Oregon DEQ: Key Performance Measures Reports

Feb. 11, 2019

Note:
This binder includes a report created in August 2018 for submittal with the DEQ 2019-21 Agency Request Budget. That 2018 report includes additional detail on proposed changes.

DEQ has also included a second KPM report, run February 2019, to show updates and other information includes in the KPM system but not present in the 2018 Annual Report.

Environmental Quality, Department of

Annual Performance Progress Report

Reporting Year 2018

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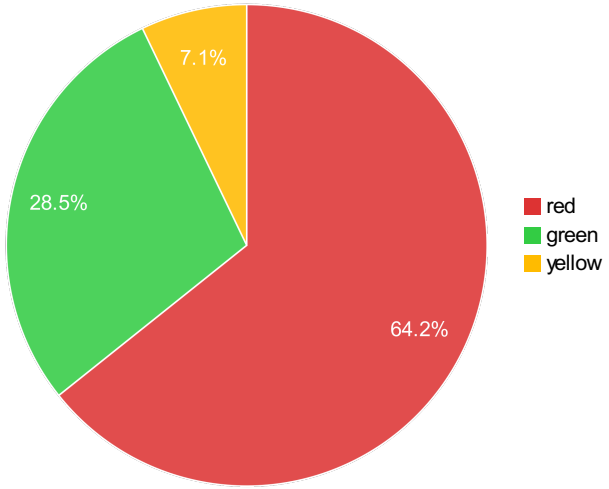
DEQ Key Performance Measures

KPM #	Approved Key Performance Measures (KPMs)
1	PERMIT TIMELINESS - Percentage of air contaminant discharge permits issued within the target period.
2	AIR QUALITY DIESEL EMISSIONS - Quantity of diesel particulate emissions.
3	AIR QUALITY CONDITIONS - National Standards: Number of days when air is unhealthy for sensitive groups and all groups.
4	AIR QUALITY - AIR TOXICS - Air Toxics Trends in Larger and Smaller Communities
5	PERMIT TIMELINESS - Percent of Title V operating permits issued with the target period.
6	PERMIT TIMELINESS - Percentage of individual wastewater discharge permits issued within 270 days.
7	UPDATED PERMITS - Percent of total wastewater permits that are current.
8	WATER QUALITY CONDITIONS - Percent of monitored stream sites with significantly increasing trends in water quality.
9	CLEANUP - Properties with known contamination cleaned up
10	MATERIALS MANAGEMENT - Waste generation
11	MATERIALS MANAGEMENT - Waste recovery
12	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.
13	ERT - Percent of local participants who rank DEQ involvement in Economic Revitalization Team process as good to excellent.
14	BOARDS AND COMMISSIONS - Percent of total best practices met by the Environmental Quality Commission.

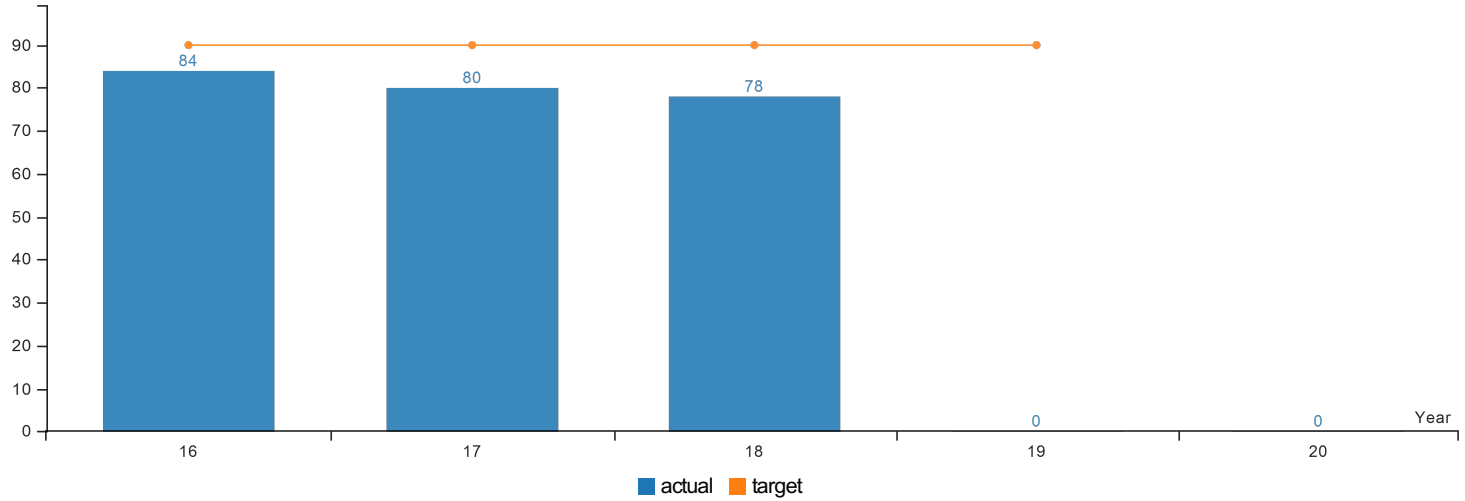
Proposal	Proposed Key Performance Measures (KPMs)
Delete	PERMIT TIMELINESS - Percentage of air contaminant discharge permits issued within the target period.
Delete	PERMIT TIMELINESS - Percent of Title V operating permits issued with the target period.
New	Permit Timeliness - Issuance of new permits - Percentage of new air quality permits that are issued within timeliness targets.
New	Permit Timeliness - Issuance of Permit Modifications - Percentage of air quality permit modifications issued within the target timeliness period.
New	Permit Timeliness - Current Permits - Percent of air quality permits that are current (not on administration extension)



Performance Summary	Green	Yellow	Red
	= Target to -5%	= Target -5% to -15%	= Target > -15%
Summary Stats:	28.57%	7.14%	64.29%

KPM #1	PERMIT TIMELINESS - Percentage of air contaminant discharge permits issued within the target period.
	Data Collection Period: Jan 01 - Dec 31

** Upward Trend = positive result*



Report Year	2016	2017	2018	2019	2020
Air Quality Permit Timeliness: ACDP Permits issued within Target					
Actual	84%	80%	78%	No Data	No Data
Target	90%	90%	90%	90%	TBD

How Are We Doing

DEQ requires Air Contaminant Discharge Permits when sources, of any size, construct or modify their facilities. These permits are also required for the operation of medium-sized point sources and the operation of some smaller-sized point sources that emit specified hazardous air pollutants. In 2017, DEQ issued 78 percent of ACDP permits within the target period. 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.

DEQ's goal is to issue 90 percent of ACDP permits within the target periods to ensure businesses have needed permits so that they can construct, expand or modify their operations. A recent performance audit conducted by the Secretary of State identified several key factors contributing to DEQ's inability to renew existing permits in a timely fashion. These factors are discussed in the "Factors Affecting Results" section.

Note: The 2018 report is based on data from calendar year 2017.

Factors Affecting Results

As mentioned above, the Oregon Secretary of State's recent performance audit revealed a permit renewal backlog. Auditors identified a number of root causes, including the following primary factors:

- Pre-application guidance and tools available for the regulated community are outdated or not easy to use
- Competing demands such as compliance inspections and responding to complaints take away time from permit writing
- Position cuts due to revenue shortfalls have led to unmanageable workloads

DEQ agrees with the results of the audit and has been working to address its findings since early 2018. Key initiatives currently underway include:

- A comprehensive process improvement effort to develop more efficient internal processes
- Redesigning the permitting program webpage for improved usability
- Updating key guidance documents that assist permit writers and sources interpret rules and requirements

Management comments

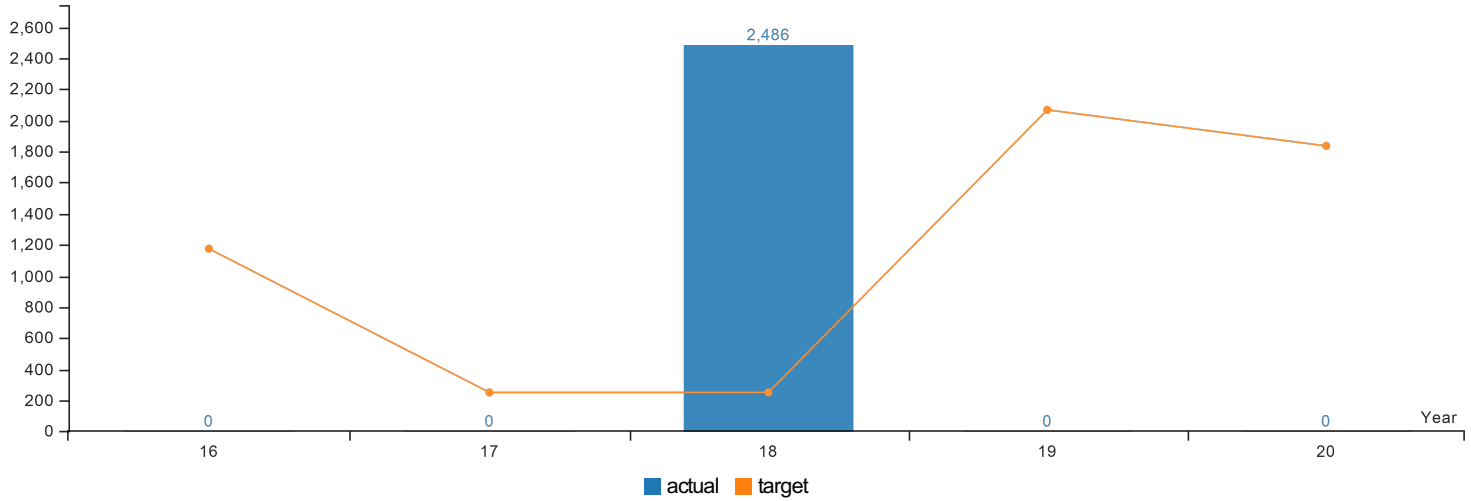
DEQ uses the ACDP timeliness KPM as one measure of the effectiveness of the ACDP program. However, the measure does not provide a full picture of program results. The agency proposes to delete the existing permit timeliness measures and replacing it with three new measures, described in detail below.

The agency proposes to track timeliness for new permits and modified permits separately instead of as a combined measure. This allows the agency and the legislature a finer level of granularity when monitoring performance of two key functions, issuing new air quality permits, and processing applications to modify existing permits.

We also propose to monitor permit renewals as a separate measure. These changes will better reflect priority work and address issues raised in a recent performance audit of the agency's Air Quality Permitting program. The new measures help ensure that the permit backlog work is measured and reported on a regular basis. Issuance of a permit that has been in "backlog" negatively impacts the existing timeliness measures, creating a disincentive for addressing permits that have been in backlog the longest. By proactively measuring progress on our backlog through a separate KPM this disincentive is eliminated.

KPM #2	AIR QUALITY DIESEL EMISSIONS - Quantity of diesel particulate emissions.
	Data Collection Period: Jan 01 - Jan 01

** Upward Trend = negative result*



Report Year	2016	2017	2018	2019	2020
Quantity of diesel particulate emissions (in tons)					
Actual	0	0	2,486	No Data	No Data
Target	1,175	250	250	2,069	1,837

How Are We Doing

Diesel particulate matter is a known human carcinogen. This health risk is present not only for those exposed to diesel particulate 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.

The targets for this measure reflect emission reductions needed to archive a legislative goal established in 2007 (ORS 468A.793) to reduce excess cancer risk from diesel particulate matter exposure to one-in-a-million by 2017. DEQ failed to meet the target and the legislative goal in 2017, with diesel particulate matter emissions close to 2,500 tons, instead of the 250 ton goal. DEQ proposes to modify the annual targets for the diesel particulate matter measure to better reflect the current tools and resources available for this issue. While DEQ, along with many other partners, has used federal and state grants and tax credits to reduce about 60 tons of emissions since 2007, that reduction has not been sufficient to achieve the statutory goal.

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 call the National Emissions Inventory. The 2014 calendar year is the latest data available for this report. While DEQ proposes a change to the target, the agency will retain the reporting period and reliance on NEI data; every three years reflecting the previous calendar year.

Proposed updated targets:

- 2017: 2,069 tons per year
- 2020: 1,837 tons per year
- 2023: 1,606 tons per year

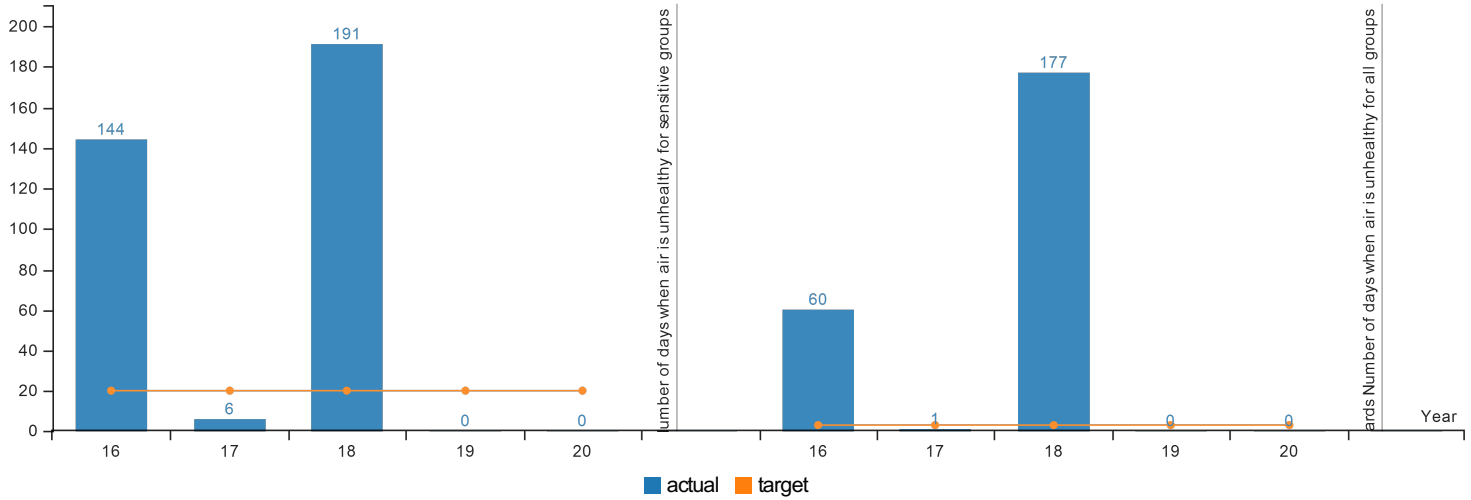
Factors Affecting Results

Retrofitting exhaust controls is a cost effective environmental and public health protection measure. However, since retrofitting is voluntary, 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 million in state funds, as well as tax credits, for clean diesel projects. The economic downturn that followed placed extraordinary pressures on the state budget, and the Legislature eliminated the General Fund support for clean diesel projects 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 reduced levels. The loss of funding for incentive programs has resulted in slower progress in meeting the target and legislative goal.

Recently a federal court stipulated a settlement against claims that Volkswagen manufactured and sold diesel passenger cars that violated federal emission standards. An element of the settlement was the establishment of a $2.9 billion fund intended to support projects to offset the excess emissions. This fund is to be distributed among states based on the proportion of VW diesel passenger cars registered in the state. Oregon's allocation comes to $72.9 million. Senate Bill 1008 (2017) stipulated that Volkswagen Settlement funds be used solely to support school bus engine retrofit and replacement projects, until further direction from the legislature.

KPM #3	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	2016	2017	2018	2019	2020
National Standards Number of days when air is unhealthy for sensitive groups					
Actual	144	6	191	No Data	No Data
Target	20	20	20	20	20
National Standards Number of days when air is unhealthy for all groups					
Actual	60	1	177	No Data	No Data
Target	3	3	3	3	3

How Are We Doing

DEQ developed this unhealthy air days measure in 2006 to track 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 2018 report is based on data from calendar year 2017.

SENSITIVE GROUPS: Oregon's number of days when air was unhealthy for sensitive groups (based on the criteria pollutants) went up from 6 days in 2016 to 191 in 2017. This includes 30 of the cities or airsheds in the state.

The unhealthy days were in Bend, Burns, Eugene, Hermiston, Lakeveiw and Prineville. Four of these unhealthy air days occurred in the winter, when Oregon normally experiences the most days. One unhealthy day occurred in Bend in the spring due to a prescribed burn nearby, and one occurred in Hermiston in the summer due to elevated ozone levels.

ALL GROUPS: In 2017, Oregon recorded 177 day when air was unhealthy for all groups or worse, up from one day in 2016. The unhealthy or worse air days occurred in 26 cities or air sheds. The numerous forest fires in 2017 in and outside of Oregon substantially affected summer-time air quality.

Factors Affecting Results

In 2017, the primary factor for the worsening trends in unhealthy air days are forest fire smoke impacts due to an exceptionally bad forest fire year, and also winter stagnation events.

- Unhealthy for sensitive groups: Out of the 191 unhealthy for sensitive group days, 144 were from forest fire smoke. The remaining 47 days were primarily from particulate matter during fall and winter stagnation events.
- Unhealthy for all groups: Out of the 177 unhealthy or worse days, 171 were from forest fire smoke. The remaining six days were primarily from particulate matter (smoke) during fall and winter.

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 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 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 Oct. 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.

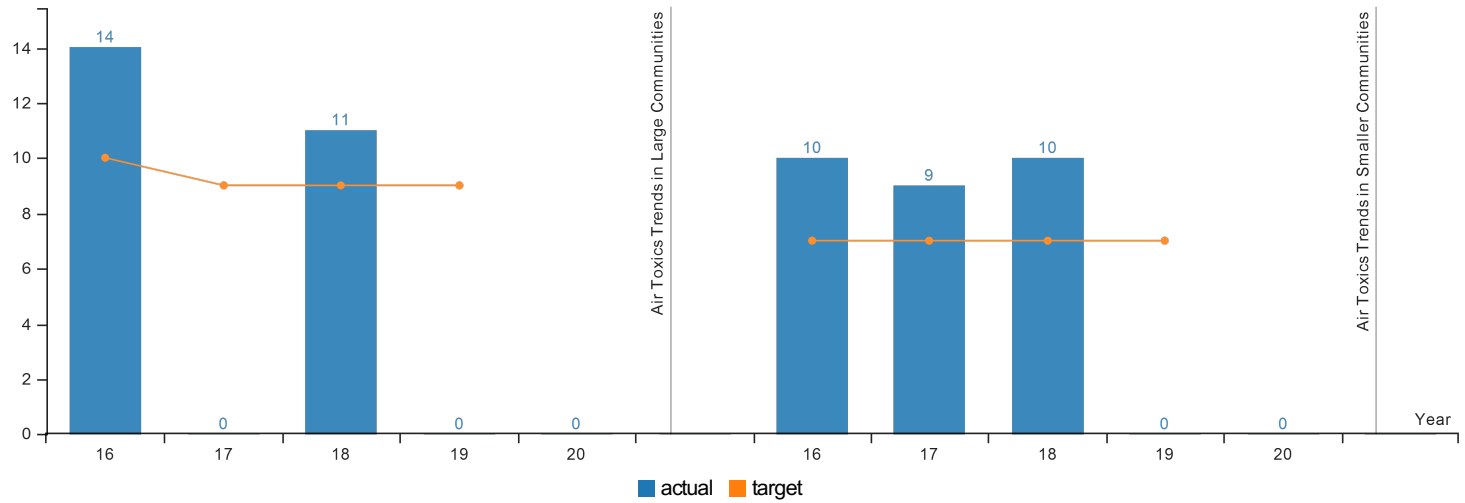
Management comments

This measure illustrates that the air is unhealthy for the general population to breathe in some Oregon cities on some days but on those days, air pollution levels far exceed the federal standard. However, the weather can affect pollutant levels and during extremely rainy years, the number of unhealthy for sensitive groups days are lower. Elevated fine particulate levels resulting from woodstoves and other combustion source cause the majority of unhealthy air days. DEQ continually works with communities to reduce fine particulate pollution, prevent air quality problems, restore air quality to health levels, and maintain progress. These efforts can also support the economic health of communities suffering from unhealthy air quality and burdened by Clean Air Act requirements.

In 2017, Oregon and the surrounding states had numerous major forest fires. The resulting forest fire smoke intrusions cause the majority of unhealthy air days. Oregon Department of Forestry, the U.S. Forest Service and Bureau of Land Management conduct prescribed burning outside of the forest fire season to reduce the fuel loading in their respective forests. DEQ monitors the prescribed burns to determine if they are affecting nearby communities. The forest managers use this monitoring information to inform their burning decisions.

DEQ and Lane Regional Air Protection Agency are working with Klamath Falls and Oakridge to reduce winter particulate levels to bring them into attainment for PM2.5. Both have PM2.5 State Implementation Plans and Klamath Falls is in attainment and we are working on a maintenance plan. Other communities at risk of going into Non-Attainment include Medford and Prineville. DEQ is working with community leaders to lower their PM2.5 levels to avoid going into non-attainment. DEQ does not use exceedances caused by forest fire smoke to determined compliance with the standard

KPM #4	AIR QUALITY - AIR TOXICS - Air Toxics Trends in Larger and Smaller Communities
	Data Collection Period: Jan 01 - Jan 01



Report Year	2016	2017	2018	2019	2020
Air Toxics Trends in Large Communities					
Actual	14	0	11	No Data	No Data
Target	10	9	9	9	TBD
Air Toxics Trends in Smaller Communities					
Actual	10	9	10	No Data	No Data
Target	7	7	7	7	TBD

How Are We Doing

The data reported in 2018 are from calendar year 2017.

Air toxics are chemicals in the air that are known or suspected to cause cancer or other serious health problems. Using current medical studies, DEQ has established benchmarks for a variety of airborne toxic chemicals. The benchmarks are based on concentration levels that would result in a cancer risk of one-in-a-million additional cancers based on a lifetime of exposure, and that protect the health of the most sensitive individuals. The benchmarks serve as clean air goals, but not regulatory standards.

DEQ's goal is to reduce levels of five representative airborne toxics - benzene, acetaldehyde, formaldehyde, arsenic and cadmium - down to the slight risk level of one time above the benchmark for each pollutant by 2020. The KPM goals 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. Meeting the KPM goals is a partial indication of reduced risk to public health, since air toxics not included in this KPM can affect health. The values for this measure are obtained by dividing the average annual monitored concentrations by DEQ benchmark values for each pollutant.

Large Communities: Between 2004 and 2016, DEQ gathered data for this measure at North Roselawn Street in Portland. Emissions during construction of housing adjacent to this monitor in 2016 rendered the data non-representative and interfered with sample collection. The new building also made the site unsuitable for future use. As a result, DEQ relocated the monitoring site 0.2 miles away at the Key Performance Measures Swan Avenue. This location is in the same North/Northeast quadrant of Portland. In calendar year 2017, DEQ collected 10 months of data at the

Humboldt School location.

The Humboldt School site is representative of a Portland 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 11 times above the benchmark in 2017.

Smaller Communities: From 2004 until the fall of 2016, data for this measure was gathered at a mostly residential area on Ash Street in La Grande. DEQ moved the monitoring station in September 2016 because of interference from burning immediately next to the site. The new site, at North Hall Street and East N Avenue, is at an elementary school on the east side of La Grande. The old and new sites are representative of typical smaller community neighborhoods. 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 2017. Annual average levels of benzene, arsenic, acetaldehyde and formaldehyde in La Grande increased slightly from 9 in 2016 to 10 in 2017.

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 elevated air toxics concentrations.

Smaller Communities: Of the five tracked pollutants in La Grande, benzene and acetaldehyde pose the most potential risk to public health. Benzene is three times the benchmark and acetaldehyde is five times the 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, wild fires 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, wild fires, 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 driving and additional vehicles related to population growth.

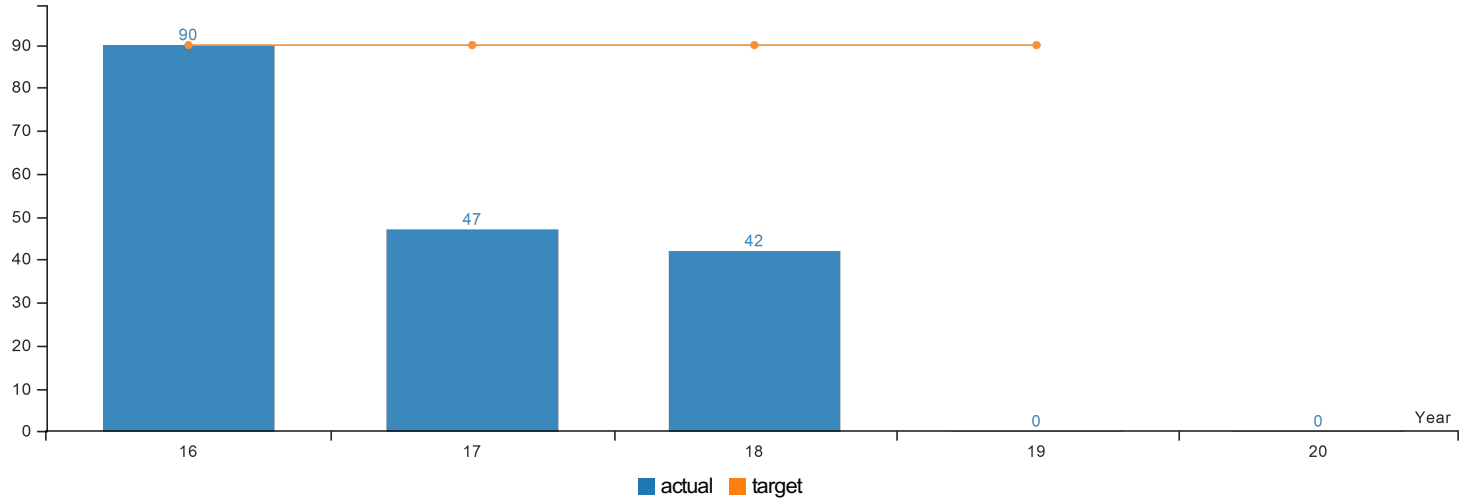
Acetaldehyde and formaldehyde are produced by wood and fossil fuel combustion, but the largest quantities of these pollutants are produced through chemical formation in the atmosphere. Precursors in the chemical formation process are volatile organic compounds emitted from wood and fossil fuel combustion 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. In 2017, cadmium was below the benchmark for the first time since air toxics trend monitoring began in Portland. Between 2012 and 2016, DEQ 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. The agency has since adopted rules specific to Colored Art Glass Manufacturers which controlled cadmium emissions from those sources, and may have resulted in the historic low level recorded at the monitor in 2017. There is no cadmium measured in La Grande.

KPM #5	PERMIT TIMELINESS - Percent of Title V operating permits issued with the target period.
	Data Collection Period: Jan 01 - Dec 31

** Upward Trend = positive result*



Report Year	2016	2017	2018	2019	2020
Air Quality Permit Timeliness: Title V Permits issued within Target					
Actual	90%	47%	42%	No Data	No Data
Target	90%	90%	90%	90%	TBD

How Are We Doing

Note: The 2018 report is based on 2017 calendar year data.

DEQ operates the Title V Permit program, which is required by the federal Clean Air Act for major sources emitting traditional "criteria" or hazardous air pollutants. Oregon's largest industrial facilities tend to be the source of these emissions. In 2016, DEQ issued 42 percent of its Title V permits within the target period.

Targets for issuing Title V permits range from 60 days to 365 days depending on the permit action and complexity. DEQ's targets for permit issuance are six to 16 months, shorter than the 18-month period required by state and federal laws. All targets include time for a public notice period, which provides the public a chance to comment on the permit and request a public hearing. It is important to DEQ that the public has an opportunity to participate in the review process and help protect public health.

Factors Affecting Results

DEQ experieced a significant decrease in Title V permit timeliness between calendar years 2015 (90 percent) and 2017. In calendar years 2016 and 2017, the agency prioritized issuing permits that have been in backlog status the longest. Addressing and improving the backlog by working on older and expired permits nagetively affects this measure, which is a composite of the number of permits that are issued and the duration of time between receiving an application and issuing the permit.

In early 2018 the Oreogn Secretary of State completed a performance audit of DEQ's air quality permitting programs, including Title V. Auditors identified a number of root causes, including the following primary factors:

- Pre-application guidance and tools available for the regulated community are outdated or not easy to use
- Competing demands such as compliance inspections and responding to complaints takes away time for permit writing
- Position cuts due to revenue shortfalls have led to unmanageable workloads.

DEQ agrees with the results of the audit and has been working to address its findings since early 2018. Key initiative currently underway include:

- A comprehensive lean process improvement effort designed to identify opportunities where the agency can create more efficient internal processes.
- A redesign of the permitting program webpage designed to improve the usability of the website by permit current and prospective permit holders.
- Updating key guidance documents that assist permit writers and sources interpret rules and requirements.

Management comments

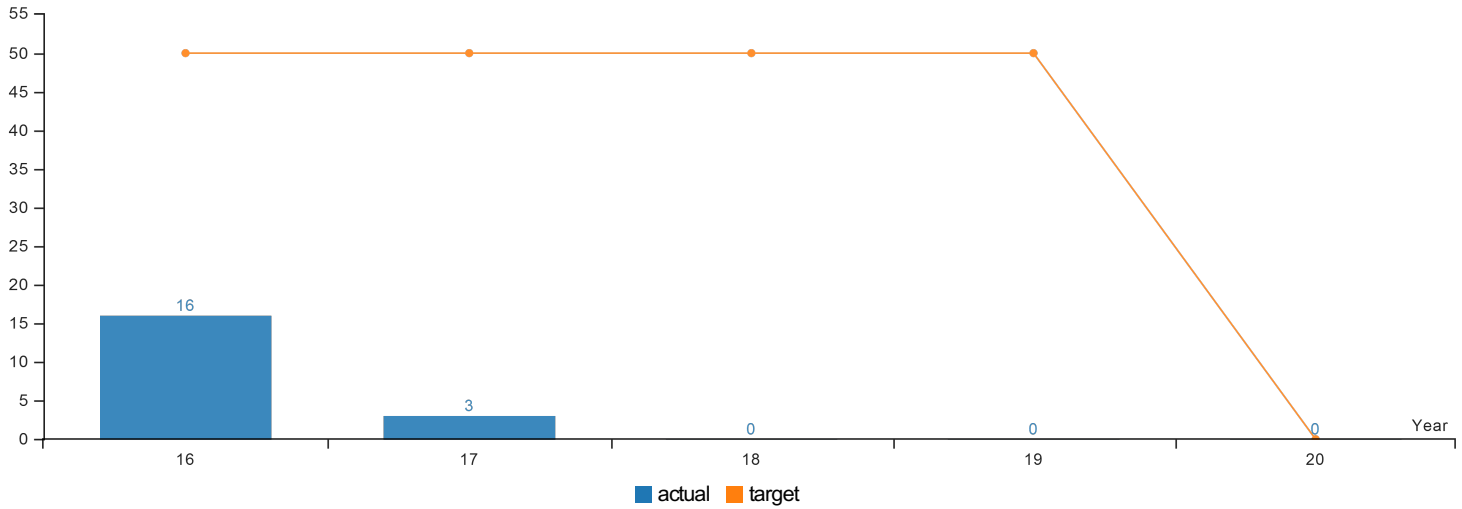
DEQ uses the Title V timeliness KPM as one measure of the effectiveness of the Title V program. However, the measure does not provide a full picture of program results. The agency proposes to delete the existing permit timeliness measures and replacing it with three new measures, described in detail below.

The agency proposes to track timeliness for new permits and modified permits separately instead of as a combined measure. This allows the agency and the legislature a finer level of granularity when monitoring performance of two key functions, issuing new air quality permits, and processing applications to modify existing permits.

We also propose to monitor permit renewals as a separate measure. These changes will better reflect priority work and address issues raised in a recent performance audit of the agency's Air Quality Permitting program. The new measures help ensure that the permit backlog work is measured and reported on a regular basis. Issuance of a permit that has been in "backlog" negatively impacts the existing timeliness measures, creating a disincentive for addressing permits that have been in backlog the longest. By proactively measuring progress on our backlog through a separate KPM this disincentive is eliminated.

KPM #6	PERMIT TIMELINESS - Percentage of individual wastewater discharge permits issued within 270 days.
	Data Collection Period: Jan 01 - Jan 01

** Upward Trend = positive result*



Report Year	2016	2017	2018	2019	2020
Percentage of individual wastewater discharge permits issued within 270 days					
Actual	16%	3%	No Data	No Data	No Data
Target	50%	50%	50%	50%	0%

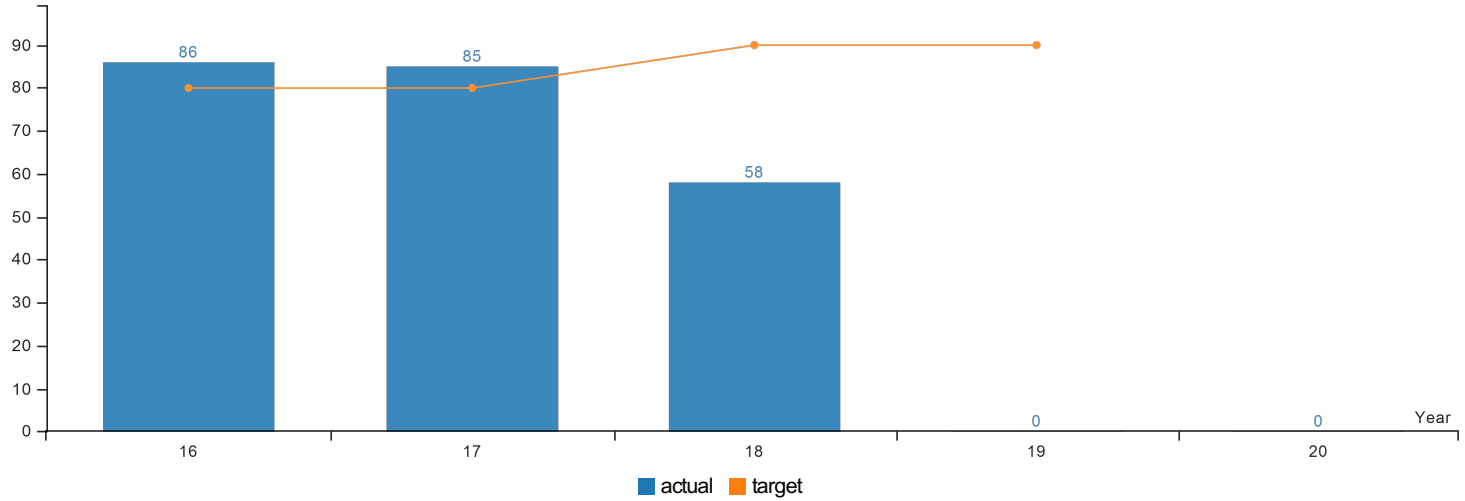
How Are We Doing

This measure requires data that is not available until October of each year. DEQ will update this report at that time.

Factors Affecting Results

KPM #7	UPDATED PERMITS - Percent of total wastewater permits that are current.
	Data Collection Period: Jan 01 - Jun 30

** Upward Trend = positive result*



Report Year	2016	2017	2018	2019	2020
Percent of total wastewater permits that are current					
Actual	86%	85%	58%	No Data	No Data
Target	80%	80%	90%	90%	TBD

How Are We Doing

At the end of June 2018, DEQ had 56 percent of permitted sources assigned to current general and individual permits, which falls short of the 80 percent target. 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 the Oregon Department of Agriculture administers.

While the overall percent of current permitted source dropped significantly, the actual number of current individual permits has remained stable. The large decrease in the total number of permitted sources reflects the expiration of general permits that previously covered large numbers of permitted sources. For example, the WPCF 600 general permit for off-stream placer mining expired in January 2018 and was not renewed, resulting in DEQ no longer counting 369 sources as current permit holders. The large backlog of expired permits remains a critical concern for the permitting program.

In 2016, an outside consultant evaluated DEQ's NPDES permit program and provided recommendations for improvement in key areas such as process improvement, workload analysis, organizational structure and policy development. DEQ has made significant progress implementing some of the recommendations, including better defining the permit development process; improving the acquisition and use of data needed for individual NPDES permit development; evaluating the “readiness” of all individual NPDES permits statewide; and shifting workload to establish NPDES permit development as a priority. Significant work remains to achieve timely, high-quality permits.

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. Moreover, DEQ’s focus on implementing

the recommendations for improvements to the individual NPDES program has resulted in less effort on issuing general permits and WPCF permits.

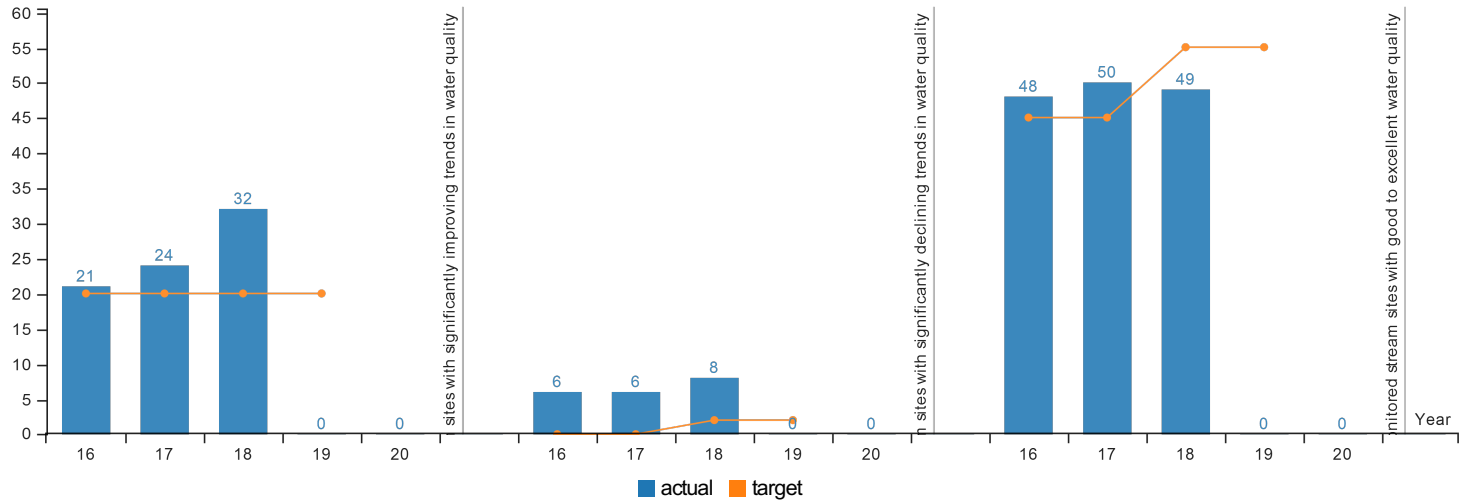
Changes in water quality standards and criteria for Total Maximum Daily Loads (clean water plans) also delay permitting efforts when the changes require additional water quality monitoring or create program uncertainty. New water quality standards have also increased the use of compliance schedules, variances and other complex regulatory tools to issue permits.

Management comments

An independent review of DEQ's permit program culminated in November 2016 with recommendations for improvement and a proposed implementation plan. The consultant examined DEQ resource needs and workload management practices and identified areas for improvement. The consultant grounded its recommendations for improvement in staff and stakeholder input, and established best practices and performance benchmarks. The recommendations included short and long-term solutions, and address concerns such as compliance rates, delays in the permit planning process and on-going program sustainability related to staff knowledge, skills and abilities.

To implement the recommendations, DEQ is dedicating a significant amount of resources to develop and improve permit writing tools and systems to make the process more consistent and efficient. This investment will have long-term payoff relative to program performance, although in the short term diverts resources away from permit writing.

KPM #8	WATER QUALITY CONDITIONS - Percent of monitored stream sites with significantly increasing trends in water quality.
	Data Collection Period: Oct 01 - Sep 30



Report Year	2016	2017	2018	2019	2020
Percent of monitored stream sites with significantly improving trends in water quality					
Actual	21%	24%	32%	No Data	No Data
Target	20%	20%	20%	20%	TBD
Percent of monitored stream sites with significantly declining trends in water quality					
Actual	6%	6%	8%	No Data	No Data
Target	0%	0%	2%	2%	TBD
Percent of monitored stream sites with good to excellent water quality					
Actual	48%	50%	49%	No Data	No Data
Target	45%	45%	55%	55%	TBD

How Are We Doing

DEQ analyzed data collected from Oct. 1, 2008, to Sept. 30, 2017, to report on these measures.

8a. Percent of monitored stream sites with significantly improving trends in water quality

In 2012-13, DEQ began monitoring an additional 19 stream sites as part of a partnership with the Oregon Department of Agriculture, bringing the total of monitored sites to 145. Of those 19 sites, DEQ now has enough data to calculate water quality trends for 14 of them, and included those sites in our 2017 results.

In 2017, 32 percent of monitored stream sites (46 of 145 sites) showed significant improving trends, an improvement from 24 percent of stream sites in 2016.

Of the 46 sites showing improvement, 37 percent are still categorized as having fair to very poor water quality. This is an improvement from 2016, when 41 percent had fair to very poor water quality,

8b. Percent of monitored stream sites with significantly declining trends in water quality

In 2017, eight percent (12 of 145) of the monitored stream sites had declining trends in water quality. This is more sites than in 2016, however; only four of these locations had previously shown a decreasing trend in water quality, indicating that a large portion of the declining trends from 2016 were stopped. Of the 12 sites with declining trends, eight are located in the Willamette Basin. The most rapid decline occurred in Neal Creek part of the Hood River Basin. This is the first year that DEQ could establish a trend at this location because the site was added in 2012.

8c. Percent of monitored stream sites with good or excellent water quality

Overall, we currently find good or excellent water quality at 49 percent of the monitored stream sites. This is a one percent drop from 2016 and is slightly below the target of 55 percent of monitored sites having good to excellent water quality.

Factors Affecting Results

8a. Percent of monitored stream sites with significantly improving trends in water quality

Over the past three years, the percent of sites with improving trends has increased. Our basin coordinators have attributed much of this success to the results of long-term restoration projects, interagency partnerships and improvements to irrigation systems. Restoration projects in the Klamath Basin have the goal of reconnecting the upper reaches of the watershed with the mainstem, and improvements are being observed each year. An interagency partnership in the Lower Willamette Basin is pooling resources to replace culverts that provide cold-water refuge to migrating fish, and in turn improve water quality. In the Owyhee Basin, formerly flood irrigated cropland now using more efficient irrigation methods have seen reductions in sediment, nutrient and bacteria loads.

8b. Percent of monitored stream sites with significantly declining trends in water quality

Land use and proximity to facilities are a couple of the issues that the basin coordinators identified this year as potential contributors to declining trends. The potential influence of land use on water quality index scores were of particular concern where riparian buffers no longer exist. The absence of these buffers could lead to increased erosion, which would increase the amount of total solids in streams, and allow for higher stream temperatures, which can be bad for migrating salmonids. In the Lower Willamette Basin, the largest magnitude decreasing trends occurred at three sites in the Tualatin River. The decreases in trend at these locations appear to be linked to increases in nitrate and total solids. There are sewage treatment facilities located upstream of one sampling location, and while these facilities contribute nitrate and total solids to the system, they discharge within their permit limits. This indicates that other potential sources of nitrate and total solids must exist within the basin.

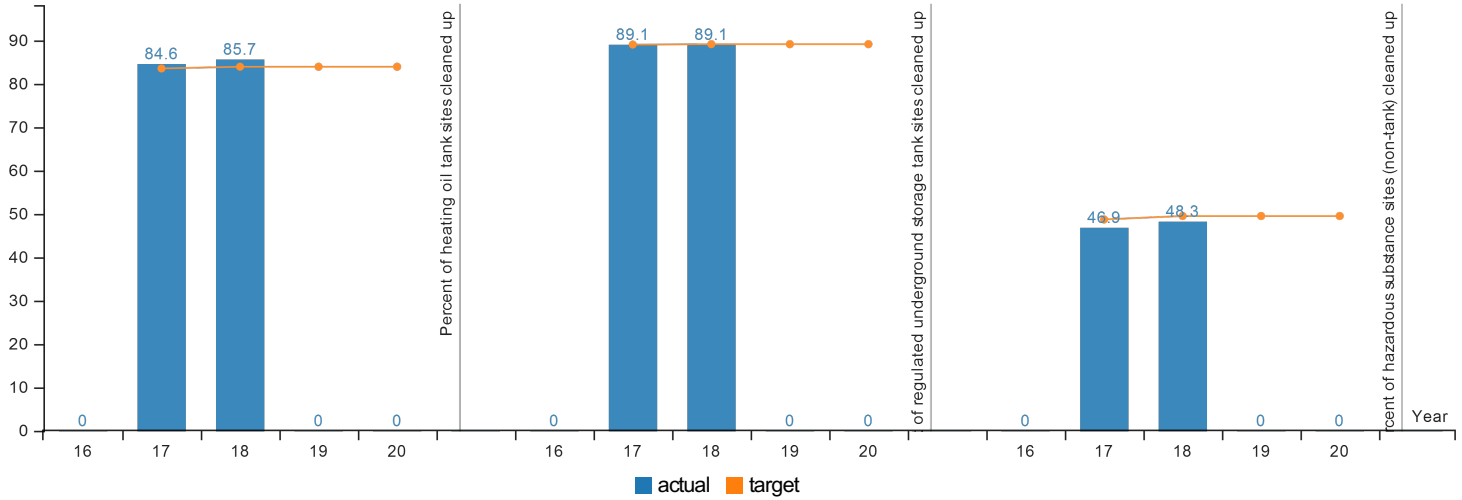
8c. Percent of monitored stream sites with good to excellent water quality

The percent of monitored stream sites in good to excellent water quality has remained steady since 2012. DEQ attributes the consistency to the effects of long-term, large-scale restoration projects like the removal of the Marmot Dam in the Sandy River Basin and continued interagency partnerships such as the North Coast Watershed Association’s effort raising awareness of possible bacteria contamination sources in the Skipanon River drainage. Both of these projects, along with numerous other across the state, can make a long-lasting difference in the waters of Oregon.

Management comments

DEQ collected data for Key Performance Measures 8a, b and c at a network of 145 ambient monitoring sites on the state's major rivers and streams. The data we collected represents the previous ten years of data up to and including data through the end of the previous water year. For 2018, this includes data through September 30, 2017. Analyzing the response of water quality to specific activities and sources of pollution helps guide decisions and future action. Implementation of clean water plans and the periodic update of existing clean water plans are important efforts for improving water quality. Communicating water quality trends with other land management agencies will help to target management actions and keep program activities moving forward. Finally, DEQ is evaluating new performance measures that would display the link between the quality of Oregon's waterways and the work DEQ does to protect them.

KPM #9	CLEANUP - Properties with known contamination cleaned up
	Data Collection Period: Jan 01 - Jan 01



Report Year	2016	2017	2018	2019	2020
Percent of heating oil tank sites cleaned up					
Actual	No Data	84.60%	85.70%	No Data	No Data
Target	TBD	83.60%	84%	84%	84%
Percent of regulated underground storage tank sites cleaned up					
Actual	No Data	89.10%	89.10%	No Data	No Data
Target	TBD	89.10%	89.20%	89.20%	89.20%
Percent of hazardous substance sites (non-tank) cleaned up					
Actual	No Data	46.90%	48.30%	No Data	No Data
Target	TBD	48.80%	49.60%	49.60%	49.60%

How Are We Doing

This measure tracks the total number of sites cleaned up as a percentage of contaminated sites in DEQ's hazardous substance cleanup and tanks databases. Tank sites include home heating oil tanks (HOTs) and regulated commercial underground storage tanks (USTs) both of which involve releases of fuel. Hazardous substance sites include a variety of industrial/commercial facilities with known releases of metals, chlorinated solvents, PCBs and other hazardous chemicals. The higher the cleanup percentage, the better we are doing.

As of Dec. 31, 2017, DEQ's Heating Oil Tanks program had overseen and/or approved the cleanup of 85.7 percent of reported HOT releases, exceeding the target of 84 percent. For regulated tanks, DEQ has completed cleanup at 89.1 percent of reported UST releases, slightly below the target of 89.2 percent. The Cleanup program had made no-further-action decisions at 48.3 percent of known hazardous substance sites, which is below the target of 49.6 percent. The reduced performance of the Cleanup program was affected by substantial senior project staff turnover due to retirements or other job opportunities with DEQ or elsewhere.

Factors Affecting Results

Each year DEQ identifies additional sites that need cleanup, creating a "moving target" as the total number of sites increases. This number is hard to project into the future because it depends as

much or more on economic activity than on agency actions. Nevertheless, DEQ has completed enough cleanups to increase the cleanup percentage. This is especially true for HOT cleanups, which typically occur during property sales, helping explain why HOTs account for most sites counted in this measure.

Hazardous substance sites may include a range of contaminants and are often more challenging than petroleum cleanups. State law requires property owners to report and clean up spills of oil or hazardous substances that exceed a reportable quantity, as well as any releases from USTs. State law also requires disclosure of HOTs during a property sale. Many hazardous-substance sites come to DEQ's attention during due-diligence investigations by prospective purchasers, following the discovery of past releases (which did not require reporting to DEQ when they occurred). Over the years, contamination from these properties may have migrated significantly in soil, surface water or groundwater, sometimes beyond property lines. As a result, required reporting at UST sites typically leads to quicker and simpler cleanups than at hazardous-substance sites, where contamination may have been present long before DEQ became aware of it.

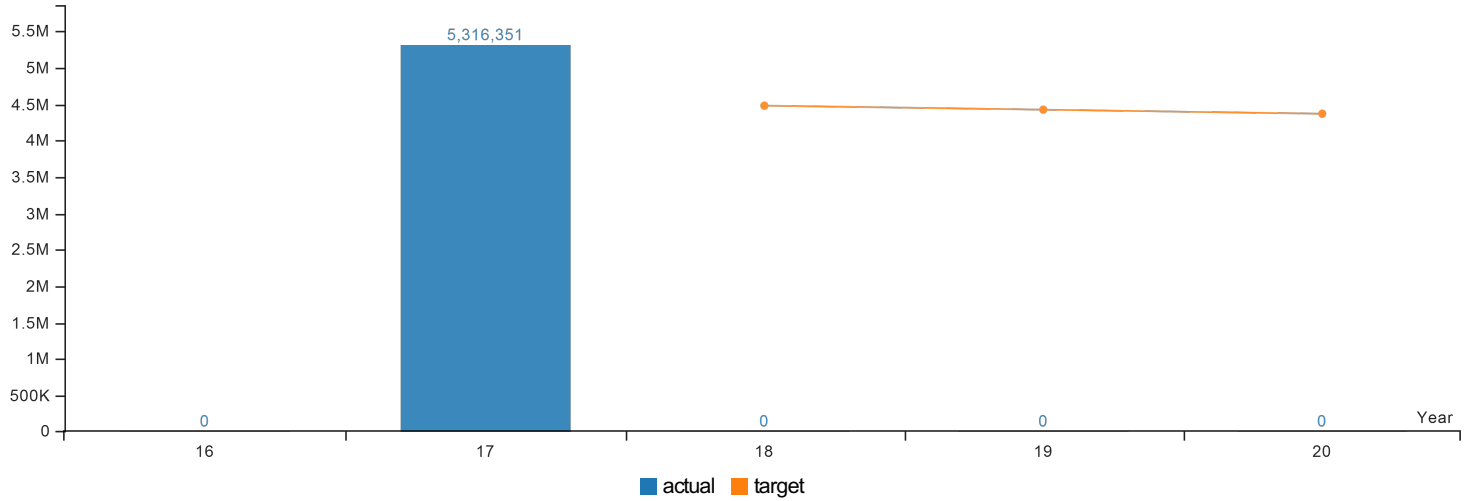
Management comments

DEQ works collaboratively with responsible parties to clean up contaminated properties in a timely and cost effective manner. The cleanup program uses risk-based guidance to aid cleanup decisions, targets hot spots of contamination, uses settlements to fund additional cleanups, and partners with Business Oregon to assist parties in funding investigation and cleanup actions. DEQ's Prospective Purchaser Agreement program encourages cleanup and redevelopment by providing liability relief for those wanting to buy contaminated property. In addition, DEQ has promoted Heating Oil Tank cleanups by allowing contractors registered with DEQ to certify that cleanups meet Oregon standards.

- Data shown in report year 2018 reflects cleanup efforts as of December 31, 2017.

KPM #10	MATERIALS MANAGEMENT - Waste generation
	Data Collection Period: Jan 01 - Jan 01

** Upward Trend = negative result*



Report Year	2016	2017	2018	2019	2020
Waste generation					
Actual	No Data	5,316,351	No Data	No Data	No Data
Target	TBD	TBD	4,482,885	4,427,312	4,371,739

How Are We Doing

Data for the the 2018 Report (2017 data) will not be available until the end of calendar year 2018.

Waste generation is the total amount of material in the waste stream whether disposed, recycled or otherwise recovered. It provides an approximation of Oregon's consumption of materials and products.

Oregon Revised Statue 459A.010 sets goals that for calendar years 2025 through 2049, total general solid waste generation shall be 15 percent below the total general solid waste generation for calendar year 2012, and that for calendar year 2050 and subsequent years, total general solid waste generation shall be 40 percent below total general solid waste generation for calendar year 2012. The targets for this measure are based on reducing the total general solid waste generation from the actual generation as measured in 2012 to 15 percent less by 2025 and 40 percent less by 2050.

From 1993 through 2006, total waste generation rose steadily. For the next three years, waste generation fell sharply, but leveled off and then began increasing slowly. Waste generation began increasing quickly again in 2015 and 2016, in contrast to legislated goals calling for reductions in generation.

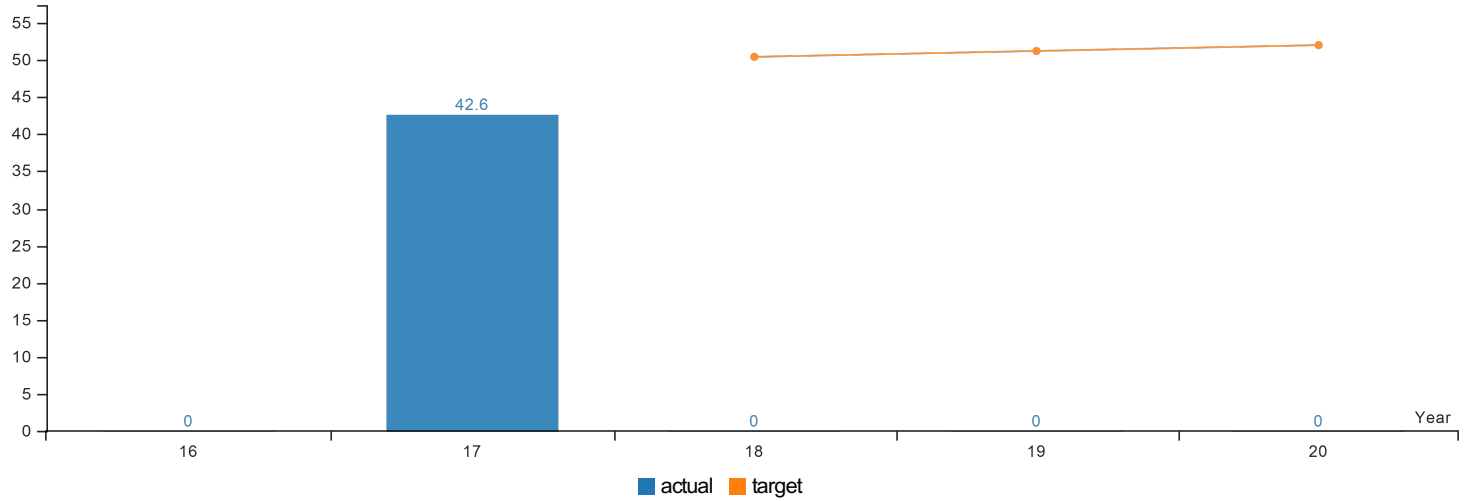
Factors Affecting Results

Waste generation is tied to the economy, as increased income leads to larger houses, increased construction and increased purchase of goods. Population increases generally increase the

generation of solid waste, and other factors can also play a role. The decline of Oregon waste generation in 2006-2009 was likely related mainly to the recession and steep decline in building construction and employment from 2007 through 2010. Another major factor playing a role was the decline in newspapers, magazines and other printed material as people moved more to the Internet as a source of information and advertising.

KPM #11	MATERIALS MANAGEMENT - Waste recovery
	Data Collection Period: Jan 01 - Jan 01

** Upward Trend = positive result*



Report Year	2016	2017	2018	2019	2020
Percent of waste recovered					
Actual	No Data	42.60%	No Data	No Data	No Data
Target	TBD	TBD	50.42%	51.21%	52%

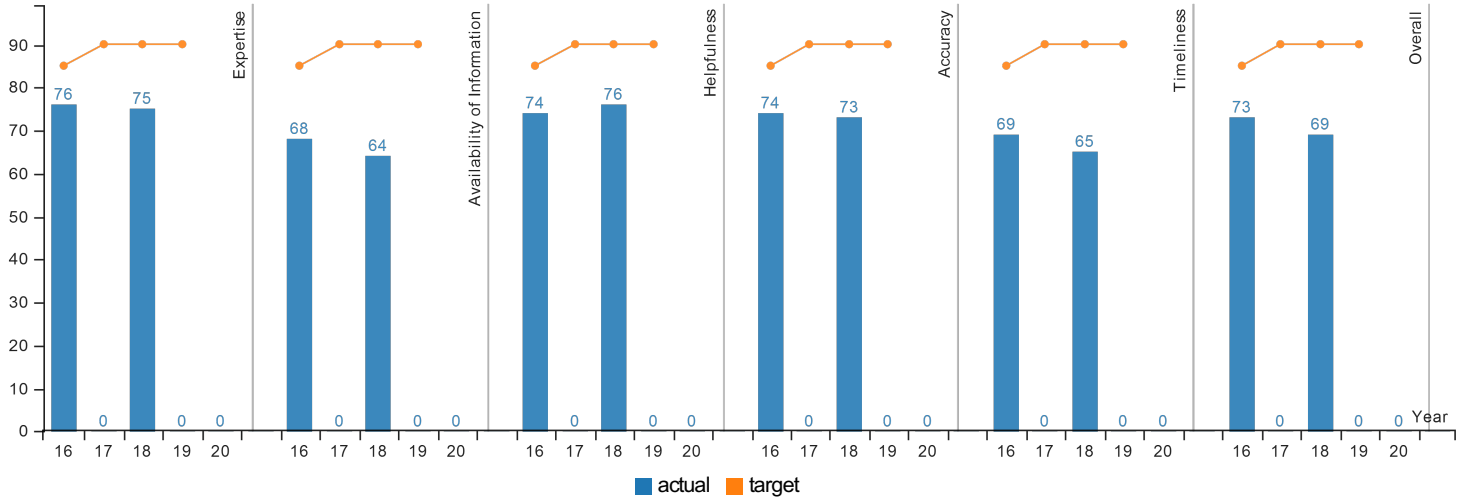
How Are We Doing

Data for the the 2018 Report (2017 data) will not be available until the end of calendar year 2018.

The waste recovery rate is the percentage of material in the waste stream which is recycled or otherwise recovered. Recycling and other recovery have environmental benefits when it prevents the extraction and processing of virgin material, though individual materials differ greatly in these benefits. Oregon Revised Statue 459A.010 sets goals that by 2020, the recovery rate of material from general solid waste shall be at least 52 percent, and by 2025, it shall be at least 55 percent.

Factors Affecting Results

KPM #12	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	2016	2017	2018	2019	2020
Expertise					
Actual	76%	No Data	75%	No Data	No Data
Target	85%	90%	90%	90%	TBD
Availability of Information					
Actual	68%	No Data	64%	No Data	No Data
Target	85%	90%	90%	90%	TBD
Helpfulness					
Actual	74%	No Data	76%	No Data	No Data
Target	85%	90%	90%	90%	TBD
Accuracy					
Actual	74%	No Data	73%	No Data	No Data
Target	85%	90%	90%	90%	TBD
Timeliness					
Actual	69%	No Data	65%	No Data	No Data
Target	85%	90%	90%	90%	TBD
Overall					
Actual	73%	No Data	69%	No Data	No Data
Target	85%	90%	90%	90%	TBD

DEQ surveys its air and water quality permit holders biennially, as required by the 2005 Legislature of all state agencies, and uses the results to 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 90 percent of customers rating service as "good"or "excellent" in all categories.

The 2018 survey yielded ratings that are nearly the same as those from the 2016 survey, with "accuracy" and "helpfulness" ratings increasing slightly. Ratings in all categories are below the 90 percent target. The survey instrument also gathers comments that provide some insight into what our customers think of our services. The majority of comments 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's survey results remain consistent over time, with the majority of our customers rating services as good to excellent for all service categories, though we don't reach the 90 percent goal. DEQ's issues with permit timeliness affect our overall customer score.

DEQ recognizes the need to improve permit timeliness. In 2016, DEQ hired an independent consultant to review the water quality permit program. The consultant's review highlighted some reasons for permitting delays, including implementing new water quality standards or clean water plans, compliance schedules and facility plans. The consultant made recommendations related to permitting process improvement, workload analysis, organizational structure and policy development. DEQ is directing resources toward implementing recommendations including better defining the permitting process. This investment diverts resources away from permit writing in the short term, but will have long-term payoff for program performance.

The Oregon Secretary of State audited DEQ's air quality permitting process to determine how DEQ can improve its air quality permitting process. The audit report cited a number of factors that affect timely permit development including competing priorities, position cuts, inconsistent guidance for staff and applicants, and increased time for the public engagement process. Recommendations in the report included evaluating permit writer workloads and staffing, clarifying the public engagement process, providing better guidance to permit writers and businesses, and conducting a process improvement effort.

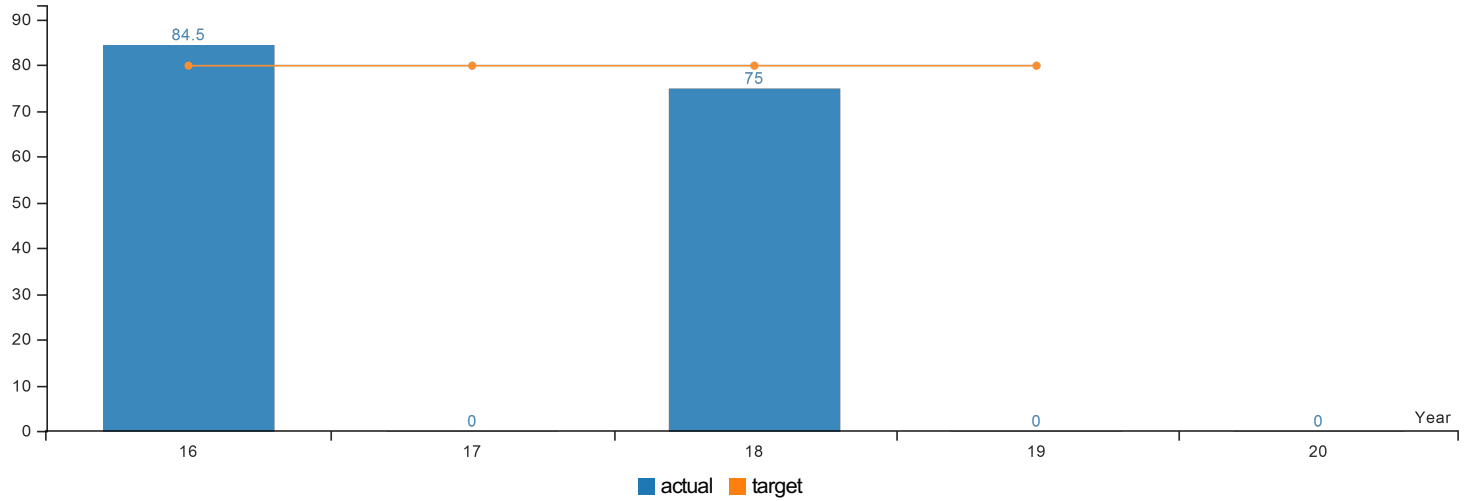
DEQ held a process improvement event to address the concerns raised in the Secretary of State audit. Teams are working on the Title V permit pre-application process; providing clear information on the public comment process; succession planning; documenting standard work; updating training material; and improving webpages. DEQ has also identified metrics to track the successes and areas that need continuous improvement.

Management comments

DEQ recognizes that water and air quality permit program issues affect our overall customer service score. The agency is directing significant resources toward process improvement for these permitting programs. Although in the short term this diverts resources away from permit writing, the long-term pay off is improved program performance, and an anticipated improvement in our customer service score.

KPM #13	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

** Upward Trend = negative result*



Report Year	2016	2017	2018	2019	2020
Percent of local participants who rank DEQ involvement in Economic Revitalization Team process as good to excellent					
Actual	84.50%	No Data	75%	No Data	No Data
Target	80%	80%	80%	80%	TBD

How Are We Doing

The Regional Solutions Team conducts a biennial survey to measure customer satisfaction with RST services. The Governor's Office conducted the most recent survey in 2018, and will conduct the next survey in May 2020.

DEQ RST staff are co-located with the Governor's Coordinator, Department of Land Conservation and Development, Oregon Department of Transportation, Oregon Housing and Community Services, and Business Oregon at Regional Solutions Centers at Oregon colleges and universities. Benefits include:

- Enhanced collaboration between local, state and federal agencies on identified regional projects that create or retain existing jobs
- Leveraging agencies' resources to assist communities
- Streamlined regulatory processes
- Providing a local DEQ contact to address community and business questions

In 2018, 75 percent of the participants ranked DEQ's involvement on Regional Solutions Team as good to excellent, demonstrating the value of DEQ's Regional Solution Team to Oregon communities. Even though DEQ's ranking was below 80 percent, our ranking of 75 percent was within our historical range from 72 percent to 84.5 percent.

Factors Affecting Results

Since 2006, the Governor's Regional Solutions Team has conducted a biennial survey to measure customer satisfaction with RST services. The survey questions measure RST participants' perception of the involvement of four partner RST agencies which include DEQ, Business Oregon, DLCD and ODOT. The 2018 survey criteria for evaluating agency involvement was based on the

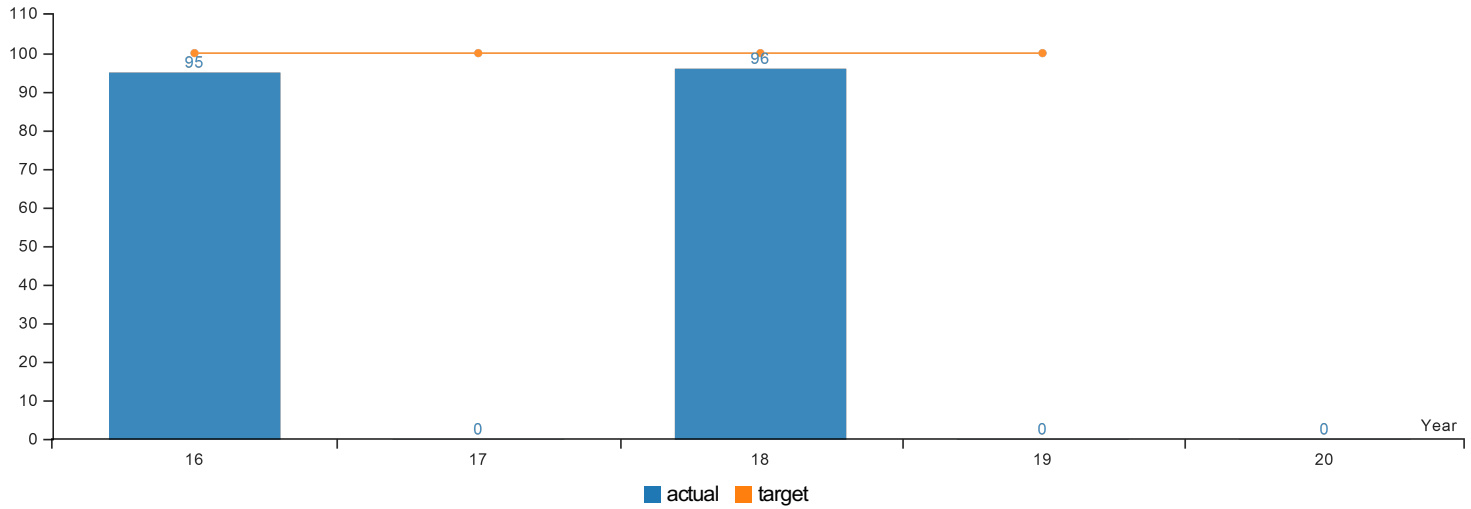
following question: "How do you rate the Oregon Department of Environmental Quality's involvement in the Regional Solutions process?"

It is challenging to draw conclusions about DEQ's performance because the survey response rate is generally low and DEQ's interaction with the group being surveyed varies from year to year, and from region to region. DEQ strives to meet communities' needs by participating in RST outreach efforts, attending business recruitment meetings to identify permitting needs, identifying funding resources, providing technical assistance and managing RST projects.

DEQ Key Performance Measures

KPM #14	BOARDS AND COMMISSIONS - Percent of total best practices met by the Environmental Quality Commission.
	Data Collection Period: Jan 01 - Jan 01

** Upward Trend = positive result*



Report Year	2016	2017	2018	2019	2020
Percent of total best practices met by the Environmental Quality Commission					
Actual	95%	0%	96%	No Data	No Data
Target	100%	100%	100%	100%	TBD

How Are We Doing

The 2005 Legislature directed the Department of Administrative Services and the Legislative Fiscal Office to develop a measure for boards and commissions having governance oversight to use in evaluating their own performance. Because the Environmental Quality Commission is included in DEQ's budget and because it hires DEQ's executive director, DAS and LFO deemed EQC to have governance oversight and identified it as one of the boards and commissions that should have a performance measure.

In 2006, EQC adopted the percent of total best practices met by the commission as the performance standard. The commission set 100 percent as its target. The measure is an annual self‐assessment of 15 best practices for boards and commissions, as laid out by DAS and customized to EQC.

The 2018 survey results indicate a high degree of success and several key opportunities for improvement. DEQ does not recommend or plan for any corrective actions at this time, and the Environmental Quality Commission discussed the survey results at the July 11-13, 2018 EQC meeting.

Factors Affecting Results

The 2018 survey, which asks for a review of the 2017 meeting year, omitted three questions as noted below. These questions would all have an answer of Not Applicable or None of the Time/0 percent because of changes to organizational leadership and commission membership during the 2017 meeting year. They will be reinstated for the 2019 survey, assessing the 2018 meeting year.

DEQ Key Performance Measures

1. The commission reviews the director's performance expectations to ensure that they are current.

2. The commission gives the director an annual performance review.

3. The agency's mission and high-level goals are current and applicable.

Environmental Quality, Department of

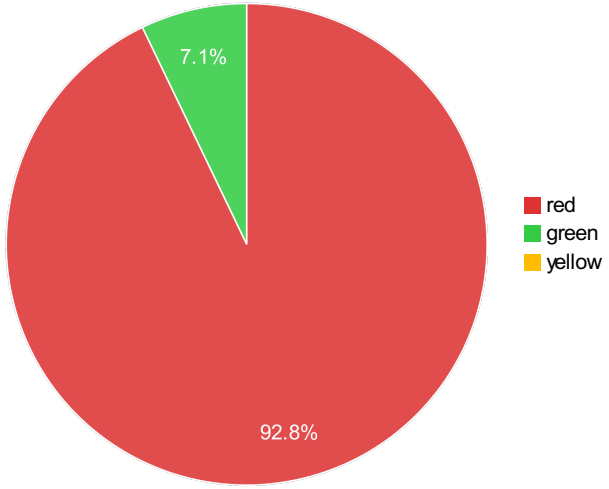
Annual Performance Progress Report

Reporting Year 2019

Published: 2/11/2019 1:49:00 PM

DEQ Key Performance Measures

KPM #	Approved Key Performance Measures (KPMs)
1	PERMIT TIMELINESS - Percentage of air contaminant discharge permits issued within the target period.
2	AIR QUALITY DIESEL EMISSIONS - Quantity of diesel particulate emissions.
3	AIR QUALITY CONDITIONS - National Standards: Number of days when air is unhealthy for sensitive groups and all groups.
4	AIR QUALITY - AIR TOXICS - Air Toxics Trends in Larger and Smaller Communities
5	PERMIT TIMELINESS - Percent of Title V operating permits issued with the target period.
6	PERMIT TIMELINESS - Percentage of individual wastewater discharge permits issued within 270 days.
7	UPDATED PERMITS - Percent of total wastewater permits that are current.
8	WATER QUALITY CONDITIONS - Percent of monitored stream sites with significantly increasing trends in water quality.
9	CLEANUP - Properties with known contamination cleaned up
10	MATERIALS MANAGEMENT - Waste generation
11	MATERIALS MANAGEMENT - Waste recovery
12	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.
13	ERT - Percent of local participants who rank DEQ involvement in Economic Revitalization Team process as good to excellent.
14	BOARDS AND COMMISSIONS - Percent of total best practices met by the Environmental Quality Commission.

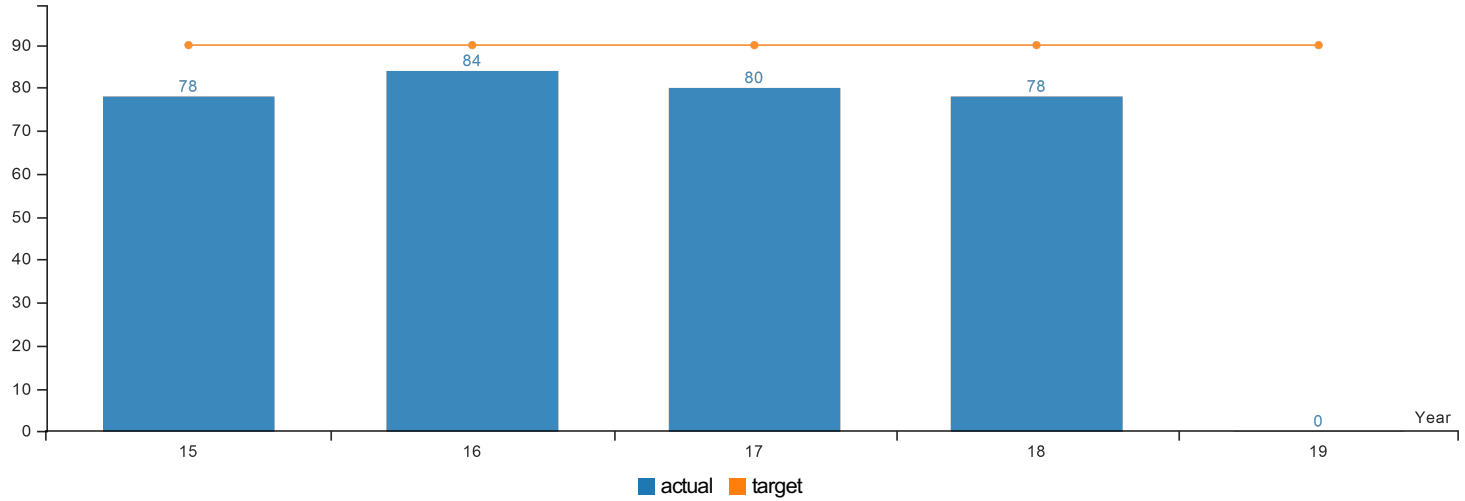


Performance Summary	Green	Yellow	Red
	= Target to -5%	= Target -5% to -15%	= Target > -15%
Summary Stats:	7.14%	0%	92.86%

DEQ Key Performance Measures

KPM #1	PERMIT TIMELINESS - Percentage of air contaminant discharge permits issued within the target period.
	Data Collection Period: Jan 01 - Dec 31

** Upward Trend = positive result*



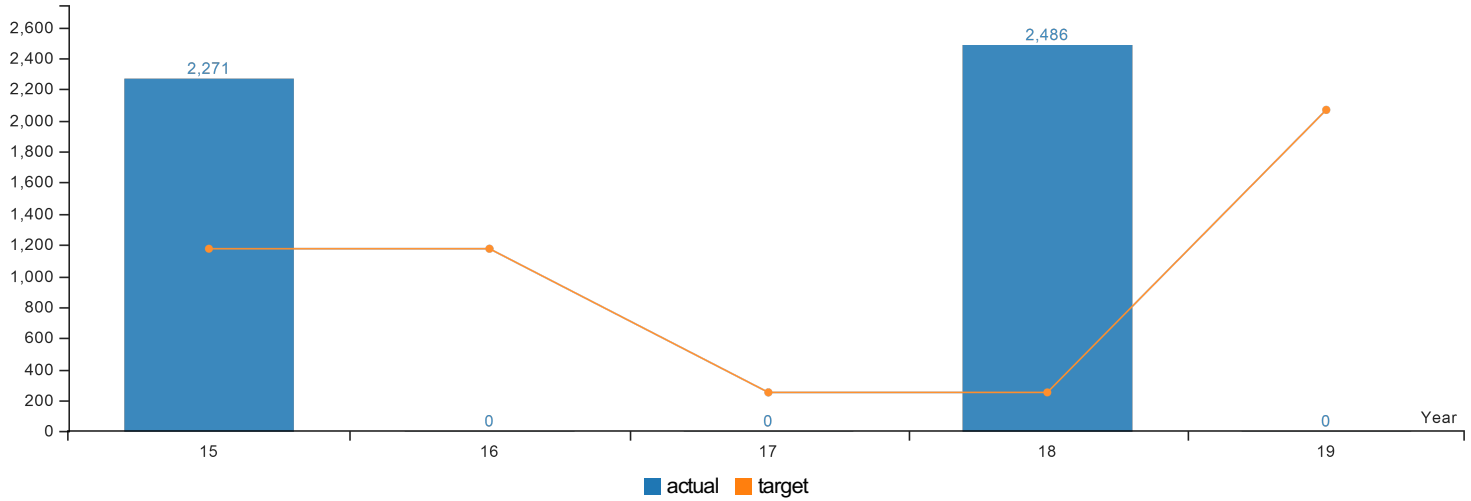
Report Year	2015	2016	2017	2018	2019
Air Quality Permit Timeliness: ACDP Permits issued within Target					
Actual	78%	84%	80%	78%	No Data
Target	90%	90%	90%	90%	90%

How Are We Doing

Factors Affecting Results

KPM #2	AIR QUALITY DIESEL EMISSIONS - Quantity of diesel particulate emissions.
	Data Collection Period: Jan 01 - Jan 01

** Upward Trend = negative result*

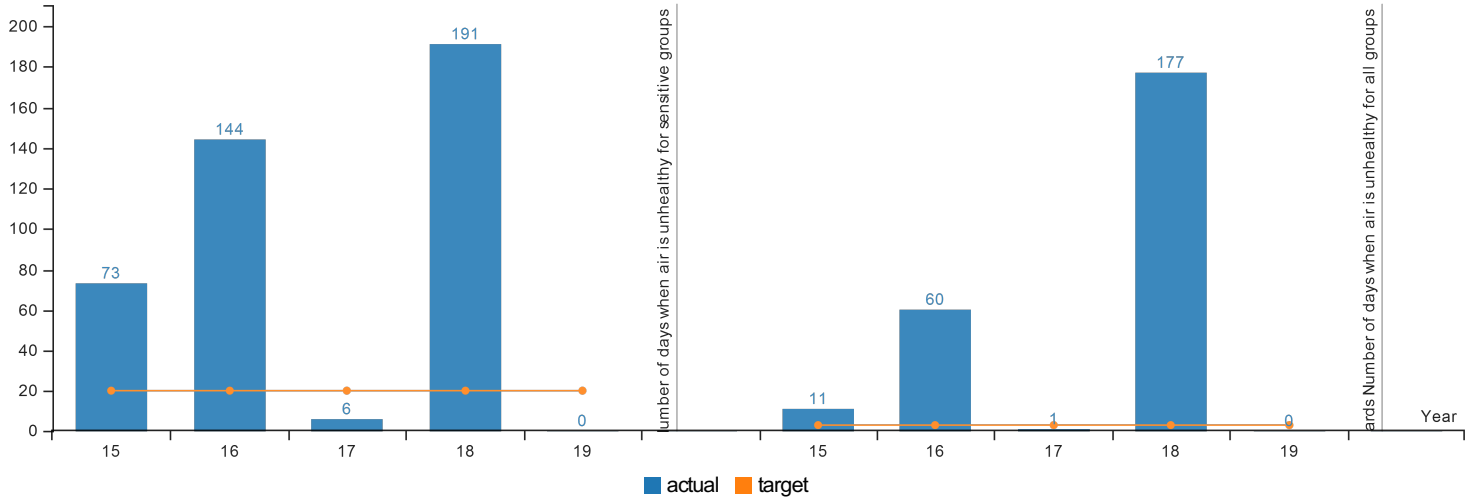


Report Year	2015	2016	2017	2018	2019
Quantity of diesel particulate emissions (in tons)					
Actual	2,271	0	0	2,486	No Data
Target	1,175	1,175	250	250	2,069

How Are We Doing

Factors Affecting Results

KPM #3	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

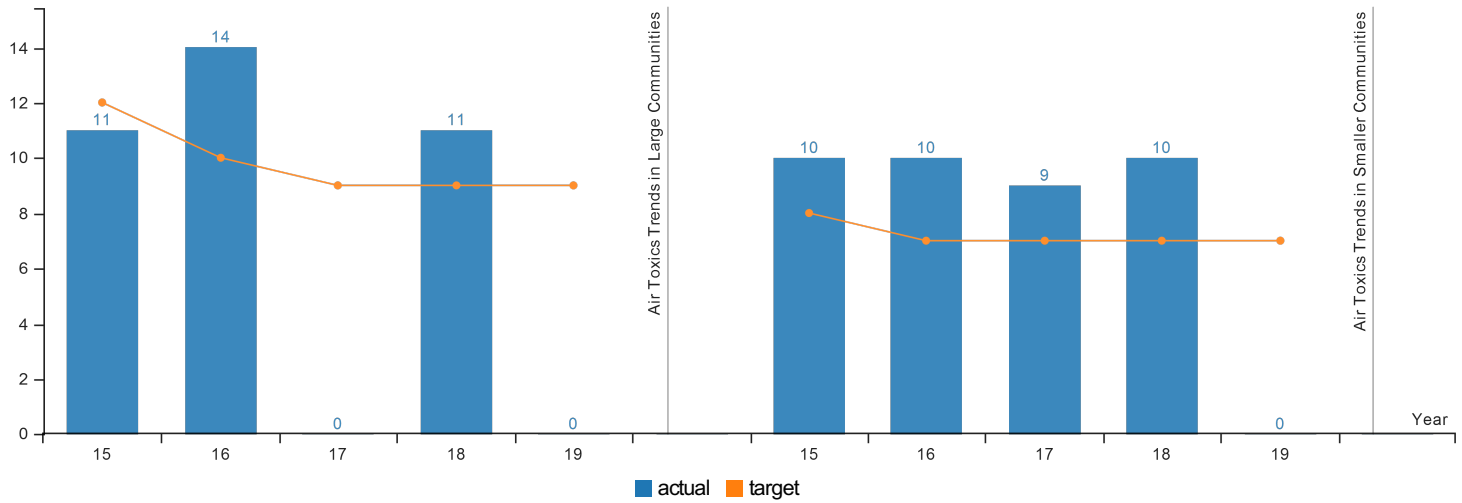


Report Year	2015	2016	2017	2018	2019
National Standards Number of days when air is unhealthy for sensitive groups					
Actual	73	144	6	191	No Data
Target	20	20	20	20	20
National Standards Number of days when air is unhealthy for all groups					
Actual	11	60	1	177	No Data
Target	3	3	3	3	3

How Are We Doing

Factors Affecting Results

KPM #4	AIR QUALITY - AIR TOXICS - Air Toxics Trends in Larger and Smaller Communities
	Data Collection Period: Jan 01 - Jan 01



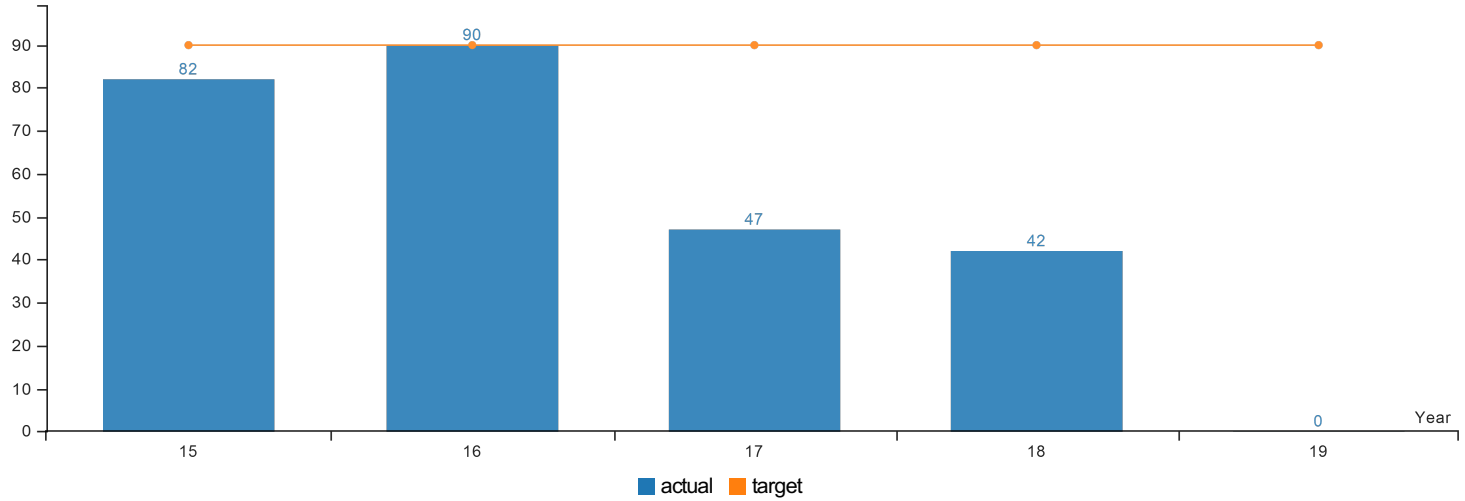
Report Year	2015	2016	2017	2018	2019
Air Toxics Trends in Large Communities					
Actual	11	14	0	11	No Data
Target	12	10	9	9	9
Air Toxics Trends in Smaller Communities					
Actual	10	10	9	10	No Data
Target	8	7	7	7	7

How Are We Doing

Factors Affecting Results

KPM #5	PERMIT TIMELINESS - Percent of Title V operating permits issued with the target period.
	Data Collection Period: Jan 01 - Dec 31

** Upward Trend = positive result*



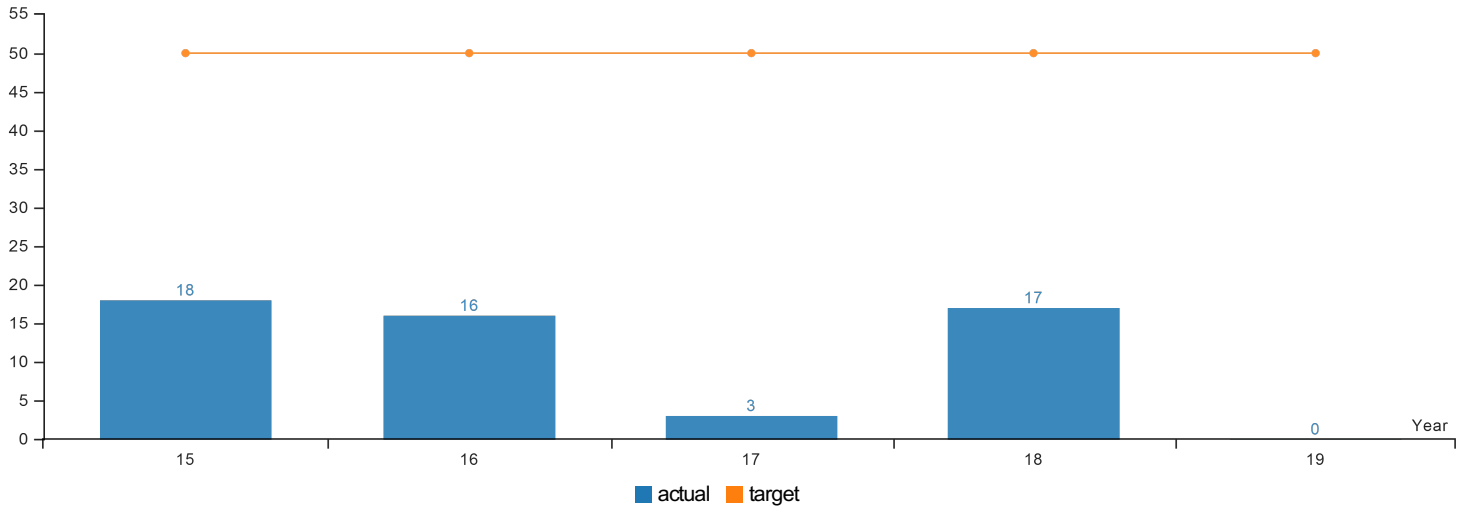
Report Year	2015	2016	2017	2018	2019
Air Quality Permit Timeliness: Title V Permits issued within Target					
Actual	82%	90%	47%	42%	No Data
Target	90%	90%	90%	90%	90%

How Are We Doing

Factors Affecting Results

KPM #6	PERMIT TIMELINESS - Percentage of individual wastewater discharge permits issued within 270 days.
	Data Collection Period: Jan 01 - Jan 01

** Upward Trend = positive result*



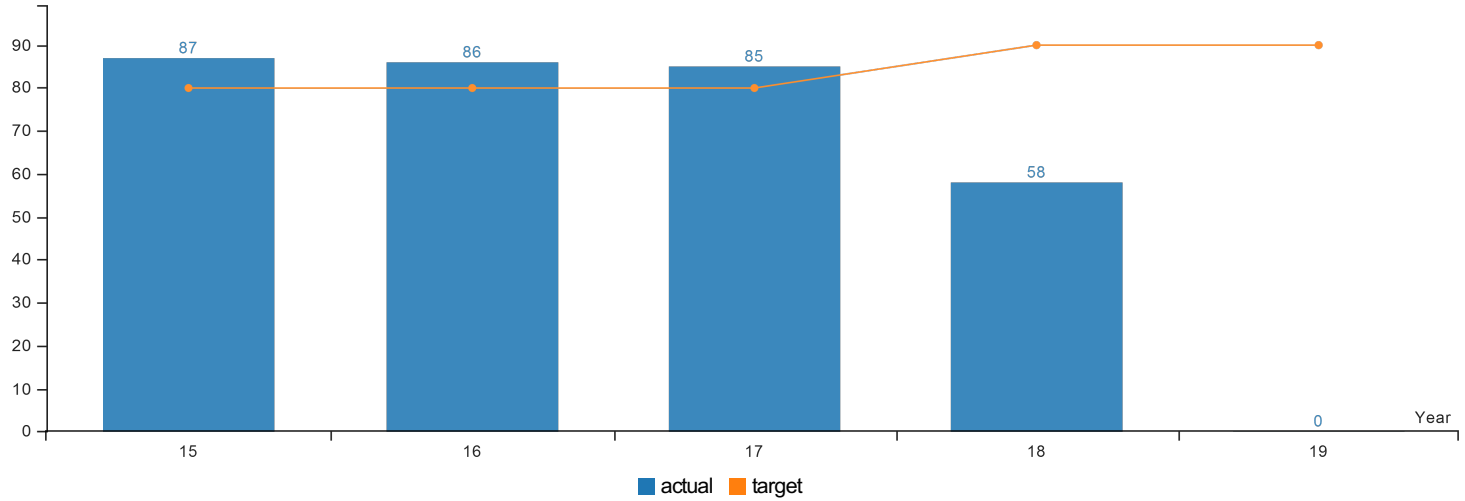
Report Year	2015	2016	2017	2018	2019
Percentage of individual wastewater discharge permits issued within 270 days					
Actual	18%	16%	3%	17%	No Data
Target	50%	50%	50%	50%	50%

How Are We Doing

Factors Affecting Results

KPM #7	UPDATED PERMITS - Percent of total wastewater permits that are current.
	Data Collection Period: Jan 01 - Jun 30

** Upward Trend = positive result*

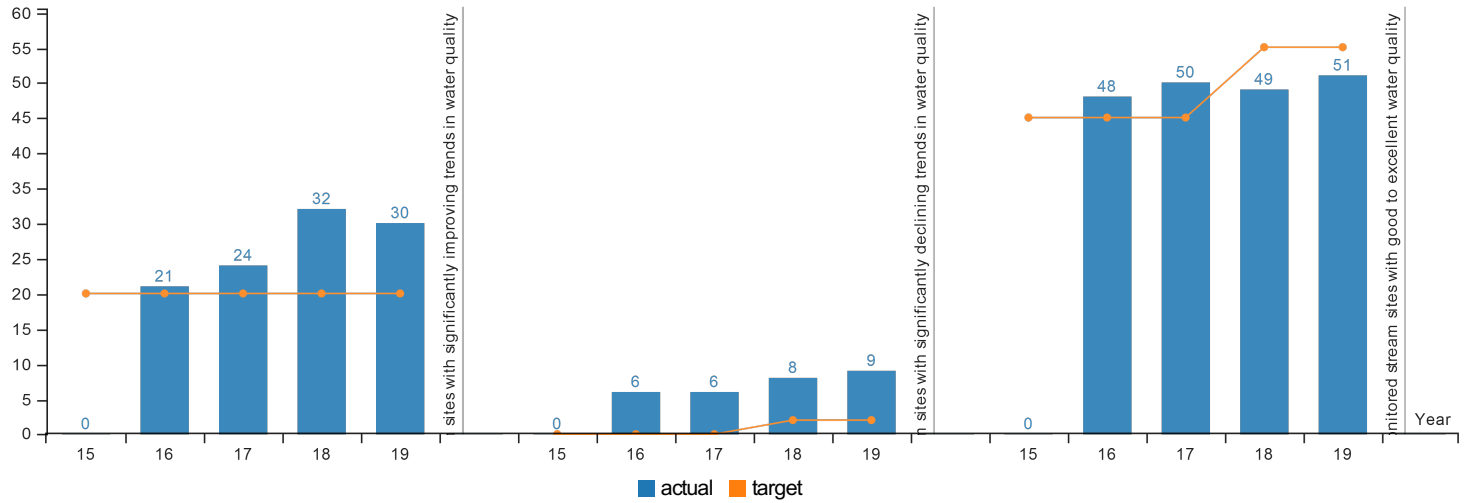


Report Year	2015	2016	2017	2018	2019
Percent of total wastewater permits that are current					
Actual	87%	86%	85%	58%	No Data
Target	80%	80%	80%	90%	90%

How Are We Doing

Factors Affecting Results

KPM #8	WATER QUALITY CONDITIONS - Percent of monitored stream sites with significantly increasing trends in water quality.
	Data Collection Period: Oct 01 - Sep 30

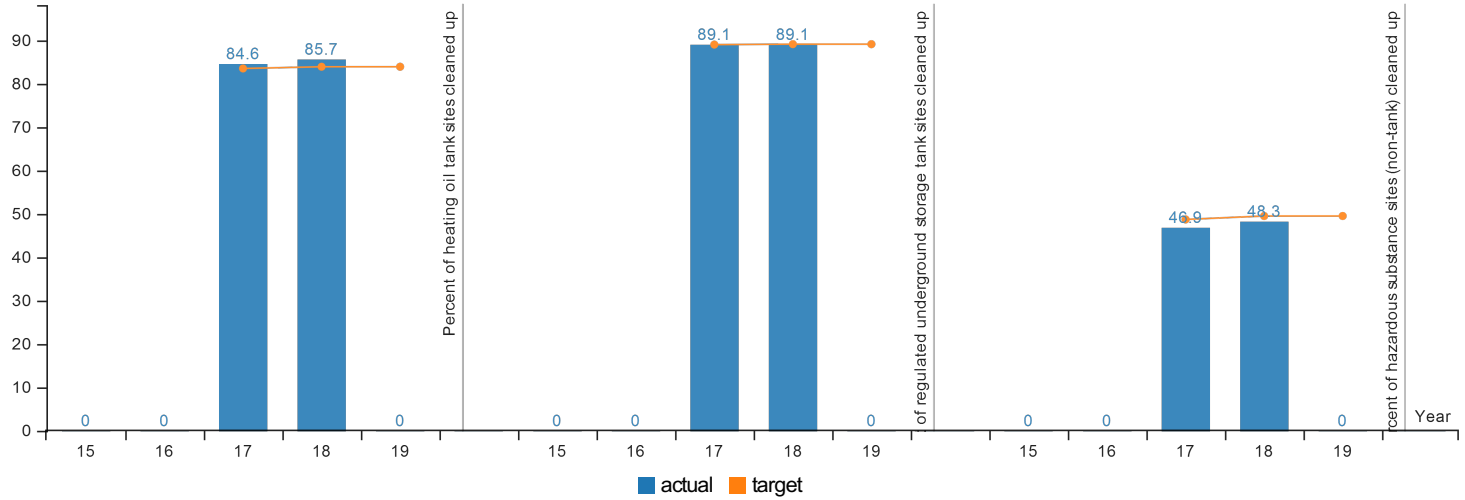


Report Year	2015	2016	2017	2018	2019
Percent of monitored stream sites with significantly improving trends in water quality					
Actual	No Data	21%	24%	32%	30%
Target	20%	20%	20%	20%	20%
Percent of monitored stream sites with significantly declining trends in water quality					
Actual	No Data	6%	6%	8%	9%
Target	0%	0%	0%	2%	2%
Percent of monitored stream sites with good to excellent water quality					
Actual	No Data	48%	50%	49%	51%
Target	45%	45%	45%	55%	55%

How Are We Doing

Factors Affecting Results

KPM #9	CLEANUP - Properties with known contamination cleaned up
	Data Collection Period: Jan 01 - Jan 01



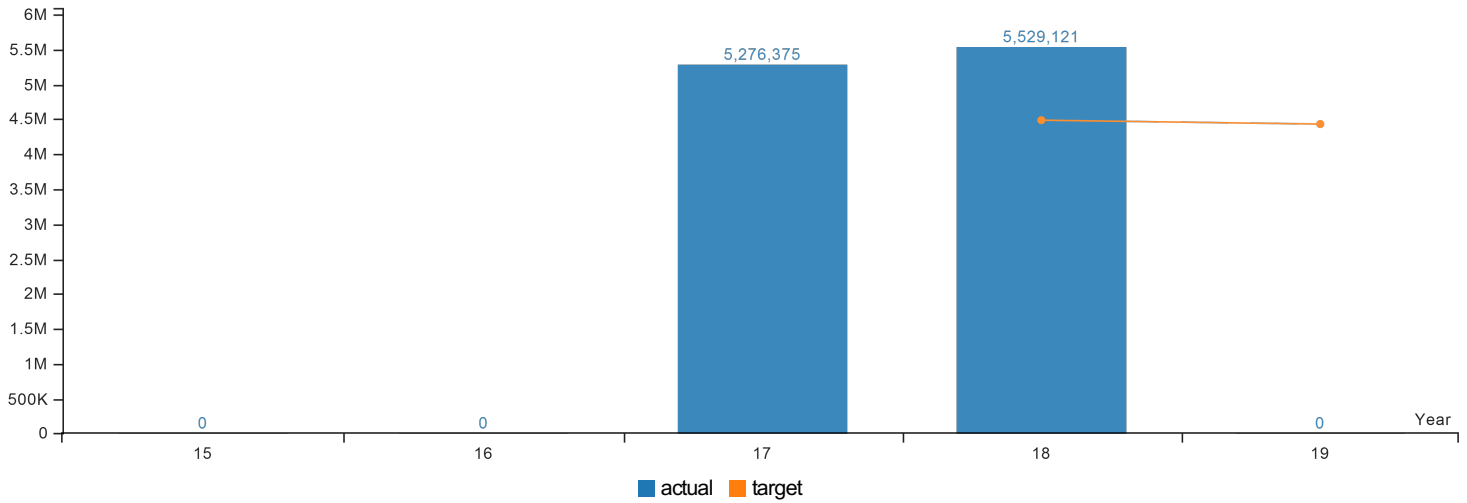
Report Year	2015	2016	2017	2018	2019
Percent of heating oil tank sites cleaned up					
Actual	No Data	No Data	84.60%	85.70%	No Data
Target	TBD	TBD	83.60%	84%	84%
Percent of regulated underground storage tank sites cleaned up					
Actual	No Data	No Data	89.10%	89.10%	No Data
Target	TBD	TBD	89.10%	89.20%	89.20%
Percent of hazardous substance sites (non-tank) cleaned up					
Actual	No Data	No Data	46.90%	48.30%	No Data
Target	TBD	TBD	48.80%	49.60%	49.60%

How Are We Doing

Factors Affecting Results

KPM #10	MATERIALS MANAGEMENT - Waste generation
	Data Collection Period: Jan 01 - Jan 01

** Upward Trend = negative result*



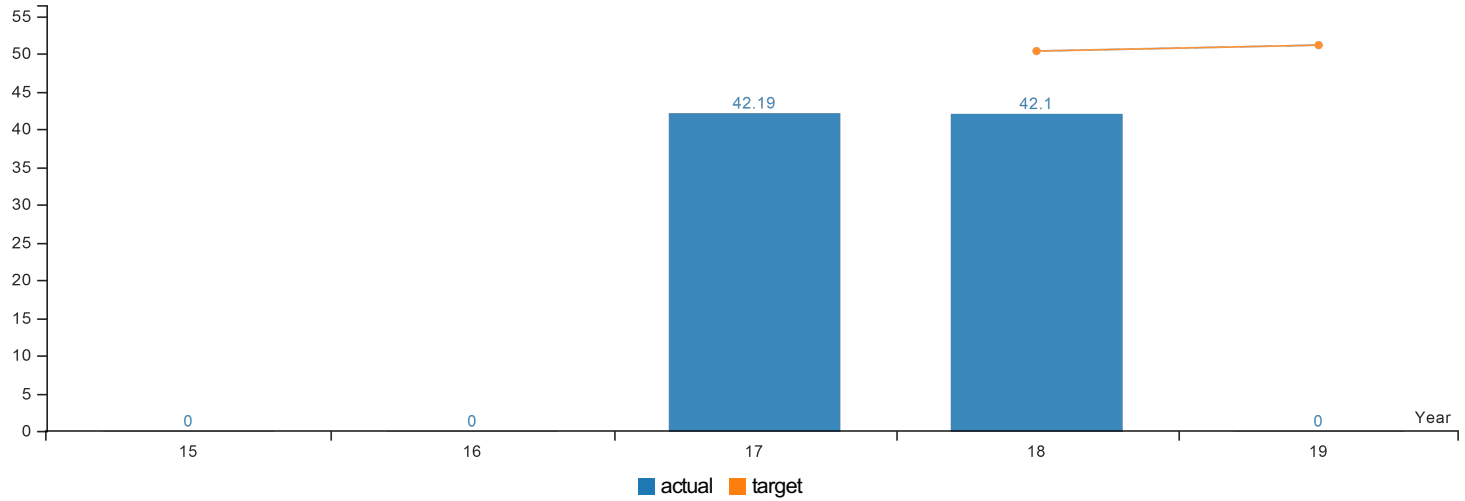
Report Year	2015	2016	2017	2018	2019
Waste generation					
Actual	No Data	No Data	5,276,375	5,529,121	No Data
Target	TBD	TBD	TBD	4,482,885	4,427,312

How Are We Doing

Factors Affecting Results

KPM #11	MATERIALS MANAGEMENT - Waste recovery
	Data Collection Period: Jan 01 - Jan 01

** Upward Trend = positive result*

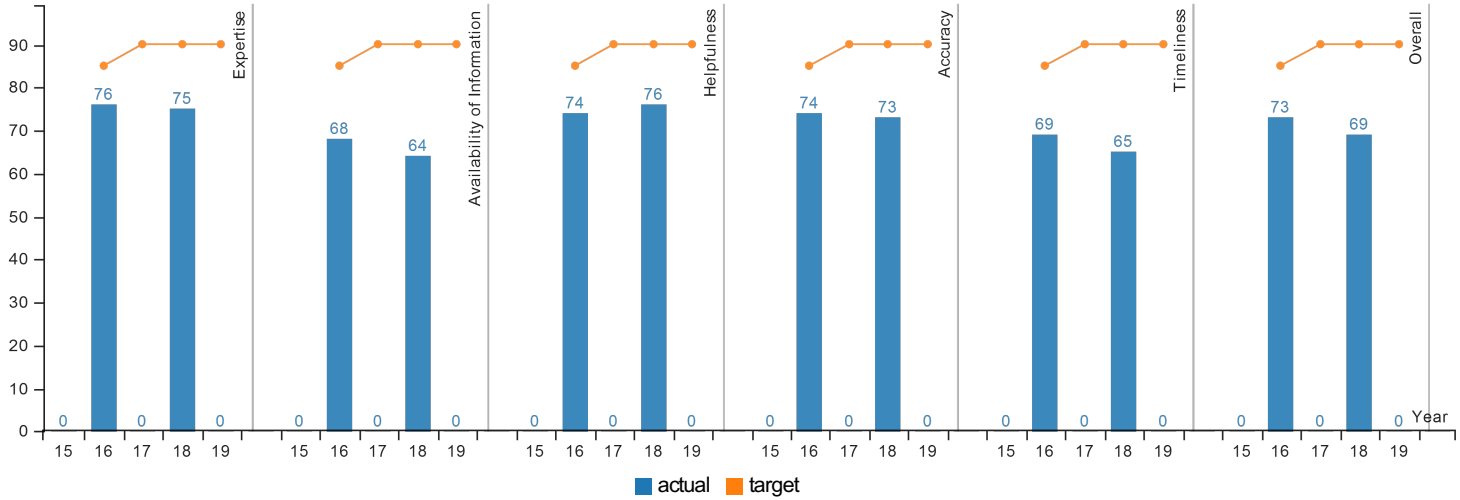


Report Year	2015	2016	2017	2018	2019
Percent of waste recovered					
Actual	No Data	No Data	42.19%	42.10%	No Data
Target	TBD	TBD	TBD	50.42%	51.21%

How Are We Doing

Factors Affecting Results

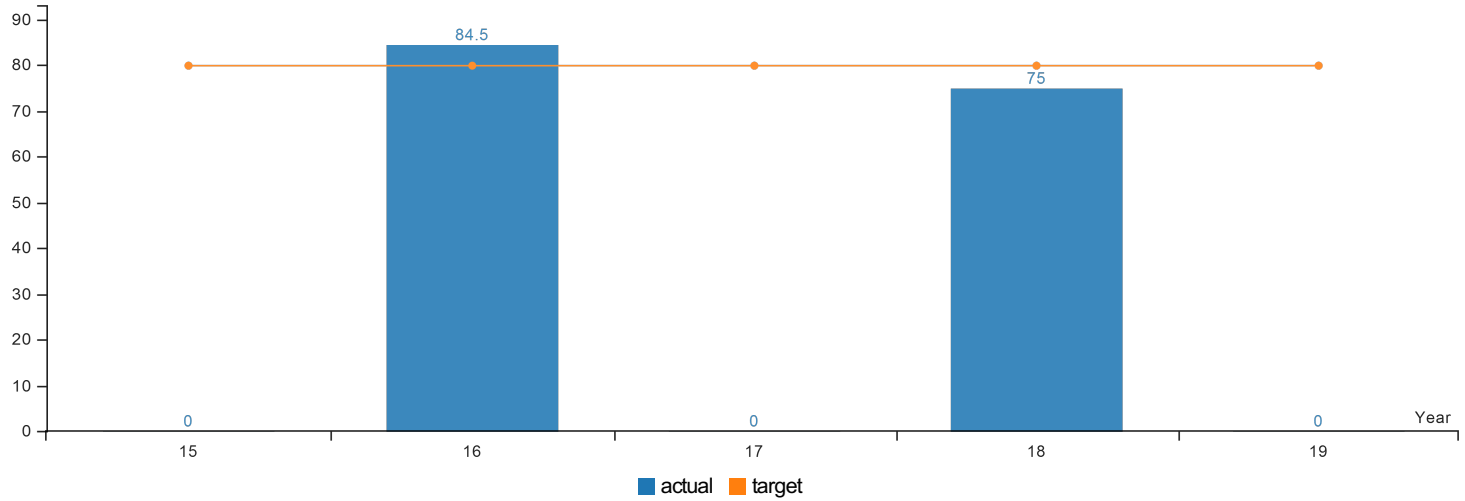
KPM #12	CUSTOMER SERVICE - Percent of customers rating their satisfaction with the agency's customer service as "good" or "excellent": overall, timeliness, accuracy, helpfulness, expertise, availability of information.
	Data Collection Period: Jan 01 - Jan 01



Report Year	2015	2016	2017	2018	2019
Expertise					
Actual	No Data	76%	No Data	75%	No Data
Target	TBD	85%	90%	90%	90%
Availability of Information					
Actual	No Data	68%	No Data	64%	No Data
Target	TBD	85%	90%	90%	90%
Helpfulness					
Actual	No Data	74%	No Data	76%	No Data
Target	TBD	85%	90%	90%	90%
Accuracy					
Actual	No Data	74%	No Data	73%	No Data
Target	TBD	85%	90%	90%	90%
Timeliness					
Actual	No Data	69%	No Data	65%	No Data
Target	TBD	85%	90%	90%	90%
Overall					
Actual	No Data	73%	No Data	69%	No Data
Target	TBD	85%	90%	90%	90%

KPM #13	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

** Upward Trend = negative result*



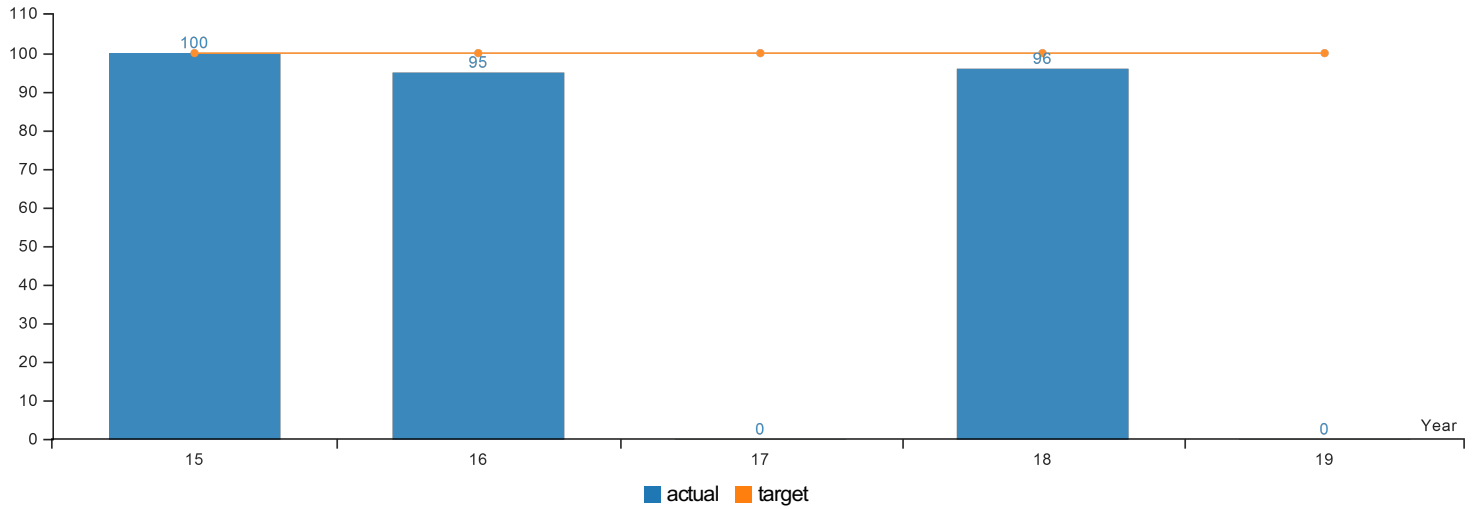
Report Year	2015	2016	2017	2018	2019
Percent of local participants who rank DEQ involvement in Economic Revitalization Team process as good to excellent					
Actual	No Data	84.50%	No Data	75%	No Data
Target	80%	80%	80%	80%	80%

How Are We Doing

Factors Affecting Results

KPM #14	BOARDS AND COMMISSIONS - Percent of total best practices met by the Environmental Quality Commission.
	Data Collection Period: Jan 01 - Jan 01

** Upward Trend = positive result*



Report Year	2015	2016	2017	2018	2019
Percent of total best practices met by the Environmental Quality Commission					
Actual	100%	95%	0%	96%	No Data
Target	100%	100%	100%	100%	100%

How Are We Doing

Factors Affecting Results

UPDATED **OTHER FUNDS ENDING BALANCES FOR THE 2017-19 & 2019-21 BIENNIA**

Agency: **34000 DEQ**
Contact Person (Name & Phone #): **Mark Brown, 503-229-5603**

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Other Fund Type	**Program Area (SCR)**	**Treasury Fund #/Name**	**Category/Description**	**Constitutional and/or Statutory reference**	**2017-19 Ending Balance In LAB**	**2017-19 Ending Balance Revised**	**2019-21 Ending Balance In CSL**	**2019-21 Ending Balance Revised**	**Comments**
OF Limited	001-AQ	1110-ACDP Fees	Operations	Air Contaminant Discharge Fees (ORS468.065)	1,305,064	1,446,628	619,470	(32,729)	Need approximately $2,200,000 ending fund balance to support the program until the annual permit fees are collected in December of each year. Small amounts of General and Federal funds support this program, but a fee supported ending balance is necessary to support the program. The program is requesting a fee increase in POP 116 in order to have sufficient funding for the 19-21 biennium.
OF Limited	001-AQ	1120-AQ Indirect Sources	Operations	Oregon Low Emission Vehicle Fees (ORS 468.065)	383,283	650,485	349,368	359,366	Need approximately $250,000 in ending fund balance to support the program. Invoice payment are due June 30 each year. Current staffing in this program has been low during the 17-19 biennium due to vacancies and expenditures are expected to pick up during the remainder of this biennium and the 19-21 biennium as staffing and activity picks up.
OF Limited	001-AQ	1130-AQ Emissions Title V Fees	Operations	Title V Permit Fees (ORS 468.065)	1,692,702	4,784,179	1,581,098	1,362,594	According to the Federal Clean Air Act, Title V fees can only be used for Title V work. Fees are the sole source of funding for this work. Focus on the Cleaner Air Oregon work has shifted FTE away from Title V, thus an increase in ending balance projections. As the Cleaner Air Oregon program hires their own staff, staff shifted to that work will return to Title V, decreasing the ending balance.
OF Limited	001-AQ	1140-Asbestos Cert Fees	Operations	Asbestos Certification Fees (ORS 468A.750)	451,891	553,979	141,245	150,782	An ending balance is necessary to support program operations. Work in this program increases in the summer months (largely construction based work) which requires sufficient funds be available for enforcement and other uptick in work. Additionally, technology upgrades continue to be necessary for this program which requires fee funding.
OF Limited	001-AQ	1310-Vehicle Inspection Program	Operations	Vehicle Inspection Certification Fees (ORS 468A.400) * excludes package 070 and 113	1,372,688	(1,720,064)	(1,632,438)	(1,370,462)	An ending balance of approximately $3,000,000 is necessary in this fund for operational purposes. This is a large program that has numerous facilities and FTE, which can result in large, unplanned expenditures. The program is requesting a fee increase in POP 118 in order to have sufficient funding for the 19-21 biennium.
OF Limited	001-AQ	1400 - AQ Receipts Authority	Operations	AQ Receipts Authority (ORS 468.065)(2)	3	280,218	92,680	92,680	This funds is revenue agreements from other governement entiteis and supports laboratory work. The fund balance is spent down seasonally when more work is required.
OF Limited	001-AQ	1420- Gas Vapor Recovery	Operations	Gas Vapor Recovery (ORS 468.065)(2)	46,956	62,832	0	254	An ending balance of approximately $30,000 is necessary to support the ongoing operations of this program due to unpredictable revenue timing.
OF Limited	001-AQ	1430-Greenhouse Gas	Operations	Greenhouse Gas Reporting Fees 468A.050(4)	1,291,227	1,451,401	577,664	579,857	An ending balance of approximately $200,000 is necessary for this program as invoicing is done annually. Current vacancies in the program are increasign the ending balances.
OF Limited	001-AQ	1460-Clean Diesel/VW	Operations		(426,051)	605,114	0	9,729	This fund is limited in it's use and is largely passthru dollars to other government and non-government units for replacement of diesel school busses. A small portion, 15%, is available to support the administration of the program. It is anticipated that all available funds for grants will be exhausted.
OF Limited	001-AQ	1470-Zero Emission Incentive	Operations		(25,793)	17,486,221	(1)	(1)	This fund is limited in it's use and is largely passthru dollars to other government and non-government units for EV Rebate Incentives. The program was delayed in it's deployment due to legislation, and rebates are just starting to be issued (January 2019). A small portion, 10%, is available to support the administration of the program. It is anticipated that all available funds for rebates will be exhausted.
OF Limited	001-AQ	1480-Cleaner Air Oregon	Operations		0	(183,916)	2,395,426	4,193,220	An ending balance of approximately $2,000,000 is necessary due to the invoicing cycle of this program. Also, as this is a new program, fees will need to cover any technology needs of the program as well.
OF Limited	001-AQ	1510 - Field Burning	Operations	Field Burning (ORS 468.065)	3,094	110,386	121,250	121,250	This fund contains revenue agreements with the Bureau of Land Management and the Forrestry Department for activities related to wild fires. Due to the seasonality of such events, balances build up but are then expended during the summer months.
OF Limited	001-AQ	1520 - Backyard Burning Fees	Operations	Backyard Burning Fees (ORS 468.065)	4,512	10,192	10,192	10,192	The agency no longer operates this program.

Objective: **Provide updated Other Funds ending balance information for potential use in the development of the 2019-21 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 2017-19 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 2017-19 Legislatively Approved Budget and the 2019-21 Current Service Level at the Agency Request Budget level.

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 2017-19 General Fund approved budget or otherwise incorporated in the 2017-19 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 2017 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 2017-19 & 2019-21 BIENNIA**

Agency: **34000 DEQ**
Contact Person (Name & Phone #): **Mark Brown, 503-229-5603**

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Other Fund Type	**Program Area (SCR)**	**Treasury Fund #/Name**	**Category/Description**	**Constitutional and/or Statutory reference**	**2017-19 Ending Balance In LAB**	**2017-19 Ending Balance Revised**	**2019-21 Ending Balance In CSL**	**2019-21 Ending Balance Revised**	**Comments**
OF Limited	003 - LQ	3330 Highway Spill Fund	Operations	Petroleum Product Withdrawal Delivery Fees (ORS 465.ORS 465.101 – 465.131)	118,766	30,000	95,086	95,086	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)	1,656,547	2,593,833	471,689	455,299	Need 4 month ending fund balance ($3.3 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)	9,239,290	14,000,000	8,693,853	8,693,853	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. Fund balances are difficult to predict due to infrequency of agreements and large variations in amounts
OF Limited	003 - LQ	3460 Dry Cleaner Environmental Response	Operations	Dry Cleaner Environmental Response (465.510; 465.517 - .525)	411,317	642,316	156,851	156,851	Need 9 months ending balance ($475,000). Annual revenues received in March. Fund is responsible for cleanup at participating dry cleaner sites.
OF Limited	003 - LQ	3350/3360 Illegal Drug Lab Fund	Operations	Illegal Drug Lab Funds (ORS 475.405 - 475.495, 475A.120, 475A.126)	732,831	345,208	651,842	424,704	No specified ending balance - usage depends on needs of local law enforcement units and Oregon Health Authority.
OF Limited	003 - LQ	3370 Ballast Water Vessel Fund	Operations	Ballast Water Vessel Fund	212,438	264,679	268,670	268,670	Need 4 months ending fund balance ($78,000). Fee increase in 2015 intended to last until 2021 is intended to increase fund balance in early biennia.
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))	2,212,134	2,212,134	4,413,324	2,413,324	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)	508,912	191,780	1,080,519	1,080,519	Need 4 months fund balance and 4 months spending on federal grant ($750,000) due to need to backfill federal funding prior to new federal allocation.
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)	352,385	329,904	4,924	4,924	Need 10 months ending balance ($465,000). 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)	343,837	167,438	85,193	85,193	Need 2 months ending balance ($61,000).
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)	84,641	578,307	393,339	393,339	Need 4 months ending fund balance ($151,000).
OF Limited	003 - LQ	3440 LUST Cost Recovery	Operations	LUST Cost Recovery (ORS 465.210)	2,338,908	2,398,538	1,749,399	1,749,399	Need at least 2 months ending balance ($375,000). This fund is federal program income and spending is controlled by EPA.
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)	148,283	161,000	79,796	79,796	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)	307,286	101,228	89,611	89,611	Need 4 months ending balance ($125,000). Revenue is dependent on home sales, making revenue erratic at times and fund balance difficult to predict.
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)	106,946	100,000	39,499	39,499	Ending balances include only cost recoveries. Bond fund balance, included in non-limited funds, are expected to be adequate through 1921 biennium.
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)	533,842	57,046	39,623	39,623	Need at least 4 months ending balance ($120,000). Revenue stream is irregular and fees are the only funding source for this work.
OF Limited	003 - LQ	3930 Orphan Site Account - Solid Waste Disposal Sites	Operations	Solid Waste Fees – Orphan Site Program (ORS 459.236; 465.381)	4,691,867	7,000,000	6,638,602	6,638,602	Fund balance has grown due to conservative interpretation of statutory uses. Clarification from DOJ is allowing DEQ to use these funds in a more appropriate way. Fund balance is expected to start declining as the program undertakes this cleanup work.
OF Limited	003 - LQ	3220 UST/LUST Contractor Licensing Fees	Operations	UST/LUST Contractor Licensing Fees (ORS 466.750 & 466.787)	46,688	161,029	128,014	128,014	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)	1,464,812	5,081,804	5,939,947	5,939,947	Need at least 2 months ending balance ($400,000). 1517 fee increase designed to build balance in 1719 to delay next fee increase until 2024.
OF Limited		3020 Solid Waste Disposal Fees	Operations	Solid Waste Disposal Fees (ORS 459A.110, 459A.115, 459A.120)	2,652,401	5,649,336	5,649,336	6,621,955	Need at least 2 months ending balance ($1.2 million). 1719 balance is not reduced for grant commitments of $2.5 million. To fully implement program, an 8 month balance ($6.8 million) is required due to long term planning, and grant and contract commitments.
OF Limited		3210 Underground Storage Tank (UST) Fees	Operations	Underground Storage Tank (UST) Fees (ORS 466.783 & 466.785)	1,030,721	701,496	2,347,428	2,347,428	Need 7 months ending balance ($650,000). 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)	119,063	162,323	137,761	122,761	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)	15,469	21,216	8,176	8,176	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)	8,344	400,000	9,629	9,629	Need 11 months fund balance ($36,000). Annual revenue collected in April.

Objective: **Provide updated Other Funds ending balance information for potential use in the development of the 2019-21 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 2017-19 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 2017-19 Legislatively Approved Budget and the 2019-21 Current Service Level at the Agency Request Budget level.

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 2017-19 General Fund approved budget or otherwise incorporated in the 2017-19 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 2017 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 2017-19 & 2019-21 BIENNIA**

Agency: **34000 DEQ**
Contact Person (Name & Phone #): **Mark Brown, 503-229-5603**

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Other Fund Type	**Program Area (SCR)**	**Treasury Fund #/Name**	**Category/Description**	**Constitutional and/or Statutory reference**	**2017-19 Ending Balance In LAB**	**2017-19 Ending Balance Revised**	**2019-21 Ending Balance In CSL**	**2019-21 Ending Balance Revised**	**Comments**
OF Limited	002 - WQ	2010/2020/2030 Wastewater Permit Fees	Operations	ORS 468.065	1,635,765	1,853,046	1,121,358	(541,044)	-Need greater than two months' balance ($1.2 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 planned vacancy savings in this fund and implemented other spending restrictions to bring ending balances to the values shown to maintain balances needed for operational cash management purposes. The municipal stormwater fee increase was adopted one year later than anticipated in the 17-19 LAB, resulting in less revenue. -DEQ expects to consume about one-third of this balance in 2019-21 if fee increases greater than the statutorily allowed, up-to-3 percent annual increases are not approved. -The revised 1921 GRB Ending Balance is negative because the GRB omitted the Revenue for POP 127. Revenue will need to be added at LAB if POP 127 is approved.
OF Limited	002 - WQ	2040 Onsite Subsurface Fees	Operations	ORS 454.662; ORS 454.745; 454.755	437,650	636,246	456,645	467,099	-Need greater than three months' balance ($500,000) 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	299,571	374,077	366,400	369,544	-A six month balance ($170,000) 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. - The revised ending balance is higher than originally projected due to unplanned turnover, and will allow the program to delay the next fee increase.
OF Limited	002 - WQ	2410 401 Dredge and Fill Fees	Operations	ORS 468B.047	240,969	250,000	340,017	345,822	-A six month balance of $305,000 in this program, which is roughly 80% fee funded in 2019-21, 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.
OF Limited	002 - WQ	2090 401 Hydroelectric Fees	Operations	ORS 536.015, 543.078, 543.080, 543.710, 543A.415, and 468.065(3)	573,581	225,877	223,035	231,225	-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 intermittently 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	1,779,339	2,197,403	2,220,928	1,819,125	-$410,000 = 2 months of operating costs -Provides for future funding of SRF Loan program administration. -Federal law restricts the use of these funds. -Revenue ebbs and flows during the fiscal year. -DEQ is investing in a loan management system, which will partly be funded from the fund balance.
OF Limited	002 - WQ	2600 WQ Enterprise Agreements	Operations	ORS 468.035	22,767	127,539	127,539	127,539	-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.
OF Limited	002 - WQ	2060 (shared) Lab Certification Funds (Transferred from Oregon Department of Human Services)	Operations	Chapter 1063, 1999 Session Laws	115,102	74,745	116,704	116,704	-A fee balance larger than six 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	94,472	75,591	79,742	80,696	-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.
OF Limited	002 - WQ	5210 Lottery Fund	Operations		20,644	20,644	(10,201)	0	

UPDATED **OTHER FUNDS ENDING BALANCES FOR THE 2017-19 & 2019-21 BIENNIA**

Agency: **34000 DEQ**
Contact Person (Name & Phone #): **Mark Brown, 503-229-5603**

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Other Fund Type	**Program Area (SCR)**	**Treasury Fund #/Name**	**Category/Description**	**Constitutional and/or Statutory reference**	**2017-19 Ending Balance In LAB**	**2017-19 Ending Balance Revised**	**2019-21 Ending Balance In CSL**	**2019-21 Ending Balance Revised**	**Comments**
OF Limited	004 - AM	4100/4200 Agency Management	Operations	SB 5518 section 2 subsection 5	1,729,792	3,015,808	5,297,397	5,297,397	$2.5M - $3M = 2 months balance Need greater than 2 month balance to cover annual assesments 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)	19,159	31,083	30,919	30,919	$12,000 = 2 month minimum Revenue derived from bond proceeds, which are transfered 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)	124,390	199,747	199,543	199,543	$16,000 = 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 2019-21 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 2017-19 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 2017-19 Legislatively Approved Budget and the 2019-21 Current Service Level at the Agency Request Budget level.

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 2017-19 General Fund approved budget or otherwise incorporated in the 2017-19 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 2017 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 2017-19 & 2019-21 BIENNIA**

Agency: **34000 DEQ**
Contact Person (Name & Phone #): **Mark Brown, 503-229-5603**

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Other Fund Type	**Program Area (SCR)**	**Treasury Fund #/Name**	**Category/Description**	**Constitutional and/or Statutory reference**	**2017-19 Ending Balance**		**2019-21 Ending Balance**		**Comments**
					In LAB	**Revised**	**In CSL**	**Revised**	
OF Non Limited	008 - NL	2900/2910/2990/2980 State Revolving Funds 2810/2890 SADLP Program	Loan Program	State Revolving Loan and Sewer Assessment Deferral Loan Program Fund	189,918,954	256,500,000	272,317,313	272,317,313	SRF Loan Funds, dedicated by Federal law to specific uses relating to water quality projects. Balances have grown since the 1113 LAB estimate as a result of project delays due to the economy and refinancing of longer-term loans with other lenders.

Objective: **Provide updated Other Funds ending balance information for potential use in the development of the 2019-21 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 2017-19 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 2017-19 Legislatively Approved Budget and the 2019-21 Current Service Level at the Agency Request Budget level.

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 2017-19 General Fund approved budget or otherwise incorporated in the 2017-19 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 2017 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 2017-19 & 2019-21 BIENNIA**

Agency: **34000 DEQ**
Contact Person (Name & Phone #): **Mark Brown, 503-229-5603**

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Other Fund Type	**Program Area (SCR)**	**Treasury Fund #/Name**	**Category/Description**	**Constitutional and/or Statutory reference**	**2017-19 Ending Balance**		**2019-21 Ending Balance**		**Comments**
					In LAB	**Revised**	**In CSL**	**Revised**	
OF Debt Service, Non Limited	009 - DS	9000 Pollution Ctrl Debt Svc	Operations	Debt Service Sinking	1,877,370	1,934,477	1,934,477	1,934,477	The amounts could decrease due to calls on outstanding issues.

Objective: **Provide updated Other Funds ending balance information for potential use in the development of the 2019-21 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 2017-19 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 2017-19 Legislatively Approved Budget and the 2019-21 Current Service Level at the Agency Request Budget level.

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 2017-19 General Fund approved budget or otherwise incorporated in the 2017-19 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 2017 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.

SUMMARY OF RECENT DEQ AUDIT RESULTS

Secretary of State Audits

The Secretary of State conducted the following audits:

- **Annual Statewide Financial Audit FY2017 (Management Letter No. 340-2018-0101):** The Secretary of State annual statewide financial audit report issued for the year ending June 30, 2017 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 was one finding dealing with internal controls over the handling of checks received in the mailroom. This finding has been resolved.

- **Clean Water State Revolving Fund (CWSRF) financial statement and compliance audits FY2017 (Report 2018-17):** 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.

- **DEQ Air Quality Permitting Process (Report 2018-01):** The Secretary of State audited DEQ's air quality permitting process to determine how DEQ could improve its air quality permitting process to better safeguard Oregon's air quality. Key findings include that 43 percent of DEQ's largest and most completed air quality permits renewals are overdue; DEQ struggles to issue timely permits; and that untimely permits, combined with a current backlog of inspections, endanger the state's air quality and health of Oregonians.

U.S. Environmental Protection Agency audits

The EPA conducted the following audits

- **Program Evaluation Report for Oregon's Clean Water State Revolving Loan Fund (FY2017):** EPA determined that DEQ complies with all financial and technical grant conditions except the operating agreement between EPA and DEQ developed in 2010, which is already being updated to reflect recent Clean Water Act amendments and the program's current standard operating procedures. The final Program Evaluation Report did not result in any outstanding action items for DEQ. EPA noted that the Oregon CWSRF program funds clean water projects that deliver significant environmental benefits throughout the state, which is the result of dedicated staff and management who ensure projects are properly ranked, published on the Intended Use Plan, quickly funded, and well managed through the life of the loan agreements. EPA also noted the efforts to strengthen and improve the program through hiring new staff and strategically addressing program improvements.

Office of the Secretary of State

Dennis Richardson
Secretary of State

Leslie Cummings, Ph.D.
Deputy Secretary of State

Audits Division

Kip R. Memmott, MA, CGAP, CRMA
Director

255 Capitol St. NE, Suite 500
Salem, OR 97310

(503) 986-2255

January 24, 2018

Richard Whitman, Director
Department of Environmental Quality
700 NE Multnomah St., Suite #600
Portland, OR 97232

Dear Mr. Whitman:

We have completed audit work of selected financial accounts at your department for the year ended June 30, 2017. This audit work was not a comprehensive financial audit of the department, but was performed as part of our annual audit of the State of Oregon's financial statements. We audited accounts that we determined to be material to the State of Oregon's financial statements.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements of the State of Oregon as of and for the year ended June 30, 2017, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, we considered the department's internal control over financial reporting as a basis for designing auditing procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements of the State of Oregon, but not for the purpose of expressing an opinion on the effectiveness of the department's internal control. Accordingly, we do not express an opinion on the effectiveness of the department's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit the attention of those charged with governance.

Our consideration of internal control was for the limited purpose described above and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that have not been identified. However, as discussed below, we identified a deficiency in internal control that we consider a significant deficiency.

Significant Deficiency

Check Handling Controls Need Improvement

Department management is responsible for ensuring internal controls are adequate to provide reasonable assurance that cash and check related transactions are properly controlled.

Although the department's cash receipting process had been updated from the prior year, there were still some weaknesses identified during testing of the cash account. Auditors observed the mail delivery and financial services processes in July 2017, shortly after the end of the fiscal year. We found that in the mailroom incoming mail is opened by a single person and the contents are examined. Envelopes containing checks are sorted and placed into a mail slot labeled "checks." Mailroom staff neither restrictively endorse the checks nor document a log of the incoming checks. Financial services is notified that the mail is ready for pick-up and the checks are retrieved from the mail slot by a single person, taken to financial services, and then restrictively endorsed. Oregon Accounting Manual (OAM) 10.20.00.PR prescribes the proper control protocols for handling cash receipts (checks). These controls include having two people opening the mail and immediately restrictively endorsing checks when they are received.

Due to the weaknesses in controls noted above, department management lacks assurance that all checks received are deposited.

We recommend department management apply OAM controls over cash receipts and ensure all incoming checks are properly secured and restrictively endorsed immediately upon receipt.

Prior Year Finding

In the prior fiscal year, we reported a significant deficiency related to the department's controls over receipting checks and maintaining adequate supporting documentation to support certain revenue transactions in a letter dated February 17, 2017. This finding can also be found in the Statewide Single Audit Report for the fiscal year ended June 30, 2016; see Secretary of State audit report number 2017-08, finding number 2016-011. During fiscal year 2017, the department partially corrected the finding by revising its accrual methodology for estimating charges for services revenue and reviewing its procedures for federal revenue draws. This finding will be reported in the Statewide Single Audit Report for the fiscal year ended June 30, 2017, with a status of partially corrected.

The above significant deficiency, along with your response for the finding, will be included in our Statewide Single Audit Report for the fiscal year ended June 30, 2017. Please prepare a response to the finding and include the following information as part of your corrective action plan:

1) Your agreement or disagreement with the finding. If you do not agree with the audit finding or believe corrective action is not required, include in your response an explanation and specific reasons for your position.
2) The corrective action planned.
3) The anticipated completion date.

4) The name(s) of the contact person(s) responsible for corrective action.

Please respond by January 31, 2018.

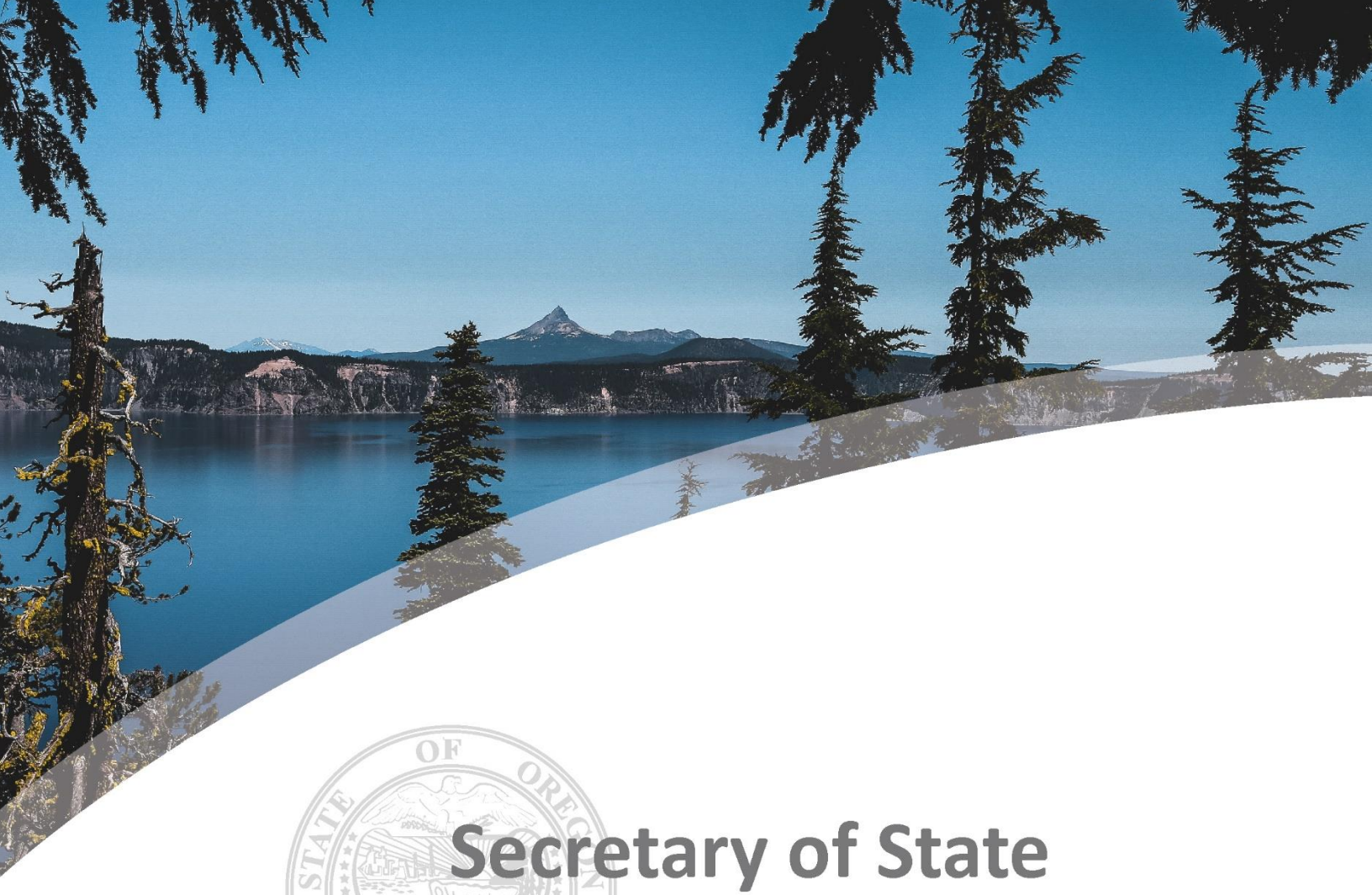
The purpose of this letter is solely to describe the scope of our testing of internal control and the result of that testing, and not to provide an opinion on the effectiveness of the department's internal control. This communication is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the department's internal control. Accordingly, this letter is not suitable for any other purpose.

We appreciate your staff's assistance and cooperation during this audit. Should you have any questions, please contact Sarah Anderson or Julianne Kennedy at (503) 986-2255.

Sincerely,

Office of the Secretary of State, Audits Division

cc: Leah Feldon, Deputy Director
Mark Brown, Financial Services Manager
Katy Coba, Director, Department of Administrative Services



Secretary of State
Oregon Audits Division

Enterprise Fund of the State of Oregon
Department of Environmental Quality
Clean Water State Revolving Fund Loan Program
For the Fiscal Year Ended June 30, 2017

May 2018
Report 2018-17

Oregon DEQ audits

Secretary of State Dennis Richardson
Audits Division Director Kip Memmott

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FINANCIAL SECTION

Office of the Secretary of State

Dennis Richardson
Secretary of State

Leslie Cummings, Ph.D.
Deputy Secretary of State

Audits Division

Kip R. Memmott, MA, CGAP, CRMA
Director

255 Capitol St. NE, Suite 500
Salem, OR 97310

(503) 986-2255

Independent Auditor's Report

The Honorable Kate Brown
Governor of Oregon

Richard Whitman, Director
Oregon Department of Environmental Quality

Report on the Financial Statements

We have audited the accompanying financial statements of the Clean Water State Revolving Fund (CWSRF) program, an enterprise fund of the State of Oregon, Department of Environmental Quality (department), as of and for the year ended June 30, 2017, and the related notes to the financial statements, as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the CWSRF, an enterprise fund of the State of Oregon, Department of Environmental Quality, as of June 30, 2017, and the respective changes in financial position and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 1.1.1, the financial statements present only the CWSRF program, an enterprise fund of the State of Oregon, Department of Environmental Quality, and are intended to present the financial position, the changes in financial position and cash flows that are attributable to the transactions of the CWSRF program. They do not purport to, and do not, present fairly the financial position of the Department of Environmental Quality or the State of Oregon as of June 30, 2017, the changes in their financial position, or their cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated May 11, 2018 on our consideration of the department's internal control over financial reporting relating to the CWSRF program and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the department's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the department's internal control over financial reporting and compliance.

Office of the Secretary of State, Audits Division

State of Oregon
May 11, 2018

State of Oregon
Department of Environmental Quality
Clean Water State Revolving Fund Loan Program
Enterprise Fund
Statement of Net Position
June 30, 2017

	Loan Fund	Administration	TOTAL
Assets			
Current Assets:			
Cash and Cash Equivalents	$ 253,191,780	$ 3,180,611	$ 256,372,391
Loan Interest Receivable	2,057,089	-	2,057,089
Total Current Assets	255,248,869	3,180,611	258,429,480
Non-Current Assets:			
Loans Receivable, Net	423,629,108	-	423,629,108
Loan Interest Receivable	2,858,797	-	2,858,797
Total Non-Current Assets	426,487,905	-	426,487,905
Total Assets	$ 681,736,774	$ 3,180,611	$ 684,917,385
Liabilities and Net Position			
Current Liabilities:			
Accounts Payable	$ -	$ 14,139	$ 14,139
Payroll Payable	-	101,318	101,318
Compensated Absences Payable	-	68,503	68,503
Due to Oregon DEQ	-	30,093	30,093
Bond Interest Payable	223,500	-	223,500
Bonds Payable	1,514,516	-	1,514,516
Total Current Liabilities	1,738,016	214,053	1,952,069
Non-Current Liabilities:			
Compensated Absences Payable	-	9,592	9,592
Bonds Payable	19,896,484	-	19,896,484
Total Non-Current Liabilities	19,896,484	9,592	19,906,076
Total Liabilities	21,634,500	223,645	21,858,145
Net Position			
Unrestricted	660,102,274	2,956,966	663,059,240
Total Net Position	660,102,274	2,956,966	663,059,240
Total Liabilities and Net Position	$ 681,736,774	$ 3,180,611	$ 684,917,385

The accompanying notes are an integral part of the financial statements.

State of Oregon
Department of Environmental Quality
Clean Water State Revolving Fund Loan Program
Enterprise Fund
Statement of Revenues, Expenses, and Changes in Fund Net Position
For the Fiscal Year Ended June 30, 2017

	Loan Fund	Administration	TOTAL
Operating Revenues			
Loan Interest Income	$ 9,429,051	$ -	$ 9,429,051
Loan Fees	38,676	1,630,543	1,669,219
Total Operating Revenues	9,467,727	1,630,543	11,098,270
Operating Expenses			
Bond Interest	656,292	-	656,292
Bond Issuance Costs	30,283	758	31,041
Principal Forgiveness on Loans	2,466,525	-	2,466,525
Salaries and Benefits	-	1,359,745	1,359,745
Services and Supplies	-	317,437	317,437
Indirect Costs	-	268,167	268,167
Total Operating Expenses	3,153,100	1,946,107	5,099,207
Operating Income (Loss)	6,314,627	(315,564)	5,999,063
Non-Operating Revenues (Expenses)			
Federal Grants	21,968,732	-	21,968,732
Interest Income on Cash and Cash Equivalents	2,735,540	36,588	2,772,128
Total Non-Operating Revenues (Expenses)	24,704,272	36,588	24,740,860
Change in Net Position	31,018,899	(278,976)	30,739,923
Net Position –Beginning	629,083,375	3,235,942	632,319,317
Net Position – Ending	$ 660,102,274	$ 2,956,966	$ 663,059,240

The accompanying notes are an integral part of the financial statements.

State of Oregon
Department of Environmental Quality
Clean Water State Revolving Fund Loan Program
Enterprise Fund
Statement of Cash Flows
For the Fiscal Year Ended June 30, 2017

	Loan Fund	Administration	TOTAL
Cash Flows from Operating Activities			
Receipts from Loan Fees	$ 38,676	$ 1,630,543	$ 1669,219
Payments to Vendors	-	(309,250)	(309,250)
Payments to Employees	-	(1,362,041)	(1,362,041)
Payments for Indirect Cost	-	(268,167)	(268,167)
Net Cash Provided (Used) by Operating Activities	38,676	(308,915)	(270,239)
Cash Flows from Noncapital Financing Activities			
Receipts from Federal Grants	21,968,732	-	21,968,732
Bond Issuance Proceeds	10,000,000	-	10,000,000
Bond Issuance Costs	(30,283)	(758)	(31,041)
Principal Payments on Bonds	(11,516,774)	-	(11,516,774)
Interest Payments on Bonds	(870,849)	-	(870,849)
Net Cash Provided (Used) in Noncapital Financing Activities	19,550,826	(758)	19,550,068
Cash Flows from Investing Activities			
Receipts from Treasury Interest Credits	2,735,540	36,588	2,772,128
Repayments from Loan Interest	9,032,790	-	9,032,790
Repayments from Loan Principal	43,812,149	-	43,812,149
Disbursements to Borrowers	(50,186,726)	-	(50,186,726)
Net Cash Provided (Used) in Investing Activities	(5,393,753)	36,588	5,430,341
Net Increase (Decrease) in Cash and Cash Equivalents	24,983,255	(273,085)	24,710,170
Cash and Cash Equivalents, Beginning	228,208,525	3,453,696	231,662,221
Cash and Cash Equivalents, Ending	$ 253,191,780	$ 3,180,611	$ 256,372,391

(Continued on next page)

The accompanying notes are an integral part of the financial statements.

State of Oregon
Department of Environmental Quality
Clean Water State Revolving Fund Loan Program
Enterprise Fund
Statement of Cash Flows
For the Fiscal Year Ended June 30, 2017

(Continued from previous page)

Reconciliation of Operating Income to Net Cash Provided (Used) by Operating Activities			
Operating Income (Loss)	$ 6,314,627	$ (315,564)	$ 5,999,063
Adjustments to Reconcile Operating Income to Net Cash Provided (Used) by Operating Activities			
Loan Interest Receipts Reported as Operating Expense	(9,032,790)	-	(9,032,790)
Bond Interest Payments Reported as Operating Expense	870,849	-	870,849
Bond Issuance Costs Reported as Financing Activities	30,283	758	31,041
Principal Forgiveness Expense Reported as Operating Expense	2,466,525	-	2,466,525
Amortization of Bond Discount	1,483	-	1,483
Amortization of Bond Premium	(198,324)	-	(198,324)
Net Changes in Assets and Liabilities			
Loan Interest Receivable	(396,261)	-	(396,261)
Accounts Payable	-	3,731	3,731
Payroll Payable	-	(10,044)	(10,044)
Due to Oregon DEQ	-	4,456	4,456
Bond Interest Payable	(17,716)	-	(17,716)
Compensated Absences Payable	-	7,748	7,748
Total Adjustments	(6,275,951)	6,649	(6,269,302)
Net Cash Provided (Used) by Operating Activities	$ 38,676	$ (308,915)	$ (270,239)

The accompanying notes are an integral part of the financial statements.

Notes to the Basic Financial Statements - Enterprise Fund
June 30, 2017

1.1 Summary of Significant Accounting Policies

The accompanying financial statements of the State of Oregon Department of Environmental Quality Clean Water State Revolving Fund have been prepared in conformity with generally accepted accounting principles (GAAP) as prescribed by the Governmental Accounting Standards Board (GASB).

1.1.1 Reporting Entity

The Oregon Clean Water State Revolving Fund (CWSRF) was established pursuant to Oregon Revised Statutes 468.423 – 468.440 and the 1987 amendments to the federal Clean Water Act. The purpose of the CWSRF is to provide low interest loans to local governments for the planning, design and construction of wastewater treatment facilities, implementation of nonpoint source pollution management plans, and the design and implementation of estuary management plans. The loan repayment period is a maximum of 30 years, and all repayments, including interest and principal, must be credited to the CWSRF.

The CWSRF program is administered by the State of Oregon Department of Environmental Quality (DEQ). The CWSRF program consists of several funds to record loan and related activity, and an administrative fund that collects loan fees and pays the operating costs of the program, and are collectively referred to as the Fund. DEQ's primary responsibilities for the CWSRF include obtaining capitalization grants from the U.S. Environmental Protection Agency (EPA), soliciting potential interested parties for loans, negotiating loan agreements with eligible public agencies, reviewing and approving payment requests from loan recipients, monitoring the loan repayments, and conducting inspection and engineering reviews to ensure compliance with all applicable laws, regulations, and program requirements.

DEQ charges the Fund for staff time spent on CWSRF activities, and the Fund pays those expenses from the Administration fund. The charges include the salaries and benefits of the employees, as well as indirect costs allocated to the Fund. The rate of indirect cost is negotiated annually with EPA.

The Annual Financial Report is prepared for the U.S. Environmental Protection Agency as an Enterprise Fund of the State of Oregon, which uses the accrual basis of accounting. For the purpose of the State of Oregon's Comprehensive Annual Financial Report (CAFR), the Fund is included as a Governmental Fund – Special Revenue. Due to differences in basis of accounting, there may be differences between the amounts reported in these financial statements and the State of Oregon's CAFR.

1.1.2 Basis of Presentation – Fund Accounting

DEQ programs and accounts are organized by "funds", each of which is a separate accounting entity. Each major program utilizes a separate set of self-balancing accounts to record the assets, liabilities, net position, revenues and expenses of their activities. DEQ's CWSRF loan program is classified as a proprietary fund for the purposes of these financial statements, however DEQ treats this fund as a governmental fund. Proprietary funds contain two types of funds: Enterprise Funds and Internal Service Funds. The CWSRF loan program is accounted for in an Enterprise Fund. Enterprise Funds account for and report any activity for which fees are charged to external users for goods and services.

1.1.3 Measurement Focus and Basis of Accounting

The basic financial statements for the Fund are presented as an enterprise fund. As such, the Fund is accounted for using the flow of economic resources measurement focus and is maintained on the accrual basis of accounting, in accordance with State policy (OAM 15.40.00). Under the accrual basis of accounting, revenues are recognized when earned and expenses are recorded at the time the liabilities are incurred, regardless of the timing of the related cash flow. All revenues and expenses of the Fund are considered to be operating revenues and operating expenses, with the exception of federal grant income and interest income,

which are considered to be non-operating revenue. All assets and liabilities associated with the operations of the Fund are included on the Balance Sheet.

1.1.4 Cash and Cash Equivalents

All monies of the Fund are deposited with the Office of the State Treasurer, which is responsible for maintaining these deposits in accordance with Oregon law. The Fund considers all such deposits to be cash and cash equivalents. Interest earnings on these deposits are received by the Fund on a monthly basis. The Fund has no other cash deposits or investments.

1.1.5 Loans Receivable/Bonds Receivable

Loans and Bonds are funded by federal capitalization grants, state matching funds, loan repayments and fund earnings. The CWSRF monies are disbursed to borrowers on a cost reimbursement basis. When borrowers have incurred qualifying expenses, they request a loan disbursement from the Fund, and at that time a disbursement is made and recorded in the Fund accounting records. Interest begins accruing when funds are disbursed to the borrower. After the project is complete, repayment begins with an interest only payment. Loans and bonds are fully amortized to assure full repayment by the loan or bond maturity date.

DEQ has been required, under the terms of several grant awards from EPA, to offer additional subsidization to certain borrowers. DEQ has chosen to offer this subsidization in the form of principal forgiveness and has implemented this in administrative rule (OAR 340-054-0065). Loans Receivable are stated net of the allowance for principal forgiveness.

1.1.6 Long-Term Obligations

Long term obligations of the Fund consist of bonds issued to provide the required State matching funds for the federal capitalization grants, and the non-current portion of compensated absences. Bonds issued on behalf of the CWSRF are reported on the Balance Sheet net of the related premium or discount. Bond premium and discount are amortized over the life of the bond issues. Bond premium and discount are reported in the Statement of Revenues, Expenses and Changes in Fund Net Position as bond interest expense.

1.1.7 Compensated Absences

Employees accumulate earned but unused vacation and sick leave benefits. There is no liability for unpaid accumulated sick leave since the State does not pay any amounts when employees separate from State service. A liability for vacation leave (compensated absences) is accrued when incurred as employees may be paid for up to a maximum of 300 hours of accrued vacation leave upon separation from State service

1.2 Cash and Cash Equivalents

On June 30, 2017, the book balance of cash and cash equivalents was $256,372,391 and the bank balance was $256,377,135. All cash in the Fund is deposited in demand accounts with the State Treasurer in the Oregon Short-Term Fund (OSTF), a cash and investment pool for use by all state agencies.

The custodial credit risk for deposits is the risk that, in the event of a bank failure, the State Treasurer will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party. The CWSRF does not have a policy regarding custodial credit risk for deposits; however, the insurance and collateral requirements for deposits in the OSTF are established by banking regulations and Oregon law.

Further details of the investments and a copy of the OSTF audited annual financial report may be obtained by writing to the Oregon State Treasury, 350 Winter Street NE, Suite 100, Salem, Oregon 97301-3896 or located at the following web site:

http://www.oregon.gov/treasury/Divisions/Investment/Pages/Oregon-Short-Term-Fund-(OSTF).aspx

1.3 Loans Receivable

The Fund makes loans to qualified entities at interest rates ranging from zero percent to the market rate (see ORS 468.440). Interest rates vary depending on the length of the loan, the type of loan, and program rules (at OAR 340-054). Rates range from 25% of the bond rate for 5 year loans to 55% of the bond rate for 30 year loans. Recipients make semiannual or, in some cases, annual payments, and must begin loan principal and interest repayments within one year of the date the facility is operationally complete and ready for the purpose it was planned, designed, and built or the project is completed, as determined by DEQ. There is an allowance account for that portion of loan disbursements that will not be repaid due to principal forgiveness offered to some borrowers. Principal forgiveness is offered to some borrowers, based on criteria in administrative rule, to comply with a requirement included in DEQ's grant agreement with EPA. There is no additional allowance account, because Fund management believes all existing borrowers will pay as agreed. The detail of loans receivable as of June 30, 2017 is as follows:

Loans Receivable	$425,234,687
Principal Forgiveness on Disbursement	(1,605,579)
Net Loans Receivable, 6/30/2017	$423,629,108

1.4 Bonds Payable

In July 2003 EPA agreed to the use of the CWSRF Fund assets to pay the principal and interest on general obligation bonds that were previously issued by the State to provide the 20 percent state matching funds as required by the Clean Water Act. The following table summarizes bonds outstanding as of June 30, 2017:

Original Issue

Series	Due Dates	Interest Range	Original Amount
2008A	2009-2028	2%-4.5%	4,800,000
2009A	2010-2030	2%-4%	4,890,000
2010A	2011-2030	2%-3.75%	4,945,000
2012P	2014-2033	1.5%-5.0%	4,235,000
2013K	2014-2024	2.0%-5.0%	4,015,000
2015E	2016-2026	5%	4,040,000
		Total:	26,925,000

Bonds Outstanding

	Balance			Balance	Due Within
Series	6/30/2016	Increases	Decreases	6/30/2017	One Year
2008A	3,318,711	-	216,774	3,101,937	224,516
2009A	2,960,000	-	250,000	2,710,000	190,000
2010A	3,730,000	-	215,000	3,515,000	225,000
2012P	3,880,000	-	160,000	3,720,000	165,000
2013K	3,360,000	-	355,000	3,005,000	370,000
2015E	4,040,000	-	320,000	3,720,000	340,000
2017A	-	10,000,000	10,000,000	-	-
Total	21,288,711	10,000,000	11,516,774	19,771,937	1,514,516

The bond interest rates noted above differ depending on the term of the individual security. Thus, those securities with the longest term yield the highest interest rate.

The following table summarizes the amounts necessary to pay all future bonded debt principal and interest requirements for each year during the next five-year period ending June 30, 2022, and in five year increments thereafter.

Year Ending	Bond	Bond	Total Debt
30-Jun	Principal	Interest	Service
2018	1,514,516	809,345	2,323,861
2019	1,714,839	741,045	2,455,884
2020	1,847,581	662,847	2,510,428
2021	1,747,903	583,687	2,331,590
2022	1,825,807	504,297	2,330,104
2023-2027	7,680,323	1,362,607	9,042,930
2028-2032	3,140,968	258,909	3,399,877
2033-2037	300,000	4,500	304,500
Totals	19,771,937	4,927,237	24,699,174

1.5 Changes In Long-Term Liabilities

The liability for compensated absences is calculated based on the vacation accrual at June 30, 2017 for each employee whose duties include CWSRF related activities. Bonds payable includes amounts payable on bonds issued to benefit the CWSRF fund, and also includes the unamortized amounts of bond discount or premium.

The long-term liability activity for the year ended June 30, 2017 was as follows:

	Beginning Balance			Ending Balance	Due Within
	7/1/2016	Increases	Decreases	6/30/2017	One Year
Bonds Payable	21,288,711	10,000,000	11,516,774	19,771,937	1,514,516
Issuance Premium	1,855,800	-	198,325	1,657,475	
Issuance Discount	(19,894)	-	1,483	(18,411)	
Total Bonds Payable	23,124,617	10,000,000	11,713,616	21,411,001	1,514,516
Compensated Absences	70,347	78,095	70,347	78,095	68,503
Total Long Term Liabilities	23,194,964	10,078,095	11,783,963	21,489,096	1,583,019

1.6 Loan Fees

In order to support administration and project management costs, loan fees are assessed on loans originating after 1992. A fee of 0.50 percent is assessed on the outstanding loan principal balance and is collected annually, beginning with the second loan payment.

Fees are deposited to a separate Treasury account and are used only for administrative and project management costs. Planning loans are not assessed annual fees in order to encourage Oregon communities to complete more planning.

1.7 Employee Retirement Plan

Plan Description

As part of the State of Oregon, the Public Employees Retirement System (PERS) provides defined benefit and defined contribution retirement plans to the Fund's employees. PERS is a cost-sharing multiple-employer defined benefit pension plan. All benefits of PERS are established by the legislature pursuant to ORS Chapters 238 and 238A. Tier One/Tier Two Retirement Benefit plan, established by ORS Chapter 238, is closed to new members hired on or after August 29, 2003. The Oregon Public Service Retirement Plan (OPSRP), established by ORS 238A, provides benefits to members hired on or after August 29, 2003. The Individual Account Program (IAP) is a defined contribution plan. Beginning January 1, 2004, all member contributions are deposited into the members IAP account. The pension plans provide pension benefits, death benefits, and disability benefits.

PERS issued a separate, publicly available, audited financial report that may be obtained from the Fiscal Services Division, Public Employees Retirement System, P.O. Box 23700, Tigard, Oregon 97281-3700.

Contributions

PERS funding policy provides for monthly employer contributions at actuarially determined rates. These contributions, expressed as a percentage of covered payroll, are intended to accumulate sufficient assets to pay benefits when due. The rates in effect for the fiscal year ended June 30, 2017 for state agencies general service members were 12.31% for Tier One/Tier Two and 6.51% for OPSRP. The IAP member contribution as set by statute is 6% and is currently paid by state agencies.

Employer contributions for the fiscal year ended June 30, 2017 were $64,961 for Tier One/Tier Two and $24,737 for OPSRP. Member contributions for the fiscal year ended June 30, 2017 were $54,462.

Pension Liabilities, Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources

At June 30, 2017, the State reported a liability of $3.1 billion for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2016, and the total pension liability used to

calculate the net pension asset was determined by an actuarial valuation as of December 31, 2014. The State's portion of the net pension liability was based on a projection of the State's long-term share of contributions of all participating employers, actuarially determined. At the June 30, 2016, measurement date, the State's proportion, was 20.7 percent.

The Fund's portion of the net pension liability was not specifically identified. See Note 14. Employee Retirement Plans, in the State of Oregon Comprehensive Annual Financial Report (CAFR), for more detail.

1.8 Other Postemployment Benefit Plans

The Fund's employees may be eligible to participate in health insurance plans and other benefit plans after retirement, collectively known as Other Postemployment Benefits (OPEB). OPEB plans are offered through the Public Employees Retirement System (PERS) as established by ORS 238 and the Public Employees Benefit Board (PEBB) as established by ORS 243. A copy of the audited annual financial report may be obtained from Fiscal Services Division, Public Employees Retirement System, P.O. Box 23700, Tigard, Oregon 97281-3700.

Retirement Health Insurance Account

The Retirement Health Insurance Account (RHIA) is a cost-sharing multiple-employer OPEB plan which provides a payment of up to $60 toward the monthly cost of health insurance for eligible PERS members. To be eligible for the RHIA subsidy, the member must: 1) have eight years or more of qualifying service in PERS at the time of retirement or receive a disability allowance as if the member had eight years or more creditable service in PERS, 2) receive both Medicare Parts A and B coverage, and 3) enroll in a PERS-sponsored health insurance plan.

The Department is required by statute to contribute actuarially computed amounts as determined by PERS. Rates are subject to change as a result of subsequent actuarial valuations. The rate of each covered employee's salary for the fiscal year end June 30, 2017 was 0.53 percent. Combined employer contributions for the years ended June 30, 2017, 2016 and 2015, was approximately $4,469, $4,370, and $5,444, respectively, equal to the required contributions each year.

Retiree Health Insurance Premium Account

The Retiree Health Insurance Premium Account (RHIPA) is a single-employer OPEB plan that provides for payment of the average difference between the health insurance premiums paid by retired state employees, under contracts entered into by the PERS Board, and the health insurance premiums paid by state employees who are not retired. Retired state employees are qualified to receive the RHIPA subsidy if they had eight or more years of qualifying service in PERS at the time of retirement or are receiving a disability pension calculated as if they had eight or more years of qualifying service, but are not eligible for federal Medicare coverage.

The Department is required by statute to contribute actuarially computed amounts as determined by PERS. Rates are subject to change as a result of subsequent actuarial valuations. The rate of each employee's covered salary for the fiscal year ended June 30, 2017 was 0.44 percent. The Fund's actual contribution for the year ended June 30, 2017, 2016 and 2015 was approximately $3,804, $3,719, and $2,370, respectively, which was equal to the actuarial required contribution.

Public Employees Benefit Board Plan

The Public Employees Benefit Board (PEBB) plan is a single-employer plan, which offers medical, dental, and vision benefits to eligible retired employees. Chapter 243 of the Oregon Revised Statutes assigns PEBB the authority to establish and amend the benefit provisions of the PEBB Plan. The PEBB Plan allows qualifying retired employees to continue their healthcare on a self-pay basis until eligible for Medicare, usually at age 65. The PEBB Plan funding policy provides for contributions at amounts sufficient to fund

benefits on a pay-as-you-go basis. Active employees do not make contributions. Participating retirees pay their own monthly premiums based on a blended premium rate since retirees are pooled together with active employees for insurance rating purposes. PEBB activity is reported as part of the State of Oregon's annual report and does not issue a separate financial report.

The State of Oregon's liability for the primary government was $57.3 million for the fiscal year ended June 30, 2017. The Fund's portion of this liability was not specifically identified.

1.9 Commitments

As of June 30, 2017, the CWSRF has active loan agreements in the amount of $212,984,816 and has disbursed a total of $70,993,924 in cash to these active borrowers. The amount of undisbursed loan commitments is, therefore, $141,990,892.

1.10 Risk Financing

The Department of Administrative Services, Enterprise Goods and Services, Risk Management section (Risk Management) administers the State's property, liability, and workers' compensation insurance program. Risk Management has found it is more economical to manage the risk of loss internally and, therefore, minimizes the purchase of commercial insurance policies to the extent possible. The monies set aside by Risk Management under Chapter 278 of the Oregon Revised Statutes are used to service the following risks:

- Direct physical loss or damage to State property
- Tort liability claims brought against the State, its officers, employees, or agents
- Inmate injury
- Workers' compensation
- Employee dishonesty
- Faithful performance bonds for key positions as required by law and additional positions as determined by agency policy

Risk Management purchases commercial insurance for specific insurance needs not covered by self-funding. For example, the self-insured property and liability program is backed by an excess property policy with a limit of $400 million and a blanket commercial crime policy with a limit of $20 million. The amount of claim settlements did not exceed commercial insurance coverage for each of the past three fiscal years.

All State agencies, commissions, and boards participate in the self-insured property and liability program. Risk Management allocates the cost of claims and claim administration by charging an assessment to each State agency, based on its share of losses. Statewide risk charges are based on independent biennial actuarial forecasts and division expenses, less any available fund balance from the prior biennium.

The CWSRF participates in this risk financing program through DEQ, which, as a State agency, is a participant. Settlements have not exceeded insurance coverage in each of the past three years.

1.11 Subsequent Events

On August 16, 2017, the federal fiscal year 2017 capitalization grant from EPA was awarded, in the amount of $14,977,000. This amount provides additional capitalization for the CWSRF program.

OTHER REPORT

Office of the Secretary of State

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Secretary of State

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Independent Auditor's Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

The Honorable Kate Brown
Governor of Oregon

Richard Whitman, Director
Oregon Department of Environmental Quality

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Clean Water State Revolving Fund (CWSRF) program, an enterprise fund of the State of Oregon, Department of Environmental Quality (department) as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise the CWSRF program's basic financial statements, and have issued our report thereon dated May 11, 2018.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the department's internal control over financial reporting (internal control) related to the CWSRF program to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the department's internal control. Accordingly, we do not express an opinion on the effectiveness of the department's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

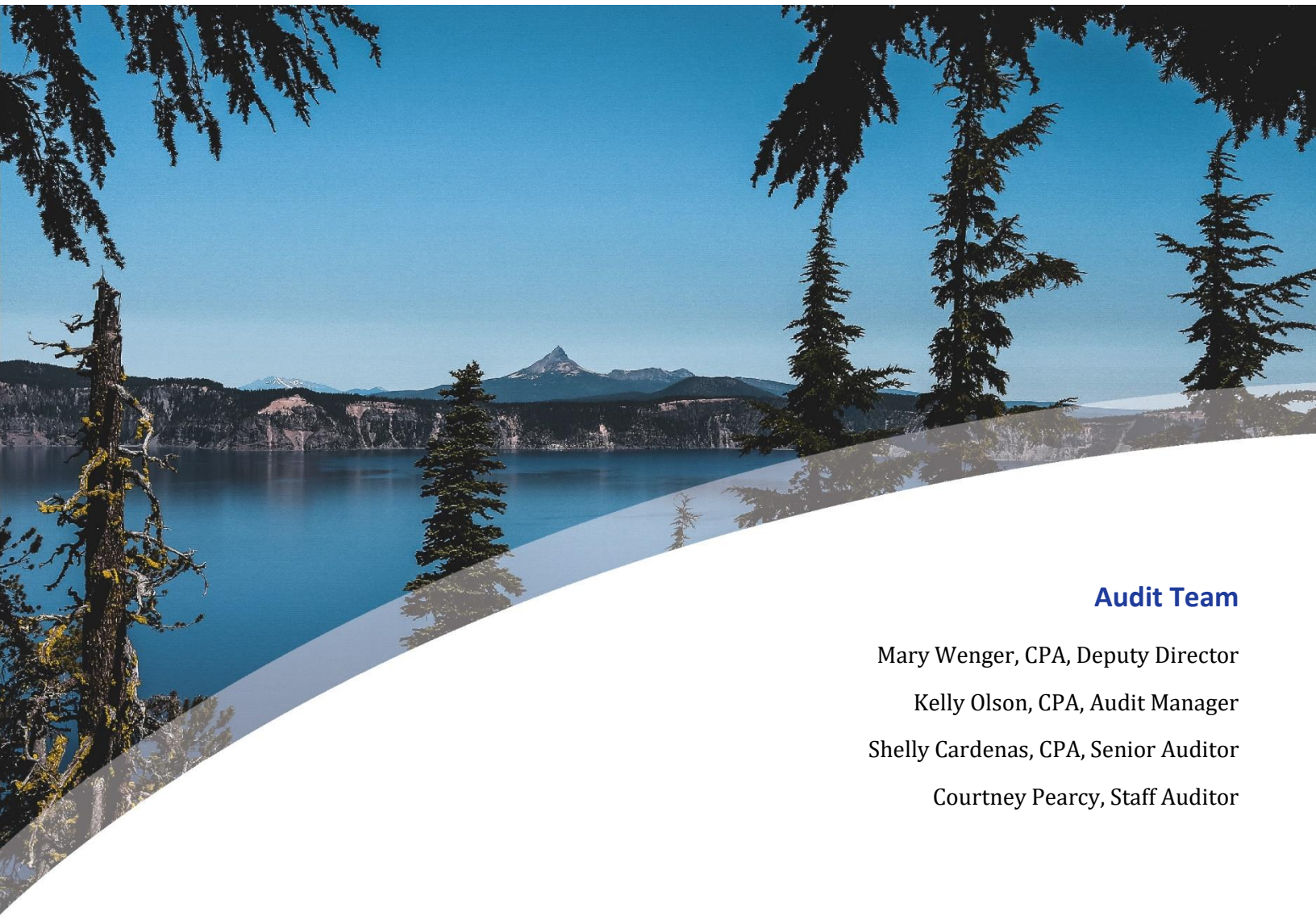
As part of obtaining reasonable assurance about whether the department's CWSRF program financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the department's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the department's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Office of the Secretary of State, Audits Division

State of Oregon
May 11, 2018



Audit Team

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The courtesies and cooperation extended by officials and employees of the Department of Environmental Quality during the course of this engagement were commendable and sincerely appreciated.

About the Secretary of State Audits Division

The Oregon Constitution provides that the Secretary of State shall be, by virtue of his office, Auditor of Public Accounts. The Audits Division performs this duty. The division reports to the elected Secretary of State and is independent of other agencies within the Executive, Legislative, and Judicial branches of Oregon government. The division has constitutional authority to audit all state officers, agencies, boards and commissions as well as administer municipal audit law.

This report is intended to promote the best possible management of public resources.
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sos.oregon.gov/audits

State of Oregon

Department of Environmental Quality Should Improve the Air Quality Permitting Process to Reduce Its Backlog and Better Safeguard Oregon's Air

Secretary of State
Dennis Richardson

Audits Division, Director
Kip Memmott

Report 2018 – 01

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DEQ Should Improve the Air Quality Permitting Process to Reduce Its Permit Backlog and Better Safeguard Oregon's Air

Report Highlights

The Secretary of State's Audits Division found that the Oregon Department of Environmental Quality (DEQ) should evaluate staffing and workloads among air quality permit writers and provide better guidance to both staff and businesses to help reduce the agency's air quality permit backlog.

Background

This audit reviewed air quality permitting at the Oregon Department of Environmental Quality. Air quality permits regulate the types and amounts of air pollution businesses are allowed to emit, based on federal pollution limits set by the Clean Air Act and state limits established in state laws and DEQ rules.

Purpose

The purpose of this audit was to determine how DEQ could improve its air quality permitting process to better safeguard Oregon's air quality.

Key Findings

The Oregon Department of Environmental Quality has a significant backlog in air quality permit renewals. We found that:

1. 43% (106 out of 246) of DEQ's largest and most complex federal and state air quality permit renewals are overdue for renewal. Additionally, more than 40% of the most complex permits issued from 2007 to 2017 exceeded timeframes established by DEQ or the Clean Air Act, some by several years.
2. DEQ struggles to issue timely permits and renewals due to a variety of factors, including competing priorities, vacancies, and position cuts that have created unmanageable workloads. Other factors include inconsistent support and guidance for staff; a lack of clear, accessible guidance for applicants; and increased time for the public engagement process.
3. Untimely permits, combined with a current backlog of inspections, endanger the state's air quality and the health of Oregonians. For example, when DEQ does not issue permit renewals on time, businesses may not provide DEQ with data showing they are complying with new or updated rules.

To reach our findings, we conducted interviews, analyzed air permit data, reviewed documents and reported practices, and researched leading practices.

Recommendations

Based on our review of leading practices and air quality agencies in other states, the report includes ten recommendations to the Department of Environmental Quality. Recommendations include evaluating permit writer workloads and staffing, clarifying the public engagement process, providing better guidance to permit writers and businesses, and conducting a process improvement effort.

The agency agreed with our findings and recommendations. Its response can be found at the end of the report.

Oregon DEQ audits

Secretary of State, Dennis Richardson
Oregon Audits Division, Kip Memmott, Director

About the Secretary of State Audits Division

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This report is intended to promote the best possible management of public resources. Copies may be obtained from:

website: sos.oregon.gov/audits

phone: 503-986-2255

mail: Oregon Audits Division
255 Capitol Street NE, Suite 500
Salem, Oregon 97310

We sincerely appreciate the courtesies and cooperation extended by officials and employees of the Department of Environmental Quality during the course of this audit.

DEQ Should Improve the Air Quality Permitting Process to Reduce Its Permit Backlog and Better Safeguard Oregon's Air

Introduction

The mission of the Department of Environmental Quality (DEQ) is to lead the state in restoring, maintaining, and enhancing the state's air, land, and water. In each of these areas, DEQ administers laws and programs, establishes standards, determines if standards are met, and takes action to enforce them when they are not.

The Oregon State Legislature has indicated state air pollution laws are intended to "safeguard the air resources of the state by controlling, abating, and preventing air pollution." Permitting facilities that emit air pollution is key to maintaining and improving Oregon's air quality.

The purpose of this audit was to determine how DEQ could improve its air quality permitting process to better safeguard the state's air quality. We found the agency is not issuing timely air quality permits. In addition, compliance inspections are integral to the ensuring facilities comply with permits, but DEQ is not consistently performing these inspections on time.

Air pollution is harmful to the health of Oregonians and the environment

Clean Air Week, 1969.
Oregon Historical Society, OrHi103775.

Beginning in the 1970s, the Clean Air Act (CAA) required the federal Environmental Protection Agency (EPA) to set national standards based on human and environmental health criteria for six common air pollutants. These "criteria pollutants" are lead, carbon monoxide, ground-level ozone commonly known as smog, nitrogen dioxide, sulfur dioxide, and particulate matter.

Of the six, smog and particulate matter, a complex mix of extremely small particles and liquid droplets, are the most widespread health risks.

Though it has decreased, smog continues to harm human health, causing respiratory problems in children, the elderly and even healthy adults. Fine particulate matter known as PM2.5 is the more dangerous type of particle pollution. PM2.5 more easily enters deep into the lungs, can enter the bloodstream, and can cause heart and asthma attacks. Other pollutants, such as lead, can cause cancer and developmental disabilities.

Federal air quality rules became more stringent in the 1990s with the passage of amendments to the CAA. These amendments created an operating permit program for larger industrial and commercial sources that release pollutants into the air and added 187 hazardous air pollutants, also known as air toxics, to the list of regulated pollutants.

Hazardous air pollutants are known or suspected to cause cancer or serious health effects. They increase the risk of cardiovascular and respiratory illness, lung disease, cancers, birth defects, developmental disorders, and premature death.

When compared to other states, the most recent National Air Toxics Assessment ranked Oregon highest in the nation for non-cancer health risks caused by hazardous air pollutants, followed by Washington.[1] Oregon's cancer risk is 24th[2] and of the 3,142 counties in the U.S., Multnomah, where Portland is located, ranks 56th for cancer risk and 3rd for non-cancer hazards.

Health problems associated with air pollution have negative economic impacts. For example, researchers estimate that up to 30% of asthma can be attributed to outdoor air pollution. In Oregon, the estimated annual medical cost of treating asthma is $411 million.

Criteria pollutants and hazardous air pollutants also affect the environment. Wildlife can experience similar problems to humans such as reproductive failure and birth defects. Air pollution can damage aquatic ecosystems and contributes to thinning of the protective layer in the upper atmosphere,[3] regional haze, and global climate change. It can also damage crops and trees, leading to reduced yields and growth.

Air quality permitting is key to maintaining and improving Oregon's air quality

Along with strategies to reduce emissions from woodstoves and vehicles, DEQ regulates stationary sources, including industrial facilities, through its air quality permitting programs. The CAA, which requires permitting of industrial air pollution, has contributed to an overall decrease in air pollution across the nation. Air quality permits regulate the types and amounts of air pollution businesses are allowed to emit, based on federal pollution limits set by the CAA and state limits established in state laws and DEQ rules.

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[1] The EPA suggests that the results of this assessment be used cautiously, as the overall quality of data submitted by states varies.
[2] Oregon's cancer risk due to toxic air pollution is 38 in a million— putting it at 24th in the nation as compared to other states.
[3] Also known as stratospheric ozone, which is naturally occurring and protects the planet from some of the sun's ultraviolet light.

Air pollution comes from a variety of sources

Air pollution in Oregon comes from a variety of sources, and the risks associated depend on the type of air pollutant, proximity to the public, and exposure. Though a contributing factor to the state's air quality, industrial facilities are not the only source of air pollution. Other sources include burning of fossil fuels, such as when driving cars and trucks, forest fires, and residential wood stoves.

Much of the state's air pollution is produced when two or more pollutants interact to create secondary chemical formations in the atmosphere. For example, nearly half of the cancer risk in Oregon is attributable to formaldehyde,[4] some of which is created when volatile organic compounds (VOCs)[5] interact with the upper atmosphere.

Emissions from industrial facilities, electric utilities, motor vehicle exhaust, gasoline vapors, and chemical solvents are sources of nitrogen oxide and VOCs, which interact with sunlight to created smog. Particulate matter can include one or more different chemical components, including acids, organic chemicals, metals, and soil or dust particles.

Air quality permitting has contributed to decreased air pollution and resulted in substantial economic benefits

Portland air pollution, 1963.
Oregon Historical Society, OrHi022557

Emission control measures implemented as part of the CAA, such as air quality permits and EPA's national emissions standards, have achieved dramatic reductions in air pollution. As a result, hundreds of thousands of cases of serious health effects, as well as premature deaths, have been prevented each year.

Reducing air pollution also prevents detrimental environmental effects. The EPA estimates improved air quality to have a net economic benefit to the agricultural and forestry sectors of $5.5 billion in 2010, and a projected net benefit of $10.7 billion in 2020. EPA's detailed cost benefit analyses of air pollution regulation over the last 20 years have shown that the benefits greatly outweigh the costs of compliance.

Air quality in Oregon has improved since the 1970s, due in part to regulation and permitting of industrial sources of air pollution. In the early 1970s, the state had serious air pollution problems. Oregonians in the Portland area were breathing air that violated the national air quality standard for smog by as much as 50%.

By 1980, only 30% of Oregonians lived in areas meeting federal clean air standards. Communities were routinely out of compliance for PM, smog,

[4] Formaldehyde is also emitted from incomplete combustion from industrial sources; engines from cars, trucks, planes, and construction equipment; diesel fuel combustion; railroad activities; and wood burning.
[5] VOCs are organic chemicals with a high vapor pressure at room temperature and are manmade or occur naturally. Some are also air toxics: benzene, carbon tetrachloride, and ethyl benzene.

and carbon monoxide (CO). In 1981, Portland exceeded standards for CO one out of every three days. However, the state has not had a CO violation since 1991, due in part to DEQ's Vehicle Inspection Program (VIP) established in the Medford and Portland Metro areas.

Criteria pollutants in Oregon have been declining over time and most are below the federal standard. The same pattern is true nationally, with combined emissions of criteria pollutants and various air toxics dropping 70% between 1970 and 2015. See Figure 1 for the percentage decrease in concentrations of criteria pollutants, comparing 1980 to 2015 levels.

Figure 1: Air Concentration of Criteria Pollutants has Decreased Nationwide Since 1980

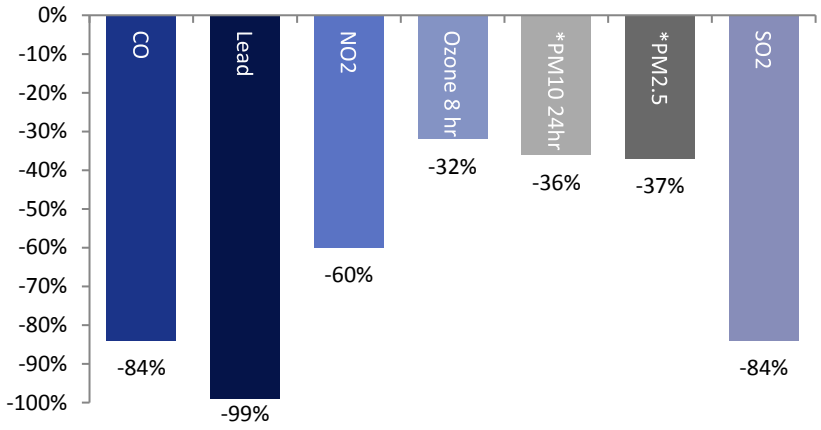


Figure note: Percentage decrease in PM concentration is from 2000 to 2015.

Air quality permitting is key to maintaining and improving air quality

Particulate matter obscures a city skyline.

As the state's population continues to grow, so do the activities that contribute to pollution. Air quality permitting of facilities is an important part of maintaining and improving the state's air quality for the health of Oregonians, the environment, and the economy. Facilities that emit pollutants and meet certain thresholds must apply for, and receive, air quality permits before they can operate. Permits describe the conditions under which facilities are to operate, based on federal and state rules. Once issued, permitted facilities are responsible for monitoring compliance with permit conditions and to keep detailed records and reports.

According to DEQ, air pollutants of most concern are PM2.5; smog; and air toxics like benzene and diesel particulate. The agency considers these pollutant most concerning because they cause the most risk to the most people. PM and smog in particular are two criteria pollutants the state has traditionally, and recently, struggled to meet standards for. There are two sizes of particulate matter — the finer and more hazardous is PM2.5 and the larger is PM10.

Over the past several decades, EPA has periodically revised National Ambient Air Quality Standards (NAAQS) and made them more stringent.

For example, in 2006, the EPA tightened regulations for fine particulate matter, and in 2015 increased standards for smog.

In recent years, several areas in Oregon fell out of attainment, meaning they did not meet NAAQS, due in part to tightened regulations. Currently, only two areas — Oakridge and Klamath Falls — are out of attainment for PM2.5. As a result, these areas must work to come back into compliance.

In addition, other geographic areas that previously violated federal NAAQS must take precautions and follow a Maintenance Plan to continue to meet standards. These are called maintenance areas. An example is the Medford area, a PM10 and CO maintenance area. Currently, there are also several areas in Oregon at risk of not meeting standards for PM2.5: Lakeview, Prineville, Medford, and Hillsboro. DEQ is also engaged with communities to avoid violations of federal standards and nonattainment.

Permitted facilities in maintenance or nonattainment areas may have more stringent regulations on their emissions and in their permits. See Figure 2 for current maintenance, non-attainment, and at risk of non-attainment areas in the state.

Figure 2: Maintenance, Non-attainment, and Areas at Risk of Non-attainment

Maintenance areas

Portland: CO; Smog

Salem: CO; Smog

Eugene-Springfield: CO

Grants Pass: PM10; CO

Medford-Ashland: PM10; CO

Klamath Falls: CO

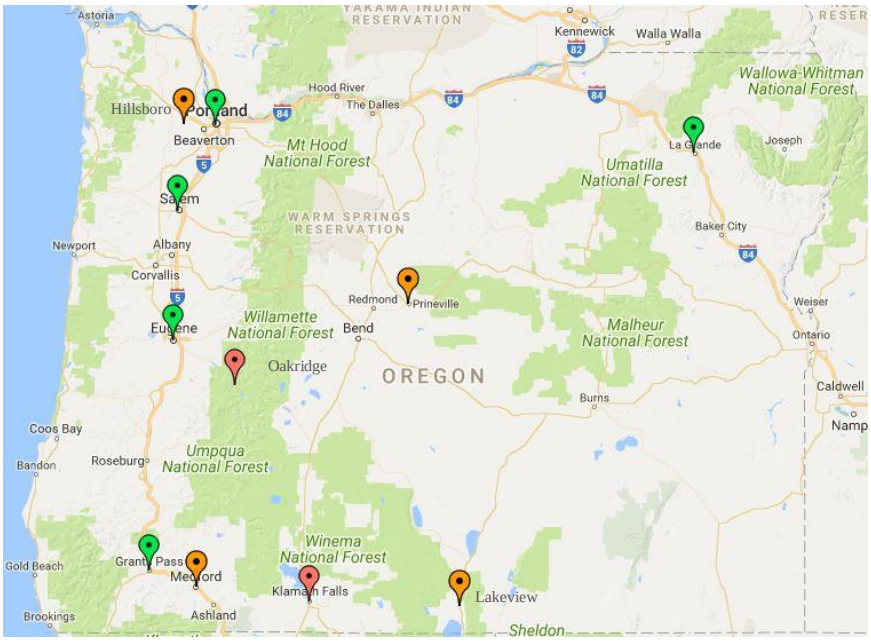
La Grande: PM10

Non-attainment areas for PM2.5

Oakridge and Klamath Falls

At risk of non-attainment for PM2.5

Lakeview, Prineville, Hillsboro, and Medford



New air toxics initiative adds human health risk evaluation and mitigation to existing air quality permitting

Federal and state rules for air quality permitting have historically focused on regulation of individual facilities, setting emission limits based on risk and the best available technology for controlling emissions. A new initiative, Cleaner Air Oregon (CAO) will now take into account the risk to people living and working nearby industrial facilities.

CAO is a partnership between DEQ and the Oregon Health Authority that will supplement existing DEQ air quality permitting by requiring evaluation and mitigation of these risks. In the draft rules, 660 air toxics are proposed to be regulated by CAO, which includes the 187 air toxics listed in the CAA.

The air toxics proposed to be regulated by CAO are known to increase the risk of a wide range of health problems. Less exposure to air toxics is expected to result in fewer premature deaths and illnesses, allowing Oregonians to experience longer lives, better quality of life, lower medical expenses, fewer work and school absences, and better worker productivity.

Historically, DEQ has not had a detailed inventory of air toxics in Oregon, but the agency recently made advances with an emissions inventory that is part of CAO.

Air quality permits and the permitting process are highly technical and complex

Title V permit (109) Most complex Largest emitters. Electricity generators, landfills, fiberglass, steel mills, pulp and paper.

Standard ACDP (137) Complex Medium emitters. Particleboard, plywood, fuel terminals, semiconductor, bakeries.

Simple ACDP (154) Simple Small emitters. Data centers, metal foundries, wastewater treatment plants, printers, publishers.

Air quality permits specify operating conditions for facilities to control and limit emissions based on federal and state rules. Permitting staff are spread throughout the state in three DEQ regions.

Air quality permits are based on emissions

Title V permits - Came about due to the 1990 CAA amendments and are issued to major industrial sources of pollution. Major sources are facilities that have the potential to annually emit 100 tons of any criteria pollutant, 10 tons of any single hazardous air pollutant or 25 tons of any combination of hazardous air pollutants. The EPA has delegated authority to issue these permits to state and local air agencies, including DEQ. Title V permits detail how facilities are to meet federal and state requirements.

Air Contaminant Discharge Permits (ACDPs) - Air agencies also have the ability to issue air quality permits based on state or local regulations. Oregon DEQ first initiated state level permits in 1972, now called Air Contaminant Discharge Permits (ACDPs). Facilities with ACDPs emit less than 100 tons of a criteria pollutant, 10 tons per year for a single hazardous air pollutant, and under 25 tons per year for collective hazardous air pollutants. Oregon's one regional air agency, the Lane County Regional Air Protection Agency (LRAPA), issues Title V and ACDPs for Lane County and the cities of Eugene, Springfield, Cottage Grove, and Oakridge.

As ACDPs increase in complexity, so do their environmental mandates, the level of the public's engagement in the process, and the associated fees. Standard, Simple, and Basic ACDPs are assigned to individual facilities and take into account individual characteristics. General ACDPs are issued to facilities in certain industries who meet specific requirements. There are four primary types of ACDPs.

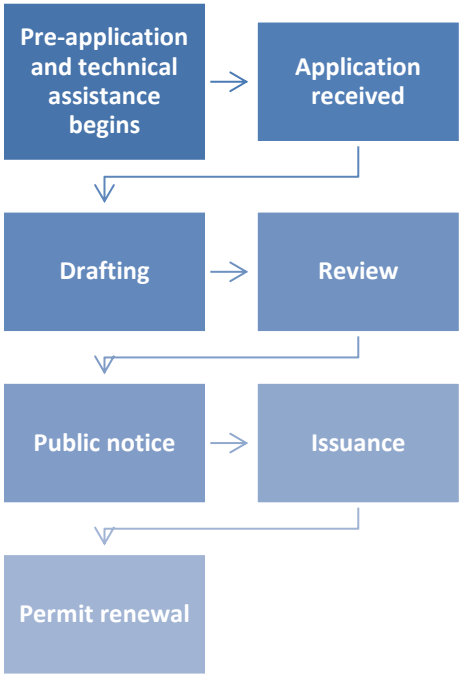
General ACDP (2,095) Simpler
Small emitters, facilities within categories. Gas stations, dry cleaners, coffee roasters.

Basic ACDP (107) Simplest
Smallest emitters. Rock crushers, asphalt paving, auto body shops, crematories.

- **Standard ACDPs** are the most complex and restrictive. They may have complex regulations or monitoring requirements, add-on controls, or address a history of compliance or complaint problems. Standard ACDPs are also used to authorize construction of a Title V facility.
- **Simple ACDPs** are issued to facilities that do not qualify for a Basic or General ACDP, but are below the Standard threshold.
- **General ACDPs** are issued to facilities in an industry category, above the threshold for a Basic ACDP.
- **Basic ACDPs** are the simplest type of permit, with the lowest production rates.

Permit writers are key to air quality permitting process

The first step in the air quality permitting process is for a facility to determine what kind of permit it needs, often with the help of DEQ staff. Before an application is submitted, permit writers may provide technical assistance, such as education about the permitting process, and conduct preliminary research on the facility.



For larger and more complex sources, writers may also consult with DEQ operational staff who assist with air quality modeling, which simulates how air pollutants disperse and react in the atmosphere to affect air quality. Modeling helps determine the potential impact of a facility's emissions on air quality. When DEQ receives an application for an air quality permit, the pre-drafting phase begins. If the application is complete, it moves on to the drafting phase. However, writers must often work with applicants to obtain information to complete the permit.

During the drafting phase for more complex permits, permit writers evaluate and analyze a host of environmental, engineering, and technical information and data. They incorporate relevant rules and regulations to create permit conditions that specify pollution control techniques facilities have to use to adhere to federal and state rules.

Once drafted, permits undergo an internal DEQ review process that involves peers and managers. The applicant also has the opportunity to review the permit for accuracy. In addition, permits with higher potential risk to the environment or human health have more opportunities for public participation. Those with the highest risk are required to have public notice and comment periods, along with hearings and informational meetings. Permit writers respond to public comment and revise permits as necessary before they are issued.

If a facility's air quality permit application meets all legal requirements, DEQ will issue the permit.

Air quality permits should be renewed and inspections completed within specific timeframes

Once issued, facilities are required to adhere to the permit conditions, including continuous self-monitoring and reporting of regular and accidental emissions. To ensure compliance, permit writers review these reports, conduct regular compliance inspections, and respond to complaints from the public. DEQ provides oversight to ensure facilities conduct their emissions source testing properly and to ensure compliance with regulations and emissions limits. Air quality staff called Source Test Coordinators approve plans for testing, review test results, and observe source test emissions testing. Source testing evaluates the type and amount of emissions from industrial stacks.

Each type of permit has timeframes that dictate how long it should take to be issued, how long it is valid before a renewal is required, and frequency of compliance inspections. The EPA sets these guidelines for Title V permits, and DEQ sets them for ACDPs. See Figure 3 for details.

Figure 3: Air Quality Permits Vary in Length of Term, Issuance Guidelines, and Frequency of Inspections.*

	Permit term	Issuance timeliness guidelines	Compliance inspection frequency
Title V permit	5 years	18 months (EPA) 12 months (DEQ)	Every other year
Standard ACDP permit	5 years	180 days	Every 3 years
Simple ACDP permit	5 years	120 days	Every 4 years
General ACDP permit	10 years	30 days	Every 5 years
Basic ACDP Permit	10 years	30 days	Every 10 years

*Does not include permit modifications.

DEQ's mission is to lead the state in restoring, maintaining, and enhancing the quality of Oregon's air, land, and water

DEQ Fast Facts

- Formed: 1969
- 2017-2019 Biennial budget: $379 million
- Authorized Full Time Equivalent (FTE) staff: 724
- Actual FTE, as of September 2017: 616
- Regional air quality staff, as of July 2017: 35

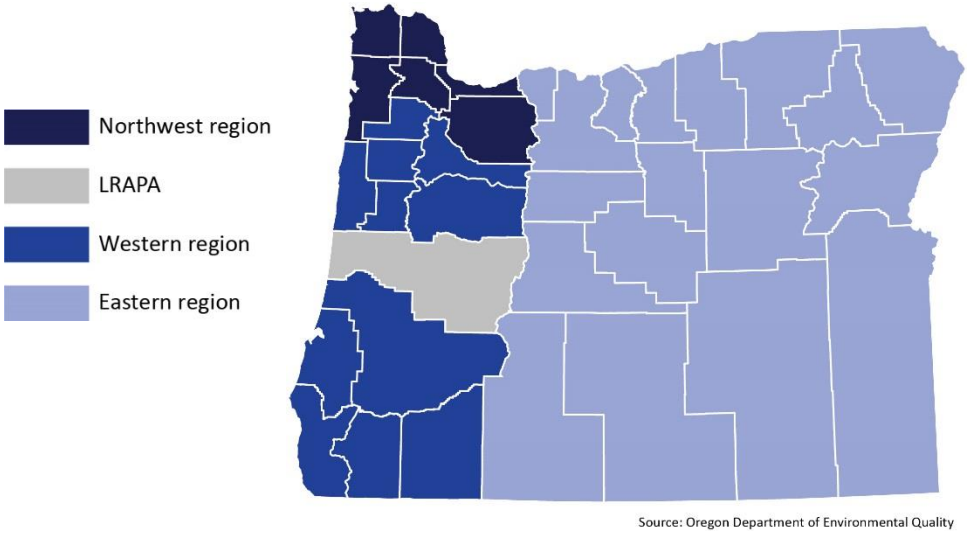
DEQ achieves its mission by administering laws and programs for air, land and water quality; establishing standards; and enforcing standards when they are not met. DEQ's policy and rulemaking board is the Oregon Environmental Quality Commission. The commission is a five-member panel appointed by the governor for four-year terms. In addition to adopting rules, the commission also establishes policies, issues orders, judges appeals of fines or other agency actions, and appoints the DEQ director.

DEQ operates within a regional structure

DEQ operates within a regional structure, with staff in three regions carrying out air, land, and water program responsibilities, and with agency headquarters providing support. The three regions, as shown in Figure 4, are Northwest (includes Portland), Western, and Eastern. Lane County's

regional air agency, LRAPA, handles air quality programming for Lane County and the cities of Eugene, Springfield, Cottage Grove, and Oakridge.

Figure 4: DEQ Programs Divided into Three Regions



Source: Oregon Department of Environmental Quality

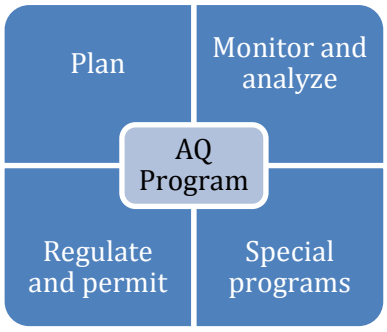
During our fieldwork, we learned about challenges unique to each region. The Eastern Region is the largest, encompassing two-thirds of the state's geographical area. This creates challenges due to travel time for inspections and complaint investigations, for example. The Western Region faces similar challenges because of its topography. The Northwest Region is the agency's most populous region with the highest concentration of air quality permits. See Figure 5 for the number and type of permits in each region.

Figure 5: Permits in Each Region, as of July 2017

	Eastern Region	Western Region	Northwest Region
Title V	31	42	36
Standard ACDP	25	40	72
Simple ACDP	33	38	83
General ACDP	460	796	839
Basic ACDP	52	21	34
TOTAL	**601**	**937**	**1,064**

DEQ rules and programs help the state meet federal air quality standards

DEQ's air quality program has several components. The Air Quality Program works to ensure that Oregon's air meets the NAAQS required by the CAA. This involves creating a plan to meet national standards, monitoring and analyzing air quality data, regulating emissions from a variety of sources, and creating programs targeted at specific air quality issues. For example, the Cleaner Air Oregon rulemaking, the Heat Smart



Program for woodstoves, and the Clean Fuels and Clean Diesel programs target specific air quality issues or causes.

Staff in the DEQ laboratory[6] collect and analyze data from air monitors around the state. Laboratory staff conduct analytical testing of the air filter samples for particulate matter, including substances such as arsenic, beryllium, cadmium, chromium, cobalt, lead, carbon, and metals. DEQ technical services staff study the science underlying air quality and estimate emissions from thousands of sources like woodstoves and cars. They also measure pollution trends and model them, in a way that's similar to how meteorologists forecast weather. In addition, laboratory staff play a large role during wildfires by monitoring conditions and pollution levels and assisting with communications to the public.

In addition to air quality permits, emissions are regulated through the Vehicle Inspection Program in the Portland and Medford areas.

DEQ's overall budget and staffing have declined over time

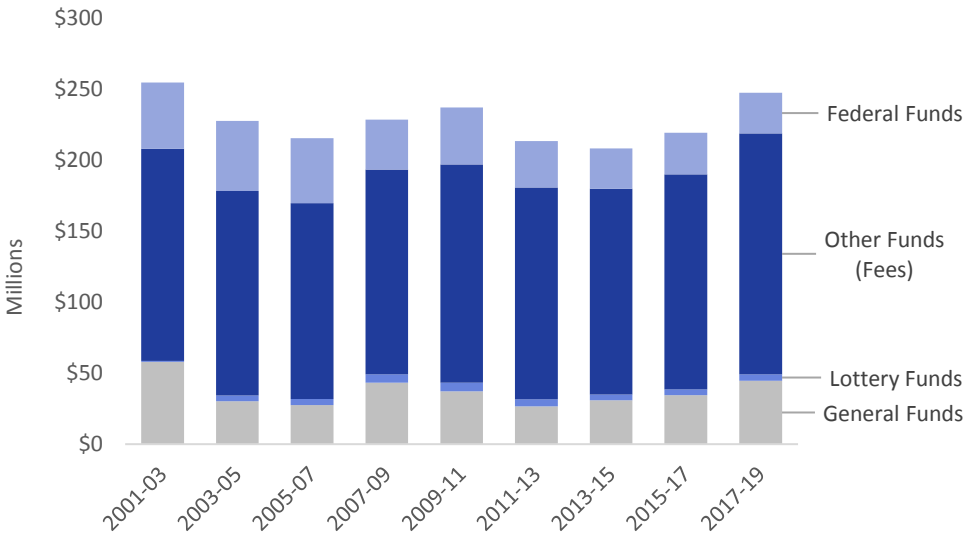
DEQ's budget has fluctuated over time, as the amount of state General Funds, federal government funding, fee revenue, and funding from other sources has varied. The agency's overall budget for the 2017-19 biennium is $379 million, down 8% since the 2001-03 biennium, after adjusting for inflation.

Revenue from the state General Fund and federal government has dropped considerably. Since the 2001-03 biennium, General Funds are down 23%, from an inflation-adjusted $58.1 million to $44.6 million in the 2017-19 budget. Over the same period, federal funds decreased 39% from an inflation-adjusted $46.7 to $28.6 million.

Conversely, revenue from permits and other fees are up 14% over the same period, from an inflation-adjusted $149.2 million to $169.6 million. This increase has not been enough to offset the loss in general and federal funds.

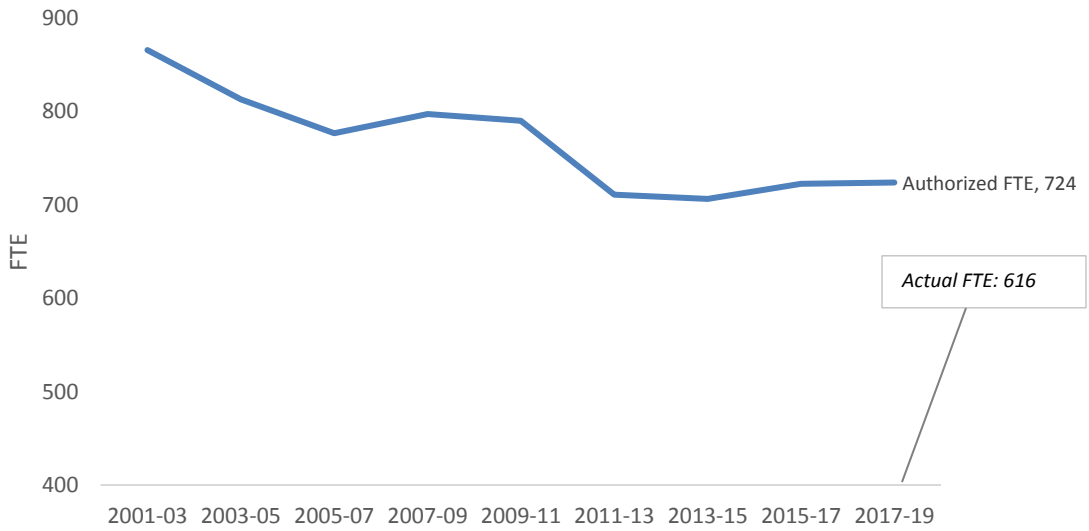
[6] The Laboratory collects and analyzes samples of air, water, soil, and tissues to provide information on Oregon's environment DEQ programs. See our 2011 report on DEQ's lab: Report 2011-10, Department of Environmental Quality: Increase Laboratory Productivity to Better Meet Customer Needs.

Figure 6: DEQ Budget From the 2001-2003 Biennium to the 2017-19 Biennium has Decreased[7]



DEQ's overall staffing level has largely mirrored the changes in its budget. In the most recently passed budget, for 2017-19, DEQ is authorized to have 724 Full Time Equivalent (FTE) positions, down from 866 in the 2001-03 biennium, or a drop of 16%. According to DEQ, the actual filled positions were even lower in September 2017, at around 616 FTE. Figure 7 shows the agency's FTE from 2001-03 to 2017-19.

Figure 7: DEQ's Full Time Equivalent (FTE) Positions Have Decreased Over Time



[7] Adjusted for inflation. Excluding Clean Water State Revolving Loan Fund.

Objective, Scope and Methodology

Objective

Our audit objective was to determine how DEQ can improve its air quality permitting process to better safeguard Oregon's air quality.

Scope

The audit focused on the agency's process for issuing state Air Contaminant Discharge Permits and federal air operating permits, commonly known as Title V permits, to industrial and commercial facilities. Our audit did not examine the quality of these permits.

Methodology

To address our objective, we interviewed agency staff and stakeholders, accompanied staff on complaint and compliance inspections, interviewed and administered questionnaires to other air agencies, analyzed agency permitting and workforce data, and reviewed documentation.

To gain an understanding of the permitting process and challenges staff face, we conducted interviews or administered questionnaires to air quality staff at DEQ headquarters and all regional air quality permitting staff. To do so, we visited regional offices in Portland, Salem, Bend, and Medford to talk with nearly 40 staff.

We also conducted interviews with numerous stakeholder groups, including:

- organizations representing environmental interests and concerned with air quality issues such as Neighbors for Clean Air and Eastside Portland Air Coalition;
- organizations representing the regulated business community such as Oregon Business and Industry and the Working Waterfront Coalition;
- governmental bodies such as the Environmental Protection Agency, Port of Portland, and the Columbia River Inter-Tribal Fish Commission; and
- representatives of businesses with air quality permits issued by DEQ.

In addition to stakeholders, we interviewed and administered questionnaires to a judgmentally chosen sample of eight air agencies to identify leading practices. We chose these agencies because they were in the same EPA region as Oregon, or because they had made progress in reducing the number of administratively extended Title V permits.

- Maryland Department of the Environment, Air and Radiation Management Administration;
- North Carolina Department of Environmental Quality, Air Quality Division;

- New Mexico Environment Department, Air Quality Bureau;
- Alaska Department of Environmental Conservation, Division of Air Quality;
- Idaho Department of Environmental Quality, Air Quality Division;
- Lane Regional Air Protection Agency (Oregon);
- Puget Sound Clean Air Agency (Washington); and
- Southwest Clean Air Agency (Washington).

In addition to leading practices identified at other air agencies, we also reviewed EPA and other reports and documentation on best practices related to the permitting process, including audit reports from other states. We also reviewed rule, law, policy and procedure documents related to air quality permitting federally and in Oregon.

We analyzed DEQ's permitting data for pending and issued permits, covering the period January 2007-July 2017. We also analyzed agency staff timekeeping data for 2015-16. We assessed the data for reliability and concluded it was sufficiently reliable for our audit purposes.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained and reported provides a reasonable basis to achieve our audit objective.

Audit Results: DEQ Should Improve the Permitting Process to Reduce Its Permit Backlog and Better Safeguard Air Quality

DEQ has a significant backlog of pending air quality permits, as well as a backlog in compliance inspections. These backlogs are the result of insufficient staff devoted to permitting, a lack of guidance to permit writers, a shortage of clear and accessible guidance for applicants, and competing priorities. Backlogs increase the risk that permit holders could be operating equipment and emitting pollution outside their permits, which can negatively affect human health and the environment.

DEQ is not issuing timely air quality permits or consistently performing timely compliance inspections

Steam from a smoke stack at an electric power plant.

DEQ has fallen behind on many renewals for Title V, Standard, and Simple Air Contaminant Discharge Permits (ACDP), and on some compliance inspections. According to the United States Environmental Protection Agency (EPA), "timely renewals are important for ensuring permits contain all applicable requirements, particularly when many new applicable requirements have been promulgated, and reflect the agency's current approaches for monitoring, recordkeeping and reporting."

43% of DEQ's largest and most complex air quality permit renewals are in backlog status

When DEQ receives a timely application for a permit renewal, but does not renew the permit before it expires, it is "administratively extended." This means that the facility may continue to operate under the conditions of the existing permit until the pending application is processed and the renewal is issued.

These administratively extended permits make up DEQ's permit backlog.

DEQ does not efficiently track its permit backlog across its three regions. While the agency's air quality data system tracks permit applications, milestones, and whether permits have been issued, it does not produce any reports that show the permit renewal backlog. Instead, air quality managers developed a central permitting plan spreadsheet of permits due for renewal, including those in the backlog, and each region updates the spreadsheet for their region.

As of July 2017, DEQ had permitted 2,602 facilities. While about 5.8% of all permits were behind, DEQ's largest and most complex permits—Title V and Standard—have the highest percentage overdue for renewal at 43.1%.

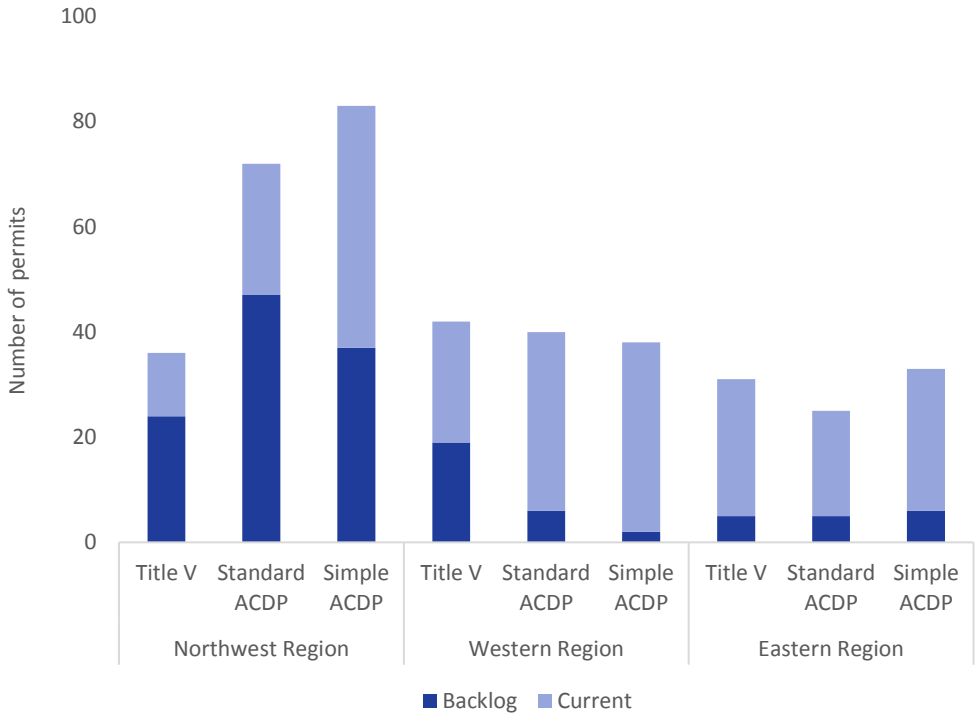
Figure 8: Most Complex Permits Have Highest Percentage Overdue for Renewal

	Backlogged Permit Renewals	Total Permits*	Percentage of Permits Backlogged
Title V	48	109	44.0%
Standard ACDP	58	137	42.3%
Total of Title V and Standard ACDP	***106***	***246***	***43.1%***
Simple ACDP	45	154	29.2%
General ACDP	0	2,095	0%
Basic ACDP	0	107	0%
Total of all permits	**151**	**2,602**	**5.8%**

**LRAPA permits are not included in these totals.*

The renewal backlog not only varies by permit type, but also by DEQ region. The Northwest Region, which has the largest number of permits, also has the largest permit backlog, followed by the Western and Eastern Regions. See Figure 9.

Figure 9: Status of Permits by DEQ Region, as of July 2017



Two-thirds of the Northwest Region's Title V renewals are behind, as compared to about 45% for the Western region and only 16% for the Eastern Region. The Northwest Region also has a much higher backlog in Standard and Simple ACDPs, at roughly 65% and 45%, respectively. For the Western and Eastern Regions, the backlog of Standard and Simple renewals ranges from about 5% up to 20%.

On average, pending renewals have been backlogged about two and a half years (881 days). The median number is much lower, at longer than a year and a half (570 days)

Many permit renewals have been backlogged for years. On average, these pending renewals have been backlogged about two and a half years (881 days). The median number is much lower, at longer than a year and a half (570 days). This suggests that the average is being pulled higher by a small number of renewals that have been backlogged for years. Figure 10 shows the average and median days pending for Title V, Standard, and Simple renewals.

Figure 10: Average and Median Days Backlogged Renewals Have Been Pending Exceed Processing Targets

	Permit Processing Target, in days	Average Days Pending	Median Days Pending
Title V	365	1,233	749
Standard ACDP	180	928	804
Simple ACDP	120	623	467
All Permits	**N/A**	**881**	**570**

Title V renewals have been backlogged for longer, on average, than the other permits. For Title V, Standard, and Simple permits, the average and median renewal times are all more than twice as long as DEQ's permit processing target.

In the last decade, nearly a quarter of permits were not issued on time

In addition to the backlog of permit *renewals* still pending, many of the permits that DEQ did issue from January 2007 through July 2017 were not issued within the agency's established timelines. Of *all* permit actions (new permits, renewals, and permit modifications[8]), 22% were not issued on time.

For *new* Title V permits, 43% were not issued on time, while 44% of Standard ACDPs and 37% of Simple ACDPs were not issued on time. Figure 11 shows the number of permits issued beyond established timeframe for each type.

Figure 11: Permit Actions Issued Beyond Their Target, by Permit Type, January 2007 to July 2017

	Permits Beyond Target	Total Permit Actions	Percentage Beyond Target
Title V	46	161	28.6%
Standard, Simple, and Basic ACDP	113	471	24.0%
General ACDP	445	2,078	21.4%
Total	**604**	**2,710**	**22.3%**

The average amount of time it takes DEQ to issue a new permit, modification, or renewal varies drastically by the type of permit. For new

[8] Permit modifications are used when a permitted facility wants to make a change to their facility. They range from simple, non-technical modifications to complex technical changes.

permits, Title V took the longest, on average, at a year and a half (549 days), while new Simple ACDPs took an average of about four months (124 days). Figure 12 shows the average and median days it took DEQ to issue new permits, modifications, and renewals.

Figure 12: Average and Median Days to Issue Permits Exceeded Processing Targets, January 2007 to July 2017

	Permit Processing Target, in days	Average Days to Issue	Median Days to Issue
Title V			
New	365	549	336
Significant Modification	365	118	52
Renewal	365	662	364
Standard ACDP			
New	180	250	154
Renewal	180	260	108
Simple ACDP			
New	120	124	97
Renewal	120	184	81

In the past decade, DEQ issued 9% of Title V renewals after the point when the *next* renewal should have been issued.

Looking closer at permit renewals DEQ has issued, Figure 13 shows the number of months it took DEQ to issue Title V, Standard ACDP, and Simple ACDP renewals, categorized by different time periods.

While DEQ issued most renewals in less than 12 months, some took much longer. For example, 12% of Title V renewals took 24-60 months, and 9% took more than 60 months, or five years. Since Title V permits have to be renewed every five years, this means that 9% of DEQ's Title V renewals were issued after the point when the *next* renewal should have been done.

Figure 13: Number of Months it Took to Issue Permit Renewals, by Permit Type, January 2007 to July 2017

	Permit Processing Target, in days	Time to Issue Renewal, in months	Percentage of Permit Renewals Issued
Title V Renewals	365	12 or less	50.6%
		13-18	15.6%
		19-24	13.0%
		25-60	11.7%
		Over 60	9.1%
Standard ACDP Renewals	180	6 or less	62.6%
		7-12	11.2%
		13-24	16.8%
		25-60	8.4%
		Over 60	0.9%
Simple ACDP Renewals	120	4 or less	64.3%
		5-12	22.4%
		13-24	7.1%
		25-60	6.1%
		Over 60	0.0%

Northwest Region failed to issue Basic ACDP for auto body repair facilities

We found one type of Basic permit for auto body repair facilities simply not being implemented at all. The General ACDP for surface coaters that emit

hazardous air pollutants, like some auto body shops, went into effect in 2011. The permit was developed to implement new regulations on the use of coatings that contain certain metals.[9] More than 100 shops exempted out of this General permit category because they certified and demonstrated the paints they used did not include the target metals identified in the federal regulation.

However, Portland area facilities that opted out of the General ACDP were never evaluated to see if they required coverage under the lesser Basic ACDP for auto body repair facilities. As a result, DEQ reports there are approximately 150 auto body shops in the Northwest Region in need of this permit. These businesses have likely been emitting volatile organic compounds that contribute to smog since the permit was first developed nearly seven years ago.

When we asked why the agency failed to roll out this permit, staff reported that previous management did not make it a priority due to workloads. Also, current management reported they intend to evaluate facilities and roll out Basic ACDPs for auto body repair facilities in early 2018.

DEQ also has a permit compliance inspection backlog, a key control for ensuring businesses comply with permit requirements

DEQ staff checks the vapor seal on an underground gas tank during an inspection.

The EPA and DEQ require regular inspections of permitted facilities. Depending on the type of permitted facility, these inspections may occur every other year, every three years, or every five years. Permit writers conduct these inspections to ensure businesses comply with their permit conditions. When violations are discovered, DEQ takes enforcement action. However, without inspections, DEQ cannot ensure facilities are in compliance with the conditions of their permits and state and federal air quality regulations.

When permits are not renewed on time, inspections are even more important because self-reporting and monitoring requirements for new rules may not be in place until incorporated into the permit renewal.

DEQ management reported there is a backlog of inspections, mostly for ACDPs. We were unable to confirm the extent of the inspection backlog because the agency does not adequately track inspections agency wide. There is no agency-wide tracking of facilities needing inspections, in part because existing systems do not allow for it. DEQ has a separate system for tracking compliance and enforcement information, but the program only tracks when compliance inspections are scheduled, not when they are due. Because of this, regional air quality managers are not able to track the backlog in the system.

[9] These metals are cadmium, chromium, manganese, nickel, and lead. The federal regulations are known as National Emissions Standards for Hazardous Air Pollutants (NESHAP).

Multiple challenges increase the time it takes DEQ to issue and renew permits and perform compliance inspections

Several factors combine to increase the time it takes DEQ permit writers to issue and renew permits and perform inspections. These include staffing shortages caused by vacancies and position cuts, lack of consistent guidance and support for staff, lack of clear and accessible guidance to permit applicants, and a poorly documented permit process.

Vacancies and position cuts create unmanageable and unrealistic workloads

DEQ lacks sufficient staffing to perform permitting and inspection responsibilities. According to DEQ, the number of filled positions is 616 FTE out of an authorized 724 FTE.

About 25% of DEQ's air quality permit-writing positions were vacant as of August 2017.

DEQ has been slow to fill vacancies, which has resulted in unmanageable workloads in the Air Quality program and permitting work falling behind. Of the 28 permit writing positions, seven were vacant as of August 2017: three in the Northwest Region and four in the Western Region[10]. We also found that filling permit writer vacancies has often taken DEQ more than a year. In fact, two vacancies have been open for more than two years.

When someone leaves, and the position is not immediately filled, their permitting and inspection workload is divided among the remaining staff members. For example, a Title V permit writer in the Northwest Region reported their workload nearly doubled when they were assigned Standard and Simple ACDP permits after a colleague retired. In addition to permit writing, this staff person was also training a new writer and stated there was enough work on their plate to work 80 hours a week. Writers in the Western Region mentioned similar situations. It is very difficult, if not impossible, for staff to complete this amount of work, which could lead to staff burnout.

All regions and headquarters have also lost Air Quality program positions, and the agency has lost overall FTE over time. DEQ's authorized FTE for 2017-19 has declined 16% from the 2001-03 biennium, and a proposed ACDP fee increase did not pass during the 2017-2019 legislative session. At the same time, the workload has increased, due in part to new rules and regulations, and new permits and modifications spurred by economic growth. In the Northwest Region, a workload analysis to determine staffing needs showed that in addition to filling three vacancies, six more staff were needed to make the department fully functional. Another manager noted that if they were fully staffed, they probably would not have a permitting backlog.

[10] As of August 2017, there was a 16% vacancy rate in the entire air quality program; 24% in the Western Region and 19% in the Northwest Region.

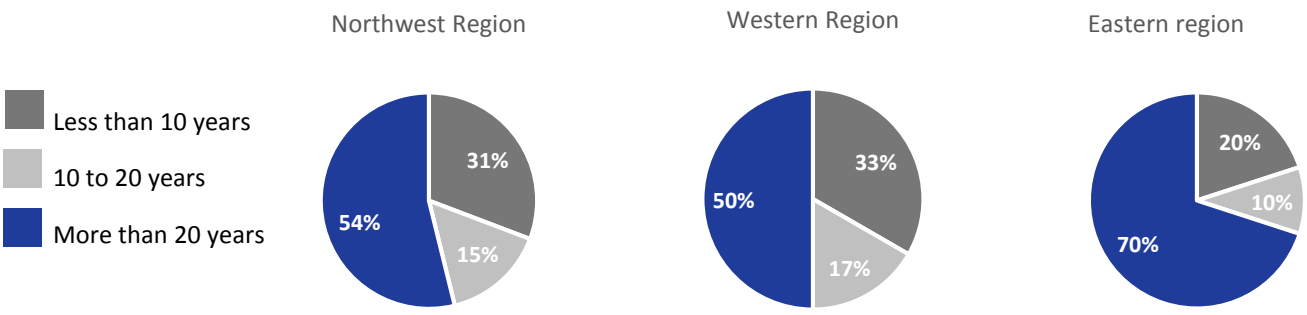
Regional managers are also facing challenging workloads. The Southern and Northern offices of the Western Region merged in 2013, condensing two management positions into one. Likewise, in the Northwest Region, two offices and management positions were condensed into one around the same time. Both managers reported challenges with successfully managing their programmatic and staff-related workloads.

Lack of succession planning has created knowledge gaps

The increasing number of permit writers retiring creates a unique challenge in the air quality program. The program has faced a number of retirements in recent years, resulting in a loss of important institutional knowledge and expertise. In fact, during the course of our audit, two permit writers retired — writers of the most complex air quality permits (Title V and Standard ACDP).

More than half of permit writers in the Northwest and Western Regions and 70% of staff in the Eastern Region have been with the agency for more than 20 years. Figure 14 shows the time in service for AQ staff in each of the regions.

Figure 14: Time in State Service for Regional AQ Staff, by Region



Retirements also create challenges because there is a steep learning curve to the job. Air quality staff told us it can take one to two years for new writers to become fully versed in the complexity of their position.

DEQ leadership reported the agency is not currently engaged in succession planning. In addition to a lack of overall succession planning, we found little evidence that there are strategies in place to retain and transfer the extensive institutional knowledge of retiring air quality permit writers. With a high number of staff at the agency for more than twenty years, DEQ is at high risk of losing skilled staff and their extensive knowledge.

In a recently released performance audit on succession planning,[11] we found that successful succession planning helps organizations retain knowledge by putting strategies in place to transfer knowledge and retain

[11] Report 2017 – 21: Department of Administrative Services Should Enhance Succession Planning to Address Workforce Risks and Challenges.

knowledgeable employees. A robust succession plan links strategic and workforce planning decisions, analyzes gaps between current state and future needs, develops succession strategies, and monitors efforts.

Lack of consistent guidance and support for staff slows the permitting process

Federal and state air quality rules are getting more complex. For example, new federal standards required writers to modify permits for facilities with a boiler over a certain size. One senior writer noted that a majority of permitted facilities have a boiler of some sort, and that the rules are more complicated for certain types of boilers, such as wood-waste boilers used in pulp and paper mills.

At the same time rules are getting more complicated, writers are receiving less guidance and support from staff at DEQ headquarters. For example, operational staff at DEQ headquarters do not consistently provide guidance on how to incorporate new rules into permits.

Many of the tools designed to help writers either do not work or are badly outdated. In 2012, DEQ staff took part in a process improvement effort to identify challenges and solutions in permitting across the agency's Air, Land, and Water programs.

DEQ's manual for air quality permit writers has not been updated since 1993.

However, most of the recommendations for the air program were not implemented, or only partially so. For example, one recommendation was to update the air quality permit writers' manual, which has not been updated since its original draft, in 1993. This recommendation still has not been addressed.

Permit writers also identified a lack of updated and easy-to-locate permitting tools and guidance. Though a central repository for such air quality documents was created, DEQ management has not maintained the repository. Many of the links are broken or do not link to current information.

Lack of clear and accessible guidance to permit applicants increases time spent on technical assistance

Permit guidance for applicants is difficult to find on DEQ's website. The guidance is also hard to follow because it is written in technical language. We heard from permit writers that some companies do not have the resources or expertise to understand the guidance and therefore must turn to DEQ for help. This leads applicants to call permit writers with questions, which takes time away from permitting activities.

Poor guidance frequently results in incomplete permit applications, which can also slow the permit writing process. Writers have to place incomplete applications on hold because they do not have all the required documentation. This takes time away from other permitting activities, as staff have to track down the necessary documentation. A checklist or better

guidance for the applicants could lessen the probability of incomplete applications.

Poorly documented and inconsistent permit process

While we found general agreement on the overall permitting phases, the steps within the phases vary. We also found the process for air quality permit writing was not fully or consistently documented across the three regions— though the Eastern Region had the most developed process documentation. When processes within organizations are not documented, controlling and improving them is challenging, making it difficult to find more efficient ways to issue permits. Documenting the permit process could also guide permit writers across the regions and aid in consistency. Likewise, tracking inspection due dates can help both identify the current inspection backlog and plan for future inspections before they become overdue.

Based on our interviews, the permit review phase varied the most, with staff identifying bottlenecks and inefficiencies. In the Western Region, permit drafts are reviewed by a permit writer "lead worker" before manager review, which can prevent bottlenecks. We heard from writers in this region that this helps make the review process more efficient and takes some of the burden off their manager. In the Eastern and Northwest Regions, there is peer and manager review, as there are no lead workers. However, high workloads make it challenging for peers to find time to review others' draft permits and permit writers stated reviews sometimes bottleneck at the manager level.

Competing compliance priorities limit staff time for permitting activities

Black smoke from a crematory smoke stack. Photo submitted to DEQ as part of citizen complaint.

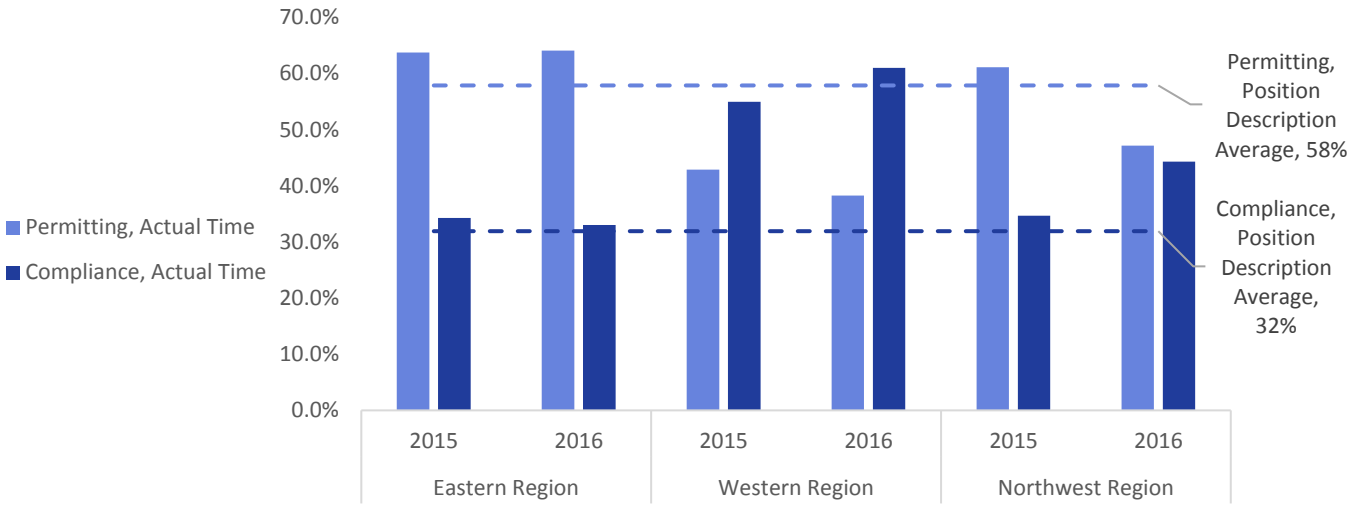
Permit writers have a host of responsibilities outside of issuing permits. Issuing new permits and permit modifications are a top priority, but renewals often fall in importance because of higher priority work. Writers essentially drop renewals they are working on when a new or modified permit comes, sometimes not picking them up until a year later. This means not only a delay in the renewal, but additional work when coming back to the renewal, to ensure previous work done is still accurate.

Compliance duties such as complaint and odor investigations, and enforcement work can take up a significant amount of time. For some, such as staff who primarily work on Basic and General ACDPs, compliance and enforcement is a majority of their work.

Review of position descriptions showed that on average, permit writers should be spending 58% of their time on permitting activities. Permitting activities include technical assistance and all other phases of the permit writing process. However, according to our analysis of timekeeping data from 2015 to 2016, permit writers across all regions spent only an average of 49% of their time on permitting activities.

Looking by region, writers in the Eastern Region largely matched the position description average in 2015 and 2016, while Western Region writers spent much more time on compliance activities in both years. The Northwest Region varied by year. Figure 15 shows the position description average and actual time spent by region.

Figure 15: Percentage of Permit Writers' Actual Time Worked Varied by Region



Permit writers are also responsible for responding to complaints about facilities. In interviews with writers, we heard of examples when complaints became their top priority. For instance, an ongoing odor investigation takes one writer away from permitting activities twice a month.

Another writer reported spending so much time in the past two years on technical work and analysis associated with compliance determination and odor investigations, that there was little time left for actual permit writing. Data show this writer as having a backlog of 30 administratively extended permits as of July 30, 2017. They attributed their backlog to time spent on non-permitting activities and inheriting past due permits when a colleague retired.

Permit writers also ensure permitted facilities comply with their permits. To do so, they complete inspections and review compliance reports, both of which vary in frequency depending on the permit type. Some facilities send in monthly emissions data, which assigned writers are required to review.

During a compliance inspection, the writer reviews adherence to permit conditions, which can include:

- reviewing recordkeeping and documentation;
- thoroughly inspecting the facility and observing processes; and
- asking questions about processes and pollution control techniques.

During inspections, writers also educate facility staff on pollution prevention and compliance requirements, and answer questions.

Like complaints, enforcement actions can at times become a permit writer's top priority. Writers are responsible for identifying and documenting violations of permit conditions. They may identify violations through a complaint investigation, compliance inspection, or self-reporting, such as in monthly emission reports. For low-level offenses, writers typically send a warning letter, which can be time consuming. If it is a repeat offense or something more serious, they are responsible for building the case for referral to DEQ's Office of Compliance and Enforcement.

Increasing public notice requirements and related process inefficiencies taking a greater percentage of up permit writers' time

Before some types of permits are issued, there is a public notice period. There may also be an information meeting or public hearing. Staff in all the regions told us that responding to growing public interest and engagement in the air quality permitting process is increasing the time it takes to issue permits.

For instance, the writer must respond to each of the public comments received on a permit. As the number of comments increases, so does the time it takes writers to respond. This takes time away from other permits because their time and attention is diverted to working on this one issue. The same holds true for permits with informational meetings and public hearings.

The degree to which each air quality permit action requires public participation varies. DEQ has established public participation procedures for each type of action, placing each into a category. DEQ categorizes these actions based on the potential risk to the environment and public health. These categories are codified in state rule such that the lower the environmental and public health significance, the lower the opportunity for public participation. Additional information about DEQ air quality permit actions and public engagement is shown in Figure 16.

Figure 16: Air Quality Permit Actions and Public Engagement

	Category I	Category II	Category III	Category IV
Permit action types	**Basic ACDP**: New permits and renewals **General ACDP**: Assignment **Simple and Standard ACDP:** Non-technical modifications **Construction ACDP**: Non-technical modification **Short-term activity ACDP**: New	**Simple ACDP**: New and renewal, moderate and complex modifications **Standard ACDP**: Renewals, moderate and complex modifications **w/o** emission increase **Construction ACDP:** Moderate & Complex modification	**Standard ACDP**: Renewals, moderate and complex modifications **with** emission increase **Construction ACDP**: New **Title V**: New, renewal, and significant modification	**Standard ACDP:** New Source Review/ Prevention of Significant Deterioration: new and significant modifications
Public notice	No public notice	30 day notice of written comment	35 day notice of written comment	30-day notice of information meeting. 40-day notice of written comment.
Public hearing	No public hearing	No public hearing	Public hearing if requested by 10 or more people. 30-day notice of public hearing.	30-day notice of public hearing.

However, the agency does not always follow these procedures. They may elevate permit actions into a higher category, adding additional meetings and outreach. DEQ may move a permit action into a higher category if they anticipate high public interest due to the facility's compliance history, potential for environmental impacts, or concern about the location or type of facility. Some writers we talked to thought this additional public outreach during the permitting process added to the time it took to issue a permit and could be unnecessary — especially in instances with low risk.

In addition, the agency does not clearly state the purpose of public hearings, or comment on their website or in press releases. Several permit writers also stated their interactions with the public regarding permit actions indicated that some have the impression their participation can impact whether or not a permit is issued. However, DEQ must issue the permit if a permit application meets regulatory requirements and has land use approval from the county or city in which the facility operates.

In one example, a permit action traditionally categorized as a two or three was elevated to a four. Observations by the audit team at the hearing for this permit renewal indicated some of the attendees did not understand the purpose of the hearing. For example, several members of the public testified against DEQ issuing the renewal. The writer reported receiving more than eighty pages of comments, all of which required responses. Many of these comments were not specific to the permit, and beyond DEQ's control — such as concerns about land use. Without adequate and clear communication as to why, elevating permit actions may give the public the

impression that the permit has higher environmental and public health significance. That, in turn, can lead to confusion, frustration, and misunderstanding of DEQ's regulatory role.

Cleaner Air Oregon and rulemaking requirements decreases time available for permitting and compliance inspection activities

In 2016, the discovery of glass manufacturers in Portland as the source of high levels of toxic metals caused public outrage and concern. This spurred the creation of the Governor's Cleaner Air Oregon (CAO) initiative, as well as new rules for colored glass facilities in the state. Permit writers and headquarters staff are involved in CAO rulemaking, taking time away from regular duties.

It is not unusual for permit writers to work on rule making. DEQ routinely updates, and occasionally creates, state rules regarding air quality. To do so, knowledgeable staff are pulled to help. For example, several General ACDP permits are in the process of being updated, taking staff time away from permit writing and inspections. In addition, a key staff member responsible for providing guidance and updating materials for permit writers has been reassigned to help implement and write rules for CAO, contributing to the lack of permitting guidance for staff.

Additionally, many permit writers have spent time helping permittees assemble information for the CAO air toxics emissions inventory. Some writers had to help smaller, less technically astute businesses record emissions information in spreadsheets. For example, one writer explained that some smaller permittees did not have or know how to use Excel and had to come into the DEQ office to complete the inventory with the writer's assistance.

During the course of the audit, DEQ's oversight board chair, agency staff, and environmental and business leaders also expressed ongoing concern about DEQ's ability to implement CAO given the current staffing and workload challenges in the air quality program, including the backlog of permits.

Because the initiative supplements existing air quality permitting, it adds to the workload of current air quality staff and permit writers. In 2016, the legislature provided DEQ with $2.5 million in funding for DEQ to increase air toxics monitoring and develop rules for CAO. However, fee increases on permitted businesses to support CAO implementation, including additional staff, were not approved during the 2017 legislative session. This places additional burden on existing staff.

Responding to emergencies adds to workload

Another major challenge permit writers told us about is dealing with emergencies and high profile or controversial facilities. Some facilities receive a significant amount of public attention, whether due to a permit

action or complaint, which takes permit writers' time and decreases time they have for permitting activities.

One type of emergency is wildfires. Wildfires significantly impact air quality and often lead to increased work for permit writers. During times of elevated smoke levels from wildfires, DEQ is heavily involved, as they monitor air quality in the state, determine if health standards are being exceeded, identify areas at greatest risk, and coordinate public and media outreach with other federal, state, and local officials.

Smoke billows from the Rowena Fire, 2014. Oregon Department of Forestry (CC BY)

Historically, wildfires have impacted the Eastern and Western Regions more dramatically than the Northwest Region. Staff in regions impacted by wildfire smoke spend time responding to air quality issues caused by wildfires. During the summer of 2017, permitting staff were pulled away from permit writing and inspection duties to address air quality issues created by multiple wildfires. This year, the northern part of the Western Region experienced heavy smoke impacts from wildfires for the first time and staff in the Northwest Region stepped away from permitting work to help answer questions from the community about air quality issues throughout the state. Major fires such as the Eagle Creek fire in the Columbia River Gorge, the Chetco Bar fire in Southern Oregon's Siskiyou National Forest, and the Whitewater Fire in the Mount Jefferson Wilderness prevented writers from engaging in their normal duties.

In addition, staff spend time investigating illegal open burning — the illegal burning of prohibited materials, like tires, or burning in prohibited areas or during certain times of year.[12] Permit writers in the Western Region in particular spend significant time investigating open burning, more than 1,300 hours in both 2015 and 2016.

Outdated permits and late inspections increase risks to human and environmental health, and impact businesses

Outdated permits increase the risk that permitted facilities are not operating according to the latest air quality standards and rules. When inspections are not completed on time, the risk increases that violations go undetected. In addition to these risks, the permit and inspection backlog has increased tensions with businesses and eroded their confidence in DEQ's ability to effectively manage air quality permits.

[12] DEQ has the authority to prohibit open burning anywhere in the state on a day-to-day basis depending on air quality and weather conditions.

State-of-the-art pollution and odor control technology at a batch asphalt plant.

Facilities may be operating outside latest air quality standards

Air quality permits set conditions for facility operations and pollution control measures. Rules for air quality permitting have historically set emission limits based on environmental risk and the best available pollution control technology. Since the CAA amendments were passed in 1990, the EPA has issued numerous new regulations, based on new understanding of environmental risk and best available control technology.

When permits are not renewed on time, they do not include the most up-to-date federal and state rules, or information on how facilities are to comply with them. Facilities rely on permit information to help them understand and interpret these new rules. Due to the permitting backlog, new rules are not getting incorporated into permits in a timely manner.

We spoke to representatives at one facility who told us their permit was issued before a host of state rules changed. Because of this, the permit has irrelevant rule references and requirements they would not have to follow if their permit were renewed and updated. According to facility staff, this makes required semiannual reporting more difficult. In a similar example, a representative of another business reported operating under outdated permit conditions other businesses whose permits have been renewed do not have to meet.

Facilities must comply with new EPA rules when they go into effect, and state rules when they are adopted by the Environmental Quality Commission. Enforcement of some federal rules and state rules is based on DEQ's discretion. DEQ leadership has reported they consider this a "gray area" and one that is hard to enforce should a facility violate a new standard not yet incorporated into their permit. Also, as noted above, permitted facilities may not be responsible for reporting monitoring results for new rules.

Past due inspections increase likelihood violations go undetected

Reliance on self-reporting without timely inspections increases the risk that facilities are not complying with permit conditions.

Along with the permitting backlog, inspection backlogs increase the risk of additional emissions, which could harm human and environmental health. Because inspections help DEQ ensure permitted facilities comply with their permits, when they are not completed on time, the risk that violations go undetected increases.

One kind of violation that could go undetected if an inspection is delayed is operating equipment not included in the permit. A DEQ inspector encountered this situation during an inspection our audit team observed, which was five years past due. On this inspection, a cement mixing facility had decommissioned one cement plant and added another shortly after their last inspection in 2007, leaving both erected. They had not notified DEQ about the additional equipment, despite a permit condition requiring them to do so.

Though the new equipment does not have the potential to emit above the threshold for their current permit, DEQ was unaware of the change for several years, during which time the company could have been operating both pieces of equipment. Although the company reported they had not, DEQ was unable to verify. DEQ relies on companies to self-report on an annual basis any changes to processes, production levels, and operating equipment. Because of the company's failure to do so correctly, they were issued a violation. Reliance on self-reporting without timely inspections increases the risk that facilities are not complying with permit conditions.

In an extreme example, an asphalt company has incorrectly operated under a General ACDP for years. Because of numerous compliance violations, including emitting more than their permit allowed, the company was required to apply for a Standard ACDP, which they submitted in 2012. Standard ACDPs are the highest level of state permit.

As of November 2017, DEQ had still not issued a Standard ACDP for a company that submitted an initial application in 2012.

Though the company has continued to operate under a General ACDP, DEQ staff reported they continued to be out of compliance with certain conditions of that permit in the years after they submitted the Standard ACDP application. As of November 2017, five years after the company submitted their application and an entire permit term, DEQ had still not issued the Standard ACDP. As a result, the facility does not have to follow the more stringent reporting requirements required of Standard ACDP holders. Despite this, the company has paid yearly fees associated with a Standard ACDP.

According to air quality staff, the permit has yet to be issued due to retirements, vacancies, and higher priority work taking precedence. Were the company to have received their Standard ACDP within established timeframes, it would have been issued in spring of 2013 and inspections would have been scheduled for 2013 and 2016. However, because the permitting process was delayed, the company has not been inspected since 2011.

Backlogs frustrate permitted businesses, putting DEQ's credibility at risk

According to business leaders, robust and rigorous permitting is not only good for the environment — it can be good for business. Some business representatives we interviewed thought that an uncertain regulatory environment, created in part from permitting backlogs, could deter businesses from moving to Oregon or expanding in the state, as businesses need regulatory certainty in order to plan for the future. One company with facilities in both Oregon and Washington thought Washington's permitting agencies were better funded and staffed, with better guidance documents and technical support for applicants and permitted facilities.

Some business leaders and permit holders expressed frustration and decreasing confidence in DEQ's ability to effectively manage the permit program. Many of those we spoke with expressed concern about

retirements, loss of institutional knowledge, and DEQ not having enough staff or funding to do this work.

Leading practices offer strategies to improve permitting process and reduce permit backlog

Best practice literature and leading practices identified at other air agencies indicates that permitting agencies must be appropriately staffed and provide high quality resources and guidance for employees who perform permitting duties. In addition, the permitting processes should be clearly documented, permit application and guidance should be user-friendly, and the process should undergo continuous improvement.

Permitting agencies must be appropriately resourced

Federal legislation[13] passed in 2015 created the Federal Permitting Improvement Steering Council to help improve federal infrastructure permitting. One of the Council's recommended permitting practices is that permitting agencies be appropriately resourced. Appropriate staffing would go a long way toward reducing permit backlogs in Oregon. For example, Alaska's Air Permits Program attributes part of their success in keeping a low backlog to having steady staff with low turnover.

When compared to other air agencies, Oregon DEQ air quality permit writers carry a heavier workload.

When compared to other air agencies, Oregon's air quality permit writers carry a heavier workload because they are both permit writer and inspector. Oregon permit writers conduct all inspection activities, and even work on enforcement actions.

Despite the heavier workload, some Oregon permit writers preferred the dual role and believed doing both allowed for better-written permits and superior inspections because they were more familiar with the facility and permit.

Permit writers should have high quality resources and guidance

We interviewed a number of air agencies in other states with low and declining permit renewal backlogs. These agencies provide permit writers with an up-to-date permitting manual or other detailed written guidance on how to consistently perform their work, a recommended best practice.

Some examples of written guidance for permit writing staff includes:

- completeness determination checklists,
- permit templates,
- detailed policies and procedures, and
- manuals.

[13] Fixing America's Surface Transportation (FAST) Act of 2015.

Completeness determination checklists in several states help writers determine application completeness, something Oregon DEQ management and staff said could be helpful. Like New Mexico and Maryland, Oregon DEQ uses permit templates. However, permit writers told us the templates were not always up-to-date.

Alaska's Division of Air Quality provides their permit writers with manuals for both Title V and minor source permits, along with a guidance specific to application processing.

Air quality permit writers in Maryland are guided in part by a thorough manual with:

- definitions,
- background information and purpose of each permit type,
- permit and application requirements,
- process and procedure steps for each part of the application, and
- public participation and technical completeness determination processes.

Maryland's manual also includes screenshots and instructions on how to use the permitting database. As noted previously, in contrast, Oregon DEQ has not updated its permitting manual since 1993 and permit writers we spoke with did not know it existed, or consider it too outdated to be of any use.

In addition, some agencies we spoke to have formalized training for writers, a recommended best practice. Agencies we talked to also consider mentoring and on-the-job training as important components of new permit writer training. However, for Oregon DEQ, this is the primary source of training for new staff, whereas other agencies provided more formal and extensive training.

Alaskan writers have training plans with training requirements for the first six months, one to two years, and beyond. Within each of the training topics, there are self-instructional courses along with online, classroom, and work in the field.

Permitting process should be clearly documented and permit application and guidance should be user-friendly

Research on improving permit timeliness shows that providing businesses with additional written guidance and support at the beginning of the permitting process can help improve applications, which can reduce the burden on the agency and shorten processing times. Best practice indicates permitting and review processes should be transparent, and that websites provide a useful tool for this purpose.

As a first step, the permit process and requirements should be clearly documented for applicants, including information on the permit process

steps, decision-making processes, and how long the process should take. Instructions for applying should be clear and concise, and explain the information applicants are required to submit. Clear instructions and processes can all help applicants produce complete applications that avoid the administrative burdens of repeated information requests, revisions and reviews. This can greatly reduce the time required for DEQ's review.

Permit applications and forms also should be user-friendly. They should be easy to understand, written in plain language, and contain clear information about requirements. What constitutes a complete application should be clearly defined, such as in an applicant checklist.

Other air agencies we spoke to provide permittees with pre-application guidance and checklists of information that must be included in permit applications. Checklists can help ensure applicants have a clear understanding of what they need to submit for their applications to be complete. Three of the air agencies we reviewed had checklists for Title V and minor source permits. Though Oregon DEQ has a checklist for Title V permit applicants, it is optional and there are two versions of it, without clear indication of which applicants should use.

In New Mexico, Air Quality Bureau management attributes permit writers' ability to meet permit timelines in part through external guidance documents that help ensure complete applications. In addition, their website is user-friendly. They group minor source applications by industry type to guide applicants towards which forms to complete, have an overview and guidance page for applicants, and have various guidance documents online.

Idaho DEQ goes a step further, and their website has a separate page on the pre-application process, including a standard pre-application meeting agenda. The agenda describes the permitting process, pitfalls to avoid, timeframes they can expect steps to be completed within, and tools to help the applicant.

Idaho, which has comprehensive pre-application guidance for applicants, also has a policy in place to reject incomplete applications.

Permitting process should undergo continuous improvement through Lean efforts and performance management

The EPA recommended DEQ's Title V program undergo a Lean process in 2016.

The Federal Permitting Improvement Steering Council recommends permitting agencies develop and track metrics on the time it takes to reach milestones, or phases, within the permitting processes. Performance metrics such as these establish a baseline for process timeframes and highlight processes that are working well and not working well, which helps to drive process improvement. Permitting agencies can help reduce timelines by developing performance measures and targets, and using that information to identify and address bottlenecks in the process.

Most of the air agencies we interviewed who had a low or declining permit backlog had undergone a Lean process improvement in the last decade. In 2016, the EPA suggested Oregon DEQ consider doing so to help identify opportunities to improve the Title V permitting process. However, DEQ has not done so.

In contrast, Idaho DEQ continues to make improvements in its permitting process using a Lean approach. They attribute reductions in their permitting backlog to ongoing process improvement efforts in 2016 and 2017, such as improved forms and applicant guidance, and additional guidance for permit writers.

In addition, to effectively reduce the air quality permit and inspection backlogs, the backlogs must first be tracked. Because DEQ does not track its permit or inspection backlog, it is difficult to gauge whether process changes are having the desired effect.

DEQ regions can learn from each other

There are promising practices throughout the DEQ regions, but the practices are not necessarily shared across the regions. Doing so could help improve the permitting process.

Draft permit review procedures vary by region. In the Western Region, a lead worker reviews draft permits. We heard that one of the benefits of lead work review is consistency, especially as permits increase in complexity. A lead worker can also shoulder some of the work of managers and reduce bottlenecks. In the Northwest Region, there is peer review of draft permits. This can add to an already heavy workload and create bottlenecks. Some permit writers in the Northwest Region were also concerned that not all staff have a sufficient knowledge base to do the peer review, especially as experienced staff retire.

Generally, permit writers have an assigned group of facilities for which they inspect and write permits. When a renewal for an assigned facility comes in, it is added to their list of tasks. In the Eastern Region, however, the manager may assign renewals to other staff, based on workload. This can help reduce the workload for a writer with several permits renewing around the same time. In the same vein, this manager also may assign an inspection to another writer, based on workload.

Occasionally, writers may do peer review across regions, especially staff experienced with similar facilities. When asked what was working well in the permitting process, a writer in the Northwest Region thought peer review did work well, and wanted to expand the peer review process to include writers in other regions. Some writers thought that these reviews, as well as more communication and collaboration across regions in general, could help with consistency across the state.

Like Oregon, Alaska's Division of Air Quality is split into regions, with geographical distance between offices making in-person meetings a challenge. When asked what they attributed their ability to reduce their Title V backlog to, management from Alaska's Division of Air Quality stated one factor was increased and regular communication across the regions, which allowed writers to discuss challenges with their peers. Oregon DEQ permit writers come together about once a year for a training on inspections, but there are few other opportunities for team building and collaboration across regions.

Recommendations: DEQ Should Reduce Its Air Quality Permit Backlog by Improving the Permitting Process and Addressing Workload Challenges

The following recommendations are intended to help DEQ management with their efforts to improve the air quality permitting process and to reduce the backlog of administratively extended permit renewals.

1. Conduct a Lean process improvement initiative to identify areas in need of improvement, as suggested by the EPA in 2016.
    a) As a first step, improve tracking of the permit backlog.
2. Centralize and improve inspection tracking to ensure compliance inspections are completed timely.
3. Implement the Basic Air Contaminant Discharge Permit for auto body repair facilities in the Northwest Region.
4. Determine staffing levels needed to provide support to permit writers to issue air quality permits and complete inspections within established timeframes, based on current and projected workloads.
    a) Based on the results of the analysis, work with the legislature to identify potential sources of funding for additional staff, to better align workload demands with appropriate staffing levels.
5. Fill vacancies in as timely a manner as possible given the highly technical nature of permitting positions and the potential difficulty finding qualified applicants.
6. Work with the Chief Human Resources Office within the Department of Administrative Services to begin the succession planning process.
7. The DEQ headquarters team should provide consistent guidance and support for regional permit writing staff, including:
    a) Current and ongoing guidance on new rule interpretation and implementation;
    b) Checklists to help determine application completeness;
    c) Documentation of up-to-date permit writing policies, procedures, and processes stored in a centralized and accessible location;
    d) Update the permit writers' manual and store it in a centralized and accessible location; and
    e) Update relevant permitting forms and templates and store in a centralized and accessible location.

8. Improve pre-application guidance for applicants, including development of such documents as:

    a) permitting process overview;

    b) completeness determination checklist for applicants; and

    c) guidance written in plain language.

9. Improve the Title V and ACDP permitting webpages to enhance usability for permit applicants, especially as it relates to content, navigation, and organization.

10. Provide clear information to the public on the purpose of public comment and participation in the issuance phase of the permitting process, including what DEQ can and cannot do as a result.

Oregon

Kate Brown, Governor

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December 28, 2017

Kip Memmott, Director
Secretary of State, Audits Division
255 Capitol St. NE, Suite 500
Salem, OR 97310

Dear Director Memmott:

This letter serves as the Oregon Department of Environmental Quality's written response to the Audit Division's final draft audit entitled "Department of Environmental Quality Should Improve the Permitting Process to Reduce Its Backlog and Better Safeguard Air Quality."

First, I'd like to express my sincere appreciation and gratitude to the Audit Division staff who assessed our air quality permitting program. They invested an incredible amount of time and energy to understand complex state and federal regulatory frameworks and to identify ways that the department can better protect Oregon's air quality. The findings described in this audit report illuminate and validate challenges that the agency has increasingly experienced over the last decade. The final report clearly identifies steps that needed to deliver the level of environmental protection that Oregonians expect and deserve.

The audit explores factors impeding DEQ's ability to meet timeliness targets for issuing and renewing air quality permits, as well as for inspecting facilities, both core functions of the agency. In addition to the detailed responses outlined below, I would like to highlight agency-wide challenges and opportunities that I, along with the DEQ Leadership Team, will be paying close attention to in 2018.

Organizational changes at Oregon DEQ

In 2014 Oregon DEQ eliminated its air, water and land quality divisions and transitioned to an organizational structure designed around functions (i.e. permitting, policy and planning, etc.). It was hoped that the new model would create opportunities for cross-media environmental management strategies. Although the model did promote programmatic integration, it obscured responsibilities for performance. As a result, DEQ's Leadership Team is directing a return to a structure with clearly identified authorities and responsibilities, including air, water and land quality divisions. Another change being implemented to improve performance is direction to each of the divisions to develop annual permitting and compliance inspection plans. An Implementation Administrator will have the authority and responsibility to allocate resources among the agency's regional offices as needed to assure that these plans are met. It is my belief that these changes will facilitate efficient and strategic decision-making and enhance the agency's ability to implement key program-wide improvements, including those recommended in this report. These changes are part of a comprehensive effort to put the agency on track to deliver a level of environmental protection that is predictable for businesses, and that makes the best use of the limited resources available to the department. However, as the audit report states, process and organizational improvements are only one part of what is needed to deliver a level of environmental protection that Oregonians expect and deserve.

Quantifying resource needs and filling vacancies

As the audit report illustrates, DEQ's air quality program has experienced a long-term decline in resources. Most recently, in the agency's 2017-2019 budget, six positions were eliminated from the Title V and Air Contaminant Discharge Permit (ACDP) programs because of inadequate funding. The agency requested a fee increase to restore four of these positions (for the ACDP program). That fee increase was not approved by the legislature. The consequences of the decline in funding are clear; permit writers have unmanageable workloads and the program cannot meet timeliness targets and address compliance obligations. As described in more detail, below, the department will work with the Governor and the legislature to document what resources are necessary for a fully-functional program during 2018.

One part of the resource shortfall identified by the audit report was a result of Oregon's hiring freeze in the spring and early summer of 2017. At this time, the department had six vacant permitting positions (two in the Northwest Region Office and four in the Western Region Office). I can report that since the statewide hiring freezes was lifted all six vacant positions have either been filled or are in active recruitment.

Modernizing data systems and analyzing business practices

Finally, as part of the agency's work to modernize our data systems and implement an Environmental Data Management System, the Air Quality Program has been working to assess its data management needs and to document its current and desired future business processes. This detailed account of the agency's current permitting processes, which involved staff from around the state, will serve as the precursor to the Lean process improvements recommended in this audit. DEQ is determined to continue its efforts to identify and address opportunities for system improvements.

This audit report has helped to crystalize key steps needed to reduce and ultimately eliminate our permitting and inspection backlogs. Below, are our detailed responses to each of the audit report's recommendations.

Recommendation 1

Conduct a Lean process improvement initiative to identify areas in need of improvement, as suggested by the EPA in 2016. **a) As a first step, improve tracking of the permit backlog.**		
Agree or Disagree with Recommendation	**Target date to complete implementation activities**	**Name and phone number of specific point of contact for implementation**
DEQ agrees with this recommendation	DEQ will conduct a Lean Kaizen event in 2018 and begin implementation of process improvements in 2018.	Jaclyn Palermo Air Programs Operations Manager 503-229-6491

DEQ will begin a workload analysis to better assess resource needs and identify opportunities for improvements. The initial workload analysis, which will incorporate a time tracking element, will be performed from January to March 2018. A Lean mapping tool called Swim Lanes will be utilized to illustrate and document current workflow and processes. The swim lane mapping will occur in parallel to the workload analysis and will be completed by May 2018. The agency will leverage existing resources when mapping processes, including documentation from the NW region office and the EDMS scoping project.

Once the baseline workload analysis is completed and the permit process is mapped, the Lean process improvement will be scoped out. A business case will be developed and DEQ will work with stakeholders to participate in the process. Lean scoping will occur in spring of 2018.

A week-long process improvement work session, referred to as a Kaizen event, will occur once the business plan and stakeholders are identified. The Kaizen event identifies improvement tasks and a roadmap for implementing those improvements that are documented in a work implementation plan at the end of the event. Depending on the size and scale of the identified projects, the implementation will occur between May and December 2018. The workload analysis will be reevaluated based on the improvements made. The agency will document gradual improvements and expects to continue implementing improvement tasks through May 2019.

DEQ has already begun work that will support implementation of a Lean process. DEQ works closely with Environmental Protection Agency (EPA), Region 10 office on air quality regulations and permitting implementation, including the federal Title V program, which has largely been delegated to DEQ. As part of a routine audit process, EPA Region 10 identified similar improvement opportunities and provided feedback in an EPA permitting audit to DEQ in 2016. DEQ will continue implementing improvements based on EPA findings in tandem with conducting the Lean process improvement recommended by this audit.

EPA Region 10 also works closely with neighboring states and is aware of permitting improvement efforts that could benefit Oregon. DEQ has been in contact with EPA to see how they can provide technical assistance to DEQ to help achieve the goals set out in both the EPA and the Secretary of State audit report's recommendations. Specifically, DEQ will be seeking EPA's permitting process expertise and knowledge of statewide permitting improvement processes. In addition to consultation with EPA, DEQ intends to reach out directly to state programs, including those interviewed by Audit Division staff, to learn about their efforts to successfully eliminate permit backlogs.

Recommendation 2

Centralize and improve inspection tracking to ensure compliance inspections are completed timely.		
Agree or Disagree with Recommendation	**Target date to complete implementation activities**	**Name and phone number of specific point of contact for implementation**
Agree	A new interim tracking tool already is in place. A more sophisticated tracking tool will be developed as part of the new Environmental Data Management System (EDMS).	Jaclyn Palermo

DEQ has begun using a centralized inspection-tracking tool that allows for all of the regions monitor compliance inspections deadlines to ensure inspections are completed within DEQ's inspection frequency goals. This spreadsheet tool is an interim solution pending inclusion of inspection tracking in DEQ's design of a comprehensive Electronic Data Management System (EDMS). The EDMS is currently in the scoping phase, and inspection tracking has been identified by Air permitting managers as a priority need. The scoping phase identified the need to support inspections planning and management, including entry of inspections notes and attaching supporting materials. The timing of when a full inspection tracking system will be implemented as part of EDMS will be determined by the fourth quarter of 2018.

Recommendation 3

Implement the Basic Air Contaminant Discharge permit for Auto body Repair Facilities in the Northwest Region.		
Agree or Disagree with Recommendation	**Target date to complete implementation activities**	**Name and phone number of specific point of contact for implementation**
Agree	July 1, 2018	Michael Orman Air Quality Manager, NW Region (503) 229-5160

The Northwest Region Air Quality Section has created an implementation plan for the Basic ACDP for Auto body Repair Facilities. NW Region staff will reach out to stakeholders in Feb 2018, to explain the purpose for the permit, which business are subject to the permit, and the timeframes for implementation. DEQ will use information from the stakeholder discussions to provide guidance and technical assistance to regulated facilities throughout the implementation process. NW region staff will use a list of facilities that met the exemption for the General ACDP for Surface Coaters as a starting point for identifying facilities that require coverage under the Basic ACDP. The agency will send applications and guidance information to those on the list that fall within the Portland Air Quality Management Area in March 2018. Facilities that receive applications must submit completed applications and fees, or submit information demonstrating that the facilities do not meet the applicability criteria for coverage under the Basic ACDP, within 60 days of receiving the request from DEQ. NW region will then issue permits to those on the list that meet the criteria for coverage by June 30, 2018. Moving forward, the agency will use complaint information and inspector data to identify additional facilities that may require coverage under the Basic ACDP and make an applicability determination on a case-by-case basis.

Recommendation 4

Determine staffing levels needed to issue air quality permits and complete inspections within established timeframes, based on current and projected workloads. Based on the results of the analysis, work with the legislature to identify potential sources of funding for additional staff, to better align workload demands with appropriate staffing levels.		
Agree or Disagree with Recommendation	**Target date to complete implementation activities**	**Name and phone number of specific point of contact for implementation**
Agree	DEQ will have a workload analysis completed by July 1, 2018.	Jaclyn Palermo Matt Davis Senior Legislative Analyst 503-229-5687

As described in the response to Recommendation 1, the agency will be conducting a workload analysis in the winter and spring of 2018. The results of this analysis will become the foundation for future work to better align staffing levels with workload demands.

Audit staff identified that DEQ permit writers carry a heavier workload than many "like" agencies and noted that "appropriate staffing would go a long way toward reducing permit backlogs in Oregon." The workload analysis mentioned above will include an analysis of related work that decrease the time available for permit writing, this includes rule writing, inspections and enforcement, and responding to emergencies. The management team will be assess current workloads, projected workloads and permit workloads in neighboring states.

DEQ will share the results of our workload analysis with stakeholders as part of the agency's development of an Agency Request Budget for the 2019-2021 biennium. Based on the workload analysis and stakeholder input, the agency will work with the Governor and the legislature to identify the resources necessary to "right-size" the program. The agency will also work with the Governor and the legislature and stakeholders to explore approaches to funding the program at levels comparable to other similarly-situated states.

Recommendation 5

Fill vacancies in as timely a manner as possible given the highly technical nature of permitting positions and the potential difficulty finding qualified applicants.		
Agree or Disagree with Recommendation	**Target date to complete implementation activities**	**Name and phone number of specific point of contact for implementation**
Agree	DEQ has already filled some of the positions, and will have all seven positions filled no later than July 1, 2018.	Jaclyn Palermo

In implementing the 2017-19 Legislative Adopted Budget, DEQ has prioritized filling vacant permitting positions. Of the seven vacant positions identified by Audit Division staff in the summer of 2017, two have been filled and the remaining positions are all in recruitment and are expected to be filled shortly. DEQ will have all seven positions filled no later than July 1, 2018. DEQ will continue to prioritize the filling of vacant permitting positons to ensure all available resources in the permitting program are deployed. DEQ will also explore additional recruitment outlets and methods to attract a larger qualifying candidate pool.

Recommendation 6

Work with the Chief Human Resources Office within the Department of Administrative Services to begin the succession planning process.		
Agree or Disagree with Recommendation	**Target date to complete implementation activities**	**Name and phone number of specific point of contact for implementation**
Agree	By July 1, 2018.	Scott Brewen Central Services Division Administrator 503) 229-5045

Succession planning is a priority across DEQ and many state agencies. DEQ is working with the Department of Administrative Services (DAS) as part of a statewide project on this issue, and will implement succession planning projects that are consistent with that effort. The initial succession planning tools for the DAS project

are scheduled to be completed by February 2018, with the full website resource available by July 2018. The full DAS website implementation is scheduled for September 2018, and DEQ is committed to work with DAS to be an early implementer of the succession planning process.

In addition to DEQ's succession planning work and interaction with DAS, the air permitting managers will identify at least one position in each of their respective regions where only one staff-person has the knowledge, skills, and ability to do the work. The managers will begin capturing processes that are not already documented for this position. Additionally, this analysis will serve as a precursor to a broader needs assessment for the air quality program with respect to succession planning.

Recommendation 7

The DEQ headquarters team should provide consistent guidance and support for regional permit writing staff, including: **Current and ongoing guidance on new rule interpretation and implementation;** **Checklists to help determine application completeness;** **Documentation of up-to-date permit writing policies, procedures, and processes stored in a centralized and accessible location;** **Update the permit writers' manual and store it in a centralized and accessible location; and** **Update relevant permitting forms and templates and store in a centralized and accessible location.**		
Agree or Disagree with Recommendation	**Target date to complete implementation activities**	**Name and phone number of specific point of contact for implementation**
Agree	DEQ will document the current state of permitting forms, templates, and the permit writers' manual by July 1, 2018 to improve consistency between regions. A second phase of updated and centralized forms, templates and manuals will be carried out in connection with the Lean Kaizen work that the program carries out in 2018.	Jaclyn Palermo

DEQ will first assure that the current permit writers' manual, relevant permitting forms and templates, and current guidance on rules are consistent between regions. DEQ will then work on updated guidance and tools later in 2018, coming out of the Lean Kaizen work described in the response to Recommendation # 1. Additionally, DEQ will develop new guidance and tools to help permitting staff determine application completeness. Since both current guidance and new documents will be discussed in the May 2018 Kaizen and work plan, the tools and guidance documents will be evaluated and updated as part of the continuous improvement efforts. The guidance will remain consistent statewide and will be updated as the needs of the permitting program evolve.

The agency expects the Lean process improvement activities described in our response to Recommendation # 1 will lead to the identification of specific tools and guidance documents to support permit writing. DEQ will also contact states that have effective tools in place and evaluate if those tools are applicable and easily

adaptable to Oregon's program. DEQ will dedicate staff time, specifically staff from the Lead Permit Writers group and the Project Management pool to complete the tasks identified in this recommendation. Depending on the size and scale of the identified projects, the implementation will occur in 2018 and 2019. The agency expects some of the more comprehensive improvements will require more time, extending into 2019.

Recommendation 8

Improve pre-application guidance for applicants, including development of such documents as: permitting process overview; completeness determination checklist for applicants; and guidance written in plain language.		
Agree or Disagree with Recommendation	**Target date to complete implementation activities**	**Name and phone number of specific point of contact for implementation**
Agree	Current guidance will be evaluated and additional tools identified in a Lean Kaizen event in May 2018. Implementation will be completed by December 2018.	Jaclyn Palermo

DEQ is hiring two new communications staff. A Communications Manager working across the agency, and an Air Quality Communications Coordinator. The people in these positions will be instrumental to the agency's ability to improve the readability and usability of externally-facing guidance documents. The air program will identify a team of subject matter experts and communications staff to review and, as necessary, update tools available to the public and regulated entities.

As part of the Lean process improvement efforts, DEQ will work with stakeholders to assess the needs of the facilities that submit air quality permit applications, and to inform the development of permitting processes checklist and guidance documents. DEQ will complete the revision of guidance documents in 2018.

Recommendation 9

Improve the Title V and ACDP permitting webpages to enhance usability for permit applicants, especially as it relates to content, navigation, and organization.		
Agree or Disagree with Recommendation	**Target date to complete implementation activities**	**Name and phone number of specific point of contact for implementation**
Agree	By July 1, 2018.	Jaclyn Palermo

DEQ recently underwent a website integration project to ensure it is compatible and consistent with State requirements, which was completed in the spring of 2017. The website conversion has caused some confusion for stakeholder groups familiar with our previous website layout. DEQ will work with stakeholders, industry associations and community groups to make the Title V and ACDP permitting webpages more user friendly, while still maintaining adherence with state agency website requirements.

Specifically, the agency will use website analytics and stakeholder feedback to identify the most frequently accessed pages and tools and explore options for making those resources more prominent and easy to find.

Recommendation 10

Provide clear information to the public on the purpose of public comment and participation in the issuance phase in the permitting process, including what DEQ can and cannot do as a result.		
Agree or Disagree with Recommendation	**Target date to complete implementation activities**	**Name and phone number of specific point of contact for implementation**
Agree	By the end of 2018.	Jaclyn Palermo

Better describing the role of, and opportunities for, public comment in decisions about air quality permits is an important long-term effort. As noted in the audit report, communities often perceive public engagement around environmental permits as an opportunity to revisit whether a particular facility should be located at its current site. In fact, DEQ is required by law to issue permits for a facility if that facility has shown that it will meet the applicable environmental standards. Public engagement often can be more productive if it is focused on land use planning – largely a local government function, or on environmental standards – largely a state and federal function. DEQ will undertake the following activities to help make public engagement more productive:

- DEQ permit writing staff and communications staff will review template public notice communications, and assess opportunities to better communicate what decision is being made, and the types of information the agency can and cannot consider in making permitting decisions. Changes to these communications will be completed by July 1, 2018.
- DEQ leadership will engage local and state agencies responsible for planning where particular types of land uses should be located, to discuss whether potential environmental conflicts between types of land uses can and should be more expressly included as part of long-range planning for communities.
- DEQ is currently recruiting for an Air Quality Administrator. The administrator will be responsible for creating opportunities for the public to engage with DEQ on air quality issues not germane to a specific permit action, including changes to environmental standards. Creating these opportunities, while clarifying the purpose of permit public hearings, will make public engagement more constructive and effective. The agency views this work as a longer-term and ongoing strategy.

Once again, please thank your staff for their thorough and balanced evaluation of the department's air permitting and compliance inspection activities. If you have any questions about our response or would like an update on our progress to implement the recommendations outlined above, please do not hesitate to contact me.

Sincerely,

Richard Whitman, Director
Oregon Department of Environmental Quality

Oregon

Kate Brown, Governor

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December 28, 2017

Kip Memmott, Director
Secretary of State, Audits Division
255 Capitol St. NE, Suite 500
Salem, OR 97310

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The audit explores factors impeding DEQ's ability to meet timeliness targets for issuing and renewing air quality permits, as well as for inspecting facilities, both core functions of the agency. In addition to the detailed responses outlined below, I would like to highlight agency-wide challenges and opportunities that I, along with the DEQ Leadership Team, will be paying close attention to in 2018.

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In 2014 Oregon DEQ eliminated its air, water and land quality divisions and transitioned to an organizational structure designed around functions (i.e. permitting, policy and planning, etc.). It was hoped that the new model would create opportunities for cross-media environmental management strategies. Although the model did promote programmatic integration, it obscured responsibilities for performance. As a result, DEQ's Leadership Team is directing a return to a structure with clearly identified authorities and responsibilities, including air, water and land quality divisions. Another change being implemented to improve performance is direction to each of the divisions to develop annual permitting and compliance inspection plans. An Implementation Administrator will have the authority and responsibility to allocate resources among the agency's regional offices as needed to assure that these plans are met. It is my belief that these changes will facilitate efficient and strategic decision-making and enhance the agency's ability to implement key program-wide improvements, including those recommended in this report. These changes are part of a comprehensive effort to put the agency on track to deliver a level of environmental protection that is predictable for businesses, and that makes the best use of the limited resources available to the department. However, as the audit report states, process and organizational improvements are only one part of what is needed to deliver a level of environmental protection that Oregonians expect and deserve.

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Recommendation 1

Conduct a Lean process improvement initiative to identify areas in need of improvement, as suggested by the EPA in 2016. **a) As a first step, improve tracking of the permit backlog.**		
Agree or Disagree with Recommendation	**Target date to complete implementation activities**	**Name and phone number of specific point of contact for implementation**
DEQ agrees with this recommendation	DEQ will conduct a Lean Kaizen event in 2018 and begin implementation of process improvements in 2018.	Jaclyn Palermo Air Programs Operations Manager 503-229-6491

DEQ will begin a workload analysis to better assess resource needs and identify opportunities for improvements. The initial workload analysis, which will incorporate a time tracking element, will be performed from January to March 2018. A Lean mapping tool called Swim Lanes will be utilized to illustrate and document current workflow and processes. The swim lane mapping will occur in parallel to the workload analysis and will be completed by May 2018. The agency will leverage existing resources when mapping processes, including documentation from the NW region office and the EDMS scoping project.

Once the baseline workload analysis is completed and the permit process is mapped, the Lean process improvement will be scoped out. A business case will be developed and DEQ will work with stakeholders to participate in the process. Lean scoping will occur in spring of 2018.

A week-long process improvement work session, referred to as a Kaizen event, will occur once the business plan and stakeholders are identified. The Kaizen event identifies improvement tasks and a roadmap for implementing those improvements that are documented in a work implementation plan at the end of the event. Depending on the size and scale of the identified projects, the implementation will occur between May and December 2018. The workload analysis will be reevaluated based on the improvements made. The agency will document gradual improvements and expects to continue implementing improvement tasks through May 2019.

DEQ has already begun work that will support implementation of a Lean process. DEQ works closely with Environmental Protection Agency (EPA), Region 10 office on air quality regulations and permitting implementation, including the federal Title V program, which has largely been delegated to DEQ. As part of a routine audit process, EPA Region 10 identified similar improvement opportunities and provided feedback in an EPA permitting audit to DEQ in 2016. DEQ will continue implementing improvements based on EPA findings in tandem with conducting the Lean process improvement recommended by this audit.

EPA Region 10 also works closely with neighboring states and is aware of permitting improvement efforts that could benefit Oregon. DEQ has been in contact with EPA to see how they can provide technical assistance to DEQ to help achieve the goals set out in both the EPA and the Secretary of State audit report's recommendations. Specifically, DEQ will be seeking EPA's permitting process expertise and knowledge of statewide permitting improvement processes. In addition to consultation with EPA, DEQ intends to reach out directly to state programs, including those interviewed by Audit Division staff, to learn about their efforts to successfully eliminate permit backlogs.

Recommendation 2

Centralize and improve inspection tracking to ensure compliance inspections are completed timely.		
Agree or Disagree with Recommendation	**Target date to complete implementation activities**	**Name and phone number of specific point of contact for implementation**
Agree	A new interim tracking tool already is in place. A more sophisticated tracking tool will be developed as part of the new Environmental Data Management System (EDMS).	Jaclyn Palermo

DEQ has begun using a centralized inspection-tracking tool that allows for all of the regions monitor compliance inspections deadlines to ensure inspections are completed within DEQ's inspection frequency goals. This spreadsheet tool is an interim solution pending inclusion of inspection tracking in DEQ's design of a comprehensive Electronic Data Management System (EDMS). The EDMS is currently in the scoping phase, and inspection tracking has been identified by Air permitting managers as a priority need. The scoping phase identified the need to support inspections planning and management, including entry of inspections notes and attaching supporting materials. The timing of when a full inspection tracking system will be implemented as part of EDMS will be determined by the fourth quarter of 2018.

Recommendation 3

Implement the Basic Air Contaminant Discharge permit for Auto body Repair Facilities in the Northwest Region.		
Agree or Disagree with Recommendation	**Target date to complete implementation activities**	**Name and phone number of specific point of contact for implementation**
Agree	July 1, 2018	Michael Orman Air Quality Manager, NW Region (503) 229-5160

The Northwest Region Air Quality Section has created an implementation plan for the Basic ACDP for Auto body Repair Facilities. NW Region staff will reach out to stakeholders in Feb 2018, to explain the purpose for the permit, which business are subject to the permit, and the timeframes for implementation. DEQ will use information from the stakeholder discussions to provide guidance and technical assistance to regulated facilities throughout the implementation process. NW region staff will use a list of facilities that met the exemption for the General ACDP for Surface Coaters as a starting point for identifying facilities that require coverage under the Basic ACDP. The agency will send applications and guidance information to those on the list that fall within the Portland Air Quality Management Area in March 2018. Facilities that receive applications must submit completed applications and fees, or submit information demonstrating that the facilities do not meet the applicability criteria for coverage under the Basic ACDP, within 60 days of receiving the request from DEQ. NW region will then issue permits to those on the list that meet the criteria for coverage by June 30, 2018. Moving forward, the agency will use complaint information and inspector data to identify additional facilities that may require coverage under the Basic ACDP and make an applicability determination on a case-by-case basis.

Recommendation 4

Determine staffing levels needed to issue air quality permits and complete inspections within established timeframes, based on current and projected workloads. Based on the results of the analysis, work with the legislature to identify potential sources of funding for additional staff, to better align workload demands with appropriate staffing levels.		
Agree or Disagree with Recommendation	**Target date to complete implementation activities**	**Name and phone number of specific point of contact for implementation**
Agree	DEQ will have a workload analysis completed by July 1, 2018.	Jaclyn Palermo Matt Davis Senior Legislative Analyst 503-229-5687

As described in the response to Recommendation 1, the agency will be conducting a workload analysis in the winter and spring of 2018. The results of this analysis will become the foundation for future work to better align staffing levels with workload demands.

Audit staff identified that DEQ permit writers carry a heavier workload than many "like" agencies and noted that "appropriate staffing would go a long way toward reducing permit backlogs in Oregon." The workload analysis mentioned above will include an analysis of related work that decrease the time available for permit writing, this includes rule writing, inspections and enforcement, and responding to emergencies. The management team will be assess current workloads, projected workloads and permit workloads in neighboring states.

DEQ will share the results of our workload analysis with stakeholders as part of the agency's development of an Agency Request Budget for the 2019-2021 biennium. Based on the workload analysis and stakeholder input, the agency will work with the Governor and the legislature to identify the resources necessary to "right-size" the program. The agency will also work with the Governor and the legislature and stakeholders to explore approaches to funding the program at levels comparable to other similarly-situated states.

Recommendation 5

Fill vacancies in as timely a manner as possible given the highly technical nature of permitting positions and the potential difficulty finding qualified applicants.		
Agree or Disagree with Recommendation	**Target date to complete implementation activities**	**Name and phone number of specific point of contact for implementation**
Agree	DEQ has already filled some of the positions, and will have all seven positions filled no later than July 1, 2018.	Jaclyn Palermo

In implementing the 2017-19 Legislative Adopted Budget, DEQ has prioritized filling vacant permitting positions. Of the seven vacant positions identified by Audit Division staff in the summer of 2017, two have been filled and the remaining positions are all in recruitment and are expected to be filled shortly. DEQ will have all seven positions filled no later than July 1, 2018. DEQ will continue to prioritize the filling of vacant permitting positons to ensure all available resources in the permitting program are deployed. DEQ will also explore additional recruitment outlets and methods to attract a larger qualifying candidate pool.

Recommendation 6

Work with the Chief Human Resources Office within the Department of Administrative Services to begin the succession planning process.		
Agree or Disagree with Recommendation	**Target date to complete implementation activities**	**Name and phone number of specific point of contact for implementation**
Agree	By July 1, 2018.	Scott Brewen Central Services Division Administrator 503) 229-5045

Succession planning is a priority across DEQ and many state agencies. DEQ is working with the Department of Administrative Services (DAS) as part of a statewide project on this issue, and will implement succession planning projects that are consistent with that effort. The initial succession planning tools for the DAS project

are scheduled to be completed by February 2018, with the full website resource available by July 2018. The full DAS website implementation is scheduled for September 2018, and DEQ is committed to work with DAS to be an early implementer of the succession planning process.

In addition to DEQ's succession planning work and interaction with DAS, the air permitting managers will identify at least one position in each of their respective regions where only one staff-person has the knowledge, skills, and ability to do the work. The managers will begin capturing processes that are not already documented for this position. Additionally, this analysis will serve as a precursor to a broader needs assessment for the air quality program with respect to succession planning.

Recommendation 7

The DEQ headquarters team should provide consistent guidance and support for regional permit writing staff, including: **Current and ongoing guidance on new rule interpretation and implementation;** **Checklists to help determine application completeness;** **Documentation of up-to-date permit writing policies, procedures, and processes stored in a centralized and accessible location;** **Update the permit writers' manual and store it in a centralized and accessible location; and** **Update relevant permitting forms and templates and store in a centralized and accessible location.**		
Agree or Disagree with Recommendation	**Target date to complete implementation activities**	**Name and phone number of specific point of contact for implementation**
Agree	DEQ will document the current state of permitting forms, templates, and the permit writers' manual by July 1, 2018 to improve consistency between regions. A second phase of updated and centralized forms, templates and manuals will be carried out in connection with the Lean Kaizen work that the program carries out in 2018.	Jaclyn Palermo

DEQ will first assure that the current permit writers' manual, relevant permitting forms and templates, and current guidance on rules are consistent between regions. DEQ will then work on updated guidance and tools later in 2018, coming out of the Lean Kaizen work described in the response to Recommendation # 1. Additionally, DEQ will develop new guidance and tools to help permitting staff determine application completeness. Since both current guidance and new documents will be discussed in the May 2018 Kaizen and work plan, the tools and guidance documents will be evaluated and updated as part of the continuous improvement efforts. The guidance will remain consistent statewide and will be updated as the needs of the permitting program evolve.

The agency expects the Lean process improvement activities described in our response to Recommendation # 1 will lead to the identification of specific tools and guidance documents to support permit writing. DEQ will also contact states that have effective tools in place and evaluate if those tools are applicable and easily

adaptable to Oregon's program. DEQ will dedicate staff time, specifically staff from the Lead Permit Writers group and the Project Management pool to complete the tasks identified in this recommendation. Depending on the size and scale of the identified projects, the implementation will occur in 2018 and 2019. The agency expects some of the more comprehensive improvements will require more time, extending into 2019.

Recommendation 8

Improve pre-application guidance for applicants, including development of such documents as: permitting process overview; completeness determination checklist for applicants; and guidance written in plain language.		
Agree or Disagree with Recommendation	**Target date to complete implementation activities**	**Name and phone number of specific point of contact for implementation**
Agree	Current guidance will be evaluated and additional tools identified in a Lean Kaizen event in May 2018. Implementation will be completed by December 2018.	Jaclyn Palermo

DEQ is hiring two new communications staff. A Communications Manager working across the agency, and an Air Quality Communications Coordinator. The people in these positions will be instrumental to the agency's ability to improve the readability and usability of externally-facing guidance documents. The air program will identify a team of subject matter experts and communications staff to review and, as necessary, update tools available to the public and regulated entities.

As part of the Lean process improvement efforts, DEQ will work with stakeholders to assess the needs of the facilities that submit air quality permit applications, and to inform the development of permitting processes checklist and guidance documents. DEQ will complete the revision of guidance documents in 2018.

Recommendation 9

Improve the Title V and ACDP permitting webpages to enhance usability for permit applicants, especially as it relates to content, navigation, and organization.		
Agree or Disagree with Recommendation	**Target date to complete implementation activities**	**Name and phone number of specific point of contact for implementation**
Agree	By July 1, 2018.	Jaclyn Palermo

DEQ recently underwent a website integration project to ensure it is compatible and consistent with State requirements, which was completed in the spring of 2017. The website conversion has caused some confusion for stakeholder groups familiar with our previous website layout. DEQ will work with stakeholders, industry associations and community groups to make the Title V and ACDP permitting webpages more user friendly, while still maintaining adherence with state agency website requirements.

Specifically, the agency will use website analytics and stakeholder feedback to identify the most frequently accessed pages and tools and explore options for making those resources more prominent and easy to find.

Recommendation 10

Provide clear information to the public on the purpose of public comment and participation in the issuance phase in the permitting process, including what DEQ can and cannot do as a result.		
Agree or Disagree with Recommendation	**Target date to complete implementation activities**	**Name and phone number of specific point of contact for implementation**
Agree	By the end of 2018.	Jaclyn Palermo

Better describing the role of, and opportunities for, public comment in decisions about air quality permits is an important long-term effort. As noted in the audit report, communities often perceive public engagement around environmental permits as an opportunity to revisit whether a particular facility should be located at its current site. In fact, DEQ is required by law to issue permits for a facility if that facility has shown that it will meet the applicable environmental standards. Public engagement often can be more productive if it is focused on land use planning – largely a local government function, or on environmental standards – largely a state and federal function. DEQ will undertake the following activities to help make public engagement more productive:

- DEQ permit writing staff and communications staff will review template public notice communications, and assess opportunities to better communicate what decision is being made, and the types of information the agency can and cannot consider in making permitting decisions. Changes to these communications will be completed by July 1, 2018.
- DEQ leadership will engage local and state agencies responsible for planning where particular types of land uses should be located, to discuss whether potential environmental conflicts between types of land uses can and should be more expressly included as part of long-range planning for communities.
- DEQ is currently recruiting for an Air Quality Administrator. The administrator will be responsible for creating opportunities for the public to engage with DEQ on air quality issues not germane to a specific permit action, including changes to environmental standards. Creating these opportunities, while clarifying the purpose of permit public hearings, will make public engagement more constructive and effective. The agency views this work as a longer-term and ongoing strategy.

Once again, please thank your staff for their thorough and balanced evaluation of the department's air permitting and compliance inspection activities. If you have any questions about our response or would like an update on our progress to implement the recommendations outlined above, please do not hesitate to contact me.

Sincerely,

Richard Whitman, Director
Oregon Department of Environmental Quality

Secretary of State - Audits Division
AUDIT FOLLOW UP FORM

Report Title: DEQ Should Improve the Air Quality Permitting Process to Reduce Its Backlog and Better Safeguard Oregon's Air
Report Number: 2018-01
Date: January 2018
Agency: Oregon Department of Environmental Quality

Recommendation:

Conduct a Lean process improvement initiative to identify areas in need of improvement, as suggested by the EPA in 2016.

a) As a first step, improve tracking of the permit backlog.

Please mark the appropriate box:

Status:		
	Implemented/Resolved	**X**
	Partially Implemented	
	Not Implemented	

Brief Explanation of Actions Taken/Current Status:

DEQ completed an initial workload analysis in May 2018 to assess resource needs and its current workflow using process improvement mapping tools. DEQ conducted a week-long process improvement work session, referred to as a Kaizen event, in June 2018. The Kaizen identified projects for the agency to focus on in 2018 – 2020 to reduce the air permit backlog.

DEQ prioritized Title V permitting improvement projects that included

- creating a robust title V pre-application outreach process,
- updating Title V forms and tools,
- applying new measures, and
- implementing a 60-day review of the incoming renewal applications.

DEQ is evaluating the Title V tools and processes created in the first phase of the project for applicability to ACDP improvements.

Secretary of State - Audits Division
AUDIT FOLLOW UP FORM

Report Title: DEQ Should Improve the Air Quality Permitting Process to Reduce Its Backlog and Better Safeguard Oregon's Air
Report Number: 2018-01
Date: January 2018
Agency: Oregon Department of Environmental Quality

Recommendation:

Centralize and improve inspection tracking to ensure compliance inspections are completed timely.

Please mark the appropriate box:

Status:	**Implemented/Resolved**	
	Partially Implemented	**X**
	Not Implemented	

Brief Explanation of Actions Taken/Current Status:

DEQ is developing a comprehensive database tool called Electronic Data Management System. The EDMS team included inspection tracking as a recommendation to occur in the first stage of development. The EDMS team will meet in March 2019 to finalize the scope and sequencing of development.

As an interim tool, DEQ has a centralized inspection-tracking tool that allows the regions to monitor compliance inspections deadlines to ensure completion within DEQ's goals.

Secretary of State - Audits Division
AUDIT FOLLOW UP FORM

Report Title: DEQ Should Improve the Air Quality Permitting Process to Reduce Its Backlog and Better Safeguard Oregon's Air
Report Number: 2018-01
Date: January 2018
Agency: Oregon Department of Environmental Quality

Recommendation:

Implement the Basic Air Contaminant Discharge Permit for auto body repair facilities in the Northwest Region.

Please mark the appropriate box:

Status:		
	Implemented/Resolved	**X**
	Partially Implemented	
	Not Implemented	

Brief Explanation of Actions Taken/Current Status:

The Northwest Region Air Quality Section created an implementation plan for the Basic ACDP for auto body repair facilities. Northwest Region staff reached out to stakeholders to explain the purpose for the permit, which businesses are subject to the permit, and timeframes for implementation. DEQ used feedback from the stakeholder discussions to provide guidance and technical assistance to regulated facilities throughout the implementation process.

The Northwest Region issued Basic ACDP permits to facilities identified as subject to the regulations. Staff referred unresponsive facilities to the Office of Compliance and Enforcement for enforcement. Northwest Region continues to identify facilities through complaint follow up, inspection data and electronic searches.

Secretary of State - Audits Division
AUDIT FOLLOW UP FORM

Report Title: DEQ Should Improve the Air Quality Permitting Process to Reduce Its Backlog and Better Safeguard Oregon's Air
Report Number: 2018-01
Date: January 2018
Agency: Oregon Department of Environmental Quality

Recommendation:

Determine staffing levels needed to provide support to permit writers to issue air quality permits and complete inspections within established timeframes, based on current and projected workloads.

a) Based on the results of the analysis, work with the legislature to identify potential sources of funding for additional staff, to better align workload demands with appropriate staffing levels.

Please mark the appropriate box:

Status:	**Implemented/Resolved**	**X**
	Partially Implemented	
	Not Implemented	

Brief Explanation of Actions Taken/Current Status:

DEQ conducted a comprehensive workload analysis in the spring of 2018. The analysis used historic data from time-keeping, permitting, and inspection databases to assess the staffing-to-workload needs of permit issuance, inspections, compliance activities, and support or "ancillary" activities. The analysis also projected workload demands for the next five years to determine current and projected resource needs. The analysis quantifies resource needs at the position classification level (expressed in FTE) by regional office.

DEQ's 2019-21 Governor's Recommended Budget includes a Policy Option Package to eliminate the air quality permit backlog with additional staff resources in the ACDP and Title V permitting program. A separate POP ratifies fees and positions authorized in the 2018 short session to implement the new air toxics permitting requirements, commonly referred to as Cleaner Air Oregon. POP 116 – Eliminate Air Quality Permit Backlog, proposes eight new positions in the ACDP and Title V programs, phased-in over the biennium. The positions are proposed as fee-funded. DEQ is engaged in ongoing discussion about this POP with fee-paying stakeholders and legislators.

Secretary of State - Audits Division
AUDIT FOLLOW UP FORM

Report Title: DEQ Should Improve the Air Quality Permitting Process to Reduce Its Backlog and Better Safeguard Oregon's Air
Report Number: 2018-01
Date: January 2018
Agency: Oregon Department of Environmental Quality

Recommendation:

Fill vacancies in as timely a manner as possible given the highly technical nature of permitting positions and the potential difficulty finding qualified applicants.

Please mark the appropriate box:

Status:	**Implemented/Resolved**	**X**
	Partially Implemented	
	Not Implemented	

Brief Explanation of Actions Taken/Current Status:

DEQ has filled all seven vacant positions identified by Audit Division staff. Shortly after the publication of the audit the legislature authorized four new General Fund positions to support the air quality permitting program. All four of those positions have been filled.

The air permitting program currently has two vacant positions in the NW Region (position numbers 1324 and 2510). Both are in various stages of recruitment.

Secretary of State - Audits Division
AUDIT FOLLOW UP FORM

Report Title: DEQ Should Improve the Air Quality Permitting Process to Reduce Its Backlog and Better Safeguard Oregon's Air
Report Number: 2018-01
Date: January 2018
Agency: Oregon Department of Environmental Quality

Recommendation:

Work with the Chief Human Resources Office within the Department of Administrative Services to begin the succession planning process.

Please mark the appropriate box:

Status:		
	Implemented/Resolved	
	Partially Implemented	**X**
	Not Implemented	

Brief Explanation of Actions Taken/Current Status:

DEQ hired a Training and Development Specialist in December 2018 who will help human resources facilitate the Agency's succession planning. The Agency will utilize Department of Administrative Service's statewide succession planning directives.

The air quality permitting management team also identified and documented additional processes as part of the succession planning effort including mapping of an emission credit banking process for a non-attainment area. The air quality permitting management team is continuing to add the identification and documentation of processes as part of their work goals.

The air quality managers are also collaborating to use internal staff expertise for cross training staff among regions. DEQ is providing a technical training series for staff and will track who received training for succession planning purposes. In October 2018, DEQ held a two-day training for all permit staff. Management and permit staff contributed to the selection of training topics and needs. DEQ will host two additional trainings for permitting staff in spring and summer 2019.

Secretary of State - Audits Division
AUDIT FOLLOW UP FORM

Report Title: DEQ Should Improve the Air Quality Permitting Process to Reduce Its Backlog and Better Safeguard Oregon's Air
Report Number: 2018-01
Date: January 2018
Agency: Oregon Department of Environmental Quality

Recommendation:

The DEQ headquarters team should provide consistent guidance and support for regional permit writing staff, including:

a) Current and ongoing guidance on new rule interpretation and implementation;

b) Checklists to help determine application completeness;

c) Documentation of up-to-date permit-writing policies, procedures, and processes stored in a centralized and accessible location;

d) Permit writers' manuals stored in a centralized and accessible location; and

e) Updated permitting forms and templates stored in a centralized and accessible location.

Please mark the appropriate box:

Status:	**Implemented/Resolved**	
	Partially Implemented	**X**
	Not Implemented	

Brief Explanation of Actions Taken/Current Status:

DEQ headquarters team created a Permit Writer's Resource Center to serve as a centralized location in SharePoint for existing permit writing policies, procedures, and processes. DEQ headquarters team has been working closely with the Lead Permit Writer's group to update the permit writer guidance manual and Title V forms. A designated team evaluated the utility of exiting Title V forms, and streamlined their format to make the forms consistent and comprehensive to both permit writers and permitted facilities operators.

DEQ headquarters assigned a senior staff member to be responsible for ongoing review and enhancement of resources to ensure they align with Cleaner Air Oregon needs. Regional Air Quality Management, Office of Compliance and Enforcement, and the Air Quality headquarters team is developing a checklist for the Title V renewal application and letter templates to assist permit applicants in submitting technically complete applications.

Secretary of State - Audits Division
AUDIT FOLLOW UP FORM

Report Title: DEQ Should Improve the Air Quality Permitting Process to Reduce Its Backlog and Better Safeguard Oregon's Air
Report Number: 2018-01
Date: January 2018
Agency: Oregon Department of Environmental Quality

Recommendation:

Improve pre-application guidance for applicants, including:

a) permitting process overview,

b) completeness determination checklist for applicants, and

c) guidance written in plain language.

Please mark the appropriate box:

Status:	**Implemented/Resolved**	**X**
	Partially Implemented	
	Not Implemented	

Brief Explanation of Actions Taken/Current Status:

DEQ has hired two new communications staff including a Communication Manager working across the agency and an Air Quality Communications Coordinator. The communication staff are instrumental to the agency's ability to improve the readability and usability of externally facing guidance documents.

As part of the process improvement efforts, DEQ implemented a Title V renewal pre-application process in January 2019. The process includes new Title V pre-application materials to assist permit applicants in preparing technically complete and timely applications.

The packet includes a pre-application meeting request letter, agenda, forms, post-meeting survey, and checklist. DEQ also offers a voluntary pre-application meeting to permit applicants to help identify appropriate forms and answer questions to ensure applications are complete at submission.

Secretary of State - Audits Division
AUDIT FOLLOW UP FORM

Report Title: DEQ Should Improve the Air Quality Permitting Process to Reduce Its Backlog and Better Safeguard Oregon's Air
Report Number: 2018-01
Date: January 2018
Agency: Oregon Department of Environmental Quality

Recommendation:

Improve the Title V and ACDP permitting webpages to enhance usability for permit applicants, especially as it relates to content, navigation, and organization.

Please mark the appropriate box:

Status:	**Implemented/Resolved**	**X**
	Partially Implemented	
	Not Implemented	

Brief Explanation of Actions Taken/Current Status:

DEQ conducted a content audit of the existing permit website to remove outdated content and identify resource gaps in the permitting process. DEQ reviewed more than 25 permitting sites from other state government environmental agencies, including interviewing staff from a successful website for best practices.

DEQ created a new website focused on providing technical assistance and the resources that support facilities in the permit application process. The web pages are now available and a dedicated staff person in the Air Operation Section will maintain, evaluate, and update the website moving forward.

Secretary of State - Audits Division
AUDIT FOLLOW UP FORM

Report Title: DEQ Should Improve the Air Quality Permitting Process to Reduce Its Backlog and Better Safeguard Oregon's Air
Report Number: 2018-01
Date: January 2018
Agency: Oregon Department of Environmental Quality

Recommendation:

Provide clear information to the public on the purpose of public comment and participation in the issuance phase of the permitting process, including what DEQ can and cannot do as a result.

Please mark the appropriate box:

Status:		
	Implemented/Resolved	
	Partially Implemented	**X**
	Not Implemented	

Brief Explanation of Actions Taken/Current Status:

Oregon DEQ Air Quality division conducted an evaluation of the current public hearing process to identify opportunities to strengthen engagement, education, and role clarity with the public.

The Air Quality division presented an engagement plan at the Inspector's forum in October 2018 to incorporate feedback from permit writers and permit coordinators. Air Quality presented strategies and resources to improve the website, public notice document, and experience at public hearings.

Air Quality staff reviewed ten other state air permit processes and template public notice communications to identify best practices. Air Quality staff also met with EPA and other state agencies to discuss shared challenges and best practices around permit public hearings. Air Quality staff are currently working with EPA in message testing research to identify best practices in communicating with regulated facilities and communities.

Next steps include finalizing public resources and creating a public engagement section on DEQ's Air Quality permit website.

PROPOSED SUPERVISORY SPAN OF CONTROL REPORT

In accordance with the requirements of ORS 291.227, the Department of Environmental Quality presents this report to the Joint Ways and Means Committee regarding the agency's Proposed Maximum Supervisory Ratio for the 2019-2021 biennium.

Supervisor Ratio based on CHRO data:

The agency actual supervisory ratio as of is 1: 10.63 as of November 2018.

The Agency actual supervisory ratio is calculated using the following calculation;

_____67_____ = _____ 60_____ + _____8_____- (____1____)
(Total supervisors) (Employee in a supervisory role) (Vacancies that if filled would perform a supervisory role) (Agency head)

_____715_____ = _____601_____ + _____114_____
(Total non-supervisors) (Employee in a non-supervisory role) (Vacancies that if filled would perform a non- supervisory role)

The agency has a current actual supervisory ratio of-

1:____10.67_____ = ____715_____ / ____67_____
(Actual span of control) (Total non - Supervisors) (Total Supervisors)

When determining an agency maximum supervisory ratio all agencies shall begin of a baseline supervisory ratio of 1:11, and based upon some or all of the following factors may adjust the ratio up or down to fit the needs of the agency.

← Narrow Span		Wide Span →
High	**RISK TO PUBLIC/EMPLOYEE SAFETY**	Low
Dispersed	**GEOGRAPHIC LOCATION(s) OF SUBORDINATES**	Assembled
Complex	**COMPLEXITY OF DUTIES/MISSION**	Not complex
Low	**BEST PRACTICES/INDUSTRY STANDARDS**	High
Small	**AGENCY SIZE/HOURS OF OPERATION**	Large
Many	**NON AGENCY STAFF/TEMPORARY EMPLOYEES**	Few
High	**FINANCIAL RESPONSIBILITY**	Low
← More Supervisors		Fewer Supervisors →

Ratio Adjustment Factors

Is safety of the public or of State employees a factor to be considered in determining the agency maximum supervisory ratio? **YES**

Explain how and why this factor impacts the agency maximum supervisory ratio upwards or downward from 1:11-

DEQ has a variety of programs that impact the safety of the public and risk the safety of DEQ employees who conduct that work in the Air Quality, Land Quality and Water Quality programs.

DEQ responds to emergency situations involving the release of pollutants and dangerous substances. Spills, leakages and major environmental events can occur at any time and at any location in Oregon. Once onsite, DEQ activates an appropriate response to mitigate risk to human health and the environment. Staff respond from the nearest DEQ office equipped to handle the size and nature of the event. Managers must also respond in a timely manner, so having trained managers in the near vicinity is important to public health and safety oversight for employees responding as well.

DEQ staff are distributed throughout the state with six offices/facilities having five staff members or less and six offices and VIP Clean Air Stations having more than five, but less than ten in each facility. Ensuring adequate managerial oversight to oversee emergency response situations and day-to-day oversight at the office makes a supervisory ratio of 1:11 difficult to maintain.

DEQ has several Policy Options Packages under consideration. The inclusion of these packages will affect the supervisory to staff recommendation. This impact will be discussed at the conclusion of this document.

Is geographical location of the agency's employees a factor to be considered in determining the agency maximum supervisory ratio? **YES**

Explain how and why this factor impacts the agency maximum supervisory ratio upwards or downward from 1:11-

DEQ has seven VIP Clean Air Stations located throughout the Portland Metro area, one Clean Air Station in Medford, three regional offices (Eugene, Bend and Portland) and eight smaller offices statewide. Supervisors must travel long distances to interact with their staff in the smaller offices. Managerial oversight and emergency response requirements noted above necessitate having managers onsite or within a reasonable distance of these smaller offices.

The smaller DEQ offices are geographically dispersed with six offices/facilities having five staff members or less and six offices and VIP Clean Air Stations having more than five, but less than ten in each facility. Ensuring adequate managerial oversight to oversee emergency response situations and day-to-day oversight at the office makes a supervisory ratio of 1:11 difficult to maintain.

DEQ has several Policy Options Packages under consideration. The inclusion of these packages will affect the supervisory to staff recommendation. This impact will be discussed at the conclusion of this document.

Is the complexity of the agency's duties a factor to be considered in determining the agency maximum supervisory ratio? **YES**

Explain how and why this factor impacts the agency maximum supervisory ratio upwards or downward from 1:11-

DEQ has four major programs (Air Quality, Water Quality, Land Quality, and Agency Management). In each major program area there are multiple sub programs, each with its own set of complexities. Specialized managerial knowledge of each program is critical to ensure DEQ is operating within the legal framework established for DEQ for this highly technical work. This includes fiduciary responsibility for federal grants and grant reporting and the use of dedicated state funding.

Each of DEQ's programs are not mutually exclusive and the work in one program may have environmental impacts on another. The level of interaction and overlapping responsibilities increases the complexity for DEQ. DEQ supervisors are responsible for the management of staff and understanding broader DEQ work to manage overlapping policy and procedure questions and providing final guidance for how an Air issue, Water issue or Land issue should be resolved. Most DEQ supervisors must be technically competent in their area of responsibility to accomplish the policy or technical work in addition to their supervisory duties.

DEQ employs professional level and scientific staff, relying on technical and scientific data to determine appropriate courses of actions to take. Supervising these staff requires a specific skillset and the ability to review highly technical information takes more time than reviewing other type of documents.

Technical and scientific programs at DEQ:

The Air Quality program includes greenhouse gases, asbestos, biodiesel, smoke from forest fires, and emissions from factories;

The Water Quality program includes harmful algae blooms, runoffs from dairy farms, and pesticides from local farms;

The Land program includes Spills, Landfill oversight, Superfund site cleanup, and Materials Management (recycling, reuse, and prevention). There is crossover as a spill or major environmental incident is likely to involve land, water, and air as well as laboratory testing;

The Laboratory has individuals that must work with each of the above programs and subprograms and how to test for each as well as understanding how to trace back to the source of the underlying issue.

Are there industry best practices and standards that should be a factor when determining the agency maximum supervisory ratio? NO

Explain how and why this factor impacts the agency maximum supervisory ratio upwards or downward from 1:11-

Is size and hours of operation of the agency a factor to be considered in determining the agency maximum supervisory ratio? **YES**

Explain how and why this factor impacts the agency maximum supervisory ratio upwards or downward from 1:11-
Although much of DEQ operates during standard business hours, some DEQ staff must be ready to respond to emergency situations 24 x 7, not only in the metropolitan areas, but to the remotest regions of the state. This results in DEQ having staff on call 24 hours per day, 7 days per week, 52 weeks per year. This is a relatively minor impact on the span of control, but is important to understand.
Additionally, DEQ has Vehicle Inspection stations, whose operating hours are as follows:
Portland Metro:
Tues, Thurs, Fri: 8:30 a.m. - 5:30 p.m., Wed: 8:30 a.m. - 7 p.m., Sat: 8:30 a.m. - 1 p.m.
Scappoose:
Fri: 8:30 a.m. - 5:30 p.m., Sat: 8:30 a.m. - 1 p.m., Closed: Sunday - Thursday and holidays
Medford:
Mon-Fri: 8:30 a.m. to 5:30 p.m.
These hours of operation, combined with the locations and size of the offices suggest a higher ratio that 1:11.

Are there unique personnel needs of the agency, including the agency's use of volunteers or seasonal or temporary employees, or exercise of supervisory authority by agency supervisory employees over personnel who are not agency employees a factor to be considered in determining the agency maximum supervisory ratio? **No**

Is the financial scope and responsibility of the agency a factor to be considered in determining the agency maximum supervisory ratio? **YES**

Explain how and why this factor impacts the agency maximum supervisory ratio upwards or downward from 1:11-

DEQ is responsible for serving every Oregonian every day of the year. The budget structure includes more than 140 funding streams each with their own limitations, rules and reporting requirements. There are four major program areas with more than 50 Operating Subprograms. Within each program are multiple sub programs each with their own rules, funding sources and complexities. Employees must know each separate sub program and their supervisor must also be able to guide the employee or answer questions they may have as to how to apply the appropriate funding to the appropriate programs and operating subprograms, as well as determine if the funding is legally authorized for specific instances.

In addition, the central office staff for each program must keep up with ever changing federal regulations as well track and report on numerous grants. This suggests a higher ratio than 1:11.

Policy Option Package Impact HERE:

Based upon the described factors above the agency proposes a Maximum Supervisory Ratio of 1:10.25

Unions Requiring Notification: AFSCME

Date unions notified: 02/01/2019

Submitted by: _____ Date:_____

Signature Line _____ Date _____

Signature Line _____ Date _____

Signature Line _____ Date _____

Signature Line _____ Date _____

Technology projects

Submitted to: Legislative Fiscal Office
By: DEQ Office of the Director
Febuary 2019

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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

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Summary

The Oregon Department of Environmental Quality has proposed three technology projects in its 2019-21 Governor's Recommended Budget materials:

1. Environmental Data Management System
2. Oregon Clean Vehicle Rebate Program
3. Clean Water State Revolving Loan Fund Program

This report is included as part of the agency's February 2019 presentation to the Oregon Legislature's Ways and Means Subcommittee on Natural Resources. A summary of each project, its anticipated costs and its timeline is included.

1. Environmental Data Management System

The Environmental Data Management System project supports DEQ's is critical to improving permit-related services and transparency at DEQ with simplified business processes, practices, and systems.

Project summary

After careful internal business and systems analysis, as well as market research of current environmental data management software and solutions other state agencies have instituted, DEQ will purchase a commercial off-the-shelf product for its Environmental Data Management System. The system offers a tested and proven product to efficiently and effectively receive and share environmental information and modernize operations with features such as e-commerce and web-based interactions desired by the agency's stakeholders. This also facilitates DEQ's ability to more easily meet its partnership agreements with the U.S. Environmental Protection Agency and other stakeholders, as well as ultimately better serve Oregon's business and public interests.

The EDMS project scope includes supporting regulated service (permit, certification, and license) processes across the agency. To achieve this, DEQ will take various disparate systems and combine the data into one EDMS system.

At a high level, the scope includes:

- Enterprise regulated service (permit, certification, and license) administration including supporting business processes, data and systems that support all aspects of defined regulated services, including applications, authoring, issuance, administration, compliance, and enforcement.
    - Data management including access to legacy/historic data
    - Document management integration including access to legacy/historic documents
    - DEQ staff portal for staff to manage regulated services
    - Workflow to match regulated service processes from application, authoring, issuance, administration, compliance, and enforcement
    - Online portal for regulated community to support permitting functions
    - Online public portal

Project costs and funding

EDMS total costs over a ten year period starting in 2019 is estimated to be approximately $18 million. Of this amount, approximately $8 million ($1 million per year) is ongoing maintenance,

licensing (SaS) and staffing. The total project cost includes staff, software licensing, software yearly maintenance and support, hosting, cloud services, vendor information gathering, solution configuration, Department of Justice service costs, Department of Administrative Services costs, independent quality assurance costs and business analysis service costs.

DEQ has requested Policy Option Packages 140, 180 and 190, in a combination of Other Funds, debt service and bonding limitation, to support the development and implementation of the EDMS project in the 2019-21 Governor's Recommended Budget.

Project timelines

DEQ has received Stage Gate 1 & 2 approvals from the Office of the Chief Information Officer, and Stage Gate 3 approval is pending as the date of this report. The vendor has been selected, and the contract will be executed upon final Stage Gate 3 approval. The EDMS project is scheduled to kick-off with the chosen EDMS software vendor, enfoTech in the Spring of 2019. The EDMS system is expected to be fully operational in January of 2021.

2. Oregon Clean Vehicle Rebate Program

The Oregon Clean Vehicle Rebate Program provides rebates for the purchase of specific vehicles, as outlined in statute and agency rule. The program provides financial incentives for the transition to non-fossil fuel passenger vehicles in Oregon and supports Governor Brown's Executive Order 17-21 and Oregon's greenhouse gas emissions reductions goals.

Project summary

House Bill 2017 (2017) directed the Department of Environmental Quality to establish a program to incentivize the purchase and lease of electric vehicles in Oregon. DEQ will to use a third-party vendor for the permanent program operations (DEQ is issuing rebates directly, pending completion of procurement). The permanent program includes an income-based rebate, which will require the handling of sensitive personal information. As a result, the information technology component of this project is being reviewed through the Stage Gate process to assure that personally identifiable information submitted by people applying for rebates is secure. The selected contractor also will be responsible for marketing the program to consumers and automobile dealers.

The project provides rebates in two forms: standard rebates of up to $2500 for qualifying purchases or leases of new zero-emission vehicles and a Charge Ahead rebate, which can be coupled with the standard rebate, of up to $2500. The Charge Ahead rebate provides the additional funds for people who submit qualifying documentation to show they are low- to moderate-income, and that rebate is eligible for the purchase or lease of a new or used vehicle. Additional, lower, rebate categories exist for neighborhood vehicles or motorcycles as defined within the statute.

Since the program began in January 2018, DEQ has received over 2300 applications, and continues to receive new applications daily for both the standard and Charge Ahead rebates.

Project costs and funding

The Oregon Clean Vehicle Rebate Program is funded by a new car sales privilege tax, equal to one half of one percent, on all new vehicles sold in Oregon starting Jan. 1, 2018. This funding mechanism was established in House Bill 2017 (2017). The statue limits appropriations to the program to $12 million per calendar year and sunsets the program after 2023.

DEQ has requested Policy Option Package 111 in the 2019-21 Governor's Recommended Budget to implement the Oregon Clean Vehicle Rebate Program. The package does not request any revenue or additional funding. The package proposes to make permanent 1.0 FTE that is

currently limited duration and to align allowable limitation of Other Funds to reflect the projected revenue for the project.

Project timelines

The project received Stage Gate 1 approval in October 2018 and Stage Gate 2 approval in December 2018 from the Office of the Chief Information Officer. A Request for Proposals, for the third-party vendor to operate the program and serve as the marketing entity to promote the program, closed in late January 2019, and DEQ anticipates submitting a request for Stage Gate 3 approval in spring 2019 to implement the final phases of the program's development.

Once approved, the selected vendor will implement the program to issue rebates and market the program. DEQ anticipates the vendor will be fully operational and issuing rebates in June 2019.

In the interim, and in recognition that some applicants submitted a request for rebate in January 2018, DEQ began to issue rebate checks for the backlogged Phase 1 standard rebate applicants as a temporary bridge solution in late December 2018. DEQ is not currently issuing Charge Ahead rebates due to the enhanced information security needed to protect the income information required from individuals applying for that additional rebate.

More project information and staff contacts are available online:
https://www.oregon.gov/deq/aq/programs/Pages/ZEV-Rebate.aspx

3. Clean Water State Revolving Loan Fund

The Oregon Clean Water State Revolving Loan Fund provides below-market rate loans for the planning, design and construction of various water pollution control activities. Eligible borrowers must be public agencies including tribal nations, cities, counties, sanitary districts, soil, water conservation, irrigation and various special districts, and certain intergovernmental entities. In Oregon, the CWSRF program has provided assistance to 194 communities, financing over $1.26 billion for pollution control projects.

Project summary

The proposed technology project would enable the DEQ Water Quality Program to procure a commercial off-the-shelf system that can be configured for managing the Clean Water State Revolving Loan Fund program data and meets its business needs. Since the program's inception in 1989, DEQ staff have managed the program data with standard spreadsheets; however, the complexity of the financial information has evolved over time and DEQ recognizes the need to modernize the program.

The project would:

- Replace the current outdated manual system, based on spreadsheet and paper for managing CWSRF data, with one that is reliable, secure, integrated, maintainable, and reduces data entry errors.
- Enhance CWSRF business processes to improve efficiency and auditability, and to increase security and maintain the ability to comply with State and EPA requirements. Produce repeatable business operations and procedures, including interactions with DEQ's accounting staff and the State Financial Management Accounting system.
- Increase customer service by providing simpler, more efficient ways to conduct business and access information with the agency.
- Increase internal efficiency by providing tools for CWSRF staff to easily retrieve and process information.
- Assist the Water Quality permitting program with backlog permits by providing quicker access to the CWSRF loan program.

Project costs and funding

The federal Clean Water State Revolving Loan Fund allows up to four percent of the federal grant be used for administrative purposes, and DEQ has allocated 3.5 percent of the federal grant for this purpose. DEQ does not plan to request any General Funds for the project. The table, below, shows the projected costs for Fiscal Years 2020 through 2026.

Item	FY20	FY21	FY22	FY23	FY24	FY25	FY26	Total
RFP Costs	$20,000							$20,000
Staffing Costs	$230,000	$249,952	$56,479	$45,741	$45,741	$45,741	$45,741	$719,395
Capital Outlay (includes consulting and training)		$3,000,000						$3,000,000
Licensing Costs	$250,000	$280,000	$30,000	$30,000	$30,000	$30,000	$30,000	$600,000
Total	$500,000	$279,952	$86,479	$75,741	$75,741	$75,741	$75,741	$4,339,395

DEQ has requested Policy Option Package 163 in the 2019-21 Governor's Recommended Budget to support this technology project. The proposal requests the limitation of $500,000 in Other Funds to support the continued development, in coordination the Oregon Chief Financial Officer, of materials to support the system purchase.

Project timelines

DEQ intends to seek approvals and begin procurement processes to obtain the system in 2020 and begin training and implementation for Fiscal Year 2021.