



Incorporating Environmental Management Systems into Maintenance Management Systems

AASHTO Subcommittees Meeting
Subcommittee on Maintenance
Subcommittee on Asset Management
Standing Committee on Environment

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Cathy M. Nelson, P.E.

Technical Services Manager/Chief Engineer
Oregon Department of Transportation



Initiation of SR-SAM

The situation:

- Nearly 9,000 miles of State roadways
- Increasing regulatory scrutiny of ODOT routine maintenance & highway construction operations

The regulations:

- Oregon Plan for Salmon and Watersheds
- Federal Endangered Species Act
- Clean Water Act
- Other environmental regulations





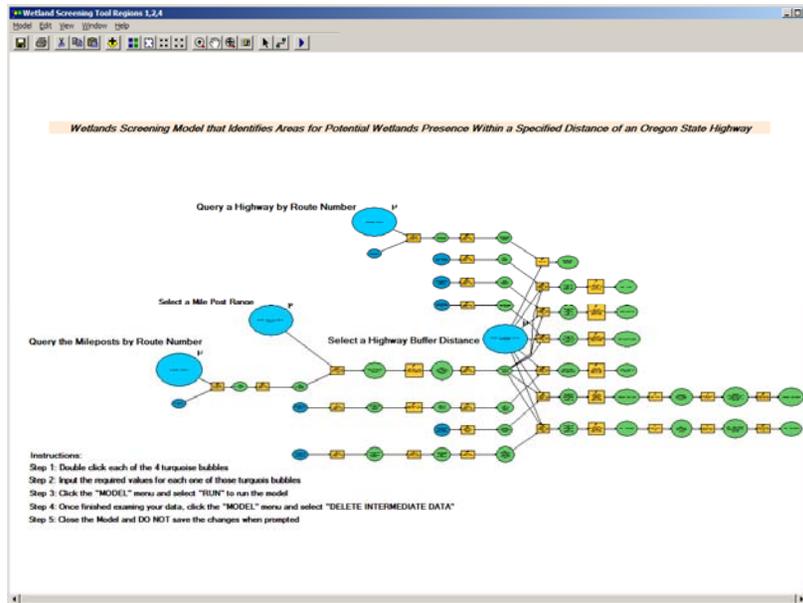
Project Goals

- Facilitate better management of resources adjacent to Oregon's highway system
- Accomplish mission within constraints of the NEPA and the 4(d) exemption under ESA
- Give Maintenance and Environmental Staff tools that are user-friendly
- Provide an information database for managers and planners



Design Approach Features

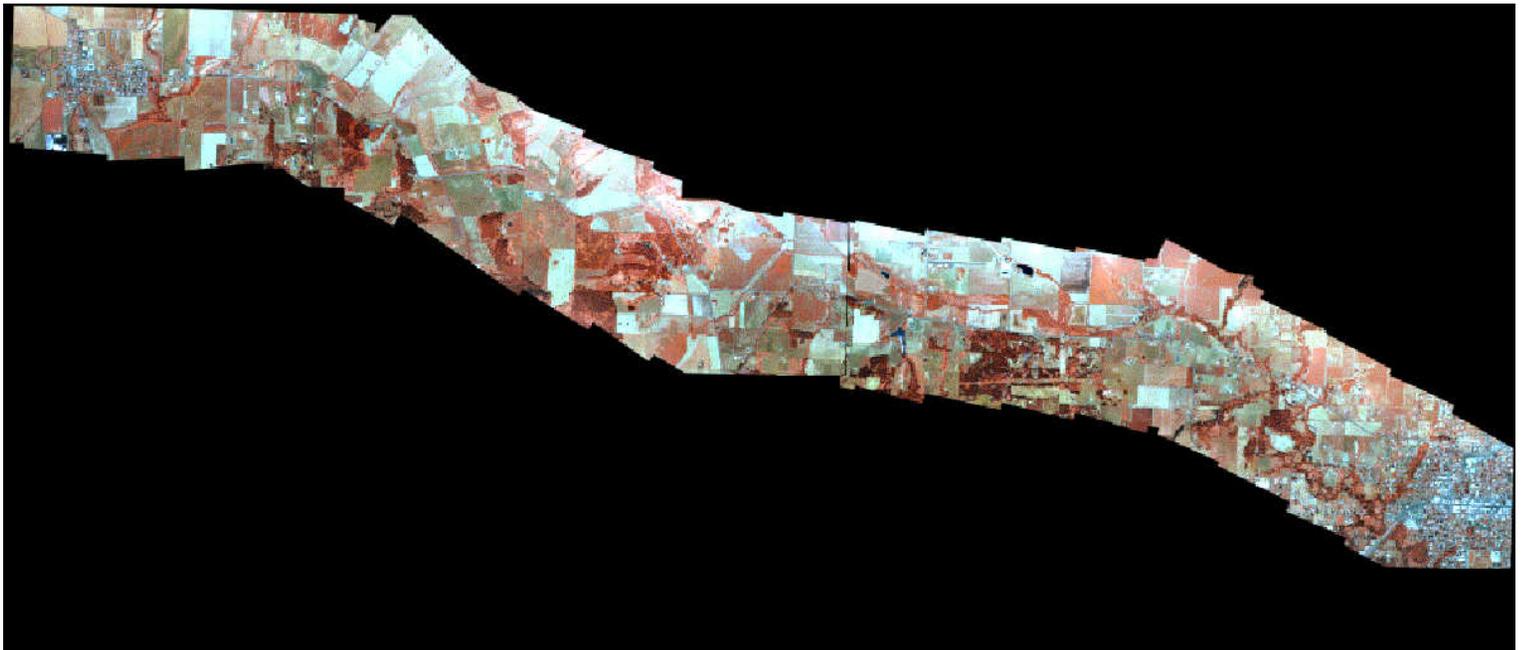
- Digital Imaging
- Digitizing
- Capture of Sensitive Resources
- GIS Modeling





Aerial Imagery

- GIS-ready High-Resolution Color Infrared
- Excellent for discerning water and vegetation
- Complete coverage of Transportation Corridor





Field Inventory

- Vehicle-Mounted Laptop Computer
 - *Imagery, Digitized Resources and Aux. Data*
- Real-Time GPS Linked to Laptop
 - *Scrolls Imagery and GIS While Traveling*
- Verify and Correct
 - *Laser Rangefinder / GPS*

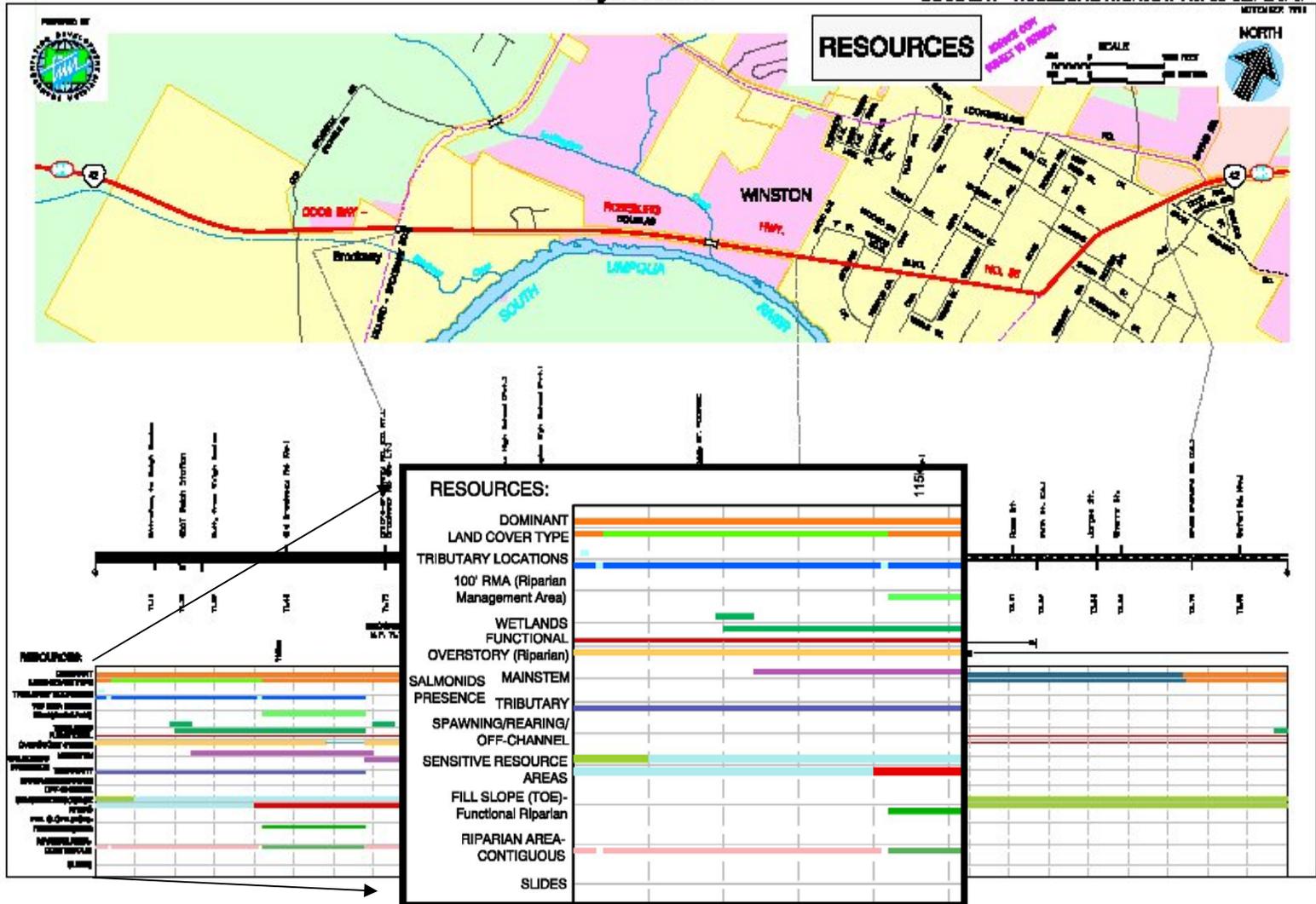




Resource Maps

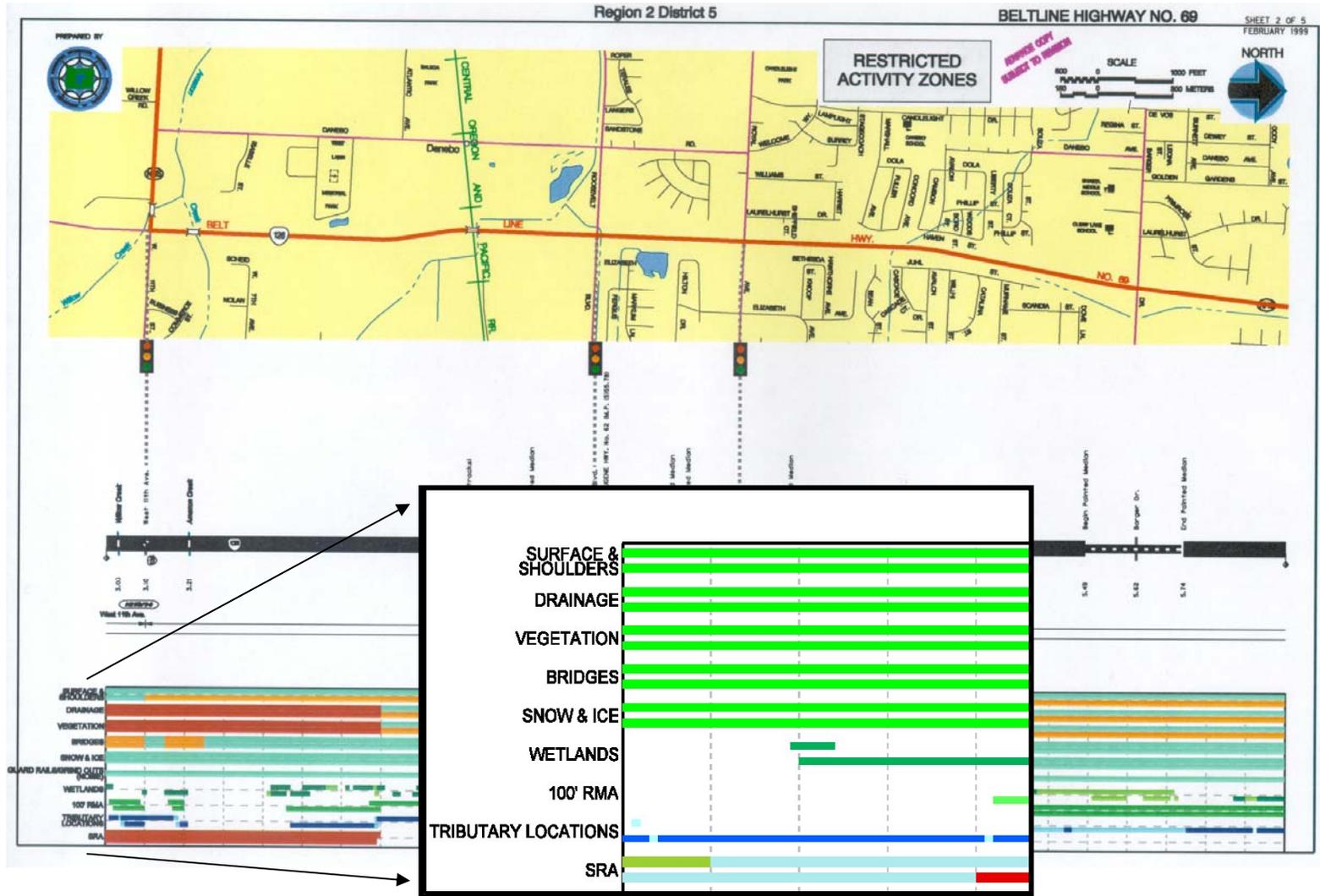
Region 3 District 7W

COOS BAY - ROSEBURG HIGHWAY No. 35 SHEET 23 OF 27
MAY 2004



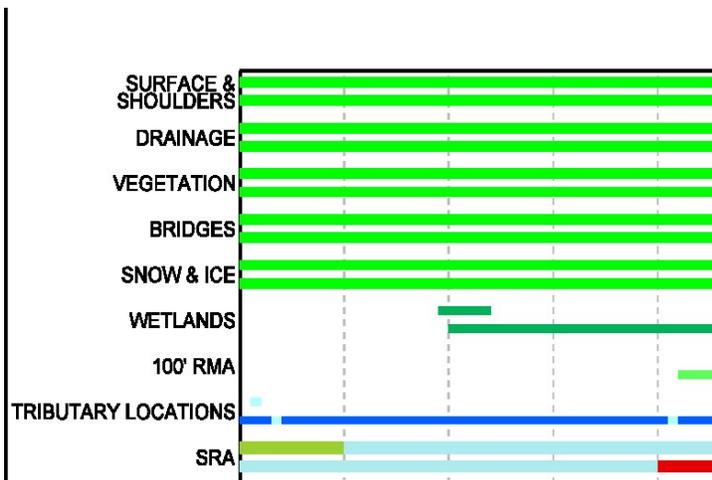


Restricted Activity Zone (RAZ) Maps



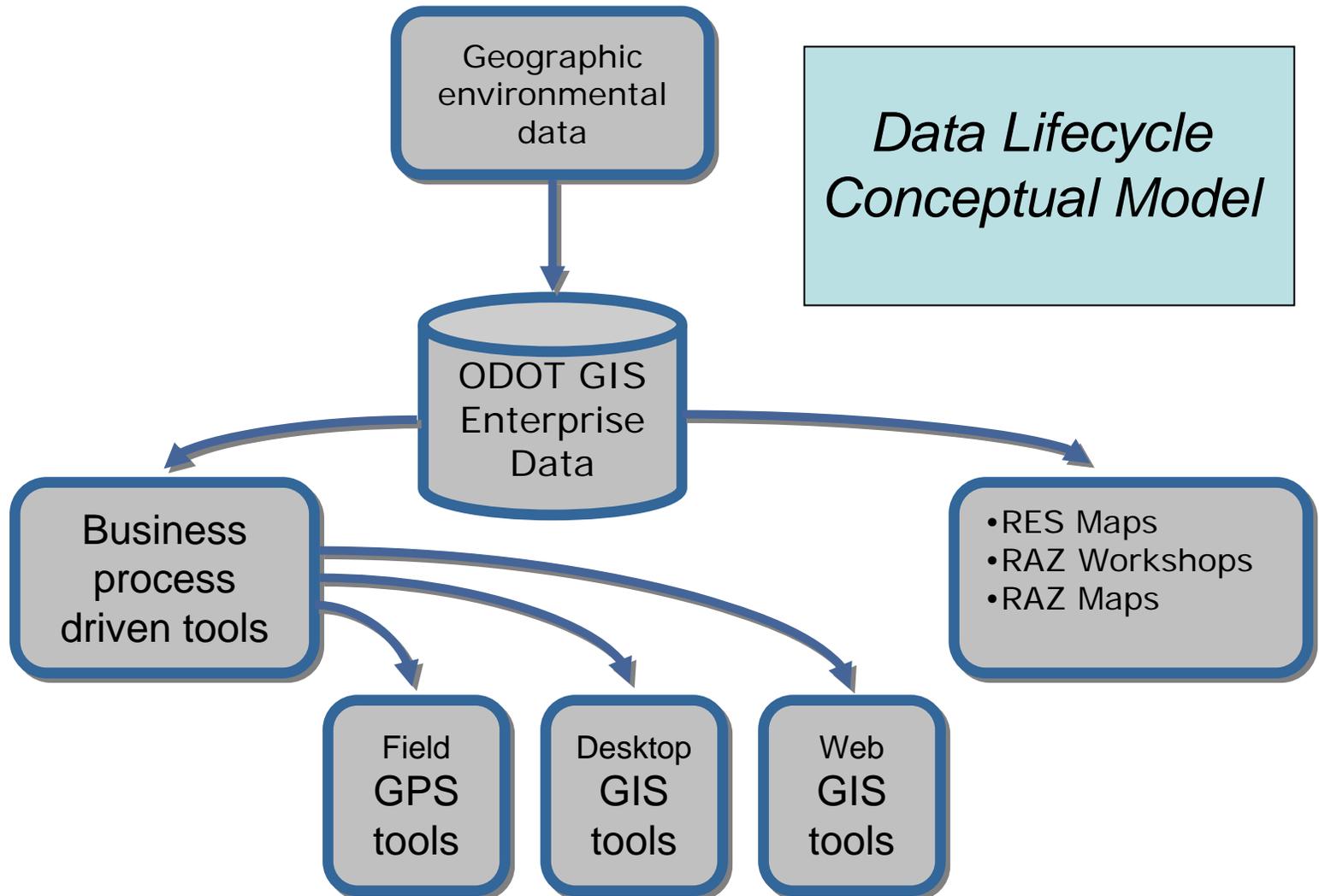


Maintenance Activities





Environmental Data Management System



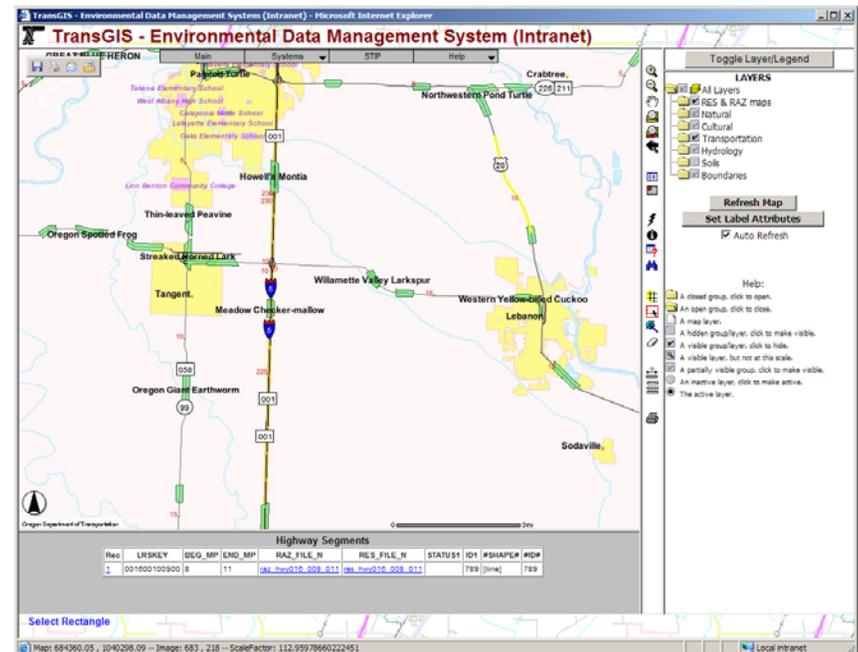


Adaptability in Management Systems

- Business Process Refinements
- Technology Advancements
- Field to Web Data Sharing



- Wetland delineation
- Mitigation monitoring
- Special Management Areas (SMA)
- Cultural resources





Additional Information

ODOT Salmon Resource – Sensitive Area Mapping (SR-SAM) website

http://www.oregon.gov/ODOT/TD/TDATA/gis/sr_sam.shtml

Conference Contacts:

Cathy Nelson, P.E. – ODOT Chief Engineer

Hal Gard, R.P.A. - ODOT Geo-Environmental Section Manager

Frannie Brindle – ODOT Natural Resource Unit Manager