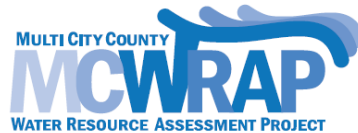


Inventory, Assessment, and Protection of Wetland and Riparian Resources Using Oregon Statewide Planning Goal 5 and Goal 6

Options to Consider



Produced by: Lane Council of Governments

**Produced for:
the Multi-City County Water Resource Assessment (MC-WRAP)
Project Team**

June 29, 2010

This project has been funded wholly or in part by the United States Environmental Protection Agency under assistance agreement WC-00J05001 to Lane Council of Governments. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency.

Introduction

Goal 5 is a broad statewide planning goal that covers more than a dozen resources, including natural resources, scenic and historic areas, and open spaces. The Goal mandates that local governments “adopt programs that will protect natural resources and conserve scenic, historic, and open space resources for present and future generations.” Goal 5 requires local governments to maintain current inventories and evaluations of wetland and riparian resources, and develop land use ordinances with clear and objective standards to protect the subset of wetland and riparian resources deemed to be significant. Additionally, Goal 5 promotes water quality through protection of wildlife habitat; Federal Wild and Scenic Rivers; Oregon Scenic Waterways; groundwater resources; and natural areas. Oregon Administrative Rules 660-023-0000 through 660-023-0250 provide the procedures and requirements for complying with Goal 5.

Goal 6 seeks to maintain and improve the quality of the air, water and land resources. The Goal 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.” Unlike Goal 5, Goal 6 does not have Administrative Rules to set standards for meeting the goal. Instead, it relies entirely on other state and federal regulations for direction and implementation.

Following the wetland and riparian inventory, each city can select from the variety of approaches discussed below using Goal 5 and Goal 6 or a combination of both Goals. Options using Goal 5 and 6 typically form the regulatory framework of a natural resource program. Although not specifically addressed in the summary that follows, additional options, such as incentives, education, and low impact development can be integrated to meet water resource related goals.

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

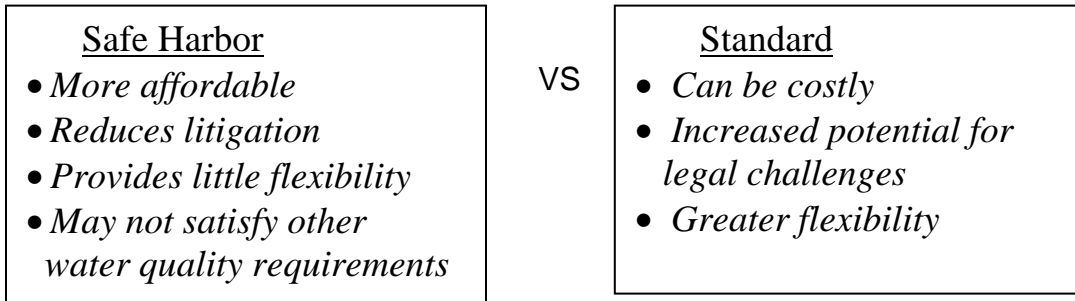
Goal 5 compliance may be triggered by a comprehensive plan amendment such as a change in the UGB or a local jurisdiction may decide to revise their strategy for managing resources covered by Goal 5, in which case the Goal 5 rule needs to be taken into consideration.

The Goal 5 process differs for each Goal 5 resource, and the Administrative Rules are very detailed and, at points, confusing. Requirements for addressing riparian areas and wetlands are among the most cumbersome. Lands within UGBs and urban incorporated communities that are protected for natural objectives cannot be used for residential, commercial or industrial development. Therefore, the protection of land within a UGB often necessitates expansion of the UGB to accommodate projected need for developable land. There is also the risk of conflict with expectations of private property owners (both within the existing UGB and in potential growth areas) if development is restricted to protect a Goal 5 resource

Options

Goal 5 offers local governments a choice of two methodologies to achieve Goal requirements: the “standard” or “safe harbor” approach. A local jurisdiction must either carefully justify its decision to protect or not protect a resource through a Goal 5 standard approach, or follow an

inventory process and protection strategy described in the Goal 5 safe harbor approach. The standard approach provides an in-depth analysis of potentially conflicting uses and has a measure of flexibility, but can be costly to conduct and is sometimes open to legal challenge. The safe harbor option is rule-prescribed, intending to streamline the process of deciding which land, if any, should have restrictions placed on its use to protect the resource. The safe harbor procedure is more affordable to apply and reduces litigation potential yet provides little flexibility.



For some resources, such as riparian areas, a jurisdiction may choose to use the safe harbor option for the inventory and assessment, but use the standard process for determining appropriate protection of significant resources. Conversely, a jurisdiction could determine its own inventory process, and choose to use the safe harbor protection strategy. Importantly, a safe harbor might meet Goal 5 but if a jurisdiction has other water quality requirements to satisfy (such as the Endangered Species Act) the safe harbor approach may not be sufficient.

Goal 5 Riparian (OAR 660-23-090)

The Goal 5 rule separates the *identification* of the significant riparian resource, from the process of determining the appropriate *protection* for that identified resource. A jurisdiction may apply the standard or safe harbor option to all phases or may choose to apply the safe harbor approach to one phase and the standard approach to the other phase. Additionally, a local government may divide the riparian corridor into a series of stream reaches and regard these as individual Goal 5 resource sites. A standard process could then be applied to some reaches and the safe harbor process to other reaches.

Riparian Standard Goal 5 Inventory and Significance Process

When taking the standard approach for a resource inventory a local government must demonstrate that the inventory process was “adequate” and justify the decision to identify some resources as “significant.” The process involves collecting information regarding all water areas, fish habitat, riparian areas, and wetlands within riparian corridors. Conducting field investigations to verify location, quality, and quantity of resources within the riparian corridor is encouraged, but optional. At a minimum, the following sources, where available, should be consulted during the inventory:

- a) Oregon Department of Forestry stream classification maps;
- b) United States Geological Service 7.5 minute quadrangle maps;
- c) National Wetlands Inventory Maps;
- d) Oregon Department of Fish and Wildlife maps indicating fish habitat;
- e) Federal Emergency Management Agency flood maps; and
- f) Aerial photographs.

For sites where information is adequate, local governments shall make a determination of whether the site is significant. The determination needs to be based on:

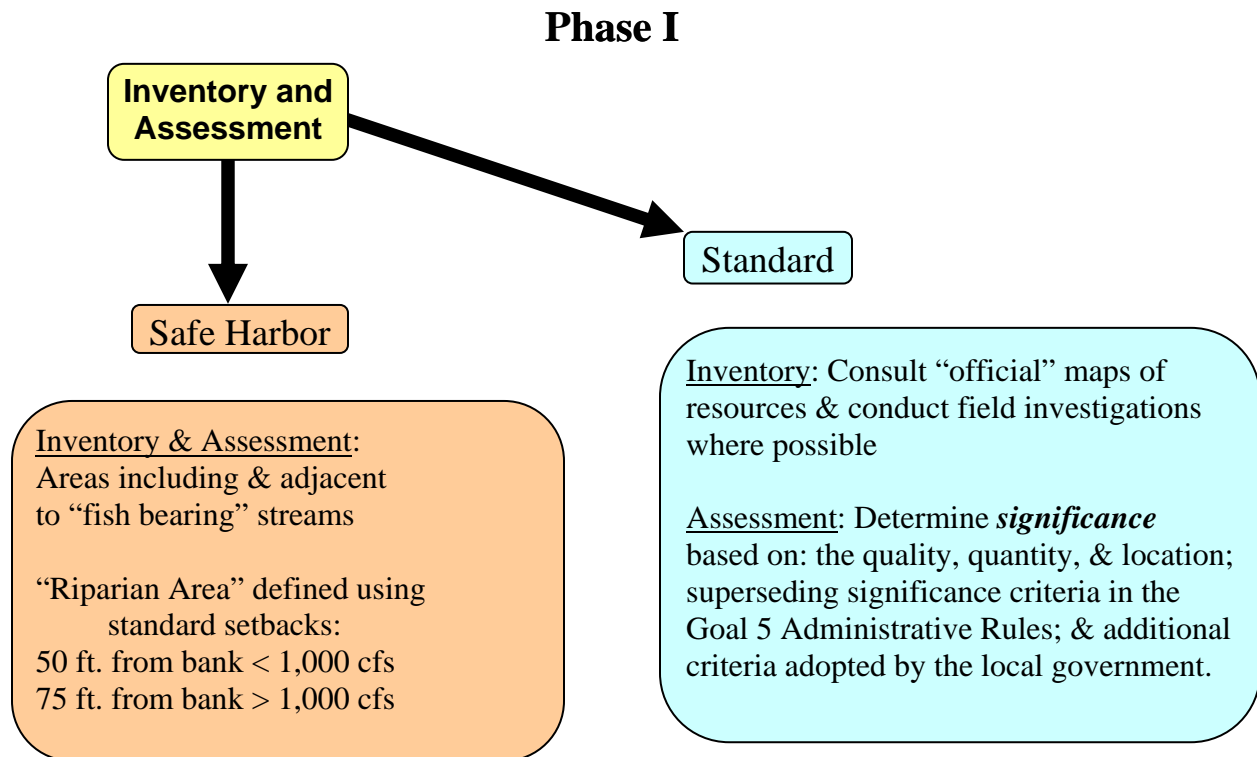
- a) The quality, quantity, and location information;
- b) Supplemental or superseding significance criteria set out in the Goal 5 Administrative Rules; and
- c) Any additional criteria adopted by the local government, provided that the criteria do not conflict with Goal 5 Administrative Rule requirements.

Riparian Safe Harbor Inventory and Significance Determination Process

Under the safe harbor provision, significant riparian corridors are those areas including and adjacent to fish-bearing lakes and streams. The area of significance is determined by using a standard setback distance from all fish-bearing lakes and streams that appear on:

- a) Oregon Department of Forestry stream classification maps;
- b) United States Geological Service 7.5 minute quadrangle maps;
- c) National Wetlands Inventory Maps;
- d) Oregon Department of Fish and Wildlife maps indicating fish habitat;
- e) Federal Emergency Management Agency flood maps; and
- f) Aerial photographs.

The safe harbor inventory specifies that the significant riparian resource will be defined by a boundary extending 50 feet from the banks of lakes and streams with an average annual stream flow less than 1,000 cubic feet per second. The safe harbor significant area boundary for streams with an average annual stream flow of 1,000 feet per second and greater is 75 feet from top of bank



Riparian Standard Process Program to Protect

The standard process for determining a program to protect the riparian resource allows for the valuable functions of riparian areas to be considered along side other priority local policy issues through the ESEE (economic, social, environmental, and energy) analysis evaluating the consequences of allowing, limiting or prohibiting uses that conflict with each significant resource site. The steps in an ESEE process include the following:

- Identify conflicting uses;
- Determine the impact area;
- Analyze the economic, social, environmental, and energy consequences of allowing, partially allowing, or not allowing the conflicting use; and
- Develop a program to achieve Goal 5

This analysis must be the basis for a local program to manage the resource.

Compliance under Goal 5 is achieved using the ESEE process when at least the following activities are identified as conflicting uses in riparian corridors:

- 1) Placement of structures or impervious surfaces that permanently alter the riparian corridor except for water-dependent or water-related uses and replacement of existing structures in the same location that do not disturb additional riparian surface area; and
- 2) Vegetation removal except on lands designated for agricultural or forest use outside the UGB, for restoration activities, and for the development of water-related or water-dependent uses.

Riparian Safe Harbor Program to Protect

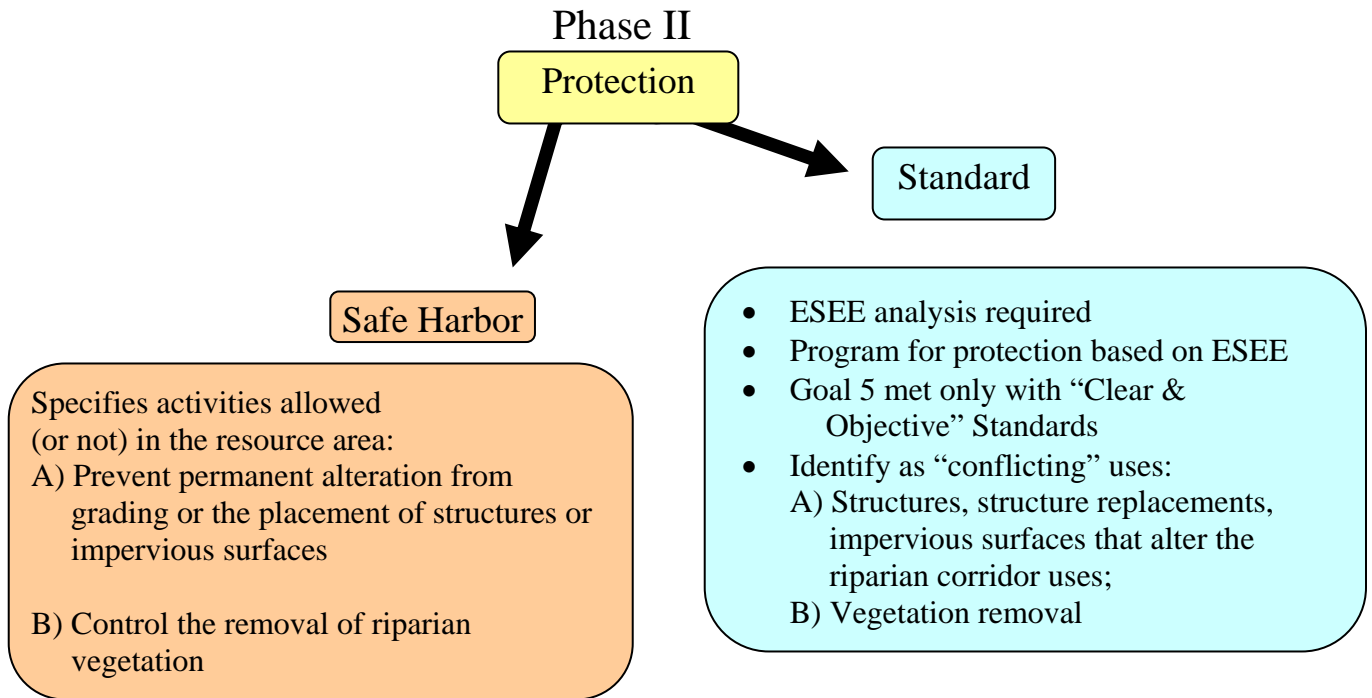
The safe harbor program to protect riparian resources specifies activities to be allowed or not allowed in the resource area. Local governments may meet riparian corridor Goal requirements by adopting an ordinance that protects significant riparian corridors outside zoned agricultural and forest areas by:

- 1) Preventing permanent alteration to riparian areas from grading or the placement of structures or impervious surfaces. The following uses are permitted, provided they are designed and constructed to minimize intrusion into the riparian area:
 - Streets, roads, and paths;
 - Drainage facilities, utilities, and irrigation pumps;
 - Water-related and water-dependent uses; and
 - Replacement of existing structures in the same location.
- 2) Controlling the removal of riparian vegetation, except for removal of:
 - Non-native vegetation and replacement with native plant-species; and
 - Vegetation necessary for the development of water-related or water-dependent uses.

The ordinance must include a procedure to consider hardship variances, claims of map error, and reduction or removal of restrictions for lots or parcels that have been rendered unbuildable by the application of the riparian protection ordinance. The ordinance may be crafted to permit permanent alteration of significant riparian areas from the placement of structures or impervious surfaces if restoration, enhancement of buffers, or similar measures offset the permanently

altered area. In any event, such alteration shall not occupy more than 50 percent of the width of the riparian area measured from the upland edge of the corridor.

The safe harbor ordinance in conjunction with the safe harbor inventory of significant riparian areas will meet the requirements of Goal 5, but may not be sufficient to fully protect water quality from the impacts of urban development. A jurisdiction interested in protecting water quality to meet requirements of a TMDL management plan, protect salmon habitat, or pursue other local priorities for resource protection may want to consider the standard process option or a process under Goal 6.



Goal 5 Wetlands (OAR 660-23-0100)

The Oregon Administrative Rule defines wetlands as an area that is inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Goal 5 directs local governments to protect significant wetlands from urban impacts. Goal 5 requires jurisdictions to complete the inventory and significance determination for wetlands using the local wetland inventory (LWI) rules. For the protection phase, the Administrative Rules directs local governments to adopt comprehensive plan provisions and land use regulations to achieve Goal 5 protection for all significant wetlands. Local governments may meet these Goal 5 requirements by developing a program using the standard process (ESEE analysis) or the safe harbor provision. Like riparian areas, the local government may divide the wetland resources and use a standard process for some and the safe harbor process for others.

Wetland Inventory and Significance Determination

Goal 5 requires that local communities complete a LWI that identifies all wetlands and characterizes them by their condition and function using the standards and procedures of OAR 141-086-0110 through 141-086-0240. “Significant wetlands” must then be identified using criteria adopted by the Department of State Lands (DSL) (see OAR 141-086-0350 for a list of the criteria). The significance of a wetland is determined largely by the habitat and water quality functions the wetland provides. In some cases these functions can be compromised if urban development is allowed up to the edge of the wetland. Goal 5 places the focus of local planning and protection on locally significant resources. Wetlands that are not considered significant are not without protection however, as the DSL and Army Corps of Engineers (ACOE) have the final authority regarding wetland impacts. The jurisdiction must adopt the LWI as part of the comprehensive plan or as a land use regulation.

Phase I

Inventory &
Assessment

Local communities must complete a LWI that identifies all wetlands & characterizes them by their condition & function using the standards & procedures of OAR 141-086-0110 through -0240

Significant wetlands must then be identified using criteria adopted by the Department of State Lands (DSL) (see OAR 141-086-0350 for a list of the criteria)

Standard Process Program to Protect Wetlands

The standard approach to wetlands requires that communities conduct a thorough analysis to determine how or whether to protect identified significant wetlands. This analysis has three steps:

- “Impact areas” around wetlands are identified. Impacted areas are defined as the geographic area within which conflicting uses could adversely affect a significant wetland.
- A conflicting use analysis is undertaken. Conflicting uses are land uses or other activities that, if allowed, could adversely affect a significant wetland
- An ESEE analysis that considers the consequences of interactions between the wetland itself, its impact area and conflicting uses or activities with respect to each of these elements.

Once the analysis is complete, the local jurisdiction can determine whether the resource should be fully protected, partially protected, or not protected.

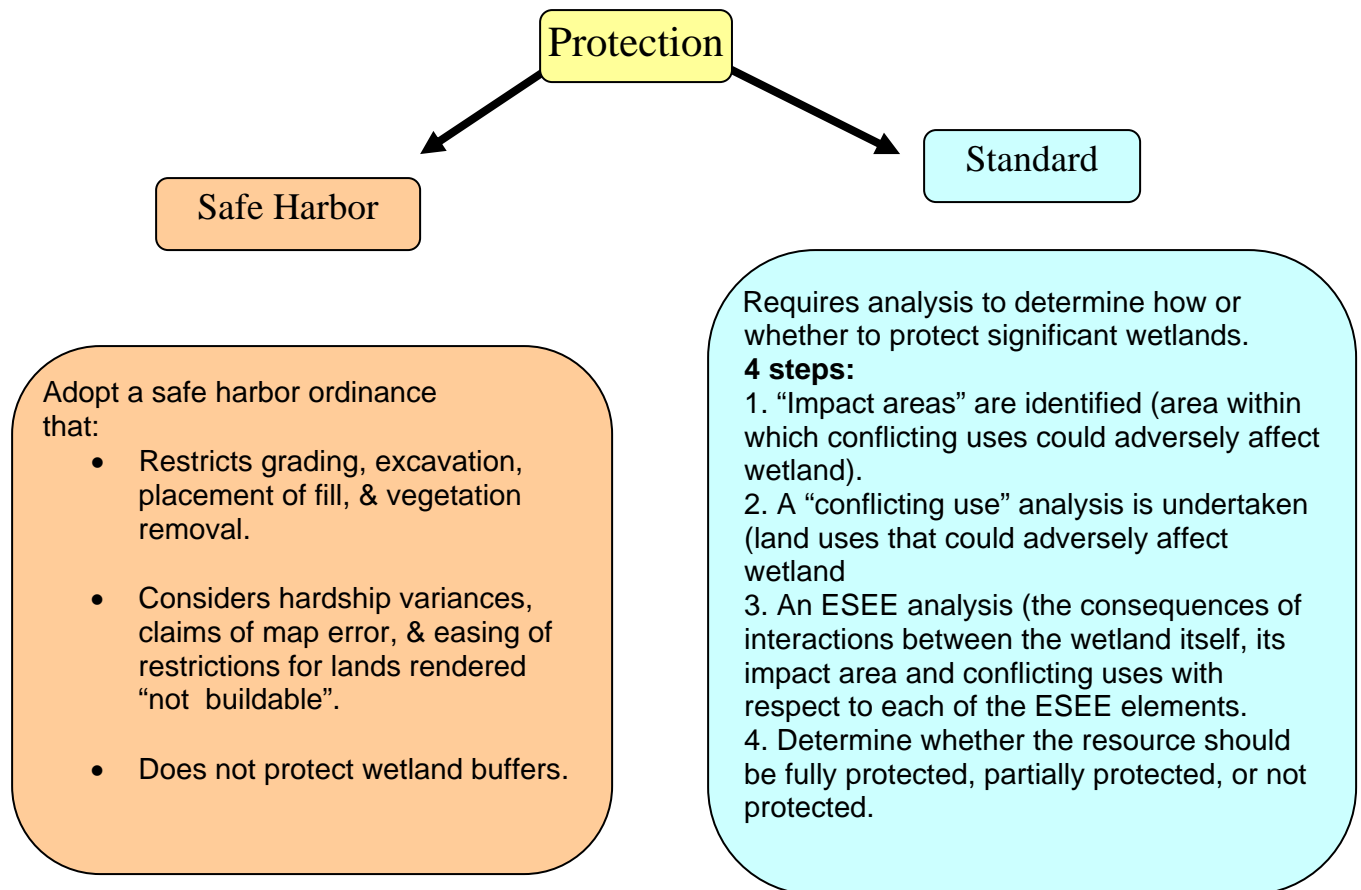
Safe Harbor Program to Protect Wetlands

Under the safe harbor provision, local governments must adopt an ordinance to protect significant wetlands consistent with the following measures:

- The protection ordinance shall place restrictions on grading, excavation, placement of fill, and vegetation removal other than perimeter mowing and other cutting necessary for hazard prevention;
- The ordinance shall include a variance procedure to consider hardship variances, claims of map error verified by DSL, and reduction or removal of the restrictions for any lands demonstrated to have been rendered not buildable by application of the ordinance.

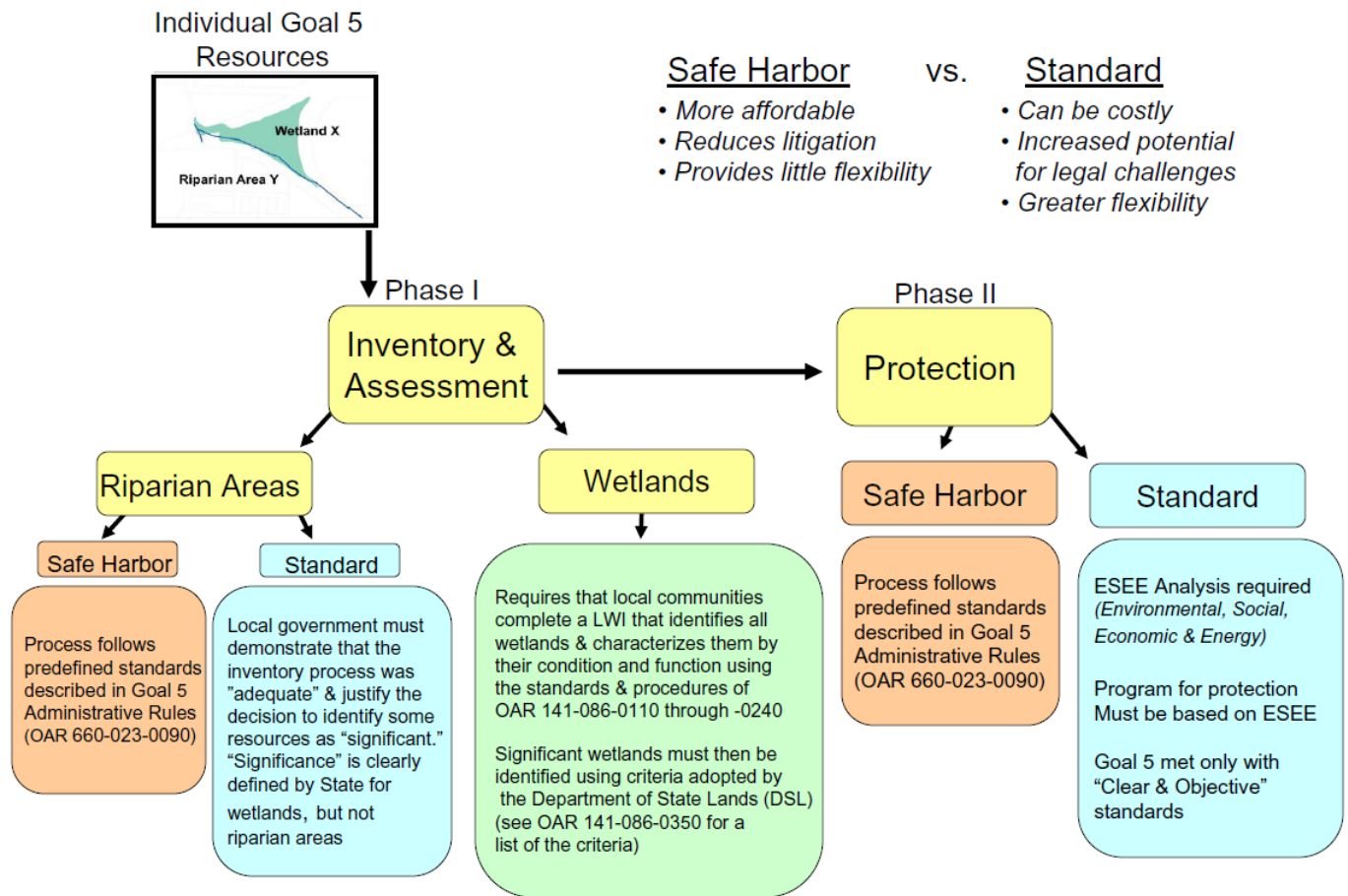
The safe harbor does not protect wetland buffers. If adopted under Goal 5 rules, restrictions on development adjacent to significant wetland would need to be justified under an ESEE analysis.

The following figure provides an overview of the Goal 5 Protection Phase process alternatives for Wetlands:



The following figure provides an overview of the Goal 5 process alternatives for both Wetlands and Riparian Areas:

Goal 5: General Overview of Process Alternatives



Goal 6 – Air, Water and Land Resources Quality

Although Goal 6 does not have administrative rules to set standards for meeting the goal, for water quality purposes, Goal 6 has the potential for being the most important land use planning goal. The Goal 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 Goal includes a series of non-mandatory “guidelines” for developing comprehensive plans such as designating sites for controlling pollution, buffering and separating land uses which lead to impacts upon water resources, and considering the planning area’s carrying capacity for water resources.

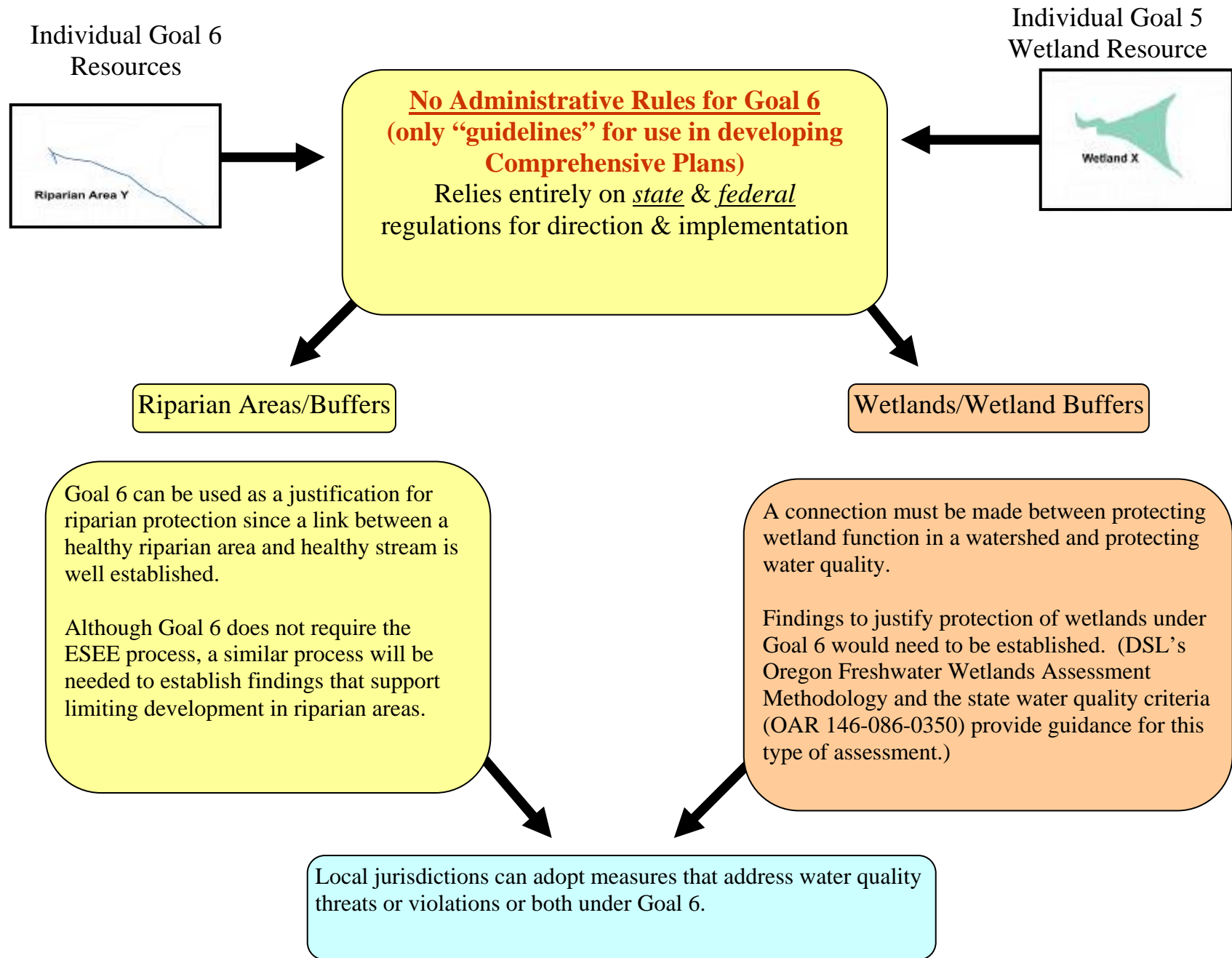
State definitions for wastewater and pollutants include pollutants carried by stormwater and impacts on habitat that result from stormwater flows. Goal 6 requires jurisdictions to integrate compliance with federal and state water quality regulations with the comprehensive planning process.

Goal 6 can be used as a justification for riparian protection since a link between a healthy riparian area and healthy stream is well established. Although Goal 6 does not require the ESEE process, a similar process will be needed to establish findings that support limiting development

in riparian areas. It may also be possible to address wetland and wetland buffer protection under the water quality provisions of Goal 6. It is well established that wetlands serve an important function in preserving the natural hydrology of a watershed. However, a connection must be made between protecting wetland function in a watershed and protecting water quality. Findings to justify protection of wetlands under Goal 6 would need to be established. DSL's Oregon Freshwater Wetlands Assessment Methodology and the state criteria for determining wetlands significant for water quality (see OAR 146-086-0350) provide guidance for this type of assessment.

Local jurisdictions can adopt measures that address water quality threats or violations or both under Goal 6. An advantage of this approach is that when Goal 6 measures are proposed for a resource that is also subject to Goal 5, Goal 5 provides an exemption to its requirements [OAR 660-023-0240(1)] when findings can be made that: a) identifies the specific Goal 6 requirement for which the measures are proposed, b) the proposed measures do not go any further than what is required by Goal 6, and c) the measures are in no way related to Goal 5 objectives.

Goal 6: General Overview of Process Alternative



Options Using Goal 5 and/or Goal 6

Once the wetland and riparian inventory has been completed, each city can choose from a variety of approaches using Goal 5 and Goal 6 and/or a combination of Goal 5 and Goal 6. Using Goal 5 alone, a jurisdiction can mix and match the safe harbor and standard process using one approach for some resources and the other approach for other resources. The jurisdiction can also select one approach for the inventory phase and a different approach for the protection program phase.

Many cities select the Goal 5 safe harbor approach as the core of a wetland and riparian resource protection program. Increasingly jurisdictions are choosing to combine aspects of Goal 5 and Goal 6 for a more comprehensive program or because working within each Goal provides benefits desired by the city. It is not Goal 5 and Goal 6 in and of themselves that can be complicated but rather the options that can be afforded using Goal 5 and/or Goal 6 that builds complexity into the decision process. Following are some examples of how a city (or county) could choose to apply Goal 5 and/or Goal 6 for riparian areas and wetlands.

Riparian Resources:

1. Apply safe harbor inventory, significance determination, and protection program.
 - Results in a 50 or 75 foot setback from fish-bearing streams (depending on average annual stream flow) and prohibits alterations of the area with few exceptions.
2. Apply a safe harbor inventory and significance determination (fish-bearing streams), and apply the standard process (ESEE analysis would need to be conducted) for the resource protection phase.
 - This could result in setbacks lesser or greater than the safe harbor setbacks based on clear standards. Protection could be based on local criteria and objectives based on the ESEE analysis.
3. Apply the standard process for the inventory and significance determination phase and the safe harbor for the protection phase.
 - This could result in non-fish bearing streams being included in the inventory with setbacks of 50 or 75 feet depending on average annual stream flow or as otherwise determined. Most alterations in the riparian area would be prohibited.
4. Use the standard process using the Riparian Inventory and Assessment Guide (URIAG) to its fullest extent resulting in setbacks that are based on the potential tree height within the riparian area.
 - This could result in setbacks up to 120 feet in areas where the predominant tree species are Douglas Fir or Black Cottonwood.
5. Use the URIAG as an assessment tool to establish criteria to determine significance and appropriate protection mechanisms under the Goal 5 standard process.
 - This could result in setbacks greater or lesser than the safe harbor setbacks and a variety of protection mechanisms.
6. Use the safe harbor approach for some streams (or stream reaches) and the standard approach for other streams (or stream reaches).

7. Identify Goal 6 resources, such as waterways linked to the 303 d list, Willamette Basin total maximum daily loads (TMDLS), or drinking water sources and apply a setback and protection strategies that protects water quality for those purposes.
 - Waterways not addressed under Goal 6 (if any) could then be addressed under Goal 5. Although an analysis regarding the water quality benefits would have to be provided, the ESEE analysis would not need to be conducted for Goal 6 waterways.
 - Could result in the safe harbor setback distances or other distances depending on protection objectives.
8. Identify and protect Goal 5 waterways first using safe harbor, then apply Goal 6 to additional waterways of interest from a water quality perspective.
 - Goal 5 fish bearing waterways would have the 50 or 75 foot setback.
 - The Goal 6 waterways might also have a 50 or 75 foot setback or other setbacks as an analysis supports.
9. Apply a Goal 5 safe harbor setback distance to Goal 5 resources, but extend the setback distance under Goal 6 to further protect water quality.
 - This would result in a total setback greater than the safe harbor distances, would not require an ESEE analysis, and the restrictions within those separate setbacks may be different.

Wetland Resources:

Wetland resources do not support as many options as riparian resources because the inventory and significance determination phases are specified in the local wetland inventory and significance determination rules (OAR 141-086-0180 through 141-086-0240 and OAR 141-086-0300 through 141-086-0350 by the DSL. Following are some examples of the protection phase for wetland resources under the regulatory framework of Goal 5 and/or Goal 6

1. Adopt a safe harbor protection mechanism.
 - This results in prohibiting development in significant wetlands.
 - Non-significant wetlands are still under the purview of permit requirements with the Department of State Lands and the Army Corps of Engineers.
2. Use the standard process and conduct a conflicting use and an ESEE analysis for each wetland. Based on the analysis, determine whether to prohibit, partially prohibit, or not prohibit conflicting uses for each site.
 - This could result in some significant wetlands being partially or fully developed.
 - This could also result in some or all wetlands protected with a buffer.
3. Combine the Goal 5 safe harbor and standard process approaches by applying safe harbor for some wetlands, and conducting the conflicting use and ESEE analysis for other wetlands.
4. Establish a link with water quality and for some or all wetlands apply a protection program based on Goal 6. Apply Goal 5 safe harbor approach for wetlands not addressed under Goal 6.
5. Use the safe harbor approach for some wetlands and the standard approach for other wetlands.
 - This would result in a mixture of protection mechanisms depending on local needs.