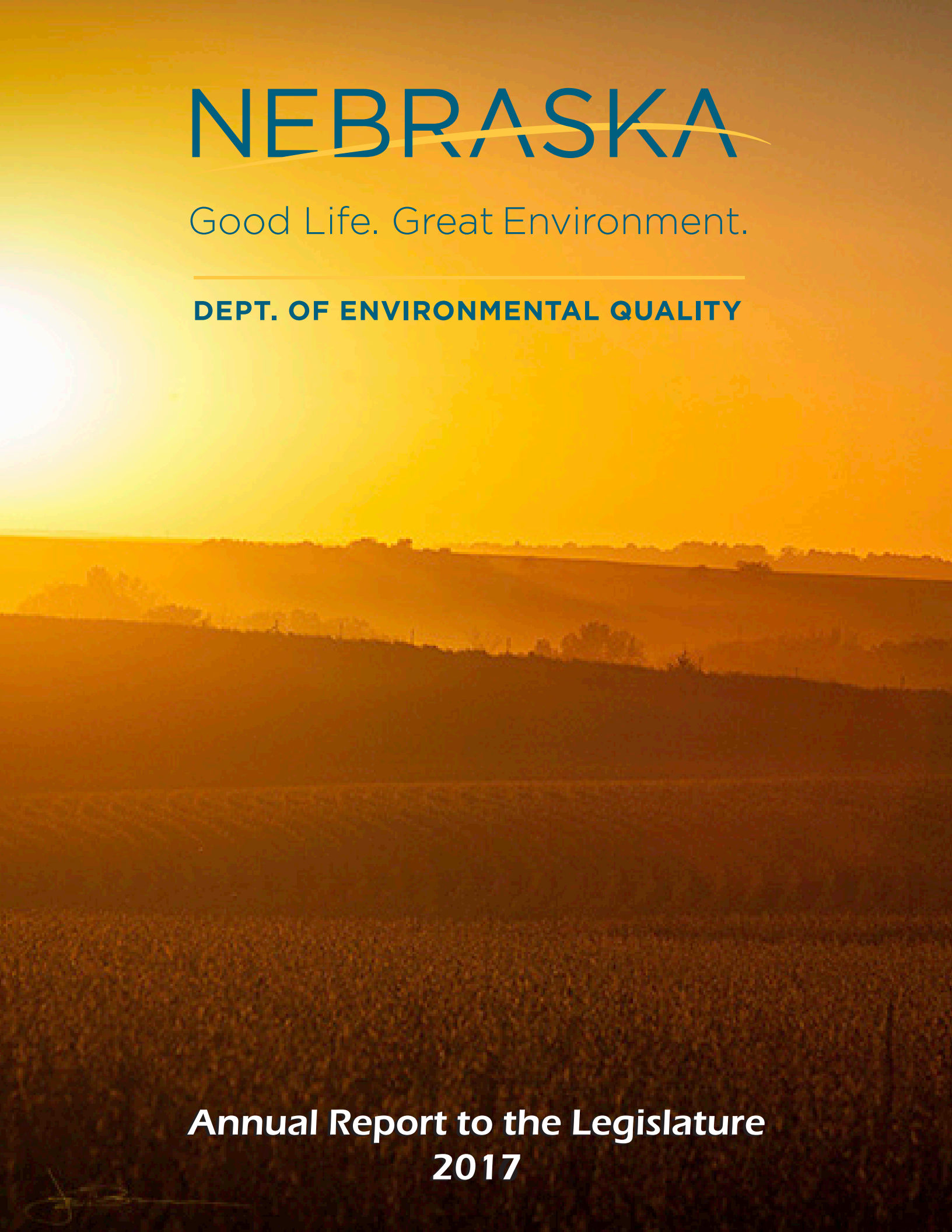
NEBRASKA
Good Life. Great Environment.
DEPT. OF ENVIRONMENTAL QUALITY
Annual Report to the Legislature
2017

For more information about the Nebraska Department of Environmental Quality:

The Agency's mailing address:

Nebraska Department of Environmental Quality
1200 N St., Suite 400
P.O. Box 98922
Lincoln, NE 68509-8922

Main phone number:	(402) 471-2186
Toll free number:	1-877-253-2603
Air Construction Permit Hotline (toll free)	1-877-834-0474
Records requests:	(402) 471-3557
Assistance Division:	(402) 471-6974
Public Information Office:	(402) 471-4223

Visit our web site at **http://deq.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 6 (continued)

CHAPTER 1:
Agency Overview

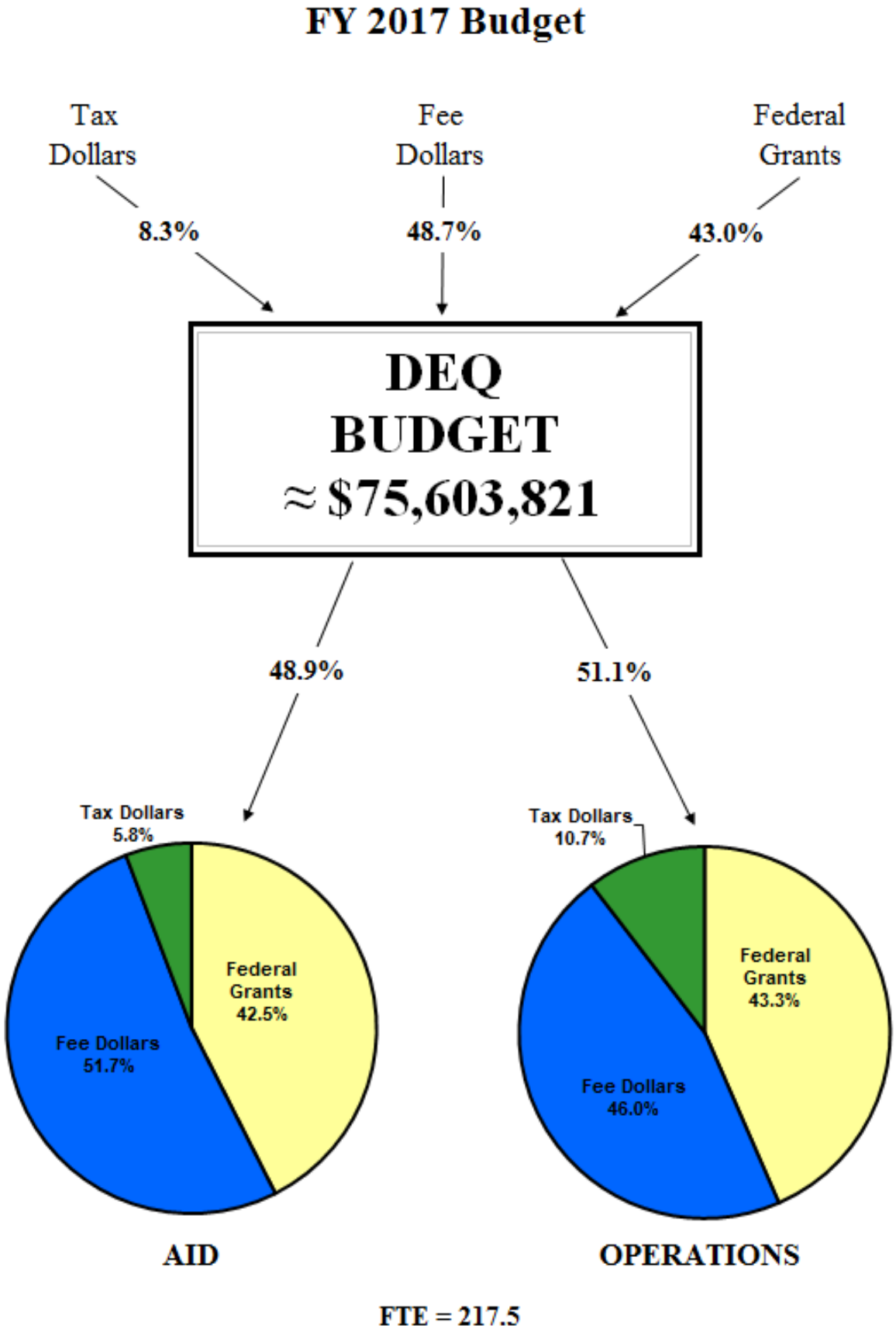
The Nebraska Department of Environmental Quality (NDEQ) was created with passage of the Nebraska Environmental Protection Act in 1971. The Department has grown and been given additional responsibilities over the years, but its mission has remained the same — the protection of Nebraska's air, land and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

The NDEQ has an FY17 annual budget of approximately $75.6 million. This includes money from federal grants, state taxes and fees. Of that amount, $36.9 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.

Funding Type	Operations: $ Amount	Percent of Operations Budget	Aid: $ Amount	Percent of Aid Budget
Federal Funds (Grants)	$16.8 million	43.3%	$15.7 million	42.5%
State General Funds (Tax $)	$4.1 million	10.7%	$2.1 million	5.8%
Cash Funds (Fees)	$17.8 million	46.0%	$19.1 million	51.7%
Total	$38.7 million		$36.9 million	

The following graphic depicts NDEQ's FY17 budget by funding source and percent anticipated to be expended by fund type and activity (aid or operations).



Significant Topics in 2017

The following are some of the significant topics, challenges and accomplishments that NDEQ addressed in 2017:

Co-location of HHS 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 two 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. They are now located by NDEQ's Wastewater staff, to promote interaction and integration between the programs.

The focus of this re-location of the Drinking Water staff is to enhance communication and integrate the state's services to communities. Locating staff together will better serve Nebraska communities in addressing their water infrastructure needs by enhancing state agency coordination. The agencies intend to cross-train 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. Engineering is primarily responsible for review and approval of Plans and Specifications dealing with water sources and treatment, Field Services is primarily responsible for water system inspections and are our "hands on" people when technical services are needed, 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 total number of Public Drinking Water Systems is 1338. The breakdown of system classification: 602 Community Water Systems (residential), 143 Non-Transient Non-Community Water Systems (Businesses, rural schools, etc.), and 593 Transient Non-Community Water Systems (rest stops, service stations along the interstate, etc.).

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 cross-trained to coordinate their programs.

This agreement does not affect DHHS staff responsible for well water contractors, construction standards, and programs such as home loan inspections, as these are separate and distinct activities.

Process Improvement. In the spring of 2016, the State of Nebraska embarked on a major initiative to improve state operational processes through the creation of the Center for Operational Excellence (COE). The COE serves as the training center for continuous process improvement across all state agencies. It currently certifies White, Yellow, and Green Belts in Lean Six Sigma to those looking to engage in process improvement. Its goal is to help agencies simplify processes, resulting in a more effective, efficient, and customer-focused government.

NDEQ has been very involved in the process improvement efforts, and hired an agency Process Improvement Coordinator in late April to help guide staff to make changes that will improve the effectiveness of our operations, create savings, and improve service to our customers.

As part of the process improvement process, many program staff meet for brief "daily huddles," to review progress and assess goals.

The entire agency has taken the Lean Six Sigma White Belt training, which provides everyone with a glimpse into the strategies to be utilized moving forward. As of Nov. 20, a total of 108 DEQ employees (including all Supervisors) have completed yellow belt training. This training includes several new tools, such as Quality-Delivery-Inventory-Production boards (QDIP) and swim-lane boards, that are designed to help teams track and measure their work efforts and begin the journey of continuous incremental improvement. An important component of process improvement is the concept that everyone should contribute toward improving quality.

In 2017, the agency established SMART (Specific, Measureable, Actionable, Relevant, and Timely) goals for all staff. The rationale ensure consistent goals are being pursued throughout the agency. SMART Goals will also be included in next year's performance evaluations.

Construction storm water permitting and other online application efforts. NDEQ has moved to an online process for applicants across the state to submit construction storm water applications. This new application process involves those who are planning construction projects of an acre or larger. The online process prevents the need for NDEQ staff to re-input information submitted by the applicant, and reduces lag time of paperwork being sent back and forth. Previously, it could take several weeks for an applicant to receive coverage. Through the new process, the timeframe has been reduced to about one day for most applications. From October 2016 through October 2017, over 1,700 construction storm water general permits have been processed online.

Many other grant application and permit application processes have moved to an online process in the past two years. These include several air construction general permits, as well as the application process for waste and water grants. Wastewater plant operators are now able to submit Discharge Monitoring Reports online, the public is able to search public records online, and for some projects, NDEQ has established an online system to submit and review public comments.

Many additional projects will move to online processing in 2018, including some aspects of ag permit applications, onsite (septic and private lagoon) applications, and petroleum remediation reimbursement applications.

Continuing Emission Monitors – NDEQ announced a new voluntary initiative for ethanol plants which is designed to promote improved compliance and greater efficiency through the installation of

continuous monitoring systems (CEMS). NDEQ observed that the biological aspect of ethanol processes can cause greater variability in readings taken from "stack testing," which is one method that the ethanol industry can use to determine whether they are considered a major emitter of air pollutants.

However, a more reliable and consistent monitoring approach is to instead install continuous monitoring emission systems at ethanol facilities' fermentation scrubbers. These monitors provide detailed long-term data regarding the types of emissions that are coming from the facilities. In addition, they serve as an effective management tool for the industry.

Several Nebraska ethanol facilities have already installed CEMS and have informed NDEQ that they have experienced benefits beyond regulatory compliance. Some indicate they are better able to manage their water and chemical use and can identify potential scrubber performance issues. The agency has been sharing this information with all of the ethanol industry due to the favorable results that are being reported by those who have already installed CEMS.

2017 Legislative Summary

The Nebraska Legislature enacted one legislative bill in 2017 that had direct impacts on NDEQ:

LB 182 – This legislation amended provisions of the Drinking Water State Revolving Fund Act that authorizes the Department of Environmental Quality to provide financial assistance to political subdivisions that operate public water systems for safe drinking water projects. The changes adopted clarify the Program's original intent that loans, grants and loan forgiveness be available to public water systems that serve populations of ten thousand or less, and are operated by a political subdivision.

CHAPTER 2:
Administration/Legal/ Management Services

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 FY17, the Director issued 12 administrative orders requiring compliance with environmental statutes and regulations. The Attorney General settled three civil judicial cases and judgments were entered for a total of $54,100 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, 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 Quality Division. 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 2017:

- 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 will become fully functional in fiscal year 2018 for all programs within NDEQ, with the goal to fully integrate the invoicing, routing, coding, approval and payment system within the ECM.
- Successfully completed a fiscal year 2016 SRF audit during 2017, 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 with online check payments coming in fiscal year 2018.
- Assisted the agency with solutions to save money. In total, $635,452 was saved versus the prior fiscal year.

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.

Incoming mail is scanned and images are indexed into the Enterprise Content Management (ECM) System utilizing OnBase software applications from Hyland Software. Images are routed to agency staff through an electronic workflow process, eliminating the need to route paper documents. Outgoing mail documents are still provided to the Records Section in paper format and then scanned. The image is indexed and stored in the ECM. Staff can access facility related documents on their desktop computer through the ECM, the agency Integrated Information System (IIS) Document Tracking System (DTS), or NDEQ's webpage. Storing document images in the ECM has reduced the number of file folders and file labels purchased; resulting in a reduction of staff time spent labeling folders and filing documents.

Mail processing in the ECM expanded in FY2017 to include invoices. Invoices are scanned upon receipt and electronically routed to the Fiscal Section and supervisors. Routing invoices through the ECM reduced processing time and increased efficiency.

The Section coordinates responses to over 80 requests for information each month from the public, government agencies, private consultants and regulated entities that wish to research the history of environmental activities by the agency. Records requests involve a variety of topics such as landfills, leaking underground storage tanks, ethanol plants, wastewater treatment facilities and hazardous waste sites. In December 2012, facility-related document images residing in the ECM were made available to the public through NDEQ's webpage. In FY2017, approximately one-third of the requests were fulfilled by records management staff imaging legacy paper files into the ECM and directing the requestor to the website. In total, 44% of the requests were fulfilled by directing the requestor to the agency website to view documents.

The change in public accessibility to NDEQ facility records was the first phase of providing self-service options to agency customers. From the agency website, permits may be obtained for Construction Storm Water and for seven different general air permits. Grants to clean up waste, litter and scrap tires are applied for and issued electronically as well as grants to prevent and abate nonpoint source water pollution.

The Electronic Content Management System has changed the focus of the Records Management Section from managing paper to managing images, workflows and information.

Information Technology

The Information Technology Section provides computer support and information management for all agency locations. Four professional staff members offer guidance and technical support in the acquisition and maintenance of computer hardware and software. They provide support for about 250 desktop computers, about 20 printers, a midrange System I AS400 computer, various network servers, about 30 mobile devices and software. They also conduct training and oversee telecommunications for the Agency. 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 addition, the agency made available its first web-based reporting application at the end of 2003, to replace the more traditional paper-based reporting process.

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). When completed, the Exchange Network will provide 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 Nebraska's Chief Information Officer and other state agencies. The purpose of the project is to create and store electronic images of the agency's documents, to improve management of and access to public records. A Request for Proposals (RFP) was issued, vendors evaluated, a vendor selected and a contract has been signed. The agency was one of three partners working with the vendor during implementation to demonstrate and accept the requirements of the RFP. As part of the acceptance process, the agency incorporated the ECM into existing business processes and operations. On April 11, 2011, the agency implemented the first project. This project is covered in more detail in the Records Management portion of the report. As support for the project, about two thirds (160) of the agency's PC-based computers were replaced between April and September. Additionally, about 170 nineteen-inch monitors were installed as a second monitor so agency staff could better utilize the agency ECM application. In early 2013, the agency added the last field office to the state network, which provided staff with better access to the ECM.

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

As an ongoing process, the agency web page is updated to make use of new software capabilities. As part of the process, static Excel files of information are replaced with applications to query the existing data in real time, providing users with better information and eliminating the need for agency staff to create the Excel files on a regular basis.

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 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, 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.

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

Pictured from left, back row: Mohamed Dahab, John Kinter, Lance Hedquist, Douglas Anderson,, John Turnbull, Mark Czaplewski, Alden Zuhlke, Rod Gangwish, Front row: Robert Hall, John Dilsaver, Joe Citta, Michelle Bucklin, NDEQ Director Jim Macy, Dennis Grams. (Other members, not pictured, are: Jeremy Buhl, James Hawks, Hilary Maricle and Ronald Sheppard.)

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 during FY2017.

Council Members

Representing	Council member	Term expires
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	John Kinter Norfolk	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

FY 2017
Environmental Quality Council Actions

Council Meeting Date	Regulation	Action
November 15, 2016	Amendment to Title 119 – Nebraska Rules and Regulations Pertaining to the Issuance of Permits Under the National Pollutant Discharge Elimination System	Approved
	NDEQ Litter Reduction and Recycling Grant Program 2017 Funding Percentage Allocations	Approved
June 13, 2017	2017 Intended Use Plan and Project Priority List for Clean Water State Revolving Fund and Drinking Water State Revolving Fund	Approved
	Proposed Clean Water and Drinking Water State Revolving Fund Intended Use Plan for State FY 2018	Approved
	Amendments to Title 129 – Nebraska Air Quality Regulations	Approved

CHAPTER 4:
Air Quality Division

The objectives of the Air Quality Division are to achieve and maintain the ambient air quality standards, to protect the quality of the air in the state, including areas that have air cleaner than the standards, and to implement federal and state air quality rules and regulations. Thousands of tons of air pollutants are emitted into the air in Nebraska each year from industrial and other man-made activities. Air pollutants can affect human health, reduce visibility, cause property damage, and harm the environment. The regulated air pollutants of most concern are particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide, ozone, lead, and 187 listed hazardous air pollutants.

This air monitoring site operated by NDEQ near Weeping Water is powered totally through solar power.

The primary air quality programs that help assure healthy air quality are: the construction permit program, operating permit program, emission inventory program, ambient air quality monitoring program, inspection and compliance program, air toxics program, and planning and development program.

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

The Federal Clean Air Act Amendments of 1990 and the passage of LB1257 (1992) by the Nebraska Legislature required that the Nebraska Department of Environmental Quality (NDEQ) establish and implement a comprehensive operating permit program for sources of certain air pollutants. Nebraska also implements the federal construction permit program, Prevention of Significant Deterioration (PSD). 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 PSD program applies to sources of air pollution that emit significant levels of certain types of pollutants.

Nebraska's Title V air quality operating permit program is referred to as the Class I operating permit program. Although the Federal Title V program only regulates major sources of air pollution, the Nebraska program also regulates certain minor sources using Class II operating permits (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. Operating permits contain all applicable requirements for all emission points at a facility.

The first step in the air quality permitting process is to determine whether a construction permit is required pursuant to Nebraska Administrative Code Title 129 – Nebraska Air Quality Regulations (Title 129). When required, an air quality construction permit must be obtained prior to constructing an air contaminant source and is valid for the life of the covered emission units. Not all new sources of air pollution are required to obtain a construction permit, only those with potential emissions at or above the permitting thresholds specified in Title 129.

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. Not all sources are eligible for all three types. Individual permits are available for all regulated sources and include all requirements applicable and specific to that source. Permit-by-rule requirements are detailed in Title 129. General permits are issued with requirements that are specific to limited types of source.

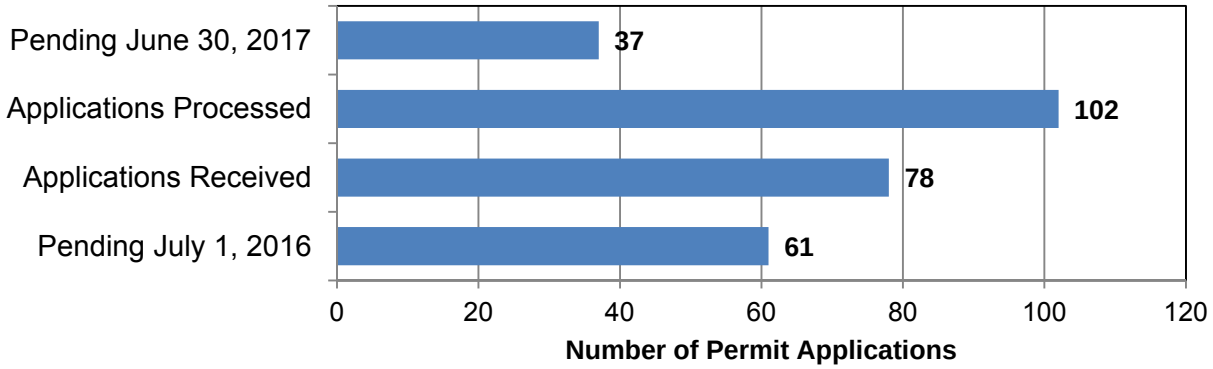
An individual permit is issued to a specific source at a specific location to address the particular needs and challenges at the source in question. Because it is "tailor made" for the source, developing an individual permit requires much more time and labor each time an individual permit is issued. Each individual permit, permit-by-rule, and general permit must go through a public notice (30-day comment period), which increases the time required to issue the permit. However, a major difference is that each permit-by-rule and general permit is only issued once, and eligible applicants apply for and obtain coverage without the need to develop a permit or go through a comment period each time coverage under that permit-by-rule or general permit is issued to an eligible source.

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 that category, provided that the source meets the applicability criteria and applies for and obtains coverage. A difference is that the requirements for a permit-by-rule are established in Title 129; whereas, in a general permit, the requirements are established in the permit. The result is that permits-by-rule and general permits offer a significantly streamlined process for eligible applicants within the narrowed scope of the permit-by-rule or general permit, at a significant resource savings for both the applicant and the Department.

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 specified thresholds. The chart on the next page summarizes construction permit applications received, processed and pending (note: the Processed category includes permits issued, withdrawn, denied, and determinations of no permit required).

Construction Permit Applications, FY2017

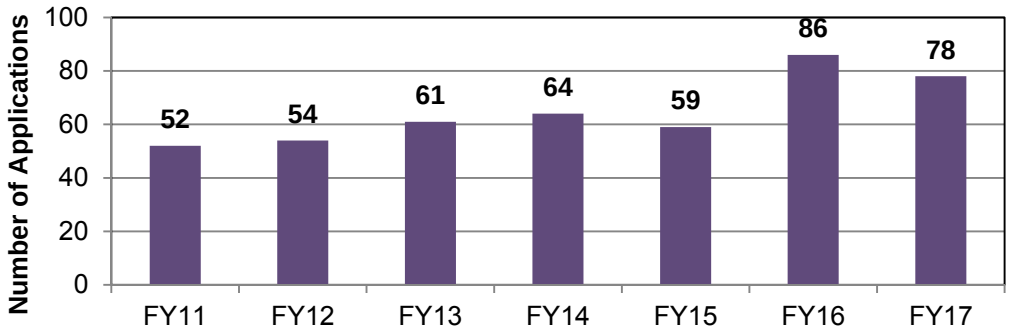


For sources regulated under the construction permit program that emit significant levels of certain types of air pollutants and trigger PSD requirements, the NDEQ conducts additional, more rigorous reviews of the construction permit application to ensure that best available control technology will be used. Two PSD construction permits were issued in FY2017. Best available controls are employed to minimize impacts on the environment. Before issuing a PSD permit, 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. The PSD program also ensures that visibility in nearby national parks and wilderness areas is protected. NDEQ notifies federal land managers of pending PSD decisions. Lastly, the program requires that permitting authorities advise nearby States and Tribes of pending PSD decisions so those authorities can express any concerns with potential impacts in their areas.

As a part of its state program, the NDEQ requires significant sources of hazardous air pollutants to control emissions with the best available control technology (Toxics BACT).

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. Applications declined during the slower economy of FY09 through FY12, but increased again during FY13 through FY17, when NDEQ saw an increase in activities associated with manufacturing and food and data processing.

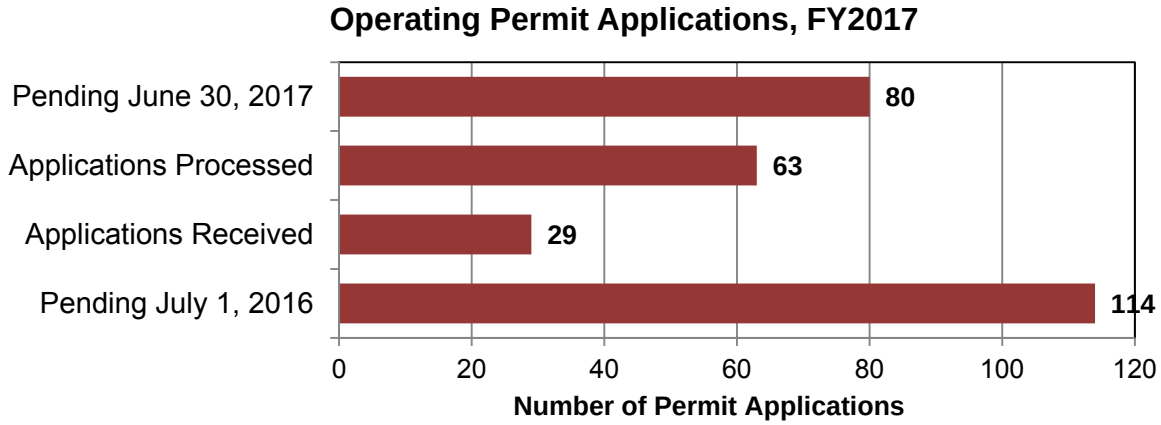
Construction Permit Applications Received, FY11 through FY17



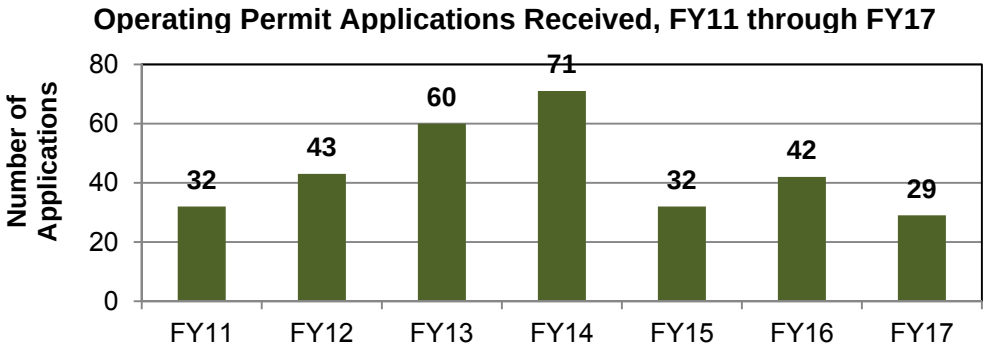
The online application process for air quality general construction permits (these include certain emergency engines and certain aggregate processing, asphalt, and concrete plants) implemented by the NDEQ in FY2016 resulted in coverage being issued to 13 applicants in FY2017. These permits are included in the charts on the previous page.

Operating Permit Program

Operating permits are issued for both major and minor sources of air pollution. These permits have a five-year renewable term. 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 Program. General operating permits and permits by rule are also available for certain source categories, in addition to individual operating permits. The chart below provides statistics relating to all applications received, processed, and pending under the operating permit program.



There have been wide variations in the numbers of operating permits up for renewal each year. The following chart summarizes air quality operating permit applications received from FY11 through FY17 (applications for all application types, including applications for permit revisions, general operating permits, permit-by-rule, etc.).



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_{10})
  - With a diameter of 2.5 micrometers or less ($PM_{2.5}$)
- Sulfur Dioxide (SO_2)
- Nitrogen Dioxide (NO_2)
- Carbon Monoxide (CO)
- Ozone (O_3)
- 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 State Ambient Air Quality Standards (SAAQS). 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. A TRS monitor previously operated by NDEQ in Dakota City was decommissioned in July 2016.

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.

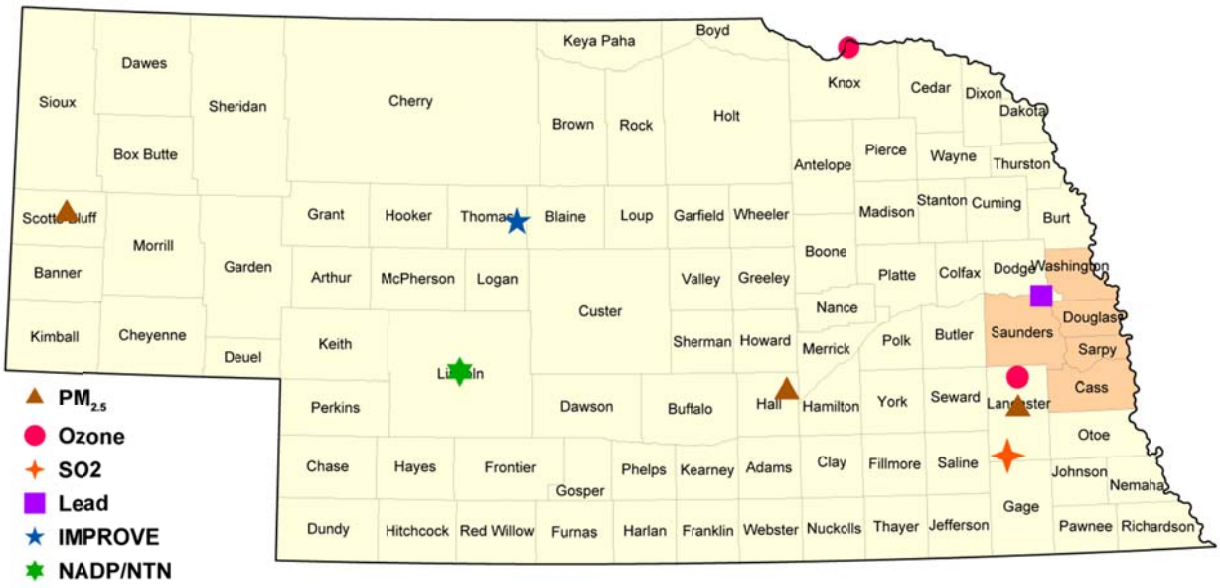
Most of the sites in the monitoring network evaluate pollutants for which standards are established (i.e., $PM_{2.5}$, PM_{10}, CO, SO_2, Lead, or Ozone). Some sites monitor for more than one pollutant. The NCore site in Omaha is part of a national network that monitors for nine

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.)

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.

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/

Nebraska Monitoring Sites Outside of the Omaha Metropolitan Statistical Area



$PM_{2.5}$
Lincoln (Lancaster County)
Grand Island (Hall County)
Scottsbluff (Scottsbluff County)

Ozone
Davey (Lancaster County)
Santee (Knox County)

Lead
Fremont (Dodge County)

Sulfur Dioxide (SO_2)
Sheldon Station (Lancaster County)

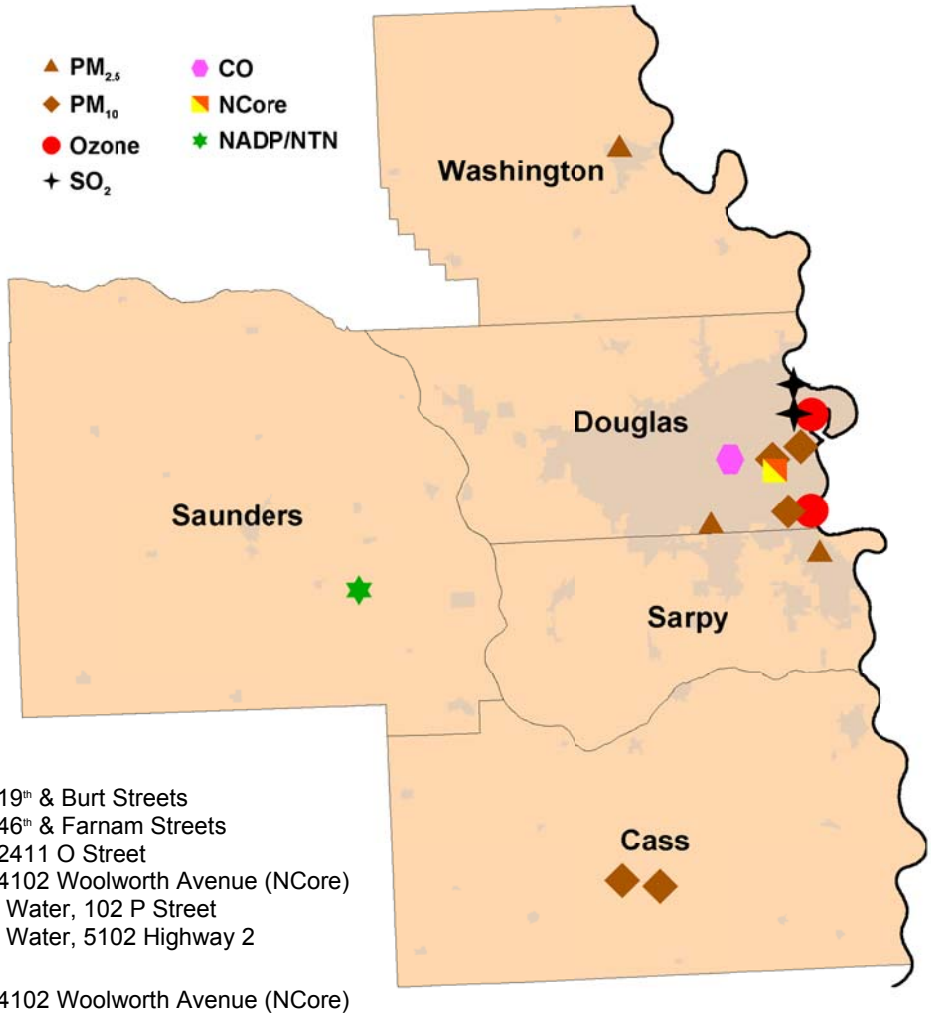
NADP/NTN
Maxwell (Lincoln County)

IMPROVE
Nebraska National Forest (Thomas County)

The Nebraska counties in the Omaha-Council Bluffs Metropolitan Statistical Area are indicated by the orange gray shading.

The state map on the previous page shows the nine monitoring sites that are located outside of the Omaha-Council Bluffs Metropolitan Statistical Area. 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.

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



PM_{10}
Omaha, 19th & Burt Streets
Omaha, 46th & Farnam Streets
Omaha, 2411 O Street
Omaha, 4102 Woolworth Avenue (NCore)
Weeping Water, 102 P Street
Weeping Water, 5102 Highway 2

$PM_{2.5}$
Omaha, 4102 Woolworth Avenue (NCore)
Omaha, 9225 Berry Street
Bellevue, 2912 Coffey Avenue
Blair, 2242 Wright Street

Ozone
Omaha, 4102 Woolworth Avenue (NCore)
Omaha, 1616 Whitmore Street
Omaha, 2411 O Street

NCore
4102 Woolworth Avenue

Carbon Monoxide
Omaha, 4102 Woolworth Avenue (NCore Trace Monitor)
Omaha, 7747 Dodge Street

Sulfur Dioxide (SO_2)
Omaha, 4102 Woolworth Avenue (NCore Trace Monitor)
Omaha, 1616 Whitmore Street
Omaha, OPPD North Omaha Station

NADP/NTN
Mead, Saunders County

The map above shows the location of the thirteen 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). Ten of these sites, located in Douglas, Sarpy, and Washington Counties, are operated by the Douglas County Health Department with NDEQ oversight. The two PM_{10} sites near Weeping Water in Cass County are operated by NDEQ. The National Atmospheric Deposition Program site at Mead is operated by the University of Nebraska.

Monitoring Information On-Line

Ozone and continuous $PM_{2.5}$ data from Lincoln and Omaha is reported hourly to the EPA AirNow system, which makes contemporaneous air quality information available to the public on the web at http://www.airnow.gov/. 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.

The Douglas County Health Department also reports daily Air Quality Index (AQI) evaluations on the City of Omaha website. The AQI is a numeric rating of the current air quality and provides the public with a quick and simple means to evaluate current air quality in each metro area.

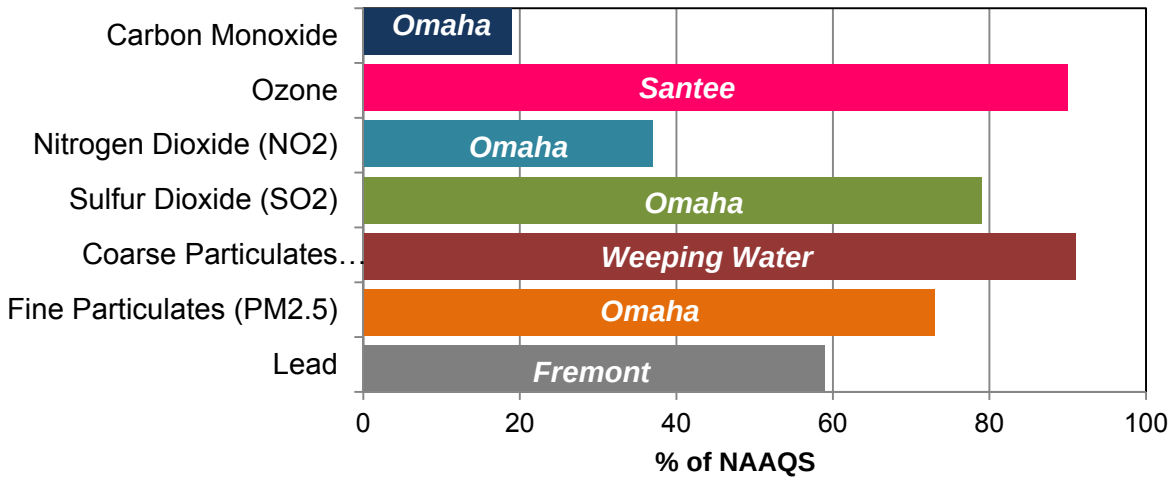
Renewable Powered Monitoring Sites

The NDEQ operates one monitoring site that is powered totally through renewable energy sources: a solar-powered site near Weeping Water.

Compliance with National Ambient Air Standards (NAAQS)

Current air quality monitoring data finds all areas of Nebraska to be in attainment (compliance) with the NAAQS. The chart below 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 highest readings for all criteria pollutants were well below 100%.)

Maximum Ambient Criteria Pollutant Levels in Nebraska as a Percentage of the National Ambient Air Quality Standards (NAAQS): Based on Monitoring Data Collected from 2014 through 2016



There are two areas of Nebraska that EPA has listed as "Unclassifiable" with respect to attainment with the NAAQS for sulfur dioxide. These areas are adjacent to coal-fired power plants in north Omaha and near Hallam in southern Lancaster County. 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 are in attainment/compliance with the NAAQS. EPA has not yet made a final sulfur dioxide attainment decision on an area in Adams County surrounding another coal-fired power plant.

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.

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. To further the Department's goals to protect and enhance public health and the environment, in certain instances, environmentally beneficial projects, or Supplemental Environmental Projects, may be part of an enforcement settlement.

2017 Compliance Activity Summary

Compliance Activity	NDEQ	LLCHD*	OAQC*
On-site Inspections	139	82	13
Facility Stack Tests Conducted On-site Observations Conducted	94 23	16 1	5 0
Continuous Emission Monitoring Audits Conducted On-site Observations Conducted	63 6	9 0	0 0
Complaints Received	87	59	85
Burn Permits Issued Burn Permits Denied Burn Permits Withdrawn	114 1 0	82 1 2	49 1 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. Emission inventories are due on March 31st each year. NDEQ also uses the emission inventories to support 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 of between 75 and 115 megawatts, the maximum emission for which a fee is assessed is 400 tons per pollutant. The fees generated are used to support the administration of the air programs.

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 2016 emissions was $78 per ton; the rate for 2015 emissions was $71 per ton.

Planning and Aid

The Air Quality Division is responsible for maintaining state air quality regulations and providing expert information on National Emissions Standards for Hazardous Air Pollutants (NESHAPS), New Source Performance Standards (NSPS), and National Ambient Air Quality Standards (NAAQS). Standards 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 designation recommendations 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.

The Division also provides support and training resources to the regulated community and 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. The Division also administers the Nebraska Clean Diesel Rebate Program to reduce diesel admissions by providing rebates for the early replacement of diesel vehicles.

Planning for Air Quality Issues in Nebraska

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, along with the Regional Haze Rule and the Clean Power Plan.

Sulfur dioxide (SO_2)

The 2010 sulfur dioxide (SO_2) standard requires that states determine and 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_2 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_2 by the use of air quality monitoring or pollutant dispersion modeling, or adopt enforceable SO_2 emission limits not to exceed 2,000 tons per year for the affected sources. Sources in the state subject to this rule include Whelan Energy Center near Hastings (Adams County), Sheldon Station, and North Omaha Station (Douglas County).

The area around Whelan Energy Center area was characterized by modeling and demonstrated attainment with the standard. NDEQ submitted this demonstration to EPA in January of 2017, and designations will be issued by EPA no later than December 31, 2017. 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.

Ozone

EPA issued revised ozone standards in 2015, lowering the standard from 0.075 parts per million (ppm) to 0.070 ppm. NDEQ submitted its designation recommendation of attainment for Nebraska to EPA in September 2016. On November 6, 2017 EPA Administrator Scott Pruitt notified Governor Ricketts that EPA has designated all of Nebraska as "unclassifiable/attainment" with respect to the 2015 ground-level ozone standard. The updated 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 is awaiting signature by the Governor. The updated State Implementation Plan is due to EPA in October 2019.

Regional Haze

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. A Federal Implementation Plan (FIP) was issued by EPA that relied on the Cross State Air Pollution Rule (CSAPR) to address reasonable progress toward regional haze goals. This rule established a trading program which allots an SO_2 emission budget for participating sources, which includes Gerald Gentleman Station. Emissions to date from this source have been below the allotted SO_2 budget under CSAPR, and no additional control measures have been required.

NDEQ filed a petition for review of the partial disapproval of the SIP, and was denied by the 8th Circuit Court of Appeals in February 2016. In this litigation, EPA requested and the court granted a voluntary remand of the FIP related to EPA's reliance on CSAPR to satisfy the long-term strategy requirements for Gerald Gentleman Station for SO_2.

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 approval is intended to address the remand on the FIP, and support approval of portions of the 2008 ozone and 2012 $PM_{2.5}$ infrastructure SIPs that address interstate transport of pollutants, prevention of significant deterioration of air quality, and protection of visibility.

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

Clean Power Plan

The Clean Power Plan, which would have regulated greenhouse gas emissions from fossil-fuel power plants, was stayed by the U.S. Supreme Court in February 2016. This action negated the September 2016 deadline for states' initial submittals under the Plan. Nebraska was among 24 states to join a lawsuit against the Clean Power Plan in 2015.

On March 28, 2017, President Trump signed the Executive Order on Energy Independence, which directs EPA to review the Clean Power Plan and revise or repeal it if determined that it causes unnecessary, costly burdens on coal-fired electric utilities, coal miners, and oil and gas producers. In EPA Administrator Scott Pruitt's guidance letter to state Governors, dated March 30, 2017, he conveyed that EPA supports the application of day-to-day tolling of future deadlines in the rule, should they become relevant. He also noted that states have not been required or expected to work towards meeting compliance dates set in the Plan. The Department halted work on the planning process following the stay in 2016.

On April 28, 2017, the Court of Appeals ordered that the cases against the Plan be held in abeyance while EPA completes its review pursuant to the Executive Order, and directed EPA to file status reports at 30-day intervals.

Nebraska Clean Diesel Rebate Program

NDEQ established the Nebraska Clean Diesel Program in 2008 to distribute funding received from the U.S. 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.

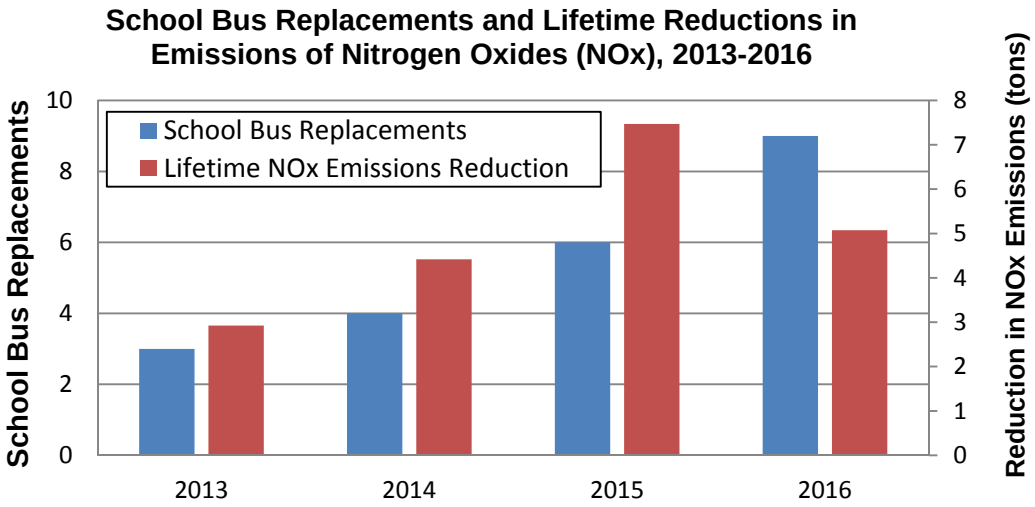
Since 2013, the Nebraska Clean Diesel Program has reduced emissions by providing rebates to Nebraska school districts for the early replacement of older diesel school buses. These rebates reimburse 25% of the cost of a new, cleaner-burning diesel or alternative-fuel school bus (up to a maximum rebate amount set for each year's program). Replaced buses and engines are scrapped to eliminate their harmful emissions of nitrogen oxides (NOx), particulates, hydrocarbons, and carbon monoxide.

In the 2016 program, NDEQ distributed $179,262.50 in rebates to eight Nebraska public school districts and one private school to replace a total of nine school buses. The 2016 rebate recipients are shown in the table below.

School District	**Location**	**Rebate Amount**
Brady Public Schools	Brady	$20,000.00
Guardian Angels Central Catholic High School	West Point	$20,000.00
Elmwood-Murdock Public Schools	Elmwood	$20,000.00
Hayes Center Public Schools	Hayes Center	$19,400.00
Mead Public School District	Mead	$20,000.00
Norfolk Public Schools	Norfolk	$20,000.00
Pleasanton Public Schools	Pleasanton	$20,000.00
Randolph Public Schools	Randolph	$19,862.50
South Central Nebraska Unified District #5	Nelson	$20,000.00

Since 2013, twenty-two Nebraska school districts have received $451,064 in rebates for new bus purchases under this program. Nitrogen oxide emissions have been reduced by 19.89 tons based on the estimated remaining lifetimes of the replaced buses.

Clean Diesel School Bus Replacements			
Year	Buses	Rebate Dollars	Lifetime Tons NOx Reduced
2013	3	$ 73,890	2.93
2014	4	$ 79,088	4.42
2015	6	$ 118,823	7.49
2016	9	$ 179,263	5.07
TOTALS	22	$ 451,064	19.89
19.89 tons = 39,772 pounds			
$451,064 / 39,772 pounds = $11.34 per pound of NOx reduced over the vehicle lifetime.			



For more information about the Nebraska air quality program, please refer to the annual Air Quality Reports and the Ambient Air Monitoring Network Plan, both of which are available on the agency's website at http://deq.ne.gov/ under "Air."

CHAPTER 5:
Land Management Division

The Land Management Division protects human health and the environment from disposal or contamination on the ground, either on the surface or spills that migrate below the 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 integrated waste management programs.

Planning and Aid

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

Main 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 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.

NDEQ's waste grants programs provide support for a variety of efforts, including recycling containers.

Online Grant Application and Reporting Processes

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 can be found by going to 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, directs NDEQ to conduct a study to examine the status of recycling and solid waste management programs operated by the department.

The study will look at the current litter reduction and recycling grant program and the waste reduction and recycling incentive grant program and determine if they should be merged or amended, conduct 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 will be included in the study.

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 will provide a report of its findings to the Legislature by December 15, 2017.

Expected Service Life

The Planning and Aid Unit 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. When the grant is closed out, 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. Two redistributions of equipment were made in 2017.

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: recycling systems; market development for recyclable materials; intermediate processing facilities and facilities using recyclable materials in new products; food waste composting; yard waste composting and composting with sewage sludge; waste reduction and waste exchange; household hazardous waste programs; electronic waste collections; pharmaceutical collections; the consolidation of solid waste disposal facilities and use of transfer stations; and incineration for energy recovery. A portion of the grants is also obligated to fund scrap tire recycling or reduction projects and another portion of the grants is available to smaller cities and counties for abandoned building deconstruction.

Fund Summary

Waste Reduction and Recycling Fund

July 1, 2016 - June 30, 2017

Fund Balance June 30, 2016	**$3,596,249**
Revenues:	
New Tire Fees	$2,252,669
Business Fees	$607,181
Solid Waste Disposal Fee	$1,230,753
Interest, Grant Returns	$73,135
Net Collections for Year	**$4,163,738**
Expenditures:	
Administration	$380,752
Grant Funds Expended*	$5,147,976
Total Expenditures FY 2017	**$5,528,728**
Fund Balance June 30, 2017	**$2,231,259**

* *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 FY2017, NDEQ awarded $4,333,457 for Waste Reduction and Recycling Incentive Grants to 130 projects. Eighteen of these grants were awarded from the Business Fee category ($833,734), 12 were awarded from the Disposal Fee category ($1,789,783), and 100 were awarded from the funds prioritized for scrap tire projects ($1,710,240). The following lists indicate the locations across Nebraska that received funds.

Waste Reduction & Recycling Grants for FY2017

Business Fee: $833,734 for 18 total grants, of which two were statewide and four were regional

Chadron	Kimball	Oakland
Columbus - 2	Lexington	Ogallala – 2
Fremont	Lincoln - 4	Omaha – 2
Grand Island	Mead	Scottsbluff

Disposal Fee: $1,789,483 for 12 total grants, of which five were regional

Fremont	Howells	Omaha
Gretna	Kearney	Valentine
Holdrege	Lincoln – 2	Waverly
	McCook	Wayne

Deconstruction Grants for FY2017

There were no deconstruction grants applied for or granted in FY2017.

Scrap Tire Grant Awards for FY 2017

89 local grants, 10 regional grants, and 1 statewide grant for an award total of $1,710,240.

Arlington Public Schools
Atkinson, City of
Aurora Public Schools
Bellevue Public School District (2)
Bloomfield Community Schools
Bloomfield, City of
Blue Hill Community Schools
Brady, Village of **(Regional)**
Cass Co. Dept. of Roads – Weeping Water
Cedar County – Hartington
Central City Public Schools
Central Nebr. Community Action Partnership Inc. - Loup City of **(Regional)**
Centura Public Schools - Cairo
Christ Lutheran Little Lambs Preschool - Grand Island
Columbus Public Schools (2)
Columbus, City of
Creek Valley Schools – Chappell
Crete Public Schools (3)
Dakota Co. Road Dept. – Hubbard
Daniel J. Gross Catholic High School (2) – Bellevue
Deshler Public Schools
Dillion Brothers Harley-Davidson – Omaha
Dreamland Daycare - Falls City
Falls City Arboretum
Falls City, City of
Fremont Public Schools
Gingerbread House – Wilber
Gothenburg Public Schools
Hall Co. Hwy. Dept. - Grand Island
Hastings Public Schools
Hayes Center, Village of
Head Start Child and Family Development Program – Hastings
Higgins, Jennifer – Elba
Hitchcock County Agricultural Society –Trenton
Holdrege, City of **(Regional)**
Humphrey Public Schools
Johnson County - Tecumseh
Kearney Public Schools
Keep Alliance Beautiful
Keith County – Ogallala **(Regional)**
Kidnect Child Development, LLC. - La Vista
Lincoln Salt Dogs - Lincoln
Little Bees Daycare – Bloomfield
Lower Loup NRD – Ord **(Regional)**
Lower Platte NRD – Wahoo **(Regional)**
Madison Elementary
Merrick Co. Highway Dept. - Central City
Mitchell Public Schools
Mullen, Village of
Nebr. Game and Parks Commission–Lincoln **(Statewide)**
Neligh, City of
Nemaha County – Auburn
Noah's Ark Child Care and Preschool - Grand Island
Northeast Nebr. Shooting Association – Norfolk
Norfolk Public Schools
Nuckolls County – Nelson
Omaha FC Properties (Omaha Sports Complex)
Omaha Public Schools (8)
Omaha, City of
O'Neill Public Schools (2)
PaC 2- Hastings
Papio Missouri River NRD – Omaha **(Regional)**
Paul Adams Elementary School – Lincoln
Pawnee City Public Schools
Pedersen, Melodee (Girl Scouts) – Columbus
Pierce County – Pierce **(Regional)**
Ralston Public Schools
Rock County Public Schools - Bassett
Saline County – Wilber
Sandhill Plastics – Kearney
Sarpy County – Papillion
Southern Valley Schools – Oxford
St. John Lutheran School – Seward
St. Paul Public School
St. Peter School - Lincoln
St. William's Catholic Church – Niobrara
Stapleton Public Schools
Sutton, City of
Solid Waste Agency of NW Nebr. – Chadron **(Regional)**
Tekamah-Herman Schools
University of Nebraska Athletics (2) - Lincoln
Wallin, Becky - Newman Grove
Wayne County – Wayne
Winside Public School
Wymore, City of
York Area Solid Waste Agency – York

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.

Fund Summary

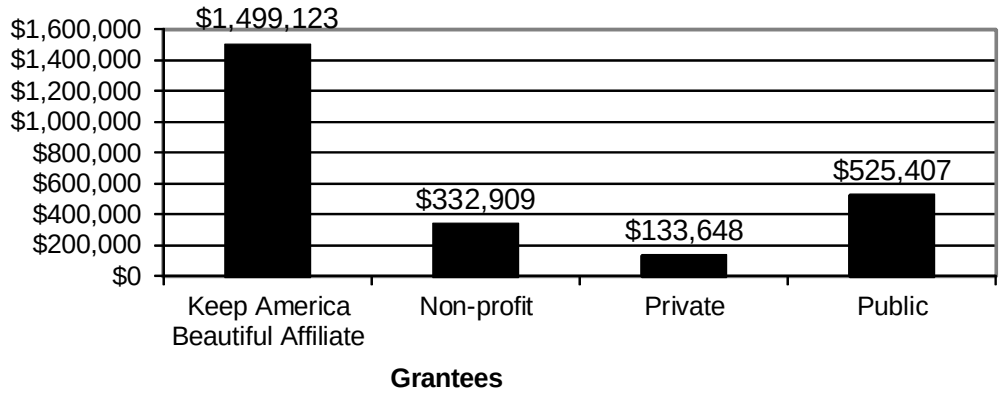
Litter Reduction and Recycling Fund

July 1, 2016 - June 30, 2017

Fund Balance June 30, 2016	**$1,712,978**
Revenues:	
Litter Taxes Collected	$2,171,526
Interest, Grant Returns	$78,284
Net Collections for Year	**$2,249,810**
Expenditures:	
NDEQ Administration	$379,551
Grant Funds Expended	$1,920,783
Total Expenditures FY 2017	**$2,300,334**
Fund Balance June 30, 2017	**$1,662,454**

In FY2017, $2,491,087.00 was awarded from the Litter Reduction and Recycling Grant Program. 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. Below is a chart reflecting FY2017 grantees.

FY 2017 Litter Reduction and Recycling Fund Grantees



FY 2017 Grant Allocations - Litter Reduction and Recycling Fund

In FY2017, NDEQ gave 57 Litter Reduction and Recycling Grant Program awards to organizations in Nebraska. The breakdown is as follows:

FY 2017 (July 1, 2016 – June 30, 2017)

Public Education	(45%)	20 grants	$ 1,037,895
Cleanup	(6%)	11 grants	$ 126,986
Recycling	(49%)	25 grants	$ 1,326,206
Totals	**100%**	**57 grants**	**$ 2,491,087**

Public Education

In FY2017, 20 grants totaling $1,037,895 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 2017 Public Education Grant Awards

Total Awarded - $1,037,895 for a total of 20 grants, of which three were regional awards

Cities

Alliance	Lexington
Beatrice	Lincoln 1.Lincoln-Lancaster County Dept. of Health 2. Lincoln Children's Museum 3. UNL
Burwell – Headquarter City for Keep Loup Basin Beautiful/Loup Basin RC&D - Regional	Louisville Keep Cass County Beautiful
Chadron	Norfolk
Columbus	North Platte
Crete Public Health Solutions - Regional	Omaha
Fremont	Schuyler
Keith County - Headquarter City is Ogallala	Plainview - Headquarter City – Keep Northeast NE Beautiful - Regional
Kimball	Scottsbluff/Gering

Regional grants:

Burwell Keep Loup Basin Beautiful / Loup Basin RC&D, (13 County area: Blaine; Loup; Garfield; Wheeler; Custer; Valley; Greeley; Sherman; Howard; Holt; Rock; Boyd; Cherry)

Plainview Keep Northeast NE Beautiful (9 County area: Knox; Antelope; Pierce; Cedar; Dixon; Wayne; Dakota; Cuming; Thurston)

Crete Public Health Solutions (5 County area: Fillmore; Jefferson; Saline; Gage; Thayer)

Cleanup

In FY2017, 11 grants totaling $126,986 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 following list indicates the locations that received funds.

FY 2017 Cleanup Grant Awards

Total Awarded - $126,986 for a total of 11 grants of which 1 was a regional grant and none were statewide grants

Cities

Beatrice	
Chadron	Ogallala – Keep Keith County Beautiful
Grand Island	Omaha
Lincoln	Scottsbluff/Gering
Louisville – Keep Cass County Beautiful	Steinauer Community Club
North Platte	Wakefield ESU #1 - Wakefield

Regional grant:

Wakefield ESU Unit #1 (6 county area: Cedar; Dakota; Dixon; Knox; Thurston; Wayne

Recycling

In FY2017, 26 grants totaling $1,326,206.00 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 and 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.

FY 2017 Recycling Grant Awards

Total Awarded - $1,326,206 for a total of 26 grants of which 5 were regional grant awards and 1 was a statewide grant award.

Cities

Alliance	Lexington	Scottsbluff
Alma	Lincoln – 2 grants 1 was Statewide	Sidney
Chadron	Morrill	Springfield - Regional
Gering	North Platte	Tekamah - Regional
Gretna	Ogallala	Valentine - Regional
Hastings	Omaha – 2 grants	Verdigre
Kearney	Red Cloud - Regional	Wisner
Kimball	Schuyler	York - Regional

Regional grants:

Springfield Soil Dynamics Composting Farm, Inc. Sarpy County (Cass County)

Red Cloud Trailblazer RC&D Council (7 county area; Clay, Fillmore, Franklin, Harlan, Nuckolls, Thayer, Webster)

Tekamah Papio-Missouri River NRD (5 county area; Thurston, Burt, Washington, Douglas, Sarpy)

York 4 Corners Health Department (4 county area; Butler, Polk, Seward, York)

Valentine Middle Niobrara NRD (4 county area; Keya Paha, Brown, Cherry, Rock)

Statewide grants:

Lincoln WasteCap NE

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, items such as 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.

There were two large cleanups in FY 2017. One of these was in the Nebraska City area which resulted in a cleanup that took several days. It was discovered through our Agency complaint program. The city coordinated the cleanup with local contractors and today the site has been restored. The total request for reimbursement through the Illegal Dumpsite Cleanup Fund for this cleanup was $22,531.90.

The second large site was along a bridge just west of Lincoln on NW 98th Street involving several hundred tires that had been illegally dumped off the roadway next to the bridge. The City of Lincoln hired a contractor for this cleanup, the final weight for the tires was 13.46 tons and the cost for this cleanup was $10,818.14.

Tires left at an illegal dumpsite in Lancaster County

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 FY2017, the program provided 36 grants, totaling $75,599.12. In FY2017, funds were provided to:

City of Lincoln - 13	City of Omaha - 3	Seward County - 6
Lincoln/Lancaster County - 2	Washington County - 5	Nebraska City
Harlan County -	Riverside Township - 3	Franklin County
Adams County		

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 FY2017, the program provided $105,270 to five counties and six cities participating in the program. In FY2014, NDEQ offered to provide letters and forms to the participants through email instead of the postal service. Eight of the eleven participants chose this option, furthering our waste reduction efforts and increasing efficiency.

Buffalo County	$ 5,310	Butler County	$ 3,548	City of David City	$ 220
City of North Platte	$ 4,003	City of Lincoln	$32,732	Saline County	$ 2,411
City of Omaha	$54,621	South Sioux City	$ 582	Jefferson County	$ 565
Seward County	$ 1,166	City of Grant	$ 112		

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, 55 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-two 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 International Sensor Systems, Inc. facility in Aurora. Investigation activities are ongoing at the Appleton Electric site in Columbus, the former Omaha Steel Castings facility in Omaha, the former Textron Turf Care and Specialty Products facility in Lincoln, 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 Dettmer Lease property in Auburn, Hoover Manufacturing in Beatrice, the former Nebraska Solvents 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 activities commenced in 2016 at the Nebraska Machine Products site in Omaha and the Lynch Park FMGP site in Omaha. Cleanup activities were completed in 2016 at the two former FMGP sites in Blair and Plattsmouth, the Lewis and Clark Landing designated work area in Omaha, the former Pfizer facility in Omaha, and the West Haymarket Redevelopment Site North in Lincoln. Cleanup activities are anticipated to be completed in 2017 at the Beatrice FMGP site, 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

Site	Location	Date of Entry into RAPMA Program	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	Active
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

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 Voluntary Cleanup 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 can 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, five

Phase II assessments, four asbestos surveys, and one lead-based paint survey. In addition, NDEQ provided partial cleanup assistance at four sites 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 two brownfield resources workshops: one in Norfolk and one in Nebraska City. In addition to workshops, the Brownfields Coordinator was invited to speak at two Brownfield Redevelopment Funding panels and promoted our program at a Southeast Nebraska Resource Network (SERN) quarterly meeting in York. 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 also attended the Sustainable Strategies for Small Cities and Rural Areas workshop that EPA held for Randolph, NE and participated in follow-up conference calls to discuss redevelopment planning for the area. (Randolph was the recipient of a competitive technical assistance grant from EPA through their Building Blocks for Sustainable Communities program). In addition, an NDEQ-sponsored workshop was held in Falls City in October. These outreach activities sparked an onset of brownfield assessment and asbestos abatement applications.

Program enhancement activities are ongoing related to updates to the Voluntary Cleanup Program Guidance Document and development of a new guidance document on management strategies for addressing free product at cleanup sites. In addition, a state-wide inventory was completed of facilities that may have used or produced perfluorinated alkyl acids such as perfluorooctane sulfonates (PFOS) and perfluorooctanoic acids (PFOA), which are considered emerging contaminants that can have adverse health effects if found in drinking water supplies.

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,
- 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. EPA presently operates the corrective action program in Nebraska, and is responsible for regulating cleanups at Nebraska facilities. The Department has authorization from EPA for corrective action and intend to begin corrective action oversight of facilities in the future.

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. No new facilities have been proposed in Nebraska since 1994, and that is the last time this fee was collected. There were no new facilities proposed in FY17.

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:

99 Large Quantity Generators (greater than 2200 pounds of hazardous waste generated per month)
371 Small Quantity Generators (between 220 and 2200 pounds generated per month)
1384 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

Location by County of Large Quantity Generators in Nebraska Regulated Under RCRA

Buffalo - 3	Douglas - 28	Madison - 3	Scotts Bluff - 2
Burt - 2	Gage - 1	Otoe - 1	Seward - 1
Cedar - 1	Hall - 4	Phelps - 1	Washington - 2
Cheyenne - 2	Holt - 1	Platte - 5	York - 1
Cuming - 1	Kimball - 1	Red Willow - 1	
Dodge - 2	Lancaster - 27	Sarpy - 8	

Summary of FY2017 Activities		
Activity	**State**	**EPA**
Compliance Assistance		
On-site Visits	**3**	*
Direct Assistance Contacts	**586**	*
Public Outreach Presentations (total 600 in attendance)	**4**	*
RCRA Inspections		
Land Treatment Facilities	0	0
Treatment, Disposal and Storage Facilities	2	1
Comprehensive Groundwater Monitoring Evaluations	0	0
Operation and Maintenance Inspections	0	0
Facility Self-Disclosure	0	0
Large Quantity Generator	10	2
Small Quantity Generator	11	2
Conditionally Exempt Small Quantity Generators	4	0
Transporters	0	0
RCRA Permitting		
Closure Plans Finalized	0	0
Permits Issued/Renewed	0	0
Modifications	2	0
EPA Corrective Action Orders	N/A	0
RCRA Record Reviews		
Financial Assurance	16	**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 288th Street site in Valley) are relatively new to the National Priorities List and are in the site study stage.

The Old Highway 275 and North 288th Street site is the most recent Nebraska site added to the National Priorities List. The site is at the northwest city limits of Valley, Nebraska. No source has been identified. However, a groundwater plume is present and is approximately 2.5 miles long. The site consists of a groundwater plume along W. Reichmuth Road. The plume contains volatile organic compounds (VOCs), mainly trichloroethene (TCE), and other chemicals of concern. The groundwater plume was discovered in 2000 during groundwater sampling for another site. Groundwater is about 5 to 10 feet below the ground surface and generally flows toward the southeast. The site was added to the National Priorities List on August 2, 2017.

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 four pre-screening assessments, four abbreviated preliminary assessments, one site investigation, two expanded site investigations, and one vapor intrusion evaluation. The EPA Region 7 Superfund program continues to investigate the Former

Northwestern Metals site at 900 T Street in Lincoln that historically operated a lead smelter at the property. A decision on whether nearby residential yard cleanup is necessary is expected in 2017. NDEQ also reviewed numerous site assessments conducted by EPA in the state and provided recommendations on the need for followup 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 10th 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.

Active National Priorities List Sites in Nebraska

Cornhusker Army Ammo Plant (Grand Island)
https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702020

Hastings Groundwater Contamination (Hastings)
https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0701973

Lindsay Manufacturing Co. (Lindsay)
https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0701913

Nebraska Ordnance Plant (Mead)
https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702031

10th Street Site (Columbus)
https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702001

Cleburn Street (Grand Island)
https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0701986

Ogallala Groundwater Contamination Site (Ogallala)
https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702287

Bruno Coop Association (Bruno)
https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702000

Sherwood Medical (Norfolk)

https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702086

Omaha Lead Site (Omaha)
https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0703481

Parkview Well Site (Grand Island)
https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0704456

Garvey Elevator (Hastings)
https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0704351

West Highway 6 & 281 (Hastings)
https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0704738

York PCE/TCE Northeast Contamination
https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0706105&msspp=med

York PCE Southeast Contamination
https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0706200&msspp=med

Iowa-Nebraska Light and Power Co. (Norfolk)
https://cumulis.epa.gov/supercpad/CurSites/csitinfo.cfm?id=0702377&msspp=med

Old Highway 275 and North 288th Street (Valley)
https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0704272&msspp=med

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:

Total Permitted Facilities in FY 2017	
Municipal Solid Waste Disposal Areas (Landfills)	23
Solid Waste Compost Sites	8
Transfer Stations	38
Materials Recovery Facilities	4
Construction & Demolition Waste Disposal Areas	30
Delisted Waste Disposal Area	1
Processing Facility	1
Fossil Fuel Combustion Ash Disposal Areas	8
Emergency Carcass Disposal	0
Total	113

The following table indicates the number of inspections, complaints and permitting-related activities that the program was involved with in FY2017:

Summary of Activities: FY2017	
Compliance	
Facility Inspections (General)	126
Facility Closure Inspection	3
Facility Construction Inspections	7
Facility Comprehensive Renewal Inspections	16
Complaints Received	142
Complaints Investigated	142
Complaints Closed	130
Permitting	
New Permits Issued	0
Permit Renewals	16
Major Permit Modifications	7
Public Hearings	1
Permits Transferred	2
Financial Assurance Reviews	171
Facilities Closed	3

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 FY2017, assessment monitoring began at three active municipal solid waste disposal areas and continued at ten active and three closed municipal solid waste disposal areas.

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 2017 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 FY2017, groundwater investigations continued at two sites, and remedial actions began at one site and continued at seven 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.

Waste Tire Permit Totals, FY2017 Permitting	
Renewed Hauler Permits	24
New Permits Issued	2
Financial Assurance Reviews	13

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

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.

NDEQ staff take samples and measure habitat characteristics to determine stream and aquatic life health.

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.

In the summer of 2017, the Drinking Water Division from Health and Human Services moved to NDEQ's Lincoln offices as a result of a Memorandum of Agreement between the two agencies. A greater opportunity for collaboration between water programs and assistance to municipalities has developed and will continue to be a benefit to facilities. See page 3 for more information.

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.

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.

Pictured at top left is excavation of fuel-contaminated soils to allow construction of a strip mall over this area in Greeley.
Above: Used remediation equipment inside the warehouse waiting for reuse at another site.
Left: A ground water monitoring well being installed by a direct-push rig in a front yard in Sargent.

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."

“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 SFY2017, 65 orphan sites were activated for investigation and/or cleanup using State contractors. As of September 6, 2017, there were 375 orphan sites yet to be investigated.

Pay for Performance

Some orphan sites are selected by the state to be cleaned up through a different process known as “Pay for Performance.” Under the Pay for Performance program, pre-qualified contractors are invited to submit bids to clean up specific petroleum-contaminated sites. NDEQ has signed 36 Pay for Performance contracts since the program’s inception. Of these projects, 13 have been successfully completed, 20 were terminated prior to completion, and 3 are still in the cleanup phase. This program saves the state time and money by using this procedure to clean these sites up.

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 $4.8 million in new equipment costs and allowed that money to be used for cleanup of additional sites.

Program Statistics

From June 1999, through August 23, 2017, 3,040 Tier 1 site investigations have been initiated. Of the 2,629 Tier 1 field investigations completed, 1,597 (61%) were closed, and 1,032 (39%) were determined to need a more detailed Tier 2 investigation. Since April 2002, 974 Tier 2

investigations have been completed; 646 (66%) of these sites have been closed. Of all the sites that have completed a Tier 1 or Tier 2 investigation, approximately 348 (13%) have reported finding the contaminant methyl tert-butyl ether (MTBE) in groundwater.

Revenue going into the cleanup fund in SFY17 was about $12 million. As of June 30, 2017, nearly $218 million has been disbursed since the program began. During SFY17, NDEQ reimbursed about $3.4 million to responsible persons (or their designees) for work done at 206 different sites.

The 40 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.

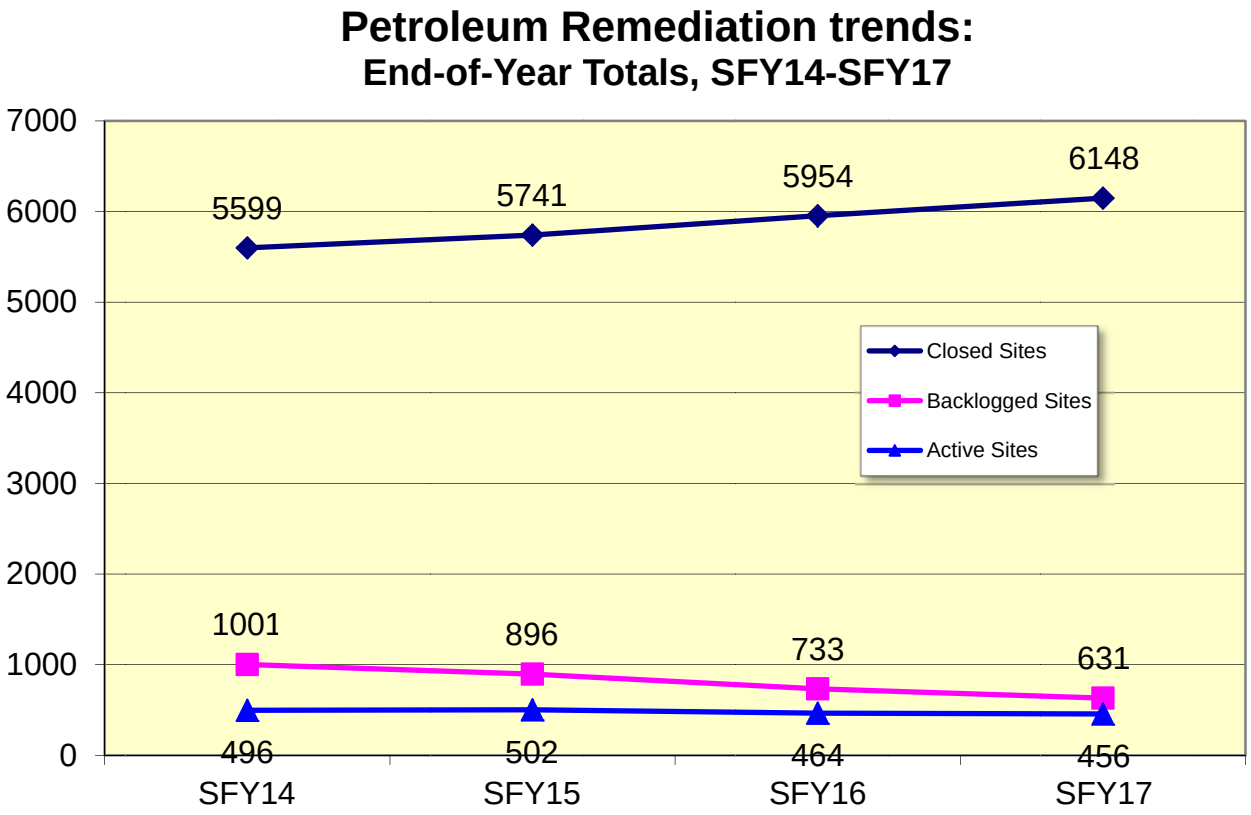
Responsible Person	City	Reimbursed Amount As Of June 30, 2017	Has Statutory Limit Been Reached?*
Ag Valley Coop	Bartley	$975,000.00	Yes
Burlington Northern & SFR	Alliance	$975,000.00	Yes
Burlington Northern & SFR	Mc Cook	$975,000.00	Yes
Konecky Oil	Mead	$975,000.00	Yes
Elkhorn Valley Coop	Snyder	$974,752.76	Yes
Burlington Northern & SFR	Lincoln	$974,300.47	Yes
Conoco Phillips	Sidney	$973,919.00	Yes
Burlington Northern & SFR	Alliance	$973,682.45	Yes
Burlington Northern & SFR	Alliance	$973,302.50	Yes
Burlington Northern & SFR	Alliance	$972,578.98	Yes
Flying J Inc	Gretna	$968,337.27	No
Unocal Corporation	Ogallala	$959,107.07	No
Magers Service	North Platte	$947,669.57	No
Sandhill Oil	Thedford	$911,133.56	No
Wortman Motor Co.	Doniphan	$910,048.10	No
Coastal Refining & Market	Chester	$883,980.39	No
Roesener Oil Co	Cook	$882,792.24	No
City Of Lincoln	Lincoln	$858,375.45	No
IBP ATV (At The Verticals)	Dakota City	$849,615.48	No
Indianola Oil Company	Indianola	$823,474.74	No
Foote Oil Company	Hastings	$805,480.70	No
Lexington Coop Oil	Eddyville	$792,010.00	No
Ag Valley Coop	Curtis	$770,395.41	No
Former Milder Oil	Omaha	$769,883.56	No
Behrends Service	Diller	$718,455.25	No
Sinclair Oil Corp.	Grand Island	$715,904.14	No
UPRR	North Platte	$691,551.19	No
Farmers Union Coop	Dannebrog	$688,229.91	No
Kaneb Pipeline Company	Geneva	$682,760.74	No
Burr Coop	Burr	$672,158.81	No
Farmers Union Coop Co	Platte Center	$671,790.24	No
Elk Oil Co	Elk Creek	$670,801.27	No
Burlington Northern & SFR	Columbus	$662,844.39	No
Havertys Farm & City	Nebraska City	$650,322.24	No
Wauneta-Palisade Pub Sch	Wauneta	$648,824.85	No
Crystal Oil Co.	South Sioux City	$642,973.44	No
Havelock Amoco	Lincoln	$639,063.82	No
Nelson Petroleum	Geneva	$622,723.83	No
Engles Oil Co	Auburn	$612,188.18	No
Former Farmers Coop	Cedar Bluffs	$607,091.97	No

** Those with a yes indicate that the statutory limit was reached prior to June 30, 2017. 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, 231 suspended or backlogged leaking underground storage tank sites have been closed based on voluntary submittals.

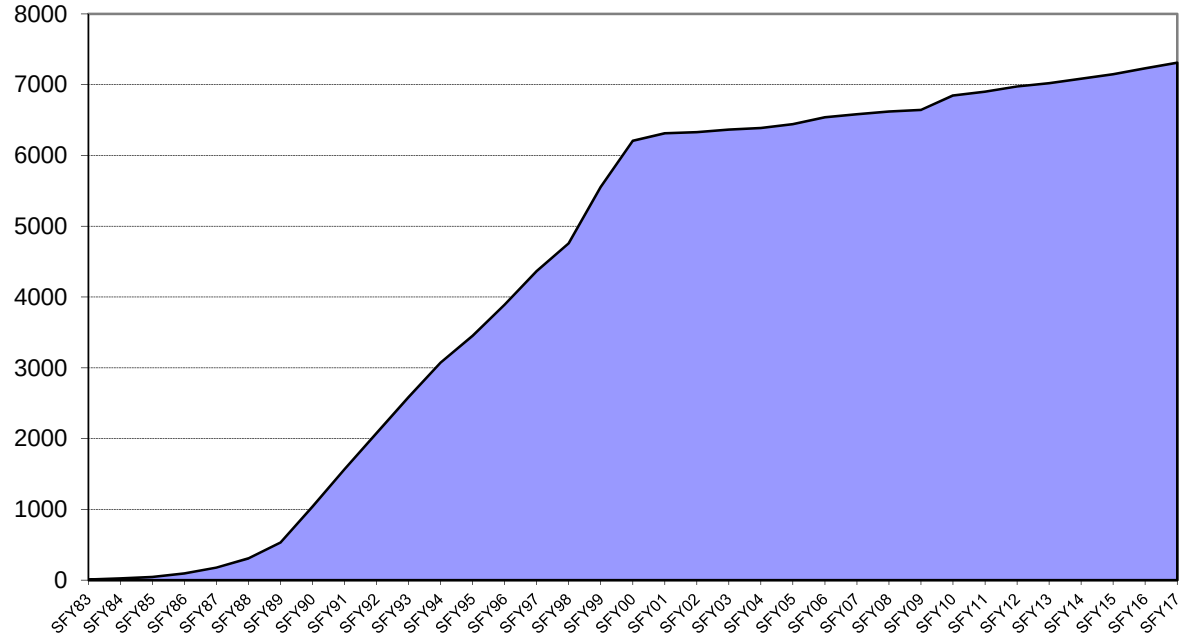
The following is a chart of end-of-year totals for the past four years relating to Petroleum Remediation sites in Nebraska. The chart provides information relating to:

- **Closed Sites:** Sites that have been closed either because they have been cleaned up or it has been determined that no cleanup is necessary.
- **Backlogged Sites:** Sites 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.

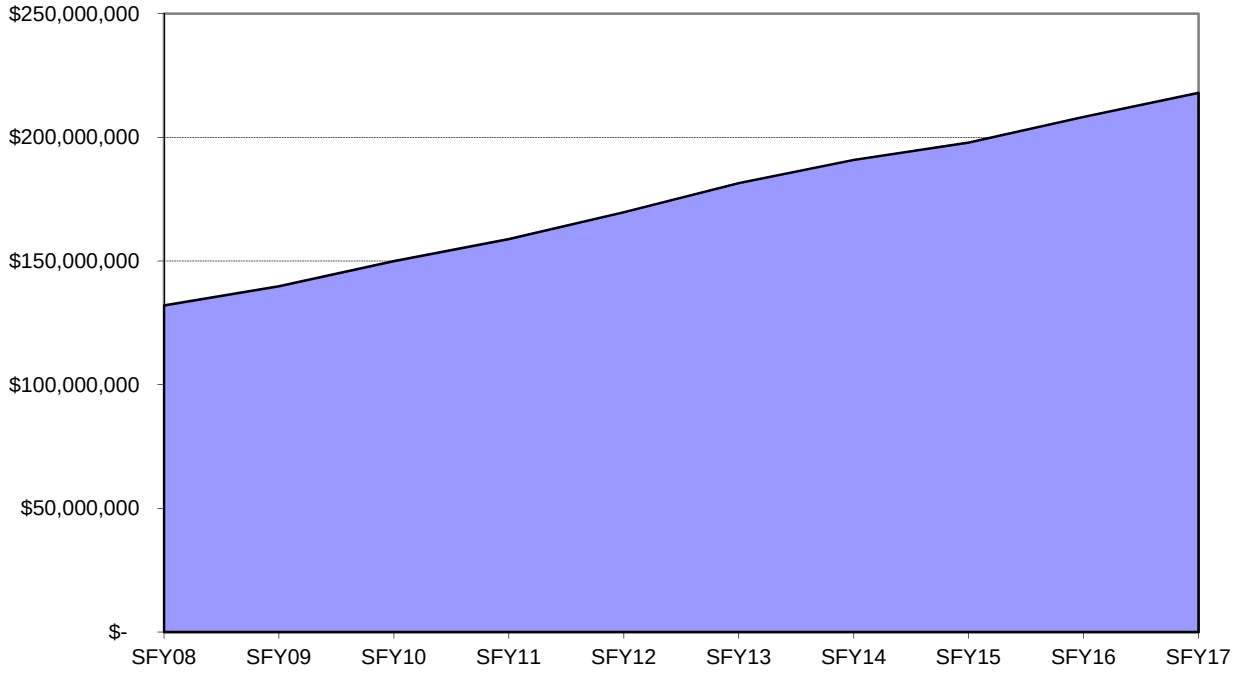


The chart below shows the cumulative number of sites that have had releases identified. The second chart shows the cumulative amount that the program has spent on investigation and cleanup in the past several years.

Cumulative Number of LUST Releases (Through SFY17)



Cumulative Title 200 Disbursements (last 10 years through SFY17)

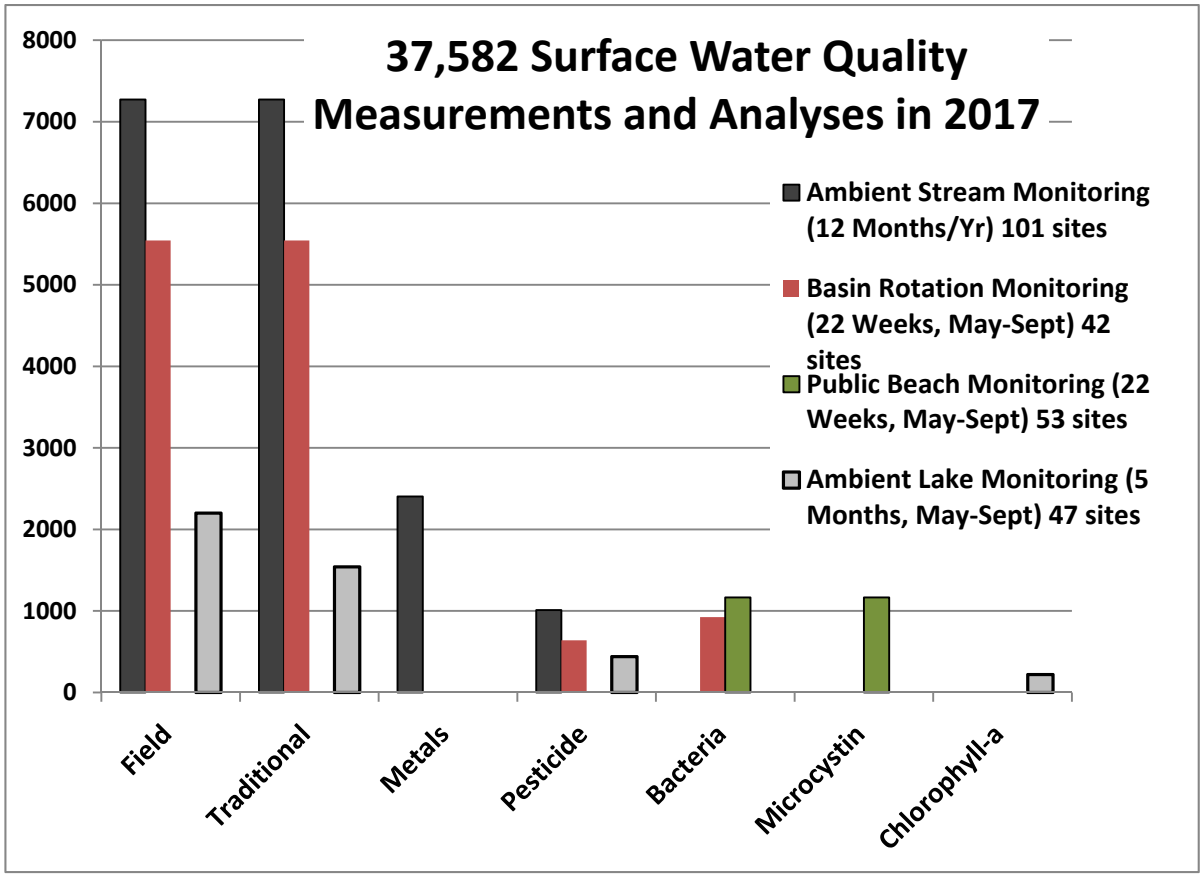


Water Quality Monitoring and Assessment Programs

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 nearly 38,000 individual field measurements and laboratory analyses. The graph below shows the expected number of field measurements made and laboratory analyses performed in 2017.

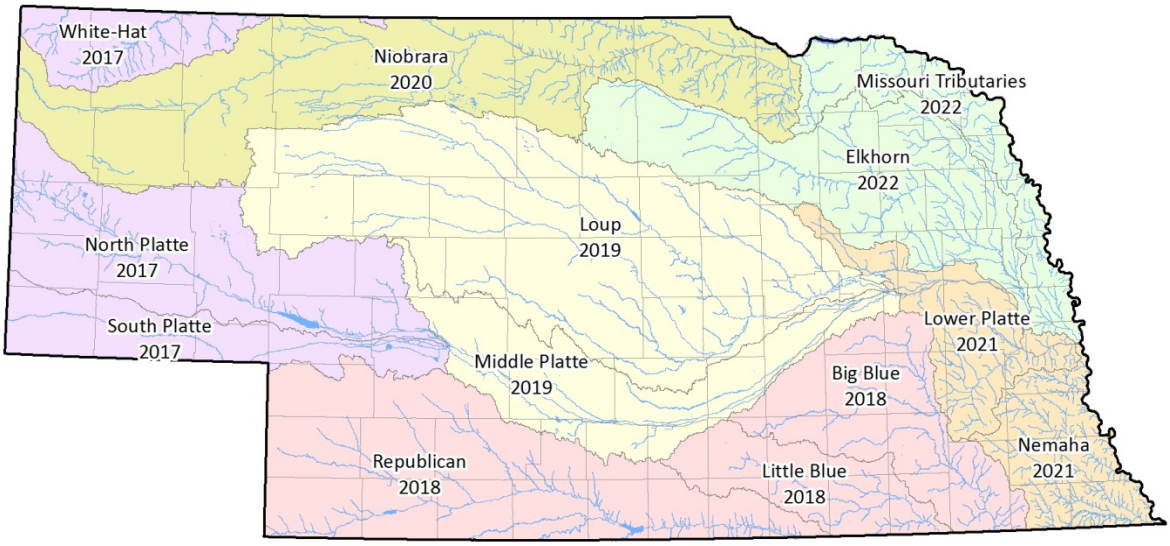


Brief descriptions of the basin monitoring strategy, as well as other water quality monitoring programs are provided below. Additionally, a more detailed overview of the programs are provided in the Department's annual publication Water Quality Monitoring Report: http://deq.ne.gov/publica.nsf/Pages/WAT243

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).

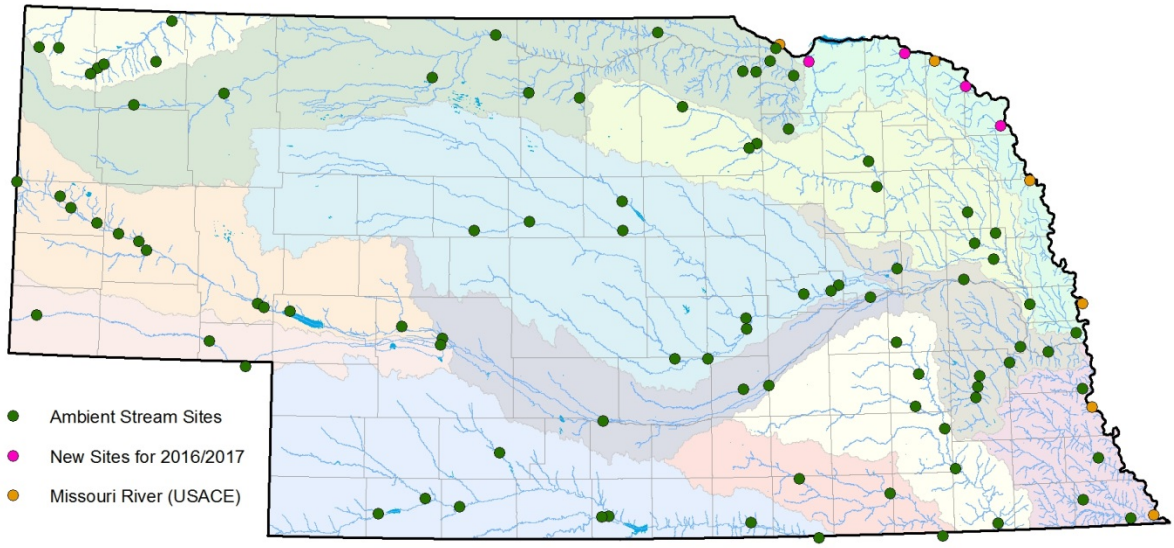
In 2017, a total of 40 stream sites and two lakes in the North Platte, South Platte, and White/Hat basins were sampled weekly from May through September with monitoring assistance provided by the South Platte NRD. A total of 924 stream samples were analyzed for the 15 parameters collected for this program.

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 below 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 2017, approximately 1,212 water samples were 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 2017, monitoring occurred weekly at 53 beaches on 50 different lakes from May through September. Over 1,200 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 2017, health alerts were issued on seven different lakes and the amount of time the lakes were on alert ranged from 2 – 7 weeks. Results and health alerts are listed weekly during the recreational season on the NDEQ's web site.

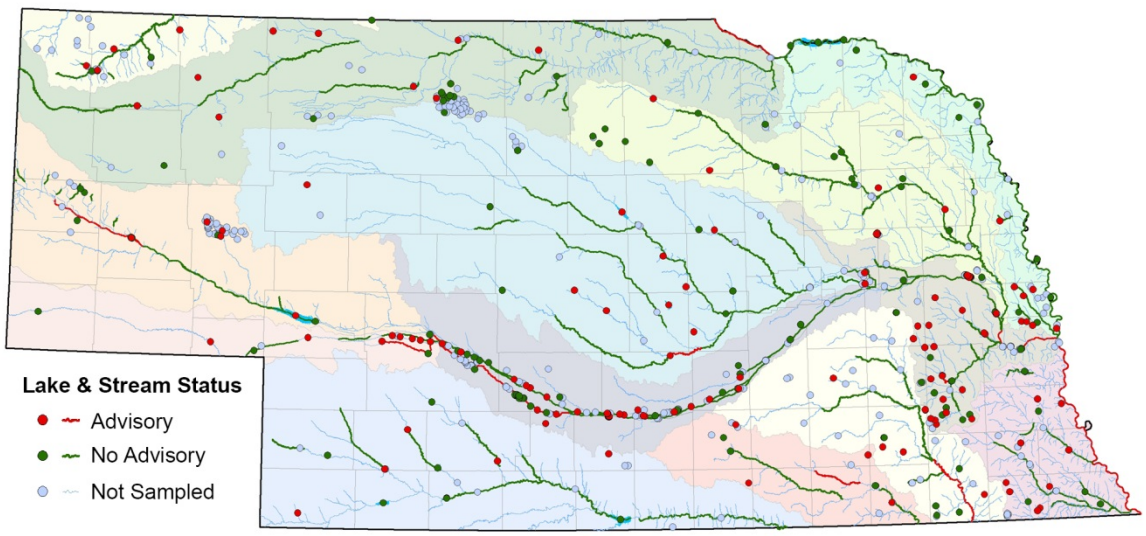
Fish Tissue Monitoring Program — The NDEQ has been sampling and assessing toxins in fish tissue annually since 1978. In 2017, a total of 75 fish tissue samples were collected from 7 streams and 33 lakes within the North Platte, South Platte, and White/Hat basins for analysis of pollutants. The NGPC assisted in collecting tissue samples from several large reservoirs.

The report "Regional Ambient Fish Tissue Program – 2016 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/WAT247. 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.

Fish tissue sample preparation at Zorinsky Lake, Douglas County

Currently, Nebraska has 141 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 2016



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 2017, a total of 34 stream sites were sampled in the North Platte, South Platte, and White/Hat basins.

Electrofishing for the Stream Bilogical Monitoring Program at Leander Creek, Cherry County

Ambient Lake Monitoring Program — In 2017, 44 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 24 geographically and categorically diverse waterbodies in 2017. Additionally, the Department collected data from three basin specific lakes in the North Platte and White/Hat basins. This method allows NDEQ to monitor the effects of changes that occur within the lakes, watersheds, regions, and across the state. Approximately 220 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 seven fish kills were reported between July 1, 2016 and June 30, 2017. Four of the reported fish kills were attributed to low dissolved oxygen levels within the waterbody, whereas two were the result of disease, and one was the result of an undetermined pollutant.

Between July 1, 2016 and June 30, 2017 the Surface Water Unit received 47 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 – 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 2017, SNAP collections were made at eight BRMP sites located in the North Platte, South Platte, and White/Hat basins.

Wahoo Creek Special Study – The Wahoo Creek Special Study (WCSS) is a 2-year study that was developed so that NDEQ can work towards the goal of assessing all stream segments within the Wahoo Creek watershed. At the same time, the study will provide information to better design, implement and evaluate sub-watershed projects to reduce pollutant loads and restore and protect the stream. In 2016, weekly surface water samples were collected from May 1- September 30 at 18 stream locations within the Wahoo Creek watershed. In addition, biological sampling (aquatic macroinvertebrates and fish) and habitat measurements were conducted at all 18 sites while periphyton and chlorophyll a samples were collected at nine of these sites. In 2017, surface water sampling was reduced to seven sites based upon the results from the previous year. The UNL School of Natural Resources and the Lower Platte North NRD assisted NDEQ with aspects of field data collection and bacteria analysis for this study.

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 will entail the recreation seasons of May through September of 2017 and 2018. In 2017, surface water samples included 11 fixed frequency grab samples plus 3 additional runoff samples at seven stream/river locations. This study also includes the collection of continuous water quality data to estimate bacteria concentrations and evaluate temperal 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 Lake Assessment – In 2017, NDEQ received a federal grant to participate in a probability based survey of the nation's lakes, ponds, and reservoirs. The National Lake Assessment (NLA) is designed to provide information on the extent of lakes that support healthy biological condition and recreation, estimate how widespread major stressors are that impact lake quality, and provide insight into whether lakes nationwide are getting cleaner. NLA field season sampling is conducted every five years. NDEQ sampled 28 waterbodies throughout Nebraska in 2017 with collections which included surface water, sediment, phytoplankton, zooplankton, macroinvetebrates, fish eDNA, and lake habitat measurements.

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/Publica.nsf/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 2016. This report describes the numerous monitoring programs NDEQ is involved with, its partners, and several highlights of recent monitoring efforts. The 2016 Nebraska Water Monitoring Programs Report is available on the NDEQ's web site http://deq.ne.gov, by selecting Your Environment (Welcome to the NDEQ box located in the center of Home page)/Water Quality Monitoring Report. The direct URL is: http://deq.ne.gov/publica.nsf/Pages/WAT243

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 2016 Groundwater Quality Monitoring Report is: http://deq.ne.gov/publica.nsf/pages/wat242. 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 Agrichemical 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.

In addition, 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.

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, 2017.

- 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 and thirteen community water supplies have approved Wellhead Protection plans as of October 1, 2017.

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, the 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. 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 89 separate Source Water Protection projects throughout the state. In SFY2017, Source Water Protection funds were distributed to the following public water systems: Auburn, Fairbury, and Ohiowa. The total amount available in SFY2017 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 466 Section 404 permit applications during FFY2017.

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 2016 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/Publica.nsf/Pages/WAT234. The 2016 Integrated Report was approved by EPA in April 2016. Work on the 2018 Integrated Report is underway.

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

TMDL Category	TMDL Name	# of Waterbodies	Pollutant	Status
4a				
	Republican River Basin	26	E. coli	NDEQ Developing Draft
5-alt				
	Elkhorn River Basin Plan	8	E. coli	NDEQ & LENRD Developing Draft
	Nemaha River Basin Plan	7	E. coli	NDEQ & NNRD Developing Draft
	Papio-Missouri River Tributaries Plan	3	E. coli	NDEQ & PMRNRD Developing Draft
	South Loup River Basin Plan	5	E. coli	NDEQ & LLNRD's Final Draft accepted by EPA 10/1/17
	White River Basin Plan	5	E. coli	NDEQ & UNWNRD Developing Draft
	Lewis and Clark NRD Basin Plan	8	E. coli	NDEQ & LCNRD Planning Draft Development
	Lower Platte South Basin Plan	10	E. coli	NDEQ & LPSNRD Developing Draft
This list includes both updated Phase II TMDLs and Protection TMDLs on waterbodies without the Recreation use that protect the downstream use				

(LENRD = Lower Elkhorn NRD; NNRD = Nemaha NRD; PMRNRD = Papio-Missouri River NRD; LLNRD = Lower Loup NRD; UNWNRD = Upper Niobrara White NRD; LPSNRD = Lower Platte South NRD; LCNRD = Lewis & Clark NRD)

Nonpoint Source Management Program

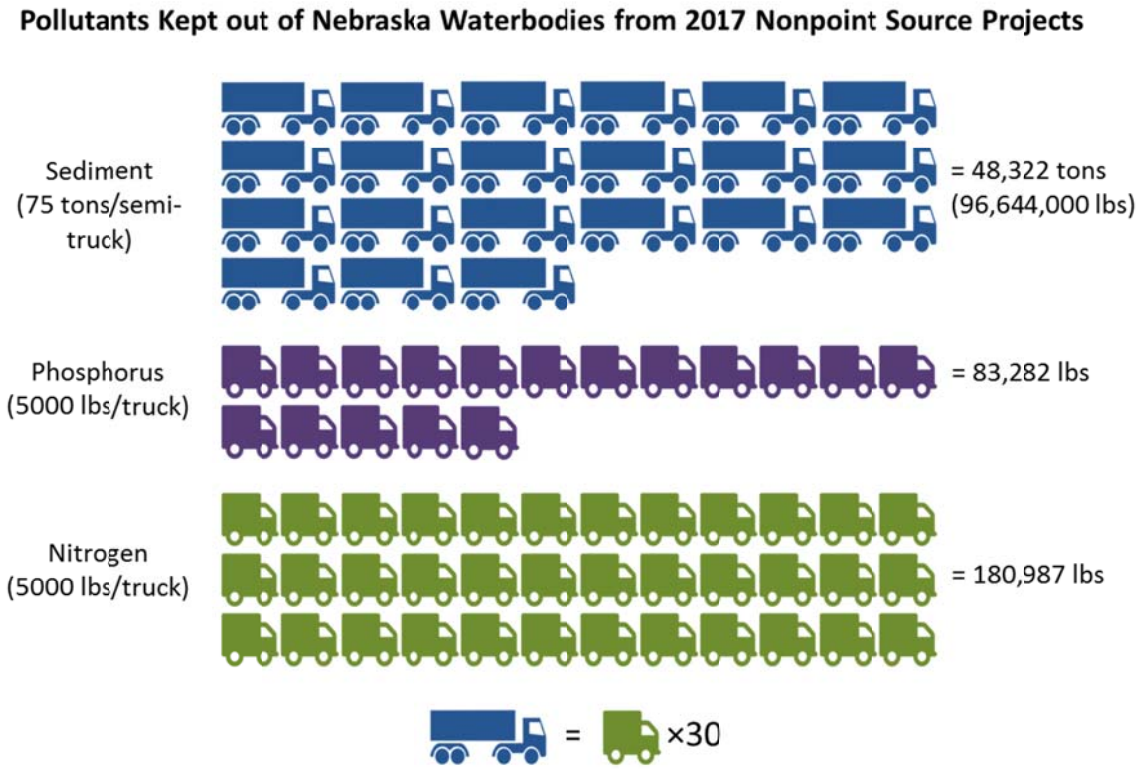
The goal of the Nebraska Nonpoint Source Management Program is to protect and improve water quality impacted by nonpoint source pollution through an integrated statewide effort. The program is of particular significance because nonpoint source pollution is the most prevalent, widespread cause of water 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, 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 2017, the Nonpoint Source Management Program provided and managed 32 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 32 grants managed, 27 were large multi-year projects, with total funds of all projects equaling $4,146,726. Five small projects were managed with total funds equaling $75,000. A total of 246 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 2016 totals $72,312,514.



Included in the major program highlights this year is the acceptance by EPA of three 9 Element watershed management plans or alternative plans: Bazile Groundwater Management Area (GMA) Plan, Shell Creek Watershed Management Plan II, and South Loup Water Quality Management Plan. The Bazile GMA Plan was developed as an alternative to a 9 Element watershed management plan. It was precedent setting at a national level that a groundwater plan be eligible for 319(h) for project funds under its own stand-alone plan. Another new program highlight was to conduct of a series of Risk Communication workshops to aid Natural Resources Districts who are working on groundwater nitrate projects in conjunction with a 9 Element or alternative plan.

Pollutant load reductions of sediment, nitrogen and phosphorus resulting from 319(h)-sponsored watershed projects are reported annually to EPA in February (see graphic).

Water Quality Data Handling and Storage

NDEQ has implemented the STORET 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 www.epa.gov/storet**.** During FY2017, NDEQ continued to add monitoring results to the STORET database, monitoring results conducted on surface waters of the state. The end result will be the centralization of NDEQ's previous and current surface water quality monitoring information.

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

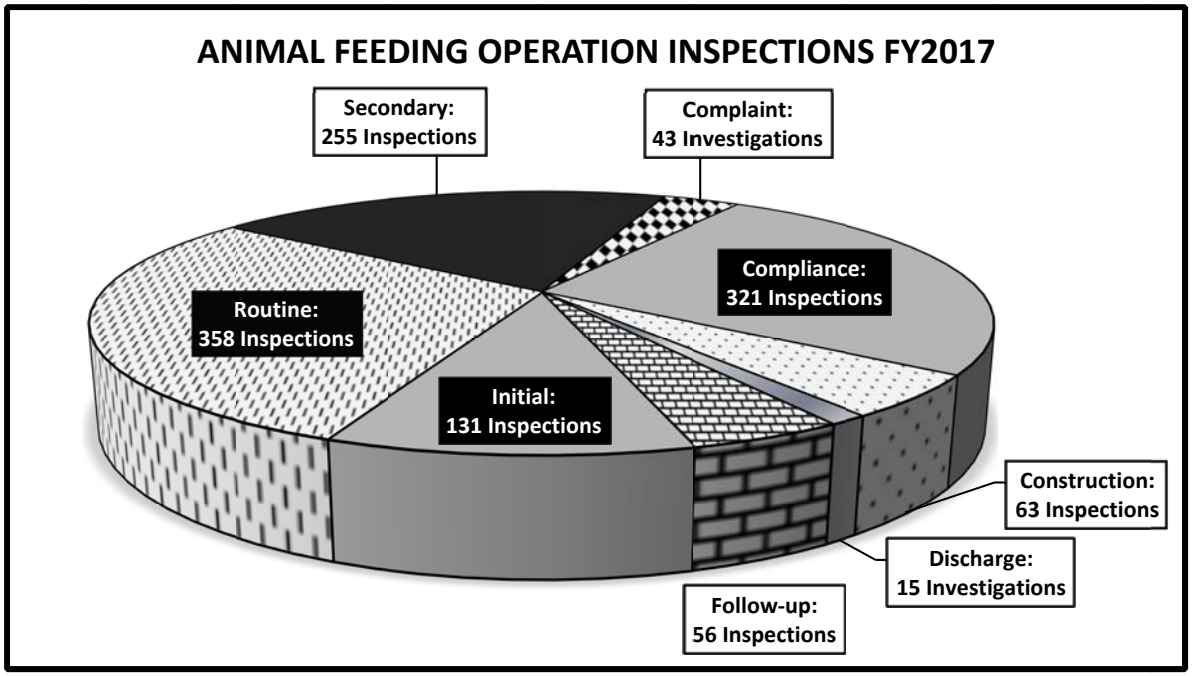
Overview

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 748 active large Concentrated Animal Feeding Operations (CAFOs) required to have permits, but also works with approximately 2,100 Medium AFOs. The LWC Program uses inspections, permitting, and periodic monitoring to fulfill this responsibility. The permitting includes administering 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 1,242 livestock waste control inspections and investigations in FY2017 (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 inspections of an AFO, involving a detailed, extensive inspection of the LWCF, recordkeeping, and waste management at the operation.

Follow-up Inspections. These are conducted in response to some specific activity, situation, or request by the operation. Follow-up inspections could be prompted by an operation's request for a "second opinion" on a requirement; or to monitor the AFO's progress on completing a construction or repair project; or to follow up after a complaint inspection or enforcement action, for example.

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.

Discharge Investigations. Discharge investigations are conducted when discharges of livestock waste from livestock waste control facilities 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 the complaint and may conduct an on-site complaint investigation.

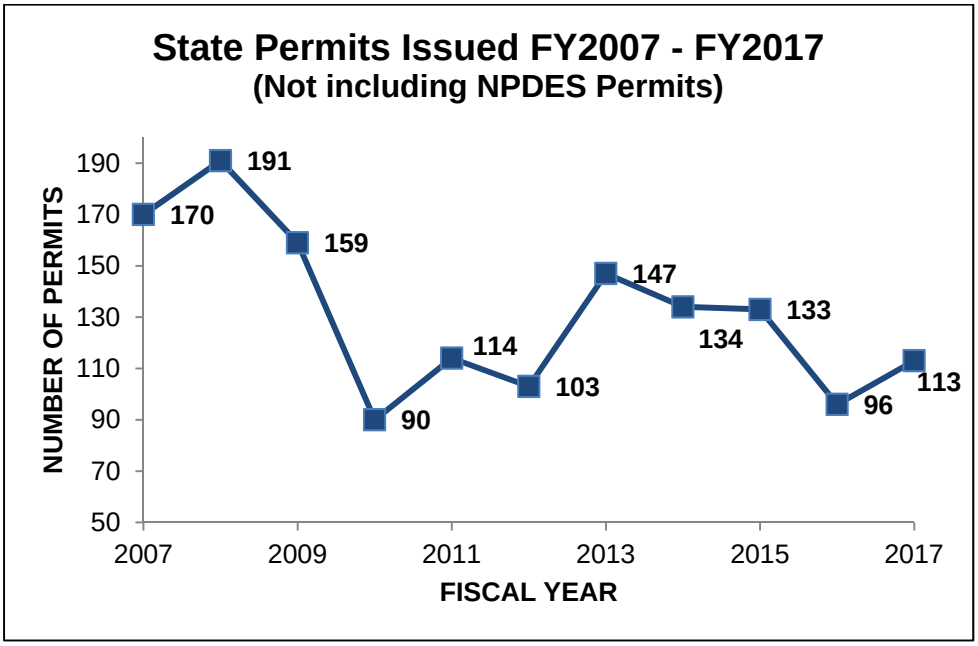
Secondary Inspections. Secondary Inspections are primarily conducted for training purposes and to assist the primary inspector in evaluating unusual or atypical AFOs.

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.

Construction and Operating Permits – FY2017		
Type of Application or Permit	**Applications Received**	**Permits Issued**
New permits	44	34
Modified permits	58	62
Transfer permits	15	17
TOTAL	**117**	**113**

The Department received a total of 117 permit applications and issued 113 permits during FY2017, as shown in the table to the right. 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 FY2017, the Department gave approval to 65 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 FY2017.

NPDES PERMITS – FY2017		
Type of NPDES Application/Permit	Applications Received	Permits Issued
GENERAL PERMIT FOR CAFOS CONFINING CATTLE		
New Coverage	9	11
Modified or Transferred	17	18
Reissued	102	59
SUBTOTAL GENERAL PERMIT:	**128**	**88**
INDIVIDUAL PERMITS		
New Coverage	1	3
Modified or Transferred	0	0
Reissued	8	3
SUBTOTAL INDIVIDUAL PERMIT:	**9**	**6**
NPDES TOTALS:	**137**	**94**

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 $252,641 in annual permit fees from 606 permitted large AFOs. In addition, the Department received $44,900 in initial inspection fees (132 inspections), $40,650 in permit application fees (140 applications), and $21,700 in late payment fees (14 operations), for a total of $359,891 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://deq.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 was moving toward 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 intent is to allow for a more streamlined processing of applications for businesses while still protecting water quality. The new system is expected to be launched in early 2018.

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 26,274 chemigation permits issued in 2016 constituted a three percent reduction in permits issued compared to the previous year (27,106 permits issued in 2015).

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 2016, 1,228 applicators have been trained, tested and certified, bringing the current number of certified chemigation applicators to 5,569 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. In FY2017, Agriculture Section staff conducted a total of three complaint investigations of suspected releases related to agricultural chemical containment systems.

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 which 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. Onsite wastewater or septic system regulations administered by NDEQ were first enacted in 1977.

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, 565 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, 2017, 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 20,000 systems have been registered, with 1,735 systems registered in FY17.

NDEQ has cooperative agreements with other governmental agencies (state and local) to help implement and coordinate the program. There are currently 17 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 318 new onsite-related complaints in FY17 and program staff resolved a total of 212 complaints, which includes both old and new complaints. Notices of Violation were issued to 17 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.

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 56 applications for construction/operating permits and five 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,

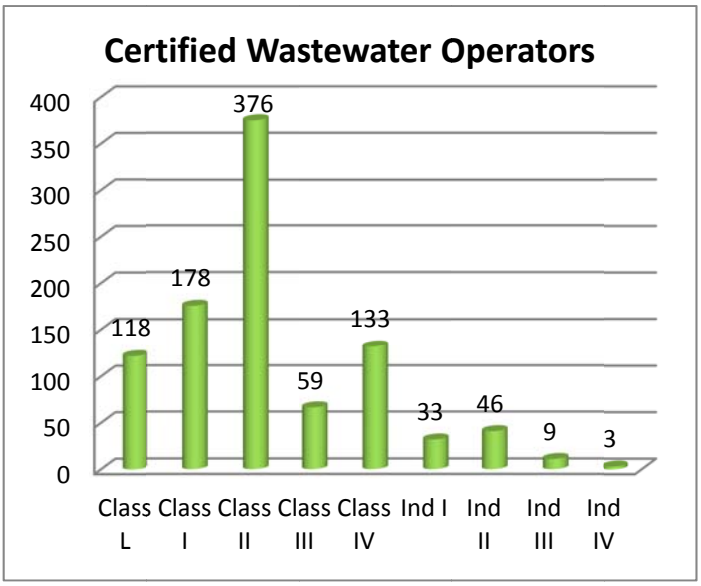
Wastewater Treatment Facility Operator Certification Program

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 864 operators with municipal/compatible certificates. In addition, there are currently 91 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 FY2017, 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 FY2017, a total of 246 wastewater projects were submitted to NDEQ for review and approval.

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.

NDEQ staff met with industrial and municipal officials in South Sioux City, Fremont, Crete, and Gibbon to assure that their wastewater facilities are adequate for the industrial and domestic flows generated in these communities. 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 75 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 23 storm sewer systems in Nebraska that have received MS4 authorizations that include municipalities, counties, the Nebraska Department of Transportation, and the University of Nebraska-Lincoln. The Construction Storm Water General Permit was reissued, effective November 1, 2016. The Industrial Storm Water General Permit was issued on July 18, 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 23 municipal storm water permits (MS4). There are 2,026 active facilities authorized to discharge under other general permits. The general permits include 1,173 active authorizations under the construction general storm water permit, 48 dewatering including Omaha, 8 hydrostatic testing, 735 industrial storm water, 14 pesticide, and 48 Treated Ground Water Remediation Discharge sites.

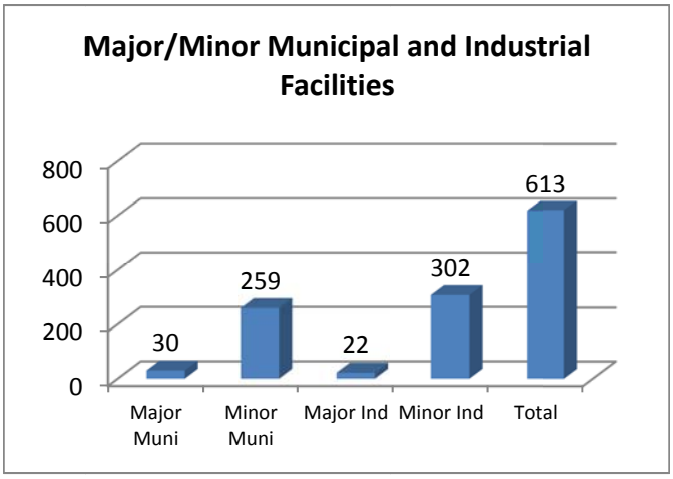
Municipal and Industrial Facilities

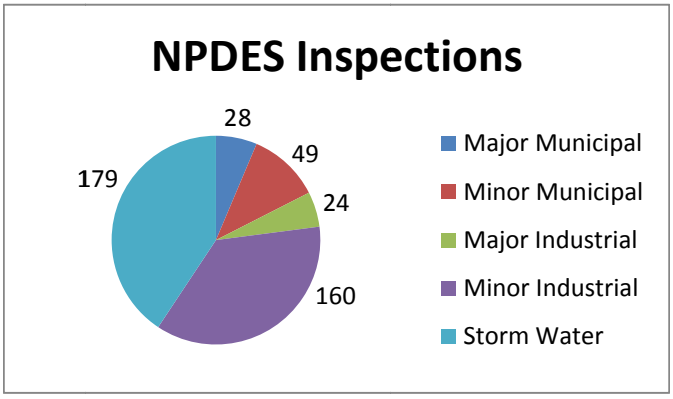
Industrial and municipal facilities are both grouped as major or minor facilities based upon their size and/or their potential to impact the receiving stream. The chart titled "Major/Minor Municipal and Industrial Facilities" provides a numeric break down of these types of facilities.

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 440 NPDES inspections in Fiscal Year 2016. A breakdown of those inspections is provided in the chart at right. The minor industrial inspections include 119 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.





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 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.

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 issued an MS4 Permit on September 1, 2002. This permit was reissued on July 1, 2008 and January 1, 2013. The Omaha MS4 Permit was issued on October 1, 2003 and was reissued in October 1, 2008. This permit is currently under review for renewal. 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 issued effective August 1, 2004 and reissued October 1, 2009. The Dakota County MS4 permit was issued effective December 1, 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 issued January 1, 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 permits for small MS4s were public noticed in Fiscal Year 2017 and issued July 1, 2017. These permits also provide coverage to the non-traditional MS4s operated by UNL 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 effective November 1, 2016. The NPDES General Permit for Storm Water Discharges from Industrial Activity, NER910000, was issued July 18, 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 Permits 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 29 years of activity, the Fund's Net Assets have reached $298.8 million. Since its inception, the CWSRF has provided loans for 287 projects with a cumulative loan award amount of $573.4 million.

In State Fiscal Year (SFY) 2017, the CWSRF has funded projects totaling $23,812,390 in loans and $564,960 in loan forgiveness and grant funds.

The EPA awarded the 2016 capitalization grant, in the amount of $6,803,000, in July of 2017. $1,360,600 was used as match for this federal grant through bonds and cash.

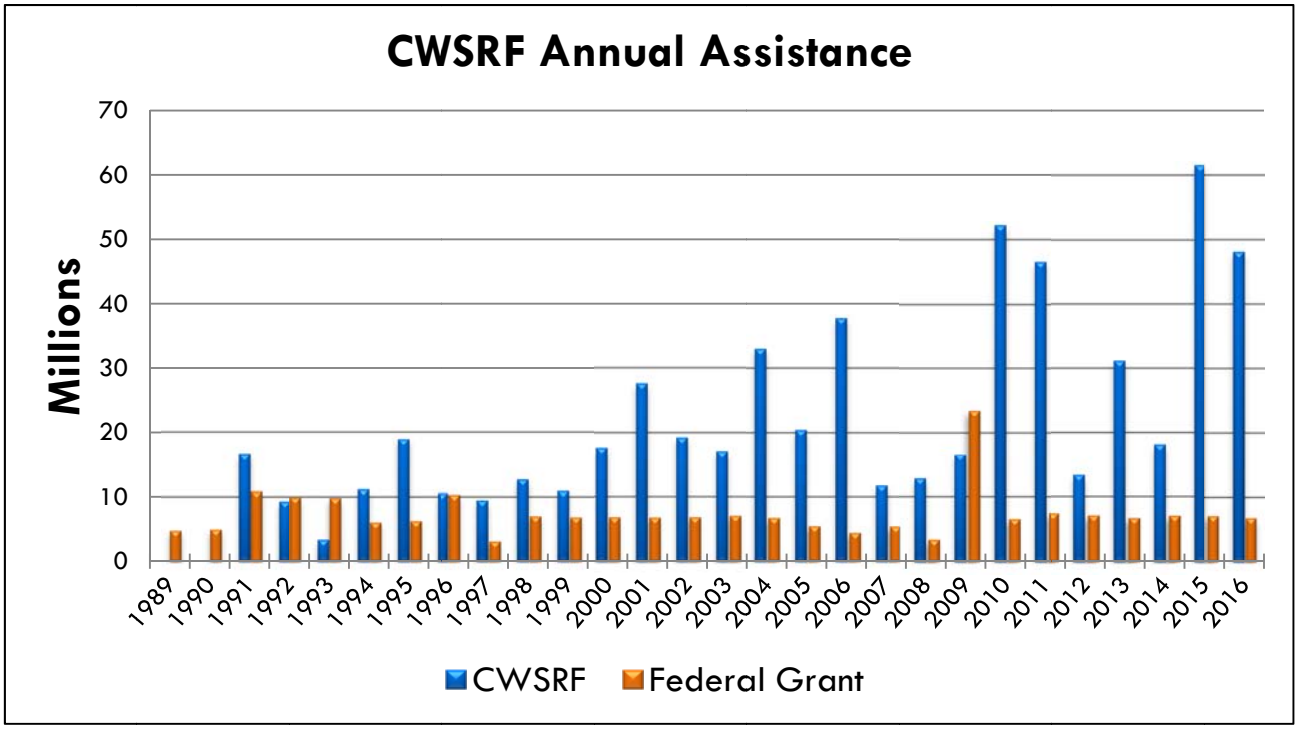
Initiatives for the SFY 2017 for the State Revolving Fund Program include:

- Nebraska's SRF program has implemented the Loans and Grant Tracking System (LGTS). Contract costs for the purchase and implementation of the LGTS system have been handled through the existing Northbridge contract with Federal Environmental Protection Agency (EPA) procurement. Therefore, expenditures are withheld as an "in-kind" deduction to the total annual grant, which is awarded to the program each year. Federal EPA staff negotiate, monitor, and manage the Northbridge contract for LGTS. During fiscal year 2014, planning of the implementation phases, business rules, and hardware/software installations occurred. During fiscal years 2015 and 2016, the system was used concurrently with existing systems to create a basis for reliability and consistency. In 2017, the existing internal system was discontinued, and LGTS became the sole system for use within the SRF program alongside the State Accounting system.
- Clean Water Act amendments from 2014 such as CWSRF eligibilities and extended loan terms required Nebraska State Statute changes. LB737 was approved by the Governor in February 2016. These State Statute changes were incorporated into Title 131 and approved by the Environmental Quality Council (EQC) in June 2017.
- The 2018 Intended Use Plan was approved by EQC in June 2017.

Municipalities Receiving CWSRF Loans in SFY 2017

Municipality	Loan Date	Loan Amount	Principal Forgiveness Amount	Small Town Grant Amount	Total
Amselmo Amd #1	9/19/2016	$42,860	$42,860		$85,720
Creighton	9/2/2016	$958,000	$100,000		$1,058,000
Gilead	9/19/2016			$78,100	$78,100
Stanton Co SID#1	9/2/2016	$767,700			$767,700
Gretna	2/21/2017	$5,147,000			$5,147,000
Omaha	6/15/2017	$15,000,000			$15,000,000
Riverton		$14,630			$14,630
Taylor	1/30/2017	$94,000	$94,000		$188,000
Alma	5/3/2017	$172,000			$172,000
Loup City Amd #2	6/12/2017	$130,000			$130,000
South Sioux City	6/23/2017	$1,486,200			$1,486,200
Lynch	6/26/2017			$250,000	$250,000
TOTAL		**$23,812,390**	**$236,860**	**$328,100**	**$24,377,350**

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 $8.95 million in grant funding for 75 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. During SFY 2008, legislation was passed providing the department with authority to allocate up to 65% of prior-year revenue from fees collected on CWSRF loans to the various grants. This legislation also increased the population level for eligible communities to 10,000 or less. The department intends to provide increased funding to as many qualifying projects as possible; therefore, for SFY2017, up to $474,180 was available for small community grants, and any one community could receive a maximum of $250,000. The program provided a total of $328,100 in grant funds to the communities of Gilead and Lynch.

In SFY 2017, planning grants for a total of $100,000 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 20 years of activity, the Fund's Net Assets have reached $187.5 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 FY2016, under the Local Assistance and Other State Programs set-aside (15%), five agreements for preliminary engineering reports totaling $75,000 were awarded to high priority ranked communities to address public health issues associated with public water supplies. In

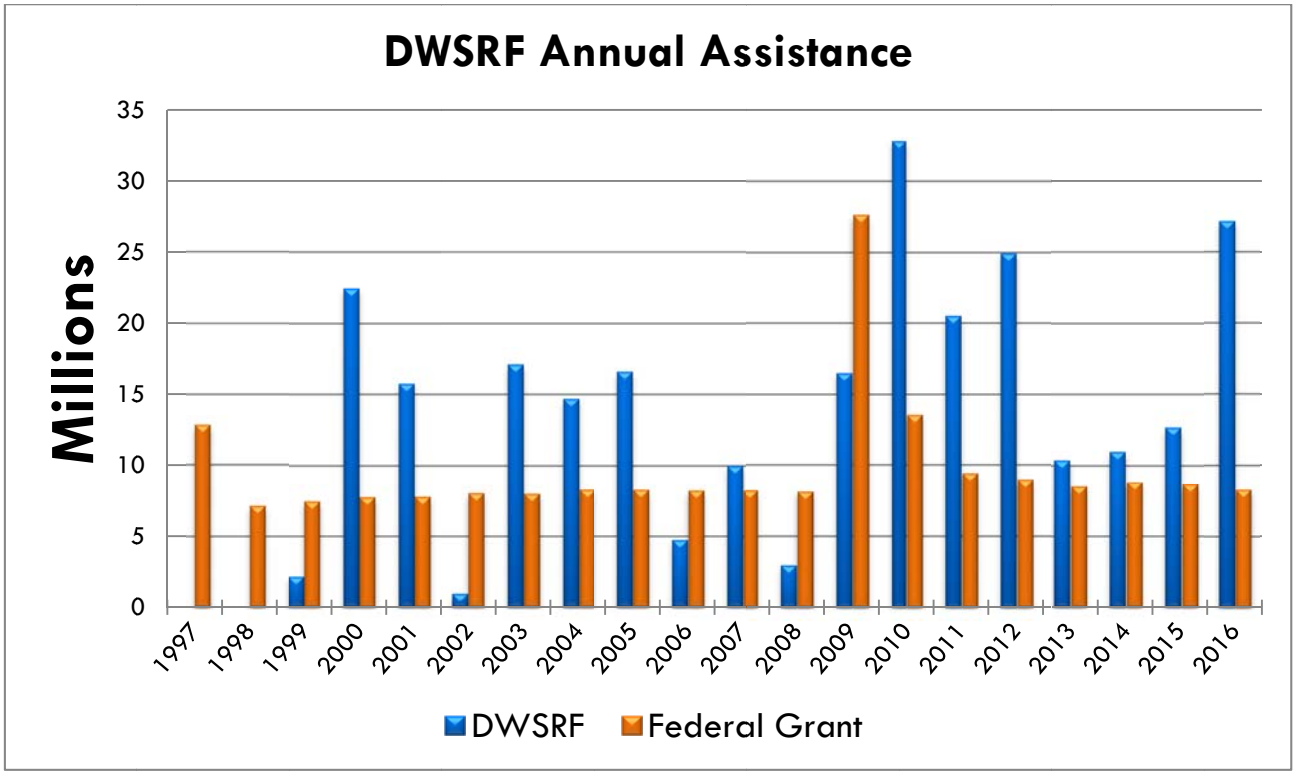
addition, there were three source water protection project agreements totaling $124,710. The NDEQ administers these programs.

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 2016 Capitalization Grant to administer Nebraska's Public Water Supply Program during SFY 2017. That amount included $403,300 of authority that had been previously reserved from past capitalization grants.

Municipalities Receiving DWSRF Loans in SFY2017

Municipality	Loan Date	Loan Amount	Principal Forgiveness	Total
Gretna	8/15/2016	$504,215		$504,215
Kenesaw	9/2/2016	$714,843	$120,157	$835,000
Riverdale	8/15/2016	$202,750	$47,250	$250,000
Adams	12/29/2016	$3,065,853	$766,463	$3,832,316
Aurora	10/26/2016	$640,000	$160,000	$800,000
Clarkson	12/27/2016	$150,000		$150,000
Fort Calhoun	12/29/2016	$643,800		$643,800
Kearney	12/27/2016	$1,500,000		$1,500,000
Papio-Missouri NRD	11/18/2016	$350,000		$350,000
Phillips Amd #1	10/18/2016	$15,000		$15,000
Springfield	12/19/2016	$889,600	$222,400	$1,112,000
Trenton	12/19/2016	$500,000		$500,000
TOTAL		**$9,176,061**	**$1,316,270**	**$10,492,331**

The graph reflects the cumulative loan assistance of DWSRF.



The 2016 DWSRF capitalization grant allocation totaled $8,312,000. In SFY 2017, the DWSRF entered into 11 binding commitments to communities, including one amendment to already existing loans, to provide financial assistance to PWS projects totaling $10,492,331, of which disadvantaged communities received $1,316,270 in forgiveness funding. The Federal Fiscal Year (FFY) 2016 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 2016 capitalization grant $1,825,740 was allocated to the 2% ($166,240), 10% ($1,234,500), and 15% ($425,000) 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 2017 on our website at http://deq.ne.gov/.

CHAPTER 7:
Field Services and Assistance Division

The annual Power Summit is organized by NDEQ and the Nebraska Public Power District. *For more information, see page 91.*

The purpose of the Field Services and 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 conduct inspections, maintain monitoring programs, and manage specific projects. With regard to performing inspections, operating monitoring programs, and managing projects, Field Services staff coordinates all activities with the Agency's Air Quality, Land Management, Water Quality and Water Permits Divisions. Many of the agency's field activities occur out of NDEQ offices located in Omaha, Norfolk, Chadron, Scottsbluff, North Platte, Grand Island, and Holdrege.

In addition to the Field Offices, the Division consists of the following programs: Small Business and Public Assistance, Emergency Response, Homeland Security, and Quality Assurance. Descriptions of these programs follow.

Field Offices

The NDEQ Field Office Section is responsible for conducting compliance inspections, complaint investigations, environmental sampling, project management, and local compliance assistance for the agency's Air Quality, Land Management, and Water Quality divisions. The number of inspections and other duties performed by field office staff are incorporated in the charts and graphs provided by other divisions in the previous chapters. There are 15 employees in seven field offices around the state. The field offices enable the agency to provide the public and regulated facilities with greater access to NDEQ staff and provide more timely response to issues raised by the public. Additionally, because Field Office staff live and work in their respective Field Office areas, they are able to help the Lincoln Office develop a better understanding of local issues.

One of NDEQ's goals is to have a strong community presence and build relationships with the public and with local entities. This is accomplished in a number of ways in the field offices. One way is by making personal one-on-one contacts with local governmental agencies that have mutual needs or responsibilities. Another way to establish a local presence is to participate on local task forces, boards of directors, and emergency planning organizations. Representatives of these organizations have reported that participating NDEQ employees add depth and insight, which is highly valued. Field office staff also build a local presence by participating in environmental

education events in their regions. Building a strong community presence helps NDEQ carry out the work of preserving the state's natural resources and serving the citizens of Nebraska.

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 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 onsite assistance visits to small businesses or individuals, development of outreach materials, hosting information workshops, and helping the regulated community understand their obligations under state and federal law.

The Program Coordinator is responsible for the Department's annual Environmental Update workshops, held this year in North Platte on May 23rd, the University of Nebraska Saunders County Extension Office on May 24th, and Norfolk on May 25th. This was the first year the Environmental Update workshop was held in two locations outside of the Omaha-Lincoln areas, as part of the Department Director's desire to get our outreach efforts to other parts of the state.

The Program Coordinator 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 2016 Power Summit was held November 16th in Lincoln, and had 70 in attendance. The 2017 Power Summit was held Oct. 31 in Lincoln, and had 73 in attendance. In addition to the Power Summit, NPPD and NDEQ also partnered on two webinars in November 2016 for economic developers throughout the state. The webinars provided participants with information and tools to assist new businesses in understanding the permit process and which permits they may need.

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. The Program Coordinator conducted 11 meetings regarding nine potential projects between July 1, 2016 and June 30, 2017.

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 Program Coordinator provided outreach to individuals to address specific questions and concerns. From July 2016 through June 2017, the Program Coordinator worked with two Nebraska citizens regarding complaints on manure management and soil amendment/nutrient issues.

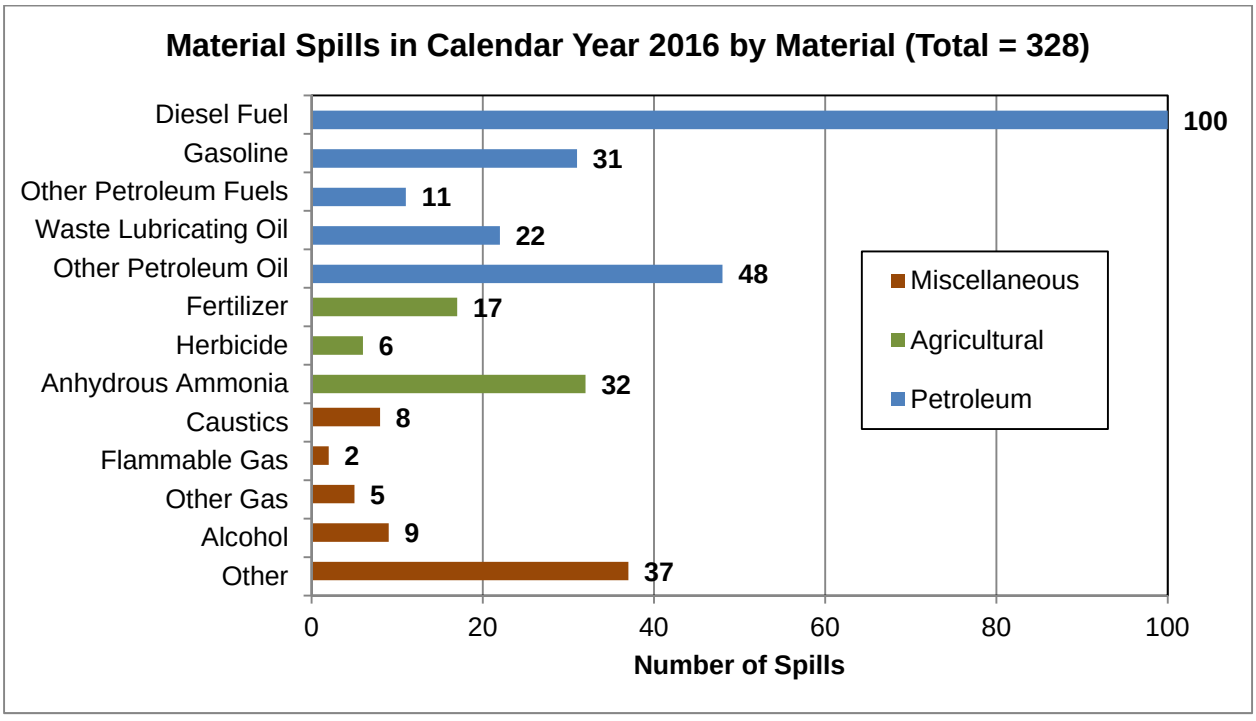
The Small Business Compliance Advisory Panel was established to evaluate the effectiveness of Department outreach programs, to provide feedback, and to identify program obstacles. The panel is composed of seven members: two representatives from the general public selected by the Governor, four representatives 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 2016 and met with NDEQ staff to discuss several issues during their annual meeting in March 2017. During the March meeting, panel members inquired about the status of the EPA and how federal impacts would affect the Department. Director Macy also discussed efforts the Department has made towards the Governor's "Grow Nebraska" initiative. Panel members also expressed their concerns regarding difficulties with respect to obtaining permits in a timely manner, and whether budget constraints are impacting the issuance of permits for businesses in the state. Director Macy and others updated the panel members on efforts the Department is making to address those concerns and on efforts to make the permitting process more efficient overall.

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. Over the past year, the Emergency Response Program responded to nine incidents and conducted nine on-site visits to these incidents.



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. During the calendar year 2016, 452 complaints were entered into the system along with 328 notices of spills or releases into the environment.

The chart on the previous page shows the material spills reported to NDEQ during calendar year 2016 broken down by category of material.

Homeland Security

NDEQ has been actively involved in the state's Homeland Security efforts which are directed by the Lieutenant Governor. Director Macy represents the Department on the Lieutenant Governor's Homeland Security Senior Advisory Committee. Department staff have participated in a number of Local Emergency Planning Committee (LEPC) exercises, which often have a Homeland Security component. These exercises help the LEPCs identify training needs and response issues in need of attention. These exercises typically involve incidents related to release of agricultural chemicals, pipeline releases, and responding to and mitigating spills into surface waters of the state.

CHAPTER 8:
Expenditure and Budget Summary

The following information summarizes department expenditures for fiscal year 2017 and outlines budget projections for fiscal year 2018. 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 FY17 expenditures for each federal grant, including the state match.

Chart B lists actual FY17 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 FY18 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 FY18 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 FY17

Grant / Program Title	Grant	Match	Total
Performance Partnership	3,390,577	2,150,790	5,541,368
Clean Water State Revolving Fund	6,771,276	1,468,889	8,240,165
Exchange Network	2,821		2,821
604 B Water Quality Management	123,940		123,940
319 H Non-Point Source	2,450,848		2,450,848
Drinking Water State Revolving Fund	13,754,651		13,754,651
Leaking Underground Storage Tanks	752,857	130,471	883,328
Clean Diesel	185,027		185,027
Section 106 Monitoring	199,751		199,751
Department of Defense	90,135		90,135
PM 2.5 Ambient Air Monitoring	295,164		295,164
Superfund UNL Mead	18,172		18,172
Superfund Core	154,415	1,246	155,661
Superfund Management Assistance	210,753		210,753
Superfund Site Assessment	260,492		260,492
Section 128 (a) State Response	439,377		439,377
Totals	**$ 29,100,256**	**$ 3,751,396**	**$ 32,851,652**

Performance Partnership is made up of Water 106, Air 105, Groundwater, RCRA 3011, a part of nonpoint source progrram, 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 53.65% was negotiated with EPA for FY17 and charged against direct payroll cost to cover agency administrative expenses

Chart B - Actual Expenditure of State Funds for State Programs for FY17 Including Aid

Program	Subprogram	Fund Type	Personal Services	Operating Expenses	Travel	Capital Outlay	Consulting /Contracting	Total	Distribution of Aid	Total
Integrated Solid Waste Management	004	C	1,447,710	538,531	28,768	1,593	27,864	2,044,466		2,044,466
Ag - Livestock	016	G/C	1,475,188	89,942	48,211			1,613,340		1,613,340
Air Construction Permits	020	C	40,854	27,835	1,068			69,757		69,757
Superfund State Cost Share	023	G/C	21,747	8,021	136		329,578	359,483	655,295	1,014,778
Litter Reduction	024	C	139,628	102,441	384	1,021	136,077	379,551	1,920,783	2,300,334
Mineral Exploration	029	C	76,661	34,361	8,818		738	120,579		120,579
Private Onsite Wastewater Cert & Registration	030	C	184,119	88,698	7,109	1,039		280,965		280,965
Emission Inventory - Title V	033	C	2,057,389	770,208	20,889	2,827	16,658	2,867,971		2,867,971
Chemigation	034	C	3,414	5,849			35,347	44,610		44,610
Groundwater Management Areas	035	G	44,119	359	530			45,008		45,008
Remedial Action Plan Monitoring Act	036	C	124,342	45,619	986			170,947		170,947
Private Onsite Wastewater Permit & Approval	037	C	40,315	14,447				54,762		54,762
Operator Certification	040	C	57,129	26,915	1,186		9,450	94,680		94,680
Community Right to Know	041	G	81,422	1,152	522	1,039		84,134		84,134
Pipeline SEIS - Keystone	050	G	2,595	825				3,420		3,420
Petroleum Release Remedial Action Act	051	C	1,102,916	526,064	5,870	169,271	5,835,345	7,639,466	3,707,040	11,346,506
Emergency Response	057	G/C	19,827	5,593	490	260		26,170		26,170
Engineering Reviews	061	G	177,077	1,967	136			179,181		179,181
Stormwater Grants	067	G	17,988	4,597				22,585	1,494,574	1,517,159
Waste Reduction & Recycling	091	C	211,423	145,640	2,784	1,619	19,316	380,783	5,147,976	5,528,759
Agency Organizational Dues	099	G		9,750				9,750		9,750
Totals			**$ 7,325,864**	**$ 2,448,814**	**$ 127,888**	**$ 178,669**	**$ 6,410,375**	**$ 16,491,609**	**$ 12,925,669**	**$ 29,417,278**

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 53.65% was negotiated with EPA for FY17 and charged against direct payroll cost to cover agency administrative expenses.

Chart C - Proposed Budget for Each Federal Grant Program for State FY18

Grant / Program Title	Grant	Match	Total
Performance Partnership	4,307,997	1,583,763	5,891,761
Clean Water State Revolving Fund	6,940,000	1,200,000	8,140,000
604 B Water Quality Management	128,276	-	128,276
319 H Non-Point Source	2,853,820	-	2,853,820
Drinking Water State Revolving Fund	8,500,000	1,732,000	10,232,000
Leaking Underground Storage Tanks	1,015,591	90,891	1,106,482
Exchange Network	130,000	-	130,000
Clean Diesel	166,700	-	166,700
Section 106 Monitoring	162,298	-	162,298
Department of Defense	188,281	-	188,281
PM 2.5 Ambient Air Monitoring	299,444	-	299,444
Superfund UNL Mead	78,899	-	78,899
Superfund Core	206,909	58,607	265,516
Superfund Management Assistance	242,702	-	242,702
Superfund Site Assessment		-	-
Section 128 (a) State Response	340,737	-	340,737
Totals	**$ 25,561,654**	**$ 4,665,261**	**$ 30,226,915**

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 D - Proposed Budget of State Funds for State Programs for FY18 Including Aid

Program	Subprogram	Fund Type	Personal Services	Operating Expenses	Travel	Capital Outlay	Consulting /Contracting	Total	Distribution of Aid	Total
Integrated Solid Waste Management	004	C	1,483,164	570,128	28,712		21,343	2,103,347		2,103,347
Ag - Livestock	016	G/C	1,548,448	122,817	48,200			1,719,464		1,719,464
Air Construction Permits	020	C	79,022	27,614	1,246			107,882		107,882
Superfund State Cost Share	023	G/C	72,133	62,509	8,136		364,500	507,277	1,561,801	2,069,078
Litter Reduction	024	C	149,484	97,805	400		136,077	383,766	2,000,000	2,383,766
Mineral Exploration	029	C	69,829	72,267	8,666			150,762		150,762
Private Onsite Wastewater Cert & Registration	030	C	264,771	175,506	7,057		12,736	460,070		460,070
Emission Inventory - Title V	033	C	2,155,822	769,209	17,699		16,658	2,959,388		2,959,388
Chemigation	034	C	21,277	5,849			35,347	62,473		62,473
Groundwater Management Areas	035	G	Not funded for the 2018 budget					-		-
Remedial Action Plan Monitoring Act	036	C	130,425	55,417	986			186,828		186,828
Private Onsite Wastewater Permit & Approval	037	C	39,963	14,447				54,410		54,410
Operator Certification	040	C	104,246	36,283	1,093			141,622		141,622
Community Right to Know	041	G	Not funded for the 2018 budget					-		-
Pipeline SEIS - Keystone	050	G	13,115	5,811				18,926		18,926
Petroleum Release Remedial Action Act	051	C	1,077,349	594,934	5,824		6,340,100	8,018,206	8,775,000	16,793,206
Emergency Response	057	G/C	28,662	24,789	3,845			57,297		57,297
Engineering Reviews	061	G	236,440	1,959	109			238,508		238,508
Stormwater Grants	067	G	Not funded for the 2018 budget					-		-
Waste Reduction & Recycling	091	C	216,697	134,059	2,664		19,616	373,037	4,000,000	4,373,037
Agency Organizational Dues	099	G		12,000				12,000		12,000
Totals			**$ 7,690,846**	**$ 2,783,402**	**$ 134,639**	**$ -**	**$ 6,946,378**	**$ 17,555,265**	**$ 16,336,801**	**$ 33,892,066**

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.

CHAPTER 9:
Distribution of Aid

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 FY2017 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 FY2017, 57 Litter Reduction and Recycling grants were awarded, totaling $2,491,087. The grants were awarded in three categories: Public Education, $1,037,895; Cleanup, $126,986; and Recycling, $1,326,206. 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 FY2017, 130 projects totaling $4.333.457 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 FY2017, the program provided $75,599 to 10 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 FY2017, the program provided $105,270 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 $218 million has been disbursed since the program began. The program provided $3.4 million to 206 sites for investigation and cleanup in FY2017.

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 FY2017, the CWSRF funded projects totaling $23,812,390 in loans and $564,960 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 FY2017, $328,100 was allocated for small community grants.

- **Planning Grants** totaling $100,000 were awarded to five small (under 10,000) communities in FY2017. 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 FY2017, the program provided financial assistance to public water system projects totaling $10,492,331, of which disadvantaged communities received $1,316,270 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 2017, the Nonpoint Source Management Program provided and managed 32 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 32 grants managed, 27 were large multi-year projects, with total funds of all projects equaling $4,146,726. Five small projects were managed with total funds equaling $75,000 .

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

CHAPTER 10:
Staffing

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:

Employees Assuming Agency Positions

These figures include new hires, promotions, transfers and classification upgrades for one-year period. Figures for 2017 are from October 1, 2016 through September 30, 2017.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Director, Deputy Director, Assistant Director, Division Administrator	0	0	0	0	0	0	0	1	5	0
Section Supervisor, Records Manager, Budget Officer	0	4	0	0	0	1	5	0	4	0
Unit Supervisor	0	5	2	0	2	1	1	2	0	0
Human Resources, Training Coordinator	2	0	1	0	0	0	0	1	0	1
Process Improvement Coordinator										1
Federal Aid Administrator, Financial Assurance Coordinator, Accountant	0	0	2	1	1	0	0	0	1	1
Clerical/Accounting Clerk	4	9	3	5	0	2	4	4	4	1
Information Technology, Public Information, Research Analyst	2	3	0	1	0	0	0	0	0	2
Attorney I, II & III	0	0	1	0	0	0	2	0	2	1
Environmental Engineer	2	4	0	3	2	2	7	2	4	5
Compliance Specialist	1	0	0	0	0	1	0	0	1	1
Programs Specialist I & II	13	17	8	9	11	10	7	11	19	8
Geologist, Groundwater I & II	4	3	2	0	2	4	2	3	1	0
Environmental Assistance Coordinator	0	0	0	1	1	1	0	0	0	0
TOTALS	29	45	20	20	19	22	28	24	41	21

CHAPTER 11:
Financial Assurance Requirements

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
Municipal Solid Waste Disposal Areas (MSWDA), Sanitary Landfills (LF)							
Alliance Landfill	Alliance	MSWDA	03/17/94	$ 4,662,958	$ 1,854,248	Enterprise Fund	City of Alliance
Beatrice Landfill	Beatrice	Sanitary LF	07/12/00	$ 136,378	$ 136,378	Financial Test	City of Beatrice
Beatrice Area SW Agency	Beatrice	MSWDA	07/12/00	$ 4,157,884	$ 4,157,884	Financial Test	City of Beatrice
Butler County Landfill	David City	MSWDA	10/03/08	$ 11,267,685	$ 4,719,001	Trust Fund	US Bank
Douglas County Landfill	Bennington	MSWDA	03/28/00	$ 12,794,663	$ 12,794,663	Surety Bond	Evergreen Ntl. Indemnity Co.
G & P Dev Landfill	Milford	MSWDA	10/03/08	$ 9,718,136	$ 2,807,959	Trust Fund	US Bank
Gering Landfill	Gering	MSWDA	02/13/96	$ 2,134,621	$ 1,383,204	Enterprise Fund	City of Gering
L.P. Gill Landfill	Jackson	MSWDA	04/09/96	$ 6,870,670	$ 3,535,904	Trust Fund	Premier Trust
Grand Island Landfill	Grand Is.	MSWDA	03/31/96	$ 10,125,036	$ 10,125,036	Financial Test	City of Grand Island
Hastings Area Landfill	Hastings	MSWDA	03/18/13	$ 6,153,920	$ 3,411,396	Enterprise Fund	City of Hastings
Hastings Landfill	Hastings	Sanitary LF	10/01/97	$ 156,530	$ 30,301	Faith & Credit	City of Hastings
Holdrege Landfill	Holdrege	MSWDA	07/29/96	$ 3,003,667	$ 1,978,195	Enterprise Fund	City of Holdrege
J-Bar-J Landfill	Ogallala	MSWDA	03/28/00	$ 6,088,770	$ 6,088,770	Performance Bond	Evergreen Ntl. Indemnity Co.
Kearney Landfill	Kearney	MSWDA	03/31/94	$ 6,957,198	$ 3,186,998	Trust Fund	Union Bank & Trust
Kimball Landfill	Kimball	MSWDA	05/10/96	$ 1,871,370	$ 1,042,133	Enterprise Fund	City of Kimball
Lexington Landfill	Lexington	Sanitary LF	07/25/96	$ 330,395	$ 293,770	Faith & Credit	City of Lexington
Lexington Area Agency	Lexington	MSWDA	01/19/97	$ 2,785,148	$ 2,277,648	Enterprise Fund	Lexington Area SW Agency
Lincoln Bluff Road Landfill	Lincoln	MSWDA	04/01/96	$ 22,368,906	$ 22,368,906	Financial Test	City of Lincoln
Loup Central Landfill	Elba	MSWDA	04/09/96	$ 2,387,771	$ 946,177	Trust Fund	Citizens Bank & Tr St. Paul
McCook Landfill	McCook	Sanitary LF	03/04/96	$ 472,152	$ 79,472	Faith & Credit	City of McCook
NE Ecology Landfill	Geneva	MSWDA	10/03/08	$ 2,422,858	$ 893,947	Trust Fund	US Bank
NNSWC Landfill	Clarkson	MSWDA	04/09/96	$ 19,969,762	$ 6,917,560	Enterprise Fund	NNSWC
Pheasant Point Landfill	Bennington	MSWDA	08/01/03	$ 28,612,870	$ 25,315,749	Surety Bond	Evergreen Ntl. Indemnity Co.
Sarpy County Landfill	Papillion	MSWDA	03/31/96	$ 7,381,332	$ 7,381,332	Enterprise Fund	Sarpy County
Sidney Landfill	Sidney	MSWDA	02/11/97	$ 2,393,613	$ 992,202	Enterprise Fund	City of Sidney
SWANN Landfill	Chadron	MSWDA	09/25/97	$ 1,510,449	$ 749,777	Enterprise Fund	SWANN
Valentine Landfill	Valentine	MSWDA	04/09/96	$ 1,788,859	$ 668,382	Enterprise Fund	City of Valentine
York Landfill	York	Sanitary LF	05/14/96	$ 73,689	$ 11,417	Faith & Credit	City of York
York Area SW Landfill	York	MSWDA	05/14/96	$ 4,543,898	$ 1,812,043	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.							
Construction/Demolition Landfills							
Abe's Trash Service C & D	Blair	Const./Demol.	03/30/98	$ 267,697	$ 267,697	Escrow Account	Bank of Bennington
Alliance C & D Landfill	Alliance	Const./Demol.	12/02/99	$ 154,351	$ 61,280	Enterprise Fund	City of Alliance
Anderson Excavating C & D	Omaha	Const./Demol.	11/15/12	$ 941,188	$ 941,188	Letter of Credit	Council Bluffs Savings Bank
Arnold C & D Landfill	Arnold	Const./Demol.	07/24/00	$ 47,577	$ 45,160	Enterprise Fund	Village of Arnold
Beatrice Area SW Agency	Beatrice	Const./Demol.	10/15/12	$ 1,024,888	$ 1,024,888	Financial Test	City of Beatrice
Benkelman C & D Landfill	Benkelman	Const/Demol.	10/15/06	$ 66,355	$ 19,262	Enterprise Fund	City of Benkelman

NDEQ FINANCIAL ASSURANCE

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	FA Mechanism	Guarantor
Broken Bow C & D Landfill	Broken Bow	Const/Demol.	11/23/07	$ 112,684	$ 31,869	Enterprise Fund	City of Broken Bow
Bud's Sanitary Service C & D	Newman Grove	Const./Demol.	06/01/97	$ 36,529	$ 36,529	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	$ 68,814	$ 83,054	Trust Agreement	Exchange Bank
Franklin C&D Landfill	Franklin	Const./Demol.	11/08/10	$ 26,892	$ 10,157	Enterprise Fund	City of Franklin
Gage County C & D Landfill	Beatrice	Const./Demol.	02/23/98	$ 198,553	$ 200,000	Letter of Credit	1st Natl. Bank, Beatrice
Hawkins Construction C & D	Omaha	Const./Demol.	01/03/02	$ 385,662	$ 385,662	Surety Bond	Hartford Fire Ins. Co.
Holdrege C & D Landfill	Holdrege	Const/Demol.	05/01/09	$ 311,014	$ 57,149	Enterprise Fund	City of Holdrege
KGP Services C & D	Norfolk	Const/Demol.	11/06/03	$ 80,661	$ 91,290	Escrow Account	Elkhorn Valley Bank & Trust
Kimball C & D Landfill	Kimball	Const./Demol.	04/01/01	$ 80,366	$ 58,760	Enterprise Fund	City of Kimball
Lead Waste Mgmt C&D Landfill	Waterbury	Const./Demol.	05/28/14	$ 38,308	$ 38,308	Letter of Credit	Adrian State Bank
Lexington C & D Landfill	Lexington	Const./Demol.	09/30/98	$ 207,765	$ 159,987	Enterprise Fund	Lexington Area SW Agency
Lincoln North 48th St. C & D	Lincoln	Const./Demol.	04/01/96	$ 1,384,914	$ 1,384,914	Financial Test	City of Lincoln
Loup Central C & D Landfill#2	Elba	Const./Demol.	01/28/01	$ 96,385	$ 44,308	Trust Fund	Citizens Bank & Tr. St. Paul
L.P. Gill Landfill C & D	Jackson	Const/Demol.	04/09/96	$ 185,140	$ 92,817	Trust Fund	Premier Trust
NPPD Gerald Gentleman	Sutherland	Const./Demol.	04/01/95	$ 253,940	$ 253,940	Financial Test	NPPD
O'Neill C & D Landfill	O'Neill	Const./Demol.	06/01/01	$ 231,985	$ 38,314	Enterprise Fund	City of O'Neill
PAD LLC C & D Landfill	Hastings	Const./Demol.	06/05/02	$ 197,321	$ 197,321	Escrow Account	Five Points Bank
Plainview C & D Landfill	Plainview	Const./Demol.	09/26/00	$ 65,646	$ 65,646	Enterprise Fund	City of Plainview
Rainwood Hill LLC C & D	Omaha	Const/Demol.	05/29/15	$ 202,996	$ 202,996	Surety Bond	Hudson Insurance Co.
Red Cloud C&D Landfill	Red Cloud	Const/Demol.	04/04/17	$ 95,000	$ 3,000	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	$ 129,280	$ 47,470	Enterprise Fund	City of Sidney
SW NE Solid Waste Agency	Imperial	Const./Demol.	06/01/01	$ 146,593	$ 60,597	Enterprise Fund	City of Imperial
Three Valleys C & D Landfill	Indianola	Const./Demol.	02/24/10	$ 78,327	$ 78,327	Letter of Credit	McCook Ntl Bank
York C & D Landfill	York	Const/Demol.	12/01/07	$ 710,402	$ 100,185	Enterprise Fund	City of York
Fossil Fuel Combustion Ash (FFCA), Industrial Waste Landfills, Monofills							
Ash Grove Cement Co.	Louisville	Indus. Waste	03/01/03	$ 4,938,699	$ 4,938,492	Financial Test	Ash Grove
Clean Harbors Technology	Kimball	Monofill	08/01/95	$ 3,472,926	$ 3,472,926	Insurance Policy	Indian Harbors Insurance Co.
Fremont Utilities	Fremont	FFCA	05/28/96	$ 3,374,613	$ 600,000	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	$ 2,297,974	$ 2,297,974	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	$ 6,454,490	$ 6,454,490	Financial Test	OPPD
OPPD NE City 2	NE City	FFCA	06/30/09	$ 1,258,117	$ 1,258,117	Financial Test	OPPD
OPPD North Omaha	Omaha	FFCA	04/04/95	$ 3,335,353	$ 1,930,601	Financial Test	OPPD
OPPD Fort Calhoun (IW)	Ft. Calhoun	Indus. Waste	04/04/95	$ 150,170	$ 150,170	Financial Test	OPPD
Platte Generation	Grand Island	FFCA	03/18/14	$ 362,181	$ 362,181	Financial Test	City of Grand Island

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Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	FA Mechanism	Guarantor
Waste Management of NE	Bennington	Indus. Waste	02/19/04	$ 1,400,699	$ 1,400,699	Surety Bond	Lexon Insurance Co.
Transfer Stations, Material Recovery Facilities, Compost Sites							
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
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	02/01/04	$ 4,224	$ 4,224	Letter of Credit	First Natl. Bank, Centralia
Stericycle	Lincoln	Processing Fac	07/01/12	$ 56,873	$ 56,873	Surety Bond	Westchester Fire Ins. Co.
Waste Connections of NE	Bridgeport	Transfer Station	08/15/03	$ 3,956	$ 3,956	Surety Bond	Evergreen Ntl. Indemnity 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	Wahoo	Transfer Station	07/02/03	$ 7,190	$ 7,190	Surety Bond	Platte River Ins Co.
Waste Connections of NE	Central City	Transfer Station	05/30/13	$ 9,223	$ 9,223	Surety Bond	Platte River Ins Co.
RCRA Closure and RCRA Post-Closure (PC)							
Loveland Products	Fairbury	RCRA PC	12/10/15	$ 630,697	$ 630,697	Letter of Credit	Bank of Nova Scotia
Behlen Manufacturing Co.	Columbus	RCRA PC	02/29/12	$ 10,100	$ 10,100	Financial Test	Behlen Mfg
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	$ 29,262,700	$ 29,262,700	Insurance Policy	Indian Harbors Insurance Co.
Douglas County Landfill	Omaha	RCRA PC	03/08/85	$ 268,015	$ 268,015	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	$ 144,154	$ 144,154	Insurance Policy	Indian Harbors Insurance Co.
Safety Kleen	Omaha	RCRA Closure	10/15/01	$ 381,931	$ 381,931	Insurance Policy	Indian Harbors Insurance Co.
Tenneco Automotive Inc.	Cozad	RCRA PC	09/17/97	$ 51,440	$ 51,440	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
Underground Injection Control (UIC)							
Crow Butte Resources, Inc.	Crawford	UIC		$ 46,875,122	$ 46,875,122	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
			Waste Tire Haulers				
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	$ 5,000	$ 5,000	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	11/17/08	$ 10,000	$ 10,000	Surety Bond	Great American Ins.Co.
Don's Used Tires	Lincoln	Waste Tire	03/13/03	$ 5,000	$ 5,000	Surety Bond	Old Republic Surety Co.
EnTire Recycling Inc	Brock	Waste Tire	04/18/13	$ 10,000	$ 10,000	Letter of Credit	Great Western Bank
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	$ 5,000	$ 5,000	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	1st Natl. Bank, Centralia, KS
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.