Using the Eco-Logical Approach to Develop and Implement Conservation and Mitigation Priorities for Oregon

Oregon State University, *Total Cost:* $101,552, *FHWA Share:* $49,962
Period of Performance: 20 months, *Dates:* June 11, 2008 – February 11, 2010*
AOTR: Mary Gray*; Grant Project Website:* http://oregonstate.edu/ornhic/publications.html

Project Goals

Two key project goals of the Oregon State University (OSU) *Eco-Logical* grant are:

- Identify conservation priority areas, as selected by State agencies and conservation groups.
- Consolidate the disparate data from each priority area into an online format.

The project builds upon two conservation strategies:

- The Oregon Conservation Strategy (OCS), an action plan for long-term conservation of wildlife and habitats in the State of Oregon developed by the Oregon Department of Fish and Wildlife.
- The Comprehensive Mitigation and Conservation Strategy developed by the Oregon Department of Transportation (ODOT).

Project Activities

OSU has consolidated data from priority areas, and the project team has worked closely with resource agencies and other partners to obtain appropriate data. OSU recently integrated data into models that can be used by ODOT and the U.S. Fish and Wildlife Service (FWS) in transportation and mitigation planning. The OSU project team plans to complete these models in early 2010. The data models will be tested in a pilot study in the Willamette Valley.

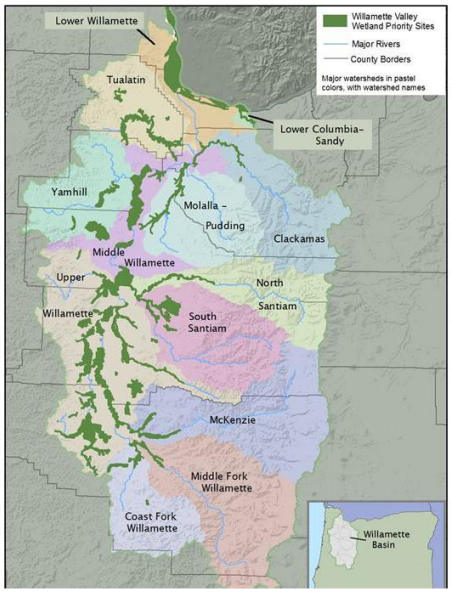

Figure: Wetland priority basins for the Willamette Valley.

Key Accomplishments

While OSU had previously partnered with many of the agencies participating in this project, including ODOT, the *Eco-Logical* grant allowed OSU to serve as problem solvers in addition to data providers.

Challenges

In Oregon, a conservation ethic among the general public and its elected officials has served as both a challenge and an opportunity. Statewide, agencies within Oregon have been pursuing mitigation strategies ahead of national requirements but have often lacked the resources to fully implement the solutions. OSU is supporting the efforts of local advocacy groups working to change the rules on existing mitigation banks. This will allow agencies to use their limited resources most efficiently rather than pursue inadequately funded solutions. A related challenge is that multiple agencies in Oregon have collected similar wildlife habitat and wetland data, but there is no central agency in the State that has combined the disparate data sets and created a shared framework.

Future Steps

OSU will create GIS models to share with ODOT. Eventually, OSU plans to link its data with the ODOT State Bridge Delivery Program, which is a $1.3 billion, 10-year effort to repair and replace hundreds of bridges in Oregon. The Bridge Delivery Program relies on static data, and OSU hopes to automatically import spatial data to provide current wildlife information to inform this major infrastructure project.

Through the TRB's "Strategic Highway Research 2 – Integration of Conservation, Highway Planning and Environmental Permitting Through Development of an Outcome-Based Ecosystem-Scale Approach and Corresponding Credit System" program, OSU received funding to perform research and work with five other States to complete similar statewide conservation strategies.