uses found in the Orient and Pleasant Home areas. In addition, housing for farm/forest workers is permitted with specific provisions. Home occupations are also permitted within residences.

The current minimum lot size for new parcels for residential use in the RC zone is one acre. Dimensional requirements consist of front and rear setbacks of 30 feet and side setbacks of 10 feet, except when abutting a street, in which case the side setback is also 30 feet. Conditional uses, which are more intensive commercial and industrial uses, must demonstrate adequate parcel size for approval.

State Guidelines

According to the Unincorporated Communities Rule, county plans and land use regulations may permit any residential use and density, as long as the density of residential development is greater than that of surrounding rural areas, and as long as it will not exceed the carrying capacity of the soil for waste disposal and of existing water supply resources.

The new zoning code must ensure that residential uses do not adversely affect surrounding agricultural uses, as well as the transportation system, environmental and water regulations and resources, and regional goals. Current lot size restrictions and setback requirements should meet this requirement.

Commercial Uses

Currently, the only commercial uses that are permitted by right in the Rural Center zone are farming and forestry uses and home occupations. Other uses are permitted only under prescribed conditions. They include wholesale and retail sales of products raised or grown in the area, with the location and building standards subject to the discretion of the planning director. Replacement of structures related to public safety and services may also be permitted when damaged from an emergency or disaster event.

Other uses permitted as conditional uses include local stores, shops, offices, repair shops, restaurants, gas stations, motels and guest ranches.

There is currently no minimum lot size for non-residential uses in the Orient Rural Center area.

State Guidelines

According to the Unincorporated Communities Rule, new commercial uses permitted in Rural Communities and Rural Service Centers may include any of the following:

- All uses authorized under Goals 3 and 4 (farm and forest lands),
- Small-scale, low-impact uses, defined as those in a building not exceeding 4,000 square feet of floor area,
- Uses intended to serve the immediate community and surrounding rural area, or those traveling through the area,
- Uses that do not adversely affect agricultural and forestry uses,
- Uses consistent with the capacity of the area's transportation facilities.

Aside from the size limitations (4,000 feet for some uses), all current commercial uses permitted in the Rural Center are permitted in the Rural Community/Service Center under this plan, with the exception of hotels and motels. According to the Unincorporated Communities Rule, hotels and motels must be served by a community sewer system, which the Rural Center area does not have.

Industrial Uses

Currently, the County's zoning code permits light industrial activities as a conditional use. The specific conditional uses allowed are the same as those permitted by right in the County's light manufacturing zones. For the current Rural Center area, these uses should require no more than 20 daily employees. Uses may be expanded up to 40 daily employees when:

- The expansion is a result of normal growth of the existing use and not required as a result of business diversification,
- The use employs primarily persons living within the area or in the surrounding rural area,
- The use satisfies other applicable Framework Plan elements¹⁰,
- The use satisfies the County's design review provisions.

It is possible that State guidelines may limit the type and extent of industrial uses currently provided in the Rural Center area. A generally accepted employment density for industrial uses is about 1,000 square feet per employee. The State's prohibitions on uses larger than 10,000 square feet of floor area might, in some circumstances, limit the number of employees to fewer than twenty, the current maximum permitted by the County (not accounting for expansions).

State Guidelines

According to State guidelines for Rural Communities and Rural Service Centers, industrial uses that are permitted include the following:

- Uses authorized under Goals 3 and 4 (farm and forest uses),
- Expansion of uses existing as of the date of the rule (12-5-94),
- Small-scale, low impact uses, defined as those using not more than 10,000 square feet of built floor area,

¹⁰ Applicable Framework Plan elements include: Number 20 – Arrangement of Land Uses; Number 30 – Industrial Location; Number 36 – Transportation Systems Development Requirements; Number 37 – Utilities; and Number 38 – Facilities.

- Uses that require proximity to a rural resource as defined by the rule, such as geothermal wells, mineral or aggregate deposits, water reservoirs and natural features).
- Uses that will not exceed the capacity of water and sewer service available to the site.

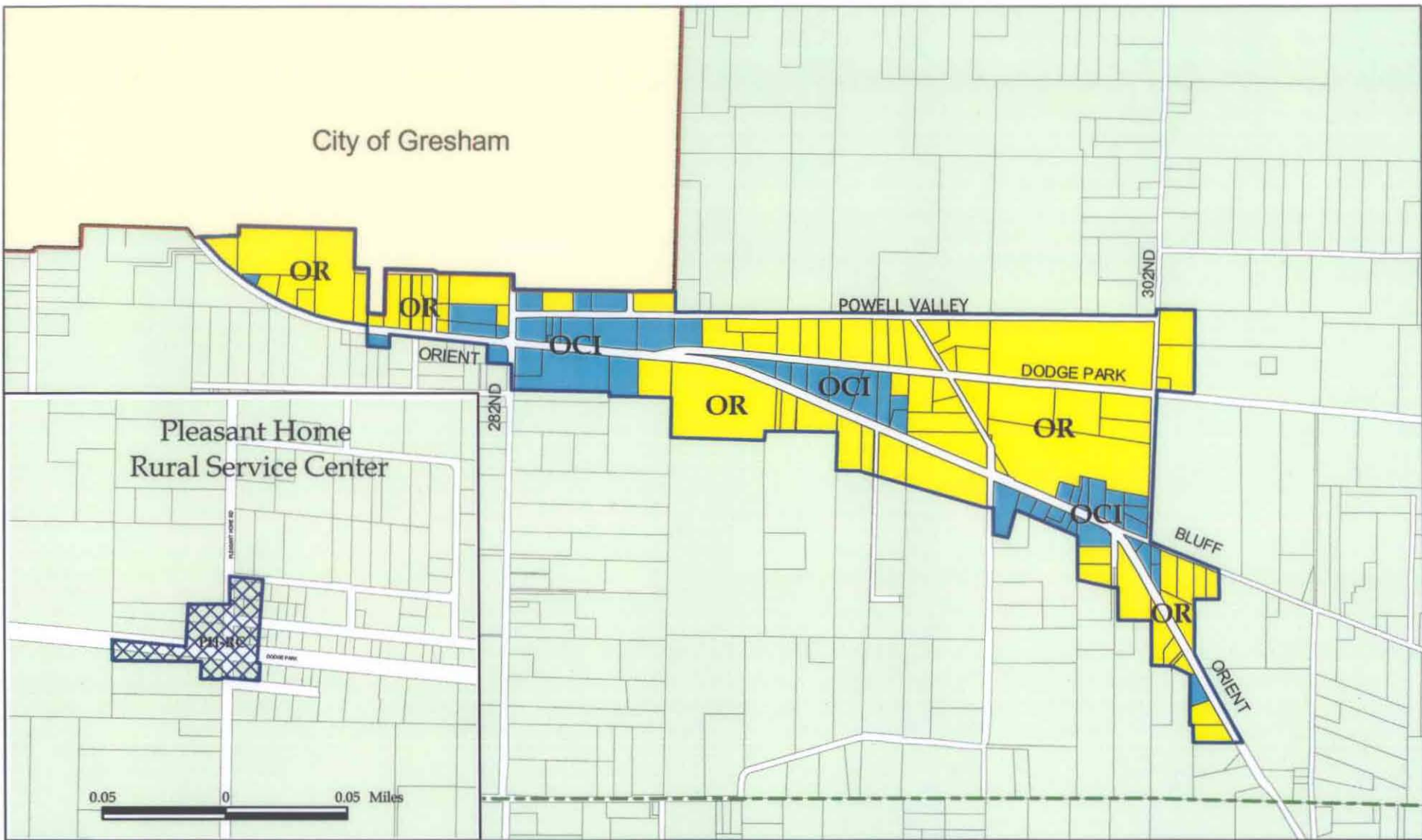
More intensive uses than those listed above may be permitted when:

- The uses do not require exceeding the projected work force within the community and the surrounding rural area,
- The uses would not rely upon a work force served by uses within urban growth boundaries, and
- The work force need determination considers the total industrial and commercial employment in the community and is coordinated with employment projections for nearby urban growth boundaries.

Both state guidelines and Multnomah County's code contain provisions for allowing more intensive uses or for expanding existing uses. While both sets of guidelines follow a similar intent, the state provisions will require the County to adopt a more specific basis for determining why a proposed use or expansion would be appropriate (e.g., not rely upon a work force served by uses within urban growth boundaries). Due to the proximity of the Rural Centers to the UGB, the plan does not attempt to justify uses more intensive than the small-scale low impact uses provided for in the Rule.

Overview of Recommended Zoning Map Changes

The new zoning designations required in the Orient area are shown on Figure 9. The new zoning map generally zones current residential areas as residential and commercial uses as commercial. The new zoning designations are designed to maintain compatibility between adjacent land uses and recognizes those areas that are likely to continue as "nodes" of commercial activity. In addition, it may be possible to combine both industrial and commercial uses for Orient into a single zone to allow more flexibility of location within the limited area of the community. Some additional commercial zoning was added at the request of property owners and the Task Force. In almost all cases, vacant parcels are zoned as residential. As noted earlier, the Pleasant Home section will not receive individual zoning designations, due to its classification as a Rural Service Center.



West of Sandy River Rural Area Plan
Figure 9
 Rural Center Zoning Concept

- Orient Rural Community Zones**
- Commercial and Industrial
 - Public Facilities and Residential
 - Pleasant Home Rural Service Center Zone



Map by Parametrix. Data source: Metro RLIS
 Revised April 5, 2012
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Current County Plan Policies and Strategies

The following is an overview of the County's current policies and strategies for the Rural Center, as detailed in the County's Comprehensive Framework Plan.

Currently, the Orient Rural Center area is planned and zoned to permit few uses by right, mainly farming and associated uses and single-family residential uses. Policy 7 (Rural Center Island Area) of Multnomah County's Framework Plan describes local objectives for the Orient Rural Center. The purpose of the centers is to provide rural services for the residents and businesses located in the rural areas of the County. The intensity and types of uses must be appropriate to the character of the rural area. The policy relates primarily to uses that are permitted within the area, and to expansions of the area boundary.

Currently, suitable uses within the Rural Center are to be ensured by:

- Gauging the need of proposed uses with respect to the area's acknowledged purpose,
- Determining that sufficient land exists for the use,
- Establishing development standards, and
- Ensuring that natural resource areas are minimally impacted.

Expansions of the Rural Center area shall:

- Not include EFU land, unless it is the only land available,
- Not impact natural resources or rural residential areas,
- Be adjacent to current RC boundaries, and
- Not be primarily for new residential development.

Local strategies for achieving the Rural Center policies include the following:

- Low-density residential development and farm/forestry uses as primary uses
- Commercial and industrial uses as conditional uses or uses under prescribed conditions
- Address the standards that should apply when altering conditional uses, as well as standards for parking, landscaping and setbacks that are consistent with the character of Rural Centers
- Establish procedures for monitoring land availability and land absorption
- Update the Rural Centers study on at least a five-year schedule.

Based on analysis and discussions with State land use planning staff the Orient area is classified as a Rural Community and the Pleasant Home area is designated a Rural Service Center as defined by the State Unincorporated Communities Rule. A new zoning map and new zoning requirements (described in the Appendix) are created for the Orient area. The new zoning scheme for the Orient area meets all of the requirements of the State's Unincorporated Communities Rule. New policies and strategies are required for the Orient Rural Community and the Pleasant Home Rural Center.

NEW POLICIES AND STRATEGIES FOR THE RURAL CENTER AREA

The following policies and strategies are intended to assist in development of ordinances to carry out the desires of the community within the standards set by law, including implementation of the Unincorporated Communities Rule. Some of these policies have significant implications on how the Orient Rural Community develops in the future.

Orient and Pleasant Home Rural Communities

Policy 21

The County's policy is to plan for the Orient and Pleasant Home Rural Communities to provide for community development that is consistent with and implements the Community Vision. Key elements of

the vision are to maintain the rural character of the communities, to support the agricultural economy of the area, and to ensure that new non-agricultural businesses primarily support the needs of residents and tourism.

Strategies:

- 21.1 The County should adopt plan policies and ordinances that meet the state Unincorporated Community Rule codified as Oregon Administrative Rule OAR 660-022-0000 through 0070.
- Orient should be designated and planned as a Rural Community because it is composed primarily of residential uses.
 - Pleasant Home should be designated and planned as a Rural Service Center in order to allow the maximum flexibility in location of uses in the limited land area.
 - Revise the RC zoning ordinance to reflect the needs of the Pleasant Home community consistent with the Division 22 OAR for Unincorporated Communities.
- 21.2 Ensure that new or expanding uses minimize impacts to EFU zoned land that is adjacent to the RC zone by requiring “right to farm” measures to be implemented. These measures can be in the form of maintaining a larger setback between the new development and the zone boundary, and/or requiring recordation of a covenant that recognizes the rights of adjacent farm managers to farm their land.

Commercial and Industrial Development

Policy 22

New commercial and industrial uses within the Orient Rural Community will be small-scale and low impact in nature as defined by the State Unincorporated Communities Rule. These uses will not adversely impact agriculture or forestry uses and will reinforce the rural nature of the Orient Rural Community and the Pleasant Home Rural Service Center.

Strategies:

- 22.1 Multnomah County will update the Community Development Ordinance to implement the Unincorporated Communities Rule for small-scale, low impact commercial and industrial uses. Due to the proximity of the communities to the Urban Growth Boundary, the plan does not attempt to justify new uses that are larger than the small-scale, low impact limits in the Rule.
- Existing commercial uses may expand up to the small-scale, low impact limit of 4,000 square feet subject to approval criteria in the ordinance.
 - Expansion of existing industrial uses shall be subject to the small-scale, low impact limit of 10,000 square feet and to approval criteria in the ordinance.
- 22.2 Multnomah County will update its implementing regulations to ensure that new or expanded commercial and industrial development will not result in public health hazards or adverse environmental impacts.
- 22.3 Multnomah County will update its implementing regulations to ensure that new or expanded commercial and industrial development will not exceed the carrying capacity of the soil or of the existing water supply and waste disposal services.
- 22.4 Ensure that new and expanded commercial or industrial uses are subject to Design Review in order to ensure compatibility with the community character.

- 22.5 Develop zoning ordinance standards for lot coverage of commercial and industrial development that allow adequate development area while ensuring the rural character of these areas is retained.

Residential Development

Policy 23

New residential development within the Orient Rural Community and the Pleasant Home Rural Service Center will not increase the number of dwellings that would be allowed in the community under the existing zoning ordinance, and will continue to reinforce the rural nature of the areas through the zoning code.

Strategies:

- 23.1 Multnomah County will update the zoning ordinance to implement the Unincorporated Communities Rule for residential development
- 23.2 Include provisions in the residential zone that allow for Type A home occupations outright, and Type B home occupations through an administrative review process and design review.
- 23.3 The zoning code for new residential parcels in the Rural Center will be at least one acre in order to not increase residential density and to ensure that the carrying capacity of public services and the environment is not exceeded.

Design

Policy 24

Accommodate the changing conditions within the Orient Rural Community and the Pleasant Home Rural Service Center while preserving their rural function and appearance.

Strategies:

- 24.1 Multnomah County should develop and adopt design standards regulating commercial and industrial development which reflect and enhance the rural character of the Orient Rural Community.
- 24.2 Multnomah County should allow flexibility of setback and parking requirements to accommodate irregular lots and existing development to help preserve the rural character of the area.

Protection of Views

Policy 25

Multnomah County should identify and help preserve critical viewsheds in the Orient Rural Community and Pleasant Home Rural Service Center and balance protection of scenic views with flexibility of use by property owners. The county should rely on education – i.e. providing information regarding identified viewsheds to property owners – rather than regulations to implement this policy.

Transportation

Policy 26

Enhance all modes of travel in a manner consistent with the rural character of the Orient Rural Community and Pleasant Home Rural Service Center.

Strategies:

- 26.1 Provide pedestrian and bicycle access to schools, transit and commercial activities within the Orient Rural Community and Pleasant Home Rural Service Center, consistent with the rural character of the area.
- 26.2 Review the existing parking standard for schools to ensure sufficient parking is provided to meet demand.

Preservation of the Night Sky

Policy 26

In keeping with the rural nature of the Orient Rural Community and Pleasant Home Rural Service Center, Multnomah County will require lighting in these areas to be low intensity and designed in a manner that minimizes the amount of light pollution.

Strategy:

- 26.1 Multnomah County will update the Community Development Ordinance to insure that new development meets lighting standards that minimize the amount of light pollution in the Orient Rural Community and Pleasant Home Rural Service Center.

TRANSPORTATION SYSTEM PLAN

REVIEW OF TRANSPORTATION PLANS AND POLICIES

Existing policies and regulations at the local, regional and, state and federal level were reviewed as part of this plan to ensure that the recommendations would be consistent and coordinated with relevant policies, goals and standards. This section summarizes applicable transportation plans and policies.

Local

Multnomah County planning documents reviewed in the preparation of the West of Sandy River TSP include the following:

- Comprehensive Framework Plan Policies, Volume 2: Policies, April 1998, specifically policies 33A, Transportation System; Policy 33C, Bikeways/Pedestrian System; Policy 34, Trafficways; Policy 35, Public Transportation; and Policy 36, Transportation System Development Requirements.
- Pedestrian Master Plan, April 1996.
- Bicycle Master Plan, December 1990.
- 1998-2002 Transportation Capital Improvements Plan and Program, June 1998. The 1998-2002 Capital Improvements Plan and Program lists six planned roadway improvement projects and 11 planned bikeway projects.
- Rural Transportation System Plan, Technical Memorandum No. 1: Background Information Summaries, prepared for the Multnomah County Transportation Division and the Oregon Department of Transportation by CH2MHill, January 1997.
- Westside Rural Multnomah County Transportation System Plan, prepared for Multnomah County by CH2MHill, July 1998.



Locally, the County's *Comprehensive Plan* addresses street and road policy. *Comprehensive Plan Policy 33A, Transportation System Plan*, is intended to "...implement a balanced, safe and efficient transportation system." Strategies include adoption of Transportation System Plans in all appropriate areas of the county and updating Policy 33 of the Comprehensive Framework Plan to reflect the policies adopted in the Transportation System Plans. *Comprehensive Plan Policy 33C, Bikeways/Pedestrian System*, establishes "the County's policy to implement a bicycle/pedestrian system as an alternative transportation mode, furthering the opportunity for a balanced system."

Comprehensive Plan Policy 34, Trafficways, establishes a functional classification system for county roadways. Trafficway classifications include:

- Local Urban Streets and Rural Roads
- Collector Streets (neighborhood collector streets, major collector streets, rural collector roads)
- Arterial Streets (minor arterial streets, major arterial streets, principal arterial streets, rural arterial roads)
- Expressways
- Freeways
- Overlay Classifications include:
 - Scenic Routes
 - Boulevards (regional boulevards, community boulevards)
 - Streets (regional streets, community streets)

Comprehensive Plan Policy 34, Public Transportation, is intended “to direct the County to consider the effects of land use decision on the efficient provision of public transportation, and to continually review the Tri-Met routes to determine that the County residents are receiving the best possible service.”

Comprehensive Plan Policy 36, Transportation System Development Requirements, is intended “to require the dedication of the additional right-of-way if the development proposal will affect the road system; to reduce the number of ingress and egress points; to ensure the provision of “on-site” parking and loading and, where possible, bus loading areas.”

The County’s adopted *Pedestrian Master Plan* (1996) notes that “in the rural area, less than 15 percent (approximately 28 miles) of the arterial and collector roads have paved shoulders. The County minimum design standards for shoulders on rural local and collectors is 1.5 m (5.0 ft). For arterials, the minimum shoulder width is 1.8 m (6.0 ft), but if the shoulder width exceeds the minimum, only the first 1.5 m (5.0 ft) of shoulder width needs to be paved.

The *Multnomah County 1998-2002 Capital Improvement Plan and Program* (CIP) addresses transportation needs in four categories: roadways, bikeways, pedestrian facilities, and Willamette River Bridges. Table 7 summarizes the CIP projects either partially or entirely within the study area. None of the projects are scheduled for construction within the 1998-2002 Capital Improvement Plan and Program.

Table 7: CIP Projects within the Study Area

Street Name Roadway Projects	From	To	Category	Priority
Division Dr.	268 th Ave.	Troutdale Rd.	Arterial	3
Division Dr./Troutdale Rd.			Signal	2
282 nd Ave.	Powell Valley Rd.	Orient Dr.	Collector	2
Regner Rd.	Butler Rd.	County Line	Collector	2
Bikeway Projects				
Division St.	Urban Growth Boundary	Troutdale Rd.	Bike Lane	
282 nd Ave.	Troutdale Rd.	Orient Dr.	Bike Lane	
Orient Dr.	Welch Rd.	Dodge Park Rd.	Shldr. Bkwy.	
Dodge Park Blvd.	Orient Dr.	County Line	Shldr. Bkwy.	
Oxbow Dr.	Division Dr.	Oxbow Prkwy.	Shldr. Bkwy.	
Troutdale Rd.	Strebin Rd.	282 nd Dr.	Bike Lane	
Division Dr.	Troutdale Rd.	Oxbow Prkwy.	Bike Lane	
Oxbow Park Rd.	Oxbow Prkwy.	Oxbow Park	Shldr. Bkwy.	
Oxbow Prkwy.	Oxbow Dr.	Oxbow Park Rd.	Shldr. Bkwy.	
302 nd Ave.	Division	Oxbow Park Rd. Orient	Shldr. Bkwy.	

Regional

Regional transportation planning and policy documents reviewed include Metro’s *2040 Growth Concept Plan*, the *Regional Framework Plan*, the *Regional Transportation Plan (RTP)* and the *Metropolitan Transportation Improvement Program (MTIP)*. These documents address transportation policy, objectives, strategies, and recommended improvement projects throughout the Portland metropolitan region. No projects within the study area are included in the 2000-2004 MTIP list of committed improvements, although the 2000 RTP includes the following designations for facilities within the study area.

- US 26: principal arterial (highway), potential neighbor city transit route, main roadway route for freight, and regional bikeway corridor.
- SE 242nd Avenue: minor arterial, and community connector for bicycle travel.
- SE Orient Drive: rural arterial (farm-to-market), road connector for freight, and community connector for bicycle travel (west of SE 282nd Avenue).
- SE Bluff Road: rural arterial (farm-to-market).
- SE Lusted Road: rural arterial (farm-to-market).
- SE Troutdale Road: collector of regional significance (north of SE Division Drive), and community connector for bicycle travel.
- SE Division Drive: collector of regional significance and community connector for bicycle travel.
- SE Stark Street: rural arterial (farm-to-market) and community connector for bicycle travel.

At the regional level, Metro establishes and implements regional transportation planning policy through the *2040 Growth Concept Plan*, the *Regional Framework Plan* and the *Regional Transportation Plan (RTP)*. These planning documents collectively establish transportation policy for all forms of travel – motor vehicle, transit, pedestrian, bicycle and freight – and include specific objectives, strategies and projects to guide local and regional policy implementation. The *Regional Framework Plan* provides a policy foundation for the specific transportation improvements and strategies identified in the *Regional Transportation Plan*. Recommendations in this West of Sandy River TSP are consistent with policies in the *Regional Framework Plan* that place limits on new roadways or new connections to existing roadways in unincorporated rural areas.

The RTP includes cost estimates for recommended projects throughout the region, and funding strategies to meet these costs. The plan was first adopted by the Metro Council in 1983 and is updated periodically to reflect changing conditions. The RTP was adopted in August 2000 to be consistent with the 2040 Growth Concept. The discussion of improvements near the West of Sandy River study area in the RTP Priority System is limited to Hogan Road/242nd Avenue, which is identified as an eventual four-lane highway link between I-84 and US 26. Improvements to Hogan Road/242nd could facilitate truck movements between the study area and I-84. However, the 2000 RTP also finds that Hogan Road/242nd Avenue will continue to perform adequately in 2020, with congestion limited to certain intersections.

State

Statewide Planning Goal 12 governs transportation planning at the state level, and is implemented through the *Oregon Transportation Plan*. Oregon Administrative Rule 660-012, the *Transportation Planning Rule*, (TPR) provides structure for the transportation system plan.

Goal 12 of the *Oregon Transportation Plan* is intended to provide and encourage a safe, convenient and economic transportation system. Goal 12 specifies that “a transportation plan shall:

- Consider all modes of transportation including mass transit, air, water, pipeline, rail, highway, bicycle and pedestrian;
- Be based upon an inventory of local, regional, and state transportation needs;
- Consider the differences in social consequences that would result from utilizing differing combinations of transportation modes;
- Avoid principal reliance upon any one mode of transportation;
- Minimize adverse social, economic and environmental impacts and costs;
- Conserve energy;
- Meet the needs of the transportation disadvantaged by improving transportation services;
- Facilitate the flow of goods and services so as to strengthen the local and regional economy; and
- Conform with local and regional comprehensive land use plans. Each plan shall include a provision for transportation as a key facility.”

The Oregon TPR (*OAR 660-012-0065*) identifies transportation facilities, services and improvements that may be permitted on rural lands consistent with Goals 3, 4, 11 and 14 without a goal exception. These include: “transportation facilities, services, and improvement other than those listed in this rule that serve local travel needs. The travel capacity and level of service of facilities and improvements serving local travel needs shall be limited to that necessary to support rural land uses identified in the acknowledged comprehensive plan or to provide adequate emergency access.”

Under the TPR, transportation improvements on rural lands must meet different requirements than improvements in urban areas. The TPR lists various types of improvements determined to be consistent with statewide planning goals for rural and agricultural areas including the West of Sandy River study area. Allowable improvement types include:

- minor roadway realignment, intersection channelization and median turn lanes;
- new two-lane roadways intended to reduce local traffic on state highways;
- bikeways, footpaths and recreational trails;
- park-and-ride lots;
- expansion or alteration of public use airports, provided the improvements are not meant to serve a larger class of airplanes; and
- other transportation facilities, services and improvements that serve local needs. These are limited to improvements to provide adequate emergency access or to support land uses identified in the acknowledged comprehensive plan.

For transportation improvements within an exclusive farm use (EFU) or forest zone, design alternatives must be evaluated. The chosen alternative must be the one with the least impact on lands in the immediate vicinity devoted to EFU or forest use.

Transportation facilities and improvements not meeting TPR requirements for rural lands require an exception in order to be allowed. Exceptions are subject to specific standards and criteria for approval described in the TPR. None of the transportation improvements recommended in the West of Sandy River TSP are believed to require an exception.

There are a number of State transportation plans that affect transportation policy throughout Oregon including: *Oregon Transportation Plan* (September 1992), the *Oregon Highway Plan* (June 1999), the *Oregon Bicycle and Pedestrian Plan* (June 1995), and the *Oregon Rail Freight Plan* (August 1994).

The *Statewide Transportation Improvement Program* (STIP) is the Oregon Department of Transportation's (ODOT) short term capital improvement program, providing project funding and scheduling information for the department and the state's metropolitan planning organizations. It is a four-year program developed through the coordinated efforts of the department, federal and local governments, tribal governments and the public. The 2000-2003 Statewide Transportation Improvement Program (STIP) lists one project in the study area, replacement of the Stark Street Viaduct, a bridge project. No other planned improvements within the study area are included in the STIP.

The study area for the *Mt. Hood (U.S. 26) Transit Feasibility Study* extends from west of Rhododendron to the OR 35 junction. Results from the *Mount Hood Corridor Final Environmental Impact Statement* indicate that future travel demand will exceed the existing corridor capacity for an extended period of time during summer and winter weekend days. In order to address this potential capacity shortfall, ODOT has been considering travel options for the corridor, such as transit service to the Mt. Hood area ski resorts. The transit feasibility study considers possible transit service and includes proposed park-and-ride locations in Gresham and Sandy to address seasonal capacity needs.

Recommendations in the West of Sandy River Rural Area Transportation System Plan are consistent with and supportive of the goals, policies, and standards in these various plans.

EXISTING CONDITIONS

This section summarizes existing conditions on Multnomah County's roadway system in the study area, providing a baseline of information from which the evaluation of the County's transportation system will be made. It includes a summary of the current roadway functional classification policy, roadway physical features such as pavement width and condition, bridge inventory and condition, speed zones, truck restrictions, traffic control, traffic crash history and safety conditions, traffic volumes and operation characteristics, and existing bicycle and pedestrian facilities.

Functional Classification

Multnomah County recognizes three rural roadway functional classes within the study area: arterial, collector and local roads. Each are described below, followed by a description of US 26, the only State highway through the study area. Figure 10 summarizes Multnomah County's roadway functional classification for County roads and State highways in the study area.

Rural Arterial Roads

Rural arterial roads are the primary means of access into the County's large rural districts and often connect between counties to accommodate through movements. Rural arterials connect to freeways or highways, and link rural collector and local roads to the urban area and other regions. Rural arterial roads carry greater traffic volumes than rural collector roads. Examples of rural arterials in the study area include portions of Stark Street, Division Street, Orient Drive and 282nd Avenue.

Rural Collector Roads

Rural collector roads serve to distribute automobile traffic over large areas and generally connect to urban streets or rural arterials. Where rural collector streets connect to adjacent counties, through traffic will occur with volumes greater than local rural roads. Rural collectors may also provide for recreational trips by auto, bicycle and equestrian. Primary access is provided to land uses adjacent to the facility and over large rural districts. Examples of rural collectors in the study area include 302nd Avenue, Dodge Park Road, Lusted Road, Oxbow Drive, and eastern portions of Division Street.

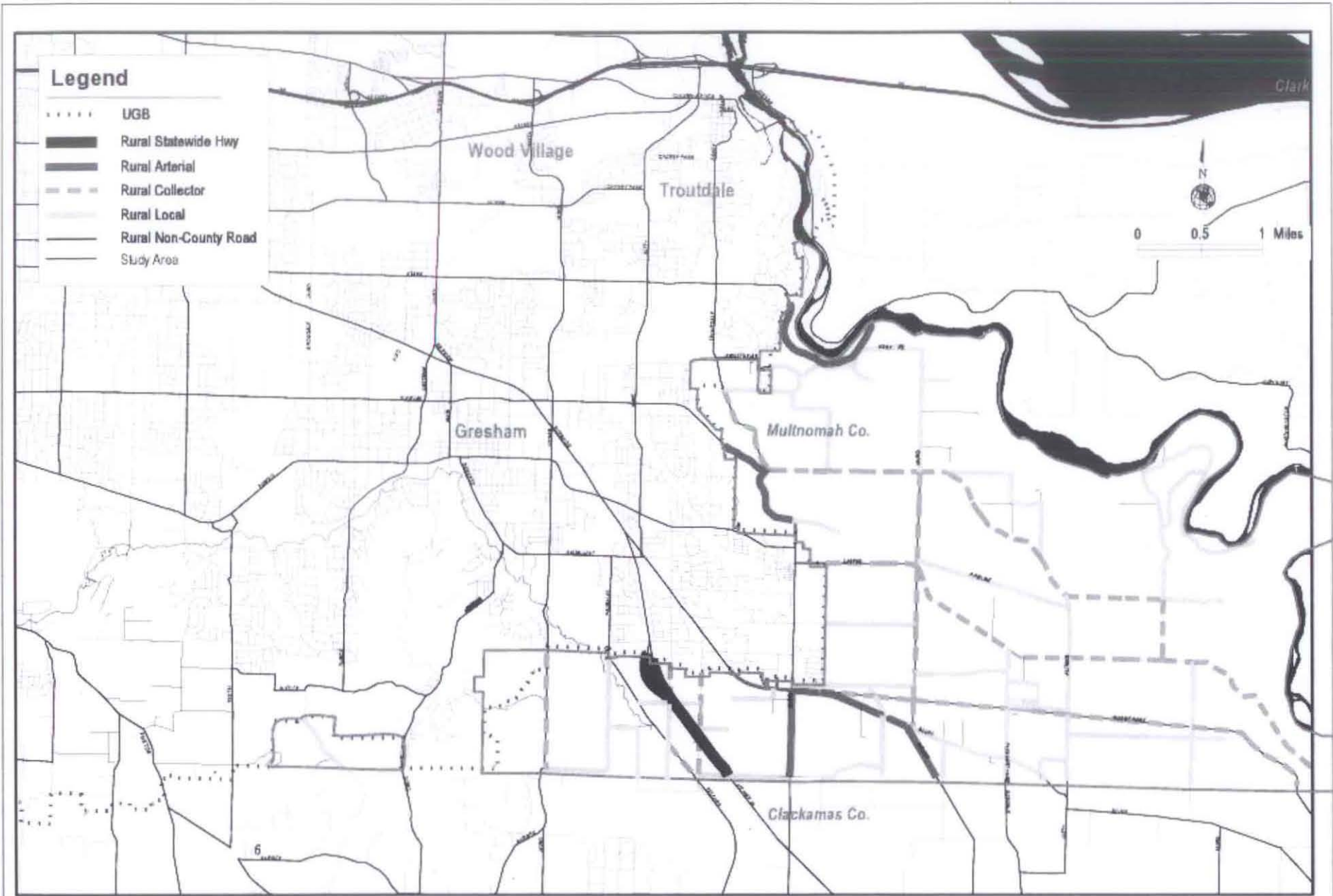
Local Rural Roads

Local roads provide access to abutting land uses on low traffic volume roadways. In rural areas local roads serve automobile and farm circulation, as well as local pedestrian, bicycle and equestrian uses. Examples of local rural roads in the study area include portions of Chase Road, Jackson Road, Altman Road, and Pipeline Road.

State US 26

US 26 is under the jurisdiction of the Oregon Department of Transportation (ODOT). It is a four-lane rural divided highway. In the 1999 Oregon Highway Plan (OHP) under the highway classification system, US 26 is designated as a Statewide Highway on the National Highway System (NHS) and is part of the designated freight route system. It is designated for access management purposes as an expressway. Multnomah County classifies US 26 as a principal arterial.

Figure 10 summarizes Multnomah County's roadway functional classification for County roads and State highways in the study area.



Multnomah County

*West of the Sandy River Rural Area:
Transportation and Land Use Plan*

**Figure 10:
Roadway Functional Classification**



Parametrix, Inc.

Roadway Inventory

More than 25 miles of roadway in the study area under Multnomah County's jurisdiction are classified as Rural Collector or Arterial. Multnomah County collects and maintains a current database of conditions on these roadways, including pavement width, pavement condition, bridge inventory, and traffic crash history. The following sections summarize the County's roadway database.

Pavement Width

Study area roadways generally have very narrow or no shoulders. Shoulders improve safety for motor vehicles, bicyclists, pedestrians and accommodate slower moving farm equipment. Multnomah County recently updated design standards for rural roadways to include minimum shoulder widths of 1.5 (5.0 ft.) meters for rural local and collector roadways and 1.8 (6.0 ft.) meters for rural arterials. Most roadways in the study area have shoulders narrower than the new standards. Roadways must be a minimum of 7.3 meters (24.0 ft.) wide to accommodate two-way motor vehicle traffic before shoulders can be striped. Figure 11 summarizes roadway widths in the study area. Proposed improvements discussed later in this document include enhancing existing shoulder widths on roads serving recreational and agricultural traffic needs.

Pavement Condition

Multnomah County routinely inventories, tests and then grades the County roadway system pavement conditions using classification grades ranging from *excellent* (no surface or structural damage) to *failing* conditions (significant surface and structural problems). The majority of roadways in rural Multnomah County exhibit *Good, Very Good or Excellent* conditions as shown in Table 8; none are rated with failing conditions.

Table 8: Pavement Condition Summary

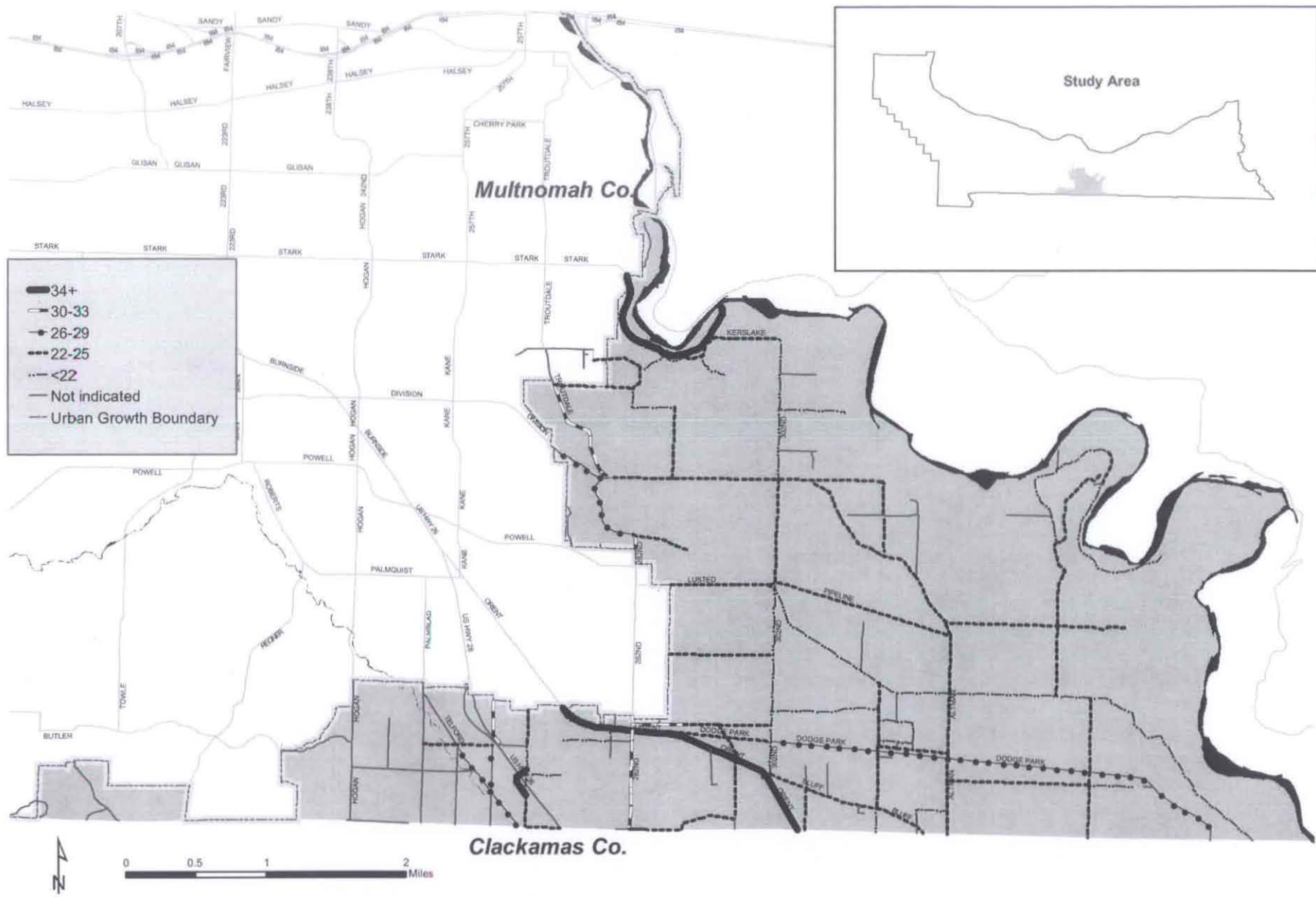
Pavement Rating	Percentage of Study Area Roadways 12/15/00
<i>Excellent</i>	39.2%
<i>Very Good</i>	44.7%
<i>Good</i>	16.0%
<i>Fair</i>	0.2%
<i>Poor</i>	0.0%
<i>Very Poor</i>	0.0%
<i>Failed</i>	0.0%

Bridge Inventory/Condition

Multnomah County maintains three historic bridges in the study area. The following information summarizes information provided by the County concerning the status of these historic bridges.

Stark Street Bridge over Sandy River

The Stark Street Bridge, constructed in 1914, is one of the oldest steel truss highway bridges in Oregon. The bridge is a contributing resource to the Columbia River Highway Historic District, which was listed in the National Register of Historic Places in 1983. National Register-listed resources are protected by the National Historic Preservation Act of 1966 as amended.



Currently the bridge can carry traffic up to the legal load limit of 40 tons (25 tons for Type III trucks). The 2000 routine inspection report indicated that the bridge was in good condition with some deterioration noted on the structure and roadway deck. The bridge's 18-foot wide roadway is too narrow for current traffic volumes and does not meet current design standards. The average daily traffic count measured in 1999 was 5800.

Stark Street Viaduct

Constructed in 1915, the Stark Street Viaduct was built in the same period as the Columbia River Highway in the Columbia Gorge and has design elements similar to the structures on that highway.

Stark Street serves as one of the main routes connecting Portland with the scenic Columbia River Highway. The Stark Street Viaduct and the Stark Street Bridge form a vital link across the Sandy River connecting nearby communities.

The 2000 routine inspection report indicated that the viaduct was in good condition. Over the years, however, the deck has been overlaid several times, resulting in approximately 18 inches of asphalt. This excessive wearing surface thickness has reduced the capacity of the bridge from its design load of 40 tons to a recommended load of 24 tons. The bridge has been posted for this reduced load capacity.

Palmbiad Road Bridge

This structure is a single-span, 33-foot, two-lane bridge crossing Johnson Creek south of Gresham, Oregon. Built in 1930, it is one of the first bridges constructed across Johnson Creek in this vicinity. Though locally important, the proximity of other bridges on SE Hogan Road in Multnomah County and SE 26th Avenue in Clackamas County allow for alternate detours in case of closures.

Traffic Crash History/Safety Issues

Crash history plays a critical role in identifying potential traffic safety issues. Multnomah County records and summarizes reported traffic crashes on County roads within the study area.

For a consistent method of measuring crash history, safety experts have devised crash rate parameters for road segments and intersections. For road segments, the rate is calculated as the number of crashes per million vehicle miles traveled. For intersections, the rate is calculated as the number of crashes per million entering vehicles. Figure 12 summarizes the reported traffic crash history on Multnomah County's roadway system within the study area.

Note: These figures are not considered indicators of substandard roadway or traffic control conditions. For example, some intersections show high crash rates due to the low level of background traffic, and the crashes themselves may be due to driver error, rather than improper roadway and traffic control conditions.

Over the three-year period (1996-1998) three separate crashes along Division Street resulted in fatalities - two at Troutdale Road and one at Oxbow Road. In all cases the crashes occurred as a result of excessive speeding, and in two cases alcohol or drug use was also involved. Another fatal crash occurred along Lusted Road between 282nd Avenue and 302nd Avenue as a result of a driver losing control of the vehicle.

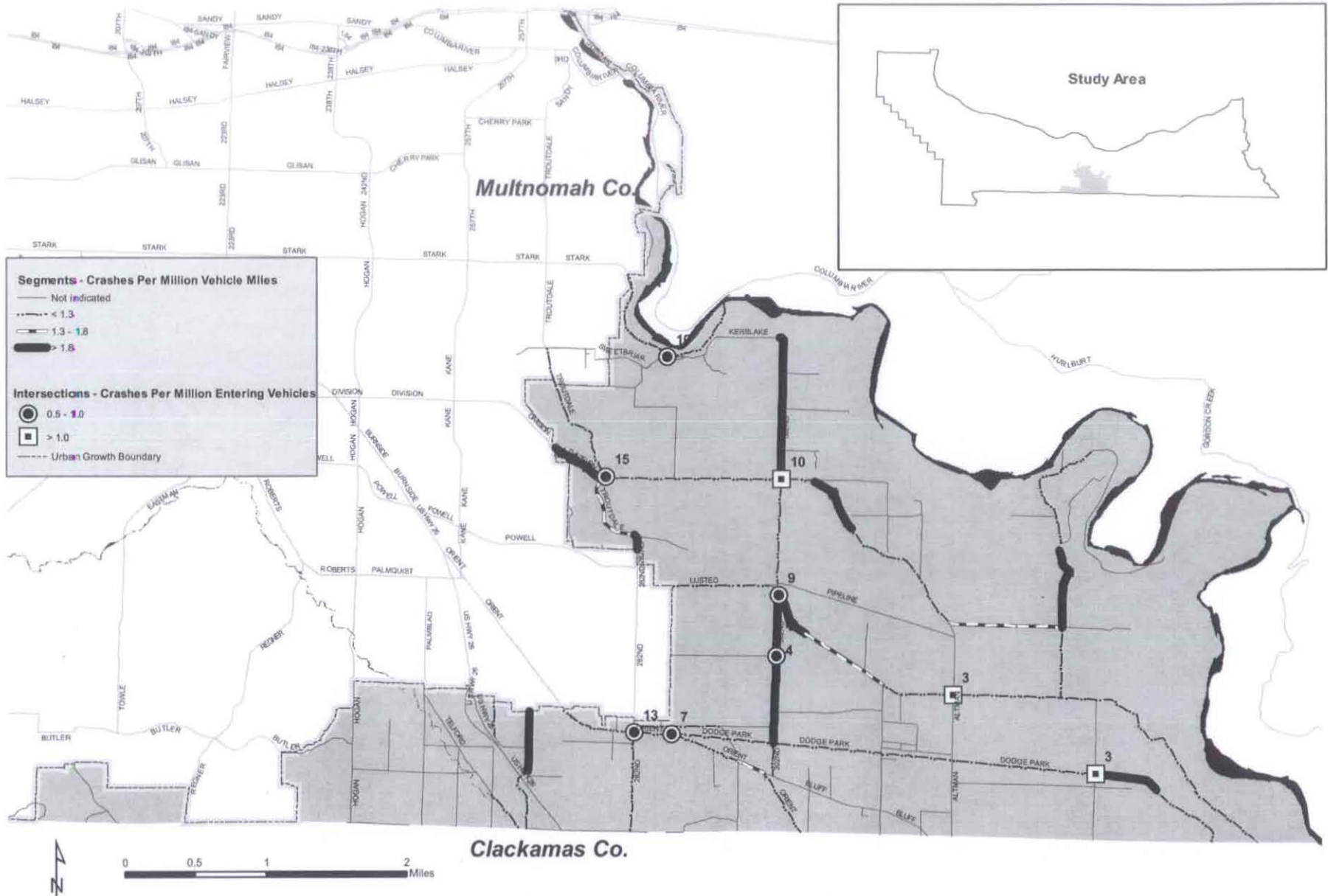


Figure 12:
Traffic Crash History (1996-1998)

Multnomah County recently installed parking restrictions and traffic control measures along Lusted Road to help improve safety conditions near Sam Barlow High School. The County also installed no-passing zones on 302nd Avenue both north and south of the high school. Eliminating parking on Lusted Road reduces potential conflict points, which is likely to reduce traffic crash rates in the immediate area.

Traffic Control

Traffic control in the study area predominantly consists of stop signs on minor street approaches at unsignalized intersections, and in some cases all-way stop-control for the intersection approaches. Traffic control at intersections along arterial roads and collectors is generally sufficient. Orient Drive/282nd Avenue and Troutdale Road is the only signalized intersection in the study area. There are also a few intersections posted with flashing signals and advance warning signs.

Speed Zones

Allowable speeds on Oregon's roads are governed by the "basic speed rule." The "basic speed rule" requires a motorist to operate at a speed that is reasonable and prudent considering the conditions present. Where not otherwise posted, a 55-mph speed is the statutory maximum in rural areas. The posting of a lower speed is permitted when authorized by the Oregon Department of Transportation. Multnomah County has requested lower speeds on numerous roads in the study area and has received authorization to post speeds ranging from 30 to 50 mph. The Oregon statutes and administrative rules specify the procedures, including engineering studies and investigations, upon which Department of Transportation may authorize posting of speeds on County roads. Multnomah County works actively with the Oregon Department of Transportation staff and requests speed zone investigations where conditions warrant them. Multnomah County installs the speed signs when approvals are received from the state.

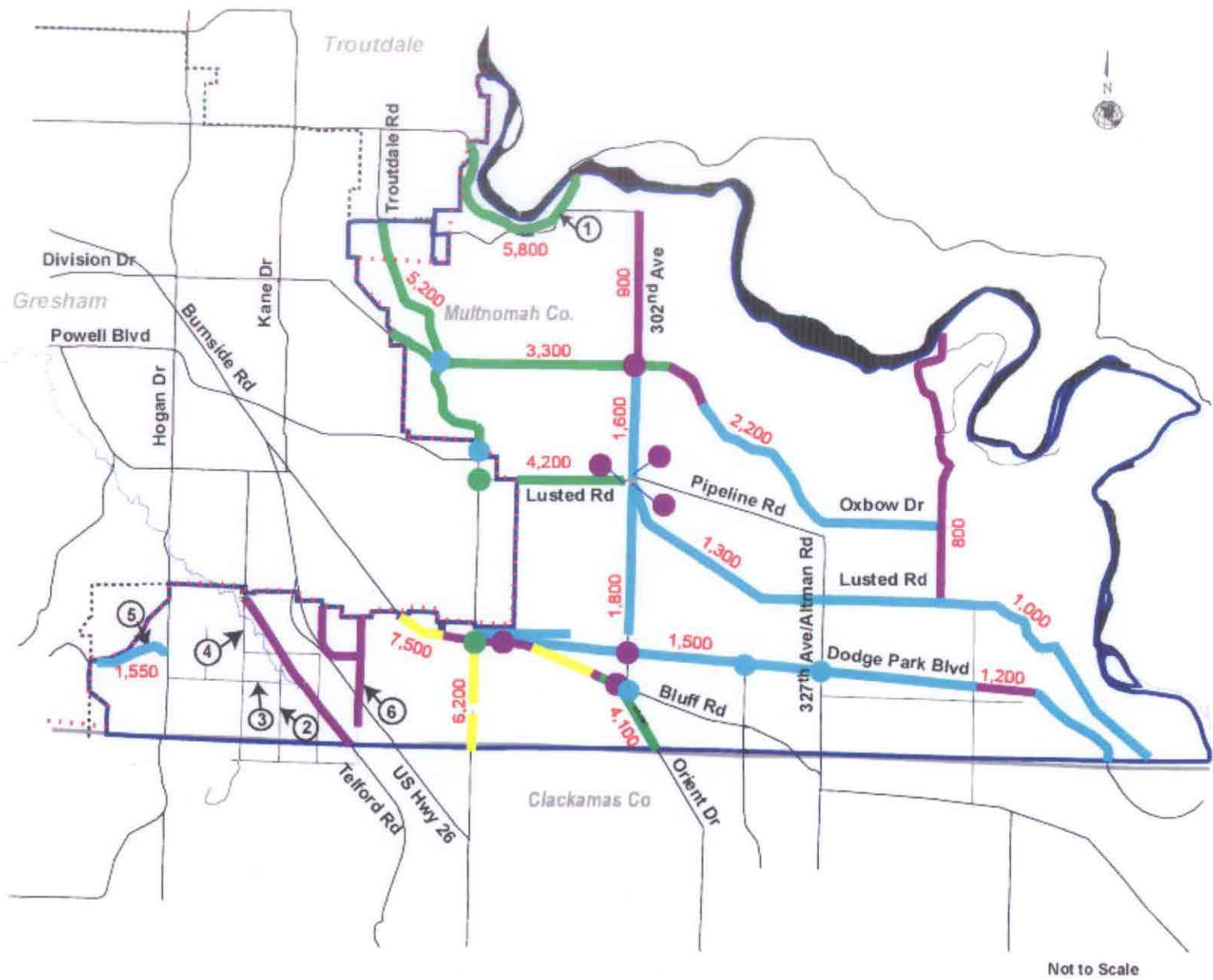
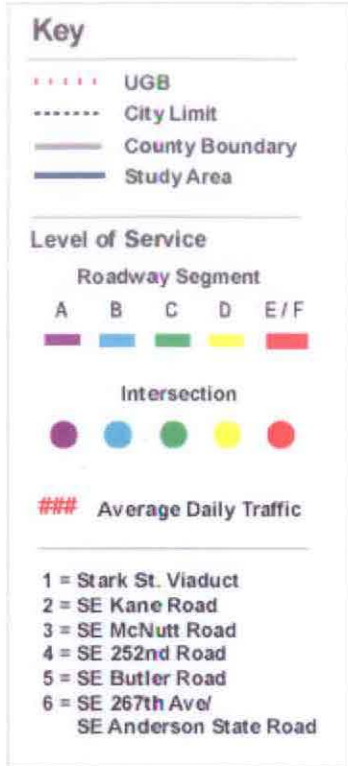
Truck Restrictions

Truck traffic is restricted to statutory requirements as described under ORS 313 for legal weight and size limits when traveling on a road under Multnomah County jurisdiction. Trucks wishing to travel in excess of the legal weight and size requirements may obtain a signal or annual trip permit to travel on certain County roads by contacting the Multnomah County Right-of-Way Permit Section. Truck traffic carrying oversized loads along the US 26 corridor are typically routed along Orient Drive due to overpass size restrictions on US 26.

Traffic Volumes

Multnomah County provided historical and current traffic count data including daily counts for selected roadway segments and p.m. peak hour turn movement counts at key intersections. Historical turn movements were increased to represent estimated 2000 peak hour volumes for analysis purposes.

Figure 13 summarizes the current (1999) daily traffic volumes on the major study area roadways. Traffic conditions range from 4,000-6,000 vehicles per day on Lusted Road, Stark Street, 282nd Avenue and 302nd Avenue. Other roads in the study area experience traffic volumes ranging from 1,000-4,000 vehicles per day.



Not to Scale



Multnomah County
 West of the Sandy River Rural Area:
 Transportation and Land Use Plan

Figure 13:
 1999 Daily Traffic and Peak Hour
 Levels-of-Service



Traffic Operations

Intersections are the locations in the transportation network with the most potential conflicts and thus typically the greatest level of congestion and delay. The concept of “level of service” or LOS is widely used to quantify intersection operations. Levels of service are letter grades A through F based on the level of delay calculated at intersections, with LOS A representing free flowing conditions and LOS F representing jammed conditions. LOS B through E represent increasing levels of delay and congestion. Delay is calculated based on factors including vehicle turning movements, intersection lane geometry, and traffic control. Current p.m. peak hour turning movements were used to calculate p.m. peak hour intersection levels of service at key signalized and unsignalized intersections using the methodology from the 1997 *Highway Capacity Manual (HCM)*¹¹, published by the Transportation Research Board. Figure 13 summarizes the 1999 levels of service (LOS) at the key intersections, with turning movements shown in Figure 14. Figure 13 also shows levels of service for key roadway sections in the study area.

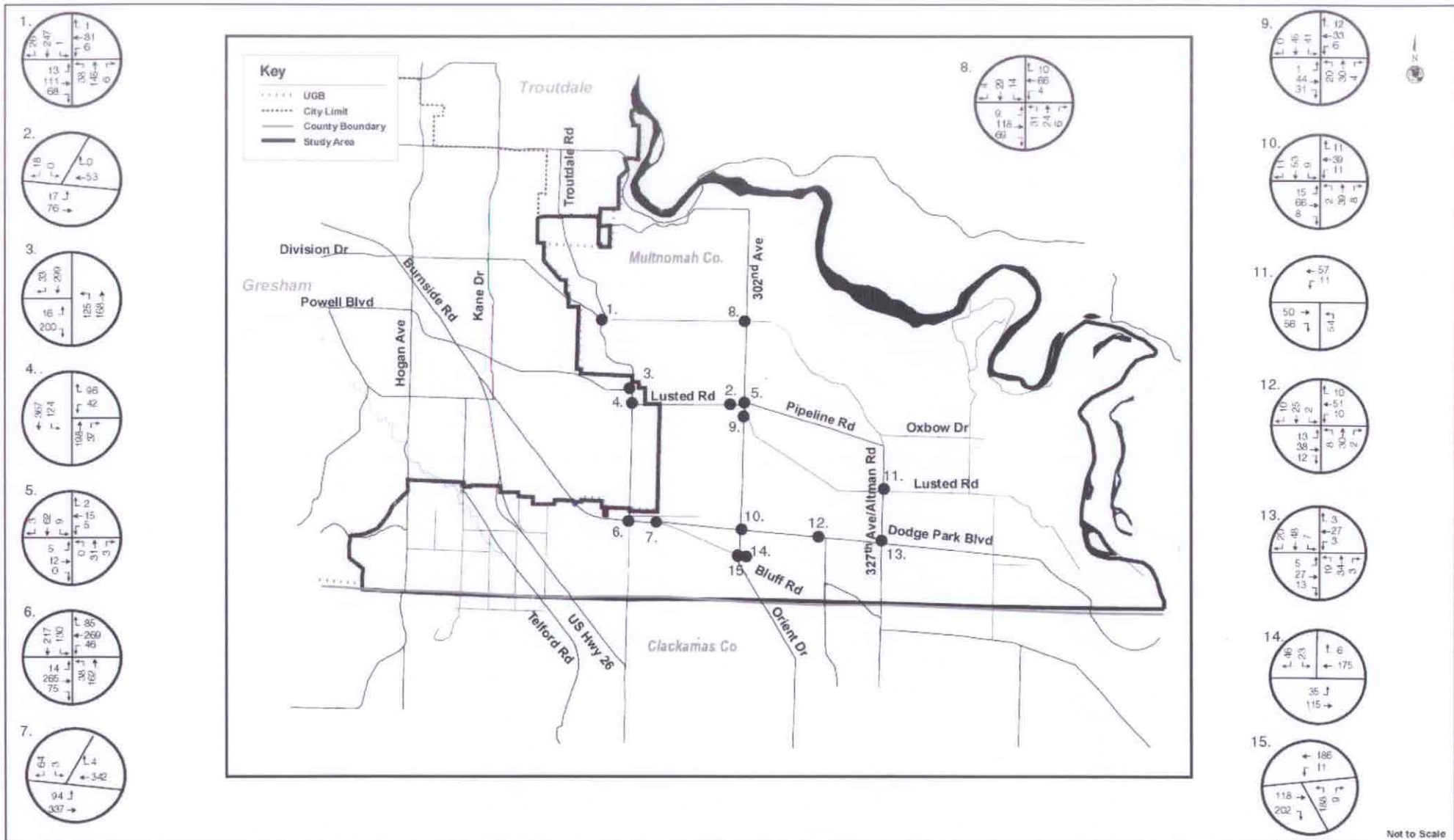
For signalized intersections and those with all-way stop control, the intersection LOS is based upon the delay for all approaches and all turning movements.

For intersections where only the minor road is controlled by the presence of stop signs, the level of service is calculated for the “critical movement.” The critical movement is the one for which motorists experience the longest delays. Typically, this is the left turn from one of the minor road’s approaches onto the major road. Motorists seeking to make left turns from the minor road onto the major road have to wait for gaps in the traffic approaching from both directions, thus accounting for longer delays. In contrast, vehicles making right turns have to wait only for traffic from one direction. Through traffic on the major road has the right of way and is not subject to delays.

No intersection capacity deficiencies were identified based on analysis of existing traffic volumes (i.e., LOS D or worse). All intersections analyzed operated today at LOS C or better in the PM peak hour as shown in Table 9. The table differentiates between those with two-way stop control and those with stop signs on all approaches or traffic signals.

The vast majority of roads in rural Multnomah County are two-lane roads. Rural roadway segment capacities were estimated based on the operations-level methodology in the 1994 *Highway Capacity Manual (HCM)* and account for factors such as lane and shoulder width, percentage of heavy vehicles, general terrain type (level, rolling, or mountainous), percent of no-passing zones, and the directional split of traffic. As with intersections, there are six LOS standards, ranging from LOS A, where traffic is free-flowing, to LOS F, where the system is congested making many, if not all traffic movements very difficult. As shown in Figure 13, all roadway segments operate at LOS D or better with existing traffic volumes.

¹¹ The HCM method calculates both the vehicular capacity and the driver delay associated with various intersection turning movements. For intersections, the procedure bases the level of service on control delay, which accounts for the time required for drivers to slow, stop and pass through an intersection. For two-way stop-controlled intersections, the procedure bases LOS on the amount of control delay experience by the most critical movement, typically a minor street left turn.



Not to Scale



Multnomah County
West of the Sandy River Rural Area:
Transportation and Land Use Plan

Figure 14:
1999 PM Peak Hour Turning Movements



Table 9: 2000 PM Peak Hour Intersection Levels of Service

Intersection	All-way Stop or Traffic Signal		Two-Way Stop		
	Avg. Delay (sec)	LOS	Critical Mvt.	Delay (sec)	LOS
SE Division Dr / SE Troutdale Rd	11.9	B	--	--	--
SE Powell Valley Rd / SE 282 nd Ave *	13.3	B	--	--	--
SE Lusted Rd / SE 282 nd Ave *	17.1	C	--	--	--
SE Orient Dr / SE 282 nd Ave (Signal)	34.2	C	--	--	--
SE 302 nd Ave / SE Dodge Park Rd (Stop Controlled)	7.9	A	--	--	--
SE 302 nd Ave / SE Lusted Rd	7.4	A	--	--	--
SE 302 nd Ave / SE Pipeline Rd	7.9	A	--	--	--
SE Orient Dr / SE Bluff Rd	--	--	Left from WB Bluff	14.9	B
SE Orient Dr / SE Dodge Park Rd	--	--	Left from WB Dodge Park	12.4	B
SE Lusted Rd / SE Pipeline Rd	--	--	Left from SB Pipeline	7.4	A
SE 302 nd Ave / SE Bluff Rd	--	--	Left from SB 302 nd	11.6	B
SE 302 nd Ave / SE Division Dr	--	--	Left from NB 302 nd	11.6	B
SE Pleasant Home Rd / SE Dodge Park Blvd	--	--	Left from NB Pleas. Home	11.1	B
SE 327 th Ave / SE Oxbow Park Drive	--	--	Left from NB 327 th	9.8	A
SE 327 th Ave / SE Dodge Park Blvd	--	--	Left from NB 327 th	10.3	B

* Both of these are T intersections. Some movements currently experience long delays. Although they are not all-way stop controlled, this analysis assumes they were all-way stop controlled.

Pedestrian and Bicycle Systems

Both residents and visitors make bicycle and pedestrian trips in the study area. Recreational bicyclists from outside the study area are drawn to the area for its beauty and Oxbow Regional Park. Many club bicycle rides are routed through the area. Paved shoulders provide the primary bicycle and pedestrian facilities in the study area.

Few sections of the study area arterial/collector roadway system have sufficient shoulder width and paved surface to serve as pedestrian facilities. Shoulders on most roadways in the study area are less than the County minimum of 1.5 meters (1.8 m on rural arterials). The regional Springwater Corridor multi-use path also runs through the study area near along Telford Road.

Public Transportation System

Transit service in the study area changed in January 2000 with the introduction of SAMS, the City of Sandy's demand-responsive transit service. SAMS' service area extends to ¼ mile outside the City of Sandy boundary, and includes a daily connection to the Gresham MAX station. As of April 2000, after four months, SAMS ridership was up to 6,000 passengers per month, or about 260 to 300 passengers per day. Intercity travel between Sandy and Gresham accounted for approximately 80% of total ridership. With the introduction of SAMS, Tri-Met relocated Routes 26 and 80 outside the study area. Tri-Met Route 84 maintains service through the study area, with five runs daily in each direction between

Gresham and Sandy, including stops on Orient Drive and Powell Valley Road. As of June 2000, Tri-Met's Route 84 carried about 40 passengers per day.¹²

Tri-Met's MAX light rail passenger line runs between Gresham and downtown Portland. The closest MAX station is in the City of Gresham about two miles west of the study area.

Air, Rail, Water, Pipeline and Culvert System

Air Transportation

No public or private airports or airfields are located within the project boundaries. Portland International Airport is less than 15 miles to the northwest and provides a full range of commercial and private flight services. The Troutdale Airport, which serves primarily recreational air travel, is located on the north side of Interstate 84 less than five miles from the study area.

Rail Transportation

No public or private rail lines exist within the study area limits. The nearest rail facilities are the Union Pacific freight rail line, which runs along Interstate 84 north of the study area.

Water Transportation

There are no commercial water transportation uses in the rural area of Multnomah County west of the Sandy River. The Sandy River is used for recreational activities such as fishing, swimming and rafting.

The Columbia River is a significant water transportation route for Oregon and the western United States. Approximately five miles north of the study area, it is a key route for transport of bulk commodities such as grain and wood products between the United States and Pacific Rim nations.

Water Pipelines

The City of Portland Water Bureau maintains several major conduits through the study area from the Bull Run Watershed (the Appendix includes a map of the general conduit alignments). The northernmost conduit runs within the SE Division Drive/SE Oxbow Drive right-of-way west of 327th Avenue. A second conduit is located in the SE Pipe Line Road right-of-way from slightly west of 327th Avenue to slightly east of 302nd Avenue. The other conduits in the study area lie outside public right-of-way.

Gas Pipelines

Williams Gas Pipeline Company operates a natural gas transmission line in the western end of the study area that runs generally along the alignment of NE 242nd Avenue. NW Natural, the area's natural gas provider, does not operate any major transmission pipelines within the study area boundaries.

Culverts

In 1998, ODOT and ODF&W conducted a state-wide inventory of culverts to identify those available to salmonids and potential barriers to salmonid passage. In 2000, Multnomah County responded to ODOT /ODF&W's findings by conducting a more in-depth survey of the identified culverts. Culverts with potential for salmonid passage were ranked as high, medium or low priority for improvements based on a number of factors related to the affects of the culvert on fish passage and habitat. Of the more than 1500 culverts the County owns, 150 pass fish and 45 present fish passage barriers. The County has prioritized culverts with fish barriers based on factors such as environmental impacts, and restoration of fish habitat.

¹² SAMS information provided by Julie Stephens, City of Sandy transit manager, telephone conversation 5/24/00. Tri-Met ridership provided by Steve Callas, Tri-Met, telephone conversation 6/13/00.

Both the County and Metro have cited the Beaver Creek basin as having the greatest potential of re-establishing fish runs in the region.

FUTURE TRANSPORTATION SYSTEM CONDITIONS

Future traffic conditions were determined using output from the Metro regional travel demand forecasting model especially designed for rural areas in Multnomah, Clackamas and Washington Counties. Population and employment projections for the year 2020 were developed by Metro and local jurisdictions and used as inputs to the model. The model calculates future traffic volume forecasts for roadways included in the model network based on these population and employment projections. Moderate traffic growth is projected within the study area, primarily within the rural center and on connecting routes. The Metro model for unincorporated areas does not assume any expansion of the urban growth boundary. With the study area's population and employment forecasts obtained directly from Metro's approved land use forecasts, they reflect regional assumptions consistent with the other TSP's currently being developed for unincorporated Multnomah County.

Future Traffic Conditions

Future Traffic Volume Forecast Methodology

A growth rate was applied to existing traffic volumes to estimate future traffic volumes on study area roadways. Compound growth rates were developed by comparing 1994 and 2020 model projections along a series of screenlines through different regions of the study area. Growth factors were adjusted to account for the difference between the traffic counts and the model's 1994 base year.

Figure 15 summarizes projected 2020 PM peak hour turn movements at the intersections analyzed for existing conditions. PM peak hour traffic is generally projected to increase about 50 percent by 2020 compared to existing conditions.

Intersection levels of service were calculated based on projected 2020 PM peak hour turn movements. The results summarized in Table 10 show five intersections would fall below the County's standard for new and improved facilities of LOS C.

Projected 2020 volume-to-capacity ratios were reviewed for all collector and arterial segments in the study area based on the Metro travel demand model. All roadway segments in the study area were projected to function with an acceptable v/c ratio (less than .80).

282nd Avenue between SE Powell Valley Road and SE Lusted Road, which lies outside the study area, was also included in the review due to its significance to the study area's transportation system. The model projects SE 282nd Avenue between SE Lusted Road and SE Powell Valley Road to have a volume-to-capacity ratio greater than 1.0. This segment of SE 282nd Avenue is recommended for future intersection consolidation and signalization improvement to mitigate the unsatisfactory v/c ratio.

US 26

Future traffic volumes on the one-mile segment of US 26 through the study area are also expected to increase by about 50 percent between 1994 and 2020, based on the Metro travel demand model for unincorporated Multnomah County. The OHP specifies operating performance on state highways using peak hour volume-to-capacity (v/c) ratios rather than levels of service. The v/c ratio standard for US 26 in the study area is 0.70. Calibrated 2020 PM peak hour volume-to-capacity (v/c) ratios on US 26 in the peak southbound direction range 0.55 to 0.61 within the study area.

The projected increase in the v/c ratio is due to increased travel between Gresham and Clackamas County. Future land use development within the West of Sandy River Rural Area would account for only a fraction of overall growth.

Table 10: 2020 No Build PM Peak Hour Intersection Levels of Service

Intersection	All-way Stop or Traffic Signal		Two-Way Stop		
	Avg. Delay (sec)	LOS	Critical Mvt.	Delay (sec)	LOS
SE Division Dr / SE Troutdale Rd	26.3	D	--	--	--
SE Powell Valley Rd / SE 282 nd Ave*	80.9	F	--	--	--
SE Lusted Rd / SE 282 nd Ave*	239.9	F	--	--	--
SE Orient Dr / SE 282 nd Ave (signalized)	46.5	D	--	--	--
SE 302 nd Ave / SE Dodge Park Rd	8.4	A	--	--	--
SE 302 nd Ave / SE Lusted Rd	8.0	A	--	--	--
SE 302 nd Ave / SE Pipeline Rd	8.6	A	--	--	--
SE Orient Dr / SE Bluff Rd	--	--	Left from WB Bluff	31.8	D
SE Orient Dr / SE Dodge Park Rd	--	--	Left from WB Dodge Park	18.4	C
SE Lusted Rd / SE Pipeline Rd	--	--	Left from SB Pipeline	7.4	A
SE 302 nd Ave / SE Bluff Rd	--	--	Left from SB 302 nd	13.0	B
SE 302 nd Ave / SE Division Dr	--	--	Left from NB 302 nd	13.9	B
SE Pleasant Home Rd / SE Dodge Park Blvd	--	--	Left from NB Pleasant Home	12.0	B
SE 327 th Ave / SE Oxbow Drive	--	--	Left from NB 327 th	10.3	B
SE 327 th Ave / SE Dodge Park Blvd	--	--	Northbound Left	10.7	B

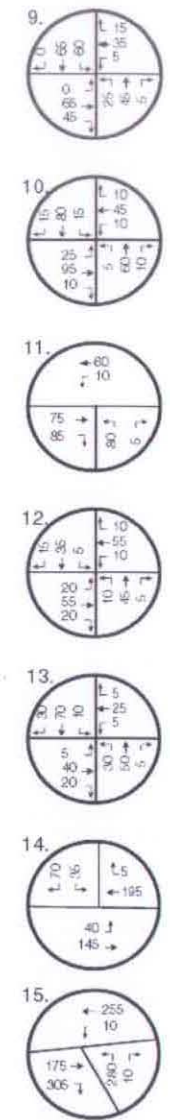
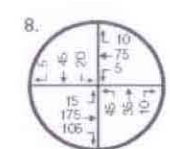
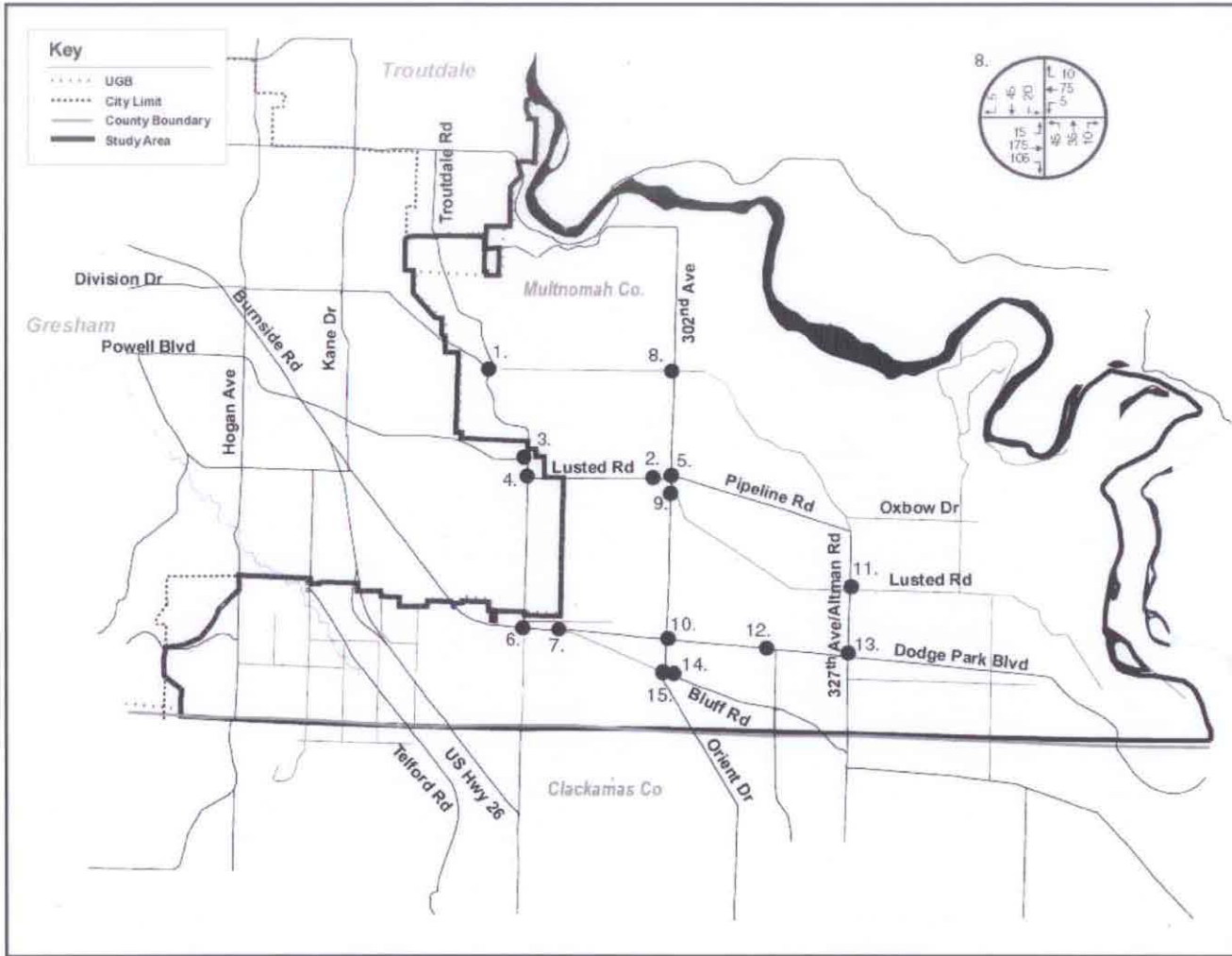
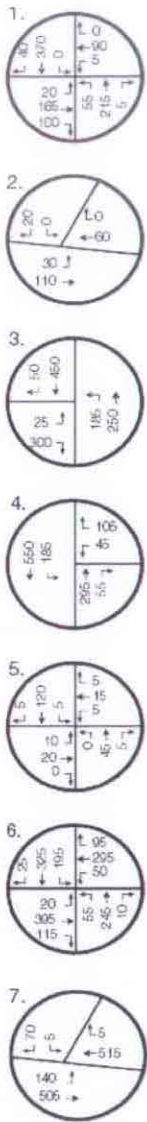
* Both of these are T intersections. Some movements currently experience long delays. Although they are not all-way stop controlled, this analysis assumes they were all-way stop controlled.

Future Public Transportation Conditions

Demand for public transit will likely increase in the future. As the area grows the number of residents commuting to the urban area will also grow. Both residents and farm workers in the area will likely seek more transit options in the future.

Future Bicycle and Pedestrian Conditions

Demand for bicycle and pedestrian facilities is expected to grow in the future. As both the rural area grows in population pedestrian demand will increase for fitness, recreation and for access to schools and businesses in the rural centers. Bicycle demand will increase both as a result of growth in the number of area residents and population growth in the urban area. The area will continue to be an attractive destination for recreational cyclists, and bicycle commuting could increase with employment growth in the surrounding urban area.



Not to Scale

Figure 15:
Projected 2020 PM Peak Hour Turning Movements

Future Air, Rail, Water, Pipeline and Culvert Conditions

Air and Rail Conditions

No demand is anticipated for a new airport in eastern Multnomah County. Similarly, neither cargo nor passenger rail service is likely to be needed in the study area in the foreseeable future.

Water Conditions

As the urban area grows the Portland Water Bureau anticipates the need for a new conduit in the study area.

Pipeline Conditions

Williams Gas Pipeline Company, which operates a single natural gas transmission line in the western end of the study area, does not plan on constructing additional lines.

Culvert Conditions

No new culverts, beyond replacing those identified with fish passage issues, are anticipated in the right-of-way.

TRANSPORTATION SYSTEM IMPROVEMENTS

Transportation needs were assessed using existing data and input from stakeholders, staff and members of the public. Potential improvement alternatives for the various transportation modes were presented at a series of public and stakeholder meetings and revised in response to feedback obtained at these meetings. Recommended realignments were modified to address stakeholder concerns, primarily to avoid impacts on agricultural lands while still accommodating truck and agricultural vehicle traffic. The resulting transportation system improvements presented in the following section are focused on specific needs identified by users of the area's transportation network, while also meeting the requirements of the TPR for improvements in unincorporated areas.

The purpose of this section is to review design standards for each transportation mode and to identify recommended improvements based upon the preferred transportation system alternative for the West of Sandy River Rural Area. The preferred transportation system is the combination of improvements, strategies and standards to best meet goals and objectives established through the public process, while at the same time addressing State requirements in the *Transportation Planning Rule*.

Roadway System

Roadway System Design Standards

Multnomah County Design Standards (1999) provide minimum, maximum and preferred shoulder widths for the functional classifications of rural roadways, in acknowledgement of the broad range of facility users including agricultural, industrial and recreational vehicles.

In the West of Sandy River Rural Area, implementing the new County road standards will involve trade-offs between design speed, shoulder width, accommodation of non-motorized and agricultural facility users, and potential impacts on drainage ways and productive agricultural lands.

Roadway System Recommendations

Recommended Functional Classification Changes

Most of the functional classifications for roadways in the study area are classified consistently, both with respect to operational characteristics and with the classification used by adjacent jurisdictions. However, SE Bluff Road from SE Orient Drive to the Multnomah/Clackamas county line should be reclassified from a local street to a rural collector. SE Bluff Road and SE Dodge Park Boulevard are the primary connections to the Pleasant Home rural community. SE Bluff Road intersects SE Orient Drive in the Orient rural center area. Approximately half the traffic on SE Orient Drive east of SE Dodge Park Boulevard is to or from SE Bluff Road, which continues as a connecting route to the City of Sandy, where it intersects US 26 immediately west of the City of Sandy's downtown one-way couplet. Clackamas County classifies SE Bluff Road as a rural collector from US 26 to the County line. Reclassifying SE Bluff Road in Multnomah County from rural local street to rural collector would recognize its function in the rural area as a farm-to-market route connecting route between the West of Sandy unincorporated area and the City of Sandy, and would be consistent with Clackamas County's designation.

Recommended Level of Service Change

The County applies a level of service C standard for intersections in unincorporated areas. To strike an appropriate balance between mobility needs and constraints on capacity improvements in unincorporated areas, it is recommended that the standard for roadways in the Orient Rural Center be revised to LOS D.

This change addresses projected 2020 LOS D conditions at the intersections of Orient Drive/282nd Avenue, and allows for a greater range of land use development intensities in the rural center.

Recommended Review of Truck Route Signage

Current truck route restrictions limit the number of roads study area farmers are able to use for farm to market access. In review of the route restrictions, recent roadway improvements may have eliminated the need for the current restrictions. It is recommended that a comprehensive review of the truck restrictions be undertaken and that truck restriction ordinances are updated accordingly.

Intersection Improvements

Six intersection improvements have been identified in the study area. All six focus primarily on safety improvements including improvements to reduce conflicts and to correct sight distance limitations. As a side benefit, two of the six proposed improvements, Division Drive and Troutdale Road, and Orient Drive and Bluff Road, will reduce delays for critical movements.

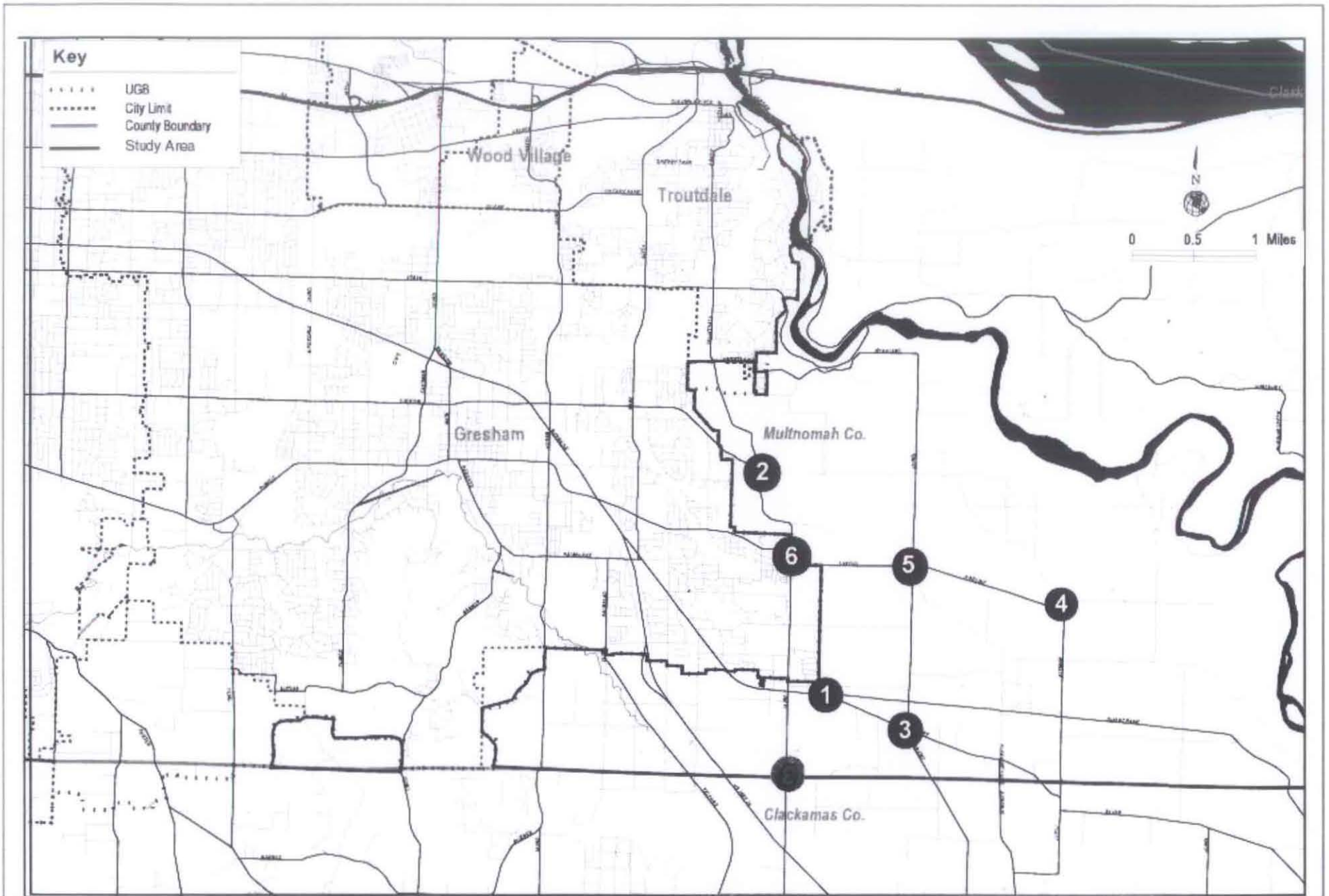
A seventh project was identified outside the study area. Due to its significance to the study area transportation system, the intersections of 282nd Avenue/ SE Powell Valley Road and 282nd Avenue/Lusted were included in the transportation analysis. The analysis found that consolidating the two intersections would provide improved safety with increased capacity by replacing two stop sign controlled intersections with one signal-controlled intersection. Such an isolated increase in intersection capacity is not expected to noticeably affect route choice or traffic volumes on the intersecting roadways. Projected 2020 PM peak hour traffic volumes would satisfy the peak hour traffic signal warrant.

The projects above present possible solutions for some of the main safety issues recently identified in the study area. Additional projects may be identified in the future as traffic volumes increase and as traffic patterns change. Different solutions to these problems may be identified through further analysis or preliminary engineering. The location of the improvements identified above can be seen on Figure 16.

Bridge Improvements

Stark Street Viaduct

Replacement of the Stark Street Viaduct is necessary to accommodate truck traffic. It is included in the State's draft *2002-2005 State Transportation Improvement Program (STIP)*. Multnomah County began engineering on the viaduct in Fall 2001.



Multnomah County

*West of the Sandy River Rural Area:
Transportation and Land Use Plan*

**Figure 16:
Recommended Intersection
Improvement Locations**



Parametrix, Inc.

Bicycle and Pedestrian System

This section identifies types of bikeways and walkways, their design standards and proposes roadways for bicycle and pedestrian facility improvements.

Types of Bikeways and Walkways

Shared Roadways are travel lanes shared by bicyclists and motorists. A motorist usually will have to cross over into the adjacent travel lane to pass a bicyclist on a shared roadway. Shared roadways are common on low volume roadways.

Shoulder Bikeways/Walkways are paved shoulders on rural roadways which provide a suitable area for bicycling and walking, and few conflicts with faster moving motor vehicle traffic. Most rural bicycle and pedestrian travel is accommodated on shoulder bikeways/walkways.

Multi-Use Paths are facilities separated from motor vehicle traffic by open space or barrier, either within the roadway right-of-way or within an independent right-of-way. These paths are typically two-way facilities used by pedestrians, joggers, skaters, and bicyclists. Shared multi-use paths are appropriate in corridors not well served by the street system, to create short cuts that link destination and origin points, and as elements of a community trail plan. The Springwater Corridor Trail, a regional multi-use path, runs through the southwestern portion of the study area.

Bicycle and Pedestrian Design Standards

The County's road design standards (1999) include minimum, maximum and preferred widths for roadway shoulders, which serve bicycle and pedestrian travel in unincorporated areas. The standards call for a minimum paved shoulder width of 1.5 m (5.0 ft.) on rural local and collector streets, and 1.8 m (6.0 ft.) on rural arterial roadways.

Improvements

Residents have requested improved bikeways and walkways for recreational trips and trips to the area's schools and businesses. Arterial and collector roadways in the study area with over 3,000 average daily vehicle trips and roads leading to Oxbow Park that are heavily used by bicyclists have been included on the bicycle and pedestrian system. A bikeway and walkways map is included in the Appendix identifying routes in the study area that need improvement to accommodate bicyclists and pedestrians.

Public Transportation System

The following sections provide definitions for functional classifications and suggested improvements to the public transportation system.

Public Transportation Functional Classification Definitions

These definitions of public transportation were developed by Metro in the Vision 2040 process. Only those pertinent to rural areas are included here.

Secondary Transit Network

This system is made up of secondary bus, minibus, paratransit and park and ride services. Secondary service is focused more on accessibility, with frequency of service and geographic coverage more critical than the travel speed. Secondary transit is designed to be an alternative to the single-occupant vehicle by providing frequent, reliable service.

Secondary Bus provides coverage and access to a wide range of land uses. Secondary bus service runs as often as every 30 minutes. Weekend service is provided as demand warrants.

Minibus service provides coverage in lower density areas by providing transit connections to a wide range of land use options. Minibus services, which may range from fixed-routes to purely demand-responsive services (including dial-a-ride, employer shuttles, and bus pools), provide at least 60-minute response time on weekdays. Weekend service is provided as demand warrants.

Paratransit service is defined as non-fixed route service that serve special transit markets, including Americans with Disabilities Act (ADA) service throughout the greater metropolitan region.

Park and Ride facilities provide convenient auto access to regional trunk route service for areas not directly served by transit. Bicycle and pedestrian access as well as parking and storage accommodations for bicyclists are considered in the siting process of new park and ride facilities.

Interurban Public Transportation

Functional classification designations for interurban public transportation are as follows:

Intercity Bus provides connection points with the regional to nearby destinations, including neighboring cities, recreational activities, and tourist destinations. Tri-Met and the City of Sandy provide intercity bus service through the study area. Neither currently provides stops within the study area.

Passenger Intermodal Facilities serve as the hub for various passenger modes and the transfer point between modes. These regional facilities are closely interconnected with urban public transportation service and are highly accessible to all modes. They include Portland International Airport, Union Station and intercity bus stations.

Public Transportation Improvements

The cost-effective extension of transit service for local residents in the study area is limited by the area's low-density, rural nature. The benefit of increased public transportation would be a reduction in commuter trips between the rural center area and the Portland metropolitan area. It would service for rural residents accessing jobs in the urban area and urban residents accessing farming jobs in the rural area.

As the rural center area develops, transit stops and facilities such as park and ride lots could become more attractive to commuters. Commuters served by both SAMS and Tri-Met as well as car-poolers with urban destinations could use a small park-and-ride lot in the rural center. If a park-and-ride lot were constructed, it could be served by Tri-Met Route 84. As an alternative, arrangements could be made with the City of Sandy to serve a park-and-ride within the study area.

Air, Rail, Water, Pipeline Systems

This section describes design standards and planned improvements for air, rail, water, and pipelines. The pipeline system is the most likely of the four to affect the west of Sandy River rural area because of the importance of existing facilities already located in the area.

Air, Rail, Water, and Pipeline System Design Standards

Reference is made to the appropriate design standards used within the industry and/or professional practice.

Air Transportation

The design standards used for design of airports are found in the Federal Air Administration's (FAA) advisory circulars. FAA Advisory Circulars 150-5300-13 and 150-5320 are the primary design standards of airports.

Rail Transportation

The design standards used for design of new track are the American Railway Engineering Association design standards.

Pipelines

The design standards used by Northwest Natural Gas are American Society of Testing and Materials (ASTM) and American National Standards Institute (ANSI) design standards.

Air, Rail, Water, Pipeline and Culvert System Improvements**Air Transportation**

Portland International Airport, approximately 15 miles northwest of the study area, plans to provide additional runway capacity in the future.

Water Pipelines

The Portland Water Bureau plans to construct a future conduit within the right-of-way of Dodge Park Boulevard and Orient Drive.

Culverts

Eighteen fish barrier culverts identified for future improvements are within the West of the Sandy River Rural Area, most of which are in the Beaver Creek basin. A map of significant fish passage culverts is included in the Appendix.

Findings and Conclusions for Transportation System Improvements

Most of the proposed roadway improvements are realignment and intersection improvement projects intended to improve conditions that are a result of the rural nature of the area. Shoulder widening improvements would increase motor vehicle safety and benefit pedestrian and bicycle travel. The County will develop project cost estimates and priority rankings for recommended improvements as part of the CIP process, which will evaluate, prioritize and select projects for funding on a countywide basis. The County's CIP is being updated in 2002 and will include projects identified in this plan after it's adopted.

Regulatory changes are also proposed affecting functional classification designations and, for the Rural Center, intersection level of service standards. The functional classification change would reclassify SE Bluff Road from SE Orient Drive to the Multnomah/Clackamas county line. It would provide a closer match between roadway classification and the land use and travel patterns served by the particular roadways.

To balance mobility needs for the Orient Rural Center with constraints on capacity improvements in unincorporated areas, it is recommended that the intersection level of service standard for roadways in the Orient Rural Center be revised to LOS D. This change addresses projected 2020 conditions at the intersections of Orient Drive/282nd Avenue, and Orient Drive and Bluff Road, and allows for a greater range of land use development intensities in the rural center.

Due to the unique geographic character of the County's jurisdiction, the County will be adopting four separate transportation system plans. Once all the transportation system planning is complete the County's Comprehensive Framework Plan and ordinances will be updated with any necessary changes.

These proposed regulatory changes together with the recommended transportation improvements described below will accommodate proposed development plans within the West of Sandy Rural Area, in particular the zoning changes proposed for the Orient Rural Center.

Figure 16 illustrates the general location of the specific roadway improvements in the West of Sandy River Rural Area proposed for inclusion in the County's rural area CIP. Individual improvements are shown in figures included in the *Recommended Transportation Improvements* Appendix, and described in Table 11.

None of the identified improvements are anticipated to impact EFU. If, upon more detailed engineering, a project is identified to impact EFU, compliance with the TPR will be undertaken at that time.

Table 11: Recommended Improvements

Improvement	Description	Jurisdiction
1 (Appendix Figure A-1)	<i>Orient Road/Dodge Park Boulevard Realignment</i> Realign the intersection to create a more perpendicular angle. Driveway modifications would be required to serve the autobody shop in the northwest quadrant of the intersection.	County
2 (Appendix Figure A-2)	<i>Division Drive/Troutdale Road Realignment.</i> Eliminate the northeast leg of the intersection between SE Division Drive and SE Troutdale Road to create one intersection. Realign each end of the segment proposed for closure. While projected 2020 PM peak hour traffic volumes satisfy signal warrants, signalization is not recommended until additional warrants are satisfied. All-way stop control would provide LOS D with projected 2020 PM peak hour traffic volumes, while adding an eastbound right turn lane would provide LOS C.	County
3 (Appendix Figure A-3)	<i>302nd Avenue/Orient Drive/Bluff Road Realignment.</i> Potential options include realigning SE Orient Drive to intersect SE Bluff at a more perpendicular angle or creating a left turn lane for eastbound traffic on SE Orient Drive. Either option may require realignment of SE Teton Drive. Further engineering analysis will be necessary to determine a preferred alignment. Signalize realigned intersection when warranted.	County
4 (Appendix Figure A-4)	<i>Oxbow Drive/327th Avenue Realignment.</i> Channelizing the broad paved area on SE 327 th Avenue at the approach to SE Oxbow Drive to create a more perpendicular intersection is recommended to improve sight distance and reduce the potential for conflict between westbound left turns and northbound left turns.	County
5 (Appendix Figure A-5)	<i>Lusted Road/302nd Avenue/Pipeline Road Realignment/ Intersection Consolidation.</i> Further engineering analysis is recommended to determine if intersection consolidation is feasible given the surrounding vertical grades and the location of a sewage holding tank in the center of the intersection. Recent parking restrictions enacted by the County may be adequate for the near term.	County
6 (Appendix Figure A-6)	<i>Lusted Road/Powell Valley Road/282nd Avenue Consolidation.</i> Realignment to connect SE Lusted Road directly with SE Powell Valley Road is included in the County's Capital Improvement Plan and Program. The project would require further engineering analysis and coordination with the City of Gresham to develop a recommended alignment. A traffic signal is warranted based on projected 2020 PM peak hour volumes, and would provide LOS B operations.	County/City of Gresham
7	<i>282nd Avenue/Stone Road Turn Lanes</i> The addition of turn lanes in the northbound and southbound direction on 282 nd would reduce the high incidence of rear end crashes at this location. Some roadway widening would be necessary.	County
8 (Appendix Figure A-7)	<i>Shoulder Widening to Meet Updated Standards</i> Prioritization for shoulder improvements within the West of Sandy River rural area should be given to roadways connecting to school sites, especially Barlow High School. Proposed shoulder widening should be evaluated based on potential impacts on drainage and adjacent productive lands. For shoulders wider than 1.8 meters, the adopted County standards require paved width of 1.5 meters. The remaining 0.3 meters may be unpaved. Shoulder widening should be incorporated into routine roadway maintenance wherever possible.	County/Metro

POLICIES AND STRATEGIES

Recommended Policies and Strategies for the West of Sandy River TSP

Policy 27

Implement a balanced transportation system that is safe and efficient in meeting the needs of all modes of travel for area residents and those traveling through the area by improving roadways to provide safe conditions for motorized and non-motorized travel.

Strategies:

- 27.1 Monitor crash rates for all modes of travel, and focus safety improvement resources on the locations with high rates and/or severity of crashes.
- 27.2 Implement operational improvements within budgetary constraints.
- 27.3 Apply the County's access management and driveway spacing standards for proposed new access locations.
- 27.4 Implement feasible and cost-effective intersection consolidations to reduce potential conflict points.
- 27.5 Consolidate driveway access points in the rural center through the land development process and other appropriate methods.
- 27.6 Coordinate with Metro to identify potential improvements to the roadways providing direct access to Oxbow Regional Park.
- 27.7 Ensure that the County's Capital Improvement Plan evaluation criteria adequately considers the needs of the West of Sandy River Rural Area.
- 27.8 Update County ordinances to meet the requirements of the Transportation Planning Rule.

Policy 28

Actively support safe travel speeds on the transportation system.

Strategies:

- 28.1 Support speed limit enforcement.
- 28.2 Apply design standards that encourage appropriate motor vehicle and truck speeds.

Policy 29

Provide safe facilities for bicyclists and pedestrians.

Strategies:

- 29.1 Make intersection and minor realignment improvements focusing on safety, sight distance, and efficiency.
- 29.2 Widen and pave shoulders to safely accommodate vehicular, bicycle, and pedestrian needs.

- 29.3 Maintain safe conditions for pedestrians and bicyclists during roadway maintenance and improvement work.

Policy 30

Encourage mobility for the transportation disadvantaged.

Strategy:

- 30.1 Work with public transportation providers and other non-profit groups to monitor and encourage the provision of transportation service for the transportation disadvantaged.

Policy 31

Develop a transportation system that supports the surrounding rural character and land use designations of rural Multnomah County west of the Sandy River by discouraging through traffic on local rural roads.

Strategies:

- 31.1 Reduce conflicts between street classification and street use, by providing appropriate traffic control devices.
- 31.2 Periodically review and update functional classification of trafficways in rural Multnomah County.
- 31.3 Coordinate with ODOT, Metro and Clackamas County in efforts to implement "Green Corridor" policies along US 26.

Policy 32

Balance the need of roadway users with potential impacts to the environment, fish, wildlife and agricultural resources and users when applying roadway design standards.

Strategies:

- 32.1 Develop a program for retrofitting drainage facilities in conformance with requirements adopted by the National Marine Fisheries Service and the U.S. Fish and Wildlife Service.
- 32.2 Secure funding for identification, prioritization and remediation of all deficient stream crossings for fish and wildlife passage.
- 32.3 Develop and adopt drainage system design guidelines and standards to accommodate fish passage where appropriate.
- 32.4 Develop and implement standards for all transportation projects with regard to water quality treatment and detention of runoff from existing and new impervious surfaces to avoid further degradation of water quality as well as fish and wildlife habitats.
- 32.5 Develop and implement standards for all transportation projects with regard to protection of existing, and restoration of deficient, riparian buffers where waters of the state border current and future road and path segments.
- 32.6 Identify and protect critical fish and wildlife migration corridors to prevent the further fragmentation of existing habitats by future project alignments.

Policy 33

Encourage preservation of critical view sheds by placing new pipelines and transmission lines in existing rights-of-way whenever possible.

Strategy:

- 33.1 Enhance and preserve the rural character and scenic qualities of the area by placing utilities underground when possible.
- 33.2 Coordinate street improvements with utility improvements whenever possible to minimize cost, visual impact and disruption to traffic flow.

Policy 34

Coordinate transportation improvements with appropriate regulatory agencies to meet federal, state and regional air, noise and water standards.

Strategies:

- 34.1 Obtain permits as necessary for transportation improvement projects and maintenance activities.
- 34.2 Develop closer working relationships with regulatory agencies by providing opportunities for participation and input at the project development phase of projects.
- 34.3 Encourage transportation staff to attend programs regarding regulatory processes such as the Endangered Species Act, The Clean Water Act and Metro's Green Streets Program.

Policy 35

Provide ongoing coordination with state, regional, and local business interests to assure efficient movement of goods and services to support a healthy rural economy.

Strategies:

- 35.1 Support north/south arterial improvements between I-84 and US-26 in the East County urban area.
- 35.2 Coordinate with ODOT to ensure continued safe access onto and across US-26.
- 35.3 Review truck weight and size restrictions based on new roadway improvements and current state law.

Policy 36

Provide a transportation system that ensures economically viable transportation of goods from farm to market.

Strategies:

- 36.1 Evaluate and implement safety improvements for trucks on rural arterials.
- 36.2 Seek funding for improvements to rural arterials.

Policy 37

Maximize cost-effectiveness of transportation improvements using the Capital Improvement Plan process and maintenance program.

Strategies:

- 37.1 Coordinate intersection improvements as appropriate through the County's Capital Improvement Plan and the County's maintenance program.
- 37.2 Provide minor improvements during maintenance projects where possible.

FINANCING PLAN

The West of Sandy River Rural Area TSP covers one of four subareas of unincorporated Multnomah County. The county assesses transportation system improvement needs on a countywide basis and develops a CIP for the entire County, instead of tracking expenditures or allocating funds by subarea. This section describes the process used to evaluate candidate projects in the West of Sandy River Rural Area for inclusion in the County's CIP.

A list of projects was developed through a public involvement process that included extensive stakeholder input. The projects address existing and future needs while maintaining the rural character of the area and conforming to the requirements for transportation improvements in rural areas under the state Transportation Planning Rule. These projects will compete for funding from a variety of county, state, and federal sources. Multnomah County will develop cost estimates for all projects, and evaluate and compare them with projects from the other regions. Over the next fiscal year the Roadway Project Evaluation Framework that has been used to select projects in the past will be updated to include criteria that weigh the importance of the land use goals of a roadway segment along with its functional efficiency. In a rural area this may mean including criteria that weigh the importance of maintaining the rural character of a roadway and preserving the natural environment and adjacent agricultural lands. Evaluation criteria will be developed through a public process beginning in 2001. The result will be a countywide, 20-year, financially constrained capital improvements plan and program. The time frame for completion of the countywide CIP has not been determined.

Various processes used to allocate funding for transportation projects within Multnomah County are summarized below. Candidate projects compete for funding based on the program amount available.

Capital Improvement Program (CIP)

Description

The Multnomah County CIP is a continuous and open process, allowing citizen input annually. Priorities for the county road system are dynamic, changing in response to land use decisions and infrastructure life cycles. Consequently, the Capital Improvement Plan and Program is updated on a regular basis.

The county holds public meetings in various communities to solicit public input regarding transportation needs. Project proposals are also solicited from each of the four east-county cities (Gresham, Troutdale, Fairview and Wood Village). After assembly by County staff, the project list is reviewed by the East Multnomah County Transportation Committee (EMCTC) and approved by the Board of County Commissioners (BCC).

The Transportation Division reviews the CIP annually, with a full update involving all interested parties occurring every 2 years. The annual review and biennial updates ensure that limited resources for capital projects are allocated to the most critical capital needs. As mentioned above, the criteria used to evaluate candidate projects for inclusion and prioritization within the County CIP will be revised through a public process beginning in 2001.

Regional Transportation Plan (RTP)

Description

The RTP is developed for the three-county metropolitan area including Clackamas, Multnomah, and Washington Counties. Public meetings are held throughout the region to solicit public input regarding transportation needs. Projects are required to meet federal and state air quality and environmental standards. The RTP is updated using a public process and committee review at the technical and policy levels before being sent to the seven-member Metro council.

Funding Potential

The Metro Transportation Improvement Program (MTIP) process, which allocates federal transportation funding to regional projects listed in the RTP, only addresses projects that can be identified as regionally significant. Stark Street, Troutdale Road, Lusted Road, Division Drive, Orient Drive have all been identified in the RTP on the Regional Motor Vehicle System.

State Transportation Improvement Program (STIP)

Description

ODOT manages the STIP update process, reviewing the projects generally in 3-year intervals through an open process that allows citizen input. The STIP update cycle was recently increased to three years due to a lack of new transportation funds at the state level.

Funding Potential

Public meetings are held in various communities around the state to solicit public input regarding transportation needs. Project proposals are also solicited from each of the local jurisdictions and metropolitan planning organizations (MPOs) from around the state. The list of projects is reviewed for air quality conformity and approved by the Oregon Transportation Commission before being sent to the U.S. Department of Transportation in Washington D.C. for approval. The draft 2000-2003 STIP includes a single project in the study area, replacement of the Stark Street Viaduct.

Candidate projects in the West of Sandy River Rural Area that qualify for state funding will be forwarded to the STIP process for funding through ODOT's Region 1. Candidate projects will receive funding based upon statewide priorities and parameters as set forth by the Oregon Transportation Commission for Modernization, Preservation, and Alternative Modes. The most likely projects to be selected for the STIP are bridges and projects for alternative modes. Other projects eligible for federal funds may also be included, such as projects on the segment of U.S. 26 through the study area.

Other Processes

Operations and Maintenance

Description. Multnomah County and ODOT each have operational budgets for ongoing maintenance and operations as allowed by Oregon statute and organizational policy. These budgets are set up to maintain facilities and services at minimum thresholds established by each agency, while being responsive to changing site conditions and customer requests.

Current Application. Operational budgets are applied to routine maintenance for traffic signing, travel lane markings, pavement management, vegetation control, winter weather patrol, and other activities. Each agency is responsible for maintenance and operations of its roadways unless there is an intergovernmental agreement transferring responsibilities.

Aside from the maintenance activities mentioned above, ODOT has a budget set aside for speed zone investigations when recommendations are made to the State Speed Control Board for changes in posted speeds.

Funding Potential. West of Sandy River Rural Area candidate projects that qualify for funding through the operations and maintenance budget will be recommended for funding to the appropriate operations and maintenance department. Minor shoulder improvements in the direction of the County's newly adopted road standards could be funded through operations and maintenance budgets.

Grants

Description. Grant programs are sponsored by various federal and state agencies for special studies and/or improvement projects beyond the processes described above.

Current Application. Grants relating to economic development and growth management-related activities are available. The grants are usually very specific in their evaluation criteria and are usually for specific studies or project types.

Funding Potential. West of Sandy River Rural Area candidate projects will be evaluated as grant funding opportunities arise.

COMPLIANCE WITH TRANSPORTATION PLANNING RULE REQUIREMENTS

Compliance with the Transportation Planning Rule was evaluated for each applicable TPR requirement and summarized in a technical memorandum provided to Multnomah County. Plan adoption and implementation ordinance preparation will follow; all other TPR requirements are addressed in this document.

APPENDIX

The Economic, Social, Environmental, and Energy analysis is a separate document.

PLANNING CONTEXT

PLANNING CONTEXT

This section of the plan provides an overview of the laws and regulations Multnomah County addressed as part of this planning effort. These laws and regulations range from recommendations to outright requirements.

Statewide Planning Goals

Oregon planning law requires that local comprehensive plans and land use regulations be consistent with the 19 Statewide Planning Goals and state rules. At regular intervals, the State conducts reviews of local comprehensive plans to ensure that they comply with these requirements.

The State adopted its 19 statewide planning goals in the mid-1970's to set a framework for local land use planning. They include the following:

1. Citizen Involvement
2. Land Use Planning
3. Agricultural Lands
4. Forest Lands
5. Open Spaces, Scenic and Historic Areas and Natural Resources
6. Air, Water and Land Resources Quality
7. Areas Subject to natural Disasters and Hazards
8. Recreation Needs
9. Economy of the State
10. Housing
11. Public Facilities and Services
12. Transportation
13. Energy
14. Urbanization
15. Willamette Greenway
16. Estuarine Resources
17. Coastal Shorelands
18. Beaches and Dunes
19. Ocean Resources

Goals 15 through 19 do not apply to all communities, and are not applicable to the West of Sandy River study area. All of the other goals are applicable, and must be addressed as part of

this planning process. Several of these goals are particularly relevant to current planning in the study area. They include Goal 2 - land use planning; Goals 3 and 4 - agricultural and forestlands; Goal 11 - public facilities; Goal 12 - transportation; and Goal 14 - urbanization. The scope of work for this Plan required that the following goals be addressed: 1, 3, 4, 5, 6, 7, 8, 11, 12, 13, and 14.

Goal 1: Citizen Involvement

Goal 1 requires that citizens be involved in all aspects of the planning process. This Plan included multiple open houses, stakeholder interviews and an on-going Task Force.

Goal 3: Agricultural Lands

Goal 3 is intended to protect the state's agricultural lands for their contribution to the state's economy, as well as for the scenic and environmental benefits. This goal requires that designated agricultural lands (defined for western Oregon as land of predominantly Class I, II, III and IV soils) be preserved and maintained for farm use. Related statutes provide for counties to zone such areas for exclusive farm use (EFU), and limit the amount of partitioning and development activity that may occur in these areas. Minimum parcel sizes should be large enough to allow existing agricultural enterprises to continue – usually 80 acres for farmland and 160 acres for rangeland. The extension of sewer and water services in such areas should be appropriate only for the uses permitted. Non-farm uses, particularly those that may impact farming operations, are to be minimized. The Land Use section of this Plan thoroughly addresses the requirements of Goal 3.

Goal 4: Forest Lands

Goal 4 contains similar provisions relating to forest lands. The purpose of Goal 4 is to conserve areas that are deemed suitable for commercial forestry uses. Local governments are to inventory, designate and zone such areas as forestlands, and limit uses that may impact forestry activities. Minimum parcels sizes in forest zones should be large enough to allow for forest operations to continue. They are usually set at 80 acres. As with agricultural lands, the state sets strict limits on the type and extent of partitioning and development activity permitted in these areas. The Land Use section of this Plan thoroughly addresses the requirements of Goal 4.

Goal 5: Open Spaces, Scenic and Historic Areas and Natural Resources

Goal 5 is intended to conserve open space and protect natural and scenic resources. As part of the development of the West of Sandy Rural Area Plan the County has conducted a Goal 5 analysis in accordance with OAR 660, Division 23. As required by OAR 660-023, the County has taken the following steps:

- Prepared an inventory of wildlife habitat and riparian corridor resources pursuant to 660-023-0030 and utilized the Statewide Wetlands Inventory pursuant to 660-023-0100 for wetlands.
- Made a determination of “significance” for wildlife habitat and riparian corridors,
- Conducted an analysis of the economic, social, environmental and energy (ESEE) consequences of allowing, prohibiting or limiting a conflicting use within the resource or its impact area for wildlife habitat and riparian corridors; and

- Made a decision as to whether to prohibit, limit or allow uses that conflict with wildlife habitat and riparian corridor resources that are determined to be significant.

Goal 6: Air, Water and Land Resources Quality

Goal 6 requires local jurisdictions to maintain and improve the quality of the air, water and land resources of the state. Compliance with Goal 6 requires that “all waste and process discharges from future development, when combined with such discharges from existing developments shall not threaten to violate, or violate applicable state or federal environmental quality statutes, rules and standards.” The planning guidelines for the goal include that “plans should buffer and separate those land uses which create or lead to conflicting requirements and impacts upon the air, water and land resources.” Title 3 of Metro’s adopted Functional Plan addresses the water quality elements of Goal 6. A portion of the West of Sandy River Study is within the Metro Boundary and, as such, must comply with Metro’s requirements. In order to provide one set of regulatory requirements within the Rural Area these standards have been met and applied consistently throughout the entire West of Sandy River Rural Area.

Goal 7: Areas Subject to Natural Disasters and Hazards

Goal 7 states that “developments subject to damage or that could result in loss of life shall not be planned nor located in known areas of natural disasters and hazards without appropriate safeguards”. Multnomah County is currently a participant in the National Flood Insurance Program. However, as noted above, a portion of the West of Sandy River Study is within Metro and, as such, must comply with Metro’s requirements. Title 3 of Metro’s adopted Functional Plan also addresses the flood hazard elements of Goal 7 and include some specific provisions regarding balanced cut-and-fill. These provisions have been met through recommended policies.

Goal 8: Recreational Needs

Goal 8 requires local jurisdictions with responsibility for recreation areas, facilities and opportunities to plan for those areas in a manner for use now and in the future. Multnomah County does not operate any parks in the study area, but Oxbow Regional Park and some other recreation facilities are found in the study area. These areas are addressed in the Land Use section of this Plan and specific policies are recommended to preserve recreational opportunities in the study area.

Goal 11: Public Facilities

Goal 11 states that all urban and rural development should be guided by, and limited to the capacity of facilities that are appropriate for the area. Local plans must address how public facilities are, or will be provided to the areas under consideration. In order to help maintain the rural character of areas outside of urban growth boundaries, local governments may not allow the extension of sewer systems into rural areas, in most cases. In addition, local governments may not rely on current water or sewer systems to accommodate rural residential development that is denser than the type of development that would be permitted without such systems. Public facilities are addressed in the Rural Center section of this Plan.

Goal 12: Transportation

Goal 12 requires communities to plan for transportation facilities and services. cities and counties must include transportation system plans that consider all types of transportation, as well as local, regional and statewide needs. Through these plans, cities and counties must weigh the options of different transportation choices, and ensure that the community does not rely on one primary mode of travel. In addition, cities and counties must incorporate environmental and economic considerations into their planning process, such as protecting air quality, ensuring that the needs of the disadvantaged are met, and facilitating the adequate flow of goods and services. This goal also requires cities and counties to coordinate their transportation planning with land use planning.

Goal 13: Energy Conservation

Goal 13 requires local jurisdictions to manage and control land use development to maximize the conservation of all forms of energy and to account for economic considerations. The environmental section of this plan considers the energy impacts of protecting natural resources in the study area. In addition, existing County policies provide guidance on energy conservation.

Transportation System Planning Rule

The West of Sandy River Plan includes a transportation system plan as required to implement Statewide Planning Goal 12. State of Oregon legislation requires local jurisdictions to prepare and periodically update a Transportation System Plan (TSP) as part of their overall Comprehensive Plan. The requirement for a TSP stems from the 1991 adoption by the State Land Conservation and Development Commission (LCDC) of the Transportation Planning Rule (TPR), Section 660, Division 12 of the Oregon Administrative Rules (subsequently modified in 1995).

Unincorporated Communities Rule

In December 1994, the LCDC adopted the Unincorporated Communities Rule. The rule provides the framework for land use designations and development standards to plan and zone for unincorporated communities outside established Urban Growth Boundaries (UGBs). The Unincorporated Communities Rule requires that established communities outside of urban growth boundaries be designated and planned as one of the several types of communities described in the Rule.

Through the Unincorporated Communities Rule, the State has acknowledged that some communities that are not rural exist outside of urban growth boundaries. State guidelines for these areas have been constructed to help counties plan for these areas and bypass a stringent “exceptions” process in their planning efforts. The rule requires that counties identify and designate such areas, plan for permitted and prohibited uses, and anticipate current and future facilities needs.

The rule requires areas to be designated as either Urban Unincorporated Communities or Unincorporated Communities. An Urban Unincorporated Community contains over 150 permanent residential dwellings and a mixture of land uses, and is served by a community sewer and water system. Because of the lack of a community sewer system and the lower number of

dwellings, both the Orient Rural Center and Pleasant Home area meet the definition of an Unincorporated Community.

Unincorporated Communities must also be defined as one of the three following types of areas:

- **Resort Communities** – established primarily for recreational and resort purposes.
- **Rural Communities** – consisting primarily of permanent residential dwellings, with at least two other lands uses present (such as commercial, industrial or public uses).
- **Rural Service Centers** – consisting primarily of commercial or industrial uses. They provide goods and services to the surrounding rural area and to persons traveling through the area.

Endangered Species Act

The decline of salmon within the Pacific Northwest has caused the National Marine Fisheries Service (NMFS) to list 26 salmon and steelhead evolutionary significant units (ESUs) in Oregon, Washington, California and Idaho as threatened or endangered under the ESA. Some jurisdictions also may be affected by ESA listings for resident fish, which remain in freshwater lakes or streams for their entire lives such as bull trout and cutthroat trout. The US Fish and Wildlife Service (USFWS) has authority to manage the recovery of these species. The Sandy River Watershed supports steelhead, chinook and coho salmon, and cutthroat trout and the Johnson Creek Watershed supports steelhead trout, all of which are covered under the ESA.

The ESA prohibits “take” of a member of any species listed as endangered, and allows the USFWS or NMFS to impose the same prohibitions for any species listed as threatened. The term “take” is defined in the ESA as to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” Take has been defined to include the intentional or negligent act of habitat modification that significantly impairs essential behavioral patterns such as breeding, spawning, rearing, migrating, feeding, or sheltering, and which results in death or injury of a protected species.

Loss or degradation of habitat resulting from land development can be considered a take, and the jurisdiction that permitted or allowed the offending development can be held liable for that take. The ESA provides for third-party lawsuits, so private citizens alleging that take has occurred because of land development can sue the permitting jurisdiction.

There is a lot of uncertainty about the exact effect of the salmon and steelhead listings on land development activities. Loss or degradation of habitat caused by development can be considered a take, and the jurisdiction that permitted or allowed the offending development can be held liable for that take. Section 4(d) of the ESA requires that NMFS list the activities that could result in a take. NMFS has also described certain precautions that, if followed, would preclude prosecution for take even if a listed species were harmed inadvertently. Such a provision is called a limit on the take prohibition. The intent is to provide local governments and other entities greater certainty regarding their liability for take.

Multnomah County has established an on-going program to respond to the listing of endangered salmonids. As part of that effort, the County has prepared the *ESA/Recovery Planning: A Decision-Support Document and Review of Multnomah County Policies, Activities and*

Regulatory Functions (dated May 2000) and is continuing to evaluate its options with regard to ESA compliance.

Metro Title 3

Title 3 of Metro's Urban Growth Management Functional Plan provides regional standards for the protection of water quality and floodplains. A portion of the West of Sandy River study area is within the Metro Boundary and, as such, must comply with Metro's requirements. In order to provide one set of regulatory requirements within the study area these standards have been applied consistently throughout the entire West of Sandy River Rural Area.

Title 3 requires local jurisdictions to adopt code to address development in "water quality and flood management areas." An official map must be adopted, and specific performance standards for water quality and flood management must be implemented. Title 3 setbacks from streams and wetlands vary from 15 to 200 feet, based on site-specific conditions.

The Metro Title 3 program for fish and wildlife is presently being developed.

ACRONYMS

Acronym	Definition
CFU (zoning)	Commercial Forest Use
CIP	Capital Improvement Plan
DSL	Division of State Lands
EFU (zoning)	Exclusive Farm Use
EMCTC	East Multnomah County Transportation Committee
ESA	Endangered Species Act
ESEE	Economic, Social, Environmental and Energy
ESU	Evolutionary Significant Units
Exception area/zone	Zones that have been approved as exempt from the requirements of a statewide planning goal. For the WSR, exception lands are not required to meet Goal 3 (farmland) or Goal 4 (forest land).
LCDC	Land Conservation and Development Commission
Metro Jurisdictional Boundary	Defines the area within which the Functional Plan has legal effect. It is located outside of the UGB in several areas around the region.
MPO	Metropolitan Planning Organization
MTIP	Metropolitan Transportation Improvement Program
MUA-20 (zoning)	Multiple Use Agriculture, 20-acre minimum lot
NMFS	National Marine Fisheries Service
OAR	Oregon Administrative Rules
ODOT	Oregon Department of Transportation
RC (zoning)	Rural Center
RR (zoning)	Rural Residential
RTP	Regional Transportation Plan
STIP	Statewide Transportation Improvement Program
SWI	Statewide Wetland Inventory
Title 3	Metro Urban Growth Management Functional Plan – Water Quality, Flood Management, and Fish and Wildlife Conservation. Imposes requirements upon local governments to adopt regulations to substantially comply.
TPR	Transportation Planning Rule
TSP	Transportation System Plan
UGB	Urban Growth Boundary
USFWS	United States Fish and Wildlife Service
SEC (zoning)	Significant Environmental Concern
LOS	Level of Service
SEC-H (Zoning)	Significant Environmental Concern – Habitat
SEC-WR (Zoning)	Significant Environmental Concern – Water Resources
PTH	Potential Tree Height

ENVIRONMENTAL PROTECTION PROGRAM CODE CONCEPTS

M E M O R A N D U M

TO: Chuck Beasley.

FROM: Cathy Corliss, Angelo Eaton & Associates

DATE: September 25, 2001

CC: Jason Franklin, Parametrix; Dan Stark, Fishman Environmental Services

FILE #: 026-001

RE: Final Code Concepts for Water Resources and Significant Wildlife Habitat Protection in the West of Sandy River Subarea

This memo describes the code concepts for environmental protection in the West of Sandy River area. The code concepts provide the framework for how significant environmental resources could be protected in the area, but will require further work before actual development code can be adopted. The code concepts described in this memo are designed to meet the requirements of Statewide Planning Goal 5 and elements of Goals 6 and 7 (as implemented through Metro's Title 3, sections 1-4). Goal 7 also is currently implemented through the Flood Plain Development ordinance and the Hillside Development ordinance.

The code concepts address the riparian corridors (and associated wetlands) and the wildlife habitat sections of Goal 5. As noted above the concepts address the portions of Goal 6 and 7 implemented by Metro's Title 3. This generally includes water quality (Goal 6) and flood hazards (Goal 7). Metro's Title 3 is used because a portion of the West of Sandy River Study is within the Metro Boundary and, as such, must comply with Metro's requirements. In order to provide one set of regulatory requirements within the Rural Area, these standards are applied consistently throughout the entire West of Sandy River area.

The recommended regulatory approach is to use the County's existing Significant Environmental Concern (SEC) Zoning Overlay District to establish protection standards for both water resource (under Goal 5 and Goal 6) and wildlife habitat (under Goal 5). The expansion of the SEC overlay to include Goal 6 (Water Quality) would be unique to the West of Sandy River Subarea. In other subarea plans the SEC Overlay is limited to Goal 5 implementation. However, other elements of the proposed West of Sandy River Subarea SEC Overlay District would be similar to the regulatory approach taken in other subareas (e.g., the West Hills Subarea), including:

- ❖ Requiring an SEC Permit for regulated development within the SEC Overlay District; and
- ❖ Establishing base standards that apply to the entire Overlay District with special standards for specific resources.

Pursuant to 660-023-0010(3), an "impact area" is a geographic area within which conflicting uses could adversely affect a significant Goal 5 resource. Within the West of Sandy River Subarea, the area within the boundaries of the SEC Overlay District represents the "impact area". Within the Impact Area there are two subcategories that include standards for the protection of natural resources: Habitat (SEC-h) and

Water Resources Areas (SEC-wr). The types of special standards that might apply in these areas are described in the Code Concepts. The regulatory approach is summarized below.

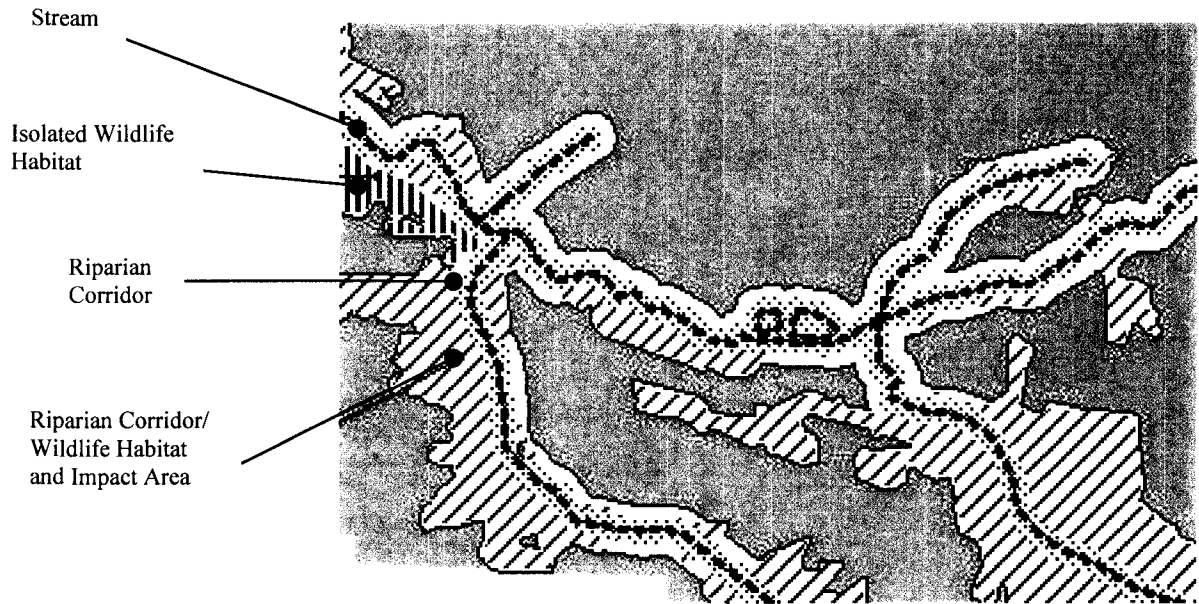
Summary of Regulatory Approach

The protection program described in this memo requires landowners to obtain a SEC permit from the County when they are proposing qualifying development. Qualifying development includes new building development, paving, grading, removal of more than 10 percent of existing vegetation and other uses that are not specifically exempted from County review. The following table provides a snapshot of how the protection program works depending on where the qualifying development is located.

Area of Regulation	Area on Map (see sample map below)	How Regulated
Areas not within the SEC boundary	All areas shown in gray on the Inventory Map*	The SEC requirements would not apply
Water Resource areas (SEC-wr)	All areas within the SEC boundary that are within 200 feet of a Protected Water Feature (see definition in Section B, in the Code Concepts)*. These are identified as "Riparian Corridor and Impact Area" on the map.	The general SEC requirements apply plus special SEC-wr standards (Code Concepts, Sections H and I)
Wildlife Habitat areas (SEC-h)	All areas within the SEC boundary* which are not otherwise identified as Water Resource Areas including areas identified on the map as: <ul style="list-style-type: none"> ◆ "Riparian Corridor/Wildlife Habitat and Impact Area", or ◆ "Isolated Wildlife Habitat" 	The general SEC requirements apply plus special SEC-h standards (Code Concepts, Sections H and J)

* Included in the Code Concepts (Section E) is a process by which an applicant can provide additional information to establish the boundary of the resource if the maps are unclear.

Map Sample from Draft Goal 5 Natural Resource Inventory



CODE CONCEPTS FOR THE SIGNIFICANT ENVIRONMENTAL CONCERN (SEC) ZONING OVERLAY WITHIN THE WEST OF SANDY RIVER SUBAREA

A. Purpose - The purpose statement, which explains why this chapter is needed, should establish the following:

1. That the chapter is intended to provide protection for natural resources or areas with natural resource values that have been identified by the County as providing benefits to the public and to protect and improve the beneficial water uses and functions and values of Water Resource Areas.
2. Regulated areas include sites meeting the standards of Statewide Planning Goal 5 for riparian corridor or habitat values as well as water quality resources pursuant to the requirements of Title 3 of the Metro Urban Growth Management Functional Plan and Statewide Planning Goal 6.
3. The SEC Overlay Zone will provide protection for natural resource sites depending upon the characteristics of the resource by establishing two subdistricts within the SEC Zoning Overlay: SEC Water Resources (SEC-wr) and SEC Habitat (SEC-h)
4. The overlay zone is intended to allow development in situations where adverse impacts from the development can be avoided or mitigated.

B. Designations - This section should establish the where these standards would apply and the relationship of the regulations to the map. Concepts that could be addressed in this section include:

1. The standards of this subsection would apply to those lands within the West of Sandy River Subarea designated SEC on the Multnomah County Zoning Map.
2. Within the boundaries of the SEC Overlay Zone, map and text definitions will be used to determine when to apply specific requirements.
3. Establish definitions for the SEC-wr and SEC-h subdistricts - Water Resource Areas (protected water feature and riparian/vegetated corridor) and Habitat Areas, as described below:
 - a) SEC-Water Resources (SEC-wr) – Protected water features, significant riparian/vegetated corridors and the adjacent impact area as established by these definitions are included within the SEC-wr Zoning Overlay Subdistrict.
 - (1) Protected Water Features shall include:
 - (a) Wetlands that provide a water quality benefit - Wetlands of metropolitan concern as shown on the Metro Water Quality and Flood Management Area Map and other wetlands which meet any one of the following criteria. Wetlands do not include artificially constructed and managed stormwater and water quality treatment facilities.
 - (i) The wetland is fed by surface flows, sheet flows or precipitation, and has evidence of flooding during the growing season, and has 60 percent or greater vegetated cover, and is over one-half acre in size;
 - (ii) The wetland qualifies as having “intact water quality function” under the 1996 Oregon Freshwater Wetland Assessment Methodology;

- (iii) The wetland is in the Flood Management Area, and has evidence of flooding during the growing season, and is five acres or more in size, and has a restricted outlet or no outlet;
 - (iv) The wetland qualifies as having “intact hydrologic control function” under the 1996 Oregon Freshwater Wetland Assessment Methodology; or
 - (v) The wetland or a portion of the wetland is within a horizontal distance of less than one-fourth mile from a water body which meets the Department of Environmental Quality definition of “water quality limited water body” in OAR Chapter 340, Division 41 (1996).
- (b) rivers, streams, and drainages downstream from the point at which 50-acres or more are drained to the water feature (regardless of whether it carries year-round flow); and
 - (c) streams within significant riparian corridors; and
 - (d) streams carrying year-round flow; and
 - (e) springs which feed stream and wetlands and have year-round flow; and
 - (f) natural lakes.
- (2) Riparian/Vegetated Corridors and Impact Area – The standard width of the riparian/vegetated corridor for all Protected Water Features should be two hundred (200) feet from the top of bank (including the Impact Area). Top of bank as defined by OAR 660-023-0090(g)
- b) SEC-Habitat (SEC-h)—The SEC Overlay Zone includes nonriparian and nonwetland natural resource sites containing habitat values such as wooded areas and areas with rare or endangered flora and fauna, as identified by the Goal 5 Inventory. Habitat areas include the significant Goal 5 habitat resource and a 25 foot buffer to protect the root zone of the vegetation. The boundaries of Significant Habitat Areas, which are designated as SEC-h, are established by the Goal 5 Natural Resource Inventory and include:
- (1) Those areas identified on the map as “Riparian Corridor/Wildlife Habitat and Impact Area” that do not otherwise meet the definition of Water Resource Area, above; and
 - (2) Those areas identified on the map as “Isolated Upland Wildlife Habitat” that do not otherwise meet the definition of Water Resource Area, above.
- C. Uses – SEC Permit Required - This Section establishes what types of activities this standards would apply to. As with the Draft Environmental Policies, we have recommended incorporating Metro’s definition of “development” with the modification that forest practices be clearly excluded and the inclusion of a reference to land divisions.**
- 1. Establish that this chapter applies to development in the SEC Overlay Zone and a definition of “development” as follows:
 - a) Any manmade change defined as buildings or other structures, mining, dredging, paving, filling, or grading in amounts greater than ten (10) cubic yards on any lot or excavation.

- b) Any other activity that results in the removal of more than 10 percent of the existing vegetation in the Water Resource Area or Habitat Area on a lot or parcel.
 - c) Other uses not specifically exempted from review, including land divisions.
2. The County may wish to state that the provisions of this section do not prohibit uses allowed [or conditionally allowed] by the primary zone. However, the amount and placement of uses and development may be regulated in order to meet the purpose and provisions of this section.
 3. The County may also wish to include a statement that prohibits pre-development clearing to alter site conditions. Potentially, the County could require that such an action would result in the maximum vegetated corridor widths and require mitigation/enhancement, regardless of pre-existing corridor conditions.

D. Exemptions – The County may wish to consider exempting certain activities from obtaining an SEC permit. These could include:

1. Uses legally existing on [adoption date];
2. Farming practices as defined in ORS 30.930 and farm use as defined in ORS 215.203, except that buildings associated with farm practices and farm uses are subject to the requirements of this document;
3. The propagation of timber or the cutting of timber for public safety or the cutting of timber in accordance with the State Forest Practices Act;
4. Routine repair and maintenance of existing structures, roadways, driveways, utility facilities, accessory uses and other development.
5. Customary dredging and channel maintenance and the removal or filling, or both, for the maintenance or reconstruction of structures such as dikes, levees, groins, riprap, drainage ditch, irrigation ditches and tile drain systems as allowed by ORS 196.905(6);
6. The maintenance and repair of existing flood control facilities;
7. The placing, by a public agency, of signs, markers, aids, etc., to serve the public;
8. Activities to protect, conserve, enhance, and maintain public recreational, scenic, historical, and natural uses on public lands;
9. Stream enhancement or restoration projects approved by the County;
10. The expansion of capacity, or the replacement, of existing communication or energy distribution and transmission systems, except substations;
11. Within SEC-wr - Change, expansion, or alteration of existing uses which do not require any modification to the exterior of the structure;
12. Within SEC-h - Change, expansion, or alteration of existing uses which require the addition of less than 400 square feet of ground coverage to the structure;

13. Construction on lots in subdivisions meeting the criteria of ORS 92.040(2) (1995);
14. Placement of structures that do not require a grading, land use or building permit;
15. Work necessary to protect, repair, maintain, or replace existing structures, utility facilities, roadways, driveways, accessory uses and exterior improvements in response to emergencies provided that after the emergency has passed, adverse impacts are mitigated; and
16. The sale of property.

E. Establishing the Boundaries of the SEC, SEC-wr or SEC-h Districts

The County may wish to allow development activities to demonstrate by on-site delineation and survey that the standards of this Chapter should not apply to the activity site. If so, the County should establish what type of permit (e.g., Type I) would be required and require site assessment information pursuant to Section G.

F. Buildable Lot Variance

In order to avoid the risk of a “taking”, the County may wish to include a “Buildable Lot Variance”. Given the large size of most lots in the West of Sandy River Subarea, this may not be necessary; however, these standards will also apply to the smaller lots within Orient and Pleasant Home. This would be a variance to avoid the loss of all economically viable use of a lot that is partially inside the SEC Overlay Zone. It would allow development on such lots provided not more than 5,000 square feet, including access roads and driveways, is disturbed. The development would still be subject to the erosion and sediment control standards. The applicant would need to demonstrate the following:

1. Without the proposed variance, the applicant would be denied economically viable use of the subject property. To meet this criterion, the applicant must show that no other application could result in permission for an economically viable use of the subject property. Evidence to meet this criterion shall include a list of uses allowed on the subject property.
2. The proposed variance is the minimum necessary to allow for the requested use;
3. The proposed variance will comply with Section J (mitigation); and
4. The proposed use complies with the standards of the base zone.

G. Application requirements - This Section should establish what information must be submitted with applications for an SEC Permit or requests for boundary modifications. The information provided must be sufficiently detailed for County staff to evaluate the impacts of the proposal. Below is a list of the type of information typically requested by a local jurisdiction for natural resource evaluation.

1. A scaled site plan which clearly identifies:
 - a) the location of all existing natural features including, but not limit to, all trees of a caliper greater than six (6) inches diameter at breast height (DBH), natural drainages on the site, springs, seeps and outcroppings of rocks, or boulders within the Water Resource Area or Habitat Area.;

- b) the location of both existing and proposed structures, parking/maneuvering areas, utilities, and other development;
 - c) a topographic map of the site at contour intervals of five feet or less showing a delineation of the Water Area or Habitat Area;
 - d) location of wetlands;
 - e) an inventory and location of existing debris and noxious materials; and
 - f) information provided for the site from the County Goal 5 Inventory.
2. A narrative describing the proposed activity and its relation to the location of the natural resources.
 3. Preparation of plans and surveys - The County may wish to specify who may prepare natural resource site surveys, mitigation plans, and management plans (e.g., type of professional expertise required), as well as what methodologies will be used. For example, the County may wish to require that wetlands be identified and delineated by a qualified wetland specialist as set forth in the 1987 Corps of Engineers Wetland Delineation Manual.
 4. Natural resource management plans - As an option, the County could allow natural resource management plans as part of the development review process for larger-scale, long-term or phased developments. This approval would allow the proposed development to occur without the need for additional development reviews, provided the proposal follows the approved plan. The natural resource management plan should include a site survey of the natural resources, a site plan, and mitigation plan. Modifications to an approved plan would require a new development review process.

H. General SEC Requirements - Standards in this section would be applied to all areas within either SEC-wr or SEC-h.

1. Site preparation and construction practices shall be followed that prevent drainage of hazardous materials or erosion, pollution, or sedimentation to water resource area or habitat area.
2. Areas of erosion or potential erosion shall be protected from loss by appropriate means. Appropriate means shall be based on current Best Management Practices and may include restriction on timing of soil disturbing activities.
3. Outdoor activities, including open fabrication or operations which create large amounts of noise, dust, or glare, vehicle maneuvering and parking areas, outside storage and display areas, and trash collection areas shall be screened from the water resource area or habitat area by sight-obscuring vegetation or fencing.
4. The types, sizes, and intensities of lights must be placed so that they do not shine directly into the water resource area or habitat area.

5. The following nuisance plants shall not be used as landscape plantings within the SEC Overlay Zone:

Table 1

Nuisance Plant List

Common Name	Scientific
Lesser celandine	<i>Chelidonium majus</i>
Canada Thistle	<i>Cirsium arvense</i>
Common Thistle	<i>Cirsium vulgare</i>
Western Clematis	<i>Clematis ligusticifolia</i>
Traveler's Joy	<i>Clematis vitalba</i>
Poison hemlock	<i>Conium maculatum</i>
Field Morning-glory	<i>Convolvulus arvensis</i>
Night-blooming Morning-glory	<i>Convolvulus nyctagineus</i>
Lady's nightcap	<i>Convolvulus seppium</i>
Pampas grass	<i>Cortaderia selloana</i>
Hawthorn, except native species	<i>Crataegus sp. except C. douglasii</i>
Scotch broom	<i>Cytisus scoparius</i>
Queen Ann's Lace	<i>Daucus carota</i>
South American Waterweed	<i>Elodea densa</i>
Common Horsetail	<i>Equisetum arvense</i>
Giant Horsetail	<i>Equisetum telemateia</i>
Crane's Bill	<i>Erodium cicutarium</i>
Robert Geranium	<i>Geranium roberianum</i>
English Ivy	<i>Hedera helix</i>
St. John's Wort	<i>Hypericum perforatum</i>
English Holly	<i>Ilex aquafolium</i>
Golden Chain Tree	<i>Laburnum watereri</i>

Common Name	Scientific
Duckweed, Water Lentil	<i>Lemna minor</i>
Fall Dandelion	<i>Loentodon autumnalis</i>
Purple Loosestrife	<i>Lythrum salicaria</i>
Eurasian Watermilfoil	<i>Myriophyllum spicatum</i>
Reed Canary grass	<i>Phalaris arundinacea</i>
Annual Bluegrass	<i>Poa annua</i>
Swamp Smartweed	<i>Polygonum coccineum</i>
Climbing Binaweed	<i>Polygonum convolvulus</i>
Giant Knotweed	<i>Polygonum sachalinense</i>
English, Portugese Laurel	<i>Prunus laurocerasus</i>
Poison Oak	<i>Rhus diversiloba</i>
Himalayan Blackberry	<i>Rubusdiscolor</i>
Evergreen Blackberry	<i>Rubus laciniatus</i>
Tansy Ragwort	<i>Senecio jacobaea</i>
Blue Bindweed	<i>Solanum dulcamara</i>
Garden Nightshade	<i>Solanum nigrum</i>
Hairy Nightshade	<i>Solanum sarrachoides</i>
Common Dandelion	<i>Taraxacum officinale</i>
Common Bladderwort	<i>Ultricularia vuigaris</i>
Stinging Nettle	<i>Urtica dioica</i>
Periwinkle (large leaf)	<i>Vinca major</i>
Periwinkle (small leaf)	<i>Vinca minor</i>
Spiny Cocklebur	<i>Xanthium spinoseum</i>
Bamboo sp.	various genera

6. Coordination among agencies – *[NOTE: The regulations of other agencies may apply to development proposals for natural resource areas. These agencies may include the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, the Environmental Protection Agency, the Oregon Division of State Lands, and the Oregon Department of Fish and Wildlife.]* The County may wish to establish standards regarding the notification of applicable agencies for referral responses to specific development proposals prior to the issuance of County permits. The County may also wish to encourage the applicant to contact applicable agencies before development plans are completed so as to consider the requirements and restrictions that may be imposed by the agencies.

I. Specific Requirements for Development within SEC-wr Areas – These standards would apply within the 200' riparian/vegetated corridor in addition to the requirements in Section H, above.

1. In addition to other SEC Permit submittal requirements, any application to develop in a SEC-wr Subdistrict shall also include:
 - a) A site plan drawn to scale showing the Water Resource Area boundary, the location of all existing and proposed structures, roads, watercourses, drainageways, stormwater facilities, utility installations, and topography of the site at a contour interval equivalent to the best available U.S. Geological Survey 7.5' or 15' topographic information;
 - b) An assessment of the existing condition of the Water Resource Area in accordance with Table 2. *[NOTE: Table 2 is from work the Unified Sewerage Agency (USA) did for Title 3 compliance. In general, the USA table is clearer and easier to use than the similar table from the Title 3 Model Ordinance. However, the USA version references two additional USA documents: Site Assessment Guidance Document and Landscape Guidance Document. Three potential options for the County to consider: (1) delete the references to additional guidance documents and let the table stand as it is; (2) delete the references to additional guidance and add supporting text to the table to further clarify the requirements; or, (3) consider developing local versions of the USA guidance documents.]*
 - c) An inventory of vegetation, including percentage ground and canopy coverage, and presence of nuisance plant listed in Table 1.
 - d) A description and map of soil types in the proposed development area and the locations and specifications for all proposed draining, filling, grading, dredging, and vegetation removal, including the amounts and methods;
 - e) A study of any flood hazard, erosion hazard, and/or other natural hazards in the proposed development area and any proposed protective measures to reduce such hazards;
 - f) A detailed Mitigation Plan as described in subsection I(6), if required; and
 - g) A description of how the proposal meets the standards of this section.
2. Exception for low impact sites – The County may wish to provide an opportunity for development sites that meet the following criterion to avoid some or all of the requirements of this Section. Applicants would need to submit sufficient information to demonstrate that they meet the criteria (e.g., topographic data) and would still have to meet the standards in Section H, above.

- a) The development site is at least one hundred (100) feet from top of bank or top of ravine, whichever results in a greater distance from the Protect Water Feature.

Top of ravine is the break in the $\geq 25\%$ slope. Slope should be measured in 25-foot increments away from the water feature until slope is less than 25% (top of ravine) Where multiple resources are present (e.g., stream with wetlands along banks), the starting point for measurement should be whichever offers greatest resource protection.

3. Alternatives Analysis Required - The Code should identify a means by which a proposed use or development activity, which poses a potentially adverse impact to a Water Resource Area can be allowed if there is no alternative. The process of making that determination typically requires an alternatives analysis to be prepared by the applicant. The alternatives analysis should demonstrate that:

- a) No practicable alternatives to the requested development exist that will not disturb the Water Resource Area;
- b) Development in the Water Resource Area has been limited to the area necessary to allow for the proposed use; and
- c) The Water Resource Area can be restored to an equal or better condition; or
- d) Any net loss of resource area, function and/or value can be mitigated. *[NOTE: The County may also wish to provide an exception for the alteration, addition, rehabilitation or replacement of existing structures which would be somewhat easier to meet (e.g., that impacts be minimized and mitigation occur to the maximum extent feasible)].*

4. Development standards within SEC-wr Subdistrict - This section establishes what standards must be met within the SEC-wr Overlay Zone. The following are some examples of development standards that could be used to protect water resources areas:

- a) Development shall occur as far as practically possible from the stream.
- b) Development of trails, rest points, viewpoints, and other facilities for the enjoyment of the resource must be done in such a manner so as to reduce impacts on the natural resource while allowing for the enjoyment of the natural resource.
- c) Development in areas of dense standing trees will be designed to minimize the numbers of trees to be cut. No more than 50 percent of mature standing trees (of 6-inch diameter or greater at a 5-foot. height) shall be removed without a one-for-one replacement with comparable species. The site plan for the proposed activity shall identify all mature standing trees by type, size, and location, which are proposed for removal, and where and what type of tree replacement (if applicable) is to occur.
- d) Areas of standing trees, shrubs, and natural vegetation will remain connected or contiguous, particularly along natural drainage courses, except where mitigation is approved, so as to provide a transition between the proposed development and the natural resource, provide opportunity for food, water, and cover for animals located within the natural resource location, and to protect the visual amenity values of the natural resource.

- e) The Water Resource Area shall be restored to “good condition” and maintained in accordance with the mitigation plan and the specifications in Table 2.
- f) To the extent practicable, existing vegetation shall be protected and left in place. Work areas shall be carefully located and marked to reduce potential damage to the Water Resource Area. Trees in the Water Resource Area shall not be used as anchors for stabilizing construction equipment.
- g) Where existing vegetation has been removed, or the original land contours disturbed, the site shall be revegetated, and the vegetation shall be established as soon as practicable. Nuisance plants, as identified in Table 1, may be removed at any time. Interim erosion control measures such as mulching shall be used to avoid erosion on bare areas. Nuisance plants shall be replaced with non-nuisance plants by the next growing season.
- h) Prior to construction, the Water Resource Area shall be flagged, fenced or otherwise marked and shall remain undisturbed except as otherwise allowed by this chapter. Such markings shall be maintained until construction is complete.
- i) Stormwater quantity control and quality control facilities:
 - (1) Stormwater management shall be conducted in a manner that does not increase the flow of stormwater to the stream above pre-development levels.
 - (2) The stormwater quantity control and quality control facility may only encroach a maximum of 25 feet into the outside boundary of the Water Resource Area of a primary water feature; and
 - (3) The area of encroachment must be replaced by adding an area equal in size and with similar functions and values to the Water Resource Area on the subject property.
- j) Additions, alterations, rehabilitation and replacement of lawful structures.
 - (1) For existing structures, roadways, driveways, accessory uses and development which are nonconforming, this document shall apply in addition to the nonconforming use regulations of the County zoning ordinance (Title ____).
 - (2) Additions, alterations, rehabilitation or replacement of existing structures, roadways, driveways, accessory uses and development shall not encroach closer to the Protected Water Feature than the existing structures, roadways, driveways, accessory uses and development.

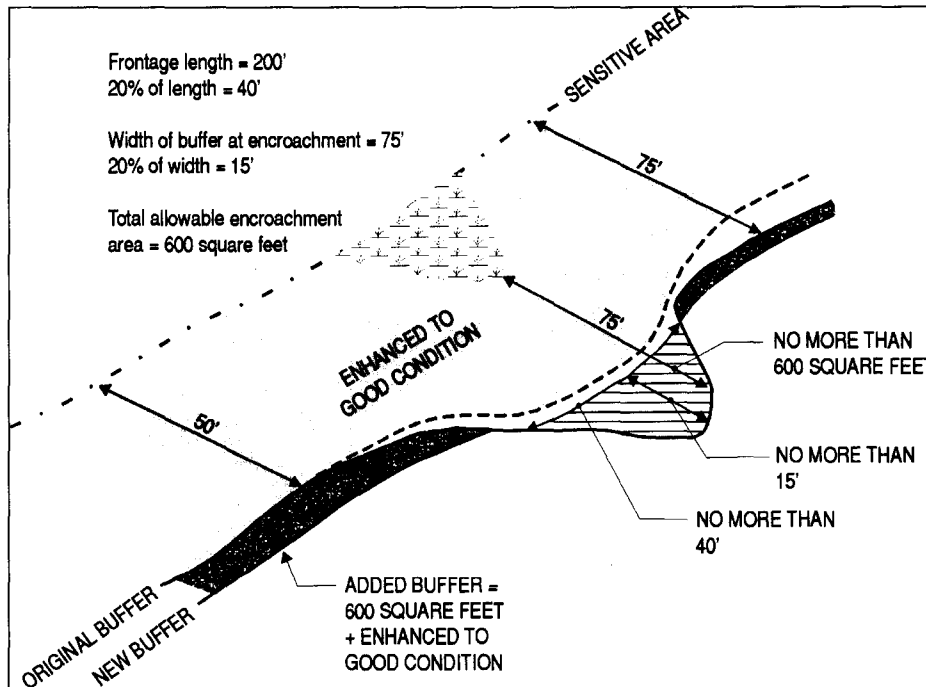
5. Buffer Averaging

As an option, the County may also wish to allow “buffer averaging”. For example, development activities, which are within a designated SEC-wr, may be allowed to reduce the width of the 200 foot riparian/vegetated corridor and impact area under the following circumstances (see Figure 1 for an illustration):

- a) Site assessment information pursuant to Section G has been submitted.

- b) The riparian/vegetated corridor is certified to be in a marginal or degraded condition pursuant to Table 2. Buffer averaging is not allowed to encroach in areas certified to be in good condition.
- c) The maximum encroachment does not exceed 20% of the frontage length of the vegetated corridor by 20% of the required width.
- d) The entire remaining vegetated corridor on the project site or the first 50 feet closest to the stream (whichever is less) will be enhanced to "good" condition pursuant to Table 2.
- e) The area of encroachment will be replaced at a 1:1 ratio.
- f) The replacement area will be incorporated into the remaining vegetated corridor on the project site and meet the "good" condition pursuant to Table 2, regardless of its distance from the resource area.

Figure 1



6. Mitigation - Mitigation may be required to offset the impacts of development within the SEC-wr Overlay District. This section establishes how mitigation can occur. It also includes an optional exception to the mitigation requirement for development that is permitted to allow "reasonable use" of a site.
- a) Mitigation Sequence. Mitigation includes avoiding, minimizing or compensating for adverse impacts to regulated natural resource areas. When a proposed use or development activity poses potentially adverse impacts to a regulated natural resource area, the preferred sequence of mitigation as defined below shall be followed unless the applicant demonstrates that an overriding public benefit would warrant an exception to this preferred sequence.

- (1) Avoiding the impact altogether by not taking a certain action or parts of actions on that portion of the site which contains the regulated natural resource area;
 - (2) Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
 - (3) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
 - (4) Compensating for the impact by replacing, enhancing or providing substitute resources or environments on-site.
 - (5) Compensating for the impact by replacing, enhancing or providing substitute resources or environments off-site.
 - (6) When evaluating potential impacts to the natural resource, the County may consider whether there is an overriding public benefit, given:
 - (a) The extent of the public need for the proposed regulated activity;
 - (b) The functional values of the Water Resource Area that may be affected by the proposed regulated activity;
 - (c) The extent and permanence of the adverse effects of the regulated activity on the Water Resource Area, either directly or indirectly;
 - (d) The cumulative adverse effects of past activities on the Water Resource Area, either directly or indirectly; and
 - (e) The uniqueness or scarcity of the Water Resource Area that may be affected.
- b) **Mitigation Exemption for Reasonable Use.** If a project qualifies for a Buildable Lot Variance for construction of a single family residence in accordance with Section F, the requirements for mitigation will be waived if adverse impacts to a regulated natural resource area cannot be avoided on a parcel which constituted a legal building site prior to the adoption of this Chapter.
- c) **Compensatory Mitigation: General Requirements.** As a condition of any permit or other approval allowing alteration which results in the loss or degradation of regulated natural resource areas, or as an enforcement action, compensatory mitigation shall be required to offset impacts resulting from the actions of the applicant or violator.
- (1) Except for persons exempt under Section b, above, any person who alters or proposes to alter regulated natural resource areas shall restore or create natural resource areas equivalent to or larger than those altered in order to compensate for resource losses.
 - (2) The following ratios apply to the creation or restoration of natural resource areas. The first number specifies the amount of natural resource area to be created and the second specifies the amount of natural resource area to be altered or lost.

Creation (off-site)	2:1
Restoration (off-site)	1.5:1
Creation (on-site)	1.5:1
(Restoration (on-site)	1:1

- (3) Only marginal or degraded water resource areas may be the subject of a restoration project proposed as part of a Mitigation Plan.
- (4) The off-site mitigation shall be as close to the development as is practicable above the confluence of the next downstream tributary, or if this is not practicable, within the watershed where the development will take place or as otherwise specified by the County.
- (5) Compensation shall be completed prior to destruction, where possible.
- (6) In order to ensure that the mitigation area will be protected in perpetuity, proof that a deed restriction or other preservation measure, such as a conservation easement, has been placed on the property where the mitigation is to occur is required.

Table 2
Riparian/Vegetated Corridor Standards

Existing Riparian/Vegetated Corridor Condition	Requirements of Riparian/Vegetated Corridor Protection, Enhancement, and/or Mitigation
<p style="text-align: center;">Good Corridor</p> <ul style="list-style-type: none"> • Combination of native trees, shrubs, and groundcover covering greater than 80% of the area <p style="text-align: center;">and</p> • Greater than 50% tree canopy exists (aerial measure) 	<ul style="list-style-type: none"> • Provide certification, pursuant to the Site Assessment Guidance Document, to the County by a professional ecologist/biologist that the riparian/ vegetated corridor meets condition criteria. • Remove any invasive non-native or nuisance species and debris and noxious materials within the corridor by hand. • Provide the County with a native plant revegetation plan appropriate to the site conditions developed by an ecologist/biologist or landscape architect to restore condition and mitigate any habitat or water quality impacts related to development. See Landscape Guidance Document. • Revegetate impacted area per approved plan to re-establish “good” corridor conditions
<p style="text-align: center;">Marginal Corridor</p> <ul style="list-style-type: none"> • Combination of native trees, shrubs, and groundcovers covering 50%-80% of the area <p style="text-align: center;">and/or</p> • 26-50% tree canopy exists (aerial measure) <p style="text-align: center;">(Enhancement up to “good” corridor required regardless of planned impact or not)</p>	<ul style="list-style-type: none"> • Provide certification, pursuant to the Site Assessment Guidance Document, to the County by a professional ecologist/biologist that the riparian/vegetated corridor meets condition criteria. • Remove any invasive non-native or nuisance species and debris and noxious materials within the corridor by hand or mechanically with small equipment, as appropriate to minimize damage to existing native vegetation. • Provide County with a native plant revegetation plan appropriate to the site conditions developed by an ecologist/biologist or landscape architect to restore to a good corridor condition. See Landscape Guidance Document. • Vegetate corridor to establish “good” corridor conditions
<p style="text-align: center;">Degraded Corridor</p> <ul style="list-style-type: none"> • Combination of native trees, shrubs, and groundcovers covering is less than 50% of the area <p style="text-align: center;">and/or</p> • Less than 25% tree canopy exists (aerial measure) <p style="text-align: center;">and/or</p> • Greater than 10% of the area is covered by invasive, non-native species <p style="text-align: center;">(Enhancement up to “good” corridor required regardless of planned impact or not)</p>	<ul style="list-style-type: none"> • Provide certification, pursuant to the Site Assessment Guidance Document, to the County by a professional ecologist/biologist that the riparian/vegetated corridor meets condition criteria. • Remove any invasive non-native or nuisance species and debris and noxious materials within the corridor by hand or mechanically as appropriate. • Provide County with a native plant revegetation plan appropriate to the site conditions developed by an ecologist/biologist or landscape architect to restore to a good corridor condition. See Landscape Guidance Document. • Vegetate corridor to establish “good” corridor conditions

7. Mitigation plans - The Code should include standards for mitigation plans that may be required as a result of development within the SEC Overlay District. Typically, natural resource mitigation plans are required to contain the following information:
 - a) A description of adverse impacts that will be caused as a result of development.
 - b) An explanation of how adverse impacts to resource areas will be avoided, minimized, and/or mitigated.
 - c) A list of all responsible parties including, but not limited to, the owner, applicant, contractor or other persons responsible for work on the development site.
 - d) A map showing where the specific mitigation activities will occur.
 - e) An implementation schedule, including timeline for construction, mitigation, mitigation maintenance, monitoring, reporting and a contingency plan. All in-stream work in fish-bearing streams must be done in accordance with the Oregon Department of Fish and Wildlife in-stream timing schedule.

J. Specific Requirements for Development within SEC-h Areas – These standards would apply in addition to the general standards in Section H, above.

1. In addition to the information required by Section H, an application for development in an area designated SEC-h shall include an area map showing all properties which are adjacent to or entirely or partially within 200 feet of the proposed development, with the following information, when such information can be gathered without trespass:
 - a) Location of all existing forested areas (including areas cleared pursuant to an approved forest management plan) and non-forested "cleared" areas;

For the purposes of this section, a forested area is defined as an area that has at least 75% crown closure, or 80 square feet of basal area per acre, of trees 11 inches DBH and larger, or an area which is being reforested pursuant to Forest Practice Rules of the Department of Forestry. A non-forested "cleared" area is defined as an area which does not meet the description of a forested area and which is not being reforested pursuant to a forest management plan.
 - b) Location and width of existing and proposed public roads, private access roads, driveways, and service corridors on the subject parcel and within 200 feet of the subject parcel's boundaries on all adjacent parcels;
 - c) Existing and proposed type and location of all fencing on the subject property and on adjacent properties and on properties entirely or partially within 200 feet of the subject property.
2. Development standards:
 - a) Where a parcel contains any non-forested "cleared" areas, development shall only occur in these areas, except as necessary to provide access and to meet minimum clearance standards for fire safety.

- b) Development shall occur within 200 feet of a public road capable of providing reasonable practical access to the developable portion of the site.
- c) The access road/driveway and service corridor serving the development shall not exceed 500 feet in length.
- d) The access road/driveway shall be located within 100 feet of the property boundary if adjacent property has an access road or driveway within 200 feet of the property boundary.
- e) The development shall be within 300 feet of the property boundary if adjacent property has structures and developed areas within 200 feet of the property boundary.
- f) Fencing within a required setback from a public road shall meet the following criteria:
 - (1) Fences shall have a maximum height of 42 inches and a minimum 17 inch gap between the ground and the bottom of the fence.
 - (2) Wood and wire fences are permitted. The bottom strand of a wire fence shall be barbless. Fences may be electrified, except as prohibited by County Code.
 - (3) Cyclone, woven wire, and chain link fences are prohibited.
 - (4) That portion of the required setback along a public road.
 - (5) Fences with a ratio of solids to voids greater than 2:1 are prohibited.
 - (6) Fencing standards do not apply in an area on the property bounded by a line along the public road serving the development, two lines each drawn perpendicular to the principal structure from a point 100 feet from the end of the structure on a line perpendicular to and meeting with the public road serving the development, and the front yard setback line parallel to the public road serving the development.
- g) Nuisance plants pursuant to Table 1 shall not be planted as landscaping and shall be controlled within cleared areas of the subject property.
- h) Wildlife Conservation Plan. An applicant shall propose a wildlife conservation plan if one of two situations exist.
 - (1) The applicant cannot meet the development standards of Section (2) because of physical characteristics unique to the property. The applicant must show that the wildlife conservation plan results in the minimum departure from the standards required in order to allow the use; or
 - (2) The applicant can meet the development standards of Section (2), but demonstrates that the alternative conservation measures exceed the standards of Section 2 and will result in the proposed development having a less detrimental impact on forested wildlife habitat than the standards in Section 2.
 - (3) The wildlife conservation plan must demonstrate the following:

- (a) That measures are included in order to reduce impacts to forested areas to the minimum necessary to serve the proposed development by restricting the amount of clearance and length/width of cleared areas and disturbing the least amount of forest canopy cover.
- (b) That any newly cleared area associated with the development is not greater than one acre, excluding from this total the area of the minimum necessary accessway required for fire safety purposes.
- (c) That no fencing will be built and existing fencing will be removed outside of areas cleared for the site development except for existing cleared areas used for agricultural purposes.
- (d) That revegetation of existing cleared areas on the property at a 2:1 ratio with newly cleared areas occurs if such cleared areas exist on the property.
- (e) That revegetation and enhancement of disturbed stream riparian areas occurs along drainages and streams located on the property.

RURAL CENTER CODE CONCEPTS



RURAL COMMUNITY RESIDENTIAL ZONE

West of the

Sandy River

Rural Area

Transportation and

Land Use Plan

This paper describes general concepts for zoning regulations for development in residential zones within the Orient Rural Community. They are based on the requirements currently in place for this area. The purpose statement includes concepts from the vision, as well as from the existing code.

Purpose

The purposes of the Orient Rural Community Residential zone are to provide standards and review procedures which will encourage concentrations of rural residential development for people who want to live in a rural setting close to small-scale, low impact commercial and industrial services; to provide for home occupations and marketing of home-grown products and to provide standards for rural land use and development consistent with the desired rural character and capability of the land and natural resources.

Permitted Uses

- Single-family detached dwellings
- Farm Use
- Propagation/harvest of forest products
- Public and private conservation areas, etc.

Uses Under Prescribed Conditions (administrative land use decision)

- Type B Home occupations
- An additional dwelling (manufactured dwelling) for help required for a primary use.
- Wholesale or retail sales for products raised or grown on the premises.

Conditional Uses

- Planned developments

Dimensional Requirements

- Minimum lot size: 1 acre
- Minimum yard dimensions (setbacks)
 - Front: 30 feet
 - Side: 10 feet
 - Street side: 30
 - Rear: 30
- Maximum height: 35 feet
- Minimum front lot line length: 50 feet



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Design Standards

- Access and circulation: Any lot in this district shall abut a street, or shall have other access determined by the approval authority to be safe and convenient for pedestrians, passengers and emergency vehicles.
- Landscaping: There are no landscaping requirements.
- Vehicle parking: Two spaces for each dwelling.
- Utilities standards: As existing in Framework Plan Policy 37, includes water and disposal system, drainage, energy and communications.





RURAL COMMUNITY COMMERCIAL ZONE

West of the

Sandy River

Rural Area

Transportation and

Land Use Plan

This paper describes general concepts for zoning regulations for development in commercial zones within the Orient Rural Community. Existing plan Policy 7 states that commercial and community uses are intended to be primarily for the residents of the rural area and some tourist services. State rules require that commercial uses must be small-scale low impact (not exceeding 4,000 sq. feet). If larger uses are allowed, findings in the plan must show that they are needed to serve the community and surrounding rural area or the travel needs of people passing through the area. Making such findings is problematic due to the proximity of the Rural Center to the Urban Growth Boundary, and staff is therefore working with the size limitation in the Rules.

Purpose

The Rural Community Commercial zone is intended to provide for small-scale, low-impact commercial uses that serve the population of the immediate Rural Community area, and the immediate surrounding rural area as well as those travelling through the area. The uses allowed within the zone will reinforce the rural nature of the area and will not adversely impact adjacent agricultural uses or exceed the capacity of the transportation system serving the area.

Permitted Uses

- The same uses listed as “Permitted” in the residential zone.

Uses Under Prescribed Conditions (administrative land use decision)

Potential uses (regulated to buildings not exceeding 4,000 square feet) could include:

- Automobile repair
- Restaurant
- Tavern
- Office for professional services
- Garden supply store
- Hardware store
- Retail bakery
- Service station
- Beauty and barber shop
- Video tape rental
- (industrial use)

The above uses also could be grouped into broader categories such as:

- Auto-oriented uses
- Entertainment (clubs, amusement uses)
- Medical and dental offices



West of the

Sandy River

Rural Area

Transportation and

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- Mixed use development
- Office uses
- Personal and professional services (child care, restaurants, dry cleaners, banks, etc.)
- Retail trade and services

Other uses

- Uses authorized under Goals 3 and 4, such as farms, nurseries, farm stands, etc.

Conditional Uses

- Community Services as found in Section 7020 of the code. Includes such uses as a campground, cemetery, church, group care facility, park, library, government building, etc.
- Other uses not specified above and subject to the following conditions:
 - A) The use will not force a significant change in, or significantly increase the cost of, accepted farm or forest practices on surrounding lands devoted to farm or forest use;
 - (B) The proposed use will not, by itself or in combination with existing uses in the community, result in public health hazards or adverse environmental impacts that violate state or federal water quality regulations;
 - (C) The proposed use will not, by itself or in combination with existing uses in the community, exceed the carrying capacity of the soil or of existing water supply resources and sewer services; and
 - (D) The traffic generated by the proposed use is consistent with the identified function, capacity, and level of service of transportation facilities serving the community; and
 - (E) The proposed use will not create significant adverse effects on existing uses or permitted uses on adjacent land, considering such factors as noise, dust and odors.

Dimensional Requirements

- Same as existing RC zone
- Lot area: The building site shall be of sufficient size to accommodate on-site sewage disposal, stormwater/drainage control, and water systems unless these services are provided by a public or community source or can be accessed by easement, required parking, landscaping, and yard areas (same as existing).
- Lot coverage: No more than 20 percent of a lot or parcel shall be covered by buildings.



West of the

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Rural Area

Transportation and

Land Use Plan

Design Standards

- Access and circulation: Any lot in this district shall abut a street, or shall have other access determined by the approval authority to be safe and convenient for pedestrians, passengers and emergency vehicles.
- Landscaping: Existing in off-street parking code, design review.
- Vehicle parking: Parking and loading shall be provided as required in Section .6100 through .6148 of the code.
- Utilities standards: As existing in Framework Plan Policy 37, includes water and disposal system, drainage, energy and communications.
- Traffic Impact Analysis: A traffic impact analysis will be required for all new uses and expansions of existing uses of greater than 25 percent of the floor area.





RURAL COMMUNITY INDUSTRIAL ZONE

West of the

Sandy River

Rural Area

Transportation and

Land Use Plan

This paper describes general concepts for zoning regulations for industrial zones within the Orient Rural Community. State rules require that industrial uses must be either small-scale low impact (not exceeding 10,000 sq. feet). As is the case with commercial uses, larger uses would have to be justified by findings in the Framework Plan. For industrial uses, the findings would need to show:

- That the uses do not provide employment that exceeds the projected employment needs within the community and surrounding rural area,
- That the use would not rely on workers coming from the within the UGB, and
- That the determination of needed employment is coordinated with Metro projections.

Due to the location of the community adjacent to the Urban Growth Boundary, staff does not believe the requirements can be met and is therefore using the size limitation in the Rules .

Purpose

The Rural Community Industrial zone is intended to support small-scale, low-impact industrial uses, expansion of existing industrial uses and uses that require proximity to a rural resource. The uses allowed within the zone will reinforce the rural nature of the area, will not adversely impact adjacent agricultural uses, will not exceed the capacity of the transportation system serving the area and will not exceed sewer or water capacity of the site.

Uses Under Prescribed Conditions (administrative land use decision)

- Potential uses (regulated to buildings not exceeding 10,000 square feet) could include:
- Uses authorized under Goals 3 and 4, such as farms, nurseries, farm stands, etc.
- Agricultural services
- Construction contractor offices

Conditional Uses

- Manufacturing and processing of:
 - (i) Apparel and other finished products made from fabrics (SIC 23)
 - (ii) Millwork, veneer, plywood, and structural wood members (SIC 243);
 - (iii) Wood containers (SIC 244);
 - (iv) Wood products, not elsewhere classified (SIC 2499);
 - (v) Furniture and fixtures (SIC 25);
 - (vi) Stone, clay, glass products (SIC 32) except: cement (SIC 324), ready-mix concrete (SIC 3273), and minerals and earths ground or otherwise treated (SIC 3295);
 - (vii) Fabricated metal products (SIC 34);
 - (viii) Household appliances (SIC 363);
 - (ix) Electric lighting and wiring equipment (SIC 364);



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- (x) Communications equipment (SIC 366);
- (xi) Electronic components and accessories (SIC 367);
- (xii) Motor vehicle parts and accessories (SIC 3714);
- (xiii) Laboratory apparatus and analytical, optical, measuring, and controlling instruments (SIC 382);
- (xix) Food and kindred products

- Public warehousing and storage (SIC 4220);
- Freight trucking terminal, with or without maintenance facility (SIC 4231);
- Wholesale trade (SIC 50).
- Automotive repair (SIC 753);

The above uses also could be grouped in broader categories:

Industrial

- Heavy manufacturing, assembly, and processing of raw materials
- Light manufacture
- Warehousing and distribution
- Uses similar to those listed above

Accessory Uses and Structures

Conditional Uses

- Community Services as found in Section 7020 of the code. Includes such uses as a campground, cemetery, church, group care facility, park, library, government building, etc.
- Other uses not specified above and subject to the following conditions:
 - A) The use will not force a significant change in, or significantly increase the cost of, accepted farm or forest practices on surrounding lands devoted to farm or forest use;
 - (B) The proposed use will not, by itself or in combination with existing uses in the community, result in public health hazards or adverse environmental impacts that violate state or federal water quality regulations;
 - (C) The proposed use will not, by itself or in combination with existing uses in the community, exceed the carrying capacity of the soil or of existing water supply resources and sewer services; and
 - (D) The traffic generated by the proposed use is consistent with the identified function, capacity, and level of service of transportation facilities serving the community; and
 - (E) The proposed use will not create significant adverse effects on existing uses or permitted uses on adjacent land, considering such factors as noise, dust and odors.



West of the

Sandy River

Rural Area

Transportation and

Land Use Plan

Dimensional Requirements

- Yards: Same as existing RC zone.
- Lot area: The building site shall be of sufficient size to accommodate on-site sewage disposal, stormwater drainage/control, and water systems unless these services are provided by a public or community source or can be accessed by easement, required parking, landscaping, and yard areas
- Lot coverage: No more than 20 percent of a lot or parcel shall be covered by buildings.

Design Standards

- Access and circulation: Any lot in this district shall abut a street, or shall have other access determined by the approval authority to be safe and convenient for pedestrians, passengers and emergency vehicles.
- Landscaping: Existing in off-street parking and design review code.
- Vehicle parking: Parking and loading shall be provided as required in Section .6100 through .6148 of the code.
- Utility standards: As existing in Framework Plan Policy 37, includes water and disposal, drainage, energy and communications.
- Traffic Impact Analysis: A traffic impact analysis will be required for all new uses and expansions of existing uses of greater than 25 percent of the floor area.





PLEASANT HOME RURAL SERVICE CENTER ZONE

West of the
Sandy River
Rural Area
Transportation and
Land Use Plan

The Pleasant Home Rural Service Center will continue to develop according to the current Rural Center Zoning (see map below). However, according to the State Unincorporated Communities Rule and County Policy 7, all of the commercial or industrial uses need to meet the small-scale low impact standard and serve the immediate area.

ORIENT AND PLEASANT HOME HISTORIC STRUCTURES

MULTNOMAH COUNTY, OREGON

HISTORIC CONTEXT STATEMENT

SEPTEMBER 1990



STATEMENT OF SIGNIFICANCE

Resource Nos. 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 62, 63, 64, and 65.

The potential Pleasant Home/Orient Rural Historic District is an area historically associated with the agricultural history of Multnomah County. While the area was settled early in Multnomah County, the biggest period of growth occurred in the first half of the 20th century when road and rail improvements facilitated transportation of agricultural goods to market.

In 1903 service began on an electric interurban railroad line between Portland, Estacada via Gresham and Boring. Power was supplied by the Cazadero dam on the Clackamas River. Branch lines were extended to Bull Run and Troutdale. By 1930 the best of the agricultural land was in production. The area remains today in agricultural use, however, the products have changed to reflect market demands.

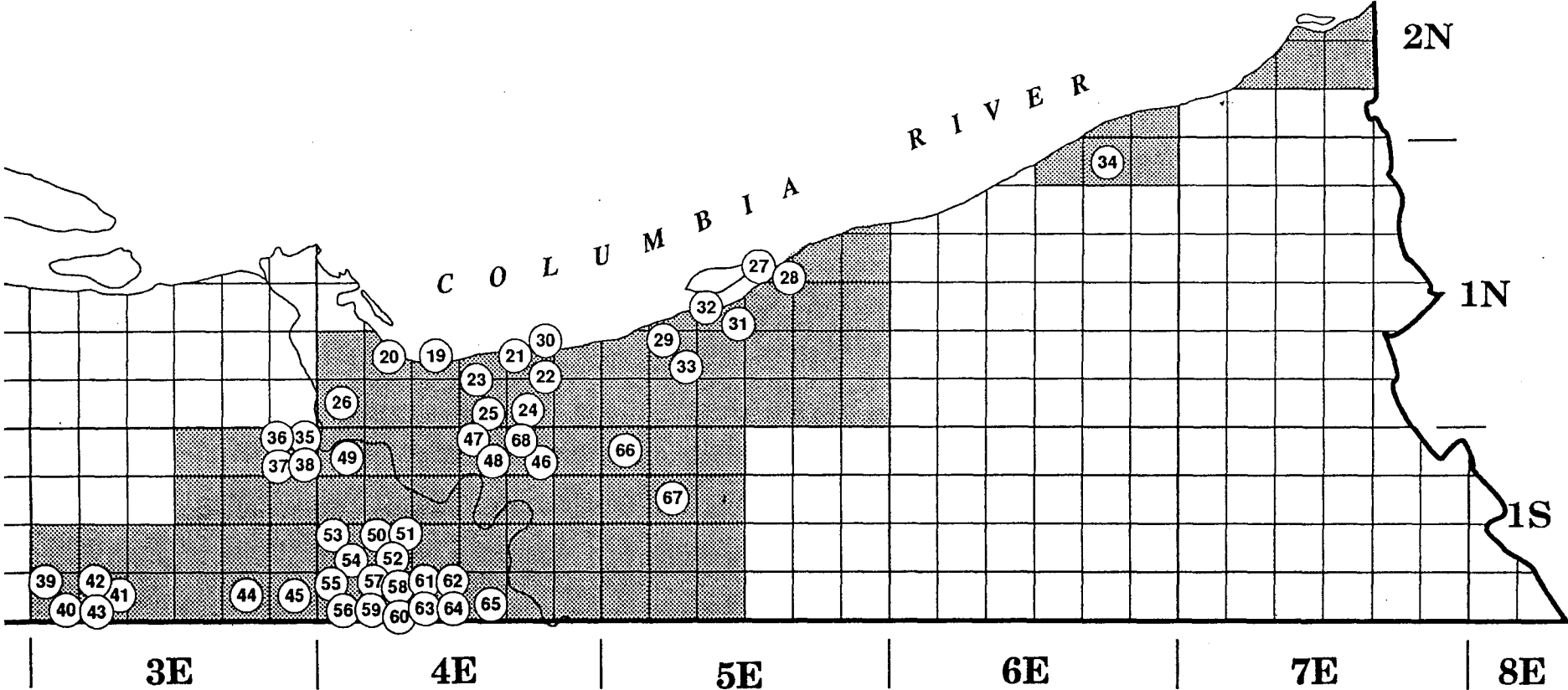
The second factor effecting transportation was the improvement of roads for vehicular traffic. During the latter part of the 19th century, farmers collectively worked to improve roads. In Aside from the obvious advantages for marketing their farm products, the incentive of free mail delivery spurred rural road improvements. By the 1913 the Good Roads Movement had caused local governments to play an active role in road improvements.

The extant historic resources in the area primarily date from the Progressive Era, 1884 through 1913. Of the 15 inventoried properties five were built after 1914. Consequently extant resources reflect the popular building styles of that period. Bungalow Craftsman dwellings are the most numerous type in the Pleasant Home/Orient area. Western barns, either the simple gable or gambrel roof variation, are typical. Smaller sheds and outbuildings were utilitarian in nature and ususally showed no influence of the leading architectural styles. These buildings are nonetheless important for they illustrate the organization and operation of the farmstead of the period.

To date fifteen farm complexes or isolated farm buildings have been inventoried and are identified with the Pleasant Home/Orient area. While many are not considered individually significant, as a group they are significant because they represent an important aspect of Multnomah County's agricultural, economic and social history.

FIGURE III

RESOURCE DISTRIBUTION MAP: EAST COUNTY



⑧ Resource Number





Current Owner: Chiodo

R994170270



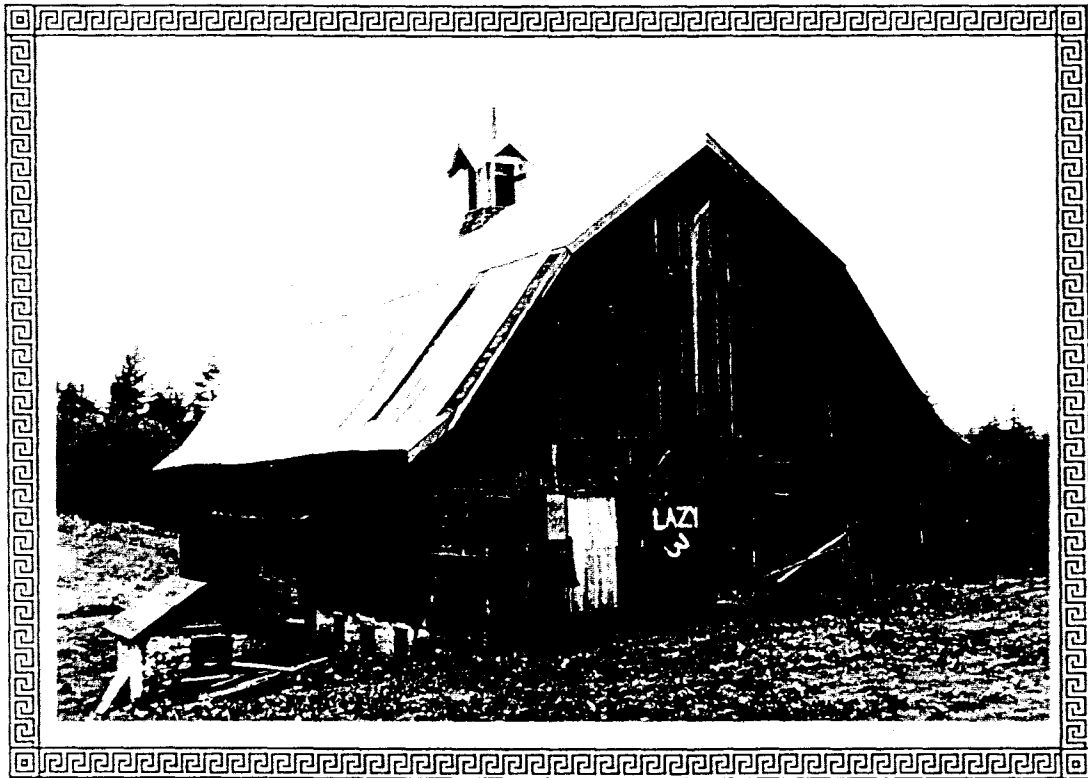
Current Owner: Rea

R994170350



Current Owner: Youmans

R994170690



Current Owner: Shattuck

R994180950



Current Owner: Kelly

R994181320



Current Owner: Richards

R994190040



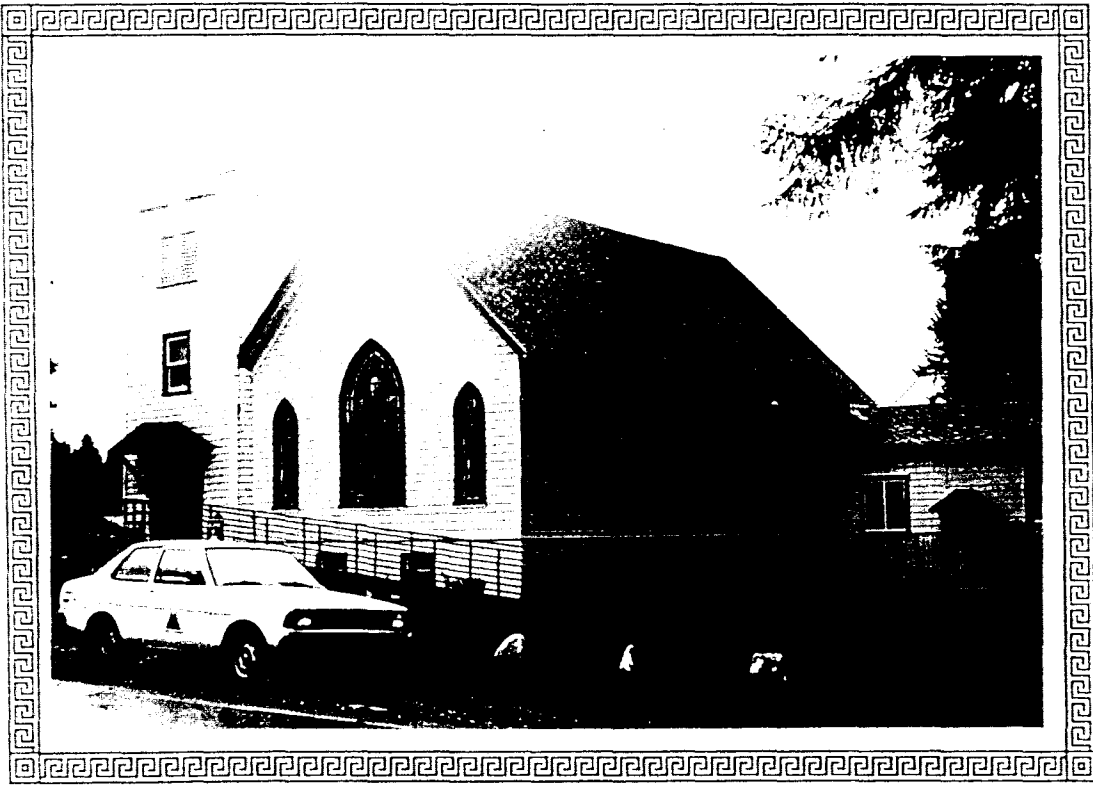
Current Owner: Harris

R994191200



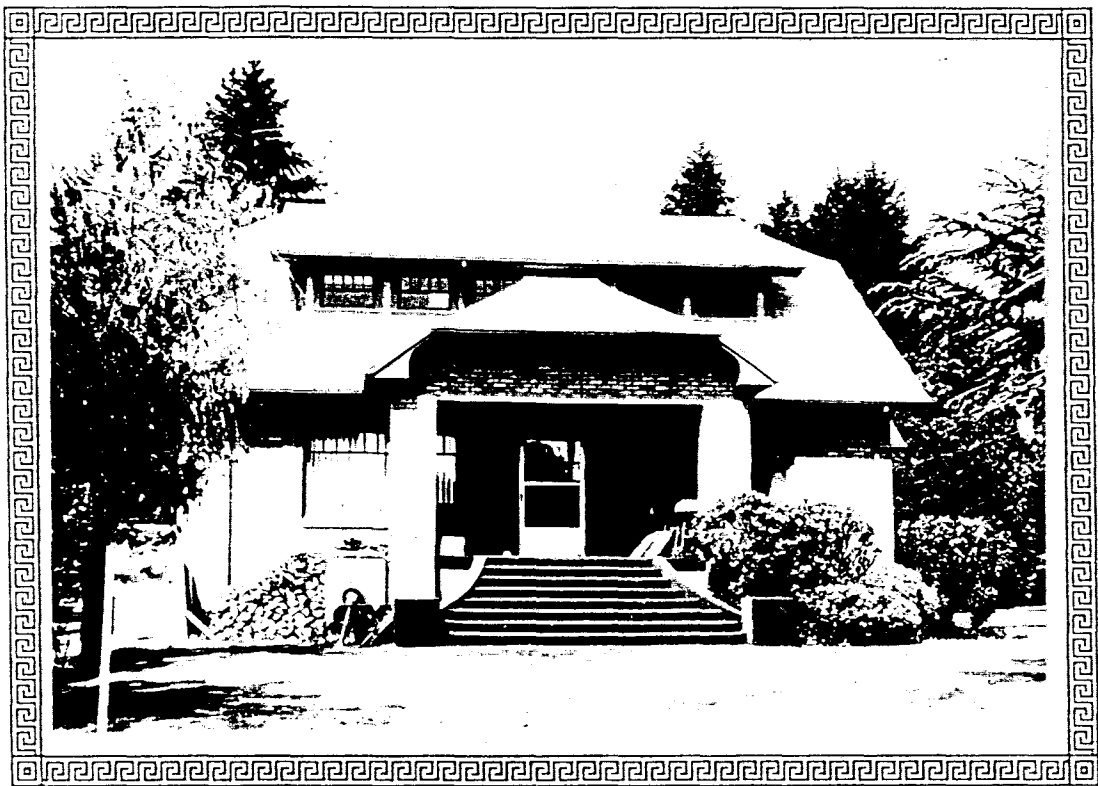
Current Owner: Carpenter and Hardin

R151300190

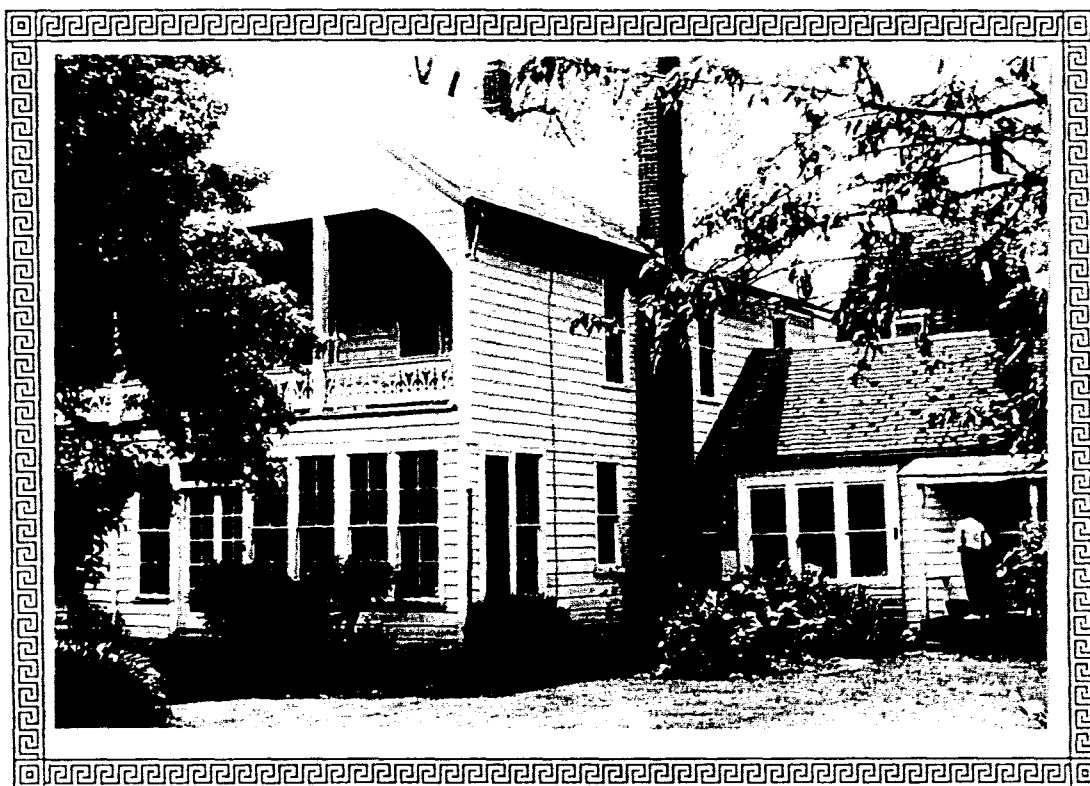


Current Owner: Pleasant ~~Way~~ ^{Home} Methodist Church

R994200290



Current Owner: Louderback



Current Owner: Bennett

R994202030



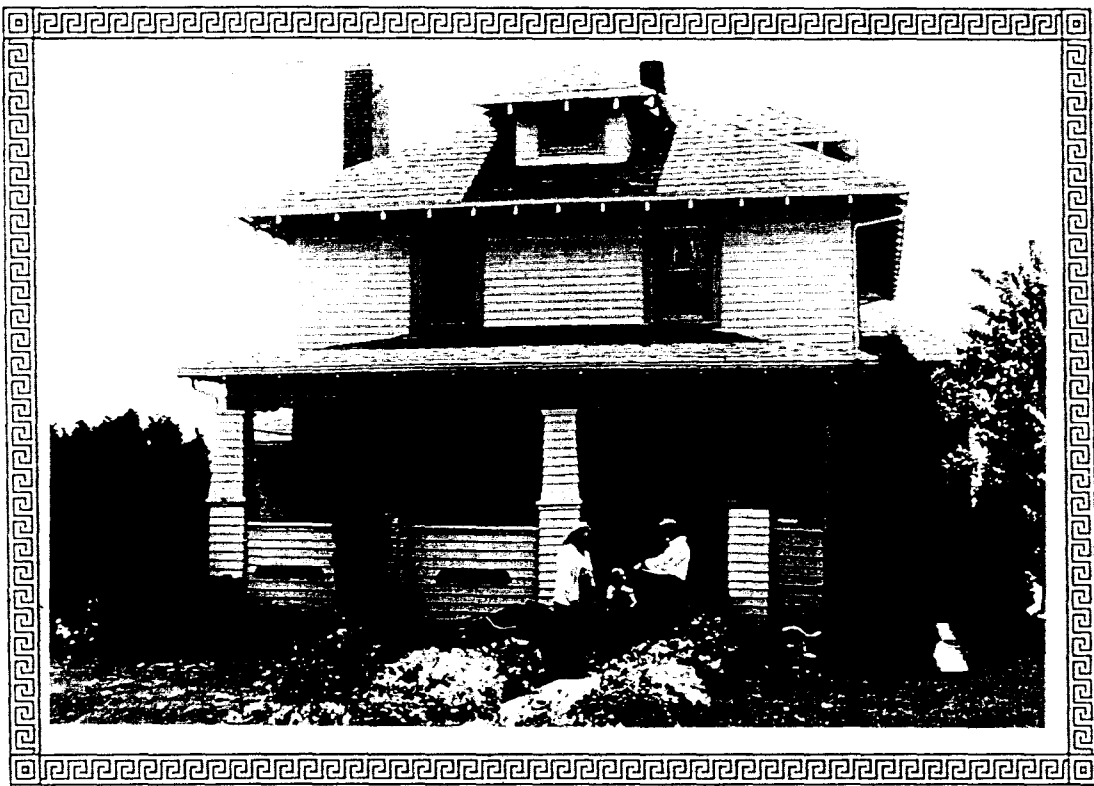
Current Owner: Surface

R994210030



Current Owner: Lamb

R994210170



Historic Name: Adolph Sester House

R994210630



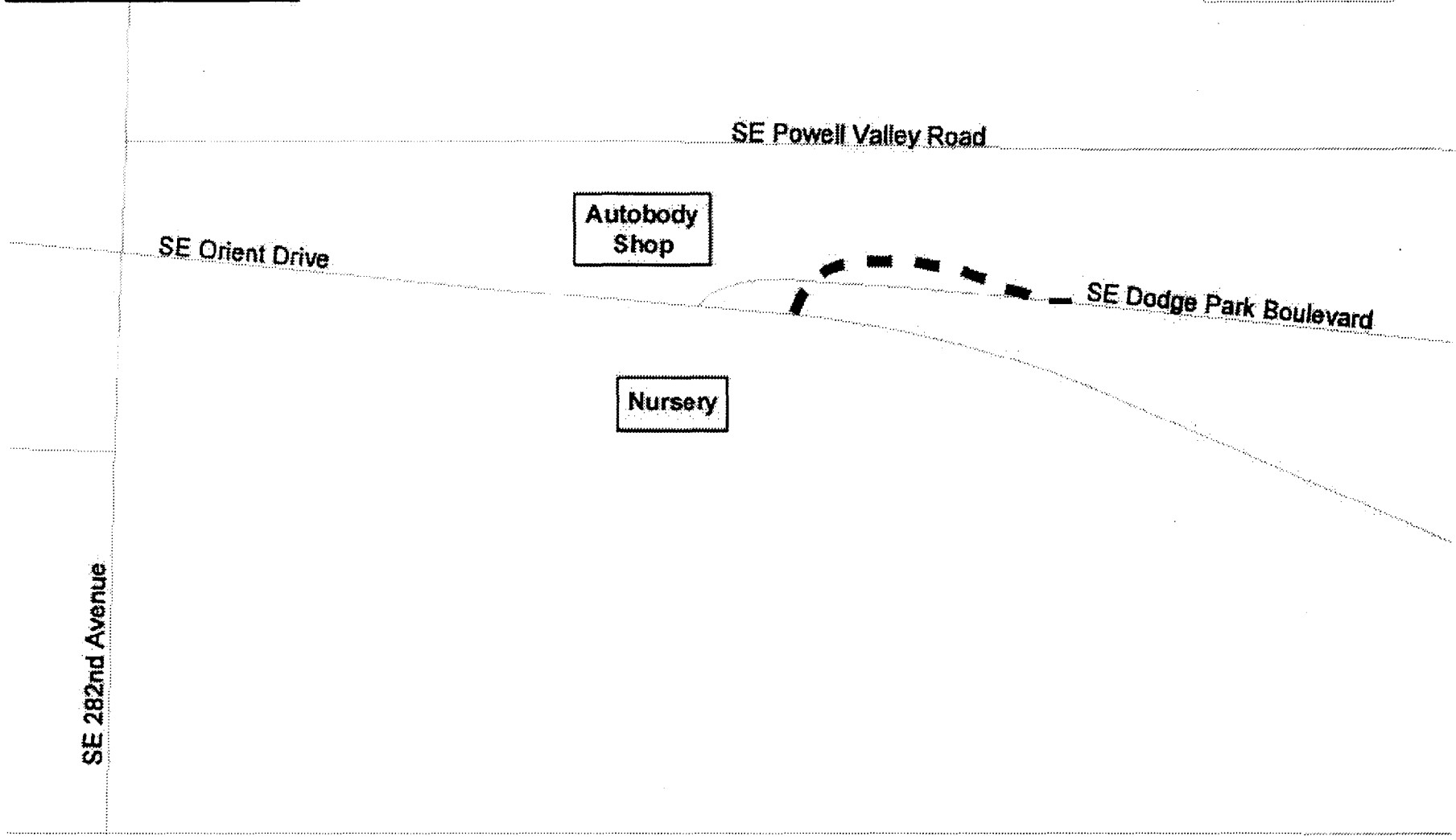
Current Owner: Blankenship

R994220060

RECOMMENDED TRANSPORTATION IMPROVEMENTS

Key

■ ■ ■ Conceptual Road Realignment

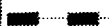



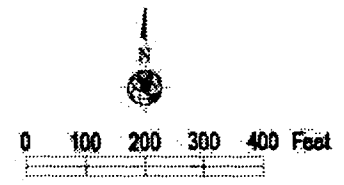
Multnomah County
*West of the Sandy River Rural Area:
 Transportation and Land Use Plan*

**Figure A-1:
 Orient Road/Dodge Park Boulevard
 Potential Realignment**

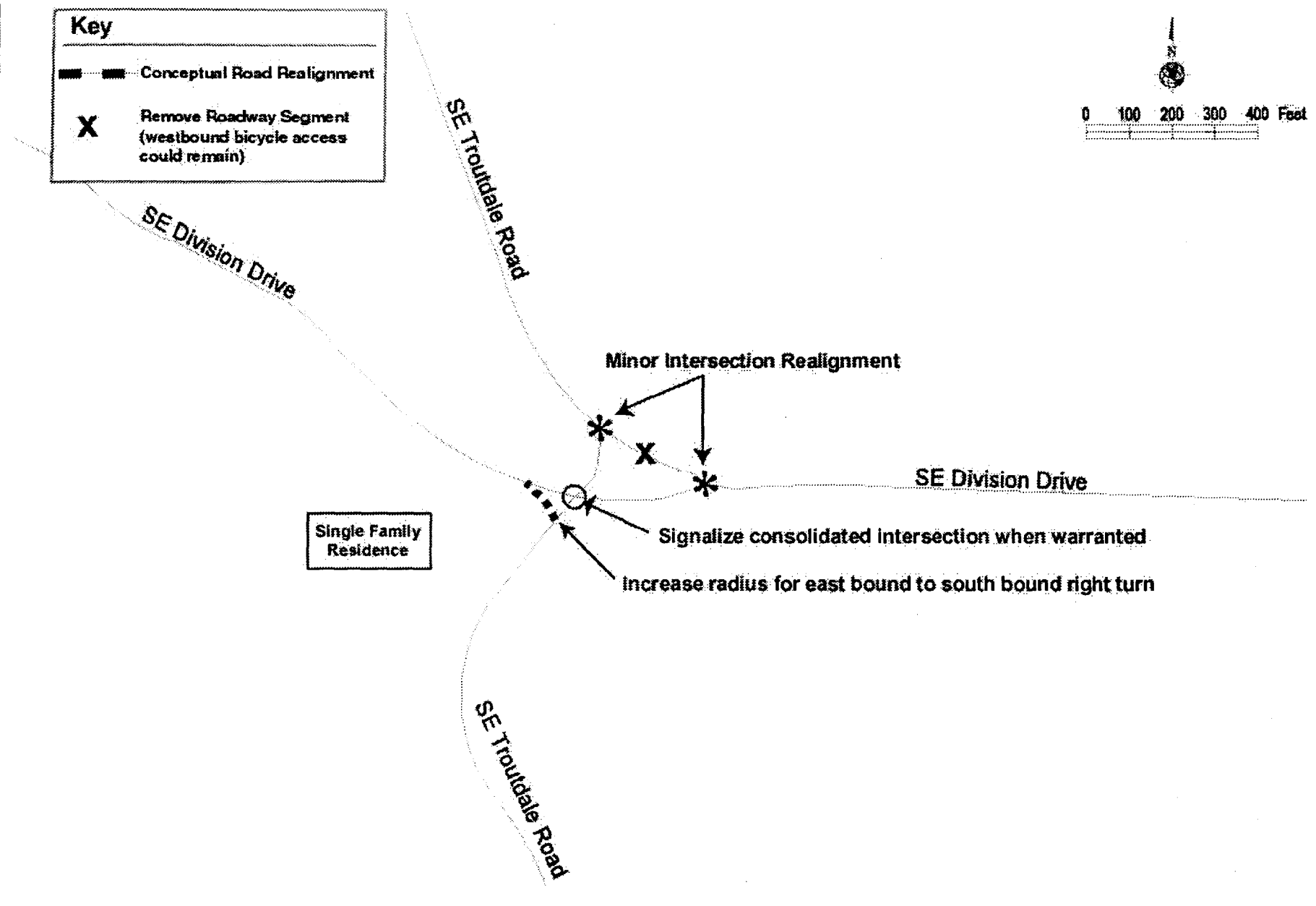
Parametrix, Inc.

Key


-  Conceptual Road Realignment
-  Remove Roadway Segment (westbound bicycle access could remain)

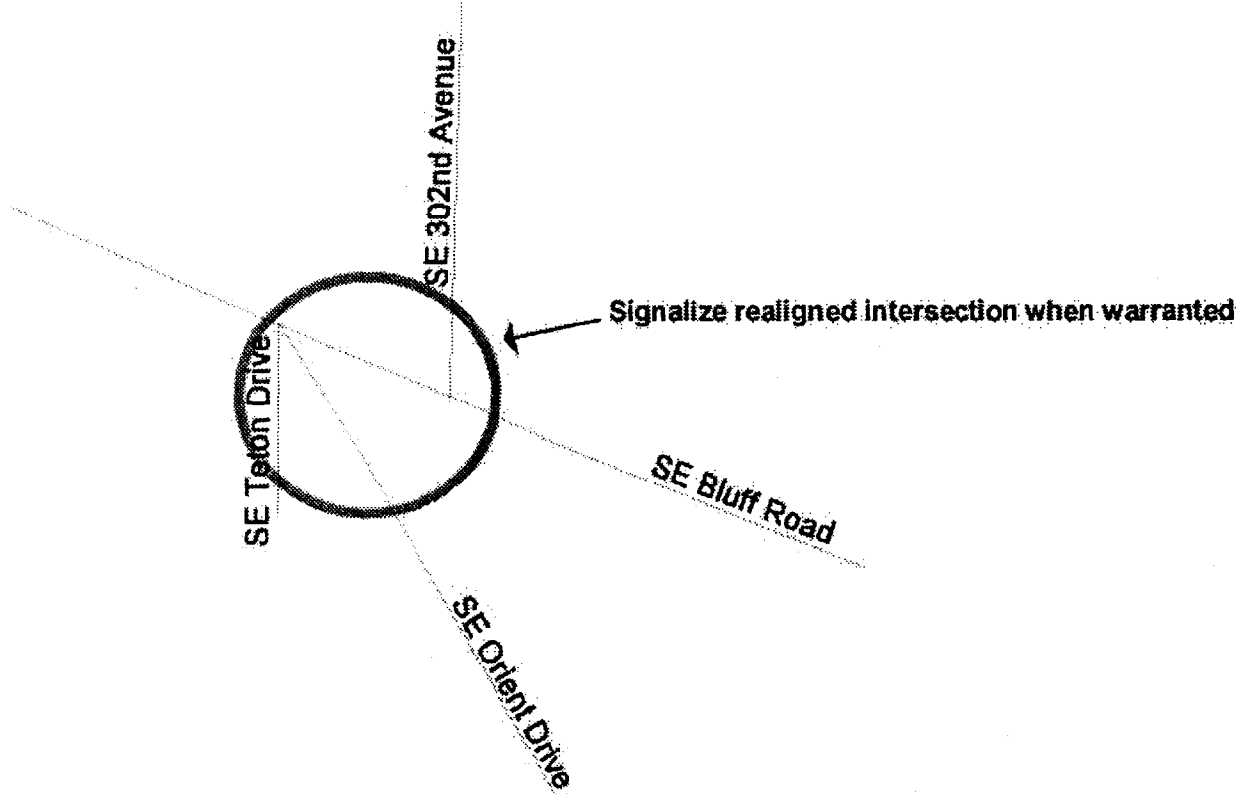
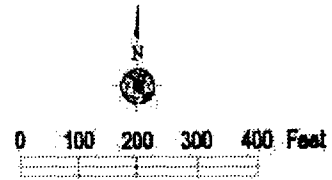


0 100 200 300 400 Feet



Key

 Area for Evaluation of Roadway Realignment



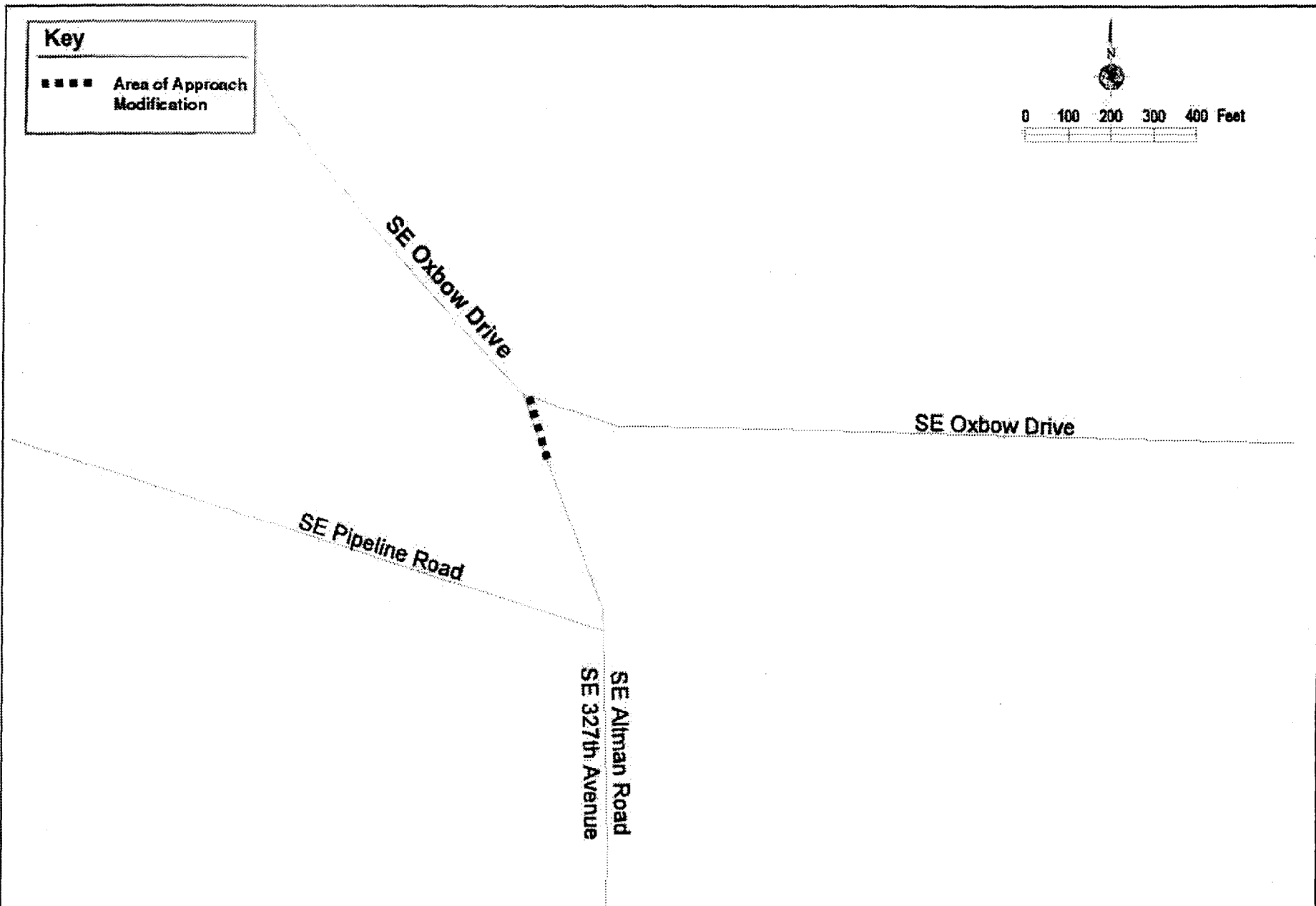
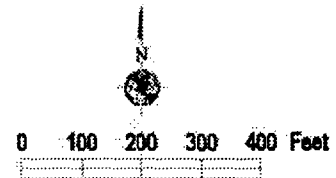
Multnomah County
*West of the Sandy River Rural Area:
 Transportation and Land Use Plan*

**Figure A-3:
 302nd Avenue/Bluff Road/Orient Drive
 Potential Intersection Realignment**



Key

■ ■ ■ ■ Area of Approach Modification



Multnomah County

*West of the Sandy River Rural Area:
Transportation and Land Use Plan*

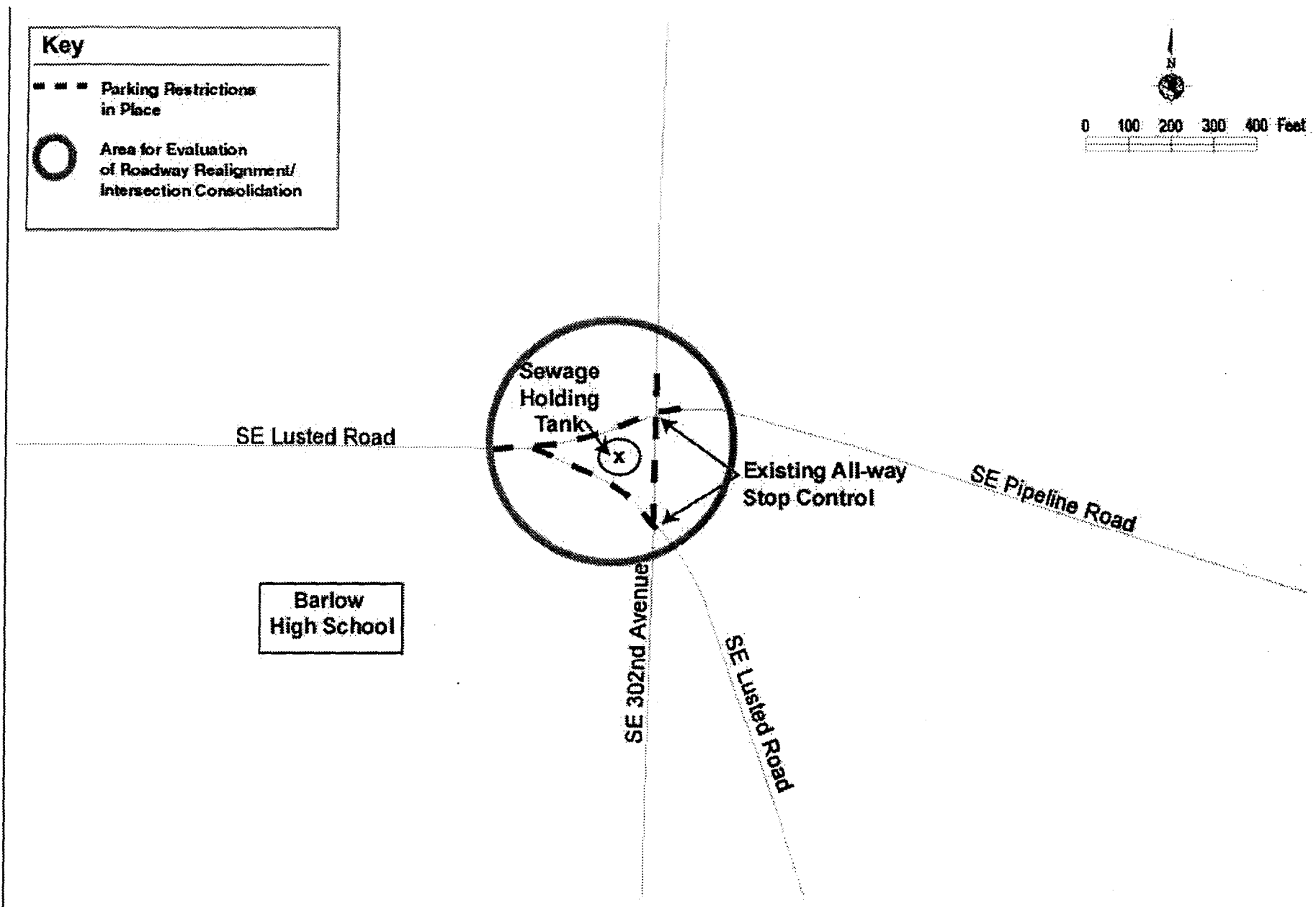
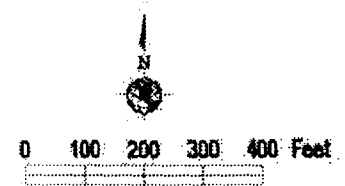
**Figure A-4:
Oxbow Drive/327th Avenue/Altman Road
Potential Intersection Realignment**



Parametrix, Inc.

Key

- ■ ■ Parking Restrictions in Place
- Area for Evaluation of Roadway Realignment/ Intersection Consolidation



Key



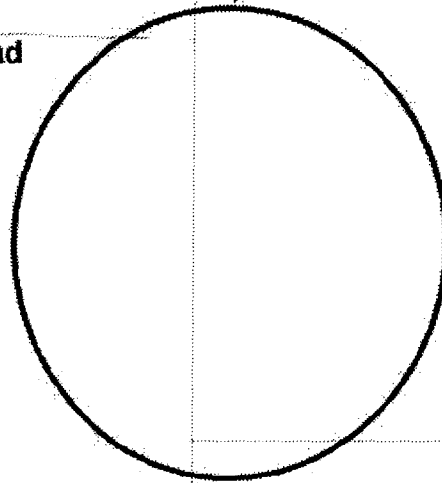
Area for Evaluation of
Roadway Realignment



0 100 200 300 400 Feet

Signalize consolidated intersection when warranted

Powell Valley Road



SE Lusted Road



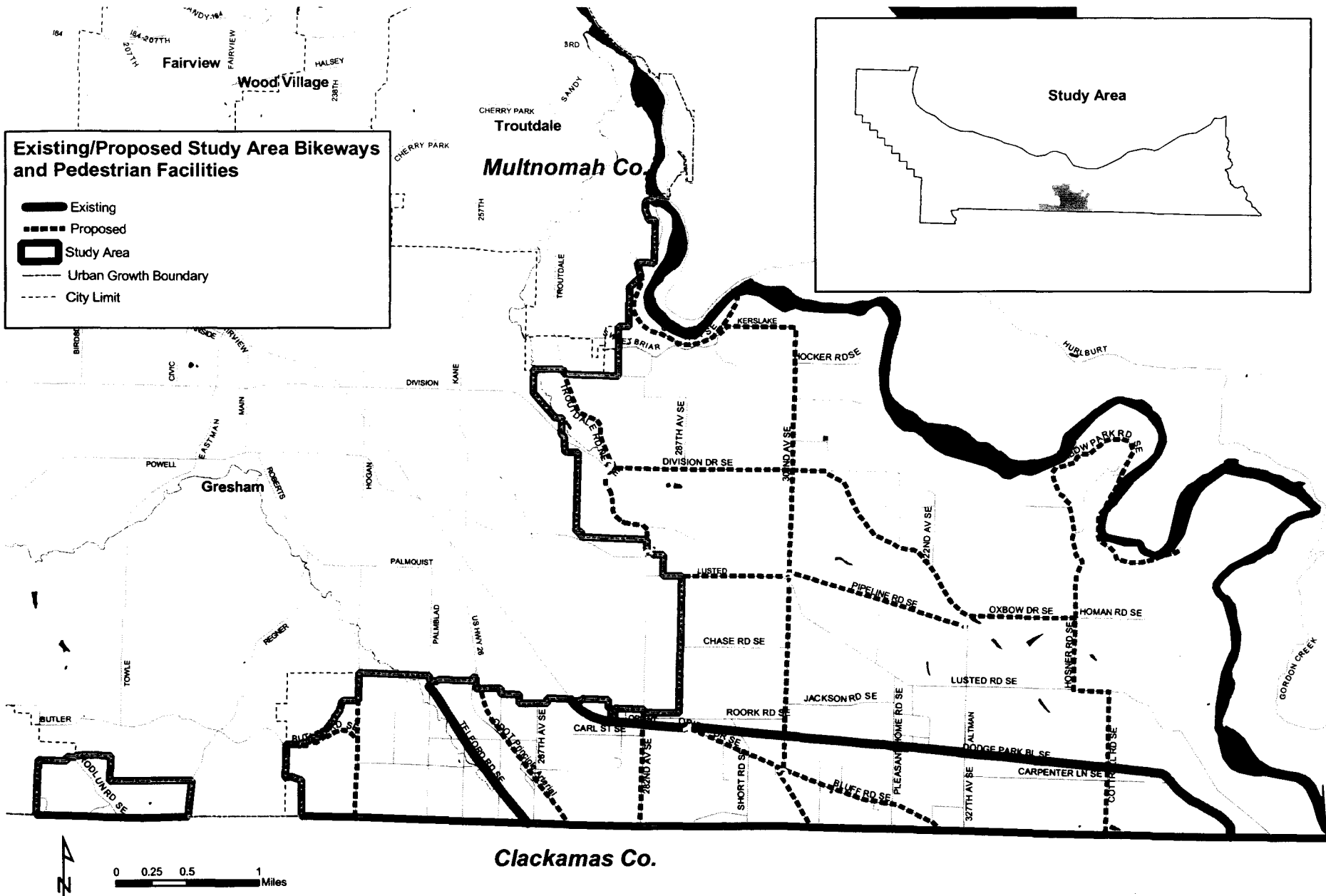

Multnomah County

*West of the Sandy River Rural Area:
Transportation and Land Use Plan*

**Figure A-6:
Lusted Road/Powell Valley Road at 282nd
Avenue Potential Realignment**




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Multnomah County
*West of Sandy River Rural Area:
 Transportation and Land Use Plan*

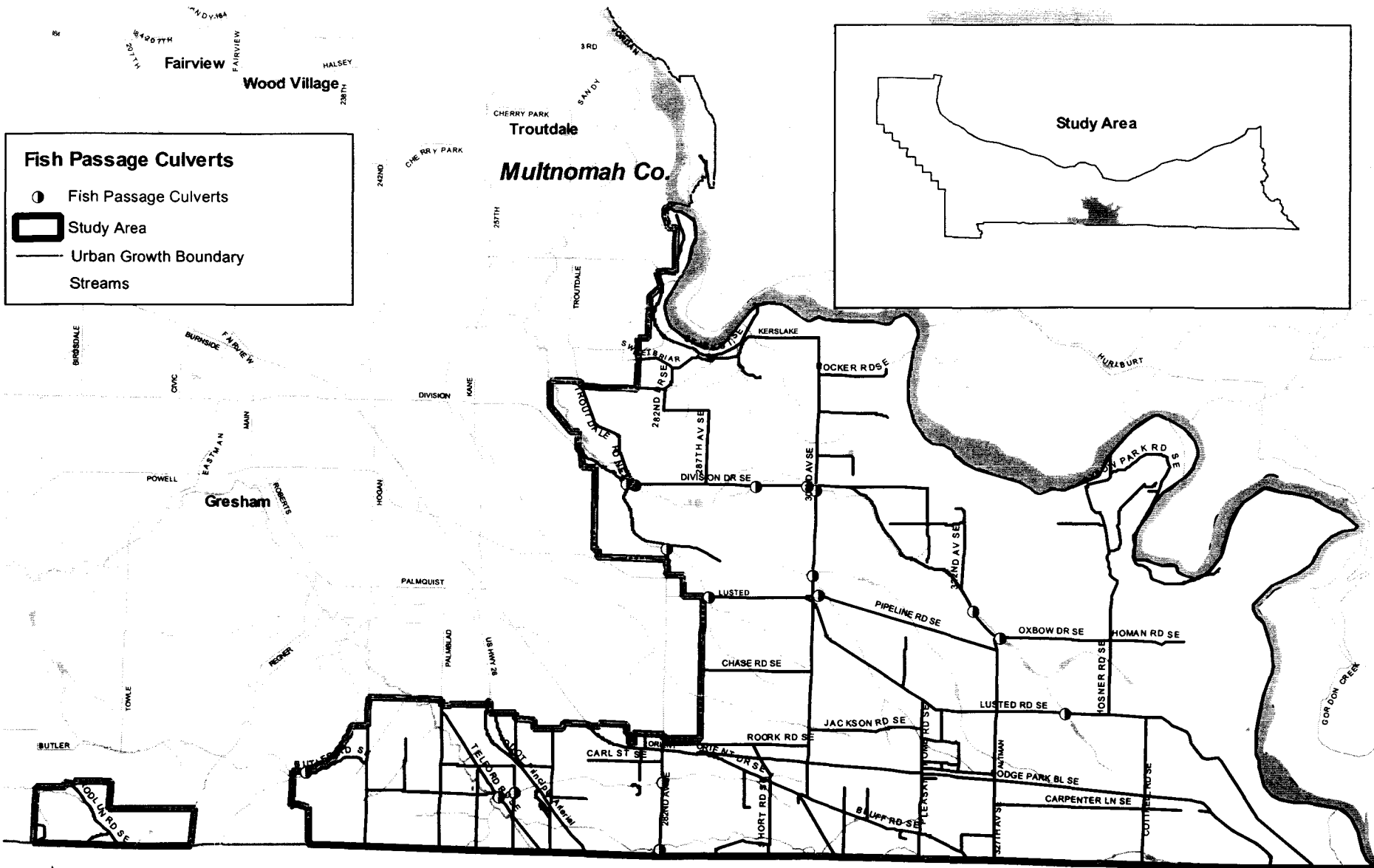
**Figure A 7:
 Existing/Proposed Study Area Bikeways
 and Pedestrian Facilities**



MULTNOMAH COUNTY OREGON
 Public Information System

20011119-01

SIGNIFICANT FISH PASSAGE CULVERTS



0 0.25 0.5 1 Miles



Multnomah County
*West of Sandy River Rural Area:
 Transportation and Land Use Plan*

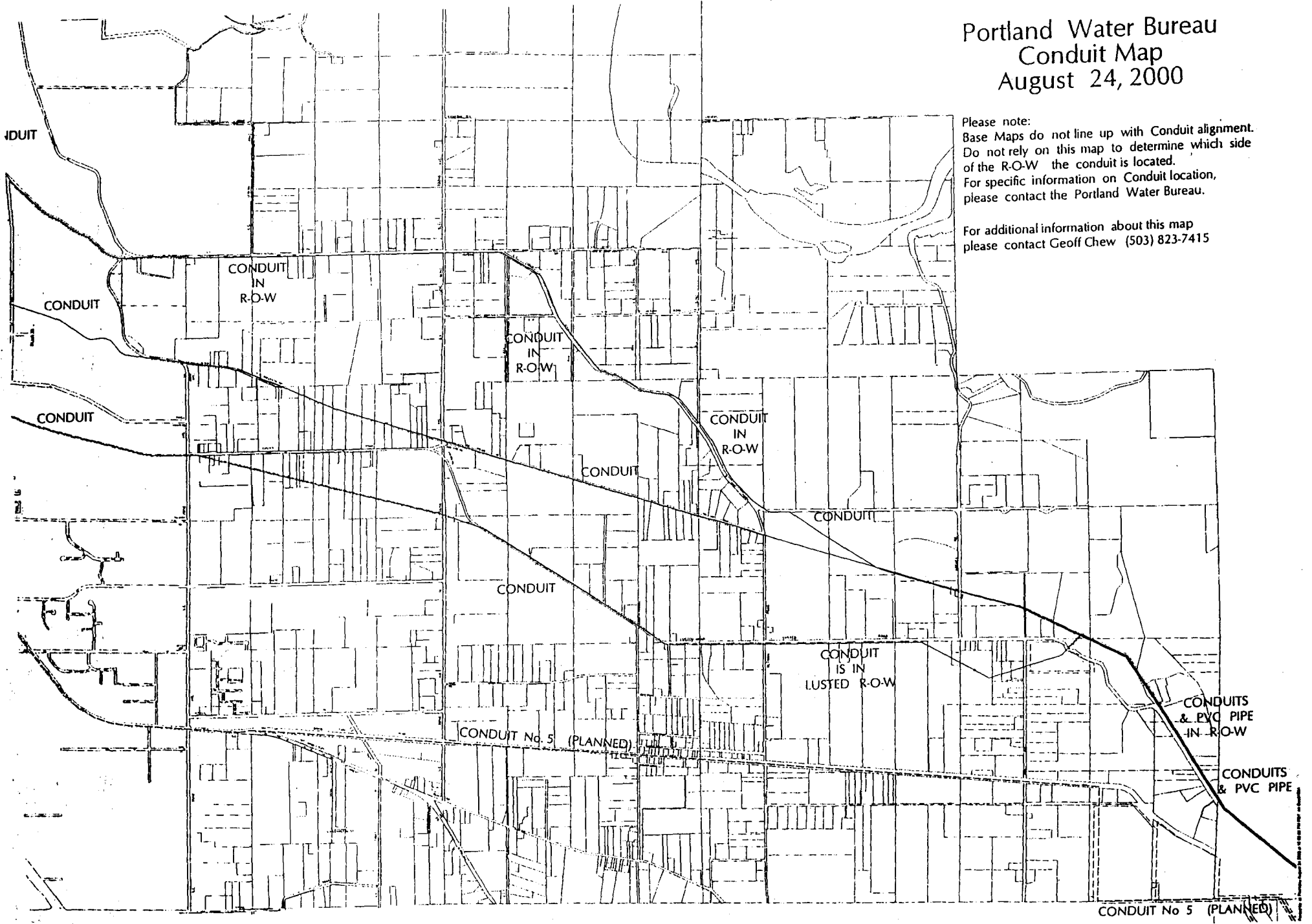
Fish Passage Culverts



20011119-01

GENERAL CONDUIT ALIGNMENTS

Portland Water Bureau Conduit Map August 24, 2000



Please note:
Base Maps do not line up with Conduit alignment.
Do not rely on this map to determine which side
of the R.O-W the conduit is located.
For specific information on Conduit location,
please contact the Portland Water Bureau.

For additional information about this map
please contact Geoff Chew (503) 823-7415

CONDUIT No 5 (PLANNED)

TECHNICAL ADVISORY COMMITTEE MEMBERS

List of people invited to attend Technical Advisory Committee meetings and to comment on work completed by the project team.

Sue Barker, City of Sandy
James Barrett, East Multnomah County Soil and Water Conservation
Jeff Beiswenger, City of Gresham
Steve Brutschner, Oregon Parks and Recreation Department
Ken Burdette, Gresham Fire Bureau
Catherine Charlo, Bicycle Transportation Alliance
Ken Cushman, Marion District-Oregon Department of Forestry
Kathy Damon, Lusted Water District
Clifton Deal, East Multnomah Soil and Water Conservation District
Maggie Dickerson, Clackamas County Planning
Mike Ebling, City of Portland Bureau of Buildings
Steve Fedje, USDA Natural Resources Conservation Service
Bill Fuji, Oregon Water Resources Department
Jim Galloway, City of Troutdale
Michelle Granger-Moore, Gresham-Barlow School District
Don Grey, Oregon Association of Nurserymen
Rob Hallyburton, Department of Land Conservation and Development
Jane Hart, Metro Greenspaces
Eric Jacobson, Department of Land Conservation and Development
Jim Johnson, Oregon Department of Agriculture
Ross Kevlin, Oregon Department of Transportation
Steve Kucas, City of Portland Water Bureau
Ted Leybold, Metro
Elizabeth McCallum, City of Troutdale
Juno Pandian, Oregon Water Resources Department
Ron Papsdorf, City of Gresham
Rod Park, Metro Councilor
Mike Powers, Oregon Department of Agriculture/Multnomah County
Dave Rader, Multnomah County Sheriff's Office
Greg Robart, Oregon Department of Fish and Wildlife
Scott Schaeffer, Oregon Farm Bureau
Charles Sciscione, Oregon Department of Transportation
Ray Valone, Metro Growth Management
Ron Weinman, Clackamas County
Cindy Zinser, Pleasant Home Water District