

# NEBRASKA



Good Life. Great Environment.

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**DEPT. OF ENVIRONMENTAL QUALITY**

**Annual Report to the Legislature  
2018**

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Visit our web site at <http://deg.ne.gov> to view the agency's:

- News Releases
- Calendar of Events
- Job Listings
- Topics of Interest
- Report a Problem
- Rules and Regulations
- Fact Sheets and other Publications
- Program Information
- Public Notices
- Enforcement Resolutions

*Front cover photo by Jim Bunstock*

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# CHAPTER 1:

## Agency Overview

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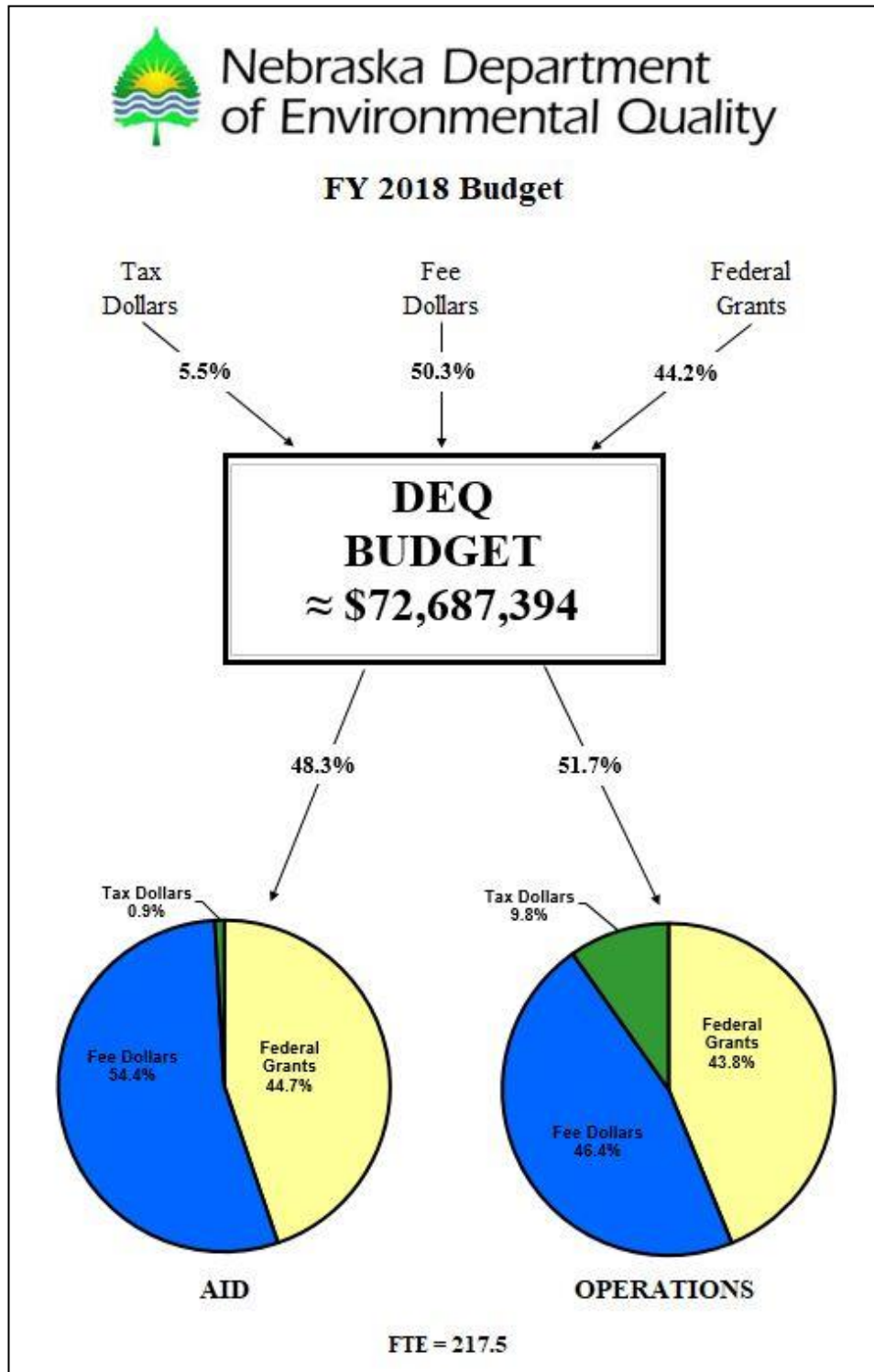
The Nebraska Department of Environmental Quality (NDEQ) was created with passage of the Nebraska Environmental Protection Act in 1971. The Department has grown and been given additional responsibilities over the years, but its mission has remained the same — the protection of Nebraska's air, land and water resources. Presently, the Agency is authorized for a staffing level of 217.50 full-time employees.

The NDEQ has an FY18 annual budget of approximately \$72.7 million. This includes money from federal grants, state taxes and fees. Of that amount, \$35.1 million is redistributed to other agencies, organizations and individuals in the form of aid (grants and loans).

The table below shows a breakdown of NDEQ funds. The columns listed as aid represent the agency's budget redistributed to other entities as grants and loans. The columns listed as operations represent amounts used for agency operation and contracts for such things as investigations and cleanups.

<b>Funding Type</b>	<b>Operations: \$ Amount</b>	<b>Percent of Operations Budget</b>	<b>Aid: \$ Amount</b>	<b>Percent of Aid Budget</b>
<b>Federal Funds</b> (Grants)	\$16.4 million	43.76%	\$15.7 million	44.75%
<b>State General Funds</b> (Tax \$)	\$3.7 million	9.78%	\$0.3 million	0.90%
<b>Cash Funds</b> (Fees)	\$17.5 million	46.46%	\$19.1 million	54.35%
<b>Total</b>	\$37.6 million		\$35.1 million	

The following graphic depicts NDEQ's FY18 budget by funding source and percent anticipated to be expended by fund type and activity (aid or operations).



## Significant Topics in 2018

The following are some of the significant topics, challenges and accomplishments that NDEQ addressed in 2018:

### Two Creeks Removed from Impaired Waters List

A variety of Best Management Practices, such as the structures and vegetation to absorb water and reduce E.coli bacteria at Antelope Creek (right), and contour farming, terracing and buffer strips that prevent runoff from entering Shell Creek (below), have led to substantial water quality improvement at the two creeks.



Pictured above, NDEQ Director Jim Macy provides comments at an Oct. 18 ceremony for the Antelope Creek delisting. Also speaking at the event were EPA Region 7 Administrator Jim Gulliford, Lincoln Mayor Chris Beutler, Lower Platte South NRD Board Chair Ray Stevens and Governor Pete Ricketts.

Water bodies are placed on the EPA’s Impaired Waters List after monitoring has demonstrated that the creek, river or lake has unacceptable levels of particular contaminants, It is rare to have a waterbody “delisted.” A creek, stream, river, pond or lake can be removed from the Impaired Waters List only if it meets water quality standards set by the NDEQ and approved by the EPA. Only 90 creeks in the nation have been removed from the list in the last 15 years. There were two creeks in Nebraska that were delisted from the Impaired Waters List in 2018.

They are:

**Antelope Creek** -- Antelope Creek runs from 84th and Highway 2 north to 14th Street and Cornhusker Highway in Lincoln. Antelope Creek was first added to the Clean Water Act List of Impaired Waters by NDEQ in 2004. At that time, levels of E.coli bacteria were more than 25

times the water-quality standard. Improving Antelope Creek and the surrounding area has been a collaborative project for more than 20 years, involving the City, Lower Platte South Natural Resources District (LPSNRD), University of Nebraska, NDEQ, Nebraska Environmental Trust and other partners and local businesses. The Antelope Valley Project -- which reduced flooding, improved traffic flow and spurred revitalization in the core of the City -- also exposed the creek water to more sunlight, which helped break down the E.coli bacteria. Since the mid-2000s, Antelope Creek has benefitted from about 15 stormwater quality improvement projects and two major flood control projects with funding from local, state and federal sources. Residents and businesses along and near Antelope Creek have installed sustainable landscaping projects, including the installation of 119 residential rain gardens. Permeable pavers and rain gardens have been installed in key locations throughout the creek area. Other projects have included Assurity Life Insurance Company's green roof and the Lincoln Children's Zoo's installation of rain gardens and special storm drain inlets designed to filter animal waste and sediment.

**Shell Creek** -- The Shell Creek watershed stretches 110 miles from Petersburg to a few miles east of Schuyler, where it empties into the Platte River. Shell Creek was first added to the Clean Water Act List of Impaired Waters in 2006 due to impairment of aquatic life caused by atrazine. Through coordinated efforts, people in the area were able to significantly reduce the pollution at Shell Creek. In 2018, EPA approved the removal of Shell Creek from the list of impaired waters due to atrazine.

This historic accomplishment took more than 12 years to complete. The Shell Creek Watershed Improvement Group (SCWIG) is a group of landowners and farmers who worked collaboratively with the Nebraska Department of Environmental Quality (NDEQ), Lower Platte North Natural Resources District (LPNDRD), USDA Natural Resources Conservation Service and other project partners in promoting no-till farming, filter and buffer strips, cover crops, and other conservation management practices to help improve the quality of water draining into Shell Creek. As a result of these conservation efforts, the atrazine level has significantly declined and the creek is now supporting aquatic life. This was the first large region in the nation to achieve atrazine delisting by implementing a watershed management plan.

### **Macy Appointed Acting Director of Energy Office**

On Aug. 1, 2018, NDEQ Director Jim Macy was appointed by Governor Pete Ricketts to also serve as the Interim Director of the Nebraska Energy Office. The former Energy Office Director, David Bracht, had concluded his service to return to his private law practice in Omaha. NDEQ and the Energy Office have subsequently been coordinating efforts regarding grant outreach and other issues related to both agencies.

### **Well Drillers' Agreement**

A Memorandum of Agreement between Health and Human Services and NDEQ became effective June 25, 2018. Under the agreement, NDEQ assumes the responsibility of administering the Water Well Standards and Contractors' Practice Act and Title 178, Chapters 10, 11, 12, and 13.

The program remains intact, but the positions in Lincoln moved from the Nebraska State Office Building to the Atrium in downtown Lincoln. The Water Well Standards and Contractors' Licensing Board and field personnel remain the same.

## Petroleum Remediation Program Eliminates Backlog

The Petroleum Remediation Program has eliminated a backlog of unresolved sites that began over two decades ago. Starting in 1991, petroleum releases were being reported at such a pace that NDEQ couldn't respond to all of them, so sites were prioritized, with highest priorities addressed first. Others of lower priority were placed on a backlog, to be addressed later. The high volume of sites in the 1990s was in large part due to a federal mandate to upgrade underground storage tanks. When old tanks were removed, petroleum releases were often discovered. Hundreds of new petroleum releases were being reported each year, and funding and staff resources were overwhelmed. In 1991, the program first started formally backlogging responsible party (RP) sites, putting them on a list to activate for work later when staff or money allowed.



Pictured above -- Excavation of fuel-contaminated soils to allow construction of a strip mall over this area in Greeley.

The total number of RP backlogged sites reached 1,000 in 1995 and then 2,000 in 1997. The peak number of RP backlogged sites occurred in December 1999 at 2,554 sites. That backlog has now been eliminated – the last sites on the list were activated for investigation and potential cleanup in November, 2018.

Since the program began in the 1980s, 6,734 petroleum release sites have been investigated, cleaned up as needed, and closed; the majority of these sites were RP sites. There is still a considerable amount work to be done on Active and Priority List sites, but the elimination of the RP backlog is a major achievement of environmental cleanup and public health protection.

## 2018 Legislative Summary

One piece of legislation passed in 2018 that impacted the agency:

**LB 1008** – This legislation, among several other features, amends the Waste Reduction and Recycling Incentive Act by extending the sunset date of the scrap tire program for five years from June 30, 2019 to June 30, 2024. LB 1008 was introduced as a wildlife violations bill, but became a vehicle for four additional pieces of legislation in the Committee's jurisdiction to include LB 762, the scrap tire sunset bill.



# CHAPTER 2:

## Administration/Legal/ Management Services

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The Administrators, Legal and Management Services provide administrative, legal and day-to-day support services to the effective operations of the Department.

### I. Administrators

The Administrators of NDEQ provide oversight and policy direction in all areas of NDEQ's activities. The Administrators include the Director, Deputy Directors, Legal Counsel, Associate Program Director and Division Administrators. The Director and Deputy Directors are responsible for the overall function and coordination of NDEQ activities.

NDEQ Administrators are responsible for coordination with other local, state and federal agencies. Staff serve on various committees within the state. The Administrators are also responsible for coordination and negotiations with the U.S. Environmental Protection Agency. A significant amount of the agency's funding derives from the EPA, and substantial coordination is required. In addition, the agency coordinates certain activities with the U.S. Department of Defense and the U.S. Army Corps of Engineers.

The Director coordinates agency activities with the Governor's Office and the Nebraska Legislature. The Director is responsible for ensuring that NDEQ effectively responds to state legislative activities and actions.

The Deputy Director of Administration serves as the manager of the Management Services Division and is largely responsible for day-to-day administrative activities and Agency operations. The Deputy Director is also given responsibility on a case-by-case basis for coordinating special activities which cross the divisional lines of responsibility.

The Deputy Directors of the Air and Land Division and the Water Divisions coordinate the various agency programmatic activities.

### II. Legal Division

The Legal Division provides legal and other assistance to the Director, Agency, and Environmental Quality Council. Legal Division responsibilities include:

- Preparing administrative orders and other enforcement actions for the Agency;
- Representing the Agency in administrative proceedings;
- Preparing judicial referrals to the Attorney General;
- Serving as hearing officers for public and administrative contested case hearings;
- Drafting and reviewing proposed legislation, rules and regulations;
- Coordinating agency legislative activities, governmental liaison and outreach;
- Preparing legal opinions interpreting federal and state laws and regulations;
- Coordinating rule and regulation review and development;
- Advising the Director and Agency staff on duties and program responsibilities;
- Drafting and reviewing contracts, leases, and other legal documents,

- Reviewing other Agency documents, and
- Representing the Director and Agency as requested by the Director.

During FY18, the Director issued 20 administrative orders requiring compliance with environmental statutes and regulations. The Attorney General settled two civil judicial cases and judgments were entered for a total of \$13,000 in civil penalties with deferrals possible in many cases for subsequent compliance.

The Legal Division works cooperatively with the Attorney General, Secretary of State, Legislature, and Governor's Policy Research Office on a variety of interagency functions, including adoption of rules and regulations, litigation involving the Agency, and legislative activities.

### **III. Management Services**

The Management Services Division provides administrative and technical support to NDEQ programs. The Deputy Director of Administration heads the division. The division's staff is divided into six areas — Fiscal Services, Human Resources, Records Management, Information Technology, Public Information, Emergency Response and Grants/Contract Coordination.

#### **Fiscal Services**

The Fiscal Services Section is responsible for agency finance and accounting functions, which includes managing NDEQ spending, purchasing, receipting, budgeting, forecasting, and auditing responsibilities. The section has five staff who offer financial advice and assistance to programs and also conduct financial reviews of grantees.

This Section is supervised by the agency's Budget Officer, who works directly with the State Budget Office in coordinating, compiling and submitting the agency's biennial budget to the Governor. Various reporting mechanisms are monitored throughout the fiscal year to ensure the agency is on track with budgeted expenditures and revenues and to ensure there is adequate appropriations, grant and cash funding to cover agency expenses in the pursuit of its mission.

The Section provides significant staff assistance and support to key programs. The first is the State Revolving Fund (SRF) Loan Program in the Water Permits and Drinking Water Divisions. Assistance includes receipting, collections, payment of loan disbursements, grant activity reconciliation and budgeting. The Section also coordinates bond activity with Nebraska Investment Finance Authority (NIFA) and the Trustee – bond issuance, retirement and interest payments. The SRF program requires annual revenue projection reports and financial statements to be audited. The Section produces these reports and coordinates the annual audit. Additional programs are supported through grants with the EPA. A significant percentage of staff time is also dedicated to meeting complex federal government tracking requirements. Given the substantial amount of grant funds NDEQ distributes, it is essential to dedicate staff time to reviewing financial activities of entities receiving grant funds.

The Section also serves as advisors in regards to financial planning of federal grants, the collection, tracking and reporting applicable fees for the Integrated Solid Waste Management, Livestock and Title V air emission programs.

Major accomplishments during fiscal year 2018:

- Enhancement of the Loan and Grants Tracking System, which provides real time access to State Revolving Fund loan program financial and programmatic information by project. Enhancements included off cycle payments and proper interest calculations.
- Assisted in implementation of an electronic grant application and payment system working with the Electronic Content Management (ECM) platform for the Administration team, Litter and Waste Grant, and Air program. This system became fully functional in fiscal year 2018 for all programs within NDEQ, with the ability to route, approve, and code invoices within the same ECM system.
- Successfully completed a fiscal year 2017 SRF audit during 2018, which resulted in a clean financial audit report, with no fiscal findings.
- Assisted in the implementation of online credit card payments for program permits and applications.
- Revamped the agency's time keeping system to place an emphasis on work activities. This emphasis will allow the agency to implement driver based budgeting in the future and focus on the cost of agency services.

## **Human Resources**

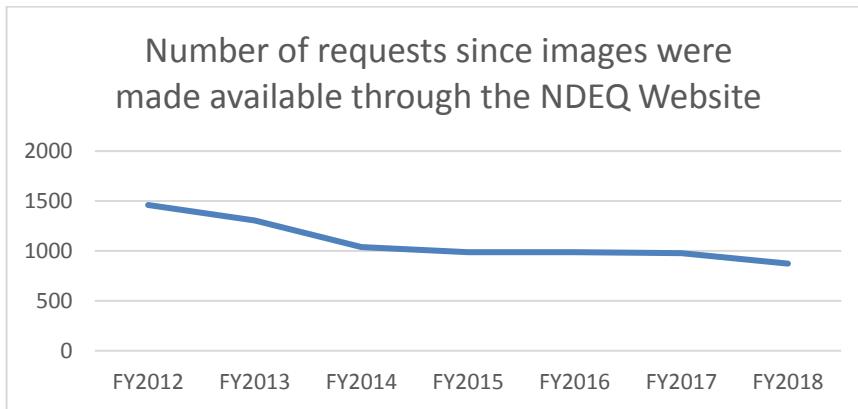
The Human Resources Section administers the day-to day operations of the Human Resource office. The Human Resources Section consists of three staff members. The Human Resource team supports agency efforts to provide a working environment that strengthens individual and organizational performance. The Section:

- Manages and provides consultation and assistance to managers during the recruitment process for both permanent and temporary employees using approved recruiting and hiring practices and showing good faith efforts to broaden diversity.
- Administers performance review process to ensure effectiveness, compliance and equity within the department.
- Plans and conducts new employee orientation/onboarding to help our newest team members feel they are part of the department team.
- Provides day-to-day benefits administration services.
- Coordinates and monitors the department Medical Monitoring Program.
- Assists with the development and administration of programs, policies, procedures and guidelines to help align the workforce with the strategic goals of the agency.
- Participates/conducts investigations when employee complaints or concerns are brought forward.
- Advises managers about the steps in the progressive discipline process.
- Administers training and development.
- Maintains employee training records.
- Administers the department recognition program.
- Administers payroll processing.
- Processes all terminations, retirements and conducts exit interviews.
- Complies with all existing governmental and labor legal and government reporting requirements including any related to the Fair Labor Standards Act (FLSA), Equal Employment Opportunity (EEO), the Americans With Disabilities Act (ADA), the Family and Medical Leave Act (FMLA), and so forth. Maintains minimal department exposure to lawsuits.

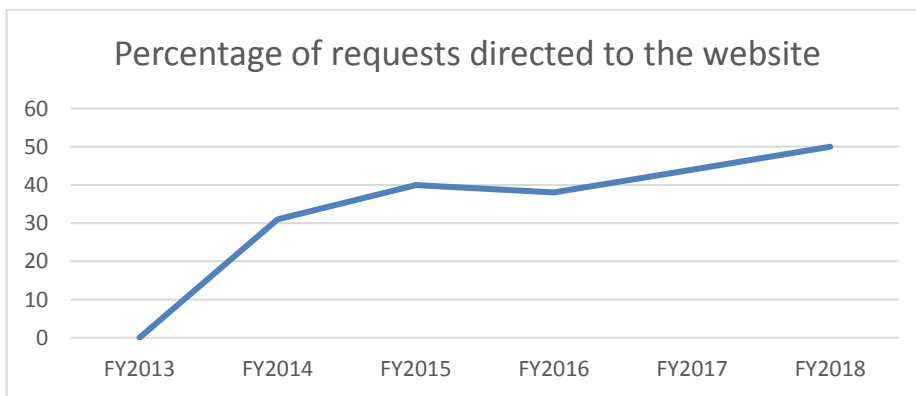
**Records Management**

The Records Management Section is responsible for managing the agency’s paper and electronic records, centralized mail handling process, requests for public information and other support functions. In FY2018:

- Over 114,000 records were stored in the Enterprise Content Management System (ECM) utilizing OnBase software applications from Hyland Software.
- Almost 30,000 incoming mail items were imaged and routed electronically to agency staff through a workflow process in the ECM.
- The agency spent 50% less on file folders and file labels than in FY2017.
- Staff in the Records Section responded to 873 requests for information. The number of information requests go down annually, as more information is made available online.



- 49% of the requests were fulfilled by directing the requestor to the agency website to view documents.
- 37% of the requests were fulfilled by the Records Section team imaging legacy paper files into the ECM and directing requestors to the website



The Records Management Section also coordinates building and implementation of solutions in the ECM. In FY2018:

- A new group was created to store Quality Assurance (QA) Project Plans and Documents. Over 200 documents are now available to staff from their desktop.

- An Air Compendium application was created to document decisions regarding air permits, regulatory determinations and internal procedures.
- Three new Air General Permit applications were made available to online applicants, resulting in quicker turnaround for industry to obtain a Permit to Construct and/or Operate.
- An electronic application was established to process and respond to public comments related to Nebraska's handling of the Volkswagen State Trust Agreement. Public comments, applications, agreements and related documents are accessible through the webpage.
- The Fiscal team processed approximately 45% of invoices through an electronic process that routes the invoice to supervisors for coding and back again to the Fiscal team for payment.

### **Information Technology**

The Information Technology Section oversees computer support and provides information management for all agency locations. The agency has about 250 desktop computers, about 20 printers, a midrange System I AS400 computer, various network servers, about 30 mobile devices and software which are all supported through the OCIO service group. Four professional staff design, develop, support and provide training for computer programs in supporting the Agency's information management needs and the administration of the Agency's computerized databases. One professional staff person is responsible for managing all of the Information Technology staff, maintaining and updating the agency technology plan and coordinating Information Technology Section activities.

The agency has developed an Integrated Information System (IIS) which is a centralized, shared database containing descriptive, locational, program specific and paper file information for all facilities and other items under the agency's jurisdiction. Nationally, NDEQ is among the leaders within state environmental agencies regarding information integration. Over the past 17 years, the program has implemented EPA grants to improve the network and information systems. These funds have been and continue to be used in efforts to integrate data that is shared among environmental agencies, to provide greater public access to this information and to build additional information systems.

In 2001, the agency successfully completed a pilot project with other states and EPA demonstrating the exchange of federally required information using eXtensible Markup Language (XML). This was the first successful effort to exchange data using this process. The Agency continues to be involved in the EPA/State efforts to build a National Environmental Information Exchange Network (Exchange Network). The Exchange Network provides a consistent method for obtaining environmental information from any participating agency or program in the country.

Since late 2010, the agency has been participating in the Enterprise Content Management Shared Services project with the OCIO and other state agencies. On April 11, 2011, the agency implemented the first project and the agency continues to incorporate the ECM in to business processes each year. The Records Management section has short descriptions of recent projects.

The application development staff, in cooperation with the Water Quality Division/Surface Water Monitoring Section staff, have been designing and developing a comprehensive Surface water program where staff will be able to generate forms for data gathering, input that data directly into the IIS system. They will be able to access that data and use it to generate reports and export some results directly to the public web page more quickly and in some cases, more accurate. The application is in full operation and the agency is realizing efficiencies in the program operation. The

collected information will be shared with EPA through the Exchange Network process utilizing the Water Quality Exchange process.

### **Public Information Office**

The Public Information Office serves as NDEQ's initial source of communication with the public and media. The services of the Public Information Office are used by all divisions of NDEQ.

A primary responsibility of this office is to handle questions from the public and media (newspaper, television, radio and web) regarding NDEQ's activities.

The Public Information Office is responsible for the writing and distribution of news releases on a wide range of environmental topics that are of importance to the public. The office is also involved in the production of a number of other publications, including this annual report, brochures, fact sheets and guidance documents.

These publications can be obtained by contacting the Public Information Office or by visiting NDEQ's website, <http://deq.ne.gov>. The website has grown considerably in recent years and provides a wide array of information to the public relating to the agency, including:

Environmental Alerts	Press Releases	Contact Us/Report a Problem
Rules and Regulations	Publications	Requests for Proposals
Topics of Interest	Program Information	Public Notices
Enforcement Resolutions	Assistance	Cleanups
Compliance	Financial	Maps and Data
Permits and Authorization		

An important component of the website is to promote two-way communication. As part of those efforts, the agency's main e-mail address is provided at numerous locations on our website. That e-mail address is: [NDEQ.moreinfo@nebraska.gov](mailto:NDEQ.moreinfo@nebraska.gov). The Public Information Office coordinates responses to those e-mails. The site also features "Report a Problem," with a link to the e-mail address to report an environmental issue of concern at [NDEQ.problem@nebraska.gov](mailto:NDEQ.problem@nebraska.gov). The site also includes phone information and procedures relating to reporting a spill or complaint.

The agency is moving toward more standardized forms, including some that can be filled online or submitted electronically.

### **Emergency Response Program**

Through the Emergency Response Program, NDEQ staff provide technical and regulatory assistance to those responsible for spills, leaks, and accidents that pose a hazard to the environment or public health. Assistance is also provided to those at the local level who are the first on the scene at these releases; typically this is the local fire department.

The Emergency Response Program Coordinator is responsible for training, equipping and coordinating staff who, in addition to their responsibilities to other programs, provide initial documentation, assistance and response to spills. These individuals have the responsibility to maintain an emergency response system that is on call 24 hours a day. The Emergency Response Program assists in arranging for the disposal of harmful and potentially hazardous materials. The Program represents the environmental interests of the state at the scene of a petroleum/chemical spill or other environmental emergency. All personnel are members of the Nebraska Hazardous Incident Team (NHIT) and coordinate closely with the local, state and federal agencies involved in emergency response incidents.

Spills that were recorded during Nov 2017 – Oct 2018 include:

Diesel Fuel – 98  
Gasoline – 28  
Other Petroleum Fuels – 6  
Waste Lubricating Oil – 21  
Other Petroleum Oil – 65  
Fertilizer – 13  
Pesticides – 4  
Anh Ammonia – 31  
Caustics – 11  
Flammable Gas – 0  
Non-Flammable Gas – 3  
Alcohols – 7  
Other – 57

TOTAL = 344

The Emergency Response Coordinator is also responsible for training staff in the use of the NDEQ Notification system. The system is used to record both spills and complaints submitted to the Department. From November 1, 2017 to Oct. 31, 2018, 815 notifications were entered into the system, including 344 notices of spills or releases into the environment.

### **Grants/Contract Coordination**

The Grant Coordinator is responsible for:

- Completing federal grant applications.
- Ensuring compliance with grant conditions and requirements, particularly reporting requirements.
- Maintaining and coordinating all official record of correspondence with the Environmental Protection Agency (EPA), Region 7 grants office.
- Tracking of grant applications through the award process, and follow-up of reporting and conditions.
- Ensuring NDEQ programs meet reporting deadlines, consolidates reports and verifies they are sent to and received by EPA.
- Ensuring all required sub-awards are reported to the Federal Funding Accountability and Transparency Act Sub-award Reporting System.
- Corresponding with EPA Headquarters to ensure NDEQ stays in compliance with Federal grant guidance and new requirements.
- Providing assistance with Requests for Proposals, contract development.
- Working with the Fiscal Services Section to ensure communication regarding grants, contracts and programs.
- Working with Records Management Section to verify all agreements and contracts are in the Enterprise Content Management system (documents imaged).

### **Funding of Management Services**

The Management Services Division provides essential administrative and technical support to the Department. Some activities in Management Services are program specific, but many are not. Funding for the Division is provided by two methods: 1) the majority of the staff salaries and activities are funded through an overhead charge to the Department's various programs; 2) Program-specific staff time and activities are charged to those programs and the grants associated with them.

# CHAPTER 3:

## Environmental Quality Council

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The Environmental Quality Council was established through the Nebraska Environmental Protection Act as the body that adopts rules and regulations which set air, water and land quality standards in order to protect the public health and welfare of the state. They adopt regulations that guide the activities and responsibilities of the Nebraska Department of Environmental Quality (NDEQ). In addition, the Governor appoints the NDEQ Director based on candidates recommended by the Council.

The Council has 17 members who are appointed by the Governor to four-year terms. Appointments require legislative approval. Council members are appointed to represent: the food manufacturing industry; conservation interests; the agricultural processing industry; the automobile or petroleum industry; the chemical industry; heavy industry; the power generating industry; crop production; labor; the livestock industry; county government; municipal government (two members, one of which represents cities not of the primary or metropolitan class); a professional engineer; a biologist; a representative of minority interests; and a doctor with knowledge about the human health aspects of air, water and land pollution.

The Council is required by statute to meet at least twice each year. NDEQ publishes notice of these meetings, together with an agenda and a description of proposed business items to be considered. The Council holds public hearings on the proposed regulations at these meetings. Any interested person may submit written comments on the proposed regulations and/or testify at the public hearing. The Council considers these comments and testimony prior to making a decision on whether to adopt, modify, or deny new state environmental regulations and amendments to existing regulations. The Council can also consider rule-making petitions submitted by the public.

Although the Council is responsible for review and adoption of rules and regulations, it does not have involvement in NDEQ's administrative functions or day-to-day responsibilities. The NDEQ Director is responsible for administration of NDEQ and the rules and regulations adopted by the Council.

Following are two tables. The first lists the council members, the second summarizes Council actions from Nov. 15, 2017 to Nov. 15, 2018.



**Council Members**

<b>Representing</b>	<b>Council member</b>	<b>Term expires</b>
Agricultural Crop Production	Rod Gangwish Shelton	June 22, 2021
Ag Processing Industry	Douglas Anderson Aurora	June 22, 2019
Automotive/Petroleum Industry	John Dilsaver Ralston	June 22, 2021
Biologist	Mark Czaplewski Grand Island	June 22, 2021
Chemical Industry	Jeremy Buhl Omaha	June 22, 2019
City Government	James Hawks North Platte	June 22, 2019
Conservation	John C. Turnbull York	June 22, 2019
County Government	Hilary Maricle Albion	June 22, 2019
Food Products Manufacturing	Michelle Bucklin Omaha	June 22, 2021
Heavy Industry	Vacant	June 22, 2019
Labor	Robert Hall Wahoo	June 22, 2021
Livestock Industry	Alden Zuhlke Plainview	June 22, 2021
Minority Populations	Mohamed Dahab Lincoln	June 22, 2021
Municipal Government	Lance Hedquist South Sioux City	June 22, 2021
Physician	Ronald Sheppard Callaway	June 22, 2019
Power Generating Industry	Joseph Citta, Jr., Columbus	June 22, 2021
Professional Engineer	Dennis Grams Lincoln	June 22, 2019

**Environmental Quality Council Actions  
Nov. 15, 2017 to Nov. 15, 2018**

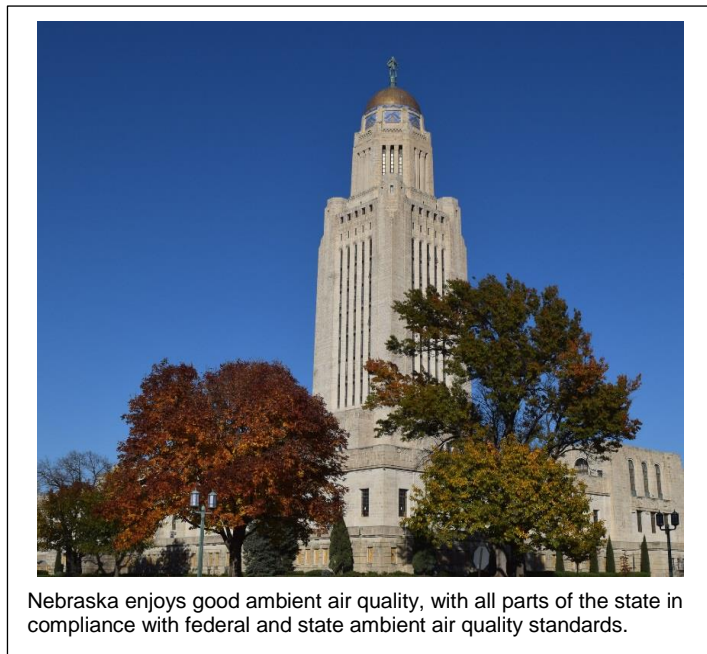
<b>Council Meeting Date</b>	<b>Regulation</b>	<b>Action</b>
November 15, 2017	2018 Litter Percent Allocations	Approved
March 30, 2018	Proposal to repeal Title 116 -- Code of Ethics	Approved
	Proposal to repeal Title 194 – Rules and Regulations for the Disposal of Low-Level Radioactive Waste	Approved
June 21, 2018	2019 Intended Use Plan and Project Priority Lists for the Clean Water State Revolving Fund and the Drinking Water State Revolving Fund	Approved
November 15, 2018	Public Hearing on the 2019 Litter Percent Allocations	Approved
	Amendments to Title 197 Amendments - Rules and Regulations for Certification of Wastewater Treatment Operators in Nebraska	Approved
	Amendments to Title 198 Amendments - Rules and Regulations Pertaining to Agricultural Chemical Containment	Approved
	Amendments to Title 133 Amendments - Litter Reduction and Recycling Grant Program	Approved
	Amendments to Title 199 Amendments - Waste Reduction and Recycling Incentive Grants Program	Approved
	Amendments to Title 120 Amendments - Rules in 401(1)a Certification	Approved

# CHAPTER 4:

## Air Quality Division

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The objective of the Air Quality Division is to maintain and protect the quality of the outdoor air in Nebraska. Thousands of tons of pollutants are emitted into the air in the state each year from industrial and other human activities. In high concentrations, these air pollutants could affect human health, cause property damage, harm the environment, and reduce visibility. The Division works to maintain Nebraska's air quality by implementing state and federal air quality regulations, through permitting and compliance activities, and by monitoring outdoor air for pollutants. Nebraska's air quality rules are set forth in *Title 129 – Nebraska Air Quality Regulations* (Title 129).



The regulated air pollutants of most concern are particulate matter, ozone, nitrogen oxides, sulfur dioxide, carbon monoxide, and lead. These pollutants are subject to National Ambient Air Quality Standards (NAAQS). Nebraska is fortunate that all areas of the state currently have air cleaner than the federal limits for these pollutants. It is important to maintain attainment with these federal standards to protect the public health and to avoid significant economic costs to state government and to regulated facilities that would be brought about by nonattainment. NDEQ also regulates the emission of substances defined by the U.S. Environmental Protection Agency (EPA) as hazardous air pollutants, which are known to cause cancer and other serious health impacts.

The Air Quality Division consists of the Permitting Section, which issues construction permits, operating permits, and performs air dispersion modeling; and the Compliance Section, which maintains an ambient air monitoring network, compiles emission inventories, and conducts inspections and other compliance and enforcement activities. Staff assigned to the Environmental Assistance Division assist the Air Quality Division with planning and development activities. These planning activities include monitoring federal regulations, updating state regulations and Nebraska's state implementation plans for remaining in compliance with air quality standards, and informing the regulated community and the public about changes in air quality regulations.

Three local agencies – Lincoln-Lancaster County Health Department, Omaha Air Quality Control, and Douglas County Health Department – have accepted, through agreement with NDEQ and direct delegation from the U.S. Environmental Protection Agency (EPA),

responsibility for various facets of the air quality program in Nebraska. These responsibilities include air quality monitoring, permitting, and enforcement within their areas of jurisdiction.

## Permitting Section

An air quality permit sets limits on the amounts of pollutants that a facility may emit, allowing facilities to operate or be constructed while protecting the quality of the surrounding air. NDEQ issues two main types of air quality permits: operating permits and construction permits. Operating permits are required for existing sources of certain air pollutants. A construction permit may be required before a facility may construct or modify an emission unit.

Title 129 provides owners and operators of air contaminant sources with a choice of three types of construction and operating permits: individual, permit-by-rule, and general. Some types of sources are not eligible for permit-by-rule and general permits.

Individual permits are available for all regulated sources and include all requirements applicable and specific to that source and location. Because it is “tailor made” for the source, developing an individual permit requires significant time and labor each time the permit is issued. Each individual permit must also go through a public notice (30-day comment period), which increases the time required to issue the permit.

A permit-by-rule and a general permit are similar in that the rule or permit has the same requirements for, and covers, all sources in a particular industrial category, provided that the source meets the applicability criteria and applies for and obtains coverage. The requirements for a permit-by-rule are established in Title 129, whereas the requirements for a general permit are established in the permit. Each permit-by-rule and general permit is issued only once (including the public notice period). Eligible applicants then apply for and obtain coverage without the need to develop a permit or to go through a public comment period each time coverage under that permit-by-rule or general permit is approved.

General construction permit coverage is currently available for eligible sources in nine categories (including time-sensitive construction activities), and general operating permit coverage is available for one category (small incinerators). Approval of general and permit-by-rule coverage takes much less time for the agency and for the facility than an individual permit. The permit-by-rule approval process usually takes less than 30 days. An online application process is used for general permit coverage, and approval may take only a few days or less.

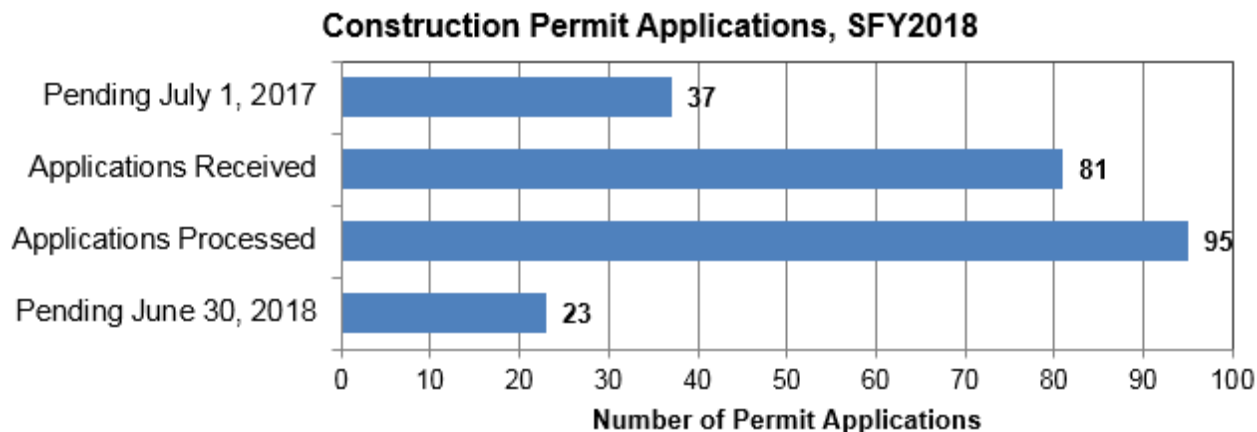
## Construction Permit Program

The Department has maintained a construction permit program for air contaminant sources since the 1970s. Facilities are required to obtain a construction permit before they construct, reconstruct, or modify any air contaminant source or emission unit where there is a net increase in the potential to emit above thresholds specified in Title 129 for particular pollutants. Only sources with potential emissions at or above these thresholds are required to obtain a construction permit. A construction permit is valid for the life of the covered emission units.

Nebraska’s program also implements the federal construction permit program, called Prevention of Significant Deterioration (PSD). The PSD program applies to construction of new major sources or major modifications to existing sources that emit significant levels of certain types of pollutants. The purpose of the PSD program is to protect air quality in areas where the

air is cleaner than the ambient air quality standards while still allowing industrial and economic growth.

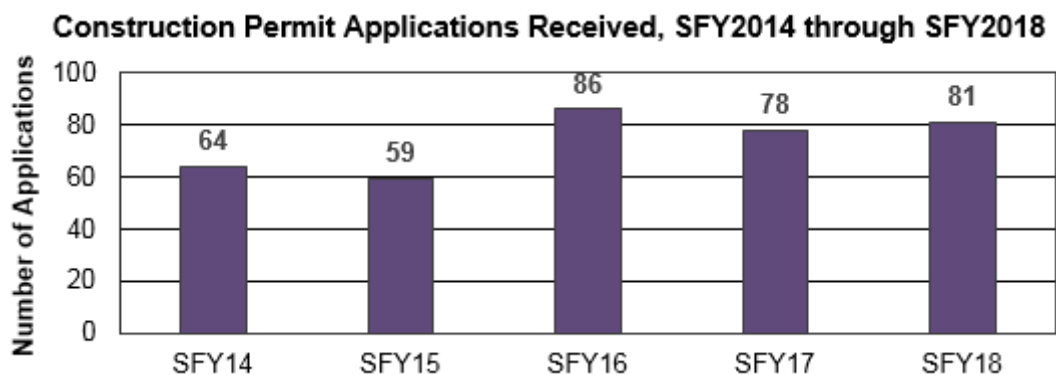
The chart below summarizes construction permit applications received, processed, and pending during the 2018 state fiscal year (SFY2018). (Note: the *Processed* category includes permits issued, withdrawn, denied, and determinations of no permit required).



For sources regulated under the construction permit program that emit levels of certain types of air pollutants sufficient to trigger PSD requirements, Division staff conduct additional, more rigorous reviews of the construction permit application to ensure that best available control technology will be used in order to minimize impacts on the environment. NDEQ must also assure that the source will not cause or contribute significantly to any deterioration of air quality that could make the area potentially vulnerable to violations of the ambient air quality standards. Five PSD construction permits were issued in SFY2018.

The PSD program also ensures that visibility in nearby national parks and wilderness areas is protected. NDEQ notifies federal land managers and nearby States and Tribes of pending PSD decisions so those authorities can express relevant concerns for potential impacts in their areas.

The number of air quality construction permit applications received each year varies depending on the state of the economy and business activity in the state. The graph below shows the number of construction permits received annually from SFY2014 through SFY2018.



## Air Dispersion Modeling

Air dispersion computer models are used to predict how air pollutants emitted by a facility spread and disperse and provide estimates of ground-level concentrations of the pollutants. These models use expected emissions, meteorological and geographical data, and other factors to estimate potential air pollutant impacts at a large array of surrounding locations. A model, in a relatively short amount of time, can predict in a standardized and cost-effective manner the ground-level impact of facility emissions.

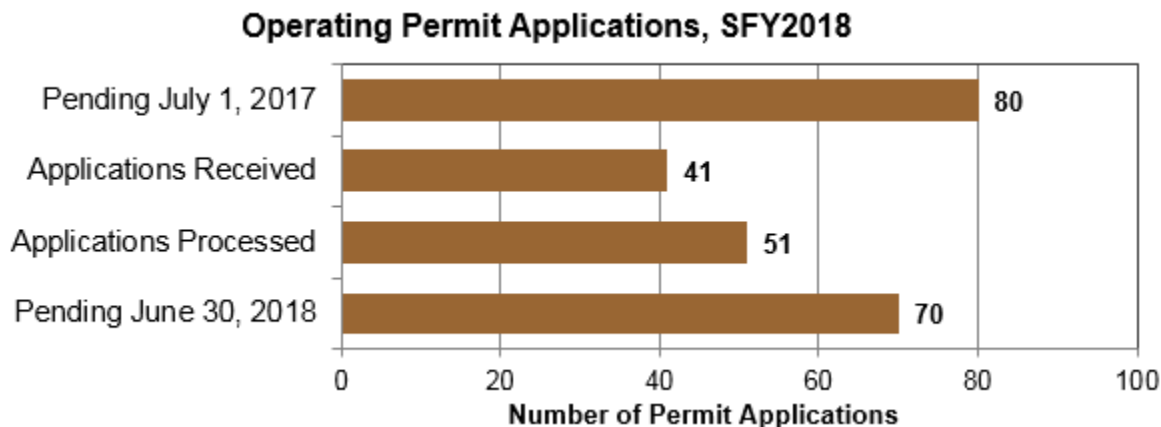
Modeling is required in conjunction with an air quality construction permit application when the expected increase in emissions of any regulated pollutant by a facility is greater than the emission rate specified in state or federal regulations. An air dispersion model is the primary tool used to determine if the predicted impacts from a new facility or modification will be in attainment with current air quality standards. Models are also used as a design tool to analyze the effects of different pollution control strategies.

The NDEQ air dispersion modeler reviews all aspects of the models that facilities provide as part of their construction permit applications. These reviews include facility emissions and meteorological data, background concentrations, the modeling protocol, and the final modeling results. NDEQ also informs the regulated community in Nebraska of any changes to EPA regulations concerning air dispersion modeling.

## Operating Permit Program

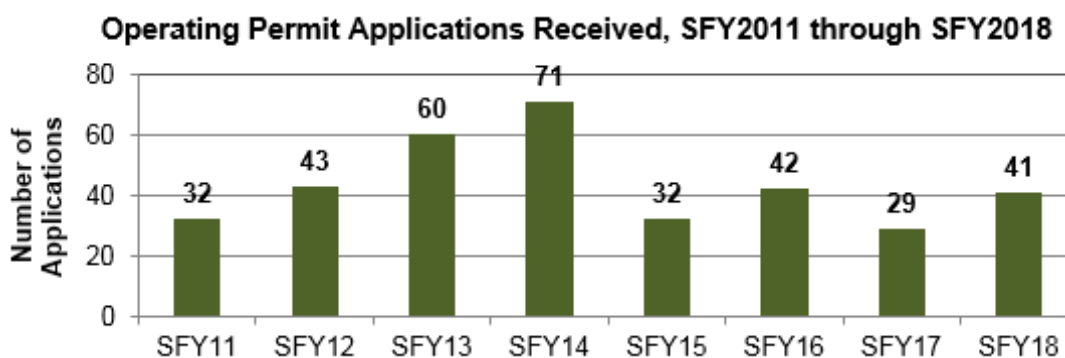
As required by Title V of the Federal Clean Air Act Amendments of 1990, Nebraska issues operating permits for major, or Class I, sources of certain air pollutants. NDEQ also regulates certain minor sources using Class II operating permits as required under Nebraska law. (The terms *major* and *minor* are defined in Title 129.) An operating permit must be applied for within 12 months of startup of a regulated air contaminant source, is valid up to five years, and must be renewed. An operating permit contains all applicable requirements for all emission points at a facility.

The chart below provides statistics on the number of operating permit applications received, processed, and pending during the 2018 state fiscal year. These statistics include general permit and permit-by-rule approvals.



The Nebraska operating permit program also offers an innovative alternative for sources that have taken measures to keep their emissions very low, called the Low Emitter Rule. To be eligible, a source must document five years of actual emissions at or below the threshold levels, meet other requirements established in the regulations, and not otherwise be required to obtain an operating permit. Since its inception in 1997, the Low Emitter Rule has significantly reduced the number of sources that need to obtain an operating permit, with no identifiable degradation of air quality in Nebraska.

The five-year renewal cycle, past delays in issuing renewals, and other factors have resulted in wide variations over time in the numbers of operating permits up for renewal each year. The following chart summarizes air quality operating permit applications received from SFY2011 through SFY2018 (applications for all application types, including applications for permit revisions, general operating permits, permit-by-rule, etc.).



### Permit Program Process Improvements

Individual construction and operating permits are complex, highly technical documents that must address all emission points for various pollutants at a facility. Consideration of a permit application thus requires a complex analysis process involving multiple steps and personnel. Beginning in late 2016 and continuing into SFY2018, staff of the Construction Permit unit undertook a process improvement project intended to reduce the lead time required to issue an individual air quality construction permit. By focusing on efficiency and eliminating redundant actions, the team reduced the number of expected process steps from 110 to 22.

Each construction and operating permit includes a fact sheet, which provides a technical description of the facility, each regulatory requirement an applicant must meet, and a statement of basis for each permit condition. Historically, fact sheet length has ranged from 10 to over 70 pages depending on the complexity of the facility, and preparation time has been as much as 192 hours. This year, Division staff analyzed the content of permit fact sheets to identify the most essential elements and analyzed the preparation process to pinpoint opportunities for streamlining. After these efforts, permit fact sheet length has been reduced by over 60% and process steps were reduced by 35% to 50%. In addition to significant time savings for both construction and operating permit writers, these more concise fact sheets should be easier for facility staff and agency compliance inspectors to understand, leading to increased compliance by facilities and more efficient inspections.

With the process improvement event that started in 2016, fact sheet project in 2018, and other smaller continued improvements, the average time required to reach a decision on a construction permit application has been reduced from 188 days to approximately 88 days.

These improvements also resulted in construction permits being actively worked on as they are received.

The same concepts from the construction permit process improvements were implemented in the operating permit program. These actions reduced a backlog of approximately 120 permit applications a couple years ago to approximately 50 today as the Air Quality program continues to receive new applications.

The Air Quality program has a notable amount of staff turnover, leading to recurring discussions about permit decisions, regulations, and other challenges. During the past year, the Division established an on-line Air Quality Permitting Compendium to archive information about existing permits, including permit decisions, regulatory determinations, and internal procedures. This tool will allow permit writers to quickly research past permit actions and facilitate more rapid permit decisions.

## **Compliance Section**

### **Ambient Air Quality Monitoring Program**

The Clean Air Act requires the U.S. Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment, which are called “criteria pollutants”. The Act established two types of national air quality standards: primary standards, which are intended to protect public health, and secondary standards, intended to protect the environment. National standards have been established for the following six pollutants:

- Particulate Matter
  - With a diameter of 10 micrometers or less (PM<sub>10</sub>)
  - With a diameter of 2.5 micrometers or less (PM<sub>2.5</sub>)
- Sulfur Dioxide (SO<sub>2</sub>)
- Nitrogen Dioxide (NO<sub>2</sub>)
- Carbon Monoxide (CO)
- Ozone (O<sub>3</sub>)
- Lead (Pb)

Nebraska has an additional ambient air quality standard for Total Reduced Sulfur (TRS). The TRS standard was adopted by the Environmental Quality Council in 1997 and is a public health-based standard.

#### ***Nebraska Ambient Air Monitoring Network***

The State of Nebraska operates an ambient air-monitoring network to determine compliance with the NAAQS and with state air quality standards. In addition, the Nebraska network includes a site for monitoring regional haze impacts that is part of a national program to help protect visibility in our National Parks and Monuments.

Three agencies are involved in the day-to-day operation of the network: NDEQ, Lincoln-Lancaster County Health Department, and Douglas County Health Department.

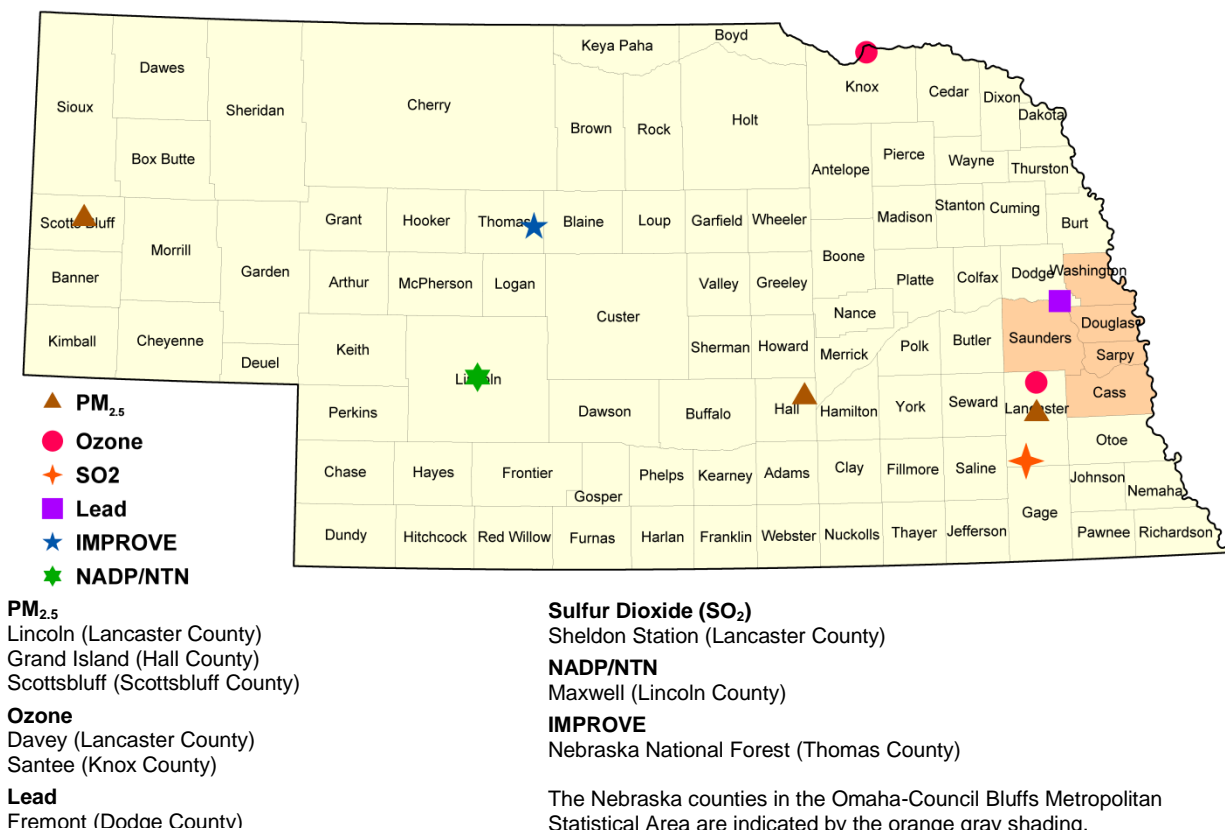


Omaha Air Quality Control (part of the Omaha Public Works Department) also provides technical support for network-related activities.

The Nebraska monitoring network includes sites at which air quality is monitored to evaluate attainment with the standards and other health- and welfare-associated priorities. NDEQ evaluates the adequacy of its monitoring network in accordance with federal regulations each year. Changes may be made to the network due to changes in monitoring regulations, updates to the ambient standards, perceived changes in pollution trends, and/or funding issues. Loss of site access is another consideration that occasionally affects the network.

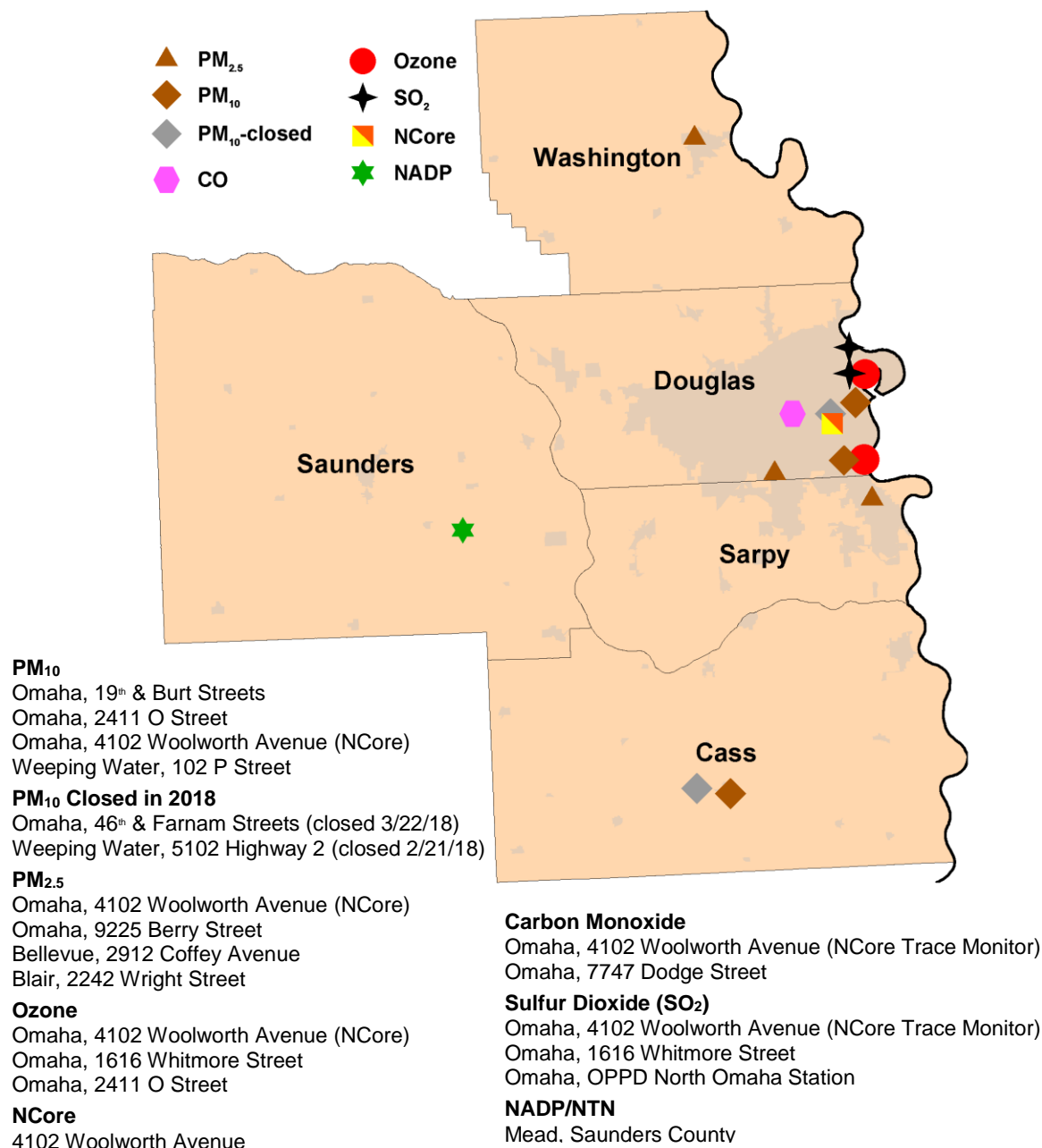
Most of the sites in the monitoring network evaluate pollutants for which standards are established (*i.e.*, PM<sub>2.5</sub>, PM<sub>10</sub>, CO, SO<sub>2</sub>, Lead, or Ozone). Some sites monitor for more than one pollutant. The NCore site in Omaha is part of a National Core Network that monitors for nine pollutant parameters. There are two additional types of sites in the network: Interagency Monitoring of Protected Visual Environments (IMPROVE) and National Atmospheric Deposition Program/National Trends Network (NADP/NTN) sites. (See maps below and on the following page for locations.)

**Nebraska Monitoring Sites Outside of the Omaha Metropolitan Statistical Area**



IMPROVE monitors provide information for studying regional haze that may impact the visibility in listed federal Class I National Park and Wilderness Areas. There is one IMPROVE monitoring site at Nebraska National Forest at Halsey, Nebraska. This site provides data on pollution trends and transport.

**Monitor Locations in the Nebraska Portion of the Omaha-Council Bluffs Metropolitan Area**



The National Trends Network (NTN) of the National Atmospheric Deposition Program (NADP) is a nationwide network of sites that monitor for pollutants deposited by precipitation. The deposition constituents examined include acidity, sulfates, nitrates, ammonium chloride, and base-cations (e.g., calcium, magnesium, potassium, and sodium). There are two NADP/NTN sites in Nebraska: one near Mead and one near North Platte. Both have been operational for over 20 years. These sites are operated by the University of Nebraska, with analytical and data development support from the NADP. The Mead site was upgraded to include mercury (Hg) deposition monitoring and is part of the NADP/Mercury Deposition Network (MDN). Both sites

maintain the NADP monitoring. Additional information about the NADP/NTN can be found at: <http://nadp.sws.uiuc.edu/NADP/>.

The state map on page 22 shows the nine monitoring sites that are located outside of the Omaha-Council Bluffs Metropolitan Statistical Area (counties shown in orange). Three of these sites are operated by NDEQ, either directly or under contract. The three sites in Lancaster County are operated by the Lincoln-Lancaster County Health Department with NDEQ oversight. The National Atmospheric Deposition Program site near North Platte is operated by the University of Nebraska. An additional ozone site near Santee in northeast Nebraska is operated by the U.S. EPA. A total reduced sulfur monitor previously operated by NDEQ in Dakota City was decommissioned in July 2016.

The map on page 23 shows the location of the monitoring sites located in the Nebraska portion of the Omaha-Council Bluffs Metropolitan Statistical Area (two sites monitor two pollutants and are represented by overlapping pairs of symbols). Nine of these sites, located in Douglas, Sarpy, and Washington Counties, are operated by the Douglas County Health Department with NDEQ oversight. A PM<sub>10</sub> site in Weeping Water in Cass County is operated by NDEQ. The National Atmospheric Deposition Program site at Mead is operated by the University of Nebraska.

Two coarse particulate (PM<sub>10</sub>) monitoring sites were closed in 2018: one at 46<sup>th</sup> and Farnam Streets in Omaha (due to equipment failure) and one in a rural area near Weeping Water (due to a decision by the landowner not to renew the site lease).

### ***Monitoring Information On-Line***

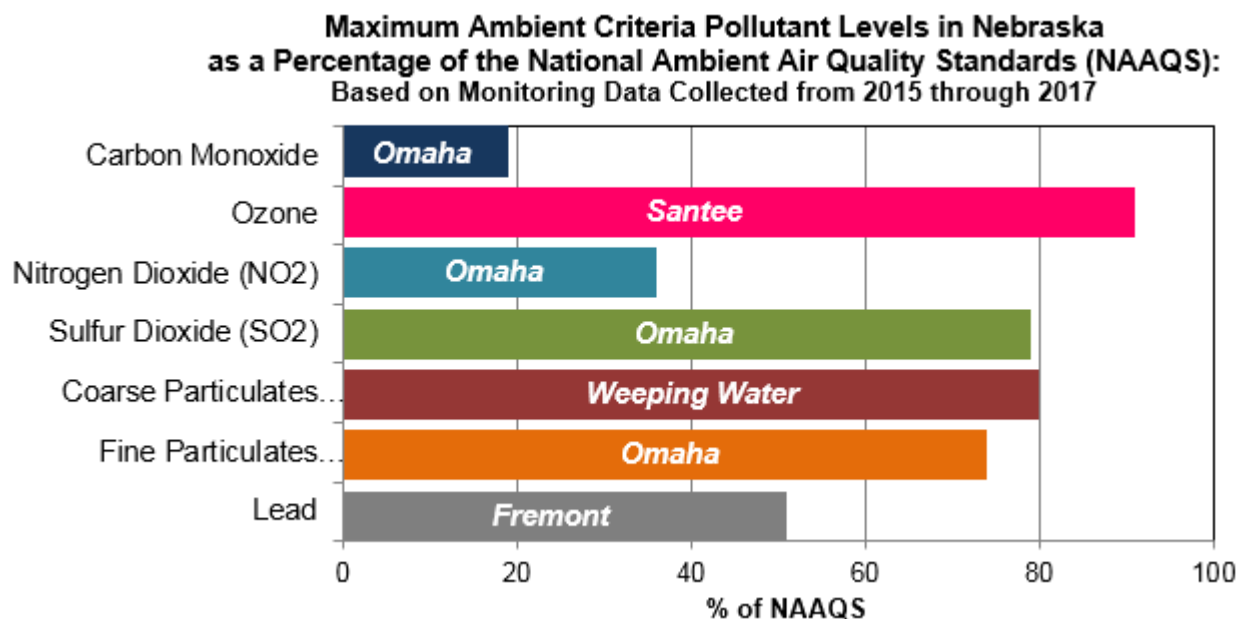
Data from continuous ozone and PM<sub>2.5</sub> monitors in Lincoln and Omaha are reported hourly to the EPA AirNow system, which makes current air quality information available to the public on the web at <http://www.airnow.gov/>. EPA uses the data to calculate an hourly Air Quality Index (AQI) for each monitor location. The AQI is a numeric rating of the current air quality that provides the public with a quick and simple means to evaluate current air quality in each metro area. The Douglas County Health Department and Lincoln-Lancaster County Health Department websites provide links to current AQI values for their cities. The Douglas County Health Department also participates in the ENVIROFLASH program that allows members of the public to sign up to receive air quality alerts via email.

### ***Compliance with National Ambient Air Standards (NAAQS)***

Current air quality monitoring data shows that all areas of Nebraska are in attainment (in compliance) with the NAAQS. The chart on the next page shows where the highest air pollutant levels are being detected in Nebraska for each criteria pollutant and how their levels compare to the NAAQS. (A reading of greater than 100% would mean that the NAAQS standard was exceeded, but the highest readings for all criteria pollutants are well below 100%.)

The U.S. EPA has designated all of Nebraska as “Attainment/Unclassifiable” with respect to the NAAQS for sulfur dioxide except for Lancaster County, which was designated “Unclassifiable” in 2016 (due to the need for additional characterization), and Douglas County, which will be designated by the end of 2020. The latter two counties include coal-fired power plants in North Omaha and near Hallam, respectively. Two additional sulfur dioxide monitoring sites were established at the end of 2016 to provide data on the air quality at these sites. Initial

monitoring data indicates that sulfur dioxide levels at these locations are in attainment/compliance with the NAAQS.



The Division compiles an annual Ambient Air Monitoring Network Plan that provides a more detailed analysis of ambient air monitoring data, pollutant trends through time, and NAAQS compliance. These reports are available on the agency website: [http://deq.ne.gov/Publica.nsf/Pubs\\_Air\\_Amb.xsp](http://deq.ne.gov/Publica.nsf/Pubs_Air_Amb.xsp).

### Inspections and Facility Compliance

The Compliance Program is responsible for conducting compliance inspections of air pollution sources, responding to citizen complaints, observing and evaluating emission tests, and the acid rain program.

Consistent with the Nebraska Environmental Protection Act, the Air Quality Division attempts to obtain compliance with environmental regulations first through voluntary efforts. Voluntary compliance has helped bring about a better working relationship with the regulated community without sacrificing environmental quality. However, enforcement actions are pursued by the Agency when compliance issues are serious, chronic, or cannot otherwise be resolved. In certain instances an enforcement settlement may include a Supplemental Environmental Project to further the Department's goals to protect and enhance public health and the environment.

## SFY2018 Compliance Activity Summary

Compliance Activity	NDEQ	LLCHD*	OAQC*
On-site Inspections	141	120	27
Facility Stack Tests Conducted	98	11	3
On-site Observations Conducted	20	0	3
Continuous Emission Monitoring Audits Conducted	47	2	0
On-site Observations Conducted	17	0	0
Complaints Received	93	75	99
Burn Permits Issued	38	56	46
Burn Permits Denied	0	3	2
Burn Permits Withdrawn	0	0	0

\*LLCHD – Lincoln Lancaster County Health Department; OAQC – Omaha Air Quality Control

## Emission Inventory and Emission Fees

Each year the Department conducts an inventory of emissions from major industrial sources and a representative sample of lower-emitting minor industrial sources. Every three years, the Department assists the EPA in preparing a comprehensive national inventory of emissions. The next national inventory compiled will include emissions reported by our sources for the 2017 calendar year. The emissions inventory is used to support the planning efforts for national rulemaking and to assess trends in emissions through time. Emission inventories are due on March 31<sup>st</sup> each year.

NDEQ also uses the emission inventories to determine the assessment of annual emission fees. Major sources of air pollution are required to pay emission fees for each ton of pollutant actually emitted during the calendar year. The maximum emission for which a fee is assessed is 4,000 tons per pollutant. For electrical generating facilities with a capacity between 75 and 115 megawatts, the maximum emission for which a fee is assessed is 400 tons per pollutant. The Department attempts to set the fee rate at the minimum level needed to pay reasonable direct and indirect costs of developing and administering the air quality permit program. An analysis detailing how the Department arrived at the fee rate is made available to fee payers and is on the NDEQ website. The rate for emissions generated in 2016 and 2017 was \$78 per ton.

## Planning

The Air Quality Division is responsible for maintaining state air quality regulations and the National Ambient Air Quality Standards (NAAQS) and for providing expert information on the National Emissions Standards for Hazardous Air Pollutants (NESHAP) and New Source Performance Standards (NSPS). The Division also provides support and training resources to the regulated community and the general public. Brief information updates

about important happenings in the air quality regulatory world are provided to interested parties via email through the AirNews listserv.

### **Planning for Air Quality Issues in Nebraska**

NAAQS are reviewed periodically based on the most recent scientific information available and revised or retained as appropriate. When a new or revised standard is issued (even if the standards are retained), states must determine if they are in attainment with the standard and, if they are not, take the necessary corrective action. States are required to submit to EPA their recommendations for attainment/nonattainment designations and State Implementation Plans (SIPs) for each standard. The Division also administers local agreements with Lincoln-Lancaster County Health Department, the City of Omaha Air Quality Control division, and the Douglas County Health Department for their delegated functions in air quality permitting, compliance, and planning.

Nebraska is currently considered in attainment with all of the National Ambient Air Quality Standards. Recent planning activity is addressing regulatory issues concerning sulfur dioxide, ozone, and lead, as well as the Regional Haze Rule.

#### ***Sulfur dioxide (SO<sub>2</sub>)***

The 2010 sulfur dioxide (SO<sub>2</sub>) standard requires that states demonstrate attainment in the areas surrounding large sources of this pollutant. NDEQ submitted Nebraska's designation recommendation of attainment for the areas surrounding three major sources to EPA in 2015. EPA designated two of these sources as in attainment in early 2016; the third (Sheldon Station in Lancaster County) was designated unclassifiable, and would require further characterization.

To supplement the 2010 SO<sub>2</sub> standard, the EPA finalized the Data Requirements Rule (DRR) in 2015 to assist in implementation of the 2010 standard. This rule requires air quality agencies to characterize the air quality near sources that emit 2,000 tons per year or more of SO<sub>2</sub> by the use of air quality monitoring or pollutant dispersion modeling, or adopt enforceable SO<sub>2</sub> emission limits not to exceed 2,000 tons per year for the affected sources. Sources in the state subject to this rule are coal-fired power plants and include Whelan Energy Center (Adams County), Sheldon Station (Lancaster County), North Omaha Station (Douglas County), Gerald Gentleman Station (Lincoln County), and Nebraska City Station (Otoe County).

Areas surrounding Gerald Gentleman Station and Nebraska City Station were characterized by modeling, and EPA designated them as "unclassifiable/attainment" in 2016. The area around Whelan Energy Center was characterized by modeling that demonstrated attainment with the standard. This area was designated as "attainment/unclassifiable" by EPA on April 9, 2018. Air quality monitors were installed in 2016 near Sheldon Station and North Omaha Station and began operation in January 2017. Monitoring will continue through 2020 and a designation recommendation for these areas will be submitted to EPA in early 2021.

The DRR requires annual reporting (termed "ongoing requirements") on areas that were characterized by modeling, and this year's report was submitted in June 2018. The three facilities subject to these ongoing requirements include Whelan Energy Center, Gerald Gentleman Station, and Nebraska City Station. Emissions data from these facilities were evaluated in June 2018 and indicated that all areas continue to demonstrate attainment with the federal standard.

**Ozone**

EPA issued revised ozone standards in 2015, lowering the standard from 0.075 parts per million (ppm) to 0.070 ppm. In September 2016 NDEQ submitted its designation recommendation to EPA, which designated the entire state as “unclassifiable/attainment” with respect to the 2015 ground-level ozone standard. The revised State Implementation Plan for ozone is due to EPA in October 2018.

**Lead**

EPA issued lead standards in October 2016, retaining the level of the previous primary and secondary standard of 15 micrograms per square meter (3-month rolling average) issued in 2008. NDEQ’s designation recommendation of attainment for Nebraska was submitted to EPA in October 2017. Nebraska’s updated State Implementation Plan is due to EPA in October 2019.

**Regional Haze**

Introduction of particulates and industrial gases into the atmosphere can result in haze that reduces visibility. EPA implemented the Regional Haze Rule in 1999 to improve visibility in national parks and wilderness areas. The rule directs state and federal agencies to work together to achieve this goal. Numerous amendments to the Rule have been issued, most recently addressing Best Available Retrofit Technology (BART) determinations for particular pollutant sources.

NDEQ submitted the Regional Haze State Implementation Plan (SIP) for the first implementation period (2008-2018) in July 2011; in 2012, EPA issued a partial approval/partial disapproval of the SIP. The disapproved portions include the BART determination for sulfur dioxide for Gerald Gentleman Station and the state’s long-term strategy for regional haze insofar as it relied on the BART determination. This source participates in the Cross State Air Pollution Rule (CSAPR) program, which allots each source an emissions budget for SO<sub>2</sub> and allows trading of allotments. Emissions to date from this source have been below the allotted SO<sub>2</sub> budget under CSAPR, and no additional control measures have been required.

The Department submitted the Regional Haze Five-Year Progress Report in April 2017 and provided additional clarification to EPA to demonstrate progress toward visibility goals. At present, NDEQ is awaiting final approval from EPA, which will effectively finalize Nebraska’s obligations under the first implementation period of the Regional Haze Rule, ending in 2018. EPA is currently preparing to undertake review of portions of the Regional Haze Rule update published in January 2017.

The second implementation period of the Rule began in 2018, and Nebraska’s Revised SIP will be due to EPA in July 2021.

**Clean Power Plan and the Affordable Clean Energy Rule**

The Clean Power Plan, which was issued by EPA in 2015, would have regulated greenhouse gas emissions from fossil-fuel power plants. Nebraska was among 24 states to join a lawsuit against the Clean Power Plan in 2015, and this court action culminated in February 2016 when the plan was stayed by the U.S. Supreme Court. This action cancelled the September 2016 deadline for states’ initial submittals under the Plan. The Department

halted work on the planning process following the stay in 2016, and the court actions concerning the Clean Power Plan remained in abeyance at the close of SFY2018.

In March 2017 President Trump signed the Executive Order on Energy Independence, which directed EPA to review the Clean Power Plan and revise or repeal the plan if EPA determined that it causes unnecessary, costly burdens on coal-fired electric utilities, coal miners, and oil and gas producers. In December 2017 EPA issued an Advance Notice of Proposed Rulemaking, soliciting information from the public about potential future rulemaking to limit greenhouse gas emissions from power plants. In August 2018 EPA proposed the Affordable Clean Energy (ACE) Rule as a replacement for the Clean Power Plan. This rule would establish emission guidelines for states to use when developing plans to limit greenhouse gas emissions at power plants. NDEQ will begin planning for implementation of the ACE Rule after the final rule is issued.

### **Air Toxics Program**

EPA currently lists 187 substances as hazardous air pollutants, or air toxics, which are air pollutants known to cause cancer and other serious health impacts. The Division developed the Air Toxics Notebook on the NDEQ website as a reference on the air toxics program and NESHAP standards that have been issued by EPA and that are applicable to facilities in Nebraska. The Notebook is intended to help the regulated community and the public understand the air toxic regulations. For each standard the Notebook has a page that provides applicability information, regulatory citations, amendment dates, guidance documents, forms, and a listing of sources in NDEQ's jurisdiction that are subject to each NESHAP. During SFY2018 the Air Toxics coordinator brought the Notebook page for each of the 139 applicable standards up-to-date with current NESHAP regulations.



# CHAPTER 5:

## Land Management Division

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The Land Management Division protects human health and the environment from disposal or contamination on the ground, both on the land surface, or spills that migrate below the land surface. This Division regulates both solid waste and hazardous waste. The Division is composed of: Planning and Aid, which is composed of several waste-related grant programs; Voluntary Cleanup Program (VCP) and Brownfields; the hazardous waste Resource Conservation and Recovery Act (RCRA) program; Superfund; and the Integrated Waste Management (IWM) programs.

### Planning and Aid Section

Land Planning and Aid includes the following programs: the Waste Reduction and Recycling Incentive Grants Program, including Scrap Tire Grants; the Litter Reduction and Recycling Grant Program; the Illegal Dumpsite Cleanup Program; and the Landfill Disposal Fee Rebate Program.

Responsibilities of the Land Planning and Aid Section include:

- Oversight and review – The Section reviews grants submissions; performs compliance inspections; monitors the activities, budgets, and equipment purchases of grantees; and conducts quarterly performance report reviews.
- Outreach – The Section promotes the availability of grant funding, coordinates the ranking process, coordinates grant awards, and provides integrated waste management information to the public.

### Online Grant Application and Reporting

In FY2014, applications for the Waste Reduction and Recycling Incentive Grants Program and the Litter Reduction and Recycling Grant Program were converted from paper-based to an online process. Applications are now filled out and submitted on NDEQ's website. The reporting and reimbursement functions for these two grant programs were converted to an online process in FY2015. As of FY2017, two more applications are available online: 1) Deconstruction of Abandoned Buildings, and 2) Cost-sharing for Civil Engineering Uses of Scrap Tires. These changes have resulted in time and material savings to both NDEQ and the grant program recipients. Online information is located on NDEQ's web site at <http://deq.ne.gov>. Select the "Land and Waste" tab and then select the "Waste Planning and Aid Programs" tab.

### New Legislation

LB 1101, passed in 2016, directed NDEQ to conduct a study to examine the status of recycling and solid waste management programs operated by the department. In accordance with LB1101, NDEQ appointed a nine-member committee to provide input on the study and selected a consultant to prepare the study. Two public meetings were conducted in October, 2017, and public comments were invited through November 7, 2017. NDEQ provided a report of its findings to the Legislature by December 15, 2017.

The study looked at the current Litter Reduction and Recycling grant program and the Waste Reduction and Recycling Incentive grant program and discussed if they should be merged or amended. The study also discussed conducting a needs assessment with regard to recycling and composting

programs in the state, potential funding sources, methods for public-private partnerships, and potential revisions to the existing grant programs to address solid waste management issues in a proactive manner. A copy of the study is available on the Department's web site.

### **Expected Service Life**

The Planning and Aid Section grant programs utilize an expected service life procedure for grant-funded equipment. The expected service life determines how long the grantee is responsible for reporting equipment status to NDEQ and how long NDEQ maintains an interest in the equipment.

An expected service life is assigned to all equipment purchased with grant funds (in whole or in part) that has a value of \$1,000 or more per item. Equipment costing less than \$1,000 can be assigned an expected service life on a case-by-case basis. Purchase of equipment is documented at the time of purchase. At the end of the grant period, the grantee is provided a sticker to properly identify the equipment and is notified of the length of the expected service life.

### **Equipment Redistribution**

When grant-funded equipment with an existing expected service life is no longer being used, it is made available for redistribution to other users. One redistribution of equipment was made in 2018.

### **Nebraska Department of Environmental Quality/Nebraska Environmental Trust Partnership**

In July 2018, the Nebraska Department of Environmental Quality and the Nebraska Environmental Trust entered into a Partnership to ensure agency resources are managed in a fiscally responsible manner by agreeing to:

- Participate in the grant review process on those projects where there is a potential for grant awards from both organizations.
- Appoint individuals that will ensure coordination occurs between our organizations.
- Commit to revising the Partnership anytime there is a personnel change, new grant programs are created, or existing programs end or are substantially modified.
- Share information on grant awards and grantees that are non-compliant with award conditions or environmental regulatory requirements.
- Meet annually and as critical program or project needs arise for the purpose of discussing issues of mutual concern and opportunities to enhance the Partnership.

### **Nebraska Environmental Quality Council Action**

At the November 15, 2018 meeting of the Nebraska Environmental Quality Council, the following actions were taken in response to Governor Ricketts' Executive Order 17-04:

1. Title 133 – Litter Reduction and Recycling Grant Program
  - Language that was considered to be advisory on the proper way to prepare information required in the application was removed and will be included in a guidance document.
  - Language in the remaining regulations will require a grant recipient to enter into a grant agreement in order to receive funds. Post-award requirement language was removed from the regulations and will be enforced through the grant agreement.
  - The threshold for requiring cost estimates/bids was reduced from \$5,000 to \$2,000. The purpose is to align the NDEQ with standards established by the Department of Administrative Services.
  - Regulatory language that repeats statutory requirements was removed.

2. Title 199 – Waste Reduction and Recycling Incentive Grants Program

- Language that was considered to be advisory on the proper way to prepare information required in the application was removed and will be included in a guidance document.
- Language in the remaining regulations will require a grant recipient to enter into a grant agreement in order to receive funds. Post-award requirement language was removed from the regulations and will be enforced through the grant agreement.
- The threshold for requiring cost estimates/bids was increased from \$0 to \$2,000. The purpose is to align the NDEQ with standards established by the Department of Administrative Services.
- Regulatory language that repeats statutory requirements was removed.

In other action taken by the Environmental Quality Council on November 15, 2018, a hearing was held to decide the 2019 Litter Percentage Allocation. Each year, the Environmental Quality Council establishes the percentage of how the funds will be allocated for each grant category. The Department’s recommended percentage allocations for 2019 were based on the actual applications received:

Category	2019 Eligible Requests	
Recycling	52.50%	\$1,443,698.00
Public Education	43.60%	\$1,196,857.00
Cleanup	3.90%	\$106,220.00
<b>Totals</b>	100%	\$2,746,775.00

The Department asked for the ability to adjust the percentages by up to 10% for the 2019 grant year, if warranted. The Environmental Quality Council granted the Department the ability to adjust the percentages by up to 20%. Prior to the hearing, the Department received nine letters in support of flexibility from 15% to 18%. One person gave testimony at the hearing, reading one of the letters that had been previously submitted.

**New Grant Application Guidance**

Grant application guidance was prepared in 2018 to provide direction and set limits on grant fund expenses. The purpose is to provide fair and equitable reimbursements, especially when requests exceed the amount of grant funding available. The guidance document was discussed by a subcommittee of the Nebraska Environmental Quality Council in the fall of 2018, and accepted at the November 15, 2018 Environmental Quality Council meeting. The guidance will affect grant applications received after January 1, 2019.

**Alignment of the Waste Reduction and Recycling Incentive Grant Program and Litter Reduction and Recycling Grant Program grant terms to a calendar year**

By 2020, the Waste Reduction and Recycling Incentive grant term will change from a fiscal year to a calendar year. With this change, both the Litter Reduction and Recycling and Waste Reduction and Recycling Incentive grant programs will be on a calendar year, and more closely align with the grant application period of the Nebraska Environmental Trust. To transition to a calendar year, the 2019 Waste Reduction and Recycling Incentive grant awards will be for a six-month term, from July 1 to December 2019, rather than a one-year term. All 2020 grant terms will be from January 1 to December 31, 2020.

## Waste Reduction and Recycling Incentive Grants Program

In 1990, the Nebraska Legislature passed Legislative Bill 163, the Waste Reduction and Recycling Act, which created the Waste Reduction and Recycling Incentive Grants Program.

There are three sources of revenue for this program:

- A business fee on sales of tangible personal property, which generates about \$600,000 annually.
- A \$1 per tire fee on the retail sale of new tires in Nebraska, which generates about \$2.2 million annually;
- Fifty percent of the \$1.25 per ton disposal fee on solid waste disposed of in permitted landfills, which generates approximately \$1.2 million annually for grant awards.

The Waste Reduction and Recycling Incentive Fund provides grants to private, non-profit, and government organizations to assist in financing sound integrated waste management programs and projects. These programs and projects may include but are not limited to: 1) recycling systems, 2) market development for recyclable materials, 3) intermediate processing facilities and facilities using recyclable materials in new products, 4) food waste composting, 5) yard waste composting and composting with sewage sludge, 6) waste reduction and waste exchange, 7) household hazardous waste programs (HHW), 8) electronic waste collections, 9) pharmaceutical collections, 10) the consolidation of solid waste disposal facilities and use of transfer stations, 11) and incineration for energy recovery. A portion of the grant funds are obligated to fund scrap tire recycling and/or reduction projects, and another portion of the grant funds are available to smaller cities and counties for abandoned building deconstruction.

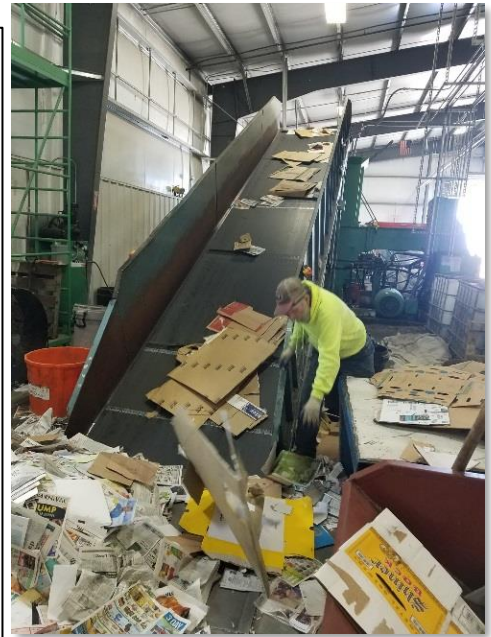
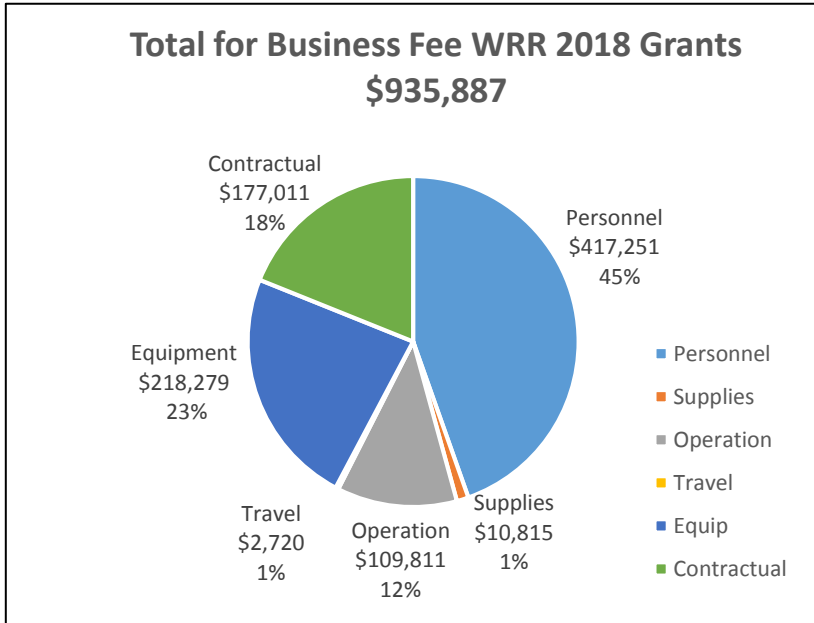
<b>Fund Summary</b> <b>Waste Reduction and Recycling Fund</b> <b>July 1, 2017 - June 30, 2018</b>	
<b>Fund Balance June 30, 2017</b>	<b>\$2,190,556</b>
<b>Revenues:</b>	
New Tire Fees	\$2,278,727
Business Fees	\$417,778
Solid Waste Disposal Fee	\$1,452,903
Interest, Grant Returns	\$32,769
Miscellaneous	\$12,954
Operating Transfers Out	\$(1,020,000)
<b>Net Collections for Year</b>	<b>\$3,175,131</b>
<b>Expenditures:</b>	
Administration	\$444,570
Grant Funds Expended*	\$4,319,833
<b>Total Expenditures FY 2018</b>	<b>\$4,764,403</b>
<b>Fund Balance June 30, 2018</b>	<b>\$601,284</b>

\* Because grants funds are expended on a reimbursement basis, total grant funds expended in a fiscal year will differ from the amount of grants awarded in that fiscal year.

**Summary of Activities** - For FY2018, NDEQ awarded \$3,491,217 for Waste Reduction and Recycling Incentive Grants to 138 projects. Twenty-two of these grants were awarded from the Business Fee category (\$935,887), 10 were awarded from the Disposal Fee category (\$964,113), and 106 were awarded from the funds prioritized for scrap tire projects (\$1,591,217). The following lists indicate the locations across Nebraska that received funds.

### Waste Reduction & Recycling Grants for FY2018

<b>Business Fee: \$935,887 for 22 grants</b>			
Alliance	Keep Alliance Beautiful	\$51,406	Public Education and Recycling Center Operations
Chadron	Keep Chadron Beautiful	\$42,313	Cardboard and Paper Recycling
Chadron	Keep Chadron Beautiful	\$3,250	Host Electronic Waste Collection Event
Fremont	Horizon Biofuels, Inc.	\$170,000	Industrial Wood Shredding for Alternative Fuel and Animal Bedding
Fremont	Keep Fremont Beautiful	\$32,144	Host one Household Hazardous Waste Collection Event
Grand Island	Grand Island Area Clean Community System	\$112,661	Household Hazardous Waste Collection Facility Operations
Hebron	Trailblazer Resource Conservation & Development	\$16,500	Host Electronic Waste Collection Event
Lexington	Lexington Area Solid Waste Agency	\$24,768	Host 3 Household Hazardous Waste Collection Events
Lincoln	Keep Nebraska Beautiful	\$68,461	Operate 3 Statewide Recycling Projects
Lincoln	Lincoln Public Schools	\$24,892	Compost Program to Divert Food Waste from the Landfill
Lincoln	Uribe Refuse Service	\$33,333	Assistance with the Food Waste Compost Project
Lincoln	Nebraska Recycling Council	\$48,728	Hub and Spoke Recycling Project
Louisville	Keep Cass County Beautiful	\$1,999	Host 4 Electronic Waste Collection Events
North Platte	Keep North Platte/Lincoln County Beautiful	\$12,336	Work with Businesses on Recycling & Waste Reduction
Oakland	Nebraska Loess Hills RC&D Council	\$17,142	Host 3 Household Hazardous Waste Collection Events
Oakland	Nebraska Loess Hills RC&D Council	\$7,662	Host 1 Electronic Waste Collection Event
Ogallala	Keep Keith County Beautiful	\$7,280	Host 2 Electronic Waste Collection Events
Ogallala	Western Resources Group	\$96,065	Purchase a trailer to move recycling containers
Ogallala	Keep Keith County Beautiful	\$6,455	Host Household Hazardous Waste Collection Event
Omaha	Keep Omaha Beautiful	\$38,494	Public Education Recycling and Under the Sink Promotion
Scottsbluff	Keep Scottsbluff/Gering Beautiful	\$68,875	Host Household Hazardous Waste & Pharmaceutical Collection Events
Tecumseh	Five Rivers RC&D	\$51,123	Host Electronic Collection Event

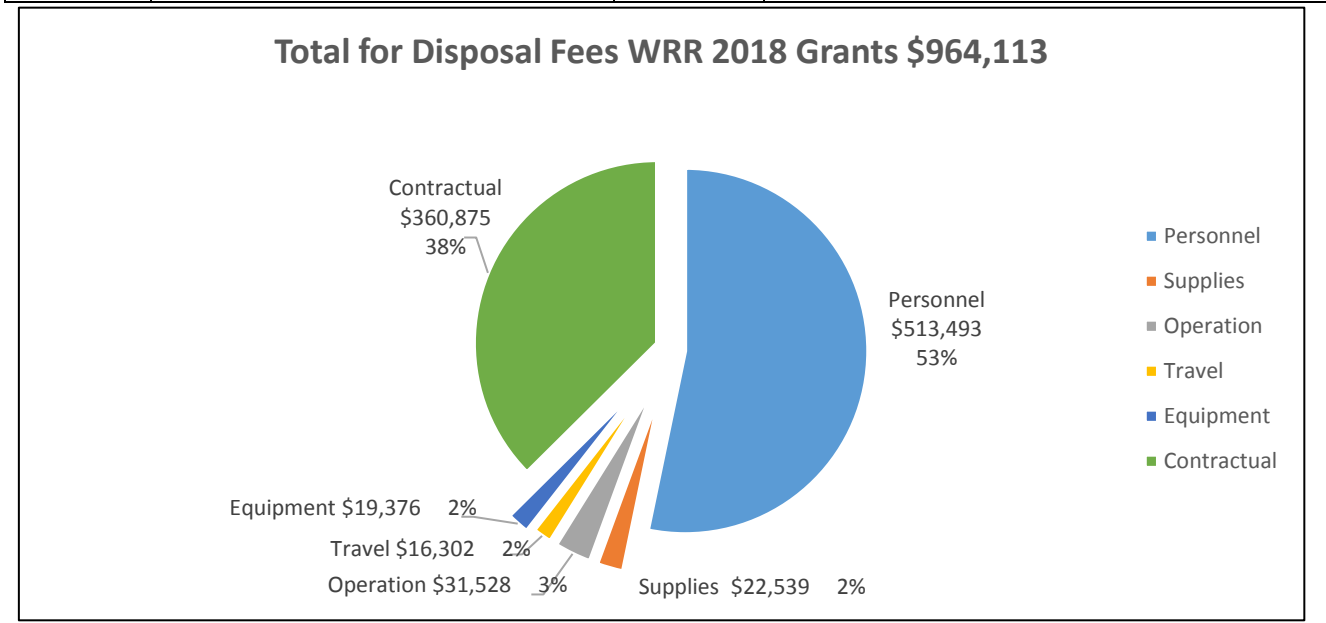


*Photo provided by Western Resources Group, who recycle cardboard and paper to create animal bedding.*



*Photos provided by Western Resources Group, who recycle cardboard and paper to create animal bedding.*

Disposal Fee: \$964,113 for 10 grants			
Bristow	Village of Bristow	\$9,860	Build Concrete Pad for Recycling Area
Dodge	Village of Dodge	\$9,417	Crush Concrete for Street Improvement
Kearney	City of Kearney	\$19,376	Purchase Baler for Recycling Center
Lincoln	Lincoln Lancaster County Health Dept.	\$178,202	Operate Household Hazardous Waste Center
Lincoln	University of Nebraska	\$69,778	Work with Nebraska Business on Waste Reduction
Lincoln	Solid Waste Management Division	\$124,475	Cardboard Recycling Education
McCook	Red Willow County	\$189,833	Operate Household Hazardous Waste Center & Collection Events
Omaha	Under the Sink	\$337,500	Operate Household Hazardous Waste Collection Center
St. Paul	City of St. Paul	\$19,000	Recycling Education
Wayne	City of Wayne	\$6,672	Host Electronic Recycling Event





*Photos provided by the City of Omaha- Under the Sink Household Hazardous Waste Facility.*



**Deconstruction of Abandoned Buildings Grants**

There were no deconstruction grants applied for or granted in FY 2018.

The Deconstruction of Abandoned Buildings grant program, part of the Department’s Waste Reduction and Recycling Incentive grant program, provides funding to assist in the removal of abandoned structures. Building deconstruction means the physical dismantlement of a building’s components to recover the materials for reuse or recycling. The process decreases the amount of demolition material lawfully disposed of in landfills or improperly disposed of elsewhere. Nebraska cities of the second class, villages, and counties with a population of 5,000 or less are eligible to apply for funding. The buildings selected must not be on, or eligible to be on, the National Register of Historic Places.



**Scrap Tire Grants FY 2018**

The scrap tire grants are funded by the \$1 per tire fee on retail sales of new tires. In the fiscal year 2018, \$1,591,217 was awarded to 106 projects.

- Scrap tire cleanup events: 26 grants, \$558,742 awarded
- Completed projects for the partial reimbursement for the purchase of tire-derived products and/or crumb rubber: 69 grants, \$953,020 awarded
- Proposed projects for the partial reimbursement for the purchase of tire-derived products and/or crumb rubber: 11 grants, \$79,445

**Awarded Scrap Tire Cleanup Events**

Funding for tire collection site cleanups for political subdivisions. A total of twenty-six scrap tire cleanup grants were awarded in 2018 to political subdivisions. The grants totaled \$558,742 and proposed to clean up 5,294 tons of scrap tires.

<b>Scrap Tire Cleanup Events: 26 grants, \$558,742 awarded</b>			
Juniata	Adams County Highway Dept.	\$2,421	Clean up 21.06 tons of scrap tires that were picked up from Adams County ditches since 2012.
David City	Butler County	\$20,040	200 ton cleanup for Butler County.
Bellevue	City of Bellevue Street Department	\$4,600	40 ton cleanup for Bellevue residents.
Benkelman	City of Benkelman	\$11,272	100 ton cleanup for Dundy County.
Kearney	City of Kearney	\$23,970	300 ton cleanup for Buffalo County.
McCook	City of McCook	\$56,160	500 ton cleanup for Dundy, Hitchcock, Red Willow, Furnas, Chase, Hayes, and Frontier counties.
Valley	City of Valley	\$12,080	125 ton cleanup for parts of Douglas, Saunders, and Dodge counties.
Ponca	Dixon County	\$11,832	100 ton cleanup for Dixon County.
Lincoln	Emerald SID #6	\$47,992	500 ton cleanup for Lancaster and surrounding counties.
Beatrice	Gage County	\$32,102	375 ton cleanup for Gage County.
Hayes Center	Hayes County	\$13,980	125 ton cleanup for Hayes and Hitchcock counties.
Ainsworth	KBR Solid Waste	\$29,644	200 ton cleanup in Ainsworth for Brown, Rock, and Keya Paha counties.
Minden	Kearney County	\$20,214	200 ton cleanup for Kearney County.
Center	Knox County	\$10,210	100 ton cleanup for Knox County.
Hebron	Little Blue NRD	\$11,798	123 ton cleanup for Thayer County.
Geneva	Little Blue NRD	\$16,306	172 ton cleanup for Fillmore County.
Clay Center	Little Blue NRD	\$15,202	160 ton cleanup for Clay County.
West Point	Lower Elkhorn NRD	\$66,810	470 ton cleanup for Cuming, Burt, Dodge, Washington, Dakota, Thurston, Douglas, Sarpy, Colfax, and Stanton counties.
Red Cloud	Lower Republican NRD	\$7,842	80 ton cleanup for Webster County.
Hildreth	Lower Republican NRD	\$8,026	82 ton cleanup for Franklin County.

Alma	Lower Republican NRD	\$9,314	96 ton cleanup for Harlan County.
Nebraska City	Otoe County	\$55,150	600 ton cleanup for Otoe County.
Pawnee City	Pawnee County	\$6,351	75 ton cleanup for Pawnee County.
Madrid	Village of Madrid	\$23,660	200 ton cleanup for Perkins County.
Stapleton	Village of Stapleton	\$20,390	150 ton cleanup for parts of Logan, McPherson, & Lincoln counties.
Walthill	Village of Walthill	\$21,376	200 ton cleanup for Thurston County.



Photos provided by the City of Valley from their 2018 scrap tire cleanup event.



**Scrap Tire Partial Reimbursement for Purchase of Tire-Derived Products and/or Crumb Rubber**

For 2018 \$1,032,475 was awarded to eighty (80) projects to partially reimburse the purchase of tire-derived products and/or crumb rubber. Of the completed projects, 3,145,008 pounds of Nebraska recycled tire rubber were used, representing over 200,000 passenger tires.

<b>Partial Reimbursement for the Purchase of Tire-Derived Products and/or Crumb Rubber- Completed Projects: 69 grants, \$953,020 Awarded</b>			
Lincoln	4Views Academy	\$2,557	25% reimbursement of a poured-in-place playground surface.
Waverly	Anna Handley	\$1,875	50% reimbursement of rubber playground mulch.

Omaha	Armbrust Acres Home Owners	\$13,715	25% reimbursement of poured-in-place playground surface.
Bellevue	Bellevue Public School District	\$74,207	25% reimbursement of an artificial turf football field at Bellevue West High School. Reused 35-40% of the rubber infill from old artificial turf.
Bellevue	Bellevue Public School District	\$71,904	25% reimbursement of an artificial turf football field at Bellevue East High School. Reused 35-40% of rubber infill from old artificial turf.
Bellevue	Bellevue Shockers Softball Association	\$751	50% reimbursement of crumb rubber to top off infill for indoor baseball/softball field.
Bridgeport	Bridgeport Public Schools	\$15,571	50% reimbursement of rubber playground mulch & 25% reimbursement of 12 rubber swing mats and rubber timbers.
Callaway	Callaway Public School	\$11,913	50% reimbursement of rubber playground mulch and 25% reimbursement of 613 rubber access mats.
Carleton	Carleton Playground Committee	\$3,600	50% reimbursement of rubber playground mulch
Central City	Central City Public School	\$60,125	25% reimbursement of an artificial turf field.
Loup City	Central Nebraska Community Action Partnership Inc.	\$3,724	25% reimbursement of a poured-in-place rubber surface and 50% reimbursement of rubber playground mulch.
Blair	City of Blair	\$12,164	25% reimbursement of 2 poured-in-place playground surfaces.
Bloomfield	City of Bloomfield	\$628	25% reimbursement of six 8-foot benches.
Edgar	City of Edgar	\$853	50% reimbursement of rubber playground mulch.
Holdrege	City of Holdrege	\$12,650	25% reimbursement of rubber playground tiles.
Kearney	City of Kearney	\$16,132	25% reimbursement of a rubber playground tile surface and rubber playground mulch.
Norfolk	City of Norfolk	\$19,103	25% reimbursement of a poured-in-place playground surface.
Oshkosh	City of Oshkosh	\$2,597	50% reimbursement of rubber playground mulch.
St. Paul	City of St. Paul	\$2,200	25% reimbursement of a poured-in-place playground surface.
Cozad	Cozad Community Schools	\$9,939	25% reimbursement of maintenance coating system on athletic track surface.
Crete	Crete Public Schools	\$4,469	25% reimbursement of poured-in-place playground surface.
Elkhorn	Elkhorn Training Camp	\$15,252	25% reimbursement of an artificial turf field for soccer, football, baseball & lacrosse.
Falls City	Falls City Sacred Heart	\$1,400	50% reimbursement of rubber playground mulch.
Fremont	Fremont Public Schools	\$20,000	50% reimbursement of rubber playground mulch.
Fullerton	Fullerton Elementary School	\$1,710	50% reimbursement of rubber playground mulch.

Adams	Gold Crest Retirement Center	\$2,548	25% reimbursement of a poured-in-place playground surface.
Papillion	Hickory Hill PTO	\$3,894	25% reimbursement of rubber playground tiles.
Holdrege	Holdrege Public Schools	\$4,850	50% reimbursement of rubber playground mulch.
Imperial	Imperial Housing Authority	\$1,725	50% reimbursement of rubber playground mulch
Lincoln	Joann Maxey Elementary School PTO	\$4,255	25% reimbursement of rubber playground tiles.
Alliance	Keep Alliance Beautiful	\$6,339	50% reimbursement of rubber landscaping mulch.
Lincoln	Kelly's Kids	\$1,429	25% reimbursement of rubber playground tiles.
Lincoln	Lincoln Parks and Recreation	\$14,147	25% reimbursement of rubber playground tiles.
Lincoln	Lincoln Parks and Recreation	\$10,954	25% reimbursement of rubber playground tiles.
Lincoln	Lincoln Parks and Recreation	\$6,863	25% reimbursement of rubber playground tiles.
Lincoln	Lincoln Parks and Recreation	\$4,520	25% reimbursement of rubber playground tiles.
Lincoln	Lincoln Parks and Recreation	\$4,349	25% reimbursement of rubber playground tiles.
Lincoln	Lincoln Parks and Recreation	\$4,159	25% reimbursement of rubber playground tiles.
Lincoln	Lincoln Parks and Recreation	\$4,003	25% reimbursement of rubber playground tiles.
Lincoln	Lincoln Parks and Recreation	\$4,003	25% reimbursement of rubber playground tiles.
Lincoln	Lincoln Parks and Recreation	\$3,990	25% reimbursement of rubber playground tiles.
Lincoln	Lincoln Parks and Recreation	\$3,596	25% reimbursement of rubber tile playground.
Lincoln	Lincoln Parks and Recreation	\$2,795	25% reimbursement of rubber playground tiles.
Lincoln	Lincoln Parks and Recreation	\$1,762	25% reimbursement of rubber playground tiles.
Lincoln	Lincoln Parks and Recreation	\$1,476	25% reimbursement of rubber playground tiles.
Lincoln	Lincoln Parks and Recreation	\$790	25% reimbursement of rubber playground tiles.
Lincoln	Lincoln Parks and Recreation	\$718	25% reimbursement of rubber playground tiles.
Lincoln	Lincoln Parks and Recreation	\$718	25% reimbursement of rubber playground tiles.

Wahoo	Lower Platte North NRD	\$2,998	50% reimbursement of rubber playground mulch.
Milligan	Milligan Community Park	\$6,465	50% reimbursement of rubber playground mulch.
Omaha	Morning Star Preschool & Child Care Center	\$3,737	50% reimbursement of rubber playground mulch.
Morrill	Morrill Public Schools	\$3,745	Reimburse 50% of rubber playground mulch.
Omaha	Nebraska Lions Foundation	\$3,174	25% reimbursement of 39 six-foot park benches.
Ainsworth	North Central Development Center	\$3,750	50% reimbursement of rubber playground mulch.
Omaha	Omaha Public Schools	\$70,070	25% reimbursement of an athletic track surface.
Omaha	Omaha Public Schools	\$21,948	25% reimbursement of artificial turf football field.
Omaha	Omaha Public Schools Foundation	\$65,225	25% reimbursement of an artificial turf softball field.
Omaha	Omaha Public Schools Foundation	\$17,500	25% reimbursement of artificial turf baseball infield.
Osmond	Osmond Community Schools	\$4,400	50% reimbursement of rubber playground mulch.
Palmer	Palmer Public School	\$1,640	25% reimbursement of a poured-in-place playground surface.
Paxton	Paxton Consolidated Schools	\$8,778	25% reimbursement of rubber playground tiles and 50% reimbursement of rubber mulch.
Springfield	Springfield Platteview Community Schools	\$107,728	25% reimbursement of an artificial turf football field.
Springfield	Springfield Platteview Community Schools	\$26,996	25% reimbursement of an athletic track surface.
St. Paul	St. Paul Public School	\$10,300	50% reimbursement of rubber playground mulch.
Grand Island	St. Paul's Christian Childcare and Preschool	\$8,800	50% reimbursement of rubber playground mulch.
Wilber	The Gingerbread House	\$120	25% reimbursement of 8 rubber timbers.
Kearney	University of Nebraska at Kearney	\$101,999	25% reimbursement of artificial turf football field. Crumb rubber from old turf reused, Saved \$75,598 by reusing crumb rubber.
Greenwood	Village of Greenwood	\$7,888	25% reimbursement of a poured-in-place playground surface.
Hayes Center	Village of Hayes Center	\$2,837	50% reimbursement of rubber playground mulch.

Partial Reimbursement for the Purchase of Tire-Derived Products and/or Crumb Rubber-Proposed Projects: 11 projects, \$79,445 Awarded			
Arnold	Arnold Economic Development Corp	\$11,445	Proposed 50% reimbursement of rubber playground mulch.
St. Paul	City of St. Paul	\$500	Proposed 50% reimbursement of rubber playground mulch.
Lindsay	Holy Family Daycare	\$4,647	Proposed 50% reimbursement of rubber playground mulch
Lewiston	Lewiston Consolidated Schools	\$3,300	Proposed 50% reimbursement of rubber playground mulch.
Madison	Madison Public School	\$2,750	Proposed 50% reimbursement of rubber playground mulch.
Omaha	Morning Star Preschool & Child Care Center	\$3,705	Proposed 25% reimbursement of a poured-in-place rubber surface.
Lincoln	Nebraska Game & Parks Commission	\$28,413	Proposed 25% reimbursement of 198 picnic tables.
Tecumseh	Nemaha Natural Resources District	\$11,220	Proposed 50% reimbursement of rubber playground mulch.
Lincoln	St. Patrick Catholic School	\$8,152	Proposed 25% reimbursement of rubber playground tiles.
Tobias	Tobias Community Club/Village of Tobias	\$4,536	Proposed 50% reimbursement of rubber playground mulch.
Holdrege	Trinity Child Care	\$787	Proposed 50% of rubber playground mulch.



*Photos provided by the University of Nebraska-Kearney. Artificial turf was installed on Foster Field in Cope Stadium. Crumb rubber from their old turf was reused. They saved \$75,598 by reusing crumb rubber.*

### Litter Reduction and Recycling Grant Program

The Litter Reduction and Recycling Grant Program has been in existence since 1979. Its purpose is to provide funds to support programs to reduce litter, provide education, and promote recycling in Nebraska.

Funds from this program are provided from an annual fee assessed to manufacturers, wholesalers, and retailers having gross receipts of at least \$100,000, on products that commonly contribute to litter. For manufacturers, the annual litter fee is \$175 for each million dollars of products manufactured. The

annual litter fee for wholesalers and retailers is \$175 for each million dollars of sales made in the state. Approximately \$2 million is received annually.

The annual litter fee is imposed on products in the following categories:

- Food for human consumption, beverages, soft drinks, carbonated water, liquor, wine, beer and other malt beverages, unless sold by retailers solely for consumption indoors on the retailer's premises;
- Food for pet consumption;
- Cigarettes and other tobacco products;
- Household paper and household paper products;
- Cleaning agents; and
- Kitchen supplies.

<b>Fund Summary</b> <b>Litter Reduction and Recycling Fund</b> <b>July 1, 2017 - June 30, 2018</b>	
<b>Fund Balance June 30, 2017</b>	<b>\$1,656,132</b>
<b>Revenues:</b>	
Litter Taxes Collected	\$2,174,828
Interest, Grant Returns	\$28,081
Miscellaneous Adjustment	\$1,691
Operating Transfer Out	\$(730,000)
<b>Net Collections for FY 2018</b>	<b>\$1,474,600</b>
<b>Expenditures:</b>	
NDEQ Administration	\$330,395
Grant Funds Expended*	\$1,893,691
<b>Total Expenditures FY 2018</b>	<b>\$2,224,086</b>
<b>Fund Balance June 30, 2018</b>	<b>\$906,646</b>

In FY2018, \$1,306,370 was awarded to 53 Litter Reduction and Recycling Grant recipients. Grant funding is awarded to several types of programs, including non-profit groups, public and private entities, and over 20 Keep America Beautiful affiliates. Many of these programs utilize the Litter Reduction and Recycling Grant Program funds to leverage additional dollars for a comprehensive, statewide approach to litter reduction and recycling.

### FY 2018 Grant Allocations - Litter Reduction and Recycling Fund

In FY2018, NDEQ gave 53 Litter Reduction and Recycling Grant Program awards to organizations in Nebraska. The breakdown is as follows:

FY 2018 (July 1, 2017 – June 30, 2018)

<b>Public Education</b>	(50%)	21 grants	\$ 651,963
<b>Cleanup</b>	( 4%)	12 grants	\$ 50,569
<b>Recycling</b>	(46%)	<u>20 grants</u>	<u>\$ 603,838</u>
<b>Totals</b>	<b>100%</b>	<b>53 grants</b>	<b>\$ 1,306,370</b>

#### Public Education

In FY2018, 21 grants totaling \$651,963 were awarded under the category of Public Education. The Public Education programs educate citizens in the areas of litter reduction, cleanup, and recycling through a variety of individual and community activities. The citizens of Nebraska are cultivating a greater awareness of their impact on the environment through their purchasing and disposal actions. The educational programs are an excellent means of providing information on proper waste disposal, recycling and available products that contain recycled material. Priority is given to programs that promote markets for recycled materials or purchasing products made from recycled materials. The following list indicates the locations that received funds.

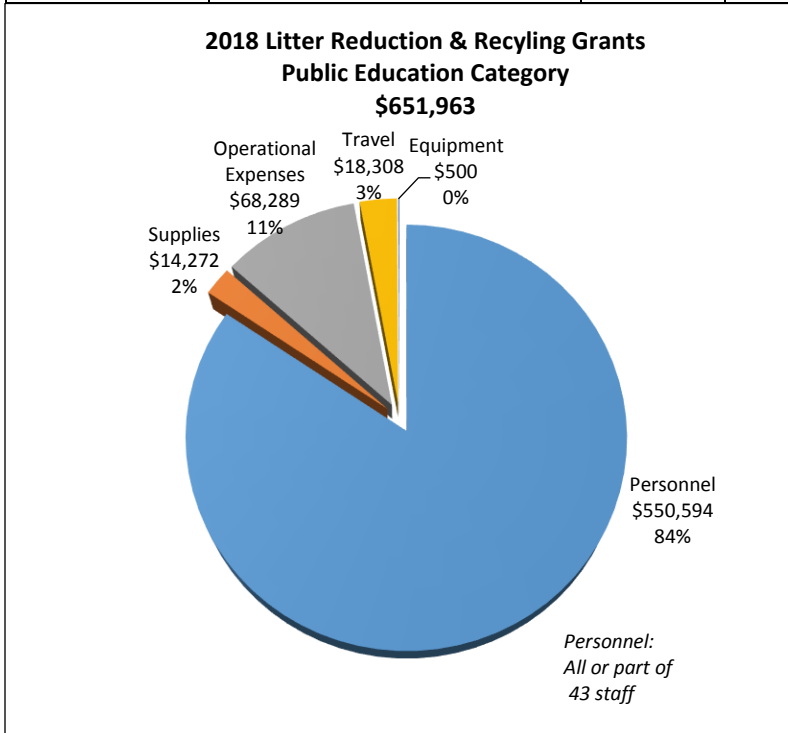
#### FY 2018 Public Education Grant Awards

Total Awarded - \$651,963 for 21 grants

<b>Public Education: \$651,963 for 21 grants</b>			
Alliance	Keep Alliance Beautiful	\$38,214	Litter reduction
Beatrice	Keep Beatrice Beautiful	\$28,873	Encourage recycling and promote reuse
Burwell	Loup Basin RC&D Council/Keep Loup Basin Beautiful	\$32,785	Litter Prevention and waste reduction/recycling in 13 counties
Chadron	Keep Chadron Beautiful	\$36,766	Litter reduction and recycling
Columbus	Keep Columbus Beautiful	\$21,039	Increase Recycling and reduce litter
Fremont	Keep Fremont Beautiful	\$42,783	Foster litter reduction and recycling
Grand Island	Grand Island Area Clean Community System	\$38,700	Litter reduction, recycling and reuse
Kimball	Keep Kimball Beautiful	\$16,241	Litter prevention, recycling and waste management
Lexington	Keep Lexington Beautiful	\$20,353	Recycling and litter reduction
Lincoln	Lincoln Children's Museum	\$ 4,530	Happy Hollow Green event
Lincoln	Lincoln/Lancaster County Health Dept.	\$68,482	Reduce illegal dumping, storm drain project
Louisville	Keep Cass County Beautiful	\$36,041	Litter reduction and waste management
Nebraska City	Keep Nebraska City Beautiful	\$13,072	Litter cleanups and waste reduction
Norfolk	Keep Norfolk Beautiful	\$21,492	Litter prevention, recycling, and waste handling
Norfolk	Lower Elkhorn NRD	\$375	Purchase recycling bins for 4th grade classroom



North Platte	Keep North Platte/Lincoln County Beautiful	\$46,086	Encourage a litter-free environment and waste reduction
Ogallala	Keep Keith County Beautiful	\$50,282	Eliminate litter and increase recycling
Omaha	Keep Omaha Beautiful	\$58,996	Litter prevention, waste reduction and recycling
Scottsbluff	Keep Scottsbluff/Gering Beautiful	\$20,278	Litter prevention, waste reduction, and recycling
Sidney	Keep Sidney Beautiful	\$21,606	Recycling in the community and businesses
South Sioux City	Keep Northeast Nebraska Beautiful	\$34,969	Reduce waste and eliminate litter



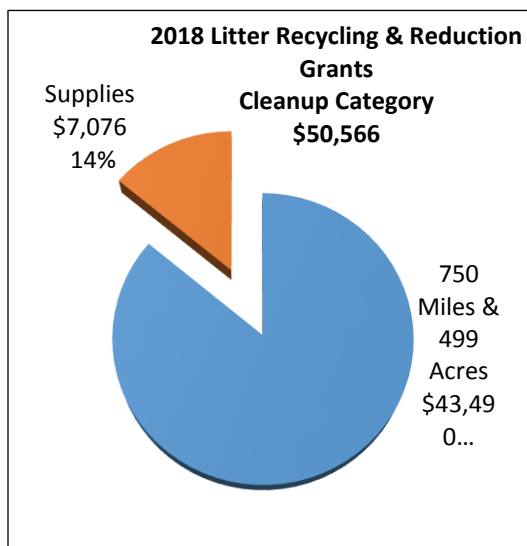
Photos provided by Keep Omaha Beautiful of a composting education event.

**Cleanup**

In FY2018, 12 grants totaling \$50,569 were awarded under the category of Cleanup. The cleanup programs utilize Nebraska residents of all ages to pick up litter and debris along Nebraska’s highways, waterways, recreation lands, urban areas, and other public-use areas within the state. Not only are the public areas improved through the removal of litter and debris, but also much of the material collected

during the cleanups is recycled. The recycling proceeds are often utilized to benefit the respective programs. The Cleanup grants will clean up litter from 750 road-side miles and nearly 500 public areas. The following list indicates the locations that received funds.

Cleanup: \$50,569 for 12 grants			
Beatrice	Keep Beatrice Beautiful	\$6,000	Clean up 100 miles and 60 acres
Chadron	Keep Chadron Beautiful	\$5,060	Clean up 100 miles
Crofton	City of Crofton	\$793	Clean up 9 miles and 34 acres
Grand Island	Grand Island Area Clean Community System	\$6,000	Clean up 125 miles and 125 acres in 3 counties
Lincoln	Lincoln/Lancaster County Health Dept.	\$6,000	Clean up 90 miles and 150 acres
Louisville	Keep Cass County Beautiful	\$1,600	Clean up 16 miles and 80 acres
North Platte	Keep North Platte/Lincoln County Beautiful	\$6,000	Clean up 120 miles
Ogallala	Keep Keith County Beautiful	\$3,000	Clean up 50 miles and 50 acres in 4 counties
Omaha	Keep Omaha Beautiful	\$6,000	Clean up 10 miles
Scottsbluff	Keep Scottsbluff/Gering Beautiful	\$5,466	Clean up 100 miles in 5 cities
Steinauer	Steinauer Community Club	\$650	Clean up 10 miles
Wakefield	ESU #1	\$4,000	Clean up 20 miles in 6 counties



Photos provided by Keep Cass County Beautiful.

**Recycling**

In FY2018, 20 grants totaling \$603,838 were awarded under the category of Recycling. The recycling programs provide an alternative to the disposal of solid waste in Nebraska's landfills. The programs recycle more than just aluminum, paper, glass and plastic. Materials such as electronic computer components, paint, aerosol cans, fertilizer, pesticides, and household hazardous waste are collected. Materials are either reprocessed to be used again or are disposed of in an environmentally friendly manner. Recycling conserves our natural resources, landfill space and energy. Jobs are created and revenue is generated through the opportunities that recycling provides. Recycling efforts that promote the purchase of recycled content products continue to receive priority for funding. This support helps to "close the loop" and enhance the recycling efforts in Nebraska. The following list indicates the locations that received funds.

<b>Recycling: \$603,838 for 20 grants</b>			
Alliance	Keep Alliance Beautiful	\$33,050	Operate a permanent recycling center
Chadron	Keep Chadron Beautiful	\$ 4,200	Host a one-day electronics recycling event
Chadron	City of Chadron	\$75,000	Crush 20,000 tons of concrete to use for road improvement
Imperial	City of Imperial	\$ 1,425	Host an electronics collection event
Imperial	City of Imperial	\$62,500	Purchase a horizontal baler for recycling center
Kimball	Keep Kimball Beautiful	\$40,700	Operate a permanent recycling center
Lexington	Keep Lexington Beautiful	\$ 3,595	Host a paper shred day
Lincoln	Solid Waste Management	\$30,080	Purchase 10 roll-off containers for recycling
Lincoln	NE Recycling Council	\$50,751	Assist business with recycling services
Lyons	City of Lyons	\$10,150	Help with the purchase of a fork lift for the recycling center
Mead	Integrated Recycling LLC	\$35,495	50% of the cost for a food depackager/perforater and 2 tank trailers
Nebraska City	Nebraska City Utilities	\$37,342	50% of the cost for a wood chipper
Norfolk	GreenFiber, LLC	\$22,180	Create a training/coaching program for rural areas
North Platte	Keep North Platte/Lincoln County Beautiful	\$17,000	Reduce waste generation through education
Ogallala	Keep Keith County Beautiful	\$10,201	Host a one-day electronics collection event
Ogallala	Western Resources Group	\$54,510	Manufacture animal bedding and garden mulch
Omaha	Angels on Wheels	\$53,844	Host 33 electronic collections events in Omaha
Omaha	Firstar Fiber Corp.	\$27,639	Create a training/coaching program for rural areas
Schuyler	Keep Schuyler Beautiful	\$22,576	Operate a permanent recycling center
Tekamah	Papio Missouri River NRD	\$11,600	Host 4 electronic waste collection events

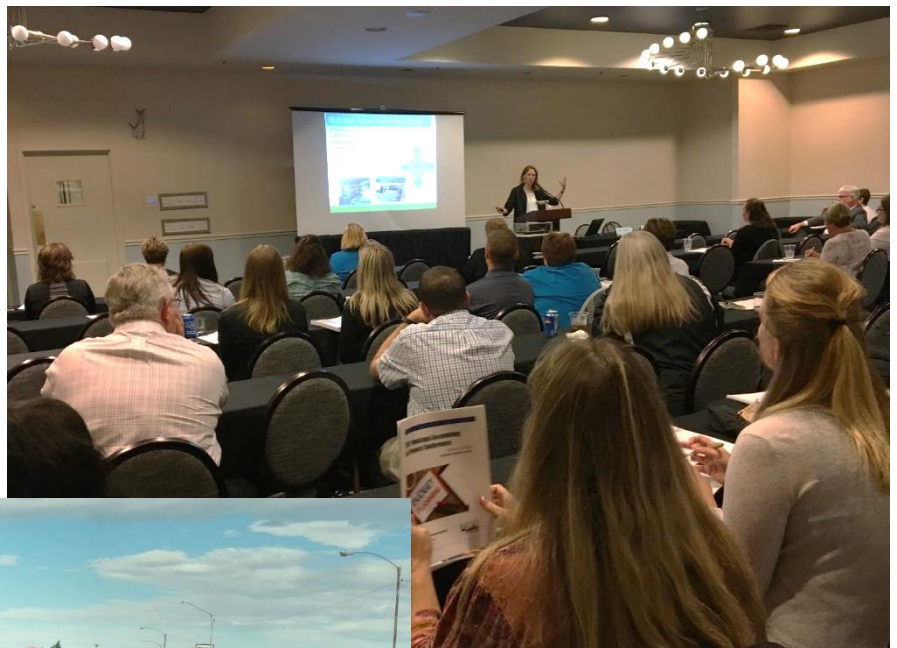
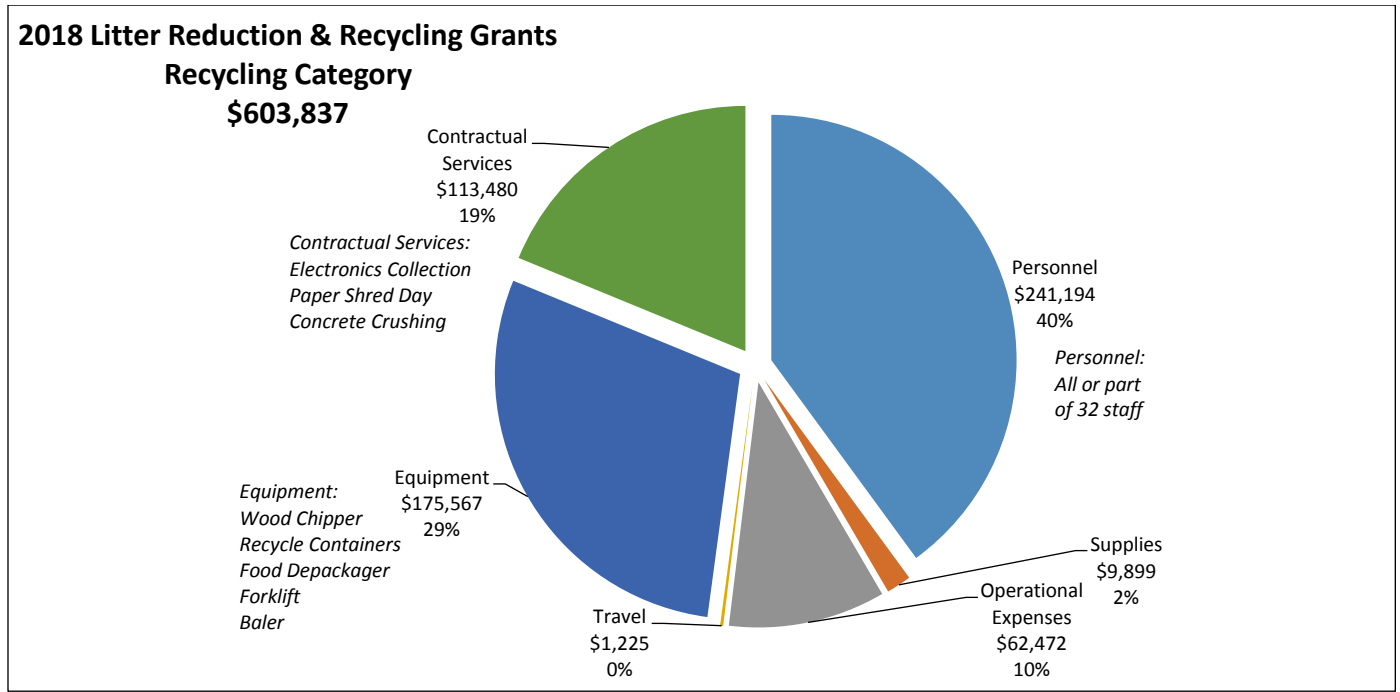


Photo above provided by the Nebraska Recycling Council.

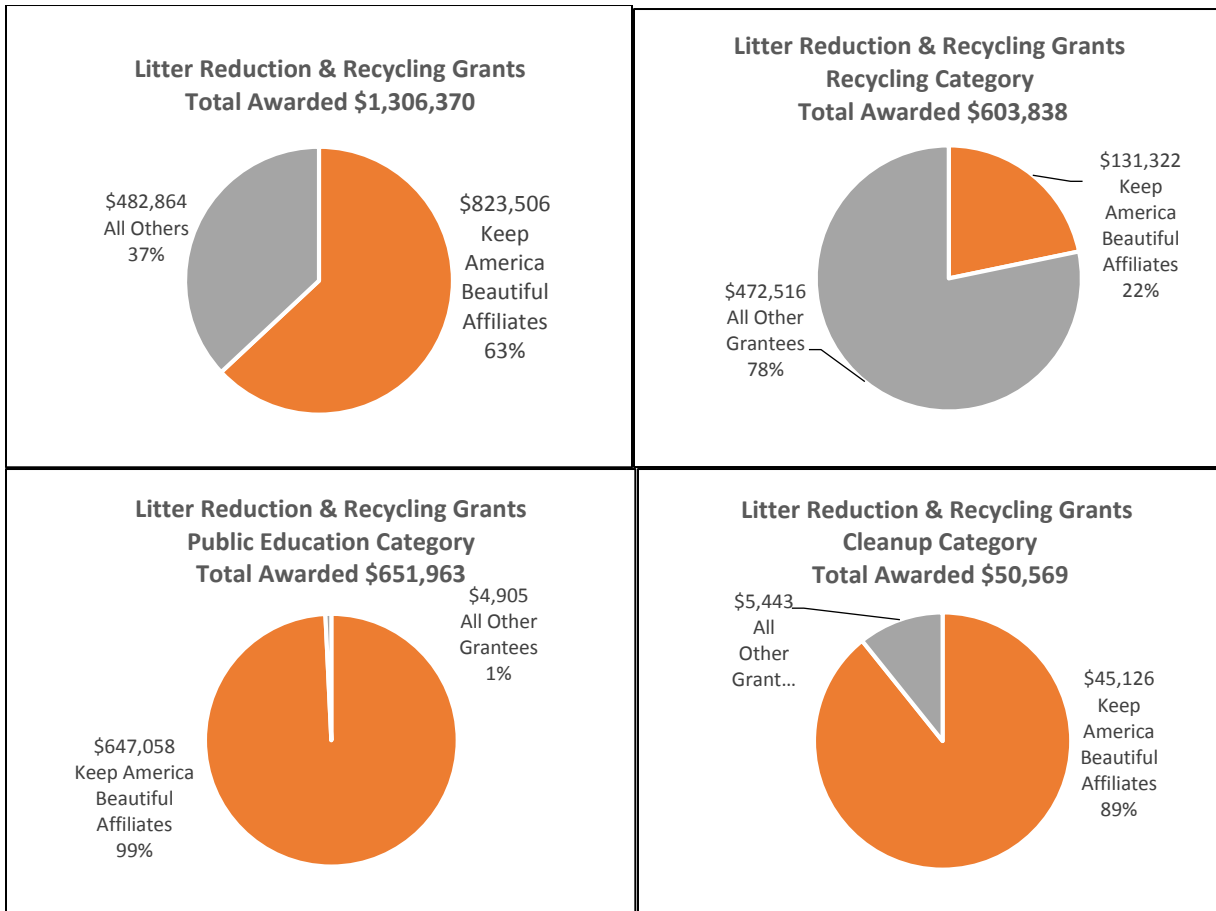


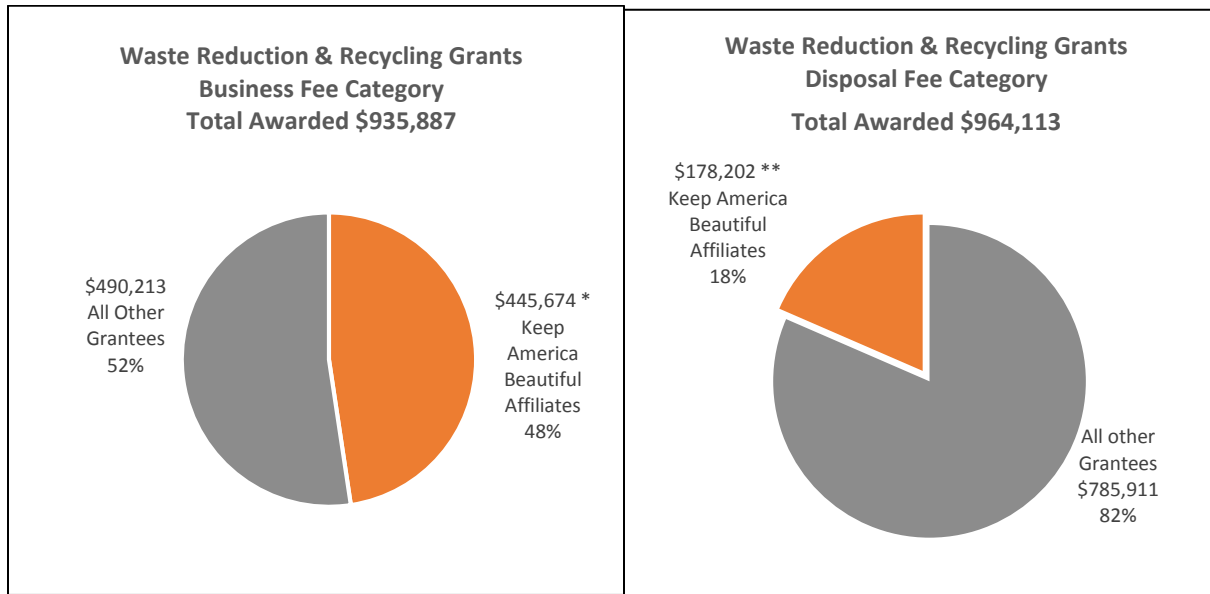
Photo to the left provided by Keep Kimball Beautiful.

**Keep America Beautiful Affiliate Funding for 2018**

Keep America Beautiful (KAB) is a national non-profit public education organization. Keep Nebraska Beautiful is a statewide affiliate of KAB. There are 21 local KAB affiliate communities in Nebraska.

Many of the KAB affiliates receive grant funding from the Litter Reduction and Recycling grant program under the public education category to cover expenses such as personnel and operating expenses. The affiliates teach the importance of reuse, recycling, and reducing waste and litter through school and community-wide education programs. The Litter grant program also includes the cleanup category, which covers expenses to pick up litter along roadways and in public areas. Recycling is the third category under the Litter grant program, and is similar to the Business Fee category of the Waste Reduction and Recycling Incentive Grant Program. Through these last two categories, the KAB affiliates have received funding to operate recycling facilities, and household hazardous waste (HHW) facilities. They have also held HHW, electronic waste, and pharmaceutical collections. These events are important because they make sure the materials collected are managed and/or disposed of properly. Although they are not eligible for direct grant funding, some KAB affiliates have worked with local political subdivisions (cities and counties) to organize scrap tire cleanup events.





\* The Business Fee Category award included a \$112,661 grant to the Grand Island Clean Community System to operate the Household Hazardous Waste Facility in Grand Island.  
 \*\* The Disposal Fee Category amount included a \$178,202 grant to the Lincoln Lancaster County Health Department to operate the Household Hazardous Waste Facility in Lincoln.

**Awarded 2018 Waste Reduction and Recycling Incentive Grants**

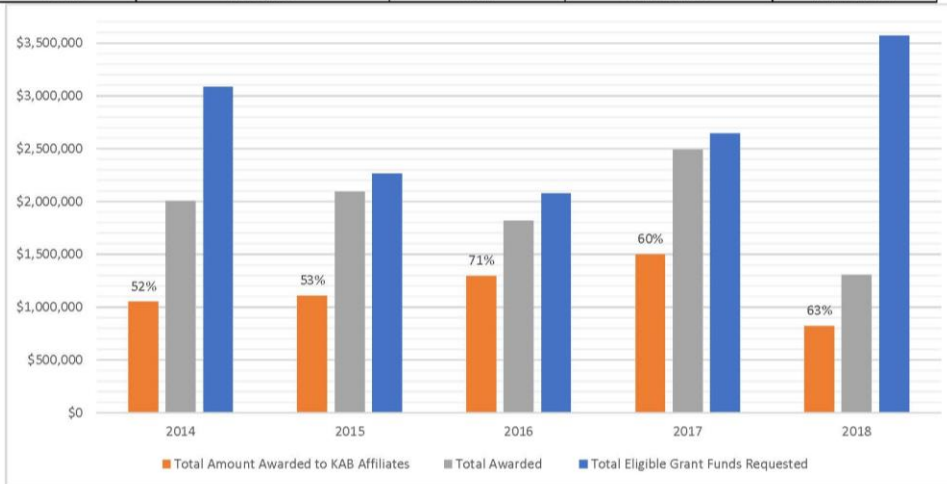
Number of Eligible Apps	52
Number of Eligible Affiliate Apps	15
Number of Funded Apps	32
Number of Funded Affiliate Apps	13

**Awarded 2018 Litter Reduction and Recycling Grants**

Number of Eligible Apps	66
Number of Eligible Affiliate Apps	35
Number of Funded Apps	53
Number of Funded Affiliate Apps	35

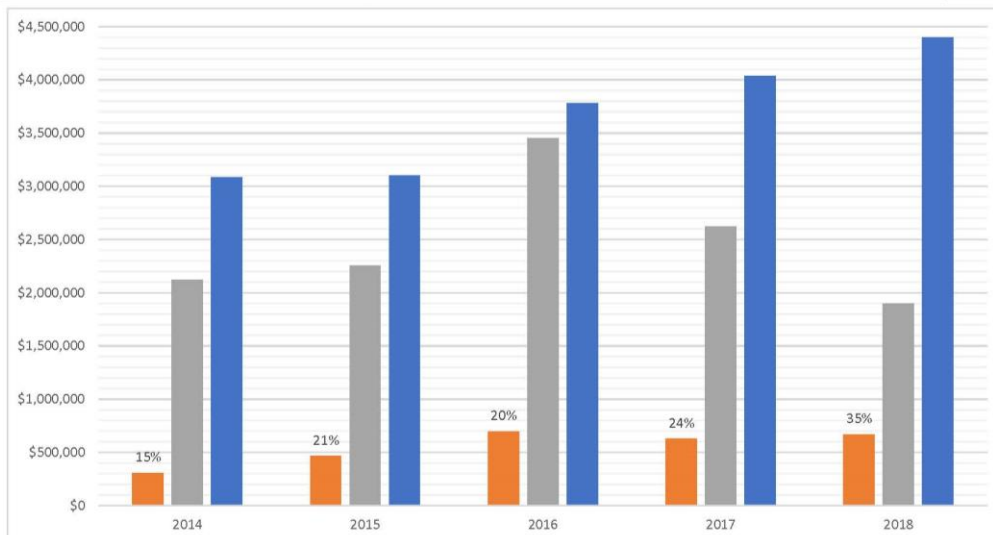
**2014-2018 Awarded Litter Reduction and Recycling Grants to Keep America Beautiful (KAB) Affiliates**

Grant Year	Total Amount Awarded to KAB Affiliates	Percent Awarded to KAB Affiliates	Total Awarded	Total Eligible Grant Funds Requested
2014	\$1,050,331	52%	\$2,006,707	\$3,083,431
2015	\$1,106,901	53%	\$2,095,864	\$2,266,267
2016	\$1,294,329	71%	\$1,821,055	\$2,079,033
2017	\$1,499,123	60%	\$2,491,087	\$2,644,088
2018	\$823,506	63%	\$1,306,370	\$3,571,584



**2014-2018 Awarded Waste Reduction and Recycling Incentive Grants to Keep America Beautiful (KAB) Affiliates**

Grant Year	Total Amount Awarded to KAB Affiliates	Percent Awarded to KAB Affiliates	Total Awarded	Total Eligible Grant Funds Requested
2014	\$308,620	15%	\$2,120,259	\$3,083,431
2015	\$466,234	21%	\$2,257,791	\$3,101,500
2016	\$696,947	20%	\$3,454,825	\$3,781,465
2017	\$627,484	24%	\$2,623,217	\$4,036,801
2018	\$668,415	35%	\$1,900,000	\$4,402,481



**Illegal Dumpsite Cleanup Program**

The Illegal Dumpsite Cleanup Program, established in 1997, is a cleanup program that provides funding assistance to political subdivisions for the cleanup of solid waste disposed of along public roadways or ditches. Through this program, household waste, white goods, construction and demolition waste, tires, furniture, yard waste, and some hazardous wastes are removed from the illegal site and disposed in a permitted facility or recycled

Funding for this program is limited to five percent of the total revenue from the disposal fee collected from landfills in the preceding fiscal year. NDEQ encourages municipalities, counties and other political subdivisions to submit applications for the reimbursement of cleanup efforts. In FY2018, the program provided 25 grants, totaling \$40,432.98. In FY2018, funds were provided to:

<b>Illegal Dumpsite Cleanup Awards</b>		
City of Lincoln - 13	City of Omaha - 2	Seward County - 5
Lincoln/Lancaster County - 1	Washington County - 2	Omaha Fire & Rescue - 1
Webster County - 1		



*Pictures provided by Washington County Cleanup*



**Landfill Disposal Fee Rebate Program**

The Landfill Disposal Fee Rebate Program was created as an incentive to political subdivisions to support and encourage the purchasing of products, materials, or supplies that are manufactured or produced from recycled material. Funding for the program is from the Waste Reduction and Recycling Incentive Fund.

Under the program, which was created in 1994, any municipality or county may apply for a rebate if they have a written purchasing policy requiring a preference for purchasing products, materials or supplies that are manufactured or produced from recycled material. If the policy is approved by NDEQ, the applicant may receive a 10-cent rebate from the \$1.25 per ton disposal fee. Rebates are provided no more than quarterly and no less than annually.

In FY2018, the program provided \$94,184 to five counties and six cities participating in the program. Eight of the eleven participants process their requests through email. This option helps to meet our agency’s goals for waste reduction efforts and process improvement.

Landfill Disposal Rebate Recipients					
Buffalo County	\$ 5,331	Butler County	\$ 3,552	City of David City	\$ 206
City of North Platte	\$ 3,630	City of Lincoln	\$31,161	Saline County	\$ 3,096
City of Omaha	\$44,825	South Sioux City	\$ 555	Jefferson County	\$ 546
Seward County	\$ 1,170	City of Grant	\$ 112		

**Ten Year Grant History of Amounts Awarded and Requested**

**Amounts Awarded and Requested for Litter Reduction and Recycling Grant Categories**

Grant Year	Awarded Recycling	Awarded Public Education	Awarded Cleanup	Total Awarded (All Categories)	Total Eligible Grant Funds Requested (All Categories)
2009	\$1,010,786	\$632,814	\$85,055	\$1,728,655	\$3,350,989*
2010	\$1,269,074	\$547,595	\$76,575	\$1,893,244	\$3,317,183*
2011	\$1,125,000	\$323,789	\$60,000	\$1,508,789	\$3,730,926*
2012	\$852,500	\$620,003	\$81,675	\$1,554,178	\$2,044,451*
2013	\$821,092	\$751,559	\$109,937	\$1,682,588	\$2,499,447*
2014	\$1,052,402	\$887,141	\$67,164	\$2,006,707	\$3,083,431*
2015	\$1,176,580	\$821,346	\$97,938	\$2,095,864	\$2,266,267*
2016	\$892,975	\$819,597	\$108,483	\$1,821,055	\$2,079,033*
2017	\$1,326,206	\$1,037,895	\$126,986	\$2,491,087	\$2,644,088
2018	\$603,867	\$651,968	\$50,569	\$1,306,404	\$3,571,584
			<b>Total Amounts</b>	<b>\$18,088,571</b>	<b>\$28,587,399*</b>

\*Estimate

**Amounts Awarded and Requested for Waste Reduction and Recycling Incentive Grant Categories**

<b>Grant Year</b>	<b>Awarded Disposal Fee</b>	<b>Awarded Business Fee</b>	<b>Total Awarded (Both Categories)</b>	<b>Total Eligible Grant Funds Requested (Both Categories)</b>
2009	\$1,357,529	\$670,150	\$2,027,679	\$3,687,595*
2010	\$1,019,827	\$423,075	\$1,442,902	\$4,473,857*
2011	\$791,488	\$349,395	\$1,140,883	\$2,446,958*
2012	\$916,461	\$774,715	\$1,691,176	\$2,387,797*
2013	\$816,990	\$549,524	\$1,366,514	\$2,388,515*
2014	\$1,012,371	\$1,107,888	\$2,120,259	\$3,083,431*
2015	\$1,435,558	\$822,233	\$2,257,791	\$3,101,500*
2016	\$2,116,399	\$1,338,426	\$3,454,825	\$3,781,465
2017	\$1,789,483	\$833,734	\$2,623,217	\$4,036,801
2018	\$964,113	\$935,887	\$1,900,000	\$4,402,481
<b>Total Amounts</b>			<b>\$20,025,246</b>	<b>\$33,790,400*</b>

\*Estimate

<b>Grant Year</b>	<b>Awarded Deconstruction Grants</b>	<b>Awarded Illegal Dumpsite</b>	<b>Awarded Recycling Rebate Fee</b>
2009		\$52,567	\$88,464
2010	\$58,800	\$60,065	\$74,017
2011	\$10,080	\$83,533	\$82,653
2012	\$291,500	\$42,468	\$118,662
2013		\$44,841	\$108,674
2014		\$49,792	\$101,810
2015		\$28,058	\$94,859
2016		\$162,536	\$80,872
2017		\$75,599	\$100,892
2018		\$40,433	\$99,341

## Nebraska Voluntary Cleanup Program

The Remedial Action Plan Monitoring Act (RAPMA), initially created in 1995, established the Nebraska Voluntary Cleanup Program (VCP). The Voluntary Cleanup Program provides property owners and parties responsible for contamination with a mechanism for developing voluntary environmental cleanup plans that are reviewed and approved by NDEQ. The voluntary cleanup program provides an avenue for businesses to proceed with cleanup of property and an opportunity for regulatory review and oversight that may not be available at the federal level. In addition, the program serves as an alternative cleanup program to the more traditional federal cleanup programs like Superfund or RCRA.

NDEQ has a Memorandum of Agreement with EPA Region 7, which provides federal approval of voluntary cleanup programs. Under this agreement, any site that joins the voluntary cleanup program and successfully completes the cleanup action is assured that EPA will not pursue federal enforcement under CERCLA.

To date, 57 sites have entered the voluntary cleanup program. Currently, 21 sites are active in the voluntary cleanup program. Two sites have been referred to the EPA Superfund program. Five sites withdrew from the program. Five sites have been terminated from the program due to lack of activity in completing the investigation and/or cleanup. Twenty-four sites have successfully completed cleanup requirements and have received "No Further Action" letters from NDEQ.

NDEQ continues to have significant interest from applicants enrolling properties or sites into the voluntary cleanup program. New applicants include the J.A. Woollam, Co. site in Lincoln and the Former Citizens Gas FMGP (former manufactured gas plant) site in McCook. Investigation activities are ongoing at these two new sites, the

International Sensor Systems, Inc. site in Aurora, and the former Bladen, Bradshaw, Eustis and York USDA grain bin sites. Cleanup activities are ongoing at the Archer Daniels Midland facility in Lincoln, the Beatrice FMGP site, the Dettmer Lease property in Auburn, Hoover Manufacturing in Beatrice, the Lynch Park FMGP site in Omaha, the Magnus Farley site in Fremont, the former Nebraska Solvents



*NDEQ staff make a site visit to review ongoing cleanup activities at the FMGP site in Beatrice.*

Company site in Grand Island, the Vishay Dale Electronics site in Norfolk, the former Murdock and Utica USDA grain bin sites, and the West Haymarket Redevelopment Site South in Lincoln. Cleanup plans were approved at the Appleton Electric site in Columbus and are anticipated to be approved at the Omaha Steel Castings site in Omaha next year. Cleanup activities were completed at the Nebraska Machine Products site in Omaha. Cleanup activities are anticipated to be completed next year at the Lynch Park FMGP site in Omaha, the Magnus Farley site in Fremont, and the West Haymarket Redevelopment Site South in Lincoln.

The application fee to participate in the program is \$2,000, and the initial deposit to pay for state oversight costs is \$3,000.

Voluntary Cleanup Program Sites and Status			
KN Energy	Holdrege	4/3/95	Completed 5/01/97
Garvey Elevator	Hastings-West	4/13/95	Deferred to EPA Superfund
ASARCO	Omaha-Riverfront	1/8/96	Completed 10/11/01
BNSFRR	Lincoln-N. Havelock	1/17/96	Terminated 12/4/06
Union Pacific RR	Omaha-N. Downtown	1/17/96	Withdrawn 3/7/03
Farmland Industries	Scottsbluff	2/26/96	Completed 7/2/09
Lincoln Journal Star	Lincoln-Downtown	2/26/97	Terminated 1/28/09
Farmland Industries	Hastings-East	6/25/97	Completed 9/2/03
Hastings Area wide	Hastings	12/17/97	Withdrawn 6/23/00
Lincoln Plating Co.	Lincoln	8/17/98	Completed 7/26/12
Witco Corporation	Omaha-North	1/20/99	Completed 6/29/99
BNSFRR	Lincoln-Lot 9 Havelock	4/28/99	Completed 2/20/01
Dana Corporation	Hastings-West	9/27/99	Deferred to EPA Superfund
Ballpark Complex	Lincoln-Haymarket	11/9/99	Completed 9/1/06
Progress Rail Services	Sidney-North	11/22/99	Completed 1/3/06
Brownie Manufacturing	Waverly-Highway 6	4/25/00	Withdrawn 7/19/01
BNSFRR	Lincoln-Havelock Yards	10/26/00	Terminated 12/4/06
New Holland	Grand Island-Southwest	11/9/00	Active
Owen Parkway East	Omaha-Abbott Drive	12/13/00	Withdrawn 11/26/02
Omaha Riverfront Redevelopment	Omaha-Riverfront - 3 sites	5/18/01	Completed 6/18/03, 12/9/03, 11/9/04
Sanford & Son	Lincoln-North	1/22/02	Terminated 4/18/07
Union Pacific RR Child Development Center	Omaha-N. Downtown	3/5/04	Completed 1/13/12
Vishay Dale Electronics	Norfolk	11/13/06	Terminated 4/20/09
Union Pacific RR Nebraska Solvent Site	Grand Island	2/23/07	Active
Archer Daniels Midland	Lincoln	11/3/08	Active
Plaza North Station LLC	Omaha	7/14/09	Completed 2/11/14
Former Pfizer Facility	Omaha	7/28/09	Completed 5/18/16

CVS Pharmacy	Lincoln	10/13/10	Completed 1/28/15
West Haymarket Redevelopment Site North	Lincoln	10/27/10	Completed 12/29/16
Izaak Walton Trap Range	Fremont	10/28/10	Completed 4/6/12
Magnolia Metal Corporation	Auburn	3/9/11	Completed 10/31/13
Dettmer Lease Property	Auburn	4/7/11	Active
Hoover Manufacturing	Beatrice	5/27/11	Active
Blair FMGP	Blair	6/28/11	Completed 4/4/16
Plattsmouth FMGP	Plattsmouth	6/28/11	Completed 4/4/16
Former USDA CCC Grain Bin Sites	Multiple Sites (Bladen, Bradshaw, Eustis, Murdock, Utica, York)	3/16/12	Active – 6 sites
Vishay Dale Electronics	Norfolk	4/2/12	Active
Lewis and Clark Landing	Omaha	4/20/12	Completed 12/29/16
West Haymarket Redevelopment Site South	Lincoln	6/11/12	Active
Quality Analytical Services	Omaha	8/2/12	Withdrawn 6/3/14
Nebraska Machine Products	Omaha	9/18/12	Completed 3/26/18
Lynch Park FMGP	Omaha	11/20/12	Active
Appleton Electric	Columbus	3/1/13	Active
Magnus Farley	Fremont	8/14/14	Active
Beatrice FMGP	Beatrice	11/17/15	Active
Omaha Steel Castings	Omaha	4/26/16	Active
Former Textron Turf Care and Specialty Products	Lincoln	10/26/16	Active
International Sensor Systems, Inc.	Aurora	3/2/17	Active
J.A. Woollam Co., Inc.	Lincoln	2/26/18	Active
Former Citizens Gas FMGP	McCook	6/4/18	Active

**Brownfields Assessments and Cleanups** — A Brownfields site is a vacant or under-used industrial or commercial property where expansion or redevelopment is complicated by unresolved contamination concerns. The Section 128(a) Brownfields Program performs assessments and cleanups at Brownfield sites in Nebraska. These assessments and cleanups are performed by NDEQ, typically with federal funds, at no cost to interested parties in Nebraska communities. A Brownfields assessment is a

preliminary investigation to evaluate the environmental conditions at a property, similar to a Phase I and Phase II Environmental Site Assessment. The Brownfields assessment can also include surveys of existing building structures on the property for the presence of lead-based paint or asbestos. Cleanups consist of asbestos abatement and can also involve a variety of measures that are implemented to contain and reduce contamination at a site. During the past year, NDEQ has performed five Phase I assessments, four Phase II assessments, three asbestos surveys, and two lead-based paint surveys. NDEQ did not receive any applications this year for partial cleanup assistance for removal of asbestos prior to building renovation or demolition.

**Brownfields Program Enhancement and Public Outreach** — Program enhancement and public outreach are key components that serve to educate the public on what a brownfield is and promote how our program can be used by communities for economic development. Workshops are arranged with a goal to increase knowledge and understanding of the environmental stigma attached to brownfield properties and how our resources can serve as a catalyst to bring these properties back to productive reuse. These workshops serve to connect stakeholders of Nebraska communities with resource providers and consist of presentations from a variety of people that play an important role in economic development.

In the past year, NDEQ organized workshops in Falls City and at the City Sprouts South Community Garden in Omaha. The Brownfields Coordinator was invited to speak at a Brownfields Redevelopment Funding panel held in Lincoln and helped plan and presented at an EPA Grant Writing Workshop in Kansas City, MO. In addition, conferences and training events provide a great opportunity to network and gain knowledge that can help enhance our program. The Brownfields Coordinator attended and participated in the National Brownfields Training Conference in Pittsburg, PA; a Community Needs workshop in York, NE; and a RE-Development Training Academy held at EPA R7 Headquarters in Lenexa, KS. The Coordinator is a member of the NDEQ-NPPD Partnership and was actively involved in two partnership meetings and attended the annual NPPD Power Summit. The Coordinator is also the Region 7 representative for the ASTSWMO Brownfields Focus Group and actively participates in monthly conference calls, creating educational materials to share with the public, and organizing national meetings and symposiums.

Ongoing program enhancement activities include updating the Voluntary Cleanup Program Guidance Document, developing a new guidance document on management strategies for addressing free product at cleanup sites, and drafting an internal Institutional Control Guidance Document for conducting audits at sites that have institutional controls in place. In addition, follow-up private well sampling is being performed by the Superfund program at sites selected from the completed state-wide inventory of facilities that may have used or produced per- and polyfluoroalkyl substances (PFAS), such as perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA), which are considered emerging contaminants that can have adverse health effects if found in drinking water supplies. NDEQ has also formed a multi-program team to track issues related to PFAS substances.

## Resource Conservation and Recovery Act (RCRA) Program

NDEQ was authorized in 1985 by EPA to administer portions of the Resource Conservation and Recovery Act (RCRA) program. RCRA regulations are incorporated in NDEQ Title 128 - Nebraska Hazardous Waste Regulations, which is updated as the Federal RCRA regulations change.

The purpose of the RCRA program is to ensure proper management of hazardous wastes from the point of generation until final disposal. Activities performed under the RCRA program include:

- helping hazardous waste generators maintain compliance through a Compliance Assistance Program,
- performing compliance inspections and enforcement actions,
- investigating complaints,
- reviewing groundwater contamination monitoring and remediation systems,
- reviewing permit applications and determining whether permits should be issued for proposed treatment, storage, and disposal (TSD) facilities,
- reviewing/approving closure and post-closure plans for hazardous waste storage areas and disposal sites,
- permitting and regulating through the RCRA Corrective Action program, the clean-up of hazardous waste that has been released to the environment,
- maintaining data systems to support decision-making and making information available to the public.

The Compliance Assistance Program helps Nebraska businesses, governmental entities, and private citizens comply with hazardous and solid waste regulations in a non-enforcement mode. This program works with the regulated community in a partnership promoting hazardous waste minimization and pollution prevention to help waste generators actually reduce the amount of hazardous waste being generated in the state. An additional product of these efforts is to ultimately reduce the amount of regulatory requirements on our industries by helping to bring hazardous waste generators into lower RCRA threshold levels.

Compliance and enforcement activities include investigating complaints and the inspection of hazardous waste generators and transporters, hazardous waste treatment, storage and disposal facilities, and used oil marketers and burners. Other compliance and enforcement activities include conducting comprehensive groundwater monitoring evaluations, and operation and maintenance inspections of sampling and analysis procedures at RCRA sites to ensure that useful and representative data is being collected.

The RCRA program also conducts extensive permitting and closure activities to minimize and prevent the release of hazardous material into the environment. Closure actions are required for treatment, storage or disposal facilities that are discontinuing operations or that have operated without a permit. Permits are required for operating treatment storage and disposal facilities. Post-closure permits are required for treatment storage and disposal facilities that have gone through closure and have remaining contamination.

There is one operating hazardous waste storage and treatment facility in Nebraska: the Clean Harbors Environmental Services, Inc. incinerator near Kimball. This facility has undergone annual performance test burns to demonstrate proper operation since hazardous waste treatment began in 1994. Operational and physical changes at the Clean Harbors incinerator, made to improve the

performance of the facility and ensure compliance with applicable regulations, have resulted in numerous permit modifications. In addition, Nebraska oversees two active hazardous waste storage facilities which do not treat hazardous waste.

Corrective action is an important part of the RCRA program and addresses past and present activities at RCRA facilities that resulted in hazardous waste and hazardous constituents being released into soil, groundwater, surface water, and air. Corrective action requires investigation and remediation of the release of hazardous constituents from regulated facilities. These regulations make current and former owners of a property responsible for past mismanagement of hazardous waste. NDEQ has administered the RCRA Corrective Action Program since January of 2017.

EPA developed an e-manifest module that is part of the national RCRAInfo database. Nebraska sees the new e-manifest system as providing an efficient way for tracking the shipment of hazardous waste in an electronic process. It provides a notification system so that those in the chain (generator, transporter and disposal facility) can see and manage the movement of wastes, as well as for States and EPA to lessen the time spent reviewing paper manifests. The reduction in the use of paper as the system is implemented will ultimately reduce costs and this provides multiple benefits including less chance to lose copies, less solid waste and a reduction in the need to have storage space for all that paper. The public also will benefit as it will be able to have a clearer understanding of wastes generated and disposed and the process it followed to disposal. The Land Management Division conducted three public training sessions on the new e-manifest system.

Also developed by EPA is the myRCRAID module, also within the national RCRAInfo database. Nebraska has opted in to allow the facility hazardous waste managers to request permission to prepare their 8700-12 Hazardous Waste notification form electronically. We currently have 133 facilities that have requested and received permission to file electronically. NDEQ approves the requests electronically saving NDEQ and the hazardous waste facilities time, which equates to money saved.

As a process improvement plan, the RCRA Section has been emailing confirmations to 8700-12 Hazardous Waste notification changes and to contingency plan submittals. In the past, a formal letter was prepared and mailed certified for each request. To date we have saved around \$3500.00 in postage alone. Additional savings are in time and supplies used.



**Program Funding**

Funding for RCRA program activities is provided by an EPA grant, which requires a 25% state match.

Additionally, the Department can charge proposed commercial hazardous waste management facilities a fee to cover expenses for facility siting committee activities. One new hazardous waste treatment facility was proposed in 2017. The facility, near Alda, has completed the siting committee activities but has yet to submit a RCRA permit application.

The RCRA program collects a yearly fee from commercial hazardous waste treatment and disposal facilities. Currently, one facility in Nebraska performs hazardous waste treatment and disposal. The fees are based on the total yearly volume or weight of hazardous waste treated or disposed. Fees are due March 1, and are remitted to the state general fund.

Currently, the RCRA Program oversees the following active sites:

- 89 Large Quantity Generators (greater than 2200 pounds of hazardous waste generated per month)
- 387 Small Quantity Generators (between 220 and 2200 pounds generated per month)
- 1395 Conditionally Exempt Small Quantity Generators (less than 220 pounds generated per month)
- 1 Hazardous Waste Incinerator Facility
- 3 Treatment, Storage or Disposal Facilities
- 18 Hazardous Waste Transporters

<b>Location by County of Large Quantity Generators in Nebraska Regulated Under RCRA</b>			
Buffalo - 3	Hall 3	Platte 5	York 1
Cheyenne 1	Kimball 1	Red Willow 1	
Cuming 1	Lancaster 28	Sarpy 7	
Dakota 1	Madison 2	Scottsbluff 3	
Dodge 2	Otoe 1	Seward 2	
Douglas 24	Phelps 1	Washington 2	

<b>Summary of FY2018 Activities</b>		
<b>Compliance Assistance</b>	<b>State</b>	<b>EPA</b>
On-site Visits	3	*
Direct Assistance Contacts	534	*
Public Outreach Presentations (total 300 in attendance)	4	*
<b>RCRA Inspections</b>		
Land Treatment Facilities	0	0
Treatment, Disposal and Storage Facilities	0	2
Comprehensive Groundwater Monitoring Evaluations	0	0
Operation and Maintenance Inspections	0	0
Facility Self-Disclosure	0	0
Large Quantity Generator	6	2
Small Quantity Generator	11	5
Conditionally Exempt Small Quantity Generators	13	5
Transporters	0	0
<b>RCRA Permitting</b>		
Closure Plans Finalized	2	0
Permits Issued/Renewed	3	0
Modifications	3	0
EPA Corrective Action Orders	0	0
<b>RCRA Record Reviews</b>		
Financial Assurance Closure/Post Closure	21	0
Corrective Action	4	0

\* Data not available

## Superfund Program

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) became federal law in 1980. CERCLA established what has commonly become known as Superfund to deal with known or suspected contamination at inactive commercial/industrial/military facilities or so-called "uncontrolled hazardous waste or abandoned sites." The nation's most contaminated sites are listed on the Superfund National Priorities List. Nebraska has 17 active National Priorities List sites. One site, the Waverly Groundwater Contamination Site, was removed from the National Priorities List on November 20, 2006 as the cleanup goals for the site have been achieved. Thirteen of the sites are in the cleanup phase and four sites (York PCE/TCE Northeast Contamination site, York PCE Southeast Contamination site, Iowa-Nebraska Light and Power Co. site in Norfolk, and the Old Highway 275 and North 288<sup>th</sup> Street site in Valley) are relatively new to the National Priorities List and are in the site study stage.

Numerous other non-National Priorities List sites with known or suspected releases of hazardous substances exist in the state, but are not being addressed through the federal Superfund process.

The investigation and remediation of contaminated sites under CERCLA are the primary responsibility of the EPA and other federal agencies. NDEQ participates in the Superfund process by serving as a technical support agency to the EPA and as the environmental representative for the State of Nebraska. Activities in the Superfund Program include:

**Site Assessment** — The Superfund Site Assessment program identifies, assesses and characterizes sites where hazardous substances are known or suspected to pose a threat to public health and/or the environment. Currently, the sites investigated in Nebraska consist primarily of areas where groundwater contamination has been detected in municipal and private drinking water supply wells or where there is a significant potential for groundwater contamination.

The first site assessment step is called a pre-screening assessment. This step is a review of existing information on a potential site to determine whether a release has occurred that should be evaluated further through the Superfund process. The next site assessment step is called an abbreviated preliminary assessment. This step involves the collection of background information such as property ownership, operational history and geology/hydrogeology, and performing a site reconnaissance. The third step is called a site investigation, which involves sampling environmental media, such as soil, soil gas and groundwater, and evaluating vapor intrusion into indoor air of building structures. In some situations, the preliminary assessment step and the site investigation step are combined. For large and/or complex sites, an expanded site investigation may also be performed to collect additional soil and groundwater samples to further define the extent of contamination. In addition, some sites that have been investigated in the past may be reassessed if new information is obtained that indicates that a threat to public health and/or the environment may exist.

During the past year, NDEQ has performed work on three pre-screening assessments, five abbreviated preliminary assessments, two site investigations, one expanded site investigation, and three site reassessments. Two of the pre-screening assessments consisted of sampling private wells for per- and polyfluoroalkyl substances (PFAS), such as perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA), which are considered emerging contaminants that can have adverse health effects if found in drinking water supplies. Results of this sampling did not show PFAS compounds above levels of concern. The EPA Region 7 Superfund program completed residential yard cleanup at 21 properties and one City park related to the Former Northwestern Metals site at 900 T Street in Lincoln that historically operated a lead smelter at the property. NDEQ also reviewed numerous site assessments conducted by EPA in the state and provided recommendations on the need for follow-up action.

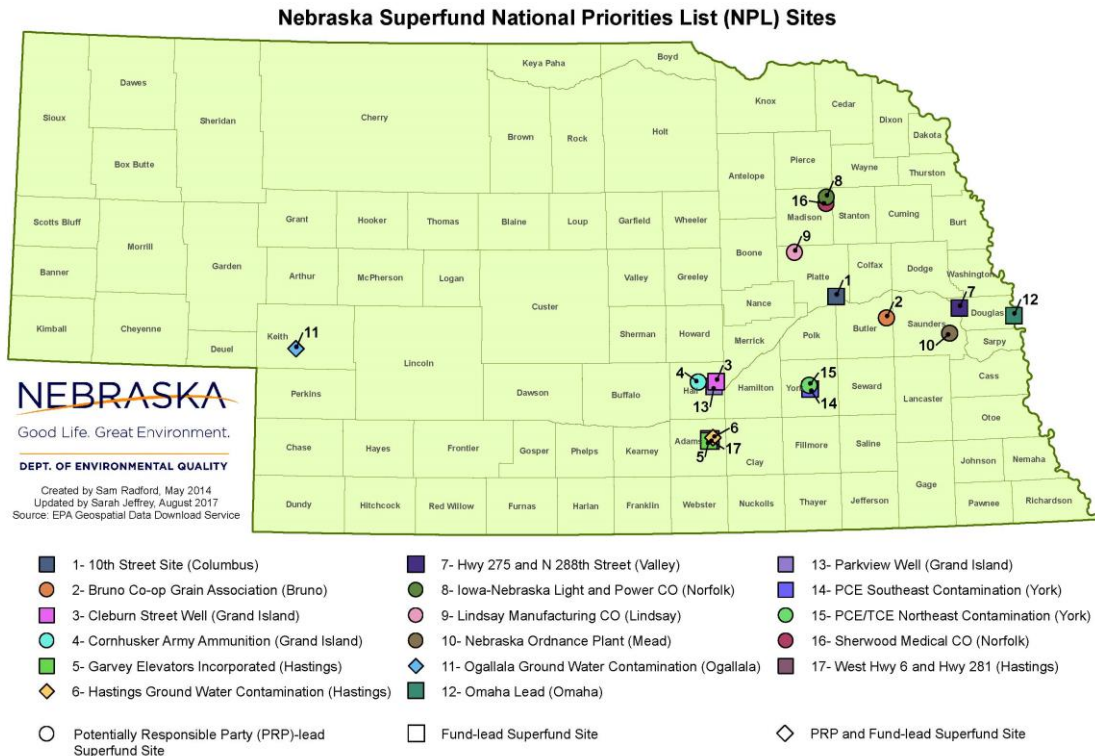
**NPL Site Management Assistance** — The Superfund Management Assistance program provides management and technical support to the EPA at Superfund National Priorities List sites in Nebraska. This assistance includes reviewing technical documents and participating in the Superfund remedy selection process. As the most heavily contaminated sites in the nation, National Priority List sites are generally large and complex, because they often involve more than one contaminated media and have multiple sub-units with varying contaminants. The investigation and cleanup activities at these sites are organized into several phases, including remedial investigations, groundwater modeling, baseline risk assessments, feasibility studies/engineering cost evaluations, field-scale pilot studies, remedy design/construction, and remedy operation and maintenance. NDEQ also participates in public meetings with citizens and local officials in the development of cleanup plans.

The Superfund law seeks to identify those responsible for contamination to pay for the cleanup. If it is not possible to identify the responsible party, or if the responsible party is insolvent, cleanup is paid for by a combination of Federal and State funds. Of the 17 active sites on the National Priorities List, seven are being addressed by the responsible party and eight are being addressed as fund lead by Superfund dollars, and two are being addressed as both responsible party and fund lead. For fund lead sites, the State of Nebraska enters into contracts with EPA and agrees to pay 10% of the capital costs of constructing the cleanup system, 10% of initial startup operation costs, and 10% of on-going operation and maintenance costs for the first 10 years of the project. After the initial 10 years, the State pays 100% of the operation and maintenance costs. The State began paying 100% of the operation and maintenance costs for the 10<sup>th</sup> Street Site in Columbus in January, 2016, the Ogallala Groundwater Contamination Site in December 2016, and the Hastings Second Street subsite of the Hastings Groundwater Contamination Site in June, 2017.

Below is a list of the 17 active National Priorities List sites. Below each name is an EPA web address that provides more detailed information about the site. The list is followed by a map showing the locations of the 17 NPL sites.

<b>Active National Priorities List Sites in Nebraska</b>
Cornhusker Army Ammo Plant (Grand Island) <a href="https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702020">https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702020</a>
Hastings Groundwater Contamination (Hastings) <a href="https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0701973">https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0701973</a>
Lindsay Manufacturing Co. (Lindsay) <a href="https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0701913">https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0701913</a>
Nebraska Ordnance Plant (Mead) <a href="https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702031">https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702031</a>
10th Street Site (Columbus) <a href="https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702001">https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702001</a>
Cleburn Street (Grand Island) <a href="https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0701986">https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0701986</a>
Ogallala Groundwater Contamination Site (Ogallala) <a href="https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702287">https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702287</a>

Bruno Coop Association (Bruno) <a href="https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702000">https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702000</a>
Sherwood Medical (Norfolk) <a href="https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702086">https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702086</a>
Omaha Lead Site (Omaha) <a href="https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0703481">https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0703481</a>
Parkview Well Site (Grand Island) <a href="https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0704456">https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0704456</a>
Garvey Elevator (Hastings) <a href="https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0704351">https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0704351</a>
West Highway 6 & 281 (Hastings) <a href="https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0704738">https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0704738</a>
York PCE/TCE Northeast Contamination <a href="https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0706105&amp;msspp=med">https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0706105&amp;msspp=med</a>
York PCE Southeast Contamination <a href="https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0706200&amp;msspp=med">https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0706200&amp;msspp=med</a>
Iowa-Nebraska Light and Power Co. (Norfolk) <a href="https://cumulis.epa.gov/supercpad/CurSites/csitinfo.cfm?id=0702377&amp;msspp=med">https://cumulis.epa.gov/supercpad/CurSites/csitinfo.cfm?id=0702377&amp;msspp=med</a>
Old Highway 275 and North 288 <sup>th</sup> Street (Valley) <a href="https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0704272&amp;msspp=med">https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0704272&amp;msspp=med</a>



**Federal Facilities** — The Superfund Federal Facilities program provides technical assistance and regulatory oversight to the U.S. Army Corps of Engineers in support of site assessment and cleanup activities and military munitions response activities at Department of Defense active facilities and formerly used sites. Active Federal installations include Offutt Air Force Base in Bellevue and Cornhusker Army Ammunition Plant in Grand Island. One hundred known formerly-used defense sites exist in Nebraska that include small former defensive surface-to-air missile sites, bomber target sites, radar and communications sites and other formerly occupied Department of Defense properties. Under the current Defense-State Memorandum of Agreement, investigation and cleanup activities are being performed or planned to be performed at three active sites and 12 formerly used defense sites. Military munitions response activities are being performed at two sites. A military munitions response site is a site that may have the potential for unexploded ordnance, discarded military munitions, or munitions constituents in soil and groundwater that may pose an explosive hazard or threat to the environment.

## Solid Waste Program

Solid Waste regulations are incorporated in NDEQ *Title 132 - Integrated Solid Waste Management Regulations*. The purpose of the program is to ensure proper management of solid waste. Solid waste includes municipal solid waste typically collected and disposed in municipal landfills, and other non-hazardous waste. The regulations provide technical criteria for land disposal areas and solid waste processing facilities.

Duties assigned to this program include: 1) Permit issuance, renewal and modification; 2) Response to inquiries related to facility operations; 3) Compliance inspections and enforcement actions; 4) Investigation of citizen complaints; 5) Alternate waste management method approvals; 6) Groundwater investigations and groundwater/soil remediation projects for permitted and non-permitted facilities; 7) Gas emissions monitoring related to landfills and other permitted sites; 8) Closure inspections and monitoring of closure and post-closure activities; 9) Conducting public information sessions and hearings related to permits; 10) Financial assurance review and monitoring compliance; and 11) Assisting regulated facilities and the general public in recycling, re-use and proper management of waste-like materials.

The program regulates municipal solid waste disposal areas (landfills), construction and demolition disposal areas, fossil fuel combustion ash disposal areas, industrial and delisted hazardous waste disposal areas, and land application sites for repeated disposal or treatment of special wastes. In addition, solid waste processing facilities, such as compost sites, material recovery facilities, and transfer stations, are regulated by this program.

Permit modification requests are regularly submitted by permitted facilities. Response to the modification requests are particularly time-critical since the facility may need to expand or construct new cells in order to meet their disposal capacity needs and continue operations.

The waste management program coordinates with other NDEQ programs to ensure that permits issued include adequate protection of all environmental media. The requirements in solid waste permits include protection against excessive emissions of landfill gas to the atmosphere, storm water runoff controls and restrictions on accepting hazardous waste for disposal at a landfill.

Currently, the Solid Waste Program oversees the following facilities, by type:

<b>Total Permitted Facilities in FY2018</b>	
Municipal Solid Waste Disposal Areas (Landfills)	23
Solid Waste Compost Sites	8
Transfer Stations	37
Materials Recovery Facilities	4
Construction & Demolition Waste Disposal Areas	31
Delisted Waste Disposal Area	1
Processing Facility	2
Fossil Fuel Combustion Ash Disposal Areas	8
<b>Total</b>	<b>114</b>

The following table indicates the number of inspections, complaints and permitting-related activities that the program was involved with in FY2018:

<b>Summary of FY2018 Activities</b>	
<b>Compliance Assistance</b>	
Facility Inspections (General)	145
Facility Closure Inspection	1
Facility Construction Inspections	9
Facility Comprehensive Renewal Inspections	16
Complaints Received	145
Complaints Investigated	145
Complaints Closed	139
<b>Permitting</b>	
New Permits Issued	2
Permit Renewals	16
Major Permit Modifications	7
Public Hearings	2
Permits Transferred	2
Financial Assurance Reviews	172
Facilities Closed	1

### **Assessment Monitoring and Remedial Measures**

All solid waste landfills accepting municipal solid waste, industrial waste, delisted hazardous waste and fossil fuel combustion ash are required to conduct groundwater monitoring. The purpose of the groundwater monitoring is to detect any release of contaminants from the facility that may impact groundwater quality. A phased approach is used from the initial detection of a potential release to making decisions on cleanup actions after groundwater contamination has been fully investigated.

The first phase is detection monitoring. During this phase, a landfill will monitor for a discrete number of contaminants that would be indicative of a potential release from the facility. If one or more of the parameters being monitored exceed background levels, the facility then begins assessment monitoring. During assessment monitoring, a landfill will monitor for a more extensive list of contaminants. During FY2018, the number active municipal solid waste disposal areas doing assessment monitoring reduced from eleven to nine, one disposal area returned to detection monitoring and the other one closed. The number of closed municipal solid waste disposal areas conducting assessment monitoring increased from three to four.

If during the assessment monitoring phase, contaminant concentrations are detected above a groundwater protection standard, the landfill may then be required to characterize the nature and extent of the release and if necessary assess and conduct remedial measures. In FY 2018 remedial measures continued at two active and one closed municipal solid waste disposal areas.



### Title 118 Groundwater Investigations and Remedial Actions

Several municipal solid waste disposal areas that closed prior to 1993 have conducted groundwater investigations and remedial actions pursuant to NDEQ *Title 118 – Groundwater Quality Standards and Use Classification*. In FY2018, groundwater investigations continued at two sites, and remedial actions continued at eight sites.

### Financial Assurance and Fees

All permitted solid waste landfills are required to provide financial assurance for closure and post-closure maintenance and monitoring. All privately owned permitted solid waste processing facilities are required to provide financial assurance for closure.

### Program Funding

The Waste Management Section collects permit fees and annual operating fees for all solid waste management facilities. Quarterly disposal fees based on cubic yards or tonnage are collected from all municipal solid waste landfills as well as transfer stations moving waste for disposal out of state. Fifty percent of the quarterly disposal fees are redistributed as grants and for administration of the Waste Reduction and Recycling Incentives Grants Program and fifty percent of the quarterly disposal fees are utilized for costs of administering the solid waste program and for investigation and remediation of contamination from solid waste facilities and for other statutorily authorized activities.

### Waste Tire Management Program

NDEQ also administers the waste tire management program. Approved beneficial uses of waste tires are outlined in NDEQ regulations. Waste tire haulers are required to obtain individual permits annually and are required to post financial assurance. Financial assurance is designed to provide adequate funds to clean up any waste tires that are illegally disposed by the transporter.

Waste tire management facilities (except tire dealers) are allowed to accumulate up to 500 tires without further requirements, other than mosquito control and fire prevention measures. Speculative accumulation of more than 500 waste tires is prohibited.

Compliance assistance is an important aspect of this program. Program activities include responding to telephone inquiries, letters and contacts from other states, developing guidance documents, conducting site visits and providing technical advice. NDEQ has developed guidance documents to explain the proper use of waste tires for blow-out and bank stabilization. Direct financial assistance is also available through the Waste Reduction and Recycling Incentives Grant program, which is described later in this chapter.

<b>Waste Tire Permit Totals, FY2018 Permitting</b>	
Renewed Hauler Permits	23
New Permits Issued	0
Financial Assurance Reviews	22

The waste tire compliance assurance program includes facility inspections, complaint investigations, and appropriate enforcement actions. Compliance activities are included in the summary of activities for the Solid Waste Program.

# CHAPTER 6:

## Water Programs

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The goal of the Water Programs is to protect the surface and groundwater resources in Nebraska. This chapter describes the programs administered by the Water Divisions, including: petroleum remediation programs, agriculture programs, surface water and groundwater monitoring and assessment programs, water quality planning, wastewater permitting and certification programs, and financial assistance programs.

In 2016, NDEQ underwent some restructuring. Previously, all the water programs were in the Water Quality Division, which was twice the size as both Air and Land Divisions. To facilitate better management, there are now two divisions for water programs, making all four divisions approximately the same size. The Water Permits Division has livestock, chemigation, secondary containment of ag chemicals, the State Revolving Fund loan programs, and all the NPDES and wastewater (including septic tanks) programs. The Water Quality Division has the petroleum remediation, underground injection control, groundwater and surface water monitoring, wellhead and source water protection, fish kill response, surface water quality standards and assessment, 401 certification, water quality data management, and the nonpoint source programs.



*Transporting used petroleum remediation equipment for reuse.*

In the summer of 2017, the Drinking Water Program from Health and Human Services moved to NDEQ's Lincoln offices as a result of a Memorandum of Agreement between the two agencies and is now the Drinking Water Division. A greater opportunity for collaboration between water programs and assistance to municipalities has developed and will continue to be a benefit to facilities.

### **Petroleum Remediation Program**

Activities regarding the Petroleum Remediation Program involve two interrelated areas:

1. Overseeing the **investigation and cleanup** of petroleum contamination resulting from leaking above-ground and underground storage tanks (and other sources such as pipeline leaks and transportation spills); and
2. Administering a **financial assistance program** for persons responsible for investigation and cleanup costs due to petroleum releases from tanks.

**Investigation and Cleanup**

The first step in the Petroleum Remediation Program is the review of tank removal assessment reports or other documentation to determine whether contamination exists. After some initial indication that there may be petroleum contamination at a site, NDEQ decides whether more investigation and cleanup are required. NDEQ also determines whether parties who caused the contamination are available and financially capable of assuming responsibility. The Program also receives reports of catastrophic tank failures, contaminated drinking water wells, vapors in structures and utilities, and other serious situations that may require emergency actions.

In the event these reports indicate a threat to health, safety, or the environment, NDEQ requires a detailed study of the affected groundwater and soil to discover the severity of the contamination, direction of groundwater flow, and potential water supplies or other points of exposure that may be impacted. Program staff review these reports to determine if cleanup requirements are needed and issue a public notice of their decision. Staff review remedial actions throughout the project and determine when sufficient cleanup has been accomplished.



(Pictured left): Drilling a monitoring well on the site of an old refinery in Gordon; (right center): looking down at the reflection from free product floating on groundwater in an abandoned sewer in Lincoln's Telegraph District; (right bottom): sampling an abandoned sludge pit on the site of an old refinery in Gordon; (center): removing the floating product and contaminated groundwater from an excavation in Lincoln's Telegraph District.



The program has incorporated risk-based corrective action (RBCA) procedures into regulations and accompanying guidance. The RBCA process allows evaluation of all petroleum release sites based on the risk they pose to human health and the environment. Those that pose no significant risk are closed; those that pose significant risk are prioritized for further work. Since 1999, the program has been initiating many new investigations to collect information needed for Tier 1, the first step in the RBCA process. The plan is to continue investigating additional sites until eventually the information necessary for a RBCA Tier 1 evaluation has been collected at all sites. Sites that fail Tier 1 are activated for Tier 2, which is a more detailed investigation and the next step in the RBCA process. If sites fail Tier 2, they are normally scheduled for cleanup.

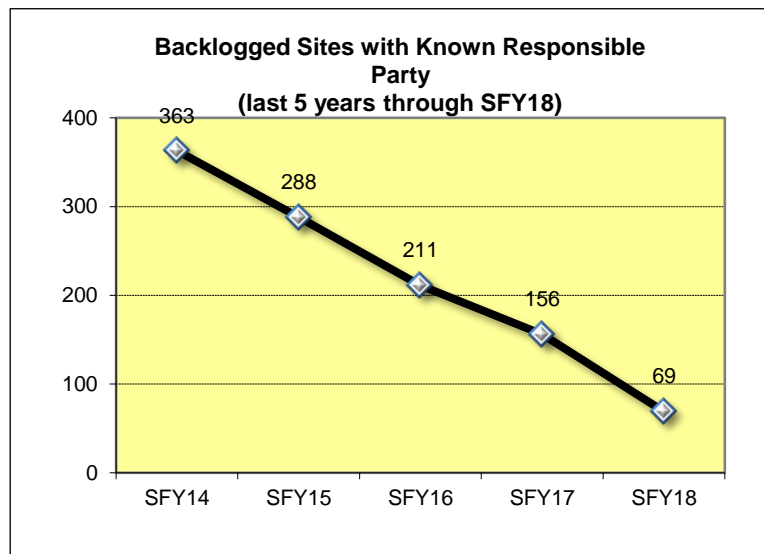
**Financial Assistance – Petroleum Release Remedial Action Reimbursement Fund**

When contamination has been found at a site, and the NDEQ has determined that more investigation and/or cleanup are required, NDEQ will also determine the “responsible person.” This term refers primarily to those who owned or operated the tank when the leak occurred. Those who are determined to be a responsible person may be eligible for reimbursement through the Petroleum Release Remedial Action Reimbursement Fund.

The Fund was created by the Legislature in order to help tank owners pay for the costs associated with assessing and cleaning up any petroleum releases from tanks as well as meet financial responsibility requirements established by federal law for underground storage tanks. Costs for both underground and above-ground tank releases are eligible for reimbursement. The program’s activities in this area include receiving and processing applications for reimbursement from the fund and subsequently issuing reimbursements for eligible costs. To assist applicants, the program developed guidelines entitled "Reasonable Rates Schedule and Reimbursement Guidance Manual."

**Responsible Person Backlogged Sites**

For the last several years, there have been hundreds of sites where the responsible person is known, but NDEQ did not require work to begin. These were lower priority sites, and there was not sufficient funding to reimburse potential costs under the Reimbursement Fund. The sites were placed on a waiting list (backlogged) until funding was available. NDEQ has worked steadily in the last several months to bring that list to zero. By the end of 2018, there will be no more responsible person sites that are waiting on NDEQ to require and approve work.



### “Orphan” Sites

In situations involving "orphan" sites (sites where the responsible person that caused the contamination either cannot be identified or located or does not have the resources to pay for their share of cleanup costs), investigation and remediation costs are paid with federal and/or state funds. In SFY2018, 67 orphan sites were activated for investigation and/or cleanup using State contractors. As of September 20, 2018, there were 354 orphan sites backlogged and not yet investigated.

### Equipment Reuse

As sites are undergoing cleanup, NDEQ pays for the purchase of remediation equipment. When sites are cleaned up and closed, NDEQ seeks to reuse that equipment at other sites. Since June 2005, NDEQ has reused hundreds of pieces of equipment, thus greatly reducing the need to buy new equipment. This reuse program has saved Nebraska taxpayers over \$5.3 million in new equipment costs and allowed that money to be used for cleanup of additional sites.

### Program Statistics

From June 1999, through October 10, 2018, 3,228 Tier 1 site investigations have been initiated. Of the 2,973 Tier 1 field investigations completed, 1,917 (64%) were closed, and 1,056 (36%) were determined to need a more detailed Tier 2 investigation. Since April 2002, 1,011 Tier 2 investigations have been completed; 670 (66%) of these sites have been closed. Of all the sites that have completed a Tier 1 or Tier 2 investigation, approximately 353 (12%) have reported finding the contaminant methyl tert-butyl ether (MTBE) in groundwater.

Revenue going into the cleanup fund in SFY18 was about \$12.1 million. As of June 30, 2018, nearly \$229 million has been disbursed since the program began. During SFY18, NDEQ reimbursed about \$5.4 million to responsible persons (or their designees) for work done at 186 different sites.

The 43 sites listed below are all currently active sites that have received a total reimbursement of more than \$600,000 each. Once the statutory limit is reached, the responsibility of funding the remainder of cleanup necessary reverts to the responsible person. Some closed sites also reached the statutory limit but are not shown.

Responsible Person	City	Reimbursed Amount as of June 30, 2018	Has Statutory Limit Been Reached?*
Ag Valley Coop	Bartley	\$975,000	Yes
Burlington Northern & SFR	Alliance	\$975,000	Yes
Burlington Northern & SFR	McCook	\$975,000	Yes
Konecky Oil	Mead	\$975,000	Yes
Elkhorn Valley Coop	Snyder	\$974,753	Yes
Burlington Northern & SFR	Lincoln	\$974,300	Yes
Conoco Phillips	Sidney	\$973,919	Yes
Burlington Northern & SFR	Alliance	\$973,682	Yes
Burlington Northern & SFR	Alliance	\$973,303	Yes
Flying J Inc	Gretna	\$972,927	Yes

Responsible Person	City	Reimbursed Amount as of June 30, 2018	Has Statutory Limit Been Reached?*
Burlington Northern & SFR	Alliance	\$972,579	Yes
Magers Service	North Platte	\$947,670	No
Sandhill Oil	Theford	\$946,780	No
Wortman Motor Co.	Doniphan	\$910,867	No
Coastal Refining & Market	Chester	\$900,045	No
City Of Lincoln	Lincoln	\$867,059	No
IBP ATV (At The Verticals)	Dakota City	\$860,784	No
Indianola Oil Company	Indianola	\$860,177	No
Footo Oil Company	Hastings	\$805,481	No
Farmers Union Coop Co	Platte Center	\$803,378	No
Former Milder Oil	Omaha	\$785,544	No
Ag Valley Coop	Curtis	\$782,839	No
Kaneb Pipeline Company	Geneva	\$763,149	No
Sinclair Oil Corp.	Grand Island	\$726,280	No
UPRR	North Platte	\$721,113	No
Elk Oil Co	Elk Creek	\$721,052	No
Farmers Union Coop	Dannebrog	\$718,743	No
Nebr Dept Of Roads	Norfolk	\$702,881	No
Havelock Amoco	Lincoln	\$691,774	No
Crystal Oil Co.	South Sioux City	\$690,914	No
Havertys Farm & City	Nebraska City	\$687,008	No
Engles Oil Co	Auburn	\$686,744	No
Nu Star Energy, LP	Columbus	\$671,767	No
Nelson Petroleum	Geneva	\$664,508	No
Burlington Northern & SFR	Columbus	\$662,844	No
Wauneta-Palisade Pub School	Wauneta	\$655,899	No
Western Convenience Store	Hershey	\$643,028	No
Staplehurst Oil Co	Staplehurst	\$635,773	No
Shaner Chevrolet	Geneva	\$625,557	No
Flying J Travel Plaza	North Platte	\$624,375	No
IBP Inc	Dakota City	\$610,159	No
Agri Coop	Holdrege	\$609,137	No
Former Farmers Coop	Cedar Bluffs	\$607,092	No

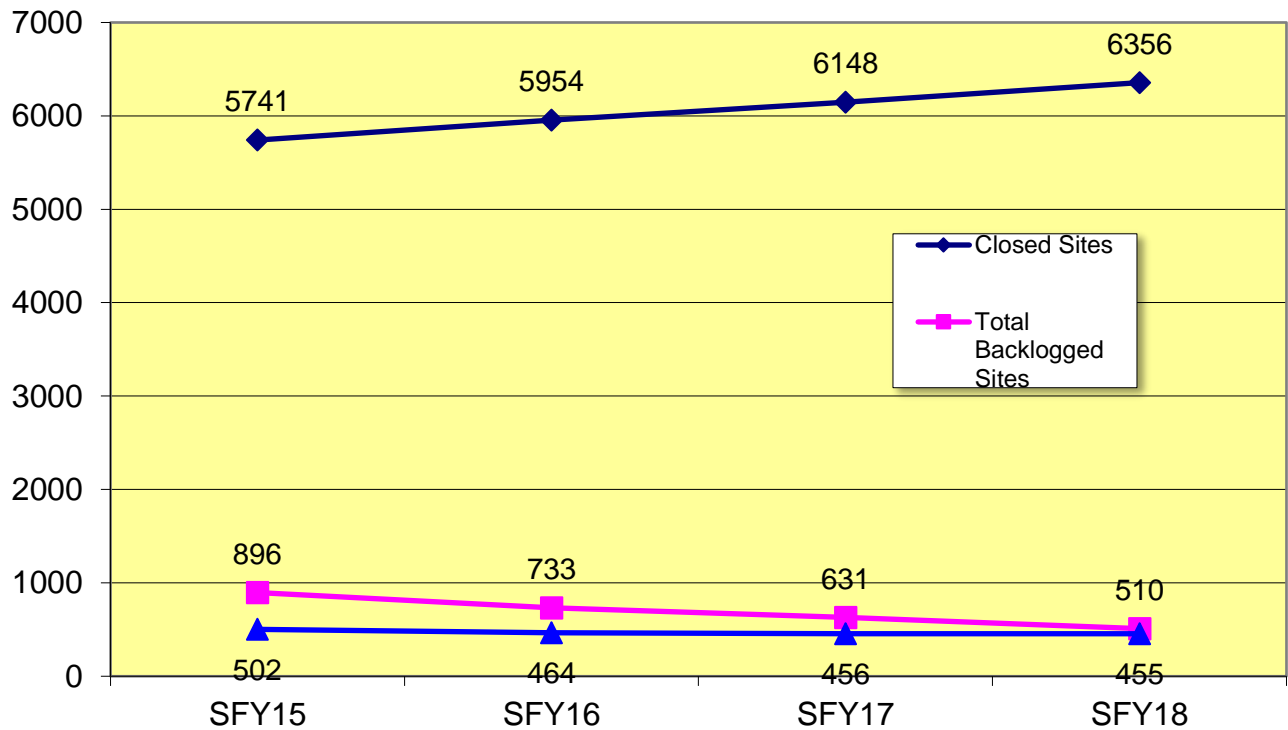
\* Those with a yes indicate that the statutory limit was reached prior to June 30, 2018. The total reimbursed amount may have been reduced due to noncompliance.

Responsible persons are able to perform voluntary remedial action prior to NDEQ's approval of their plans and still be eligible for reimbursement consideration in the future. This allows sites to move forward on their own initiative. To date, 233 suspended or backlogged leaking underground storage tank sites have been closed based on voluntary submittals.

The following is a chart of end-of-year totals for the past four years relating to Petroleum Remediation sites in Nebraska. The chart provides information relating to:

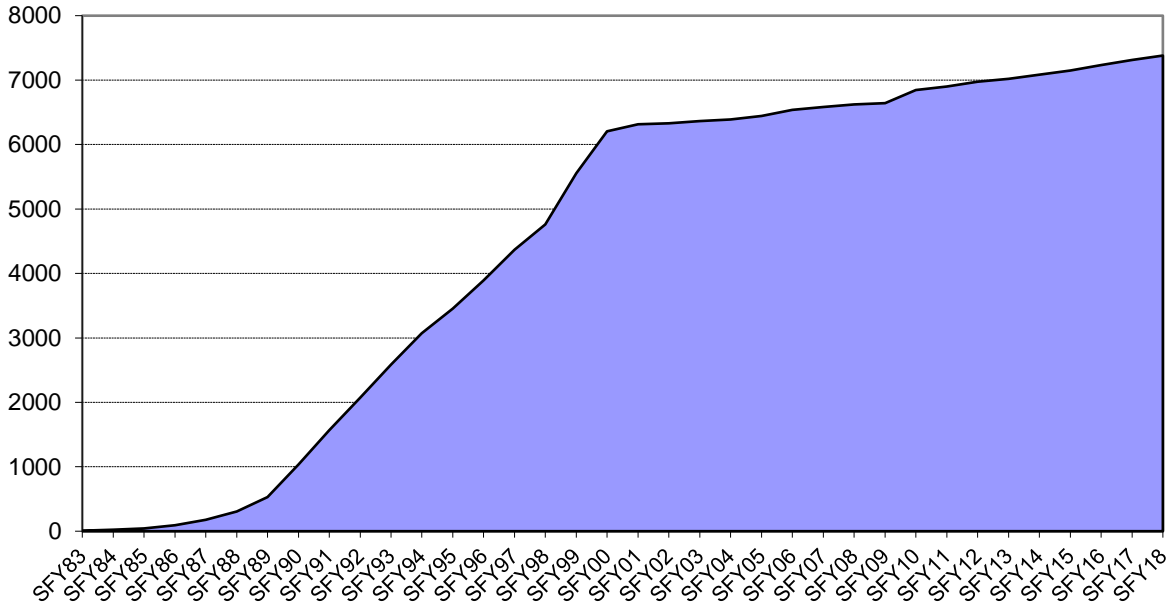
- **Closed Sites:** Sites that have been closed either because they have been cleaned up or it has been determined that no cleanup is necessary.
- **Total Backlogged Sites:** Sites (both responsible person and orphan) identified as potentially needing cleanup, but are on a waiting list for further investigation.
- **Active Sites:** Sites that are currently being actively investigated or remediated.

**Petroleum Remediation trends:  
End-of-Year Totals, SFY15-SFY18**

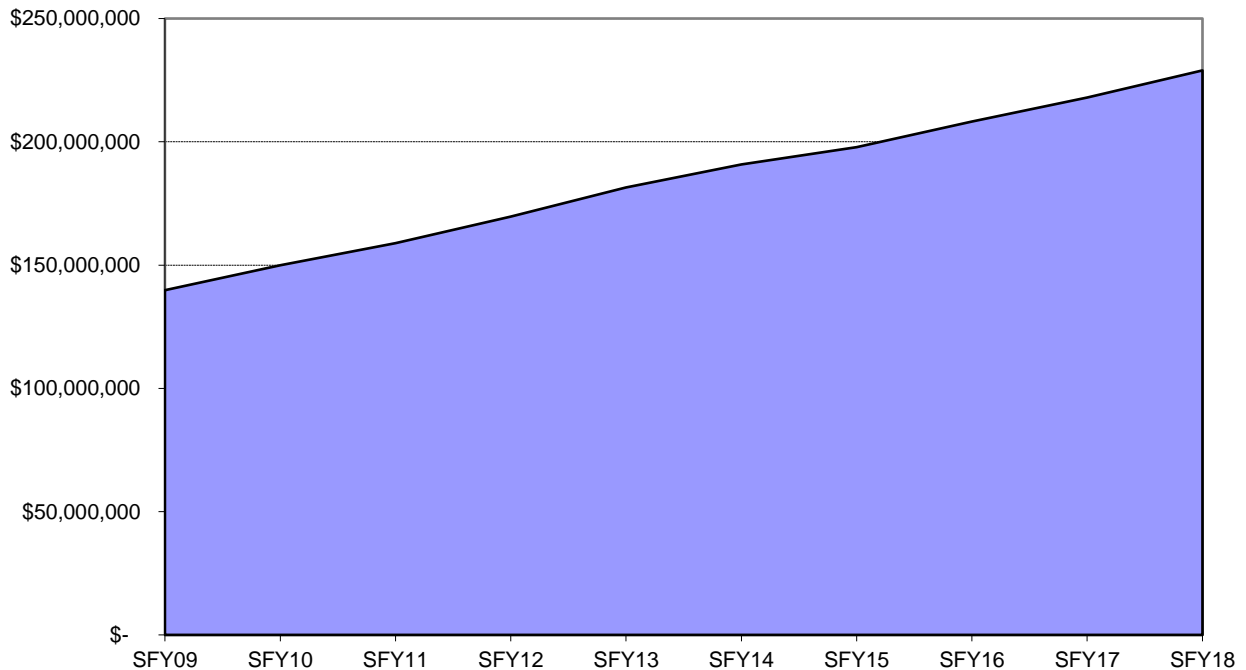


The chart below shows the cumulative number of sites that have had releases identified. The second chart shows the cumulative amount that the program has spent on investigation and cleanup in the past several years.

**Cumulative Number of LUST Releases  
(Through SFY18)**



**Cumulative Title 200 Disbursements  
(last 10 years through SFY18)**



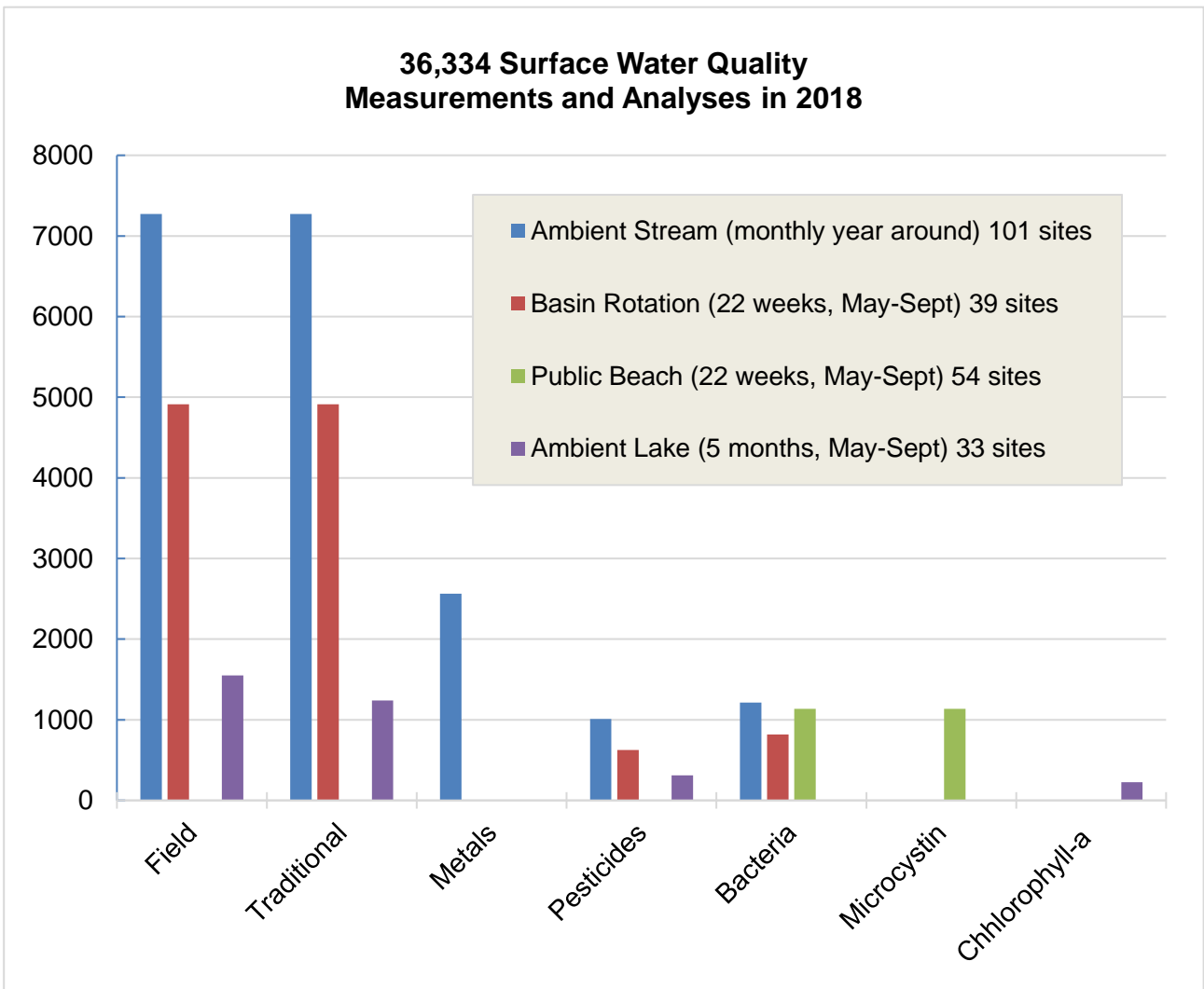


## Water Quality Monitoring and Assessment Programs

### Surface Water Assessment Programs

Staff working with the Surface Water Monitoring and Assessment programs collect physical, chemical, and biological water quality samples from streams and lakes, implement surface water improvement projects, and prepare surface water quality reports. Some monitoring programs collect stream and lake samples throughout the state; however, most monitoring is focused in one to three major river basins each year in conjunction with a rotating basin monitoring strategy. Monitoring data are used to document existing water quality conditions, assess the support of beneficial uses (such as aquatic life, recreation, and public drinking water supply), and prioritize water quality problems. Current monitoring partners include the Natural Resources Districts (NRDs), Nebraska Public Power District (NPPD), U.S. Army Corps of Engineers (USACE), Nebraska Game and Parks Commission (NGPC), University of Nebraska-Lincoln (UNL), Central District Health Department (CDHD), and United States Geological Survey (USGS).

Each year, surface water samples are collected at hundreds of locations across the state resulting in over 36,000 individual field measurements and laboratory analyses. The graph below



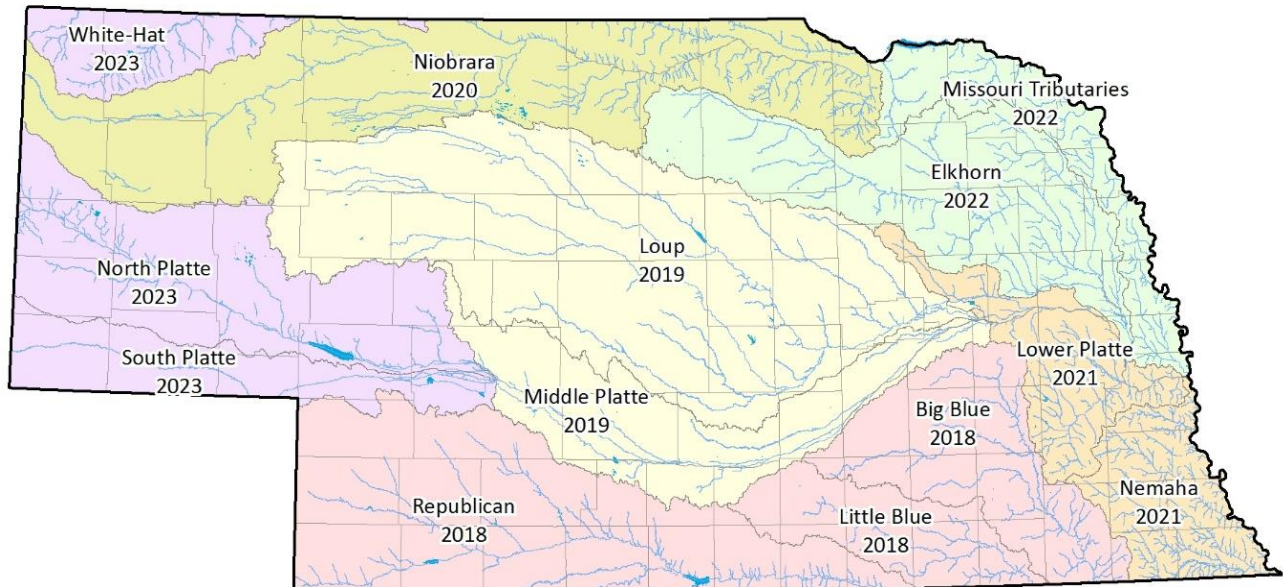
shows the expected number of field measurements made and laboratory analyses performed in 2018.

Brief descriptions of the basin monitoring strategy, as well as other water quality monitoring programs, are provided below. Additionally, a more detailed overview of the programs are provided in the Department's annual publication Water Quality Monitoring Report: <http://deq.ne.gov/publications/Pages/WAT250>

**Basin Rotation Monitoring Program** — The Basin Rotation Monitoring Program (BRMP) targets one to three river basins each year for intensive monitoring. Targeting resources in this manner improves NDEQ's ability to identify and remediate water quality problems and allows resources to be focused where they can produce the greatest environmental results. During a six-year cycle, all 13 major river basins in the state are intensively monitored (see map below for details).

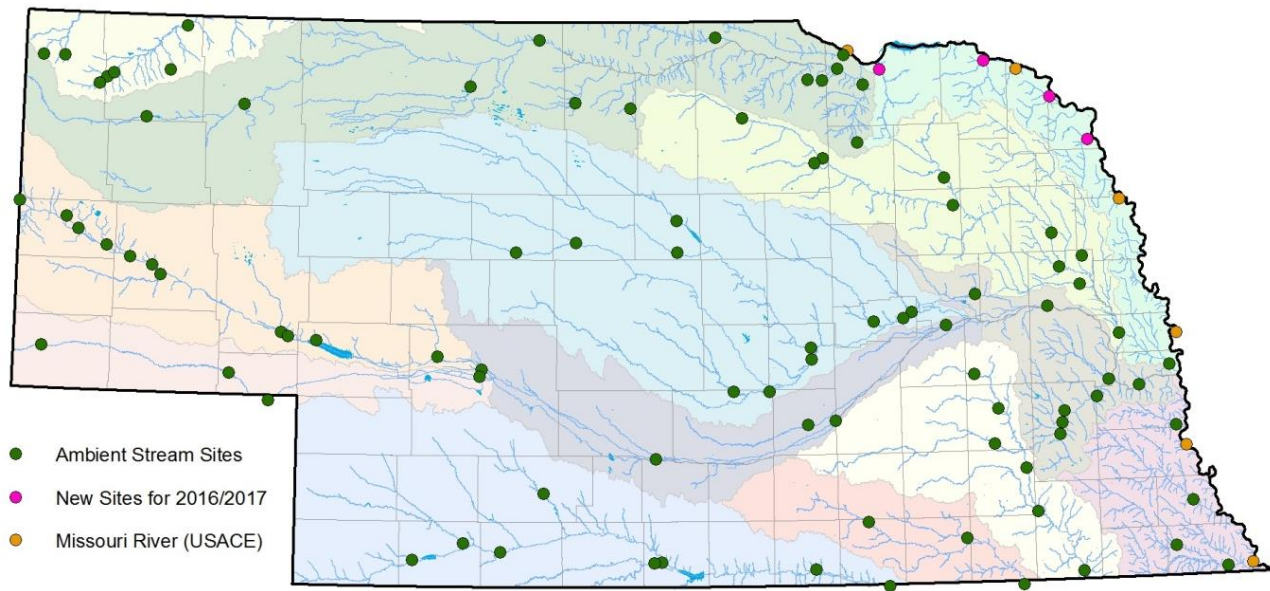
In 2018, a total of 39 stream sites in the Big Blue, Little Blue, and Republican basins were sampled weekly from May through September. A total of 819 stream samples were analyzed for the 15 parameters collected for this program.

### Six-year basin rotation monitoring schedule



**Ambient Stream Monitoring Program** — The Ambient Stream Monitoring Program (ASMP) has a network of 101 fixed stations located on main stem and tributary streams across the state (see map on next page for locations). The primary objectives are to provide information on the status and trends of water quality in streams within each of the state's 13 major river basins and link assessments of status and trends with natural and human factors that affect water quality. During 2018, approximately 1,212 water samples will be analyzed for the 32 parameters collected monthly for this program. Monitoring assistance for this program is provided by the USACE, and the South Platte and Middle Niobrara NRDs.

### Locations of NDEQ Ambient Stream Monitoring Program sites



**Public Beach Monitoring Program** — Since 2004, NDEQ has conducted sample collection at public beaches statewide, for *E. coli* bacteria and the microcystin toxin. The microcystin toxin is hepatotoxin that can be produced by blue-green algae also known as a harmful algal bloom (HAB). The risks to humans come from external exposure (prolonged contact with skin) and from swallowing the water. Symptoms from external exposure are skin rashes, lesions and blisters. Symptoms from ingestion can include headaches, nausea, muscular pains, central abdominal pain, diarrhea and vomiting. Severe cases could include seizures, liver failure and respiratory arrest. The severity of the illness is related to the amount of water ingested, and the concentrations of the toxins. Because dogs died from drinking water from lakes that were undergoing a HAB, NDEQ began monitoring public waters for the presence and concentration of microcystin.



In 2018, monitoring occurred weekly at 54 beaches on 51 different lakes from May through September. Over 1,100 samples were assessed for each parameter. NDEQ and partners collected, analyzed and reported to the public weekly before the weekend when lakes typically experience the most usage. Results are posted to the NDEQ website by Thursday afternoon with press releases on affected lakes being sent to area newspapers Friday morning.

Levels of microcystin above 20 ppb result in public health alerts being issued and signs are then posted recommending full body contact activities in the water be avoided. In 2018, health alerts were issued on seven different lakes and the amount of time the lakes were on alert ranged from 2 to 11 weeks. Results and health alerts are listed weekly during the recreational season on the NDEQ's web site.

Additionally, in 2018 NDEQ assisted Public Water Systems that obtain drinking from surface water sources by monitoring their source water for microcystin. All source water tested in 2018 was below the detectable limit for microcystin testing.

**Fish Tissue Monitoring Program**

— The NDEQ has been sampling and assessing toxins in fish tissue annually since 1978. In 2018, a total of 103 fish tissue samples were collected from 19 streams and 35 lakes within the Big Blue, Little Blue, and Republican basins for analysis of pollutants.

The report “Regional Ambient Fish Tissue Program – 2017 Data Assessment Report” and current list of advisory sites can be found at DEQ’s web site, <http://deq.ne.gov>. The report is located at Publications and Forms/Water Publications/Water Publications by Type/Reports. The direct URL is: <http://deq.ne.gov/publica.nsf/pages/WAT256>.

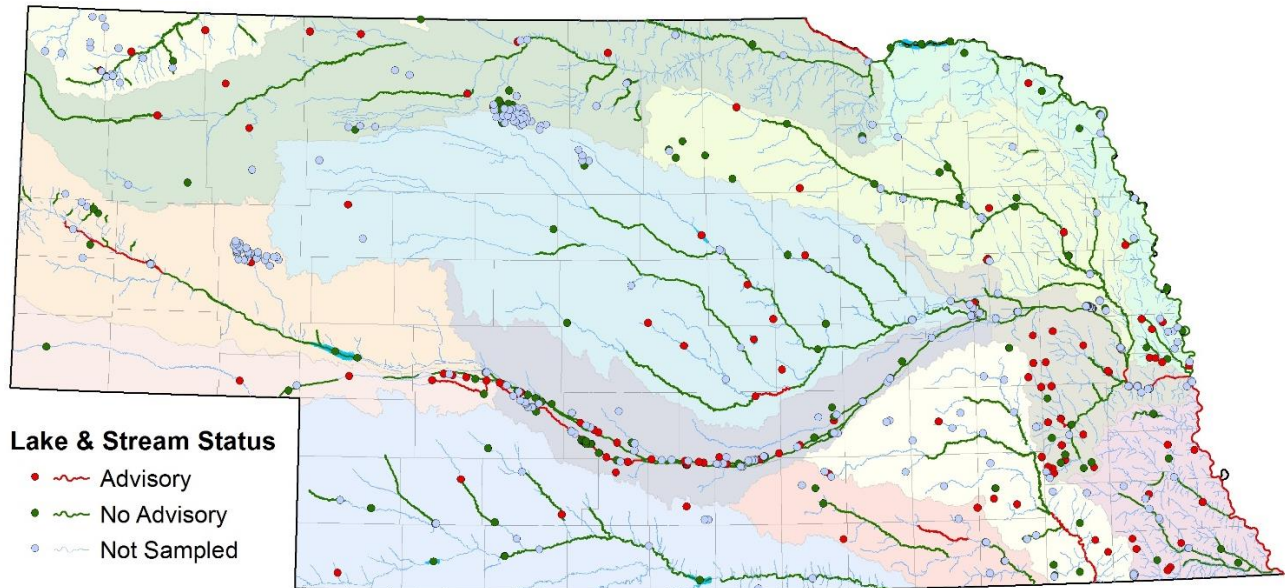


*Electrofishing for the Stream Biological Monitoring Program at Leander Creek, Cherrv County*

A summary of fish advisory information is easily located at DEQ’s web site by entering “fish” in the Search NDEQ Web box located on the right side of the Home page. The direct URL is: <http://deq.ne.gov/NDEQProg.nsf/OnWeb/FCA>.

Currently, Nebraska has 139 state-issued advisories. The primary contaminants of concern in fish tissue in Nebraska and most other states are mercury and polychlorinated biphenyl compounds (PCBs). See maps below for current advisory locations.

**Lake and Stream Fish Consumption Advisory Locations in Nebraska Through 2017**



**Stream Biological Monitoring Program** — This program is used to assess the health of streams by evaluating the numbers and diversity of resident aquatic macroinvertebrate and fish

communities. The probabilistic sampling design used for this program allows NDEQ to scale up from the conditions of the selected sites within a basin to an estimate of the aquatic condition of the entire basin. The Department's fish surveys have also provided information on changing abundances and ranges of fish in the state. During 2018, a total of 34 stream sites were sampled in the Big Blue, Little Blue, and Republican basins.

**Ambient Lake Monitoring Program** — In 2018, 33 lakes and reservoirs were sampled monthly May through September for physical /chemical parameters by NDEQ and its lake monitoring partners (USACE and Nemaha NRD). The Department monitors these resources to determine if water quality is suitable for fish and other aquatic organisms to survive and reproduce. A focus was placed on long term monitoring of 26 geographically and categorically diverse waterbodies in 2018. Additionally, the Department collected data from three basin specific lakes in the Big Blue, Little Blue, and Republican basins. This method allows NDEQ to monitor the effects of changes that occur within the lakes, watersheds, regions, and across the state. Approximately 165 samples were collected at deep water locations and assessed for 15 parameters with additional profiles collected from mid-lake locations.

**Fish Kill and Citizen Complaint Investigations** — The Surface Water Unit responds to reports of fish kills and other environmental concerns of citizens related to surface water. On-site investigations are conducted, as needed, to document existing water quality conditions, surface water quality standards violations and identify pollution sources and responsible parties. A total of five fish kills were reported between July 1, 2017 and June 30, 2018. Four of the reported fish kills were attributed to low dissolved oxygen levels within the waterbody and one was the result of disease.

Between July 1, 2017 and June 30, 2018 the Surface Water Unit received 42 notifications of complaints concerning surface water issues. While many of these cases were referred to other Department programs that more closely relate to the problem, sometimes the Surface Water Unit assists by providing observations or samples to help document conditions.

**Stream Nutrient Assessment Pilot Study** – In 2015, the department began a pilot program, based on the State of Ohio's Stream Nutrient Assessment Protocol (SNAP), to assess the impacts of nutrients on the biology of Nebraska's streams. The primary purpose of the pilot program is to determine whether it is possible to observe local degradation to Nebraska streams resulting from elevated nutrient loads. One-time determinations of nutrient concentrations do not characterize their variable nature or their impacts. Therefore, NDEQ has chosen to collect stream data that is most likely to be directly impacted by nutrients, including changes in dissolved oxygen availability, water column chlorophyll-a concentrations, and measurements of the algal communities that directly assimilate nutrients from the water. The streams chosen for the pilot study are also sampled as part of the Basin Rotation Monitoring Program (BRMP) so that NDEQ may compare high quality and high frequency nutrient sampling to the aforementioned SNAP parameters. About 8 to 10 streams sampled per year. Once a complete six year basin rotation has been completed, a full analysis will be performed to look for degradation and for specific environmental indicators. Afterwards, NDEQ will determine whether the SNAP pilot program should be expanded into a regularly performed monitoring program. In 2018, SNAP collections were made at eight BRMP sites located in the Big Blue, Little Blue, and Republican basins.

**South Loup River Special Study** - The SLRSS was developed in 2017 so that NDEQ can work towards the goal of assessing many of the stream segments within the South Loup River watershed, while at the same time, insuring sufficient data is collected to determine if a stream segment is impaired by pollution and it's contribution of pollutant loads to downstream segments. This monitoring program includes the recreation seasons of May through September of 2017 and

2018. In 2018, surface water samples included 3 base flow grab samples plus 5 runoff samples at seven stream/river locations. This study also included the collection of continuous water quality data to estimate bacteria concentrations and evaluate temporal changes. The USGS, Lower Loup NRD, and Nebraska Department of Natural Resources assisted NDEQ with pollutant load modelling, stream gage installation, surface water sample collections, and bacteria analyses.

**National Rivers and Streams Assessment** – In 2018, NDEQ received a federal grant to participate in a probability based survey of the nation’s rivers and streams. The National Rivers and Streams Assessment (NRSA) is designed to determine the extent to which rivers and streams support a healthy biological condition and extend of stressors that affect them. NRSA field season sampling is conducted every five years. NDEQ sampled 27 waterbodies throughout Nebraska in 2018 with included collections of water, fish, benthic macroinvertebrates, and observations of habitat, vegetation, and disturbance. Sampling will continue in 2019 at an additional 34 sites statewide.

**Integrated Report** —States are required by the federal Clean Water Act to prepare a biennial water quality report called the Integrated Report. The Integrated Report provides a comprehensive summary of the status and trends of surface water quality in Nebraska and includes a list of impaired surface waters that do not support their assigned beneficial uses. The 2016 Water Quality Integrated Report, which was approved by the EPA in April 2016, is available on NDEQ's web site <http://deq.ne.gov>. The report's direct URL is: <http://deq.ne.gov/Publications/Pages/WAT234>

**Nebraska Water Monitoring Programs Report** — A report summarizing the monitoring programs performed by NDEQ called the “Nebraska Water Monitoring Programs Report” was prepared in 2017. This report describes the numerous monitoring programs NDEQ is involved with, its partners, and several highlights of recent monitoring efforts. The 2017 Nebraska Water Monitoring Programs Report is available on the NDEQ's web site <http://deq.ne.gov>, by selecting Publications and Forms/Water Publications/Water Publications by Type. The direct URL is: <http://deq.ne.gov/publications/Pages/WAT250>

## Groundwater Assessment Programs

### Groundwater Quality Monitoring Report

Legislation passed in 2001 directed NDEQ to issue an annual report to the Legislature concerning the quality of the groundwater in Nebraska. The first of these reports was issued December 1, 2001. These reports summarize the water quality monitoring efforts of the Natural Resources Districts, NDEQ, and other state, local and federal agencies, and can be found on NDEQ's web site, <http://deq.ne.gov>. (Select Publications & Forms, then select Groundwater Program, then select Annual Reports.) The direct URL to the 2017 Groundwater Quality Monitoring Report is: <http://deq.ne.gov/publications/pages/wat248>.

Statistics and maps showing nitrate-nitrogen groundwater monitoring results as well as statistics for three of the 241 agricultural chemicals detected in the state are presented. The report uses data from the Quality-Assessed Agricultural Contaminant Database for Nebraska Groundwater, developed cooperatively by the Nebraska Department of Agriculture, University of Nebraska-Lincoln, and NDEQ. These data are accessible to the public on the Nebraska Department of Natural Resources web site, <https://dnr.nebraska.gov>.



### Hydrogeologic Studies and Reviews

The Groundwater Unit is responsible for hydrogeologic review of various NDEQ projects and programs to determine possible effects on groundwater quality and to recommend possible courses of action. Programs for which this review is performed include leaking underground storage tanks, surface spills, underground injection control, wastewater treatment facilities, septic systems, NPDES permits, livestock waste control facilities, the Natural Resources Districts' Groundwater Management Plans, and others.

The Groundwater Unit performs reviews and oversees remediation if a situation does not fall under another agency program and is of environmental significance. Unit personnel continue to take responsibility under Title 118 — Groundwater Quality Standards and Use Classification for many site investigations, and have sampled and supervised site cleanups.

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### Underground Injection Control (UIC)

The Underground Injection Control (UIC) program reviews and issues permits, conducts inspections, and performs compliance reviews for wells used to inject fluids into the subsurface. The program must ensure that injection activities are in compliance with state and federal regulations, and that groundwater is protected from potential contamination sources. Injection wells are classified by injection activity. There are six classes of injection wells:

- Class I injection wells are permitted by NDEQ for the injection of wastewater below the lowermost underground source of drinking water. Two Class I well permits are issued to the Crow Butte Resources uranium mine near Crawford and one to the City of McCook.
- Class II wells are associated with oil and gas production, and are regulated by the Nebraska Oil and Gas Conservation Commission.
- Class III wells are used to inject fluids for the purpose of extracting minerals and permitted by NDEQ. The only Class III wells in the state are at the Crow Butte Resources uranium facility near Crawford. Crow Butte Resources operates over 5,100 Class III wells as of October 1, 2018.

- Class IV wells are associated with the injection of hazardous waste, are illegal, and have never been allowed in Nebraska.
- Injection wells not included in the other specific classes are considered to be Class V wells. Common examples of Class V wells include: open-loop heat pump systems, large capacity septic systems, and sub-surface drip irrigation systems
- Class VI wells are associated with the injection of carbon dioxide for permanent disposal. This class of wells is currently regulated by the EPA.

### Mineral Exploration Program

The Mineral Exploration program issues and reviews permits, conducts inspections, and performs compliance reviews for holes drilled, driven, bored, or dug for the purpose of mineral exploration. These permits are issued to persons exploring for potential mineral resources such as consolidated rock; sand and gravel; or material commingled, in solution, or otherwise occurring beneath the surface or in waters of the State, and are regulated under Title 135 – Rules and Regulations for Mineral Exploration Holes. This type of exploration specifically excludes oil and gas exploration, which is regulated by the Nebraska Oil and Gas Conservation Commission.

Wells that are drilled for the production of mineral resources are regulated as Class III injection wells, and are governed by Title 122 – Rules & Regulations for Underground Injection and Mineral Production Wells as previously described.

### Wellhead Protection

The State Wellhead Protection program is a voluntary program, which assists communities and other public water suppliers in preventing contamination of their water supplies. State Wellhead Protection Program activities include delineating the zones of influence which may impact public supply wells, training communities on how to inventory all potential sources of pollution within these vulnerable zones, working with the local officials to identify options to manage these potential pollution sources, working on monitoring plans, and helping develop contingency plans to provide alternate water supplies and site new wells. All community public water supplies have a Wellhead Protection area map. The Nebraska Legislature passed LB 1161 in 1998 (Neb. Rev. Stat. §46-1501 - 46-1509), authorizing the Wellhead Protection Area Act. This Act sets up a process for public water supply systems to use if they choose to implement a local Wellhead Protection plan. One hundred eighteen community water supplies have approved Wellhead Protection plans as of October 1, 2018.



### Source Water Assessment and Protection

When Congress amended the Safe Drinking Water Act in 1996, one of the amendments created the Source Water Assessment Program (SWAP) for public drinking water protection. Every state has developed a Source Water Assessment Program with the following basic components:

- 1) Delineate the source of each public drinking water system;
- 2) Identify potential contaminants in the source area;
- 3) Determine the drinking water source's susceptibility or vulnerability to contamination; and
- 4) Make the assessments available to the public.

NDEQ is implementing their EPA-approved program in cooperation with the Nebraska Department of Health and Human Services, Nebraska Rural Water Association, Natural Resources Districts, and numerous other stakeholders. All assessments were completed and distributed by August



2003; however, delineations continue to be updated as needed upon receipt of new information about public water supply systems.

Beginning in SFY2004, funds were set aside from the Drinking Water State Revolving Fund (DWSRF) to finance source water protection projects statewide. Funds are provided to political subdivisions that operate a public water system serving a population of 10,000 or less that can show financial hardship. Eligible activities address drinking water quality, quantity, and/or education within the source water protection area. To date, Source Water Protection funds have been distributed to complete 97 separate Source Water Protection projects throughout the state. In SFY2018, Source Water Protection funds were distributed to the following public water systems: Gordon, Syracuse, and Wilber. The total amount available in SFY2018 was \$100,000.

## Water Quality Planning

### Surface Water Quality Standards

NDEQ develops surface water quality standards which are found in Title 117 – Nebraska Surface Water Quality Standards. The state’s waterbodies have been assigned beneficial uses in one of the following categories:

- Public water supply,
- Aquatic life,
- Agriculture,
- Industry,
- Recreation, and
- Aesthetics.

Each beneficial use has water quality criteria for pollutants and chemicals that are developed to be protective of that use. For example, criteria for nitrogen are different for waters assigned to public water supply use than those which have an industrial beneficial use. These criteria



form the basis of water quality protection for all surface water quality programs conducted by NDEQ. The federal Clean Water Act specifies that states review their water quality standards and revise where appropriate once every three years (triennial review).

Nebraska’s triennial review was formally initiated with a public hearing to take testimony from any interested party regarding changes sought for Title 117. A list of potential changes was formed and draft mark-up was prepared for Departmental and Administration consideration.

The current standards are available on NDEQ’s website. In addition to developing the standards, staff develop and implement procedures for applying the standards to surface water quality programs, such as NPDES permits.

### Section 401 Water Quality Certification

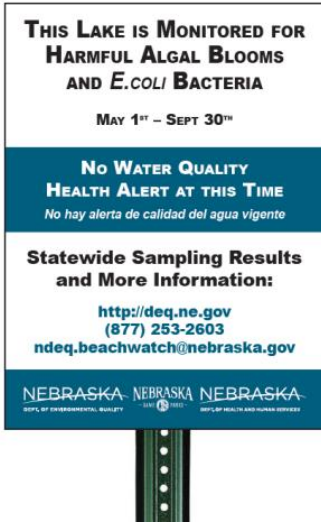
The Water Division Planning Unit administers the Water Quality Certification Program in accordance with Section 401 of the Clean Water Act. This program evaluates applications for federal permits and licenses that involve a discharge to Waters of the U.S. and determines whether the proposed activity complies with Nebraska Surface Water Quality Standards. If the activity is likely to violate the standards, conditions for complying with the standards will be issued with the certification, or certification will be denied. The U.S. Army Corps of Engineers Section 404 Dredge and Fill Permits and Federal Energy Regulatory Commission licenses are examples of federal regulatory programs that require State Water Quality Certification before federal permits or licenses can be issued. NDEQ reviewed 402 Section 404 permit applications during FFY2018.

Although NDEQ has no permitting mechanism for projects in non-federally jurisdictional waters (such as isolated wetlands, which are Waters of the State), voluntary procedures have been developed to assist project sponsors so they will meet state water quality standards. Project sponsors are encouraged to contact NDEQ before implementing their project so that the plans can be discussed in light of Title 117 - Nebraska Surface Water Quality Standards. NDEQ can then issue a Letter of Opinion which provides recommendations for implementing the project in a

manner that protects water quality in streams, lakes, wetlands, and associated important wildlife habitat.

**Impaired Waters and Total Maximum Daily Loads (TMDLs)**

The Federal Clean Water Act, Section 303(d), requires states to prepare a list of impaired surface waters. These are waters that do not support the assigned beneficial uses as listed in Title 117 - Nebraska Surface Water Quality Standards. From this list, states are to prepare TMDLs that include the pollution control goals and strategies necessary to improve the quality of these waters and remove the identified impairments so that these waters may meet their assigned beneficial uses. EPA and NDEQ have agreed to a new alternative to a TMDL which is designed to meet water quality standards quicker called a 5-alt. While a TMDL is still required of all waterbodies listed as impaired, this 5-alt provides a faster alternative for planners to develop proper protection activities for a watershed where a project sponsor intends to implement protection or restoration activities.



As in previous years, NDEQ has opted to combine the required CWA Section 303(d) list with the Section 305(b) report on the general status of water quality in the state. This combination is referred to as the Integrated Report. The 2018 Integrated Report is available on NDEQ's web site <http://deq.ne.gov>, by selecting Water, then selecting Water Quality Planning. Or, the report's direct URL is:

<http://deq.ne.gov/Public.nsf/Pages/WAT251>. The 2018 Integrated Report was approved by EPA in April 2018. Work on the 2020 Integrated Report is underway.

The following table summarizes NDEQ's work in this area.

TMDL Category	TMDL Name	# of Waterbodies	Pollutant	Status
<b>4a</b>				
	Republican River Basin	26	<i>E.coli</i>	NDEQ Developing Draft
<b>5-alt</b>				
	Elkhorn River Basin WMP	9	<i>E.coli</i>	LENRD Developing Draft
	Nemaha River Basin WMP	7	<i>E.coli</i>	NNRD Developing Draft
	White River Basin WMP	5	<i>E.coli</i>	UNWNRD Developing Draft
	Lewis and Clark NRD WMP	7	<i>E.coli</i>	LCNRD Developing Draft
	Lower Platte South NRD WMP	10	<i>E.coli</i>	LPSNRD Developing Draft

This table includes updated Phase II TMDLs and Protection TMDLs on waterbodies without the Recreation Use to protect downstream uses. (LENRD = Lower Elkhorn NRD; NNRD = Nemaha NRD; UNWNRD = Upper Niobrara White NRD; LPSNRD = Lower Platte South NRD; LCNRD = Lewis & Clark NRD)

**Nonpoint Source Management Program**

The goal of the Nebraska Nonpoint Source Management Program is to protect and improve water quality impacted by nonpoint source pollution through an integrated statewide effort. The program is of particular significance because nonpoint source pollution is the most prevalent, widespread cause of water quality degradation in Nebraska. Nonpoint source pollutants of particular concern in Nebraska include those associated with runoff and percolation from agricultural and urban areas. Initiated in 1990, the program is largely funded by the Environmental Protection Agency (EPA) through Section 319 of the federal Clean Water Act and involves key federal, state and local partners.

State nonpoint source problems and priorities are defined in the primary guidance document of the Nonpoint Source Management Program: "Strategic Plan and Guidance for Implementing the Nebraska Nonpoint Source Management Program 2015-2030," which can be found at DEQ's website at <http://deq.ne.gov/publica.nsf/pages/wat119>. The program emphasizes watershed and groundwater management area planning, targeting of 303(d)-listed impaired waters and community participation in watershed plan development. Eligible projects and activities were refined in the 2014 national Section 319 program guidance to emphasize implementation of 9-Element watershed management plans.

Major components of the Nonpoint Source Management Program include implementation of nonpoint source pollution management projects through Section 319 grant funding, nonpoint source pollution monitoring and assessment, and program administration. Nonpoint source monitoring and assessment is an integral and crucial element for the successful implementation of the program. Water quality information is needed to identify and prioritize nonpoint source problem areas, develop watershed management plans and TMDLs, and evaluate the effectiveness of measures implemented to abate nonpoint source pollution. Nonpoint source monitoring activities conducted during the past year included investigative water quality evaluations, detailed watershed assessments, and effectiveness evaluations of implemented nonpoint source management measures.

In FFY 2018, the Nonpoint Source Management Program provided and managed 30 Section 319 grants to local sponsors of eligible projects in the two categories: 1) Large Competitive Projects (generally under \$300,000) and 2) Small Project Assistance (under \$15,000). Of the 30 grants managed, 24 were large multi-year projects, with total funds of all projects equaling \$3,666,127. Six small projects were managed with total funds equaling \$90,000. A total of 251 large projects have been funded through Section 319 funds since the beginning of the program in 1990 and have addressed both surface water and ground water quality concerns. The amount of 319(h) grants funds received by NDEQ between 1990 and 2018 totals \$74,707,514.

Included in the major program highlights this year is the acceptance by EPA of three 9-Element watershed management plans or alternative plans: Little Blue NRD Water Quality Management Plan, Papio-Missouri River NRD Water Quality Management Plan, and Auburn Drinking Water Protection Management Plan. The Auburn plan was developed as an alternative to a 9-Element watershed management plan, similar to the Bazile Groundwater Management Area Plan. Other major achievements were the delisting of Shell Creek for Atrazine and Antelope Creek for E. coli.

### **Water Quality Data Handling and Storage**

NDEQ continues adding Nebraska surface water quality information to the EPA's Water Quality Exchange (WQX) electronic storage system for water quality data. This will make Nebraska surface water quality information available to anyone who has an internet connection. The web site for this information is <https://www.epa.gov/waterdata>. During FY2018, NDEQ continued to add surface water monitoring results to the WQX database. NDEQ has developed a new internal database application which has increased the efficiency of processing surface water monitoring data resulting in significant time savings.

## Agriculture Section

The Agriculture Section programs consist of the Livestock Waste Control Program, the Chemigation Program, and the Agricultural Chemical Containment Program.

### LIVESTOCK WASTE CONTROL PROGRAM

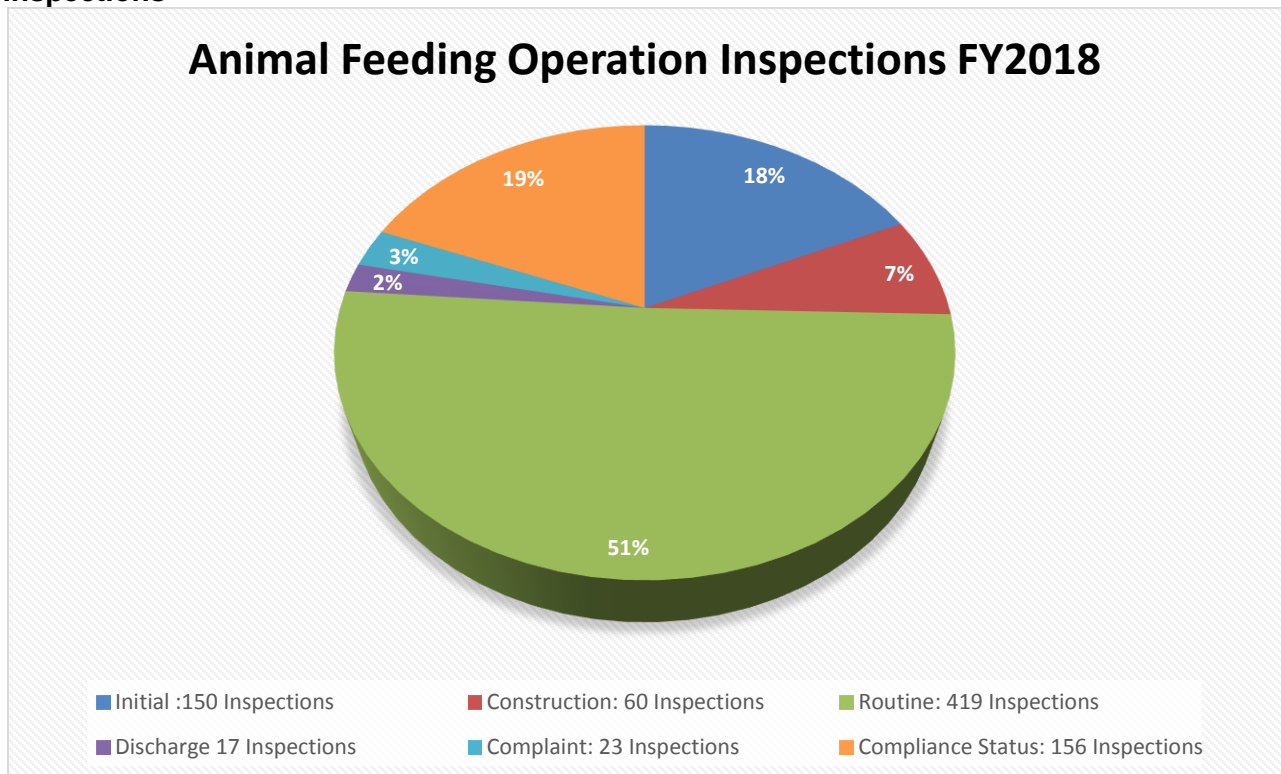
#### Overview

The Livestock Waste Control Program (LWC) is charged with the overall responsibility to protect Nebraska’s surface water and groundwater from discharge of livestock waste from any of the thousands of Animal Feeding Operations (AFOs) in Nebraska.

To accomplish this responsibility, the program administers *Title 130 - Livestock Waste Control Regulations*. The LWC program primarily focuses on the 1193 active large Concentrated Animal Feeding Operations (CAFOs) required to have permits, but also works with approximately 2,153 Medium AFOs. The LWC Program uses inspections, permitting, and periodic monitoring to fulfill this responsibility. The program also implements the National Pollutant Discharge Elimination System (NPDES) program for CAFOs.

Amendments to Title 130 became effective October 4, 2011 to reflect changes in the U.S. Environmental Protection Agency (EPA) CAFO Rule for NPDES permitting, which primarily involved who needs to apply for NPDES permit coverage. The changes were necessary to ensure the Department would continue to administer the NPDES permit program for EPA. As a result, only CAFOs that discharge are required to apply for NPDES permit coverage.

#### Inspections



The LWC Program staff conducted a total of 825 livestock waste control inspections and investigations in FY2018 (including complaint and discharge investigations). The chart above illustrates the breakdown by type of inspection or investigation. A concerted effort was made during the fiscal year to revisit many medium-sized operations to ensure that they were in compliance with Title 130 and the EPA CAFO Rule.

A short description of each type of inspection and investigation follows:

Initial Inspection: Before constructing a new operation or expanding an existing operation, all medium and large AFOs – whether or not the operation currently is permitted -- must request an initial inspection by LWC Program staff. The reason for this inspection is to determine if livestock waste control facilities (LWCF) must be constructed, expanded, or modified to prevent a discharge and to properly manage the livestock waste generated by the operation.

Post Construction Inspection: Upon completion of any required construction of a LWCF, program staff conduct a post-construction inspection to verify the waste control facility was constructed as approved by the Department.

Routine Inspections: Once a CAFO or an AFO has received a permit, and the Department has approved operation of the LWCF, program staff will conduct periodic, routine inspections to monitor operation of the livestock waste control facilities, management of the operation's livestock waste, and the records these CAFOs and AFOs are required to maintain. Routine inspections are regularly scheduled with an AFO, involving a detailed, extensive review of the operation's recordkeeping and waste management at the operation.

Discharge Investigations: Discharge investigations are conducted when livestock waste control facilities discharging are reported. Sometimes these discharges are not recorded as complaints because the AFO does self-reporting, as required by the regulations.

Complaint Investigations: When a complaint is received, LWC Program staff will investigate and may conduct an on-site investigation.

Compliance Status Inspections: Generally conducted to verify the AFO's operating status or level of compliance with a specific requirement; these inspections are usually less urgent, non-emergency situations.

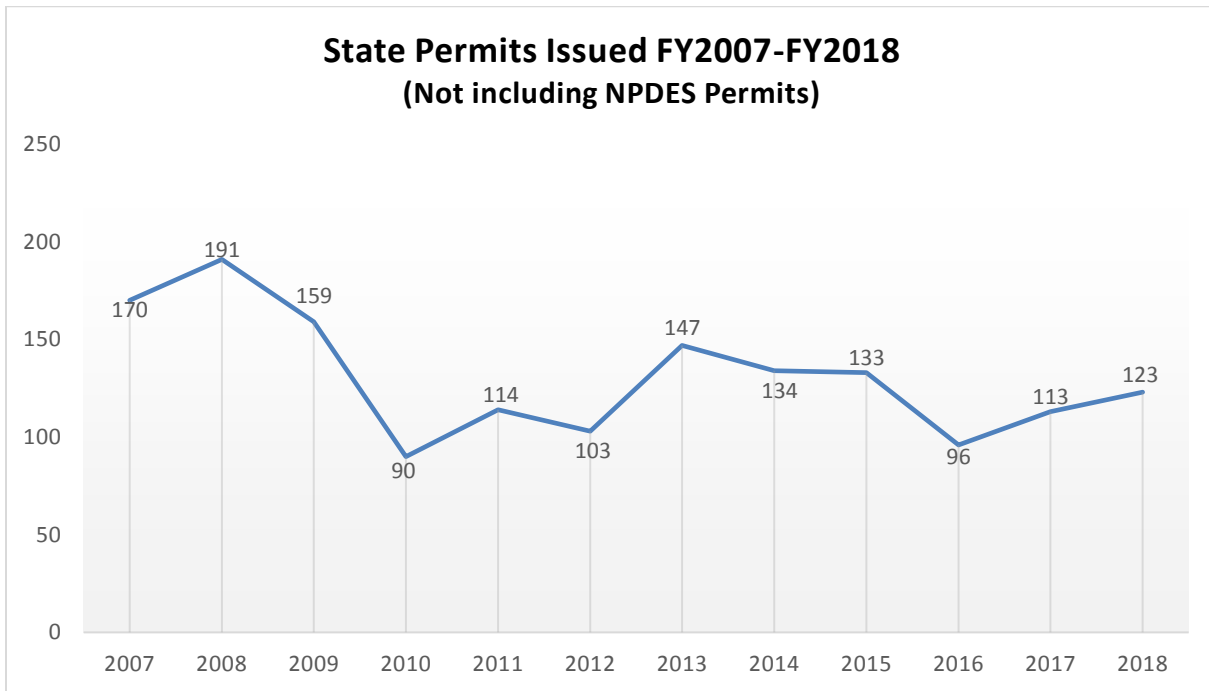
**State Permitting**

After conducting an initial inspection, the Department may require the AFO to submit an application for a Construction and Operating Permit – the state permitting process for livestock waste control facilities – prior to construction of livestock waste control facilities.

The Department received a total of 151 permit applications and issued 123 permits during FY2018, as shown in the table to the right.

<b>Construction and Operating Permits – FY2018</b>		
<b>Type of Application or Permit</b>	<b>Applications Received</b>	<b>Permits Issued</b>
New permits	68	42
Modified permits	56	60
Transfer permits	27	21
<b>TOTAL</b>	<b>151</b>	<b>123</b>

The totals do not include applications received or permits issued for any NPDES permits. The chart below shows the total number of state permits issued annually for livestock waste control facilities since FY2007. The Department updated some existing Construction Permits, Construction Approvals and Operating Permits to Construction and Operating Permits if the AFOs updated their nutrient management plans (NMP) to current Title 130 standards. The NMP updates were mainly in conjunction with NPDES Permit renewals or transferred permits.



Once a permitted AFO has completed its construction project, the Department conducts a post-construction inspection. If the post-construction inspection shows the construction was completed as approved, the Department notifies the AFO that operation of the new livestock waste control facility is approved. In FY2018, the Department gave approval to 62 AFOs for operation of their new or expanded LWC facilities.

### National Pollutant Discharge Elimination System (NPDES) Permit

The LWC Program also oversees the NPDES permitting process for livestock, issuing coverage under individual NPDES permits to CAFOs, as well as coverage under an NPDES General Permit for Concentrated Animal Feeding Operations Confining Cattle. Both permits expire every five years, and permittees are required to submit a reissuance application to continue NPDES permit coverage.

The table below summarizes the number of NPDES applications received and permits issued for livestock waste control facilities in FY2018.

<b>NPDES PERMITS – FY2018</b>		
Type of NPDES Application/Permit	Applications Received	Permits Issued
<b>GENERAL PERMIT FOR CAFOs CONFINING CATTLE</b>		
New Coverage	25	8
Modified or Transferred	19	17
Reissued	93	90
<b>SUBTOTAL GENERAL PERMIT:</b>	<b>137</b>	<b>115</b>
<b>INDIVIDUAL PERMITS</b>		
New Coverage	5	4
Modified or Transferred	4	2
Reissued	7	6
<b>SUBTOTAL INDIVIDUAL PERMIT:</b>	<b>16</b>	<b>12</b>
<b>NPDES TOTALS:</b>	<b>153</b>	<b>127</b>

### Fees

The annual fee is assessed on all permitted Large CAFOs and all CAFOs covered under an NPDES permit. The fee is determined based upon the number of head of livestock for which the operation has a permit. The fees provide 20% of the Department's costs to administer the livestock waste control program, as required by statute. The Department received \$250,818 in annual permit fees. In addition, the Department received \$65,613 in initial inspection fees, \$55,781 in permit application fees, and \$14,447 in late payment fees, for a total of \$386,629 in fees.

General information about the Livestock Waste Control Program, including applications, fact sheets, forms, guidance documents, copies of the NPDES General Permit and the four general permits, Title 130 regulations, and public notices of permit issuance or denial, can all be found on the Department's website at: <http://deg.ne.gov>.

### Online Applications

In February 2017, the Agriculture Section held a team building event intended to identify areas where additional effort would improve overall operations. A key outcome of the event is the online submittal of permit applications. Section personnel have been working with information technology



professionals designing an online portal for the submittal of construction and operating permit applications. The program is convinced that a more streamlined processing of applications for businesses will still be protective of water quality. The new system is still under development and is expected to be in production in 2019.

### **COSTCO**

The livestock program began receiving new chicken barn applications from producers under contract with Costco in FY2018. These chicken producers are not required to obtain permits because their waste product is considered dry manure. However, Costco is requiring their contract chicken producers to apply and obtain the same permit that cattle or hog producers apply for. More Costco chicken barn applications are expected in the next year.

### **CHEMIGATION PROGRAM**

The Chemigation program, which functions in cooperation with Nebraska's 23 Natural Resources Districts (NRDs), works to ensure that users of irrigation systems applying fertilizers and pesticides do not contaminate the sources of irrigation water. These regulations are contained in *Title 195 – Chemigation Regulations*.

Since 1987, the NRDs have inspected irrigation systems used for chemigation for functioning safety equipment and issued site permits. Chemigation permits are issued annually, and are reported to the Department on a calendar year basis. The 26,835 chemigation permits issued in 2018 constituted a two percent increase in permits issued compared to the previous year (26,274 permits issued in 2017).

A chemigation applicator must be certified by the Department every four years. To receive certification, an applicator must complete training and testing, which is provided under contract with the University of Nebraska Cooperative Extension. Applicator certifications also are reported on a calendar-year basis.

In calendar year 2018, 1,052 applicators have been trained, tested and certified, bringing the current number of certified chemigation applicators to 5,633 applicators. Information about chemigation applicator training dates and certified applicators is available after January 1 of each year on the Department's web site, <http://deq.ne.gov>.

### **AGRICULTURAL CHEMICAL CONTAINMENT PROGRAM**

The Agricultural Chemical Containment program regulates the construction and use of commercial and private facilities for the storage, loading, and rinsing activities of bulk liquid fertilizers and bulk liquid and dry pesticides. These regulations are contained in *Title 198 - Rules and Regulations Pertaining to Agricultural Chemical Containment*.

The regulations administered by this program provide specific requirements for design by a Nebraska Registered Professional Engineer, construction materials, containment capacities and maintenance. Although no permit or registration is required, the operation must have a construction plan for the facility and a management program.

The Department and the Nebraska Department of Agriculture have a cooperative agreement that outlines the procedure for coordinating inspection activities between the two agencies. The agreement enhances the communication between the agencies and provides specific protocols to be followed when investigating Agricultural Chemical Containment complaints.

## Wastewater Permitting and Certification Programs

There are a number of certification and permitting programs relating to wastewater treatment facilities, ranging from certification of those who work on septic systems to the permitting of large municipal facilities. These programs include:

- **Onsite Wastewater Treatment Facilities Program** – This program administers system design, professional certification and system registration requirements that affect mostly smaller wastewater treatment or storage systems, such as septic systems, household lagoons, and holding tanks, and anyone doing work on these types of facilities.
- **Wastewater Treatment Facility Operator Certification Program** – This program administers the certification program for wastewater treatment facility operators to ensure proper operation and maintenance of these facilities.
- **Wastewater Construction Permit Program** – The construction permit program establishes design standards for commercial, industrial, and municipal wastewater facilities that are planned for construction. The program also maintains regulations for the operation and maintenance of wastewater facilities and for the proper abandonment of facilities when they are removed from service.
- **The National Pollutant Discharge Elimination System (NPDES) Program** – This program is responsible for regulating discharges of pollutants to Waters of the State to maintain and protect the water quality of Nebraska's streams, lakes, rivers, and groundwater. Other NPDES-related programs include:
  - **Combined Sewer Overflows** -- to address municipalities that have combined storm water and wastewater sewer systems.
  - **Wastewater Treatment Sludge and Biosolids Disposal** -- requirements for treatment and disposal of municipal and industrial wastewater sludges and biosolids, and
  - **Storm Water Permit Program** -- involves: 1) Construction sites of a specific size; and 2) the Municipal Separate Storm Sewer System permits for medium and large municipalities.
- **The Nebraska Pretreatment Program** -- This program functions to protect municipal wastewater collection and treatment systems from damage or overloading by industries.

NDEQ initiated the **Assessing Wastewater Infrastructure Needs (AWIN)** project to assist Nebraska communities with environmental compliance with existing or upcoming regulations. The project is based in NDEQ's Wastewater Division, but it can involve other NDEQ programs, as well as other state and local agencies.

Many communities in the Upper Great Plains States and other regions of the country have population declines, aging populations, declining median household income, and limited or no job availability, all of which lead to limited resources to operate their utilities. AWIN uses data from the latest census and other available data sources to generate a rating for communities using modeling tools. NDEQ uses this information, the communities' input, their consultants' input, and NDEQ observations to make adjustments in standard procedures and design conditions. A few examples of changes include better interest rates on loans, longer compliance schedules, and designs that take into account future declining population.

### **Onsite Wastewater Treatment Facilities Program**

The requirements administered by the Onsite Wastewater Program cover septic systems, wastewater holding tanks, individual household wastewater lagoons, and other decentralized wastewater treatment systems not connected to municipal wastewater treatment systems. The majority of onsite systems are for single households. However, there are onsite or decentralized systems that provide wastewater treatment for multiple houses (these systems are sometimes called cluster systems), mobile home parks, churches, recreational facilities, camper trailer parks, a variety of businesses with high strength wastes (such as restaurants, butcher shops, and wineries), equipment maintenance buildings, and other commercial or industrial facilities. The U.S. EPA estimates that nearly one in four households depend on onsite systems for wastewater treatment.

The *Private Onsite Wastewater Treatment System Contractors Certification and System Registration Act (Act)* passed in 2003 required that anyone doing work associated with onsite wastewater systems be certified by the State of Nebraska. The Act provided for the registration of all onsite wastewater systems constructed, reconstructed, altered, or modified. The law also provided for certification and system registration fees to support the program.

The Act was amended in 2007 by LB333, which provided for application fees for permits and subdivision approvals and established a fee waiver provision for government inspectors. Nebraska Administrative Code *Title 124 – Rules and Regulations for the Design, Operation and Maintenance of Onsite Wastewater Treatment Systems* was last amended, effective August 11, 2012.

Certification of onsite professionals covers design, installation, inspection, maintenance, and pumping of onsite systems. Subdivision review and approval requirements apply when onsite systems will be used on any proposed development lots that will have less than three acres suitable for building. Program staff work to make sure that the design, installation, modification, repair, and maintenance of onsite wastewater systems is performed by certified professionals who understand Title 124 and the proper practices of their trade.

The Onsite Program is focused on the protection of surface and groundwater in the area of proposed onsite systems through the use of standardized design requirements, the certification of onsite professionals, review and approval of plans for subdivision development, and review of plans and issuance of permits for large onsite systems.

A certification by examination is required for professionals to obtain initial certification. Currently, 512 people hold onsite wastewater certificates. Some professionals obtain certification in multiple categories. The categories of certification are: Installer (Master and Journeyman), Pumper (Master and Journeyman), Inspector, and Soil Evaluator. Current certificates expire December 31, 2019, and may be renewed via continuing education requirements or re-examination. Certificates must be renewed every two years.

The registration requirement for onsite wastewater systems provides a statewide inventory of new or modified onsite systems. Since registrations began in 2004, over 22,000 systems have been registered, with 1,486 systems registered in FY18.

NDEQ has cooperative agreements with other governmental agencies (state and local) to help implement and coordinate the program. There are currently 23 certified inspectors from local governments. NDEQ also works cooperatively with Nebraska Department of Health and Human Services personnel to resolve health-related onsite wastewater handling issues.

There were 228 new onsite-related complaints in FY18 and program staff resolved a total of 183 complaints, which includes both old and new complaints. Notices of Violation were issued to 12 entities. Typical types of complaints that are investigated include: failed systems that have a surface discharge, and which may pose a threat to public health or the environment, and installation or performance of work on onsite wastewater systems by individuals who are not certified by NDEQ. In addition, the Section fields approximately 4000 calls annually seeking compliance assistance.

The regulations set minimum design standards for all onsite wastewater treatment systems and include an “Authorization by Rule” provision which allows for the installation of typical onsite systems by a certified professional and subsequent operation by the owner without a site-specific construction or operating permit. These standard conforming systems constitute the vast majority of all new and replacement onsite systems.

Department engineers review construction/operating permit applications for systems that do not meet requirements for Authorization by Rule. Title 124 also provides for Department approval prior to construction of any subdivision with any lot less than three acres where onsite wastewater treatment is proposed. In the past year, the program received 45 applications for construction/operating permits and eight applications for subdivision review and approval.

The Private Onsite Wastewater Treatment System Advisory Committee advises NDEQ on administration of the Act and proposed rules and regulations. Program staff have worked and continue to work with many organizations to educate the public about the importance of proper installation and maintenance of onsite wastewater treatment systems and to improve the knowledge and skills of the various practitioners who install and maintain onsite systems. These groups include: local health offices, county and city planning and zoning, the Nebraska Onsite Wastewater Association, the Nebraska Onsite Wastewater Task Force, UNL Cooperative Extension, Nebraska Realtors, Nebraska Association of County Officials, and the Groundwater Foundation,

### **Wastewater Treatment Facility Operator Certification Program**

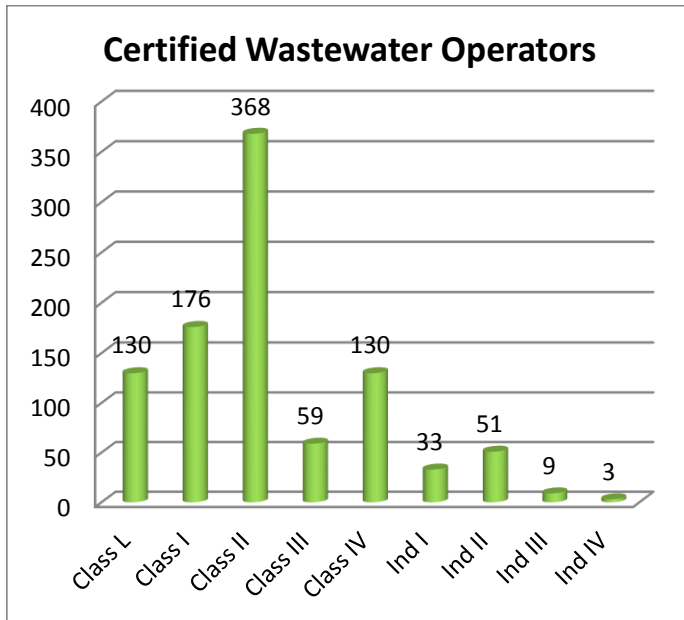
Competent and qualified operators are a critical component to ensure that wastewater treatment plants are well run and protect the environment. The life span of treatment facilities can be prolonged and proper operation and maintenance programs can protect the owner’s substantial financial infrastructure investment. The Wastewater Treatment Facility Operator Certification Program was established to help accomplish this. The program administers the operator certification program, which includes administering certification exams, issuing certificates, evaluating continuing education programs, tracking certificate compliance, processing certificate renewals, and conducting facility ratings to determine operator needs, in addition to continuing to evaluate ways to help wastewater treatment facility operators obtain continuing education to maintain their certification and help them do their jobs.

This program administers nationally accredited certification exams to new wastewater operators, or to operators wishing to advance their credentials, and issues certification renewals for operators who have obtained the necessary Department-approved continuing education as provided for in *Title 197 – Rules and Regulations for the Certification of Wastewater Treatment Operators in Nebraska*. Staff will continue to monitor those facilities that are required to have certified operators and work with them to help them comply with the regulations.

Municipal, commercial, compatible industrial facilities, and non-compatible industrial facilities are required to employ certified operators based on the point rating assigned to each facility by

NDEQ. The point rating for each facility is based on the design flow, type of treatment, instrumentation and control systems, and laboratory analysis requirements at each location. Certified Operators for municipal, commercial, and compatible industrial facilities are classified under the following categories: Class L (lagoons), Class I, Class II, Class III, and Class IV, according to the type of facility and its point rating. Certified operators for non-compatible industrial facilities are classified under the following categories: Industrial I, Industrial II, Industrial III, and Industrial IV, according to the type of facility and its point rating.

The Wastewater Operator Certification Program currently has 863 operators with



municipal/compatible certificates. In addition, there are currently 96 certified operators with industrial certificates (see chart at left for a breakdown of certified wastewater operators by category).

NDEQ also reviews applications and issues operator certification exemptions for towns and other entities that have full-retention non-discharging lagoon wastewater treatment facilities that may not require qualified operators due to very limited maintenance and operational needs. The exemption is for a fixed four-year period and the period under current review will end at the end of 2020. NDEQ has contacted approximately 300 facilities potentially eligible for the exemption and, of these, issued four-year operator exemptions to 216 facilities.

**Wastewater Construction Permit Program**

The Wastewater Section administers Nebraska's construction permit program for wastewater facilities built in the state. Industries, commercial facilities, and municipal utilities are required to submit the plans and specifications for their projects to NDEQ for review and approval. The construction documents are reviewed to make sure that the collection systems and treatment facilities will function properly and protect the public and the environment from adverse effects.

In FY2018, DEQ reviewed and approved designs for a wide range of projects, including livestock truck washes, Omaha Combined Sewer Overflow projects, municipal disinfection systems, and a variety of commercial upgrades. For FY2018, a total of 270 wastewater projects were reviewed and approved by NDEQ.

Nebraska's design standards for wastewater facilities are found in NDEQ *Title 123 -- Rules and Regulations for the Design, Operation and Maintenance of Wastewater Works*. These standards are updated periodically to keep Nebraska in agreement with regional standards. The state's design standards are written to encourage the use of proven technologies, but have also allowed the use of innovative designs where they are appropriate.

Title 123 also contains basic rules for the operation and maintenance of collection systems and treatment facilities. One chapter has rules for the proper abandonment of wastewater facilities which have been removed from service. The abandonment rules are intended to protect the public from unsafe site conditions and allow the property to be redeveloped for other uses.

A considerable amount of time every year is spent working with communities that need to upgrade their facilities. Section engineers met regularly with municipal officials, funding agencies, and consulting engineers to develop affordable projects for Nebraska's communities. Assessing Wastewater Infrastructure Needs (AWIN) principals were used to evaluate projects for small communities. The section also met with State Parks, manufacturing facilities, mobile home parks, livestock truck washes, and with small agricultural businesses to plan for their wastewater treatment needs.

The Agency continues to have quarterly meetings with the City of Omaha to discuss their combined sewer separation project. The meetings have provided an excellent forum for reviewing regulatory and engineering issues.

### **National Pollution Elimination System (NPDES) and Related Programs**

The Wastewater Section administers permitting programs that regulate point source dischargers of water pollutants, including:

- **The National Pollutant Discharge Elimination System (NPDES) Program**, which is responsible for regulating discharges of pollutants to Waters of the State in order to maintain and protect the water quality of Nebraska's streams, lakes, rivers, and groundwater. NPDES programs also include:
  - **Combined Sewer Overflows**, which addresses those municipalities that have combined storm water and wastewater sewer systems.
  - **Wastewater Treatment Sludge and Biosolids Disposal**, which are requirements for treatment and disposal of municipal and industrial wastewater sludges and biosolids,
  - **Storm Water Permit Program** – This permit programs involves: 1) Construction sites of a specific size; 2) the Municipal Separate Storm Sewer System permits for medium and large municipalities; 3) Industrial facilities.
  - **The Nebraska Pretreatment Program**, which functions to protect municipal wastewater collection and treatment systems from damage or overloading by industries.

Activities include issuing permits to monitor and limit pollutants in wastewater discharges and evaluate compliance with the permits and other applicable regulatory requirements of the programs.

### **NPDES Permits**

Anyone who directly discharges pollutants to Waters of the State is required to obtain a permit. NPDES permits control pollutant discharges by establishing wastewater limitations for pollutants and/or requiring permittees to maintain certain operational standards or procedures. Permittees are required to verify compliance with permit requirements by monitoring their wastewater, maintaining records, and/or filing periodic reports.

NDEQ is responsible for developing and issuing NPDES permits, and for ensuring that permitted facilities comply with permit requirements. The regulatory basis for this program is through an Environmental Protection Agency (EPA) delegation agreement with the Department and NDEQ *Title 119 - Rules and Regulations Pertaining to the Issuance of Permits Under the National Pollutant Discharge Elimination System*. The Nebraska NPDES program encompasses a number of different types of discharges including: municipal, commercial and industrial wastewater discharges; livestock waste control; industrial discharges to public wastewater treatment systems (also known as the Nebraska Pretreatment Program); municipal combined sanitary and storm sewer overflows; and industrial and municipal storm water discharges. Graphs on the next page show distribution of permits issued to various types of NPDES dischargers, except Livestock. Information regarding Livestock NPDES permits is found on page 92 of this report.

Most NPDES permits limit the discharge of pollutants by establishing effluent limitations for specific pollutants such as carbonaceous biochemical oxygen demand, total suspended solids, and ammonia among others. The permittee is then responsible for testing their wastewater discharge to ensure that the limits are not exceeded. Permits may also limit toxicity in effluents and permittees may be required to demonstrate that their wastewater is not toxic to aquatic organisms (e.g., daphnia or fathead minnows). The permit may also require development of Best Management Practices Plans to reduce or control pollutant discharges.

The permit development process involves identifying the pollutants of concern, and then developing permit limits based upon the more stringent of either technology-based standards or water quality based standards. Technology-based standards reflect effluent quality that can be achieved using treatment technology that is available to the permittee. NDEQ Title 119 sets forth technology-based standards for municipal facilities and many types of industrial facilities. Technology-based standards can also be developed on a case-by-case basis when necessary.

Water quality based limits are the limits necessary to meet the in-stream water quality standards established in NDEQ *Title 117 - Nebraska Surface Water Quality Standards*. In some instances, where a surface water/groundwater interconnection may be of concern, NPDES permit limits may be based upon NDEQ *Title 118 - Groundwater Quality Standards and Use Classification*.

Permits may be developed and issued on an individual site-specific basis, or they may be developed and issued to apply to facilities with similar activities or effluent characteristics. These two types of permits are respectively referred to as individual permits and general permits. To date, the department has developed and issued general permits for the following activity categories: hydrostatic testing, dewatering, land application of concrete grooving/grinding slurry, pesticides applications to, over, and near Waters of the State, gasoline contaminated groundwater remediation projects, petroleum product contaminated groundwater remediation projects, construction site storm water, and industrial site storm water. Municipal Separate Storm Sewer System (MS4) permits have been issued to entities, including metropolitan areas and counties that meet the criteria of the NPDES Storm Water Program. There currently are 27 storm sewer systems in Nebraska that have received MS4 authorizations that include municipalities, counties, the Nebraska Department of Transportation, and the University of Nebraska. The Construction Storm Water General Permit was reissued November 2016. The Industrial Storm Water General Permit was reissued July 2016. During FY2017, online application processes were utilized for these general permits which streamlined the issuance of coverage to applicants. Determinations for coverage can now be made within a couple of days for qualified applicants.

There are 613 facilities with discharge authorizations under individual permits (municipal, industrial and pretreatment), and 27 municipal storm water permits (MS4). There are 2,180 active facilities authorized to discharge under other general permits. The general permits include 1,264

active authorizations under the construction general storm water permit, 68 dewatering including Omaha, 13 hydrostatic testing, 775 industrial storm water, 14 pesticide, and 46 Treated Ground Water Remediation Discharge sites.

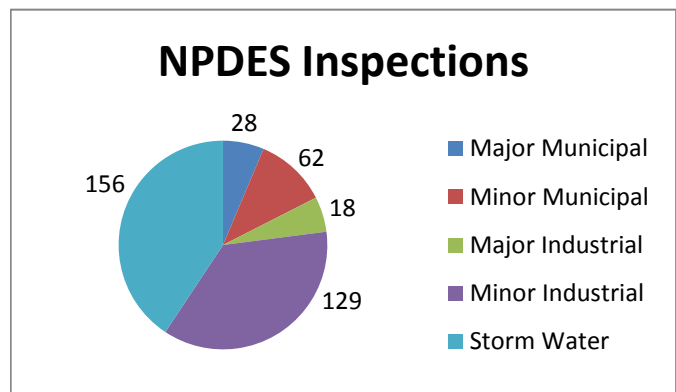
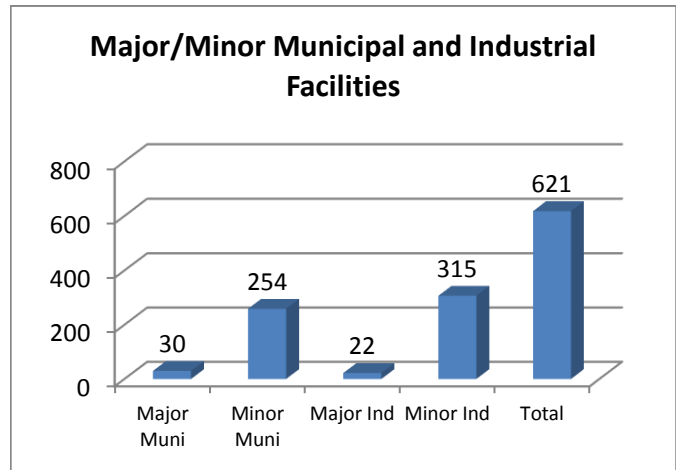
**Municipal and Industrial Facilities**

Industrial and municipal facilities are both grouped as major or minor facilities based upon their size and/or their potential to impact the receiving stream. The chart titled "Major/Minor Municipal and Industrial Facilities" provides a numeric break down of these types of facilities.

Municipal and industrial facilities are required to verify compliance with numeric permit limits by monitoring their effluents (i.e., self-monitoring). Monitoring frequency can vary from daily to annually depending upon the pollution and impact potential of the facility. The facility must report monitoring results to the Department; typically this is done on a quarterly basis. However, monitoring results that indicate non-compliance with permit requirements must be reported verbally within 24 hours. Records of all monitoring activities must be kept for a period of three years.

The Section verifies compliance through a variety of activities including reviewing discharge monitoring reports, following up on complaints and incident reports, conducting on-site inspections, and performing effluent monitoring inspections.

During on-site inspections, section personnel walk through the facility and review operational procedures and records. Major industrial and municipal facilities receive annual on-site inspections. The priority of minor facilities inspections is based on discharge compliance histories, incident reports and complaints. Inspectors performed 394 NPDES inspections in Fiscal Year 2018. A breakdown of those inspections is provided in the chart at right. The minor industrial inspections include 112 pretreatment inspections. During selected effluent monitoring inspections, effluent samples are collected and analyzed by the Department to compare with self-monitoring results. Facilities selected for effluent monitoring inspections are chosen based upon pollution potential, past compliance or incident report histories, complaints, and/or Basin Management Approach priorities. In addition an MS4 inspection was conducted in North Platte.



Data generated by facility monitoring and Department on-site and effluent monitoring inspections are reviewed and entered into the federal Integrated Compliance Information System (ICIS) computer database. This database is used to generate facility reports and review facility compliance history.



### **Combined Sewer Overflow Program**

The Combined Sewer Overflow (CSO) program addresses Omaha's combined storm water and wastewater sewer systems. Omaha's systems were built prior to the existence of secondary sanitary wastewater disposal standards. When storm or snow melt runoff is occurring, these systems may become hydraulically overloaded and excess water flows bypass the treatment system. Untreated wastewater is discharged into the receiving stream when bypasses occur.

The City of Omaha has combined sewers that are subject to storm-induced bypasses of untreated waste. The City submitted a substantively complete long-term control plan on October 1, 2007 in compliance with an Administrative Consent Order between the City and NDEQ. On September 25, 2009, the City submitted their Final Long Term Control Plan, also in compliance with the Administrative Consent Order. This order initially required Omaha to complete the long-term control plan projects by 2024. In 2012 the order was modified to add an additional three years due to the 2011 Missouri River flood. The projects included in the plan span 18 years and are estimated to cost over \$2 billion. The goal of the projects is to reduce or eliminate combined sewer overflows and comply with State and Federal regulations. The order was amended in January 2018 to allow for evaluation of existing and future CSO improvements. The evaluation will help determine what efforts have been the most or least effective meeting permit requirements, provide socio-economic value to neighborhoods, improve the bid process, and improve value engineering for projects.

The City of Omaha's CSO NPDES permit has been re-issued effective October 1, 2015 and includes a schedule for project implementation. This schedule utilizes the first five years of project implementation as defined by the Long Term Control Plan. The City of Omaha and NDEQ continue to work cooperatively on evaluating and implementing long term solutions to protect water quality, comply with the CSO requirements of the Clean Water Act, and minimize the financial impacts to the most vulnerable citizens in the community.

### **Wastewater Treatment Sludge and Biosolids Disposal**

Disposal requirements for municipal and industrial wastewater treatment sludges or biosolids can be incorporated into NPDES permits. These sludge disposal requirements assure that sludges or biosolids are treated and disposed in a manner that is environmentally sound and protective of human health. Beneficial use, such as land application of biosolids, is strongly encouraged.

On Feb. 19, 1993, the EPA published the federal sludge regulations. Under these regulations, an estimated 330 municipal facilities in the state have additional sludge monitoring requirements. These additional requirements include increased metal and nutrient content analyses; improved records for tracking the amount of sludge and metals applied to each disposal site, and cumulative disposal limits. The Department has not sought delegation of this program from the EPA. The program is managed out of the EPA Region 7 office in Lenexa, KS. NDEQ can provide guidance for municipalities and provides permit language to assist with biosolids program compliance.

### **Storm Water Program**

In compliance with federal regulations, the NPDES Storm Water Phase I and Phase II Programs regulate the discharge of pollutants in storm water from certain construction sites, industrial facilities and municipal storm sewer outfalls. Storm Water Phase II federal regulations lowered the threshold for coverage of construction sites from five acres or more to one acre or

more. And, sites that are less than one acre can also be regulated in Phase II, if they are part of a common plan of development or sale. The industrial facilities are defined to include a number of different types of facilities in addition to typical process industries (e.g., landfills, wastewater treatment sites, recycling centers, scrap yards, mining operations, transportation facilities, and hazardous waste facilities). These regulations also increase the number of municipalities and urban areas that are subject to the NPDES program for storm water discharges.

The cities of Omaha and Lincoln were subject to the Municipal Separate Storm Sewer System (also known as the MS4) Program with the implementation of Phase I. Lincoln was initially issued an MS4 Permit on September 1, 2002. This permit will be reissued November 2018. The Omaha MS4 Permit was initially issued on October 1, 2003 and was reissued in March 2018. Phase II has expanded the areas requiring coverage under an NPDES MS4 Permit to include the urbanized areas in Douglas, Sarpy, Lancaster, Washington and Dakota Counties. An NPDES permit for Douglas, Sarpy and Washington Counties was initially issued August 2004. The Dakota County MS4 permit was initially issued effective December 2004.

In 2002, NDEQ initially determined the communities of Beatrice, Columbus, Fremont, Grand Island, Hastings, Kearney, Lexington, Norfolk, North Platte and Scottsbluff were exempt. However, newly approved Total Maximum Daily Loads and a review of the criteria for each municipality, included these communities under Phase II regulations for MS4 permits. A statewide general permit was initially issued January 2006. The Storm Water Management Plans (SWMPs) for these cities were received, public noticed and each of these communities was authorized under this general permit. These permittees have entered into a cooperative agreement to form the Phase II Storm Water Cooperative. Their Storm Water Management Plans are coordinated so that development work and implementation plans can be shared between them. The NDEQ works closely with this group.

The re-issuance of the statewide general and Douglas, Sarpy County permits for small MS4s were issued July 2017. These permits also provide coverage to Gretna and the non-traditional MS4s operated by UNL, UNO, and Offutt Air Force Base. Dakota County, South Sioux City, and Dakota City are now covered under the state-wide permit. NDEQ reviewed the status of Washington County determining the criteria requiring coverage was no longer met.

Two general permits have been issued to provide coverage for industrial facilities and construction sites. Both of these general permits require the permittee to develop Storm Water Pollution Prevention Plans to control and reduce the discharge of pollutants. The NPDES General Permit for Storm Water Discharges from Construction Sites, NER160000 was issued November 2016. The NPDES General Permit for Storm Water Discharges from Industrial Activity, NER910000, was issued July 2016. The new permit continues benchmark monitoring for certain industrial activities.

### **Nebraska Pretreatment Program Permits**

The Nebraska Pretreatment Program functions to protect municipal wastewater collection and treatment systems from damage or overloading by industrial dischargers. The pretreatment regulations are found in Title 119. The rules and regulations set forth prohibited discharge standards that apply to all industrial users of publicly owned wastewater treatment facilities and require permits for significant industrial users. The significant industrial users are determined by one of several means: 1) the existence of an industrial category for which pretreatment discharge standards are established in NDEQ Title 119; 2) the volume or strength of the wastewater discharged from the facility; or 3) the potential of the industrial user to adversely affect the wastewater collection or treatment facilities.

The authority for establishing the Pretreatment Program is derived from the NPDES program requirements set forth in Section 402 of the Federal Clean Water Act. The issuance procedures and general format of Pretreatment Program and NPDES permits are very similar. Permittees are required to carry out self-monitoring activities, maintain records and submit periodic reports. Compliance activities include report reviews, on-site inspections and compliance monitoring inspections. Compliance data are entered into the national database, ICIS, to facilitate compliance review activities.

Although the Pretreatment Program is really a subprogram of the NPDES program, administration of this program requires more coordination and cooperation with local municipal officials. To accomplish this, the Department has entered into Memorandums of Agreement (MOAs) with 11 communities describing respective city and state responsibilities. The agreements vary in nature depending on the size and capabilities of the community. Omaha and Lincoln are the most active municipal partners, accepting responsibility for a large variety of activities including facility sampling, inspections, complaint investigations, permit reviews, and industrial user technical assistance. Other communities rely more heavily upon the State for compliance inspections and technical reviews. However, all cities with agreements conduct initial complaint or incident investigations, report significant incidents to the Department and assist in permit development by reviewing draft permits. The Department is working with communities throughout the state to get them more involved in the pretreatment program and to improve cooperative efforts in this program.

## State Revolving Loan Fund Programs

The Water Quality Division's Financial Assistance Section administers distribution of state and federal assistance for the Clean Water State Revolving Loan Fund and the Drinking Water State Revolving Loan Fund.

### Clean Water State Revolving Loan Fund

The Nebraska Clean Water State Revolving Loan Fund (CWSRF) program provides low-interest loans and small community matching grants to municipalities for construction of wastewater treatment facilities and sanitary sewer collection systems to alleviate public health and environmental problems. The loan principal repayments go into new loans, and interest earnings on the Fund are used to pay off the state match bond issues and to make new loans.

The CWSRF program receives an annual federal EPA capitalization grant. A 20% state match, required to obtain the federal grant, is provided through Nebraska Investment Finance Authority (NIFA) bond issues. After 30 years of activity, the Fund's Net Assets have reached \$310.2 million. Since its inception, the CWSRF has provided loans for 301 projects with a cumulative loan award amount of \$569.6 million.

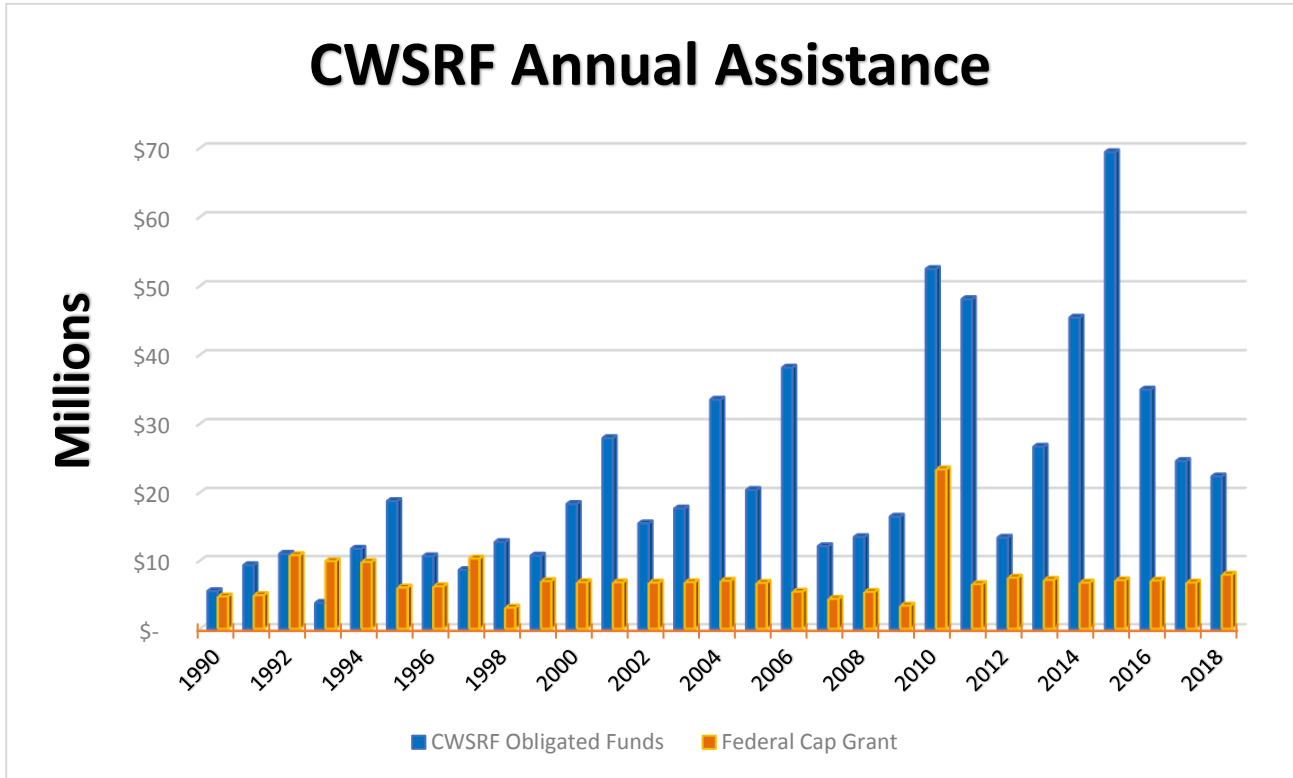
In State Fiscal Year (SFY) 2018, the CWSRF funded projects totaling \$21,217,975 in loans and \$1,149,775 in loan forgiveness and grant funds.

The EPA awarded the 2017 capitalization grant, in the amount of \$6,750,000, in August of 2017. \$1,360,000 was used as match for this federal grant through bonds and cash.

#### Municipalities Receiving CWSRF Loans in SFY 2018

Municipality	Loan Date	Loan Amount	Principal Forgiveness Amount	Small Town Grant Amount	Total
Gilead Amd #2	9/11/17	\$16,900		\$16,900	\$33,800
Grand Island	9/11/17	\$6,473,500			\$6,473,500
Hastings	9/11/17	\$7,000,000			\$7,000,000
Lynch	12/21/17	\$472,700	\$100,000		\$572,700
Wauneta	10/23/17	\$150,000	\$100,000		\$250,000
Deweese	1/9/18	\$120,000	\$100,000	\$20,000	\$240,000
Gothenburg	2/14/18	\$625,000			\$625,000
Marquette	2/13/18	\$210,000	\$100,000	\$44,200	\$354,200
Sutherland	3/13/18	\$365,000			\$365,000
Cairo	4/13/18	\$870,000			\$870,000
Comstock	5/16/18	\$121,100	\$100,000		\$221,100
Haigler	6/29/18	\$318,675	\$100,000	\$218,675	\$637,350
Kearney	5/2/18	\$4,075,100			\$4,075,100
Benkelman	6/1/18			\$250,000	\$250,000
Randolph	4/13/18	\$400,000			\$400,000
<b>TOTAL</b>		<b>\$21,217,975</b>	<b>\$600,000</b>	<b>\$549,775</b>	<b>\$22,367,750</b>

The graph reflects the cumulative loan assistance of CWSRF.



**Small Town Grants**

In addition to and concurrent with loans, the CWSRF provides small community matching grants to financially distressed municipalities with a population of 10,000 or less. The Small Town Grant (STG) program has provided \$9.49 million in grant funding for 80 projects concurrent with a CWSRF loan since the start of the program. Many small municipalities find that needed projects are too costly without the additional grant subsidy provided concurrent with the CWSRF loan. The department intends to provide increased funding to as many qualifying projects as possible; therefore, for SFY2018, up to \$550,268 was available for small community grants, and any one community could receive a maximum of \$250,000. The program provided a total of \$549,775 in grant funds to the communities of Gilead, Deweese, Marquette, Benkelman and Haigler.

In SFY 2018, planning grants for a total of \$60,000 from the Administrative Cash Fund were awarded to small communities. These communities identified wastewater treatment facility project needs. They were listed on the Project Priority List, have not received a planning grant in the previous five years, and have a population of 10,000 or less.

**Drinking Water State Revolving Loan Fund**

The Nebraska Drinking Water State Revolving Loan Fund (DWSRF) program provides low-interest loans and loan forgiveness to owners of public water systems. The loan principal repayments go into new loans, and interest earnings on the Fund are used to pay off the state match bond issues and to make new loans. An agreement between the NDEQ and the Nebraska Department of Health and Human Services, Division of Public Health (NDHHS-DPH), effective on October 30, 1997, defined the authority of the two agencies in administering the DWSRF program.

The DWSRF is similar to the Clean Water State Revolving Fund in that both obtain the required 20% state match through Cash Funds or revenue bonds, give low interest loans, and will be self-sustaining. The DWSRF is unique in that loans may be awarded to privately owned public water supplies. Other program differences include set-asides for program administration, technical assistance, wellhead protection, capacity development, and operator certification. After 21 years of activity, the Fund's Net Assets have reached \$196.7 million.

### DWSRF Set-Aside Funds and Administration Cash Fund

Administrative costs are being paid out of the Administrative Cash Fund and may include program operating costs for both NDEQ and NDHHS-DPH, including day-to-day DWSRF program management activities for both agencies. Also included are other costs associated with debt issuance, financial management, consulting, and support services necessary to provide a complete program.

The Small System Technical Assistance set-aside (2%) provides technical assistance to Public Water Systems (PWS) serving a population of 10,000 or less. This is accomplished through contracts with organizations with expertise in dealing with small systems and is coordinated by the NDHHS-DPH.

In FY2018, under the Local Assistance and Other State Programs set-aside (15%), six agreements for preliminary engineering reports totaling \$90,000 were awarded to high priority ranked communities to address public health issues associated with public water supplies. In addition, there were three source water protection project for the communities of Gordon, Syracuse, and Wilber totaling \$100,000. The NDEQ administers these programs.

The State may use up to a total of 10 percent of the Capitalization Grant for the PWS Program Administration set-aside. NDHHS-DPH used \$1,234,500 from the FFY 2017 Capitalization Grant to administer Nebraska's Public Water Supply Program during SFY 2018. That amount included \$403,300 of authority that had been previously reserved from past capitalization grants.

### Municipalities Receiving DWSRF Loans in SFY 2018

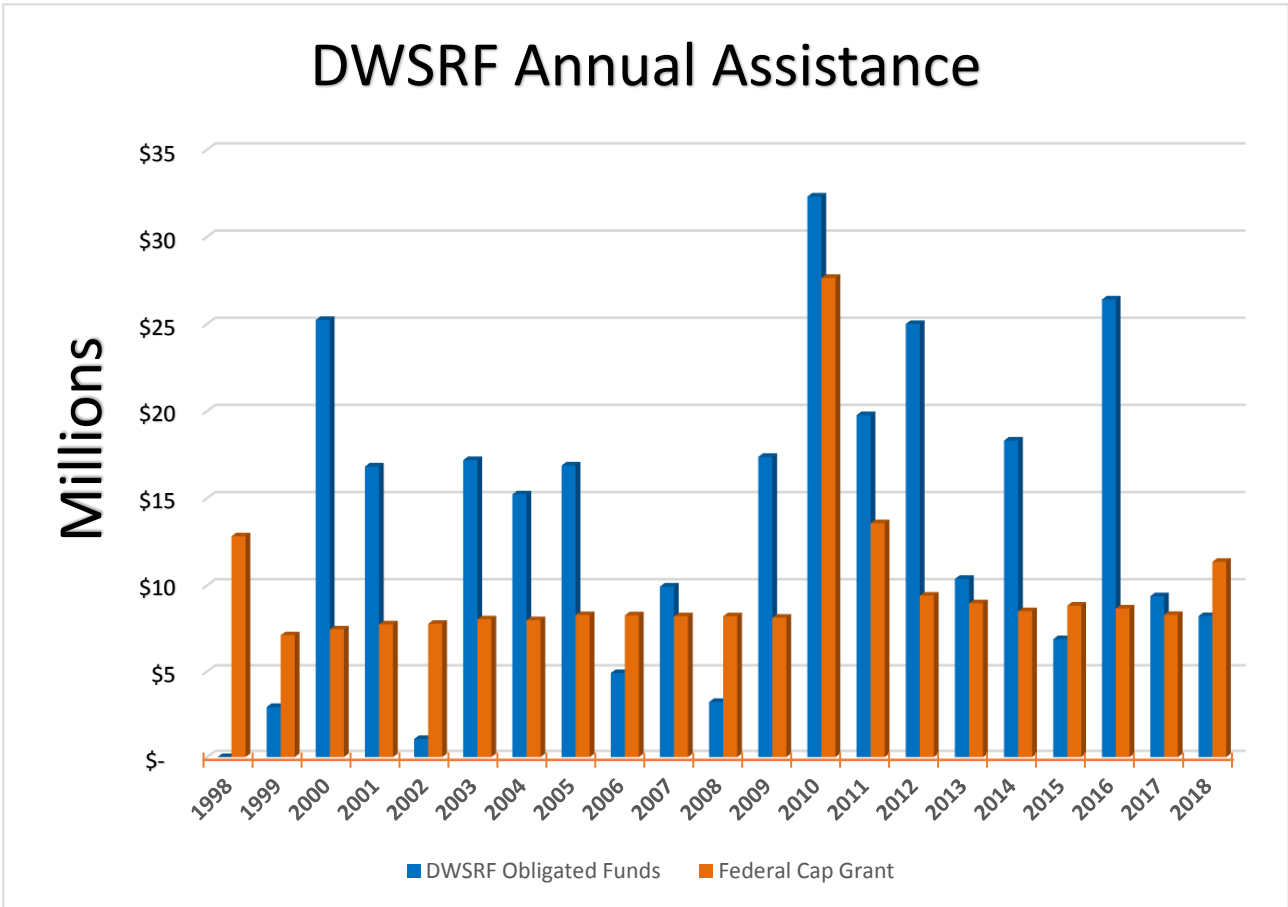
Municipality	Loan Date	Loan Amount	Principal Forgiveness	Total
York	6/6/2018	\$3,635,000	\$665,000	\$4,300,000
Blair	5/10/2018	\$1,190,000	\$210,000	\$1,400,000
Milford	1/26/2018	\$1,153,041	\$288,260	\$1,441,301
Utica Amd #2	1/11/2018	\$120,000	\$30,000	\$150,000
Osmond Amd #1	12/5/2017	\$227,500	\$122,500	\$350,000
Grant Amd #1	12/5/2017	\$480,000	\$120,000	\$600,000
<b>TOTAL</b>		<b>\$6,805,541</b>	<b>\$1,435,760</b>	<b>\$8,241,301</b>

The 2017 DWSRF capitalization grant allocation totaled \$8,242,000. In SFY 2018, the DWSRF entered into three binding commitments to communities, including three amendments to already existing loans, to provide financial assistance to PWS projects totaling \$8,241,301, of which disadvantaged communities received \$1,435,760 in forgiveness funding. The Federal Fiscal Year

(FFY) 2017 capitalization grant required that a minimum of 20% of the grant be reserved for additional subsidization (e.g., principal forgiveness).

In addition, from the FFY 2017 capitalization grant \$2,150,740 was allocated to the 2% (\$166,240), 10% (\$1,234,500), and 15% (\$750,000) set-asides. More details on the programs associated with these set-asides can be found in the Drinking Water State Revolving Fund Annual Report for SFY 2018 on our website at <http://deg.ne.gov/>.

The graph reflects the cumulative loan assistance of DWSRF.

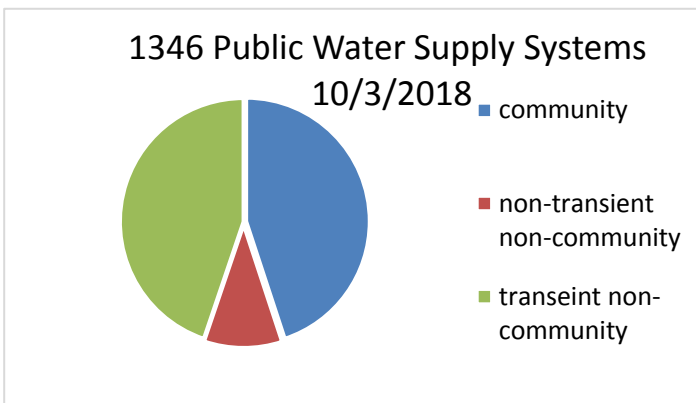


### Co-location of Drinking Water Program

On July 6, 2017, NDEQ and the Nebraska Department of Health and Human Services (DHHS) announced a Memorandum of Agreement to improve coordination of Safe Drinking Water Act and Clean Water Act programs. Through the agreement, 25 DHHS staff have moved to shared office space with NDEQ wastewater staff, and eight DHHS field staff will begin working with NDEQ field staff. The goal is to have the programs integrate into a team to better serve the communities and citizens of the state.

The Drinking Water staff moved into NDEQ’s Lincoln office space at the Atrium in the first week of August, 2017. They are now located by NDEQ’s Water staff, to promote interaction and integration between the programs. Locating staff together will better serve Nebraska communities in addressing their water infrastructure needs by enhancing state agency coordination. The agencies have cross-trained staff to ensure complete and timely review of applications and coordinated site assistance.

The new Drinking Water Division is composed of Engineering, Field Services and Monitoring and Compliance sections working to provide safe drinking water to 134 Systems.



The 1,346 Public Water Supply Systems in Nebraska are comprised of: 605 Community Water Systems (residential), 136 Non-Transient Non-Community Water Systems (Businesses, rural schools, etc.), and 602 Transient Non-Community Water Systems (rest stops, service stations along the interstate, etc.).

Nebraska public water systems can be broken down into categories based on the size of the population served and/or the type of population served.

Population	Community Water Systems	Non-transient, Non-community	Transient, Non-community	Total Systems	Percentage*
<100	103	73	510	686	51.1%
101-500	273	45	88	406	30.3%
501-1000	101	8	4	113	8.4%
1001-3300	85	8	0	93	7.0%
3301-10,000	28	2	0	30	2.2%
10,001-50,000	11	0	0	11	0.8%
>50,000	3	0	0	3	0.2%
<b>TOTAL</b>	<b>604</b>	<b>136</b>	<b>602</b>	<b>1342</b>	<b>100%</b>

\*Based on approximate population



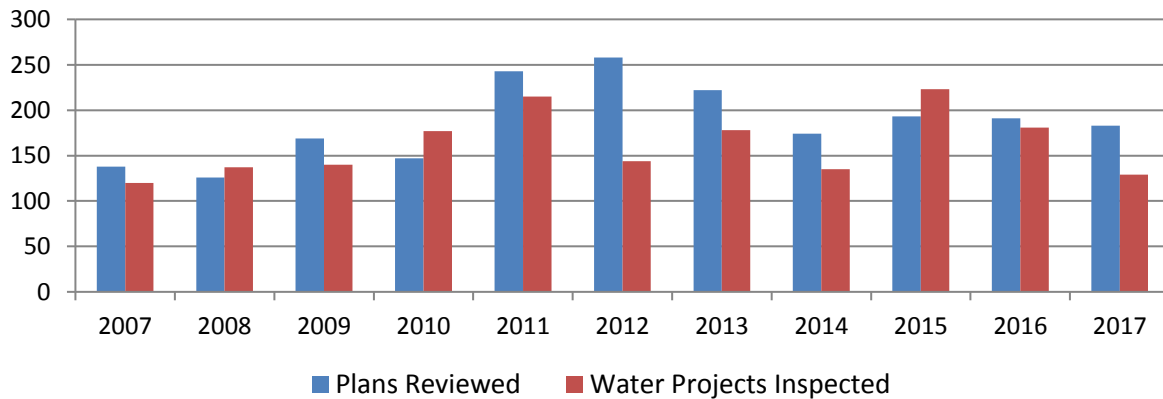
**Engineering** is responsible for review and approval of Plans and Specifications dealing with water sources and treatment. In 2017, the Department received 183 sets of plans and specifications for the construction of water projects for review and approval. In addition, engineering staff conducted 129 inspections of constructed water projects.

**SUMMARY REPORT FOR DRINKING WATER ENGINEERING SECTION  
REVIEW AND INSPECTION ACTIVITIES**

January 1, 2017 to December 31, 2017

Activites	Number
Water Projects Received for Review and Approval	183
Water Projects Inspected	129
Major Engineering Reports for Water System Improvements Evaluated	13
Special Reports/Pilot Studies reviewed	2
New Water Well Sites Evaluated	12
Common Pre-Applications for Water/Wastewater Projects for Federal and State Financial Assistance Reviewed	8
Operation and Maintenance Manuals for Drinking Water State Revolving Loan Funded Projects Reviewed	12
Three-Year Agreements for Distribution Main Projects—Annual Audits Completed	21
Encroachment Issues	2

**Engineering Plans Reviewed/  
Water Projects Inspected**



**Monitoring and Compliance** is primarily responsible for assuring water quality samples are collected when required and interpreting water quality data to assure water standards are met. The following is an example of the Nitrate-Nitrite Violations. Additional contaminants are listed in the 2017 Public Water System report available at [http://dhhs.ne.gov/publichealth/Pages/enh\\_pwsindex.aspx](http://dhhs.ne.gov/publichealth/Pages/enh_pwsindex.aspx).

**Nitrate-Nitrite Violations**

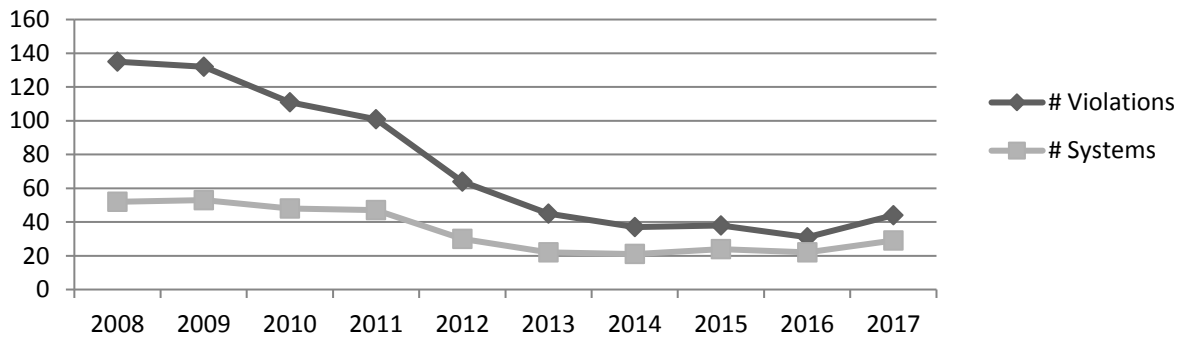
This listing is separate from other Inorganic Contaminants because only Community and Non-transient, non-community systems monitor for other inorganic contaminants, while ALL public water systems monitor for Nitrate-Nitrite.

The number of nitrate-nitrite Maximum Contaminant Level (MCL) violations increased by one and the number of monitoring violations decreased from the previous year.

Violation	Number of Violations	Number of Systems	% of Systems with Violations
MCL – 10 mg/l	44	29	2.2%
Monitoring	13	12	0.9%

Nitrate-nitrite violations are considered acute violations. Immediate adverse health effects can be experienced when nitrate is consumed by the vulnerable population of pregnant women, infants under six months of age, and nursing mothers. The system is significantly out of compliance when it receives one violation. A system is issued an Administrative Order to correct a nitrate contamination problem if two acute nitrate-nitrite violations are issued within a consecutive three quarter period.

**Acute Nitrate MCL Violations**



**Administrative Orders Issued**

The Public Water System Program issues an administrative order when a public water system is significantly out of compliance. (Each contaminant has different parameters that indicate what constitutes “significantly out of compliance.”) Once an administrative order is issued, MCL violations continue to be issued, but no other formal enforcement is initiated while the administrative order for violating that particular maximum contaminant level is in effect. Failure to comply with the terms of an administrative order can result in action by the Department to revoke the system’s permit to operate.

	Total Coliform Monitoring	Nitrate	Arsenic	DBP
Number of Orders	1	7	2	1
Population Affected	35	642	724	2494

**Field Services and Training (FS&T)** Section encompasses four separate but related areas of responsibility: 1) field services (inspections, operator assistance, etc.), 2) training, 3) capacity development, and 4) water system security. FS&T staff include a supervisor, eight field representatives, a training coordinator, a capacity development coordinator, and a staff assistant. FS&T staff conduct sanitary surveys, train public water system operators, attend and present information at continuing education programs for water operators, assist public water systems during emergency situations and help public water systems to achieve or maintain adequate technical, financial, and managerial capacity. There are eight field areas with locations in North Platte, Grand Island, Norfolk, Blair, Nelson, Chadron and Lincoln to provide close contact and timely assistance to Nebraska's public water systems. The Norfolk office serves two field areas. Both agencies' field offices will remain at their current locations, but under the agreement, both agencies' field office staff who are involved with wastewater and drinking water programs will be coordinating their programs.

Routine sanitary surveys are conducted once every three years for community water systems (CWS) and non-transient non-community (NTNC) public water systems and once every five years for transient non-community (TNC) public water systems. A sanitary survey is an on-site review of the water source, facilities, equipment, operation and maintenance of a public water system for the purpose of evaluating the system's adequacy and ability to reliably produce and distribute safe drinking water within the confines of regulatory requirements. A few of the items for which field personnel check are the presence of a properly licensed water operator in responsible charge, an emergency plan, and a cross-connection control program. When deficiencies are found, the system is notified of the needed improvements.

When public water systems have a confirmed presence of coliform bacteria, the Revised Total Coliform Rule requires that either a Level 1 or Level 2 assessment of the system be conducted. An assessment is an evaluation to identify the possible presence of sanitary defects, defects in coliform monitoring practices, and (when possible) the likely reason for the presence of coliform bacteria in the system. Any identified defects are required to be corrected.

A Level 1 assessment is triggered by the confirmed presence of only total coliform in the public water system. The public water system is responsible for completing the Level 1 assessment, and submitting its findings to the Department for review. Field staff are responsible for completing the review of Level 1 assessments.

Level 2 assessments are triggered by either multiple Level 1 triggers within a running 12 month period, or by the confirmed presence of *E. coli* in the system. The Level 2 assessment provides a much more detailed evaluation of the public water system. Similar in many aspects to a sanitary survey, Level 2 assessments are conducted by Field Staff.

There are no new or pending assessments as of October 1, 2018.

The Department received 31 emergency calls in 2017. The circumstances prompting these calls included positive coliform samples and pressure losses due to main breaks. Other emergency calls not related to public water include swimming pool accidents, fuel spills, fertilizer spills, wastewater releases, etc.

In 2017, FS&T program personnel conducted 11 water operator training courses, Grades I through IV, with a total of 185 attendees. An additional 14 persons completed the correspondence course that is also offered to prepare for the Grade IV licensure examination. For Grade VI licensure

(backflow preventer testing and repair), 9 courses were offered with a total of 90 attendees. For Grade V operators (transient systems only), there are no classroom courses. Training is obtained through a self-study process. Water operators are licensed only after successfully passing an exam. Examinations are offered following each training course and can also be scheduled individually.

The following table breaks down the number of licenses issued following examination at each grade level during 2017:

Grade	Examinations	Passing	Number of Licenses Issued
I	3	3	2
II	29	17	11
III	41	27	23
IV	171	141	118
V	51	49	41
VI	102	91	64

Numerous training events with partners have been held to train public boards and water operators. Please refer to the 2017 Public Water Supply annual report at: [http://dhhs.ne.gov/publichealth/Pages/enh\\_pwsindex.aspx](http://dhhs.ne.gov/publichealth/Pages/enh_pwsindex.aspx).

In July 2018, DHHS staff responsible for well water contractors and well construction standards also were moved to the NDEQ offices under a new Memorandum of Understanding. Three field staff are working throughout the state and two Lincoln positions are in the Groundwater Section of the Water Quality Division. This program ensures that water wells are installed properly and that well standards maintained.

# CHAPTER 7:

## Environmental Assistance Division

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The purpose of the Environmental Assistance Division is to provide information and assistance to the public and the regulated community, as well as to work in partnership with other agency programs to manage specific projects. Division activities include Small Business and Public Assistance, Quality Assurance, Homeland Security, Smoke Awareness, and several rebate programs aimed at reducing diesel emissions and improving air quality in Nebraska.



*The annual Power Summit is organized by NDEQ and the Nebraska Public Power District.*

### **Small Business and Public Assistance Program**

The Small Business and Public Assistance program (SBCAP) was created as a result of the Clean Air Act Amendments of 1990. Although the SBCAP was created to address air quality issues, NDEQ has provided the same compliance assistance services to Water Permitting and Land Management Division stakeholders as well.

Nebraska's SBCAP is organized into four major units: the Small Business and Public Assistance (SBPA) program, the One-Stop Permit Assistance program, the Public Advocate, and the Small Business Compliance Advisory Panel. Key activities of the program include developing guidance and outreach materials, hosting information workshops, helping the regulated community understand their obligations under state and federal law, and promoting compliance and permit assistance visits to small businesses.

This year, the Environmental Assistance Division's two assistance coordinators created – with the help of the Department's permitting staff – an online tool called the "Permit Matrix." The Permit Matrix is an Excel document organized to help businesses coming to the State, or existing businesses that wish to expand their operations, understand any NDEQ permit-related issues that may affect them. The tool begins with a Frequently Asked Questions section and a matrix page that lists over 100 industrial sectors or business operations and the types of permits typically required for those activities. The tool contains links to forms or online application systems, guidance documents, program overviews, regulations, supporting NDEQ web pages, and additional local, state, regional and federal resources that may be helpful to the customer. The Permit Matrix may be viewed at <http://deq.ne.gov/publica.nsf/pages/18-011>.

The Program Coordinators continued to work with representatives of the Nebraska Public Power District (NPPD) to organize and host the annual Power Summit, which provides an opportunity to exchange information related to power production, environmental policies, programs, and issues in Nebraska. A primary objective of the Summit is to enhance the dialogue that has been established between the power industry and the associated regulatory agencies. The 2017 Power Summit was held October 31 in Lincoln, and had 73 people in attendance.

The One-Stop Permit Assistance Program was established to offer information and permit application assistance to the regulated community. It provides our customers with an initial point of contact and ensures that businesses are aware of the permits they will need, and that they understand the application process. Eight new potential business entrepreneurships have met with NDEQ this year.

This year, the Department expanded and formalized the One-Stop meeting process with the creation of the NDEQ Grow Nebraska Team. The primary purpose of the Team is to ensure constituents and stakeholders receive responses to inquiries on NDEQ regulations and policies in a comprehensive and timely manner. NDEQ seeks to “make compliance easy” for the regulated community and to provide the public with clear and understandable explanations of NDEQ regulations, policies and processes. The core members of the Team include representatives from the Air Division permitting section, the Water Permitting Division NPDES permitting section, the Land Management Division’s compliance unit, and the Public Information Office. The Team also reached out to the Nebraska Department of Economic Development, and one of their staff within their business recruitment office has also formally joined the Team.

The Public Advocate serves as the ombudsman for purposes of the Clean Air Act requirements, receiving requests for regulatory information or environmental complaints from the public and ensuring the Department is accessible and responsive to public concerns. In this role, the Public Advocate provides outreach to individuals to address specific questions and concerns. This year, the Public Advocate worked with Air Quality Division and Water Permitting Division staff regarding violations of a facility in Scottsbluff.

The Small Business Compliance Advisory Panel was established to evaluate the effectiveness of Department outreach programs, to provide feedback, and to identify program obstacles. The panel is composed of seven members: two representatives from the general public selected by the Governor, four representatives from small businesses selected by the Legislature, and one representative selected by the Director. The Panel members provided their annual report to the Governor in December 2017 and met with NDEQ staff to discuss several issues during their annual meeting in September 2018. During the September meeting, the Director informed the panel members about efforts the Department has undertaken to implement the Governor’s “Grow Nebraska” initiative, concerns that may affect the state’s agricultural sector, and efforts to streamline the Department’s waste grant procedures.

## **Homeland Security**

NDEQ has been actively involved in the state’s Homeland Security efforts, which are directed by the Lieutenant Governor. The Director represents the Department on the Lieutenant Governor’s Homeland Security Senior Advisory Committee. Department staff have participated in a number of tabletop exercises hosted by the Nebraska Emergency Management Agency. These exercises, which often have a Homeland Security component, help NDEQ identify training needs and response issues in need of attention. These exercises typically involve incidents related to operation of our

nuclear power plants, release of agricultural chemicals, pipeline releases, and responding to and mitigating spills into surface waters of the state.

## Quality Assurance

The EPA has requirements for conducting quality management activities for all environmental data collected by the NDEQ, to ensure that the Department's decisions are supported by data of known and documented quality. In turn, the Department is responsible for reviewing the procedures a project will use to ensure that the samples participants collect and analyze, the data they store and manage, and the reports they write are of high quality. Quality Assurance Project Plans (QAPPs) are written documents that outline these procedures. Assistance Division staff help coordinate the review of QAPPs by appropriate personnel throughout the Department. This year, 14 QAPP reviews were completed.

## Smoke Awareness Program

Prescribed burning in the Flint Hills of eastern Kansas is an annual occurrence. Each year in early to mid-spring, ranchers and land managers burn on average 2.3 million acres of tallgrass prairie in the Flint Hills to control invasive plant species and to encourage growth of pasture grass. In some years, unpredictable spring weather conditions provide only a few days of optimal weather for burning, leading to widespread prescribed fires and large amounts of smoke on those days. If the wind direction is from the south, as is common in the spring, Nebraska can experience air quality impacts (elevated fine particulates and ozone) for one to two days following these events. In addition, prescribed burning of rangeland also takes place in Nebraska on a lesser scale, which can have local smoke impacts.

In early 2018, the Department engaged with other key stakeholder agencies to establish communication and foster coordination to better predict potential air quality impacts from prescribed burning and to develop timely, cohesive, and consistent messaging to the public. Participating agencies included:

- Douglas County Health Department (DCHD)
- Environmental Protection Agency (EPA, Region VII)
- Kansas Department of Health and Environment (KDHE)
- Lincoln-Lancaster County Health Department (LLCHD) and Lincoln Mayor's Office
- National Weather Service (NWS)
- Nebraska Department of Health and Human Services (DHHS)
- Omaha Air Quality Control.

These stakeholders met in February 2018 to plan for burn season activities and again in June to review the season and the outcomes of the planned activities. In addition, NDEQ and LLCHD each installed temporary fine particulate monitors in and near Beatrice to assess potential smoke impacts from fires in Kansas.

From February 17 to April 30, 2018, a total of approximately 1,454,750 acres were burned in the Flint Hills, 37% less than the annual average. Favorable weather patterns for Nebraska were instrumental in preventing significant impacts on air quality during this period. Temperatures were cooler than normal and winds were predominantly out of the north or other directions that prevented the resulting smoke from encroaching into Nebraska.

Assistance Division staff performed a number of daily tasks during the 2018 burn season:

- Monitoring PM<sub>2.5</sub> monitor levels
- Generating maps showing fire locations and smoke plumes
- Reviewing weather forecasts for the upcoming 24-48 hours
- Monitoring the smoke modeling and predicted smoke impact information provided on the Kansas Smoke Management website
- Reviewing the Flint Hills Prescribed Fire Updates and Kansas Smoke Outlook messages from KDHE and disseminating to other agencies
- Updating the NDEQ Smoke Awareness webpage with current information on smoke impacts and pollutant monitoring

On days when heavy burning was predicted, Division staff consulted with other stakeholder agencies to assess predicted smoke and air quality impacts and determine if a health advisory was warranted. On April 11, 2018, DHHS issued a Smoke Advisory for April 11-12, with update advisories on April 12 and 16.

During this burn season, Nebraska experienced a total of 27 days with an Air Quality Index (AQI) for fine particulates (PM<sub>2.5</sub>) in the *Moderate* range (37% of days) and seven days with an AQI for ozone in the *Moderate* range. The *Moderate* range is characterized by pollutant levels at or above the National Ambient Air Quality Standard for a 24-hour period, which may induce health effects in those who are unusually sensitive to fine particulates or ozone. In comparison, Nebraska experiences daily AQI levels in the *Moderate* category for PM<sub>2.5</sub> on about 24% of days outside of the burn season.

There were no days during the 2018 burn season in which the AQI values in Nebraska were in the *Unhealthy for Sensitive Groups* or *Unhealthy for All* categories. Burn seasons in previous years (2010-2017) averaged about one day per year in the *Unhealthy for Sensitive Groups* category.

The activities conducted with other agencies in 2018 resulted in timely health advisories and notification to the public of potential air quality impacts from prescribed burning. Predictions of potential impacts, while guarded, were fairly accurate. The flow of information was acceptable but will be improved upon in subsequent years.

## Nebraska Clean Diesel Rebate Program

NDEQ established the Nebraska Clean Diesel Program in 2008 to distribute funding received from the EPA to reduce diesel emissions, as authorized by Congress in the Diesel Emissions Reduction Act (DERA). The DERA program provides funding annually to states for the establishment of grant, rebate, and loan programs for the early replacement of diesel engines and vehicles and the installation of diesel emission controls. Within DEQ, this program is jointly administered with the Air Quality Division.

From 2013 through 2016, the Nebraska Clean Diesel Program reduced emissions by providing rebates to Nebraska school districts for the early replacement of older diesel school buses. These rebates reimbursed up to 25% (the maximum amount allowed under the federal grant guidelines) of the cost of a new, cleaner-burning diesel or alternative-fuel school bus. Replaced buses were scrapped to eliminate their harmful emissions of nitrogen oxides, particulates, hydrocarbons, and carbon monoxide.



For the Clean Diesel Rebate Program funding cycle that opened in October 2017, NDEQ received a base award from EPA of \$228,201. The Department chose to match or overmatch that amount using funds from the *Volkswagen Diesel Emissions Environmental Mitigation Trust* (see next section), thereby earning an additional \$114,100 in federal funds, for a total of over \$570,000. In this program cycle, NDEQ has awarded rebates for diesel replacements in three categories: school buses, refuse trucks, and irrigation engines. The school bus and refuse truck replacement rebates reimburse up to 25% of the cost of a new diesel vehicle, or up to 35% for a new vehicle meeting emission standards for nitrogen oxides that are stricter than the current EPA standard. The irrigation engine rebates are for replacement of the diesel irrigation engine with an electric motor (to power a surface pump) or for connecting an existing submersible pump directly to the electric grid. The rebate reimburses up to 60% of the cost of the electric equipment, installation, and required extension of electric service lines. All replaced diesel vehicles and engines must be scrapped in order to eliminate their emissions. A total of \$579,924 in rebates have been awarded or are anticipated to be awarded in this program cycle. The recipient shares of the project costs will total approximately \$1,013,847.

#### 2017-2018 School Bus Replacement Rebates: \$113,666

Name	Location	Replacement	Rebate Amount
Ainsworth Community Schools	Ainsworth	Diesel School Bus	\$20,475
Bishop Neumann Central High School	Wahoo	Diesel School Bus	\$20,409
Boone Central Schools	Albion	Diesel School Bus	\$21,000
Johnson County Central Public Schools	Tecumseh	Diesel School Bus	\$21,000
Loomis Public School	Loomis	Propane School Bus	\$30,783

#### 2017-2018 Refuse Truck Replacement Rebates: \$373,000

Name	Location	Replacement	Rebate Amount
Gretna Sanitation	Gretna	1 CNG Refuse Truck	\$105,000
S2 Rolloffs	Fremont	2 Diesel Refuse Trucks	\$128,000
Waste Connections	Papillion	2 Diesel Refuse Trucks	\$140,000

#### 2017-2018 Irrigation Engine Replacement Rebates: \$93,253

Name	Location	Replacement	Rebate Amount
James Riley	Wood River	Electric motor	\$16,200
Mike Phillips	Lisco	Electric motor	\$16,200
Frederick T. Schultz	Clearwater	Electric motor	\$12,253
Robert Fuchtman	Creighton	Electric power to submersible pump	\$16,200
Cockerill Fertilizer	Logan County	Electric motor	\$16,200
Thies Farms Central	Merrick County	Electric power to submersible pump	\$16,200

## Volkswagen State Trust Activities

In September 2017, NDEQ was designated by Governor Ricketts as the lead agency to administer funds allocated to Nebraska from the *Volkswagen Environmental Mitigation Trust for State Beneficiaries, Puerto Rico, and the District of Columbia* (“VW State Trust”). The VW State Trust was established as part of a series of court settlements with Volkswagen AG and its subsidiaries to resolve charges that their diesel passenger vehicles were equipped with devices to circumvent emissions testing and allow them to emit excess nitrogen oxide gases in normal operation, in violation of the Clean Air Act. The initial allocation to Nebraska from the VW State Trust is approximately \$12.25 million. As directed by the Trust Agreement, these funds are to be used to undertake authorized actions to reduce nitrogen oxide (NOx) emissions in Nebraska.

The VW State Trust will have a 15-year time span. Nebraska may request no more than one-third of its initial allocation in the first year of the Trust and no more than two-thirds of its initial allocation in the first two years. Each state beneficiary must expend at least 80% of its initial allocation by October 2, 2027, otherwise the unexpended funds will be reallocated to other beneficiaries that have complied with that guideline.

### Nebraska Beneficiary Mitigation Plan

The Trust Agreement requires each state beneficiary to submit a Beneficiary Mitigation Plan that summarizes how the beneficiary intends to use the funds allocated to it under the Trust. In response to this requirement, NDEQ created a web page providing an overview of the available mitigation actions and solicited public comment on these potential actions. Public information meetings were held in Lincoln on October 16, 2017 and in North Platte on October 18, 2017. Written comments were accepted at these meetings and also through a web portal and via e-mail from September 21 through November 3, 2017.

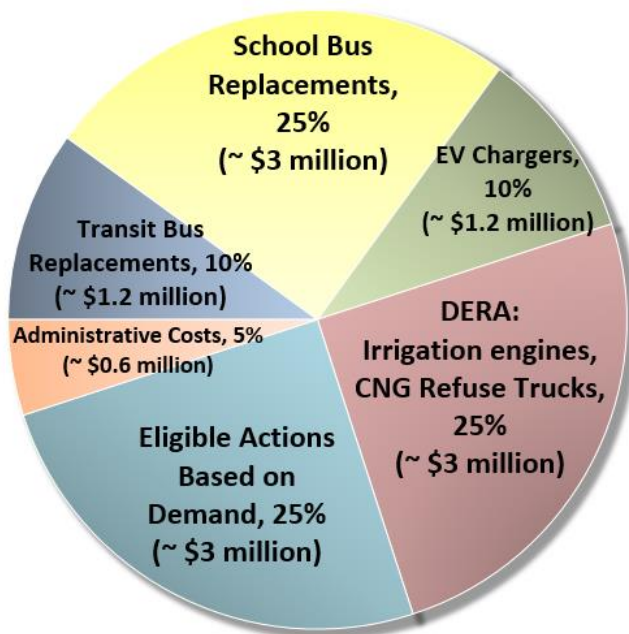
After reviewing the public comments and consulting other state agencies and the Governor’s office, NDEQ finalized and posted Nebraska’s initial Beneficiary Mitigation Plan on January 5, 2018. The plan is available on the agency’s Volkswagen Environmental Mitigation Trust Fund web site (<http://deq.ne.gov/NDEQProg.nsf/OnWeb/AirVW>). The plan’s overall goal is to achieve significant, sustainable, and cost-effective reductions in NOx emissions to improve air quality in the state. Other goals of the plan include:

- Achieving reductions in diesel engine emissions especially in areas of the state that bear an undue share of the impact of NOx emissions, while also providing funding for emission reduction projects in other areas of the state;
- Achieving reductions in ground level ozone, for which NOx is a precursor, and which occurs in some areas of the state at levels approaching those that would violate federal ambient air quality standards;
- Providing project funding to both public and private entities;
- Spurring investment in cleaner alternative-fuel vehicles and infrastructure;
- Supporting long-term investments in the zero-emission transportation sector in Nebraska.

NDEQ assessed the mitigation actions allowed by the VW State Trust in the context of Nebraska’s air pollution issues, population distribution, existing transportation infrastructure, estimated cost-effectiveness, potential public health benefits, and public comments. The table and

figure on the next page present the project types initially selected for funding in Nebraska and the percentage of funds expected to be allocated to each type.

### Initial Allocations of VW State Trust Funds by Mitigation Action



Action	Percent	Dollars
Transit Bus Alternative Fuel Replacements	10%	\$1,224,834.75
School Bus Diesel & Propane Replacements	25%	\$3,062,086.87
Zero Emission Vehicle (ZEV) Charging Infrastructure	10%	\$1,224,834.75
DERA: Irrigation engines, Refuse Trucks	25%	\$3,062,086.87
Eligible Actions Based on Demand	25%	\$3,062,086.87
Administrative Costs*	5%	\$612,417.37
<b>TOTAL</b>	100%	\$12,248,347.48

\* The State Mitigation Trust agreement allows reimbursement of administrative costs up to 15% of each funded project.

Nebraska's Beneficiary Mitigation Plan is intended to provide the public with insight into the Department's intentions for the use of the mitigation funds and information about the specific uses for which funding is expected to be requested. Nothing in the plan is binding, and Nebraska may adjust its goals and specific spending plans at its discretion by providing an updated Beneficiary Mitigation Plan to the Trustee. Since the publication of the Beneficiary Mitigation Plan, the Department has set a goal of expending Nebraska's share of the funds in approximately five years.

### VW State Trust Funding for the Nebraska Clean Diesel Rebate Program (DERA)

NDEQ plans to use 25% of the available VW State Trust funds for projects in the Nebraska Clean Diesel Rebate Program (DERA category in the table and chart above).

The first use of funds from the VW State Trust in Nebraska was for projects in the Nebraska Clean Diesel Rebate Program that opened in October 2017. Trust funds are being used for reimbursement for the replacement of three diesel refuse trucks (\$198,000) and four diesel irrigation engine replacements (\$60,853) for a total of \$258,853. All of these projects are expected to be completed by the end of CY2018.

### **Nebraska Diesel Emission Mitigation Program**

NDEQ has established the Nebraska Diesel Emission Mitigation Program to undertake other mitigation actions using funds from the VW State Trust. Two funding opportunities were initiated under this program during this fiscal year: Transit Bus Alternative Fuel Replacements and School Bus Replacements.

#### Transit Bus Alternative Fuel Replacements

Applications were opened in May 2018 for Transit Bus Alternative Fuel Replacements. Lincoln StarTran and the Transit Authority of Omaha (Metro) will each replace two diesel transit buses. StarTran will receive \$489,934 (about 29%) toward the purchase of two new battery-electric transit buses. Omaha Metro will receive \$734,901 (about 42%) toward the purchase of two new buses (fueled by compressed natural gas) that will operate as part of the new Omaha Rapid Bus Transit (ORBT) service beginning in fall 2019. Federal grant funds obtained by these agencies are also being used in these purchases. NDEQ expects these projects to be completed by August 30, 2019.

#### School Bus Replacement Rebates

Applications were opened on June 1, 2018 for School Bus Replacement Rebates. For each applicant NDEQ offered to pay 50% of the cost (up to \$42,000) for a new diesel public school bus or 60% of the cost (up to \$57,000) for a new propane-fueled public school bus meeting NOx emission standards stricter than the federal standard. Applications were received from 42 school districts, and the Department has elected to fund all applicants at an anticipated cost of approximately \$1,800,000. These projects are expected to be completed by August 30, 2019.

#### Planning for Additional Mitigation Actions

Nebraska has allocated 10% of its VW State Trust funds, or approximately \$1.2 million, for Electric Vehicle (EV) Charging Infrastructure. NDEQ Environmental Assistance staff have initiated ongoing discussions with representatives of electric utilities (Nebraska Public Power District, Lincoln Electric System, and Omaha Public Power District), the Nebraska Department of Transportation, Nebraska Energy Office, and other stakeholders in order to learn about the technical and economic issues surrounding electric vehicle charging and to determine the types of charging infrastructure that would do the most to encourage adoption of battery-electric and plug-in hybrid vehicles in the state.

# CHAPTER 8:

## Expenditure and Budget Summary

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The following information summarizes department expenditures for fiscal year 2018 and outlines budget projections for fiscal year 2019. The figures in the expenditure summaries were derived from the state accounting system. The budget projections were prepared by the Department. Some limited flexibility exists to adjust these numbers to meet unforeseen needs.

**Chart A** shows actual FY18 expenditures for each federal grant, including the state match.

**Chart B** lists actual FY18 expenditures of programs funded by state general funds and/or cash funds. This chart lists expenditures by activity. Activity in this case is not considered a program activity, but is a category of expenditure. Activities listed in this chart are personal services, operating expenses, travel, capital outlay, contracting and distribution of aid.

**Chart C** outlines the proposed FY19 budget for each federal grant. Chart C also lists proposed match for each program for which a non-federal match is required. Additionally, match for the 319H grant is provided by in-kind services in the Groundwater Management Area program.

**Chart D** outlines proposed FY19 budgets for programs funded by state funds. This chart lists proposed expenditures by activity. As in Chart B, activity is not a program activity, but a category of expenditure. Activities listed are personnel services, operations, travel, capital outlay, contracting and distribution of aid.

Agency program activities are described in Chapter 2 and Chapters 4 through 7 of this report.

### Chart A -- Actual Expenditure for Each Federal Grant for FY18

Grant / Program Title	Grant	Match	Total
Performance Partnership	4,432,150	2,150,790	6,582,940
Clean Water State Revolving Fund	6,750,119	365,635	7,115,754
Exchange Network	7,920		7,920
604 B Water Quality Management	60,164		60,164
319 H Non-Point Source	2,145,224		2,145,224
Drinking Water State Revolving Fund	7,870,805		7,870,805
Leaking Underground Storage Tanks	930,746	99,078	1,029,824
Clean Diesel	227,743		227,743
Section 106 Monitoring	270,951		270,951
Department of Defense	118,671		118,671
PM 2.5 Ambient Air Monitoring	299,859		299,859
Superfund UNL Mead	4,108		4,108
Superfund Core	120,254	2,076	122,330
Superfund Management Assistance	179,850		179,850
Superfund Site Assessment	340,571		340,571
Section 128 (a) State Response	461,141		461,141
<b>Totals</b>	<b>\$ 24,220,275</b>	<b>\$ 2,617,579</b>	<b>\$ 26,837,854</b>

Performance Partnership is made up of Water 106, Air 105, Groundwater, RCRA 3011, a part of nonpoint source program, Underground Injection Control, and Mineral Exploration

A portion of the match for the State Revolving Fund Programs is provided by Revenue Bonds issued by NIFA

An indirect rate of 58.11% was negotiated with EPA for FY18 and charged against direct payroll cost to cover agency administrative expenses

**Chart B - Actual Expenditure of State Funds for State Programs for FY18 Including Aid**

Program	Subprogram	Fund Type	Personal Services	Operating Expenses	Travel	Capital Outlay	Consulting /Contracting	Subtotal	Distribution of Aid	Total
Integrated Solid Waste Management	004	C	1,025,687	866,865	27,754	1,986	-	1,922,292	-	1,922,292
Ag - Livestock	016	G/C	1,115,876	672,957	52,766	485	30,572	1,872,656	-	1,872,656
Air Construction Permits	020	C	19,091	44,708	-	-	-	63,799	-	63,799
Superfund State Cost Share	023	G/C	33,831	538,788	55	-	-	572,673	172,835	745,508
Litter Reduction	024	C	104,940	89,235	855	-	137,417	332,448	1,893,691	2,226,138
Mineral Exploration	029	C	50,280	54,019	3,968	-	-	108,268	-	108,268
Private Onsite Wastewater Cert & Registration	030	C	184,287	197,110	4,109	1,420	6,247	393,173	-	393,173
Emission Inventory - Title V	033	C	1,517,982	1,253,701	28,369	-	29,373	2,829,426	-	2,829,426
Chemigation	034	C	17,630	12,868	-	-	32,671	63,169	-	63,169
Remedial Action Plan Monitoring Act	036	C	63,711	52,181	483	-	-	116,375	-	116,375
Private Onsite Wastewater Permit & Approval	037	C	33,177	70,636	1,194	-	9,107	114,115	-	114,115
Operator Certification	040	C	44,194	37,500	2,165	-	10,407	94,266	-	94,266
Community Right to Know	041	G	5,918	1,998	-	-	-	7,916	-	7,916
Petroleum Release Remedial Action Act	051	C	783,970	852,493	9,656	-	5,162,696	6,808,815	5,802,968	12,611,784
Emergency Response	057	G/C	45,028	49,907	2,154	-	-	97,089	-	97,089
Engineering Reviews	061	G	156,924	60,127	89	-	27,515	244,654	-	244,654
Waste Reduction & Recycling	091	C	186,767	212,521	5,805	-	63,655	468,748	4,319,833	4,788,581
Agency Organizational Dues	099	G	-	13,000	-	-	-	13,000	-	13,000
<b>Totals</b>			<b>\$ 5,389,295</b>	<b>\$ 5,080,615</b>	<b>\$ 139,423</b>	<b>\$ 3,890</b>	<b>\$ 5,509,660</b>	<b>\$ 16,122,883</b>	<b>\$ 12,189,327</b>	<b>\$ 28,312,210</b>

FUND TYPE LEGEND

G - Program Expends General Funds

C - Program Expends Cash Funds

G/C - Program Expends Both General and Cash Funds

An indirect rate of 58.11% was negotiated with EPA for FY18 and charged against direct payroll cost to cover agency administrative expenses.

### Chart C - Proposed Budget for Each Federal Grant Program for State FY19

Grant / Program Title	Grant	Match	Total
Performance Partnership	5,239,487	1,836,014	7,075,500
Clean Water State Revolving Fund	6,940,000	1,200,000	8,140,000
604 B Water Quality Management	59,365	-	59,365
319 H Non-Point Source	2,463,686	-	2,463,686
Drinking Water State Revolving Fund	8,500,000	1,732,000	10,232,000
Leaking Underground Storage Tanks	983,297	109,255	1,092,552
Clean Diesel	195,144	-	195,144
Section 106 Monitoring	270,282	-	270,282
Department of Defense	128,892	-	128,892
PM 2.5 Ambient Air Monitoring	313,957	-	313,957
Superfund UNL Mead	16,262	-	16,262
Superfund Core	107,907	11,990	119,896
Superfund Management Assistance	190,093	-	190,093
Superfund Site Assessment	327,981	-	327,981
Section 128 (a) State Response	470,288	-	470,288
<b>Totals</b>	<b>\$ 26,206,640</b>	<b>\$ 4,889,259</b>	<b>\$ 31,095,899</b>

Performance Partnership is made up of Water 106, Air 105, Groundwater, RCRA 3011, a part of nonpoint source program, Underground Injection Control, and Mineral Exploration

A portion of the match for the State Revolving Fund Programs is provided by Revenue Bonds issued by NIFA

An indirect rate of 55.22% was negotiated with EPA for FY19 and charged against direct payroll cost to cover agency administrative expenses



**Chart D - Proposed Budget of State Funds for State Programs for FY19 Including Aid**

Program	Subprogram	Fund Type	Personal Services	Operating Expenses	Travel	Capital Outlay	Consulting /Contracting	Subtotal	Distribution of Aid	Total
Integrated Solid Waste Management	004	C	1,060,447	944,220	24,754	1,986	65	2,031,472	-	2,031,472
Ag - Livestock	016	G/C	1,251,817	581,401	51,550	-	-	1,884,769	-	1,884,769
Air Construction Permits	020	C	25,408	49,712	-	-	-	75,120	-	75,120
Superfund State Cost Share	023	G/C	34,486	28,695	55	-	368,312	431,549	232,876	664,424
Litter Reduction	024	C	81,711	78,440	855	-	137,417	298,423	1,700,649	1,999,072
Mineral Exploration	029	C	46,519	53,855	3,968	-	-	104,342	-	104,342
Private Onsite Wastewater Cert & Registration	030	C	246,884	222,119	4,109	1,420	6,247	480,778	-	480,778
Emission Inventory - Title V	033	C	1,801,621	1,518,037	28,369	-	29,373	3,377,400	-	3,377,400
Chemigation	034	C	19,852	17,587	-	-	32,671	70,110	-	70,110
Remedial Action Plan Monitoring Act	036	C	62,950	56,018	483	-	-	119,451	-	119,451
Private Onsite Wastewater Permit & Approval	037	C	47,096	37,622	1,194	-	9,107	95,020	-	95,020
Operator Certification	040	C	50,344	43,703	2,165	-	10,407	106,619	-	106,619
Community Right to Know	041	G	8,404	1,720	-	-	-	10,124	-	10,124
Petroleum Release Remedial Action Act	051	C	831,179	913,576	9,656	-	10,140,138	11,894,549	5,698,072	17,592,622
Emergency Response	057	G/C	45,316	54,789	2,154	-	-	102,259	-	102,259
Engineering Reviews	061	G	202,857	62,965	97	-	26,599	292,518	-	292,518
Waste Reduction & Recycling	091	C	214,164	205,941	5,805	-	63,655	489,565	3,900,649	4,390,214
Agency Organizational Dues	099	G	-	13,000	-	-	-	13,000	-	13,000
<b>Totals</b>			<b>\$ 6,031,055</b>	<b>\$ 4,883,402</b>	<b>\$ 135,215</b>	<b>\$ 3,405</b>	<b>\$ 10,823,991</b>	<b>\$ 21,877,067</b>	<b>\$ 11,532,246</b>	<b>\$ 33,409,313</b>

FUND TYPE LEGEND

G - Program Expends General Funds

C - Program Expends Cash Funds

G/C - Program Expends Both General and Cash Funds

An indirect rate of 55.22% was negotiated with EPA for FY19 and charged against direct payroll cost to cover agency administrative expenses.

# CHAPTER 9:

## Distribution of Aid

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The Department has a number of programs that distribute aid for specific activities. These range from funding for roadside cleanup to providing loans through the State Revolving Fund Loan Programs for construction of wastewater treatment facilities and drinking water systems.

### **WASTE MANAGEMENT AID PROGRAMS**

Following is a summary of funds provided in FY2018 through the Waste Grants programs managed in the Waste Planning and Aid Unit.

#### **A. Litter Reduction and Recycling**

The Litter Reduction and Recycling Grant Program provides funds to reduce litter, provide education and promote recycling in Nebraska. Funding for the program is an annual fee on manufacturers, wholesalers and retailers who have significant sales in categories of products that would generally be considered to produce litter.

In FY2018, 53 Litter Reduction and Recycling grants were awarded, totaling \$1,306,370. The grants were awarded in three categories: Public Education, \$651,693; Cleanup, \$50,569; and Recycling, \$603,838. These grants were awarded to both public and private entities.

#### **B. Waste Reduction and Recycling**

The Waste Reduction and Recycling Incentive Grants Program provides grants for various solid waste management activities. Revenues to the fund are provided by proceeds from various fees, including a one-dollar fee on each new tire sold in the state, and a retail business fee on tangible personal property sold in the state. In addition, 50% of a fee collected on the disposal of solid waste going to landfills goes to this fund.

In FY2018, 138 projects totaling \$3,491,217 were funded from the Waste Reduction and Recycling Incentive Grants Program.

#### **C. Illegal Dumpsite Cleanup Program**

The Illegal Dumpsite Cleanup Program, established in 1997, provides funding for political subdivisions to clean up solid waste disposed of along public roadways or ditches. Potential funding is limited to five percent of the total revenue from the disposal fee collected in the preceding fiscal year. In FY2018, the program provided \$40,432 to 25 recipients.

#### **D. Landfill Disposal Fee Rebate Program**

The Landfill Disposal Fee Rebate Program was created as an incentive to political subdivisions to support and encourage the purchasing of products, materials, or supplies that are manufactured or produced from recycled material. Funding for the program is from the Waste Reduction and Recycling Incentive Fund. In FY2018, the program provided \$94,184 to 11 recipients.

Any municipality or county may apply for a rebate if they have a written purchasing policy in effect requiring a preference for purchasing products, materials or supplies which are manufactured or produced from recycled material. If the policy is approved by NDEQ, the applicant may receive a ten cent rebate from the \$1.25 per ton disposal fee. Rebates are provided no more than quarterly and no less than annually.

Additional information about these programs can be found in the Planning and Aid portion of Chapter 5.

## **WATER QUALITY AID PROGRAMS**

### **A. Petroleum Remediation**

The Petroleum Remediation program provides aid through the Petroleum Release Remedial Action Fund to assist in paying the cost of cleanup of sites where petroleum has leaked from tanks, generally service stations. Funding to this program is primarily provided by a fee on petroleum sold in Nebraska. Over \$229 million has been disbursed since the program began. The program provided \$5.4 million to 186 sites for investigation and cleanup in FY2018.

Additional information about this program can be found in the Petroleum Remediation portion of Chapter 6.

### **B. State Revolving Loan Fund Program**

**I. Clean Water (Wastewater) State Revolving Loan Fund Program** -- Grant and loan programs administered by DEQ related to wastewater facilities, which are funded through the Clean Water State Revolving Fund program, include:

- The **Clean Water State Revolving Loan Fund** provides low interest loans and loan forgiveness to municipalities for construction of wastewater treatment facilities and sanitary sewer collection systems. The sources of funding for this program include federal grants and funds from the Nebraska Investment Financial Authority (NIFA) through bond issuance. In FY2018, the CWSRF funded projects totaling \$21,217,975 in loans and \$1,149,775 in principal forgiveness and grant funds.
- **Clean Water Construction Administration Small Community Matching Grants** provide matching grants to eligible communities with populations of 10,000 or less. In FY2018, \$550,268 was allocated for small community grants.
- **Planning Grants** totaling \$60,000 were awarded to five small (under 10,000) communities in FY2018. These communities were listed on the Project Priority List and used the grants to identify wastewater treatment facility project needs.

Additional information about these programs can be found in the State Revolving Loan Fund Programs portion of Chapter 6.

**II. Drinking Water State Revolving Fund Program** -- The Drinking Water State Revolving Fund provides low-interest loans and loan forgiveness to owners of public water systems. In FY2018, the program provided financial assistance to public water system projects totaling \$8,241,301, of which disadvantaged communities received \$1,435,760 in forgiveness funding.

Additional information about these programs can be found in the State Revolving Loan Programs portion of Chapter 6.

### **C. Nonpoint Source Management**

The Nonpoint Source Management program provides pass-through funding for the prevention and abatement of nonpoint source water pollution and the restoration of watershed resources under Section 319 of the federal Clean Water Act. This funding is provided to units of government, educational institutions, and non-profit organizations, for projects that facilitate implementation of the state Nonpoint Source Management Plan.

In FFY 2018, the Nonpoint Source Management Program provided and managed 30 Section 319 grants to local sponsors of eligible projects in the two categories: 1) Large Competitive Projects (generally under \$300,000) and 2) Small Project Assistance (under \$15,000). Of the 30 grants managed, 24 were large multi-year projects, with total funds of all projects equaling \$3,666,127. Six small projects were managed with total funds equaling \$90,000 .

Additional information about these programs can be found in the Water Quality Planning portion of Chapter 6.

# CHAPTER 10:

## Staffing

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NDEQ deals with a wide array of complex environmental issues and it is essential to our operations to recruit and hire technically competent people. Technically competent, trained, experienced, and dedicated staff within NDEQ provide the foundation to support the Mission of the agency to protect, preserve and enhance Nebraska's Air, Land, and Water Resources.

Staff retention continues to be an important goal for NDEQ. Staff turnover impacts continuity in NDEQ's programs and activities, and results in additional costs for recruitment and training of replacement staff members. NDEQ strives to foster and maintain an employee-friendly workplace by offering transfer and promotional opportunities for qualified internal applicants. In addition, training and tuition assistance are provided to interested staff.

NDEQ monitors diversity to encourage the receipt of applications from qualified members of protected groups by seeking to recruit members of protected groups.

The chart on the following page shows hiring activity on specific job categories for the last ten years:

<b>Employees Assuming Agency Positions</b>										
<i>These figures include new hires, promotions, transfers and classification upgrades for one-year period. Figures for 2018 are from October 1, 2017 through September 30, 2018.</i>										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Director, Deputy Director, Assistant Director, Division Administrator	0	0	0	0	0	0	1	5	0	0
Section Supervisor, Records Manager Budget Officer, IT Manager	4	0	0	0	1	5	0	4	0	1
Unit Supervisor	5	2	0	2	1	1	2	0	0	0
Human Resources, Training Coordinator	0	1	0	0	0	0	1	0	1	0
Process Improvement Coordinator									1	0
Federal Aid Administrator, Financial Assurance Coordinator, Accountant	0	2	1	1	0	0	0	1	1	1
Clerical/Accounting Clerk	9	3	5	0	2	4	4	4	1	3
Information Technology, Public Information, Research Analyst	3	0	1	0	0	0	0	0	2	0
Attorney I, II & III	0	1	0	0	0	2	0	2	1	0
Environmental Engineer	4	0	3	2	2	7	2	4	5	4
Compliance Specialist	0	0	0	0	1	0	0	1	1	0
Programs Specialist I & II	17	8	9	11	10	7	11	19	8	11
Geologist, Groundwater I & II	3	2	0	2	4	2	3	1	0	0
Environmental Assistance Coordinator	0	0	1	1	1	0	0	0	0	1
<b>TOTALS</b>	45	20	20	19	22	28	24	41	21	21

# CHAPTER 11:

## Financial Assurance Requirements

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Section 81-1505(21) provides the statutory authority for the Department to develop, and the Council to adopt as regulations, requirements for all applicants to establish proof of financial responsibility. The requirements pertain to all new or renewal permit applicants regulated under the Nebraska Environmental Protection Act, the Integrated Solid Waste Management Act, and the Livestock Waste Management Act, unless a class of permittees is exempted by the Council. The purpose of financial responsibility is for an applicant to provide funds to be used in the event of abandonment, default or other inability of the permittee to comply with terms or conditions of its permit or license. State statutes also identify types of funding mechanisms that applicants can use to meet the requirements.

Following is a table which provides a comprehensive list of existing financial assurance requirements for each permittee. Financial assurance amounts are listed in two categories: the first is the obligated amount, which lists the total amount of financial assurance which must be provided by the time of closure of the facility. Second is the current amount demonstrated, which lists the amount of financial assurance which is currently accrued towards the obligated amount. The table lists the facility location, permit type, initial date financial assurance provided, method or type of financial assurance provided and the guarantor for each permittee.

## NDEQ FINANCIAL ASSURANCE

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	FA Mechanism	Guarantor
<b>Municipal Solid Waste Disposal Areas (MSWDA), Sanitary Landfills (LF)</b>							
Alliance Landfill	Alliance	MSWDA	03/17/94	\$ 4,662,958	\$ 1,902,868	Enterprise Fund	City of Alliance
Beatrice Area SW Agency	Beatrice	MSWDA	07/12/00	\$ 6,758,252	\$ 6,756,023	Financial Test	City of Beatrice
Butler County Landfill	David City	MSWDA	10/03/08	\$ 11,470,503	\$ 5,396,719	Trust Fund	US Bank
Douglas County Landfill	Bennington	MSWDA	03/28/00	\$ 13,024,969	\$ 13,024,967	Surety Bond	Evergreen Ntl. Indemnity Co.
G & P Dev Landfill	Milford	MSWDA	10/03/08	\$ 12,063,747	\$ 3,018,619	Trust Fund	US Bank
Gering Landfill	Gering	MSWDA	02/13/96	\$ 2,258,903	\$ 1,561,465	Enterprise Fund	City of Gering
L.P. Gill Landfill	Jackson	MSWDA	04/09/96	\$ 6,994,343	\$ 3,861,833	Trust Fund	Premier Trust
Grand Island Landfill	Grand Is.	MSWDA	03/31/96	\$ 10,307,362	\$ 10,307,362	Financial Test	City of Grand Island
Hastings Area Landfill	Hastings	MSWDA	03/18/13	\$ 6,235,152	\$ 3,513,738	Enterprise Fund	City of Hastings
Hastings Landfill	Hastings	Sanitary LF	10/01/97	\$ 158,596	\$ 31,175	Faith & Credit	City of Hastings
Holdrege Landfill	Holdrege	MSWDA	07/29/96	\$ 3,057,733	\$ 2,038,133	Enterprise Fund	City of Holdrege
J-Bar-J Landfill	Ogallala	MSWDA	03/28/00	\$ 6,198,369	\$ 6,198,369	Performance Bond	Evergreen Ntl. Indemnity Co.
Kearney Landfill	Kearney	MSWDA	03/31/94	\$ 8,267,153	\$ 3,481,875	Trust Fund	Union Bank & Trust
Kimball Landfill	Kimball	MSWDA	05/10/96	\$ 1,896,072	\$ 1,078,580	Enterprise Fund	City of Kimball
Lexington Landfill	Lexington	Sanitary LF	07/25/96	\$ 304,968	\$ 288,712	Faith & Credit	City of Lexington
Lexington Area Agency	Lexington	MSWDA	01/19/97	\$ 2,835,280	\$ 2,316,745	Enterprise Fund	Lexington Area SW Agency
Lincoln Bluff Road Landfill	Lincoln	MSWDA	04/01/96	\$ 25,375,500	\$ 22,771,546	Financial Test	City of Lincoln
Loup Central Landfill	Elba	MSWDA	04/09/96	\$ 2,430,750	\$ 1,004,112	Trust Fund	Citizens Bank & Tr St. Paul
McCook Landfill	McCook	Sanitary LF	03/04/96	\$ 442,871	\$ 80,522	Faith & Credit	City of McCook
NE Ecology Landfill	Geneva	MSWDA	10/03/08	\$ 2,466,469	\$ 907,684	Trust Fund	US Bank
NNSWC Landfill	Clarkson	MSWDA	04/09/96	\$ 20,329,374	\$ 7,522,087	Enterprise Fund	NNSWC
Pheasant Point Landfill	Bennington	MSWDA	08/01/03	\$ 29,127,902	\$ 29,127,902	Surety Bond	Evergreen Ntl. Indemnity Co.
Sarpy County Landfill	Papillion	MSWDA	03/31/96	\$ 3,518,407	\$ 3,937,989	Enterprise Fund	Sarpy County
Sidney Landfill	Sidney	MSWDA	02/11/97	\$ 2,405,249	\$ 1,028,742	Enterprise Fund	City of Sidney
SWANN Landfill	Chadron	MSWDA	09/25/97	\$ 1,530,323	\$ 777,393	Enterprise Fund	SWANN
Valentine Landfill	Valentine	MSWDA	04/09/96	\$ 1,812,471	\$ 726,883	Enterprise Fund	City of Valentine
York Landfill	York	Sanitary LF	05/14/96	\$ 46,490	\$ 11,417	Faith & Credit	City of York
York Area SW Landfill	York	MSWDA	05/14/96	\$ 4,625,689	\$ 1,986,923	Enterprise Fund	City of York
*MSWDAs are landfills that are operating under current solid waste management regulations.							
**Sanitary LFs are closed facilities that have post-closure monitoring and maintenance.							
<b>Construction/Demolition Landfills</b>							
Abe's Trash Service C & D	Blair	Const./Demol.	03/30/98	\$ 272,526	\$ 272,526	Escrow Account	Bank of Bennington
Alliance C & D Landfill	Alliance	Const./Demol.	12/02/99	\$ 156,389	\$ 81,218	Enterprise Fund	City of Alliance
Anderson Excavating C & D	Omaha	Const./Demol.	11/15/12	\$ 958,130	\$ 958,130	Letter of Credit	Availa Bank
Arnold C & D Landfill	Arnold	Const./Demol.	07/24/00	\$ 48,434	\$ 50,200	Enterprise Fund	Village of Arnold
Beatrice Area SW Agency	Beatrice	Const./Demol.	10/15/12	\$ 1,034,385	\$ 1,068,855	Financial Test	City of Beatrice
Benkelman C & D Landfill	Benkelman	Const./Demol.	10/15/06	\$ 66,357	\$ 21,157	Enterprise Fund	City of Benkelman
Broken Bow C & D Landfill	Broken Bow	Const./Demol.	11/23/07	\$ 126,678	\$ 39,086	Enterprise Fund	City of Broken Bow



## NDEQ FINANCIAL ASSURANCE

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	FA Mechanism	Guarantor
Bud's Sanitary Service C & D	Newman Grove	Const./Demol.	06/01/97	\$ 37,186	\$ 37,186	Letter of Credit	First Natl. Bank Newman Gr
Butler County C & D Landfill	David City	Const./Demol.	06/01/97	\$ 36,853	\$ 36,853	Surety Bond	Evergreen Ntl. Indemnity Co.
Eco-Storage C & D Landfill	Omaha	Const./Demol.	06/03/10	\$ 286,600	\$ 286,600	Surety Bond	Evergreen Ntl Indemnity Co.
Franklin C&D Landfill	Franklin	Const./Demol.	11/08/10	\$ 27,648	\$ 10,433	Enterprise Fund	City of Franklin
Gage County C & D Landfill	Beatrice	Const./Demol.	02/23/98	\$ 165,076	\$ 200,000	Letter of Credit	Security First Bank
Hawkins Construction C & D	Omaha	Const./Demol.	01/03/02	\$ 392,604	\$ 392,604	Surety Bond	Hartford Fire Ins. Co.
Holdrege C & D Landfill	Holdrege	Const/Demol.	05/01/09	\$ 316,612	\$ 63,756	Enterprise Fund	City of Holdrege
KGP Services C & D	Norfolk	Const/Demol.	11/06/03	\$ 96,872	\$ 92,933	Escrow Account	Elkhorn Valley Bank & Trust
Kimball C & D Landfill	Kimball	Const./Demol.	04/01/01	\$ 80,366	\$ 59,876	Enterprise Fund	City of Kimball
Lead Waste Mgmt C&D Landfill	Waterbury	Const./Demol.	05/28/14	\$ 38,998	\$ 38,998	Letter of Credit	Adrian State Bank
Lexington C & D Landfill	Lexington	Const./Demol.	09/30/98	\$ 211,506	\$ 162,232	Enterprise Fund	Lexington Area SW Agency
Lincoln North 48th St. C & D	Lincoln	Const./Demol.	04/01/96	\$ 2,515,350	\$ 1,935,075	Financial Test	City of Lincoln
Loup Central C & D Landfill#2	Elba	Const./Demol.	01/28/01	\$ 97,776	\$ 48,831	Trust Fund	Citizens Bank & Tr. St. Paul
L.P. Gill Landfill C & D	Jackson	Const/Demol.	04/09/96	\$ 188,472	\$ 124,503	Trust Fund	Premier Trust
NPPD Gerald Gentleman	Sutherland	Const./Demol.	04/01/95	\$ 258,511	\$ 258,511	Financial Test	NPPD
O'Neill C & D Landfill	O'Neill	Const./Demol.	06/01/01	\$ 232,836	\$ 42,080	Enterprise Fund	City of O'Neill
PAD LLC C & D Landfill	Hastings	Const./Demol.	06/05/02	\$ 200,893	\$ 200,893	Escrow Account	Five Points Bank
Plainview C & D Landfill	Plainview	Const./Demol.	09/26/00	\$ 87,298	\$ 32,973	Enterprise Fund	City of Plainview
Rainwood Hill LLC C & D	Omaha	Const/Demol.	05/29/15	\$ 206,650	\$ 205,347	Surety Bond	Hudson Insurance Co.
Red Cloud C&D Landfill	Red Cloud	Const/Demol.	04/04/17	\$ 96,710	\$ 6,058	Enterprise Fund	City of Red Cloud
Schmader C & D Landfill	West Point	Const/Demol.	07/27/12	\$ 140,975	\$ 140,975	Letter of Credit	Charter West Ntl Bank
Sidney C & D Landfill	Sidney	Const./Demol.	11/23/99	\$ 131,060	\$ 49,600	Enterprise Fund	City of Sidney
SW NE Solid Waste Agency	Imperial	Const./Demol.	06/01/01	\$ 148,528	\$ 67,581	Enterprise Fund	City of Imperial
Three Valleys C & D Landfill	Indianola	Const./Demol.	02/24/10	\$ 79,737	\$ 79,737	Letter of Credit	McCook Ntl Bank
York C & D Landfill	York	Const/Demol.	12/01/07	\$ 804,050	\$ 117,361	Enterprise Fund	City of York
<b>Fossil Fuel Combustion Ash (FFCA), Industrial Waste Landfills, Monofills</b>							
Ash Grove Cement Co.	Louisville	Indus. Waste	03/01/03	\$ 4,784,326	\$ 4,784,326	Financial Test	Ash Grove
Clean Harbors Technology	Kimball	Monofill	08/01/95	\$ 3,535,438	\$ 3,535,438	Insurance Policy	Indian Harbors Insurance Co.
Fremont Utilities	Fremont	FFCA	05/28/96	\$ 3,435,356	\$ 700,000	Enterprise Fund	City of Fremont
Hastings Utilities	Hastings	FFCA	02/01//01	\$ 12,334,270	\$ 1,910,212	Enterprise Fund	City of Hastings & PPGA
NPPD Gerald Gentleman 4	Sutherland	FFCA	04/01/95	\$ 2,339,337	\$ 2,339,337	Financial Test	NPPD
NPPD Sheldon Station 4	Sheldon	FFCA	07/01/01	\$ 2,281,095	\$ 2,281,095	Financial Test	NPPD
OPPD NE City 1	NE City	FFCA	04/04/95	\$ 6,570,670	\$ 6,570,670	Financial Test	OPPD
OPPD NE City 2	NE City	FFCA	06/30/09	\$ 1,280,764	\$ 1,280,764	Financial Test	OPPD
OPPD North Omaha	Omaha	FFCA	04/04/95	\$ 3,384,438	\$ 3,384,438	Financial Test	OPPD
OPPD Fort Calhoun (IW)	Ft. Calhoun	Indus. Waste	04/04/95	\$ 139,476	\$ 150,170	Financial Test	OPPD
Platte Generation	Grand Island	FFCA	03/18/14	\$ 368,701	\$ 368,701	Financial Test	City of Grand Island
Waste Management of NE	Bennington	Indus. Waste	02/19/04	\$ 1,425,911	\$ 1,425,911	Surety Bond	Lexon Insurance Co.

## NDEQ FINANCIAL ASSURANCE

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	FA Mechanism	Guarantor
<b>Transfer Stations, Material Recovery Facilities, Compost Sites</b>							
AltEn LLC	Mead	Compost	04/01/07	\$ 188,466	\$ 188,508	Escrow Account	American Ntl Bank
Bud's Sanitary Service	Newman Gr.	Transfer Station	05/19/17	\$ 2,970	\$ 2,970	Letter of Credit	First Natl. Bank, NG
Custer Transfer Station	Broken Bow	Transfer Station	11/08/16	\$ 10,339	\$ 10,339	Letter of Credit	Nebraska State Bank
Doernemann Const. Co.	Clarkson	Compost	12/15/99	\$ 101,013	\$ 101,013	Letter of Credit	Clarkson Bank
Edgetown Properties LLC	Madison	Transfer Station	06/27/12	\$ 7,500	\$ 7,500	Escrow Account	Frontier Bank
Fremont CRD, Inc.	Fremont	Transfer Station	07/02/03	\$ 13,125	\$ 13,125	Surety Bond	Capitol Indemnity Corp
King Transfer Station	Walthill	Transfer Station	04/02/96	\$ 1,182	\$ 1,187	Escrow Account	First Natl. Bank, Walthill
Medi-Waste Disposal	Lincoln	Proc Fac	01/24/18	\$ 36,036	\$ 36,036	Surety Bond	Cincinnati Ins. Co.
Prairieland Dairy LLC	Firth	Compost	08/01/15	\$ 313,830	\$ 313,830	Letter of Credit	First State Bank Nebraska
Recycling Enterprises of NE, Inc.	Lincoln	Mat. Recovery	08/30/12	\$ 7,734	\$ 7,734	Letter of Credit	CityBank & Trust Co.
River City Recycling	Omaha	Mat. Recovery	01/01/01	\$ 55,920	\$ 55,920	Escrow Account	US Bank Ntl Assoc
Sarpy County	Papillion	Transfer Station	04/17/12	\$ 98,643	\$ 98,643	Surety Bond	Travelers Surety Co. of Amer.
Seneca Sanitation	Dubois	Transfer Station	09/27/17	\$ 4,012	\$ 4,012	Letter of Credit	First Heritage Bank
Stericycle	Lincoln	Processing Fac	07/01/12	\$ 56,873	\$ 56,873	Surety Bond	Westchester Fire Ins. Co.
Waste Connections of NE	Gering	Transfer Station	08/15/03	\$ 10,076	\$ 14,740	Surety Bond	Evergreen Ntl. Indemnity Co.
Waste Connections of NE	Ord	Transfer Station	07/02/03	\$ 8,387	\$ 8,387	Surety Bond	Capitol Indemnity Corp
Waste Connections of NE	Central City	Transfer Station	05/30/13	\$ 9,223	\$ 9,223	Surety Bond	Platte River Ins Co.
<b>RCRA Closure and RCRA Post-Closure (PC)</b>							
Loveland Products	Fairbury	RCRA PC	12/10/15	\$ 630,697	\$ 630,697	Letter of Credit	Bank of Nova Scotia
Bosch Security Systems	Lincoln	RCRA PC	06/02/09	\$ 10,344	\$ 10,344	Letter of Credit	Bank of Montreal
Clean Harbors Technology	Kimball	RCRA Closure	09/16/13	\$ 29,789,429	\$ 29,789,429	Insurance Policy	Indian Harbors Insurance Co.
Douglas County Landfill	Omaha	RCRA PC	03/08/85	\$ 270,981	\$ 270,981	Trust Fund	First Natl Bank of Omaha
Eaton Corporation	Omaha	RCRA PC	06/08/09	\$ 4,463,158	\$ 4,463,158	Letter of Credit	JP Morgan/Chase Bank
Safety Kleen	Grand Island	RCRA Closure	10/15/01	\$ 146,057	\$ 146,057	Insurance Policy	Indian Harbors Insurance Co.
Safety Kleen	Omaha	RCRA Closure	10/15/01	\$ 386,973	\$ 386,973	Insurance Policy	Indian Harbors Insurance Co.
Tenneco Automotive Inc.	Cozad	RCRA PC	09/17/97	\$ 52,366	\$ 52,366	Letter of Credit	Canadian Imperial Bank
Van Diest Supply Liquid Plant	McCook	RCRA PC	02/16/06	\$ 2,627,776	\$ 2,627,776	Letter of Credit	1st State Bank Webster Cty IA
Douglas County Landfill	Omaha	RCRA Cor Act	08/20/18	\$ 1,726,617	\$ 1,726,617	Financial Test	Douglas County
Becton Dickinson & Company	Columbus	RCRA Closure	08/30/18	\$ 9,839	\$ 9,839	Escrow Agreement	Bank of New York Mellon
Preferred Pump & Equipment	Dodge	RCRA Closure	09/15/17	\$ 57,084	\$ 57,084	Financial Test	Preferred Pump & Equipment
Hornady Manufacturing CO.	Grand Island	RCRA Closure	12/28/17	\$ 121,742	\$ 121,742	Letter of Credit	Five Points Bank
<b>Underground Injection Control (UIC)</b>							
Crow Butte Resources, Inc.	Crawford	UIC		\$ 47,740,447	\$ 47,740,447	Letter of Credit	Royal Bank of Canada

## NDEQ FINANCIAL ASSURANCE

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	FA Mechanism	Guarantor
<b>Waste Tire Haulers</b>							
ABC Tire LLC	Kansas C, KS	Waste Tire	06/24/13	\$ 10,000	\$ 10,000	Surety Bond	Nationwide Mutual Ins.
B-Rose Transportation	Alvo	Waste Tire	04/16/15	\$ 40,000	\$ 40,000	Surety Bond	Merchants Bonding Co.
Butler County Landfill	David City	Waste Tire	05/16/97	\$ 50,000	\$ 50,000	Surety Bond	Travelers Casualty & Surety
Champlin Tire Recycling Inc	Concordia KS	Waste Tire	10/04/96	\$ 10,000	\$ 10,000	Letter of Credit	United Bank & Trust
D & B Enterprise LLC	Correctville, IA	Waste Tire	01/22/18	\$ 10,000	\$ 10,000	Surety Bond	Western Surety Co.
Don's Used Tires	Lincoln	Waste Tire	03/13/03	\$ 5,000	\$ 5,000	Surety Bond	Old Republic Surety Co.
Gill Hauling Inc.	Jackson	Waste Tire	02/04/09	\$ 10,000	\$ 10,000	Letter of Credit	Dakota County State Bank
Hackbart Brothers, Inc	Seward	Waste Tire	08/03/15	\$ 10,000	\$ 10,000	Letter of Credit	Jones Natl. Bank & Trust
Hoke Transport LLC	Gering	Waste Tire	04/04/12	\$ 5,000	\$ 5,000	Surety Bond	Old Republic Surety Co.
Intrawest LLC	Fountain CO	Waste Tire	09/15/15	\$ 5,000	\$ 5,000	Surety Bond	U.S. Specialty Ins. Co.
J & M Steel	Hastings	Waste Tire	01/15/15	\$ 5,000	\$ 5,000	Letter of Credit	Five Points Bank
Kenny Frazier	Edmond OK	Waste Tire	05/26/04	\$ 5,000	\$ 5,000	Escrow Account	Bank of America, Inc.
LAL Enterprise, LLC	Alvo	Waste Tire	04/16/15	\$ 40,000	\$ 40,000	Surety Bond	Merchants Bonding Co.
Leo Porter	Oshkosh	Waste Tire	02/21/08	\$ 5,000	\$ 5,000	Escrow Account	Nebraska State Bank
Liberty Tire Services of Ohio	Savage, MN	Waste Tire	03/09/09	\$ 10,000	\$ 10,000	Surety Bond	Evergreen Ntl. Indemnity Co.
Million Tire Disposal	Sarcoxie,MO	Waste Tire	09/16/16	\$ 5,000	\$ 5,000	Surety Bond	Great American Ins.Co.
New Horizons Enterprises LLC	Lincoln	Waste Tire	05/11/12	\$ 5,000	\$ 5,000	Surety Bond	Granite Re, Inc.
Omaha Casing Co. Inc	Omaha	Waste Tire	12/05/14	\$ 5,000	\$ 5,000	Letter of Credit	Security Natl. Bank
Resource Management Co	Brownell, KS	Waste Tire	01/17/06	\$ 10,000	\$ 10,000	Letter of Credit	First State Bank, Ness Cy,KS
River City Recycling	Omaha	Waste Tire	04/22/16	\$ 43,750	\$ 43,750	Letter of Credit	Access Bank
Shockley Trucking	Octavia	Waste Tire	02/24/16	\$ 10,000	\$ 10,000	Surety Bond	Universal Surety Co.
Tire Cutters	Centralia KS	Waste Tire	05/13/06	\$ 5,000	\$ 5,000	Letter of Credit	First Heritage Bank
Tire Town, Inc.	Leavenworth,K	Waste Tire	06/11/15	\$ 10,000	\$ 10,000	Letter of Credit	Bank of the Prairie
Uribe Scrap Tires, LLC	Lincoln	Waste Tire	01/06/14	\$ 5,000	\$ 5,000	Surety Bond	Ohio Casualty Ins. Co.