

# Oregon Dept. of Environmental Quality

**A regulatory agency whose mission is to be a leader in restoring, maintaining and enhancing the quality of Oregon's air, land and water.**



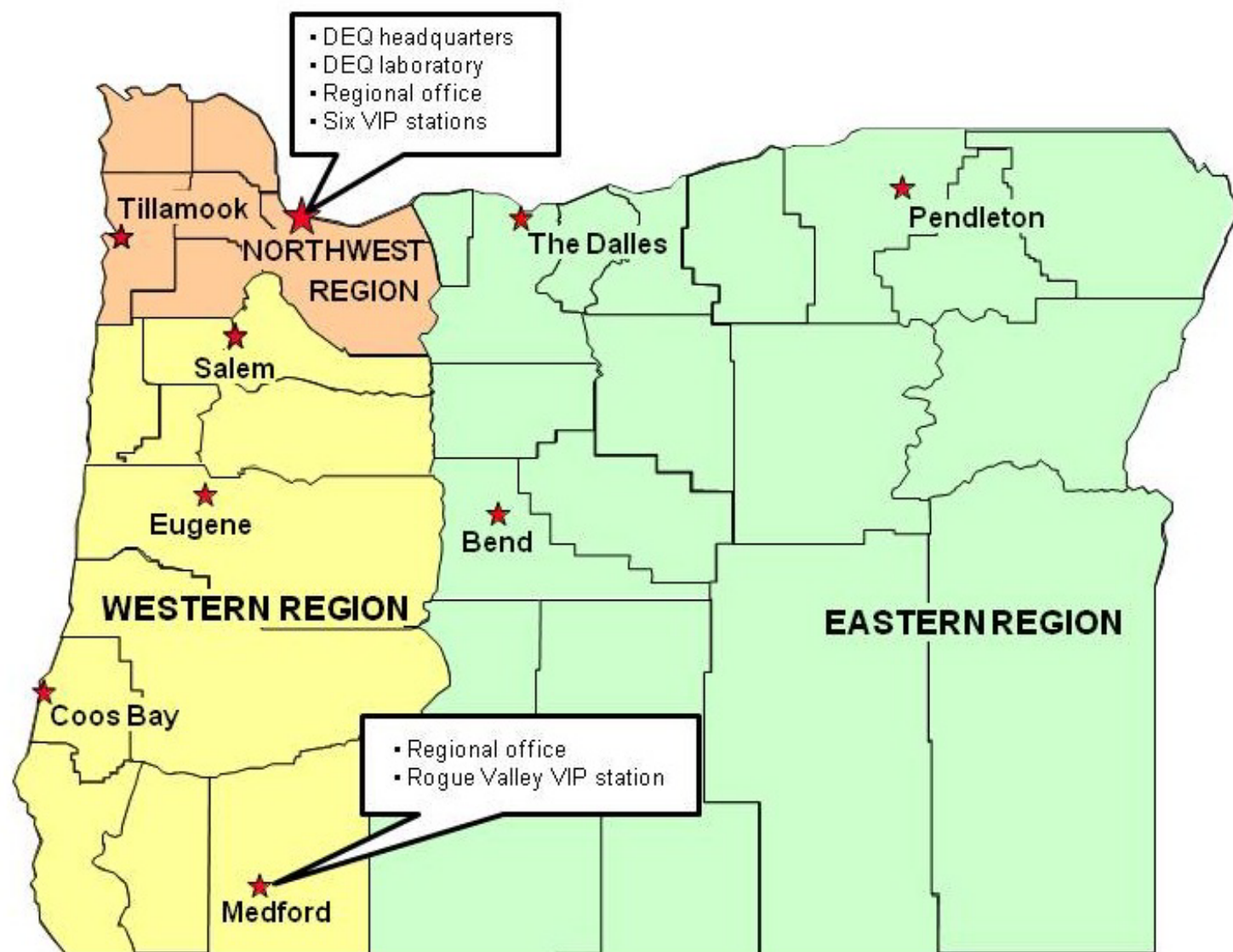
# DEQ's work

- The Oregon Environmental Quality Commission (EQC) serves as DEQ's policy and rulemaking board, provides direction.
- Implement state and federal environmental laws to protect the quality of Oregon's air, water and land.
- Provide environmental science and information, regulatory services and technical assistance to Oregon businesses, local governments, homeowners and community groups.

# DEQ's Divisions & Regions

- Divisions-
  - Air Quality
  - Land Quality
  - Water Quality
  - DEQ Laboratory
- Compliance and Enforcement
- Director's Office
- Regions-
  - Eastern
  - Northwest
  - Western
- Employs approximately 700 scientists, engineers, geologists, toxicologists, inspectors, legal and policy staff, technicians, managers and environmental specialists.

# DEQ regions and offices



# What does the DEQ do?

## ■ **Monitoring and analysis**

- at over 1,500 locations
- collects over 20,000 samples and
- performs approximately 300,000 analyses each year

## ■ **Permitting and licensing**

- 400 material recovery facilities, landfills and solid waste disposal facilities
- More than 2,600 federal and state air quality permits
- Over 5,300 federal and state water quality permits
- 10 household hazardous waste disposal facilities
- Over 700 onsite septic system installers and service providers
- 164 underground tank removal and cleanup companies
- About 1,500 tanker truck vapor certifications

# What does the DEQ do?

## ■ **Inspections, compliance and enforcement**

- Issues approximately 200 penalties per year derived from 2000 inspections and monitoring reporting reviews
- Penalties for the most significant violations and chronic violators

## ■ **Technical assistance**

- Public education, training and technical assistance through programs, workshops etc.
- Also provide one on one assistance from technical staff

## ■ **Pollution reduction**

- Monitoring of an average of 2,500 asbestos abatement projects
- Tracking statewide greenhouse gas emissions and air toxics
- Working on water quality pollution control plans in 33 sub basins
- E-waste recycling



# What does the DEQ do?

## ■ **Emergency Response and Cleanup**

- Follows up on 2,300 reports of spills, oil or hazardous materials
- Biennially, program staff responds to about 20 significant spills
- Expertise for the cleanup of about 700 other environmental incidents
- Wildfire response

## ■ **Environmental Cleanup**

- Cleanup of more than 440 contaminated sites across Oregon
- Assists homeowners to decommission unused heating oil tanks

## ■ **Environmental Justice**

- Fair treatment with regard to environmental laws, regulation and policies

# GIS in Water Quality

- **Standards & Assessment**
  - Integrated Report
  - 303(d)
  - 305(b)
  - Beneficial uses
- **Watershed Management**
  - TMDLs
- **Drinking Water Protection**
- **Groundwater Protection**
  - GWMA
- **Water quality permits**
  - General
  - Industrial
  - Stormwater



# GIS in Land Quality

- Environmental Cleanup
  - Brownfields
  - Dry Cleaners
- Emergency Response
  - Incident Response
  - Geographic Response Plans
- Site Assessment
- Tanks
  - Underground Storage Tanks
  - Leaking Underground Storage Tanks
  - Heating Oil Tanks
- Recycling
  - Electronic recycling collections
- Waste Management
  - Hazardous Waste
  - Household Hazardous Waste
  - Solid Waste

# GIS in Air Quality & LEAD

## Air Quality

- Maintenance Areas
  - Nonattainment areas
- Vehicle Inspection
- Air Toxics
  - Portland Air Toxics Solution
- Air Pollution

## DEQ LAB and Environmental Assessment (LEAD)

- Air Quality
  - Air quality index
  - Air quality monitoring
  - Real time data request
- Water Quality
  - Groundwater Monitoring
  - Water quality Index
  - Watershed monitoring
- Technical Reports

# GIS Licenses

- ArcGIS Desktop Advanced/Basic
- ArcGIS Pro
- ArcGIS Extensions- Spatial Analyst, 3D, GeoStats, Network, Publisher
- ArcGIS Server 10.7.1
- ArcGIS Online – 166 users
- Geocortex- 3 licenses (2 production, 1 development)

# DEQ's GIS Applications

- Your DEQ Online (YDO) application
- Facility Profiler (to be decommissioned)
- Location Improvement Tool (LIT) (to be decommissioned)
- Stream Location Identification Tool
- Drinking Water
- Oregon Water Quality Index
- Station Creation Tool (internal)

GIS in the programs...