



Strategic Plan 2016-20

Division of Environmental Protection

Department of Conservation and Natural Resources

State of Nevada

Message from the Administrator...

In 2017, NDEP will mark its 40th anniversary as an agency in State government. It's a good time to reflect on some of our accomplishments as an agency and to consider what lies ahead.

Over the past 40 years, working with our partners at EPA and local government, NDEP has made tremendous progress toward improving Nevada's environment and protecting the health and safety of Nevadans and its visitors. While Nevada's population has nearly quadrupled since 1977, our Air, Water and Land are in many respects cleaner. Environmental regulation is imperfect and often maligned but the fact is it works!

As I write this in 2016, the entire State is finally in attainment with all national ambient air quality standards. The impressive thing about this accomplishment is both our larger population and the fact that the standards are much more stringent now. Fuels are cleaner, tailpipe emissions are strictly controlled, and our energy sources are cleaner; sulfur dioxide emissions from electricity generation in Nevada have declined 81% since 1990. In addition, mercury emissions from gold mining operations declined by 94% following implementation of a unique NDEP control program.

Our drinking water is safer, thanks to a more extensive list of regulated contaminants, more stringent standards and better treatment systems. Since the lower Arsenic standard was adopted in 2001, over 100 public water systems in Nevada have implemented measures to either consolidate with larger systems or deliver drinking water that complies with the standard.

Lake Tahoe is both a source of drinking water and a scenic magnet for public recreation. After decades of decline, the clarity of the Lake has stabilized and shows signs of improvement due to strict regulation, extensive investment in pollution control measures and implementation of the Tahoe TMDL. Redevelopment represents an opportunity to further reduce pollution in the basin by replacing 1960's structures with green buildings using modern stormwater controls.

Nevada's groundwater resources are precious and we have implemented several regulatory programs aimed at protecting groundwater. Fluids managed at mine sites and other industrial operations are regulated and contained. Financial assurance is required for mining operations to ensure post-mining reclamation occurs. Hazardous waste, once dumped indiscriminately, is regulated from cradle to grave. Municipal solid waste is disposed of in fewer, better operated landfill sites. Underground fuel storage tanks are subject to regulation to prevent future releases.

Past releases of contaminants to soil and groundwater are being cleaned up. Perchlorate contamination in the lower Colorado River was detected in Los Angeles' drinking water in the late 1990's and was traced back upstream to releases at facilities that had produced chemicals used in rocket fuel in the Henderson area. Under NDEP oversight, loading of perchlorate to Las Vegas Wash from contaminated shallow groundwater has been reduced by 90% and work is underway to achieve even further reductions. In the past 25 years, thousands of contaminated sites have been assessed and closed across the State, including many locations at the Nevada National Security Site.

Redevelopment of once contaminated properties provides another illustration of how the environment and economy are intertwined. The 2,200 acre BMI Common Areas in Henderson were historically used for disposal of chemical waste, but after detailed investigation and soil

cleanup under NDEP oversight, the area is now being developed as in-fill residential housing; this could not have happened without private investment and a sustained commitment by the developer and NDEP. Other examples include cleanup of the Sparks Tank Farm which made way for development of the Sparks Marina, and the Union Pacific railyard in Las Vegas which now features Symphony Park and The Smith Center.

We are also safer from the risk of catastrophic chemical accidents. Following a devastating explosion at the Pepcon facility in 1988 and a massive chlorine release in 1991 from the Pioneer Chlor-Alkali facility, the Chemical Accident Prevention Program was born. Since its inception, there have been no fatalities due to chemical releases and for those very few incidents that have occurred, the effects have been greatly mitigated due to the program's implementation.

Our progress is incremental so we tend to take our achievements for granted. But the record is clear, NDEP, working with our partners, has come far and accomplished a lot since our founding 40 years ago. We have grown as an agency, not just in size but also in capacity. I have personally witnessed growth in the diversity and quality of our staff and the ability of our organization to solve complex problems. We will need to continue to grow in our capacity going forward because the problems of the next 40 years are likely to be more difficult than what we've seen so far.

The Air programs will continue to confront challenges maintaining attainment with ambient standards in the Truckee corridor and other basins in the face of industrial development pressures. While Nevada has supported and encouraged clean energy development, the potential for energy deregulation creates uncertainty regarding future Nevada generating stations and carbon emissions. We will need thoughtful State energy policy to guide us going forward.

As the driest State in the nation, water has always been the central issue in Nevada. But with a growing population and the prospect of prolonged drought due to climate change, the issue is even more acute. We are already seeing impacts to water quality due to lower flows and warmer temperatures and more frequent wildfires. Within NDEP's purview, we will need to continue to encourage reuse of effluent, work with our partners to minimize discharges of pollutants, and be prepared to regulate emerging contaminants that may threaten drinking water supplies.

Nevada has embraced the concept of sustainability on many fronts. However, one area where we continue to struggle is with the State recycling rate, particularly in southern Nevada. We need to work to improve citizen's access to recycling services and to find ways to incentivize commercial and industrial recycling so that Nevada is part of a circular economy where waste is a resource.

Although modern mines are heavily regulated, Nevada's mining history has left numerous sites that existed prior to modern regulations that pose various environmental concerns. A challenge going forward is to find the means to address high priority concerns at abandoned mine sites. This will require a collaborative effort with other agencies and industry.

As we move forward, we need to stay focused on our mission and provide timely and efficient customer service. By doing so, our citizens can be assured that they are getting a good return on the investment of public funds with the results we achieve in terms of clean air, clean water, chemical safety and restoration of contaminated properties. My thanks go out to all of the NDEP staff and management, past and present, who have contributed to a cleaner, safer Nevada.

Dave Emme, Administrator

Introduction and Background

Governor's Strategic Planning Framework

In 2016, Governor Sandoval established a Statewide Strategic Planning Framework to guide the State over the next five years. The four Strategic Priorities that form the foundation of the framework are as follows:

- Vibrant and Sustainable Economy
- Educated and Healthy Citizenry
- Safe and Livable Communities
- Efficient and Responsive State Government

This Framework provides a guide to help focus State agency planning efforts. For the Division of Environmental Protection, the Governor's priorities and goals provide some fundamental direction. His Framework directs us to protect and sustainably manage natural resources, including our air and water, but to do so in a way that contributes to economic success and minimizes regulatory barriers for business. The Governor also wants Nevada to be the nation's leading producer and consumer of clean and renewable energy, which will directly contribute to clean air and lower carbon emissions. Lastly, the Governor is asking State agencies to focus on customer service, improve the efficiency of service delivery and adopt best practices to recruit and retain a mission-ready workforce.

Mission and Purpose

The mission of the Division of Environmental Protection aligns well with the Governor's priorities. Our mission is to preserve and enhance the environment of the state to protect public health, sustain healthy ecosystems and contribute to a vibrant economy.

In service to the citizens of Nevada, the Division's management and staff are guided by the following core values:

- Getting Results. We are focused on working effectively with our partners to achieve positive outcomes for the environment and the health and safety of our citizens and visitors.
- Teamwork. Our strength and credibility is in the diversity, competence, expertise and professionalism of our staff and our ability to work together and with other partner agencies toward our common goals.
- Acting with Integrity. We are committed to honest, open and transparent government, good faith negotiation and reasonable regulation.
- Customer Service. We work to provide outstanding customer service both internally and to the public and the industries and entities we regulate.

We are at our best when we demonstrate these core values in everyday interactions as well as during challenging circumstances.

Organizational Structure

The Division of Environmental Protection was created as a division within the Department of Conservation and Natural Resources in 1977. Headquarters offices are located in Carson City and a field office is located in Las Vegas. The Division is composed of eleven Bureaus (Figure 1):

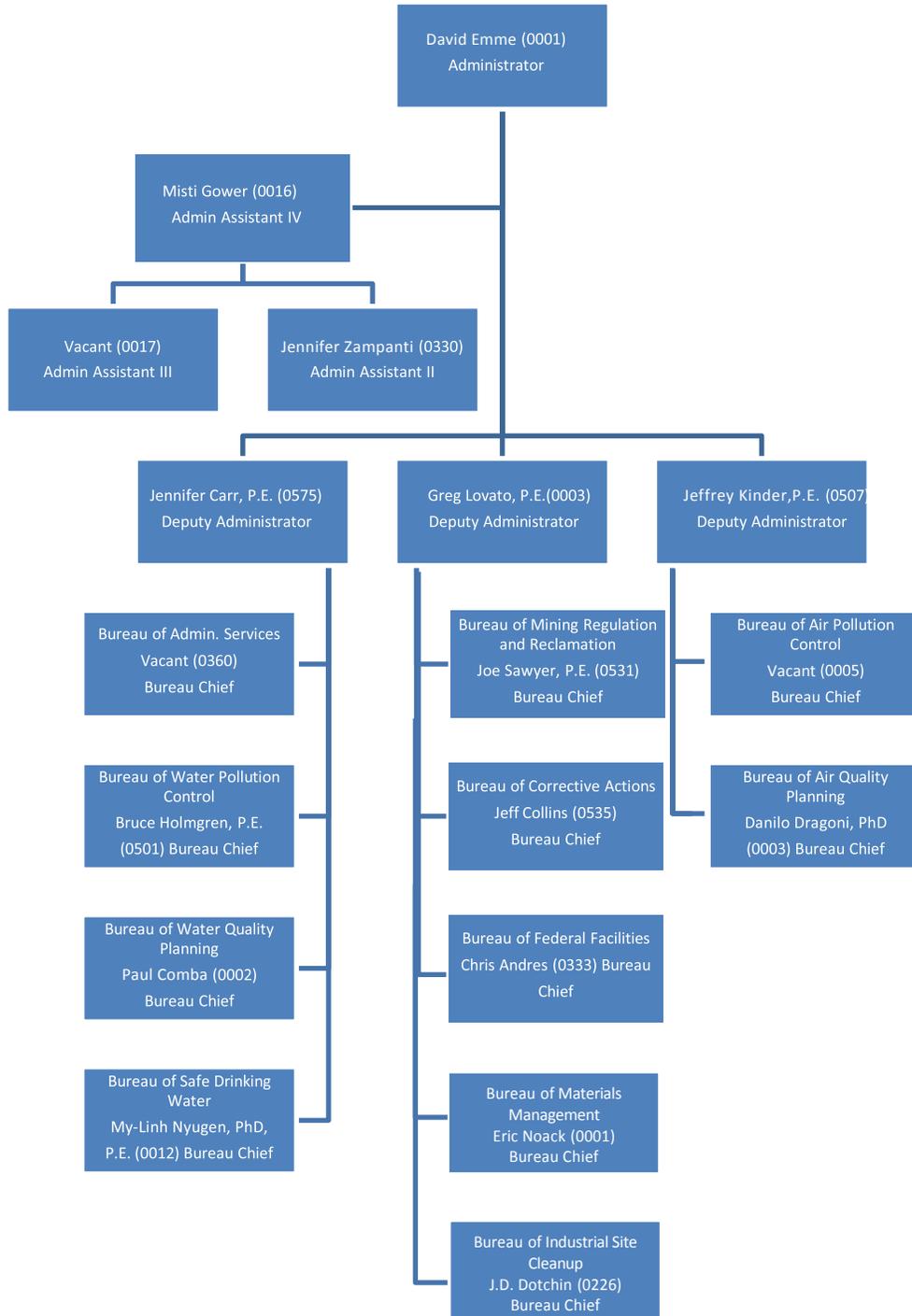
- Administrative Services
- Air Quality Planning
- Air Pollution Control
- Water Pollution Control
- Water Quality Planning
- Safe Drinking Water
- Mining Regulation and Reclamation
- Corrective Actions
- Industrial Site Cleanup
- Materials Management
- Federal Facilities

Division staff also provides support to three boards and commissions. The State Environmental Commission is an eleven member body that hears petitions to adopt regulations, ratifies certain air pollution control penalties and hears appeals from parties aggrieved by actions of the Division. The Board for Financing Water Projects is a five member board that governs applications for grant funds from the State water infrastructure grants program and applications for loans from the Drinking Water State Revolving Fund. The Board to Review Petroleum Claims is a seven member board that governs claims against the State Petroleum Fund for reimbursement of expenses associated with remediation of petroleum releases from registered underground storage tanks.

Statutory Authority: NRS 232.136, 444, 444A, 445A, 445B, 445C, 445D, 459, 486A, 519A, and 704

Number of Employees: 265 Authorized FTE / July 2016

Fig. 1. Organization chart for the Division of Environmental Protection



Summary of Agency Goals

The following goals represent the core functions of the Division of Environmental Protection:

GOAL 1. Clean Air Achieve and maintain levels of air quality that will protect human health and preserve the scenic, historical, and aesthetic treasures of the state.

GOAL 2. Clean Water. Protect the waters of the state from the discharge of pollutants and contaminants to protect groundwater, preserve beneficial uses of surface water and maintain healthy aquatic habitat.

GOAL 3. Safe Drinking Water. Protect the health of the citizens and visitors of Nevada by ensuring that public water systems provide safe and reliable drinking water.

GOAL 4. Safe and Sustainable Materials Management. Ensure safe management of solid and hazardous waste; promote waste reduction, reuse, and recycling.

GOAL 5. Environmentally Responsible Mining. Ensure Nevada's mining industry complies with State regulatory programs for the protection of surface and groundwater resources, general pollution control, and reclamation of disturbed lands.

GOAL 6. Effective Oversight of Federal Facilities. Provide regulatory oversight of environmental remediation and hazardous waste management activities, low level and mixed low level radioactive waste disposal, and other programs conducted by the U.S. Department of Energy (DOE) at its Nevada facilities.

GOAL 7. Prevention of Petroleum Releases and Restoration of Contaminated Sites. Regulate underground fuel storage tanks to prevent releases of petroleum products to the environment. Assess and, if necessary, clean up contaminated properties to levels appropriate for their intended land use and zoning.

GOAL 8. Minimize the Risk of Chemical Accidents. Provide effective regulatory oversight of activities involving the handling of highly hazardous substances to protect the health, safety, and general welfare of the public and the environment by minimizing the risk of chemical accidents.

GOAL 9. Low Cost Financing of Needed Environmental Infrastructure. Provide low cost financing of improvements to drinking water and wastewater infrastructure that is needed to achieve compliance with applicable environmental standards.

GOAL 10. Efficient and Effective Administration. Ensure effective implementation of the Division's environmental programs and manage Division operations as efficiently as possible, continuously looking for opportunities to improve business processes.

GOAL 11. Transparency. Inform the public about environmental issues of concern, involve citizens in decision-making processes and make information accessible.

GOAL 1: Clean Air

Achieve and maintain levels of air quality that will protect human health and preserve the scenic, historical, and aesthetic treasures of the state. Minimize the risk of chemical accidents.

Responsibility, Authority and Resources:

Air program functions are organized into regulatory and planning bureaus. The Bureau of Air Pollution Control (BAPC) issues air quality operating permits, conducts inspections and, when necessary, pursues enforcement action to compel compliance.

The Bureau of Air Quality Planning (BAQP) develops regulations, standards and State Implementation Plans necessary to maintain federal authorization to implement the provisions of the Clean Air Act in lieu of US EPA. The Bureau also monitors ambient air quality in the State, conducts annual inventories of air emissions, conducts air modeling and increment tracking to support permit functions, implements a smoke management program to minimize the impacts from controlled burns, and implements alternative fuels and mobile sources programs in coordination with Motor Pool, DMV and other agencies.

Statutory Authority: NRS 445B.100 - 445B.845, NRS 486A.010 - 486.180.

The Division currently has 60 staff positions that are dedicated to the goal of clean air. Staffing levels have been increased, from a staff of 54 in 2010 to current levels, adding staff to conduct air monitoring, permitting and inspection to meet new federal requirements of the Clean Air Act. BAPC and BAQP jurisdiction is limited to the areas of the State outside of Washoe County and Clark County. Except for fossil fuel fired steam generators, air quality in those counties is managed locally.

Challenges:

The Air programs face a number of fundamental challenges. The stationary source permitting program manages a high volume of permit actions and has had a substantial permitting backlog. Since 2015, a number of measures have been taken to streamline permitting business processes, including changing the workflow, improving completeness reviews, centralizing modeling to provide modeling services in parallel to permit processing, standardized emission factor spreadsheets, creation of industry guidance and revision of regulations to eliminate Class III and Class IV permitting requirements for very small sources emitting insignificant level of pollutants. These have been dramatic changes that will help to streamline and focus the program over time; the challenge will be to keep the momentum going and to continue to improve. Replacement of the outdated Air Resources Information System (ARIS) database will also be a priority in order to improve workflow efficiency, as well as, provide better recall of historical information for more complete site projections

The Air programs also face challenges related to industrial development, particularly in basins that are in attainment but where Prevention of Significant Deterioration (PSD) regulations have

been triggered. PSD regulations are designed to protect clean air by not allowing pollution up to the ambient standards, but to accommodate development by allowing incremental addition of pollution to the existing background up to the pollutant-specific increment thresholds. Given the rapid development of the Tahoe Reno Industrial Center, we are approaching the PSD increment for certain pollutants and it may impact some proposed industrial developments in the future.

Keeping pace with the ever changing regulatory landscape on the federal level and complying with associated planning requirements is another key challenge. Litigation and pendulum swings in federal policy create both work and uncertainty. The ozone standard was lowered in 2015 to a level approaching background in some areas of the State, though we expect attainment designations within NDEP jurisdiction it will require close monitoring and submittal of several exceptional events packages to EPA. This is particularly critical in light of the fact that a large majority of high ozone events observed in the State can be associated with causes for which NDEP has minimum or no control, such as out-of-state long-range transport, natural events (e.g., wildfires), and mobile sources. Complex regional haze rules will require expensive and time consuming modeling and collaborative work across states over the next few years. Given all these challenges, we are expecting much more focus in understanding the local and global mechanisms that generate and affect air pollution dispersion and the use of more advanced modeling and measurement techniques.

Successfully administering Nevada's share of the Mitigation Trust Fund resulting from the 2016 Volkswagen (VW) settlement will also be a challenge. Last but not least, outreach and education for stakeholders and public will become an even more central point in our mission. For instance, as personal air quality sensors will become more diffuse and reliable, the NDEP will have to take the challenge of educating and helping the public on how to use this new technology and interpret its measurements.

Objectives:

Objective 1.1:

Reduce the backlog of pending air quality operating permit actions by at least 30% relative to a 2016 baseline without compromising NAAQs attainment or the integrity of permits.

Objective 1.2:

Attain and maintain compliance with required permitting timelines without compromising NAAQs attainment or the integrity of permits for new permitting actions

Objective 1.3:

Replace the ARIS database system to improve functionality for staff, add a compliance module and avoid duplicate data entry.

Objective 1.4:

Maintain an efficient ambient air monitoring network that meets federal and State regulatory requirements.

Objective 1.5:

Closely monitor and manage, in coordination with stakeholders, the Air resource in PSD triggered basins, particularly related to development at the Tahoe Reno Industrial Center.

Objective 1.6:

Efficiently administer VW Mitigation Trust Funds to provide the maximum emissions reductions for the dollars invested in projects.

Objective 1.7:

Administer effective outreach with the public and stakeholders related to Air Quality.

Performance Measures:

Performance measures representing the air programs provide an indication of effectiveness by reporting on the percentage of standards attained through air pollution control measures and the rate of compliance found at inspected facilities. These statistics demonstrate an exceptionally responsive regulatory program with a high rate of compliance.

	Title/Description	Actual FY15	Actual FY16	Proj. FY17	Proj. FY18	Proj. FY19
1	Percent of hydrographic basins outside of Clark and Washoe Counties in attainment with National Ambient Air Quality Standards (NAAQS)	95%	100%	100%	100%	100%
2	Percent of inspections and data reviews of air pollutant sources that find substantial compliance	98%	98%	97%	98%	98%

GOAL 2: Clean Water

Protect the waters of the state from the discharge of pollutants and contaminants to protect groundwater, preserve beneficial uses of surface water and maintain healthy aquatic habitat.

Responsibility, Authority and Resources:

Water program functions are organized into regulatory and planning bureaus. The Bureau of Water Pollution Control (BWPC) serves a regulatory function by issuing permits to discharge to surface and/or ground water and ensuring compliance with water pollution control laws. Facilities are inspected to ensure compliance and enforcement actions are taken if necessary. Staff reviews the design of waste water treatment plants and infrastructure. Subdivisions are reviewed to ensure that adequate systems are in place to treat waste water. The Bureau also implements the Underground Injection Control (UIC) program, which is a ground water protection program. The Bureau is delegated authority to implement provisions of the federal Clean Water Act in lieu of US EPA. Statutory authority: NRS 445A.300 - 445A.730.

The Bureau of Water Quality Planning (BWQP) conducts surface water chemical, physical and biological monitoring to assess the health of Nevada waters; develops and reviews surface water quality standards and establishes Total Maximum Daily Loads (TMDLs) and wasteload allocations to protect Nevada waters; assesses water quality and prepares numerous water quality reports and plans. The Bureau implements environmental education programs to inform the public about nonpoint source pollution, water quality protection and watershed health and funds water quality improvement projects to prevent, control and abate the impacts of nonpoint source pollution. In coordination and collaboration with the State of California, the Bureau administers the Lake Tahoe TMDL program aimed at restoring historic clarity within the Lake and is a key participant in strategizing on the assessment and protection of nearshore lake conditions. The Bureau implements provisions of the federal Clean Water Act in lieu of US EPA.

Statutory authority: NRS 445A.300 - 445A.730.

The Division currently has 45 positions dedicated to protecting Nevada's waters. Staffing levels in this program were reduced from 2010 levels due to transfer of the laboratory certification program and source water protection program to the Bureau of Safe Drinking Water.

Challenges:

The BWPC has faced extraordinary staff turnover in the past few years. Fortunately, an excellent and diverse staff has been recruited; development and training of new staff is a key priority. Deployment of innovative e-permitting and e-reporting systems has helped

the permitting programs, though a challenge will be to gain more broad acceptance and use of the system by permittees. Development of a more robust stormwater program over the next few years is also a challenge for the Bureau as we strive to find the right balance to match resources to risk and develop an efficient and effective program.

The BWQP is funded solely through federal grants primarily from the U.S. Environmental Protection Agency. Further budget cuts at the national level could result in a reduction of stream miles monitored and assessed, fewer approved water quality standard actions and fewer water quality improvement projects being implemented. With potentially shrinking resources, the Bureau will need to be strategic with limited non-point source grant funds. In addition, continuing the momentum and progress with the Tahoe TMDL will continue as a key priority.

Objectives:

Objective 2.1:

Streamline the permitting process to reduce processing time and increase the percentage of permits in current status to 80% by 2020.

Objective 2.2:

Enhance the staffing and capability of the Stormwater compliance program to ensure a high level of compliance with permit requirements, particularly at high priority facilities.

Objective 2.3:

Increase the proportion of permittees that submit applications using the e-permitting system to 100% of NPDES permits by 2018 and 95% of State permits by 2020. Continue to encourage electronic submittal of Discharge Monitoring Reports.

Objective 2.4:

Encourage the beneficial use of reclaimed water and biosolids. Consider regulations to allow for direct potable reuse by 2020.

Objective 2.5:

Review and update, as necessary, water quality standards for waters throughout the state on a triennial basis to ensure the standards reflect current scientific data and are appropriate to protect beneficial uses.

Objective 2.6:

Provide protection of waters considered high-risk due to their proximity to ongoing/potential land use activities and/or are of high quality and in need of protection from future impairment.

Objective 2.7:

Develop effective TMDLs and provide assistance where needed to support local efforts to address real problems. Ensure tangible progress is made towards implementation of TMDLs or alternative strategies to address impaired waters.

Objective 2.8:

Reduce nonpoint sources (NPS) of pollution through effective planning, implementation of NPS pollution control projects, environmental education and outreach to the public and other local, state and federal agencies.

Performance Measures:

Performance measures representing the water programs indicate the status of permitting efforts, rate of compliance, extent of ambient water quality monitoring and assessment, and progress reducing sediment loads to Lake Tahoe to improve water clarity. These measures demonstrate a consistent regulatory program with a high rate of compliance.

	Title/Description	Actual FY15	Actual FY16	Proj. FY17	Proj. FY18	Proj. FY19
1	Percent of National Pollutant Discharge Elimination System permits in current status relative to the total number of permits	71%	66%	90%	80%	80%
2	Percent of facilities in compliance with NPDES permits relative to the total number of NPDES permits	96%	75%	95%	95%	95%
3	Percent of miles of perennial streams assessed to determine if water quality standards are being met	40%	42%	42%	42%	42%
4	Percent of load reduction credits awarded to Lake Tahoe TMDL urban implementers	NA	100%	100%	100%	100%

GOAL 3: Safe Drinking Water

Protect the health of citizens and visitors of Nevada by ensuring that public water systems provide safe and reliable drinking water.

Responsibility, Authority and Resources:

The Bureau of Safe Drinking Water (BSDW) implements the Public Water System Supervision Program (PWSSP) authorized under the federal Safe Drinking Water Act (SDWA) and maintains Primary Enforcement Responsibility (Primacy) for the State of Nevada. State implementation of the PWSSP ensures Nevada's public water systems comply with state and federal drinking water standards by enforcing the sampling and monitoring requirements for water quality, as well as enforcing requirements for water treatment and corrosion control. The Bureau reviews engineering plans for public water systems and the subdivision of land to assure conformance with engineering standards and compliance with regulatory requirements. The Bureau regulates Drinking Water Operator Certification to ensure that operators possess the skill, knowledge, experience and education necessary to operate a water system successfully. The Bureau also administers the Laboratory Certification Program to oversee laboratories performing water analysis for the purposes of meeting the Safe Drinking Water, Resource Conservation and Recovery Act and/or the Clean Water Act.

Statutory authority: NRS 445A.425 - 445A.428; NRS 445A.800 - 445A.955; NRS 459.500 and NRS 278.330 – 278.460.

The Bureau currently has 29 staff positions. Staffing levels have increased in recent years from a staff of 19 to current levels, mainly due to the transfer of 5 positions in the Laboratory Certification Program from the Bureau of Water Quality Planning to BSDW. An additional Laboratory Certification Officer was added to the Bureau in 2013, one additional PWSSP staff position was added in 2014 and another in 2016 to enhance data management needs. The Source Water protection program was also transferred to BSDW from the BWPC.

Challenges:

The drinking water program will be working to address a number of new and ongoing programmatic challenges. In general, workload has increased due to a resurgence of activity resulting from the rebounding economy, continued compliance issues with some small systems and the need to address “found” systems which are subject to regulation but were previously unknown to regulators. In addition, the Bureau faces new demands for reports and information related to the compliance status of public water systems, particularly with regard to the lead and copper rule. Potential revisions to the lead and copper rule and new primary standards for perchlorate and Chromium-6 are also on the horizon. Lastly, more and more hospitals and hotels are adding

secondary disinfection to control the *Legionella* organism in premise plumbing that must be regulated as public water systems, adding to the Bureau’s workload.

Objectives:

Objective 3.1:

Maintain a high rate of compliance among public water systems with drinking water standards and applicable regulations.

Objective 3.2:

Provide timely review of water system improvement plans and subdivision plans to assure consistency with regulatory requirements.

Objective 3.3:

Continue to make public water system compliance data accessible and transparent to the public, including posting of public water systems that are in non-compliance on the NDEP website.

Objective 3.4:

Streamline data management to facilitate timely reporting and review, ensure data integrity and accuracy, and promote transparency.

Objective 3.5:

Fully integrate the Source Water Protection program with the overall safe drinking water program.

Objective 3.6:

Assist the regulated community in building technical, managerial, and financial capacity through training, technical assistance, collaboration and outreach.

Performance Measures:

Performance measures for the Safe Drinking Water program are focused on compliance with water quality standards. These measures demonstrate a consistent regulatory program with a high rate of compliance, ensuring the protection of public health.

	Title/Description	Actual FY15	Actual FY16	Proj. FY17	Proj. FY18	Proj. FY19
1	Percent of community water systems in compliance with maximum contaminant levels for primary drinking water standards	90.6%	90.7%	90%	90%	90%
2	Percent of population served by community water systems in compliance with maximum contaminant levels for primary drinking water standards	99.6%	99.5%	99%	95%	95%

GOAL 4: Safe and Sustainable Materials Management.

Ensure safe management of solid and hazardous waste; promote waste reduction, reuse, and recycling.

Responsibility, Authority and Resources:

The Bureau of Materials Management is responsible for ensuring safe management of hazardous waste by regulating its handling, transportation, treatment, storage and disposal; ensuring safe collection and disposal of solid waste; and encouraging businesses, institutions and individuals to reduce the amount of waste generated, participate in recycling programs and conserve natural resources. The Bureau implements provisions of the federal RCRA law related to hazardous and solid waste management in lieu of US EPA.

Statutory authority: NRS 444.440 - 444.645, NRS 444A.010 - 444A.110, and NRS 459.400 - 459.600.

The Division currently has 22 staff positions that are dedicated to the goal of safe materials management. Staffing levels in the waste management programs have been flat for several years. Health districts in Clark and Washoe counties have jurisdiction over solid waste management within those counties.

Challenges:

A key issue in the hazardous waste program includes ongoing oversight of the Beatty facility, given its planned expansion. The Bureau is also tasked with continued participation in the Division of Public and Behavioral Health's Technical Advisory Group, which was created following the 2015 fire at the closed rad waste portion of the Beatty site. In addition, the Bureau will need to shift to more risk-based targeting of inspections to prioritize resources in the face of declining federal grant funds. The primary challenge in the solid waste program is encouraging expansion of recycling opportunities and participation to increase the State's recycling rate.

Objectives:

Objective 4.1:

Reduce generation of solid and hazardous waste in Nevada by encouraging waste reduction, recycling, and product substitution.

Objective 4.2:

Prevent uncontrolled releases of hazardous wastes to the environment through

effective permitting controls, risk-based compliance monitoring, and enforcement.

Objective 4.3:

Prevent release of pollutants or contaminants from solid waste disposal facilities through effective permitting controls, compliance monitoring, and enforcement.

Performance Measures:

Performance measures for the Materials Management programs reflect compliance rates and the State’s recycling rate. The compliance measures demonstrate a very high rate of compliance among handlers of hazardous waste and solid waste disposal facilities. Nevada’s recycling rate had met the statewide goal of 25%, though showed a decline in FY16.

	Title/Description	Actual FY15	Actual FY16	Proj. FY17	Proj. FY18	Proj. FY19
1	Percent of inspections of businesses that generate, treat, store, dispose of, or recycle hazardous waste that find substantial compliance	98%	99%	95%	95%	95%
2	Percent of Nevada solid waste that is recycled	25%	21%	25%	25%	25%
3	Percent of inspections of permitted solid waste landfills that find substantial compliance	83%	88%	85%	85%	85%

GOAL 5: Environmentally Responsible Mining

Ensure Nevada's mining industry complies with State regulatory programs for the protection of surface and groundwater resources, general pollution control, and reclamation of disturbed lands.

Responsibility, Authority and Resources:

The Bureau of Mining Regulation and Reclamation is responsible for regulating fluid management, closure and reclamation at mining operations. It is the mission of the Bureau to ensure that Nevada's waters are not degraded by mining operations and that the lands disturbed by mining operations are reclaimed to safe and stable conditions to ensure a productive post-mining land use. The Closure Branch also requires that mine components are chemically stable for the long term.

Statutory authority: NRS 445A.300 - 445A.730 and NRS 519A.010 - 519A.280.

The Division currently has 22 staff positions in the Bureau of Mining Regulation and Reclamation. Staffing levels in the mining programs have been relatively flat for many years, with one new position added to the Reclamation Branch in FY10 and one position each transferred to the Regulation and Closure Branches during FY15 to keep up with increasing workload due to mine expansions and permit renewals.

Challenges:

Despite somewhat lower metal prices, Nevada has sustained a high level of mining activity, which in turn heightens the need for regulatory services. It is also important to note that even in times of dropping metal prices the need for regulatory services persists for many years as mining operations require reclamation and closure. While most mining operations are managed by responsible operators, less responsible operators tend to place an added demand on regulatory resources. In addition, Nevada has seen a significant increase in the size and scope of mining operations, which has increased the need for regulatory oversight. Lastly, over the past decade the State has seen many mines moving into sulfide ores below the water table in both underground and open pit scenarios. This has complicated closure at many sites and requires innovative planning and bonding for the longer term. Both the industry and the Division are interested in improving the mine closure process to ensure safe and cost-effective closures and while continuing to coordinate reclamation permitting and bonding with BLM and USFS where federal lands are involved.

Objectives:

Objective 5.1:

Periodic review and revision of the regulatory framework as needed to achieve the goal of environmentally responsible mining.

Objective 5.2:

Work closely with the regulated community, governmental agencies, and stakeholder groups to improve mine closure techniques and overall mine closure direction. Increase the percentage of closure permits in current status to 90% by 2019 and 100% by 2020.

Objective 5.3:

Establish and sustain a system of surety that is durable and fiscally secure. Develop and implement long term bonding mechanisms for mine impacted water.

Objective 5.4:

Continuously look for ways to streamline and improve administrative and regulatory processes in an effort to save money and resources for both the Bureau and the regulated community.

Objective 5.5:

Maintain a high level of service to the regulated community by reviewing and responding to permit applications and other submittals in a timely, professional, and technically defensible manner.

Objective 5.6:

Periodically inspect and monitor all regulated mining operations for compliance with applicable regulations and permit requirements, and when needed follow a progressive enforcement strategy to efficiently bring non-compliant mining operations back into compliance.

Performance Measures:

Performance measures for the Mining programs reflect compliance with financial assurance requirements, the frequency of inspections, and the degree to which impacts to waters of the state due to mining activity are being addressed. These measures reflect a well-managed program that is able to meet or exceed its performance targets. The high rate of financial assurance demonstrates that the State is protected from the liability risk of possible mine abandonment or bankruptcy.

	Title/Description	Actual FY15	Actual FY16	Proj. FY17	Proj. FY18	Proj. FY19
1	Percent of mining reclamation operations requiring financial assurance that have adequate financial assurance	98%	100%	98%	98%	98%

2	Percent of scheduled mining regulation compliance inspections that document substantial compliance	99%	99%	97%	97%	97%
3	Percent of regulated mine sites with water degradation issues that are being appropriately managed	97%	94%	87%	90%	90%

GOAL 6: Effective Oversight of Federal Facilities

Provide regulatory oversight of environmental remediation activities, hazardous waste management activities, low level and mixed low level radioactive waste disposal, and other programs conducted by the U.S. Department of Energy (DOE) at its Nevada facilities.

Responsibility, Authority and Resources:

Under the Federal Facility Agreement and Consent Order (FFACO) with the Department of Energy (DOE) and Department of Defense, the Bureau of Federal Facilities provides oversight of cleanup activities at facilities and lands formerly used or in support of nuclear weapons testing in Nevada. These sites include industrial, soils and underground test areas at the Nevada National Security Site (NNSS), formerly the Nevada Test Site, the Tonopah Test Range and off-site test areas that include the Central Nevada Test Area and the Project Shoals Site. Following a Superfund-like process, staff review site characterization studies, risk assessments and consider remediation alternatives, moving each corrective action unit to closure and in some cases post-closure monitoring.

The Bureau also provides independent compliance monitoring and verification of DOE activities related to air and water pollution control, safe drinking water and waste management. This regulatory work is provided under an Agreement in Principle (AIP) with DOE. Bureau staff also review shipments of low level radioactive waste and mixed waste destined for disposal at the NNSS to ensure compliance with waste acceptance criteria.

Statutory authority: NRS 445A.300 -445A.730 and NRS 459.400 - 459.600.

The Division currently has 9 staff positions in the Bureau of Federal Facilities, located in the Las Vegas office. Staffing levels in this program have been flat for several years and is expected to gradually decline as cleanup activities move to closure.

Challenges:

Although significant progress has been made in closing industrial sites and bringing various corrective action units to post-closure monitoring, most notably Frenchman Flat, continued progress at NNSS is dependent on the adequacy of Congressional appropriations to the DOE and allocation of resources within DOE to Nevada operations. It is an ongoing challenge to press the Department to devote adequate resources to address site issues in Nevada. In addition, DOE site cleanups in other States are generating significant quantities of mixed and low level radioactive waste, a portion of which is destined for NNSS for disposal. The lack of predictability of waste disposal plans and the broad classification scheme for low level waste has

resulted in numerous questions and concerns over the past several years regarding waste streams destined for Nevada. Recent improvements have been made to communication, planning and coordination. Work to improve the low level classification scheme will require a long-term effort.

Objectives:

Objective 6.1:

Continue to make progress under the FFACO, moving the underground test areas units of Yucca Flat and Ranier Mesa into closure and long-term monitoring; closing out soils activity and moving all units to post-closure monitoring; and continuing with the corrective action investigation at Pahute Mesa and off-site areas.

Objective 6.2:

Continue to provide regulatory oversight under the AIP. Ensure waste streams comply with waste acceptance criteria. Complete RCRA permitting of expansion to Area 5 waste disposal area.

Objective 6.3:

Engage stakeholders and other agencies regarding environmental issues at NNSS and related facilities.

Performance Measures:

The performance measure for the Federal Facilities program reflects compliance with milestones in the key governing agreement between the State and the Department of Energy. This measure indicates compliance is successfully being maintained.

	Title/Description	Actual FY15	Actual FY16	Proj. FY17	Proj. FY18	Proj. FY19
1	Percent of waste shipments arriving at NNSS for disposal in compliance with the Waste Acceptance Criteria	100%	99%	100%	100%	100%
2	Percent of NNSS drinking water supply sampling events showing compliance with Safe Drinking Water Act standards	100%	100%	100%	100%	100%

GOAL 7: Prevention of Petroleum Releases and Restoration of Contaminated Sites

Regulate underground fuel storage tanks to prevent releases of petroleum products to the environment. Assess and, if necessary, clean up contaminated properties to levels appropriate for their intended land use and zoning.

Responsibility, Authority and Resources:

The Bureau of Corrective Actions (BCA) is responsible for the analysis and remediation of contaminated sites, certification of environmental consultants, regulation of underground storage tanks (UST), remediation of leaking underground storage tanks and administration of the Petroleum Claims Fund. The Bureau implements provisions of the federal Resource Conservation and Recovery Act (RCRA) Subtitle I in lieu of US EPA. The Bureau also provides staff support to the Board to Review Petroleum Claims.

The Bureau of Industrial Site Cleanup (BISC) was created in the 2015 Legislative session in response to the nationwide settlement with Anadarko Petroleum over the Kerr McGee/Tronox bankruptcy case. The settlement resulted in an allocation of \$1.1 billion to the Nevada Environmental Response Trust (NERT), which was established to address legacy conditions deriving from the Tronox facility at the BMI complex. BISC provides oversight of all cleanup activities at the BMI complex, which includes response actions by multiple companies and NERT.

Statutory authority: NRS 445A.060 - 445A.730, NRS 445C.150 – 445C.410, NRS 445D.010 – 445D.220, NRS 459.500 - 459.535, NRS 459.610 - 459.658, and NRS 459.800 - 459.856.

The Division currently has 37 staff positions in the Bureau of Corrective Actions and Bureau of Industrial Site Cleanup. Staffing levels in this program have grown mostly due to the creation of BISC. In addition, the Bureau has made extensive use of contractor support to help keep pace with oversight of large, complex remediation projects.

Challenges:

The Bureau of Corrective Actions has had success moving a large number of cases, some highly complex, to closure. However, the caseload remains high and a significant number of cases have been open for more than a decade; 56% of LUST cases are over 10 years old. Consultants are not always incentivized to close cases in a timely manner. In addition, prioritization of cases has been inconsistent and the Bureau lacks the necessary systems to enable reports on case status to management in a routine manner.

Some cases have lagged due to lack of financial resources available to parties responsible for chemical releases to the environment. SB89 was passed in the 2015 Legislative Session to provide access to Petroleum Fund resources to address abandoned dry cleaner sites. The challenge is to make effective use of these resources, show progress and to seek fair and reasonable cost recovery.

The Bureau also faces the challenge of developing and implementing a successful Abandoned Mine Lands program with limited resources; providing thorough and efficient oversight of the Anaconda Site will be a particular challenge given the scope of work needed. In addition, implementing new UST regulations will present a challenge, especially with small operators with limited financial means.

The Bureau of Industrial Site Cleanup is off to a solid start with effective plans in place to address perchlorate loading over time. The challenge for the Bureau will be to keep the momentum going, and in particular to maintain steady progress with all the plant sites at the BMI complex.

Objectives:

Objective 7.1:

Develop and implement by mid-2017 a system to prioritize, track and report on the status of corrective action cases.

Objective 7.2:

Establish technical guidance for corrective action by the end of 2017 and hold CEM consultants to a consistent standard.

Objective 7.3:

Efficiently and effectively move corrective action cases to closure. Reduce the number of aged cases so that by 2020 no more than 25% of the total number are 10 years old or older.

Objective 7.4:

Effectively implement an Abandoned Mine Lands program that prioritizes sites, investigates high priority sites, addresses environmental concerns where resources are available, and works in coordination with other agencies and entities.

Objective 7.5:

Effectively implement new UST regulations to increase rates of compliance, providing compliance assistance to small operators where needed.

Objective 7.6:

Reduce overall loading of perchlorate to Las Vegas Wash by 95% by 2020 through continuous optimization of existing systems, source controls and capture and control of downgradient source areas.

Performance Measures:

Performance measures for the Corrective Actions programs reflect the rate of

compliance among owners of UST's, progress in Brownfields programs and successful UST remediation. These measures indicate a relatively high rate of compliance at UST facilities, though implementation of new UST regulations will present a challenge. They also show demonstrated success at Brownfields sites, and continued advancement in UST remediation. Achievement and exceedance of Brownfields property reuse goal is in part related to changing market conditions in the Nevada real estate market.

	Title/Description	Actual FY15	Actual FY16	Proj. FY17	Proj. FY18	Proj. FY19
1	Percent of underground storage tank facilities found to be in significant operational compliance with the 1998 federal regulations	80%	94%	90%	60%	70%
2	Percentage of sites receiving Brownfields funding within past 4 fiscal years that are ready for reuse	50%	87%	55%	60%	65%
3	Percent of leaking underground storage tank and remediation cases with site wide groundwater contamination under control	89%	91%	92%	93%	94%
4	Percent of sites in and around the BMI Complex with groundwater remedies in place	NA	NA	80%	80%	80%
5	Percent reduction in perchlorate loading to Las Vegas Wash from previous year	NA	NA	18%	6%	8%

GOAL 8: Minimize the Risk of Chemical Accidents.

Provide effective regulatory oversight of activities involving the handling of hazardous substances to protect the health, safety, and general welfare of the public and the environment by minimizing the risk of chemical accidents.

Responsibility, Authority and Resources:

The Bureau of Air Pollution Control (BAPC) implements the Chemical Accident Prevention Program (CAPP), which is a chemical process safety program.

The purpose of the Chemical Accident Prevention Program (CAPP) is stated in NRS 459.380:

1. Protect the health, safety and general welfare of the residents of this state from the effects of the improper handling of hazardous chemicals at the point where they are produced, used or stored in this state or where explosives are manufactured for sale;
2. Ensure that the employees of this state who are required to work with hazardous chemicals or explosives are guaranteed a safe and healthful working environment;
3. Protect the natural resources of this state by preventing and mitigating accidental or unexpected releases of hazardous chemicals into the environment; and
4. Ensure the safe and adequate handling of hazardous chemicals produced, used, stored or handled; and explosives that are manufactured for sale in this state.

Statutory Authority: NRS 459.380 - 459.3874.

The Division currently has 3 staff positions that are dedicated to the goal of reducing the risk of chemical accidents. The jurisdiction of the CAPP program is State-wide.

Challenges:

Since its founding in 1991, the Chemical Accident Prevention Program has worked well to minimize the risk of chemical accidents at facilities handling highly hazardous substances. There has been a significant reduction in the number and severity of catastrophic releases. And, for those very few uncontrolled releases that have occurred, the effects have been greatly mitigated due to the program's implementation.

The current one size fits all approach to permitting has ensured that every new process involving a highly hazardous substance above a threshold quantity is being brought on-line with a consistent, systematic, approach to plant design and operation. However, the permitting process has proven to be cumbersome to industry and needlessly lengthy; therefore, it is in need of revision and streamlining.

Similarly, the compliance program, given the maturity of the program, is in need of a new approach which will target and prioritize work based on risk ranking in order to use available resources wisely.

Objectives:

Objective 1.1:

Revise the permit application process to either evaluate common difficulties in the permitting process and provide the outreach and tools for facilities to complete applications more fully and accurately or to establish more streamlined permitting requirements for lower risk facilities and to tailor the compliance program to the relative risk posed by the facility or process.

Objective 1.2:

Transition the program from the existing advisory and informative model to a more compliance and enforcement regulatory model given the maturity of the program; placing greater emphasis on higher risk processes.

Performance Measures:

Performance measures representing the CAPP provide an indication of effectiveness by reporting on the rate of compliance found at inspected facilities. This statistic demonstrates an exceptionally responsive regulatory program with a high rate of compliance.

	Title/Description	Actual FY15	Actual FY16	Proj. FY17	Proj. FY18	Proj. FY19
1	Percent of inspections and data reviews of Chemical Accident Prevention Program that find substantial compliance	94%	94%	94%	94%	94%

GOAL 8: Financing of Needed Environmental Infrastructure

Provide low cost financing of improvements to drinking water and wastewater infrastructure that is needed to achieve compliance with applicable environmental standards.

Responsibility, Authority and Resources:

The Bureau of Administrative Services, Office of Financial Assistance provides low cost financing of drinking water and wastewater treatment infrastructure through the Safe Drinking Water and Clean Water State Revolving loan fund programs. The Office also implements the State Capital Improvements Grants (also known as AB198) program.

Statutory authority: NRS 445A.060 - 445A.160, NRS 445A.200 - 445A.295, and NRS 349.980 - 349.987.

The Division currently has 5 staff positions in the Office of Financial Assistance. Staffing levels in this program have decreased slightly with reorganization of some staff positions within the Division in recent years.

Challenges:

The key challenges facing the Office of Financial Assistance relate to uncertainties over the amount of annual SRF capitalization grants, the continued federalization of the SRF program through new mandates and set-asides, uncertainties over future demand for infrastructure financing given severe economic strains on local government budgets, and the lack of State infrastructure grant funds due to limited State debt capacity.

Objectives:

Objective 8.1:

Assist communities by issuing low cost loans for the construction of needed improvements to drinking water and wastewater facilities.

Objective 8.2:

Implement the Capital Infrastructure Grants program and the Drinking Water State Revolving Fund additional subsidy in a manner that provides assistance to those most in need while helping to develop capacity among small system operations so that systems are sustainable.

Objective 8.3:

Continue to seek creative solutions to support the needs of very small systems that may have limited technical, managerial or financial capacity.

Performance Measures:

Performance measures for the Office of Financial Assistance reflect the utilization rate of loan funds available for both Safe Drinking Water projects and Clean Water projects. Since the amount of capitalization grants is dependent on Congressional Appropriations, future funding for the SRF programs is uncertain, though it is anticipated that appropriations will continue to decline for the next few years at least.

	Title/Description	Actual FY15	Actual FY16	Proj. FY17	Proj. FY18	Proj. FY19
1	Percent of Safe Drinking Water State Revolving Fund loans committed relative to cumulative	85%	89%	85%	85%	85%
2	Percent of Clean Water State Revolving Fund loans committed relative to cumulative funds available	85%	58%	85%	85%	85%

GOAL 9: Efficient and Effective Administration

Ensure effective implementation of the Division's environmental programs and manage Division operations as efficiently as possible, continuously looking for opportunities to streamline and automate processes.

Responsibility, Authority and Resources:

Division administration consists of the Administrator, Deputies, Administrative Assistants and the Offices of Financial and Personnel Management (OFPM) and Information Management (OIM) within the Bureau of Administrative Services. These positions provide centralized management, accounting and IT services for the Division.

Despite increasing demand for services, the staffing levels in OFPM and OIM have remained flat for the past several years. Automation of many accounting and payroll processes has improved productivity, enabling just 10 FTE's (3.9% of the total Division FTE's) to handle the agency's accounting workload. Late in 2012, the IT resources for the Department of Conservation and Natural Resources were centralized resulting in more efficient use of resources through sharing personnel and software department wide. However, IT staffing has not kept pace with demand for services, particularly programming and application development services. This is evidenced by the fact that several programs have hired their own programmers to provide services and meet existing project needs.

Challenges:

The primary challenge facing the Division's management team is keeping pace with the demands for environmental regulatory services in the face of limited fiscal resources. Federal grant funds continue to erode and there is generally a limited appetite for raising fees. At the same time, staff costs continue to rise, particularly since many entry level staff were hired during the recession that will be eligible for annual merit increases until they are topped out. It is more critical than ever to find efficiencies in all business processes and to strategically focus regulatory efforts based on risk and priority. Transitioning to an electronic document management system and deploying a redesigned website will be key improvements.

Objectives:

Objective 9.1:

Provide effective management of the Division's environmental programs through planning, collaboration, sound decision-making and clear communication.

Objective 9.2:

Prudently manage the Division's fiscal resources and minimize administrative overhead

costs so that staffing can be maintained at a level sufficient to implement regulatory programs with confidence and competence.

Objective 9.3:

Ensure that effective internal controls are consistently implemented to avoid loss, waste and abuse.

Objective 9.4:

Achieve an optimal level of efficiency by continuously looking for ways to streamline and improve business processes through Lean or similar techniques and technology improvements. Deploy the Documentum electronic document management system agency-wide through FY19 and work toward the goal of a paperless records management environment by 2020.

Objective 9.5:

Provide reliable and competent IT support to Division staff and operations. Deploy the new agency website by early 2017.

Objective 9.6:

Support Bureau efforts to develop and consistently deploy training programs that onboard new staff more quickly and assist employee development and retention.

Performance Measures:

Performance measures for OFPM and OIM reflect audit results on internal controls and computer network operational performance. The measures indicate very high performance in both areas.

	Title/Description	Actual FY15	Actual FY16	Proj. FY17	Proj. FY18	Proj. FY19
1	Number of audit findings that reflect a material weakness in internal	0	0	0	0	0
2	Unscheduled computer network downtime	60 min	26 min	60 min	60 min	60 min

GOAL 10: Transparency

Inform the public about environmental issues of concern, involve citizens in decision-making processes and make information accessible.

Responsibility, Authority and Resources:

The Division has one Public Information Officer to respond to media inquiries, prepare press releases, assist with public meetings, participate in emergency preparedness exercises and coordinate with other agencies regarding communication of information related to environmental issues.

Challenges:

The role of the Public Information Officer has evolved as the news media has shifted from primarily print media to internet websites and new media. While it is still crucial to maintain a rapport with the few remaining print media reporters, making effective use of new media is equally important. Another challenge relates to coordination and communication with local governments. The Division has frequent interaction with local governments through nearly all of its regulatory programs. At times there have been real or perceived issues arising from local land use decisions and Division permitting actions. Maintaining clear and consistent communication is important to minimizing conflict and enhancing understanding of local issues.

Objectives:

Objective 10.1:

Provide a timely and accurate response to news media inquiries and public requests for information.

Objective 10.2:

Maintain open and routine channels of communication with local governments to hear local issues and communicate the Division's perspective.

Objective 10.3:

Maintain a robust public website that enables easy access to information related to the Division's environmental programs and provides online services to regulated entities.

Objective 10.4:

Prepare to fulfill an environmental public information role during emergencies by participating in emergency preparedness exercises and training.

Objective 10.5:

Provide credible and timely public information that addresses environmental or public health concerns.