



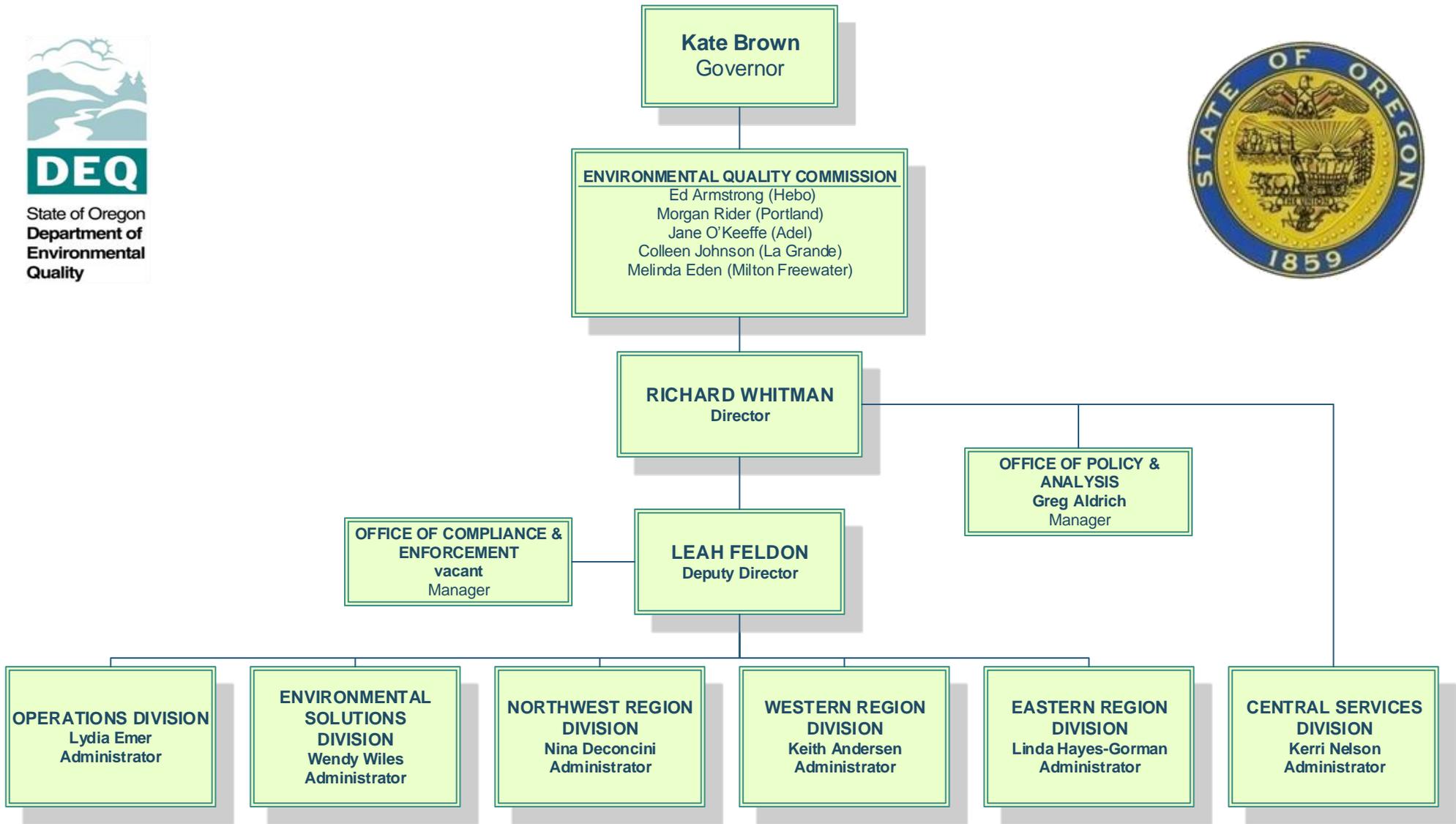
Department of Environmental Quality  
Ways and Means presentation

## 2017-19 Governor's Recommended Budget

Ways and Means Subcommittee on Natural Resources, March 2017

### APPENDICES

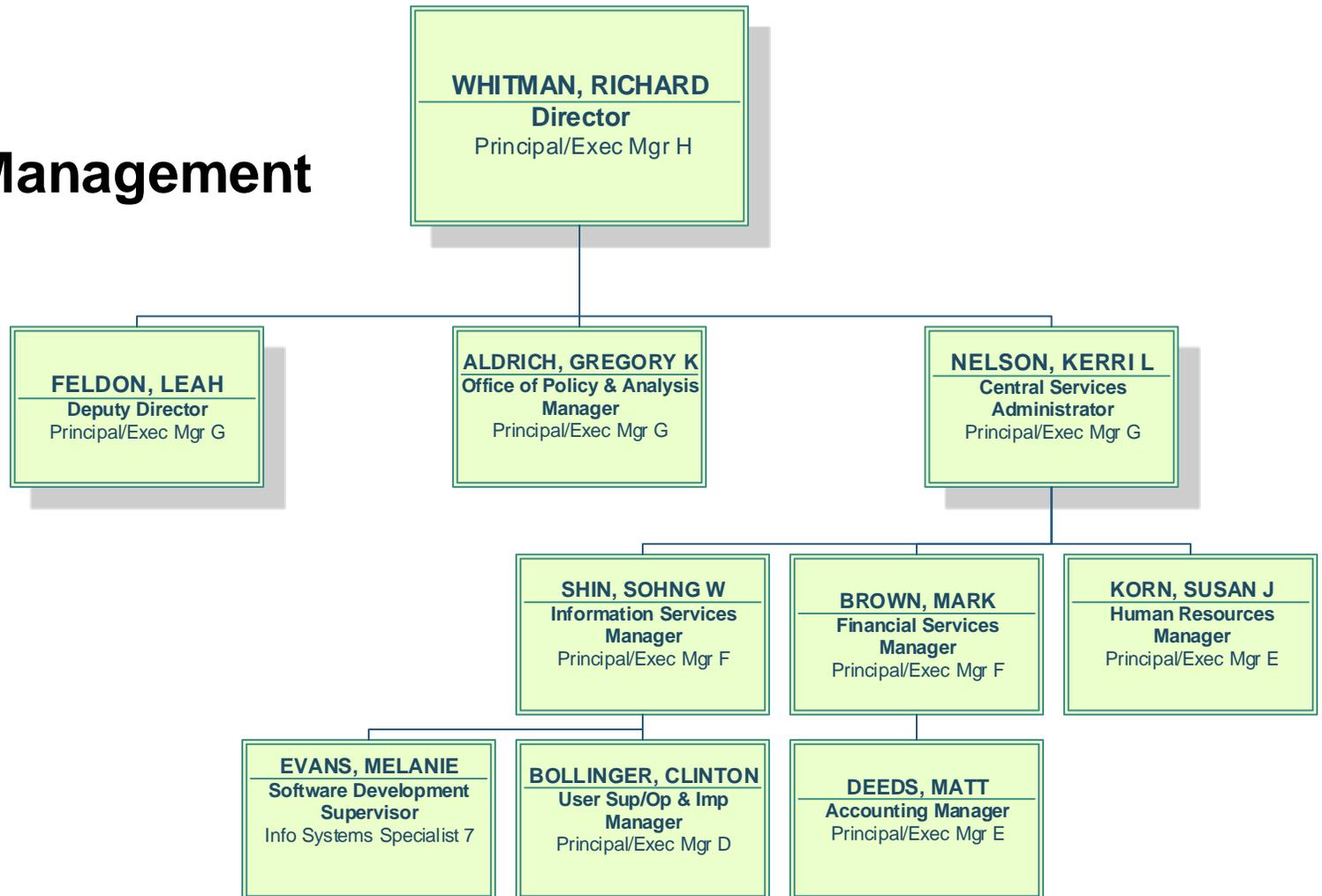
- A. Organizational Charts
- B. Environmental Quality Commission
- C. DEQ Snapshot
- D. Audit Results
- E. Technology Projects
- F. Budget Changes
- G. Reduction Options
- H. Ending Balance
- I. Policy Option Packages
  - 1. Air Quality
  - 2. Water Quality
  - 3. Land Quality
  - 4. Agency Management
  - 5. Debt Services
  - 6. Non-Limited
- J. Executive Summaries
  - 1. Cleanup
  - 2. Groundwater
  - 3. OpCert
  - 4. Materials Management
- K. Measures
  - 1. KPM Reports
  - 2. Performance Measures
  - 3. Fourth Quarter Measures





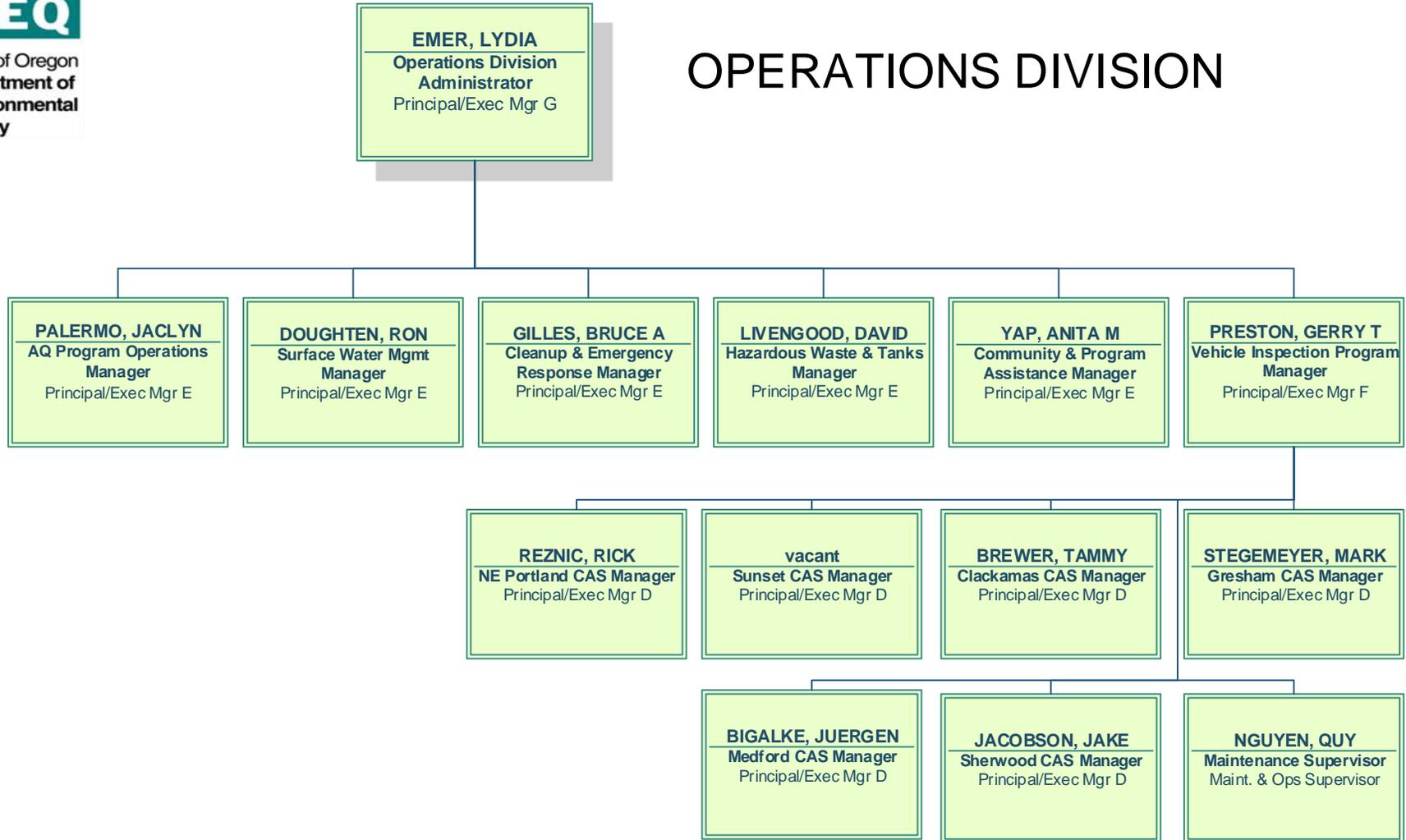
State of Oregon  
Department of  
Environmental  
Quality

# Agency Management



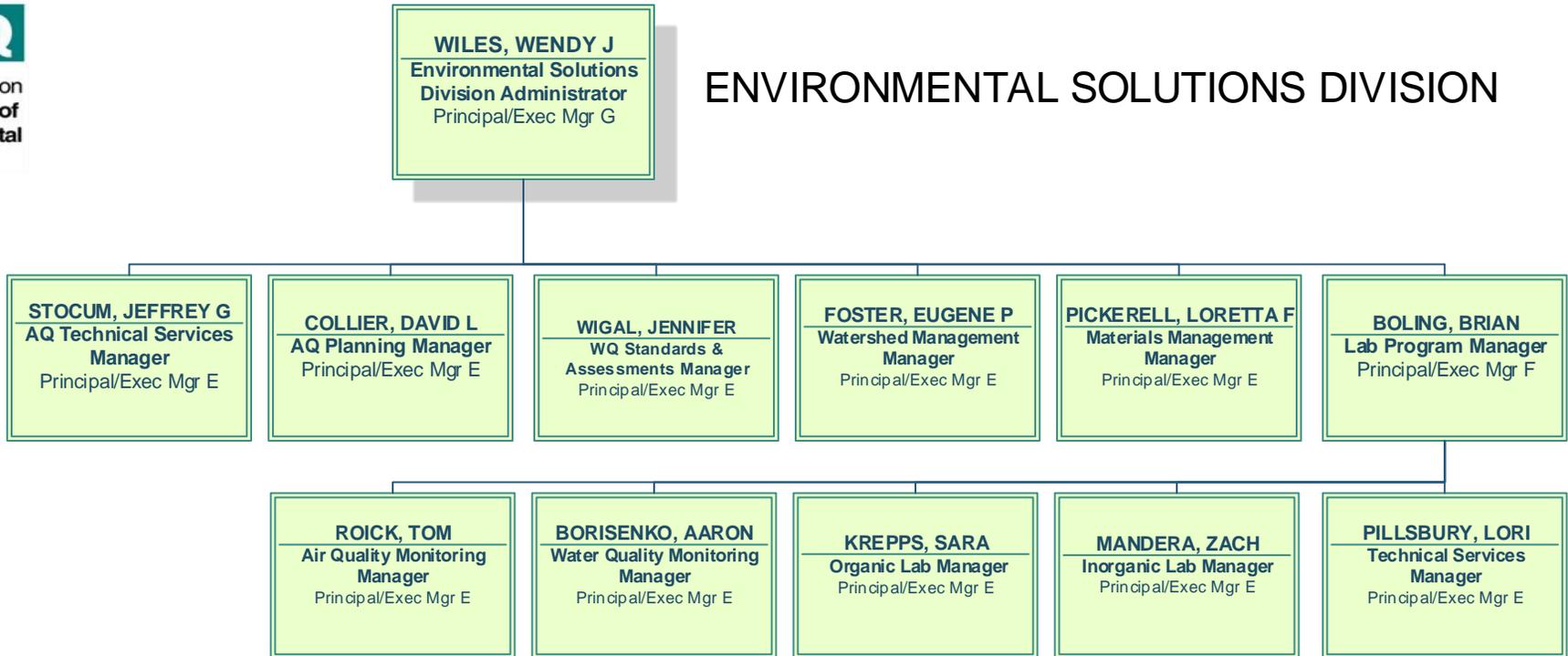


# OPERATIONS DIVISION





# ENVIRONMENTAL SOLUTIONS DIVISION





State of Oregon  
Department of  
Environmental  
Quality

**DECONCINI, NINA M**  
Northwest Region  
Administrator  
Principal/Exec Mgr G

## NORTHWEST REGION DIVISION

**ORMAN, MICHAEL**  
Air Quality Manager  
Principal/Exec Mgr E

**YELTON-BRAM, TIFFANY**  
WQ Source Control  
Manager  
Principal/Exec Mgr E

**SVETKOVICH, CHRISTINE**  
Stormwater/UIC  
Manager  
Principal/Exec Mgr E

**MRAZIK, STEVE C**  
Watersheds/401  
Manager  
Principal/Exec Mgr E

**PARRETT, KEVIN G**  
Cleanup/LUST Manager  
Principal/Exec Mgr E

**JOHNSON, KEITH**  
Cleanup Manager  
Principal/Exec Mgr E

**KORTENHOF, MICHAEL**  
Tanks Manager  
Principal/Exec Mgr E

**OBRIEN, AUDREY M**  
Environmental  
Partnerships Manager  
Principal/Exec Mgr E

**HAYES-GORMAN, LINDA**  
Eastern Region  
Administrator  
Principal/Exec Mgr G

## EASTERN REGION DIVISION

**BAILEY, MARK W**  
Air Quality Manager  
Principal/Exec Mgr E

**NIGG, ERIC W**  
Water Quality  
Manager  
Principal/Exec Mgr E

**BUTCHER, DONALD P**  
Water Quality Manager  
Principal/Exec Mgr E

**DRUBACK, ELIZABETH**  
Solid & Haz Waste  
Manager  
Principal/Exec Mgr E

**ANDERSON, DAVID G**  
Cleanup Manager  
Principal/Exec Mgr E

**ANDERSEN, KEITH**  
Western Region  
Administrator  
Principal/Exec Mgr G

## WESTERN REGION DIVISION

**DAVIS, CLAUDIA J**  
Air Quality North  
Manager  
Principal/Exec Mgr E

**vacant**  
Air Quality South  
Manager  
Principal/Exec Mgr E

**NOMURA, RANEI**  
WQ Point Source  
Manager  
Principal/Exec Mgr E

**LOBOY, ZACHARY J**  
Watersheds &  
Stormwater Manager  
Principal/Exec Mgr E

**BELYEA, DAVID R**  
Regional Environmental  
Solutions Manager  
Principal/Exec Mgr E

**FULLER, BRIAN R**  
Hazardous & Solid  
Waste Manager  
Principal/Exec Mgr E

**KUCINSKI, MICHAEL**  
Cleanup Manager  
Principal/Exec Mgr E

**STEINDORF, CHRIS**  
Regional Services  
Manager  
Principal/Exec Mgr D

# Environmental Quality Commission Members

The Oregon Environmental Quality Commission is a five-member panel of Oregonians appointed by the governor and confirmed by the Senate for four-year terms to serve as DEQ's policy and rule-making board. Members are eligible for reappointment but may not serve more than two consecutive terms.



Ed Armstrong  
Chair

**Ed Armstrong** has lived in Oregon for nearly six decades. He grew up in Washington County and served many years in the education field. He received a B.S. degree in biology from Portland State University. He has served as a high school teacher, director of an alternative education program, curriculum director, grant writer, and CEO of a national water treatment company. Commissioner Armstrong has served on numerous boards and councils, and has been involved with watershed restoration projects with students over the years. His work has been recognized and received awards statewide and nationally. Commissioner Armstrong was appointed to EQC in February 2012 and lives in Hebo.

*Terms of service: 3/1/12-6/30/15, reappointed 7/1/15-6/30/19*



Melinda Eden  
Vice Chair

**Melinda Eden** is a senior policy advisor for the Northwest Energy Efficiency Alliance. Previously at NEEA, she was a stakeholder relations manager, working to engage and assist public utilities, particularly small public utilities and those with service territories that include rural areas. Before joining NEEA in June 2011, she represented Oregon for eight years as a member of the Northwest Power and Conservation Council. She has worked as a wire service and newspaper reporter, attorney specializing in hazardous-substance law, herd manager, and Council member. She has a bachelor's degree in journalism from the University of Maryland and a law degree from the University of Oregon with a certificate in natural resources law.

*Terms of service: 11/23/13-6/30/17; eligible for reappointment*



Sam Baraso  
Commissioner

**Sam Baraso** is a graduate of Duke University with a background in environmental management, finance, and social equity. Commissioner Baraso currently works as a senior policy analyst in Multnomah County's Office of Sustainability developing financing mechanisms to support building resiliency investments. He has worked on projects at the intersection of health and the environment evaluating emerging research on the use of green infrastructure for water quality, air quality, and psychological health. Prior to his role at the County, Commissioner Baraso developed water quality and

endangered species' mitigation banking programs across the Northwest. He believes a truly sustainable Oregon is ecologically, economically, socially healthy.

*Terms of service: 2/1/17-6/30/20; eligible for reappointment*



Colleen Johnson  
Commissioner

**Colleen Johnson** has been a professor of Economics at Eastern Oregon University for over 26 years. She has a Ph.D. in economics from Washington State University. She is a nationally known scholar on the effects of federal deficits on interest rates and the field of institutional economics. Her primary areas of teaching are macroeconomics, labor economics, public policy and public administration. Commissioner Johnson served for 16 years on the La Grande City Council, 14 of those as Mayor of La Grande. As mayor, she also served on the Oregon Mayors Association Board of Directors and on the League of Oregon Cities Board of Directors. Commissioner Johnson was appointed to the EQC in December 2012 and lives in Portland.

*Terms of service: 12/13/12-12/12/16, reappointed 12/13/16-6/30/20*



Morgan Rider  
Commissioner

**Morgan Rider** has a Civil & Environmental Engineering degree from Cornell University, and for over 25 years she worked with government, non-profit and private companies including LSI Logic, Nike, Ball Aerospace and BMW North America, on a variety of environmental and natural resource related issues. Commissioner Rider currently works for Grady Britton, a creative branding agency putting thoughtful, informed advertising, PR, digital, media, and planning capabilities to work for companies in the modern marketplace. She believes that the best way to affect long term behavior change is through amazing creative visuals, simple messaging, and great storytelling. Commissioner Rider was appointed to EQC in February 2012 and lives in Portland.

*Terms of service: 3/1/12-6/30/15, reappointed 7/1/15-6/30/19*

# DEQ Snapshot

*The Oregon Department of Environmental Quality's mission is to be a leader in restoring, maintaining and enhancing the quality of Oregon's air, water and land. DEQ works with all Oregonians to provide a healthy, sustainable environment that supports a diverse economy.*

## Overview

DEQ employs approximately 650 people who implement state and federal environmental laws to protect Oregon's air, water and land. The Oregon Environmental Quality Commission, a five-member citizen panel appointed by Oregon's governor, serves as DEQ's policy and rulemaking board. DEQ is one of 10 state agencies that collaborate to find local solutions to community and economic issues through Oregon's Regional Solutions Team.

## Science is DEQ's cornerstone

Science and environmental information require regular monitoring and analysis of Oregon's air, water and land. DEQ uses scientific data to determine appropriate permit limits and to inform citizens and policy makers about the best ways to provide a healthy environment and a sustainable economy.

## Monitor and analyze

DEQ's accredited laboratory monitors the quality of Oregon's natural resources. Employees collect more than 10,000 samples from more than 1,500 locations annually, producing more than 300,000 individual results.

## Air Quality Index

DEQ also processes over half a million points of data from 45 locations to support Oregon's Air Quality Index which helps pinpoint sources and amounts of pollution, whether it is increasing or decreasing, and how to reduce it with cost-effective strategies.

## Emergency Response and Cleanup

- Receives and investigates approximately 2,300 reports a year from the Oregon Emergency Response System on reported spills of oil or hazardous materials, sewage or other environmental concerns from the public. DEQ investigates every report to ensure the protection of human health and water quality.
- Responded to over 1,500 spills in 2016 and advises on the cleanup of approximately 400 other contaminated sites across the state, biennially.
- Tracked over 1500 vessel trips per year to ensure ships, barges and other vessels have oil spill contingency plans and properly manage ballast water to prevent costly spills and introduction of invasive species to Oregon waters.
- DEQ has overseen the cleanup of 1,400 contaminated sites statewide since 1991. In addition to working at industrial or commercial cleanup sites, DEQ works with homeowners to decommission more than 1,700 unused heating oil tanks in 2016.

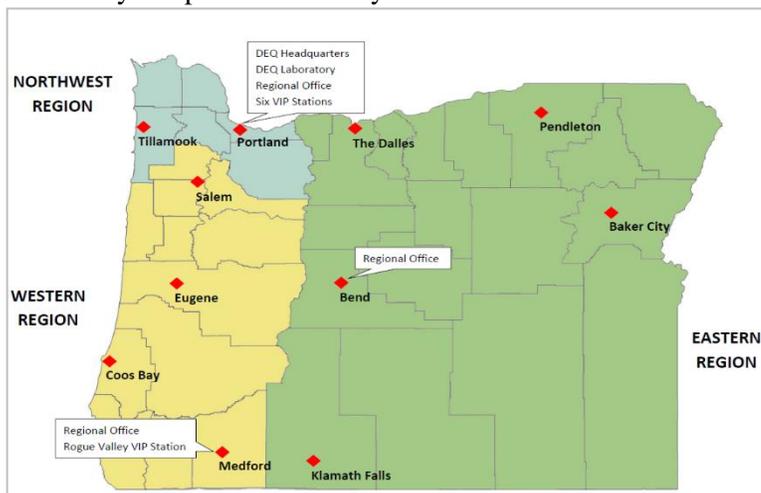
## Compliance and enforcement

In 2016, DEQ conducted inspections of 1,088 permitted facilities to ensure compliance with rules and regulations. If a potential violation is identified, DEQ's first goal is to offer assistance. Most violations are corrected through informal, non-enforcement measures. DEQ issues approximately 200 penalties per year based on more than 2,000 inspections. To streamline the settlement process and meet compliance goals, DEQ may provide expedited enforcement options which may result in lower penalties.



State of Oregon  
Department of  
Environmental  
Quality

**Office of the Director**  
700 NE Multnomah St.  
Portland, OR 97232-4100  
Phone: (503) 229-5696  
(800) 452-4011  
Fax: (503) 229-5850  
[www.oregon.gov/DEQ](http://www.oregon.gov/DEQ)



## Examples of how DEQ leveraged 2016 funds

- DEQ awarded \$1.2 million in materials management grants.
- DEQ partnered with regional nonprofit lender Craft3 to help Oregonians afford repairs to failing septic systems through “Clean Water Loans.”
- The Oregon Clean Water State Revolving Fund program signed 14 new loans with local governments for water quality improvement projects in the total amount of \$97,882,085.
- DEQ awarded \$55,199 to Portland Parks & Recreation and \$129,783 to Multnomah County Drainage District to improve the Columbia Slough habitat.

## Restore valuable property

DEQ helps remove environmental barriers to redevelopment by providing assistance in investigating and cleaning up potentially contaminated property known as brownfields. Contaminated property may pose health and safety risks to the surrounding community. Even the mere *perception* of site contamination can affect the neighborhood by lowering property values. On the other hand, cleaning up and redeveloping brownfields helps communities remove blight and provides needed services, such as industrial or commercial development, housing, or open space for playing fields and parks. Redeveloping land that is already urbanized also helps to reduce sprawl.



*Completed in 2014, a former landfill turned into a sports complex in the City of Astoria, creating revenue for the school district and freeing up land for expansion of Columbia Memorial Hospital.*



*In 2015, the City of St. Helens secured an EPA grant to redevelop 90.4 acres of underused industrial waterfront property which DEQ began investigating in 1988.*



*Cleanup of McCormick & Baxter Creosoting Co. site in north Portland led to the removal of 33,000 tons of highly contaminated soil.*

## Regional Solutions

As a member of Oregon’s Regional Solutions Teams, DEQ works collaboratively with state agency partners to bring people and resources together to solve local problems. Located in Tillamook, Portland, Eugene, Medford, La Grande, and Bend, Regional Solutions Teams reflect the unique priorities of each region. Working directly with local government, business and industry, DEQ’s Regional Solutions Team members work to achieve environmental benefit and economic development by:

- Creating better communication and working relationships between agencies on tangible, priority economic projects that create new or retain existing jobs
- Leveraging agency, private, and philanthropic resources
- Providing proactive assistance to companies and communities, which results in more compliance and less enforcement.
- Making permitting and other regulatory processes more understandable and efficient to save funding and time

### Pollution Reduction and Technical Assistance

Asbestos abatement program  
Employee commute option  
Greenhouse gas inventory  
Free hazardous waste collection events  
Hazardous waste and toxic use reduction  
Small business assistance

Clean diesel grants  
Green chemistry  
Free pesticides collection events  
Free well water testing in small communities  
Odor nuisance strategy  
Woodstove certification

# Summary of recent DEQ audit results (2017-19)

## Secretary of State Audits

The Secretary of State conducted the following audits:

- **Annual Statewide Financial Audit FY2015:** The Secretary of State annual statewide financial audit report issued for the year ending June 30, 2015 concluded that the segment of the financial accounts audited were fairly presented, in all material respects, in accordance with generally accepted accounting principles in the United States of America in relation to the comprehensive annual financial report (CAFR). There were no major findings or reportable conditions.
- **Annual Statewide Financial Audit FY2016:** The Secretary of State annual statewide financial audit report issued for the year ending June 30, 2016 concluded that for the segment of the financial accounts audited were fairly presented in accordance with generally accepted accounting principles in relation to the statewide financial statements (CAFR). Four weaknesses in internal controls were identified, which resulted in a Significant Deficiency finding. The weaknesses related to procedures related to incoming check endorsement, federal revenue draws, reconciliation with SFMS and cost recovery invoicing. DEQ has corrected each of these internal control issues and has put controls in place to prevent future issues.
- **Clean Water State Revolving Fund (CWSRF) financial statement and compliance audits FY2015:** The Secretary of State auditors concluded that the CWSRF financial statements were presented fairly, in all material respects, in accordance with generally accepted accounting principles in the United States of America. Also, the auditors didn't identify any material weaknesses in internal control or instances of noncompliance or other matters that are required to be reported under Government Auditing Standards. The auditors had no major findings or recommendations.
- **Public Records Requests Audit Report FY 2015:** The Secretary of State examined the public records requests practices of nine Oregon state agencies, including DEQ. This general audit concluded that agencies respond well to most public records requests for routine information, but that non-routine, complex requests take longer and cost more to complete; agencies tend to keep records for longer than required by retention schedules; agencies tend to lack technology for digital storage of records; and that agencies don't all have public records policies and documented procedures. DEQ is responding to the audit by evaluating its current practices, identifying areas for improvement and providing staff training.

---

## US Environmental Protection Agency audits

The EPA conducted the following audits:

- **Program Evaluation Report for Oregon's Clean Water State Revolving Loan Fund (FY2015):** EPA determined that DEQ has an effective CWSRF program and demonstrates continuing commitment to its success and improvement. In particular, EPA noted the success of the prior year's marketing plan resulting in an improvement in program pace of binding commitments. EPA also noted that DEQ needs to increase projects allocated to Green Project Reserve (GPR) and that there was an upcoming deadline of June 30, 2016 associated with the FFY2014 capitalization grants. The CWSRF program responded by correcting federal reporting to accurately reflect projects that were allocated to the GPR to show that the goal has been met.

## Summary of Technology Projects

- **EDMS** – Environmental Data Management System. Through Policy Option Package 161 in the agency’s Governor’s Request Budget, DEQ is requesting funding to purchase and customize an integrated environmental data management system to better meet customer and agency needs. An environmental data management system can store, process and display data from numerous DEQ programs. Using a shared platform, EDMS will standardize and automate business processes to support all agency permitting, invoicing, e-reporting, inspections and other program work. These changes will increase our efficiency in protecting the environment and in providing the public access to environmental data about their communities. This project has received Stage One approval of the state’s Stage Gate process for information technology projects.

DEQ’s 2017-19 Governor’s Request Budget includes:

- \$7.68 million in bonding authority and \$350,748 in General Fund.
  - 13.50 FTE for project staff, many limited in duration.
- **TAMS** – Time and Attendance Management System. DEQ is working with the Oregon Department of Transportation (lead agency) and the Oregon Department of Agriculture to implement a commercial-off-the-shelf electronic time accounting system which will allow for employee time entry and reporting to OSPA for payroll, leave tracking (including OFLA/FMLA) and activities tracking. For DEQ, the system is intended to replace an aging in-house developed time system and paper timesheets. The expected completion date is second quarter 2018.
    - Total project cost estimate (all agencies, over several biennia): \$5.6 million
    - DEQ share of project cost estimate: \$800,000
    - 2015-17 budget expenditure to date (through 12/31/16): \$90,000
  - **CWSRF IS** – Clean Water State Revolving Fund Information System. DEQ needs a system to automate existing manual processes (Excel spreadsheets) for loans to local districts for upgrading water pollution control systems. An automated system would streamline data entry, assist in the financial management of the loans and provide better public access to data. Funding for this project comes from program administrative fees. This project has been submitted to the State CIO.
    - Total project cost estimate: \$750,000 to \$1 million
    - 2015-17 budget expenditure to date (through 10/31/16): \$23,500
  - **ACME** – ACES and CEM Merging into EDMS. DEQ is merging its compliance/enforcement and central entity management systems. The ACME project will complete all the known remaining work for the two systems with the main goal of improving data quality to prepare for implementation of the Environmental Data Management System. The work includes system enhancements and major tasks remaining from the compliance/enforcement system project. DEQ will complete the work in three phases; ACME 2017 is the first phase. Project scope is

limited to improving data quality. The remaining phases cover data integration and technology upgrades. The State CIO considers this a maintenance project that doesn't need to be tracked through the state's Stage Gate process.

- Total project cost estimate: \$210,000
  - 2015-17 budget expenditure to date: \$90,000 (development costs through 12/31/16)
  
- **Active Directory Modernization.** DEQ is preparing to update procedures and develop standards for ongoing maintenance of Active Directory entries. Active Directory is a database that keeps track of all the user accounts and passwords in an organization in one location, improving cyber security. The State CIO considers this an operational project that doesn't need to be tracked through the state's Stage Gate process.
  - Total project cost estimate: \$188,000
  - 2015-17 budget expenditure to date: \$11,000
  
- **Exchange Upgrade.** DEQ's Exchange email system currently resides in older generation servers. Both hardware and Exchange software need updating. We are currently doing background research to understand constraints and issues related to the upgrade. Options for the upgrade include purchasing new servers and maintaining them in-house or moving to a cloud-based system.
  - Total project cost estimate: More than \$100,000
  
- **E-Reporting.** EPA's Electronic Reporting Rule requires National Pollutant Discharge Elimination System water quality permit holders to report permit information to EPA electronically instead of filing written paper reports. DEQ will be implementing changes to meet the requirements, from spring 2017 through summer 2018, in two stages. Stage One will include Discharge Monitoring Reports and the Sewage/Sludge Biosolids annual program reports. Stage Two will include the remaining permit reporting. The Electronic Reporting Rule's phase two starts Dec. 21, 2020 and will require additional NPDES reporting.
  - Total project cost estimate: DEQ does not need to purchase any software or hardware but will need to use staffing resources to update business operations and existing systems.

## Description of how recent changes to Agency budget and/or management flexibility affected Agency operations

### A. DEQ's 2015-17 Legislatively Adopted Budget

The Legislature approved policy packages that added, restored or continued the following work in 2015:

- Air toxics monitoring – Added General Fund for 2 FTE to continue air toxics monitoring in other parts of the state once the Swan Island monitoring study is complete.
- Wastewater permitting – Added General Fund and approved a fee increase to restore 6 FTE and added two new senior permit writing positions.
- Water quality permitting system – Added General Fund and approved a fee increase to replace the agency's Water Quality wastewater permitting information management system, including one new position and budget for contracts. This was the first part of a planned consolidated permitting system for all agency permits.
- Water quality assessment – Phased in three new positions to enhance DEQ's ability to assess and report water quality data.
- Nonpoint source pollution – Added General Fund to restore two positions to help with the development, implementation and evaluation of plans to reduce nonpoint source pollution.
- Materials Management vision – Authorized fee increases to add 7 FTE and \$500,000 in contracts and grants to implement the Materials Management 2050 vision.
- Ballast water – Restored program to 1.5 FTE and increased General Fund to match the fee increase to continue vessel inspection, compliance verification and enforcement activities.
- Oil spill response planning – Authorized a fee increase, restored two positions to full time and added a position to program to carry out marine oil spill planning and preparedness activities.
- Process improvement – Added 6 positions to support process improvement activities and IT project management.
- Portland Harbor coordinator – Added a senior-level policy position beginning in the second half of the biennium to help facilitate state-federal coordination on the Portland Harbor cleanup.
- Asbestos – Added a half-time position to for implementation of the residential asbestos inspection program established by Senate Bill 705.

The budget implemented the permanent reduction of 1.29 FTE positions budgeted on Other and Federal Funds in Package 070.

### B. 2016 legislative session

During February 2016, the Legislature provided DEQ with \$2.5 million in General Fund and 12 positions (Senate Bill 5701) to allow for an immediate response to public health concerns, increased industrial air toxics monitoring, and to begin developing a risk-based approach to air permitting rules. The funding included \$350,000 of capital outlay purchases, which covered two new monitoring sites that sample for a full suite of air toxics and two mobile metal-only monitors. DEQ immediately installed the two additional air toxics monitoring stations and hired the appropriate staff to manage those stations and perform analysis work.

The funding allowed DEQ to focus on increased air toxics monitoring of cadmium, arsenic, and chromium hotspots in Portland, expand air toxics monitoring in a limited number of other locations across the state and to begin developing a risk-based approach to air permitting for industrial sources through rulemaking.

### **C. Emergency Board**

In May 2016, the Emergency Board allocated \$225,000 in General Fund to DEQ to replace monitors borrowed from EPA (who requested their return) with 24 new metals monitors (\$200,000) and pay for the costs associated with installing and moving the monitors such as permits, electricity drops, rent and extra travel to set up the new sites (\$25,000). The allocation gave DEQ the capacity to set up 13 monitoring sites, in groups that are appropriate to the size and location of facilities or hot spots the agency needs to monitor.

The monitors will support implementation of the new rules DEQ is developing for a health-based approach to air permitting for industrial sources; and could be used to measure particulate material in the air caused by Oregon wildfires.

DEQ needed this additional funding, beyond what was received during the 2016 legislative session, to support monitoring and data needs that were greater than originally anticipated when DEQ developed the 2016 policy option package. DEQ also used some funding to cover unanticipated and unbudgeted costs in its Air and Land programs in response to Portland air toxics issues.

### **D. Federal funding**

- EPA is proposing to refine the regional allocations for Section 105 grants. To maintain the integrity of state and local air programs and to facilitate a smooth transition, EPA is proposing an implementation approach that would limit regional losses to no more than 2.5 percent from each region's prior year amount. This loss of 2.5 percent will affect Oregon over the next 10 years (25 percent loss overall).
- Water Quality grant reduction: On Jan. 30, 2015, the National Oceanic and Atmospheric Administration and the U.S. Environmental Protection Agency concluded that the State of Oregon has not submitted a fully approvable Coastal Nonpoint Pollution Control Program as required by section 6217(a) of the Coastal Zone Act Reauthorization Amendments of 1990, 16 U.S.C. 1455b. NOAA and EPA found that Oregon has not adopted additional management measures applicable to forestry that are necessary to achieve and maintain applicable water quality standards under Clean Water Act section 303 and to protect designated uses. In July 2015, EPA notified DEQ that it was withholding \$631,500 of Oregon's Fiscal Year 2015 Clean Water Action Section 319 grant appropriation until NOAA and EPA determined whether Oregon had provided sufficient indication that the State is taking steps to address shortfalls in its Coastal Nonpoint Pollution Control Program. The EPA also applied the withholding to the FY 2016 grant and is expected to continue withholding into FY 2017 and 2018.
- At this point in time, DEQ has not experienced any additional federal funding changes due to federal administration changes, and the long-term funding outlook is unknown.

**E. Consolidation of Portland headquarters and Northwest Region offices**

DEQ's Portland headquarters and Northwest Region offices used to be in separate locations. With leases ending at both locations, DEQ and the Department of Administrative Services evaluated options and decided to let the leases end and consolidate the Portland offices into one location. This decision allowed the agency to align with DAS Space Standards, and reduced the overall square footage the agency was leasing from 109,793 square feet to 89,137 square feet. This resulted in a monthly cost savings of \$22,126. DEQ also anticipates gaining efficiencies and cost savings through workplace design, furniture selection, energy savings and the sharing of resources such as fleet vehicles.

The move occurred in two phases, based on lease expirations. The Northwest Region office moved in May 2015 and the headquarters office completed its move in November 2016. The new lease has an initial 15-year term that runs through Oct. 31, 2030 with an option to extend twice for an additional five years each.

**F. Air toxics since mid-2016**

Since mid-2016, DEQ and the Oregon Health Authority convened a Technical Working Group of national experts; held public forums in Medford, Bend, Pendleton, and Portland; and launched a 23-member rules advisory committee that is meeting from October 2016 through June 2017.

To begin developing a risk-based approach to industrial air toxic permitting, DEQ reprioritized skilled existing staff with the level of expertise and familiarity needed for the rulemaking. It also requested air toxics emissions information from more than 1,260 facilities around the state in order to help define the scope of Cleaner Air Oregon.

Cleaner Air Oregon will determine allowable risk limits resulting from industrial air emissions. The program is expected to set limits on toxic air emissions for industrial facilities based on impact to human health, giving businesses clear direction and guidance on regulations.

Starting in fall of 2016, the Cleaner Air Oregon Rules Advisory Committee was convened to discuss the implementation and framework for the new air toxics permitting program. All these efforts contribute to informing proposed rules anticipated to come before the Environmental Quality Commission in 2018.

Details of Cleaner Air Oregon remain to be defined. The comprehensive community engagement and rulemaking advisory committee process are described and detailed at <http://cleanerair.oregon.gov>. It is anticipated that the new rules will add steps to the permitting process and may expand the universe of required permit holders, necessitating increased DEQ staff, expertise, equipment and supplies. DEQ is working closely with the regulated community and others to ensure effective and efficient program implementation.

**G. Water Quality budget note and report**

The 2015 Oregon Legislature, due to concerns with a backlog in renewing individual municipal and industrial NPDES water quality permits, directed DEQ to hire an outside consultant to evaluate this aspect of the NPDES Water Quality permitting program and make recommendations on improving the quality and

timeliness of permits. The consultants recommended numerous actions and implementation approaches covering a number of different topic areas. With regards to funding, the consultants noted that funding uncertainty and fluctuations may impede the agency's ability to resolve the backlog problem. They recommended that DEQ develop a per-permit funding formula and establish a realistic annual funding estimate based on a five-year work plan given that permits are renewed on a five-year cycle. The program evaluation was completed and a report submitted to the Legislature in December, 2016. DEQ used \$250,000 from its water quality permitting budget to pay for this work.

#### **H. Onsite Wastewater Management program**

During the 2015-17 biennium, three local public agencies entered into agreements with DEQ to assume permitting responsibilities for onsite septic systems. This included North Central Public Health District for Gilliam County, Harney County (Lake County previously provided services) and Umatilla County. DEQ will be evaluating potential staffing implications as these transitions settle out. DEQ will continue to maintain a statewide oversight and coordination role for these counties.

# DEQ Reduction Options

<b>Activity or Program</b> <i>(which program or activity will not be undertaken)</i>	<b>Describe Reduction</b>	<b>Amount and Fund Type</b>	<b>Rank and Justification</b>
Air Quality (001) - LRAPA 10%  <b><i>GRB Implemented Reduction</i></b>	Amount represents 10% of the General Fund that is passed through DEQ's budget to Lane Regional Air Protection Agency. The cut will mean further reduction in overall services that LRAPA provides for Lane County residents and businesses.	GF - \$26,689	GR1 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.
Air Quality (001) - PM 2.5 speciation  <b><i>GRB Implemented Reduction</i></b>	Reduces fine particulate speciation to all but three to four winter months. DEQ will need EPA approval to implement this reduction.	GF - \$192,000	GR2 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.
Water Quality (002) – Eastern Region basin specialist  <b><i>GRB Implemented Reduction</i></b>	Reduces capacity in eastern Oregon to support TMDL implementation activities, including assistance in developing TMDL implementation plans, oversight of TMDL implementation activities to ensure their effectiveness toward meeting water quality objectives, and providing technical assistance to communities, watershed councils and other stakeholders on the design and implementation of water quality restoration projects. If taken, DEQ would not be able to support this work unless a reevaluation of statewide priorities led DEQ to discontinue TMDL implementation work in western Oregon basins in order to reassign a position to work in eastern Oregon.	GF - \$200,000	GR3 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.
Air Quality (001) - Ozone monitoring	Eliminate five ozone monitoring sites, two in Portland and three others state-wide.	GF - \$136,000	GR4 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.

# DEQ Reduction Options

<b>Activity or Program</b> <i>(which program or activity will not be undertaken)</i>	<b>Describe Reduction</b>	<b>Amount and Fund Type</b>	<b>Rank and Justification</b>
<p>Water Quality (002) – Integrated Water Resources Strategy</p> <p><b><i>GRB Implemented Reduction</i></b></p>	<p>Following adoption of the IWRS in 2012, the legislature established three new positions at DEQ to support achievement of the IWRS goal of meeting Oregon's future water needs. These positions provide water quality expertise for place-based planning efforts and ensure water quality outcomes are adequately considered when planning water storage and supply projects. Loss of this position reduces DEQ's ability to staff these efforts throughout the state and increases the potential that they might inadvertently result in negative water quality impacts. Diminished stream flow is the most widespread cause of water quality impairment in Oregon. This reduction diminishes DEQ's ability to determine flow needs to meet water quality standards and promote non-regulatory approaches to meeting water quantity/quality objectives (e.g., water reuse).</p>	<p>GF - \$250,000</p>	<p>GR5 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.</p>
<p>Water Quality (002) - Nonpoint Source Policy</p> <p><b><i>GRB Implemented Reduction</i></b></p>	<p>Reduces capacity for nonpoint source policy development and interagency coordination on federal lands and agricultural, forestry and road-related water quality issues, including technical assistance, development of memoranda of agreement, reviewing and providing feedback on water quality management plans regarding progress toward meeting TMDL load allocations, and ongoing coordination needed to protect water quality throughout the state. Also reduces support for developing guidance, improving coordination between HQ and regions and updating Oregon's nonpoint source program plan.</p>	<p>GF - \$238,000</p>	<p>GR6 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.</p>

# DEQ Reduction Options

Activity or Program <i>(which program or activity will not be undertaken)</i>	Describe Reduction	Amount and Fund Type	Rank and Justification
<p>Water Quality (002) - GWMA, toxics and groundwater monitoring and analysis</p> <p><b><i>GRB Implemented Reduction of one of two positions in this option, and replaced General Fund for another position with Lottery Fund</i></b></p>	<p>Reduces by about one-third DEQ's current capacity for collecting and reporting surface water and sediment toxics data, assessing groundwater quality in basins throughout the state, and tracking groundwater quality trends in Groundwater Management Areas (GWMAs). Fewer data would be collected and reports would be delayed, leaving DEQ, communities and other stakeholders with less information to guide water quality protection and restoration activities. Also limits ability to identify areas that are vulnerable to groundwater contamination so preventative measures can be implemented to protect groundwater quality and avoid costly clean-ups or point-of-use treatment, and determine if there are contaminants in drinking water that could present a threat to human health.</p> <p>Note: POP 121 also includes monitoring resources. If POP 121 is not funded and if this reduction is implemented, we would see a 2/3 reduction in toxics, groundwater and GWMA monitoring.</p>	<p>GF - \$387,000</p>	<p>GR7 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.</p>
<p>Air Quality (001) - Heat Smart</p>	<p>Eliminates a position that implements the Heat Smart program and provides technical assistance to homeowners on removal of old, polluting woodstoves, which are the leading cause of air quality violations. This cut would result in very minimal support for woodstove work and would halt implementation of the emerging inter-agency approach to wood smoke and biomass work.</p>	<p>GF - \$296,000</p>	<p>GR8 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.</p>

# DEQ Reduction Options

<b>Activity or Program</b> <i>(which program or activity will not be undertaken)</i>	<b>Describe Reduction</b>	<b>Amount and Fund Type</b>	<b>Rank and Justification</b>
Water Quality (002) – Nonpoint Source Coordination  <b><i>GRB Implemented Reduction</i></b>	Reduces capacity for nonpoint source policy development and interagency coordination on agricultural water quality issues, including development of memoranda of agreement, reviewing and providing feedback on agricultural water quality management plans regarding progress toward meeting TMDL load allocations, and ongoing coordination with Oregon Department of Agriculture. Also reduces capacity for developing guidance and improving coordination between HQ and regions, and providing support for DEQ's nonpoint source toxics reduction efforts.	GF - \$276,000	GR9 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.
Water Quality (002) – Integrated Water Resources Strategy  <b><i>GRB Implemented Reduction</i></b>	Eliminates the second of three IWRS positions, severely impairing DEQ's ability to support the realization of IWRS goals. DEQ would be unable to support place-based planning efforts throughout the state and be hard-pressed to provide an adequate level of review for water supply and storage projects to ensure water quality is protected. Current program improvement projects would not be completed, meaning there would be no return on investment.	GF - \$250,000	GR10 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.

# DEQ Reduction Options

<b>Activity or Program</b> <i>(which program or activity will not be undertaken)</i>	<b>Describe Reduction</b>	<b>Amount and Fund Type</b>	<b>Rank and Justification</b>
<p>Water Quality (002) - WPCF permit writer</p> <p><b><i>GRB Implemented Reduction</i></b></p>	<p>Eliminates the Water Pollution Control Facility (WPCF) permit writer position from DEQ's Northwest Regional Office. This would result in significant delays in permit renewals, permit modifications and processing new applications for permittees located in the Portland Metro Area and counties on the north coast. This would also result in delays in DEQ's response to requests for approval for land application of biosolids, working with applicants on biosolids management plans and recycled water plans. This reduction will impact DEQ's ability to provide timely reviews for new facilities that need permits and technical assistance for businesses and communities working on recycled water projects and/or needing DEQ's approval of plans for disposing biosolids. Work done by this position would be redistributed to DEQ's permitting and policy staff, which would result in delays to WPCF permit issuance, approval of biosolids land application plans and recycled water projects throughout the state, as well as delays in policy development.</p>	<p>GF - \$250,000</p>	<p>GR11 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.</p>
<p>Air Quality (001) - Emission Inventory</p> <p><b><i>GRB Implemented Reduction</i></b></p>	<p>Emission inventories are the scientific underpinning of air quality planning, including identification of sources, determining baseline emission levels, evaluating the benefits of proposed emission reduction strategies, and meeting federal technical requirements. This cut would result in delayed air toxics and fine particulate planning work.</p>	<p>GF - \$122,590</p>	<p>GR12 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.</p>

# DEQ Reduction Options

<b>Activity or Program</b> <i>(which program or activity will not be undertaken)</i>	<b>Describe Reduction</b>	<b>Amount and Fund Type</b>	<b>Rank and Justification</b>
Water Quality (002) – Compliance and enforcement  <b>GRB Implemented Reduction</b>	Eliminates the agency’s principal subject matter expert on compliance and enforcement. Loss of this position significantly reduces the agency’s ability to be strategic and forward looking in its development and application of compliance and enforcement policies, and its ability to develop and effectively apply appropriate mechanisms to promote compliance with and deter violations of state regulations. Additionally, loss of this position would impact DEQ’s ability to coordinate with and be responsive to EPA, other agencies, and the legislature on enforcement issues.	GF - \$210,828	GR13 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.
Air Quality (001) - Planning/project management  <b>GRB Implemented Reduction</b>	Position provides project management support for Air Quality projects. Would eliminate work on projects supported by General Fund; the main focus of work is air toxics, clean diesel and clean fuels.	GF - \$163,090	GR14 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.
Water Quality (002) - GWMA, toxics and groundwater monitoring and analysis	This work is already implicated in POP 121 and another reduction option on this list. If POP 121 is not funded we would see a 1/3 reduction in these monitoring activities. The two reduction options also represent a 1/3 reduction. If POP 121 is not funded and both reductions are implemented, DEQ's toxics monitoring program, statewide groundwater monitoring program and GWMA monitoring would be eliminated. This level of reduction makes it untenable to continue to support the full range of analytical capabilities at the laboratory, thereby causing the laboratory to discontinue analysis of certain suites of chemicals including those that are persistent and bio-accumulative and may impact human health (i.e., organics).	GF - \$680,307	GR15 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.

# DEQ Reduction Options

<b>Activity or Program</b> <i>(which program or activity will not be undertaken)</i>	<b>Describe Reduction</b>	<b>Amount and Fund Type</b>	<b>Rank and Justification</b>
Water Quality (002) – Biomonitoring (1 of 2)	Reduces by half DEQ's collection of water quality and biological data for assessing watershed health. This information is used by state and federal agencies and local stakeholders to guide watershed restoration efforts and help ensure resources are strategically applied to achieve salmon recovery and water quality objectives.	LF - \$209,396	LR1 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.
Water Quality (002) – Biomonitoring (2 of 2)	Implementing both biomonitoring reductions would eliminate DEQ's collection of water quality and biological data for assessing watershed health. This information is used by state and federal agencies and local stakeholders to guide watershed restoration efforts and help ensure resources are strategically applied to achieve salmon recovery and water quality objectives.	LF - \$209,396	LR2 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.
Air Quality (001) – Contract for Scientific Data	Eliminate DEQ's ability to manage the contract for NW AirQuest. In a coordinated effort, the EPA Region 10 environmental quality agencies of Oregon, Washington and Idaho contract with the Northwest International Air Quality Environmental Science and Technology Consortium (NW-AIRQUEST) for meteorological, emissions and modeling data. The other states have managed the contract and it is ODEQ's turn to do so.	FF - \$704,730	FR1 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.
Water Quality (002) – Federal grants supporting Water Quality initiatives	Would reduce funding DEQ uses to accomplish high priority agency work such as program improvement and streamlining efforts, augmenting existing water quality protection efforts, development and testing of innovative approaches to water quality protection, enhanced use of electronic databases and other information technology innovations, and clean water protection and enhancement activities, including water quality monitoring and Total Maximum Daily Load (TMDL) development.	FF - \$643,929	FR2 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.

# DEQ Reduction Options

<b>Activity or Program</b> <i>(which program or activity will not be undertaken)</i>	<b>Describe Reduction</b>	<b>Amount and Fund Type</b>	<b>Rank and Justification</b>
Land Quality (003) – LUST Cleanups Completed	Eliminate services and supplies. Reduced ability to complete LUST cleanups.	FF - \$450,000	FR3 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.
Water Quality (002) – Clean Water Act Section 604(b) Water Quality Management Planning grants	This reduction would reduce federal funding for water quality management planning. EPA provides funds for states and regional and interstate agencies to determine the nature and extent of point and non-point source water pollution and to develop water quality management plans. If this limitation were cut, DEQ would not be able to make grants to regional and interstate water quality planning organizations if federal funding were available.	FF - \$174,999	FR4 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.
Air Quality (001) – Pollution Prevention Grant	Eliminate the limitation associated with federal Pollution Prevention Grants. These grants are meant to reduce pollution before it happens.	FF - \$326,538	FR5 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.
Land Quality (003) – LUST Trust Grant	In the short term LUST Cost Recovery fund will support the need, but eventually this will limit DEQ's ability to do LUST cleanup work. LUST program not meeting site closure targets could lead to reduced base funding in future years.	FF - \$314,739	FR6 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.

# DEQ Reduction Options

<b>Activity or Program</b> <i>(which program or activity will not be undertaken)</i>	<b>Describe Reduction</b>	<b>Amount and Fund Type</b>	<b>Rank and Justification</b>
Water Quality (002) Clean Water Act Section 106 grant funded surveys of the nation's waters	This reduction would eliminate federal funding for Oregon's participation in the Clean Water Act Section 106 surveys of the nation's waters. EPA provides funds for States, Tribes and other eligible entities to participate in statistically-valid surveys of the Nation's waters. If DEQ does not conduct the work, it can request EPA to perform the work in Oregon, but will lose the opportunity to leverage this funding to support other monitoring objectives by integrating work plans for sample collection and analysis.	FF - \$323,339	FR7 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.
Water Quality (002) – Federal Clean Water Act Section 319 grants	Reduction in grants used for watershed restoration activities to improve water quality. Under normal circumstances, DEQ would grant \$1.5 to \$2.0 million per biennium. In FFY2015 and FFY2016, EPA has reduced Oregon's 319 appropriation until the State demonstrates progress towards implementing an approval Coastal Nonpoint Source Management Plan. No position or FTE impact.	FF - \$178,975	FR8 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.
Land Quality (003) – Cleanup/Dedicated Cleanup	Reduces ability to oversee cleanup work paid for by responsible parties.	OF - \$4,542,397	HR1 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.
Land Quality (003) – SW Orphan	Limits ability to pay for orphaned landfill cleanup work, help local governments assess need for cleanup and to establish loans to local governments for cleanup work at local landfills.	OF - \$1,000,000	HR2 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.

# DEQ Reduction Options

<b>Activity or Program</b> <i>(which program or activity will not be undertaken)</i>	<b>Describe Reduction</b>	<b>Amount and Fund Type</b>	<b>Rank and Justification</b>
Air Quality (001) – VIP station	Close a Portland VIP Station and reduce technical support for the program. Closing an inspection station would drastically increase average wait times at the remaining Portland stations and inconvenience customers in the closure area. Reduce approximately 21 FTE.	OF - \$4,629,184	HR3 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.
Water Quality (002) – Miscellaneous Other Fund projects	Would eliminate DEQ’s ability to enter into agreements regulated entities, and with other partners to expedite regulatory processes and to conduct special projects. ORS 468.073 allows DEQ to enter into agreements with an applicant, permittee or regulated party to enable the agency to expedite or enhance a regulatory process. ORS 468.035 allows DEQ to conduct and prepare, independently or in cooperation with others, studies, investigations, research and programs pertaining to the quality and purity of the air or the waters of the state and to the treatment and disposal of wastes. This reduction would eliminate all limitation and position authority for these types of projects.	OF - \$1,748,147	HR4 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.
Land Quality (003) – Dry Cleaners	Reduces ability to clean up contamination at dry cleaner sites participating in the program.	OF - \$500,000	HR5 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.

# DEQ Reduction Options

Activity or Program <i>(which program or activity will not be undertaken)</i>	Describe Reduction	Amount and Fund Type	Rank and Justification
Agency Management (004) – Support Services	<p>Reductions would be gradually implemented as reductions in indirect revenue accrue from adopting reduction options (all fund types) in program areas, when Agency Management indirect fund balanced drop below the amount needed for ongoing operations. Would reduce \$200,000 of capital purchases; \$198,000 contract limitation; and 11 FTE, with the following impacts on support services provided to other sections of DEQ:</p> <ul style="list-style-type: none"> <li>• Would eliminate internal Central Services clerical support</li> <li>• Business systems development cuts would reduce DEQ’s ability to develop new systems and keep current systems updated</li> <li>• IT cuts would reduce help desk support that keeps desktop computer systems working efficiently, and support for email services</li> <li>• Financial Services cuts would reduce accounting support beyond organizational savings already implemented. Could reduce response to audit issues; increase likelihood of accounting errors; delay payments, deposits and report submittals; and decrease oversight of expenditures. Would also reduce procurement and contracts support, potentially delaying needed purchases, contracts and agreements.</li> <li>• Eliminate combined rule coordinator/tribal position currently used to provide limitation/funding for parts of other positions.</li> </ul>	OF - \$2,794,269 Indirect Surcharge	HR06 – Combination of factors: Least harm to agency core infrastructure support and mandatory processes.

# DEQ Reduction Options

<b>Activity or Program</b> <i>(which program or activity will not be undertaken)</i>	<b>Describe Reduction</b>	<b>Amount and Fund Type</b>	<b>Rank and Justification</b>
Water Quality (002) – 401 Hydroelectric Certification capacity	Would reduce capacity to evaluate 401 hydroelectric certification applications to determine if state water quality standards will be met. DEQ would have limited capacity to respond to major complex hydroelectric relicensing projects under FERC and minor projects under state review process, and reduced capacity to evaluate proposed investigations to assess site conditions and potential impacts of hydroelectric projects on water quality and beneficial uses.	OF - \$187,000	HR7 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.
Water Quality (002) – Septic system (Onsite) permitting implemented by county governments	Shift septic system permitting to other government entities. Some counties already perform this function, though expanding the universe would likely be challenging due to local government economic considerations. DEQ would retain oversight and technical assistance. Approximately 3 FTE would be reduced.	OF - \$614,645	HR8 - Combination of factors: Least harm to environmental protection; Maintain strategic priorities; Least harm to service delivery.

UPDATED OTHER FUNDS ENDING BALANCES FOR THE 2015-17 & 2017-19 BIENNIA

Agency: 34000 DEQ  
 Contact Person (Name & Phone #): Mark Brown, 503-229-5938

(a) Other Fund Type	(b) Program Area (SCR)	(c) Treasury Fund #/Name	(d) Category/Description	(e) Constitutional and/or Statutory reference	(f) 2015-17 Ending Balance		(g) 2017-19 Ending Balance		(i) Comments
					In LAB	Revised	In CSL	Revised	
OF Limited	001-AQ	1110-ACDP Fees	Operations	Air Contaminant Discharge Fees (ORS468.065)	1,238,286	1,550,000	275,047	2,538,373	- Need balance of approximately \$1,700,000 to support the program until annual permit fees are collected in December. Small amounts of GF and FF support this program but need sufficient OF balance. 2017-2019 budget based on a beginning balance of \$1,550,000 and ending balance is slightly under needed ending balance.
OF Limited	001-AQ	1120-AQ Indirect Sources	Operations	Oregon Low Emission Vehicle Fees (ORS 468.065)	289,013	615,792	429,001	437,563	- Need 12 months balance, \$250,000, since fees are due June 30 each year. Budgeted annual costs exceed \$200k annual revenue, so need balance to maintain program going forward.
OF Limited	001-AQ	1130-AQ Emissions Title V Fees	Operations	Title V Permit Fees (ORS 468.065)	(24,583)	3,823,122	1,287,953	1,853,828	- According to the federal Clean Air Act, Title V fees can only be used for Title V work and the fee is the only funding source for that work. Title V invoices are sent out in August. Vacancies and focus on Cleaner Air Oregon resulted in a slow down in Title V spending. In 2017-2019 budget, some positions have been permanently cut or shifted to other programs.
OF Limited	001-AQ	1140-Asbestos Cert Fees	Operations	Asbestos Certification Fees (ORS 468A.750)	922,026	1,067,491	453,475	465,369	- Need about 4 to 5 months balance (\$400,000) in the summer to support enforcement and other work during the rest of the season. Fees received throughout the year but normally higher income in the summer. The Asbestos program needs additional balance to develop some information technology improvements that will make it administratively easier for contractors to do business with DEQ and will provide more information to the public about current abatement projects. A good construction economy continues to improve the asbestos balance.
OF Limited	001-AQ	1310-Vehicle Inspection Program	Operations	Vehicle Inspection Certification Fees (ORS 468A.400) * excludes package 070 and 113	1,089,550	3,894,595	(1,137,265)	1,172,869	- Need at least 2 to 3 months of balance (\$3,400,000) because monthly revenues are processed through DMV and Treasury and are not immediately available in the fund. Operating multiple emissions testing stations can result in large unplanned expenditures but the positive variance is due to program managing expenditures to avoid a fee increase. 2015-2017 budget is based on a beginning balance of \$5.0 million and needed to support the program through the 2015-2017 biennium. The ending balance is short of a 2 month balance.
OF Limited	001-AQ	1400/1420 AQ Receipts Authority & Gas Vapor Recovery	Operations	AQ Receipts Authority & Gas Vapor Recovery(ORS 468.065)(2)	(5,069)	-	8,710	-	- Need 4 to 5 months balance (\$400,000) in the summer to support enforcement and other work during the rest of the season. Fees received throughout the year but normally higher income in the summer. The Asbestos program needs additional balance to develop some information technology improvements that will make it administratively easier for contractors to do business with DEQ and will provide more information to the public about current abatement projects. A good construction economy continues to improve the asbestos balance.
OF Limited	001-AQ	1430-Greenhouse Gas	Operations	Greenhouse Gas Reporting Fees 468A.050(4)	928,257	1,404,092	1,295,198	1,296,007	- Need at least 2 to 3 months of balance (\$3,400,000) because monthly revenues are processed through DMV and Treasury and are not immediately available in the fund. Operating multiple emissions testing stations can result in large unplanned expenditures but the positive variance is due to program managing expenditures to avoid a fee increase. 2015-2017 budget is based on a beginning balance of \$5.0 million and needed to support the program through the 2015-2017 biennium. The ending balance is short of a 2 month balance.
OF Limited	001-AQ	1510/1520 Field & Backyard Burning Fees	Operations	Backyard Burning & Field Burning (ORS 468.065)	17,153	9,482	7,435	7,435	- Need 4 to 5 months balance (\$400,000) in the summer to support enforcement and other work during the rest of the season. Fees received throughout the year but normally higher income in the summer. The Asbestos program needs additional balance to develop some information technology improvements that will make it administratively easier for contractors to do business with DEQ and will provide more information to the public about current abatement projects. A good construction economy continues to improve the asbestos balance.
OF Limited	002 - WQ	2010/2020/2030 Wastewater Permit Fees	Operations	ORS 468.065	657,885	1,564,035	667,929	859,210	- Need greater than two months' balance (\$1.1 million) because the ending fee balance is required as an operational reserve for the entire wastewater permitting program. Installments of federal grant awards are irregularly timed with gaps of six months or more between installments that vary widely in size over the two-year grant period. -DEQ is targeting to achieve vacancy savings in this fund and has implemented other spending restrictions to bring ending balances to the values shown in an effort to maintain a reduced, but steady, level of delivered services through the 2017-19 biennium, in addition to maintain balances needed for operational cash management purposes. -DEQ expects to consume about one-third of this balance in 2017-19.
OF Limited	002 - WQ	2040 Onsite Subsurface Fees	Operations	ORS 454.662; ORS 454.745; 454.755	62,775	562,128	350,301	352,730	-Need greater than three months' balance (\$465,000) because fee revenue generally spikes in the spring and the fund balance steadily declines from late summer through the following spring when revenue spikes again. -Onsite fee revenue is responsive to economic cycles, and can change relatively rapidly compared to other fee sources.
OF Limited	002 - WQ	2050 Sewage Works Operator Certification and Program Support Fees	Operations	ORS 448.405 -448.430 & 448.992	273,646	241,601	283,624	285,676	-A six month balance (\$152,000) is preferred for this wholly fee funded program because the program receives a spike in revenue at the end of each fiscal year. May and June revenues historically represent half of the annual revenues, so more than two months of balance are required at the end of the fiscal year to cover expenses and cash management needs through months when revenues are low. -DEQ administratively adopted a fee increase late in 2011-13, which was ratified in our 2013-15 budget. The fee increase was intended to meet the operational needs of the program through 2017-19 without returning for another fee increase.
OF Limited	002 - WQ	2410 401 Dredge and Fill Fees	Operations	ORS 468B.047	257,596	110,000	121,354	122,350	-A six month balance of \$250,000 in this program, which will be 80% fee funded in 2013-15, is preferred because revenue flow is irregular and unpredictable, with some months having very low revenue and others having above average revenue. Since the revenue is based on applications, DEQ has limited control over the timing and flow of revenue. -DEQ administratively adopted a fee increase, effective July 2013, which we are proposing for ratification in our 2013-15 budget. The fee increase is anticipated to meet the operational needs of the program through 2017-19 without returning for another fee increase.
OF Limited	002 - WQ	2090 401 Hydroelectric Fees	Operations	ORS 536.015, 543.078, 543.080, 543.710, 543A.415, and 468.065(3)	413,346	530,074	360,558	360,901	-DEQ needs about four months of balance (\$160,000) because we receive annual program fees in January that pay for work through the following December and annual project fees in June that are needed to fund 401 certification implementation oversight during the following fiscal year.

OF Limited	002 - WQ	2520 Water Pollution Control Administrative Fund State Revolving Loan Fund Fee	Operations	CWA Title VI and ORS 468.440	3,440,542	2,283,626	1,453,107	1,679,000	- \$350,000 = 2 months of operating costs - Provides for future funding of SRF Loan program administration. - Federal law restricts the use of these funds. - DEQ revised our 2011-13 revenue projection downward due to changes made in the existing repayment schedules (loans not moving to repayment as soon as we thought they would), and due to a temporary, two-year reduction in the loan administration fee from 0.5% to 0.25%.
OF Limited	002 - WQ	2600 WQ Enterprise Agreements	Operations	ORS 468.035	(2,267)	22,191	20,362	20,701	- This fund used to account for the provision of services to external entities where the costs involved are primarily paid for in the form of charges to the users of such services. This fund requires an ending balance because user charges might come in higher or lower than the cost of providing the services.
OF Limited	002 - WQ	2060 (shared) Lab Certification Funds (Transferred from Oregon Department of Human Services)	Operations	Chapter 1063, 1999 Session Laws	32,466	86,578	109,841	110,430	- A fee balance larger than two months (\$30,000) is required because reimbursement for expenses lags up to several months.
OF Limited	002 - WQ	2130 Subsurface Injection Fluids Account - Underground Injection Control Fees	Operations	ORS 468B.195 and ORS 468B.196	23,375	75,075	94,039	94,192	- Need greater than two months' balance (\$25,000) because installments of federal grant awards are irregularly timed with gaps of six months or more between installments that vary widely in size over the two-year grant period. - The fee structure adopted by statute in 2007 was intended to fund the program for six years without a fee increase; however, actual 2007-09 to 2011-13 revenues were much lower than projected. - The recession continues to dampen fee revenue in 2011-13 and might continue to affect fee revenue in 2013-15.
OF Limited	002 - WQ	2120 WQ Violations Process	Operations	ORS 468B.032	0	0	0	0	- Statute requires fees be refunded under certain circumstances.
OF Limited	002 - WQ	2140 Persistent Pollutant Control - Persistent Pollutant Control Surcharge Fees	Operations	Chapter 696, 2007 Laws	0	0			- No ending balance required beyond 2009-11. - Two-year surcharge beginning July 1, 2008 to fund limited duration positions. Revenue was consumed by mid 2009-11.
OF Limited	002 - WQ	5210 Lottery Fund	Operations			20,644			
OF Limited	003 - LQ	3330 Highway Spill Fund	Operations	Petroleum Product Withdrawal Delivery Fees (ORS 465.ORS 465.101 – 465.131)	6,472	24,000	51,302	51,302	Need 6 months ending fund balance (\$37,000) due to funds expended before billing, collection often delayed. Costs and revenue dependent on widely varying number and extent of spills; revenues vary with ability to pay, extent of insurance coverage.
OF Limited	003 - LQ	3400/3410/3430 Hazardous Substance Remedial Action Fund (HSRAF)	Operations	Hazardous Substance Remedial Action Fund (ORS 465.381)	724,418	724,418	726,921	726,921	Need 4 month ending fund balance (\$4 million) due to unpredictable cash flow, timing of expenditures and revenues. Large, unexpected spills cost more and collection from responsible parties is often delayed.
OF Limited	003 - LQ	3430 Hazardous Substance Remedial Action Fund - Escrow	Trust (dedicated by legal agreement with responsible parties)	Hazardous Substance Remedial Action Fund (ORS 465.381)	6,637,689	14,340,629	10,935,561	10,935,561	Funds are committed by legal agreement to be spent for cleanup or investigation of specific contaminated sites. Sites with the largest balances are expected to take several biennia to complete. Variance due to \$7 million site not anticipated when 15-17 budget was prepared.
OF Limited	003 - LQ	3460 Dry Cleaner Environmental Response	Operations	Dry Cleaner Environmental Response (465.510; 465.517 - .525)	235,358	881,327	399,217	399,217	Need 9 months ending balance (\$500,000). Annual revenues received in March. Fund is responsible for cleanup at participating dry cleaner sites. Variance due to settlement not anticipated when 15-17 budget was prepared.
OF Limited	003 - LQ	3350/3360 Illegal Drug Lab Fund	Operations	Illegal Drug Lab Funds (ORS 475.405 - 475.495, 475A.120, 475A.126)	461,971	461,971	720,904	720,904	No specified ending balance - usage depends on needs of local law enforcement units.
OF Limited	003 - LQ	3370 Ballast Water Vessel Fund	Operations	Ballast Water Vessel Fund	68,446	68,446	205,935	205,935	Need 4 months ending fund balance (\$40,000). Fee increase in 2015 intended to last until 2021 is intended to increase fund balance in early biennium.
OF Limited	003 - LQ	3040 Electronic Waste Registration & Recycling Fees	Operations	Electronic Waste Manufacturer Registration Fee (ORS 459A.315) and Recycling Fee (ORS 459A.325 and 340 (6))	755,172	755,172	2,194,357	2,194,357	Need 8 months ending balance (\$1.4 million). Revenues collected for calendar year. Statute and rules require revenues collected in excess of actual expenditures to be returned to fee payers or reduce future fees.
OF Limited	003 - LQ	3120 Hazardous Waste Generator Fees	Operations	Hazardous Waste Generator Fees (ORS 466.077, 466.165)	642,521	1,000,000	457,173	457,173	Need 2 months fund balance (\$300,000). Due to other operating needs in 11-13 fund balance increased, delaying next fee increase (last increase 2007).
OF Limited	003 - LQ	3130 Hazardous Substance Possession Fee (HSPF) – Toxics Use Reduction	Operations	Hazardous Substance Possession Fee – Toxics Use Reduction (ORS 453.400, 453.402)	284,867	284,867	318,644	318,644	Need 10 months ending balance (\$1.3 million). Fees are received January to May.
OF Limited	003 - LQ	3140/3150 Hazardous Waste Disposal Fees	Operations	Hazardous Waste Disposal Fees (ORS 465.375 - .376)	648,362	648,362	369,442	369,442	Need 2 months ending balance (\$65,000).
OF Limited	003 - LQ	3110 Hazardous Waste Treatment Storage & Disposal (TSD) Fees	Operations	Hazardous Waste Treatment Storage & Disposal (TSD) Fees (ORS 466.045, 466.160, 466.215, 466.350)	101,424	427,982	75,096	75,096	Need 4 months ending fund balance (\$165,000).
OF Limited	003 - LQ	3440 LUST Cost Recovery	Operations	LUST Cost Recovery (ORS 465.210)	350,415	3,234,229	2,394,489	2,394,489	Need at least 2 months ending balance (\$220,000). Federal grant regulations require all cost recovered funds to be spent on LUST grant eligible purposes. Balance variance due to fewer than site cleanup than budget anticipated.
OF Limited	003 - LQ	3310/3340 Spill Penalty funds	Operations	Oil Spillage Control Fund (ORS 468B.450, 468B.455); Oil and Hazardous Materials Emergency Response and Remedial Action Fund (ORS 466.670, 466.675, 466.990)	56,715	50,805	145,742	145,742	No specified balance; funds are used to support program as they become available. Difficult to forecast this fund - revenues vary greatly with number and type of violation and violators' ability to pay.
OF Limited	003 - LQ	3450/3470 Heating Oil Filing and Licensing Fees	Operations	Heating Oil Filing and Licensing Fees (ORS 466.868, 466.872)	182,386	400,000	290,757	290,757	Need 2 months ending balance (\$70,000). Balance increased due to delay in hiring after revenues increase post recession. Program expects to operate at full budget in 17-19.





UPDATED OTHER FUNDS ENDING BALANCES FOR THE 2015-17 & 2017-19 BIENNIA

Agency: 34000 DEQ  
 Contact Person (Name & Phone #: Mark Brown, 503-229-5938

(a) Other Fund Type	(b) Program Area (SCR)	(c) Treasury Fund #/Name	(d) Category/Description	(e) Constitutional and/or Statutory reference	(f) 2015-17 Ending Balance		(g) 2017-19 Ending Balance		(j) Comments
					In LAB	Revised	In CSL	Revised	
OF Limited	001-AQ	1110-ACDP Fees	Operations	Air Contaminant Discharge Fees (ORS468.065)	1,238,286	1,550,000	275,047	2,538,373	- Need balance of approximately \$1,700,000 to support the program until annual permit fees are collected in December. Small amounts of GF and FF support this program but need sufficient OF balance. 2017-2019 budget based on a beginning balance of \$1,550,000 and ending balance is slightly under needed ending balance.
OF Limited	001-AQ	1120-AQ Indirect Sources	Operations	Oregon Low Emission Vehicle Fees (ORS 468.065)	289,013	615,792	429,001	437,563	- Need 12 months balance, \$250,000, since fees are due June 30 each year. Budgeted annual costs exceed \$200k annual revenue, so need balance to maintain program going forward.
OF Limited	001-AQ	1130-AQ Emissions Title V Fees	Operations	Title V Permit Fees (ORS 468.065)	(24,583)	3,823,122	1,287,953	1,853,828	- According to the federal Clean Air Act, Title V fees can only be used for Title V work and the fee is the only funding source for that work. Title V invoices are sent out in August. Vacancies and focus on Cleaner Air Oregon resulted in a slow down in Title V spending. In 2017-2019 budget, some positions have been permanently cut or shifted to other programs.
OF Limited	001-AQ	1140-Asbestos Cert Fees	Operations	Asbestos Certification Fees (ORS 468A.750)	922,026	1,067,491	453,475	465,369	- Need about 4 to 5 months balance (\$400,000) in the summer to support enforcement and other work during the rest of the season. Fees received throughout the year but normally higher income in the summer. The Asbestos program needs additional balance to develop some information technology improvements that will make it administratively easier for contractors to do business with DEQ and will provide more information to the public about current abatement projects. A good construction economy continues to improve the asbestos balance.
OF Limited	001-AQ	1310-Vehicle Inspection Program	Operations	Vehicle Inspection Certification Fees (ORS 468A.400) * excludes package 070 and 113	1,089,550	3,894,595	(1,137,265)	1,172,869	- Need at least 2 to 3 months of balance (\$3,400,000) because monthly revenues are processed through DMV and Treasury and are not immediately available in the fund. Operating multiple emissions testing stations can result in large unplanned expenditures but the positive variance is due to program managing expenditures to avoid a fee increase. 2015-2017 budget is based on a beginning balance of \$5.0 million and needed to support the program through the 2015-2017 biennium. The ending balance is short of a 2 month balance.
OF Limited	001-AQ	1400/1420 AQ Receipts Authority & Gas Vapor Recovery	Operations	AQ Receipts Authority & Gas Vapor Recovery(ORS 468.065)(2)	(5,069)	-	8,710	-	Should have 4 months balance (\$23,000) to support the program since revenue timing is unpredictable. Need 5 to 6 months of balance since fees are the only support and are collected from September through January. Also, reporting system enhancement project has been delayed.
OF Limited	001-AQ	1430-Greenhouse Gas	Operations	Greenhouse Gas Reporting Fees 468A.050(4)	928,257	1,404,092	1,295,198	1,296,007	
OF Limited	001-AQ	1510/1520 Field & Backyard Burning Fees	Operations	Backyard Burning & Field Burning (ORS 468.065)	17,153	9,482	7,435	7,435	Little activity in this program.

**Objective:** Provide updated Other Funds ending balance information for potential use in the development of the 2017-19 legislatively adopted budget.

- Instructions:**
- Column (a): Select one of the following: Limited, Nonlimited, Capital Improvement, Capital Construction, Debt Service, or Debt Service Nonlimited.
  - Column (b): Select the appropriate Summary Cross Reference number and name from those included in the 2015-17 Legislatively Approved Budget. If this changed from previous structures, please note the change in Comments (Column (j)).
  - Column (c): Select the appropriate, statutorily established Treasury Fund name and account number where fund balance resides. If the official fund or account name is different than the commonly used reference, please include the working title of the fund or account in Column (j).
  - Column (d): Select one of the following: Operations, Trust Fund, Grant Fund, Investment Pool, Loan Program, or Other. If "Other", please specify. If "Operations", in Comments (Column (j)), specify the number of months the reserve covers, the methodology used to determine the reserve amount, and the minimum need for cash flow purposes.
  - Column (e): List the Constitutional, Federal, or Statutory references that establishes or limits the use of the funds.
  - Columns (f) and (g): Use the appropriate, audited amount from the 2015-17 Legislatively Approved Budget and the 2017-19 Current Service Level as of the Agency Request Budget.
  - Columns (g) and (i): Provide updated ending balances based on revised expenditure patterns or revenue trends. Do not include adjustments for reduction options that have been submitted unless the options have already been implemented as part of the 2015-17 General Fund approved budget or otherwise incorporated in the 2015-17 LAB. The revised column (i) can be used for the balances included in the Governor's budget if available at the time of submittal. Provide a description of revisions in Comments (Column (j)).
  - Column (j): **Please note any reasons for significant changes in balances previously reported during the 2015 session.**

Additional Materials: If the revised ending balances (Columns (g) or (i)) reflect a variance greater than 5% or \$50,000 from the amounts included in the LAB (Columns (f) or (h)), attach supporting memo or spreadsheet to detail the revised forecast.

UPDATED OTHER FUNDS ENDING BALANCES FOR THE 2015-17 & 2017-19 BIENNIA

Agency: 34000 DEQ  
 Contact Person (Name & Phone #): Mark Brown, 503-229-5938

(a) Other Fund Type	(b) Program Area (SCR)	(c) Treasury Fund #/Name	(d) Category/Description	(e) Constitutional and/or Statutory reference	(f) (g) 2015-17 Ending Balance		(h) (i) 2017-19 Ending Balance		(j) Comments	CODE
					In LAB	Revised	In CSL	Revised		
OF Limited	002 - WQ	2010/2020/2030 Wastewater Permit Fees	Operations	ORS 468.065	657,885	1,564,035	667,929	859,210	-Need greater than two months' balance (\$1.1 million) because the ending fee balance is required as an operational reserve for the entire wastewater permitting program. Installments of federal grant awards are irregularly timed with gaps of six months or more between installments that vary widely in size over the two-year grant period. -DEQ is targeting to achieve vacancy savings in this fund and has implemented other spending restrictions to bring ending balances to the values shown in an effort to maintain a reduced, but steady, level of delivered services through the 2017-19 biennium, in addition to maintain balances needed for operational cash management purposes. -DEQ expects to consume about one-third of this balance in 2017-19.	O838 and OWWP
OF Limited	002 - WQ	2040 Onsite Subsurface Fees	Operations	ORS 454.662; ORS 454.745; 454.755	62,775	562,128	350,301	352,730	-Need greater than three months' balance (\$465,000) because fee revenue generally spikes in the spring and the fund balance steadily declines from late summer through the following spring when revenue spikes again. -Onsite fee revenue is responsive to economic cycles, and can change relatively rapidly compared to other fee sources.	OSUR and OSTP
OF Limited	002 - WQ	2050 Sewage Works Operator Certification and Program Support Fees	Operations	ORS 448.405 -448.430 & 448.992	273,646	241,601	293,624	285,678	-A six month balance (\$152,000) is preferred for this wholly fee funded program because the program receives a spike in revenue at the end of each fiscal year. May and June revenues historically represent half of the annual revenues, so more than two months of balance are required at the end of the fiscal year to cover expenses and cash management needs through months when revenues are low. -DEQ administratively adopted a fee increase late in 2011-13, which was ratified in our 2013-15 budget. The fee increase was intended to meet the operational needs of the program through 2017-19 without returning for another fee increase.	OOCF
OF Limited	002 - WQ	2410 401 Dredge and Fill Fees	Operations	ORS 468B.047	257,596	110,000	121,354	122,350	-A six month balance of \$250,000 in this program, which will be 80% fee funded in 2013-15, is preferred because revenue flow is irregular and unpredictable, with some months having very low revenue and others having above average revenue. Since the revenue is based on applications, DEQ has limited control over the timing and flow of revenue. -DEQ administratively adopted a fee increase, effective July 2013, which we are proposing for ratification in our 2013-15 budget. The fee increase is anticipated to meet the operational needs of the program through 2017-19 without returning for another fee increase.	OD&F
OF Limited	002 - WQ	2090 401 Hydroelectric Fees	Operations	ORS 536.015, 543.078, 543.080, 543.710, 543A.415, and 468.065(3)	413,346	530,074	360,558	360,901	-DEQ needs about four months of balance (\$160,000) because we receive annual program fees in January that pay for work through the following December and annual project fees in June that are needed to fund 401 certification implementation oversight during the following fiscal year.	OWCP
OF Limited	002 - WQ	2520 Water Pollution Control Administrative Fund State Revolving Loan Fund Fee	Operations	CWA Title VI and ORS 468.440	3,440,542	2,283,626	1,453,107	1,679,000	-\$350,000 = 2 months of operating costs -Provides for future funding of SRF Loan program administration. -Federal law restricts the use of these funds. -DEQ revised our 2011-13 revenue projection downward due to changes made in the existing repayment schedules (loans not moving to repayment as soon as we thought they would), and due to a temporary, two-year reduction in the loan administration fee from 0.5% to 0.25%.	OLAF
OF Limited	002 - WQ	2600 WQ Enterprise Agreements	Operations	ORS 468.035	(2,267,000)	22,191	20,362	20,701	-This fund used to account for the provision of services to external entities where the costs involved are primarily paid for in the form of charges to the users of such services. This fund requires an ending balance because user charges might come in higher or lower than the cost or providing the services.	OENT
OF Limited	002 - WQ	2060 (shared) Lab Certification Funds (Transferred from Oregon Department of Human Services)	Operations	Chapter 1063, 1999 Session Laws	32,466	86,578	109,841	110,430	-A fee balance larger than two months (\$30,000) is required because reimbursement for expenses lags up to several months.	OLAB
OF Limited	002 - WQ	2130 Subsurface Injection Fluids Account - Underground Injection Control Fees	Operations	ORS 468B.195 and ORS 468B.196	23,375	75,075	94,039	94,192	-Need greater than two months' balance (\$25,000) because installments of federal grant awards are irregularly timed with gaps of six months or more between installments that vary widely in size over the two-year grant period. -The fee structure adopted by statute in 2007 was intended to fund the program for six years without a fee increase; however, actual 2007-09 to 2011-13 revenues were much lower than projected. -The recession continues to dampen fee revenue in 2011-13 and might continue to affect fee revenue in 2013-15.	OUIIC
OF Limited	002 - WQ	2120 WQ Violations Process	Operations	ORS 468B.032	-	0	-	-	- Statute requires fees be refunded under certain circumstances.	OWPP
OF Limited	002 - WQ	2140 Persistent Pollutant Control - Persistent Pollutant Control Surcharge Fees	Operations	Chapter 696, 2007 Laws	-	0	-	-	- No ending balance required beyond 2009-11. -Two-year surcharge beginning July 1, 2008 to fund limited duration positions. Revenue was consumed by mid 2009-11.	OPBT
OF Limited	002 - WQ	6210 Lottery Fund	Operations			20,644				OLTW and OLMN

Objective: Provide updated Other Funds ending balance information for potential use in the development of the 2017-19 legislatively adopted budget.

Instructions:

- Column (a): Select one of the following: Limited, Nonlimited, Capital Improvement, Capital Construction, Debt Service, or Debt Service Nonlimited.
- Column (b): Select the appropriate Summary Cross Reference number and name from those included in the 2015-17 Legislatively Approved Budget. If this changed from previous structures, please note the change in Comments (Column (j)).
- Column (c): Select the appropriate, statutorily established Treasury Fund name and account number where fund balance resides. If the official fund or account name is different than the commonly used reference, please include the working title of the fund or account in Column (j).

Column (d): Select one of the following: Operations, Trust Fund, Grant Fund, Investment Pool, Loan Program, or Other. If "Other", please specify. If "Operations", in Comments (Column (j)), specify the number of months the reserve covers, the methodology used to determine the reserve amount, and the minimum need for cash flow purposes.

Column (e): List the Constitutional, Federal, or Statutory references that establishes or limits the use of the funds.

Columns (f) and (h): Use the appropriate, audited amount from the 2015-17 Legislatively Approved Budget and the 2017-19 Current Service Level as of the Agency Request Budget.

Columns (g) and (i): Provide updated ending balances based on revised expenditure patterns or revenue trends. Do not include adjustments for reduction options that have been submitted unless the options have already been implemented as part of the 2015-17 General Fund approved budget or otherwise incorporated in the 2015-17 LAB. The revised column (i) can be used for the balances included in the Governor's budget if available at the time of submittal. Provide a description of revisions in Comments (Column (j)).

Column (j): **Please note any reasons for significant changes in balances previously reported during the 2015 session.**

Additional Materials: If the revised ending balances (Columns (g) or (i)) reflect a variance greater than 5% or \$50,000 from the amounts included in the LAB (Columns (f) or (h)), attach supporting memo or spreadsheet to detail the revised forecast.

UPDATED OTHER FUNDS ENDING BALANCES FOR THE 2015-17 & 2017-19 BIENNIA

Agency: 34000 DEQ  
 Contact Person (Name & Phone #): Mark Brown, 503-229-5938

(a) Other Fund Type	(b) Program Area (SCR)	(c) Treasury Fund #/Name	(d) Category/Description	(e) Constitutional and/or Statutory reference	(f) 2015-17 Ending Balance		(g) 2017-19 Ending Balance		(j) Comments
					In LAB	Revised	In CSL	Revised	
OF Limited	003 - LQ	3330 Highway Spill Fund	Operations	Petroleum Product Withdrawal Delivery Fees (ORS 465.ORS 465.101 – 465.131)	6,472	24,000	51,302	51,302	Need 6 months ending fund balance (\$37,000) due to funds expended before billing, collection often delayed. Costs and revenue dependent on widely varying number and extent of spills; revenues vary with ability to pay, extent of insurance coverage.
OF Limited	003 - LQ	3400/3410/3430 Hazardous Substance Remedial Action Fund (HSRAF)	Operations	Hazardous Substance Remedial Action Fund (ORS 465.381)	724,418	724,418	726,921	726,921	Need 4 month ending fund balance (\$4 million) due to unpredictable cash flow, timing of expenditures and revenues. Large, unexpected spills cost more and collection from responsible parties is often delayed.
OF Limited	003 - LQ	3430 Hazardous Substance Remedial Action Fund - Escrow	Trust (dedicated by legal agreement with responsible parties)	Hazardous Substance Remedial Action Fund (ORS 465.381)	6,637,689	14,340,629	10,935,561	10,935,561	Funds are committed by legal agreement to be spent for cleanup or investigation of specific contaminated sites. Sites with the largest balances are expected to take several biennia to complete. Variance due to \$7 million site not anticipated when 15-17 budget was prepared.
OF Limited	003 - LQ	3460 Dry Cleaner Environmental Response	Operations	Dry Cleaner Environmental Response (465.510; 465.517 - 525)	235,358	881,327	399,217	399,217	Need 9 months ending balance (\$500,000). Annual revenues received in March. Fund is responsible for cleanup at participating dry cleaner sites. Variance due to settlement not anticipated when 15-17 budget was prepared.
OF Limited	003 - LQ	3350/3360 Illegal Drug Lab Fund	Operations	Illegal Drug Lab Funds (ORS 475.405 - 475.495, 475A.120, 475A.126)	461,971	461,971	720,904	720,904	No specified ending balance - usage depends on needs of local law enforcement units.
OF Limited	003 - LQ	3370 Ballast Water Vessel Fund	Operations	Ballast Water Vessel Fund	68,446	68,446	205,935	205,935	Need 4 months ending fund balance (\$40,000). Fee increase in 2015 intended to last until 2021 is intended to increase fund balance in early biennium.
OF Limited	003 - LQ	3040 Electronic Waste Registration & Recycling Fees	Operations	Electronic Waste Manufacturer Registration Fee (ORS 459A.315) and Recycling Fee (ORS 459A.325 and .340 (6))	755,172	755,172	2,194,357	2,194,357	Need 8 months ending balance (\$1.4 million). Revenues collected for calendar year. Statute and rules require revenues collected in excess of actual expenditures to be returned to fee payers or reduce future fees.
OF Limited	003 - LQ	3120 Hazardous Waste Generator Fees	Operations	Hazardous Waste Generator Fees (ORS 466.077, 466.165)	642,521	1,000,000	457,173	457,173	Need 2 months fund balance (\$300,000). Due to other operating needs in 11-13 fund balance increased, delaying next fee increase (last increase 2007).
OF Limited	003 - LQ	3130 Hazardous Substance Possession Fee (HSPF) – Toxics Use Reduction	Operations	Hazardous Substance Possession Fee – Toxics Use Reduction (ORS 453.400, 453.402)	284,867	284,867	318,644	318,644	Need 10 months ending balance (\$1.3 million). Fees are received January to May.
OF Limited	003 - LQ	3140/3150 Hazardous Waste Disposal Fees	Operations	Hazardous Waste Disposal Fees (ORS 465.375 - .376)	648,362	648,362	369,442	369,442	Need 2 months ending balance (\$65,000).
OF Limited	003 - LQ	3110 Hazardous Waste Treatment Storage & Disposal (TSD) Fees	Operations	Hazardous Waste Treatment Storage & Disposal (TSD) Fees (ORS 466.045, 466.160, 466.215, 466.350)	101,424	427,982	75,096	75,096	Need 4 months ending fund balance (\$165,000).
OF Limited	003 - LQ	3440 LUST Cost Recovery	Operations	LUST Cost Recovery (ORS 465.210)	350,415	3,234,229	2,394,489	2,394,489	Need at least 2 months ending balance (\$220,000). Federal grant regulations require all cost recovered funds to be spent on LUST grant eligible purposes. Balance variance due to fewer than site cleanup than budget anticipated.
OF Limited	003 - LQ	3310/3340 Spill Penalty funds	Operations	Oil Spillage Control Fund (ORS 468B.450, 468B.455); Oil and Hazardous Materials Emergency Response and Remedial Action Fund (ORS 466.670, 466.675, 466.990)	56,715	50,805	145,742	145,742	No specified balance; funds are used to support program as they become available. Difficult to forecast this fund - revenues vary greatly with number and type of violation and violators' ability to pay.
OF Limited	003 - LQ	3450/3470 Heating Oil Filing and Licensing Fees	Operations	Heating Oil Filing and Licensing Fees (ORS 466.868, 466.872)	182,386	400,000	290,757	290,757	Need 2 months ending balance (\$70,000). Balance increased due to delay in hiring after revenues increase post recession. Program expects to operate at full budget in 17-19.
OF Limited	003 - LQ	3920/3990/8080 Orphan Site Account - Industrial Sites	Operations	Orphan Site Bond Proceeds & Cost Recoveries (ORS 468.195 - .220; 465.381); Hazardous Substance Possession Fee – Orphan Site Program (ORS 453.400, 453.402, 465.381)	497,233	0	(1,611,052)	(1,611,052)	Ending balances include only cost recoveries. Bond balance excluded as it is included in non-limited funds, but is expected to be \$0 at end of 1517. Previous bond sale was anticipated to last until 2015, but supported the program through most of 1517.
OF Limited	003 - LQ	3320 Oil Spill Prevention Fund	Operations	Oil Spill Prevention Fees (ORS 468B.405, 468B.410) and spill penalties (466.670, 466.675)	221,441	100,000	334,606	334,606	Need at least 2 months ending balance (\$63,000), because revenue stream is irregular and fees are the only funding source for the program. Ending balances lower than expected due to decrease in shipping traffic in FY 16.
OF Limited	003 - LQ	3930 Orphan Site Account - Solid Waste Disposal Sites	Operations	Solid Waste Fees – Orphan Site Program (ORS 459.236; 465.381)	3,353,846	7,000,000	4,690,382	4,690,382	Community must raise funds for cleanup before orphan site can be used on landfill cleanups. DEQ uses funds for orphan landfills in need of cleanup and to provide up to \$100,000 to communities to investigate sites. Loans can be made to local governments for cleanup of municipal landfills.
OF Limited	003 - LQ	3220 UST/LUST Contractor Licensing Fees	Operations	UST/LUST Contractor Licensing Fees (ORS 466.750 & 466.787)	121,015	77,661	28,850	28,850	Need 4 months ending balance (\$20,000). Funds received unpredictably throughout year.
OF Limited	003 - LQ	3010 Solid Waste Permit Fees	Operations	Solid Waste Permit Fees (ORS 459.235)	157,997	1,200,000	1,616,478	1,616,478	Need at least 2 months ending balance (\$440,000). 1517 fee increase designed to build balance in 1719 to delay next fee increase until 2022.

OF Limited	3020 Solid Waste Disposal Fees	Operations	Solid Waste Disposal Fees (ORS 459A.110, 459A.115, 459A.120)	2,410,493	8,000,000	4,758,258	4,758,258	Need at least 2 months ending balance (\$1.14 million). 1517 balance is not reduced for grant commitments of \$3-4 million. To fully implement program need 8 month balance (\$6.8 million) due to long term planning, grants and contracts.
OF Limited	3210 Underground Storage Tank (UST) Fees	Operations	Underground Storage Tank (UST) Fees (ORS 466.783 & 466.785)	(24,480)	250,000	(688,205)	(688,205)	Need 7 months ending balance (\$700,000). Annual fees are invoiced in January.
OF Limited	3230/3240 UST Compliance and Corrective Action Fund	Operations	UST Compliance and Corrective Action Fund (ORS 466.791, 466.994)	179,169	47,333	116,730	116,730	No specified balance; funds are used to support program needs as they become available.
OF Limited	3030 Waste Tire Fees	Operations	Waste Tire Fees (ORS 459.730, 459.750, 459.765, 459.775)	(349)	1,000	15,087	15,087	Need 2 months fund balance (\$2,000). Solid Waste Disposal Fees supplement waste tire fees to support waste tire work.
OF Limited	3050 Product Stewardship Fund	Operations	Product Stewardship Fund (Paint stewardship fees) (ORS 459A.820- .855)	(1,989)	10,000	6,198	6,198	Need 11 months fund balance (\$33,000). Annual revenue collected in April.

**Objective:** Provide updated Other Funds ending balance information for potential use in the development of the 2017-19 legislatively adopted budget.

**Instructions:**

Column (a): Select one of the following: Limited, Nonlimited, Capital Improvement, Capital Construction, Debt Service, or Debt Service Nonlimited.

Column (b): Select the appropriate Summary Cross Reference number and name from those included in the 2015-17 Legislatively Approved Budget. If this changed from previous structures, please note the change in Comments (Column (j)).

Column (c): Select the appropriate, statutorily established Treasury Fund name and account number where fund balance resides. If the official fund or account name is different than the commonly used reference, please include the working title of the fund or account in Column (j).

Column (d): Select one of the following: Operations, Trust Fund, Grant Fund, Investment Pool, Loan Program, or Other. If "Other", please specify. If "Operations", in Comments (Column (j)), specify the number of months the reserve covers, the methodology used to determine the reserve amount, and the minimum need for cash flow purposes.

Column (e): List the Constitutional, Federal, or Statutory references that establishes or limits the use of the funds.

Columns (f) and (h): Use the appropriate, audited amount from the 2015-17 Legislatively Approved Budget and the 2017-19 Current Service Level as of the Agency Request Budget.

Columns (g) and (i):

Provide updated ending balances based on revised expenditure patterns or revenue trends. Do not include adjustments for reduction options that have been submitted unless the options have already been implemented as part of the 2015-17 General Fund approved budget or otherwise incorporated in the 2015-17 LAB. The revised column (i) can be used for the balances included in the Governor's budget if available at the time of submittal. Provide a description of revisions in Comments (Column (j)).

Column (j): **Please note any reasons for significant changes in balances previously reported during the 2015 session.**

Additional Materials: If the revised ending balances (Columns (g) or (i)) reflect a variance greater than 5% or \$50,000 from the amounts included in the LAB (Columns (f) or (h)), attach supporting memo or spreadsheet to detail the revised forecast.

UPDATED OTHER FUNDS ENDING BALANCES FOR THE 2015-17 & 2017-19 BIENNIA

Agency: 34000 DEQ  
 Contact Person (Name & Phone #): Mark Brown, 503-229-5938

(a) Other Fund Type	(b) Program Area (SCR)	(c) Treasury Fund #/Name	(d) Category/Description	(e) Constitutional and/or Statutory reference	(f) 2015-17 Ending Balance		(g) 2017-19 Ending Balance		(i) Comments
					In LAB	Revised	In CSL	Revised	
OF Limited	004 - AM	4100/4200 Agency Management	Operations	HB 5022 section 2 subsection 5	1,767,354	1,594,955	1,295,181	1,355,371	\$2M = 2 months balance Need greater than 2 month balance to cover annual assessments from Sec. of State, Oregon Library etc. The rules that apply to Federal Funds extend to Indirect Funds, and hence revenues cannot be used for any other purpose in accordance with DEQ annual indirect rate agreements with EPA. Revenues cannot be removed from this fund IAW provisions of Office of Management and Budget (OMB) Circular A-87.
OF Limited	004 - AM	4990 Bond Fund Admin	Operations	Bond Fund Administration (ORS 468.230)	166,111	166,111	19,240	19,240	\$11,832 = 2 month minimum Revenue derived from bond proceeds, which are transferred into this fund, with limitations on use related to bond transactions. DEQ has decided to maintain bond proceeds in the bond proceeds account and shift revenues as expenditures in the bond fund admin fund dictate, effectively maintaining a zero balance.
OF Limited	005 - XP	4070 Tax Credits	Operations	Pollution Control Tax Credit Fees (ORS 468.165)	154,732	154,732	124,308	124,308	\$16,603 = 2 month minimum This covers ongoing administration of existing Tax Credits that will be active for the next 5 years.

**Objective:** Provide updated Other Funds ending balance information for potential use in the development of the 2017-19 legislatively adopted budget.

**Instructions:**

- Column (a): Select one of the following: Limited, Nonlimited, Capital Improvement, Capital Construction, Debt Service, or Debt Service Nonlimited.
- Column (b): Select the appropriate Summary Cross Reference number and name from those included in the 2015-17 Legislatively Approved Budget. If this changed from previous structures, please note the change in Comments (Column (j)).
- Column (c): Select the appropriate, statutorily established Treasury Fund name and account number where fund balance resides. If the official fund or account name is different than the commonly used reference, please include the working title of the fund or account in Column (j).
- Column (d): Select one of the following: Operations, Trust Fund, Grant Fund, Investment Pool, Loan Program, or Other. If "Other", please specify. If "Operations", in Comments (Column (j)), specify the number of months the reserve covers, the methodology used to determine the reserve amount, and the minimum need for cash flow purposes.
- Column (e): List the Constitutional, Federal, or Statutory references that establishes or limits the use of the funds.
- Columns (f) and (g): Use the appropriate, audited amount from the 2015-17 Legislatively Approved Budget and the 2017-19 Current Service Level as of the Agency Request Budget.
- Columns (h) and (i): Provide updated ending balances based on revised expenditure patterns or revenue trends. Do not include adjustments for reduction options that have been submitted unless the options have already been implemented as part of the 2015-17 General Fund approved budget or otherwise incorporated in the 2015-17 LAB. The revised column (i) can be used for the balances included in the Governor's budget if available at the time of submittal. Provide a description of revisions in Comments (Column (j)).
- Column (j): **Please note any reasons for significant changes in balances previously reported during the 2015 session.**

Additional Materials: If the revised ending balances (Columns (g) or (i)) reflect a variance greater than 5% or \$50,000 from the amounts included in the LAB (Columns (f) or (h)), attach supporting memo or spreadsheet to detail the revised forecast.





**Title: Maintain an Effective ACDP Permit Program (#110)**

**Purpose:** The purpose of this package is to maintain an Air Contaminant Discharge Permit program (ACDP). The package proposes a fee increase sufficient to restore current service.

The ACDP permit serves two important purposes. First, efficient and timely ACDP permitting is an essential ingredient in many efforts to grow Oregon's economy. Issuing ACDP permits during new or expanded industrial source construction is very important because it is most cost-effective for industries to install emission controls at the time of new construction. Timely construction permitting is important because under the federal Clean Air Act permit applicants cannot begin construction until DEQ approves of discharge control plans.

Second, ACDP is a state operating permit for industrial sources that are not subject to the federal Title V operating permit program. Industrial facilities are subject to a variety of federal and state air quality emission standards that help ensure that Oregonians breathe clean and healthy air. ACDP permits ensure that permittees comply with these standards.

The ACDP program is funded by a combination of permit fees, General Fund and federal funds. The amount of General and federal funds available for the program have declined since the 1990's. Fees now account for 93 percent of program expenditures. Unlike the Title V program, the ACDP fee is not limited to a specific dollar amount by statute, nor is the fee indexed to the consumer price index to provide regular inflationary increases. ACDP fees were last increased by 20 percent in 2013 with the expectation that the fee increase would provide sufficient funding until 2017.

As predicted, inflation and personal services cost increases have created a projected shortfall of fee revenue in comparison to resources required to maintain current services. The program has also shifted one existing position from another Air Quality program to the ACDP budget due to continued high demand for ACDP work. Without a fee increase, DEQ will have to reduce staffing from the current 30.69 FTE to 26.72 FTE for the 2017-2019 biennium. At the reduced level, DEQ would not be able to maintain adequate service in the program, causing permit backlogs and delays in addressing air quality issues at ACDP facilities. DEQ's inability to process ACDP permits in a timely manner could create an obstacle to future economic development, especially for new facilities and for existing facilities modifying their operations.

**How Achieved:** To maintain an acceptable service level for the next two biennia, DEQ plans to request a fee increase. If the increase is borne by every ACDP permit holder equally, the percent increase would be 22 percent. The program is reviewing recent workload trends and may propose fee increases that vary with the type of permit or the service required. The positions lost without a fee increase conduct permitting, inspections, source testing, complaint response, emission inventories and rule and state implementation plan updates.

Approval of this package will benefit Oregonians and the environment by ensuring that DEQ:

- Issues and renews ACDP permits in a timely manner.
- Provides timely construction permits so that economic development is not stalled.
- Completes required ACDP inspections.
- Monitors and enforces compliance with air quality regulations that apply to ACDP facilities.
- Develops rules and state implementation plans to comply with federal health standards.

Risk to Oregonians and the environment without this package:

- Backlogs in ACDP permitting and potential delays in construction approvals that would negatively impact economic development efforts in the state.
- Likely reduced compliance with permit limits due to reduced inspector staffing. DEQ has studied the deterrent effect, in terms of inducing compliance, of inspections and of enforcement actions sometimes warranted by the findings of such inspections. The study confirms the common-sense belief that active and publically-visible inspections stimulate greater compliance among permittees who are not themselves the subject of an inspection. Without this proposal, the credibility of DEQ’s inspection and enforcement effort will be diminished, and non-compliance would be predicted to rise as a result.
- An increase in unresolved complaints and less technical assistance to permittees. Delays in attainment and maintenance planning for communities, making it more difficult and costly for a new business to establish itself and for established businesses to grow.

**Quantifying Results:** Staffing restoration will help DEQ issue permits in a timely manner as measured by Key Performance Measure 2, ACDP permit timeliness.

**2017-2019 Staffing Impact:**

<u>Position Class</u>	<u>Total Positions</u>	<u>Position Number</u>	<u>FTE by Division</u>
Natural Resource Specialist 2	-	1255	.5 FTE HQ
Natural Resource Specialist 4	-	2126	.5 FTE HQ
Natural Resource Specialist 1	1	2506	1.0 FTE ER
Natural Resource Specialist 2	1	2717	1.0 FTE NWR
Environmental Engineer 2	1	2938	1.0 FTE NWR

**2019-2021 Staffing Impact:**

Natural Resource Specialist 2	-	1255	.5 FTE HQ
Natural Resource Specialist 4	-	2126	.5 FTE HQ
Natural Resource Specialist 1	1	2506	1.0 FTE ER
Natural Resource Specialist 2	1	2717	1.0 FTE NWR
Environmental Engineer 2	1	2938	1.0 FTE NWR

**Revenue Source:** ACDP Fees

**Total Budget:** \$724,269 OF

## **Title: Enhance Community Response POP # 112**

*(Note: The Governor's Recommended Budget modifies the proposal submitted in DEQ's Agency Request Budget by removing five of the seven positions from the original proposal, and by removing the General Fund revenue.)*

**Purpose:** Oregon residents report over 3,500 investigable pollution complaints to DEQ each year. Approximately 70 percent involve air quality. Some of the complaints DEQ receives involve odors which may be associated with air pollutants affecting or potentially affecting human health. In addition to identifying the potential for the presence of hazardous air pollutants, patterns of complaints help DEQ narrow the search for the source of pollutants. Identifying a specific source allows DEQ to concentrate its limited resources on developing a plan to reduce emissions from the source. When DEQ is able to identify a specific source for emissions of a hazardous pollutant other potential sources are relieved of the public perception that they are significant contributors to the problem.

Oregonians are vitally interested in air, water and land pollution from many different sources, both permitted and unpermitted. The number of complaints received by DEQ is steadily rising. DEQ does not have dedicated resources to provide a timely response or solutions to complaints. As a result, DEQ draws on personnel assigned other duties to receive and investigate pollution complaints. Due to the resource shortages, DEQ's response is usually limited to telephone or email follow up, which typically occurs days or weeks after the event. These delayed or inadequate response often lead citizens to file additional complaints regarding the same instance or additional complaints for future instances because their complaint was not addressed.

In neighboring states citizen complaints are received and acted upon by significant numbers of dedicated staff. For example, San Francisco employs 60 investigators with a goal of responding within one hour of complaint receipt. In Southwest Washington, the local air agency also aims to have an investigator in the car and on site within an hour of the complaint.

This proposal has an important nexus to the principle of environmental justice. Although the largest number of complaints is made by residents of the Portland metropolitan area, they may arise wherever neighborhoods are comprised of mixed industrial, commercial and residential uses. Neighborhoods in which industrial and residential uses are located close together are often regions in which affordable housing is found in concentrations beyond what would be expected in uniform residential use areas. Communities of people who have not enjoyed an equal share of Oregon's prosperity thus may be concentrated in these areas. DEQ's citizen complaint system is one important means by which their voices may be more effectively heard.

Effectively responding to the wide array of potential complaints often requires DEQ to coordinate with federal, state or local agencies whose legal authority may provide the complainant with a stronger potential remedy than DEQ's process. Source attribution is a complicated task, which sometimes leads to complainants identifying a permitted facility as a source of their concern when instead, the problem lies with another facility or

unpermitted source. More timely and thorough complaint response will allow DEQ to identify the true source of a complainants concern and will lead to faster resolution of problems.

**How Achieved:** Two field response positions recommended in this package would focus on complaints related to permitted facilities holding either an Air Contaminant Discharge Permit or Title V permit. Air Contaminant Discharge Permits cover typically smaller, less complex facilities. They include: hot mix asphalt plants, rock crushing operations, gasoline dispensing facilities, incinerators and coffee roasters. Title V permits cover the larger, more complex facilities. They include: power plants, paper mills, semiconductor facilities and chemical manufacturing. Title V fees are set in statute. In 2016, DEQ received approximately 734 complaints that identified a facility permitted under the ACDP program and 271 complaints that identified a facility permitted under the Title V program. While DEQ received more complaints on ACDP sources, providing a timely and thorough response to complaints for Title V sources will take more time due to the complexity of the permits and facilities. Therefore, DEQ proposes to increase ACDP fees by approximately four percent over the current fee level to pay for complaint responses related to ACDP permittees and increase the Title V fees by approximately four percent over the current level to pay for complaint responses related to Title V permittees (through DEQ legislative concept 594). Positions requested include:

Natural Resource Specialist 2 (NRS 2) – One full time position funded by an equal split of ACDP and Title V fee increases to perform field investigations of less complex sites in response to complaints. Response activities may include assisting with nuisance odor investigations, conducting compliance determinations, providing technical assistance and completing enforcement actions.

Natural Resource Specialist 3 (NRS 3) – One full time position funded by an equal split of ACDP and Title V fee increases to perform field investigations for more complex sites in response to complaints. Response activities may include conducting nuisance odor investigations, conducting compliance determinations, providing technical assistance and completing enforcement actions.

To increase DEQ's response to complaints Statewide, both positions would be distributed amongst the regions based on complaint response need. The NRS 3 position would function out of the Northwest Region and the NRS 2 position would function out of a DEQ office with access to both, Eastern or Western regions. Both positions would coordinate with currently funded regional permitting and compliance staff when responding to complaints. Coordination may include background research of facility, review of permit requirements, evaluation of current enforcement activities, development of solutions, and review of historical complaint responses.

When a complaint is filed with DEQ, information is collected from the complainant to assist DEQ staff in identifying potential sources to investigate. Since these positions are funded with permitted source's fee revenue, their focus will be on investigating complaints that involve permitted sources.

DEQ proposed establishment of five other positions responsible for field response, but those positions were not included in the Governor's Recommended Budget. Those positions would have been an integrated complaint response team to provide real-time responsiveness and field presence.

Approval of this package will benefit Oregon residents and the environment by:

- Improving timeliness and thoroughness of DEQ's response to complaints, with the result that permitted facilities emitting odors and/or air toxics can be identified and solutions implemented more quickly and efficiently especially in neighborhoods with environmental justice concerns.
- Increasing communication of information in a timely fashion and in a variety of forms so residents are aware of the status of their complaint and what is being done to resolve it.
- Improving responsiveness by conducting more site visits at permitted facilities to thoroughly investigate odors and/or the sources of air pollution so solutions can be implemented to improve public health and quality of life.
- Allowing existing technical and permitting employees who are currently providing DEQ's limited complaint response to focus on their primary work.

Risks to Oregon residents and the environment without this package include:

- DEQ response to complaints will continue to be tardy and follow-up shallow or incomplete.
- DEQ complaint and source identification work, and therefore its capacity for timely enforcement of permit requirements, will continue to be impaired by the absence of a robust complaint processing system.
- DEQ will continue to divert resources from its other functions, such as permit writing, in an ongoing effort to attempt to address citizen reports about pollution.

**Quantifying results:** DEQ currently tracks the resolution of complaints as a core function of the agency as part of the agency's outcome based management system. With additional staff to provide a higher quality of service to Oregon residents, DEQ will improve its ability to provide real time response and timely resolution to complaints received on permitting facilities. DEQ will continue to report results on a quarterly basis.

**2017-2019 Staffing Impact:**

<u>Position Class</u>	<u>Total Positions</u>	<u>Position Number</u>	<u>FTE by Division</u>
Natural Resource Specialist 2	1	3252	1.00 Regional
Natural Resource Specialist 3	1	3253	1.00 Regional

*The Governor's Recommended Budget does not propose to fund these positions or capital outlay that were proposed in DEQ's Agency Request Budget:*

<i>Admin Specialist 1</i>	<i>2</i>	<i>3248, 3249</i>	<i>2.00 Regional</i>
<i>Natural Resource Specialist 1</i>	<i>1</i>	<i>3250</i>	<i>1.00 Regional</i>
<i>Natural Resource Specialist 2</i>	<i>2</i>	<i>3251, 3252</i>	<i>2.00 Regional</i>
<i>Natural Resource Specialist 4</i>	<i>1</i>	<i>3247</i>	<i>1.00 Regional</i>

*Capital Outlay-equipment* *\$45,000*

**2019-2021 Staffing Impact:**

<u>Position Class</u>	<u>Total Positions</u>	<u>Position Number</u>	<u>FTE by Division</u>
Natural Resource Specialist 2	1	3252	1.00 Regional
Natural Resource Specialist 3	1	3253	1.00 Regional

**Revenue Source: ACDP fees, Title V fees**

**Total Budget: \$418,490**  
**OF: \$418,490**

## **Title: Implement Cleaner Air Oregon Air Toxics Monitoring POP #113**

*(Note: The Governor's Recommended Budget modifies the proposal submitted in DEQ's Agency Request Budget by removing three of the 12 positions from the original proposal.)*

**Purpose:** Together with policy option package 116, this proposal will help to reduce public health risks arising from hazardous air pollutants.

From public ownership of our beaches to passage of the nation's first bottle bill, Oregon set the pace for the nation in protecting our quality of life and environment. Yet, Oregon's air quality regulations and the capacity to monitor the quality of our air have not kept up.

Hundreds of chemicals are released into Oregon's air by industrial and other sources. "Hazardous air pollutants" are designated as such because of the potential to adversely affect human health by increasing the likelihood of cancers, immune system damage, nerve damage, birth defects, respiratory diseases and other health problems. We must do more to ensure our air, soil and water are safer for people.

DEQ and the Oregon Health Authority (OHA) are working together to overhaul Oregon's industrial air toxics regulations and align them with human health. This new program is called "Cleaner Air Oregon." DEQ and OHA have begun to engage Oregon residents across the state to provide input on how new health-based standards will be written, implemented and enforced.

Policy package 113 is submitted in recognition of the need to improve DEQ's capacity to identify and measure health risks arising from allowed and prohibited emissions of hazardous air pollutants. It also reflects a good-faith effort to project features of the final outcome of the comprehensive regulatory reform process, even though Cleaner Air Oregon's final outcome, in the form of new rules, is not expected to be known until December 2017.

Following federal law, Oregon's current rules aim to restrict industrial pollution by imposing industry- or technology-specific requirements on manufacturing facilities (e.g., emissions control devices, specific work practices or equipment designs). The rules impose requirements based on the size of a facility and hazardous materials it uses.

While the current rules are intended to reduce industrial air toxics emissions, they do not cap the total amount of contaminants a facility may release. Nor do they restrict concentrations of pollutants based on the health risks they pose for people living or working nearby. Current industrial air toxics regulations are not designed to take into account the local impacts of industrial pollution on human health.

The goal of Cleaner Air Oregon is to close gaps in current industrial air toxics rules. Based on best available science and best public health practices, it will reset allowable pollution levels for individual permittees. The standards regulators use in permitting decisions and enforcement actions will, for the first time in individualized permitting decisions, be tied to health-based standards. The new regulations are expected to:

- Set limits on air emissions for industrial sources based on risks to human health.
- Define exposure levels that are protective of human health and assess facility emissions based on human health safety standards.

- Cover a comprehensive range of industrial facilities across the state. The rules will apply to facilities that emit a wide variety of potentially harmful toxics.

While many of the features of the eventual result of Cleaner Air Oregon remain to be defined through the comprehensive community engagement and rule making advisory committee process described above and detailed at <http://cleanerair.oregon.gov>, POP 113 squarely addresses one certainty of the new regulatory regime: DEQ must significantly improve its capacity to monitor the quality of the air around specific sites of potential concern and in air sheds generally. POP 113 provides for that improvement.

DEQ needs detailed air quality data to characterize which pollutants are of most concern, which geographic areas (neighborhoods, populations) face the highest risk, and to help identify which emission sources are significant and which are not. Having scientific data will help DEQ communicate to the public and stakeholders about those risks and develop appropriately targeted and sustainable solutions. Rapidly developing knowledge and awareness of the health impacts of air pollution has increased public and agency demand for improved monitoring data. Better air quality assessment, analysis and communication provide a better service to DEQ customers.

The demand for air quality monitoring has outpaced available resources. Some of the demand can be met by tapping new methods. Full air toxics monitoring sites are expensive to equip and operate. DEQ needs to take advantage of the most cost-effective methods to identify where toxic air pollution is most prevalent, identify the source and amount of the pollution and then measure long term progress in reducing the pollution.

Recently, DEQ and the United States Forest Service collaborated on a moss screening study for airborne toxic metals in the Portland area. These groundbreaking studies have provided DEQ with information about metals at a level of detail over a large geographic area never before available. Moss data identified many areas of potential metals emissions that need follow up air monitoring. DEQ has responded with some additional metals monitoring, but available equipment and methods are resource intensive. Current methods require daily visits by staff to the location to switch out filters and bring the filters back to the laboratory for analysis. Once analyzed, DEQ reviews this information with wind speed and direction to identify potential metals sources.

Because the moss studies identified areas of concern for metals emissions, the 2016 Legislature provided funding for monitoring equipment and staff to study air toxics in two areas of concern in Oregon. These resources along with what the agency had previously only allows for four areas in the state to be assessed for air toxics each year. These four sites are designed to rotate around the state yearly or biannually to areas of interest at both community and near source areas. This rotation does not provide information that can be used for determining improving or declining trends.

**How Achieved:** This policy package requests equipment and staff to screen for toxic air pollution and measure air toxics in various locations across the state for an extended period of time to measure progress.

One effective screening method is particulate monitoring. Where levels of particulate are elevated, there are often associated levels of combustion or process-related air toxics, such as metals, benzene and polycyclic aromatic hydrocarbons. As a result, particulate measurements can be used as an effective screening tool to indicate where further air toxics monitoring should occur. DEQ is requesting funding to purchase 30 nephelometers for use across the state and one position to operate the network. In addition to identifying the likely presence of toxic air pollution, particulate matter remains one of the top air pollutants contributing to unhealthy air statewide. Particulate levels exceed National Ambient Air Quality Standards in several communities. In

addition to targeting where future air toxics sites should be placed, expanding the particulate network throughout the state would greatly improve the Air Quality Index that Oregonians use to see real-time particulate levels. This data would also provide information on trends to see improvements or deterioration in particulate pollution.

The only air toxics trend sites in Oregon are two federally fund sites in Portland and La Grande. The ability to understand trends in air toxics in various cities in Oregon will help inform DEQ, the public and the Legislature about improving or declining trends in a number of locations across the state. Long-term trends can help to focus resources on issues that continue to be problematic. Without long-term trend data, a one-time high value may become the focus for resources when it was simply a single high value. DEQ is requesting funding for equipment and eight positions to operate six trend sites across the state to measure the full spectrum of air pollutants. The likely locations are three sites in the Portland metro area, one location in Eugene, one location in Medford and one location in Bend in order to spread the locations throughout the state in areas with high populations and more sources of air toxics.

This policy package recommends funding to purchase and operate monitoring equipment and collect and analyze the data. To carry out this work, four full-time positions for the entire biennium, three phased-in and two seasonal positions are as follows:

Screening for air toxics - nephelometers to measure particulate

- (1) Natural Resource Specialist 2 – This phased-in position would be responsible for sample collection and overall site maintenance.
- \$95,000 for 30 nephelometers and \$30,000 for associated software, to be purchased and installed over the course of the biennium.

Six air toxics trends sites

- (2) Natural Resource Specialist 3 – One full-time position responsible for monitoring site setup, equipment calibration, sample collection and overall site maintenance. One phased in position responsible for data analysis and reporting, to include annual reports for air toxics sites.
- (1) Natural Resource Specialist 2 – One full-time position responsible for sample collection and overall site maintenance.
- (2) Chemist 3 – Two phased-in positions, one for organic analysis of air toxics and one for inorganic analysis of air toxics.
- (2) Chemist 1 – Two seasonal positions (9 months), one responsible for organic analyses and one responsible for inorganic analyses.
- (1) Information Systems Specialist 6 – This full-time position would be responsible for management of data systems.
- The cost of equipment for each full air toxics site is \$120,000. Approximately \$720,000 worth of equipment will be purchased and installed over the course of the biennium.

*The Governor's Recommended Budget does not propose to fund these three positions that were proposed in DEQ's Agency Request Budget:*

*Screening for air toxics - moss collection and analysis*

- (1) Natural Resource Specialist 2 – This seasonal position (12 months) would be responsible for collection of moss samples.

*Screening for air toxics - nephelometers to measure particulate*

- (1) Natural Resource Specialist 3 – This full-time position would be responsible for initial site identification and set up, data analysis and equipment calibration.

*Continuous metals monitoring*

- (1) Natural Resources Specialist 3 – This full-time position would be responsible for metals monitoring using the continuous metals monitor. This would include setup, calibration and analysis of the information from the monitor.
- \$200,000 for the purchase of a continuous monitor.

Approval of this package will benefit Oregonians and the environment by ensuring that DEQ:

- Provides citizens with good scientific information about the air toxics in their neighborhoods
- Uses the equipment to more comprehensively assess air toxics statewide
- Gathers air toxics trend data to assess changes in areas where actions have been taken to reduce toxics over time
- Is better equipped to monitor ambient air to meet the goals of Cleaner Air Oregon

Risks to Oregonians and the environment without this package are:

- Ongoing elevated health risks from exposure to toxic air pollution throughout Oregon
- Significantly lowered capacity for DEQ to monitor air toxics emissions, track trends and measure progress
- Significant reduction in DEQ's ability to work with communities to prevent and reduce air toxics emissions

**Quantifying Results:** Over time, as air toxics reduction efforts are guided by good monitoring data, Oregonians should see improvements in DEQ's Key Performance Measure related to air toxics trends in larger and smaller communities. Also as air toxics monitoring information becomes available DEQ will report the results to interested stakeholders. Specifically, DEQ would report on the results for the toxic pollutants in comparison to health benchmarks and provide stakeholders with an assessment of the problem pollutants.

**2017-2019 Staffing Impact:**

<u>Position Class</u>	<u>Total Positions</u>	<u>Position Number</u>	<u>FTE by Division</u>
Natural Resource Specialist 2	2	3275, 3278	1.75 Laboratory
Natural Resource Specialist 3	2	3279, 3280	1.75 Laboratory
Chemist 1	2	3282, 3283	.75 Laboratory
Chemist 3	2	3276, 3277	1.50 Laboratory
Information Systems Specialist 6	1	3281	1.00 Laboratory

**Capital Outlay**

\$845,000

*The Governor's Recommended Budget does not propose to fund these positions or capital outlay that was proposed in DEQ's Agency Request Budget:*

<i>Natural Resource Specialist 3</i>	<i>2</i>	<i>3245, 3274</i>	<i>2.00 Laboratory</i>
<i>Natural Resource Specialist 2</i>	<i>1</i>	<i>3284</i>	<i>0.50 Laboratory</i>

*Capital Outlay*

*\$345,000*

**2019-2021 Staffing Impact:**

Natural Resource Specialist 2	2	3275, 3278	2.00 Laboratory
Natural Resource Specialist 3	2	3279, 3280	2.00 Laboratory
Chemist 1	2	3282, 3283	1.00 Laboratory
Chemist 3	2	3276, 3277	2.00 Laboratory
Information Systems Specialist 6	1	3281	1.00 Laboratory

**Capital Outlay**

\$300,000

**Revenue Source:** General Fund

**Total Budget:** \$ 2,500,000

**Title: Reduce Wood Smoke Emissions POP# 114**

*(Note: This package was proposed by DEQ but not included in the Governor's Recommended Budget.)*

**Purpose:** The purpose of this package is to recognize the probability that a legislatively mandated study by DEQ, scheduled for completion in late summer 2016, will identify the necessity of additional resources if DEQ is to make further reduction in public health risk from wood smoke emissions.

Residential wood combustion is a known source of particulate pollution and air toxics. It is the single largest contributor to contaminants in Oregon communities that already violate the federal health standard for fine particulate (soot/smoke). DEQ estimates there are about 590,000 homes with a wood burning device. Many of these devices can also affect indoor air quality and degrade air quality outside the home. Wood smoke contains a mixture of fine particles and toxic air pollutants (e.g., benzene and formaldehyde). Exposure to fine particles has been associated with a range of health effects, including heart or respiratory problems as well as premature death. Air toxics pose a significant risk to public health including an increased risk of cancer, immune system damage, nerve damage, birth defects, respiratory diseases and other health problems.

The U.S. Environmental Protection Agency sets health standards for air quality pollutants, such as fine particulate matter (also known as PM<sub>2.5</sub>). EPA designates areas which don't meet the standard as "nonattainment." Being declared nonattainment is very serious for any community because the designation means that the air is unhealthy, legal requirements are triggered for states to reduce pollution and meet standards, stricter requirements are imposed on new and potentially existing industry and the stigma of nonattainment can be a deterrent to attracting new business and new residents. Currently, the cities of Klamath Falls and Oakridge violate the federal daily fine particulate standard and are designated nonattainment. Other communities such as Lakeview and Prineville also exceed the standard but have not yet been classified by EPA as nonattainment areas. Five other communities, (Portland, Medford, Eugene, La Grande, and Burns) are at risk of exceeding federal fine particulate standards. Wintertime residential wood burning is the most significant source of fine particulate matter in most communities in or on the verge of nonattainment.

In 2015, the Oregon Legislature passed House Bill 3068. It directs DEQ to conduct a study and develop recommendations for legislation to further reduce woodstove smoke in Oregon, particularly in communities that are in or at risk of violating national air quality standards for fine particulate. DEQ convened a 15-member workgroup to inform the study and provide recommendations for legislation or budget requests. One of the key preliminary recommendations the workgroup identified is to provide funding to the local communities to implement wood smoke reduction programs. Locally implemented wood smoke reduction programs (such as woodstove curtailment, education/outreach, and open burning restrictions) have been the most effective way to reduce wood smoke in communities. Locally-run programs understand the unique challenges of their community and can craft tailored programs that include various wood smoke curtailment measures and specific education and outreach messages. Such local programs have already proven their value in maintaining or achieving cleaner air. They are required for some communities under their EPA-approved PM attainment plans. Investing in local air quality programs serves both the public health and economic interests of Oregon communities.

For the 2015-2017 biennium, \$166,000 is available to aid local approaches to wood smoke reduction. Funding of this function has been larger in prior biennia. The appropriation was reduced by \$76,000 in 2011. That reduction has not been restored.

**How Achieved:** This package requests \$100,000 per biennia in General Fund to supplement the sum included in DEQ's 2017-2019 budget for local communities. However, this request may be modified by the final HB 3068 report. DEQ expects the workgroup will recommend a larger increase in funding to support local communities.

This request would provide communities already designated nonattainment or identified as at-risk of such designation with additional funds to help implement their programs. The request could also allow DEQ to expand the number of communities covered.

This package modified and likely enlarged based upon anticipated funding recommendations of the workgroup, will benefit Oregonians and the environment by ensuring that communities impacted by fine particulate can:

- Have the necessary resources and expertise to fully implement wood smoke reduction programs to better protect public health, particularly for vulnerable populations such as young children and the elderly.
- Achieve attainment or prevent the community from violating the fine particulate standard and lower air toxics emissions, ensuring the community has clean air and allowing for economic growth.
- Coordinate with state and local partners to address wood smoke and find and pursue grants and additional funding to supplement wood smoke reduction programs, such as woodstove changeouts.
- Support the principle of environmental justice by helping communities identify and support households whose private resources are insufficient to take measures such as woodstove change outs, yielding health benefits for the particular household as well as for the community at large.

Risks to Oregonians and the environment without the package are:

- Ongoing elevated health risks from exposure to fine particulate and air toxics emissions.
- Decreased ability for DEQ and communities to address wood smoke, resulting in fewer programs being implemented to lower fine particulate levels and ongoing issues with communities violating or more communities at risk of violating health standards.
- Delays in attainment and maintenance planning for communities, possibly making it more difficult and costly for new and expanding businesses.

**Quantifying Results:**

Yearly monitored values in each community will inform DEQ about the effectiveness of each community's air program, what adjustments may be needed to their strategy and what if any new communities need to be supported to address wood smoke and reduce fine particulate levels. Over time, resources requested in this package should help to reduce the number of days when the air is unhealthy to breathe in Oregon as measured by Key Performance Measure 9, National Standards: number of days when air is unhealthy for sensitive groups and all groups.

**2017-2019 Staffing Impact:**

**Position Class**  
N/A

**Total Positions**

**Position Number**

**FTE by Division**

**Contracts: \$100,000**

**2019-2021 Staffing Impact:**

N/A

**Contracts: \$100,000**

**Revenue Source: General Fund**

**Total Budget: \$100,000**

## **Title: Reduce Harmful Diesel Emissions POP# 115**

*(Note: The Governor's Recommended Budget modifies the proposal submitted in DEQ's Agency Request Budget by removing the General Fund revenue.)*

**Purpose:** The overall purpose of this policy package is to reduce harmful emissions from diesel engines whose exhaust is known to contribute to at least 80 welfare and health effects in humans ranging from asthma risk to early mortality from cardiovascular disease and cancer. DEQ developed this policy package in anticipation of the Volkswagen settlement but prior to the release of the settlement. As a result, the request for positions and limitation to fund diesel emission reduction projects may change as DEQ gains more clarity about the use of the funds.

On June 28, 2016 for 2.0 liter diesel passenger cars and December 20, 2016 for 3.0 liter diesel passenger cars, the plaintiffs, including Oregon through the Oregon Department of Justice, submitted a proposed partial consent decree to the U.S. District Court settling claims made in a lawsuit alleging select diesel powered passenger cars manufactured under the Volkswagen, Audi and Porsche brands violated federal engine emission certification standards by the deliberate installation of emission control defeat devices. The proposed settlement includes provision for relief for vehicle owners. It also includes a \$2.925 billion assessment Volkswagen must pay into an environmental mitigation fund managed by a trustee appointed by the court. The fund is allocated by the court among the states, the District of Columbia and Puerto Rico based on the share of registered cars within the jurisdiction. Under this formula Oregon could initially receive \$72,967,518.46 over a three-year period to be paid out over no longer than 10 years for projects within certain limited categories outlined by the Court. The overall goal of the settlement is to reduce nitrogen oxide emissions from mobile sources. The proposed decree directs beneficiaries to identify and select projects. Recipients must comply with terms and conditions of the decree, including tracking, reporting results and auditing.

**How Achieved:** Legislative Concept 594 calls for a modification of the Clean Diesel Engine Fund statute to make explicit DEQ's statutory authority to receive settlement funds and to expend them from the fund, provided the expenditure conforms to the requirements and limitations of the final decree. Specific expenditures of settlement funds from the Clean Diesel Engine Fund will be based on the terms of the decree and on Oregon priorities as determined by consultation with the Governor's office, the public, stakeholders and the Oregon Legislature. The proposed decree constrains the choices Oregon may make about how to bring greatest benefit from the available funds. Oregon cannot expend any funds it receives for any purpose other than a purpose specified in the proposed settlement.

This policy package requests one position to develop administrative rules during the first year of the 2017-2019 biennium followed by the addition of three positions to implement the award program. With this level of staffing, DEQ expects that the entire settlement amount could be disbursed over eight years. The settlement requires that all funds to be disbursed within ten years. The court is expected to finalize terms of the settlement during the fall of 2016. DEQ has been advised by the Department of Justice that the award amount and general focus of the final approved settlement is unlikely to be significantly different than the proposed settlement.

DEQ is requesting General Fund to support the initial position to develop necessary administrative rules and perform work that is not eligible for funding according to the terms of the expected final decree. The final decree is expected to allow recipients to expend up to 10 percent of received funds on administrative costs. DEQ is also requesting a phase-in of three positions in July 2018 to perform project specific work. DEQ would fund the three phased-in positions with the 10 percent administrative costs allowed by the settlement agreement.

Approval of this package will benefit the people of Oregon and the environment by ensuring that DEQ:

- Makes productive, effective and responsible use of the funding to make a major difference in reducing exposure to harmful diesel exhaust.

Risks to the people of Oregon and the environment without this package are:

- Oregonians will continue to be exposed to high levels of diesel exhaust, which is classified as a known human carcinogen.

**Quantifying Results:** DEQ will be gathering and reporting on emissions reduction data for each project. This information will be collated and presented in report formats available to the public. Over time, VW settlement funds, administered and distributed through the means sought in this proposal, will result in reduced tons of diesel particulate emissions and improve the results measured by Key Performance Measure 8, Air Quality Diesel Emissions.

**2017-2019 Staffing Impact:**

<u>Position Class</u>	<u>Total Positions</u>	<u>Position Number</u>	<u>FTE by Division</u>
Operations Policy Analyst 2	1 PF	3220	1.00 HQ-Program Operations
Operations Policy Analyst 2	1 PF	3221	.50 HQ-Program Operations
Operations Policy Analyst 2	1 PF	3222	.50 HQ-Program Operations
Operations Policy Analyst 2	1 PF	3223	.50 HQ-Program Operations
<b>Attorney General</b>			\$52,500
<b>Contracts &amp; Special Payments:</b>			\$10,000,000

**2019-2021 Staffing Impact:**

Operations Policy Analyst 2	1 PF	3220	1.00 HQ-Program Operations
Operations Policy Analyst 2	1 PF	3221	1.00 HQ-Program Operations
Operations Policy Analyst 2	1 PF	3222	1.00 HQ-Program Operations
Operations Policy Analyst 2	1 PF	3223	1.00 HQ-Program Operations
<b>Attorney General</b>			\$150,000
<b>Contracts and Special Payments:</b>			\$20,000,000

**Revenue Source:** Other Fund

**Total Budget:**  
Other Fund: \$10,737,022

## **Title: Implement Cleaner Air Oregon Risk-based Air Permitting POP# 116**

**Purpose:** Together with policy option package 113, this proposal will help to reduce public health risks arising from hazardous air pollutants.

From public ownership of our beaches to passage of the nation's first bottle bill, Oregon set the pace for the nation in protecting our quality of life and environment. Yet, Oregon's air quality regulations have not kept up.

Hundreds of chemicals are released into Oregon's air by industrial and other sources. "Hazardous air pollutants" are designated as such because of the potential to adversely affect human health by increasing the likelihood of cancers, immune system damage, nerve damage, birth defects, respiratory diseases and other health problems. We must do more to ensure our air, soil and water are safer for people.

DEQ and the Oregon Health Authority (OHA) are working together to overhaul Oregon's industrial air toxics regulations and align them with human health. This new program is called "Cleaner Air Oregon." DEQ and OHA have begun to engage Oregon residents across the state to provide input on how new health-based standards will be written, implemented and enforced.

Policy package 116 is submitted in recognition of the need to improve DEQ's capacity to identify health risks arising from allowed and prohibited emissions of hazardous air pollutants. It also reflects a good-faith effort to project features of the final outcome of the comprehensive regulatory reform process, even though Cleaner Air Oregon's final outcome, in the form of new rules, is not expected to be known until December 2017.

Following federal law, Oregon's current rules aim to restrict industrial pollution by imposing industry- or technology-specific requirements on manufacturing facilities (e.g., emissions control devices, specific work practices or equipment designs). The rules impose requirements based on the size of a facility and hazardous materials it uses.

While the current rules are intended to reduce industrial air toxics emissions, they do not cap the total amount of contaminants a facility may release. Nor do they restrict concentrations of pollutants based on the health risks they pose for people living or working nearby. Current industrial air toxics regulations are not designed to take into account the local impacts of industrial pollution on human health.

The goal of Cleaner Air Oregon is to close the gaps in current industrial air toxics rules. Based on best available science and best public health practices, it will determine allowable pollution levels for individual permittees. The standards regulators use in permitting decisions and enforcement actions will, for the first time in individualized permitting decisions, be tied to health-based standards. The new regulations are expected to:

- Set limits on air emissions for industrial sources based on risks to human health.
- Define exposure levels that are protective of human health and assess facility emissions based on human health safety standards.
- Cover a comprehensive range of industrial facilities across the state. The rules will apply to facilities that emit a wide variety of potentially harmful toxics.

Many of the features of the eventual result of Cleaner Air Oregon remain to be defined through the comprehensive community engagement and rule making advisory committee process described above and detailed at <http://cleanerair.oregon.gov>, but DEQ will need additional resources to implement Cleaner Air Oregon. POP 116 provides for those additional resources.

**How Achieved:** DEQ's regulatory reform and rulemaking for industrial air toxics permitting is a major effort requiring significant long-term investments in science-driven policy and program development, including extensive stakeholder and public involvement. The 2016 Legislature provided DEQ with General Fund resources to support the current public rulemaking effort. Once the rulemaking is complete, those initial positions will help implement and support the new air toxics program. However, the new rules will add steps to the permitting process. The rule will likely require more sources to obtain permits. DEQ will need additional staff to implement this significant new program. Another policy option package, #113, funds monitors likely required to meet the expected monitoring demands of Cleaner Air Oregon.

DEQ will complete the rules by December 2017 and begin implementation in 2018. The requested positions will be phased-in beginning January 2018, others added in April 2018 and the final group added in July 2018. Proposed fee increases for Air Contaminant Discharge Permits and Title V permits would pay for the new positions. Title V fees are set in statute and legislative concept 594 includes a placeholder for a proposed increase. DEQ expects more ACDP permit work than Title V and has reflected that in the proposed position mix. A fee structure for both permit programs will be determined as the rule making progresses. DEQ is also requesting one position funded by General Fund to reflect the current funding mix of the ACDP program. The requested positions include:

- Permit writers – DEQ is requesting three Natural Resource Specialist 4 positions and one Natural Resource Specialist 3. The ACDP funded NRS 4 positions begin January 2018 and April 2018 and the NRS 3 position begins July 2018. The Title V funded position begins July 2018. Permit writers are needed to oversee implementation of adding new air toxics regulations to industrial permitting. Work will include managing the overall permitting process and actions. Permit writers review and make decisions about proposed new permits or permit revisions, apply applicable laws, work with permitted facilities, evaluate emission control technology and other work practices that reduce toxic air pollutants at industrial facilities, consult with other program staff providing information on emissions, modeling, and risk assessment, perform inspections, communicate about permitting and risk issues and manage public processes during permit actions, including holding public hearings and information sessions.
- Modelers and Source Testers: DEQ is requesting three Natural Resource Specialist 4 positions. The ACDP-funded NRS 4 positions begin January 2018 and April 2018 and the Title V-funded position begins July 2018. These positions support the permitting process by using computer models to conduct assessments of air quality impacts from industrial sources. Modeling information provides the scientific basis for public health risk assessment. These positions will also oversee and review source test information, which is used to document the actual emission releases from industrial facilities. Source test data is used to verify compliance with permit conditions and can also be used to develop emission estimates for air quality assessment.
- Risk Assessment: DEQ is requesting three Natural Resource Specialist 4 positions that will work with OHA. The ACDP-funded NRS 4 positions begin January 2018 and April 2018 and the Title V-funded position begins July 2018. A health risk assessment is the scientific evaluation of potential adverse health effects resulting from human exposure to air pollution. In evaluating risks to public health, the risk assessor considers many factors,

including estimated air quality impacts on a community or neighborhood, the nature and toxicity of the air pollutants involved, thresholds of allowable exposure, and the nature of the population exposed, including any special considerations such as impacts on certain vulnerable groups (e.g. children, low income citizens). The conclusions drawn from the risk assessment are used to communicate with the facility as well as the public and to inform DEQ's permitting decisions.

- Emission Inventory: DEQ is requesting one Natural Resource Specialist 3 position. This General Funded position would begin July 2018. This position will use the most accurate data available, including permit information and source testing, to develop estimates of the amount of air toxics pollution released by industrial facilities. There are potentially hundreds of different toxic air pollutants to be accounted for involving several thousand facilities across Oregon. Collecting this emission data and making it transparent improves the characterization of industrial source air toxics pollution, ensures DEQ's permitting program has the most accurate data available to guide permitting decisions and policy development and provides the public a more complete accounting of industrial air toxics.
- Information Systems Support: DEQ is requesting one Information Systems Specialist 5 position. This position, funded 50 percent by ACDP and 50 percent by Title V, would begin April 2018. The ISS5 provides the information technology infrastructure needed to support the new permitting program, including creating and managing new databases for emissions and other information as well as supporting web-based interfaces to make information easily available to facilities and the public.

Approval of this package will benefit the people of Oregon and the environment by ensuring that DEQ has the:

- Resources and expertise necessary to successfully implement this major program upgrade to better protect public health.
- Most accurate air toxics data and analysis available on which to base industrial permitting decisions.
- Most accurate data and analysis available to support communication with the regulated community and the public about health risk and permitting issues.
- Information technology support to provide scientific data to the public in a timely and efficient manner.
- Staff expertise and data available to help companies understand DEQ's rules.
- Staff expertise to help facilities evaluate emission controls or operational changes that would reduce air toxics pollution.

Risks to the people of Oregon and the environment without this package are:

- DEQ would not have sufficient resources to implement the more comprehensive and health protective risk-based industrial permitting program adopted.
- DEQ would not have sufficient resources to issue the permits necessary for facilities to legally operate in Oregon and control their air toxics pollution to the extent required under Cleaner Air Oregon.
- DEQ would not have accurate assessments of air toxics emission sources, resulting in less effective air toxics emission reduction efforts.
- DEQ would not have an accurate and complete accounting of industrial air toxics that would better inform facilities, stakeholders, elected officials and the public.

**Quantifying Results:** The amount of air toxics reduced or avoided, and the associated reduction in public health risk achieved through the permitting program cannot be estimated in advance, it will depend on case-specific permitting analysis and permitting decisions made as the program is implemented.

**2017-2019 Staffing Impact:**

<u>Position Class</u>	<u>Total Positions</u>	<u>Position Number</u>	<u>FTE by Division</u>
Natural Resource Specialist 3	2	3265	.50 NWR
		3259	.50 HQ
Natural Resource Specialist 4	9	3254	.50 ER
		3255	.50 HQ
		3256	.50 ER
		3261	.75 WR
		3262	.75 HQ
		3263	.75 WR
		3264	.63 NWR
		3266	.63 HQ

Information Systems Specialist 5	1	3267	.63 NWR
		3257	.63 HQ

**2019-2021 Staffing Impact:**

<u>Position Class</u>	<u>Total Positions</u>	<u>Position Number</u>	<u>FTE by Division</u>
Natural Resource Specialist 3	2	3265	1.00 NWR
		3259	1.00 HQ
Natural Resource Specialist 4	9	3254	1.00 ER
		3255	1.00 HQ
		3256	1.00 ER
		3261	1.00 WR
		3262	1.00 HQ
		3263	1.00 WR
		3264	1.00 NWR
		3266	1.00 HQ
Information Systems Specialist 5	1	3267	1.00 NWR
		3257	1.00 HQ

**Revenue Source:** General Fund, ACDP fees, Title V fees

**Total Budget:** \$ 130,529 General Fund  
\$1,541,171 Other Fund

**Title: Minimizing Impacts from Urban Stormwater (#120)**

*(Note: The Governor's Recommended Budget modifies the proposal submitted in DEQ's Agency Request Budget by removing two of the four positions from the original proposal, and by removing the General Fund revenue.)*

**Purpose:** This package is intended to protect water quality by minimizing pollutants in stormwater runoff from developed areas.

**Background**

Stormwater runoff occurs when precipitation from rain or snowmelt flows over the ground in both urban and rural lands. All stormwater runoff picks up pollutants and transports them into groundwater, rivers, lakes and streams.

Urban areas commonly manage stormwater runoff using municipal separate storm sewer systems (commonly abbreviated as MS4s—one “s” each for “separate,” “storm,” “sewer” and “systems”) that are designed to collect and convey stormwater using storm drains, pipes and ditches. Urban stormwater runoff contains pollutants such as bacteria, metals and herbicides. These pollutants can harm aquatic life and make the water unsafe for recreational activities. The water quality impacts associated with stormwater pollutants may be compounded during decreased summer stream flows.

To prevent harmful pollutants from being washed or dumped into MS4s and through MS4s discharged into rivers and streams, the U.S. Environmental Protection Agency requires municipalities in urban areas to obtain federal National Pollutant Discharge Elimination System (“NPDES”) permits. EPA has delegated authority to DEQ to issue these permits in Oregon. MS4 permits require permittees to develop and implement a site-specific stormwater management program, which describes the stormwater control practices that the MS4 will implement to reduce contamination of stormwater runoff and prohibit illegal discharges.

EPA requires DEQ to require cities or counties with populations of 100,000 or more to obtain MS4 permits for stormwater discharges (Phase I MS4 permit). A similar permit is required for smaller urban areas meeting specified population or density thresholds (Phase II MS4 permit). Currently, DEQ oversees eight Phase I permits covering over 20 cities, counties and the Oregon Department of Transportation, and 15 Phase II permits covering 19 cities and counties. In 2012, the U.S. Census Bureau released data which had the effect of adding five cities and two counties to the list of jurisdictions required to obtain a MS4 permit. The new census data triggered the need to study additional regions to determine whether they, too, will fall within the Phase II MS4 permit requirement. The number of MS4 permittees is expected to increase as Oregon's population grows and urban areas continue to expand.

The federal government has available many mechanisms by which it can compel compliance with MS4 permit requirements. In addition to commanding DEQ to enforce the permits, the federal government has conditioned receipt of certain federal funds on a local government's conformance with MS4 permitting requirements.

The core work associated with implementing both phases of the MS4 program includes issuing timely and effective permits; evaluating compliance and providing compliance assistance where needed; conducting inspections and initiating enforcement actions when necessary; analyzing annual reports to evaluate stormwater management plan effectiveness and providing feedback to permittees; and responding to complaints.

DEQ lacks the resources to adequately fulfill these responsibilities. DEQ has been working with communities, environmental groups, and other interested stakeholders to administer an MS4 program with efficient use of DEQ resources. Even with the most efficient regulatory approach, DEQ does not expect to be able to meet the existing demand let alone the expansion of the MS4 program required by the continued growth and urbanization of communities in Oregon. This creates the following risks, all of which have negative consequences for the environment and the regulated community:

- DEQ lacks capacity to produce written procedures, policies and protocols for the MS4 program. This:
  - Creates internal inefficiencies and prevents clear and consistent communication internally and with the public.
  - Increases the likelihood that misunderstandings between DEQ and permittees will result in discharges of contaminated runoff into Oregon's waters and non-compliance with permit requirements.
- Lack of alignment and integration with other DEQ water quality programs creates inefficiencies for DEQ and permittees, such as duplicative paperwork and reporting
- Lack of resources to review and provide feedback on annual reports and other submittals
  - Creates uncertainty for the regulated communities as to whether they are meeting all permit requirements. Communities may spend money to meet permit conditions without certainty that their investments are prudent.
  - Prevents DEQ from being able to use reported information to improve the permits and the permit program.
- Inability to conduct inspections and complete compliance evaluations for MS4 permit holders
  - Limits DEQ's ability to hold permittees accountable for meeting permit requirements.
  - Threatens timely action on economic development projects that have the potential to create jobs for Oregonians because the inability to demonstrate compliance with permits can impede a municipality's ability to obtain federal financial assistance or permits for infrastructure projects that must go through Endangered Species Act consultation with National Marine Fisheries Service or U.S. Fish and Wildlife Service (e.g., channel dredging, projects involving removal or fill of sediments in waters of the state).
- Inability to respond to complaints in a consistent and timely manner
  - DEQ regularly receives complaints that are directly related to MS4 permits but can't follow up on those complaints or provide assistance to the municipalities to ensure expectations are met and issues are resolved.

### **How Achieved**

DEQ currently has one position administering the statewide MS4 program. Annual permit fees as of May 2016 (\$4,786 for each Phase I permittee and \$875 for each Phase II permittee) cover less than half of the cost of this position. This policy package maintains ("restores") this position and establishes one new position, and funds both positions entirely on fees.

- One existing Natural Resource Specialist 4 position (1.0 FTE) to develop and issue timely and quality permits; provide program leadership on strategic planning and integration/alignment with related water quality programs; lead development and guide implementation of new policy;

conduct inspections and compliance evaluations for Phase I MS4 permittees; and regularly engage EPA and stakeholders to solicit input and feedback on the MS4 program's effectiveness and areas/opportunities for improvement.

- One new Natural Resource Specialist 3 position (0.76 FTE) to develop and issue quality permits, conduct inspections and compliance evaluations, provide compliance assistance, respond to permittees' requests for guidance and assistance, review and provide feedback on permittees' annual reports, and analyze data and other information to evaluate permit and stormwater management plan effectiveness and inform permit renewals.

DEQ proposed the establishment of two additional MS4 positions in its Agency Request Budget but these positions were not included in the Governor's Recommended Budget. The work of these two new positions (Natural Resource Specialist 2) would have involved providing compliance assistance, conducting inspections and compliance evaluations, responding to permittees' requests for guidance and assistance, responding to complaints, evaluating and providing feedback on annual reports, and evaluating new jurisdictions for permit coverage. DEQ will have very limited ability to perform these functions with the staffing level proposed in this package.

### **Results/Outcomes**

If this package is approved, DEQ will have two positions to assist MS4 jurisdictions with developing and implementing effective stormwater management plans and maintaining compliance with MS4 permit requirements. With these two positions, DEQ will:

- Start work on reissuing all eight expired MS4 Phase I permits, with the goal of having six of the eight Phase I permits current by October 2018.
- Evaluate 19 new jurisdictions for permit coverage as required by federal regulations and by the census data reported above.
- Review and provide feedback on annual reports from Phase I and II permittees; follow up on compliance issues identified during the review.
- Provide ongoing program and permit evaluation to guide program improvements.

DEQ will have very limited capacity to perform the following functions:

- Develop an inspection protocol; establish and keep up-to-date with an inspection schedule.
- Conduct inspections and provide compliance assistance to regulated facilities.
- Provide compliance assistance to permittees, with an emphasis on the smaller communities that have recently registered for coverage under the MS4 Phase II general permit. This includes:
  - Timely responses to permittees' questions and requests for assistance.
  - Develop tools and other resources to assist existing and future permittees with development of their stormwater management program.
  - Conduct trainings and provide assistance for new permittees on permit requirements and how to achieve and maintain compliance.
- Produce an annual summary of program status, accomplishments and metrics.

If this package is not approved, the consequences include:

- Water quality in urban streams and downstream waters is likely to be further degraded.
- Because the ultimate objective of water quality protection is to avoid cumulative impacts beyond acceptable limits, failing to adequately address one contributor—stormwater runoff—can have the effect of increasing the stringency of standards on other contributors—such as industrial sites and municipal sewage treatment plants.
- MS4 communities may be subject to inspections and enforcement by EPA.
- Communities that cannot demonstrate compliance with permit requirements will continue to have difficulties getting federal approvals needed for financial assistance and projects that need federal permits.
- Economic development projects that have the potential to create jobs for Oregonians may be threatened or delayed.

### Quantifying Results

DEQ will measure success through a variety of measures, including number of permits current and number of approved stormwater management plans.

### Staffing Impact – 17-19:

<u>Position Class</u>	<u>POS</u>	<u>FTE</u>	<u>Position Number</u>	<u>FTE by Division</u>
NRS4 Municipal Stormwater Coordinator	1 PF	1.0	2626	1.0 Operations (location subject to need)
<i>The following position phases in during December 2017:</i>				
NRS3 Stormwater Quality Specialist	1 PF	0.76	3216	0.76 Northwest Region (location subject to need)
<i>The Governor's Recommended Budget does not propose to fund these two positions that were proposed in DEQ's Agency Request Budget:</i>				
<u>Position Class</u>	<u>POS</u>	<u>FTE</u>	<u>Position Number</u>	<u>FTE by Division</u>
NRS2 Water Quality Specialist	1 PF	1.0	2634	1.0 Western Region (location subject to need)
<i>The following position would have phased in on October 1, 2017:</i>				
NRS2 Water Quality Specialist	1 PF	0.875	3215	0.875 Eastern Region (location subject to need)

**Revenue Source:** Other Fund - \$ 343,729

**Staffing Impact – 19-21:**

<u>Position Class</u>	<u>POS</u>	<u>FTE</u>	<u>Position Number</u>	<u>FTE by Division</u>
NRS4 Municipal Stormwater Coordinator	1 PF	1.0	2626	1.0 Operations (location subject to need)
NRS3 Stormwater Quality Specialist	1 PF	1.0	3216	1.0 Northwest Region (location subject to need)

**Revenue Source:** Other Fund - \$410,000

**Title: Toxics Monitoring and Groundwater Assessment & Protection (#121)**

*(Note: This package was proposed by DEQ but not recommended in the Governor's Recommended Budget.)*

**Purpose:** This package would restore laboratory resources. Without restoration, DEQ would need to reduce by about one third its water quality monitoring efforts aimed at assessing toxic pollutants and groundwater quality. It also enables DEQ to restore two positions dedicated to groundwater protection activities, and increase one of those positions from half time to full time.

**Background**

DEQ has primary responsibility for surface water and groundwater protection in Oregon, including monitoring and reporting on water quality status and trends. This package affects two DEQ programs that are of keen interest to Oregonians – protecting Oregon's groundwater resources and assessing levels of toxic pollutants in surface waters.

Groundwater

Groundwater is vital to Oregon's public health, economy and environment. Oregon's groundwater has many uses, including drinking water and other household uses, irrigation for crops, numerous industrial and commercial uses, and base flow to streams. Over 90 percent of Oregon's available freshwater is stored beneath the earth's surface as groundwater. Approximately 70 percent of Oregonians depend on groundwater for their daily water needs via private, public and industrial water wells. Understanding and protecting Oregon's groundwater resources is a core element of Oregon's Integrated Water Resources Strategy.

The Oregon Legislature passed the Oregon Groundwater Quality Protection Act in 1989, with the goal of preventing groundwater contamination and to conserve, restore and maintain Oregon's groundwater resource for present and future uses. Although the Act assigns primary responsibility for groundwater protection to DEQ, Oregon's groundwater quality protection program consists of a number of programs spread among different state agencies. Key agencies include the Oregon Health Authority Drinking Water Program, the Water Resources Department and the Department of Agriculture.

DEQ implements a statewide groundwater monitoring program to identify areas of the state that are vulnerable to groundwater contamination, update our understanding of groundwater quality throughout Oregon, determine emerging groundwater quality problems and inform groundwater users of potential risks from contamination.

DEQ focuses its groundwater protection activities in three sensitive groundwater areas called Groundwater Management Areas. These are areas where the water quality has been degraded and public health may be at risk in part from nonpoint source groundwater pollution. One GWMA is located in the Lower Umatilla Basin, one in Northern Malheur County and another in the Southern Willamette Valley. Protection efforts in these areas involve working with local stakeholders to develop and implement groundwater action plans. DEQ monitors groundwater quality in these areas to help guide protection activities, and provides technical assistance to communities and watershed councils engaged in groundwater protection efforts.

## Toxics

More than 80,000 different chemicals are in use in the United States. These chemicals include pesticides, pharmaceuticals, consumer products and industrial chemicals. Although they have intended beneficial uses, they sometimes end up causing water pollution with potentially negative effects on aquatic life and human health. There are many potential sources of toxic pollutants, including wastewater discharges from industrial and municipal facilities; surface water runoff that contains pollution from roads, parking lots, and urban and rural lands; legacy contamination in sediments, such as in Portland Harbor; air pollution from Oregon and around the world; and natural soil erosion. With so many sources, it's important to design control and reduction strategies that address the toxics of highest concern and are targeted to get results. Designing successful strategies will require timely information on the types and amounts of toxics in waterbodies throughout the state.

In 2007, the Oregon Legislature provided DEQ resources to initiate a statewide water quality toxics monitoring program. Overall, goals for DEQ's Water Quality Toxics Monitoring Program are to:

- Work with DEQ internal groups, community groups and Oregon citizens to identify opportunities for reducing these pollutants
- Gather information to characterize the presence and concentration of chemicals of concern in Oregon's waters
- Use this information to identify sources of these chemicals
- Present and make available information gathered for public benefit

DEQ coordinates its toxics monitoring activities with state, federal and local agencies and tribal governments, the regulated community and other groups and organizations to leverage resources and avoid duplication. DEQ produced its first [statewide assessment of toxics](#) in water in 2015, based on water samples collected from 177 sites across the state between 2008 and 2013. These sites included coastal estuaries, large rivers and small streams. DEQ analyzed samples for more than 500 different chemicals. DEQ continues to collect samples in two or three basins per year, with the objective of completing a statewide assessment every five years.

### **How Achieved**

This policy package would restore (maintain) four positions that are unaffordable due to a revenue shortfall in the Water Quality program. This includes two laboratory positions whose loss would result in approximately a one-third reduction in toxics monitoring, GWMA monitoring and statewide groundwater quality assessment. It would also restore a statewide groundwater program coordinator and policy development position, and restore a half-time position as a full-time position working on the Southern Willamette GWMA and related permitting issues, technical assistance and coordination with local entities and sister agencies in that area.

### **Results/Outcomes**

If this package is approved DEQ will have the resources it needs to:

- Provide strategic direction and leadership for DEQ's groundwater monitoring programs and groundwater protection policy development, and facilitate interagency alignment on groundwater protection activities

- Lead DEQ's policy activities related to the Integrated Water Resources Strategy
- Continue to support the Southern Willamette GWMA Committee and other stakeholders to develop and implement effective strategies to prevent and reduce groundwater contamination
- Continue to collaborate with OSU Extension and others on research projects aimed at evaluating the effectiveness of agricultural management practices at preventing migration of pollutants to groundwater
- Coordinate partner agencies and organizations for developing and implementing strategies to prevent and reduce contamination groundwater areas of concern
- Work with communities that use groundwater as their source of drinking water to identify potential contaminant sources and implement drinking water protection plans
- Maintain existing level of effort for the statewide toxics monitoring program (20 water samples collected in two basins three times a year and 40 sediment samples a year)
- Maintain existing level of effort in the statewide groundwater monitoring program (60 groundwater samples collected twice a year in two geographic areas)
- Maintain existing monitoring levels in GWMA areas

If this package is not funded:

- DEQ will have very limited ability to provide leadership, both internally and externally, for statewide groundwater protection strategies, and to produce and provide groundwater data and information to support these efforts
- The statewide toxics monitoring program would be reduced from two basins a year to one basin a year, which would slow down the availability of statewide information on toxics in water from 5 years to 10 years. In addition, sediment monitoring – an important source for toxics that accumulate in fish – would be reduced from 40 samples to 20 samples per year, resulting in less information in each basin
- The statewide groundwater monitoring program would be reduced by about one third, resulting in less data and information on ground water quality conditions throughout the state. Fewer domestic well owners, many in vulnerable aquifers and environmental justice areas, would have information on the safety of their drinking water
- DEQ would reduce GWMA monitoring in the Southern Willamette Valley by one half and reduce the frequency of sampling in the Northern Malheur GWMA. This reduces the amount of information available to understand nitrate and pesticide trends in these areas and to guide pollution prevention activities to restore water quality in those areas

**Quantifying Results:** DEQ will quantify the success of this package based on its ability to maintain the current level of monitoring and produce information that is made available to the public and used to protect human health and guide pollution prevention and reduction efforts.

**Staffing Impact – 17-19:**

**Budget: \$ 991,080**

<u>Position Class</u>	<u>POS</u>	<u>FTE</u>	<u>Position Number</u>	<u>FTE by Division</u>
NRS4 Hydro	1 PF	1.0	2610	1.0 Operations
NRS4 Hydro	1 PF	1.0	3269	1.0 Western Region
NRS2 WQ Monitoring Specialist	1 PF	1.0	0683	1.0 Environmental Solutions (Laboratory)
Chemist 2	1 PF	1.0	0684	1.0 Environmental Solutions (Laboratory)

**Revenue Source:** General Fund

**Staffing Impact – 19-21:**

**Budget: \$ 991,080**

<u>Position Class</u>	<u>POS</u>	<u>FTE</u>	<u>Position Number</u>	<u>FTE by Division</u>
NRS4 Hydrogeologist	1 PF	1.0	2610	1.0 Operations
NRS4 Hydrogeologist	1 PF	1.0	3269	1.0 Western Region
NRS2 WQ Monitoring Specialist	1 PF	1.0	0683	1.0 Environmental Solutions (Laboratory)
Chemist 2	1 PF	1.0	0684	1.0 Environmental Solutions (Laboratory)

**Revenue Source:** General Fund

## **Title: Setting Water Quality Standards (#122)**

*(Note: This package was proposed by DEQ but not recommended in the Governor's Recommended Budget.)*

**Purpose:** The purpose of this package is to restore (maintain) a water quality standards position that is unaffordable due to a revenue shortfall. Restoring this position will help DEQ complete core work within reasonable timeframes, meet minimum federal requirements and provide support for developing and implementing compliance strategies, such as variances, in wastewater permits.

### **Background**

Water quality standards are the foundation of DEQ's water quality protection program. Standards establish water quality goals by designating beneficial uses for each water body and setting criteria to protect those uses. Beneficial uses include public water supply, fish and aquatic life, recreation, irrigation and others. Standards serve as the basis for pollution control programs, such as developing pollution reduction plans (Total Maximum Daily Loads) to restore water quality where standards are not being met, certifying that in-water projects are conducted in a manner that meets water quality standards, and limiting the discharge of wastewater into waters of the state through National Pollutant Discharge Elimination System permits. Standards also set goals for nonpoint source pollution control plans and land management programs. Failing to set, update (when needed) and implement sufficiently protective standards can allow pollution that harms fish and other aquatic life, presents a human health risk or limits recreational opportunities. These impacts can cause economic and "quality of life" impacts to the state. Standards that are more stringent than necessary to protect beneficial uses, however, may require unnecessary expenditures by cities, businesses and land managers and may have limited environmental benefit. Whenever possible, DEQ's goal is to establish standards at levels that protect beneficial uses while supporting economic development and small business.

Oregon has water quality standards for approximately 140 pollutants. The federal Clean Water Act requires that DEQ review its standards at least once every three years to consider new federal recommendations and to ensure that Oregon's standards are based on the latest science and information. In addition, the standards program provides critical information and assistance to the permitting, certification and TMDL programs to ensure that standards are interpreted correctly and consistently implemented across the state.

DEQ currently has four positions (3.8 FTE) working on water quality standards. Current priorities include revising the temperature standard in response to a lawsuit that invalidated certain elements of the existing standard, revising copper and other metals standards to prevent harm to endangered salmonids, updating standards to reflect Reasonable and Prudent Alternatives identified in National Marine Fisheries Services and Reasonable and Prudent Measures in U.S. Fish and Wildlife Service Biological Opinions, and developing tools and compliance mechanisms for implementing revised standards in water quality permits.

### **How Achieved**

This package would restore a water quality standards position that is unaffordable due to a revenue shortfall.

### **Results/Outcomes**

If this package is approved DEQ expects to deliver the following results:

- Conduct work to develop high priority water quality standards and deliver critical support for implementation in water quality permits

- Address current absence of a standard that enabled DEQ to consider natural conditions when implementing water quality standards in permits and TMDLs
- Continue to promptly respond to litigation that challenges water quality standards and their use in other water quality programs
- Support development of compliance mechanisms for water quality permits associated with temperature and toxic pollutants

If this package is not funded:

- Critical and required revisions to water quality standards will be delayed. For standards required under federal law, EPA may promulgate federal standards which may not reflect Oregon’s needs or consider implementation. Delay in promulgating other critical revisions could result in inadequate implementation or unnecessary expenditures by water quality permit holders to meet overly stringent requirements.
- DEQ will have fewer staff to assist with the implementation of standards in permits and TMDLs, meaning that staff working on revising water quality standards will be pulled into this work when needed, resulting in further delays to water quality standard revisions.

**Quantifying Results:** DEQ will quantify results based on the number of water quality standard revisions, development of new tools and mechanisms for implementing standards in permits, and permits issued that include a compliance mechanisms associated with water quality standards.

**Staffing Impact – 17-19:**

**Budget: \$ 257,898**

<u>Position Class</u>	<u>POS</u>	<u>FTE</u>	<u>Position Number</u>	<u>FTE by Division</u>
NRS4 WQ Standards Specialist	1 PF	1.0	0111	1.0 Environmental Solutions

**Revenue Source:** General Fund

**Staffing Impact – 19-21:**

**Budget: \$ 257,898**

<u>Position Class</u>	<u>POS</u>	<u>FTE</u>	<u>Position Number</u>	<u>FTE by Division</u>
NRS4 WQ Standards Specialist	1 PF	1.0	0111	1.0 Environmental Solutions

**Revenue Source:** General Fund

**Title: Harmful Algae Bloom Response and Assessment (#123)**

*(Note: This package was proposed by DEQ but not recommended in the Governor's Recommended Budget.)*

**Purpose:** This package provides permanent funding for DEQ to collect and analyze water samples in response to harmful algae blooms in coordination with the Oregon Health Authority. It also provides permanent funding for analyzing data, identifying the factors contributing to the development of HABs and supporting local restoration efforts to minimize the frequency and severity of HABs in the future.

**Background**

Harmful algae blooms are formed when naturally occurring cyanobacteria get the nutrients (nitrogen and phosphorous) and conditions they need to multiply into what is called a bloom. HABs can form in any waterbody under the right conditions and commonly last for several weeks or longer. Blooms look different depending on the type of cyanobacteria present in the water. They can appear green, blue-green or reddish brown and form foam, slicks, scum or mats.

Cyanobacteria have the potential to produce toxins at levels that can be harmful to people and animals. These toxins can make people ill and can be highly toxic – often resulting in death – to pets, livestock, and wildlife that ingest water containing the toxins. Toxins in waterbodies used for drinking water may force water suppliers to shut down their operations, as was evident in Toledo, Ohio in 2014. The Oregon Health Authority issues public health advisories when necessary based on water testing data supplied by partner agencies. OHA works to educate the public about HABs and toxins so that people can avoid illness and protect their pets and livestock. Advisories are lifted when sampling data indicates low or no risk to public health. In 2014 and 2015, there were 18 waterbodies in Oregon that had HABs advisories, including the Willamette River in downtown Portland.

HABs can also disrupt recreational activities such as swimming, boating and fishing. These disruptions can result in economic impact to local businesses associated with those activities. While these impacts may be unavoidable when a HABs occurs, the magnitude of the impact can be lessened by timely and accurate data on toxin levels. The appearance of a bloom does not always indicate the presence of toxins, but most people will stay away unless they are assured that toxins are not present. This is only possible if agencies are standing ready to collect samples, expedite analysis, produce high quality data and communicate the results.

When a HAB occurs, a local land or reservoir management agency such as the U.S. Forest Service, lake associations and local government agencies typically collects water testing data. When no agency is able to respond, OHA may ask DEQ to monitor the bloom and collect and analyze water samples. Monitoring responses only happen after internal and interagency discussions about the potential risks to humans and animals, the determination of monitoring responsibilities and availability of monitoring resources. The decision to monitor, or not, requires the judgement and experience of the individuals responsible for the water body. This may include the OHA, DEQ, other state and federal agencies, and reservoir management entities.

Monitoring is especially important when a HAB occurs on waterbodies where public access is available and recreational use is promoted, in areas upstream of municipal drinking water intakes, and when a human illness or animal death is believed to have been associated with a bloom.

In 2010, DEQ began to include waters with HAB health advisories on its 303(d) list of impaired waters, required under the federal Clean Water Act. The negative impact of the blooms on the beneficial uses of the waterbodies constitutes a violation of state water quality standards. The 303(d) listing triggers the CWA requirement for DEQ to assess the waters to determine the causes of the blooms, identify pollution sources contributing to the bloom and develop a pollution reduction plan. DEQ has identified at least 33 waterbodies needing a pollution reduction plan to address HABs.

HABs are likely to become more common given predictions for lower stream flows and warmer water temperatures due to climate change land and water use changes related to population growth. The Legislature provided DEQ with a one-time appropriation of \$100,000 for the 2015-17 biennium to purchase analytical equipment and cover HABs monitoring and analytical costs. Aside from that, DEQ is not funded to monitor HABs or develop pollution reduction plans to reduce their frequency in the future.

This package would enable DEQ to monitor and sample HABs when requested to do so by OHA, and create a small team to do the technical analysis and work with external stakeholders to plan and implement restoration activities that will reduce the occurrence and severity of HABs in the future. DEQ would use this information to develop protection strategies to prevent HABs from occurring in additional high-risk waterbodies.

### **How Achieved**

This package establishes four new positions (3.0 FTE) to respond to HABs and reduce the frequency and severity of HABs in the future. It also includes \$30,000 for laboratory supplies necessary for conducting toxin analyses.

- HABs Specialist (Natural Resource Specialist 3; 1.0 FTE) to lead DEQ's "response monitoring" efforts for HABs events and work with local stakeholders to develop and implement pollution reduction plans. This work includes but is not limited to the following:
  - Assist with updating DEQ's HABs Strategy
  - Develop a quality assurance project plan for HABs response to ensure the data quality objectives are met
  - Build a network of partners to assist with HAB monitoring and communications
  - Train partners in the appropriate collection techniques for assessing HAB presence and toxins
  - Collect water samples, identify and quantify cyanobacteria species, provide these data to OHA and make them available to the public
  - Update and maintain the Memorandum of Understanding between participating state agencies (e.g., Parks, State Lands, Fish and Wildlife, etc.) that describes how they may assist with HABs response efforts to optimize resources and minimize response times
  - Compile and present information on HABs occurrences, impacts and trends to stakeholders and other interested groups
  - Work with the HABs water quality analyst to identify causes and lead the work with local stakeholders to develop pollution reduction plans to reduce the occurrence and severity of HABs
  - Provide information to interested stakeholders on effective pollution reduction strategies for pollutant(s) causing or contributing to HABs

- Water Quality Analyst (Natural Resource Specialist 3; 1.0 FTE) to conduct technical analyses to identify the causes of HABs and potential solutions to reduce HABs occurrence and severity in waterbodies where pollution reduction are being developed. This work includes but is not limited to the following:
  - Lead the update and maintenance of DEQ's HABs Strategy
  - Develop study design, Quality Assurance Project Plan and Sampling and Analysis Plan to identify causes and contributing factors
  - Process, interpret, and summarize complex environmental information into an understandable format for use by technical staff, management and stakeholders
  - Analyze and interpret watershed and water quality data to identify the causes and contributing factors for HABs in waterbodies
  - Develop the HABs Reduction Response Plan for watersheds and waterbodies that will have pollutant source identification and pollutant reduction strategies
  - Work with the HABs Basin Specialist in communicating findings to external stakeholders
  - Participate in the development of pollution reduction plans
  - Evaluate the implementation and effectiveness of the HABs Reduction Response Plan for watersheds and waterbodies
  
- Two seasonal Water Quality Monitoring Specialists (Natural Resource Specialist 1; 1.0 FTE)
  - Collect water samples and ship or deliver samples for algae identification and/or toxin analysis
  - Identify cyanobacteria in the field and in the laboratory
  - Analyze water samples for algal toxins
  - Assemble and maintain HAB response kits to ship to partners
  - Conduct visual surveys for HABs where they have been reported
  - Assist with posting advisory signs
  - Assist in developing local contact lists for various waterbodies with HABs

## **Results/Outcomes**

If this package is approved, DEQ will:

- Develop and maintain a coordinated state agency HABs response monitoring strategy to optimize resources and minimize response times.
- Produce timely and high quality data that OHA will use to issue and lift public health advisories.
- Maintain a publicly accessible clearinghouse of HABs data, including data collected and submitted by other agencies.
- Analyze data and other information for specific waterbodies to identify pollutants contributing to HABs and potential strategies to reduce pollutant loads and the frequency or severity of HABs.

- Assist local stakeholders with developing pollution reduction plans, identifying pollution reduction strategies, designing and implementing pollution reduction projects and evaluating the effectiveness of their efforts at reducing HABs.

If this package is not approved:

- Oregonians, their pets and livestock will be more at risk of suffering the effects of exposure to algal toxins.
- Drinking water providers may unnecessarily shut down production in response to a HAB, causing hardship for homes and businesses they serve.
- Algae blooms, whether toxic or not, will cause greater economic hardship on businesses than would occur if timely and high quality data was more readily available to OHA and the public.

**Quantifying Results:**

DEQ will measure success of its HABs response efforts by tracking measures including the number and timeliness of responses by DEQ or other agencies; cost effectiveness; analytical turnaround time from sample collection to reporting; the number of approved pollution reduction plans; number of pollution reduction measures implemented; and reductions in the amount of pollutants in the waterbody.

**Staffing Impact – 17-19:**

**Budget: \$ 694,480**

<u>Position Class</u>	<u>POS</u>	<u>FTE</u>	<u>Position Number</u>	<u>FTE by Division</u>
NRS3 Water Quality Analyst	1 PF	1.0	3270	1.0 Environmental Solutions
NRS3 HABs Specialist	1 PF	1.0	3271	1.0 Northwest Region
NRS1 WQ Monitoring Technician	2 SF	1.0	3272, 3273	1.0 Environmental Solutions (Laboratory)

**Revenue Source:** General Fund

**Staffing Impact – 19-21:**

**Budget: \$ 694,480**

<u>Position Class</u>	<u>POS</u>	<u>FTE</u>	<u>Position Number</u>	<u>FTE by Division</u>
NRS3 Water Quality Analyst	1 PF	1.0	3270	1.0 Environmental Solutions
NRS3 HABs Specialist	1 PF	1.0	3271	1.0 Northwest Region
NRS1 WQ Monitoring Technician	2 SF	1.0	3272, 3273	1.0 Environmental Solutions (Laboratory)

**Revenue Source:** General Fund

## **Title: Water Quality Permit Program Improvements (#125)**

*(Note: The Governor's Recommended Budget modifies the proposal submitted in DEQ's Agency Request Budget. The original proposal included a Program Analyst 3 position funded on General Fund to assist with permit renewals. The revised package recommends phasing in four new positions funded by a combination of General Fund and Other Fund to support permit issuance and oversight by performing essential administrative and information management functions.)*

**Purpose:** This package provides resources needed to perform essential, foundational work in the water quality permitting program that will help DEQ achieve its objective of having a sustainable water quality permitting program that issues timely, high quality permits.

### **Background**

DEQ is responsible for issuing and managing federal and state water quality permits in Oregon. This includes administering approximately 6,000 permits for wastewater and stormwater discharges from industrial facilities, sewage treatment plants and municipal storm sewer systems. Fundamental administrative tasks, such as data and file management, compliance monitoring and complying with federal reporting requirements, require a tremendous amount of information management for a permit portfolio of this size. Unfortunately the permit program's information management systems and staffing to perform this work have not kept up as the permit portfolio has grown over the years. Existing systems and procedures are inefficient and inadequate to manage the workload, and lack adequate quality control. The new workload associated with recently enacted federal requirement for electronic intake and reporting of compliance-related data has made the situation worse. Two recent evaluations discussed below point to specific shortcomings of the permitting program.

#### NPDES Permit Program Review

In 2015, the Oregon Legislature included a budget note in DEQ's budget due to concern about the quality and timeliness of National Pollutant Discharge Elimination System (NPDES) permits issued by DEQ. Pursuant to the note, the agency hired a contractor to review the NPDES permitting program and make recommendations to improve the efficiency and effectiveness of the program, particularly to reduce the permit backlog. The contractor submitted their final report and implementation plan in December 2016. These documents and other project information are available online beginning in February 2017 at <http://www.oregon.gov/DEQ/wq/wqpermits/Pages/WQ-Permitting-Program-Review.aspx>

The consultants recommended numerous actions and implementation approaches covering a number of different topic areas to address these issues. The recommendations include programmatic and administrative changes, as well as identifying the need for additional program resources in the short term in order to make headway on the permit backlog. This policy package directly addresses some of their recommendations, as described below.

One critical area of need involves the timely delivery of data to permit writers. The data needs for writing permits, such as discharge monitoring data and ambient water quality data, are largely predictable and the inability to deliver this data in a timely manner delays permit issuance and increases costs for both DEQ and permittees. They found that DEQ uses outdated data delivery systems that use information from multiple unintegrated systems, and permit writers do not have access to critical parts of the systems. To achieve the objective of reducing the permit backlog, they assert that the Water Quality program needs to establish a reliable and integrated data delivery system that ensures permit writers have the data they need when they need it. This system needs to:

- include a system for electronically accepting discharge monitoring data that works well for permittees;

- deliver data in the form needed by permit writers and that complies with EPA's Electronic Data Reporting Rule; and,
- allow permit program information to be made available to the public.

The consultants also recommended that DEQ realign its resources so that permit writers are able to spend more time working on duties essential to the preparation of permits. They identify some functions now assigned to permit writers that could be re-assigned to other staff, such as certain compliance functions (e.g., reports and enforcement proceedings) and providing technical assistance to permittees.

#### EPA's State Review Framework Report

Every five years EPA conducts a review of states' compliance and enforcement programs related to implementation of federal regulations, including the NPDES permitting program. EPA's 2016 State Review Framework report identified a number of deficiencies. Some of the deficiencies they identified will be directly addressed by this package, including missing or incomplete inspection reports, and inaccurate or incomplete tracking and reporting of violations data, which can result in a failure to take timely or appropriate enforcement actions.

**How Achieved** – In order to achieve the objective of having a sustainable water quality permitting program that issues timely, high quality permits, the Water Quality program needs additional resources to establish a functional, stable administrative foundation and a cohesive system for managing and reporting permit information and compliance data. This is necessary to ensure permit writers have timely and easily accessible information for permit writing and have more time to focus on writing permits and the tasks that directly support that work. It will also enable DEQ to fulfill its federal regulatory responsibilities related to NPDES permit issuance and compliance reporting, and be in compliance with federal electronic reporting requirements.

This policy option package establishes the following new positions:

- Program Analyst 3 to identify systems needed to integrate water quality data with permit information and compliance and enforcement data, assuring that permit writers have timely and easy access to the data needed for permit reissuance; be the program's expert for electronic reporting and ensuring staff and permittees have the training and tools needed to use the systems; work with permit writers, inspectors, permit holders, data staff and enforcement staff to create a coordinated approach for data management and reporting.
- Program Analyst 1 for data and program analysis, tracking permit compliance, setting up permit-specific information and data fields in the electronic reporting system, ensuring data quality and providing technical support to permittees for use of electronic reporting systems.
- Office Specialist 2 to provide administrative support for permit data input and reporting, and permit set-ups in electronic systems.
- Information Systems Specialist 5 to provide technical leadership in developing the data system input/output, automating compliance and enforcement reporting, producing customized reports to support permit development, facilitating records management and ensuring public access to permit-related data and information.

#### **Results/Outcomes** –

- Reduction in NPDES permit backlog
- Timely identification and follow-up on significant non-compliance issues
- Compliance with EPA's Electronic Data Reporting Rule

- Timely and accurate uploading of compliance information into EPA’s data systems
- Improved public access to permit-related information
- Increased reliability, efficiency and access for permit holders to enter compliance data and receive reports

**Quantifying Results**

DEQ will measure success through a variety of measures, including number of permits current, timely permit issuance, compliance with federal reporting requirements and timely completion of project tasks.

**Staffing Impact – 17-19:**

**Budget: \$714,286**

*The Governor’s Recommended Budget proposes to phase in four new positions, which replace the Program Analyst 3 proposed in DEQ’s Agency Request Budget:*

<u>Position Class</u>	<u>POS</u>	<u>FTE</u>	<u>Position Number</u>	<u>FTE by Division</u>
Program Analyst 3	1 PF	0.83	3288	0.83 Operations
Program Analyst 1	1 PF	0.83	3289	0.83 Operations
Office Specialist 2	1 PF	0.77	3290	0.77 Operations
Information Systems Specialist 5	1 PF	0.83	3292	0.83 Operations
<b>Revenue Source:</b>	General Fund - \$500,000			
	Other Fund - \$214,286			

**Staffing Impact – 19-21:**

**Budget: \$920,246**

<u>Position Class</u>	<u>POS</u>	<u>FTE</u>	<u>Position Number</u>	<u>FTE by Division</u>
Program Analyst 3	1 PF	1.00	3288	1.00 Operations
Program Analyst 1	1 PF	1.00	3289	1.00 Operations
Office Specialist 2	1 PF	1.00	3290	1.00 Operations
Information Systems Specialist 5	1 PF	1.00	3292	1.00 Operations
<b>Revenue Source:</b>	General Fund - \$644,172			
	Other Fund - \$276,074			

**Title: Implement Materials Management 2050 Vision POP #131**

**Purpose:** This policy package will enable DEQ to make further progress toward implementing Oregon's plan for sustainable materials management, *Materials Management in Oregon: 2050 Vision and Framework for Action*.

**Background:**

Many of today's environmental, economic and social challenges are related to how materials are produced, used and managed. Current production and use of materials is not environmentally sustainable. The rapid rise in material use has led to serious environmental effects, including impacts from toxic chemicals; damage to ecosystems and biodiversity; unsustainable use of energy, water and other natural resources; and global warming. Many environmental challenges across all DEQ programs are related to how materials are produced, used and managed. Increasing consumption, particularly of finite resources, global competition for declining resources and rising prices, also have a negative impact on the economy.

The Environmental Quality Commission adopted the *2050 Vision and Framework for Action* in December 2012 to guide a more holistic approach to reducing the impacts from materials produced, used and discarded in Oregon. This material management framework addresses the effects of material usage across the full life cycle of materials – from design, production and use to material recovery and disposal of discards. Shifting from a narrow focus on managing wastes to this broader approach is important because the large majority of environmental consequences occur before materials are discarded. This approach helps DEQ and others to focus efforts on gaining the best environmental results at the lowest cost to society.

The 2015 Legislature passed Senate Bill 245, which authorized increases in solid waste permit and tipping fees to provide adequate and stable revenue for DEQ to implement the *2050 Vision and Framework for Action*. This additional revenue is sufficient for 12 additional positions and additional grant and contract dollars. The Legislature approved funding seven of those positions and added limitation for DEQ to contract for studies and specialized services and provide grant funding for local governments and others for the 2015-17 biennium. In February 2016, the EQC adopted the permit and tip fee increases as authorized. DEQ will fill all seven positions in 2015-17.

DEQ has involved more than 100 highly-engaged and supportive stakeholders in its multi-year development and initial implementation of the *2050 Vision*. The activities include rulemaking in 2016 and 2017 that implemented fee increases and amendments to Oregon's recycling and grants programs adopted by the 2015 Legislature. Our stakeholders expect us to continue leading Oregon toward more sustainable materials management.

This policy package helps to reduce and recover solid waste, which aids in the reduction of greenhouse gas emissions and other impacts from the production, use and discard of materials.

**How Accomplished:**

This package would provide five new positions and add \$1.7 million in contract and grant limitation for the 2017-19 biennium. DEQ's revenue from solid waste tipping fees is sufficient to fund this proposal. These positions will build on the strategic planning and program development initiated with the staff and resources added in 2015-17. They will accomplish the following high-priority work:

Natural Resource Specialist 3 – 2.0 FTE – Business Initiatives Specialist: Implement voluntary business initiatives programs working with manufacturers to reduce impacts of materials, potentially including reducing air toxics via breakthroughs in manufacturing. Support Oregon’s Green Chemistry Innovation Initiative and DEQ’s toxics reduction strategy. Continue to identify opportunities and establish voluntary programs for producers and retailers to support sustainable production, such as improved information dissemination about the life cycle of products, product footprinting and product stewardship initiatives.

Natural Resource Specialist 4 – 2.0 FTE – Sustainable Consumption Specialist: Partner with industry, local governments and others to implement programs to prevent wasting of food and to support sustainable consumption of materials. Projects may include demonstration projects, research and evaluation, incentives, grants to local governments and others. Implement programs to increase and improve recovery of high value materials (e.g., metals, plastics, wood).

Operations and Policy Analyst 1 – Operations and Policy Analyst: Assist with program evaluation, planning, and budget development and policy and rule development; conduct research and support Materials Management projects.

Understanding the importance of materials management at the local level, DEQ intends to provide grants to local governments to reduce the generation of waste and maximize the environmental benefits of material recovery; reduce toxic chemicals through local initiatives; establish and expand product reuse and repair programs (e.g., promoting Habitat for Humanity ReStores; providing job skills to help develop a building deconstruction industry); perform demonstration projects on food waste prevention; collect household hazardous waste in rural Oregon; and clean out dangerous chemicals from school laboratories. DEQ also proposes to use contract dollars to design and conduct a study of the quantity and composition of solid waste disposed in Oregon; identify opportunities and barriers to improve Oregon’s reuse and repair infrastructure; research impacts of materials to guide producers and consumers in selecting lower impact materials ; research opportunities for preventing waste in partnership with industry and local government; identify materials with the most adverse environmental impacts, and processes and methods to reduce these impacts; develop metrics for new goals; and produce education and outreach materials.

### **Quantifying Results:**

Approval of this package will benefit Oregonians and the environment by enabling DEQ to:

- Increase and improve prevention and recovery of high impact wastes, including food.
- Reduce toxics and other impacts of materials purchased by state agencies, local governments and industry.
- Help Oregon businesses reduce environmental impacts and gain efficiencies through product and packaging redesign and green chemistry.
- Build internal and statewide capacity to fully understand impacts of products and better inform priority actions by all stakeholders (e.g. life cycle analysis).
- Continue high-priority household hazardous waste collections.
- Provide targeted grants for local governments (e.g. reuse and repair infrastructure, food waste prevention), and public outreach.
- Increase and improve effective recovery of materials, with focus on high impact materials.
- Advance food waste prevention.
- Inform the public about environmental impacts of products.

If this package is not adopted, Oregonians will not receive the services or environmental benefits DEQ committed to provide with the fee increases authorized in Senate Bill 245 (2015) and that stakeholders expected to receive when supporting that bill. Oregonians and the environment are at risk because DEQ will only have capacity to minimally address or support the following:

- Environmental impacts that might be minimized or avoided through green chemistry.
- Environmental impacts that could be avoided or minimized through better product and packaging design.
- Oregon businesses understanding the potential impacts of choices around design, production or use products and packaging.
- Local government efforts to collect household hazardous waste, clean out dangerous school laboratories, improve material recovery or waste prevention programs, develop reuse and repair infrastructure, or enhance food waste prevention.
- Targeted public education and outreach to inform choices about product selection and other sustainable materials management.
- Stakeholders seeking to fully understand impacts of products (e.g., life cycle analysis).

**2017-2019 Staffing Impact:**

<u>Position Class</u>	<u>Total Positions</u>	<u>Position Number</u>	<u>FTE by Division</u>
Natural Resource Specialist 4	1 PF	3207	.25 HQ-Program Operations
Natural Resource Specialist 4	1 PF	3208	1.00 HQ-Program Operations
Natural Resource Specialist 3	1 PF	3209	1.00 HQ-Program Operations
Natural Resource Specialist 3	1 PF	3210	1.00 HQ-Program Operations
Operations Policy Analyst 1	1 PF	3211	1.00 HQ-Program Operations

**Contracts & Special Payments:**

\$1,700,000

**Revenue Source: Other Fund**

**Total Budget:**

Other Fund: \$2,490,130

**2019-2021 Staffing Impact:**

Natural Resource Specialist 4	1 PF	3207	1.00 HQ-Program Operations
Natural Resource Specialist 4	1 PF	3208	1.00 HQ-Program Operations
Natural Resource Specialist 3	1 PF	3209	1.00 HQ-Program Operations
Natural Resource Specialist 3	1 PF	3210	1.00 HQ-Program Operations
Operations Policy Analyst 1	1 PF	3211	1.00 HQ-Program Operations

**Contracts & Special Payments:**

\$1,700,000

**Revenue Source:** Other Fund

**Total Budget:**

Other Fund: \$2,490,130

**Title: Restore Underground Storage Tanks Inspection POP #132**

**Purpose:** To prevent and minimize leaks from underground storage tanks, this policy package increases DEQ's Underground Storage Tank Compliance program budget revenues under House Bill 2268. This fee increase would allow DEQ to restore two inspector positions that DEQ cannot fill due to lack of funding and add one position to provide adequate policy and program administration.

Congress and the Oregon Legislature passed laws in the late 1980's requiring UST permit holders to upgrade and maintain tanks to respond to impacts from petroleum leaking from underground storage tanks. The Oregon law also required a per tank fee to pay for DEQ to implement the law. No General Fund is used for this work. The 2007 Legislature increased the per tank fee from \$85 to \$135. The \$135 per tank fee no longer supports all required program activities.

**How Accomplished:**

Without a fee increase, DEQ is unable to meet the inspection requirements mandated by the Energy Policy Act of 2005 or fully implement the program. DEQ could also be at risk of losing part or all Leaking Underground Storage Tank and LUST Prevention grant funding (\$1.317 million in federal FY 2017) for cleanups and inspections. In March 2016, DEQ fell behind on the federal requirement to inspect each facility once every three years due to lack of funding to fill two vacant positions. EPA has increased the inspections it performs for federal FY 2016 to partially compensate for DEQ staff reductions (retirements) resulting in fewer inspections performed by the state. Without additional funding, DEQ may need to ask EPA to operate the program in Oregon. Over the years, stakeholders have consistently expressed their desire to have DEQ administer the UST program and maintain State Program Approval from EPA. To keep State Program Approval, EPA requires DEQ to demonstrate the ability to carry out an effective program, such as maintaining the three year inspection schedule and keeping Oregon rules updated to reflect changes in federal regulations. A tank fee increase would allow DEQ to have the resources necessary to implement required federal regulations and avoid returning the program to EPA.

This package requests the following positions and funding so DEQ can perform its role in regulating USTs in Oregon:

New position:

- Program Analyst 2 – UST Program Analyst  
This position will plan and administer all aspects of the invoicing process and required reporting; analyze requirements and implement changes to reporting and invoicing forms, web pages, databases, policies and procedures; and evaluate operations, identify process improvements, and work with managers and staff to implement procedures and processes to further program objectives. This position will serve as the program's expert on program reporting by understanding and explaining rules, policies and procedures.

Funding for existing positions:

- Natural Resource Specialist 3 – 2.0 FTE – UST Compliance Inspectors  
UST inspectors inspect facilities with underground storage tanks for compliance with EPA and Oregon requirements for operating, installing, upgrading and decommissioning tanks. Inspectors also provide technical assistance to permittees when requested. DEQ currently has 3.5 funded inspector positions.

**Quantifying Results:**

Approval of this package will benefit Oregonians and the environment by ensuring that DEQ:

- Inspects each facility once every three years.
- Provides timely technical assistance.
- Reapplies for state program approval by October 2018.

Risks to Oregonians and the environment without this package are:

- DEQ may be unable to adequately prevent and minimize UST leaks.
- Loss of State Program Approval to implement the federal UST program.
- Loss of part or all Leaking Underground Storage Tank and LUST Prevention grant funding (\$1.317 million in federal FY 2017) for cleanups and inspections.

**2017-2019 Staffing Impact:**

<u>Position Class</u>	<u>Total Positions</u>	<u>Position Number</u>	<u>FTE by Division</u>
Natural Resource Specialist 3	1 PF	0651	1.00 NW Region
Natural Resource Specialist 3	1 PF	0826	1.00 NW Region
Program Analyst 2	1 PF	3246	1.00 HQ

**Revenue Source:** Other Fund

**Total Budget:**

Other Fund: \$629,324

**Title: Emergency Preparedness Planning, Incident Response and Resource Restoration and Enhancement POP #134**

*(This package was proposed by DEQ but was not included in the Governor's Recommended Budget.)*

**Purpose:** Part of this package is intended to maintain (“restore”) resources in DEQ’s Emergency Response Program which are essential in preventing and minimizing the environmental impacts of oil and hazardous materials spills, such as the derailment, spill and fire in Mosier, Oregon in June, 2016. The package is also proposed for the purpose of enlarging DEQ’s capacity to respond to incidents more severe than the event in Mosier.

DEQ’s capacity to respond to emergencies is stretched thin during single events. DEQ quickly exhausts its resources when responding to multiple simultaneously-occurring emergencies.

Emergency Response: DEQ receives and acts on approximately 2,400 calls from Oregon Emergency Response System each year, representing the largest volume of OERS reports managed by any local or state agency. These notifications of “reportable releases” of oil and hazardous materials are received 24 hours a day, seven days a week. DEQ relies on one full-time daytime (Monday –Friday) duty officer and other DEQ staff that rotate as after-hours duty officers to follow-up on notifications, collect and evaluate spill release information and site conditions, and verify and direct cleanup actions if necessary.

Spills with significant impacts to public health or the environment such as maritime incidents involving a significant oil release, industrial facility fires releasing harmful air-borne chemicals into residential neighborhoods, or highway and rail accidents resulting in ruptured tanks of flammable liquids require immediate deployment of DEQ response personnel to the scene to direct response operations. DEQ works closely with local fire, police and hazardous materials response teams, cleanup contractors, the Oregon Department of Transportation and the responsible party, typically a facility or vessel owner, railroad or highway transportation provider. A quick, efficient response by DEQ may reduce environmental damage and save the responsible party significant amounts of time and money, and result in a cleanup which allows affected residents, businesses and local governments to return to normal activities sooner.

Under ORS 468B.395, DEQ is the lead state agency for the safe management and cleanup of many oil and other hazardous material releases. The agency serves as the “Incident Commander” for cleanup of many oil and hazardous material spills and is responsible for development and approval of response action objectives and plans. The State Fire Marshal however has been charged by law since passage of HB 3225 (2015) with the primary responsibility for adopting a plan for coordinated response to oil and hazardous materials releases occurring during rail transport.

Whether as the Incident Commander or performing a supporting role, DEQ spill response functions, as with fire and police actions, require highly trained and specialized teams of individuals and multiple agencies. These intra-agency teams may include representatives from local, state and federal agencies, tribal governments, the responsible party and environmental cleanup contractors. When a significant spill occurs, emergency response actions typically require multiple DEQ staff for environmental analysis, planning, community liaison or logistical support. Depending on the size and complexity of the emergency, on-site staff may be needed for days, weeks, or even months.

DEQ quickly exhausted its response resources during the incident at Mosier. That incident required 24-hour operations. DEQ and a coordinated response from local, state, and federal agencies successfully oversaw containment of the spill and successfully minimized risk of greater environmental damage. The outcome may have been worse if the incident had been more severe, if its acute phase had continued beyond a few days, more than one emergency had occurred at the

same time, or if the nearest regional state on-scene coordinator had been unavailable. This package will provide funding needed to ensure adequate response resources.

**Emergency Preparedness:** Emergency preparedness is the work necessary before a disaster occurs. This includes ensuring that equipment, supplies and other resources needed for response actions are readily available; personnel are trained; working relationships are built; and plans for responding are developed and regularly practiced by the personnel who will be responding to emergencies. At the community level, this work requires outreach, consultation and technical assistance to coordinate with local industries that transport or use oil and hazardous materials, oil and hazardous material spill response contractors, community emergency preparedness groups, and local, state, federal and tribal government agencies.

As evidenced by many local, statewide and national disasters, more preparation is needed for response to emergencies including catastrophic events, such as earthquakes, tsunamis, floods, drought, infectious disease outbreaks, and wildfires. DEQ is not currently able to participate with our public agency and private industry partners at the level that is required to prevent and minimize spill incidents and to prepare for emergency response actions. Specifically, at our current level of resources, DEQ finds it challenging to perform essential planning activities. Additional planning and preparedness is needed related to the transport of oil by rail along the Columbia River Gorge and through inland areas of the state. Additional resources are also required to perform DEQ's normal business operations after a temporary disruption due to a natural disaster, such as the earthquake and tsunami modeled during the "Cascadia Rising" exercise.

Oil and hazardous material spill planning is needed along inland railroad corridors, pipelines and highways that transect significant watersheds throughout the state. There are approximately 2,377 miles of freight railroad track in Oregon. Less than half of these tracks have emergency preparedness plans. Geographic response strategies are also lacking for major highways and pipelines used in transport of significant volumes of oil or hazardous materials in inland areas of the state.

The State has designated DEQ as the lead state agency in coordinating natural and cultural resource preservation following a natural disaster. This work will require resources to lead an interagency workgroup charged with developing a state-wide implementation strategy to address various types of resource damages that could occur during a wildfire, flood, earthquake or sustained drought in addition to chemical spills from facilities, vessels, railroads or pipelines.

DEQ is uniquely positioned to provide technical assistance to emergency responders, industry and transporters of oil and hazardous materials to prevent spills and minimize the impacts of spills that do occur. This policy package will provide the resources DEQ needs to participate more effectively in providing technical assistance to local industry and communities to prevent and respond to emergencies involving oil and hazardous materials, and the restoration of natural and cultural resources following a natural disaster.

The goal is to work with facilities, transporters, emergency responders, communities and other stakeholders before a catastrophic event occurs, have plans and resources available to expedite recovery and provide essential response depth in the event of multiple significant incidents when they occur.

**How Accomplished:**

This package requests the following positions and funding so DEQ can perform its assigned role for oil and hazardous material spill preparedness planning and response, and other emergency support functions for disaster response:

#### New positions:

- Principle Executive/Manager E - Emergency Response Manager

Establish a PEM E position dedicated to managing emergency planning, preparedness and response to oil and hazardous substance spills. Management of the Emergency Response Program requires a dedicated manager. DEQ's Emergency Response Program performs work in every part of Oregon. The manager responsible for that performance must coordinate the application of agency emergency response resources to each or more than one incident.

A position performing these managerial functions was eliminated in 2006 for lack of adequate funds. Currently the Emergency Response Program is just one of several programs for which the current manager is responsible. As a result, the Emergency Response Program lacks sufficient managerial resources to perform the Program's core mission efficiently.

- Program Analyst 4 - Senior Emergency Program Analyst

This senior program analyst position will provide expertise in emergency management and experience in managing responses under the National Incident Management System. This position will serve as a lead for business continuity and disaster response and recovery for DEQ and will provide leadership, stakeholder and other agency coordination with the Office of Emergency Management and other state partners.

- Natural Resource Specialist 4 - 2.0 FTE - Emergency Response Planner/Responder

These positions will be located in DEQ's Western and Eastern Regions and assigned responsibilities in developing geographic response plans for inland transportation corridors where oil or other flammable liquids, and other hazardous substances are transported through the state. Planning responsibility will also include coordination of the natural and cultural resource recovery planning work for Recovery Function Seven of the State's Disaster Recovery Plan specific for the regions assigned. Each position will lead a regional committee comprised of over ten state agency representatives and develop an implementation plan that identifies each agency's roles/responsibilities and provides for interagency coordination. The three regional positions will coordinate to develop a statewide plan and agency coordination. These positions will also respond to complex spills requiring multiple DEQ personnel to effectively manage the incident. These positions will help ensure that DEQ is tightly integrated into the State Fire Marshal's rail transport coordinated response plan.

- Administrative Specialist 1 – 0.5 FTE Administrative Support Specialist

This position will provide administrative support to all of the positions sought in this proposal related to planning committees, business continuity plan maintenance, training materials and drills and exercises. This position will also serve as a resource in DEQ's incident command for emergency response incidents.

#### Funding for existing positions:

- Natural Resource Specialist 3 - Business Continuity Specialist

This position will maintain the Department's business continuity plan, conduct annual training, and plan and lead drills and exercises statewide. Preparedness activities will include development of training modules for staff assigned to BCP roles, conducting exercises to ensure our business continuity plan provides an effective and organized response for emergency support function assignments, and address gaps and implement corrective actions identified during drills.

- Information Systems Specialist 5 - Geographic Information System/Data Management Specialist  
This GIS position was eliminated in January 2016 due to lack of funding. Restoring this position would restore DEQ's capabilities to apply Geographic Information System (GIS) tools to planning, preparedness and response activities that need geographic response plans for navigable waterways, effectively planning for natural disasters, and protecting resources at risk. GIS resources are essential during a response to provide planning and response personnel with current information to facilitate development of strategies and tactics to mitigate ongoing releases or protect essential resources such as drinking water intakes from contamination.
- Natural Resource Specialist 4 - Emergency Response Planner/Responder  
This position was eliminated in January 2016 due to lack of resources. This position will develop geographic response plans for inland transportation corridors through which oil or other flammable liquids and other hazardous substances are transported. Planning activities will also include coordination of the natural and cultural resource recovery planning work for Recovery Function Seven of the State's Disaster Recovery Plan specific for the regions assigned. This will involve leading a committee of over ten state agency representatives and developing an implementation plan that identifies each agency's roles/responsibilities and provides for interagency coordination. This position will also have spill response duties for complex cases requiring multiple DEQ personnel to effectively manage the incident.

Funding for training materials, equipment and travel:

The primary cost of training is personnel time. This package also requests funding for training materials, equipment and travel.

**2017-2019 Staffing Impact:**

<u>Position Class</u>	<u>Total Positions</u>	<u>Position Number</u>	<u>FTE by Division</u>
Principle/Executive Manager E	1 PF	3202	1.00 HQ-Program Operations
Information Support Specialist 5	1 PF	1267	1.00 HQ-Program Operations
Natural Resource Specialist 2	1 PF	3133	1.00 HQ-Program Operations
Natural Resource Specialist 4	1 PF	1430	1.00 NW Region
Natural Resource Specialist 4	1 PF	3258	1.00 Western Region
Natural Resource Specialist 4	1 PF	3203	1.00 Eastern Region
Program Analyst 4	1 PF	3201	.92 HQ-Program Operations
Administrative Support Specialist 1	1 PF	3204	.46 HQ-Program Operations

**Attorney General & Other Services and Supplies:**

\$235,000

**Revenue Source:** General Fund

We are proposing General Fund as the revenue source because the work protects public health, safety and welfare, and benefits all Oregonians. Prior to 2003, General Fund supported Emergency Response program work. We do not recommend using funds from DEQ's Hazardous Substance Remedial Action Fund (funded through waste disposal fees and project cost recovery) for emergency preparedness work because of legal limitations on the use of these funds.

**Total Budget:**

General Fund: \$1,974,631

**2019-2021 Staffing Impact:**

Principle/Executive Manager E	1 PF	3202	1.00 HQ-Program Operations
Information Support Specialist 5	1 PF	1267	1.00 HQ-Program Operations
Natural Resource Specialist 2	1 PF	3133	1.00 HQ-Program Operations
Natural Resource Specialist 4	1 PF	1430	1.00 NW Region
Natural Resource Specialist 4	1 PF	3258	1.00 Western Region
Natural Resource Specialist 4	1 PF	3203	1.00 Eastern Region
Program Analyst 4	1 PF	3201	.92 HQ-Program Operations
Administrative Support Specialist 1	1 PF	3204	.46 HQ-Program Operations

**Attorney General & Other Services and Supplies:**

\$235,000

**Revenue Source:** General Fund

**Total Budget:** General Fund: \$1,997,144

# LAND QUALITY POLICY OPTION PACKAGE # 135 NARRATIVE (17-19)

**Title:** Ongoing Cleanup Work – Orphan Site Account POP #135

**Purpose:** This policy package requests Other Fund contract limitation to spend a portion of the \$10.3 million general obligation bonds requested in Policy Option Package 193 to replenish the state’s Industrial Orphan Site Account. To minimize interest costs and comply with bond issuance requirements, DEQ will issue the proposed bonds in two groups: one in fall 2017 and one in spring 2019. Replenishing the Orphan Site Account would support DEQ’s ongoing need to investigate and clean up contaminated sites where uncontrolled hazardous substance releases pose a risk to human health and the environment, and where no other source of funding is available to address the risk.

Background:

DEQ’s Environmental Cleanup – Industrial Orphan Sites program protects public health and the environment by investigating and cleaning up highly contaminated properties when the parties responsible for the contamination are unknown, unwilling or unable to do so. DEQ designates sites as orphans only if they are high priorities for cleanup. Since 1992, DEQ has designated 107 sites as orphans. Although cleanup activities at some orphans can continue for years, 32 sites have received DEQ’s “no-further-action needed” designation. These sites are safe for use and many now support enhanced uses and economic redevelopment.

Orphans include a range of contaminated sites from corner service stations to small and large former industrial operations, and area wide sites where hazardous substances have affected sources of drinking water. Another significant category of sites includes abandoned mines from which runoff with heavy metals contamination is impairing streams in watersheds essential to endangered salmon species or downstream drinking water sources. Sites statewide involve protecting public health by removing or stabilizing contamination to prevent human exposure to hazardous vapors or direct contact with contaminated soil.

Types of Orphan Site Activities:

Remedial activities being performed at orphan sites generally fall into two groups. One grouping includes sites undergoing investigation to determine the scope of the problem, or at which cleanups are underway or will be performed. The second grouping of orphan sites are in the operations and maintenance phase (O&M), in which DEQ and others operate, maintain and monitor the cleanup remedy until the site is cleaned up and safe for use. Included in this second group are federal Superfund sites where the State is responsible for contributing to remedy implementation costs and for performing long term O&M obligations. This policy package seeks additional contract limitation of \$3.7 million to pay for work in both groupings.

Investigation and Cleanup:

Investigations and cleanups are performed at industrial sites, small businesses, mine sites, area wide groundwater sites and in stream and river sediments.

Examples of existing high-priority investigations/cleanups that DEQ will continue if a bond sale is approved include:

- Keizer Areawide, Marion County (contaminated drinking water)
- ARCO AM/PM, Marion County (contaminated groundwater)
- Lawndale Areawide, Benton County (contaminated drinking water)
- Fashion Cleaners, Klamath County (toxic vapors entering buildings)
- Bonanza Mine, Douglas County (mercury-contaminated tailings and soil have affected a large area around this former mine, and were used years ago to build a 17-mile road that ends in Sutherlin)
- Red Boy Mine, Grant County (acid mine drainage in North Fork John Day Watershed)

Operations, Maintenance, Monitoring and Federal Obligations:

Cleanups in the O&M or monitoring phase typically include groundwater treatment systems and engineered soil or sediment caps. Operations and maintenance activities ensure that installed groundwater treatment systems continue to prevent people from drinking contaminated water. They also ensure that engineered caps continue to protect people and environmental receptors from exposure to hazardous substances.

Examples of orphan sites needing O&M and on-going monitoring include:

- Lebanon Areawide and Sweet Home Areawide (both Linn County)
- Ivy's Jiffy Market (Jefferson County)
- Frenchglen Mercantile (Harney County)
- Keno Areawide (Klamath County)
- Lone Elk Market (Wheeler County)

In most cases, treatment systems have been installed to protect drinking water supplies. Per site O&M and monitoring costs range from \$20,000 to \$200,000 per biennium.

This policy package would also fund Oregon's 2017-19 and 2019-21 obligations at federally-funded Superfund (National Priorities List) sites. Under federal law, Oregon must contribute 10 percent of EPA's cleanup costs and pay 100 percent of long-term maintenance costs at federally-funded Superfund sites. Currently, Oregon has three sites with federal obligations:

- At the former Taylor Lumber facility (Yamhill County), EPA completed construction of a final cleanup remedy in 2009. Having paid its match obligation of \$450,000, DEQ is obligated to perform on-going site O&M.
- At the former McCormick and Baxter Creosoting site (Multnomah County), EPA and DEQ have implemented a final cleanup remedy and the State of Oregon is required to pay for O&M costs, estimated to average \$500,000 per biennium.
- At the North Ridge Estates site (Klamath County), EPA is performing a multi-year, \$35 million clean-up remedy of asbestos contaminated soils in an approximately 100 acre residential development. Once complete, Oregon will be responsible for 10 percent of the cost of the cleanup and continuing O&M. DEQ is currently incurring some costs that will offset the payment due after completion.

Total O&M and federal match obligations are estimated to cost approximately \$5 million in 2017-19 and 2019-21. Depending on the final costs and completion dates of EPA's remedy at North Ridge Estates, the amount and timing of DEQ's 10 percent match requirement and future O&M obligations may change.

DEQ will continue to focus its limited Industrial Orphan Site Account budget on sites directly affecting public health (placing lower priority on ecological or environmental threats). Examples of human-health threats associated with orphan sites include:

- Drinking contaminated water from private and public drinking water supplies
- Eating fish contaminated by releases of hazardous substances
- Breathing indoor air contaminated by hazardous substances migrating into homes and commercial businesses
- Breathing asbestos fibers originating from demolished older buildings
- Construction workers trenching in contaminated soils
- Explosions and fires resulting from methane generation from organic decomposition in old fill sites

The bond sales would allow DEQ to start or continue work on about 20 sites in 2017-19. This includes existing high-priority sites as well as new sites. DEQ identifies, on average, about five new orphan sites needing investigation and cleanup each year.

A new, high priority orphan site DEQ identified in the 2015-17 biennium is the Triangle Oil site in John Day. DEQ detected high levels of gasoline and diesel contamination in soil and groundwater and in indoor air in residential and commercial buildings located near the Triangle Oil bulk fuel plant. DEQ determined that the site posed a significant threat to human health and the environment and took actions to address the risks until we were able to identify a potentially responsible party. DEQ incurred \$500,000 of the costs to investigate and control the immediate threats to human health, and is now in the process of attempting to recover its costs.

#### Proposed Funding:

Over the life of the Environmental Cleanup – Industrial Orphan Sites program, DEQ has issued bonds eight times, providing a total of \$41.85 million, including the most recent issue of about \$7.6 million authorized by the 2011 Legislature. Since the beginning of the program, recovery of prior expenditures has returned about \$9.1 million to the Industrial Orphan Site Account. In addition, \$657,000 of the bond proceeds has been used for debt service rather than site cleanup, as a result of a 2009 General Fund reduction. DEQ has spent most of the proceeds of the last bond sale and the Orphan Site Account fund balance is projected to be less than \$200,000 by the end of the current 2015-17 biennium.

DEQ estimates it needs \$5 million to \$6 million per biennium to address known and future orphan sites to: investigate and cleanup sites where remedies have not yet been implemented to protect public health and the environment; to continue O&M at existing sites; and pay our match and O&M obligations at Federal Superfund Sites. DEQ proposes to finance needed work for the next two biennia with a proposed sale of \$5.15 million in bonds in fall 2017 to finance investigation and cleanup of known and new high priority sites during 2017-19, and a proposed sale of \$5.15 million in spring 2019 to finance Orphan Site costs in late 2017-19 and 2019-21. DEQ currently anticipates that \$10.3 million would be adequate to fund investigation and cleanup through June 2021. Historically, DEQ has issued long-term bonds approximately every other biennium for investigation, cleanup and O&M work.

**How Achieved:** DEQ proposes to finance Orphan Site Account work for the next two biennia by issuing bonds financed with General Fund backed General Obligation Pollution Control bonds.

This package requests Other Fund contract limitation to spend \$3.7 million of the proposed \$10.3 million General Obligation bonds DEQ would issue during 2017-21. Funds remaining at the end of 2017-19 will be spent in the 2019-21 biennium.

DEQ needs legislative authority to issue additional bonds. Debt service for the new bonds is requested in package #193. In 2015-17, DEQ will retire previously issued bonds, reducing the General Fund debt service on existing bonds. DEQ structured the new bond sales to keep General Fund payments for orphan bonds at or below the 2015-17 level.

This package covers only the request for additional expenditure limitation. Package 193 in the Pollution Control Bonds program provides details of the request for bond issuance authority. Package 183 requests limitation to pay bond issuance costs.

Approval of this package will benefit Oregonians and the environment by ensuring that DEQ has the resources to:

- Operate already-installed treatment systems that continue to remove pollution from contaminated sites
- Monitor sites where contamination has not been or cannot be entirely removed, to ensure that the contamination will not affect people or the environment
- Meet known federally required match obligations for EPA-funded cleanup remedies and O&M needs
- Continue the investigation and cleanup of known, high-risk sites such as those identified above
- Address newly discovered orphan sites where the risks to public health and the environment are significant

Risks to Oregonians and the environment of not funding this work are:

- DEQ will run out of funds for groundwater treatment systems that have protected people for many years.
- The effectiveness of past orphan investments will be compromised.
- Area-wide groundwater contamination plumes will spread, potentially exposing people to hazardous substance releases that had been stabilized in the past.
- Human and environmental receptors will face uncontrolled exposures to hazardous levels of contaminated groundwater, soils and vapors.

### Staffing Impact

**2015-17:**

None

**Contracts:**

\$3,682,500

**Revenue Source:** General Obligation bond proceeds

**Total Budget:** Other Funds \$3,682,500

**Title: Lead Paint Task Force POP #136**

**Purpose:** Lead Paint Task Force provides \$50,000 to support a task force on lead paint. The task force will be led by Oregon Health Authority and supported by DEQ. The task force will prepare a report on the efficacy of laws regulating lead-based paint activities and potential improvements.

**Revenue Source:** General Fund

**Total Budget:**

General Fund: \$50,000

## **Title: Website Content Management (#141)**

*(Note: This package was proposed by DEQ but not included in the Governor's Recommended Budget.)*

**Purpose:** This proposal would open new windows through which the public can examine DEQ's records and hold the agency accountable for its performance; improve the quality of information provided by DEQ to the public through the DEQ website; and help ensure that critical information and reports are delivered to the public through DEQ's website in a manner consistent with how that information is delivered through other means.

A well-designed and efficient internet presence is an essential engagement tool for a modern public agency. With over 4.3 million page views of the DEQ website in 2015, the website is an important public communication tool. For many, the agency's website is the face of DEQ and a vital source of information relating to DEQ's key role in protection of Oregon's air, land and water.

DEQ aims to provide easy access to high-quality information and services that meet the public's needs. DEQ isn't meeting this goal. For example, 81 percent of visitors to DEQ's website indicate it is difficult to navigate the content of DEQ webpages.

DEQ's website visitors should be confident of finding current information when visiting the website. They should also expect to understand what they read. Highly educated and trained, our staff are skilled in technical writing, where the value is in lengthy details, but not in writing for the web. As a result, DEQ's webpages contain a lot of technical information. Much of it is not plainly written.

The strategic management of content – as well as readability and general user experience – is a skill set belonging to a website content manager. A content manager – having an eye towards a proper readability and style – can help DEQ better serve the public by providing updated, concise, plainly written material. DEQ does not anticipate reducing access to detailed technical material. Such information would be more useful to more users if provided through a plainly written framework. The agency has not been able to devote resources to the comprehensive strategic direction for our content. For example, DEQ adds new content but doesn't routinely remove older, outdated content. As a result, the website grew by 648 pages and 1,800 documents between 2013 and 2015. About 40 percent of webpages and 73 percent of documents predating 2013 have not been revised since 2011. This means that many of DEQ's web visitors are presented with a lot of outdated information. Users must wade through a lot of useless or even misleading information before finding what they need.

Strategic content management can assist the agency in managing the information on a website from its creation through evaluation, updating, and eventual removal from a website. Additionally, content management implies the use of a strategy to manage the relationship of web content to other agency public materials as well as larger strategic goals. Ideally, web content – defined as text, images, audio and video – is written plainly and concisely, gets frequent review and is removed as needed.

Finally, DEQ is overhauling the agency's Public Records Law procedures, policies, and practices to conform to new DAS requirements and to best practices with respect to public records requests. Maintenance of an interactive, outward-facing log of pending and completed responses to requests for public records would be an important addition to DEQ's broader reform of its work on public records. Such logs can be part of an efficient public records response function – which DEQ currently lacks as to requests requiring analysis of complex potential exemptions or requiring production of voluminous

records. More importantly, such logs exhibit in real time the agency's timeliness to performing its important public records functions. For one example of such a log, see <http://www.oregon.gov/gov/media/Pages/Public-Records-Log.aspx> (Governor Brown's website). The person filling the proposed position would be expected to help ensure timely and accurate log entries.

In summary, careful strategic management of content results in a website where:

- Information is always timely and accurate
- Content is written in plain language, as required by law
- There is a consistent style and voice
- People can find the information for tasks they need to complete on our website

DEQ has considered providing training to employees on web writing, but believes that having one content manager for the agency website would produce better results than training a large pool of staff for whom web writing is not an expected job skill, nor a natural proficiency. For similar reasons, DEQ is reexamining its current widely-diffused approach to responding to media inquiries. That approach similarly requires DEQ to train many employees about the importance of timely, accurate consistent responses to media inquiries.

For purposes of this package, DEQ has simply identified this requested position as one to be located within DEQ's headquarters. The website content manager may, in the end, be more specifically placed administratively within a broader reorganization of the agency's system for efficiently, timely and accurately meeting the needs of reporters and editors.

**How Achieved:** DEQ is requesting an Operations and Policy Analyst 1 (1.0 FTE) to manage website content. Having this resource would free staff time currently spent on writing web pages to work on other projects that better align with their skills and expertise. Adding a content management position would ensure routine evaluation and updating of the agency's website content. This would result in a manageable amount of website content that is timely, accurate and useful to the public. This position would also develop and implement standards and policy to guide the agency's management of web content.

**Results:** Approval of this package will benefit Oregonians by ensuring that:

- DEQ's website content would be less technical and in plain language appropriate for the general public.
- DEQ's website features information most needed by our website visitors.
- DEQ's website content is regularly updated to ensure timely, accurate information for all website visitors.
- DEQ could direct website content needs to a writing professional, and direct environmental program staff to other agency priority work.

DEQ would measure successful web content management by:

- Surveying web visitors to get feedback on what they like about our website and where they find room for improvement.
- Developing policy and standards for website content management and monitoring compliance with them.
- Conducting website analytics to determine the most and least visited pages on our website and using that information to guide page updates and removal.

Risks if this package is not approved include:

- Fresh information will continue to be at risk of being rendered functionally inaccessible by the clutter of outdated information.
- Web content will continue to be presented at a technical level inaccessible to many users.
- DEQ will continue to experience difficulties in giving the public real-time information about the agency's performance of its Public Records Law duties.

**2015-2017 Staffing Impact:**

<u>Position Class</u>	<u>Total Positions</u>	<u>Position Number</u>	<u>FTE by Division</u>
Operations & Policy Analyst 1	1	3218	1.00 HQ
Total	1		1.00

**2017-2019 Staffing Impact:**

None

**Revenue Source:** Indirect

**Total Budget:** \$179,278 Other Fund

**Title: Information Security (#142)**

*(Note: This package was proposed by DEQ but not included in the Governor's Recommended Budget.)*

**Purpose:** The purpose of this package is to improve DEQ's capacity to identify and blunt threats to the security of its computers and computer systems.

Like any organization, the State of Oregon is vulnerable to security threats and unauthorized access of its computers and computer systems. The State has experienced some high-profile incidents that have prompted an increased awareness of cybersecurity and the need to address vulnerabilities. For example, in late 2014 a hacker got into an Employment Department system through a web-based application and accessed social security numbers and other personally identifying information. Another incident involved a hacker infiltrating online systems on the Secretary of State's website.

To support the security of state information systems, the Legislature passed House Bill 3099 in 2015. The bill strengthened the State Chief Information Officer's roles, responsibilities and authorities, including those related to cybersecurity. They also passed Senate Bill 1538 in 2016, which requires state agencies to notify the Legislative Fiscal Office of security incidents and to provide LFO with reports so that the state stays informed about security incidents.

DEQ supports the state's direction and the need for cybersecurity, which is defined as measures taken to protect a computer or computer system against unauthorized access or attack. DEQ's information systems contain protected information from companies and industries that DEQ regulates through air, water, hazardous waste and other permits; social security and tax identification numbers of our permit, license and certificate holders; and other personally identifying information. Some of the records are compiled during proceedings in which a public controversy is active enough to attract broad public attention, including the attention of potential hackers. DEQ also has online applications on the agency's website which could be vulnerable to attack. A security breach of any of DEQ's systems could result in the unauthorized release of data that would cause serious problems for many organizations and individuals. It would allow DEQ to be the portal for a disruption of statewide services.

DEQ does not have a full-time position handling cybersecurity; an agency network administrator currently handles some cybersecurity tasks. Not having adequate support in this area puts the State and its customers at risk. DEQ does not have the capacity to keep up with the research and training required to keep up with ever-changing attack prevention strategies, or develop and implement a cybersecurity plan. Additionally, not having staff dedicated to monitoring information systems full time makes it difficult to detect and respond to viruses that can attack systems with little or no advance warning, such as catastrophic zero-day viruses that can render systems useless in minutes. At current staffing levels, DEQ can't meet all state-required cybersecurity standards and requirements or conduct or respond to annual cybersecurity tests, and incident response can be challenging.

**How Achieved:** Approval of this package would provide a full-time security system analyst to protect DEQ's information assets from security breaches and to handle any issues that arise. The position would provide information security expertise, strategic planning, related technical services and support. Responsibilities include developing and implementing a comprehensive strategic information security plan, information security policies and information security incident response plan, and ensuring that DEQ is in compliance with local, state and federal information security regulations, such as HIPPA.

**Results:**

Approval of this package better positions DEQ to:

- Prevent cybersecurity attacks that could compromise customers’ data maintained in agency systems.
- Respond more quickly to cybersecurity incidents.
- Develop and implement a cybersecurity plan that would keep the agency in compliance with legal requirements.

DEQ would measure success by achieving reductions in:

- The number of cybersecurity risks DEQ is exposed to
- Response time to high threat incidents
- The amount of spam that gets through our email system (spam can bring in viruses)
- Information system downtime due to threats and incidents

Risks if this package is not approved include:

- If the agency is not adequately prepared to prevent information security breaches, a cyber attack could result in the theft or release of data that could be harmful to the agency, state and any individual or organization that the agency regulates.
- DEQ could be challenged in adequately responding to cybersecurity breach, putting state and customers’ data at risk.
- DEQ may need to divert staff time and other resources to recover from a security breach, which would be more costly than having a position dedicated to the prevention of such breaches.

**2015-2017 Staffing Impact:**

<u>Position Class</u>	<u>Total Positions</u>	<u>Position Number</u>	<u>FTE by Division</u>
Information Systems Specialist 7	1	3219	1.00 HQ
Total	1		1.00

**2017-2019 Staffing Impact:**

None

**Revenue Source:** Indirect

**Total Budget:** \$235,970 Other Fund

## **Title: Environmental Data Management System (#161)**

**Purpose:** DEQ seeks funding to provide interactive, nimble, modern and transparent services to the public and our stakeholders while simultaneously standardizing and streamlining DEQ's internal business practices by implementing an environmental data management system.

DEQ's critical information systems, such as permitting and invoicing systems, are all more than 10 years old. Several are almost 20 years old. They are costly to maintain and some of our businesses processes are still done manually. Agency program areas (Air Quality, Land Quality and Water Quality) were created at different points throughout the 1970s and '80s. As successive legislative mandates accumulated, DEQ created systems to deal with each new program in turn. This created numerous undocumented business processes and redundant, dissimilar processes to address common general business needs (such as invoicing and permitting). Information systems currently tend to serve individual programs' business processes or information management needs. Many systems don't have known or documented business processes that support the need for the systems.

DEQ faces many challenges in managing data and information, both internally and externally, in a web and mobile-based world. DEQ's customers want the ability to do business on the web including being able to submit permits, pay invoices and submit reports online. Currently, DEQ can't meet that demand. In addition, most of DEQ's systems currently live on aging infrastructure, such as Windows Server 2003 and SQL Server 2005, neither of which Microsoft supports any longer.

DEQ faces additional current challenges including:

- Dozens of separate information systems – each designed to serve individual program needs – that lack a common architecture, are not interoperable and do not produce consistent information that can be integrated across the systems. This reduces DEQ's credibility with the regulated community, public and other stakeholders, as the agency can't easily provide information to them. It also lengthens the amount of time needed to gather data to meet public record and legislative information requests.
- Opaque data. Currently, DEQ lacks efficient or capable systems for offering important data to the public and other stakeholders for real time searches and information retrieval. A modern, integrated system will provide access to DEQ's permitting, program and enforcement data across all major agency programs.
- Cleaner Air Oregon and other responses to newly-discovered data about the limitations of current air quality regulations will likely result in DEQ regulating additional entities. Existing systems do not easily accommodate new functions and are not scalable for program growth.
- The lack of system integration creates additional work related to data transfers, reporting and communication between staff, thus increasing the potential for errors.
- DEQ is required to provide much of the permit-related data the agency collects to the EPA through electronic reporting, but agency systems can't meet most of the federal electronic reporting requirements. DEQ is currently out of compliance with some requirements and will soon be out of compliance with all federal requirements for electronic reporting to EPA. DEQ's inability to facilitate electronic reporting can result in regulated sources needing to provide information to both EPA and DEQ separately, an additional burden for industrial and municipal facilities and a potential drag on economic development.
- DEQ currently lacks the capacity to accept online payments. For some of our customers, this means driving a long distance to deliver payment to a DEQ office.

In addition to not meeting customer needs, maintaining old systems is increasingly difficult, more costly and adds risks to business continuity. On average, DEQ's critical information systems are more than 10 years old. The age of these systems present us with many challenges. For example, several key systems within DEQ run on a Microsoft Windows Server 2003, which has hit an end of life with Microsoft, and can only be supported via a special service contract with the vendor. The extended service contract has been in place for over a year. The annual cost of DEQ's contract to continue to support the discontinued Microsoft product will rise from \$3,000 per license in FY2016 to \$4,500 per license in FY2017. At last count in July 2016, DEQ has 16 Microsoft Windows Server 2003 licenses. If for some reason Microsoft were no longer able to provide this support, DEQ would likely need to remove them from the State network due to security risk. Without the servers, DEQ would not be able to provide some services, including some online tools and databases used by the public and our permit holders.

**How Achieved:** Technology functions as DEQ's central nervous system and is critical to our success. As already noted, DEQ's technology is outdated and no longer meets agency or customer needs. The environmental data management system (EDMS) project is intended to replace the majority of our siloed business systems by providing a common platform and updated business processes. After carefully considering system market research, what other state agencies have successfully done, and internal limitations, DEQ determined that an off-the-shelf product offers the best path forward. Such systems are used in many other states and offer a tested and proven way to efficiently and effectively receive and share environmental information, standardize and streamline DEQ's business processes and modernize with features such as online services and web-based interactions desired by DEQ's customers. DEQ will also be able to meet our partnership agreements with the EPA and other stakeholders, and ultimately better serve the people and businesses of Oregon.

DEQ estimates the total costs over all phases of development and implementation will be between \$18 to 21 million (including software license costs, consultant costs, quality assurance and staff time). DEQ expects to complete the project in approximately six years after project initiation. DEQ seeks bonding authority, along with the General Fund appropriation limitation, in the 2017-19 budget, and will request additional bonding authority in the 2019-21 biennium to pay for the project. DEQ expects that the bonds will be fully paid off over three biennia after each bond issue. DEQ anticipates a long-term operational maintenance phase of at least 10 years. Maintenance includes vendor assistance, system upgrades (fixes and enhancements), and an agency governance team to oversee potential future iterations of EDMS (development, testing and implementation) and adherence to business process standards. DEQ anticipates ongoing costs to be approximately \$825,000 annually, with potentially larger costs during periods of significant system enhancement.

DEQ is carefully planning this project to ensure its success:

- **Office of the State CIO Stage Gate Review process.** DEQ is working closely with our Strategic Technology Officer to ensure compliance with all of the requirements associated with each of the four stages of the state's technology project review process. DEQ is working with our Strategic Technology Officer to complete Stage 1 (Origination and Initiation), which included producing a high-level business case. DEQ's work during Stage 2, which DEQ has explored as Stage 1 is in its final phase though not yet complete, includes completing and then presenting a more detailed project business case, project charter, initial risk assessment and other documents for the OSCIO to review and approve.
- **Quality assurance.** The Office of the State Chief Information Officer requires quality assurance for projects the size of the EDMS project. DEQ will meet this requirement by contracting with a third-party vendor to ensure each project phase's deliverables meet Stage Gate Review process requirements and DEQ's overall project plan.

- **Change management planning.** A project of this scope requires substantial change management. To ensure staff and stakeholder transition and adopt a new way of doing things, DEQ will contract with a change management vendor. DEQ will work with the vendor to develop and implement a change management plan that includes an awareness campaign, a training plan and a rollout plan.
- **Related activities:**
  - **Project governance.** DEQ is forming an executive steering committee with representation from the agency's senior leaders, an Environmental Quality Commission member and our strategic technology officer from the State CIO's Office to ensure we keep the project on track and focused on ensuring DEQ's business needs are met. We envision this committee meeting quarterly and getting status updates from the technical committee. DEQ is also forming a technical committee, comprised of program managers, technical staff and a member appointed by the Union (AFSCME 3336) to provide day-to-day guidance of overall planning and strategic implementation. DEQ will be seeking sponsorship from our new director once the person has started to ensure that the project has the full weight of the agency behind its decisions.
  - **Systems Preparation.** DEQ continues to make strides in cleaning up its data within the Central Entity Management system. This work will ensure that the data to be imported into the new EDMS system is as accurate as possible. DEQ will continue to develop this system to provide additional services that will make the transition more streamlined.
  - **Water quality permitting program improvements.** In 2015, the Oregon Legislature, concerned about the backlog in renewing water quality permits, authorized DEQ to hire an independent, outside consultant to evaluate the Water Quality National Pollutant Discharge Elimination System permitting program. Goals of the program are: 1) to issue permits that are environmentally relevant by regulating discharges so Oregon's waters meet state water quality standards; 2) to reissue permits before the existing permits expire; and 3) to reduce the number of administratively extended permits to less than 10 percent. DEQ retained MWH Americas to conduct this third party program review focusing on strategies for successful issuance and renewal of NPDES permits to achieve the goals listed above and to meet agency permitting metrics. The final consultant deliverable is a detailed implementation plan that includes short and long-term strategies to support timely and high quality permit issuance. Started in Spring 2016, the project is slated for completion in November 2016. DEQ will align new business processes with the EDMS project.
  - **Inspections.** DEQ has begun improving and streamlining its inspections process. As part of a process improvement project, staff developed an inspections manual to ensure better quality inspections and more uniform expectations of how staff interact with facilities DEQ inspects. Staff from different disciplines and different offices came together to identify the problems related to how DEQ did inspections and mapped out a process. All agency inspectors – more than 220 staff – received training on the process and the manual. Agency managers also now accompany their inspectors on an inspection once a year to assess compliance with the inspection process. Inspection staff now meet regularly to discuss challenges and opportunities for process improvement. In addition, separate projects of creating an agency compliance and enforcement system and coordinated planning has resulted in the careful scheduling, completion and tracking of inspections. The EDMS system will need to be implemented in a way consistent with ongoing improvements in the inspection process.

- **Water Quality permit management system modernization funding.** In 2015, DEQ received one new project manager position and \$325,000 for professional services to advance the agency's effort to replace DEQ's outdated and inadequate wastewater permitting information management system. During the early planning stages of this project DEQ determined that pursuing the EDMS would be the most cost-effective approach and applied these resources to developing the EDMS business case and overall project management.

**Project staffing.** The 19 positions requested in this package would work on the following activities in support of preparing for, securing and implementing EDMS. These positions are grouped into three distinct functions: expert programmatic analysis, information systems and project management and administration.

- **Program analysis.** Ten Natural Resource Specialist 3 and two Administrative Specialist 2 positions would bring subject matter expertise about permitting, inspections and data management to the project. The NRS positions would be responsible for aligning DEQ's current business processes to become as internally consistent as is practicable among the Air, Water and Land Quality programs and then aligning those processes with functions in the selected environmental data management system.

The AS positions would be subject matter experts in our invoice and collections processes. Presently, DEQ has 17 different invoicing systems. DEQ plans to combine all of these into one unified invoicing process capable of accepting payments over the web. The positions would carefully evaluate the invoicing cycles, collection methods and rules/statutory requirements among programs, and work with a state-certified vendor so DEQ has the necessary protocols in place to accept electronic payments.

- **Information systems.** Seven information system specialist positions would be responsible for data analysis, conducting any customized configuration work necessary to move data from existing systems to EDMS, and trouble-shooting any system issues that arise. Given that there are currently many systems that house this data and that DEQ is migrating to a single system, DEQ anticipates the need for all seven positions. This body of work will also include information coordinators for the three program areas who are responsible for ETL (extraction, transforming and loading data) from one system into another and verifying data quality.
- **Project management and administration.** Project management and administration staff would keep the project operating on budget and schedule. The positions include a Project Manager 2 to keep the programmatic functions operating at an optimal level, and an ISS7 management position to provide oversight and direction to the ISS staff doing the systems work. The OPA 4 would lead the business analysis work of the programmatic functions and provide support to a PEM E in stakeholder outreach/engagement and would provide contract management oversight for the quality assurance vendor, the Change Management vendor and the vendor of the selected system. The PEM E, together with the agency director, would have ultimate responsibility and authority for ensuring that the project's goals and objectives are met as well as provide on-going management support to the staff within this unit.

The majority of these positions are being requested as Limited Duration. Workloads are expected to peak during implementation and decline thereafter. Elements of the expected work will continue unabated after implementation. Positions necessary to perform these functions are requested as permanent.

**Results:**

Approval of this package will benefit the public and the organizations that DEQ regulates. Having an environmental data management system will:

- Standardize and streamline the business processes that support DEQ’s air, water and land quality permitting programs. This includes invoicing, reporting, permit tracking and issuance, payments, inspections and customer name and relationship management.
- Improve access to public records and information. The system would provide the public, permittees, state and federal partners, and DEQ staff with access to system data (permitting, reporting, inspections, invoicing, etc.), in detail and real-time, through ad-hoc queries and web-based reports. This will improve timeliness and decrease the costs of fulfilling records requests.
- Allow for online payments, decreasing transaction costs for DEQ and regulated entities.
- Automate the reporting process via online submittals. This will reduce time and effort for people and businesses that must submit reports and improve DEQ’s ability to issue timely permits.
- Allows for compliance with state and federal requirements for electronic reporting and registration
- Improve user experience. For example, repeat system users would be able to auto-populating forms.

Risks if this package is not approved include:

- Continued agency investment in technology that supports outdated, ineffective and poorly-defined businesses processes that do not meet internal and external needs
- DEQ’s aging IT infrastructure will become unsupportable or beyond repair
- Reporting and registering would continue to be labor-intensive and error-prone processes
- The agency will remain out of compliance with federal electronic reporting requirements
- Managing the reporting process would continue to be manual and inefficient for DEQ
- Business processes and systems would remain compartmentalized
- Undocumented and non-standardized business processes, and fragmented processes that don’t support business needs.
- Public records would continue to be unnecessarily inaccessible to the public

**2017-2019 Staffing Impact:**

<u>Position Class</u>	<u>Total Positions</u>	<u>Position Number</u>	<u>FTE by Division</u>
Natural Resource Specialist 3	1	3224	.25 AQ
Natural Resource Specialist 3	1	3225	.25 AQ
Natural Resource Specialist 3	1	3226	.25 AQ
Natural Resource Specialist 3	1	3227	.25 AQ
Information Systems Specialist 5	1	3228	.75 AQ
Information Systems Specialist 7	1	3229	1.00 AQ
Natural Resource Specialist 3	1	3230	1.00 WQ
Natural Resource Specialist 3	1	3231	1.00 WQ
Administrative Specialist 2	1	3232	.50 WQ

Natural Resource Specialist 3	1	3233	.50 WQ
Natural Resource Specialist 3	1	3234	1.00 WQ
Information Systems Specialist 5	1	3235	.75 WQ
Information Systems Specialist 6	1	3236	1.00 WQ
Information Systems Specialist 5	1	3237	.50 LQ
Principal Exec Mgr E	1	3240	1.00 AM
Operations & Policy Analyst 4	1	3241	1.00 AM
Administrative Specialist 2	1	3242	.75 AM
Information Systems Specialist 5	1	3243	1.00 AM
Information Systems Specialist 5	1	3244	.75 AM
Total	19		13.50 FTE

**2017-2019 Staffing Impact:**

None

<b>Revenue Source:</b> Other Funds	\$6,278,990
General Fund	\$ 350,748
General Fund Debt Service	\$1,086,701

**Total Budget: \$7,716,439**

**Title: # 162 Portland Harbor - Debt Service**

**Purpose:**

This package appropriates funds for debt service for Portland Harbor Lottery Bonding. The authority to issue these Lottery Obligation Bonds is in the statewide Bond Bill. Expenditure authority for costs of bond issuance is sought in package #162 in the non-limited program section.

**How Accomplished:**

This package provides an appropriation for 2017-19 debt service associated with \$10 million bond sales to be authorized in Bond Bill. The bond sales are planned for fall of 2017. Due to the timing of the issuance of the bonds, \$970,108 of Debt Service paid from Lottery Funds is anticipated in 2017-19.

**1719: Staffing impact: None**

**Budget: \$ 970,108**

**Revenue source:** Lottery Fund Appropriation

**1921: Staffing Impact: None**

**Budget: \$ 0**

**Revenue Source:** Lottery Fund Appropriation

**Title: Clean Water State Revolving Fund – Bond Debt Service (#191)**

**Purpose:**

This package seeks to obtain limitation to provide debt service for General Obligation Bonds issued to meet the state match for up to three federal capitalization grants to maintain Oregon’s Clean Water State Revolving Fund. The CWSRF provides below-market interest rate loans to public agencies, including counties and municipalities, for three kinds of water pollution abatement projects: wastewater collection, treatment, and disposal systems; nonpoint source water pollution control measures; and implementation of management plans for federally designated estuaries (Tillamook and Lower Columbia River). DEQ issued its first CWSRF loan in 1991, and as of June 30, 2016, has written loans amounting to over \$1.16 billion to 188 Oregon communities. Without this package, DEQ would need to decline approximately \$15 million per year of federal grants, and there would be less state assistance to Oregon communities for such projects.

The federal Water Quality Act of 1987 created the state wastewater treatment revolving loan fund program. The primary source of funds for this program is repayments of loan principal and interest and federal capitalization grants. The federal act requires the state to match federal dollars with state funds in an amount at least equal to twenty percent of the federal capital grant. DEQ issues General Obligation Bonds for match, which is to be authorized by the statewide Bond Bill.

Debt service for the bonds will be sourced from the interest earnings received by the CWSRF. Interest earnings may be used for this purpose.

Approval of this package ensures DEQ continues to provide communities with affordable financing options for wastewater treatment and other clean water projects. Adequate wastewater treatment capacity is needed for communities’ economic development future.

Without this package communities may face delays or higher financing costs for wastewater treatment and other clean water projects.

**How accomplished:**

The State of Oregon issues General Obligation Bonds to finance the annual state match contributions to the CWSRF. These bonds are issued under the authority of Article XI-H of the Oregon Constitution and ORS Chapters 286, 288, and 468 in accordance with resolutions of the Environmental Quality Commission and Issuance Certificates of the State Treasurer.

The state will issue up to \$10 million worth of these bonds during the 2017-19 biennium to meet the twenty percent state match requirement for federal capitalization grants and to pay bond issuance costs. If the amount of state matching funds exceeds the twenty percent requirement, the excess can be used to match future federal grants. DEQ will require funds to finance the debt service on these Pollution Control Bonds. All debt service will be sourced from interest earnings of the CWSRF program, and hence these General Obligation Bonds are “self-financed.” This package covers \$10.02 million of debt service for Bonds of short duration which are fully redeemed during the 2017-19 biennium with no carryover into subsequent biennia. However, if demand for CWSRF loans remains strong and the long-term bond markets are favorable, DEQ will request the issuance of 20-year bonds with debt-service spread equally over as long as 10 biennia.

**Staffing impact: None**

**Budget: \$10,020,000**

**Revenue source: Non-Limited Funds**

**Title: # 193 Clean Up Contaminated Orphan Sites - Debt Service**

**Purpose:**

This package appropriates funds for debt service on \$10.3 million in bond sales to pay for cleanup of high priority contaminated sites. The authority to expend the bond proceeds for investigation and cleanup is requested in Policy Package #135. The remaining proceeds would be reserved for expenditure in 2019-21. Package #135 in the Land Quality program section provides details of the need for orphan site funding. The authority to issue these General Obligation Bonds is in the statewide Bond Bill. Expenditure authority for costs of bond issuance is sought in package #183 in the nonlimited program section.

**How Accomplished:**

This package provides an appropriation for 2017-19 debt service associated with \$10.3 million bond sales to be authorized in Bond Bill. The bond sales are planned for fall of 2016 and spring of 2019. Due to the timing of the issuance of the bonds, only about \$521,250 of Debt Service is anticipated in 2017-19, increasing to about \$1.4 million for each subsequent biennium through 2035-37, but remaining below the 2015-17 level.

**Budget: \$521,250**

**Staffing Impact – 1719:**

None

**Staffing Impact – 1921:**

None

**Revenue Source:** General Fund Appropriation

**Title: # 162 Portland Harbor - Debt Service**

**Purpose:**

This package appropriates funds for bonding for Portland Harbor Clean-up. This package contains issuance costs of \$227,251 and a Special Payment in the amount of \$10,000,000 to Business Oregon. The authority to issue these Bonds is in the statewide Bond Bill.

**How Accomplished:**

This package seeks expenditure approval for up to \$227,251 of bond-issuance costs in Services and Supplies for those bonds and \$10 million from a bond sales. The bond sales are planned for fall of 2017.

**1719: Staffing impact: None**

**Budget: \$ 10,227,251**

**Revenue source:** Other Fund Appropriation

**1921: Staffing Impact: None**

**Budget: \$ 0**

**Revenue Source:** Other Fund Appropriation

**Title: Clean Water State Revolving Fund – Loans and Bonds (#181)**

**Purpose:**

This package seeks to obtain non-limited expenditure approval to fund \$150,000 of bond issuance costs, including legal and other fees, associated with bonds issued to provide the state match component of up to three federal capitalization grants to maintain Oregon’s Clean Water State Revolving Fund. The package also seeks limitation to provide \$30 million of additional CWSRF loans using the federal grant monies received.

**Background**

The federal Water Quality Act amendments of 1987 created the state wastewater treatment revolving loan fund program (the CWSRF). The primary source of funds for this program is federal capitalization grants and repayments of principal and interest on existing loans. The federal act requires states to match federal dollars with state funds in an amount at least equal to twenty percent of the federal capital grant. DEQ issues General Obligation Bonds for the purpose of the match, which is authorized by the statewide Bond Bill each biennium.

The CWSRF provides below market interest rate loans to public agencies, including counties and municipalities, for three kinds of water pollution abatement projects: wastewater collection, treatment, and disposal systems; nonpoint source water pollution control measures; and implementation of management plans for federally designated estuaries (Tillamook and Lower Columbia River). DEQ issued its first CWSRF loan in 1991, and as of June 30, 2016, has written loans amounting to over \$1.16 billion to 188 Oregon communities.

For this package, bond issuance costs for the bonds will be sourced from the interest earnings received by the CWSRF and/or from bond proceeds. Interest earnings may be used to pay bond issuance costs.

Approval of this package ensures we continue to provide communities with affordable financing options for wastewater treatment and other clean water projects. Adequate wastewater treatment capacity is needed for communities’ economic development future.

Without this package, DEQ would need to decline federal capitalization grants of approximately \$15 million per year, and there would be less state assistance to Oregon communities for such projects. Additionally, communities may face delays or higher financing costs for wastewater treatment and other clean water projects and DEQ would make fewer loans.

**How accomplished:**

The state seeks authority to issue up to \$10 million of CWSRF General Obligation Bonds during the 2017-19 biennium in the statewide Bond Bill as the means to meet the twenty percent state match requirement for federal capitalization grants. If the amount of state matching funds generated by the bond sales exceeds the twenty percent requirement, the excess can be used to match future federal grants. Package #191 provides the debt service for these bonds issued on a short-term basis to meet match requirements. If the demand for CWSRF loans remains strong and the long-term bond markets are favorable, DEQ will consider the alternative of issuing bonds with a 20-year maturity.

This package seeks non-limited expenditure approval for up to \$150,000 of bond-issuance costs for those bonds and for \$30,000,000 of CWSRF loans associated with the federal capitalization grants expected in the 2017-19 biennium.

**Budget:** \$30,150,000

**Staffing impact:** None

**Revenue source:** Non-Limited Funds

**Title: # 183 Clean Up Contaminated Orphan Sites - Bonds**

**Purpose:**

The purpose of this package is to obtain non-limited expenditure approval for \$300,000 of bond issuance costs associated with two bond sales totaling \$10.3 million to pay for cleanup of high priority contaminated sites. The authority to issue these General Obligation Bonds will be requested in the 2017 Bond Bill. The authority to expend the bond proceeds in performing cleanups is requested in Policy Package #135. The anticipated timing of bond sales in 2017 and 2019 will result in \$0.5 million of General Fund debt service on this issue for 2017-19. Thereafter, debt service will be approximately \$1.4 million per biennium. See Policy Option Package #135 (Land Quality program) for details about the need for orphan funding and anticipated cleanup expenditures from bond proceeds during the 2017-19 biennium.

**How accomplished:**

This package provides an appropriation for bond issuance costs associated with \$10.3 million in bond sales to be authorized in the statewide Bond Bill. Bond issuance costs include bond-counsel, financial-advisor and attorney fees.

**Budget: \$300,000**

**Staffing impact: None**

**Revenue source:** Bond proceeds

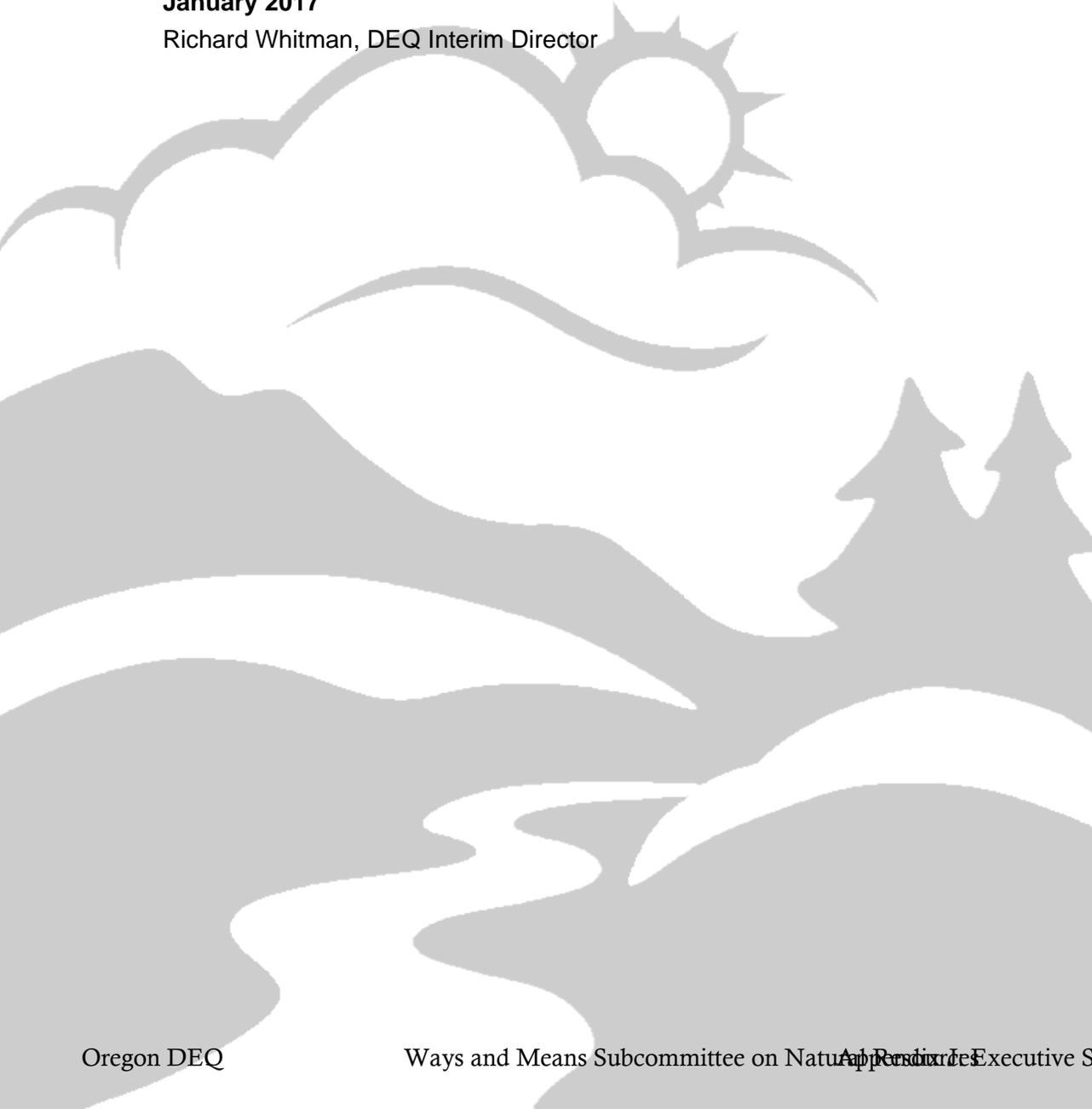
# Annual Environmental Cleanup Report – 2017: Executive Summary

## Submitted to:

Governor Kate Brown  
Oregon Legislative Assembly  
Oregon Environmental Quality Commission

January 2017

Richard Whitman, DEQ Interim Director



**Environmental  
Cleanup Program**  
700 NE Multnomah, Suite 600  
Portland, OR 97232  
Phone: 503-229-5696  
800-452-4011  
Fax: 503-229-5850  
Contact: Bruce Gilles

DEQ is a leader in restoring, maintaining and enhancing the quality of Oregon's air, land and water



State of Oregon  
**Department of  
Environmental  
Quality**

# Executive Summary

This annual report from the Oregon Department of Environmental Quality provides an update on the Environmental Cleanup Program's efforts to assess, investigate, and clean up contaminated lands and put these lands back into productive use. Oregon Revised Statute 465.235 mandates this yearly report to the Oregon Legislature, the Governor and Oregon's Environmental Quality Commission. This report includes:

- Statistics and a description of Environmental Cleanup Program activities.
- A summary of Cleanup Program highlights including: work to control upland sources of hazardous substance releases to the Willamette River within the Portland Harbor Superfund site, efforts to improve Cleanup Program performance, voluntary cleanup progress, brownfields work, prospective purchaser agreement projects and an outline of future funding needs for the state's orphan site program.
- The current four-year operational plan for fiscal years 2016 – 2019 (fiscal year ending June 30th).

## Cleanup Actions – Fiscal Year 2016

Completed actions	FY 2016		FY 2015 + FY 2016	
	Projected	Actual	Projected	Actual
Removal Actions	12	9	24	20
Preliminary Assessments (PAs)	7	4	17	12
Remedial Investigations (RIs)	12	4	24	16
Feasibility Studies (FSs)	9	6	21	13
Records of Decision (RODs)	5	5	9	12
Remedial Actions (RAs)	10	7	20	16
No Further Action Determinations (NFAs)	80	73	170	142
<b>Totals:</b>	<b>135</b>	<b>108</b>	<b>285</b>	<b>231</b>

While DEQ is continuing to make progress investigating and cleaning up contaminated sites, actual completions for fiscal year 2016 were somewhat below projections, except for remedial action records of decision or RODs. Several circumstances affected service delivery of the Cleanup program in 2016. DEQ's Northwest Region office and the Salem office changed locations that resulted in the move of well over half of DEQ regional cleanup staff. Additionally, several senior project managers retired, which required assigning of a number of their projects to other staff while DEQ recruited and trained new staff and reassigning work to new employees. This affected record availability and our ability to respond to requests from parties interested in project information.

DEQ continues to return contaminated and unusable lands to productive use through prospective purchaser agreements and monies specifically directed to address "orphan" sites – highly contaminated properties whose responsible parties are unknown, unwilling or unable to clean up these sites. DEQ continues to engage an external technical workgroup to identify ways to improve DEQ's ecological risk assessment process. DEQ is also continuing efforts to develop and plan the implementation of a periodic review pilot program to verify whether institutional and engineering controls on sites are still protective.<sup>1</sup>

### For More Information

For a full copy of the 13-page report, contact DEQ Government Relations Manager, Palmer Mason at 503-229-6800 or DEQ's Emergency Response and Environmental Cleanup Program Manager, Bruce Gilles at 503-229-6391. The full report is also available online at <http://www.deq.state.or.us/pubs/legislativepubs/AnnualCUREporttoLegislature2017.pdf>.

# Groundwater Quality Protection in Oregon

## *Executive summary*

January 2017

### **Water Quality Program**

700 NE Multnomah Street, Suite 600  
Portland, OR 97232

Phone:

(503) 229-5696

(800) 452-4011

Fax:

(503) 229-6977

Contact: Karen Tarnow

[www.oregon.gov/DEQ](http://www.oregon.gov/DEQ)

DEQ is a leader in restoring, maintaining and enhancing the quality of Oregon's air, land and water.



State of Oregon  
Department of  
Environmental  
Quality

Last Updated: 1/17/17  
By: Karen Tarnow

# Executive Summary

Groundwater is an essential Oregon resource. It makes up 95 percent of available freshwater resources in Oregon. More than 70 percent of Oregon residents get their drinking water from groundwater, and over 90 percent of the state's public water systems get their drinking water from groundwater. To protect this valuable resource, Oregon passed laws to prevent groundwater contamination, conserve and restore groundwater, and maintain the high quality of Oregon's groundwater resource for present and future uses. The Oregon Department of Environmental Quality implements Oregon's groundwater protection program to monitor, assess, protect and restore Oregon's groundwater resources. Because the sources of groundwater contamination and consumers of groundwater cross all boundaries, DEQ also engages with other state agencies, federal agencies, private and public organizations and individuals to improve and protect groundwater quality.

Oregon Revised Statute 468B.162(3) requires DEQ to prepare a biennial report to the Oregon Legislature. The report includes the status of groundwater in Oregon, efforts made in the immediately preceding year to protect, conserve and restore Oregon's groundwater resources, and grants awarded under ORS 468B.169. This report also includes an overview of program history from the late 1980s to the present. Program highlights for 2014-16 are noted below.

In 2015, DEQ conducted a groundwater study in the mid-Rogue River Basin to identify areas of groundwater contamination and provide information regarding potential risks to human health. The study area spanned Jackson and Josephine counties, including the communities of Grants Pass, Shady Cove, Central Point, Medford and Ashland. DEQ staff sampled 107 private, mostly domestic, wells and analyzed samples for nitrate, arsenic, bacteria, pesticides, metals, and common ions. A final report is available on DEQ's website. DEQ is currently analyzing groundwater data collected in the Clatsop Plains area of the north coast and the Milton-Freewater area in northeastern Oregon.

In 2016, DEQ and OHA began publishing updated assessments for all surface water sources for public water systems to incorporate information that was not previously available, including additional data that can be used to analyze watershed characteristics and potential pollutant sources. Information in the source water assessments provides the basis for a community to voluntarily develop strategies or a plan to protect the source area supplying their drinking water. DEQ is currently working with OHA to complete updated source water assessments for groundwater systems in Oregon. As of June 2016, 416 groundwater systems have achieved partial or substantial implementation of source water protection. This represents a total of 908,962 people served by public water systems that participate in active groundwater protection for drinking water.

The Pesticide Stewardship Partnership program continues to conduct monitoring in PSP watersheds and present results to local stakeholders. DEQ and ODA participate in multiple watershed-based events each year to create awareness about the PSP Program and identify priorities for collaborative actions to improve water quality. A small amount of funding is available for technical assistance and conducting agricultural pesticide collection events. Since 2006, nearly 209,500 pounds of pesticides have been collected.

DEQ designates groundwater management areas when groundwater in an area has elevated contaminant concentrations resulting from nonpoint sources such as farming, timber harvesting or other dispersed human activity. Oregon has three groundwater management areas: Northern Malheur County, Lower Umatilla Basin, and Southern Willamette Valley. In each area, DEQ monitors groundwater quality, provides technical assistance and engages communities to adopt best management practices to reduce groundwater contamination. Highlights of recent activities are noted below.

- Northern Malheur County GWMA: The Natural Resources Conservation Service and the local Soil and Water Conservation District are working with farmers to develop water quality plans to address groundwater concerns. Alternative irrigation and fertilization management practices have been designed and recommended for the area.
- Lower Umatilla Basin GWMA: The GWMA committee is currently updating their GWMA Action Plan with an anticipated completion date of summer 2017.

- Southern Willamette Valley GWMA: DEQ is partnering with the University of Oregon on a project that looks at what types of messages resonate with rural residents to get their drinking water wells tested or treated. The project will gather baseline data on community awareness of local groundwater contamination in specific geographic areas in the GWMA. The results from this study will help the GWMA Committee, DEQ staff, and others better understand constituents' needs, create the appropriate communication tools, and encourage beneficial practices.

DEQ continues to work with local groups on the South Deschutes/North Klamath Groundwater Protection Project, an area with elevated nitrate concentrations, to identify and implement measures to protect groundwater quality. In July 2013, DEQ and a steering committee comprised of local citizens finalized recommendations on how to address nitrate contamination from traditional onsite septic wastewater treatment systems in a practical, cost-effective way. One recommendation – seeking an area-wide exception to land use Goal 11 – had unanimous support from the group. An exception would allow establishment of sewers within the area of concern, with the intention of offering the greatest number of options for wastewater treatment and disposal. After substantial public process, the Deschutes County Board of Commissioners approved a Goal 11 exception in February 2016. However, before the ordinance could take effect, the exception was appealed to the Oregon Land Use Board of Appeals. On November 1, 2016, LUBA remanded the application back to the Deschutes County Board of County Commissioners. DEQ, DLCD and Deschutes County are currently discussing how to respond to the remand.

The full report available through the DEQ Legislative Reports web page:

<http://www.deq.state.or.us/pubs/legislativepubs/2017/GroundwaterQualityProtection.pdf>

# Certification Programs for Water and Wastewater System Operators

## *Executive summary*

January 2017



**Public Health Division  
Drinking Water  
Services**  
800 Oregon Street  
Portland OR 97232  
(971) 673-0405  
Contact: Anthony Fields  
(971) 673-2269



State of Oregon  
**Department of  
Environmental  
Quality**

**Water Quality Program**  
700 NE Multnomah St.  
Suite 600  
Portland, OR 97232  
Phone: 503-229-5696  
800-452-4011  
Fax: 503-229-5850  
Contact: Karen Tarnow  
[www.oregon.gov/DEQ](http://www.oregon.gov/DEQ)

DEQ is a leader in restoring, maintaining and enhancing the quality of Oregon's air, land and water.

# Executive Summary

Oregon law requires owners of drinking water and wastewater systems (public and private) to operate their systems under the responsible control and direction of certified operators. Trained and certified operators ensure that the systems function in a manner that fully protects public health and the environment. Certified operators also improve facility operation and compliance, protect the public's investment in the facilities, and instill public confidence in the safety and certainty of services. The Oregon Health Authority's Center for Health Protection, Drinking Water Services administers the certification program for drinking water system operators, and the Oregon Department of Environmental Quality administers the program for domestic wastewater system operators. This report provides an overview of program activities and accomplishments, and notes several initiatives to improve program efficiency.

OHA-DWS and DEQ coordinate activities to benefit their respective certification programs. Coordination efforts include, but are not limited to, representation and input at advisory committee meetings on program activities, effectiveness and rulemaking, and general program administration in areas such as testing, efficiencies and the sharing of operator work experience records. Another important area of coordination includes input to trainers and educators through the Oregon Environmental Services Advisory Council for workforce training and continuing education. Program staff also works with the Associated Boards of Certification, a national accreditation organization, on issues germane to certification program operation. Both programs contract with Associated Boards of Certification for computer-based testing. OHA-DWS and DEQ eliminated paper-and-pencil exams offered once a year, replacing them with computer-based exams offered year-round and up to six days a week. This approach provides examinees with immediate exam results and is expected to improve program efficiency and service delivery.

The legislature authorized the Drinking Water Services agency to increase all drinking water fees effective Jan. 1, 2016. The fee increases included all exam and certification fees. This report explains the new renewal and continuing education units (CEUs) audit that began with the 2016 renewal, and the revision to the small water system training manual.

DEQ has increased use of the Internet for communication, guidance, application and other document distribution. The wastewater system operator certification program's web page also includes a query for operators who passed the exam and those who hold current certification, including expiration date and county of residence. DEQ program staff also provided outreach at training workshops and community colleges throughout the state to make additional certification information available to current and prospective operators.

The full report available through the DEQ Legislative Reports web page:  
<http://www.deq.state.or.us/pubs/legislativepubs/2017/CertProgram2017.pdf>



State of Oregon  
Department of  
Environmental  
Quality

# 2015-16 Materials Management Program Information Update

## *Executive summary*

January 2017

### **Materials Management**

700 NE Multnomah  
Street, Suite 600  
Portland, OR 97232  
(503) 229-5696  
(800) 452-4011  
Fax: 503-229-6124  
TTY: 711  
[www.oregon.gov/DEQ](http://www.oregon.gov/DEQ)

Contact:  
Loretta Pickerell

DEQ's mission is to be a leader in restoring, maintaining and enhancing the quality of Oregon's air, land and water. DEQ works collaboratively with Oregonians for a healthy, sustainable environment.

Last Updated: 1/25/2017

By: Martin Brown

This report prepared by:

Oregon Department of Environmental Quality

700 NE Multnomah Street, Suite 600

Portland, OR 97232

Phone: 503-229-5696

Toll free in Oregon: 800-452-4011

Oregon TTY: 800-735-2900 or 711

Fax: 503-229-6124

[www.oregon.gov/deq](http://www.oregon.gov/deq)

Contact:

Loretta Pickerell

(503) 229-5808

## **Accessibility information**

DEQ is committed to accommodating people with disabilities. Please notify DEQ of any special physical or language accommodations or if you need information in large print, Braille or another format.

To make these arrangements, call 503-229-5696 or call toll-free in Oregon at 800-452-4011; fax to 503-229-6762; or email [deqinfo@deq.state.or.us](mailto:deqinfo@deq.state.or.us).

People with hearing impairments may call 711.

*The full report is available through DEQ's Legislative Reports webpage:*  
<http://www.deq.state.or.us/pubs/legislativepubs/2017/MMProgram2017.pdf>

# Executive summary

The DEQ Materials Management program works to reduce the environmental and human health impacts of the products and materials Oregonians make and use. It was formerly known as the Solid Waste program. Materials Management:

- Performs foundational research and policy analysis about environmental impacts;
- Administers permits and complaint response for facilities managing solid waste;
- Provides direct services to residents and communities; and
- Conducts strategic collaborations with businesses, local governments, and others.

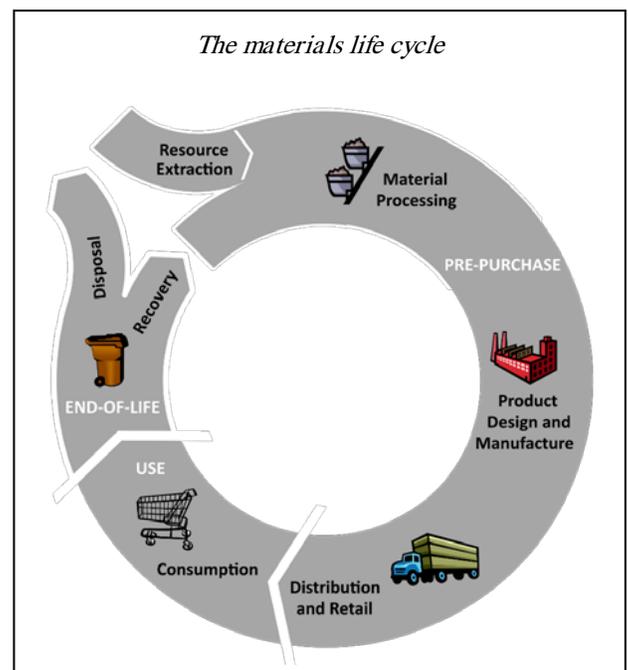
This report fulfills DEQ's requirement to report to the legislature about the statewide solid waste plan (ORS 459A.015-020) and electronics recycling (ORS 459A.340).

## *The 2050 Vision and the Materials Life Cycle*

The work of Materials Management is guided by *Materials Management in Oregon: 2050 Vision and Framework for Action*.<sup>1</sup> This plan was approved by the Environmental Quality Commission in 2012 after an extensive collaboration with stakeholders.

The plan adopts a life cycle view of materials and products. This recognizes that environmental impacts occur not only at “end of life,” when items are discarded or recycled, but throughout a cycle that includes resource extraction, production, distribution, and use. An estimated 65 percent of greenhouse gas emissions associated with Oregonians' consumption of goods and services occur before the point of purchase, while less than 1 percent occur during disposal.<sup>2</sup> Any effort to reduce the impacts of materials must address the whole life cycle.<sup>3</sup>

The *2050 Vision* recognizes that materials, environment, and quality of life are linked. It describes an Oregon of 2050 where producers make products sustainably, people live well and consume sustainably, and materials have the most useful life possible before and after discard.



## *Growth and change under new guidance and law*

2015 and 2016 were years of growth and change for Materials Management, as it continued to respond to the new direction in the *2050 Vision*. Achieving sustainable production and use of materials in Oregon by 2050 is a significant endeavor, and the *Vision* lists four tasks as foundations for that work. These are: securing sustainable funding for Materials Management, establishing goals, performing key research and building the *Vision* into DEQ's operations.

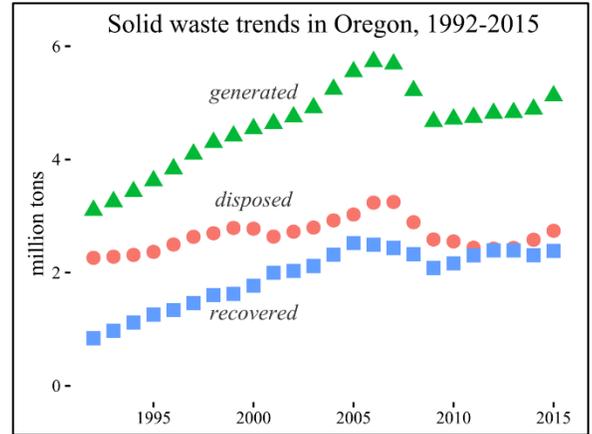
<sup>1</sup> This document is the state's integrated solid waste plan, required by ORS 459A.020. <http://www.deq.state.or.us/lq/pubs/docs/sw/2050vision/MaterialsManagementinOregon.pdf>

<sup>2</sup> Oregon Department of Environmental Quality, "Oregon's 2005-2014 Consumption-Based Greenhouse Gas Emissions," March 1, 2016, <http://www.deq.state.or.us/lq/pubs/factsheets/GHGInventory2014.pdf>.

<sup>3</sup> US EPA, "Sustainable Materials Management: The Road Ahead," June 2009, <https://www.epa.gov/sites/production/files/2015-09/documents/vision2.pdf>.

The 2015 legislature began building this foundation with two bills:

- **Senate Bill 245** changed the structure of landfill tipping fees, the primary source of Materials Management program funding. This provided adequate and stable funding, allowing Materials Management to restore several priority services lost during the recession, and fund the highest priority projects identified in the *2050 Vision*.
- **Senate Bill 263** updated the state’s Recycling Opportunity Act, revising waste prevention and recovery goals, adding new waste prevention and recycling program elements for local governments, and allowing outcome-based recovery rates that support the *2050 Vision*.

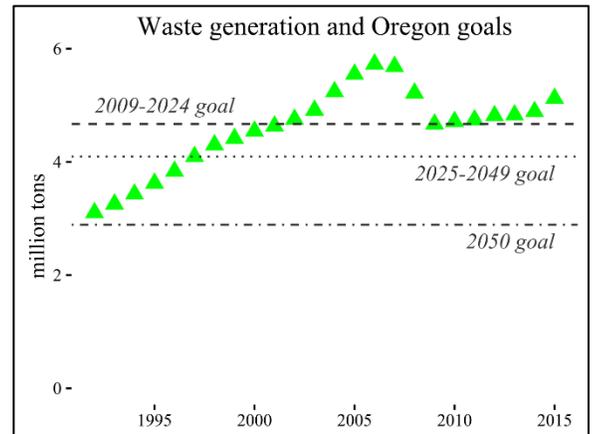


EQC adopted rules to implement SB 245 in early 2016 and portions of SB 263 in early 2017.

### Materials Management work in 2015-16

In 2015-16 Materials Management worked on two main tracks. First, it continued positive work in end-of-life management. For example,

- In 2015 Oregon E-Cycles recycled more than 29,000,000 pounds of consumer electronics.
- Staff administered disposal site permits, investigated complaints, and assisted local governments in fulfilling the requirements of the Recycling Opportunity Act.
- The 2015 Materials Recovery Survey<sup>4</sup> reported on solid waste trends and goals. The recovery rate (the portion of discards recycled or otherwise recovered) was little changed from 2014. However, the tonnage of materials disposed increased, as did waste generation (the total of recovered and disposed tons).
- These data show that in 2015, Oregon moved away from its SB 263 goals for lowering waste generation. To meet those goals, waste must be prevented earlier in the materials life cycle.



The second track of activity responded to that need, as well as broader opportunities in sustainable production. In 2015-16, Materials Management initiated strategically chosen projects across the materials life cycle. For example, Materials Management:

- Awarded more than \$2 million in grants to local governments and nonprofits, often for projects focusing on preventing waste and encouraging repair and reuse.
- Initiated key research on materials with high environmental impacts, including designing a study on the prevention of wasted food with Portland State University.
- Pursued initiatives with businesses to make products with lower environmental impacts, such as working with concrete producers to reformulate their mixes.

SB 245 and SB 263 have placed Materials Management on a strong footing to work toward the *2050 Vision*. In the next two years, the results of this investment should become visible in research reports, policy analyses, and service to local governments, businesses, and residents.

<sup>4</sup> Oregon Department of Environmental Quality, “2015 Oregon Material Recovery and Waste Generation Rates Report,” November 2016, <http://www.deq.state.or.us/lq/pubs/docs/sw/2015MRWGratesReport.pdf>.

# Environmental Quality, Department of

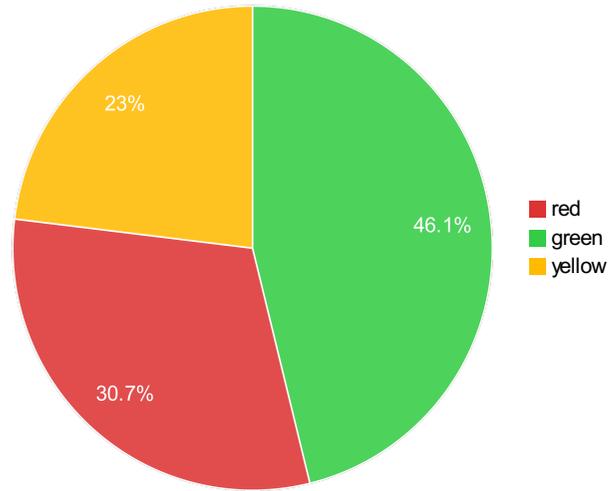
Annual Performance Progress Report

Reporting Year 2016

Published: 2/23/2017 11:08:33 AM

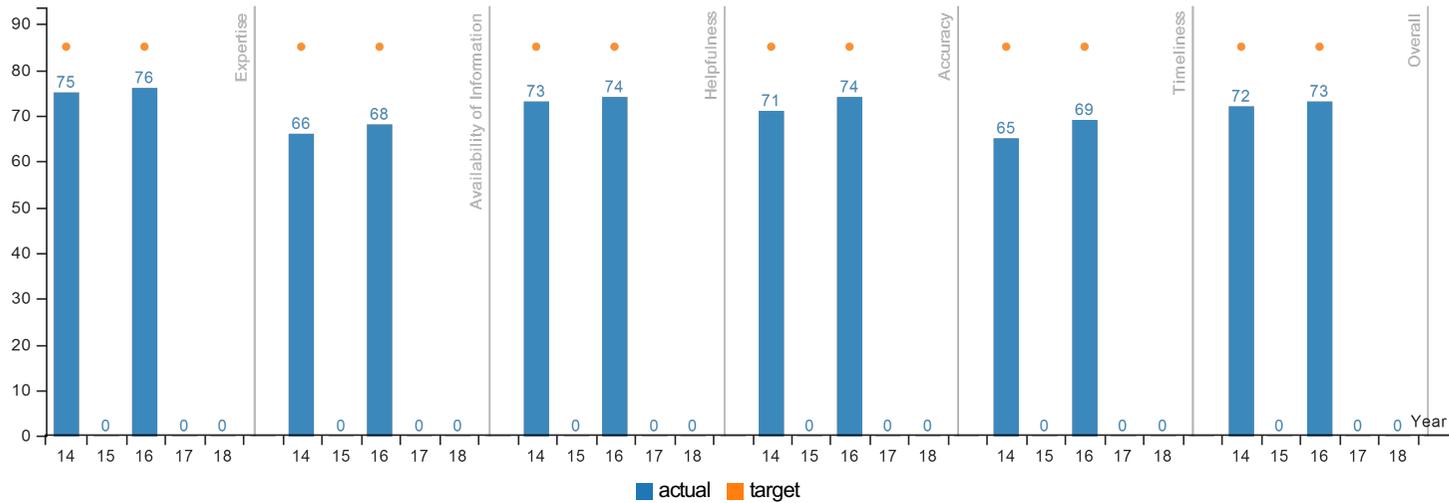
KPM #	Approved Key Performance Measures (KPMs)
1	CUSTOMER SERVICE - Percent of customers rating their satisfaction with the agency's customer service as "good" or "excellent": overall, timeliness, accuracy, helpfulness, expertise, availability of information.
2	PERMIT TIMELINESS - Percentage of air contaminant discharge permits issued within the target period.
3	PERMIT TIMELINESS - Percentage of individual wastewater discharge permits issued within 270 days.
4	UPDATED PERMITS - Percent of total wastewater permits that are current.
5	CLEANUP - Percent of identified Oregon hazardous substance sites cleaned up
6	SOLID WASTE - Pounds of municipal solid waste landfilled or incinerated per capita.
7	WATER QUALITY CONDITIONS - Percent of monitored stream sites with significantly increasing trends in water quality.
8	AIR QUALITY DIESEL EMISSIONS - Quantity of diesel particulate emissions.
9	AIR QUALITY CONDITIONS - National Standards: Number of days when air is unhealthy for sensitive groups and all groups.
10	AIR QUALITY - AIR TOXICS - Air Toxics Trends in Larger and Smaller Communities
11	ERT - Percent of local participants who rank DEQ involvement in Economic Revitalization Team process as good to excellent.
12	PERMIT TIMELINESS - Percent of Title V operating permits issued with the target period.
13	BOARDS AND COMMISSIONS - Percent of total best practices met by the Environmental Quality Commission.

Proposal	Proposed Key Performance Measures (KPMs)
Delete	CLEANUP - Percent of identified Oregon hazardous substance sites cleaned up
New	CLEANUP - Properties with known contamination cleaned up
Delete	SOLID WASTE - Pounds of municipal solid waste landfilled or incinerated per capita.
New	MATERIALS MANAGEMENT - Waste generation
New	MATERIALS MANAGEMENT - Waste recovery



Performance Summary	Green	Yellow	Red
	= Target to -5%	= Target -6% to -15%	= Target > -15%
Summary Stats:	46.15%	23.08%	30.77%

KPM #1	CUSTOMER SERVICE - Percent of customers rating their satisfaction with the agency's customer service as "good" or "excellent": overall, timeliness, accuracy, helpfulness, expertise, availability of information.
	Data Collection Period: Jan 01 - Jan 01



Report Year	2014	2015	2016	2017	2018
<b>Expertise</b>					
Actual	75%	No Data	76%	No Data	No Data
Target	85%	TBD	85%	TBD	TBD
<b>Availability of Information</b>					
Actual	66%	No Data	68%	No Data	No Data
Target	85%	TBD	85%	TBD	TBD
<b>Helpfulness</b>					
Actual	73%	No Data	74%	No Data	No Data
Target	85%	TBD	85%	TBD	TBD
<b>Accuracy</b>					
Actual	71%	No Data	74%	No Data	No Data
Target	85%	TBD	85%	TBD	TBD
<b>Timeliness</b>					
Actual	65%	No Data	69%	No Data	No Data
Target	85%	TBD	85%	TBD	TBD
<b>Overall</b>					
Actual	72%	No Data	73%	No Data	No Data
Target	85%	TBD	85%	TBD	TBD

**How Are We Doing**

DEQ surveys its customers biennially, as required by the 2005 Legislature of all state agencies. DEQ surveys a random sample of its air and water permittees and onsite septic customers and uses the results to help inform improvements to overall customer service. The measure identifies the percent of customers rating their satisfaction with the agency's customer service as "good" or "excellent" in the following service categories: overall service, timeliness, accuracy, helpfulness, expertise/knowledge and availability of information. The target is 85 percent of customers rating service as "good" or "excellent" in all categories.

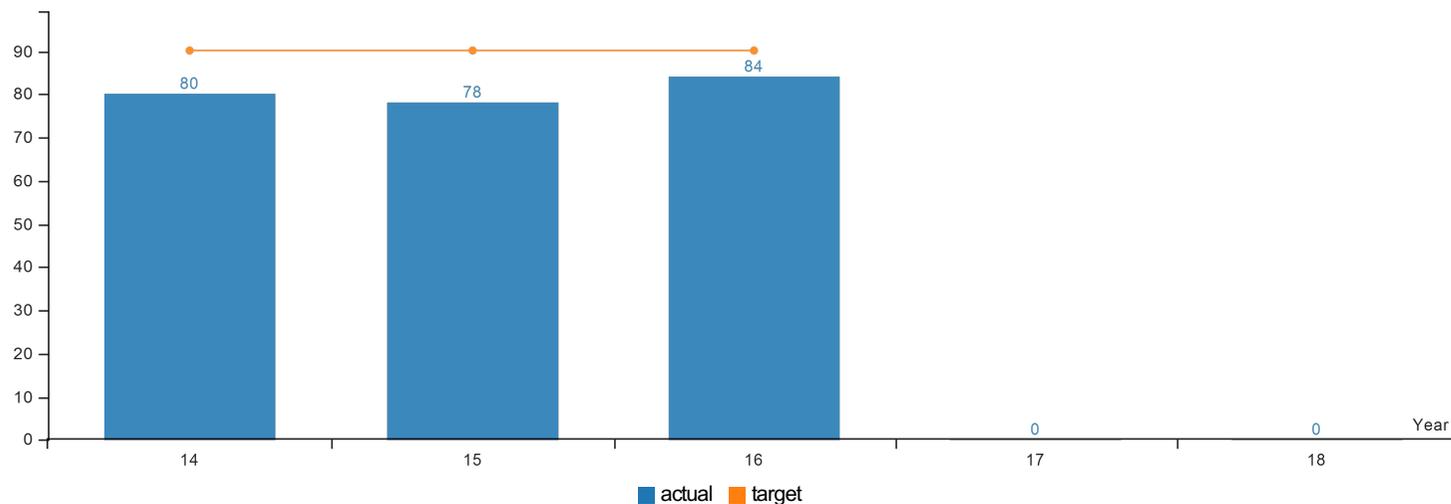
The 2016 survey yielded scores that were higher than those from the 2014 results in all categories, though each category's score is still below the target of 85 percent. The survey instrument also gathers comments that provide some insight into what our customers think of our services. The majority of comments were positive and reflect satisfaction with the helpfulness, responsiveness and expertise of agency staff. The most frequently cited concerns related to permit timeliness, difficulty in finding information on our website and staffing levels.

#### **Factors Affecting Results**

DEQ permit staff receive good scores for their expertise, helpfulness and accuracy of their work. However, lower scoring on permit timeliness affects our overall customer service score. DEQ recognizes that we need to improve on permit timeliness and are currently evaluating our water permitting program. Once evaluation is complete, we will develop strategies for improving permit timeliness.

DEQ has completed a project related to inspections that may have contributed to the slightly increased scores of our 2016 survey. The agency has already started improving and streamlining its inspections process. As part of a process improvement project, staff developed an inspections manual to ensure better quality inspections and more uniform expectations of how staff interact with facilities we inspect. Staff from different disciplines and different offices came together to identify the problems related to how DEQ did inspections and mapped out a process. All agency inspectors – more than 220 staff – received training on the process and the manual. Agency managers also now accompany their inspectors on an inspection once a year to assess compliance with the inspection process. Inspection staff now meet regularly to discuss challenges and opportunities for process improvement. In addition, separate projects of creating an agency compliance and enforcement system and coordinated planning has resulted in the careful scheduling, completion and tracking of inspections.

KPM #2	PERMIT TIMELINESS - Percentage of air contaminant discharge permits issued within the target period.
	Data Collection Period: Jan 01 - Dec 31



Report Year	2014	2015	2016	2017	2018
<b>KPM2: Air Quality Permit Timeliness: ACDP Permits issued within Target</b>					
Actual	80%	78%	84%	No Data	No Data
Target	90%	90%	90%	TBD	TBD

### How Are We Doing

Note: The 2016 report is based on 2015 calendar year data.

DEQ requires Air Contaminant Discharge Permits for construction of new and modified point sources of all sizes as well as operation of medium-sized point sources and smaller sources of hazardous air pollution. In 2015, 84 percent of ACDP permits were issued within the target period, an improvement over the 78 percent recorded in 2014 and slightly above the historical level of around 80 percent. DEQ sets processing targets for the different types of permits, with a range from 30 days for the simplest permits to 365 days for the most complex permits.

In 2001, DEQ streamlined the ACDP permitting process and developed general permits to expeditiously permit entire source categories under one permit rather than more time-consuming individual permits. Streamlining significantly decreased the time required to issue a permit. Along with streamlining, DEQ shortened the target period for timely processing of ACDP permits from an average of 167 days to an average of 69 days.

DEQ's goal is to issue 90 percent of ACDP permits within the target periods. This goal sets a high standard for issuing permits in a timely manner. Businesses need quick turnaround times on permits to construct, expand or modify their operations. A high percentage of timely permits issued was a key economic development benchmark that was long tracked by the Oregon Progress Board and one indicator of an efficient permitting program.

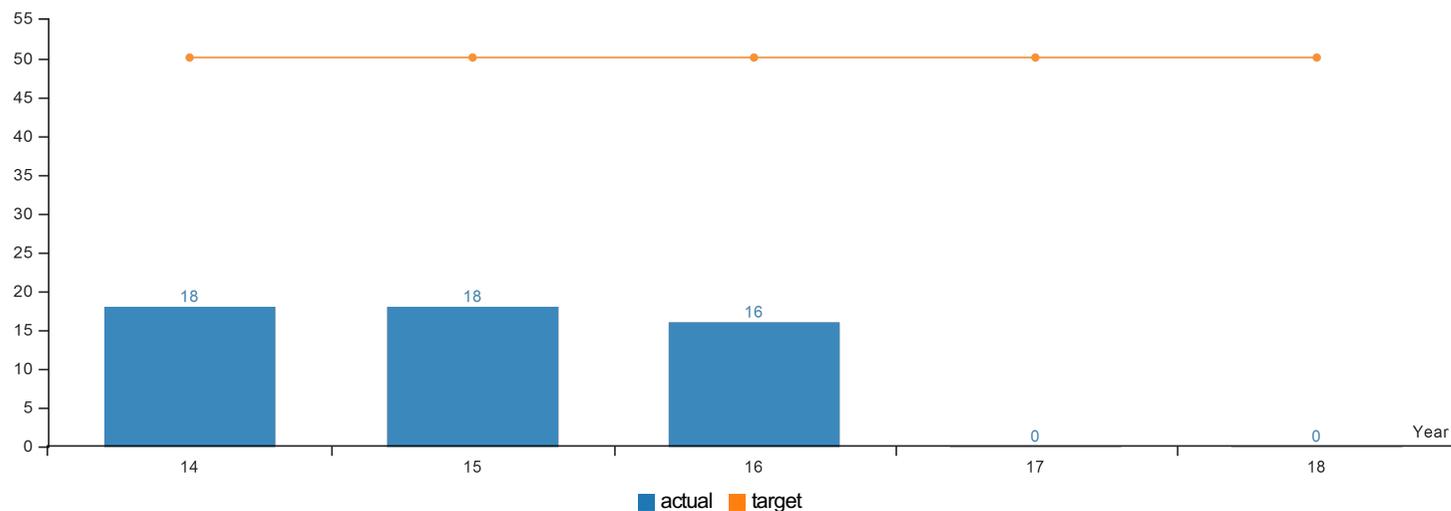
While the 90 percent timeliness goal is not being met, DEQ prioritizes work and makes sure that critical permitting gets done. For example, permits that must be issued before a source can proceed with a construction project receive high priority and get processed before more routine work, resulting in more routine work not meeting timeliness targets.

### Factors Affecting Results

Maintaining adequate staffing and continuous improvement to permit processing are the key actions for attaining and sustaining the permit timeliness goal. Over the years, the public's concern about emissions from industrial sources near where they live has increased. They are demanding more information and more opportunities to comment and express their concern for both new or expanding facilities and even renewal of existing permits. DEQ must have sufficient resources to recruit and retain staff to address their concerns. At the same time, DEQ must continue to develop new general permits and add procedural improvements like the air quality permitting rule updates adopted in early 2015. The ACDP program is supported by fees along with small amounts of general fund and federal funds. It is important to retain all three funding sources to maintain an adequate, responsive program.

In 2015, the Air Quality permitting program implemented a new approach to manage workload, increase permit timelines, reduce the permit backlog and make sure the highest priority permit applications are processed in a timely manner. Regional air managers developed a permit issuance plan for the October 1, 2015 through September 30, 2016 permitting and inspection year. The plan lists each permit application that will be processed during this timeframe and the anticipated timeline for issuing the permit. Due to economic development considerations, DEQ gives applications for new facilities and modifications to existing facilities highest priority; these facilities cannot be constructed or expanded until the appropriate permit is issued. DEQ gives renewal permits a lower priority because (1) we administratively extend them until the renewal permit is issued as long as the source has submitted a timely renewal application and (2) DEQ does not need to make any changes to the permit to allow the facility to continue conducting business. DEQ updates the permitting plan quarterly and an explanation must be provided if a permit is not issued by the expected date. This new process holds the agency accountable for issuing permits in a timely manner and provides data that can be used to help accurately forecast the time needed to issue permits. Continuing this new approach in conjunction with seeking new methods of continuous improvement should further increase the ACDP permit timeliness for future years.

KPM #3	PERMIT TIMELINESS - Percentage of individual wastewater discharge permits issued within 270 days.
	Data Collection Period: Jan 01 - Jan 01



Report Year	2014	2015	2016	2017	2018
<b>KPM3: Percentage of individual wastewater discharge permits issued within 270 days</b>					
Actual	18%	18%	16%	No Data	No Data
Target	50%	50%	50%	50%	50%

### How Are We Doing

The 2016 KPM report reflects DEQ's performance in 2015 because this measure requires data that is not available until October of the following year.

DEQ did not meet its timeliness target for 2015. For new or renewal permit applications submitted in 2015, 16 percent of individual wastewater discharge permits were issued within 270 days. This is a decrease relative to 2014, where the agency issued 18 percent of permits within 270 days.

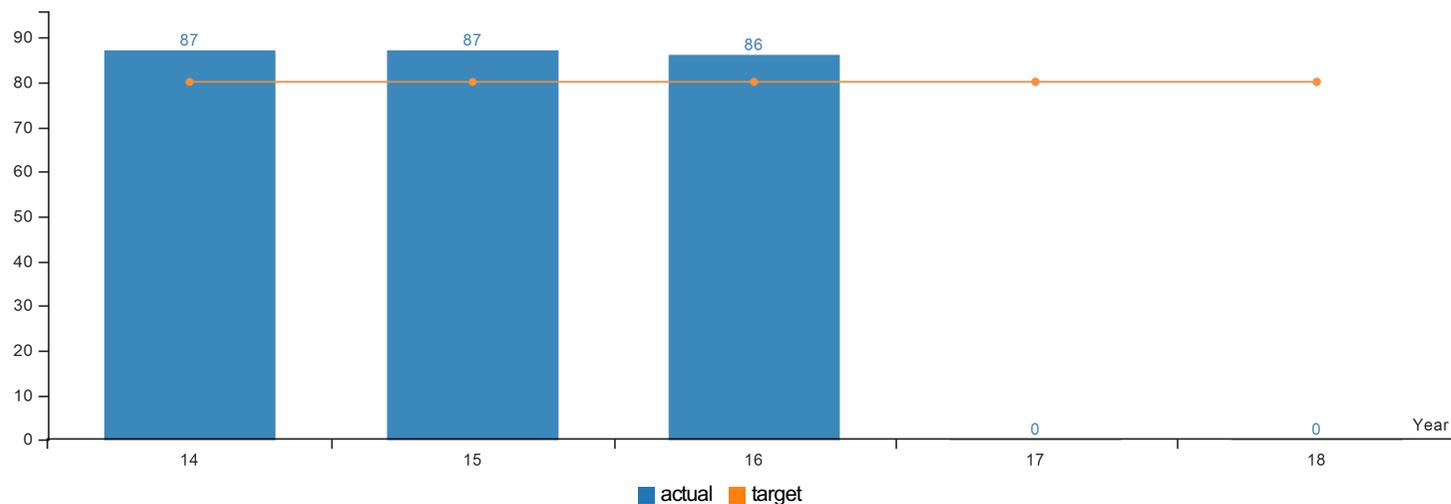
### Factors Affecting Results

DEQ's inability to meet this KPM target is a result of several factors: legal challenges, permit complexity, evolving federal water quality standards and related data requirements for permitted sources, staffing reductions and an increase in the number of permits managed by the program.

Lawsuits can cause DEQ to temporarily halt the issuance of permits while issues are being addressed, such as happened during the 2012-2014 calendar cycles due to litigation in federal court over the water quality standard for temperature and separate litigation regarding associated Total Maximum Daily Loads.

Evolving federal water quality criteria and standards contribute to delays as demands for enough data to write permits increases. Monitoring and sampling to provide enough data to evaluate a permittee's discharge and develop mathematical, science-based standards to protect water quality requires time to complete – often over several seasonal cycles.

KPM #4	UPDATED PERMITS - Percent of total wastewater permits that are current.
	Data Collection Period: Jan 01 - Jan 01



Report Year	2014	2015	2016	2017	2018
<b>KPM4: Percent of total wastewater permits that are current</b>					
Actual	87%	87%	86%	No Data	No Data
Target	80%	80%	80%	80%	80%

### How Are We Doing

At the end of 2015, 86 percent of permitted sources were assigned to current general and individual permits, meaning DEQ exceeded its target of 85 percent. This metric includes National Permit Discharge Elimination System permits and Water Pollution Control Facility permits, but excludes onsite septic system permits and “agent” permits such as the Combined Animal Feeding Operations permit administered by the Oregon Department of Agriculture.

The dramatic improvement between 2012-13 (58 percent current) and 2014 (87 percent current) is attributable to the correction of an anomaly in the way suction dredge permits were counted in DEQ’s database.

DEQ is actively working on continuous improvement activities in the Water Quality Program with an emphasis on producing high quality, timely permits. This includes continuing work with the Blue Ribbon Committee, a group of stakeholders formed in 2002 and tasked with developing recommendations to improve water quality permitting in Oregon. Since 2005, DEQ has been implementing the Committee’s recommendations, such setting measurable goals for inspections and compliance reviews and reporting regularly on performance.

In 2010, DEQ began implementing outcome-based management, which included the development of outcome and process measures that the agency reviews quarterly to ensure timely response to issues and identify processes where efficiencies may be gained.

In 2012 and again in 2014, DEQ reviewed its permitting programs to identify high-impact, low-cost internal solutions to reduce the amount of time it takes to issue permits, and has been implementing recommendations that came out of that process. Over the last year, this work included the following initiatives:

- Viewing the program holistically and prioritizing work with an emphasis on quality, timely permit delivery and meeting our core program responsibilities.

- Quarterly and monthly review of metrics related to individual NPDES permit issuance by DEQ's leadership team as part of DEQ's outcome based management business model.
- Standardizing permitting tools, including the development of templates and checklists for NPDES permit applicants to improve consistency and quality throughout the state.
- Drawing on experience obtained from implementing last year's statewide permit and inspection plan and refining workload analysis tools.
- Addressing policy issues to remove barriers to issuing timely, quality permits.

While the overall percent of current permits is high, the low percentage of current NPDES permits (approximately 30 percent) remains a critical concern for the permitting program. In 2015, the Oregon Legislature, concerned about the backlog in renewing water quality permits, authorized DEQ to hire an independent, outside consultant to evaluate the Water Quality NPDES permitting program. The independent consultants began their work early in 2016 and will deliver their recommendations and an implementation plan in November 2016. Priority areas for the consultant to focus analysis of the program include:

- Process improvement
- Workload analysis
- Organizational structure
- Policy development

#### **Factors Affecting Results**

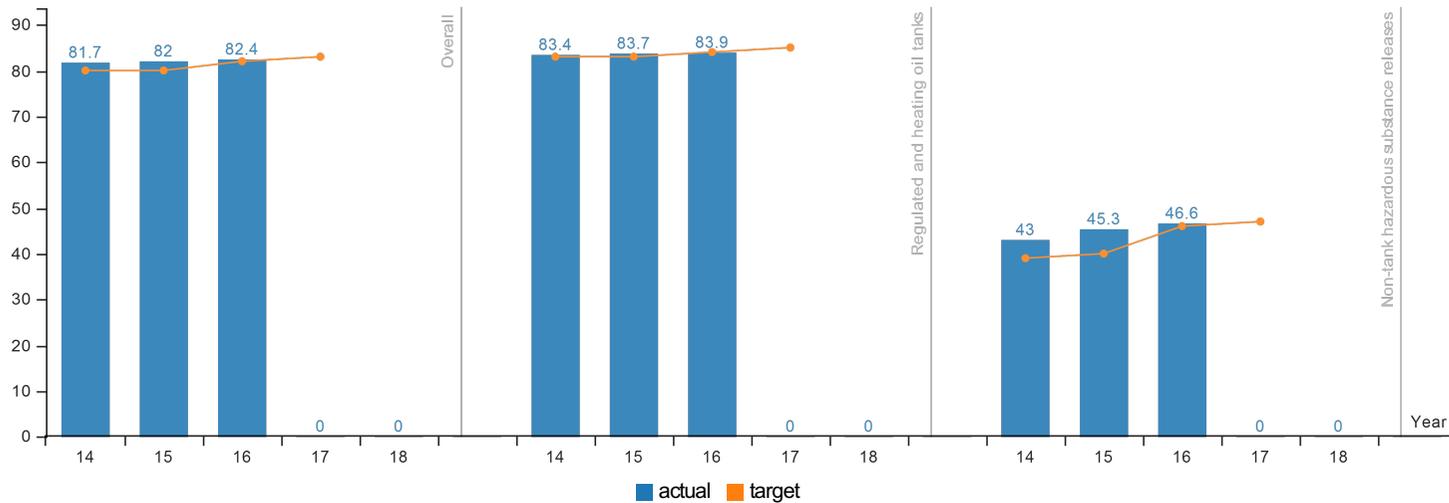
The complexities of technical and legal issues encountered during permit development continue to affect DEQ's ability to issue permits in a timely manner. Court decisions and settlement agreements can cause permit delays by interrupting DEQ's work on permits while we create new policies and procedures, and by increasing the amount of work that goes into developing a permit.

Changes in water quality standards and criteria can also delay permitting efforts when the change necessitates the need for additional data collection. The amount of data needed to determine appropriate effluent limits typically requires monitoring and sampling over multiple seasons.

Requests for new permits or major modifications of existing permits can disrupt permit issuance schedules because DEQ needs to redirect resources to address these high priority permits.

DEQ directs a certain amount of staff resources to develop and improve permit writing tools and systems to make the process more consistent and efficient. These investments will have long-term payoff relative to program performance, although in the short term they have the effect of diverting resources away from permit writing. The 2015 Legislature established two new permit specialist positions at DEQ to maintain permit writing tools and guidance, help resolve technical issues related to permit development and to assist with permit writing while performing internal permit peer reviews.

KPM #5	CLEANUP - Percent of identified Oregon hazardous substance sites cleaned up
	Data Collection Period: Jan 01 - Jan 01



Report Year	2014	2015	2016	2017	2018
<b>Overall</b>					
Actual	81.70%	82%	82.40%	No Data	No Data
Target	80%	80%	82%	83%	TBD
<b>Regulated and heating oil tanks</b>					
Actual	83.40%	83.70%	83.90%	No Data	No Data
Target	83%	83%	84%	85%	TBD
<b>Non-tank hazardous substance releases</b>					
Actual	43%	45.30%	46.60%	No Data	No Data
Target	39%	40%	46%	47%	TBD

### How Are We Doing

This measure tracks the total number of sites cleaned up as a percentage of the universe of contaminated sites in DEQ's hazardous substance cleanup and tanks databases. Tank sites are home heating oil tanks or regulated commercial gasoline service stations where releases of fuel from underground storage tanks have occurred, and hazardous substance sites are where releases of hazardous substances such as heavy metals, chlorinated solvents or PCBs have occurred. The higher the percentage of sites cleaned up, the better we are doing.

As of December 31, 2015, DEQ's cleanup and tanks programs had overseen the cleanup of 82.4 percent of all sites identified, which is above the target of 80 percent (5a); overseen 83.9 percent of all tank sites cleaned up, over the target of 83 percent (5b); and completed cleanup at 46.6 percent of all hazardous substance sites, above the target of 40 percent (5c).

This work involved the cleanup in 2015 of an additional 1,610 sites, for a total of 37,857 sites that DEQ has addressed since the late 1980s, out of 45,944 known sites. The cumulative percentage completed has increased by at least one percentage point per year since tracking began in 1996. We believe the trend in completing cleanups will continue upwards, towards at least 90 percent. It is noteworthy that Oregon has consistently exceeded the national average of regulated tank sites cleaned up.

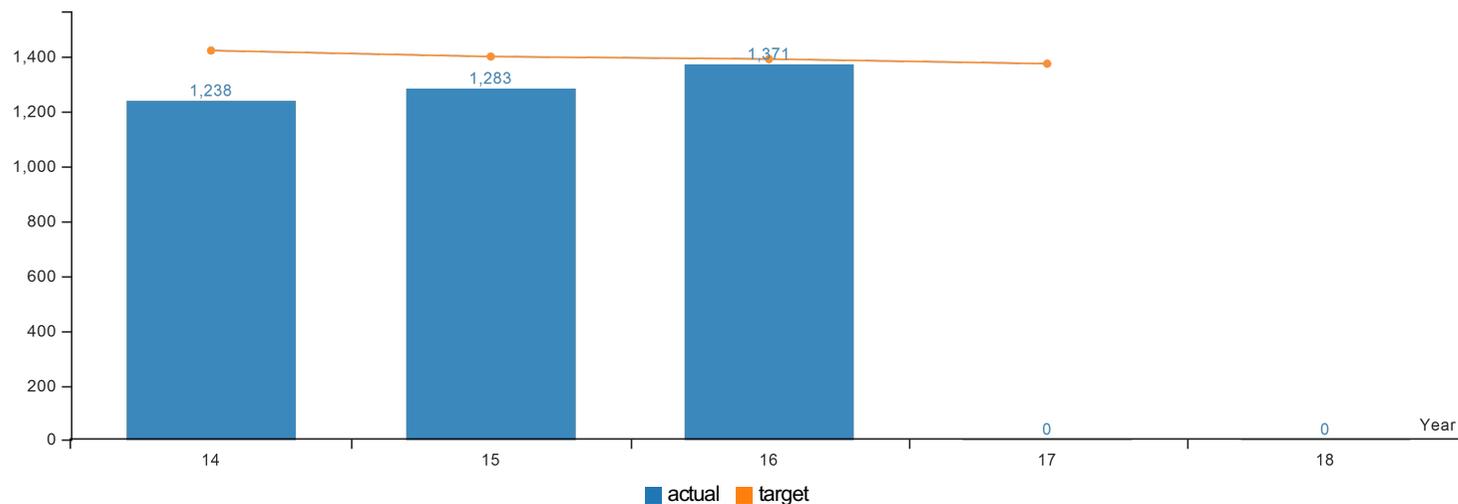
**Factors Affecting Results**

Each year DEQ identifies additional sites that need cleanup, creating a "moving target" as the total number of sites increases. Nevertheless, DEQ has completed enough cleanups to increase our cleanup percentage. This is especially true for home heating oil tank cleanups, which typically occur during property sales.

The great majority of sites counted in this overall measure are tank sites. From the beginning, DEQ has tried to improve processes to make it easier and cheaper to clean contaminated properties to safe levels. Examples are DEQ's risk-based guidance to aid cleanup, and working with Business Oregon staff to fund site investigations. Also, DEQ's Prospective Purchaser Agreement program encourages cleanup and redevelopment by reducing or eliminating liability for those wanting to buy contaminated property. Finally, the heating oil tank program has promoted residential tank cleanups by allowing private contractors to certify cleanups that meet Oregon standards.

Hazardous substance sites may include a range of contaminants and are often more complex than petroleum cleanups. Additionally, while state law requires property owners to decommission unused underground tanks, report on the release, clean up leaking tanks, and disclose heating oil tanks during a property sale, there is no such law for hazardous-substance sites. Finally, DEQ's "no further action" decision at a leaking underground storage tank site applies only to contamination from the tank system, whereas completion of cleanup at a hazardous substance site includes the entire site and any contaminants that may have migrated beyond property boundaries. In sum, most tank sites are cleaned up more quickly than hazardous substance sites.

KPM #6	SOLID WASTE - Pounds of municipal solid waste landfilled or incinerated per capita.
	Data Collection Period: Jan 01 - Jan 01



Report Year	2014	2015	2016	2017	2018
<b>KPM 6: Pounds of municipal solid waste landfilled or incinerated per capita</b>					
Actual	1,238	1,283	1,371	No Data	No Data
Target	1,422	1,400	1,391	1,374	TBD

### How Are We Doing

The targets for this measure reflect a desire to continue reducing the per capita disposal of solid waste over time. Oregon experienced large drops in disposal from 2007 through 2013 when disposal reached its low and has shown an upswing since the economy began to rebound in 2014. In 2015 the per capita waste disposed or incinerated was 1,371 pounds, which is better than the target of 1,391 pounds. Oregon's per capita waste disposal rate is substantially below the national average.

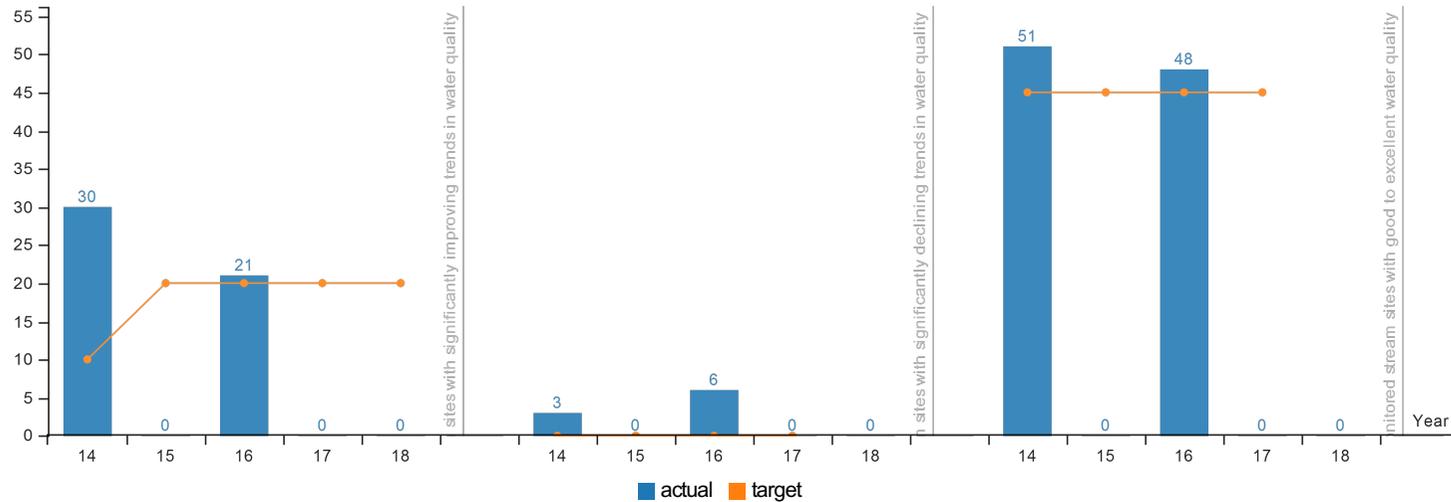
Note: The data used to generate the KPM are preliminary because the KPM cycle is not in alignment with the data analysis for the program. DEQ will update the 2016 KPM in 2017.

### Factors Affecting Results

A stronger Oregon economy has led to more purchasing and consequently more disposal, but another contributing factor is the sharp decline in the recovery markets for woodwaste statewide, leading to reduced recovery and significant increase in disposal of wood waste. Generally, recycling commodity values were less in 2015 than in previous years, but the decline in the value of wood waste from demolition and construction projects probably had the largest impact among commodities.

The 2015 Oregon Legislature passed Senate Bill 245 and Senate Bill 263, giving DEQ better tools to implement the *2050 Vision and Framework for Action for Materials Management in Oregon*. The framework focuses DEQ's efforts on identifying the most significant impacts across a product's full lifecycle, and taking action to reduce those impacts. DEQ will promote understanding of significant greenhouse gas and other environmental impacts associated with the full life cycle of products and materials and identify and pursue strategies to reduce them; reduce waste generation by working with businesses on initiatives for better product design and preventing the wasting of food; inform and promote more sustainable consumption, including efforts to improve state purchasing and reduce purchase and use of household toxic chemicals; and target high impact materials for optimal waste recovery.

KPM #7	WATER QUALITY CONDITIONS - Percent of monitored stream sites with significantly increasing trends in water quality.
	Data Collection Period: Jan 01 - Jan 01



Report Year	2014	2015	2016	2017	2018
<b>Percent of monitored stream sites with significantly improving trends in water quality</b>					
Actual	30%	No Data	21%	No Data	No Data
Target	10%	20%	20%	20%	20%
<b>Percent of monitored stream sites with significantly declining trends in water quality</b>					
Actual	3%	No Data	6%	No Data	No Data
Target	0%	0%	0%	0%	TBD
<b>Percent of monitored stream sites with good to excellent water quality</b>					
Actual	51%	No Data	48%	No Data	No Data
Target	45%	45%	45%	45%	TBD

### How Are We Doing

DEQ analyzed data collected from Oct. 1, 2004 to Sept. 30, 2015 to report on these measures.

#### 7a. Percent of monitored stream sites with significantly improving trends in water quality

In 2015, the percent of monitored streams sites with statistically significant improving trends over the previous ten years was 21 percent (28 of 131 stream sites). All sites with improving trends in 2014 either continued to improve or maintained the current level of water quality. Seven of the 28 stream sites with improving water quality trends in 2015 were showing improvement for the first time in at least a decade. Overall, the most improvements in 2015 occurred in the Klamath Basin where four of the six regularly monitored stream sites showed improving trends. Despite the improvements, all four sites remain in the poor or very poor water quality category and efforts at improving quality should continue in the future.

#### 7b. Percent of monitored stream sites with significantly declining trends in water quality

The 2015 data indicates that six percent (8 of 131 stream sites) of monitored stream sites have declining water quality trends, a three percent increase from the 2014 report. These stream sites are spread across the state. Two are located in the Deschutes Basin, while one is located in each of the Grand Ronde, North Coast, Owyhee, Powder, South Coast and Upper Willamette basins. The stream sites in the Owyhee and Powder basins are in the very poor water quality category and were the two of the lowest scoring stream sites in the state.

#### **7c. Percent of monitored stream sites with good to excellent water quality**

Overall, we currently find good or excellent water quality at 48 percent of the sites we routinely monitor, a three percent drop from the 2014 report. While we are exceeding the target of 45 percent, DEQ needs to continue monitoring to prevent the improved water quality of some locations from declining.

#### **Factors Affecting Results**

##### **7a. Percent of monitored stream sites with significantly improving trends in water quality**

Two challenging goals in water quality management are maintaining water quality gains seen over the past 30 years and improving water quality in agricultural and urban areas. DEQ can help maintain the earlier gains and continue to improve water quality by managing non-point sources, such as stormwater runoff; continuing to improve practices on forestry and agricultural lands; and restoring stream-side vegetation and habitats. In 2015, sites in Klamath Basin showed the greatest improvements in water quality, yet all of the sites were in poor or very poor status, indicating that the largest gains occurred at sites with the most room for improvement. DEQ attributes improvements in the Klamath to reductions in nitrogen which can indicate improvements in riparian areas and better practices in fertilizer application. Statewide, 12 of the 17 major basins have one or more sites with an improving water quality trend. This is most likely due to the continued development and implementation of clean water plans, known as total daily maximum loads or TMDLs, in these areas.

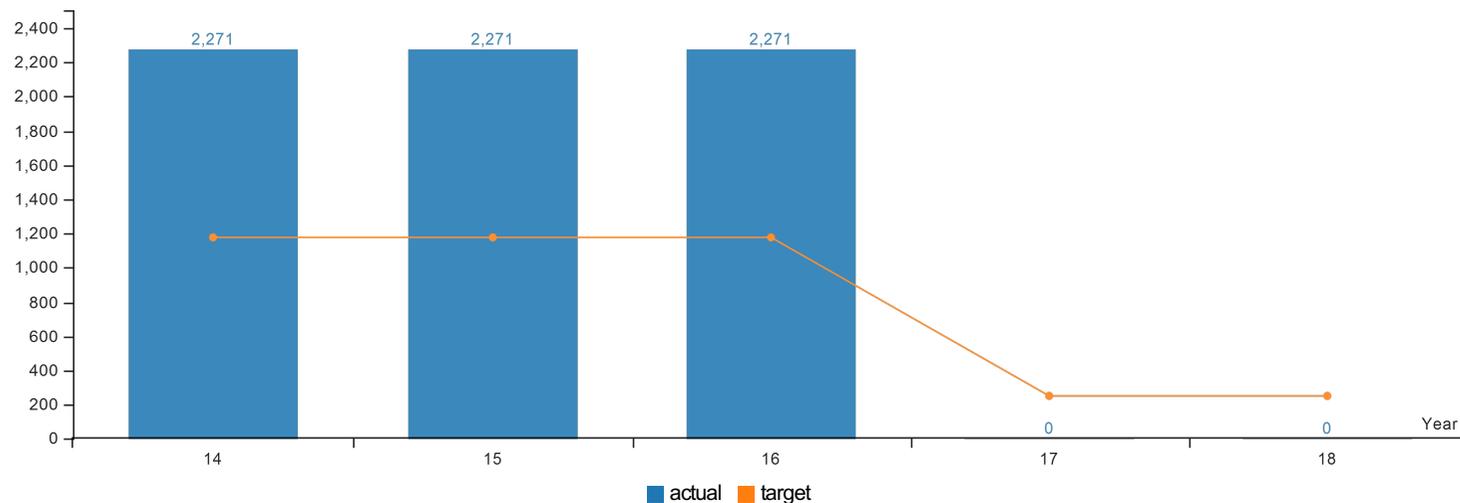
##### **7b. Percent of monitored stream sites with significantly declining trends in water quality**

Despite continued efforts by DEQ, Department of Forestry and Department of Agriculture to improve water quality around the state, factors out of agency control, such as the 2015 drought, can affect water quality in Oregon. Additionally, streams with poor riparian areas are more sensitive to the warmer summer temperatures Oregon has experienced in the last few years. DEQ believes that factors such as these can cause declines statewide. The 2015 trend data helps DEQ identify areas of concern in the state. Specifically, four sites (lower Deschutes basin- 2 sites; upper Grande Ronde basin - 1 site; and upper Willamette basin -1 site) have had declining trends for four or more consecutive years. These trends can imply a change in land use or water management issue, but at this time require further investigation.

##### **7c. Percent of monitored stream sites with good to excellent water quality**

The percent of monitored stream sites with good to excellent water quality has remained fairly steady since 2012. This leveling off indicates that DEQ's management of the state's water quality has been effective over the past decade. The three percent drop in this measure is likely based on the inclusion of 32 additional monitoring locations in predominantly agricultural areas (19 of these sites are funded by the Oregon Department of Agriculture). DEQ will continue to work with partners, like ODA, and monitor rivers and streams across the state to protect and improve Oregon's waters.

KPM #8	AIR QUALITY DIESEL EMISSIONS - Quantity of diesel particulate emissions.
	Data Collection Period: Jan 01 - Jan 01



Report Year	2014	2015	2016	2017	2018
<b>KPM8: Quantity of diesel particulate emissions (in tons)</b>					
Actual	2,271	2,271	2,271	No Data	No Data
Target	1,175	1,175	1,175	250	250

### How Are We Doing

Diesel particulate matter is a known human carcinogen. This health risk is present not only for those exposed in the workplace but also for about 92 percent of Oregon's population, based on the 2011 U.S. Environmental Protection Agency National Air Toxics Assessment, the most recent data available.

In 2007, the Oregon Legislature set a goal to reduce the risk from diesel emissions to one in a million by 2017, which would require a reduction of about 1,400 tons over that ten year period in addition to what was expected to be secured from normal fleet turnover to new, lower emitting engines. DEQ, along with many other partners, has used federal and state grants and tax credits to reduce about 60 tons of emissions since 2007 but this is far from the reductions needed. Fleet turnover in Oregon appears to lag behind modeled projections by 40 percent, meaning that the necessary reductions are even greater than the original projection. Solutions at the scale needed to meet the goal will come from either retrofitting exhaust controls, transition to alternative fuel engines including natural gas propane and electricity or accelerating scrapping and turnover to low emission diesel engines at higher rates than currently experienced.

DEQ derives the data for this measure from an assessment of all air pollutants from all sources in the state that EPA compiles every three years. The 2011 calendar year is the latest data available for this report.

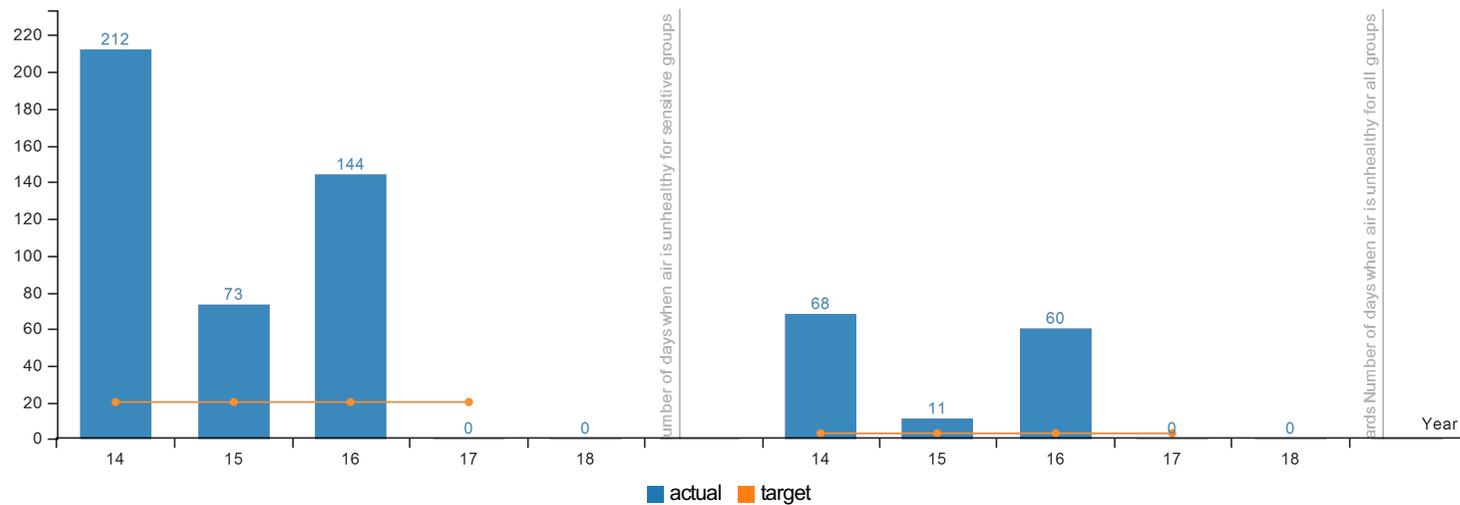
### Factors Affecting Results

Retrofitting exhaust controls is a highly cost effective environmental and public health protection measure. However, since this is a voluntary program, there is no regulatory or economic incentive for engine owners to purchase new low emitting equipment much before the end of useful life of existing equipment. Retrofits are difficult expenditures for fleet owners to undertake absent any other pressure to change. Financial assistance has been crucial to achieving the gains to date.

In 2007, when the Legislature set the diesel goal, they also appropriated \$1.0 million in state funds, as well as tax credits, for clean diesel projects. The economic downturn that quickly followed

placed extraordinary pressures on the state budget, and the Legislature eliminated the General Fund support in the 2009-2011 biennium. State tax credits for diesel projects sunset after 2011. Federal funding available through the Diesel Emission Reduction Act continues but at very reduced levels. The loss of funding for incentive programs has resulted in slower progress toward the target and legislative goal.

KPM #9	AIR QUALITY CONDITIONS - National Standards: Number of days when air is unhealthy for sensitive groups and all groups.
	Data Collection Period: Jan 01 - Jan 01



Report Year	2014	2015	2016	2017	2018
<b>National Standards Number of days when air is unhealthy for sensitive groups</b>					
Actual	212	73	144	No Data	No Data
Target	20	20	20	20	TBD
<b>National Standards Number of days when air is unhealthy for all groups</b>					
Actual	68	11	60	No Data	No Data
Target	3	3	3	3	TBD

### How Are We Doing

DEQ strives to fully protect public health from outdoor air pollution. DEQ developed this unhealthy air days measure in 2006 to reflect the annual trend in actual air quality for sensitive individuals - children, the elderly and people with existing medical conditions such as asthma, respiratory and heart problems - and all groups in the general population. The sensitive groups are at greater risk from the effects of air pollution than the general population. The measure indicates the number of days that sensitive groups and all groups of Oregonians breathe air that exceeds the federal health-based air quality standards for particulate matter, ozone (smog) and four other air pollutants.

Note: the 2016 report is based on data from calendar year 2015.

**SENSITIVE GROUPS:** In 2015, Oregon recorded 144 days when air was unhealthy for sensitive groups, up from 73 days in 2014. The unhealthy air days occurred in 29 cities or airsheds throughout the state. Of the 144 days, 122 days were attributable to forest or wildfires. This is by far the highest number of unhealthy air days attributable to forest or wildfires since DEQ began collecting data for this measure. Communities most impacted by forest or wild fires in 2015 were Shady Cove with 17 days, Medford with 14 days and Baker City with 10 days.

The 22 unhealthy air days unrelated to forest or wildfires were spread among nine communities with Medford and La Grande experiencing the most with five unhealthy air days each followed by Prineville with three days. The balance of days was spread among a number of communities. All but one of these unhealthy air days occurred in the wintertime when Oregon normally experiences the most unhealthy air days.

ALL GROUPS: In 2015, Oregon recorded 60 days when air was unhealthy for all groups, up from 11 days in 2014. The unhealthy air days occurred in 25 cities or airsheds throughout the state. Of the 60 unhealthy air days, 58 were attributable to forest or wildfires. This is by far the highest number of unhealthy air days attributable to forest or wildfires since DEQ began collecting data for this measure. Communities most impacted by the forest or wildfires in 2015 were Shady Cove with eight days, Medford with seven days and Enterprise and John Day with five days each.

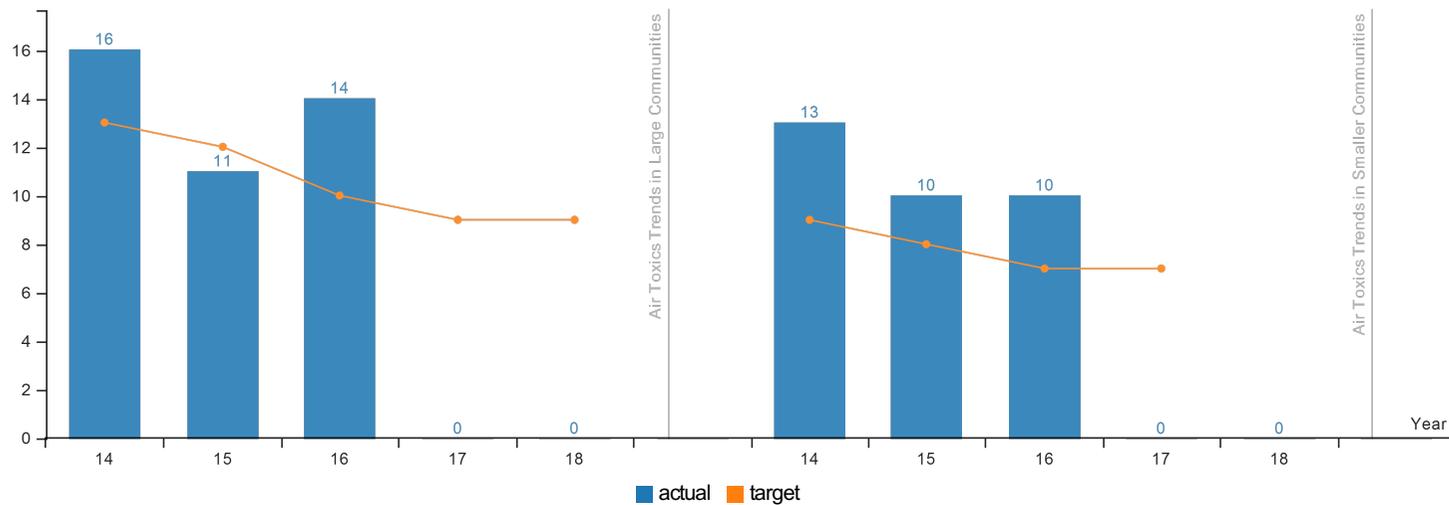
The two unhealthy air days for all groups unrelated to forest or wildfires were confined to one day in Albany and one day in La Grande. Both occurred in the wintertime when Oregon normally experiences the most unhealthy air days.

#### **Factors Affecting Results**

Air pollution levels caused by man-made sources are affected by the amount of pollution-generating activity occurring in each community, the amount of resources dedicated to pollution reduction and in many cases simply the weather. Very cold winters with periods of severe air stagnation can greatly intensify and increase fine particulate levels in communities. In the summer, prolonged periods of very hot temperatures combined with poor ventilation can intensify and increase ground level ozone (smog) pollution. Federal, state and local air pollution reduction programs, such as woodstove curtailment, education, cleaner car standards and industrial emission controls all work together to reduce air pollution. Air quality monitoring also plays a vital role in allowing DEQ and local governments to assess air quality and health risk conditions in communities and respond appropriately. Each forest fire season brings different air pollution impacts depending on the frequency, location and duration of forest fires. The air pollution trends presented in this Key Performance Measure reflects all these factors. In addition, medical research on the health effects of air pollution continues to advance, and EPA may continue to make national ambient air quality health standards more protective based on that science.

On October 1, 2015, EPA strengthened the National Ambient Air Quality Standards for ground-level ozone to 70 parts per billion from 75 ppb, based on extensive scientific evidence about ozone's effects on public health and welfare. All communities in Oregon currently meet the standard; however, Medford, Portland, Salem and Hermiston are closest to the standard with annual averages ranging between 60 ppb and 64 ppb.

KPM #10	AIR QUALITY - AIR TOXICS - Air Toxics Trends in Larger and Smaller Communities
	Data Collection Period: Jan 01 - Jan 01



Report Year	2014	2015	2016	2017	2018
<b>Air Toxics Trends in Large Communities</b>					
Actual	16	11	14	No Data	No Data
Target	13	12	10	9	9
<b>Air Toxics Trends in Smaller Communities</b>					
Actual	13	10	10	No Data	No Data
Target	9	8	7	7	TBD

### How Are We Doing

These 2016 measures are based on monitoring data DEQ collected in the 2015 calendar year.

Air toxics are chemicals in the air we breathe that are known or suspected to cause cancer as well as other detrimental health effects in people. Using current medical studies, DEQ has established threshold levels (i.e. air toxic benchmarks) for a variety of airborne toxic chemicals that represent levels of acceptable risk to the public. DEQ's KPM goal is to reduce monitored levels of five representative toxics - benzene, acetaldehyde, formaldehyde, arsenic and cadmium - down to the slight risk level one time above the benchmark for each pollutant by 2020. The benchmarks serve as clean air goals not regulatory standards. They are based on very protective concentrations at which sensitive members of the population would experience a negligible increase in risk of additional cancers or other health effects. The values for this measure are obtained by dividing the average annual monitored concentrations by DEQ benchmark values for each pollutant.

Large Communities: DEQ gathers data for this measure at a monitoring site located in the north/northeast quadrant of Portland on North Roselawn Street. The site is representative of a typical inner city neighborhood. Tracking air toxics trends in Portland provides information about changes in risk to Oregon's most populated and developed areas, communities with populations of 50,000 or more. Air toxics, as measured by trends in the five tracked pollutant concentrations, have improved significantly from an average concentration of 32 times above the health benchmark in 2004 to 14 times above the benchmark in 2015. Compared to 2014, the 2015 annual average level of acetaldehyde was twice as high, and the level of benzene was one time higher. This may be partly explained by the higher than usual winds and atmospheric mixing in 2014, and a return to more typical weather patterns in 2015. Statewide, pollutant levels were lower in 2014 because of the lack of strong inversions or air stagnation periods when air pollutants become more concentrated. Compared to 2012 and 2013, the five tracked air toxics continue to show downward trends in 2015.

Smaller Communities: Data for this measure is gathered at a mostly residential area on Ash Street in La Grande. The site is representative of a typical smaller community neighborhood. La Grande is a small community not influenced by surrounding development or heavy industrialization. Compared to larger communities, such as Portland, fewer air toxics in La Grande come from vehicle emissions. An interstate highway runs through La Grande, and it is a regional freight distribution center, but there are lower levels of congestion and traffic volume. Air toxics, as measured by trends in the five tracked pollutant concentrations, have improved from an average concentration of 15 times above the health benchmark in 2004 to about 10 times above the benchmark in 2015. Annual average levels of benzene, arsenic, acetaldehyde and formaldehyde in La Grande remained unchanged between 2014 and 2015.

#### **Factors Affecting Results**

Large Communities: In an urban area like Portland, air toxics are most influenced by emissions from cars and trucks, with additional influence from residential wood burning and, on a neighborhood level, emissions from industry and commercial activities. Portland is an ozone maintenance area in which industry has been required to control volatile organic compounds, many of which are also air toxics. Weather patterns, such as winter-time stagnation, high summer-time temperatures, and natural events, such as wildfires, can be significant factors resulting in high air toxics concentrations.

Smaller Communities: Of the five tracked pollutants in La Grande, benzene and acetaldehyde pose the most potential risk to public health, both are four times above the health benchmark. Sources of benzene in La Grande are residential wood combustion, cars and trucks, leaks in the gasoline distribution system, fossil fuel combustion for heat and energy, industrial emissions and background levels that presumably come from other developed areas.

Pollutant information:

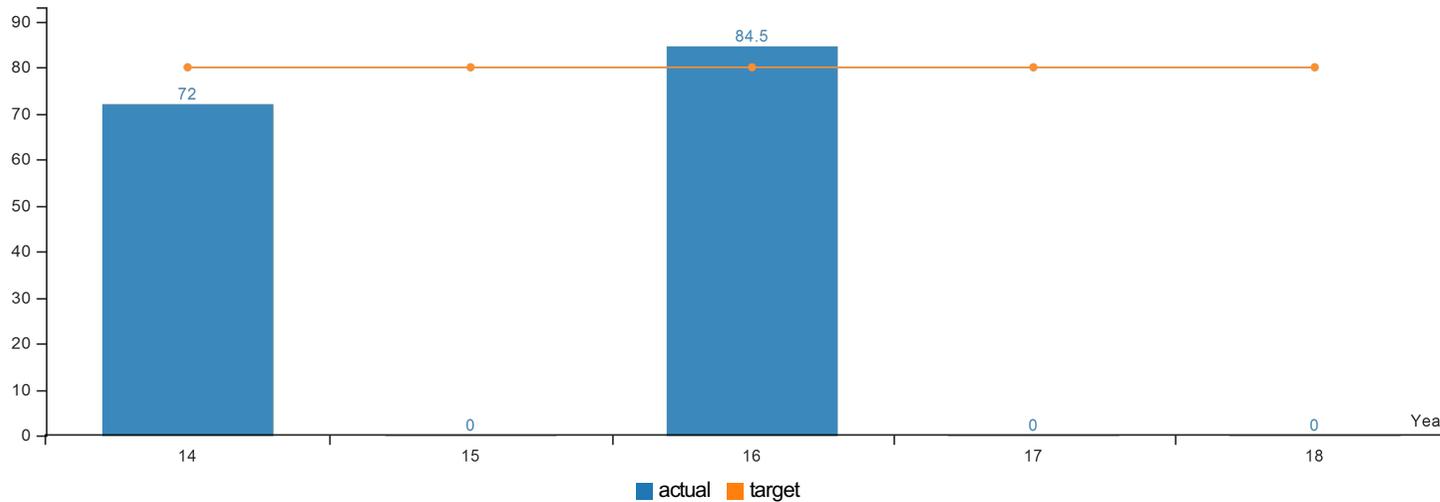
Sources of benzene are cars and trucks, leaks in the gasoline distribution system, residential wood combustion, fossil fuel combustion for heat and energy, industrial emissions and background levels that presumably come from other developed areas. Decreases in benzene are largely attributable to cleaner vehicle engines with improved fuel economy and federally mandated reduction of benzene in gasoline that took effect in 2011 and 2012. However, reductions may be offset by local increases in vehicle usage as population increases, the economy continues to improve and gasoline prices remain low.

Acetaldehyde and formaldehyde are produced by wood and fossil fuel combustion, but the largest quantities of these pollutants are produced through chemical formation in the atmosphere. Precursors in the chemical formation process are volatile organic compounds emitted from wood and fossil fuel combustion and vegetation. Acetaldehyde and formaldehyde values have not changed significantly since 2004. Pollutants formed through a complex secondary process are more difficult to decrease through emission reduction strategies than pollutants controlled at their primary sources.

Arsenic is predominantly from engines burning fossil fuels, natural gas and other petroleum products, and glass and metals industries. Arsenic values have dropped from a high of nine times above the benchmark in 2004 to levels fluctuating around four or five times above the benchmark for the last six years in Portland. DEQ expects that arsenic levels in Portland will decrease as the vehicle fleet continues to turn over to new and cleaner vehicles and fuel efficiency improves. Arsenic in Portland is also influenced by background concentrations because arsenic is present in local volcanic soils that become airborne as dust. Arsenic levels in La Grande have remained at the clean air goal of one time above the benchmark for the past ten years.

Levels of cadmium have ranged from four times above the benchmark in 2005 to levels fluctuating between one and two times above the benchmark since 2010. For several years, DEQ has investigated unidentified sources of cadmium in the Portland area. In 2016, DEQ in collaboration with federal moss researchers, identified art glass manufacturers as a significant source of cadmium in Portland and we are taking action to reduce these emissions. There is no cadmium measured in La Grande.

KPM #11	ERT - Percent of local participants who rank DEQ involvement in Economic Revitalization Team process as good to excellent.
	Data Collection Period: Jan 01 - Jan 01



Report Year	2014	2015	2016	2017	2018
<b>KPM11: Percent of local participants who rank DEQ involvement in Economic Revitalization Team process as good to excellent</b>					
Actual	72%	No Data	84.50%	No Data	No Data
Target	80%	80%	80%	80%	80%

### How Are We Doing

The Governor's Economic Revitalization Team (reorganized as Regional Solutions Team) conducts a biennial survey to measure customer satisfaction with RST service. The first survey was conducted in 2006. The 2016 survey included two additional groups of customers. Overall, it included advisory committee members, county commissioners, city mayors/managers/recorders, economic development directors and the Oregon Economic Development Association's board of directors. Out of 789 customers surveyed, 159 responded. Of the 159 respondents, 58 completed the question about DEQ's involvement specifically whether their project involved environmental permitting or other environmental quality issues.

The survey questions measure RST participants' perception of the involvement of four partner RST agencies which include DEQ, Oregon Department of State Lands, Oregon Department of Land Conservation and Development, and Oregon Department of Transportation. The 2016 survey criteria on agency involvement was based on the following question: "How do you rate the Oregon Department of Environmental Quality's involvement in the Regional Solutions process?" The desired outcome is the highest percentage of responses rating DEQ's performance as good to excellent.

DEQ met the target goal of receiving 80 percent good to excellent ratings. We have hovered around 75 percent favorable ranking for the past four biennial surveys. This year we received an 84.5 percent rating. This demonstrates that DEQ Regional Solution Team's outreach efforts and technical assistance are improving our relationship with communities.

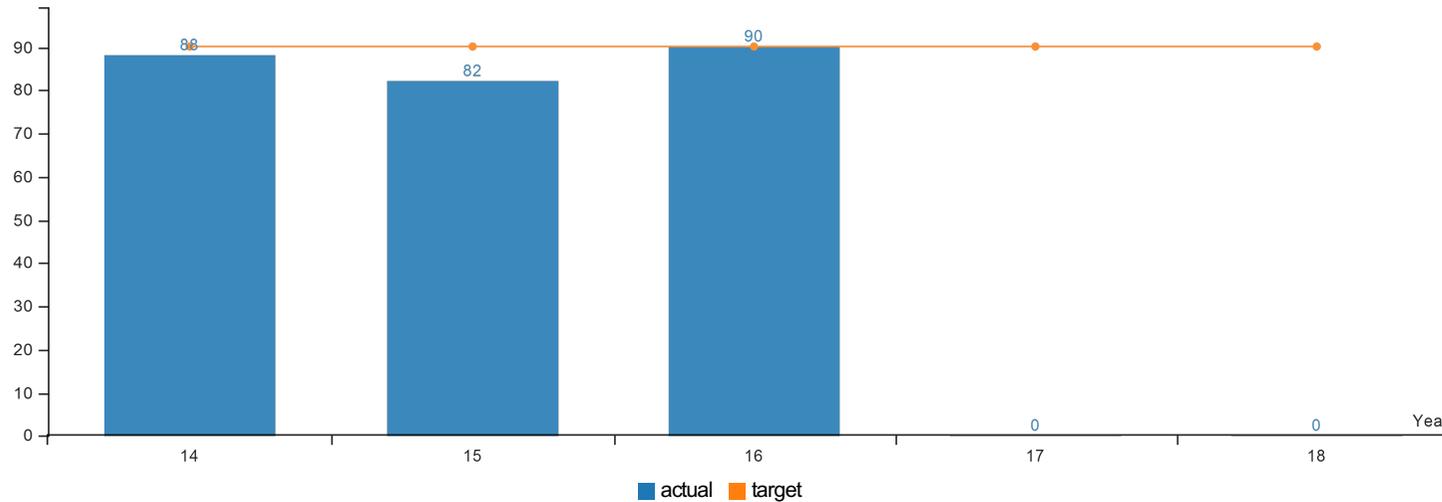
### Factors Affecting Results

DEQ's rating was 75.4 percent in 2012, 72.3 percent in 2014 and 84.5 percent in 2016. We contribute our success to several actions we have taken over the past two years:

- We have increased our outreach to communities over the past year
- We have convened or participated in task forces when problems were identified
- We have juggled resources to meet tight permitting deadlines for economic development when possible

It would be helpful if the same customers were surveyed from year to year, more customers responded and customers gave written feedback on what we are doing well and what we need to improve. We could then evaluate how we could improve our performance.

KPM #12	PERMIT TIMELINESS - Percent of Title V operating permits issued with the target period.
	Data Collection Period: Jan 01 - Dec 31



Report Year	2014	2015	2016	2017	2018
<b>KPM12: Air Quality Permit Timeliness: Title V Permits issued within Target</b>					
Actual	88%	82%	90%	No Data	No Data
Target	90%	90%	90%	90%	90%

**How Are We Doing**

Note: the 2016 report is based on 2015 calendar year data.

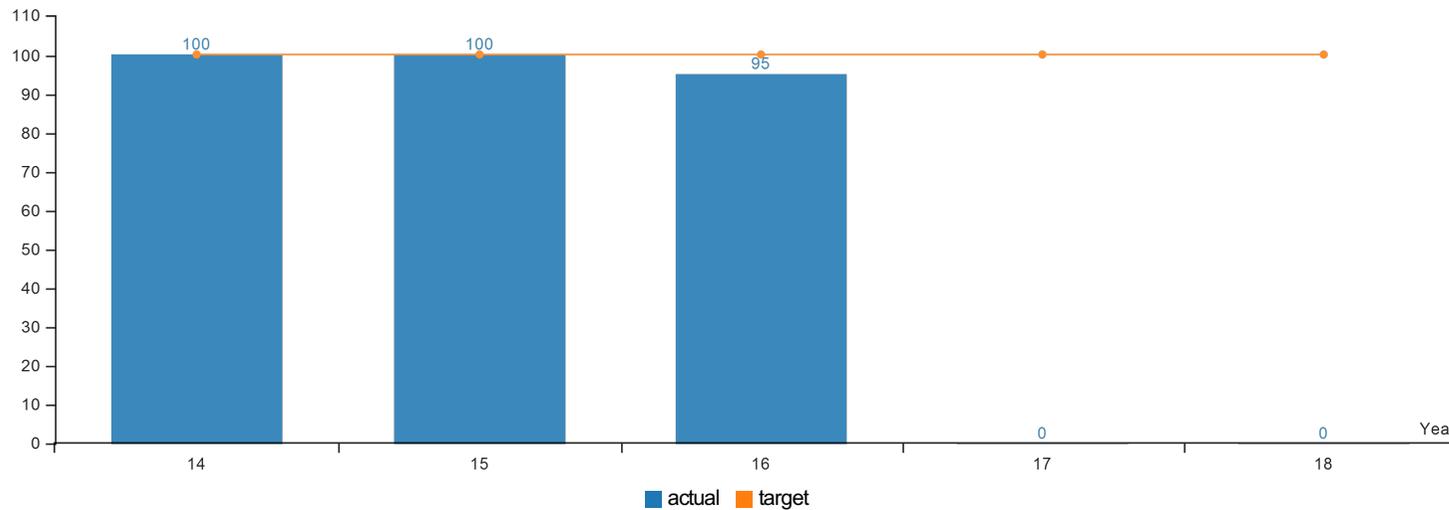
DEQ operates the Title V Permit program, which is required by the federal Clean Air Act for operating major sources of traditional “criteria” or hazardous air pollutants. These sources tend to be Oregon’s largest industrial facilities. In 2015, the Title V program met the 90 percent timeliness goal, an improvement over the 2014 timeliness of 82 percent.

Targets for issuing Title V permits range from 60 days to 365 days depending on the permit category and complexity. DEQ’s targets for permit issuance are six to sixteen months shorter than the 18-month period required by state and federal laws. All targets include the time necessary for a public notice period during which citizens can comment on the permit and request a public hearing. It is important that the public has this opportunity to participate in a review process and help DEQ to ensure protection of public health.

**Factors Affecting Results**

In 2015, the Air Quality permitting program implemented a new approach to manage the workload, increase permit timelines, reduce the permit backlog and make sure the highest priority permit applications are processed in a timely manner. Regional air managers developed a permit issuance plan for the October 1, 2015 through September 30, 2016 permitting and inspection year. The plan lists each permit application that DEQ will process during this timeframe and the anticipated timeline for issuing the permit. The permitting plan is updated quarterly and an explanation must be provided if a permit is not issued by the expected date. This new process ensures that regional managers and permitting staff are held accountable for issuing permits in a timely manner and provides data that can be used to help accurately forecast the time needed to issue permits.

KPM #13	BOARDS AND COMMISSIONS - Percent of total best practices met by the Environmental Quality Commission.
	Data Collection Period: Jan 01 - Jan 01



Report Year	2014	2015	2016	2017	2018
<b>KPM13: Percent of total best practices met by the Environmental Quality Commission</b>					
Actual	100%	100%	95%	No Data	No Data
Target	100%	100%	100%	100%	100%

**How Are We Doing**

Overall, the survey results indicate that the Environmental Quality Commission members have a high level of knowledge about the commission's and DEQ's operations, roles and responsibilities. The performance measure has a summary target of 100 percent, and the 2016 self-evaluation, assessing the 2015 meeting year, had a summary average total of 95 percent.

**Factors Affecting Results**

In meeting-year 2015, DEQ had several key communications positions vacant. The commissioners noted in their survey results that these vacancies negatively affected DEQ's ability to provide frequent and comprehensive communications updates to commissioners. DEQ has filled the positions during meeting-year 2016, which has resulted in a noticeable improvement.

Name: Bold on QMR, Italics child measure	Rollup Measure Name	Measure Description	Reporting Quarter	Target	Green Range	Yellow Range	Red Range	Direction for green
--	---------------------	---------------------	-------------------	--------	-------------	--------------	-----------	---------------------

## Outcome

### Timeliness

<b>Timeliness</b>		Timeliness percentage by using 5 points for green, 2.5 yellow and 0 red and dividing by the total possible. All weighting is currently 1:1. (Weighted Points)	All year	> 85%	> 85%	50 - 85%	< 50%	Higher
<i>VIP Wait time</i>	Timeliness	The average number of minutes that motorists spent waiting at vehicle inspection stations.	All year	< 15 minutes	< 15 minutes	15 - 30 minutes	> 30 minutes	Lower

### Sustainability goal performance

<b>GHG Emissions from Fleet Vehicle Fuel Use</b>		Greenhouse gas emissions from DEQ fleet vehicles over the preceding 12 months, measured as metric tonnes CO2 equivalent, based on fuel purchases made with DAS gas cards.	All year	<367.5 metric tonnes CO2e	<= 367.5 metric tonnes CO2e	367.5-408.3 metric tonnes CO2e	> 408.3 metric tonnes CO2e	Lower
--	--	---	----------	---------------------------	-----------------------------	--------------------------------	----------------------------	-------

Name: Bold on QMR, Italics child measure	Rollup Measure Name	Measure Description	Reporting Quarter	Target	Green Range	Yellow Range	Red Range	Direction for green
---	------------------------	---------------------	----------------------	--------	----------------	-----------------	--------------	------------------------

## Operating Process

### *Assessing Environmental Conditions*

<b>Analytical Turnaround Time</b>	Timeliness	Percent of cases on time by quarter	All year	80%	> 80%	65 - 79%	< 65%	Higher
-----------------------------------	------------	-------------------------------------	----------	-----	-------	----------	-------	--------

Name: Bold on QMR, Italics child measure	Rollup Measure Name	Measure Description	Reporting Quarter	Target	Green Range	Yellow Range	Red Range	Direction for green
---	------------------------	---------------------	----------------------	--------	----------------	-----------------	--------------	------------------------

## Operating Process

### *Assessing Environmental Conditions*

<b>LEAD Quality Systems Measure</b>		This is a composite measure of the overall health of the LEAD Quality System. The measure incorporates the status of 7 quality system measures and 2 data quality measures. (Weighted Points)	All year	> 85%	> 80%	50 - 80%	< 50%	Higher
<i>Completeness</i>	LEAD Quality Systems Measure	This is a measure of % completeness. "Completeness" is a measure of reported usable data relative to the total amount of data generated for a month. Generally speaking data reported with a DQL of A or B are considered useable	All year	> 95%	> 95%	90 - 95%	< 90%	Higher
<i>Data Integrity Training</i>	LEAD Quality Systems Measure	Status of LEAD employees that are current on mandatory Data Integrity training. Status is calculated based on the time since last training. < 14 mos - Green 14-18 mos-yellow > 18 mos - Red	All year	5 on Score	> 4 on Score	3 - 4 on Score	< 3 on Score	Higher
<i>LEAD Quality Manual</i>	LEAD Quality Systems Measure	Measuring the time since the last LEAD Quality Manual was reviewed and/or updated.  Goal is annual	All year	< 12 Months	< 13 Months	13 - 18 Months	> 18 Months	Lower

Name: Bold on QMR, Italics child measure	Rollup Measure Name	Measure Description	Reporting Quarter	Target	Green Range	Yellow Range	Red Range	Direction for green
--	---------------------	---------------------	-------------------	--------	-------------	--------------	-----------	---------------------

## Operating Process

### *Assessing Environmental Conditions*

<i>Number of Data Corrections Past Due</i>	LEAD Quality Systems Measure	LEAD's ability to make timely corrections to past data when errors are identified. Measurement: Count of Data correction (DCP) items that have not been resolved before a pre-determined due date.	All year	0 DCP	< 2 DCP	2 - 6 DCP	> 6 DCP	Lower
<i>Number of Open Corrective Actions Past Due</i>	LEAD Quality Systems Measure	LEAD's ability to set and achieve goals for making corrective actions when identified as a preventative action, or as a corrective action identified from internal audits, external audits, complaints, or during routine activities.	All year	0 CARs	< 5 CARs	5 - 10 CARs	> 10 CARs	Lower
<i>Percentage of Current SOP's</i>	LEAD Quality Systems Measure	LEAD's ability to have current and approved procedures for sampling, analysis, and Quality Activities. Current is defined as 3 years since last review except for SOPs that relate to the EPA Drinking Water program (1 year)	All year	>95%	> 90%	75 - 90%	< 75%	Higher
<i>Proficiency Testing Performance</i>	LEAD Quality Systems Measure	LEAD's ability to correctly analyze single blind Proficiency Test samples  > 95% acceptable scoring	All year	> 95%	> 95%	90 - 95%	< 90%	Higher
<i>Proficiency Testing Performance -Regulatory Compliance</i>	LEAD Quality Systems Measure	LEAD's ability to meet proficiency testing performance relative to accreditation, regulatory, or program requirements.	All year	> 95%	> 95%	90 - 95%	< 90%	Higher

Name: Bold on QMR, Italics child measure	Rollup Measure Name	Measure Description	Reporting Quarter	Target	Green Range	Yellow Range	Red Range	Direction for green
---	------------------------	---------------------	----------------------	--------	----------------	-----------------	--------------	------------------------

## Operating Process

### *Assessing Environmental Conditions*

<i>Quality Management Review</i>	LEAD Quality Systems Measure	Measuring the time since the last annual LEAD QMR	All year	< 12 Months	< 13 Months	13 - 18 Months	> 18 Months	Lower
----------------------------------	---------------------------------	--	----------	----------------	----------------	-------------------	----------------	-------

### *Developing environmental solutions*

<b>WQ Permits Issued to Plan</b>		The percentage of success each quarter in meeting pre-planned commitments for permit issuance and renewal contained on the current and correlating FFY statewide WQ permit issuance plan	All year	80	80-100	60-79	0-59	Higher
----------------------------------	--	---	----------	----	--------	-------	------	--------

### *Implementing environmental solutions*

<b>Supplemental environmental projects completed</b>		The percentage of cases mitigated by SEPs in relation to number of final orders reached through settlement offers in the reporting period.	All year	19%	> 16%	13 - 15%	< 13%	Higher
--	--	--	----------	-----	-------	----------	-------	--------

Name: Bold on QMR, Italics child measure	Rollup Measure Name	Measure Description	Reporting Quarter	Target	Green Range	Yellow Range	Red Range	Direction for green
--	---------------------	---------------------	-------------------	--------	-------------	--------------	-----------	---------------------

## Operating Process

### *Permitting*

<b>Percent of permits current</b>		Permit sub-categories meeting target. (Weighted percentage)	All year	> 90%	> 85%	70 - 85%	< 70%	Higher
<i>Individual ACDP Permits Current</i>	Percent of permits current	Percent of active individual ACDP permits are current (not expired)	All year	> 90%	> 85%	70 - 85%	< 70%	Higher
<i>Individual NPDES Permits Current</i>	Percent of permits current	Percent of active individual NPDES permits are current (not expired)	All year	> 90%	> 85%	70 - 85%	< 70%	Higher
<i>Individual Title V Permits Current</i>	Percent of permits current	Percent of active Title V permits are current (not expired)	All year	> 90%	> 85%	70 - 85%	< 70%	Higher
<i>Individual WPCF Permits Current</i>	Percent of permits current	What percent of active individual WPCF permits are current (not expired)	All year	> 90%	> 85%	70 - 85%	< 70%	Higher
<i>Solid Waste Composting Permits Current</i>	Percent of permits current	What percent of active Solid Waste composting permits are current (not expired)	All year	> 90%	> 85%	70 - 85%	< 70%	Higher
<i>Solid Waste Industrial Permits Current</i>	Percent of permits current	What percent of active Solid Waste Industrial permits are current (not expired)	All year	> 90%	> 85%	70 - 85%	< 70%	Higher
<i>Solid Waste Municipal Permits Current</i>	Percent of permits current	What percent of active Solid Waste MSW permits are current (not expired)	All year	> 90%	> 85%	70 - 85%	< 70%	Higher
<i>Solid Waste Tire permits Current</i>	Percent of permits current	What percent of solid waste tire permits are current (not expired)	All year	> 90%	> 85%	70 - 85%	< 70%	Higher

Name: Bold on QMR, Italics child measure	Rollup Measure Name	Measure Description	Reporting Quarter	Target	Green Range	Yellow Range	Red Range	Direction for green
--	---------------------	---------------------	-------------------	--------	-------------	--------------	-----------	---------------------

## Operating Process

### *Determining Compliance*

<b>Compliance - Tanks - UST</b>		Percentage of Underground Storage Tank (UST) facility inspections in the last Qrt in significant operational compliance (SOC) with operating conditions (both leak detection and equip as defined by the EPA.	All year	>85%	> 85%	80 - 85%	< 80%	Higher
<b>Timely closure of complaints</b>	Timeliness	Percentage of complaints open >90 days within the previous quarter	All year	< 10%	< 10%	10 - 25%	> 25%	Lower
<b>Significant Operational Compliance Inspections</b>		The percentage of inspections where the latest facility inspection in the last Qrt occurred within 3 years of the last one.	All year	95%	> 95%	90 - 95%	< 90%	Higher

Name: Bold on QMR, Italics child measure	Rollup Measure Name	Measure Description	Reporting Quarter	Target	Green Range	Yellow Range	Red Range	Direction for green
--	---------------------	---------------------	-------------------	--------	-------------	--------------	-----------	---------------------

## Operating Process

### *Determining Compliance*

<i>Inspections conducted on schedule - Construction Stormwater &lt; 5 Acres - Eastern Region</i>	Inspections conducted on schedule - Water Quality	Percent of Construction Stormwater < 5 Acres required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - Construction Stormwater &lt; 5 Acres - Northwest Region</i>	Inspections conducted on schedule - Water Quality	Percent of Construction Stormwater < 5 Acres required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - Construction Stormwater &lt; 5 Acres - Western Region</i>	Inspections conducted on schedule - Water Quality	Percent of Construction Stormwater < 5 Acres required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - Construction Stormwater &gt; 5 Acres - Eastern Region</i>	Inspections conducted on schedule - Water Quality	Percent of Construction Stormwater > 5 Acres required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - Construction Stormwater &gt; 5 Acres - Northwest Region</i>	Inspections conducted on schedule - Water Quality	Percent of Construction Stormwater > 5 Acres required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher

Name: Bold on QMR, Italics child measure	Rollup Measure Name	Measure Description	Reporting Quarter	Target	Green Range	Yellow Range	Red Range	Direction for green
--	---------------------	---------------------	-------------------	--------	-------------	--------------	-----------	---------------------

## Operating Process

### ***Determining Compliance***

<i>Inspections conducted on schedule - Construction Stormwater &gt; 5 Acres - Western Region</i>	Inspections conducted on schedule - Water Quality	Percent of Construction Stormwater > 5 Acres required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - Industrial Stormwater - Eastern Region</i>	Inspections conducted on schedule - Water Quality	Percent of Industrial Stormwater required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - Industrial Stormwater - Northwest Region</i>	Inspections conducted on schedule - Water Quality	Percent of Industrial Stormwater required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - Industrial Stormwater - Western Region</i>	Inspections conducted on schedule - Water Quality	Percent of Industrial Stormwater required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - WQ Major Individual Permits - Eastern Region</i>	Inspections conducted on schedule - Water Quality	Percent of Major Individual Permit facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher

Name: Bold on QMR, Italics child measure	Rollup Measure Name	Measure Description	Reporting Quarter	Target	Green Range	Yellow Range	Red Range	Direction for green
--	---------------------	---------------------	-------------------	--------	-------------	--------------	-----------	---------------------

## Operating Process

### *Determining Compliance*

<i>Inspections conducted on schedule - WQ Major Individual Permits - Northwest Region</i>	Inspections conducted on schedule - Water Quality	Percent of Major Individual Permit facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - WQ Major Individual Permits - Western Region</i>	Inspections conducted on schedule - Water Quality	Percent of Major Individual Permit facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - WQ Minor Individual Permits - Eastern Region</i>	Inspections conducted on schedule - Water Quality	Percent of Minor Individual Permit facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - WQ Minor Individual Permits - Northwest Region</i>	Inspections conducted on schedule - Water Quality	Percent of Minor Individual Permit facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - WQ Minor Individual Permits - Western Region</i>	Inspections conducted on schedule - Water Quality	Percent of Minor Individual Permit facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher

Name: Bold on QMR, Italics child measure	Rollup Measure Name	Measure Description	Reporting Quarter	Target	Green Range	Yellow Range	Red Range	Direction for green
--	---------------------	---------------------	-------------------	--------	-------------	--------------	-----------	---------------------

## Operating Process

### *Determining Compliance*

<i>Inspections conducted on schedule - ACDP Basic Permits - Eastern Region</i>	Inspections conducted on schedule - Air Quality	Percent of Basic ACDP facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - ACDP Basic Permits - Northwest Region</i>	Inspections conducted on schedule - Air Quality	Percent of Basic ACDP facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - ACDP Basic Permits - Western Region</i>	Inspections conducted on schedule - Air Quality	Percent of Basic ACDP facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - ACDP General Permits - Eastern Region</i>	Inspections conducted on schedule - Air Quality	Percent of General ACDP facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - ACDP General Permits - Northwest Region</i>	Inspections conducted on schedule - Air Quality	Percent of General ACDP facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - ACDP General Permits - Western Region</i>	Inspections conducted on schedule - Air Quality	Percent of General ACDP facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher

Name: Bold on QMR, Italics child measure	Rollup Measure Name	Measure Description	Reporting Quarter	Target	Green Range	Yellow Range	Red Range	Direction for green
--	---------------------	---------------------	-------------------	--------	-------------	--------------	-----------	---------------------

## Operating Process

### *Determining Compliance*

<i>Inspections conducted on schedule - ACDP Simple Permits - Eastern Region</i>	Inspections conducted on schedule - Air Quality	Percent of Simple ACDP facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - ACDP Simple Permits - Northwest Region</i>	Inspections conducted on schedule - Air Quality	Percent of Simple ACDP facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - ACDP Simple Permits - Western Region</i>	Inspections conducted on schedule - Air Quality	Percent of Simple ACDP facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - ACDP Standard Permits - Eastern Region</i>	Inspections conducted on schedule - Air Quality	Percent of Standard ACDP facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - ACDP Standard Permits - Northwest Region</i>	Inspections conducted on schedule - Air Quality	Percent of Standard ACDP facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - ACDP Standard Permits - Western Region</i>	Inspections conducted on schedule - Air Quality	Percent of Standard ACDP facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher

Name: Bold on QMR, Italics child measure	Rollup Measure Name	Measure Description	Reporting Quarter	Target	Green Range	Yellow Range	Red Range	Direction for green
--	---------------------	---------------------	-------------------	--------	-------------	--------------	-----------	---------------------

## Operating Process

### *Determining Compliance*

<i>Inspections conducted on schedule - Title V Permits - Eastern Region</i>	Inspections conducted on schedule - Air Quality	Percent of Title V facilities to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - Title V Permits - Northwest Region</i>	Inspections conducted on schedule - Air Quality	Percent of Title V facilities to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - Title V Permits - Western Region</i>	Inspections conducted on schedule - Air Quality	Percent of Title V facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher

Name: Bold on QMR, Italics child measure	Rollup Measure Name	Measure Description	Reporting Quarter	Target	Green Range	Yellow Range	Red Range	Direction for green
--	---------------------	---------------------	-------------------	--------	-------------	--------------	-----------	---------------------

## Operating Process

### *Determining Compliance*

<i>Inspections conducted on schedule - HW LQG facilities - Eastern Region</i>	Inspections conducted on schedule - Land Quality	Percent of HW Large Quantity Generator (LQG) facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - HW LQG facilities - Northwest Region</i>	Inspections conducted on schedule - Land Quality	Percent of HW Large Quantity Generator (LQG) facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - HW LQG facilities - Western Region</i>	Inspections conducted on schedule - Land Quality	Percent of HW Large Quantity Generator (LQG) facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - HW SQG facilities - Eastern Region</i>	Inspections conducted on schedule - Land Quality	Percent of HW Small Quantity Generator (SQG) facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - HW SQG facilities - Northwest Region</i>	Inspections conducted on schedule - Land Quality	Percent of HW Small Quantity Generator (SQG) facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher

Name: Bold on QMR, Italics child measure	Rollup Measure Name	Measure Description	Reporting Quarter	Target	Green Range	Yellow Range	Red Range	Direction for green
--	---------------------	---------------------	-------------------	--------	-------------	--------------	-----------	---------------------

## Operating Process

### ***Determining Compliance***

<i>Inspections conducted on schedule - HW SQG facilities - Western Region</i>	Inspections conducted on schedule - Land Quality	Percent of HW Small Quantity Generator (SQG) facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - Solid Waste Permits - Eastern Region</i>	Inspections conducted on schedule - Land Quality	Percent of Solid Waste Permit facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - Solid Waste Permits - Northwest Region</i>	Inspections conducted on schedule - Land Quality	Percent of Solid Waste Permit facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<i>Inspections conducted on schedule - Solid Waste Permits - Western Region</i>	Inspections conducted on schedule - Land Quality	Percent of Solid Waste Permit facilities required to be inspected that are inspected to date for the reporting year. 3rd quarter QMR is reporting for the prior inspection year.	All year	100%	> 90%	80 - 90%	< 80%	Higher
<b>Inspections conducted on schedule - Air Quality</b>		Cumulative percent of air quality facilities required to be inspected that are inspected to date for the federal fiscal year. 3rd quarter QMR is reporting for the prior inspection year	All year	>90%	> 90%	80-90%	< 80%	Higher

Name: Bold on QMR, Italics child measure	Rollup Measure Name	Measure Description	Reporting Quarter	Target	Green Range	Yellow Range	Red Range	Direction for green
--	---------------------	---------------------	-------------------	--------	-------------	--------------	-----------	---------------------

## Operating Process

### *Determining Compliance*

<b>Inspections conducted on schedule - Water Quality</b>		Cumulative percent of water quality facilities required to be inspected that are inspected to date for the federal fiscal year. 3rd quarter QMR is reporting for the prior inspection year.	All year	>90%	>90%	80-90%	<80%	Higher
<b>Inspections conducted on schedule - Land Quality</b>		Cumulative percent of Hazardous and Solid Waste facilities required to be inspected that are inspected to date for the federal fiscal year. 3rd quarter QMR is reporting for the prior inspection year.	All year	>90%	>90%	80-90%	<80%	Higher

Name: Bold on QMR, Italics child measure	Rollup Measure Name	Measure Description	Reporting Quarter	Target	Green Range	Yellow Range	Red Range	Direction for green
--	---------------------	---------------------	-------------------	--------	-------------	--------------	-----------	---------------------

## Operating Process

### *Enforcing Environmental Law*

<b>Proposed Orders in Contested Case Hearings that ALJ upheld all violations alleged.</b>		Percentage of Proposed Orders issued during the reporting period that upheld the Department's alleged violations	All year	100%	> 90%	80 - 90%	< 80%	Higher
<b>Timeliness of issuing formal enforcement actions</b>	Timeliness	Median number of work days between day OCE receives referral and day formal enforcement action issued during the reporting period.	All year	32	< 35 Days	36 - 45 Days	> 45 Days	Lower
<b>Resolved compliance orders</b>		Point score percentage of all cases in compliance as of the scheduled compliance date, out of all the cases with scheduled compliance dates in the previous quarter. (Weighted Points)	All year	100%	80%	66 - 80%	< 66%	Higher
<i>Resolved compliance orders ("other" orders)</i>	Resolved compliance orders	Percentage of all cases in compliance as of the scheduled compliance date, out of all the cases with scheduled compliance dates in "other" orders in the previous quarter.	All year	70%	> 70%	50 - 70%	<50%	Higher
<i>Resolved compliance orders (default final orders)</i>	Resolved compliance orders	Percentage of all cases in compliance as of the scheduled compliance date, out of all the cases with scheduled compliance dates in default final orders.	All year	50%	> 50%	30 - 49%	< 30%	Higher
<i>Resolved compliance orders (MAOs)</i>	Resolved compliance orders	Percentage of all cases in compliance as of the scheduled compliance date in MAOs, out of all the cases with scheduled compliance dates in MAOs in the previous quarter.	All year	90%	90 - 100%	75 - 90%	< 75%	Higher

Name: Bold on QMR, Italics child measure	Rollup Measure Name	Measure Description	Reporting Quarter	Target	Green Range	Yellow Range	Red Range	Direction for green
--	---------------------	---------------------	-------------------	--------	-------------	--------------	-----------	---------------------

## Support Process

### *Meeting operational requirements*

<b>Timely completion of records requests</b>		Percent of records requests are completed within 30 days of receipt.  30 days is based on state/attorney general requirements.	All year	95%	> 85%	70 - 85%	< 70%	Higher
--	--	--	----------	-----	-------	----------	-------	--------

### *Ensuring a safe work environment*

<b>Cost of time Lost</b>		Total cost of time lost due to unsafe actions (accidents and injuries)	All year	12500	< 25,000	25,000 - 60,000	> 60,000	Lower
<b>Cost of medical expenses</b>		Total cost of medical expenses due to unsafe actions (accidents and injuries)	All year	12500	< 15,000	15,000 - 25,000	> 25,000	Lower
<b>Safety hazards corrected by deadline</b>		Potential safety hazards identified through quarterly checks that are resolved within 90 days	All year	> 95%	> 95%	90 - 95%	< 90%	Higher
<b>Number of accidents per miles driven statewide</b>		The total number of accidents per 325,000 miles driven statewide.	All year	0 per 325,000 miles	1 per 325,000 miles	2 per 325,000 miles	>2 per 325,000 miles	Lower
<i>Facility/site inspections completed</i>	Implementation of agency safety plan	Percent of required safety measures conducted agencywide in accordance with safety plan	All year	100%	> 95%	90 - 95%	< 90%	Higher

Name: Bold on QMR, Italics child measure	Rollup Measure Name	Measure Description	Reporting Quarter	Target	Green Range	Yellow Range	Red Range	Direction for green
--	---------------------	---------------------	-------------------	--------	-------------	--------------	-----------	---------------------

## Support Process

### *Engaging Employees*

<b>Days to hire</b>		The number of days elapsed between the time a managers signs a staffing request and the successful applicant starts the position.	All year	76 Days	< 76 Days	76 - 120 Days	> 120 Days	Lower
<b>Employees engaged in career development</b>		Percentage of employees engaged in career development which includes mentorship, job shadows, job rotations and formal career development.	All year	20%	> 10%	5 - 10%	< 5%	Higher
<b>State training benchmark</b>		Percent of employees meeting the benchmark of a minimum of 20 hours of training/year.	All year	95%	> 90%	70 - 90%	< 70%	Higher

### *Managing resources*

<b>Meeting mileage requirements</b>		Percent of underutilized vehicles	All year	2%	< 5%	6 - 15%	> 15%	Lower
<b>SPOTS Log Error Rate</b>		Percent of SPOTS logs without errors	All year	> 90%	> 90%	80 - 90%	< 80%	Higher
<b>Deposit Timeliness</b>		Percent of days meeting deposit timeliness standard	All year	> 95%	> 95%	75 - 95%	< 75%	Higher
<b>Cost of timesheet corrections</b>		Hours spent correcting prior months Q-Time coding errors	All year	< 10 Hours	< 10 Hours	10 - 20 Hours	> 20 Hours	Lower
<b>Accounting Change Orders</b>		Number of accounting change orders per quarter	All year	< 5 ACOs	< 5 ACOs	6 - 15 ACOs	> 15 ACOs	Lower

Name: Bold on QMR, Italics child measure	Rollup Measure Name	Measure Description	Reporting Quarter	Target	Green Range	Yellow Range	Red Range	Direction for green
--	---------------------	---------------------	-------------------	--------	-------------	--------------	-----------	---------------------

## Support Process

### *Providing information infrastructure*

<b>IT Systems Uptime</b>		Rollup of Email, Internet and Network uptime for both business and after hours. (Weighted percentage)	All year	> 90%	> 90%	80 - 90%	< 80%	Higher
<i>Email System Uptime - After hours</i>	IT Systems Uptime	Percent of time that systems are available to DEQ employees. Availability of Exchange Email via Outlook and (OWA) Outlook web access email clients. This includes email communications, calendaring, task management, notes and contact management.	All year	95.0%	> 95.0%	90.0 - 95.0%	< 90.0%	Higher
<i>Email System Uptime - Business hours</i>	IT Systems Uptime	Percent of time that systems are available to DEQ employees. Availability of Exchange Email via Outlook and (OWA) Outlook web access email clients. This includes email communications, calendaring, task management, notes and contact management.	All year	99.9%	> 99.9%	98.0 - 99.9%	< 98.0%	Higher
<i>Internet Availability - After Hours</i>	IT Systems Uptime	Percent of time that Internet services are available to DEQ employees.  Availability of internet during normal business hours. Measures multiple user outages.	All year	95.0%	> 95.0%	90.0 - 95.0%	< 90.0%	Higher

Name: Bold on QMR, Italics child measure	Rollup Measure Name	Measure Description	Reporting Quarter	Target	Green Range	Yellow Range	Red Range	Direction for green
--	---------------------	---------------------	-------------------	--------	-------------	--------------	-----------	---------------------

## Support Process

### *Providing information infrastructure*

<i>Internet Availability - Business Hours</i>	IT Systems Uptime	Percent of time that Internet services are available to DEQ employees.  Availability of internet during normal business hours. Measures multiple user outages.	All year	99.9%	> 99.9%	98.0 - 99.9%	< 98.0%	Higher
<i>Network Systems Uptime - After Hours</i>	IT Systems Uptime	Percent of time that network is available for DEQ employees.  Availability of network resources, including the ability to login and access work directories during normal business hours. Measures multiple user outages.	All year	95.0%	> 95.0%	90.0 - 95.0%	< 90.0%	Higher
<i>Network Systems Uptime - Business Hours</i>	IT Systems Uptime	Percent of time that network is available for DEQ employees.  Availability of network resources, including the ability to login and access work directories during normal business hours. Measures multiple user outages.	All year	99.9%	> 99.9%	98.0 - 99.9%	< 98.0%	Higher
<b>Technology Project Tracking</b>		Rollup of project status for technology related projects	All year	90%	>90	85- 89.9%	<84	Higher

# DEQ Quarterly Measure Review

4th Quarter - 2016

Oct, Nov, Dec

Total Measures on QMR: 41

Total measure data was collected on: 101

Rollup	Description	Target	Green Range	Yellow Range	Red Range	Season	Current Status	Actions	Trend	Measure Owner
--------	-------------	--------	-------------	--------------	-----------	--------	----------------	---------	-------	---------------

## Outcome

### Employee Engagement

Employee Engagement Survey	<a href="#">chart</a>		Score from seven questions	80%	> 72%	66 - 72%	< 66%	All year		No measurable data for quarter	None Selected	Kerri Nelson
----------------------------	-----------------------	--	----------------------------	-----	-------	----------	-------	----------	--	--------------------------------	---------------	--------------

### Customer Experience

VIP Customer Service	<a href="#">chart</a>		The percent of motorists that rate VIP's customer service as excellent or good.	95%	> 85%	70 - 85%	< 70%	All year	<b>96.95</b>		Neutral	Gerry Preston
----------------------	-----------------------	--	---	-----	-------	----------	-------	----------	--------------	--	---------	---------------

### Process performance

Process measures in the Green	<a href="#">chart</a>		Percent of core process measures being reported on that are within their green range.	80%	> 80%	50 - 80%	< 50%	All year	<b>63.7</b>	Continue to monitor	Neutral	Leah Feldon
Outcome measures in the Green	<a href="#">chart</a>		Percent of core Outcome measures being reported on that are within their green range.	80%	> 80%	50 - 80%	< 50%	All year	<b>50</b>	Continue to monitor	Neutral	Leah Feldon
Percent of measures in red or yellow involved in process improvement	<a href="#">chart</a>		Total number of measures involved in process improvement divided by number of red measures.	80%	> 75%	50 - 75%	< 50%	All year	<b>84.8</b>	Measure or data needs refinement	Neutral	Leah Feldon

### Workplace Safety

Workplace Safety	<a href="#">chart</a>		Total number of injuries that require medical attention that were reported monthly as a rolling 12 month value	0 Injuries	0 - 8 Injuries	9 - 13 Injuries	> 13 Injuries	All year	<b>3</b>	Continue to monitor	Neutral	Linda Hayes-Gorman
------------------	-----------------------	--	--	------------	----------------	-----------------	---------------	----------	----------	---------------------	---------	--------------------

### Timeliness

Timeliness	<a href="#">chart</a>	Yes	Timeliness percentage by using 5 points for green, 2.5 yellow and 0 red and dividing by the total possible. All weighting is currently 1:1. (Weighted Points)	> 85%	> 85%	50 - 85%	< 50%	All year	<b>62.5</b>	Continue to monitor	Neutral	Sarah Wheeler
------------	-----------------------	-----	---	-------	-------	----------	-------	----------	-------------	---------------------	---------	---------------

### Sustainability goal performance

Rollup	Description	Target	Green Range	Yellow Range	Red Range	Season	Current Status	Actions	Trend	Measure Owner
--------	-------------	--------	-------------	--------------	-----------	--------	----------------	---------	-------	---------------

## Outcome

### Sustainability goal performance

GHG Emissions from Fleet Vehicle Fuel Use	<a href="#">chart</a>		Greenhouse gas emissions from DEQ fleet vehicles over the preceding 12 months, measured as metric tonnes CO2 equivalent, based on fuel purchases made with DAS gas cards.	<367.5 metric tonnes CO2e	<= 367.5 metric tonnes CO2e	367.5-408.3 metric tonnes CO2e	> 408.3 metric tonnes CO2e	All year	<b>429.8</b>	Process improvement underway	Neutral	Wendy Wiles
---	-----------------------	--	---	---------------------------	-----------------------------	--------------------------------	----------------------------	----------	--------------	------------------------------	---------	-------------

## Operating Process

### Assessing Environmental Conditions

Analytical Turnaround Time	<a href="#">chart</a>		Percent of cases on time by quarter	80%	> 80%	65 - 79%	< 65%	All year	<b>72.1</b>	Continue to monitor	Improving	Brian Boling
Analytical workload assigned per FTE - 4th Quarter	<a href="#">chart</a>	Yes	Rollup of the analysis and analytes assigned per FTE in the inorganic and organic section at the laboratory. (Weighted Points)	80%	> 75%	50 - 75%	< 50%	4th-quarter		Measure or data needs refinement	Neutral	Brian Boling
LEAD Quality Systems Measure	<a href="#">chart</a>	Yes	This is a composite measure of the overall health of the LEAD Quality System. The measure incorporates the status of 7 quality system measures and 2 data quality measures. (Weighted Points)	> 85%	> 80%	50 - 80%	< 50%	All year	<b>83.3</b>	Continue to monitor	Improving	Brian Boling

### Developing environmental solutions

WQ Permits Issued to Plan	<a href="#">chart</a>		The percentage of success each quarter in meeting pre-planned commitments for permit issuance and renewal contained on the current and correlating FFY statewide WQ permit issuance plan	80	80-100	60-79	0-59	All year	<b>20</b>	Assignable cause	Declining	Wendy Wiles
---------------------------	-----------------------	--	--	----	--------	-------	------	----------	-----------	------------------	-----------	-------------

### Implementing environmental solutions

Rollup	Description	Target	Green Range	Yellow Range	Red Range	Season	Current Status	Actions	Trend	Measure Owner
--------	-------------	--------	-------------	--------------	-----------	--------	----------------	---------	-------	---------------

## Operating Process

### Implementing environmental solutions

Supplemental environmental projects completed	<a href="#">chart</a>		The percentage of cases mitigated by SEPs in relation to number of final orders reached through settlement offers in the reporting period.	19%	> 16%	13 - 15%	< 13%	All year	<b>14</b>	Continue to monitor	Improving	Wendy Wiles
---	-----------------------	--	--	-----	-------	----------	-------	----------	-----------	---------------------	-----------	-------------

### Permitting

Percent of permits current	<a href="#">chart</a>	Yes	Permit sub-categories meeting target. (Weighted percentage)	> 90%	> 85%	70 - 85%	< 70%	All year	<b>75.8</b>	Continue to monitor	Neutral	Keith Andersen
----------------------------	-----------------------	-----	---	-------	-------	----------	-------	----------	-------------	---------------------	---------	----------------

### Determining Compliance

Compliance - Tanks - UST	<a href="#">chart</a>		Percentage of Underground Storage Tank (UST) facility inspections in the last Qrt in significant operational compliance (SOC) with operating conditions (both leak detection and equip as defined by the EPA.	>85%	> 85%	80 - 85%	< 80%	All year	<b>85</b>	Continue to monitor	Neutral	Nina Deconcini
Timely closure of complaints	<a href="#">chart</a>		Percentage of complaints open >90 days within the previous quarter	< 10%	< 10%	10 - 25%	> 25%	All year	<b>19</b>	Continue to monitor	Declining	Nina Deconcini
Significant Operational Compliance Inspections	<a href="#">chart</a>		The percentage of inspections where the latest facility inspection in the last Qrt occurred within 3 years of the last one.	95%	> 95%	90 - 95%	< 90%	All year	<b>0</b>	Assignable cause	Declining	Nina Deconcini
Inspections conducted on schedule - Air Quality	<a href="#">chart</a>		Cumulative percent of air quality facilities required to be inspected that are inspected to date for the federal fiscal year. 3rd quarter QMR is reporting for the prior inspection year	>90%	> 90%	80-90%	< 80%	All year	<b>80</b>	Continue to monitor	Neutral	Nina Deconcini
Inspections conducted on schedule - Water Quality	<a href="#">chart</a>		Cumulative percent of water quality facilities required to be inspected that are inspected to date for the federal fiscal year. 3rd quarter QMR is reporting for the prior inspection year.	>90%	>90%	80-90%	<80%	All year	<b>101</b>	Continue to monitor	Improving	Nina Deconcini

Rollup	Description	Target	Green Range	Yellow Range	Red Range	Season	Current Status	Actions	Trend	Measure Owner
--------	-------------	--------	-------------	--------------	-----------	--------	----------------	---------	-------	---------------

## Operating Process

### Determining Compliance

Inspections conducted on schedule - Land Quality	<a href="#">chart</a>		Cumulative percent of Hazardous and Solid Waste facilities required to be inspected that are inspected to date for the federal fiscal year. 3rd quarter QMR is reporting for the prior inspection year.	>90%	>90%	80-90%	<80%	All year	119		Neutral	Nina Deconcini
--	-----------------------	--	---	------	------	--------	------	----------	-----	--	---------	----------------

### Enforcing Environmental Law

Proposed Orders in Contested Case Hearings that ALJ upheld all violations alleged.	<a href="#">chart</a>		Percentage of Proposed Orders issued during the reporting period that upheld the Department's alleged violations	100%	> 90%	80 - 90%	< 80%	All year	100		Neutral	Sarah Wheeler
Timeliness of issuing formal enforcement actions	<a href="#">chart</a>		Median number of work days between day OCE receives referral and day formal enforcement action issued during the reporting period.	32	< 35 Days	36 - 45 Days	> 45 Days	All year	37	Assignable cause	Neutral	Sarah Wheeler
Resolved compliance orders	<a href="#">chart</a>	Yes	Point score percentage of all cases in compliance as of the scheduled compliance date, out of all the cases with scheduled compliance dates in the previous quarter. (Weighted Points)	100%	80%	66 - 80%	< 66%	All year		No measurable data for quarter	Neutral	Sarah Wheeler

## Support Process

### Meeting operational requirements

Policies completed on schedule	<a href="#">chart</a>		This measure will be the total number of policies completed in a calendar year compared to the number that were expected to be completed in that year.	> 80%	> 80%	60 - 80%	< 60%	4th-quarter	20	Assignable cause	Declining	Kerri Nelson
--------------------------------	-----------------------	--	--	-------	-------	----------	-------	-------------	----	------------------	-----------	--------------

Rollup	Description	Target	Green Range	Yellow Range	Red Range	Season	Current Status	Actions	Trend	Measure Owner
--------	-------------	--------	-------------	--------------	-----------	--------	----------------	---------	-------	---------------

## Support Process

### Meeting operational requirements

Timely completion of records requests	<a href="#">chart</a>	Percent of records requests are completed within 30 days of receipt.  30 days is based on state/attorney general requirements.	95%	> 85%	70 - 85%	< 70%	All year	<b>85</b>	Assignable cause	Declining	Kerri Nelson
---------------------------------------	-----------------------	--	-----	-------	----------	-------	----------	-----------	------------------	-----------	--------------

### Ensuring a safe work environment

Cost of time Lost	<a href="#">chart</a>	Total cost of time lost due to unsafe actions (accidents and injuries)	12500	< 25,000	25,000 - 60,000	> 60,000	All year	<b>308</b>	Continue to monitor	Neutral	Linda Hayes-Gorman
Cost of medical expenses	<a href="#">chart</a>	Total cost of medical expenses due to unsafe actions (accidents and injuries)	12500	< 15,000	15,000 - 25,000	> 25,000	All year	<b>727</b>	Continue to monitor	Neutral	Linda Hayes-Gorman
Facility/site inspections completed	<a href="#">chart</a>	Percent of required safety measures conducted agencywide in accordance with safety plan	100%	> 95%	90 - 95%	< 90%	All year	<b>100</b>	Continue to monitor	Neutral	Linda Hayes-Gorman
Safety hazards corrected by deadline	<a href="#">chart</a>	Potential safety hazards identified through quarterly checks that are resolved within 90 days	> 95%	> 95%	90 - 95%	< 90%	All year	<b>94</b>	Assignable cause	Neutral	Linda Hayes-Gorman
Number of accidents per miles driven statewide	<a href="#">chart</a>	The total number of accidents per 325,000 miles driven statewide.	0 per 325,000 miles	1 per 325,000 miles	2 per 325,000 miles	>2 per 325,000 miles	All year	<b>0</b>	Continue to monitor	Improving	Linda Hayes-Gorman

### Engaging Employees

Days to hire	<a href="#">chart</a>	The number of days elapsed between the time a managers signs a staffing request and the successful applicant starts the position.	76 Days	< 76 Days	76 - 120 Days	> 120 Days	All year	<b>70</b>	Measure or data needs refinement	Neutral	Kerri Nelson
Employees engaged in career development	<a href="#">chart</a>	Percentage of employees engaged in career development which includes mentorship, job shadows, job rotations and formal career development.	20%	> 10%	5 - 10%	< 5%	All year	<b>7.8</b>	Continue to monitor	Neutral	Kerri Nelson

Rollup	Description	Target	Green Range	Yellow Range	Red Range	Season	Current Status	Actions	Trend	Measure Owner
--------	-------------	--------	-------------	--------------	-----------	--------	----------------	---------	-------	---------------

## Support Process

### Managing resources

Meeting mileage requirements	<a href="#">chart</a>		Percent of underutilized vehicles	2%	< 5%	6 - 15%	> 15%	All year	6.7	Assignable cause	Neutral	Kerri Nelson
SPOTS Log Error Rate	<a href="#">chart</a>		Percent of SPOTS logs without errors	> 90%	> 90%	80 - 90%	< 80%	All year	76.99	Continue to monitor	Improving	Mark Brown
Deposit Timeliness	<a href="#">chart</a>		Percent of days meeting deposit timeliness standard	> 95%	> 95%	75 - 95%	< 75%	All year	97		Neutral	Mark Brown
Cost of timesheet corrections	<a href="#">chart</a>		Hours spent correcting prior months Q-Time coding errors	< 10 Hours	< 10 Hours	10 - 20 Hours	> 20 Hours	All year	5.5	Continue to monitor	Neutral	Mark Brown
Accounting Change Orders	<a href="#">chart</a>		Number of accounting change orders per quarter	< 5 ACOs	< 5 ACOs	6 - 15 ACOs	> 15 ACOs	All year	9	Continue to monitor	Improving	Mark Brown

### Providing information infrastructure

IT Systems Uptime	<a href="#">chart</a>	Yes	Rollup of Email, Internet and Network uptime for both business and after hours. (Weighted percentage)	> 90%	> 90%	80 - 90%	< 80%	All year	98.8		Neutral	Greg Aldrich
Annual IT Disaster Recovery Drill	<a href="#">chart</a>		Completion of DR drill and follow-up actions.	100%	> 75%	1 - < 75%	0 %	4th-quarter	50	Assignable cause	None Selected	Greg Aldrich
Annual technology implementation plan and report completed on time	<a href="#">chart</a>		The combined annual technology implementation plan and report is scheduled to be completed by June 30 of each year starting in 2014. For 2013 the date is August 30.	Reported by June 30	<1 Month late	1 - 2 Months late	> 2 Months late	4th-quarter		No measurable data for quarter	None Selected	Greg Aldrich
Technology Project Tracking	<a href="#">chart</a>		Rollup of project status for technology related projects	90%	>90	85-89.9%	<84	All year	85.7	Continue to monitor	Neutral	Greg Aldrich