

## ATTACHMENT 9

### Summary of Goal 5 Natural Resource Inventory Methods

The City of Portland's *Natural Resource Inventory: Riparian Corridors and Wildlife Habitat* (NRI) is based on and incorporates the scientific foundation and methodology Metro used to produce the Metro Title 13 Riparian Corridor and Wildlife Habitat Inventories and accompanying Technical Report for Fish and Wildlife Habitat. The Metro Council adopted the inventory on September 29, 2005 in the Findings of Fact and Conclusions of Law for Urban Growth Management Functional Plan Title 13 Nature in Neighborhoods (Ordinance NO. 05-1077C, Attachments 1 and 2 of Exhibit F, and amended by Ordinance No.05-1097A, December 8, 2005).

On January 5, 2007 the Oregon Land Conservation Development Commission (LCDC) found the Title 13 package which included Metro's regional inventory to be in compliance with specified requirements of Statewide Land Use Planning Goals 5 and 6 (Compliance Acknowledgement Order 06-ACK-001713). LCDC stated, "The Commission concludes that Metro relied on the best available information in creating inventories and maps; therefore those submittals are supported by an adequate factual base as required by Goal 2 and are consistent with OAR 660-023-0090(4) and 660-023-110(3)..." LCDC also stated, "...the Commission concludes that the submittal complies with the statewide planning goals, particularly applicable provisions of Statewide Planning Goals 5 (Open Spaces, Scenic and Historic Areas, and Natural Resources) and 6 (Air, Water and Land Resources Quality) ....the Commission concludes that Metro's program for protection of riparian corridors and wildlife habitat under Goal 5 and water quality under Goal 6 complies with statewide planning goals pursuant to ORS 197.251, 197.274 (1)(a) and OAR chapter 660, division 25...."

In completing the following steps Metro met the process requirements of OAR-66-023 Procedures and Requirements for Complying with Goal 5. The resulting reports and maps provide descriptions and analyses, and allow comparison of natural resource location, quantity and quality across the region, as required in the rule. :

- Conducting and documenting an extensive scientific literature review on which to base the methodology;
- Reviewing existing data sources (e.g., state and federal agency maps and documents, aerial photographs) to produce GIS natural resource feature data and maps. These data and maps document the location, and extent of resource features, including rivers, streams, wetlands, flood areas, topography, and vegetation. The quantity of natural resources within the inventory area and resource sites is derived from this information.
- Developing GIS models that apply science-based criteria to evaluate the relative quality of natural resources. The models assign scores to identified resources for specific riparian functions and habitat attributes. The models then aggregate these scores to assign an overall relative rank;
- Identifying regional fish and wildlife species and mapping Habitats of Concern;
- Submitting the methodology to independent experts and a technical advisory committee comprised of federal, state, and local agencies and community organizations for review

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- Disaggregating the information into large-scale resource sites spanning the region;
- Determining which of the identified resources are ecologically and regionally significant;
- Holding a public hearing before the Metro Council, and endorsing the inventory for use completing the Title 13 development process (ESEE Analysis, Program Development)
- Incorporating updated natural resource data;
- Adopting the inventory with Title 13, Nature in Neighborhoods;

This work is documented in Exhibit F, Findings of Fact and Conclusions of Law, Ordinance No. 05-1077C, and amended by Ordinance No.05-1097A.

The City's inventory relies upon and incorporates Metro's work. The City has also taken steps to update and improve the Title 13 regional inventory, including:

Updating GIS natural resource feature data layers and maps to reflect current aerial photographs, LiDAR imagery, and field visits. Through this process the City remapped 160 miles of stream centerlines and mapped more than 100 additional miles of stream channel, and improved the accuracy and resolution of the vegetation and topography data. The City also:

- Revised the flood area maps to reflect FEMA floodplain map updates
- Honed information on fish and wildlife species and Special Habitat Areas in Portland (equivalent of the regional Habitats of Concern)
- Completed a strategic update of the wetland inventory per Task II of Periodic Review Work Program
- Refined Metro's GIS inventory model criteria to reflect additional scientific literature (including studies for urban areas and Portland) and Portland's urban character.
- Added data updates, consultation with agencies and local experts, and field visits for area-specific inventories for the River Plan/North Reach and Airport Futures projects.

The City collaborated closely with Metro, state and federal agencies (Oregon Department of Fish and Wildlife, U.S. Fish and Wildlife Service, NOAA Fisheries, Oregon Department of Environmental Quality), and other experts to ensure that the updates and refinements complement and are consistent with the Title 13 inventory of Regionally Significant Riparian Corridors and Wildlife Habitat.

Resources were determined to be significant based on a combined riparian/wildlife habitat rank. This ranking was fully consistency with Metro determination of significance for Title 13 that determined:

- For Riparian resources: After weighing approaches for determining regional significance Metro deemed all ranked riparian resources as regionally significant citing the following specific bases: science-based, watershed approach, protects hydrology, promotes connectivity, multi-species benefits, restoration potential, meets Goal 5 requirements, meets the goals in the Vision Statement, likely to address ESA requirement Metro stated, "...Each riparian corridor is important to enable a properly functioning network of streams and rivers to support fish and wildlife in the Metro region." Metro cited relevant scientific literature in

making the determination of ecological significance, emphasizing the importance of stream connectivity and continuous riparian buffers in urban areas. Metro also referred to the provisions of OAR 660-23-080 which establishes “regional resources” which must be identified on a map adopted by Metro ordinance.

- For Wildlife habitat resources: Metro also evaluated options for assigning regional significance to inventoried wildlife habitat against the following criteria: Meets Goal 5 requirements, meets the goals in the Vision Statement, Supports the goals in ODFW’s Wildlife Diversity Plan, Consistent with Metro’s Technical Report for Fish and Wildlife Habitat, ecosystem approach, promotes sensitive species/habitat conservation, maintains existing connectivity, maximizes restoration potential. Metro determined that all but the lowest ranking wildlife habitat resources (primarily neighborhood street trees in more densely developed areas), and including all Habitats of Concern, are significant.

Significance determinations reflect the important functions that these inventoried resources provide throughout the region’s watersheds. Most of the resource areas identified in the City NRI align with regionally significant resources identified in the Title 13 inventory. City-identified resources that do not align with Title 13 resources are explained by improved stream, vegetation, topographic, wetland and flood area mapping, or updated information on wildlife use. Applying the approach Metro used to determine regional significance, most of these resource areas would have been deemed significant for purposes of Title 13. Some of these areas reflect the City’s ability to include smaller vegetation patches than Metro was able to address at the regional scale. These resource areas, if outside the Metro inventory, are determined to be locally significant.

The resource areas identified in the updated inventory also substantially align with resource sites that the City has already deemed significant through the adoption of nine prior inventories, much of which is within existing environmental overlay zones. The natural resource inventory provides more accurate and current information significant sites.

The City has fully documented these methods in the Natural Resource Inventory and the Natural Resource Inventory Update – versions as recommended by the PSC on July 10, 2012.