

# More information about the

# Nebraska Department of Environment and Energy

NDEE's vision is everyone living, working and enjoying a healthy Nebraska environment. Our mission is to protect and improve human health, the environment and energy resources. We enforce regulations and provide assistance, but to fully accomplish this vital mission we need your help. We encourage you to work with us to ensure future generations can use and enjoy the precious natural resources we enjoy today.

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Visit our website at http://dee.ne.gov to view the agency's:

- News releases
- Agency Information
- > Topics of Interest
- Rules and regulations
- > Fact sheets and other publications
- Program information
- Public notices
- Enforcement resolution
- Job listings

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# CHAPTER 1:

# <u>Agency Overview</u>

The Nebraska Department of Environment and Energy (NDEE) marked its 50<sup>th</sup> year as a state agency in 2021. The agency was originally created with the passage of the Environmental Protection Act in 1971. At that time, the agency was named the Nebraska Department of Environmental Control; it later became the Nebraska Department of Environmental Quality in 1992. With the 2019 merger of the Nebraska Energy Office, the agency became the Nebraska Department of Environment and Energy to better reflect its new focus.

This report focuses on activities occurring in state fiscal year 2024 (July 1, 2023 to June 30, 2024). At the start of FY2024, NDEE was authorized for a staffing level of 273 full-time employees. At the end of FY2024, NDEE was authorized for a staffing level of 268 full-time employees. The reduction in FTE during SFY24 was due to the discontinuation of the Clean Water Act 404 Program.

The NDEE has an FY2023-24 annual budget of approximately \$108 million. This includes money from federal grants, state taxes, and fees.

The table below shows a breakdown of NDEE budgeted funds. The columns listed as aid represent the agency's budget to be redistributed to other agencies, organizations, and individuals as grants and loans. The columns listed as operations represent amounts to be used for agency operation and contracts for such things as investigations and cleanups.

Funding Type	Operations: \$ Amount	Percent of Operations Budgeted	Aid: \$ Amount	Percent of Aid Budgeted
State General				
Funds (Tax \$)	\$7.9 million	15.5%	\$0.0 million	0.0%
Cash Funds (Fees)	\$21.3 million	41.7%	\$30.9 million	53.8%
Federal Funds (Grants)	\$21.9 million	42.8%	\$26.6 million	46.2%
Total	\$51.1 million		\$57.5 million	

The following graphic depicts NDEE's FY2023-24 budget by funding source and percent budgeted by fund type and activity (aid or operations).

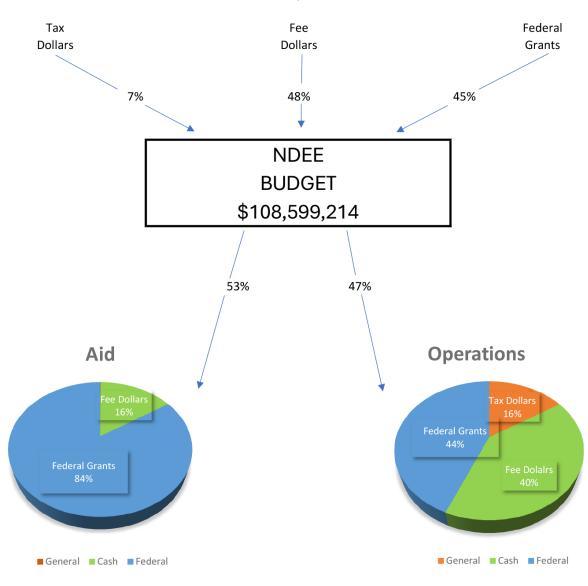


**AGENCY OVERVIEW** 

Good Life. Great Resources.

# FY 23-24 Budget

As of July 1, 2023



# **Significant Topics in 2024**

The following are some of the significant topics, challenges, and accomplishments that NDEE addressed in FY2024:

### NDEE Receives \$307 million Climate Pollution Reduction Grant

In July 2024 NDEE announced the State had been selected to receive \$307 million from the U.S. EPA's Climate Pollution Reduction Implementation Grant program – the largest grant ever received by the agency to administer. NDEE will fund measures that incentivize the adoption of climate-smart and precision agriculture measures, electrify irrigation wells and fund projects to improve energy efficiency in commercial and industrial facilities and low income households.

These implementation funds follow a \$3 million planning grant the EPA awarded NDEE in FY2023. The \$3 million grant was used to develop Nebraska's first-ever priority climate action plan (PCAP), which is available to view on NDEE's website: <a href="http://dee.ne.gov/ndeqprog.nsf/onweb/pcap">http://dee.ne.gov/ndeqprog.nsf/onweb/pcap</a>. Remaining funds will be used to develop a comprehensive action plan (CAP), due in December 2025.

The action plans propose greenhouse gas reduction measures across all economic sectors, with the PCAP proposing readily implemented measures and the CAP proposing long-term measures. By developing the PCAP, NDEE was eligible to apply for the implementation funds to carry out select measures in the priority plan.

Throughout FY2024, NDEE conducted extensive public outreach to formulate ideas and create the PCAP. Here are a number of events that took place during the plan's development:

- A kickoff webinar on Oct. 17, 2023, to provide an overview of the EPA's CPRG program. This webinar was the first step in the public participation process and provided information on Nebraska's current greenhouse gas emissions, the elements the PCAP is required to cover, the economic sectors to be considered in the planning process. NDEE also proposed potential GHG reduction measures as a starting point for participants to build off of or develop their own ideas.
- Online stakeholder workgroup sessions that took place between Nov. 28 and Dec. 19, 2023, to consider greenhouse gas emission reduction measures in various sectors of the economy. There were five working groups: Transportation, Agriculture/Natural & Working Lands, Industry/Waste & Wastewater, Energy Production, and Buildings/Housing/Communities. Each group met twice to propose and discuss GHG reduction measures that impact their industries. While these were targeted toward industry stakeholders, the events were open to public attendance.
- In-person public meetings across the state to solicit feedback from the general public on ideas that were refined through the stakeholder workgroup meetings. These events took place between Jan. 30 and Feb. 12, 2024, in Alliance, North Platte, Norfolk, Lincoln, and Grand Island.

CHAPTER 1 AGENCY OVERVIEW

After incorporating public input into the plan, NDEE submitted its completed PCAP to the EPA on March 1, 2024, and submitted its application for implementation funding on April 1, 2024.

Along with the \$307 million implementation grant announcement, NDEE introduced the name of its new implementation program called ONE RED (Opportunity for Nebraska: Reducing Emissions and Decarbonization) which will administer the grant.

More details on the planning and implementation grants are found in Chapter 4 of this report.

# **Grid Resiliency**

As part of the Infrastructure Investments and Jobs Act, NDEE received \$10.8 million from the U.S. Department of Energy's Grid Resilience State/Tribal Formula Grants program. This grant is designed to strengthen and modernize the United States' power grid against natural disasters.

The \$10.8 million award encompasses funding for years one and two of the five-year program. NDEE expects to receive \$5.4 million each year for the three remaining years for a total award of \$27 million.

In FY 2024, NDEE accepted preliminary proposals for grid resiliency projects in Nebraska. This allowed eligible entities to submit their ideas for assessment and feedback from NDEE prior developing a full application. Pre-proposals were accepted Dec. 14, 2023, through Jan. 31, 2024.

NDEE opened the application period from May 1 through June 21, 2024. The agency received 46 applications, which are currently under review.

# **Revitalize Rural Nebraska Grant Program**

NDEE administered the Revitalize Rural Nebraska Grant Program established by the Nebraska Legislature during the 2023 session. The grant program funded the demolition of dilapidated commercial properties located within the corporate limits of a city of the first or second class or a village.

Through a competitive grant process, NDEE opened the application period from Jan. 15 to Feb. 29, 2024. Grant awards were announced Aug. 16, 2024. More than \$898,000 was distributed among nine communities: Bloomfield, Chester, David City, Deshler, Falls City, Oxford, Tekamah, Wakefield, and Wymore.

To be eligible, properties had to be owned by the applying municipality, abandoned or vacant for at least six months, and not on or eligible to be listed on the National Register of Historic Places. Communities were also required to provide a local match.

# **System Mapping/Strategic Planning**

Agency leadership started strategic planning efforts in August 2019 to update NDEE's vision and mission statements and provide the agency a compass for the next one to five years.

The department's vision and mission statement are as follows:

Vision: Everyone living, working, and enjoying a healthy Nebraska environment.

**Mission:** To protect and improve human health, the environment, and energy resources. We will accomplish this through assessing, assisting, inspecting, educating, enforcing, funding, monitoring, permitting, and restoring.

### Core Values

- Integrity: Honest, accountable, consistent
- Excellence: Customer focused; commitment to quality
- Teamwork: Working together towards a common goal
- Innovation: Open to new ideas and continuous improvement
- Communication: Sharing information; respectful; active listening

Strategic planning affects both internal and external components of NDEE functions. Internally, it addresses areas of potential improvement and helps teammates work more efficiently. It also allows teammates and team leaders to focus on the future and efficiencies in day-to-day tasks. On an external level, it enables NDEE to take a more proactive approach to serving Nebraskans' needs by planning and allocating resources as needed.

# Changes to the Strategic Plan:

In late 2022, efforts commenced to redesign the Strategic Plan into something agency teammates could more easily connect with to see how the meaningful work completed each day moves us towards a shared vision and reflects our mission and values. Throughout 2023 and into 2024, agency leadership continued to collaborate to clarify our Key Goals and Strategic Focus Areas the agency intends to work towards and focus on.

To measure progress with the Key Goals and Focus Areas, a Systems



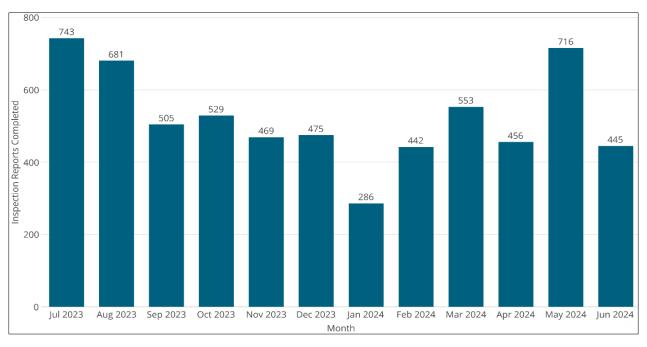
Mapping approach has evolved and depicts the agency's current top processes and metrics each uses to operate. The Systems Mapping approach is a Results-Driven approach to prioritize, connect, enable and drive the execution of work in a way that ensures every resource is focused on the Key Goals and Focus Areas and has maximum authority to act.

An Agency Wide Systems Map and corresponding Division and Section level maps were developed to identify the primary/core process and sub-process and the owner(s) of each along with the metrics to help us understand how the process is going. All help the agency work towards the Key Goals and Focus Areas.

# **Agency Annual Statistics**

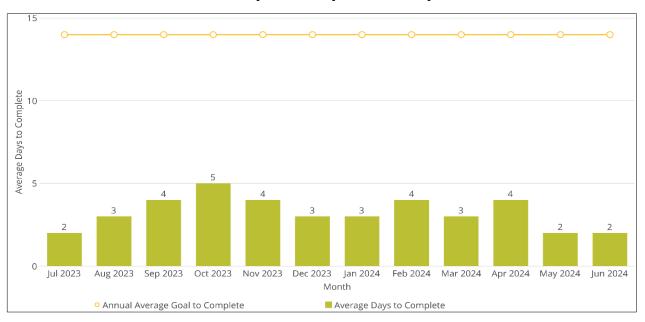
The following charts show statistics from state fiscal year 2024 (July 1, 2023 to June 30, 2024) related to Inspection Reports Completed, Time to Complete Inspection Reports, Time to Issue Livestock Construction and Operating Permits, and Water Construction Permitting. This information is updated monthly and can be found on the agency website <a href="http://dee.ne.gov">http://dee.ne.gov</a> by selecting the <a href="Monthly Metrics">Monthly Metrics</a> link.

# **Inspection Reports Completed**



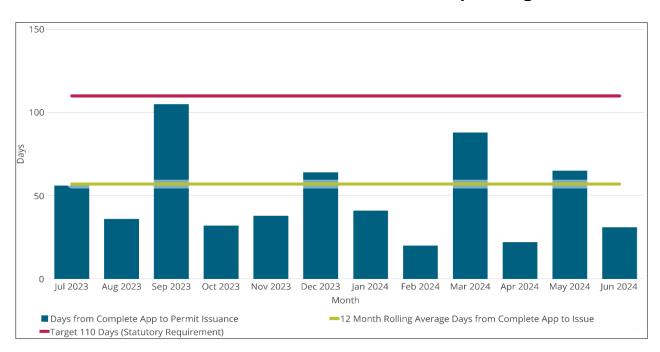
Inspectors completed all the fiscal year inspection goals set by EPA for delegated enforcement programs, while also undertaking additional inspections and complaint investigations. The jump in summer inspections is primarily due to inspections of outdoor pools by our environmental health inspectors.

# **Time to Complete Inspection Reports**



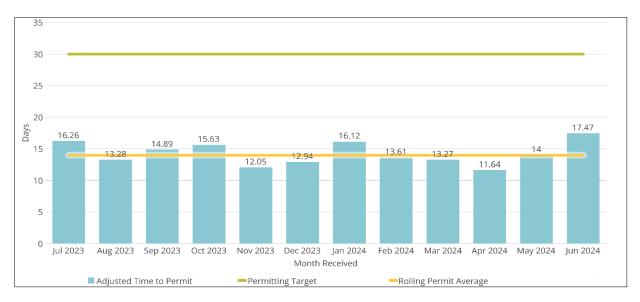
NDEE has an internal goal of no more than 14 days to complete inspection reports; that goal was met this fiscal year as shown by the chart above/below. Some inspections take a few hours while some take a few days. For purposes of consistency and timeliness of inspections, 14 days is reasonable. This enables inspectors to complete inspection reports while the details from the inspection are still fresh and allows permit holders to correct deficiencies sooner.

# **Time to Issue Livestock Construction and Operating Permits**



NDEE meets the Livestock Waste Management Act's statutory requirement to process construction and operating permits within 110 days, and averages 50 days from a receiving a complete application to permit issuance.

# Water Construction Permitting (Drinking Water, Wastewater, Onsite Wastewater, Swimming Pools)



For FY 2024 the adjusted time to process water construction permits is consistently below the department's internal permitting target goal of 30 days. The variability in permitting time reflects the relative number of projects received in the fall/winter versus spring/summer. More projects are submitted in the early spring and summer which lines up with the prime construction season. The fall/winter months typically receive fewer applications that are broader, more complex projects planned for the following construction season.

# 2024 Legislative Summary

The Nebraska Legislature enacted three legislative bills in 2024 that had a direct impact on NDEE.

**LB 867:** The legislation extends the sunset date of the Petroleum Release Remedial Action Fund from June 30, 2024, to June 30, 2028. This fund covers the investigation and cleanup costs for facilities affected by leaking petroleum tanks. NDEE oversees the program, which addresses both underground and above-ground petroleum contamination. The legislation also directs investment interest to be credited to the fund, ensuring continued financial support for these environmental remediation efforts.

**LB 880:** The Drinking Water State Revolving Fund Act was amended to streamline processes within the NDEE. The amendment removes the requirement for the NDEE Director to consult with the DHHS Director of Public Health when conducting certain non-loan activities under the federal Safe Drinking Water Act. This change allows for more efficient management and planning of intended use.

**LB 1317:** This piece of legislation allocates \$1 million to the NDEE to enhance water quality monitoring across the state. The funding will support the installation of real-time nitrate sensors in monitoring wells. These sensors will provide critical data to prioritize nitrate management and reduction, ensuring the protection of Nebraska's water resources.

# 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.

# **Administrators**

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

NDEE Environmental Managers (Division 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 NDEE 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 coordinate the various agency programmatic activities.

# **Legal Division**

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

- Supporting enforcement case development and return to compliance:
- Preparing administrative orders and other enforcement actions for the Agency;
- Coordinating Agency response to variance requests;
- Representing the Agency in administrative proceedings;
- Preparing judicial referrals to the Attorney General:
- Assisting the Attorney General as requested;
- Serving as hearing officers for public and administrative contested case hearings;
- Assisting review and development of proposed legislation, rules and regulations;
- Advising the Director and Agency staff on duties and program responsibilities:
- Advising the Environmental Quality Council as requested;
- Drafting and reviewing contracts, leases, environmental covenants, and other documents
- Reviewing other Agency documents as requested; and
- Representing the Director and Agency as requested by the Director.

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

# **Management Services**

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

### **Fiscal Services**

The Fiscal Services Section is responsible for agency finance and accounting functions, which includes managing NDEE purchasing, spending, receipting, budgeting, forecasting, and auditing responsibilities. The section has seven staff who offer financial advice and assistance to programs and also conduct financial reviews of grantees. The Section also provides significant staff assistance to support key programs and to serve as advisors in regard to financial planning, in addition to the collection, tracking and reporting applicable fees. The Fiscal Team was challenged to create ways to streamline, condense or simplify processes used in the past.

Major accomplishments during fiscal year 2024:

- Continued to refine the Federal draw process and refine payroll/non-payroll
  expenditure Federal reimbursement process. On a bi-weekly basis, Federal awards
  are reconciled to the ASAP (Automated Standard Application for Payments) website,
  where Federal award dollars are drawn, reimbursing the agency for Federal
  expenditures.
- Updated Annual Comprehensive Financial Reporting (ACFR) process to include detailed annual data for transparent reporting. Amounts reported on the annual ACFR are supported with Enterprise One Accounting System data, allowing for clear, intentional information sharing and direct roll-up reporting functionality.
- With support and assistance of the Environmental Protection Agency (EPA), NDEE simplified aspects of the negotiated indirect cost rate calculation. This will allow for a more efficient, accurate and predictable rate that reflects agency administrative financial needs.

### **Human Resources**

The Human Resources Section consists of three staff members, who together plan, direct, coordinate, and administer the day-to day human resource operations. The Human Resource team supports the agency efforts to provide a working environment that strengthens individual and organizational performance.

Human Resources has a Training Coordinator which is responsible for analyzing training needs, developing curriculum and consults with the managers and supervisors of the agency to assess training needs and develop programs to match these needs. The coordinator continually evaluates procedures to monitor and analyze course effectiveness, updates the curriculum as needed and identifies opportunities for staff personal and professional growth.

Staff retention continues to be an important goal for NDEE. Staff turnover impacts continuity in NDEE's programs and activities, and results in additional costs for recruitment and training of

replacement staff members. NDEE strives to foster and maintain an employee-friendly workplace by offering transfer and promotional opportunities for qualified internal applicants. The agency continues to look for ways to retain and attract new talent. The State of Nebraska implemented a 2% plus a 3% performance increase for on July 1, 2024

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

The summary at right shows staffing activity for FYs 2021, 2022, 2023 and 2024. With historically low unemployment, the agency has been very fortunate to have the opportunity to hire and promote 61 of the best and brightest new employees during this fiscal year timeframe. The agency continues to anticipate a large number of retirements over the next few years, as the baby boomer generation is reaching retirement age. We have been actively developing redundancy in positions (succession planning) to avoid a significant loss of agency knowledge and expertise.

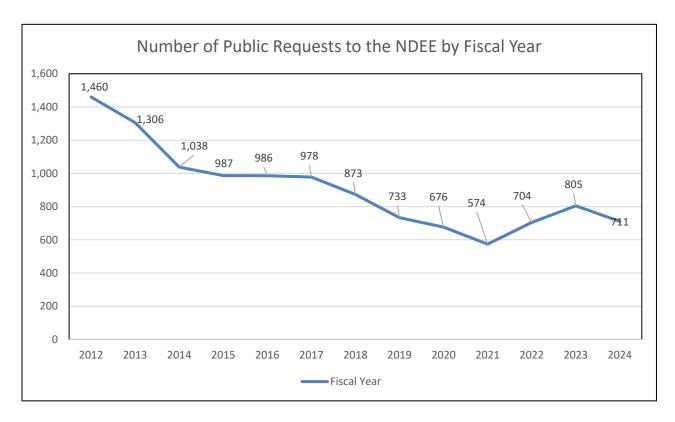
Staffing	FY21	FY22	FY23	FY24
New Hires	25	32	35	39
Retirements	17	9	9	7
Terminations	11	18	12	27
Transfers	4	8	6	18
Promotions	24	29	47	22

# **Records Management**

The Records Management Section is responsible for managing the agency's paper and electronic records, centralized mail handling process, and requests for public information. Section employees also furnish support functions to agency programs.

### In FY2024:

- NDEE has more than 1 million records that have been made available through the agency's public records portal.
- Over 189,900 records were stored in the Enterprise Content Management System (ECM) utilizing OnBase software applications from Hyland Software.
- Of these, nearly 77,000 were paper documents that were imaged and routed electronically to agency staff through a workflow process in the ECM.
- Staff in the Records Section responded to 711 requests for information. In January 2024, the agency began accepting records requests online via a public request portal through JustFOIA. Since the implementation of the new portal January 2,2024, the average response time for fulfillment of public requests is 1.54 days.
- Since 2009 the Records Section has imaged over 63,000 legacy paper files into the ECM system. All documents associated with these files are available to view on the agency's public portal.



# Information Technology

The Information Technology (IT) Section responsibilities are to assist NDEE users with any problems or concerns that are not PC hardware or software related, maintain the midrange IBM Power 10 server, web page support, GIS support and development, and application development. The vacant GIS position and a vacant Applications Developer position were filled in mid-November, which makes the IT section fully staffed.

In early 2024, IT staff began working diligently with subcontractors, Deputy Directors and Division Administrators on a new public website. The new website is scheduled to be available to the public by the end of 2024.

The application development staff is developing a new agency private intranet and a new notifications interface to provide process improvement for the Agency staff.

The Office of the Chief Information Officer (OCIO) has assigned one OCIO support staff to the Fallbrook Blvd building for PC hardware and software support. This will help the IT staff focus and be more efficient in accomplishing other work that is not PC support.

### **Public Information Office**

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

A primary responsibility of this office is to handle questions from the public and media (newspaper, television, radio and web) regarding NDEE'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 NDEE's website, <a href="http://dee.ne.gov.">http://dee.ne.gov.</a>

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: <a href="MDEE.moreinfo@nebraska.gov">NDEE.moreinfo@nebraska.gov</a>. 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 <a href="MDEE.problem@nebraska.gov">NDEE.problem@nebraska.gov</a>. The site includes phone information and procedures relating to reporting a spill or complaint. The agency has moved toward providing more standardized forms on its website, including those that can be filled online or submitted electronically.

NDEE also maintains social media accounts on Facebook, Twitter, LinkedIn, and YouTube to share agency updates, offer a resource for its audiences, and provide another way to reach the agency.

Additionally, the PIO team provides support for the small business and environment assistance program. You can review the discussion of the Department's environmental assistance activities in Chapter 4.

## **Emergency Response Program**

Through the Emergency Response Program, NDEE 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 and coordinate closely with the local, state, and federal agencies involved in emergency response incidents.



PHOTO 1 - Eppley Airport (April 2024)

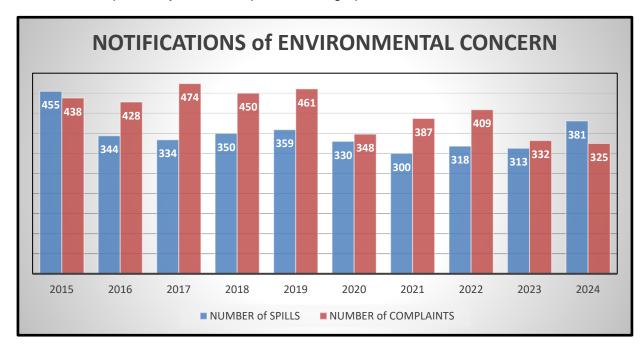
Air monitoring equipment, used for hazard assessment and safety, have been upgraded and replaced. The program has nearly completed the process of replacing aging respiratory protection equipment (SCBAs and respirators).

NDEE participated and presented at the Nebraska Traffic Incident Management Exercise (TIMEX) in November. In January, members of the NDEE Emergency Response Team travelled to St. Louis to train with USEPA On Scene Coordinators from around the U.S. NDEE personnel, in partnership with the Nebraska State Patrol (NSP) and State Fire Marshal (SFM), completed annual training related to responding to an illegal clandestine drug manufacturing (March). In June, USEPA trained NDEE, partner agencies (DHHS, NSP, SFM), local health and fire officials in performing air monitoring at environmental incidents, radiation response and responding to spills of elemental mercury.



PHOTO 2 - NDEE Training (June 2024)

The NDEE recorded 381 reports of spills in FY 2024 (July 2023 – June 2024). An additional 325 citizen complaints were recorded by NDEE in FY 2024. The number of recorded spills and complaints recorded in the past ten years are depicted in the graph below.



## Continuity of Operations

The Department has the responsibility to continue operations in the aftermath of any disaster that adversely affects its facilities and resources. The agency's *Continuity of Operations Plan* describes how we will react, respond, and recover from an incident or disaster that causes a disruption of the agency's essential functions. A functional exercise of the plan was completed in May.

## **Quality Assurance**

The EPA has requirements for conducting quality management activities for all environmental information to ensure that the Department's decisions are supported by data of known and documented quality. In turn, the Department is responsible for reviewing the procedures a project will use to collect and analyze samples, store, and manage data, and ensure the reports they write are of high quality. The *Quality Management Plan* is the framework for Quality Assurance Project Plans (QAPPs) which are written to outline these procedures. Management Assistance Division staff help coordinate the review of QAPPs by appropriate personnel throughout the Department.

The agency's *Quality Management Plan* was revised to reflect recent statutory changes in the NDEE organization and additional duties and responsibilities. The new plan was reviewed by both the agency and the USEPA Region 7 and approved in October 2022. Staff training is required and ongoing.

### **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 NDEE programs meet reporting deadlines, consolidating reports and verifying 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 NDEE 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**

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 NDEE. In addition, the Governor appoints the NDEE 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. NDEE 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 NDEE's administrative functions or day-to-day responsibilities. The NDEE Director is responsible for administration of NDEE and the rules and regulations adopted by the Council.

Following are two tables. The first lists the council members and the second summarizes Council actions for FY23-24.

# **Council Members**

Representing	Council Member	Term Expires
Agricultural Crop Production	Kevin Peterson Osceola	June 22, 2025
Ag Processing Industry	Allison Willis Aurora	June 22, 2027
Automotive/Petroleum Industry	Jill Becker Lincoln	June 22, 2025
Biologist	Amy Staples Broken Bow	June 22, 2025
Chemical Industry	Seth Harder Plainview	June 22, 2027
City Government	Marty Stange Hastings	June 22, 2027
Conservation	Vacant	June 22, 2027
County Government	Lisa Lunz Wakefield	June 22, 2027
Food Products Manufacturing	Jessica Kolterman Seward	June 22, 2025
Heavy Industry	Kurt Bogner Norfolk	June 22, 2027
Labor	Brad Bird Blair	June 22, 2025
Livestock Industry	Alden Zuhlke Plainview	June 22, 2025
Minority Populations	Tassia Steidley Lincoln	June 22, 2025
Municipal Government	Lance Hedquist South Sioux City	June 22, 2025
Physician	Timothy Tesmer, MD Lincoln	June 22, 2027
Power Generating Industry	Lynn Mayhew Grand Island	June 22, 2025
Professional Engineer	James Theiler Papillion	June 22, 2027

# Environmental Quality Council Actions July 1, 2023, to June 30, 2024

Council Meeting Date	Regulation	Action
	Resolution to Increase Borrowing Authority for the Wastewater Treatment Facilities Construction Loan Fund (CWSRF)	Approved
November 17, 2023	Resolution to Increase Borrowing Authority for the Drinking Water State Revolving Fund	Approved
	Public Hearing on 2024 Litter Percent Allocations	Approved
	Public Hearing on Amendments to Title 117	Approved
June 20, 2024	Public Hearing on 2025 Intended Use Plan and Project Priority List for Clean Water State Revolving Fund (CWSRF) and Drinking Water State Revolving Fund (DWSRF)	Approved

# CHAPTER 4:

# Air Quality Programs

The objective of the Air Quality Programs is to maintain and protect the quality of the outdoor air in Nebraska. Thousands of tons of pollutants are emitted into the air in the state each year from industrial and other human activities. These air pollutants can affect human health. cause property damage, harm the environment, and reduce visibility. The Air Programs work to maintain Nebraska's air quality by implementing state and federal air quality regulations, through permitting and compliance activities for stationary sources, and by monitoring outdoor ambient air for regulated pollutants. Nebraska's air quality rules are set forth in Nebraska Administrative Code (NAC) Title 129 - Nebraska Air Quality Regulations (Title 129).



Nebraska enjoys good ambient air quality, with all parts of the state in compliance with federal and state ambient air quality standards.

The regulated air pollutants of most concern are particulate matter, ozone, nitrogen oxides, sulfur dioxide, carbon monoxide, and lead. These pollutants are subject to National Ambient Air Quality Standards (NAAQS). All areas of the state are currently in attainment, meaning that the state has air at least as clean as the federal health-based standards for these pollutants. Maintaining compliance with these federal standards is important to protect the public health. NAAQS nonattainment could result in additional requirements and significant economic costs to regulated facilities and the state. The Department also regulates the emission of substances defined by the U.S. Environmental Protection Agency (EPA) as hazardous air pollutants (HAPs), which are toxic substances known to cause cancer or have other serious health impacts. Title 129 does not include any requirements specifically for the control of odors, however, many of the pollutants that are regulated do have an odor, so by minimizing such pollutants, odors may in turn be reduced.

The Air Quality Programs are found in several Divisions of the Department. In the Permitting and Engineering Division, air quality construction permits and operating permits are issued and air dispersion modeling is performed. The Inspection and Compliance Division compiles emission inventories and conducts inspections and other compliance and enforcement activities. The Remediation and Monitoring Division maintains an ambient air quality network and evaluates stack tests. Regulatory development, as well as state implementation plan maintenance is done within the Legal Division.

Lastly, the agreements with three local agencies — Lincoln-Lancaster County Health Department, Omaha Air Quality Control, and Douglas County Health Department are managed through the Planning and Aid Division. These local agencies have accepted responsibility for various facets of the air quality program within the jurisdictions of those agencies including air quality monitoring, permitting, and enforcement.

# **Air Quality Permitting**

An air quality permit sets practical enforceable limits on the amounts of pollutants that a facility may emit, ensuring that facilities are constructed and operated in a manner that protects the quality of the surrounding ambient air. The Department issues two main types of air quality permits: construction permits and operating permits. A construction permit may be required for a facility before the construction or modification of an emission unit. An operating permit may be required for an existing facility source of certain air pollutants. Currently, there are over 1,200 facilities that have received a construction permit and/or an operating permit.

Title 129 provides for two types of construction and operating permits: individual and general. Some sources are not eligible for coverage under general permits. Some sources will require a construction permit but may not require an operating permit.

Individual permits are available for all regulated sources. These permits include all requirements applicable and specific to that source and location. Because it is tailor made for the source, significant time and labor is required for each permit issued. The individual permit process includes a required public notice with a 30-day comment period, which also offers the public the opportunity to request a public hearing.

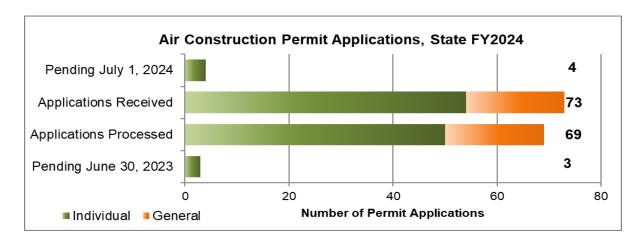
A general permit covers all sources in a particular industrial category, provided that the source meets the applicability criteria, applies for, agrees to the conditions of and obtains coverage. Requirements for a general permit are established in that general permit. Each general permit is issued only once (including the public notice period). Eligible applicants then apply for and obtain coverage without the need to develop an individual permit for that facility or to go through a public comment period each time coverage is approved for an eligible source under that general permit.

General construction permit coverage is currently available for eligible sources in nine categories (including time-sensitive construction activities), and general operating permit coverage is available for one category (small incinerators). Approval of general permit coverage takes much less time for the agency and for the facility than an individual permit. An online-only application process is used for general permit coverage, and approval may take only 5 days or less.

## **Construction Permit Program**

The Department has maintained a construction permit program for air contaminant sources since the 1970s. The program is referred to as the New Source Review (NSR) program and has two categories; a minor source program (state) and a major source program (federal Prevention of Significant Deterioration). Both programs require facilities to obtain a permit before they construct, reconstruct, or modify any air contaminant source or emission unit where there is a net increase in the potential to emit above thresholds specified in Title 129 for particular pollutants. Only sources with potential emissions at or above these thresholds are required to obtain a construction permit. A construction permit is valid for the life of the covered emission units.

The following graph summarizes construction permit applications received, processed, and pending during the 2024 state fiscal year. (Note: The *Processed* category includes permits issued, withdrawn, denied, and determinations of no permit required.)

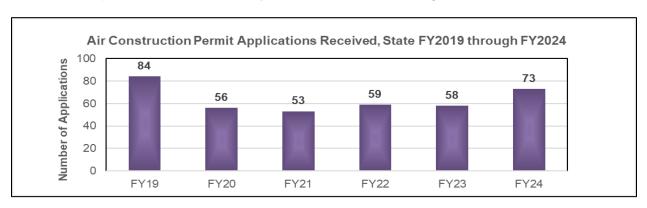


The Prevention of Significant Deterioration (PSD) program applies to construction of new major sources or modifications to existing major sources that emit significant levels of certain types of pollutants. The purpose of the PSD program is to protect air quality in areas where the air is cleaner than the ambient air quality standards while still allowing industrial and economic growth. The objective is to continue to maintain compliance with the health-based ambient air quality standards.

For facilities regulated under the construction permit program that emit pollutants at levels sufficient to trigger PSD requirements, air engineering staff conduct additional, more rigorous reviews to ensure that best available control technology will be employed to minimize impacts on the environment. The NDEE must also assure that the source will not cause or contribute significantly to any deterioration of air quality or violations or exceedances of the ambient air quality standards.

The PSD program helps to protect visibility in nearby national parks and wilderness areas. The Department notifies federal land managers and nearby States and Tribes of pending PSD decisions so those authorities can share relevant concerns for potential impacts.

The economy and business activity in the state impact the number of air quality construction permit applications received each year. The following graph shows the number of construction permits received annually from state FY2019 through FY2024.



## Air Dispersion Modeling

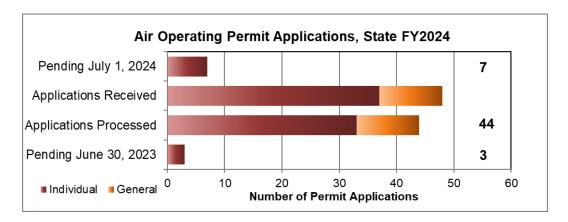
Air dispersion computer models predict how air pollutants emitted by a facility spread and disperse. These regulatory models use expected emissions, meteorological and geographical data, and other factors to estimate ground level concentrations of air pollutants at a large array of locations outside of the facility fence line. In a relatively short amount of time, a model can predict the maximum potential ground-level impact of facility emissions in a standardized and cost-effective manner.

Modeling is required with most air quality construction permit applications as part of the Department's review. An air dispersion model is the primary tool used to determine if, as permitted, the emissions from a new or modified facility or modification will comply with current health-based ambient air quality standards. Models are also used as a design tool to analyze the effects of different pollution control strategies. The air dispersion modeler reviews the inputs and outputs of the models that facilities provide as part of their construction permit applications. These reviews include facility emissions and meteorological data, background concentrations, existing nearby facilities, the modeling protocol, and the final modeling results.

# **Operating Permit Program**

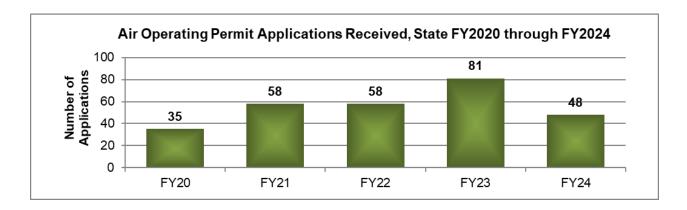
As required by Title V of the Federal Clean Air Act Amendments of 1990, Nebraska issues operating permits for Class I (major) sources of certain air pollutants. The Department also regulates minor sources using Class II operating permits as required under Nebraska law. Application for an operating permit is required by Title 129 within 12 months of startup of a regulated air contaminant source. Until recently, Title 129 provided for operating permit terms up to five years, after which the permit must be renewed. When Title 129 was revised in September 2022, changes to the operating permit program were made which allow the Department to issue Class II operating permits for a term longer than five years. An operating permit contains all applicable requirements for emission points at a facility. For a large, complicated, growing facility, an operating permit incorporates requirements from all construction permits issued for the facility, providing the source with one permit document to help compliance with all associated air permitting requirements.

The chart on the following page provides statistics on the number of operating permit applications received, processed, and pending during the 2024 state fiscal year. These statistics include general permit coverage approvals. The current general operating permit for small incinerators was issued in SFY2018, replacing the previous five-year general operating permit that expired that year. The general operating permit coverages issued in SFY2022 were for new applicants requesting coverage for small incinerators. The current general operating permit for small incinerators is available through an efficient online process, whereas the previous general permit required a paper application.



The Nebraska operating permit program also offers an innovative alternative for major sources that have taken measures to keep their emissions very low, called the Low Emitter Rule. To be eligible, a Class I (Title V) source must document five years of actual emissions at or below the minor source (Class II) threshold levels, meet other requirements established in the regulations, and not otherwise be required to obtain an operating permit. Since its inception in 1997, the Low Emitter Rule has allowed over 100 active sources to opt out of their Class I (Title V) operating permits, with no identifiable degradation of air quality in Nebraska.

The five-year renewal cycle, past delays in issuing renewals, and other factors have resulted in wide variations over time in the numbers of operating permits up for renewal each year. The chart below summarizes air quality operating permit applications received from State FY2020 through FY2024 (applications for all application types, including permit revisions, general operating permits, low emitters, etc.).



### Permit Program Process Improvements

Individual construction and operating permits are complex, highly technical documents that must address all emission points for various pollutants at a facility in a manner that is enforceable as a practical matter. Processing a permit application includes complex analysis with multiple steps and personnel. In FY2020, the Operating Permits Team undertook a process improvement project on operating permit renewals and applications. The project resulted in a significant reduction in the time needed to prepare and process an operating permit renewal application. One applicant estimated an 80% reduction in their application preparation time. The Air Programs have documented similar savings in staff time to process the renewal.

Each construction and operating permit include a fact sheet, which provides a technical description of the facility, applicable regulatory requirements, and a statement of basis for each permit condition. Air Program staff made significant fact sheet process improvements in FY2018 and will revisit permit fact sheets each year to pinpoint opportunities for streamlining. Additional improvements were made in FY2022 that continue to make these fact sheets more uniform and easier to understand, making compliance easier for facility staff, which also assists the efforts of agency compliance inspectors.

With the process improvement event that started in 2016, fact sheet project initiated in 2018, and other ongoing efforts, the average time required to reach a decision on a construction permit application improved significantly from 188 days to approximately 120 days (including online-only general construction permit coverage) at the end of FY2024. The operating permit application backlog was also significantly improved down from approximately 120 applications a few years ago to 7 applications pending at the end of FY2024, even with a steady influx of applications. Although some impacts of improvements may not be realized in the immediate future, sources with permits being issued now should see processing times significantly improved at permit renewal time.

The Air Quality Permitting Programs have consistently had a significant amount of staff turnover, leading to recurring discussions about permit decisions, regulations, and other challenges. The Air Program staff established an electronic Air Quality Permitting Compendium that allows important information about existing permits — such as permit decisions, regulatory determinations, and internal procedures — to be archived, easily searched, and readily accessible to Air Program Staff. In addition, the Air Program revamped new employee onboarding procedures. These are two examples of the significant efforts to help improve staff training and permitting consistency. This tool allows Air Program staff to research past permitting actions and associated publications and documents to help facilitate more rapid permit and uniform permit decisions.

# **Air Compliance**

# **Ambient Air Quality Monitoring Program**

The Clean Air Act requires the 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 (PM)
  - With a diameter of 10 micrometers or less (PM<sub>10</sub>)
  - o With a diameter of 2.5 micrometers or less (PM<sub>2.5</sub>)
- Sulfur Dioxide (SO<sub>2</sub>)
- Nitrogen Dioxide (NO<sub>2</sub>)
- Carbon Monoxide (CO)
- Ozone (O<sub>3</sub>)
- Lead (Pb)

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

## Nebraska Ambient Air Monitoring Network

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

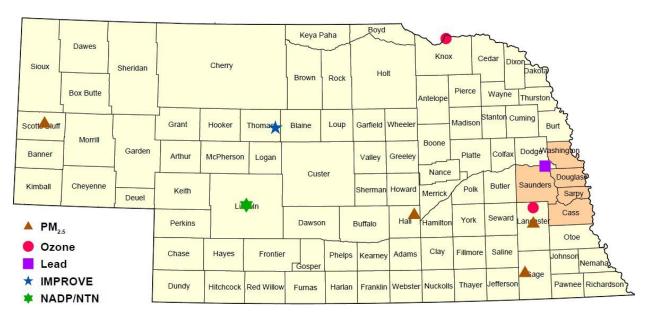
Three agencies are involved in the day-to-day operation of the network: NDEE, Lincoln-Lancaster County Health Department, and Douglas County Health Department. Omaha Air Quality Control (part of the Omaha Public Works Department) also provides technical support for network-related activities.

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. The Department evaluates the adequacy of its monitoring network in accordance with federal regulations each year. Changes may be made to the network due to changes in monitoring regulations, updates to the ambient standards, perceived changes in pollution trends, and/or funding issues. Loss of site access is another consideration that occasionally affects the network.

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



# Nebraska Monitoring Sites Outside of the Omaha Metropolitan Statistical Area

PM<sub>2.5</sub>

Lincoln (Lancaster County)
Grand Island (Hall County)
Scottsbluff (Scotts Bluff County)
Beatrice (Gage County)

Ozone

Davey (Lancaster County) Santee (Knox County)

Lead

Fremont (Dodge County)

IMPROVE

Nebraska National Forest (Thomas County)

NADP/NTN

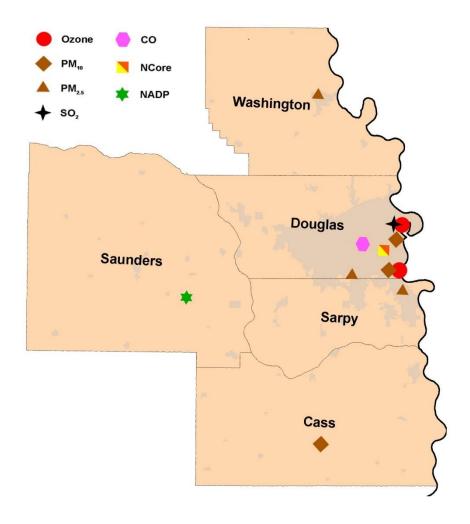
Maxwell (Lincoln County)

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

The state map above shows the nine monitoring sites that are located outside of the Omaha-Council Bluffs Metropolitan Statistical Area (counties shown in orange). Four of these sites are operated by the Department, either directly or under contract. The two sites in Lancaster County are operated by the Lincoln-Lancaster County Health Department with NDEE 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.

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

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



## **Carbon Monoxide**

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

### **NCore**

4102 Woolworth Avenue

# NADP/NTN

Mead, Saunders County

### **Ozone**

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

### PM<sub>2.5</sub>

Omaha, 4102 Woolworth Avenue (NCore) Omaha, 9225 Berry Street Bellevue, 2912 Coffey Avenue Blair, 2242 Wright Street

### Sulfur Dioxide (SO<sub>2</sub>)

Omaha, 4102 Woolworth Avenue (NCore Trace Monitor) Omaha, 1616 Whitmore Street

# $PM_{10}$

Omaha, 19<sup>th</sup> & Burt Streets
Omaha, 2411 O Street
Omaha, 4102 Woolworth Avenue (NCore)
Weeping Water, 102 P Street

## **Updates to the Monitoring Network**

In work beginning in 2022 and completed this year, NDEE has provided American Rescue Plan grant funds to the Lincoln-Lancaster County Health Department and Douglas County Health Department to improve continuous monitoring of PM<sub>2.5</sub>, sulfur dioxide, and ozone. The grant funded replacement of eight monitors at six sites in Lancaster and Douglas Counties along with auxiliary support equipment.

The Interagency Monitoring of Protected Visual Environments (IMPROVE) site in the Nebraska National Forest near Halsey (Thomas County) was destroyed in October 2022 by the Bovee wildfire. The fire consumed nearly 19,000 acres of grassland and forest in this northern Sandhills region, destroying a campground lodge, cabins, and lookout tower. At the IMPROVE site near the lookout tower, the wooden shelter, particulate samplers, and the overhead electrical line to the site were all destroyed.

NDEE, which provides administrative support for the site, obtained grant funds in 2023 through an Inflation Reduction Act – Clean Air Act program to restore this IMPROVE site. Working with the Bessy Ranger District of the USDA Forest Service and Custer Public Power District, a new underground electric service line has been completed to the site. NDEE staff have constructed a new shelter, and an electrical contractor has installed wiring and outlets. IMPROVE program staff are expected to complete installation of new particulate samplers at the site in fall of 2024.





Photos of IMPROVE monitor site in Nebraska National Forest. Left: remains of shelter after the Bovee Fire in October 2022. Right, new monitor shelter at the site. Photos by NDEE.

NDEE has also received an Air Monitoring Direct Award from an Inflation Reduction Act program. These funds are being used to establish continuous ozone monitoring in Grand Island, Nebraska's fourth largest city by population. The new monitor will be installed at the current PM<sub>2.5</sub> monitoring site. New equipment has been purchased, and installation will be complete before the beginning of the 2025 ozone monitoring season in March.

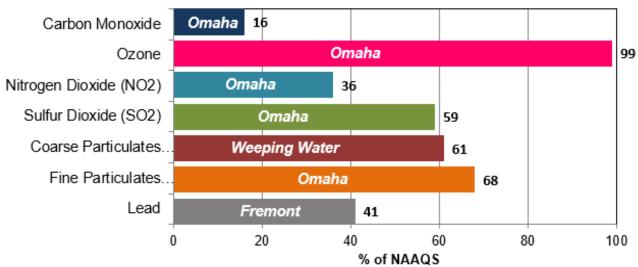
## **Monitoring Information Online**

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

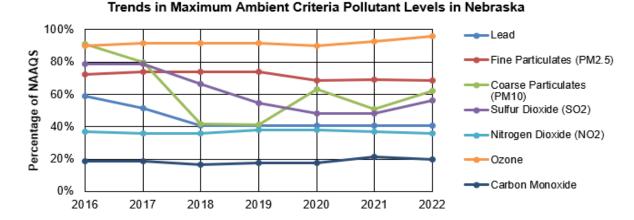
## Compliance with National Ambient Air Standards (NAAQS)

Current air quality monitoring data shows that all areas of Nebraska are in attainment (in compliance) with the NAAQS. The chart 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 the highest readings for all criteria pollutants are below 100%.





In March 2024, EPA revised the primary annual  $PM_{2.5}$  standard by lowering the regulatory level from 12.0 micrograms per cubic meter to 9.0 micrograms per cubic meter. Recent data from all monitoring sites in Nebraska are in compliance with both the old and new standard. NDEE will be submitting recommendations for Nebraska county designations in early 2025.



The chart above shows trends in the maximum measured levels of criteria pollutants in Nebraska from 2016 through 2022. The value for each pollutant and year is the maximum measured at any monitoring site in the state (as a percentage of the NAAQS for that pollutant). Ozone is the criteria pollutant of most concern, as maximum levels have remained above 90% of the NAAQS at a number of urban and rural monitor sites in Nebraska as well as in the adjacent states. Levels for ozone, NO<sub>2</sub>, CO, and PM<sub>2.5</sub> have remained fairly constant or have declined slightly since 2016, while the maximum SO<sub>2</sub> level has decreased significantly since 2017. The level and location of the maximum PM<sub>10</sub> readings have fluctuated widely during this period.

The Department 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 Department website: <a href="http://dee.ne.gov/Publica.nsf/Pubs-Air-Amb.xsp">http://dee.ne.gov/Publica.nsf/Pubs-Air-Amb.xsp</a>.

# 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 Program 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 Department when compliance issues are serious, chronic or cannot otherwise be resolved. This table lists the compliance activities conducted by the Department during the year.

FY2024 Air Compliance Activity	NDEE
On-site Inspections	195
Facility Stack Tests Conducted	107
On-Site Observations Conducted	39
Continuous Emission Monitoring Audits Conducted	35
On-site Observations Conducted	11
Complaints Received	61
Burn Permits Issued	41
Burn Permits Denied	20
Burn Permits Withdrawn	0

# **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. Emission inventories are due on March 31 each year for the previous calendar year. Every three years, the Department assists the EPA in preparing a comprehensive national inventory of emissions. The 2023 national inventory has been submitted and uses emissions reported by sources for the calendar years 2021-2023. The emissions inventory is used to support the planning efforts for national rulemaking and to assess trends in emissions through time.

The Department also uses the emission inventories to determine the assessment of annual emission fees. Facilities that emit major sources of air pollution are required to pay emission fees for each ton of pollutant emitted during the previous calendar year. The maximum emission for which a fee is assessed is 4,000 tons per pollutant. For electrical generating facilities with a capacity between 75 and 115 megawatts, the maximum emission for which a fee is assessed is 400 tons per pollutant. The Department attempts to set the fee rate at the minimum level needed to pay reasonable direct and indirect costs of developing and administering the air quality permit program. An analysis detailing how the Department arrived at the fee rate is made available to fee payers. The rate for emissions generated in 2023 was \$56 per ton.

The Department transitioned to an online reporting system called State and Local Emissions Inventory System (SLEIS) during calendar year 2019. Training sessions for those new to the system continue on an annual basis.

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

National Ambient Air Quality Standards (NAAQS) are established by EPA for six pollutants: carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter ( $PM_{2.5}$  and  $PM_{10}$ ), and sulfur dioxide. EPA periodically reviews the NAAQS using the most current scientific information available and revises or retains the standards as appropriate. When a new or revised standard is issued, states determine their compliance (attainment) status with respect to the standard and submit to EPA their recommendations for attainment or nonattainment designations for areas within the state. State Implementation Plans (SIPs) are then developed to describe how the state meets the CAA requirements for the NAAQS, specifically describing how the Department will implement, maintain, and enforce the standard.

At the present time, Nebraska is in attainment with each of the NAAQS. Planning activities are currently underway to address the recently revised Particulate Matter annual primary standard, which was strengthened; proposed revisions to state Air Quality regulations (Title 129); and Regional Haze. At the federal level, EPA is undertaking a new review of the ozone standard; conducting its review of the lead standard; and finalizing its review of the secondary (welfare-based) sulfur dioxide, nitrogen oxides, and particulate matter standards. EPA recently finalized its approval of Nebraska's SIP revision for Title 129.

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

The 2010 sulfur dioxide (SO<sub>2</sub>) standard required states to demonstrate attainment in the areas surrounding large sources of the pollutant. EPA finalized the Data Requirements Rule

(DRR) in 2015 to assist in implementation of the 2010 standard, requiring characterization of the air quality near sources that emit 2,000 tons per year or more of SO<sub>2</sub>. Sources in Nebraska subject to this rule include coal-fired power plants, specifically Whelan Energy Center (Adams County), Sheldon Station (Lancaster County), North Omaha Station (Douglas County), Gerald Gentleman Station (Lincoln County), and Nebraska City Station (Otoe County).

EPA issued its designations of attainment for Nebraska areas in 2016, 2018, and 2021; all areas continue to comply with this standard.

The DRR requires annual reporting (termed "ongoing requirements") for areas characterized by modeling, and this year's report was submitted as part of the Nebraska's annual Ambient Air Monitoring Network Plan in July 2024. The two areas subject to these ongoing requirements surround Whelan Energy Center and Gerald Gentleman Station; the area around Nebraska City Station was also addressed in this year's report due to an increase in emissions. Facility emissions data indicate that all areas in Nebraska continue to demonstrate attainment with the federal standard.

### Ozone

EPA issued revised ozone standards in 2015, lowering the standard from 0.075 parts per million (ppm) to 0.070 ppm. In November 2017 EPA designated the entire state of Nebraska as in attainment and approved Nebraska's SIP revision for ozone in April 2020. In December 2020, following a review of the standard, EPA retained the current NAAQS; in October 2021 it announced a decision to reconsider the previous administration's retention decision. EPA is expected to release the Integrated Review Plan to describe the timeline of its review of the standard in late 2024.

#### Particulate Matter

EPA finalized its review of the particulate matter (PM) standards, initiated based on its concern that the standards retained in 2020 are not adequate. A final rule with a revised annual PM<sub>2.5</sub> standard was issued in February 2024. The primary (health-based) annual standard was strengthened, and the secondary annual standard and primary and secondary 24-hour standards were retained. Because the annual primary standard is used as the lower breakpoint for the Moderate Air Quality Index (AQI) category, this revision was anticipated to result in more days with Moderate AQI during prescribed burning and wildfire season. It's important to note that Moderate AQI is reflective of elevated levels of PM<sub>2.5</sub> that are at or below the NAAQS.

NDEE is preparing its designation recommendations to address the revised standard (to recommend that all areas of Nebraska are in attainment) for submission to EPA later this year. The next step will be development of a revised SIP to address the more stringent annual standard.

### Lead

EPA's review of the lead standard is underway and the Risk and Exposure Assessment and Policy Assessment are expected to be completed by early 2025. Nebraska was designated in attainment with the NAAQS by EPA in 2011 and the state's SIP revision was approved in 2015.

## Regional Haze

Regional Haze refers to impaired visibility at national parks and wilderness areas caused by particulates in the atmosphere. EPA issued the Regional Haze Rule in 1999 to improve visibility in these areas, requiring state and federal agencies work together to achieve this goal. Numerous amendments to the Rule have been issued addressing the Cross-State Air Pollution Rule (CSAPR) as an alternative to Best Available Retrofit Technology (BART) for particular pollutant sources, and regulatory requirements for SIPs. In addition, guidance and technical support documents were provided to assist states in preparing SIPs for the second implementation period (2019-2028). EPA is preparing to undertake a revision to the most recent rule to address the third implementation period (2029-2038).

Nebraska submitted its Regional Haze 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 analysis for sulfur dioxide for NPPD's Gerald Gentleman Station (GGS) and the state's long-term strategy for regional haze insofar as it relied on the BART determination. EPA issued a Federal Implementation Plan (FIP) that relies on the Cross-State Air Pollution Rule (CSAPR) to satisfy BART for sulfur dioxide at GGS. This source participates in the CSAPR trading program, which allots each source an emissions budget for SO<sub>2</sub> and permits trading of allotments. The remaining disapproved portion (long-term strategy) is being addressed by a proposed FIP published in August 2024. Prior to this proposal, no additional control measures have been required.

The Department submitted its Regional Haze Five-Year Progress Report in April 2017, and recently submitted its SIP revision for the second implementation period on August 20, 2024. This revision addresses portions of the initial SIP and progress report, as well as state obligations for the current implementation period that ends in 2028. EPA review and rulemaking is pending.

### Municipal Solid Waste Landfill Plan

On May 21, 2021, EPA finalized the federal implementation plan for municipal solid waste landfills (MSWL). The plan supports the following federal rule located at 40 CFR Part 60 Subpart Cf: Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills. The emission guidelines apply to landfills constructed prior to July 17, 2014 which accepted waste after November 8, 1987, and lowered the threshold for which facilities must install gas collection and control equipment from 50 Mg/yr to 34 Mg/yr of nonmethane organic compounds (NMOCs).

# **Air Toxics Program**

EPA currently lists 188 substances as hazardous air pollutants, or air toxics, which are air pollutants known to cause cancer and other serious health impacts. The Department developed an Air Toxics Notebook, found on the agency website, as a reference tool for the air toxics program and developed a set of web pages for the New Sources Performance Standards (NSPS), which are federal rules that apply largely to new stationary sources.

Both sets of rules have been issued by EPA. The Notebooks are intended to help the regulated community and the public understand the air toxics and NSPS regulations. For each standard the Notebook contains a page that provides applicability information, regulatory citations, amendment dates, guidance documents, and forms.

## **Smoke Awareness Program**

The impact of prescribed fires and wildfires on Nebraska's air quality continues to receive attention statewide. In early to mid-spring, ranchers and land managers burn an average of two million acres of tallgrass prairie in the Flint Hills of Kansas to control invasive plant species and to encourage growth of pasture grasses. Unpredictable spring weather conditions may provide only a few days of optimal weather for burning, which can result in widespread burning and large amounts of smoke on those days. Wind from the south is typical during the spring and Nebraska may experience air quality impacts (elevated fine particulates, known as PM<sub>2.5</sub>, and ozone) for 24-48 hours following these events. Rangeland prescribed burning and wildfires also occur in Nebraska, with the number of incidents and acres burned due to human-caused fires increasing dramatically in 2022, making it the second worst year for wildfires in state history.

Impacts on air quality in Nebraska from wildfires continue to draw more interest due to drought conditions in the state and recurring annual wildfires in Canada and the Pacific northwest. Air quality impacts that persist over several days due to heavy smoke from these fires are becoming more common and often impact large areas of the United States, typically in the form of fine particulate matter (PM<sub>2.5</sub>). In June 2023, portions of the state were impacted by elevated ozone levels – a pollutant that forms when nitrogen oxides (NOx) and volatile organic compounds (VOCs) react in the presence of sunlight. Elevated ozone levels are uncommon in Nebraska and these occurrences were attributed to Canadian wildfire smoke impacting the area. Air quality thus far in 2024 has been minimally impacted by smoke from prescribed burning and wildfires.

The Department continues its collaborative efforts with key stakeholder agencies in state FY2024, and held a pre-season meeting in March 2024. Participants included NDEE and other Nebraska agencies, local health departments, EPA, University of Nebraska, National Weather Service, adjacent state and local air agencies, and land managers who rely on prescribed fire as a management practice. Other activities included outreach and notification of potential smoke and air quality impacts, collaboration with Nebraska DHHS and local air agencies to develop quidance for schools and youth sports, and planning for future burn seasons.

Tasks performed by NDEE staff during the 2024 burn season include:

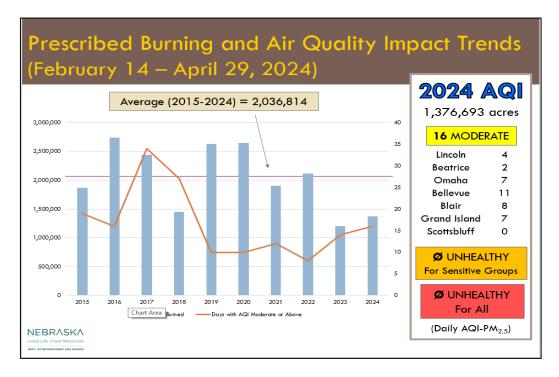
- Monitoring air quality (PM<sub>2.5</sub> and ozone levels)
- Generating maps showing fire locations and smoke plumes
- Reviewing weather and smoke forecasts, prescribed fire and smoke updates from Kansas, and smoke prediction models
- Updating the NDEE Smoke Awareness webpage with current information on smoke impacts and pollutant monitoring
- Discussions with stakeholders to determine the likelihood for smoke impacts and to generate advisories/alerts for the public
- Coordinating Air Quality Advisories with the Nebraska Department of Health and Human Services (DHHS)
- Generating and coordinating Air Quality Alerts with the National Weather Service
- Providing email updates to stakeholders on air quality conditions and wildfire conditions
- Interpreting and deploying National Weather Service software technologies.

Agency staff coordinate and consult with other stakeholder agencies on days when heavy burning and smoke impacts are predicted. If a health advisory is warranted, NDEE staff coordinate with the Nebraska DHHS to issue a Smoke Advisory, and with NWS to issue an Air Quality Alert to the public. In calendar year 2024, advisories and alerts were issued for July 25-26, July 30-31, and August 16-18. The Department takes a conservative approach to ensure that advisories and alerts are not issued unless confidence in predicted conditions and consensus among stakeholder agencies is strong.

EPA uses the Air Quality Index (AQI) to report air quality conditions to the public through its webpage at https://www.airnow.gov/. The AQI is similar to a yardstick that runs from 0 to 500 – the higher the value, the greater the amount of air pollution and greater the health concern. AQI values ranging from 0 to 50 (*Good* AQI) and from 51-100 (*Moderate* AQI) are indicative of pollutant concentrations in compliance with the NAAQS. At concentrations within the *Moderate* AQI category, those who are unusually sensitive to air pollution may experience health effects such as coughing or shortness of breath.

Higher AQI values (101-150) fall within the *Unhealthy for Sensitive Groups* AQI category; those in sensitive groups may experience health effects such as coughing or shortness of breath at this AQI level. Sensitive groups include people with heart or lung disease, older adults, children and teenagers, minority populations, and outdoor workers. At the *Unhealthy* AQI level (151-200), it's possible that everyone may experience health effects.

During the 2024 prescribed burn season, Nebraska experienced a total of 22 days with an Air Quality Index (AQI) for fine particulates (PM<sub>2.5</sub>) in the *Moderate* range (29% of days) and no days in the *Unhealthy for Sensitive Groups* or *Unhealthy* range, as noted in the chart below. There were four days (5%) with *Moderate* AQI for ozone, one of which was concurrent with a *Moderate* AQI day for PM<sub>2.5</sub>. During prescribed burn seasons for the previous five years (2019-2023) Nebraska has averaged 24 days in the *Moderate* category, about one day in the *Unhealthy for Sensitive Groups* category, and less than one day for the *Unhealthy* category.



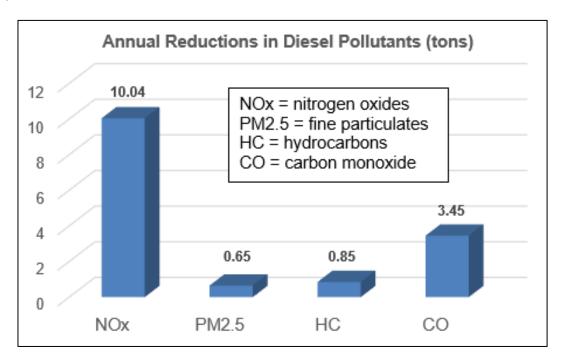
The 2024 wildfire season produced 71 days with *Moderate* AQI, with no days in the *Unhealthy for Sensitive Groups* or *Unhealthy* AQI range through the month of October. In 2023, the state experienced 70 days with an AQI of *Moderate* or higher; of these days, 21 were in the *Unhealthy for Sensitive Groups* AQI range and two were in the *Unhealthy* AQI range.

Though impacts from both prescribed burning and wildfires affect local air quality it has not compromised the State's attainment status. In fact, Nebraska remains one of the few states to comply with all of the NAAQS.

#### **Nebraska Clean Diesel Rebate Program**

The Department established the Nebraska Clean Diesel Program in 2008 to distribute federal funding received from the EPA to reduce diesel emissions, as authorized by Congress in the Diesel Emissions Reduction Act (DERA). The DERA program provides annual funding 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. Starting in 2017, NDEE has elected to supplement the federal grant in most years with funds from Nebraska's portion of the *Volkswagen Diesel Emissions Environmental Mitigation Trust* (*VW Trust*; see next section), which earns bonus EPA funding.

For the Clean Diesel Rebate Program annual funding cycle that opened in October 2023, NDEE has awarded or expects to award \$599,411 in rebates to 31 irrigation engine projects. The irrigation engine rebates are for replacement of a diesel irrigation engine with an electric motor (to power a surface pump) or for connecting an existing submersible pump directly to the electric grid. The rebate reimburses up to 60% of the cost of the electric equipment, installation, and required extension of electric service lines, up to a maximum reimbursement of \$20,000. All replaced diesel engines must be scrapped in order to eliminate their emissions. Estimated annual reductions in diesel pollutants expected from these replacement projects are shown below.



## 2023-2024 Irrigation Engine Replacement Rebates: \$599,411

Name	County	Replacement	Rebate Amount
Peter Baumgartner	Lincoln	Electric Motor	\$20,000
Sheralee Boe	Madison	Electric Motor	\$18,888
Peter E. Brummels	Cedar	Electric Motor	\$20,000
Shane Czarnick	Nance	Electric Motor	\$20,000
DBR Farms Inc.	Thayer	Electric Motor	\$20,000
Eagle Creek Acres	Holt	Electric Motor	\$19,603
Harry Feeny	Lincoln	Electric Motor	\$20,000
Lori Fricke	Butler	Electric Motor	\$20,000
Terry K. Harimon	Morill	Electric Motor	\$20,000
Herman's Heritage LLC	Fillmore	Electric Motor	\$20,000
Cody Jensen	Greeley	Electric Motor	\$9,869
Keetle Farms Inc.	Antelope	Electric Motor	\$16,711
Kemling Farms LLC	Perkins	Electric Motor	\$20,000
Kerkman Sandhills Farms	Antelope	Electric Motor	\$20,000
Collin Krupicka	Thayer	Electric Motor	\$19,979
Eric Krupicka	Thayer	Electric Motor	\$18,210
Maxwell-Zikmund LLC	Butler	Electric Motor	\$20,000
Keith Reichmuth	Madison	Electric Motor	\$20,000
Sandi Reichmuth	Madison	Electric Motor	\$20,000
Robert Sandberg Jr.	Keith	Electric Motor	\$20,000
Sanne Trust	Antelope	Electric Motor	\$20,000
T&T Bader Farms	Butler	Electric Motor	\$20,000
Nelson and Kelly Trambly	Franklin	Electric Motor	\$17,933
Nelson F. and Maryetta Trambly	Franklin	Electric Motor	\$20,000
Twin Pine Ranch	Custer	Electric Motor	\$20,000
Matthew Winkelbauer	Holt	Electric Motor	\$20,000
Adam Woitaszewski	Hall	Electric Motor	\$20,000
Andrew Woitaszewski	Hall	Electric Motor	\$18,218
Yindrick Farms LLC	Butler	Electric Motor	\$20,000
Todd Yindrick	Butler	Electric Motor	\$20,000
Bruce Young	Keith	Electric Motor	\$20,000



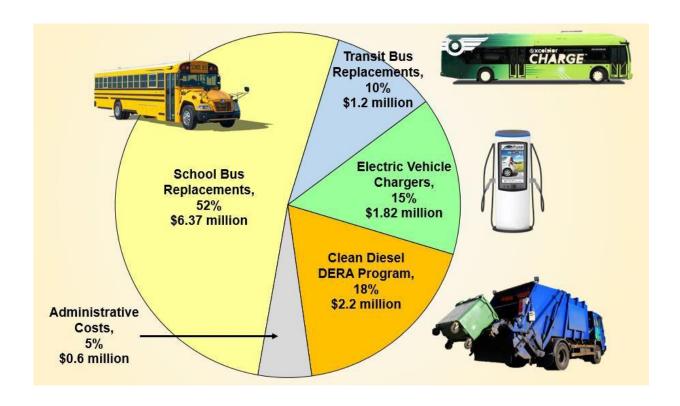
New electric motor and related equipment replacing a diesel engine at an irrigation well in Lincoln County, partially funded by the 2022 Nebraska Clean Diesel Rebate Program. Photo courtesy of the owner.

#### **Volkswagen State Trust Activities**

NDEE is the lead agency administering funds allocated to Nebraska from the *Volkswagen Environmental Mitigation Trust for State Beneficiaries, Puerto Rico, and the District of Columbia* (VW State Trust). The VW State Trust was established in 2017 as part of court settlements with Volkswagen AG and its subsidiaries to resolve charges that their diesel passenger vehicles were equipped with devices to circumvent emissions testing and allow them to emit excess nitrogen oxide gases in normal operation, in violation of the Clean Air Act. The initial allocation to Nebraska from the VW State Trust is approximately \$12.25 million, which has been supplemented by over \$238,000 in investment income. As directed by the Trust Agreement, these funds are to be used to undertake authorized actions to reduce nitrogen oxide (NOx) emissions in Nebraska.

#### Beneficiary Mitigation Plan

In April 2020, NDEE submitted a revised Beneficiary Mitigation Plan that summarized how Nebraska intended to use the funds allocated to it under the Trust. The following table and figure present the project types selected for funding in Nebraska and the percentage of funds allocated to each type.



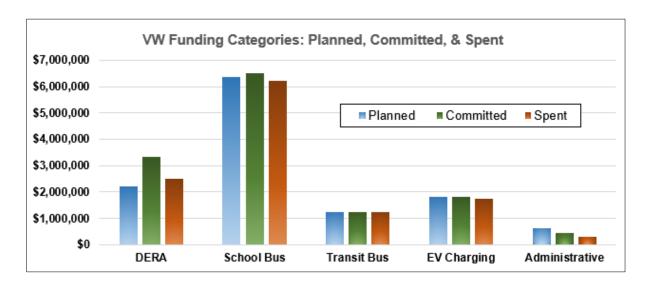
Planned Allocations of VW State Trust Funds by Mitigation Action			
Action	Percent	Dollars	
Transit Bus Alternative Fuel Replacements (completed)	10%	\$1,224,835	
School Bus Diesel & Propane Replacements (completed)	52%	\$6,369,141	
Electric Vehicle Charging Infrastructure (completed)	15%	\$1,818,224	
DERA: Diesel Irrigation Engine, School Bus, & Truck Replacements	18%	\$2,223,729	
Administrative Costs*	5%	\$612,417	
TOTAL	100%	\$12,248,347.48	

<sup>\*</sup> The Trust agreement allows reimbursement of administrative costs up to 15% of each funded project.

Nebraska's Beneficiary Mitigation Plan was intended to provide the public with insight into the Department's intentions for the use of the mitigation funds and information about the specific uses for which funding is expected to be requested. Nebraska may adjust its goals and specific spending plans at its discretion by providing an updated Beneficiary Mitigation Plan to the Trustee. Each state beneficiary must expend at least 80% of its initial allocation by October 2, 2027; otherwise, the unexpended funds will be reallocated to other beneficiaries that have complied with that guideline. By the end of FY2024, the Department expended 96% of the VW principal, meeting that threshold, and has set a goal of expending Nebraska's share of the funds by the end of 2027.

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

NDEE established the Nebraska Diesel Emission Mitigation Program to use VW State Trust funds for projects to mitigate NOx emissions in Nebraska. The program has carried out projects in all of the categories laid out in the Beneficiary Mitigation Plan. As of the end of June 2024, NDEE has requested Trust funds for ten projects and expended \$11,980,565 of those funds. The distribution of spending in the different project categories is shown in the following chart. The transit bus, school bus, and electric vehicle charging rebate programs have been completed. Remaining funds are dedicated to DERA projects.



NDEE's Beneficiary Mitigation Plan set a goal to limit administrative costs to no more than 5% of Trust funds spent. To date only 2.4% of Trust funds spent have been for administrative costs.

# **Climate Pollution Reduction Planning Grant**

In August 2023 NDEE received a \$3 million Climate Pollution Reduction Planning Grant from the U.S. Environmental Protection Agency (EPA) to develop Nebraska's first state-wide climate action plans to reduce greenhouse gas (GHG) emissions and other harmful air pollutants in the state. The grant requires two key deliverables proposing measures to reduce GHG emissions: 1) a Priority Climate Action plan to propose high-priority, short-term, readily implemented measures in one or more economic sectors, and 2) a Comprehensive Climate Action Plan exploring longer-term measures covering all of the state's economy.

The Nebraska Priority Climate Action Plan (PCAP) is Nebraska's first statewide climate action plan. It proposes over a dozen voluntary, high-impact, readily-implemented measures to reduce greenhouse gas emissions in the state by 2030. The plan, which was submitted to EPA on March 1, 2024, was the result of a year-long planning effort that included significant input and advice from citizens and stakeholders across the state, including other state agencies, public power districts, agricultural trade groups, nonprofit and environmental organizations, and interested members of the public.

The plan includes measures that touch all sectors of Nebraska's economy and would provide benefits to both rural and urban communities. If implemented, the proposed voluntary measures and financial incentives would reduce air pollution, stimulate economic growth, create high-quality jobs, and enhance the quality of life for all Nebraskans. The planning effort included a significant focus on benefits to low-income and underserved rural and urban communities across the state. The measures included in the PCAP and their estimated greenhouse gas emissions reductions are listed in the table below. The reductions are expressed as millions of metric tons of  $CO_2$  equivalents (MMT  $CO_2$ e)

Measure	Cumulative GHG Emissions Reductions through 2030 (MMT CO₂e)
Energy Efficiency and Electrification	1.085
Promote Energy Efficiency and Electrification Upgrades for Non-Residential Facilities	0.989
Incentives for Home Energy Efficiency Equipment Upgrades for Low- and Middle-Income Homeowners	0.074
Residential Pre-Weatherization Program	0.007
Incentives for Irrigation Well Conversion from Diesel to Electric	0.015
Solar Projects	0.398
Incentives for Micro-Solar Arrays for Critical Infrastructure in Low-Income Rural Communities	0.008
Funding for Solar Projects on Unused/Contaminated Land, Ag & Industrial Facilities, and Parking Lot/Feedlot Solar Canopies	0.390
Agriculture	22.13
Measures to Reduce Emissions in Agricultural Production:      Establish a Carbon Intensity Score Registry      Provide Incentives for Regenerative Agriculture Practices     Provide Incentives for Precision Agriculture Equipment	22.13
Transportation	0.096
Incentives for Alternative-Fuel and Electric Replacement of Diesel Vehicles	0.096
Incentives for New Public Electric Vehicle Charging Stations	Not Determined
Waste Management	1.996
Establish Hub-and-Spoke Anaerobic Digester/Biogas Hubs for Agricultural Waste	1.037

Incentives to Reduce Food Waste	0.946
Incentives for Production and Use of Biochar to Reduce Organic Waste and Sequester Carbon in Soil	0.013
TOTAL	25.705

Submission of the Priority Climate Action Plan qualified Nebraska to apply to EPA for funding to implement measures in the plan. In late March 2024 NDEE submitted an application for a Climate Pollution Reduction Implementation Grant, requesting \$341 million dollars to implement eight of the measures in the PCAP. Announcement of awards was expected in July 2024.

In the second phase of the planning program, NDEE is developing a Comprehensive Action Plan (CAP) to propose short-term and long-term greenhouse gas reduction measures across all sectors of Nebraska's economy. Like the PCAP, this plan will propose voluntary measures and financial incentives that could produce environmental and economic benefits across Nebraska. The plan will assess the potential benefits of these measures statewide and for low-income and underserved communities, which include both urban and rural areas. The CAP, which is due by December 2025, will also propose long-term greenhouse gas reduction targets and analyze workforce impacts arising from the proposed actions and their associated training needs.

NDEE has established the ONE RED (Opportunity for Nebraska: Reducing Emissions and Decarbonization) program to continue with these planning activities. Beginning in fall 2024, the Department will undertake extensive outreach to stakeholder groups and the public for ideas, discussion, and comments. NDEE will invite stakeholders to join one or more sector-based workgroups to suggest and discuss potential GHG reduction measures and targets to guide development of an effective plan tailored to the needs of Nebraska.

# **Small Business and Public Assistance Program**

The Small Business and Public Assistance program and associated Small Business Compliance Advisory Panel (SBCAP) were created to comply with the Clean Air Act Amendments of 1990 to assist businesses in complying with air quality regulations. However, the Department now provides the same compliance assistance services and support to the Water Quality, Land Management, and Energy Programs.

Key activities of this program include developing guidance and outreach materials; responding to outside requests for information; hosting training and informational workshops, webinars, and one-stop meetings to help new businesses determine their permit applicability; expanding partnerships; helping the regulated community understand their obligations under state and federal law; and promoting compliance and permit assistance visits to small businesses and municipalities.

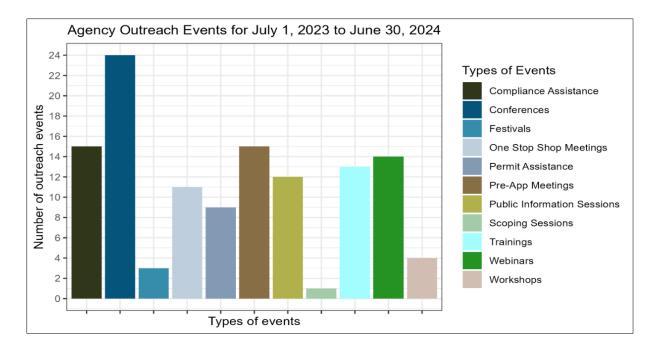
NDEE's internal Grow Nebraska Team (GNT) provides outreach to new businesses proposing operations in Nebraska within 10-days of a request for information, in addition to the services outlined below.

# The following summarizes the primary compliance assistance activities offered by the agency.

- Compliance Assistance Visit (CAV): An on-site service offered by NDEE in response to a request by a business or regulated party to receive support for one or multiple environmental program areas to which they are currently subject or considering under proposed operations. Compliance assistance activities (see Individual Site Assistance/Training below) may be provided during an inspection; however, a CAV cannot be requested after an inspection that may result in enforcement until that issue is resolved. A CAV focuses on supporting the efforts of an entity to achieve voluntary compliance; however, it does not absolve it from receiving an enforcement action if egregious violations are found during the visit.
- Permit Assistance Visit (PAV): An on-site service (or meeting) offered by NDEE in response to a request by a business or regulated party to receive support under a new, modified, or existing permit to address permit related questions.
- One-Stop Permit Meeting: A One-Stop meeting allows for a newly proposed or expanding business and their selected representatives to engage with applicable NDEE permitting programs and other regulatory agencies. The goal of each meeting is to provide the permittee an opportunity to ask questions and receive direction toward attainment of the necessary permits to achieve environmental regulatory compliance.
- Scoping Meeting: A meeting within or outside of NDEE to introduce a new or proposed business to involved staff, programs, and agencies. The meeting may include a review of processes or technologies, tools, resources, and strategic partnerships to assist the business in making the appropriate contacts for applicable regulatory requirements or business needs.
- Individual Site Assistance/Training: An on-site service offered by NDEE in response to a request or during or after a Compliance Inspection.

#### Key accomplishments for the agency team during FY2024:

- Hosted and provided support to the Small Business Compliance Advisory Panel's annual meeting
- Participated in regular engagement opportunities with the Nebraska Industrial Council on the Environment (NICE), the Nebraska Natural Resource Districts and other industry and businesses interested in regulatory information
- NDEE programs provided nearly 121 outreach/training events/presentations to the public and regulated community. The events provided information, trainings and updates on agency programs.



- Provided webinars on the Climate Pollution Reduction Grants program and its development, lead remediation in schools program, an educational experience with international students on being a Nebraska environmental regulator, and litter and water grants applications
- Conducted five Permit Assistance Visits to municipal and industry permittees and coordinated four additional permit assistance meetings
- Hosted 11 One-Stop Permitting meetings where new and expanding businesses talk with NDEE experts from multiple program areas regarding permitting questions
- Programs processed approximately 21,600 compliance assistance and permit assistance phone calls from businesses and communities with compliance questions throughout the fiscal year
- Developed ten new guidance documents and revised nearly 25 others to assist the public and regulated community with information or direction regarding the general application of state statutes or regulations
- Maintained Permit Matrix information and resources. The Matrix assists small businesses with compliance-related topics by sharing links to guidance documents, program overviews, regulations, supporting NDEE web pages, and additional resources.
- Engaged in social media outreach via Twitter, Facebook, and LinkedIn, and monitoring of metrics in conjunction with the Public Information Office

The Department is committed to work on enhancements and improvements to its outreach and assistance activities which educate and inform Nebraska's regulated community in ways that will assist making regulatory compliance easy.

# CHAPTER 5:

# Land Management Programs

The Land Management Program's objectives are to ensure solid and hazardous wastes are properly managed, assess and remediate contaminated sites, facilitate the redevelopment and reuse of contaminated properties and administer grant programs that advance waste reduction and recycling practices throughout the state. This chapter will begin discussion with the waste grant programs, the voluntary cleanup program, and is followed by activities performed by the hazardous waste (RCRA), Superfund and solid waste management programs.

## **Waste Grants Programs**

The Grants Section manages the Waste Reduction and Recycling Incentive Grants Program and the Litter Reduction and Recycling Grants Program; Illegal Dumpsite Cleanup Program; and Landfill Disposal Fee Rebate Program.

The Section's responsibilities include:

- Awards financial aid to public and private partners reviews grant submissions; performs compliance inspections; monitors the activities, budgets, and equipment purchases of grantees; and conducts quarterly performance report reviews.
- Outreach Promotes the availability of grant funding, coordinates the ranking process, coordinates grant awards, and provides integrated waste management information to the public.

# Nebraska Department of Environment and Energy/Nebraska Environmental Trust Partnership

Since July 2018, the Nebraska Department of Environment and Energy (NDEE) and the Nebraska Environmental Trust continue a partnership to ensure agency resources are managed in a fiscally responsible manner by agreeing to:

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

#### Litter Percentage Allocation

At the Environmental Quality Council meeting on November 17, 2023, a hearing was held to decide the 2024 Litter Percentage Allocation. Each year, the Council establishes the percentage of how the funds will be allocated for recycling, public education, and cleanup programs or projects. The Department's recommended percentage allocations for 2024 were based on the actual applications received:

Category	2024 Eligible Requests		
Recycling	28%	\$726,872	
Public Education	68%	\$1,766,348	
Cleanup	4%	\$106,791	
Totals	100%	\$2,600,011	

The Department asked for the ability to adjust the percentages by up to 20% for the 2024 grant year, if warranted. The Environmental Quality Council approved this request.

#### **Expected Service Life**

The Grants Section programs utilize an expected service life procedure for grant-funded equipment. The expected service life determines how long the grantee is responsible for reporting the status of grant-funded equipment to NDEE and how long NDEE maintains a financial interest in the equipment.

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

#### **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 \$500,000 annually.
- A \$1 per tire fee on the retail sale of new tires in Nebraska, which generates about \$2.4 million annually.
- Fifty percent of the \$1.25 per ton disposal fee on solid waste disposed of in permitted landfills, which generates approximately \$1.4 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 (HHW) programs
- Electronic waste collections
- Pharmaceutical collections
- The consolidation of solid waste disposal facilities and use of transfer stations
- Incineration for energy recovery

A portion of the grant funds are obligated to fund scrap tire recycling and/or reduction projects, and another portion of the grant funds are available to smaller cities and counties for abandoned building deconstruction.

Fund Summary Waste Reduction and Recycling Fund July 1, 2023 - June 30, 2024			
Fund Balance June 30, 2023	\$2,288,870		
Revenues:			
New Tire Fees	\$2,822,181		
Business Fee	\$571,065		
Solid Waste Disposal Fee	\$1,659,016		
Interest, Grant Returns	\$57,704		
Miscellaneous	(\$677)		
Operating Transfers Out	(\$120,000)		
Net Collections for Year	\$4,989,289		
Expenditures:			
Administration	\$340,433		
Grant Funds Expended*	\$4,646,313		
Total Expenditures FY 2024	\$4,986,746		
Fund Balance June 30, 2024	\$2,291,413		

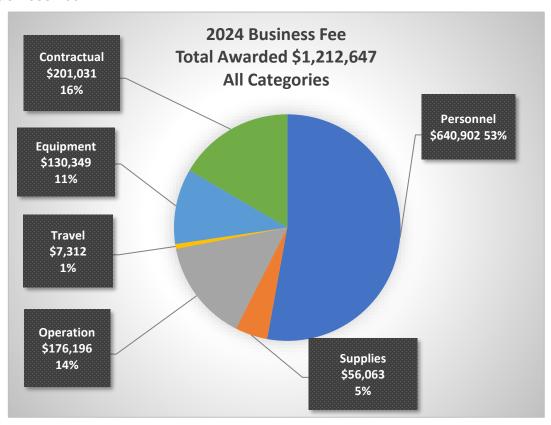
<sup>\*</sup> Because grants funds are expended on a reimbursement basis, total grant funds expended in a fiscal year will differ from the amount of grants awarded in that fiscal year.

For calendar year 2024, the department awarded \$4,097,462.72 for Waste Reduction and Recycling Incentive Grants to 81 projects. There was 14 grants awarded from the Business Fee category (\$1,212,647), 8 awarded from the Disposal Fee category (\$1,046,954), and 59 awarded from the funds prioritized for scrap tire projects (\$1,837,861.72).

Funds received in the Business Fee, Disposal Fee, and Tire Fee categories are represented by the following graphs. Locations across Nebraska that received funds are represented by the following lists.

#### Waste Reduction & Recycling Grants for FY 2024

#### **Business Fee**







Pictures provided by Keep Alliance Beautiful which was awarded funds to operate their recycling center.

Business Fee: \$1,212,647 for 14 grants				
Alliance	Keep Alliance Beautiful	\$108,099	Funds for operation of the recycling center and education materials	
Chadron	Keep Chadron Beautiful	\$72,395	Funds to continue the cardboard and office paper recycling for the City of Chadron	
Columbus	Keep Columbus Beautiful	\$12,166	Hold one-day electronics recycling event open to Platte County residents	
Fremont	Keep Fremont Beautiful	\$26,979	Funds to hold a one-day HHW event for the residents of Dodge County and surrounding areas, one-day paper shredding event, and recycling opportunities at public events	
Grand Island	Grand Island Area Clean Community System	\$149,983	Funds to continue the HHW facility and provide services to dispose waste	
Kimball	Keep Kimball Beautiful	\$17,094	Funds for pick-up services for the "Residential Alley Recycling Program," around Kimball and rural areas	
Lincoln	Lincoln Public Schools	\$89,356	Salary for Assistant Sustainability Coordinator to manage various district recycling, waste reduction and diversion programs, and organic composting programs, and other supply costs	
Lincoln	Keep Nebraska Beautiful	\$159,713	Funds to operate a food waste, material exchange, used oil collection, and a school chemical cleanout program statewide	
North Platte	All Business & Commercial Recycling, LLC	\$106,920	Provide a consolidation hub & spoke drop- off location that is accessed easily by all municipalities in the area.	
Oakland	Nebraska Loess Hills RC&D Council Inc	\$24,585	Conduct three HHW Collections in Dakota, Cuming, and Burt Counties in late summer or fall of 2024. Educate the public about the benefits of proper disposal of Household Hazardous Waste.	
Oakland	Nebraska Loess Hills RC&D Council Inc	\$5,300	Electronic Waste (E-Waste) collection in Cuming County in late summer or fall of 2024.	
Ogallala	Western Resources Group	\$336,837	Funds for the regional processing and shipping facility for recycled materials.	
Plattsmouth	Keep Cass County Beautiful	\$2,539	3 electronic device recycling events at different locations	
Scottsbluff	Keep Scottsbluff Gering Beautiful	\$100,681	Funds to hold a HHW event and Rx take back for the residents of Scottsbluff, Gering, and surrounding areas	

## Disposal Fee







Pictures provided by City of Wayne which was awarded funds to host a community electronics recycling event.

Disposal Fee: \$1,406,954 for 8 grants				
Kearney	Kearney Area Solid Waste Agency Landfill - City of Kearney	\$68,559	Replace existing compost turner with a new and reliable one.	
Lincoln	Lincoln - Lancaster County Health Department	\$349,527	Maintain and expand management services for hazardous waste.	
Lincoln	University of Nebraska-Lincoln	\$56,513	On-site waste reduction assistance with a focus on aiding three Nebraska businesses focused on reducing their solid waste disposal, water use, and energy use.	
McCook	Red Willow County	\$135,872	Manage Red Willow HW facility in McCook and transport HW for several other entities	
Omaha	City of Omaha - UnderTheSink HHW Regional Collection Facility	\$361,420	Operate Household Hazardous Waste Facility	
Valentine	Middle Niobrara Natural Resources District (MNNRD)	\$59,665	Renovate and implement green infrastructure projects at the MNNRD Office headquarters.	
Wayne	City of Wayne	\$6,470	Continue household battery recycling program.	
Wayne	City of Wayne	\$8,928	Hold annual electronic recycling event in the fall of 2024.	

#### Tire Fee

The scrap tire grants are funded by the \$1 per tire fee on retail sales of new tires. In 2024, \$1,837,861.98 was awarded to 59 projects.

- Scrap tire cleanup events: 28 grants, \$869,312 awarded
- Completed projects for the partial reimbursement of the purchase of tire-derived products and/or crumb rubber: 22 grants, \$719,648.10 awarded
- Proposed projects for the partial reimbursement for the purchase of tire-derived products and/or crumb rubber: 9 grants, \$248,901.88

## Scrap Tire Cleanup Events



Funding is provided to political subdivisions for tire collection site cleanups. Twenty-eight scrap tire cleanup grants were awarded in 2024 to political subdivisions. The grants totaled \$869,312 and proposed to clean up 5,461 tons of scrap tires.

Scrap Tire Cleanup Events: 28 grants, \$869,312 awarded			
Alma	Lower Republican Natural Resource District	\$13,532	Cleanup of 90 Tons
Alma	Lower Republican Natural Resource District	\$15,852	Cleanup of 106 Tons
Alma	Lower Republican Natural Resource District	\$10,632	Cleanup of 70 Tons
Arnold	Village of Arnold	\$24,248	Cleanup of 150 Tons
Atkinson	City of Atkinson	\$37,644	Cleanup of 200 Tons
Auburn	County of Nemaha Nebraska	\$17,588	Cleanup of 100 Tons
Beatrice	City of Beatrice	\$30,752	Cleanup of 200 Tons
Center	Knox County	\$26,288	Cleanup of 150 Tons
Chadron	Solid Waste Agency of Northwest Nebraska (SWANN)	\$33,841	Cleanup of 175 Tons
Cozad	City of Cozad	\$22,958	Cleanup of 150 Tons
Davenport	Little Blue Natural Resources District	\$19,332	Cleanup of 230 Tons
Davenport	Little Blue Natural Resources District	\$26,582	Cleanup of 180 Tons

Davenport	Little Blue Natural Resources District	\$32,382	Cleanup of 220 Tons
David City	County of Butler County	\$27,240	Cleanup of 200 Tons
Hastings	City of Hastings, Solid Waste Department	\$50,178	Cleanup of 350 Tons
Hershey	Village of Hershey	\$23,985	Cleanup of 15 Tons
Hubbard	Dakota County Road Department	\$17,352	Cleanup of 100 Tons
Madison	City of Madison	\$25,226	Cleanup of 150 Tons
Minden	Kearney County	\$29,164	Cleanup of 200 Tons
O'Neill	Upper Elkhorn NRD	\$115,720.	Cleanup of 600 Tons
Osceola	County of Polk, Nebraska	\$29,324	Cleanup of 200 Tons
Pawnee City	Pawnee County	\$16,552	Cleanup of 100 Tons
Seward	Seward County	\$48,050	Cleanup of 350 Tons
St. Paul	Howard County	\$27,426	Cleanup of 175 Tons
Tecumseh	Johnson County	\$17,320	Cleanup of 100 Tons
Wahoo	Saunders County Highway Dept	\$32,976	Cleanup of 250 Tons
Weeping Water	Cass County Roads Department	\$62,758	Cleanup of 400 Tons
Wilber	Saline County	\$34,410	Cleanup of 250 Tons

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

In 2024, \$968,549.98 was awarded to 31 projects to partially reimburse the purchase of tire-derived products and/or crumb rubber.





Left: Pictures provided by the Nebraska City Public School, which was awarded for partial reimbursement of artificial turf made with crumb rubber for their football field. Right: The Omaha Public School received a 50% remibursement for the purchase of rubber playground mulch.

Partial Reimbursement for the Purchase of Tire-Derived Products and/or Crumb Rubber-Completed Projects: 22 projects, \$719,648.10 awarded				
Alliance	Keep Alliance Beautiful	\$6,124.00	50% Completed Mulch.	
Aurora	Aurora Public School	\$ 15,711.00	25% Completed Tiles.	
Bloomfield	City of Bloomfield	\$2,135.00	25% Completed Bench and Picnic Tables.	
Gretna	Gretna Public Schools	\$39,924.75	25% Completed Track.	
Hooper	Logan View Public Schools	\$3,859.50	25% Completed Poured in Place.	
Lincoln	Lincoln Sports Foundation	\$90,150.99	25% Completed Turf	
Lincoln	Campus Recreation - University of Nebraska-Lincoln	\$113,633.61	25% Completed Turf	
Lincoln	Lincoln Public Schools	\$93,465.00	25% Completed Turf.	
Lincoln	Lincoln Police Department	\$25,696.50	25% Completed Turf.	
Lincoln	Belmont Community Center	\$8,784.00	50% Completed Mulch.	
Loup City	Sherman County, Nebraska	\$880.00	25% Complete Bench/Picnic Table.	
Milford	Milford Kiwanis Club	\$6,278.00	25% Completed Poured in Place	
Monroe	Village of Monroe	\$17,250.00	50% Completed Mulch.	
Nebraska City	Nebraska City Public Schools Foundation	\$98,412.00	25% Completed Turf.	
Ogallala	City of Ogallala	\$15,855.00	25% Completed Poured in Place.	
Omaha	Omaha Public Schools/DOUGLAS COUNTY SCHOOL DISTRICT 001	\$13,040.50	25% Completed Tiles	
Omaha	Omaha Public Schools/Douglas County School District 0001	\$9,622.00	25% Completed Tiles.	
Red Cloud	Redcloud Elementary	\$2,087.00	50% Completed Mulch.	
Tecumseh	City of Tecumseh	\$4,000.00	50% Completed Mulch.	
Virginia	Lewiston Consolidate School Foundation Inc	\$36,673.00	25% Completed Track.	
Wausa	Village of Wausa	\$4,710.00	50% Completed Mulch.	
Wayne	Wayne State Foundation	\$ 111,356.00	25% Completed Turf	

	Partial Reimbursement for the Purchase of Tire-Derived Products and/or Crumb Rubber-Proposed Projects: 9 projects, \$248,901.88 awarded				
Bartley	Southwest Public Schools	\$15,730.00	50% Proposed Mulch.		
Greeley	Central Valley Public Schools	\$6,342.50	50% reimbursement for rubber mulch		
Kearney	Kearney Catholic	\$134,967.00	25% Proposed Turf.		
Lincoln	B&J Partnership, Ltd	\$62,131.25	25% Proposed Turf.		
Omaha	Morningstar Elementary	\$1,125.00	50% Proposed Mulch.		
Pawnee	City of Pawnee City	\$3,372.00	50% reimbursement for rubber mulch		
Plainview	City of Plainview	\$20,250.00	50% reimbursement for rubber mulch		
St. Paul	City of St. Paul, Nebraska	\$920.00	50% reimbursement for rubber mulch		
Union	The Village of Union	\$4,064.13	50% reimbursement for rubber mulch		

#### **Deconstruction of Abandoned Buildings**

The Deconstruction of Abandoned Buildings grant program, part of the Department's Waste Reduction and Recycling Incentive grant program, provides funding to assist in the removal of abandoned structures. Building deconstruction means the physical dismantlement of a building's components to recover the materials for reuse or recycling. The process decreases the amount of demolition material lawfully disposed of in landfills or improperly disposed of elsewhere. Nebraska first- and second-class cities, villages, and counties with a population of 99,000 or less are eligible to apply for funding. The buildings selected must not be on, or eligible to be on, the National Register of Historic Places.

## Illegal Dumpsite Cleanup Program

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

Funding for this program is limited to 5% of the total revenue from the disposal fee collected from landfills in the preceding fiscal year. NDEE encourages municipalities, counties, and other political subdivisions to submit applications for the reimbursement of cleanup efforts. In FY2024, the program provided 24 grants, totaling \$33,122.46. Funds were provided to:

Illegal Dumpsite Cleanup Awards					
Lincoln/Lancaster County - 9 City of Omaha – 12 Seward County - 2					
Clay County - 1					

#### 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 NDEE, 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 FY2024, the program provided \$117,410 to five counties and seven cities participating in the program. All twelve participants processed their requests through email. This option helps to meet our agency's goals for waste reduction efforts and process improvement.

Landfill Disposal Rebate Recipients							
Buffalo County	\$ 6,081	Butler County	\$ 2,986	City of Cozad	\$ 80		
City of David City	\$ 257	City of Grant	\$ 107	Jefferson County	\$ 20		
City of Lincoln	\$ 29,812	City of North Platte	\$ 3,581	City of Omaha	\$ 65,695		
Saline County	\$ 2,115	Seward County	\$ 1,622	City of S. Sioux City	\$ 475		

# **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
- Kitchen supplies

Fund Summary Litter Reduction and Recycling Fund July 1, 2023 - June 30, 2024					
Fund Balance June 30, 2023	\$3,052,900				
Revenues: Litter Taxes Collected Interest, Grant Returns	\$3,054,514 \$109,202				
Miscellaneous Adjustment	\$36,056				
Operating Transfer Out	(\$40,000)				
Net Collections for FY2024	\$3,159,772				
Expenditures:					
NDEE Administration	\$221,125				
Grant Funds Expended*	\$2,075,317				
Total Expenditures FY2024 \$2					
Fund Balance June 30, 2024	\$3,916,230				

<sup>\*</sup>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.

## **Grant Allocations - Litter Reduction and Recycling Fund**

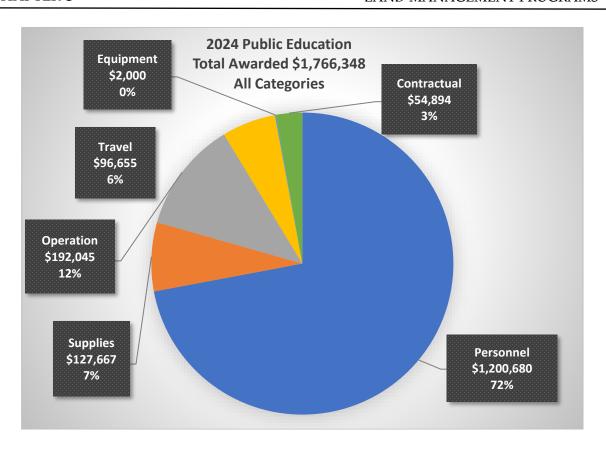
In 2024, \$2,600,011 was awarded to 51 Litter Reduction and Recycling Grant recipients. Grant funding is awarded to several types of programs, including non-profit groups, public and private entities, and over 20 Keep America Beautiful affiliates. Many of these programs utilize the Litter Reduction and Recycling Grant Program funds to leverage additional dollars for a comprehensive, statewide approach to litter reduction and recycling.

The breakdown is as follows:

Totals	100%	51 grants	\$ 2,600,011
Recycling	(28%)	17 grants	\$ 726,872
Cleanup	( 4%)	12 grants	\$ 106, 791
<b>Public Education</b>	(68%)	22 grants	\$ 1,766,348

#### **Public Education**

In 2024, the department awarded 22 grants totaling \$1,766,348 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.





Photos provided by Keep Keith County Beautiful who was awarded public education on litter reduction through classroom presentations, community education on source and litter reduction, recycling, food waste elimination, and sustainable waste management. Outreach to individuals and organizations to encourage litter cleanups.

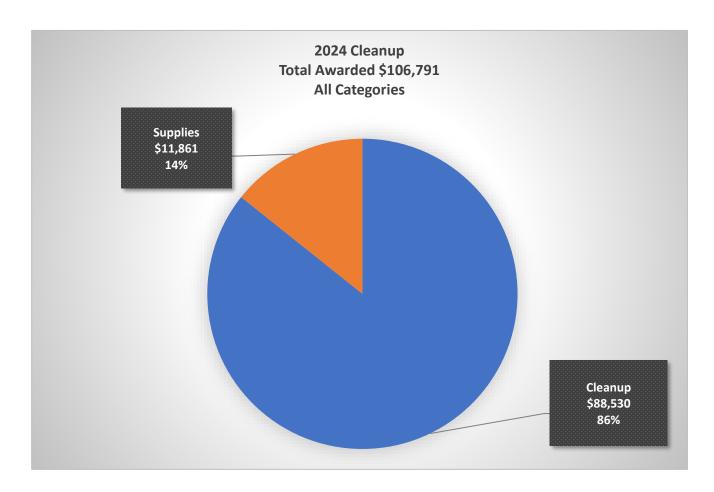
Public Educ	Public Education Awards: \$1,766,348 for 22 grants					
Alliance	Keep Alliance Beautiful	\$35,489	Educational programs in Hemingford and Alliance schools and summer camp programs; Earth Day and America Recycles Day school programs; community presentations on recycling/upcycling at library and rec center and at public events; advertising for community events			
Beatrice	Keep Beatrice Beautiful	\$50,485	Litterbag distribution, annual newsletter and website promoting litter reduction and recycling, Earth Day flyers, educational booths at community events, promotion of cleanup events			
Burwell	Loup Basin RC&D Council/Keep Loup Basin Beautiful	\$49,403	School and adult group presentations; booths at area fairs and events to distribute educational materials; twicemonthly KLBB radio show; plan and promote cleanup events			
Chadron	Keep Chadron Beautiful	\$77,811	Classroom presentations and activities on littering and recycling; presentations to community organizations; placing recycling containers at public events; public service announcements about special events; sponsoring community cleanups			
Columbus	Keep Columbus Beautiful	\$47,450	Provide educational presentations to schools and local community groups; promote recycling drop-off program; promote and participate in litter free events			
Fremont	Keep Fremont Beautiful	\$96,030	Community and school presentations, workshops, fairs, campaigns, print materials, and digital media on recycling; promotion of recycling events			
Grand Island	Grand Island Area Clean Community System	\$58,199	School, after-school, library, and summer camp programs, Earth Day and other public events, presentations, and booth at Nebraska State Fair			
Kimball	Keep Kimball Beautiful	\$24,928	Educational programs in Kimball and Banner County schools and summer programs; provide printed materials with City of Kimball utility bill; publicize litter-free events			
Lexington	Keep Lexington Beautiful	\$67,044	Recycling education in schools 4 days/wk plus summer classes; host summer cleanups; advertising recycling opportunities via newspaper and TV; participate in community events			
Lincoln	Lincoln - Lancaster County Health Department	\$174,652	Classroom presentations, outreach at public festivals/events, and strategic messaging			

			·
Lincoln	Nebraska Recycling Council	\$184,206	Partial funding of salaries and operating expenses for programs supporting local and regional recycling systems, recycling service providers, outreach and training on composting, technical assistance and training, and public education
Lincoln	Nebraska Recycling Council	\$78,089	Collect data to update ArcGIS Map of Statewide Resource Management; develop municipal waste reduction toolkits; promote and distribute toolkits and offer training
Lincoln	Keep Nebraska Beautiful	\$120,215	Operating Nebraska Litter Hotline in six counties; working with 48 schools in Litter Free School Zones program; providing recycling curriculum to Community Learning Centers; affiliate coordination for KAB
Nebraska City	Keep Nebraska City Beautiful	\$71,547	School and community presentations to promote recycling; advertising by mail, social media, and radio to promote litter-free event
Norfolk	Keep Norfolk Beautiful	\$28,026	School presentations, advertising, and distribution of materials on recycling and litter cleanup events; planning and conduction recycling and litter cleanup events
North Platte	Keep North Platte & Lincoln County Beautiful	\$97,812	Organize school and public presentations to instill environmental values to decrease items going to landfills via at least once-a-month events including Tire Amnesty Days, PSAs, multiple summer camps, and various community events including cleanups and other activities to promote recycling.
Ogallala	Keep Keith County Beautiful	\$155,578	School programs and public/community education on source and litter reduction, recycling, food waste elimination, and sustainable waste management
Omaha	Keep Omaha Beautiful	\$169,976	School-based educational programming, curriculum certification workshops for educators, public education via activity-based learning, public education, and outreach via the Reduce. Reuse. Recycle Right. educational campaign.
Plattsmouth	Keep Cass County Beautification	\$100,299	Environmental programs for 6 school districts, youth environmental fair; adult educational events and presentations to community groups; booth at county fair and other events; quarterly newsletter; sponsoring litter hotline; distributing car litter bags
Schuyler	Keep Schuyler Beautiful	\$31,864	Resume litter reduction/recycling education with school presentations and distributing educational materials at public events and by mail to homeowners

Scottsbluff	Keep Scottsbluff Gering Beautiful	\$40,131	Educational presentations at public events such as Earth Day; media releases, social media, and website updates on litter prevention and cleanups; distribution of litter bags; promotion of recycling/clean up events
Wayne	City of Wayne	\$7,114	Zero Waste marketing campaign, advertising for Earth Day public events, and lessons/presentations to elementary school students

#### Cleanup

In 2024, the department awarded 12 grants totaling \$106,791 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. The awarded cleanup grants propose to clean up litter from 761 road-side miles and 1,617 acres of public areas.





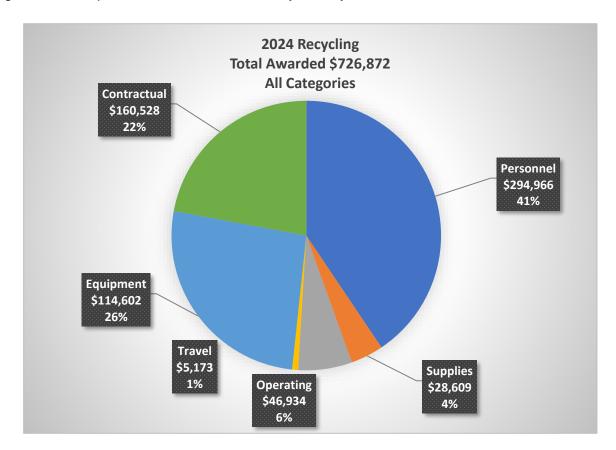
Pictures provided by Keep Omaha Beautiful (KOB), which was awarded funding to clean up public spaces around City of Omaha.

Cleanup Av	Cleanup Awards: \$106,791 for 12 grants						
Beatrice	Keep Beatrice Beautiful	\$8,980	100mi @ \$75 = \$7,500, 60ac @ \$15 = \$900, Supplies: gloves \$140, trash bags \$200, litter pickup tools \$240				
Chadron	Keep Chadron Beautiful	\$7,585	100mi @ \$75 = \$7,500. Supplies: gloves \$30, trash bags \$55				
Grand Island	Grand Island Area Clean Community System	\$7,000	81mi @ \$75 = \$6,075, 35ac @ \$15 = \$525, Supplies: Gloves, \$500				
Lincoln	Lincoln - Lancaster County Health Department	\$30,000	100mi @ \$75 = \$7,500, 1,500ac @ \$15 = \$22,500				
Nebraska City	Keep Nebraska City Beautiful	\$780	10mi @ \$75 = \$750, 2ac @ \$15 = \$30				
North Platte	Keep North Platte & Lincoln County Beautiful	\$24,820	320mi @ \$75 = \$24,000. Supplies: litter tongs \$114, gloves \$200, trash bags \$506				
Ogallala	Keep Keith County Beautiful	\$4,781	50mi @ \$75 = \$3,750, 20ac @ \$15 = \$300. Supplies: litter pickers \$731				

Omaha	Keep Omaha Beautiful	\$8,570	Supplies: litter tools \$2,100, gloves \$800, disposable bags \$2,930, reuseable bags \$1,075, safety vests \$410, carts \$275, duffle bags \$170, scales \$495, collection bags \$315
Plattsmouth	Keep Cass County Beautiful	\$2,250	20mi @ \$75 = \$1,500, 50ac @ \$15 = \$750
Scottsbluff	Keep Scottsbluff Gering Beautiful \$4,875		56mi @ \$75 = \$4,200. Supplies: backpacks \$105, trash bags \$340, vests \$180, gloves \$50
South Sioux City	City of South Sioux City   S6.400		10mi @ \$75 = \$750, 150ac @ \$15 = \$2,250. Supplies: gloves \$430, vests \$750, trash picker \$700, trash bags \$1520
Steinauer	Steinauer Community Club	\$750	10mi @ \$75 = \$750

#### Recycling

In 2024, the department awarded 17 grants totaling \$726,872 under the category of Recycling. The recycling programs provide an alternative to the disposal of solid waste in Nebraska's landfills. The programs recycle more than just aluminum, paper, glass, and plastic. Materials such as electronic computer components, paint, aerosol cans, fertilizer, pesticides, and household hazardous waste are collected. Materials are either reprocessed to be used again or are disposed of in an environmentally friendly manner.







Pictures provided by Keep Alliance Beautiful (KAB), which was awarded funding to operate the recycling center and recycling program in Box Butte County.

Recycling Awards: \$726,872 for 17 grants						
Alliance	Keep Alliance Beautiful \$61,893		Operate the recycling center and recycling program in Box Butte County			
Chadron	Keep Chadron Beautiful	\$13,738	Electronics collection event – one day			
Columbus	Keep Columbus Beautiful	\$32,210	Collect recyclables at two drop off locations and transport to Schuyler for sorting/processing			
Columbus	Keep Columbus Beautiful	\$33,100	Provide 2 semi trailers to fill with all fiber products that will be transported to the Applegate Green Fiber facility			
Eagle	Village of Eagle	\$11,000	Pay a contractor for the collection and delivery of recyclables to a material recovery facility. Comprehensive review of waste and recycling collection in the Village of Eagle			
Kimball	Keep Kimball Beautiful	\$77,711	Management and operation of Kimball Recycling Center, including collection, processing, and transportation of recyclables			
Lexington	Keep Lexington Beautiful	\$32,545	Manage recyclables at five drop-off locations and hold two shredding events			
Lincoln	Lincoln Bike Kitchen	\$6,600	Getting functional bikes into the hands of community members while also properly recycling unusable parts from unrepairable bikes			

Lincoln	City of Lincoln Transportation and Utilities - Solid Waste Manage	\$157,992	Purchase additional roll-off bins. Solid Waste Management and Circular Economy educational supplies. Rebranding of City of Lincoln Biochar Project. Recycling expanded polystyrene.
Lincoln	Ashley Kasper - Girl Scout	\$259	Put recycling bins at various girl scout properties in Eastern Nebraska and begin teaching the younger scouts what can and cannot be recycled.
North Platte	Keep North Platte & Lincoln County Beautiful	\$38,677	Operate local recycling program and increase collection at drop-off sites and at area events through advertising
Omaha	Green Recycling Enterprises, LLC DBA Second Nature Media	\$87,000	Create a turnkey program to reduce waste and provide recycling options at gas stations, events and host locations
Omaha	Open Door Mission	\$21,710	Purchase 130 reusable plastic bulk containers (gaylords) to improve the efficiency of redistribution and recycling, reduce unnecessary waste, and lower costs of disposable materials.
Schuyler	Keep Schuyler Beautiful	\$58,577	Personnel and some operating expenses for Colfax County Recycling Center
Scottsbluff	Reisig Earthmoving & REM Screening LLC	\$48,460	Reisig Earthmoving and REM Screening LLC will be purchasing a heavy weight trailer to be able to move equipment such as, screening equipment or big wheel loaders into and out of properties to load and carry off unwanted items such as used railroad ties and rock ballast. This will have a positive impact on the environment by changing these discarded piles of debris into useable product. Supplies: \$3,460 Equipment: \$45,000.
Tekamah	Papio Missouri River Natural Resources District	\$17,800	Conduct a series of four electronic waste (e-waste) recycling collections at NRD/USDA Service Centers
Thedford	Upper Loup Natural Resources District	\$27,600	Contractual costs for transporting recycling trailers and collection totes from collection locations to ULNRD recycling for processing and then to Western Resources.

# Ten-Year Grant History of Amounts Awarded and Requested Amounts Awarded and Requested for Litter Reduction and Recycling Grant (LRR) Categories

Grant Year	Awarded Recycling	Awarded Public Education	Awarded Cleanup	Total Awarded (All LRR Categories)	Total Eligible Grant Funds Requested (All LRR Categories)
2015	\$1,176,580	\$821,346	\$97,938	\$2,095,864	\$2,266,267*
2016	\$892,975	\$819,597	\$108,483	\$1,821,055	\$2,079,033*
2017	\$1,326,206	\$1,037,895	\$126,986	\$2,491,087	\$2,644,088
2018	\$603,867	\$651,968	\$50,569	\$1,306,404	\$3,571,584
**2019	\$423,523	\$826,761	\$49,716	\$1,300,000	\$2,746,775
2020	\$325,938	\$1,325,085	\$89,153	\$1,740,176	\$1,827,643
2021	\$586,646	\$1,431,568	\$65,986	\$2,084,200	\$2,105,370
2022	\$587,552	\$1,535,370	\$56,349	\$2,179,271	\$2,331,980
2023	\$825,104	\$1,528,991	\$81,458	\$2,435,553	\$2,435,553
2024	\$726,872	\$1,766,348	\$106,791	\$2,600,011	\$2,600,011
			Total Amounts	\$20,053,621	\$20,263,004

<sup>\*</sup>Estimate

# Amounts Awarded and Requested for Waste Reduction and Recycling Incentive Grant (WRR) Categories

Grant Year	Awarded Disposal Fee	Awarded Business Fee	Total Awarded (Both WRR Categories)	Total Eligible Grant Funds Requested (Both WRR Categories)
2015	\$1,435,558	\$822,233	\$2,257,791	\$3,101,500*
2016	\$2,116,399	\$1,338,426	\$3,454,825	\$3,781,465
2017	\$1,789,483	\$833,734	\$2,623,217	\$4,036,801
2018	\$964,113	\$935,887	\$1,900,000	\$4,402,481
**2019	\$461,365	\$300,180	\$761,545	\$2,188,344
2020	\$1,400,186	\$828,181	\$2,228,367	\$2,481,692
2021	\$1,661,286	\$1,405,815	\$3,067,101	\$3,469,624
2022	\$1,218,800	\$948,373	\$2,100,578	\$3,904,766
2023	\$1,608,610	\$1,189,408	\$2,798,018	\$2,798,108
2024	\$1,046,954	\$1,212,647	\$2,259,601	\$6,076,011
*F-bine		Total Amounts	\$23,451,043.00	\$33,139,202.00

<sup>\*</sup>Estimate

<sup>\*\*</sup> FY2019 Grant awards were for a 6-month grant term

<sup>\*\*</sup> FY2019 Grant awards were for a 6-month grant term

#### Amounts Awarded for Deconstruction, Illegal Dumpsite, and Landfill Disposal Rebates

Grant Year	Awarded Deconstruction Grants	Awarded Landfill Disposal Rebate	Awarded Illegal Dumpsite
2015		\$28,058	\$94,859
2016		\$162,536	\$80,872
2017		\$75,599	\$100,892
2018		\$40,433	\$99,341
2019		\$14,935	\$91,630
2020	\$186,662	\$23,016	\$102,061
2021		\$101,365	\$48,579
2022		\$72,591	\$30,753
2023		\$112,099	\$26,012
2024		\$117,410	\$33,122
Total	\$186,662	\$748,042	\$708,121

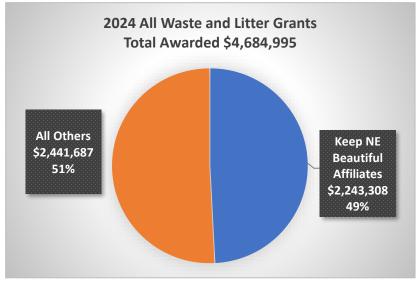
#### Keep America Beautiful Nebraska Affiliate Funding for 2024

Keep America Beautiful (KAB) is a national non-profit public education organization. Keep Nebraska Beautiful is a statewide affiliate of KAB. There are 20 local KAB affiliate communities in Nebraska. Many of the KAB affiliates receive grant funding from the Litter Reduction and Recycling grant program under the public education category to cover expenses such as personnel and operating expenses. The affiliates teach the importance of reuse, recycling, and reducing waste and litter through school and community-wide education programs.

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

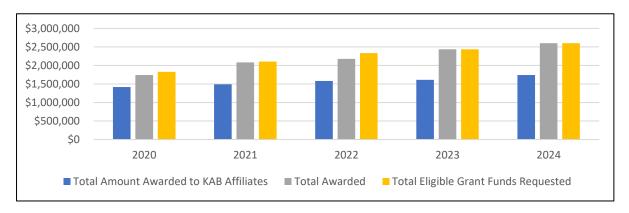






2020-2024 Awarded Litter Reduction and Recycling Grants to Keep America Beautiful (KAB) Nebraska Affiliates

Grant Year	Total Amount Awarded to KAB Affiliates	Percent Awarded to KAB Affiliates	Total Awarded	Total Eligible Grant Funds Requested
2020	\$1,415,978	81%	\$1,740,176	\$1,827,643
2021	\$1,489,598	71%	\$2,084,200	\$2,105,370
2022	\$1,582,064	73%	\$2,176,341	\$2,331,980
2023	\$1,612,349	66%	\$2,435,553	\$2,435,553
2024	\$1,740,379	67%	\$2,600,011	\$2,600,011



2020-2024 Awarded Waste Reduction and Recycling Incentive Grants to Keep America Beautiful (KAB) Nebraska Affiliates

Grant Year	Total Amount Awarded to KAB Affiliates	Percent Awarded to KAB Affiliates	Total Awarded	Total Eligible Grant Funds Requested
2020	\$689,675	31%	\$2,228,367	\$2,481,692
2021	\$714,693	23%	\$3,067,101	\$3,469,624
2022	\$778,583	37%	\$2,117,673	\$3,904,767
2023	\$596,797	21%	\$2,798,018	\$2,798,018
2024	\$649,649	29%	\$2,259,851	\$6,076,011

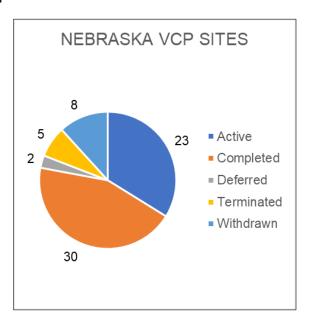


# **Nebraska Voluntary Cleanup Program**

The Remedial Action Plan Monitoring Act (RAPMA), initially created in 1995, established the Nebraska Voluntary Cleanup Program (VCP). The VCP provides any entity (including, but not limited to property owners or parties responsible for contamination) a mechanism for developing voluntary environmental cleanup plans that are reviewed and approved by NDEE. It also gives applicants a way to proceed with property cleanup 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. The application fee to participate in the program is \$2,000, and the initial deposit to pay for state oversight costs is \$3,000. NDEE has a Memorandum of Agreement with EPA Region 7, which provides federal approval of VCPs. Under this agreement, any applicant that joins the VCP and successfully completes the cleanup action is assured that EPA will not pursue federal enforcement under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund.

To date, 68 sites have entered the VCP. Currently, 23 sites are active in the VCP. Two sites have been deferred to the EPA Superfund program. Eight 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-nine sites have successfully completed cleanup requirements and have received "No Further Action" letters from NDEE, and one site received an Acknowledgement Letter for cleanup work completed to date, but not an official No Further Action letter.

NDEE continues to have significant interest from applicants enrolling properties or sites into the VCP. Two new sites enrolled in the VCP this fiscal year include the Vishay Dale Electronics, Inc. Site #6 in Columbus and the Becton, Dickinson and Company site in Columbus.



Investigation activities are ongoing at the Omaha Steel Castings – Parish School site in Omaha, former Goodyear Lease Location #7522 site in Lincoln, former Citizens Gas Former Manufactured Gas Plant (FMGP) site in McCook, 48<sup>th</sup> & Dodge Redevelopment site in Omaha, and the Flatwater Mews (former Oak Lake Landfill) site in Lincoln.

Cleanup activities are ongoing at the Dettmer Lease Property in Auburn, former Vishay Dale Electronics, Inc. site in Norfolk, International Sensor Systems, Inc. site in Aurora, former Farmland Industries Urea Ammonium Nitrate (UAN) Terminal in Doniphan, Elster American Meter Company site in Nebraska City, former AAA Welding site in Omaha, and the AltEn, LLC site in Mead.

Post-remediation monitoring is ongoing at the New Holland site in Grand Island, Former Nebraska Solvents Company site in Grand Island, Archer Daniels Midland site in Lincoln, Hoover Manufacturing site in Beatrice, and the Appleton Electric, LLC site in Columbus. NDEE is currently reviewing Remedial Action Reports for the Lewis and Clark Landing/Heartland of

America Park Redevelopment site in Omaha, former Max I. Walker Cleaners – Baker Square site in Omaha, West Haymarket Block 4 site in Lincoln, and J.A. Woollam Co., Inc. site in Lincoln.







The historical drycleaning activities at the former Max I. Walker facility at Baker Square caused contamination of the underlying soil and groundwater. As a result, concentrations of chlorinated solvent vapors in soil gas beneath the building posed a vapor intrusion risk to occupants of the facility. Remedial measures implemented through the VCP included installing a soil vapor extraction system that uses negative pressure to remove hazardous vapors from beneath the structure to reduce exposure risks and improve the quality of the indoor air. Air and soil gas monitoring is ongoing, and the site is expected to receive a No Further Action letter next fiscal year.

Voluntary Cleanup Program Sites and Status			
Site	Location	Date Started	Progress
	Active Sites		
New Holland	Grand Island	11/9/2000	Active
Former Nebraska Solvents Company	Grand Island	10/10/2007	Active
Archer Daniels Midland	Lincoln	12/11/2008	Active
Dettmer Lease Property	Auburn	5/19/2011	Active
Hoover Manufacturing	Beatrice	5/27/2011	Active
Former Vishay Dale Electronics, Inc.	Norfolk	4/2/2012	Active
Appleton Electric, LLC	Columbus	3/1/2013	Active
International Sensor Systems, Inc.	Aurora	3/2/2017	Active
Omaha Steel Castings - Parish School	Omaha	3/24/2017	Active
J.A. Woollam Co., Inc.	Lincoln	2/26/2018	Active
Former Farmland Industries UAN Terminal	Doniphan	10/9/2018	Active
Lewis and Clark Landing/Heartland of America Park Redevelopment	Omaha	8/13/2019	Active
Elster American Meter Company	Nebraska City	9/19/2019	Active
West Haymarket Block 4	Lincoln	2/4/2020	Active
Former Goodyear Lease Location #7522	Lincoln	7/21/2020	Active
Former Max I. Walker Cleaners – Baker Square	Omaha	1/11/2021	Active
Former AAA Welding	Omaha	1/11/2021	Active
AltEn, LLC	Mead	6/30/2021	Active
Former Citizens Gas FMGP	McCook	11/6/2021	Active
48 <sup>th</sup> & Dodge Redevelopment	Omaha	12/7/2021	Active
Flatwater Mews (former Oak Lake Landfill)	Lincoln	6/28/2022	Active
Vishay Dale Electronics, Inc. Site #6	Columbus	9/6/2023	Active
Becton, Dickinson and Company	Columbus	9/8/2023	Active

Completed Sites			
KN Energy	Holdrege	4/3/1995	Completed 5/1/97
Lewis and Clark Landing - American	Omaha-Riverfront	2/5/1996	Completed 10/11/01
Smelting and Refining Company (ASARCO)		1 - 2 - 2 - 2	
Farmland Industries	Scottsbluff	2/9/1996	Completed 7/2/09
Farmland Industries- Equalizer Midwest Inc. Terminal	Hastings-East	6/25/1997	Completed 9/2/03
Lincoln Plating Co.	Lincoln	9/17/1998	Completed 7/26/12
Composite Structures, Inc. (Witco Corporation)	Omaha-North	1/20/1999	Completed 6/29/99
BNSF Railroad Lot 9	Lincoln-Lot 9 Havelock	4/28/1999	Completed 2/20/01
Haymarket Park	Lincoln-Haymarket	11/9/1999	Completed 9/1/06
Progress Rail Services	Sidney-North	11/22/1999	Completed 1/3/05
Omaha Riverfront Redevelopment	Omaha-Riverfront	5/18/2001	Completed 6/18/03,
(3 sites) – Gallup Campus, Omaha Docks, and West Gallup and Miller Property	Omana-Nivemoni	3/10/2001	12/9/03, 11/9/04
Union Pacific Railroad Child Development Center	Omaha-N. Downtown	3/5/2004	Completed 1/13/12
Plaza North Station LLC- Max I Walker Inc. Drop Store	Omaha	7/17/2009	Completed 2/11/14
Former Pfizer Facility – JN Medical Corporation	Omaha	7/28/2009	Completed 5/18/16
CVS Pharmacy	Lincoln	10/13/2010	Completed 1/28/15
West Haymarket Redevelopment Area North	Lincoln	10/27/2010	Completed 12/29/16
Izaak Walton Trap Range	Fremont	10/28/2010	Completed 4/13/12
Magnolia Metal Corporation	Auburn	3/9/2011	Completed 10/31/13
Blair FMGP	Blair	6/28/2011	Completed 4/4/16
Plattsmouth FMGP	Plattsmouth	6/28/2011	Completed 4/4/16
Lewis and Clark Landing – Designated Work Area	Omaha	4/20/2012	Completed 12/29/16
West Haymarket Redevelopment Area South	Lincoln	6/11/2012	Completed 9/18/18
Nebraska Machine Products	Omaha	10/1/2012	Completed 3/26/18
20th and Center FMGP/Lynch Park	Omaha	11/20/2012	Acknowledgement Letter issued 10/1/20
Magnus Farley	Fremont	6/16/2014	Completed 8/23/18
Beatrice FMGP	Beatrice	11/13/2015	Completed 8/22/19
Omaha Steel Castings – Saddle Creek Redevelopment	Omaha	4/26/2016	Completed 8/24/20
Former AmFirst Bank Branch	McCook	11/7/2019	Completed 6/22/20
Tiny Houses	Omaha	2/1/2021	Completed 4/11/23
Defe	rred, Terminated, or Wit	hdrawn Sites	
Garvey Elevator	Hastings-West	4/13/1995	Deferred to EPA Superfund
Burlington Northern Santa Fe (BNSF) Railroad	Lincoln-N. Havelock	1/17/1996	Terminated 12/4/06
Union Pacific Railroad	Omaha-N. Downtown	1/17/1996	Withdrawn 3/7/03
Lincoln Journal Star	Lincoln-Downtown	2/26/1997	Terminated 1/28/09
Hastings Area-Wide	Hastings	12/17/1997	Withdrawn 6/23/00
Dana Corporation	Hastings-West	9/27/1999	Deferred to EPA Superfund
Brownie Manufacturing	Waverly-Highway 6	4/25/2000	Withdrawn 7/19/01
BNSF Railroad	Lincoln-Havelock Yards	10/26/2000	Terminated 12/4/06
Owen Parkway East	Omaha-Abbott Drive	12/13/2000	Withdrawn 11/26/02
Sanford & Son	Lincoln-North	1/22/2002	Terminated 4/18/07
Vishay Dale Electronics	Norfolk	11/13/2006	Terminated 4/20/09
Quality Analytical Services	Omaha	8/2/2012	Withdrawn 6/3/14
Quality Alialytical Oct vices	Ulliana	UILILUIL	VVIIIIUI AVVII U/3/14

Former Textron Turf Care and Specialty Products	Lincoln	10/26/2016	Withdrawn 6/11/19
Former Citizens Gas FMGP	McCook	6/4/2018	Withdrawn 7/16/20
Galaxy Laundry	Grand Island	2/2/2022	Withdrawn 1/4/23

# **Brownfields Assessments and Cleanups**

A brownfield site is a vacant or under-used property where expansion or redevelopment is complicated by the presence or potential presence of hazardous substances, pollutants, or contaminants. Common brownfield properties include historic dry cleaners, former gas stations, auto repair shops, and closed manufacturing facilities. These properties can be contaminated with various chemicals such as tetrachloroethene (PCE) used in dry cleaning, benzene from petroleum fuel, and heavy metals such as lead from manufacturing activities.

NDEE's Section 128(a) Brownfields Program receives funding from EPA to offer various investigations and assistance at no cost to eligible applicants. This includes the following services:

- Phase I Environmental Site Assessments (ESAs) provide a review of historical documents and regulatory databases to determine if there are any environmental concerns associated with the past use of a property (e.g., the property was a gas station in the 1950s) and surrounding land use.
- Phase II ESAs are completed when environmental concerns are identified in the Phase I ESA, and include collecting soil, soil gas, and/or groundwater samples to identify if there has been a release to the environment and the initial extent of contamination onsite.
- Asbestos-containing materials, lead-based paint, and mold surveys can be completed on building materials as part of a Phase I ESA, Phase II ESA, or independently.
- Brownfield property inventories help to document all brownfields properties in a corridor, neighborhood, downtown, or other larger area slated for redevelopment.
- Cleanup planning activities (e.g., an Analysis of Brownfield Cleanup Alternatives report) include cleanup options and cost estimates based on future uses and redevelopment plans. Analysis of Brownfield Cleanup Alternatives reports are required to qualify for federal cleanup grants.
- Cleanup grants provide partial assistance for asbestos abatement or cleanup to contain and reduce contamination at a site (e.g., treatment or excavation of contaminated soil).
- Other cleanup assistance may include planning grants to assist with developing a cleanup plan for a contaminated site.

This year, the Section 128(a) Brownfields Program rolled out the Orphan Tank Removal Program (OTRP). The OTRP covers 100% of the costs associated with removing abandoned underground storage tanks (USTs) at former service stations and industrial facilities for eligible applicants and properties. For a UST to qualify for removal by the OTRP, the tank must be out of operation and cannot be tied to a liable or viable party. The UST must also be located on a Brownfields site, which must be owned by an organization that represents community interests; this may include city or county governments, non-profit organizations, economic development districts, regional councils of government, or other public entities. This program was developed and made possible by additional Section 128(a) funding made available through the Infrastructure Investment and Jobs Act, aka the Bipartisan Infrastructure Law.

During the past year, NDEE has completed ten Phase I ESAs, five Phase II ESAs, eight asbestos-containing materials surveys, five lead-based paint surveys, four mold surveys, one Brownfield Inventory, one Analysis of Brownfield Cleanup Alternatives report, and a Ground Penetrating Radar investigation at a former service station to locate abandoned USTs slated for removal through the OTRP. NDEE also provided partial cleanup assistance for asbestos removal to five applicants.



Community Crops is a non-profit organization based in Lincoln, NE that provides education and resources for people to grow their own food. In 2022, Community Crops set their sights on a new community garden site on vacant land adjacent to the Charles H. Gere Library in Lincoln. The Lincoln-Lancaster County Health Department (LLCHD) requested environmental assessments to ensure the soil was safe for gardening. Being that Community Crops is a small organization with limited funding, Community Crops reached out to the NDEE Brownfields Program for assistance. The NDEE used nearly \$14,000 of Section 128(a) Brownfields Program funding to complete a Phase I ESA and conduct additional soil sampling that met the standards of the LLCHD. Following the assessment work, Community Crops was able to move forward with the garden site. The Gere Library garden has had a wonderfully successful first season serving 18 households (46 individuals), with 17% of these families being immigrants or refugees and 56% being low-to-moderate income.

# **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 NDEE's Brownfields 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 NDEE's 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.

Outreach activities completed in FY2024 include:

- Presentation at the March Environmental Meeting with the Nebraska Chapter of the American Society of Civil Engineers in Lincoln – March 26, 2024.
- Interview at the Association of State and Territorial Solid Waste Management Officials,
   Inc. (ASTSWMO) Mid-Year Meeting in Boston, MA April 23, 2024.
- Brownfields Redevelopment Workshop in Neligh, NE May 21, 2024.
- NDEE University Presentation at NDEE Office in Lincoln June 18, 2024.
- Presentation at the Relators Association of Lincoln, June Commercial Brokers Committee Meeting – June 26, 2024.



On April 23, 2024, NDEE's Brownfields Coordinator, Taryn Horn (Center), spoke at the ASTSWMO Mid-Year Meeting in Boston, MA. Taryn's session, called "BILding the Good Life in Rural Nebraska", highlighted Nebraska's efforts to support vital cleanups in small and rural communities using Section 128(a) funding provided by the Bipartisan Infrastructure Law. NDEE was asked to speak because of its experience providing assessments and cleanups to small and rural communities in Nebraska who otherwise lack capacity to address brownfields sites.

The NDEE Brownfields Program also meets one-on-one with community representatives as an outreach approach to discuss resources and develop strategies for the successful redevelopment of brownfield properties.

In FY2024, NDEE met with representatives of the following communities/organizations to discuss resources and next steps for redevelopment of their priority brownfield project listed below:

- City of Beatrice Dempster Industries
- Seward County Community Development Former Centennial School building in Utica
- Village of Elm Creek Former service station at 340 E. Front Street
- Schuyler Community Development Historical Top Notch building
- League of Nebraska Municipalities Former office building.
- City of Lincoln Additional projects in Haymarket area.
- City of Hastings Former Middle School building.
- Lutheran Family Services Former Dana College in Bellevue
- Blair Freeman Former dumping ground at 2108 L Street in Omaha

Outreach efforts by the NDEE Brownfields Program also helped Centennial Public Schools (CPS) secure a technical assistance grant from the EPA. CPS has been working with the Village of Utica and Seward County Chamber & Development Partnership to seek support and redevelopment ideas for the former Centennial school building and bus barn in Utica. The technical assistance grant will help provide a feasibility study, site planning, and exploration of different use options for a Preliminary Reuse Framework Report.



On May 20, 2024, EPA announced that the City of Schuyler was selected to receive a Community-Wide Assessment Grant in the amount of \$500,000. A Community-Wide Assessment Grant provides funding for a grant recipient to inventory, characterize, and assess brownfield sites in their community; conduct a range of planning activities; develop site-specific cleanup plans; and conduct community engagement. NDEE assisted the City of Schuyler with their grant application by visiting with the former Economic Development Director, touring brownfields sites in Schuyler, and following up on available resources. NDEE also provided a travel stipend to the former Economic Development Director to attend the National Brownfields Training Conference. NDEE drafted a letter to the EPA in support of the City of Schuler's efforts in applying for the grant and revitalizing their community. (Left: Brian Bywater - Schuyler Community Development; Right Meg McCollister - EPA Region 7 Administrator).

In addition to providing public outreach, NDEE awards travel stipends to local community representatives to attend the National Brownfields Training Conference and other educational brownfields workshops. In 2023, NDEE awarded six travel stipends to the City of Hastings, Schuyler Community Development, Southeast Nebraska Development District, City of Auburn, Civic Nebraska, and the Metropolitan Area Planning Agency to attend the National Brownfields Training Conference in Detroit, MI from August 8-11, 2023. In 2024, NDEE awarded one travel stipend to the City of Seward to attend the Brownfields Redevelopment Workshop in Neligh, NE on May 21, 2024.

To facilitate the leveraging of public resources, NDEE's Brownfields Program collaborates with EPA Region 7, KSU TAB, and other partners to identify and make available resources that can be used for brownfields activities. NDEE tracks leveraged resources by evaluating the dollars leveraged, cleanup and redevelopment jobs leveraged, and acres made ready for anticipated reuse. In the current Cooperative Agreement periods (starting on July 1, 2020 for Section 128(a) funding provided via the annual appropriation and October 6, 2022 for Section 128(a) funding provided via the Infrastructure Investment and Jobs Act), Nebraska has received \$4,594,920 in total funding and has leveraged \$2,479,957 in additional cleanup and redevelopment funding, 65.25 cleanup and redevelopment jobs, and 168.34 acres ready for anticipated reuse at 16 properties. Funding provided by the Infrastructure Investment and Jobs Act has allowed the NDEE Brownfields Program to expand and develop new resources so a greater number of communities can address their brownfield properties and cultivate healthy,

resilient neighborhoods. Additional resources currently being developed as a result of this funding include cleanup programs to address mold and lead-based paint, as well as a technical assistance program that will allow a community to hire a consultant to assist with strategic planning and sustainability analysis for a brownfield redevelopment project.

# Resource Conservation and Recovery Act (RCRA) Program

The NDEE received authorization from the EPA in 1985 to administer portions of the Resource Conservation and Recovery Act (RCRA) program. Nebraska Administrative Code (NAC) *Title 128 - Nebraska Hazardous Waste Regulations* incorporates the applicable RCRA regulations, which the NDEE updates as Federal regulations change.

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

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

The Compliance Assistance Program helps Nebraska businesses, government entities, and the public comply with hazardous and solid waste regulations in a non-enforcement setting. This program works with the regulated community in a partnership that promotes hazardous waste minimization and pollution prevention to encourage waste generators to take steps that actually reduce the amount of hazardous waste being generated in the state saving them resources, time and costs. An additional product of these efforts is that it ultimately reduces the number of regulatory requirements on our industries by helping hazardous waste generators generate less RCRA hazardous wastes.

Compliance and enforcement activities include investigating complaints and inspecting hazardous waste generators and transporters (including accompanying US EPA Region 7 on their inspections); 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 for RCRA cleanup sites to ensure that useful and representative data is being collected to review and document progress.

The RCRA program also conducts extensive permitting and closure activities to prevent the release of hazardous substances into the environment. Closure actions are required for treatment, storage, or disposal facilities that discontinue operations or that have operated without a permit. Permits are required for all operating treatment, storage, and disposal facilities. Post-

closure permits are required for treatment, storage, and disposal facilities that have gone through closure and have contamination remaining on-site.

There is one operating hazardous waste storage and treatment facility in Nebraska: the Clean Harbors Environmental Services, Inc. incinerator near Kimball, which began operation in 1994. This facility has a compliance inspection twice per year and undergoes annual performance test burns to demonstrate proper operation and compliance with applicable Title 128 – Nebraska Hazardous Waste Regulations and its permit to operate requirements. Operational and physical changes at the Clean Harbors incinerator, made to improve the performance of the facility and ensure compliance with applicable regulations, result in numerous permit modifications. In addition, Clean Harbors has announced plans to expand the Kimball facility. The Air Quality Construction permit and the RCRA permit have been issued. Nebraska also oversees two active hazardous waste storage facilities that do not treat hazardous waste.

Corrective action 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. NDEE has administered the RCRA Corrective Action Program since January of 2017.

# Significant Accomplishments

Significant corrective action accomplishments during FY2024 include the modification of the RCRA permits for both Safety-Kleen facilities (Grand Island and Omaha) and Clean Harbors Environmental Services Inc (Kimball).

EPA requires generators use the e-manifest module that is part of the national RCRAInfo database. Nebraska assists generators in the use of the e-manifest system, which provides a more efficient way for tracking the shipment of hazardous waste electronically. It provides a notification system so that those in the chain (generator, transporter, and disposal facility) can see and manage the movement of wastes, as well as for States and EPA to lessen the time spent reviewing paper manifests. The reduction in the use of paper since system implementation has reduced costs and saved generators time by being able to manage the manifest information and correct discrepancies easier. This has provided multiple benefits including less solid waste, and space savings for not having to store all that paper. This system also provides the public a way to review wastes generated and disposed by generators, and the process it followed to be properly disposed.

Nebraska's RCRA program continues to help generators notify and manage their generator status by having them electronically file through the secure Industry national RCRAInfo database. In addition, Nebraska assists facility hazardous waste managers to prepare their Hazardous Waste notification form electronically. NDEE then is notified and approves the requests electronically, which saves NDEE and the hazardous waste facilities time, equating to money saved. Each generator then has electronic notification (email documentation) of the last time their status was updated and by whom. In the rare occurrence that a generator files a notification by mail or thorough an email to the RCRA program staff work with that generator to get them set up to file electronically and upload the information while working with that generator to complete their notification.

# **Program Funding**

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

The RCRA program collects an annual 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:

- 92 Large Quantity Generators (greater than 2,200 pounds of hazardous waste generated per month)
- 443 Small Quantity Generators (between 220 and 2,200 pounds generated per month)
- 1,479 Very Small Quantity Generators (Federal Status less than 220 pounds per month)
- 1 Hazardous Waste Incinerator Facility
- 3 Treatment, Storage or Disposal Facilities
- 24 Hazardous Waste Transporters

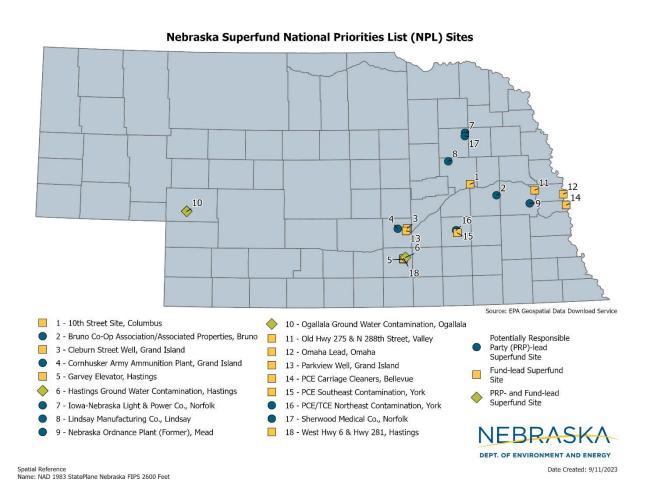
Location by County of Large Quantity Generators in Nebraska Regulated Under RCRA			
Buffalo 3	Hall 4	Platte 2	Washington 2
Cass 1	Kimball 1	Red Willow 1	Wayne 1
Cheyenne 1	Knox 1	Sarpy 9	York 1
Cuming 1	Lancaster 26	Saunders 2	
Dodge 1	Madison 2	Scottsbluff 2	
Douglas 22	Otoe 1	Seward 2	
Fillmore 1	Phelps 2	Stanton 1	
Gage 1			

Summary of SFY2024 Activitie	s	
Compliance	State	EPA
On-site Visits	1	*
Direct Assistance Contacts	653	*
Public Outreach Presentations (total 30 in attendance)	1	*
Complaints Received	15	*
Complaints Investigated	15	*
Complaints Closed	15	*
	*!	Data not availab
RCRA Inspections		
Land Treatment Facilities	0	0
Treatment, Disposal, and Storage Facilities	2	2
Comprehensive Groundwater Monitoring Evaluations	0	0
Operation and Maintenance Inspections	0	0
Facility Self-Disclosure	0	0
Large Quantity Generator	6	7
Small Quantity Generator	12	1
Conditionally Exempt Small Quantity Generators	1	1
Transporters	0	0
RCRA Permitting		
Closure Plans Finalized	0	0
Permits Issued/Renewed	1	0
Modifications	2	0
EPA Corrective Action Orders	0	0
CRA Record Reviews		
Financial Assurance Closure/Post Closure	1	0
Corrective Action	17	0

# **Superfund Program**

Thousands of contaminated sites exist nationally due to hazardous waste being improperly managed. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) became federal law in 1980 to clean up these sites, which include manufacturing facilities, processing plants, landfills, and mining sites. Superfund is a federal cleanup program designed to investigate and cleanup sites contaminated with hazardous substances under CERCLA. Sites in the Superfund program that are listed on the National Priorities List (NPL) are considered the most highly contaminated and undergo longer-term remedial investigation and cleanups. These sites pose the highest risk to human health and the environment in the nation.

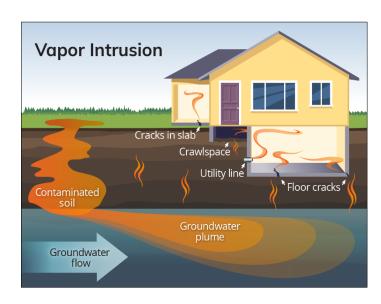
The investigation and remediation of contaminated sites under CERCLA are the primary responsibility of EPA and other federal agencies. NDEE participates in the Superfund process by serving as a technical support agency to EPA and as the environmental representative for the State of Nebraska. The EPA, with concurrence from the State of Nebraska, determines whether a site should be listed on the NPL.



This investigation and remedial work at Nebraska Superfund sites make a visible and lasting difference in communities across the state, giving people healthy places to live and work. NDEE provides technical assistance to EPA Superfund efforts across two programs: the Superfund Site Assessment Program and the Superfund Management Assistance Program.

# **Superfund Site Assessment Program**

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 around contaminated municipal and private drinking water supply wells or where there is a significant potential for groundwater contamination. It is also becoming more common to investigate sites for potential vapor intrusion from contaminated soil or groundwater.



#### What is Vapor Intrusion?

Volatile organic compounds (VOCs) are a class of chemicals that are volatile (evaporate easily) and form a vapor in the air. Vapor intrusion is a way that these volatile chemicals in soil and groundwater near and under buildings can enter and build up inside the buildings, similar to how radon can enter a home. Common uses of VOCs included dry cleaning, treatment of stored grain, and industrial operations. Breathing in certain VOCs at elevated levels can cause adverse health effects based on overall age and health, the length of exposure, and the type of chemical.

Image courtesy of the Washington State Department of Ecology

#### Site assessment steps:

- 1. Pre-CERCLA Screening Assessment. This step is a review of existing information on a potential site to determine whether a release has occurred requiring further evaluation through the Superfund process.
- Abbreviated Preliminary Assessment/Preliminary Assessment. This step involves collecting background information such as property ownership, operational history, and geology/hydrogeology, and performing a site reconnaissance.
- Site Inspection. This step involves sampling environmental media, such as soil, soil gas, and groundwater, and evaluating vapor intrusion into indoor air of building structures. In some situations, a combined Preliminary Assessment and Site Inspection is conducted.

- 4. Expanded Site Inspection. This step is performed at large and/or complex sites to collect additional soil and groundwater samples to further define the extent of contamination.
- 5. Site Re-Assessment. This step is performed at some sites if new information is obtained that indicates that a threat to public health and/or the environment may exist.

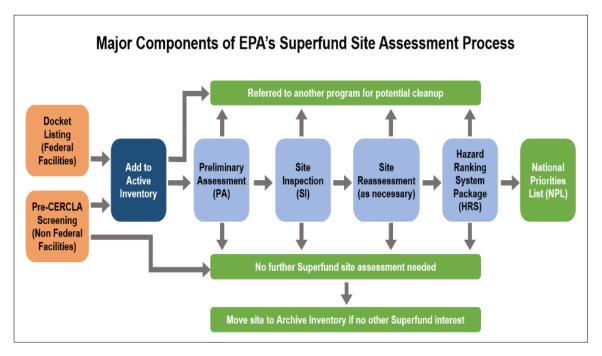
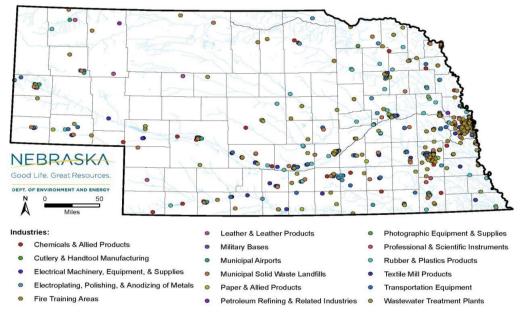


Image courtesy of the EPA

NDEE often uses inventories to guide its prioritization of site assessment projects. In 2017, NDEE compiled a Statewide Inventory of Per- and Polyfluoroalkyl Substances (PFAS). PFAS are a large group of man-made chemicals that have been used in consumer products, industrial processes, and firefighting foams since the 1940s. PFAS are resistant to heat, oils, stains, grease, and water, and break down very slowly over time. These unique properties contribute to their wide use and persistence in the environment. The figure on the following page illustrates the locations of industries present across the state that potentially used or manufactured PFAS based on the 2017 Statewide Inventory.

# Nebraska Statewide Inventory Per- and Polyfluoroalkyl Substances



EPA has identified PFAS as contaminants of emerging concern that can have adverse health effects if found in drinking water supplies. One of the main uses of PFAS is in aqueous film-forming foam (AFFF), which is a commercial surfactant solution used to extinguish hydrocarbon fires. Other high priority processes and facilities identified in the Statewide Inventory include metal and chrome plating facilities and fire training areas. Due to the scope of this inventory and research methods utilized, there were additional facilities which may have used, manufactured, or accumulated PFAS-related materials that are not included in this inventory, including wastewater treatment plants, landfills, and sites where AFFF was used, such as past and present civilian and military airports, past aviation crash sites, oil spill sites, or other large fire sites.

During the past year, NDEE has performed work on three Pre-CERCLA Screening Assessments, three Abbreviated Preliminary Assessments, three Site Inspections, one Expanded Site Inspection, and six Site Re-Assessments.



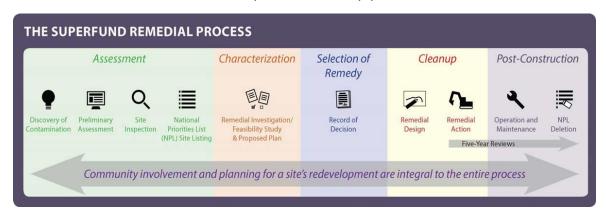




In March 2024, NDEE completed an Abbreviated Preliminary Assessment at the Bare Ave & 2<sup>nd</sup> Street Private Wells site in North Platte. The purpose of the Abbreviated Preliminary Assessment was to assess the impact on drinking water sources downgradient from several businesses that may have used PFAS in western North Platte, including several dry cleaners, a former electroplater, a business related to tarps and covers, a railroad yard, and two fire stations. Samples were collected from private wells (left), a municipal well (center), and temporary wells (right) to determine to determine the existence and possible extent of groundwater contamination by PFAS

# **Superfund Management Assistance Program**

The Superfund Management Assistance program provides management and technical support to EPA at NPL 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, NPL sites are generally large and complex, because they often involve more than one contaminated media and have multiple sub-units with varying contaminants. The activities at these sites are organized into several phases, including site assessment, characterization, remedy selection, cleanup, and post-construction activities. NDEE also participates in public meetings with citizens and local officials in the development of cleanup plans.



Nebraska currently has 18 active NPL sites. One site, the Waverly Groundwater Contamination Site, was removed from the NPL on November 20, 2006, upon achieving the cleanup goals for the site. Fourteen of the sites are in the cleanup phase and four sis (the Iowa-Nebraska Light & Power Company site in Norfolk; Old Hwy 275 site in Valley; PCE Carriage Cleaners site in Bellevue; and PCE/TCE Northeast Contamination site in York) are relatively new to the NPL and are in the site study stage.

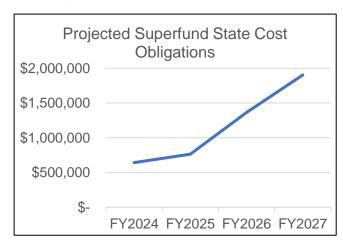
Below is a list of the 18 active NPL sites. Aside each site name is an EPA web address that provides more detailed information about the site.

Active National Priorities List Sites in Nebraska		
Site Name	EPA Web Address	
10th Street Site, Columbus	https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm? id=0702001	
Bruno Co-Op Association/Associated Properties, Bruno	https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm? id=0702000	
Cleburn Street Well, Grand Island	https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm? id=0701986	
Cornhusker Army Ammunition Plant, Grand Island	https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm? id=0702020	
Garvey Elevator, Hastings	https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0704351	
Hastings Ground Water Contamination, Hastings	https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm? id=0701973	
Iowa-Nebraska Light & Power Co., Norfolk	https://cumulis.epa.gov/supercpad/CurSites/csitinfo.cfm ?id=0702377&msspp=med	

Lindsay Manufacturing Co., Lindsay	https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?
	<u>id=0701913</u>
Nebraska Ordnance Plant (Former), Mead	https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?
, , ,	id=0702031
Ogallala Ground Water Contamination,	https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?
Ogallala	id=0702287
Old Hwy 275 & N 288th Street, Valley	https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?
	id=0704272&msspp=med
Omaha Lead, Omaha	https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?
	<u>id=0703481</u>
Parkview Well, Grand Island	https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?
	id=0704456
PCE Carriage Cleaners, Bellevue	https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?
	<u>id=0710226</u>
PCE Southeast Contamination, York	https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?
	id=0706200&msspp=med
PCE/TCE Northeast Contamination, York	https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?
	id=0706105&msspp=med
Sherwood Medical Co., Norfolk	https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?
	<u>id=0702086</u>
West Hwy 6 & Hwy 281, Hastings	https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?
	<u>id=0704738</u>

Under the Superfund program, EPA has the authority to mandate the parties responsible for the contamination to either perform the cleanup or provide reimbursement for EPA-led cleanup. If the responsible parties are no longer in business or cannot be identified, then EPA has the authority to finance and perform the cleanup itself. State cost obligations occur when the responsible party lacks the financial resources so federal funds are used to pay for the cleanup.

Of the 18 active Nebraska sites on the National Priorities List, seven are being addressed by the responsible party. The remaining eleven sites either are or will be partially or fully financed by Federal and State funds (i.e., "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 ten years of the project. State cost obligations may be waived for a portion of the



cleanup if EPA uses funds derived from a settlement (or other instrument) with potentially responsible parties or if funds are provided by the Infrastructure Investment and Jobs Act (IIJA) of 2021. After the initial ten years, the State pays 100% of the operation and maintenance costs. Initially, NDEE funded these costs with legislative appropriations of General Funds. During 2004-2007, NDEE received Nebraska Environmental Trust grant funding to pay these costs. Beginning in FY18, the Legislature authorized NDEE to fund these costs through a transfer of up to \$1.5 million from the Petroleum Release Remedial Action Cash Fund into the Superfund Cost Share Cash fund.

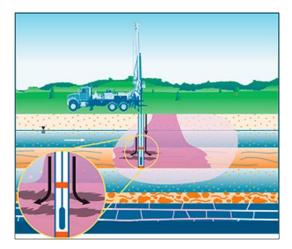
For FY2024, NDEE's cost share was \$642,560.87. Future projections of these costs are \$763,609 in FY2025, \$1,365,711 in FY2026, and \$1,904,094 in FY2027. In FY2025, NDEE is not expected to have a 10% cost share for remedial activities at Fund-lead sites due to the use of IIJA funds; however, it will retain its responsibility for 100% of the operation and maintenance costs at the five sites described below.

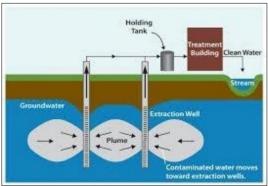
During the last year, NDEE paid 100% of operation and maintenance costs related to cleanup at the Cleburn Operable Unit (OU) 3 subsite in Grand Island, Columbus 10<sup>th</sup> Street site, Hastings Second Street OU 20 subsite, Ogallala OU 2 subsite, and Parkview Well OU 1 subsite in Grand Island.

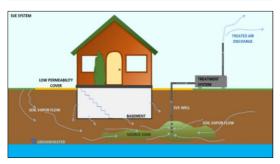
- At the Cleburn OU 3 subsite, NDEE is completing routine groundwater sampling.
   The Cleburn OU 3 subsite was contaminated as a result of dry-cleaning operations.
- At the Columbus 10<sup>th</sup> Street site, NDEE initiated a pilot study in FY 2023 for insitu treatment near the southern municipal well field. Additional data was collected in FY 2024. The results of this pilot study will be evaluated during the next fiscal year. NDEE is also completing routine groundwater sampling, vapor intrusion sampling, and vapor mitigation system inspections. The Columbus 10<sup>th</sup> Street site was contaminated as a result of dry-cleaning operations.
- At the Hastings Second Street OU 20 subsite, NDEE is completing routine groundwater sampling and in-situ treatment. The Hastings Second Street OU 20 subsite was contaminated from operation of a coal gas plant.
- At the Ogallala OU 2 subsite, NDEE is completing routine groundwater sampling, vapor intrusion sampling, and vapor mitigation system inspections.
   The Ogallala OU 2 subsite was contaminated as a result of dry-cleaning operations.
- At the Parkview Well OU 1 subsite, NDEE is operating and maintaining a
  groundwater extraction and treatment system. NDEE is also completing routine
  groundwater sampling, vapor intrusion sampling, and vapor mitigation system
  inspections. The Parkview Well OU 1 subsite was contaminated from industrial
  operations.

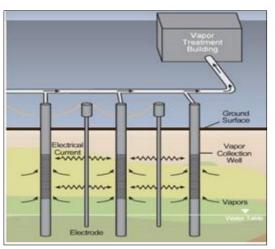


This photo shows one of the two air strippers inside the groundwater treatment plant at the Parkview Well OU 1 subsite. Groundwater is pumped to the top of the air stripper, and then runs through the perforated trays. The contaminated air goes out the top of the air stripper. The treated groundwater is either pumped to a storm water drain or to one of the discharges into Kenmare Lake.









# What are In-Situ Injections?

In-situ remediation treats contamination "in place" using chemical or biological approaches. This can be done below ground surface and with minimal disturbance by injecting the chemical or biological substrate directly into the groundwater. The substrate is injected at the appropriate depths and locations to allow it to come into direct contact with the contamination.

Image courtesy of the Interstate Technology Regulatory Council (ITRC)

# What is Groundwater Extraction and Treatment?

Groundwater extraction and treatment uses extraction wells to pump groundwater to an aboveground treatment system. Once treated water meets regulated standards, it is discharged for disposal or beneficially reused.

Image courtesy of the EPA

#### What is Soil Vapor Extraction?

Soil vapor extraction uses wells to extract soil vapor to reduce or eliminate sources of contamination in the unsaturated zone. The offgas is typically treated before being discharged into the atmosphere

Image courtesy of ITRC

#### What is In Situ Thermal Treatment?

In situ thermal treatment treats contamination "in place" using heat. The heat is generated using either electrodes, steam, or underground heaters, which vaporize chemicals in soil and groundwater. The chemical vapors move through soil and groundwater toward vapor collection wells and are then piped to the ground surface to be treated before being discharged into the atmosphere.

Image courtesy of the EPA

IIJA funds are being used for cleanup at the Garvey Elevator OU 1 subsite in Hastings, Hastings Second Street OU 12 subsite, Parkview Well OU 2 subsite in Grand Island, and PCE Southeast OU 1 and OU 2 subsites in York. The use of IIJA funds is expected to result in a cost savings of \$2,622,747 in NDEE's cost share.

- At the Garvey Elevator OU 1 subsite, IIJA funds are being used for operation and maintenance of a soil vapor extraction system and groundwater extraction and treatment system, and for routine groundwater sampling. The Garvey Elevator OU 1 subsite was contaminated from the use of liquid fumigant at a grain storage facility.
- At the Hastings Second Street OU 12 subsite, IIJA funds are being used for the construction and operation of an in-situ thermal treatment system. The Hastings Second Street OU 12 subsite was contaminated from operation of a coal gas plant.



The top photo shows a wellfield for an in-situ thermal treatment system at the Hastings Second Street OU 12 subsite. Heaters are placed close together to reach the targeted temperatures. In this area, vapor extraction wells are installed with the heaters to remove vapors and keep them from cooling and blocking the system. This strategy keeps the vapor temperature high in the extraction wells, preventing condensation and blockage. From this wellfield, the vapors are pulled into the blowers where they are sent to the treatment phase.



The bottom photo shows blowers (on the right) that move contaminated vapor from the wellfield to three treatment units (on the left) at the Hastings Second Street OU 12 subsite. The blowers control the air flow and adjust their speed as needed. The treatment units use natural gas to heat and clean the vapor. Usually, two units work together, with a third used during busy times. Safety devices monitor the vapor to prevent explosions, automatically adjusting or shutting down if necessary. The cleaned air is then released into the atmosphere.

 At the Parkview Well OU 2 subsite, IIJA funds are being used to perform insitu injections. The Parkview Well OU 2 subsite was contaminated from industrial operations.







The above photos show the in situ injections at the Parkview Well OU 2 subsite. Chemicals called oxidants are mixed with water above ground (left) and are pumped underground into contaminated groundwater (center). Real time monitoring (right) is used to ensure that the oxidants are delivered to the correct locations and depths. These oxidants break down the volatile compounds in the groundwater to byproducts like carbon dioxide and water. This is an efficient and cost-effective way to treat groundwater.

 At the PCE Southeast OU 1 and OU 2 subsites, IIJA funds are being used for the construction and operation of an in-situ thermal treatment system.
 The PCE Southeast OU 1 and OU 2 subsites were contaminated as a result of dry-cleaning operations.



On May 23, 2024, EPA hosted an event to highlight the ongoing cleanup of the PCE Southeast Superfund Site in York, NE. EPA Region 7 Administrator Meg McCollister (right) and York Mayor Barry Redfern (left) gave remarks on the success of the cleanup, which is funded by the Bipartisan Infrastructure Law. The event included a walking tour of the site to observe the cleanup, which uses in situ thermal treatment to destroy chemicals. Photo courtesy of the

January 2024, EPA updated its Residential Soil Lead Guidance, which lowered the screening level for lead in soil at residential properties from 400 parts per million (ppm) to 200 ppm (where there is a single source of lead) or 100 ppm (where there may be other sources of lead exposure, such as lead in air or water).

In Nebraska, the primary impact that this update will have is in regards to the Omaha Lead site. The Omaha Lead site is associated with two former lead-processing facilities, American Smelting and Refining Company, Inc. (ASARCO) and the Aaron Ferer & Sons Company (later the Gould Electronics, Inc.) lead battery recycling plant. Both the ASARCO and Aaron Ferer/Gould facilities released lead-containing particulates to the

atmosphere from their smokestacks, which were deposited on surrounding residential properties.

As a result of the update to the Residential Soil Lead Guidance, EPA Region 7 will evaluate the residential soil cleanup level for lead to ensure it is consistent with the updated guidance and risk assessment methods. The EPA will determine whether additional actions should be taken to further reduce the risk of future elevated blood levels in young children at the site.

#### **Federal Facilities**

# Defense and State Memorandum of Agreement (DSMOA) Program

Under the DSMOA program, NDEE oversees investigation and cleanup of munitions and hazardous substances at current federal facilities, such as Offutt Air Force Base, and formerly used defense sites (FUDS), such as the former Nebraska Ordnance Plant near Mead. The cleanup efforts are conducted by a Department of Defense (DOD) component, such as the Air Force or the Army Corps of Engineers. Investigation and cleanup of hazardous substances follow the Superfund CERCLA process. Some sites must first be investigated and cleared of munitions and unexploded ordnance before CERCLA work can begin. NDEE also reviews previous no-further-action decisions for facilities and if needed, provides non-concurrence with recommendations for further work. During FY2024, investigation and cleanup activities for hazardous substances were conducted at two active sites and 13 formerly used defense sites, and military munitions response activities were performed for one site.

PFAS were found at five DSMOA sites prior to FY2024. NDEE is coordinating with EPA and the DOD components to determine the appropriate response activities at these sites. Follow-up investigations are ongoing at Offutt Air Force Base.



Photo shows a direct-push rig preparing for in-situ enhanced bioremediation injections into the aquifers beneath the Former Lincoln Air Force Base Atlas "F" Missile Site 1 in Elmwood, NE.

# Former USDA/CCC Grain Storage Facilities

Nebraska contains 332 former U.S. Department of Agriculture/Commodity Credit Corporation (USDA/CCC) grain storage facilities. The soil, groundwater, and soil vapor at and near many of these former grain storage facilities is contaminated with carbon tetrachloride, which was commonly used as a grain fumigant during their operation. The USDA/CCC is currently prioritizing, investigating, and cleaning up these former grain storage facilities, and installing vapor mitigation systems in occupied buildings as needed. Investigation and cleanup follow the Superfund CERCLA process. NDEE oversees these efforts under a Nebraska Voluntary Cleanup Program agreement with the

USDA. During FY2024, remedial actions were conducted at three sites, investigations were ongoing at six sites, and new groundwater and vapor intrusion investigations were started at nine sites.

# **Solid Waste Program**

Every day, tons of solid waste are disposed of at landfills across the state. The purpose of the Solid Waste program is to ensure proper management of solid waste, which includes solid waste typically collected and disposed in municipal landfills, and other non-hazardous waste. Solid Waste regulations are incorporated in NAC *Title 132 - Integrated Solid Waste Management Regulations*. The regulations provide technical criteria for land disposal areas and solid waste processing facilities. In May 2023, Title 132 marked a milestone of 30 years. Duties assigned to this program include:

- Permit issuance, renewal, and modification;
- Response to inquiries related to facility operations;
- Compliance inspections and enforcement actions;
- Investigation of citizen complaints;
- Alternate waste management method approvals;
- Groundwater investigations and groundwater/soil remediation projects at permitted and non-permitted facilities;
- · Gas emissions monitoring related to landfills and other permitted sites;
- Closure inspections and monitoring of closure and post-closure activities;
- Conducting public information sessions and hearings related to permits;
- Financial assurance review and monitoring compliance; and
- 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 the disposal (one time and repeated) or treatment of special wastes. In addition, solid waste processing facilities, such as compost sites, material recovery facilities, transfer stations, and medical waste processing facilities are regulated by this program.

Permit modification requests are routinely submitted by permitted facilities. Responses to the modification requests are particularly time-critical since the facility may need to expand or construct new waste disposal cells in order to meet their disposal capacity needs.

The LB1101 Solid Waste Management Programs Study published in 2017 provides a complete description of Nebraska's solid waste programs and reported that the average remaining capacity for waste disposal is approximately 39 years.

The Waste Permit programs coordinate with other NDEE 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, amongst other regulatory requirements.

Currently, the Waste Permit and Waste Compliance Programs oversee the following facilities:

Total Permitted Facilities in FY2024	
Municipal Solid Waste Disposal Areas (Landfills)	22
Solid Waste Compost Sites	8
Transfer Stations	36
Materials Recovery Facilities	4
Construction & Demolition Waste Disposal Areas	31
Delisted Waste Disposal Area	1
Processing Facility	2
Fossil Fuel Combustion Ash Disposal Areas	7
Total	111

The following table indicates the number of inspections, complaints, and permitting-related activities that the program was involved with in FY2024:

Summary of FY24 Activities			
Compliance			
Facility Inspections (General)	140		
Facility Closure Inspection	0		
Facility Construction Inspections	10		
Facility Comprehensive Renewal Inspections	18		
Complaints Received	156		
Complaints Investigated	155		
Complaints Closed or Referred	155		
Permitting			
New Permits Issued	0		
Permit Renewals	21		
Major Permit Modifications	2		
Public Hearings	0		
Permits Transferred	0		
Financial Assurance Reviews	142		
Facilities Closed	0		

# Assessment Monitoring and Remedial Measures

All solid waste disposal areas (facilities) 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 facility will monitor for a discrete number of contaminants that would be indicative of a potential release of contaminants from the facility. During FY2024, 13 operating and 2 closed facilities conducted detection monitoring. If one or more of the parameters being monitored exceed background levels, the facility must begin assessment monitoring, which includes a more extensive list of contaminants. During FY2024, 16 operating and 5 closed facilities conducted assessment monitoring.

If during the assessment monitoring phase, contaminant concentrations are detected above a groundwater protection standard, the facility is required to characterize the nature and extent of the release and, if necessary, assess and conduct remedial measures. In FY2024 investigations or remedial measures were continued at 4 active and 2 closed landfills.

# 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 NAC *Title 118 – Groundwater Quality Standards and Use Classification*. In FY2024, groundwater investigations continued at 1 site, and remedial actions continued at 9 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 Permit 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 50% 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**

The NDEE also administers the waste tire management program. Approved beneficial uses of waste tires are outlined in NDEE regulations. Waste tire haulers are required to obtain individual permits annually and 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 while maintaining mosquito control and fire prevention measures. Accumulation of more than 500 waste tires at any location is prohibited by rule.

Compliance assistance is an important aspect of this program. Program activities include responding to inquiries from local and state sources, developing guidance documents, conducting site visits, and providing technical advice. The NDEE develops and maintains guidance documents explaining on a wide variety of topics, including 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.

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.

Waste Tire Pe	rmit Totals, FY2024
Renewed Hauler Permits	23
New Permits Issued	8
Permits Expired	2
Financial Assurance Reviews	8

# CHAPTER 6:

# Water Programs

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

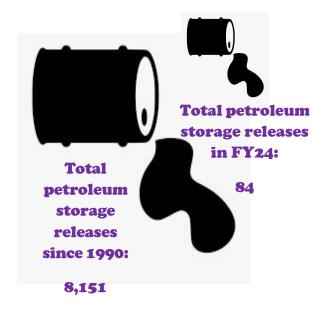
# **Petroleum Remediation Program**

Activities regarding the Petroleum Remediation Program involve two interrelated areas:

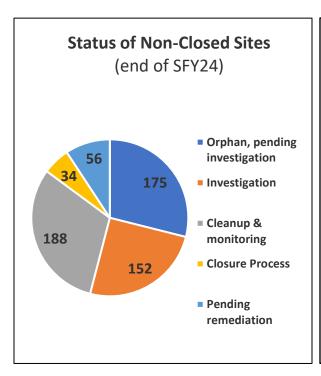
- Overseeing the investigation and cleanup of petroleum contamination resulting from leaking above ground and underground storage tanks as well as other sources such as pipeline leaks and transportation spills; and
- 2. Administering a **financial assistance program** for persons responsible for investigation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

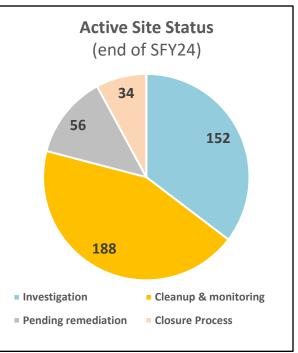
# Investigation and Cleanup

The first step in the Petroleum Remediation Program is the review of tank removal assessment reports or other documentation to determine whether contamination exists. If contamination is present, NDEE decides whether more investigation and cleanup are required. NDEE also determines whether parties who caused the contamination are available and financially capable of assuming responsibility.



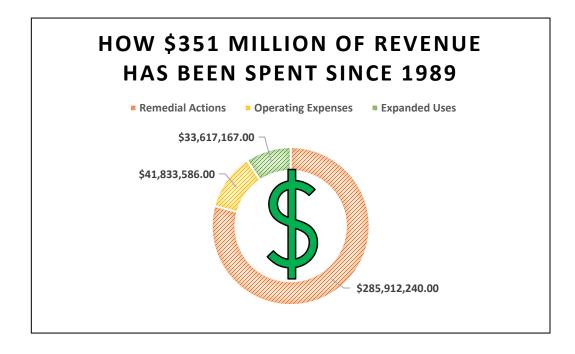
The program has incorporated Risk-Based Corrective Action (RBCA) procedures into regulations and accompanying guidance. The RBCA process allows for the evaluation of all petroleum release sites based on the risk they pose to human health and the environment. Those that pose no significant risk are closed; those that pose significant risk are prioritized for further work. Since 1999, the program has been collecting site-specific information needed for Tier 1, the first step in the RBCA process. Sites that fail Tier 1 are activated for Tier 2, which is a more detailed investigation and the next step in the RBCA process. In FY 2024, 152 Tier 1 / Tier 2 investigations were initiated. If sites fail Tier 2, they are normally scheduled for cleanup. In FY 2024, 273 referrals were received through the notification system (spill reports, complaints, and other).





#### Financial Assistance - Petroleum Release Remedial Action Reimbursement Fund

When contamination has been found at a site and NDEE has determined that more investigation and/or cleanup is required, NDEE will also determine the "Responsible Person." This term refers primarily to those who owned or operated the tank or other source when the release occurred. Those entities 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 to help tank owners pay for the costs associated with assessing and cleaning up any petroleum releases from tanks as well as meet the \$1 million financial responsibility requirement established by EPA 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 a guideline entitled "Reasonable Rates Schedule and Reimbursement Guidance Manual" which is available on the web site.

Revenue was \$12.0 million in FY24. During the year, NDEE reimbursed about \$3.0 million to Responsible Persons for work done at 115 different sites, and \$6.2 million was spent to clean up 211 different orphan sites. An additional \$442,560.87 of revenue was transferred to NDEE's Superfund program, as directed by legislation passed in 2017. As of June 30, 2024, over \$285 million total has been spent on site cleanups.

# Responsible Person Sites



Air sparge/soil vapor extraction remediation system at the site of a former gas station.

Previously, there had been hundreds of sites where the responsible person was known, but NDEE had not required work to begin. These were lower priority sites, and there was not sufficient funding to reimburse potential costs under the reimbursement fund. The sites were placed on a waiting list (backlogged) until funding was available. NDEE worked steadily to bring that list to zero. By November 2018, there were no more responsible person sites waiting on NDEE to require and approve work. Now when new spills are reported, they are worked on immediately with no waiting required. This helps speed property transactions and redevelopment.

# **Orphan Sites**

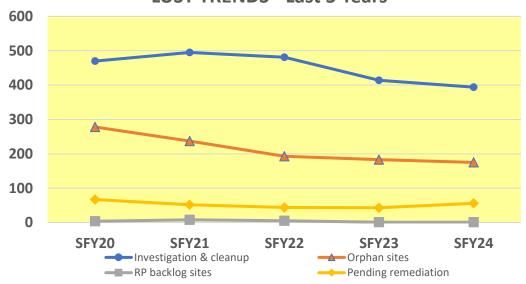
In situations involving "orphan" sites (sites where there is no viable responsible person), investigation and remediation costs are paid with federal and/or state funds. In FY 2024, there were 207 active sites for investigation and/or cleanup using State contractors. At the end of FY 2024, there were 175 orphan sites backlogged and not yet investigated.

# Leaking Underground Storage Tanks

Another name for the entire program is the acronym **LUST**. Many states use this term for their state petroleum cleanup programs.



**LUST TRENDS - Last 5 Years** 



# **Equipment Reuse**

As sites are undergoing cleanup, NDEE pays for the purchase of remediation equipment. When sites are cleaned up, NDEE seeks to reuse that equipment at other sites. Since June 2005, NDEE has reused hundreds of pieces of equipment, thus greatly reducing the need to buy new equipment. This reuse program has saved Nebraska taxpayers over \$7 million in new equipment costs and allowed that money to be used for cleanup of additional sites.





# Voluntary Remedial Action

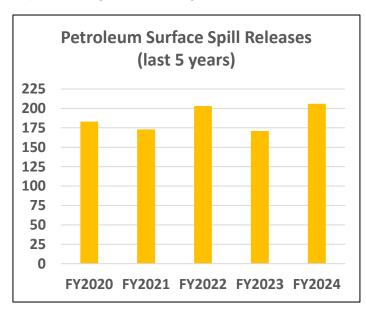
Tank owners can perform voluntary remedial action prior to NDEE's approval of their plans and still be eligible for reimbursement consideration in the future. This allows sites to move forward on their own initiative. To date, 238 suspended or backlogged leaking underground storage tank sites have been closed based on voluntary submittals.

# Surface Spills

NDEE has long been aware that many trucking companies, petroleum distributors, emergency response managers, and law enforcement agencies are unaware of Nebraska regulations regarding response to a petroleum spill onto road surfaces and shoulders, especially when groundwater and/or surface water is threatened.

Therefore, the Petroleum Remediation Section developed a brochure for distribution throughout the State explaining NDEE regulations and recommendations for cleaning up after a spill. We have distributed the brochure to all Nebraska county emergency managers, many law enforcement entities, as well as many trucking companies and private citizens.

The brochure, in addition to further information, is also available on our website at <a href="http://dee.ne.gov/NDEQProg.nsf/OnWeb/PSS">http://dee.ne.gov/NDEQProg.nsf/OnWeb/PSS</a>.



# What to do when you've had a fuel spill

(Over the Road Vehicle Incidents)

Nebraska Department of
Environment and Energy (NDEE)

February 2024



# When and how do I report a fuel spill?

- Call NDEE M-F, 8-5 at 402-471-2186
- Non-office hours, call the Nebraska State Patrol (NSP) Dispatch at 402-479-4921. NSP will contact NDEE, who will call you back
- NDEE will ask you:
   when the spill occurred,
   location of the spill,
   amount spilled,
   what has been done to contain or recover the
   spill, and
   who is responsible for the spill.

# Frequently Asked Questions about the Sale and Purchase of a Retail Petroleum Convenience Store

January, 2020

The Nebraska Department of Environment and Energy (NDEE) Petroleum Remediation Section often fields questions from real estate agents, lenders, and the public regarding the sale or purchase of a convenience store/gas station. Many of the questions relate to concerns about environmental problems due to leaks of petroleum from the fuel storage tank system or concerns about costs the buyer may incur if the system needs to be upgraded to meet current requirements. Here are some commonly asked questions and suggested methods the public can use to gather information needed to make an informed buying or selling decision.



# Contact for more information

NDEE-Petroleum

Remediation Section

http://deq.ne.gov/NDEQProq.nsf/OnWeb/LUST

NDEE Records
Management Section
http://dee.ne.gov/NDEQProq.nsf/OnWeb/PRR

NE State Fire MarshalFuels Division
https://sfm.nebraska.gov/fuels-safety

#### Sale & Purchase of Retail Petroleum Convenience Store

The Petroleum Remediation Section often fields questions from real estate agents, lenders, and the public regarding the sale or purchase of a convenience store/gas station. Many of the questions relate to concerns about environmental problems due to leaks of petroleum from the fuel storage tank system or concerns about costs the buyer may incur if the system needs to be upgraded to meet current requirements.

As a response, PRS developed a brochure for distribution to the public containing some commonly asked questions and suggested methods the public can use to gather information needed to make an informed buying or selling decision.

More information is available on the Petroleum Remediation Section website at http://dee.ne.gov/NDEQProg.nsf/OnWeb/LUST.



# **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, but most monitoring is focused in one to three major river basins each year in conjunction with a six-year rotating basin monitoring



Snake River in Cherry County

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), United States Geological Survey (USGS) and United States Environmental Protection Agency (USEPA).

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

NDEE's surface water monitoring programs have different purposes. Brief descriptions of the basin monitoring strategy, as well as other water quality monitoring programs, are provided as follows. Additionally, a more detailed overview of the programs is provided in the Department's biennial publication Water Quality Monitoring Programs Report available online. <a href="http://dee.ne.gov/Publica.nsf/pages/24-001">http://dee.ne.gov/Publica.nsf/pages/24-001</a>

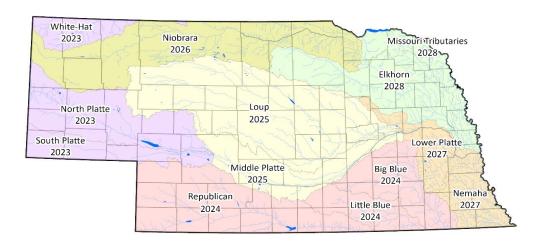


Collecting water samples

# **Basin Rotation Monitoring Program**

- Geographically focuses water quality sampling in one to three major river basins per year.
- Weekly monitoring of rivers and streams. May-September.
- Fourteen parameters analyzed at each sampling location.
- In 2024, NDEE sampled 41 sites within the Republican, Little Blue, and Big Blue River Basins.

# Six-year Basin Rotation Monitoring Schedule



# Ambient Stream Monitoring Program

- Network of 101 fixed stations.
- Main stem and tributary streams.
- Thirty-four parameters analyzed at each sampling location.
- Samples are collected monthly, year-round.
- Long-term changes to water quality can be assessed.



Collecting field measurements

# Ambient Stream Sites

# **Locations of NDEE Ambient Stream Monitoring Program Sites**

# **Public Beach Monitoring Program**

- Nebraska is on the forefront of national sampling and public notification for events related to Harmful Algal Bloom (HAB), also known as toxic blue-green algae.
- 56 public beaches at 51 lakes across Nebraska are sampled weekly May through September during 2023.
- Samples are analyzed for E. coli bacteria and the microcystin toxin. The EPA recreational guidelines for E. coli are 235 colonies/100 mL and 8 ppb for microcystin.
- Beginning in 2020, USEPA changed their recommended recreational guidelines for microcystin from 20 ppb to 8 ppb. Figure 2 shows the number of Health Alerts since the change in microcystin guidelines.



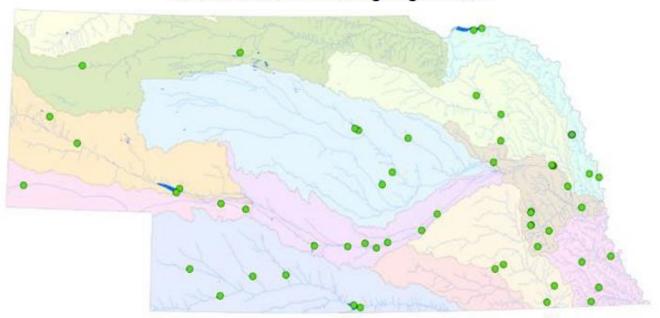
Harmful Algal Bloom on surface of lake

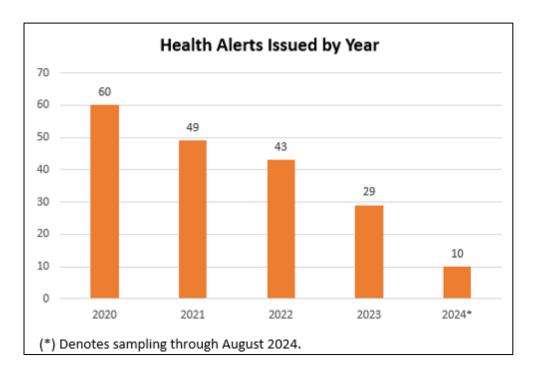
- A Health Alert is issued when a lake tests above 8 ppb and signs are posted at affected beaches warning the public that the beach is closed.
- A Health Alert is not issued for a beach testing above 235 colonies/100m L. The public is urged to make their own informed decision of whether to recreate or not when *E. coli* levels are high.
- Risks to humans come from external exposure (prolonged contact with skin) and from swallowing the water.

 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 and the concentrations of the toxins ingested.

- Children are at risk for more intensive symptoms, because of their smaller body size.
- Results are reported each week during the summer on the NDEE's Beach Watch web page. The weekly
  and past results are available online at <a href="https://deq-iis.ne.gov/zs/bw/">https://deq-iis.ne.gov/zs/bw/</a>. Directions to sign up for the
  Listserv email are at the bottom of the Beach Watch web page.







# Stream Biological Monitoring Program

 Diversity and numbers of resident aquatic macroinvertebrate and fish communities are evaluated to assess the overall health of streams.

- Sites chosen with a probabilistic sampling design within the framework of the basin rotation schedule.
- Thirty sites (5 completed in partnership with Nebraska Game and Parks Commission) were sampled in 2024 within the Republican, Little Blue, and Big Blue River basins.





Collecting aquatic macroinvertebrates



Stonefly nymph

# Fish Tissue Monitoring Program

- Assess fish tissue for toxins, such as mercury and polychlorinated biphenyl compounds (PCBs).
- Current fish tissue consumption advisories at 139 locations (133 lakes and 6 river/stream segments; see maps on the next page).
- In 2024, 41 lakes and 1 river location were sampled within the Republican, Little Blue, and Big Blue River basins.
- The most recent report is online at http://dee.ne.gov/publica.ns/pages/24-018

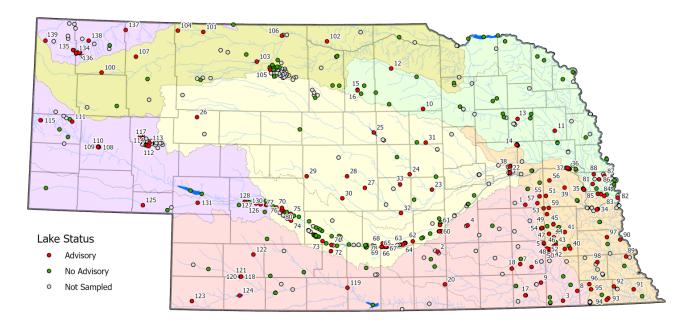


Weighing a largemouth bass

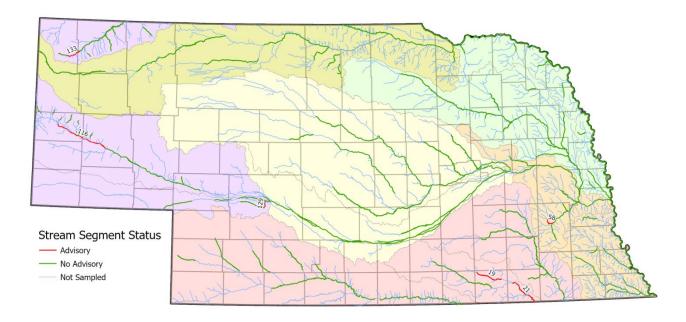


Collecting a fish tissue plug sample

Lake - Fish Consumption Advisory Sites in Nebraska Through 2023



Stream - Fish Consumption Advisory Sites in Nebraska Through 2023



## Ambient Lake Monitoring Program

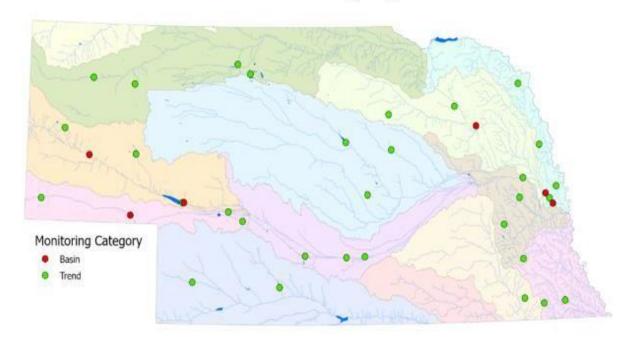
- Data from 24 trend lakes (sampled every year) and six basin lakes (sampled according to basin rotation schedule) were collected monthly May through September in 2024.
- Seven additional trend lakes are sampled for this program by staff from the USACE and the Lower Loup and Nemaha NRD's.
- Thirteen parameters are analyzed at each lake.
- Depth profile data are taken at deep water and mid-lake locations.
- Data are used to evaluate water quality suitability for fish and aquatic organisms to survive and reproduce.



Filtering lake water samples

• Long-term changes to water quality can be assessed.

## 2023 Ambient Lake Monitoring Program Sites



## Fish Kill and Citizen Complaint Investigations

- Dead fish and other surface water concerns are relayed to NDEE throughout the year.
- On-site investigations and water quality sampling performed at sites of many of the complaints.
- Eight fish kills investigated from July 1, 2023, to June 30, 2024: Two resulted from discharges, one from a spill, four were from low dissolved oxygen levels and one resulted from an unknown cause.

Sixty-four complaints of surface water pollution were taken by the Monitoring Section in the last year, many were forwarded to other NDEE programs.

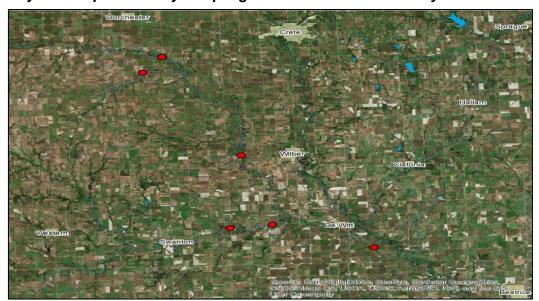


Fish kill due to a high ammonia discharge to the Wood River

## **NRD Watershed Special Studies**

- NDEE has partnered with several NRDs on Watershed Special Studies with strategic plans to monitor the sources and quantities of pollutants entering these systems from specific sub-watersheds.
- Information gathered allows a complete assessment of stream segments where data is insufficient to determine if all designated uses are met.
- Allows finer calibration of predictive models to allocate pollutant loads to specific subwatersheds and to quantify load reductions from sub-watershed conservation projects.
- Sampling partners of Watershed Special Studies in 2024 include the Lower Big Blue NRD – Turkey Creek Special Study.

#### Turkey Creek Special Study sampling locations within the Turkey Creek Watershed



## Regional Monitoring Network



Sensor deployed in East Branch Verdigre Creek

- Collaboration between the USEPA and numerous states, tribes, and other organizations to collect continuous stream discharges and temperatures and other chemical and biological data.
- Data are used as baselines for long term comparisons of stream condition.
- Having many sensors deployed nationwide that collect continuous data allows USEPA and other partners to detect significant yet subtle trends in stream condition.
- NDEE has been monitoring 7 streams since May 2017.
- Each location has a sensor that collects water level and temperature every thirty minutes, typically bolted to a post driven into the stream bottom.
- Each of the study locations is also sampled as part of the NDEE Ambient Stream Monitoring Program.

#### National Rivers and Streams Assessment

- NDEE partnered with USEPA to assess Nebraska stream quality as part of their larger national assessment: https://www.epa.gov/national-aquatic-resource-surveys/nrsa
- Collected data includes benthic macroinvertebrate, algal, and fish communities, water chemistry, fish tissue, and others.
- NDEE sampled 44 streams for NRSA, 27 in 2023 and 17 in 2024.



Conducting stream transect measurements



Electrofishing Rose Creek

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 2022 Water Quality Integrated Report is available on NDEE's web site at: <a href="http://dee.ne.gov/Publica.nsf/Pages/23-012">http://dee.ne.gov/Publica.nsf/Pages/23-012</a> Work on the 2024 Integrated Report is underway and expected to be completed by the end of calendar year 2024.

## **Groundwater Assessment Programs**

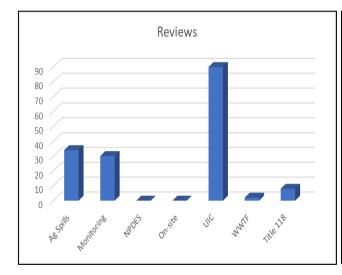
## **Groundwater Quality Monitoring Report**

The Groundwater Quality Monitoring Report summarizes the water quality monitoring efforts of the Natural Resources Districts, NDEE, and other state, local and federal agencies. The 2023 Groundwater Quality Monitoring Report can be accessed on the NDEE website at <a href="http://dee.ne.gov/publica.nsf/PubsForm.xsp?documentId=60154D2D29AFC49486258A760053F4DC&action=openDocument">http://dee.ne.gov/publica.nsf/PubsForm.xsp?documentId=60154D2D29AFC49486258A760053F4DC&action=openDocument</a>. The statistics and maps showing nitrate-nitrogen groundwater monitoring results were all created using the Clearinghouse. This data is accessible to the public as the Nebraska Groundwater Quality Clearinghouse at <a href="http://clearinghouse.nebraska.gov">http://clearinghouse.nebraska.gov</a>.

#### Hydrogeologic Studies and Reviews

The Groundwater Section is responsible for hydrogeologic review of various NDEE programs to determine possible effects on groundwater quality and to recommend possible courses of action. These reviews are completed for projects that address leaking underground storage tanks, surface spills, underground injection control, wastewater treatment facilities, septic systems, NPDES permits, livestock waste control facilities, and for outside entities, such as the Natural Resources Districts' Groundwater Management Plans

In addition, the Groundwater Section performs reviews and oversees remediation if a situation does not fall under another agency program and is of environmental significance. Section personnel continue to take responsibility under Nebraska Administrative Code (NAC) *Title 118*— *Groundwater Quality Standards and Use Classification* for many site investigations and have sampled and supervised site cleanups.





#### **Nitrate Study**

During the 2023 legislative session, Governor Pillen requested and was granted a state appropriation to conduct a statewide water quality study which later was narrowed in focus to nitrate in drinking water. NDEE conducted this study throughout FY2024. Notably, the study included a free private well sampling effort, which ran from Nov. 29, 2023, through June 30, 2024. NDEE has nitrate sampling data from public water systems, however private drinking water well data was limited because private domestic water wells are not required to sample for nitrate or any other pollutant under the Safe Drinking Water Act (SDWA).

NDEE sent postcards to more than 29,000 registered domestic well owners in Nebraska inviting them to participate in this study. The free sample kits and lab analyses were offered to all Nebraskans with a private drinking water well – not just those who received a postcard or have a registered well.

Over 4725 test kits were requested, and 3499 were returned for processing, making this the largest private drinking water well sampling event in the state's history. Of the samples tested, 542 or 15.5% of the tests reported above the drinking water standard of 10 mg/L. All well owners with test results above the 10 mg/L were contacted directly by the Department and were offered assistance in enrolling in the Reverse Osmosis (RO) Rebate Program administered by NDEE.

In 2022, the Legislature made \$1.2 million available to private drinking water well owners with nitrate levels above the standard to install RO systems to treat their drinking water. As a result, this rebate program is on target to expend all the funds appropriated.

This newly collected data was used in conjunction with historical data from the Nebraska Clearinghouse and Public Water Systems to assess the current status of nitrate impacted drinking water supplies. Several tools were developed for both public water systems and private domestic wells to help assess and address the risk of serving and/or consuming drinking water that has nitrate contamination over the drinking water standard.

The study has been completed and the release of the report is pending.

#### **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. There are six classes of injection wells:



- Class I injection wells are for the injection of wastewater below the lowermost underground source of drinking water.
- 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.
- Class IV wells are associated with the injection of hazardous waste, which are illegal, and have never been allowed in Nebraska.
- Class V injection wells are any wells not included in the other specific classes. Common examples of Class V wells include open loop heat pump systems, large capacity septic systems, and subsurface 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.

Currently the State of Nebraska has five permitted Class I wells. Two of these are issued to Crow Butte Resources, Inc., a uranium facility near Crawford. The other three are issued to the City of McCook, Kugler Oil Company in Culbertson, and Nebraska Public Power District near Sutherland. The only Class III wells in the state are at the Crow Butte Resources, Inc. Class V wells are located throughout the state and make up the majority of Nebraska UIC wells.

#### Mineral Exploration Program

The Mineral Exploration program reviews and issues 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 NAC *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.

#### Wellhead Protection

The State Wellhead Protection (WHP) program is a voluntary program which assists communities and other public water suppliers in preventing contamination of their water supplies. State WHP 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, developing monitoring plans and contingency plans to provide alternate water supplies and site new wells. Over one hundred eighteen (118) community water supplies have approved Wellhead Protection plans as of June 30, 2024.

In 2019, NDEE began using the Groundwater Evaluation Tool (GET) to model WHP areas for Nebraska's Public Water Systems (PWS). GET is a web-based subscription service which utilizes seven



regional numeric groundwater models to run reverse particle tracking, which creates time-of-travel capture zones. This tool has allowed NDEE to become more efficient in updating WHP areas throughout the state while increasing the quality of models and reports it produces for Nebraska communities. GET can also be used to assist communities in understanding the water quality in areas where new wells may be placed.

#### Source Water Assessment and Protection

Source Water Protection (SWP) funds have been distributed to complete 100 separate Source Water Protection projects throughout the state since 2004. In SFY2023, Source Water Protection funds were distributed to the following public water systems: The Village of Exeter, the Village of Hildreth, and Lancaster County SID #6 Emerald NE. The total amount awarded was \$30,000.

The Source Water Protection program coordinates closely with the CWA 319 program to engage Nebraska's communities and producers and develop alternative 9element Watershed Management Plans known as Drinking Water Protection Management Plans (DWPMP) that proactively address nonpoint source contamination. SWP grant funds (from the Drinking Water State Revolving Fund) are used to develop the plans, encourage community involvement through stakeholder groups, and put on public meetings to promote the projects. These plans are non-regulatory, community-based plans that provide an implementation strategy for protecting drinking water by reducing groundwater contamination. Approved 9element watershed management plans allow project sponsors to apply for nonpoint source pollution program (319) grants from NDEE. These plans provide more funding and longer-



term grants (five years) than what the Source Water Protection Grants are able to provide.

These plans bring together Natural Resources Districts (NRDs), the Natural Resource Conservation Service (NRCS), and local stakeholders to increase on-the-ground adoption of agricultural best management practices and increased outreach and education efforts in Nebraska's communities. The first Drinking Water Protection Management Plan in the nation was accepted by EPA in the summer of 2016 for the Bazile Creek area in northeastern Nebraska. Since then, seven additional plans have been accepted and more are in development.

The 2018 Farm Bill dedicated 10% of total conservation funds (with the exception of Conservation Reserve Funds), to be used for source water protection each year. NDEE worked with the NRCS to develop the priority areas in Nebraska where funds are focused. This effort is meant to address excessive nutrients and other impairments of drinking water. For Nebraska, this effort will primarily focus on groundwater as it is the predominant source for drinking water in the state. The highest priority areas include community public water systems WHP areas and NRD groundwater management areas (Phases I - IV) that include WHP areas.

# DEART SQUARE MARKATURE UPPER BLOOM PLATE UPPER BLOOM PLATE TOOM PLATE UPPER BLOOM PLATE TOOM PLATE UPPER BLOOM PLATE TOOM PLATE UPPER BLOOM PLATE TOTAL PLATE UPPER BLOOM PLATE TOTAL PLATE UPPER BLOOM PLATE TOTAL PLATE UPPER BLOOM PLATE UPPER BLOO

# NRCS Priority Areas for the National Water Quality Initiative

The Phase 2-4 and Quantity Management Areas that intersect a Wellhead Protection Area are medium priority.

Quantity Mgmt Areas (Medium Priority)

Phase 2-4 GMAs (Medium Priority)

NRD Boundary

Total Medium & High Priority Areas: 8,006,050 acres

A Phase I area covers an entire NRD district. In specific areas within an NRD where nitrate reaches a determined threshold, they may move into Phase II, III or IV areas. Some NRDs only define areas as I - III, while others go from I - IV. Each NRD determines the 'trigger' (or contaminant level) that would move a Phase area into the next level. Each Phase level has requirements for landowners/producers to follow. Moving from a Phase I to a Phase II level often means that producers need to complete an educational requirement such as nutrient management or fertilizer application training. Phase II-IV may also require that certain Best Management Practices (BMPs) may be required such as split application of fertilizer, cover crops, or not applying fertilizer in the fall for example. Best management practices incentive payments will go to the NRCS - EQIP eligible owner/operators of agricultural land who install conservation practices relating to water quality and quantity.

The farm bill helps many Nebraska communities enact voluntary Drinking Water Protection Management Plans, and the priority in funding from NRCS may ensure that all community public water systems have on-the-ground practices that work to reduce nitrate in source water protection areas.

#### Water Well Standards and Contractors' Licensing Program

This program is tasked with inspecting all domestic wells and 25% of all other wells drilled in the previous calendar year. Program personnel include three inspectors and one administrative assistant. Inspectors are using iPads equipped with GPS and mapping software to assist in completing inspections.

Starting July 1, 2021 all licensing tasks were moved to the NDEE Water Well Standards Program. The Program is responsible for licensing and regulating over 800 licensed water well professionals which includes administering examinations on a quarterly basis. December 31, 2024 is the renewal date for all licenses and this will be the second time the NDEE system will be used for licensing.

Advising the Program is the Water Well Standards and Contractors Licensing Board. The board is comprised of five government representatives (including NDEE, DHHS, UNL Conservation and Survey Division, Nebraska Resources Districts and Nebraska Department of Natural Resources) and five non-government entities (including pump installation contractors, irrigation water well contractors and equipment suppliers/manufacturers). Board members meet quarterly to make decisions related to issues such as application fees, rules and regulations, continuing education units and disciplinary action.



# **Water Quality Planning**

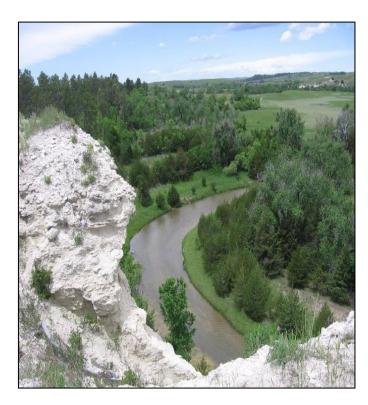
The stated public policy of Nebraska related to water quality includes conserving water and to protect and improve the quality of water for human consumption, wildlife, fish and other aquatic life, industry, recreation, and other productive, beneficial uses (Neb. Rev. Stat. 81-1501(1)). NDEE carries out this important mandate, in part, through water quality planning along with water quality standards.

#### Surface Water Quality Standards

NDEE develops surface water quality standards which are found in NAC *Title 117 – Nebraska Surface Water Quality Standards*. Through these standards, waterbodies in the state are assigned beneficial uses in one of the following categories:

- Public water supply
- Aquatic life
- Agriculture
- Industry
- Recreation
- Aesthetics

Each beneficial use has water quality criteria for chemical and physical parameters that are developed to be protective of that use. For example, when considering nitrogen, waters assigned for public water supply will have a different criteria for nitrogen than waters assigned beneficial use for recreation. These criteria form the basis of water quality protection for all surface water quality programs conducted by NDEE. The federal Clean Water Act (CWA) also instructs states to review and revise their water quality standards on a regular basis. This is done every three years, and is known as a "triennial review".



Nebraska's previous triennial review was conducted in 2019. The current triennial review process was delayed but is in its final phase. Updates to the standards were presented to the Environmental Quality Council in late 2023. The Council approved the changes, and they are awaiting the Governor's signature. The current standards are available on NDEE'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.

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

The Federal CWA, 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 NAC *Title 117 - Nebraska Surface Water Quality Standards*. From this list, states are instructed to prepare TMDLs that include the pollution control goals and strategies necessary to improve the quality of these waters to where they meet water quality standards associated with their beneficial uses and can be removed from the 303(d) list of impaired waters.

As in previous years, NDEE 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 (IR). The 2022 Integrated Report was finalized in August 2023 and is available on the NDEE website along with past IRs and additional information regarding impaired waters: <a href="http://dee.ne.gov/NDEQProg.nsf/OnWeb/TMDL">http://dee.ne.gov/NDEQProg.nsf/OnWeb/TMDL</a>.

The following table summarizes NDEE's current work in this area. A comprehensive list of approved TMDLs for Nebraska is available on NDEE's website: http://dee.ne.gov/NDEQProg.nsf/OnWeb/TMDLlist

IR Category	TMDL/5-alt Name	# of Waterbodies	Pollutant	Status			
4a							
	Republican River Basin	5	E. coli	TMDL submitted to EPA in December, 2023. EPA approved in May, 2024.			
5-alt <sup>1</sup>							
				No 5-alts currently in development.			

<sup>1</sup>In 2015, NDEQ (now NDEE) and EPA created the "5-alt" alternative to developing TMDLs for impaired waterbodies in order to address missing TMDLs in areas where project sponsors have targeted restoration work. This alternative restoration approach allows the state flexibility to align efforts with public interests to restore impaired waters more effectively and efficiently.

## Nonpoint Source Pollution Management Program

The goal of the Nebraska Nonpoint Source Pollution 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, and is associated with runoff and percolation from agricultural and urban areas to waters of the state. The program is largely funded by the Environmental Protection Agency (EPA) through Section 319 of the federal CWA and involves key federal, state, and local partners.

State nonpoint source problems and priorities are defined in the Nebraska Nonpoint Source Management Plan: "Strategic Plan and Guidance for Implementing the Nebraska Nonpoint Source Management Program – 2021 through 2036," available at <a href="http://dee.ne.gov/publica.nsf/pages/WAT119">http://dee.ne.gov/publica.nsf/pages/WAT119</a>.

The program emphasizes watershed and groundwater management area planning, targeting impaired waters on the 303(d) list, and community participation in water quality management plan development. Projects emphasize implementation of 9-Element watershed management plans or Alternative to

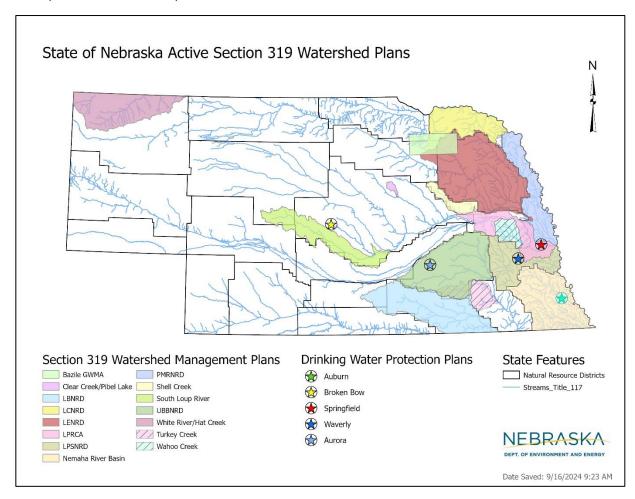
9-Element plans in the case of groundwater

quality plans.



Stormwater infrastructure tour, Omaha

Included in the major program highlights this year were the development of Project Implementation Plans for: Bazile Groundwater Management Area Phase III, Bow Creek Phase II, Ralston Creek, Willow Creek Watershed Phase II, and Dunker Basin. We have also been working to develop Watershed Management Plans for: Lower Platte River Corridor Alliance WMP, Prairie Lake WMP, and Wahoo Creek WMP.



## Water Quality Data Handling and Storage

NDEE continues adding Nebraska surface water quality information to the EPA's Water Quality Exchange (WQX) electronic storage system for water quality data. This will make Nebraska surface water quality information available to anyone who has an internet connection. The website for this information is <a href="https://www.epa.gov/waterdata">https://www.epa.gov/waterdata</a>. During FY2023, NDEE continued to add surface water monitoring results to the WQX database. NDEE has developed an internal database application which has increased the efficiency of processing surface water monitoring data, resulting in significant time savings.

#### **CWA 404 Program**

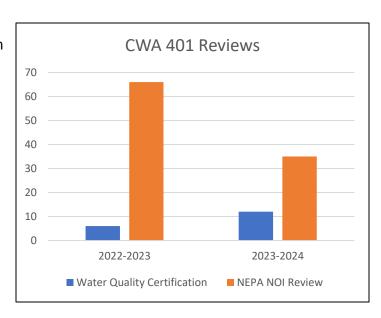
#### Dredge and Fill Permits

The Clean Water Act (CWA) 404 Section was created in response to LB302 (2019) and completed a feasibility analysis for assuming the CWA 404 permitting authority from the U.S. Army Corps of Engineers (Corps) for dredge and fill activities in and around waters of the U.S. The analysis determined the assumable workload, staffing needs, program implementation costs and sustainable funding options. LB809 (2022) was subsequently passed giving NDEE the authority to develop a state dredge and fill permitting program. LB809 came with an Appropriations bill which provided funding to cover the cost of program development over FYs 2022-2023 and 2023-2024. The funds were used for Section staff to develop the remaining program elements required for the application to EPA for program approval.

The ever-changing federal regulatory environment regarding Waters of the U.S. and the 404(g) rule proposal which outlines the requirements for states to assume the 404 program hampered progress. The Department paused all efforts to assume the CWA 404 program in November 2023. The U.S. Army Corps of Engineers with oversite from EPA continues to permit dredge and fill activities impacting Waters of the U.S. in Nebraska.

#### **CWA Section 401 Water Quality Certification**

The CWA 404 Section administers the Water Quality Certification Program in accordance with Section 401 of the CWA. 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 Title 117 - 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. In fiscal year 2023 there were twelve certifications issued which is twice as many from the previous year.



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. For projects that may impact surface water quality that do not require a 404 permit, the agency reviews the project and issues a letter of recommendation if the project is not anticipated to negatively impact water quality. Lastly, the department reviewed 35 projects that are required to comply with the National Environmental Policy Act for any impacts to natural resources and the potential need to comply with programs administered by the Department.

# **Agriculture Programs**

The responsibilities for the Agriculture programs are divided amongst the Permitting and Engineering Division and the Inspection and Compliance Division. The Permitting and Engineering Division is responsible for issuing state construction and operating permits, issuing National Pollutant Discharge Elimination System (NPDES) permits, and issuing licenses to Chemigation Applicators. The Inspection and Compliance Division conducts inspections of livestock operations, investigates complaints, and implements the Agricultural Chemical Containment Program.

## **Livestock Waste Control Program**

#### Overview

The NDEE 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.

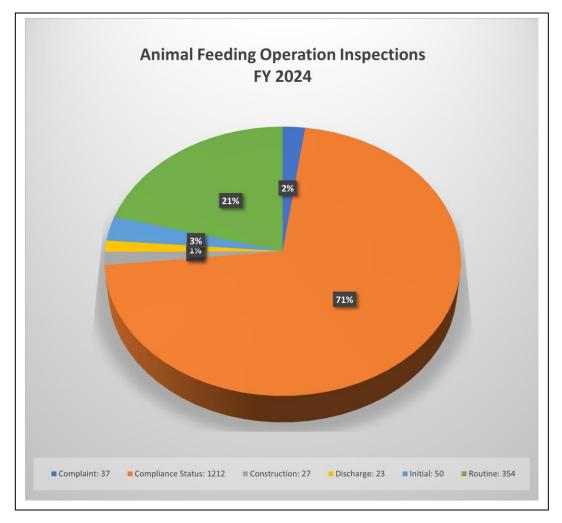
To accomplish this responsibility, the NDEE administers NAC *Title 130 - Livestock Waste Control Regulations*. The NDEE primarily focuses on the 883 active large Concentrated Animal Feeding Operations (CAFOs) required to have permits, but also works with



approximately 2,182 active Medium Animal Feeding Operations (AFOs). The NDEE uses inspections, permitting, and periodic groundwater monitoring to fulfill this responsibility. The program also implements the National Pollutant Discharge Elimination System (NPDES) program for CAFOs.

Amendments to Title 130 became effective in 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 or have the potential to discharge are required to apply for NPDES permit coverage.

#### Inspections



The LWC Compliance and Inspection staff conducted a total of 1,703 livestock waste control inspections in SFY2024. The chart above illustrates the breakdown by type of inspection. A concerted effort is being made to revisit medium-sized operations to ensure compliance with Title 130 and the EPA CAFO Rule. In addition, the LWC inspectors have begun contacting and visiting Class I sites to determine the current operating status of these AFOs. The Class I designation is a size category that is no longer in use by the LWC program. A Class I site could be considered a large, medium or small AFO by current regulations.

A short description of each type of inspection 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 to be conducted by LWC Compliance and Inspection 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, Compliance and Inspection staff conduct a post-construction inspection to verify the LWCF 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, Compliance and Inspection 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 at an AFO, involving a detailed, extensive review of the operation's recordkeeping and waste management at the operation.

**Discharge Inspections:** Discharge inspections are conducted when a discharge at a livestock waste control facility is reported. Permitted facilities are required to self-report all discharges to the Department.

Complaint Inspections: When a complaint is received, LWC Compliance and Inspection staff will investigate and may conduct an on-site inspection.

**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, nonemergency situations.

#### State Permitting

After conducting an initial inspection, the NDEE 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 facilitie

The Department received a total of 67

permit applications and issued 67 permits during SFY2024, as shown in the table to the right.

Such permits are evaluated by the State

Construction and Operating Permits – SFY2024				
Type of  Application or Permit	Application s Received	Permits Issued		
New permits	17	12		
Modified permits	37	36		
Transfer permits	13	19		
TOTAL	67	67		

and NPDES Permit staff. As part of the application review, the State and NPDES Permit staff evaluate compliance with Title 130. An agronomist evaluates the sufficiency of the nutrient management plan, an engineer reviews the adequacy of the design of the livestock controls, and a geologist from the Drinking Water and Groundwater Division evaluates whether there may be a potential threat to groundwater. The Natural Resource District and the County Government where the new/expanded AFO are provided an opportunity to share comments with the NDEE on the application prior to public notice. Once the review team is satisfied that the facility will meet Title 130 requirements, a notice of intent to issue a permit is publicly noticed and open for public comment. There is no opportunity for the public to request a hearing on state construction and operating permits.

The chart at right shows the total number of state permits issued annually for livestock waste control facilities since SFY2019. During this time, 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.



2021

2022

2023

2024

Once a permitted AFO has completed its construction project, the LWC Inspectors conduct a post-construction inspection. If the post-construction inspection shows the construction was completed as approved, the NDEE notifies the AFO that operation of the new livestock waste control facility is approved.

2019

2020

## National Pollutant Discharge Elimination System (NPDES) Permit

The State and NPDES Permit staff also oversee 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. NPDES permits expire every five years, and permittees are required to submit a reissuance application to continue NPDES permit coverag

The table at right summarizes the number of NPDES applications received and permits issued for livestock waste control facilities in FY2024. More permits were issued than applications received due to the issuance date of NEG023000. Many applications were received prior to the coverage period. They were issued while on extension.

NPDES PERMITS – SFY2024				
Type of NPDES	Applications	Permits		
Application/Permit	Received	Issued		
GENERAL PERMIT FOR CAFOS CONFINING CATTLE				
New Coverage	16	5		
Modified or Transferred	22	11		
Reissued	21	86		
SUBTOTAL GENERAL PERMIT:	59	102		
Individual Permits				
New Coverage	0	0		
Modified or Transferred	2	1		
Reissued	2	0		
SUBTOTAL INDIVIDUAL PERMIT:	4	1		
NPDES TOTALS:	63	103		

There are approximately 460 CAFOs subject to an NPDES General Permit. In order to balance out workload, the NDEE has divided up coverage of the NPDES-subject facilities over 4 separate general permits. Many individual permittees are now obtaining coverage under a general permit. In 2023, NDEE worked towards the reissuance of general permit NEG020000, which was signed and issued in August 2024. There are approximately 130 facilities expected to seek coverage under that permit. For the first time on the NPDES General CAFO Permit, during the public notice period, NDEE received several public comments and a request for a

public hearing. As such, issuing the final permit was behind schedule and the State and NPDES Permit team will finish issuing coverage under the general permit in SFY2024.

#### **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 \$285,774 in annual permit fees. In addition, the Department received \$21,900 in initial inspection fees, \$34,564 in permit application fees, \$4,750 in late payment fees, and \$9,453 in investment income for a total of \$356,442 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 be found on the Department's website at <a href="http://dee.ne.gov">http://dee.ne.gov</a>.

## **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 NAC 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 each March. The 29,576 chemigation permits issued in Calendar Year (CY) 2023 constituted a 0.34% increase in permits issued compared to CY2022.

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-Lincoln Nebraska Extension. Applicator certifications also are reported on a calendar-year basis.

In CY2023 1,124 applicators have been trained, tested, and certified, bringing the current number of certified chemigation applicators to 5,235. Information about chemigation applicator training dates and certified applicators is available after January 1 of each year at <a href="http://dee.ne.gov/NDEQProg.nsf/%24%24OpenDominoDocument.xsp?documentId=D884FD6E">http://dee.ne.gov/NDEQProg.nsf/%24%24OpenDominoDocument.xsp?documentId=D884FD6E</a> <a href="https://dee.ne.gov/NDEQProg.nsf/%24%24OpenDominoDocument.xsp?documentId=D884FD6E">https://dee.ne.gov/NDEQProg.nsf/%24%24OpenDominoDocument.xsp?documentId=D884FD6E</a> <a href="https://dee.ne.gov/NDEQProg.nsf/%24%24OpenDocument.">https://dee.ne.gov/NDEQProg.nsf/%24%24OpenDocument.xsp?documentId=D884FD6E</a> <a href="https://dee.ne.gov/NDEQProg.nsf/%24%24OpenDocument.">https://dee.ne.gov/NDEQProg.nsf/%24%24OpenDocument.xsp?documentId=D884FD6E</a> <a href="https://dee.ne.gov/NDEQProg.nsf/%24%24OpenDocument.">https://dee.ne.gov/NDEQProg.nsf/%24%24OpenDocument.xsp?documentId=D884FD6E</a> <a href="https://dee.ne.gov/NDEQProg.nsf/%24%24OpenDocument.">https://dee.ne.gov/NDEQProg.nsf/%24%24OpenDocument.xsp?documentId=D884FD6E</a> <a href="https://dee.ne.gov/NDEQProg.nsf/%24%24OpenDocument.">https://dee.ne.gov/NDEQProg.nsf/%24%24OpenDocument.</a> <a href="https://dee.ne.gov/NDEQProg.nsf/%24%24OpenDocument.">https://dee.ne.gov/NDEQProg.nsf/%24%24OpenDocument.</a> <a href="https://dee.ns.nsf/">https://dee.ns.nsf/</a> <a href="https://dee.ns.nsf/">

## **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 NAC *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. Title 198 was updated on April 25, 2020.

# **Water 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, 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.
- Environmental Safety The Environmental Safety Program inspects the following types of facilities: public swimming pools, recreational camps, and mobile home parks. The Environmental Safety Program also performs well and septic inspections upon request for property transfers. The Department has a Memorandum of Understanding with the Nebraska Department of Agriculture to perform food inspections at the following facilities: schools, college food service (room and board for students), senior centers, and childcare centers (upon referral from the DHHS Licensure Unit).
- Wastewater Engineering Program The wastewater engineering program reviews
  and issues permits 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.
- Drinking Water Engineering Program The drinking water engineering program
  provides engineering plan review; issuance of construction permits; inspection of newly
  constructed projects for issuance of approvals for placement into service; and technical

assistance and advisory contacts with owners/operators of public water systems, consulting engineers, state, federal and local officials, organizations, and the general public in matters relating to siting, design, construction, maintenance, and operation of public water systems. In addition to public water systems, the program provides similar services for all new and substantially modified public swimming pools and spas.

- 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.
- The Nebraska Pretreatment Program This program functions to protect municipal wastewater collection and treatment systems from damage or overloading by industries.

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

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 (the 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 to provide for application fees for permits and subdivision approvals as well as waiving fees for government inspectors. A certification by examination is required for professionals to obtain initial certification. Currently, 476 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, 2025, 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 31,000 systems have been registered, with 1,452 systems registered in FY2024.

The Section receives a large number of complaints. 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 systems installed by individuals who are not certified by NDEE. In addition, the Section fields approximately 3,000 calls and emails annually from individuals seeking compliance assistance.

The regulations set minimum design standards for all onsite wastewater treatment systems and include General Permits which allow 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.

## **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 and 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 NAC *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 NDEE. 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 noncompatible 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.



This photo shows a Wastewater Treatment Facility for Lincoln.

The Wastewater Operator Certification Program currently has 842 operators with municipal/compatible certificates. In addition, there are currently 140 certified operators with industrial certificates.

In 2022, the Onsite Section launched the online credentialling system. The online system can be used to apply for a new credential or renew a current one, submit and check their professional development hours, as well as pay online. Every other year the Section processes over 400 paper registrations, development hour submittals and payments. About half of these documents are now being submitted online. The new system greatly speeds up the certification process and frees up resources for other priorities.

The Onsite section has prioritized its efforts to resolve a backlog of open compliance issues and complaints. Significant progress has been made by conducting file reviews, contacting homeowners and certified professions to confirm work has been completed or the issue has been resolved. The past year, the sections have closed 37 open compliance cases.

NDEE 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 close at the end of calendar year 2025. NDEE has contacted 254 facilities potentially eligible for the exemption and, of these, issued four-year operator exemptions to 215 facilities.

The Department contracts with the Association of Boards of Certification (ABC) for testing services for the Operator Certification Program. Starting in 2019, ABC issued a new exam series for Class I through IV that was not specific to Nebraska. Since the Department began using this exam series, the pass rate for exams has declined sharply. The Department evaluated the issue with ABC and decided the best course of action was to reinstate the previously used statespecific exams. The Department also began offering more training courses to assist operators in studying for the exam. From FY23 to FY24, the passing rate increased from 38% to 61%. The table at right shows the current passing rate.

NDEE Wastewater Treatment Operator Certification Program				
Fiscal Year July 1, 2023 –	Exams Administered	Pass Rate		
June 30, 2024	210	61%		

- 16 certification testing events with 3 or more operators (Individual testing also offered)
- 128 operators newly certified or upgraded certifications

# **Environmental Safety Program**

The Environmental Safety staff inspect all public swimming pools/spas located at hotels, apartments, municipalities, and recreational camp facilities. During inspections staff check water chemistry, safety equipment, personnel training, and mechanical areas. Recreation camps and mobile home parks are inspected to assure conditions are safe, sanitary, and comply with NAC *Title 178 - Environmental Health*. NDEE has a Memorandum of Understanding with the Nebraska Department of Agriculture to perform food inspections at the following facilities: schools, college food service (room and board for students), senior centers, and childcare centers (upon referral from the DHHS Licensure Unit). Lastly, sanitarians

conduct evaluations of private drinking water supplies and onsite wastewater treatment systems at the request of homeowners, purchasers, or mortgage lending institutions. Many lenders require an inspection of the onsite water and wastewater treatment systems for compliance with applicable State of Nebraska regulations prior to granting a loan. During the evaluation, staff visually inspect the water well and the onsite wastewater treatment system and collect water samples to test for bacteria and nitrates.

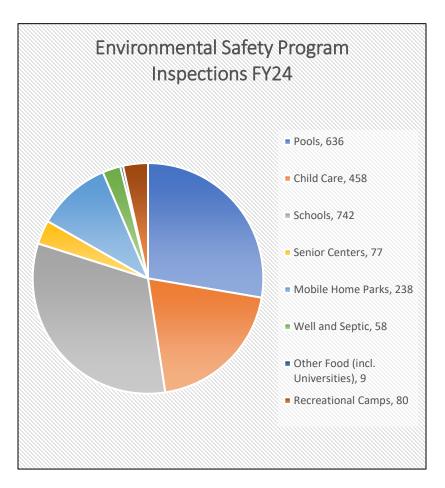




At left: shown is a sign temporarily closing an apartment pool. Above: Ord Community Pool

NDEE partners with local health departments to perform inspections of public pools within their jurisdictions. The partnerships include: Douglas County, Lincoln-Lancaster County, Sarpy County, and Central District Health Departments.

During FY2024, the seven Environmental Safety program staff completed 2,298 inspections of pools, camps, mobile home parks, childcare centers, senior centers, and schools. There were additionally 58 well and septic evaluations completed for property transfers. The following chart shows a breakdown of FY2024 inspections.



## **Engineering Section**

#### Wastewater & Onsite Construction

Industries, commercial facilities, and municipal utilities are required to submit the plans and specifications for their wastewater projects, including sewer mains and lift stations to NDEE for review and approval. The construction documents are reviewed to make sure that the collection systems and treatment facilities will function properly, are able to meet treatment standards as well as meet discharge limits and protect the public and the environment from adverse effects. During FY2024, the Engineering Section received 177 applications for wastewater projects. The average time for review was 12 days.

Nebraska's design standards for wastewater facilities are found in NAC *Title 123 - Rules* and *Regulations for the Design, Operation and Maintenance of Wastewater Works*. These standards are updated periodically to keep Nebraska in alignment 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. The last update became effective on September 4, 2019. This update addressed duplicative language and provided clarity to the reader. The update also removed an exemption for not requiring a construction permit for pretreatment facilities if the facility discharged to a public owned treatment works in another state.

NAC *Title 124 - Onsite Wastewater Treatment Systems* requires Department approval prior to construction of any subdivision with any lot less than three acres where onsite wastewater treatment is proposed, or if design standards cannot be achieved. Common examples are if a system cannot meet setback distances or the 4-foot groundwater separation distance prescribed in the regulation. Department engineers review construction/operating permit applications. In FY2024, the program received 45 applications for construction/operating permits and 8 applications for subdivision review and approval. The average time for review was 9 days.

#### **Public Water System & Swimming Pool Construction**

Plans and specifications are required to be reviewed and approved by the NDEE for many types of projects at public water systems such as new wells, new intake structures, new or modified treatment plants, transmission mains and pump stations. The NDEE engineers also inspect newly constructed projects for issuance of approvals for placement into service to assure proper adherence to specifications. During FY2024, NDEE received 184 projects for review which took an average of approximately 17 days to review. NDEE engineers inspected 91 projects that had completed construction to place into service.

In 2010, NAC *Title 179, Chapter 7: Siting, Design, and Construction of Public Water Systems* became effective. As a result, public water systems can enter into a three-year agreement to construct water distribution main projects without having to submit plans and specifications for review and approval. These systems are subject to an annual audit as a condition of the agreement. There are a total of 24 public water systems that have agreements with the agency. Of the 24 systems, NDEE conducted audits of 15 systems. Five systems that were not audited had not completed any projects and four were not audited due to distance and low number of projects completed but will be audited in the coming fiscal year.

Another public health and safety review conducted by the engineers is the review of plans and specifications for swimming pools and spas. The NDEE reviews pools for places such as hotels, apartment complexes, health clubs, and municipalities. Reviews are conducted in accordance with NAC *Title 178, Chapter 2: Design Construction, Operation, and Maintenance of Public Swimming Pools (effective July 27, 2020).* During FY2023, NDEE received 77 projects for review which took an average time of approximately 18 days to review. Additionally, NDEE engineers inspected 91 pools to assure adherence to the rules and specifications.





#### Other Engineering Activities

The Engineering Section also reviewed justifications provided by professional engineers for any new drinking water well siting that does not meet the setback distances identified in Title 179 NAC 7. A total of 9 new well site justifications were reviewed. In addition, the engineering staff worked with NDEE and city officials to evaluate encroachment issues that may be of concern to existing public drinking water wells. Four encroachment related issues were evaluated and resolved. In addition, three operation and maintenance manuals for DWSRF projects were reviewed. The engineering team works closely with the State Revolving Fund Section and the National Pollutant Discharge Elimination System (NPDES) programs.

The Engineering Section also works with communities that need to upgrade their facilities, meeting with municipal officials, funding agencies, and consulting engineers to develop affordable projects for Nebraska's communities.

#### The National Pollutant Discharge Elimination System (NPDES) Program

The NPDES Program 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. Currently, the City of Omaha is the only municipality operating a combined sewer in the state.
- Wastewater Treatment Sludge and Bio-solids Disposal, which are requirements for treatment and disposal of municipal and industrial wastewater sludges and bio-solids.
- Storm Water Permit Program, which involves: 1) Construction sites of a specific size;
   2) the Municipal Separate Storm Sewer System permits for medium and large municipalities; and 3) Industrial facilities.

#### **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.

NDEE 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 NAC *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 (CSO); and construction, industrial, and municipal storm water discharges. Livestock NPDES permits may be found under the Agriculture Program.

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). Permits may also require development of Best Management Practice Plans to minimize 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. NDEE 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 NAC *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 NAC *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 are 604 facilities with discharge authorizations under individual permits (municipal, industrial, and pretreatment), and 26 municipal storm water permits (MS4). There are currently 2984 active authorized discharges under other general permits. The general permits include 1,502 active authorizations under the construction general storm water permit, 426 dewatering, 159 hydrostatic testing, 864 industrial storm water, 9 pesticide, and 24 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.

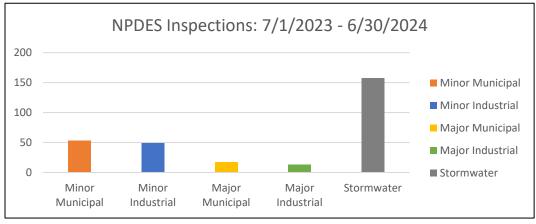
Municipal and industrial facilities are required to verify compliance with numeric permit limits by monitoring their effluents (i.e., self-monitoring). Monitoring frequency can vary from daily to annually depending upon the pollution and impact potential of the facility. The facility must report monitoring results to NDEE, typically 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. Inspections are planned and conducted to align with the federal fiscal year.

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During on-site inspections, section personnel walk through the facility and review operational procedures and records. Major industrial, major municipal, and pretreatment facilities receive annual on-site inspections. The priority of minor facilities inspections is based on discharge compliance histories, incident reports and complaints. Minor facilities are inspected once every five years at a minimum. Inspectors performed 399 NPDES inspections in Fiscal Year 2024. A breakdown of those inspections is provided in the chart on the preceding page.

The minor industrial inspections include 110 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 NDEE 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.

In addition to inspections, NDEE provides permit assistance visits to help permittees better understand the requirements in their permits and help identify problems before they become significant noncompliance. These visits can be requested by the permittee or offered by NDEE. NDEE conducted 22 assistance visits in the 2024 Fiscal Year.

#### **Combined Sewer Overflow Program**

The City of Omaha has combined sewers that are subject to storm-induced bypasses of untreated wastewater. Many of 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. These type of bypass events are detrimental to receiving streams due to the present of pollutants such as E. Coli. By reducing the combined sewer overflows, Omaha is able to further minimize pollutants discharging to Nebraska streams.

The City and the Department work within the framework of the Clean Water Act, a consent Order initiated in 2007, and the City's Long-Term Control Plan (LTCP). The projects included in the LTCP span through 2037 and are estimated to cost approximately \$2 billion. The goal of the projects is to reduce or eliminate combined sewer overflows and comply with State and Federal regulations. The City has identified 29 projects in the LTCP for delivery in the next 14 years. Thirteen of these projects are scheduled for completion by 2026. The order was amended in October 2019 that upon NDEE approval of the LTCP and schedule, the City is to implement the LTCP according to the schedule on or before October 1, 2037. The City submitted the update to the LTCP in March 2021; NDEE approved the LTCP in August 2021.

Omaha modeled estimates of wet-weather volume capture for the Missouri River Watershed (MRW) and the Papillion Creek Watershed (PCW). With 2002 as the baseline and 2037 the compliance, the model shows the following:

Percent Volume Capture						
	Year					
Watershed	2002	2019	2037			
Missouri River Watershed	32	57	85			
Papillion Creek Watershed	78	84	97			

The City of Omaha and NDEE 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. The key elements of this process are evaluating the success of completed efforts, maximize the effectiveness and value of future efforts, and balance these achievements with other infrastructure needs. The City provides updates and encourages public involvement with its CSO program. This can be viewed on the City's website at <a href="http://omahacso.com/">http://omahacso.com/</a>.

#### 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 through the land application of biosolids is an effective management tool.

On Feb. 19, 1993, the EPA published the federal sludge regulations under 40 CFR 503. Under these regulations, an estimated 330 municipal facilities in the state have sludge monitoring requirements. These requirements include 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, Kansas. NDEE provides guidance for municipalities, approves land application sites, and provides permit language to assist with biosolids program compliance.

#### Storm Water Programs

In compliance with federal regulations, the NPDES Storm Water Programs regulate the discharge of pollutants in storm water from certain construction sites, industrial facilities, and municipal storm sewers. Federal Storm Water regulations determine the threshold for coverage of construction sites at one acre or more or sites that are less than one acre if they are part of a common plan of development or sale. Industrial facilities 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 determine the number of municipalities and urban areas that are subject to the NPDES program for storm water discharges.

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. Since FY2017, an online application process is utilized for the Construction Storm Water General Permit that streamlines the issuance of coverage to applicants. This online process coordinates with the Nebraska Game and Parks Commission and facilitates endangered and threatened species reviews, reducing the time and paperwork needed. The City of Lincoln now shares a construction storm water permitting and records system with the NDEE. This increases communication and efficiency with the state, city, and permitted community.

The Industrial Storm Water General Permit online application was made available to public in FY2022. Like the CSW online application process, the process coordinates with the Nebraska Game and Parks Commission and efficiently walks the user through portal registration and the document upload process needed to obtain approval.

Urbanized areas are subject to the Municipal Separate Storm Sewer System (MS4) Program. Currently, permitted urbanized areas in Nebraska include the cities of Lincoln and Omaha; Douglas, Sarpy, and Dakota Counties; and the communities of Beatrice, Columbus, Fremont, Grand Island, Hastings, Kearney, Lexington, Norfolk, North Platte, South Sioux City, Gretna, Gering, Terrytown, and Scottsbluff. The program also requires coverage for the University of Nebraska's campuses in Lincoln and Omaha; the Nebraska Department of Transportation; and Offutt Air Force Base. The NDEE works with individual permittees and organizations, like Nebraska H2O and the Nebraska Floodplain & Stormwater Managers Association, to conduct outreach. The NDEE also evaluates the individual storm water management plans provided by permittees and communicates if these plans meet requirements. This can also include site visits throughout the year to evaluate implementation of the plans.

## **Nebraska Pretreatment Program**

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 NAC 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 NAC 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. There are 130 significant industrial users with a pretreatment permit.

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 NDEE, and assist in permit development by reviewing draft permits. The NDEE 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 Fund and Associated Grant Programs**

The Planning and Aid Division's State Revolving Fund Section administers distribution of state and federal assistance for the Clean and Drinking Water State Revolving Funds (SRFs), which provide below market financial assistance to communities. This section also oversees the Emerging Contaminants in Small or Disadvantaged Communities, the Lead Service Line Cash Fund, the Sewer Overflow and Stormwater Reuse Municipal, the Revitalize Rural Nebraska Grant Program, the Small, Underserved, and Disadvantaged Communities and the Voluntary School and Child Care Lead Testing and Reduction Grant programs. Federal and State funding for these programs comes from annual congressional appropriations and the Infrastructure Investment and Jobs Act, more commonly referred to as the Bipartisan Infrastructure Law (BIL), and appropriations from the Unicameral, respectively. Funding awards for traditional water and wastewater infrastructure projects, along with those to address emerging contaminants, remain on track. The Department's increased focus on the development of funding awards to address the replacement of Lead Service Lines has been successful to date, albeit with much still left to accomplish. The remediation of lead containing drinking water appurtenances in schools and licensed childcare facilities will be primary focus of the section for the upcoming year.

Separate from the BIL, and signed into law by Governor Pete Ricketts in 2022, the section also administers several projects with allocations from the American Rescue Plan Act of 2021 (ARPA), as any essential water and sewer infrastructure projects funded under ARPA are aligned with that eligible under the SRFs. For this funding the infrastructure projects tasked to the NDEE to implement include:

- Wastewater and drainage system improvements at the State Fair Grounds
- Drinking water system improvements in the City of Wisner and for the Cedar Knox Rural Water Project
- Reverse Osmosis system installations for Private Well Owners

Funding for the latter projects have met the initial ARPA December 31, 2024 deadline, with only construction to complete before the end of 2026. The second phase of the State Fair Grounds project is under design, and will open bids in November of 2024.

## **Clean Water State Revolving Fund**

The Clean Water State Revolving Fund (CWSRF) program provides below-market loan financing with forgiveness assistance to municipalities for construction of wastewater treatment facilities and sanitary sewer collection systems to alleviate public health and environmental

problems. The loan principal repayments revolve back into new loans, and interest earnings on the fund are primarily used to pay off the state match bonds. An administrative fee is assessed to each loan made, which pay for program operating costs including day-to-day program management activities and for other costs associated with debt issuance, financial management, consulting, and support services necessary to provide for a complete program.

The CWSRF program receives capitalization grants annually from EPA. There is a 10% to 20% state match requirement to obtain those grants, which is typically a debt issuance provided through a Nebraska Investment Finance Authority (NIFA) bond. In fall of 2023, the EPA awarded Nebraska's annual and BIL CWSRF capitalization grants in the amounts of \$3,837,000 and 10,661,000, respectively. The required match amount of \$1,834,000 was provided through bonds. In SFY 2024, the CWSRF funded projects totaling \$12,410,771, with \$2,580,555 loan forgiveness and grant assistance.

#### **Additional Subsidy Awards**

Many small municipalities find that the development and construction of needed projects are too costly without additional grant subsidy provided with CWSRF loans. To assist those communities, the CWSRF provides additional subsidy awards to financially distressed municipalities with a population of 10,000 or less. One available grant is the Project Planning Activities and Report Grant (PPAR). This grant is funded through the Administrative Cash Fund and awarded to small communities to identify wastewater project needs. For this past fiscal year \$20,000 planning grants were awarded to Beemer and Emerald. After the project is identified, the CWSRF may also provide a Small Town Grant (STG).

In addition to the above, loan forgiveness has become the primary method of providing additional subsidy, through reserving up to 30% of the annual capitalization grant and the required 49% BIL grant. Like the PPAR and STG, borrowers must meet affordability criteria to be eligible for forgiveness assistance, then eligibility is based on:

Letter of Non-Compliance, Administration or Consent Order Projects

- Population of 10,000 or less Up to 40%
- Population of 3,300 or less Up to 50%
- Population of 500 of less Up to 60%

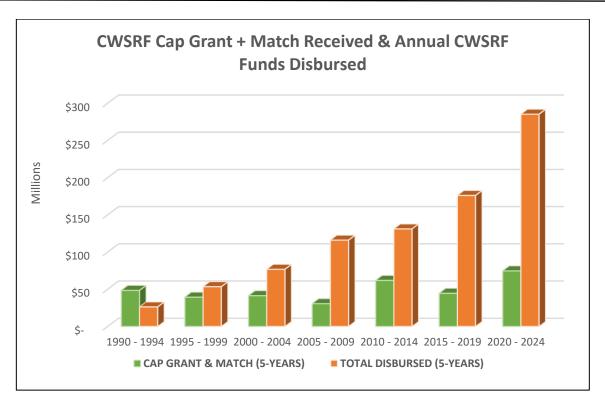
For all remaining projects and if it is assessed by the Department that the non-compliance or order was caused by negligence of the municipality, the forgiveness caps below shall apply.

- Population of 10,000 or less Up to 35%
- Population of 3,300 or less Up to 45%
- Population of 500 of less Up to 55%

#### Total CWSRF Assistance Provided

After 36 years of activity, the Fund's Net Assets have reached \$398.6 million as of June 30, 2024. Since its inception, the CWSRF has provided loans for 363 projects with a cumulative loan award amount of \$888.7 million.

The following graph provides the total assistance provided by the Clean Water program per year and the cumulative amounts of capitalization grants and match received and total amounts disbursed.



## **Drinking Water State Revolving Fund**

The Drinking Water State Revolving Fund (DWSRF) program provides below-market rate loans, with forgiveness and grant assistance, to owners of public water systems (PWSs). The DWSRF is unique in that loans may also be awarded to privately-owned non-for-profit PWSs. Loan principal repayments revolve back into new loans, and interest earnings on the Fund are used to pay off NIFA bonds issued for the required EPA capitalization grant match. There is also an administration fee assessed to each DWSRF loan for program management activities.

The DWSRF program receives capitalization grants annually from EPA. There is a 10% to 20% state match requirement to obtain those grants, which is typically a debt issuance provided through a NIFA bond. In fall of 2023, the EPA awarded Nebraska's annual and BIL CWSRF traditional project capitalization grants in the amounts of \$4,938,000 and \$21,055,000, respectively. The required match amount of \$3,094,000 was provided through bonds. Through the DWSRF, Nebraska was also awarded a grant for Lead Service Line Replacement projects (LSLRs) in the amount of \$28,650,000, a reallocation award of \$2,195,000 and a pending award for \$8,728,000 of Emerging Contaminant projects, those that primarily address manganese in drinking water systems. Those two grants do not require any state match contributions. In SFY 2023, the DWSRF funded projects totaling \$96,642,729 in loans with \$60,313,477 in loan forgiveness, with \$40,728,000 of that being for LSLRs.

Forgiveness assistance is offered out based on the long standing established Median Household Income disadvantaged community definition criteria following a tiered system:

Public Health/Administrative Order Projects

- Population of 10,000 or less Up to 40%
- Population of 3,300 or less Up to 50%
- Population of 500 of less Up to 60%

Low Priority Projects ranked with a Sustainability Factor and new GPR projects, or greater

- Population of 10,000 or less Up to 35%
- Population of 3,300 or less Up to 45%
- Population of 500 of less Up to 55%

Projects that in part address an Emerging Contaminant (e.g., PFAS, Manganese)

- Population of 10,000 or less Up to 55%
- Population of 3,300 or less Up to 65%
- Population of 500 of less Up to 75%

For Lead Service Line Replacement funding up to 62% forgiveness assistance is available, with a possible 10% increase in grant assistance for mechanical LSL inventory efforts (e.g., potholing, hydro-vacuum excavation, etc.).

#### **DWSRF Set-Aside Funds**

A notable difference between the SRFs, the DWSRF include set-asides for funding within Nebraska's Drinking Water Division to provide for technical assistance, source water protection, capacity development and operator certification.

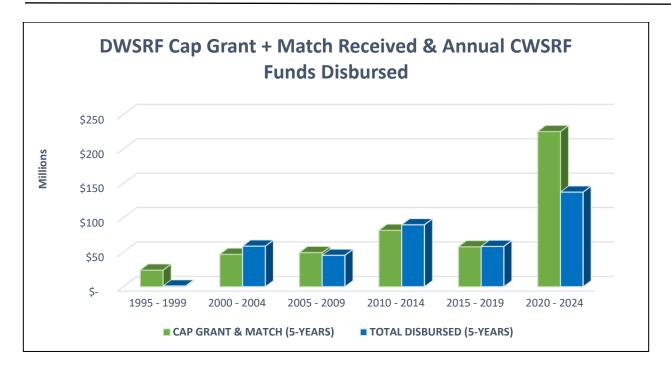
The Small System Technical Assistance set-aside (up to 2% of the capitalization grant) provides technical, managerial, and financial assistance to PWSs serving a population of 10,000 or less. This is accomplished through contracts with organizations that have expertise in dealing with small systems. Up to 4% of the grant is permitted to be used for administration of the DWSRF program. The state may use up to a total of 10% of the capitalization grant from the State Program Management set-aside, which the DWSRF typically allocates to help fund NDEE's Drinking Water Division.

In SFY 2024, under the Local Assistance and Other State Programs set-aside (15%), the communities of Malcolm, Newman Grove, Platte Center and Tecumseh were selected to receive Source Water Grants totaling \$318,800. Further, one \$20,000 planning grant agreement for a preliminary engineering report was awarded to high priority PWSs to address public health issues in Bassett.

From the FFY 2023 capitalization grant, \$6,630,530 was allocated to the 2% (\$213,780), 4% (\$197,250), and 15% (\$6,219,500) set-asides, with \$5,919,500 of that latter amount being for mechanical inventory efforts for LSLRs.

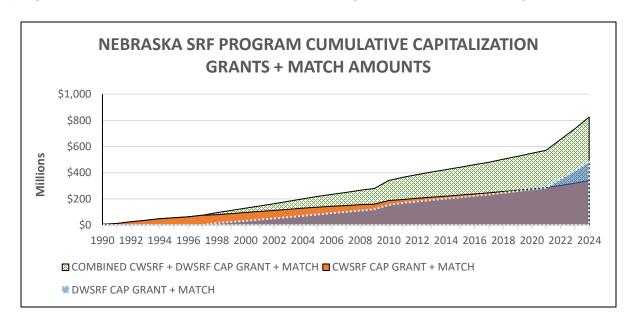
After 26 years of activity, the Fund's Net Assets have reached \$265.9 million as of June 30, 2024. Since its inception, the DWSRF has provided loans for 306 projects with a cumulative loan award amount of \$538.5 million.

The following graph provides the total assistance provided by the Drinking Water program per year since inception and the cumulative amounts of capitalization grants and match received and total amounts disbursed.



## SRF Summary

Each year the CWSRF and DWSRF publish an Intended Use Plan (IUP), which explains how the SRF programs will use capitalization grants received annually from EPA, annual state matching funds, and current program funds to meet Nebraska's communities' drinking water and wastewater infrastructure needs and funding requirements for the upcoming fiscal year. The IUP requires a comment period that is then formally presented to the Environmental Quality Council (EQC) for review and approval. Lastly, a more detailed annual report is prepared to meet EPA program requirements, including the Auditor of Public Account's report done for SRF programs. These can be found at the State Revolving Fund Section at dee.ne.gov.



WATER PROGRAMS CHAPTER 6

## State Revolving Fund Assistance by Legislative District as of June 30, 2024

	CWSRF Fund	ling to Districts (a	pproximate)	DWSRF Fund	ling to Districts (a	pproximate)	TOTAL SRF ASSISTANCE TO DISTRICTS (approximate)		
District #	CWSRF Loan Agreement	CWSRF Subsidy TOTAL	CWSRF Total Assistance	DWSRF Loan Agreement	DWSRF Subsidy TOTAL	DWSRF Total Assistance	TOTAL SRF LOAN AGREEMENTS	TOTAL SRF SUBSIDY	TOTAL SRF ASSISTANCE
1	\$9,993,593	\$1,049,006	\$11,042,599	\$34,272,729	\$5,862,987	\$40,135,716	\$44,266,322	\$6,911,993	\$51,178,315
2	\$124,968,808	\$514,559	\$125,483,367	\$28,052,516	\$364,535	\$28,417,051	\$153,021,324	\$879,094	\$153,900,418
3	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
4	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
5	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
6	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
7**	\$195,369,110	\$1,908,000	\$197,277,110	\$17,752,655	\$30,072,182	\$47,824,837	\$213,121,765	\$31,980,182	\$245,101,947
8	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
9	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
10	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
11	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
12	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
13	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
14	\$2,745,000	\$-	\$2,745,000	\$-	\$-	\$-	\$2,745,000	\$-	\$2,745,000
15	\$8,896,699	\$620,577	\$9,517,276	\$7,317,009	\$5,123,792	\$12,440,801	\$16,213,708	\$5,744,369	\$21,958,077
16	\$15,875,054	\$1,330,215	\$17,205,269	\$52,293,697	\$19,257,176	\$71,550,873	\$68,168,751	\$20,587,391	\$88,756,142
17	\$63,312,279	\$3,739,801	\$67,052,080	\$18,872,257	\$9,545,897	\$28,418,154	\$82,184,536	\$13,285,698	\$95,470,234
18	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
19	\$11,813,750	\$189,394	\$12,003,144	\$2,733,027	\$239,967	\$2,972,994	\$14,546,777	\$429,361	\$14,976,138
20	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
21	\$1,992,000	\$270,000	\$2,262,000	\$2,056,127	\$20,000	\$2,076,127	\$4,048,127	\$290,000	\$4,338,127
22	\$3,685,714	\$514,979	\$4,200,693	\$5,553,519	\$2,022,576	\$7,576,095	\$9,239,233	\$2,537,555	\$11,776,788
23	\$31,990,099	\$1,705,388	\$33,695,487	\$16,809,205	\$10,291,738	\$27,100,943	\$48,799,304	\$11,997,126	\$60,796,430
25	\$27,637,584	\$1,024,064	\$28,661,648	\$20,820,954	\$7,852,151	\$28,673,105	\$48,458,538	\$8,876,215	\$57,334,753
26	\$- \$-	\$- \$-	\$-	\$829,007	\$112,303	\$941,310	\$829,007	\$112,303	\$941,310
27**		•	\$-	\$-	\$-	\$-	\$-	\$-	\$-
28	\$34,576,358	\$1,250,000 \$-	\$35,826,358	\$17,217,829	\$5,760,000	\$22,977,829	\$51,794,187	\$7,010,000 \$-	\$58,804,187
29	\$- \$-	\$- \$-	\$- \$-	\$- \$-	\$- \$-	\$- \$-	\$- \$-	\$- \$-	\$- \$-
30	\$4,856,586	\$305,000	\$5,161,586	\$17,422,570	\$1,830,051	\$19,252,621	\$22,279,156	\$2,135,051	\$24,414,207
31	\$-	\$303,000	\$3,101,380	\$17,422,370	\$1,830,031	\$19,232,021	\$22,279,130	\$2,133,031	\$24,414,207
32	\$13,365,352	\$3,550,677	\$16,916,029	\$13,424,315	\$4,502,625	\$17,926,940	\$26,789,667	\$8,053,302	\$34,842,969
33	\$5,272,521	\$275,989	\$5,548,510	\$1,496,858	\$1,653,693	\$3,150,551	\$6,769,379	\$1,929,682	\$8,699,061
34	\$16,495,680	\$1,341,286	\$17,836,966	\$6,286,357	\$1,663,068	\$7,949,425	\$22,782,037	\$3,004,354	\$25,786,391
35	\$33,831,257	\$1,341,280	\$33,831,257	\$1,260,000	\$3,240,000	\$4,500,000	\$35,091,257	\$3,240,000	\$38,331,257
36	\$14,613,210	\$-	\$14,613,210	\$4,659,623	\$650,000	\$5,309,623	\$19,272,833	\$650,000	\$19,922,833
37	\$62,663,336	\$-	\$62,663,336	\$24,470,942	\$3,311,869	\$27,782,811	\$87,134,278	\$3,311,869	\$90,446,147
38	\$16,884,982	\$1,797,735	\$18,682,717	\$21,880,377	\$4,404,970	\$26,285,347	\$38,765,359	\$6,202,705	\$44,968,064
39	\$3,255,467	\$-	\$3,255,467	\$297,522	\$-	\$297,522	\$3,552,989	\$-	\$3,552,989
40	\$12,304,519	\$3,185,348	\$15,489,867	\$12,578,092	\$5,348,663	\$17,926,755	\$24,882,611	\$8,534,011	\$33,416,622
41	\$15,936,903	\$1,552,126	\$17,489,029	\$8,998,974	\$2,273,352	\$11,272,326	\$24,935,877	\$3,825,478	\$28,761,355
42	\$18,064,666	\$60,484	\$18,125,150	\$10,846,128	\$737,046	\$11,583,174	\$28,910,794	\$797,530	\$29,708,324
43	\$22,355,116	\$5,847,983	\$28,203,099	\$10,801,663	\$1,534,493	\$12,336,156	\$33,156,779	\$7,382,476	\$40,539,255
44	\$50,554,600	\$1,990,972	\$52,545,572	\$10,123,626	\$1,830,674	\$11,954,300	\$60,678,226	\$3,821,646	\$64,499,872
45	\$6,985,901	\$-	\$6,985,901	\$-	\$-	\$-	\$6,985,901	\$-	\$6,985,901
46	\$271,286	\$-	\$271,286	\$-	\$-	\$-	\$271,286	\$-	\$271,286
47	\$16,877,285	\$3,183,379	\$20,060,664	\$28,458,859	\$5,713,972	\$34,172,831	\$45,336,144	\$8,897,351	\$54,233,495
48	\$14,752,244	\$991,959	\$15,744,203	\$8,438,598	\$2,550,340	\$10,988,938	\$23,190,842	\$3,542,299	\$26,733,141
49	\$-	\$-	\$-	\$988,800	\$-	\$988,800	\$988,800	\$-	\$988,800

<sup>\*</sup>The data collected is from loan obligations and grants awarded to communities for SRF related projects. Grants include Loan Forgiveness, Small

Town Grant (CW only), and Planning Grants.

\*\*For the cities of Omaha and Lincoln, which have multiple districts in the area, District 7 was selected for Omaha projects and District 27 was used for Lincoln area projects

#### Other Clean Water and Safe Drinking Water Act Grants

## Small, Underserved, and Disadvantaged Communities Grant Program

Now an annual grant program authorized under the Water Infrastructure Improvements for the Nation Act (WIIN), the Small, Underserved, and Disadvantaged Communities Grant Program was established to assist such PWSs. The grant program is designed to help systems meet and comply with the Safe Drinking Water Act. Aid is provided to underserved communities that are served by a PWS that violates or exceeds any Maximum Containment Level, treatment technique, or action level.

The second recipient of this grant is the Village of Steele City to help that community return into compliance with the Nitrate drinking water standard. This past fiscal year, \$772 was offered to the Village to replace a failed transmission water main installation.

## Sewer Overflow and Stormwater Reuse Municipal Grants Program

America's Water Infrastructure Act of 2018 amended section 221 of the Clean Water Act, which reauthorized the Sewer Overflow and Stormwater Reuse Municipal Grants Program (OSG). These amendments expanded project eligibilities to include stormwater management projects and authorized appropriations for the program. Grants are awarded to states, which will then provide sub-awards to eligible entities for projects that address infrastructure needs for combined sewer overflows (CSO), sanitary sewer overflows (SSO), and stormwater management. In August of 2023, an allotment of \$1,198,000 was awarded to Nebraska, bringing the total program funding to \$2,080,000.

The recipients for the 2023 OSG allotment will be the City of Omaha (\$928,450) and the Village of Ashton (269,550). As the City of Omaha's project is the primary, categorically eligible, need for this grant program, it is planned that for each funding allotment, another political subdivision will be selected as a best paired fit to meet the OSG's program minimum allocation to rural and financially distressed communities, this year being the Village of Ashton.

The EPA has issued guidance for the Federal Fiscal Year 2023 OSG award stating that should other Region 7 states decline their OSG funding those funds may be reallocated to another recipient. The Department plans to request the reallocation of the regional funds to provide funding for the City of Omaha and the Village of Colon, the latter seeking funds to remedy infiltration and inflow concerns for their collection system.

#### Voluntary School and Child Care Lead Testing and Reduction Grant

The NDEE in cooperation with the Nebraska Department of Health and Human Services is committed to reducing childhood exposure to lead from drinking water. NDEE applied for grant funding as part of EPAs 2021 WIINs Lead Testing in School and Child Care Programs and will be implementing the 3Ts (training, testing, and taking action) for reducing lead exposure in drinking water.

With the passage of the BIL, the authority for this grant program has been expanded to now include projects that remediate lead contamination in drinking water. Eligible entities include schools and early childhood education programs, but only those under the jurisdiction of local educational agencies, a requirement of the federal law. As such, sampling at public preschools, elementary schools, and associated childcare facilities will be a renewed focus of this

WIIN Grant award. The funding will be focused on facilities serving underserved and low-income communities, elementary schools and those school facilities older than 1988, as they are at highest risk for internal plumbing and drinking water appurtenances containing lead, all within tiered program remediation trigger levels ranging between 10 to greater than 100 parts per billion (ppb). Funding assistance was offered out to all schools with levels above 10 ppb, with only the Bellevue Public Schools District accepting an award totaling \$131,250.

## Emerging Contaminants in Small or Disadvantaged Communities Grant

EPA issued implementation guidance for this approximate \$48 million grant during the latter part of the fiscal year. A master program work was approved by EPA that will focus on the regionalization of small communities that have elevated levels of Manganese, in order to avoid the installation or the replacement of a more costly water treatment plant alternative. Specific workplans for projects in the Giltner, Riverton and Talmage areas of the state have been drafted for EPAs review.

### American Rescue Plan Act (ARPA)

The State of Nebraska was allocated \$1.04 billion of Coronavirus State Fiscal Recovery Funds, which in part may be used to make necessary investments in water and sewer infrastructure. In the final rule adopted for implementation of these funds, the U.S. Department of the Treasury aligned the eligible uses of these funds with the wide range of types or categories of projects that would be eligible to receive financial assistance through the SRFs.

Signed into law on April 13, 2021, Section 51 of Legislative Bill No. 1014e states that these funds are "...for grants for reverse osmosis systems, which shall only be used for such purpose". The narrative of the legislation further clarified that the NDEE "...shall provide grants for villages and cities of the second class to install reverse osmosis systems in community water systems where drinking water test levels are above ten parts per million of nitrate and, if appropriate, provide grant funds for use to install reverse osmosis systems if test levels for nitrate in drinking water pumped from private wells are above ten parts per million". The Department is developing programs to administer the \$4,000,000 allocated for the above. From those funds, the agency signed an agreement for \$2,775,000 with the City of Wisner for the construction of a centralized reverse osmosis (RO) treatment plant, and as of the end of the fiscal year, rebates totaling \$503,629.91 have been processed for RO installations with Private Well Owners. The agency closed the window for Private Well Owner applications on June 30<sup>th</sup>, with the projection for such installations to be under \$1,200,000. For Wisner, a construction contract totaling \$5,467,679 was let, with that project now under construction with a substantial completion date set for July 13, 2026. As such, any excess funding available under Section 51 will be amended into Wisner's signed agreement before the end of 2024.

Section 52 of Legislative Bill No. 1014e states that these funds are to be used "...for wastewater and drainage system updates at the state fairgrounds, which shall only be used for such purpose". Wastewater and drainage system updates are eligible for assistance under the CWSRF, and therefore under ARPA, when a project provides a water quality benefit or for measures to manage, reduce, treat, or recapture stormwater or subsurface drainage water. The agency signed an agreement to provide the \$20,000,000 allocated to the Nebraska State Fair. Contracts totaling \$5,331,632 were let, with those first phase infrastructure improvements now under construction.

Section 53 of Legislative Bill No. 1014e states that these funds are "...to provide grant assistance for a rural drinking water project that serves rural water connections and at least four communities in two contiguous counties in order to convert to ground water sources and to provide for water system infrastructure and distribution, which shall only be used for such purpose". The agency signed a contract to provide the \$7,000,000 allocated for this program to the Lewis & Clark NRD. That NRD owns and operates the Cedar-Knox Rural Water Project, which is the only water system to meet the above narrative language. Construction contracts totaling \$8,443,998 were let, with those project phases now under construction with a substantial completion date set for June 1, 2026.

## Revitalize Rural Nebraska Grant Program (RRNGP)

The NDEE announced the award of \$898,139 in grants to support nine projects that will demolish dilapidated commercial properties across the state. The funds provided through the RRNGP were awarded based on the competitive ranking of applications being received from 15 communities.

The grant awards by municipality:

- Bloomfield \$51,315 for the property on 108 South Broadway
- Chester \$39,649 for the property on 522 Thayer Avenue
- David City \$47,250 for the property on 551 E. Street
- Deshler \$200,000 for the property on 618 4th Street
- Falls City \$17,000 for the property on 1817 1/2 Stone Street
- Oxford \$300,000 for the property on 404 West Derby Street
- Tekamah \$137,925 for the property on 141 South 13th Street
- Wakefield \$25,000 for the property on 106-110 West 3rd Street
- Wymore \$80,000 for the property on 207 S. 7th Street

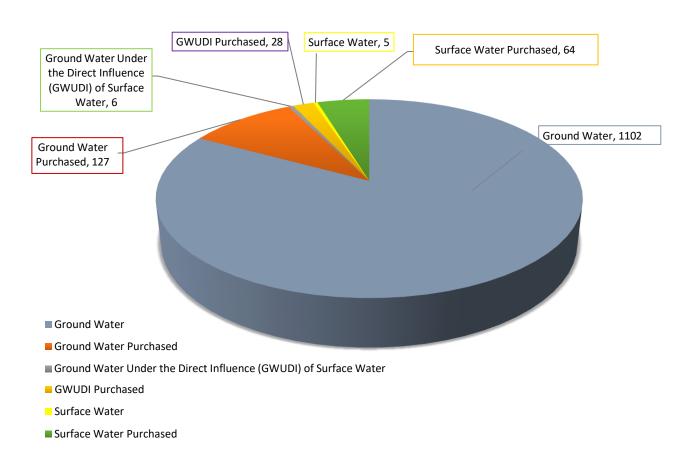
The RRNGP was established in 2023 by the Nebraska Legislature to fund the demolition of dilapidated commercial properties owned by a village or a city of the first or second class. To be eligible for funding, properties likely have to be owned by the applying municipality, abandoned or vacant for at least six months, and not on or eligible to be listed on the National Register of Historic Places. Recipient communities must also provide a local match. NDEE assessed applications for eligibility and competitive ranking with priority given to applications from villages and second-class cities.

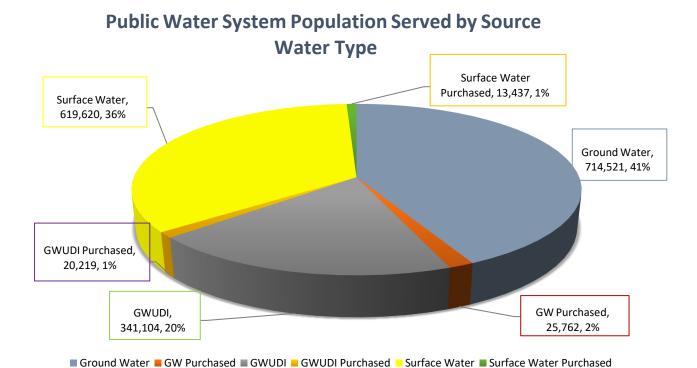
# **Drinking Water Programs**

The Drinking Water Program at the NDEE administers the State's regulations governing Public Water Systems (PWSs), Title 179 NAC 2 through 26, promulgated under the State's SDWA pursuant to and in accordance with the federal SDWA. State regulations must be at least as stringent as the federal regulations.

Public Water Systems provide water to approximately 80% of Nebraskans. Private domestic wells, which are not regulated under the SDWA, provide water for other 20% of Nebraskans. Most of the water Nebraskans drink is ground water and only five public water systems in the state obtain their drinking water from surface water. Another 64 systems purchase water from those five systems. In addition, 6 systems utilize ground water under the influence of surface water (GWUDI), and 28 additional systems purchase water from those six systems. The remaining 1,102 systems use ground water, and an additional 127 systems purchase their water from another ground water system.

# **Number of Systems by Source Water Type**





#### \*Percentages rounded to nearest 1%

As you can see above, although surface water sources account for the smallest number of public water systems in Nebraska, these sources provide public water to a significant population in the state. This is because Omaha and all of the consecutive water systems that purchase water from Omaha utilize surface water from the Missouri River.

## Nebraska's Public Water Systems

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

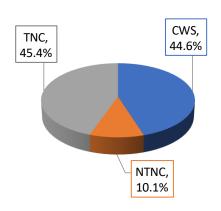
Population	CWS	NTNC	TNC	Total Systems	Percentage*
<101	102	73	503	678	50.9%
101-500	267	42	96	405	30.4%
501-1000	95	10	6	111	8.3%
1001-3300	88	7	0	95	7.1%
3301-10000	28	2	0	30	2.3%
10001-50000	11	0	0	11	0.8%
>50000	3	0	0	3	0.2%
TOTAL	594	134	605	1333	100.0%

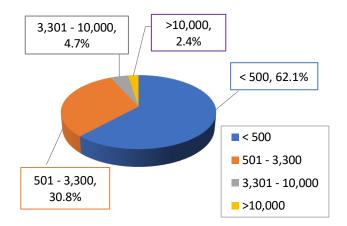
<sup>\*</sup>Based on approximate population

CWS = Community	594 systems
NTNC - Non-transient, non-community	134 systems
TNC = Transient, non-community	

## **Public Water System Types**

# Community Public Water Systems by size of population





Over 60% of Nebraska's community water systems (CWSs) serve populations less than 500 people. Water systems with populations below 3,300 are considered to be 'small systems' by the EPA. This makes Nebraska a predominantly small system state with 92.9% of all of the State's CWSs serving 3,300 or fewer people.

## Drinking Water Field Services, Water Operator Training, and Capacity Development

These areas encompass four separate, but related areas of responsibility:

- 1) Field Services (inspections, operator assistance, etc.)
- 2) Water Operator Training
- Capacity Development, and
- 4) Water System Security

Field Services staff include a supervisor, and eight field representatives. The Water Operator Training and Capacity Development components of the program are overseen by a training coordinator, and capacity development coordinator, respectively. Staff within these areas conduct sanitary surveys, train public water system operators, attend and present information at continuing education programs for water operators, assist public water systems (PWSs) with Level 1 and Level 2 assessments, provide support during emergency situations, and help public water systems to achieve or maintain adequate technical, financial, and managerial capacity. There are eight field areas located throughout the State to provide close contact and timely assistance to Nebraska's public water systems.

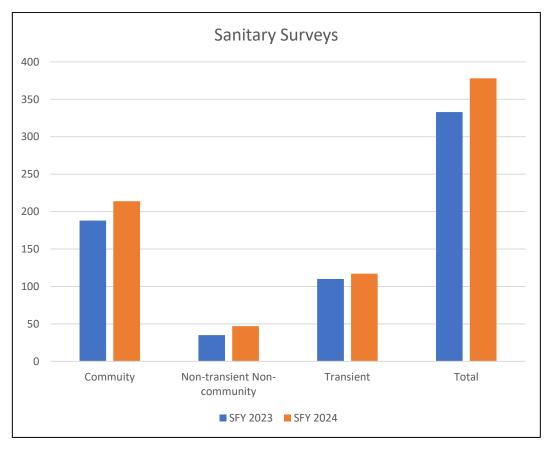
#### **Field Services**

## Sanitary Surveys

Routine sanitary surveys are conducted once every three years for community water systems (CWS) and non-transient non-community (NTNC) public water systems and once every five years for transient non-community (TNC) PWSs. A sanitary survey helps to ensure that a water system is operating properly by working with their licensed water operator(s) to evaluate records, review their emergency plan and cross-connection control program, and inspect components of the water system.

Field Services personnel conducted 378 sanitary surveys (214community, 47non-transient non-community, and 117 transient public water systems). A total of 632 deficiencies were found. This reflects an overall deficiency rate of 1.7 deficiencies per sanitary survey. No deficiencies were found in 167 (44%) of the sanitary surveys completed. The average number of deficiencies found in Nebraska's public water systems has remained stable, highlighting the great work of water operators in our State.

Outside of sanitary surveys, field staff conduct site inspections for the location of new public wells, assist engineering services personnel in conducting construction inspections of public water system projects (such as the drilling of wells, the construction of treatment plants, and the erection of water towers). Field services staff are essential workers that respond to emergencies associated with natural disasters, water service interruption, and/or contamination of a PWS.



#### Level 1 & Level 2 Assessments

When public water systems have a confirmed presence of coliform bacteria, the Revised Total Coliform Rule (RTCR) requires that an assessment of the system be conducted. An assessment helps to identify the likely reason for the presence of coliform bacteria in the system. Any identified defects are required to be corrected.

A Level 1 assessment is triggered when a system detects total coliform bacteria but not *E. coli*. The public water system is responsible for completing a Level 1 assessment. Then field staff are responsible for reviewing Level 1 assessments to ensure all potential contamination-causing issues were considered.

A Level 2 assessment is triggered by either multiple Level 1 assessments within a running twelve-month period, or by the confirmed presence of *E. coli* bacteria in the system. A Level 2 assessment is conducted by field staff and provides a much more detailed evaluation of the PWS.

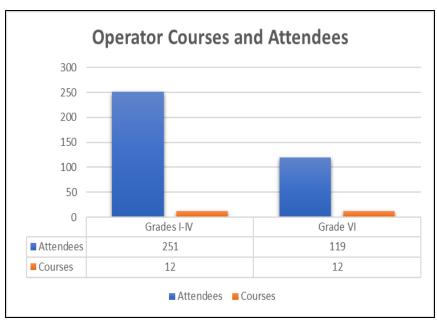
## **Hypochlorinators**

The Drinking Water Program maintains a number of hypochlorinators for temporary loan to public water systems when bacterial contamination is a source of concern. This equipment helps communities with temporary chlorination of their water supplies to ensure the safety of their drinking water. When a power outage or source failure is involved, program staff also help systems locate equipment and supplies which may be needed.

## **Training**

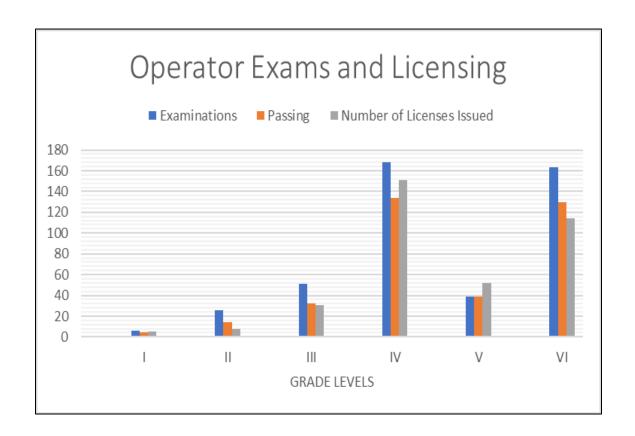
Field Services and Training program personnel conducted 12 water operator training courses, Grades I through IV, with a total of 251 attendees. The correspondence course, that is also offered to prepare for the Grade IV licensure examination, was not completed by anyone.

For Grade VI licensure (backflow preventer testing and repair), 12 courses were offered with a total of 119 attendees. For Grade V operators (transient systems only), there are no classroom courses. Training is obtained through a self- study process. Water operators are licensed only after successfully passing an exam. Examinations are offered following each training course and can also be scheduled individually.



The following table breaks down the number of initial licenses issued, and examinations conducted at each grade level:

Grade	Examinations	Passing	Number of Licenses Issued
ı	6	4	5
II	26	14	8
III	51	32	31
IV	168	134	151
V	39	39	52
VI	163	130	114



The Drinking Water Program and other training providers have adapted to existing conditions, continuing to provide both in person, and virtual training formats for water operators in SFY 2024. Coordinated by the program, a group informally known as the Water Operator Training Coalition, met to identify training needs and to assist with scheduling of training opportunities. Members include the Nebraska Rural Water Association, the League of Nebraska Municipalities, the Midwest Assistance Program, Central Community College, and the Nebraska Section of the American Water Works Association. As in past years, the Coalition produced a calendar identifying dates and locations of continuing education opportunities for distribution to licensed water operators.

A total of 76 workshops/seminars/conferences were initially offered in Nebraska for the purpose of water operator continuing education. Of these, 19 focused primarily on backflow prevention continuing education for Grade VI operators.

## **Capacity Development**

Capacity development is a proactive approach, through which water systems acquire and maintain adequate technical, managerial, and financial capabilities, enabling them to provide safe drinking water to Nebraskans. NDEE's activities to bolster water systems' capacity are overseen by the program's Capacity Development Coordinator.

Additional support is provided by the 2% Assistance Team, which consist of the same members as the Water Operator Training Coalition. The name comes from the 2% set-aside from the Drinking Water State Revolving Fund (DWSRF).

#### **DWSRF 2% Assistance Contracts**

Funds from the 2% Set-Aside of the DWSRF are used to provide assistance to public water systems serving 10,000 or less people, to develop, and maintain, technical, managerial, and financial capacity. NDEE contracts with assistance providers to provide this assistance. In 2021, NDEE initiated a process to restructure the contractual agreements by which assistance is provided to public water systems, shifting the focus to a much more proactive approach. In May 2022, requests for proposals were published for three contracts, one to provide board/council workshops and trainings, a second to assist with the development of lead service-line inventories, and the third to provide broader, technical, managerial, and financial assistance to aid in achieving/maintaining regulatory compliance and system capacity. All three contracts were awarded in SFY 2023.

**Board/Council Workshops & Trainings:** It is critical that local board and council members understand their responsibilities as owners of a public water system, and the importance of ensuring the managerial and financial aspects of running a water system are being addressed. Regional workshops, and trainings for individual systems, provide ownership, and other public water system personnel, with the knowledge, ability, and resources to effectively maintain their system, become sustainable, and ensure compliance with the Safe Drinking Water Act.

**Regional Workshops:** These workshops are conducted throughout the state, with the goal to educate owners of public water systems about their responsibilities and provide resources to accompany that education goal. The workshops include practical exercises for technical, managerial, and financial capacity building, including rate setting, capital reserves, and asset management. The regional approach enables representatives from multiple systems the ability to attend and participate in discussions with each other. In SFY 2024 seven regional workshops were held, with representatives from public water systems attending.

**Individual System Trainings:** Trainings for individual systems cover the same elements as the workshops, but also emphasize the particular needs of that system. These trainings are conducted at the request of the public water system, or as a required element of an Administrative Order issued by the Department to address on-going compliance issues. Two individual board trainings in total were held in SFY 2024

**Lead Service Line Inventory Assistance:** EPA's Lead and Copper Rule Revision requires public water systems to identify lead service lines, make available to the public the location of known lead service lines, and develop a plan for replacement of lead service lines. The intent of this contract is not to complete the inventories for systems, but to educate them, and provide tools and resources to aid in the development of their inventories, as well as replacement plans and public outreach, as needed. Projects aiding with the development of lead service line inventories were conducted at 109 public water systems.

**Compliance & Capacity Assistance:** The purpose of this contract is to aid public water systems in achieving/maintaining compliance with the Nebraska Safe Drinking Water Act and regulations promulgated under that Act, as well as voluntary implementation of capacity building programs to ensure the continuous supply of drinking water that meets regulatory standards. Work under this contract provides:

**Routine sanitary survey (RSS) preparation.** This component provides assistance to ensure public water systems have the knowledge and preparation needed for a successful routine sanitary survey. Often, many RSS deficiencies are due to a lack of knowledge of what a RSS is, and how to prepare for one. Oftentimes there is also a misunderstanding of how to respond to deficiencies. This component provides both on- and off-site assistance with follow-up to systems that receive deficiencies from the RSS.

**New operator hands-on training and mentoring**. Many newly licensed operators are hired by very small community systems without other operators for orientation and support. Likewise, operators hired for non-community systems may find in-house training unavailable to learn their new job. This component provides on-site, multiple- day training, and mentoring, to ensure new operators understand their responsibilities for maintaining the operation of water system, and regulatory compliance. Assistance was initiated with eight public water system operators.

**Technical, Managerial, and Financial (TMF) Assistance.** Individualized assistance is often needed to build the capacity of water systems. This element of the contract covers requests by water systems, and NDEE, to assist with activities such as rate setting, water loss, deficiency and compliance issues, asset management, and other items where assistance will improve the understanding and ability of the system to become sustainable. Assistance provided by this component is, depending on the situation, and will be done as a supporting role to ensure the systems obtain needed understanding and skill.

## Capacity Assessment

Assessment of a public water system's technical capacity is primarily addressed through the Routine Sanitary Survey process. In the past, the sanitary survey also included a very brief, high-level assessment of managerial and financial capacity. A much more thorough assessment was conducted of water systems that received loans through the DWSRF.

An updated capacity survey, which includes detailed information about asset management, has been created to replace the managerial and financial capacity assessment processes used previously in both the sanitary survey, and the DWSRF loan process. Beginning July 2022, the updated capacity surveys are sent out several weeks prior to routine sanitary surveys for community and non-transient non-community (NTNC) systems. The surveys are to be completed by board members, or owners, with input from other water system personnel. The survey also requests signature/verification from a board member or owner, and the operator. This process will ensure surveys are updated every three years for all community and NTNC systems. If a survey isn't on file when a system applies for a DWSRF loan, the DWSRF program sends the survey as part of the application.

Completed capacity surveys are scored based on the answers provided to the survey questions. Public water systems with a score of 70%, or higher, are considered to be demonstrating stronger capacity. Upon request from the system, those with a population of 10,000 or less, and a score of 70 to 89 may request assistance and be referred to the appropriate 2% contractor. A system serving a population of 10,000, or less, that scores below 70%, is offered assistance from the appropriate 2% contractor. In SFY 2024 119 completed surveys were received from community water systems with an average score of 84%, and 40 non-transient non-community systems with average score of 74%. Twenty community, and thirteen NTNC systems scored below 70%.

#### **Education and Outreach**

In-person training is a focus for the capacity development program. Outreach and training regarding capacity development was provided by the capacity development coordinator, NDEE Drinking Water team members, as well as Training Coalition partners.

## Nebraska Capacity Development Strategy

States must develop and implement a strategy to assist public water systems in acquiring and maintaining technical, managerial, and financial capacity. America's Water Infrastructure Act of 2018 required States to amend their strategies to include efforts encouraging public water systems to develop asset management plans. Nebraska's revised strategy was approved on August 19, 2022. As the first strategy submitted in Region 7, it was also subject to concurrent review from the U.S. EPA Office of Ground Water and Drinking Water.

#### **Monitoring and Compliance Section**

The Monitoring and Compliance (M&C) Section of the Drinking Water Program reviews analytical results for contaminants in drinking water, issues enforcement actions, maintains and tracks each PWS's compliance status, provides compliance assistance internally and externally, and maintains the Safe Drinking Water Information System (SDWIS) database for PWSs.

#### Safe Drinking Water Information System

The Safe Drinking Water Information System (SDWIS) database was developed by EPA for states to track and report water quality data test results, violations, compliance assistance, enforcement, compliance schedules, water operator licensure, and PWS operating permits. SDWIS receives electronic data from the State of Nebraska Environmental Health Laboratory and four contract laboratories (Midwest Laboratories Inc., Central District Health Department, American Agriculture Laboratory Inc., and Enviro-Service Inc.) that perform water analyses for NDEE.

NDEE is preparing for transition to cloud-based software called the State, Federal, and Tribal Information Exchange System (SFTIES) that will replace the current SDWIS database. This new database is being provided to the states by EPA. This transition will include staff training, implementing routine quality assurance and quality control measures, and implementing standard data entry and reporting methods.

#### Monitoring and MCL Violations, and Assessments

A public water system is required to monitor for the presence of 83 different contaminants. If a contaminant is present in the water, the system must verify that the contaminant does not exceed its maximum contaminant level (MCL).

Only 5 of 83 contaminants for which community public water systems monitor were found to be present above a SDWA MCL. That means 78 contaminants, for which monitoring was conducted, were not found above their respective MCL in a PWS in Nebraska.

Monitoring & Compliance enforces 9 different federal monitoring rules. Each rule contains a group of similar contaminants. Below is a list of the federal monitoring rules:

- Revised Total Coliform Rule
- Disinfections Byproducts
- Groundwater
- Lead & Copper
- Inorganic Chemicals
- Radionuclides
- Synthetic Organic Chemicals
- Surface Water Treatment
- Volatile Organic Chemicals

A major monitoring violation occurs when a system fails to collect any samples during a required compliance period. Significant monitoring violations are defined as any major monitoring violation that has occurred during a specified reporting period, which differs for each contaminant.

There was a total of 153 violations from 81 public water systems in FY2024 for exceeding an MCL or failing to properly monitor. More detailed information on each of the monitoring rules follow the summary table below.

## Revised Total Coliform Rule (RTCR)

The objective of the Revised Total Coliform Rule (RTCR) is to identify and reduce potential exposure to bacterial contamination in drinking water. Testing for coliform bacteria is a way to indicate whether potentially harmful bacteria may be present. All public water systems are required to routinely monitor for the presence of coliform bacteria and *E.coli*, or the fecal form of coliform bacteria. The RTCR establishes a MCL for *E. coli*. Assessments of the PWS and corrective actions are required if either total coliform or *E.coli* bacteria are found. A system is required to issue a Public Notice (PN) if they fail to monitor for coliform bacteria, if *E.coli* bacteria are found, or for failure to complete an assessment or corrective action.

A Level 1 assessment is triggered when a system detects total coliform bacteria but not *E.coli*. PWS officials are responsible for conducting Level 1 assessments, in which they report

sampling site conditions, typical sample procedures, and other water-related events. NDEE's Field Services team is responsible for reviewing Level 1 assessments to ensure all potential contamination-causing issues were considered.

A Level 2 assessment under the RTCR is a more comprehensive and detailed evaluation conducted when a PWS experiences either a second occurrence of total coliform bacteria or detects *E. coli* bacteria. This type of assessment is conducted by NDEE's Field Services and is designed to identify and address more complex or severe issues, known as significant deficiencies, within the system.

Significant deficiencies must be corrected within 120 days and minor deficiencies must be corrected within 12 months.

#### RTCR Assessments

Type of RTCR Assessment	Number of Assessments Triggered	Number of Systems	% of Systems with Assessments
Level 1	106	106	8.0%
Level 2	89	66	5.0%
Level 2, <i>E. coli</i> MCL triggered	10	9	0.47%

#### **RTCR Violations**

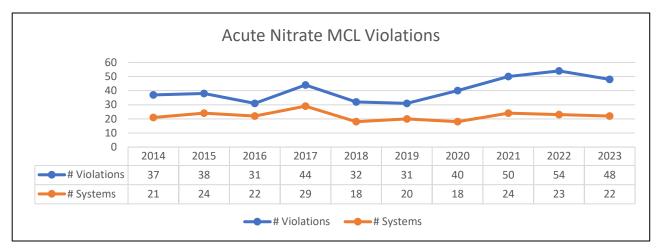
Type of RTCR Violation	Number of Violations Issued	Number of Systems	% of Systems with Violations
Treatment Technique, Level 1	0	0	0%
Treatment Technique, Level 2	0	0	0%
MCL – E. coli +	10	9	0.47%
Monitoring, Additional Routine, Major Routine	69	45	3.5%
Startup Procedures TT	2	2	0.15%

#### **Nitrate-Nitrite Rule**

All public water systems monitor for nitrate-nitrite. Adverse health effects may be experienced when pregnant women, infants under six months of age, and nursing mothers, consume high levels of nitrate or nitrite in drinking water. A system is out of compliance when it receives one monitoring or MCL violation. A system is issued an administrative order (AO) to correct a nitrate contamination problem if two nitrate-nitrite violations are issued within a consecutive three- quarter period.

#### Nitrate-Nitrate Violations

Violation	Number of Violations	Number of Systems	% of Systems with Violations
MCL – 10 mg/l	48	22	1.7%
Monitoring	14	8	0.6%



#### **Public Notification Rule**

Public notification is required if a PWS receives a MCL, monitoring, or treatment technique violation. There were six systems in violation of the PN Rule.

Rule	Number of Violations	Number of Systems
Public Notification Rule	21	5

#### **Consumer Confidence Rule**

The Consumer Confidence Rule (CCR) requires all community water systems to prepare and distribute an annual water quality report summarizing information regarding source water, detected contaminants, compliance issues, and educational information. There were seven systems in violation of the CCR Rule.

Rule	Number of Violations	Number of Systems
Consumer Confidence Rule	7	7

#### MCL Violations for Chronic Contaminant Exposure

Ingestion of bacteria and nitrate-nitrite in drinking water are typically associated with acute (i.e., sudden) adverse health effects. Exposure to other drinking water contaminants is considered to be associated with chronic health effects (i.e., the adverse health effect is evident only after repeated exposure or ingestion of the same contaminated water over a long period of time. Depending on the contaminant, routine monitoring occurs every year, every three years, or every six years (per the EPA). If a contaminant is detected, monitoring is increased to quarterly.

If the level decreases below the MCL, the monitoring frequency may be reduced. A public water system is issued an AO after three quarterly MCL violations are issued in a rolling 12-month period. An AO is issued immediately if the contaminant is found at a level that may pose an immediate health risk.

Below is a list of tables that outline the type of contaminants and the number of violations issued for each.

## Volatile Organic Chemical (VOC) Violations

(Per the SDWA, only community and non-transient, non-community systems monitor for VOCs.)

VOC Contaminant	Number of MCL Violations	Number of Monitoring Violations	Number of Systems	% of Systems with Violations
Aldrin	0	0	0	0.0%
Benzene	0	0	0	0.0%
Carbon tetrachloride	0	0	0	0.0%
cis-1,2-Dichloroethylene	0	0	0	0.0%
Dicamba	0	0	0	0.0%
1,1-Dichloroethylene	0	0	0	0.0%
Dichloromethane	0	0	0	0.0%
1,2-Dichloropropane	0	0	0	0.0%
Metribuzin	0	0	0	0.0%
Monochlorobenzene	0	0	0	0.0%
o-Dichlorobenzene	0	0	0	0.0%
para-Dichlorobenzene	0	0	0	0.0%
Styrene	0	0	0	0.0%
Tetrachloro-ethylene	0	0	0	0.0%
Toluene	0	0	0	0.0%
trans-1,2-Dichloroethylene	0	0	0	0.0%
1,2,4-Trichlorobenzene	0	0	0	0.0%
Trichloroethylene	0	0	0	0.0%
1,1,1-Trichloroethane	0	0	0	0.0%
1,1,2-Trichloroethane	0	0	0	0.0%
Vinyl chloride	0	0	0	0.0%
Xylenes (total)	0	0	0	0.0%

## Inorganic Chemical Contaminant (IOC) Violations

(Per the SDWA, only Community and Non-transient, non-community systems monitor for IOCs.)

Contaminant	Number of MCL Violations	Number of Monitoring Violations	Number of Systems	% Systems with MCL Violations
Antimony	0	0	0	0%
Asbestos	0	0	0	0%
Arsenic	4	0	1	0.07%
Barium	0	0	0	0%
Beryllium	0	0	0	0%
Cadmium	0	0	0	0%
Chromium total	0	0	0	0%
Cyanide (as free cyanide)	0	0	0	0%
Fluoride	0	0	0	0%
Mercury	0	0	0	0%
Nickel	0	0	0	0%
Selenium	0	0	0	0%
Sodium	0	0	0	0%
Thallium	0	0	0	0%

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# Non-Volatile Synthetic Organic Chemical (SOC) Contaminants

(Per the SDWA, only community and non-transient, non-community systems monitor for SOCs.)

Contaminant	Number of MCL Violations	Number of Monitoring Violations	Number of Systems	Systems with Violations
Alachlor (Lasso)	0	0	0	0%
Atrazine	0	0	0	0%
Benzo[a]pyrene	0	0	0	0%
Butachlor	0	0	0	0%
Carbaryl	0	0	0	0%
Carbofuran	0	0	0	0%
2,4-D	0	0	0	0%
2,3,7,8-TCDD (Dioxin)	0	0	0	0%
2,4,5-TP	0	0	0	0%
Chlordane	0	0	0	0%
Dalapon	0	0	0	0%
Di(2-ethylhexyl) adipate	0	0	0	0%
Di(2-ethylhexyl) phthalate	0	0	0	0%
Dibromochloropropane	0	0	0	0%
Dieldrin	0	0	0	0%
Dinoseb	0	0	0	0%
Diquat	0	0	0	0%
Endothall	0	0	0	0%
Endrin	0	0	0	0%
Ethylene dibromide	0	0	0	0%
Glyphosate	0	0	0	0%
Heptachlor	0	0	0	0%
Heptachlor epoxide	0	0	0	0%
Hexachlorobenzene	0	0	0	0%
Hexachlorocyclopentadiene	0	0	0	0%
Lindane	0	0	0	0%
Methomyl	0	0	0	0%
Methoxychlor	0	0	0	0%
Oxamyl (Vydate)	0	0	0	0%
Pentachlorophenol	0	0	0	0%
Picloram	0	0	0	0%
Polychlorinated biphenyls	0	0	0	0%
Propachlor	0	0	0	0%
Simazine	0	0	0	0%
Toxaphene	0	0	0	0%

#### Radionuclide Violations

(Per the SDWA, only Community water systems monitor for Radionuclides.)

Contaminant	Number of MCL Violations	Number of Monitoring Violations	Number of Systems	Systems with Violations
Combined Radium (Radium)	0	0	0	0%
Gross Alpha Including Radon	0	0	0	0%
Uranium Mass	12	0	3	0.22%

## **Disinfection Byproduct Violations**

(Only water systems that disinfect their water, monitor for Disinfection Byproducts and Disinfectant Residuals.)

Contaminant	Number of MCL Violations	Number of Monitoring Violations	Number of Systems
Total Haloacetic Acids	0	0	0
Total Trihalomethanes	0	0	0

## Disinfection Byproducts Stage 1 Monitoring

Violation	# Violations	# Systems
Qualified Operator Failure	0	0

### **Disinfection Byproducts Monitoring**

	# Violations	# Systems
Monitoring	0	0

## **Disinfectant Residual Violations**

MRDL	Treatment Technique # Violations	Treatment Technique # Systems	Monitoring # Violations	Monitoring # Systems
0	2	2	0	0

## **Lead and Copper Rule Violations**

(Per the SWDA, only Community and Non-transient, non-community water system monitor for Lead and Copper.)

Contaminant	Number of Monitoring Violations	Number of Systems	Systems with Violations
Lead and Copper	0	0	0.00%

#### Surface Water Treatment Rule Violations

Type of Violation	Number of Violations	Number of Systems
Monitoring	1	1
Record Keeping	0	0
Treatment Technique	0	0

#### **Ground Water Rule**

Type of Violation	Number of Violations	Number of Systems
Monitoring/Reporting/Recordkeeping	0	0
Sanitary Survey – Failure to Address	0	0
Sanitary Survey – Failure to Consult	0	0
Treatment Technique	0	0

#### **Administrative Orders**

The Drinking Water Program issues an AO when a PWS is significantly out of compliance. (Each contaminant has different parameters that indicate what constitutes "significantly out of compliance.") Once an AO is issued, MCL violations continue to be issued until the PWS returns to compliance. Failure to comply with the terms of an AO can result in administrative action or revoking the system's permit to operate.

	Nitrate	Uranium	Arsenic
Number of Orders	0	0	0
Population Affected	0	0	0

## **Variances and Exemptions**

No variances or exemptions were issued.

#### MCL Violations other than Total Coliform/RTCR and Nitrate

#### Population Affected by Various Contaminants

Contaminant	Number of MCL Violations	Number of Systems	Population Affected
Arsenic	4	1	150
Selenium	0	0	0
Uranium Mass	12	3	515

## **Emerging Issues**

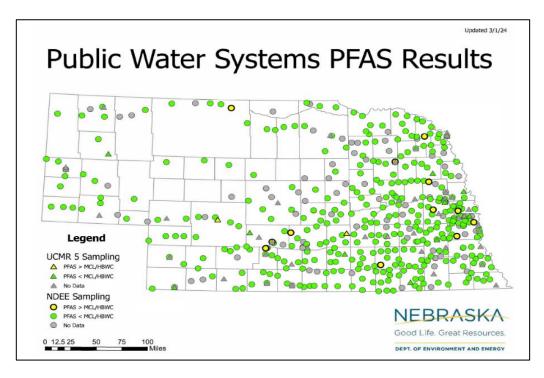
The EPA final rule on PFAS in drinking water became effective on June 25, 2024 which applies to both Community and Non-transient Non-Community public water systems. NDEE is reviewing the final rule and will work to update its regulations to ensure compliance with the new federal standards. In addition, the department is reviewing the new Emerging Contaminant Bipartisan Infrastructure Law funds for 2024 to learn more about funding available to public water systems affected by this new standard and how the agency can provide support.

The final rule regulates six unique PFAS (see chart on the following page) and requires initial monitoring by 2027 with compliance to the PFAS MCLs beginning in 2029.

Regulated PFAS Chemical(s)	Maximum Contaminant Level (MCL)
PFOA	4.0 ppt
PFOS	4.0 ppt
PFHxS	10.0 ppt
HFPO-DA	10.0 ppt
PFNA	10.0 ppt
Mix of 2 or > (PFHxS, PFNA, HFPO-DA & PFBS)	Hazard Index (HI) of 1 unitless

The EPA has PFAS sampling data for public water systems that serve populations of 3,300 or more through the Fifth Unregulated Contaminant Monitoring Rule (UCMR5). That data is available online: <a href="https://www.epa.gov/dwucmr/data-summary-fifth-unregulated-contaminant-monitoring-rule">https://www.epa.gov/dwucmr/data-summary-fifth-unregulated-contaminant-monitoring-rule</a>

NDEE is using funding from a federal emerging contaminant grant and the SRF set aside fund to provide free PFAS sampling for community and non-community non-transient PWSs that serve 3,300 or fewer. While NDEE's sampling effort is ongoing, the results to date have determined 17 of the 414 PWSs that have sampled have source water with one or more PFAS above the MCL.



The free sampling assists PWSs to meet initial monitoring requirements. PFAS sampling costs approximately \$800/sample to process, and initial monitoring requires 2 to 4 samples in a 12-month period, depending on the number of people served and the water source. NDEE continues to encourage the 35 remaining systems that serve populations of 3,300 or fewer who have not yet participated to take advantage of the free sampling.

# CHAPTER 7:

# **Energy Programs**

The department's primary energy-related responsibilities focus on administering the federally funded state Weatherization Assistance Program (WAP) and conducting the overall State Energy Program (SEP). The SEP consists of the general pursuit of all energy-related activities and is funded by the Department of Energy (DOE). Specific efforts include the administration and implementation of the Nebraska State Energy Code and administering the long standing and successful Dollar and Energy Saving Loan (DESL) program. The WAP and DESL program provide financial resources for Nebraska citizens to install upgrades to their homes or businesses to make them more energy efficient and decrease energy costs.

The Energy Programs continued to develop several new programs which address grid resiliency, school energy use efficiency, and home energy use efficiency. These programs are described below.

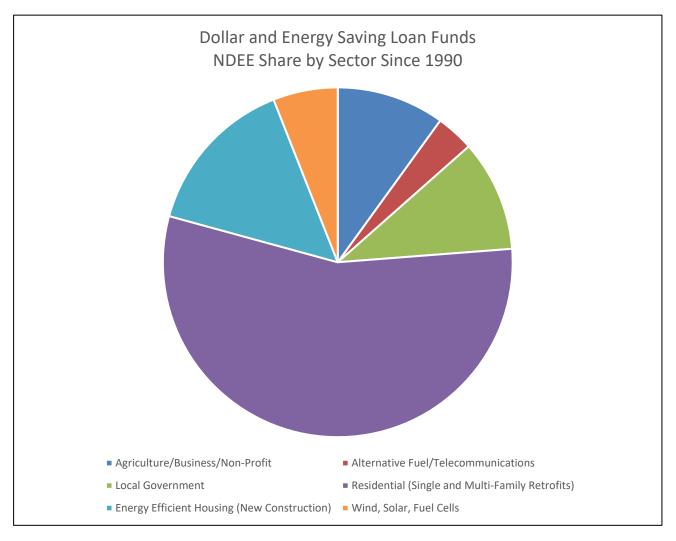
A comprehensive annual report on energy activities is required by statute; the 2024 report will be included in a separate report submitted to the Governor and the Clerk of the Legislature by February 15, 2025. The State Energy Annual Report for 2023 may be found at <a href="http://dee.ne.gov/publica.nsf/PubsForm.xsp?documentId=9D63DE5512CB1EC086258AC3005E63698action=openDocument">http://dee.ne.gov/publica.nsf/PubsForm.xsp?documentId=9D63DE5512CB1EC086258AC3005E63698action=openDocument</a>

# **Dollar and Energy Savings Loan Program**

The Dollar and Energy Saving Loans (DESL) program has helped tens of thousands of Nebraska residents, local businesses, school districts, and municipalities make their homes and buildings more energy efficient and helped them reduce energy bills by providing low-cost financing for energy-efficient equipment and projects. NDEE partners with Nebraska-based lending institutions by purchasing a portion of each loan (50-90%) thus incentivizing lower interest rates to the borrowers while leveraging lender funds for energy-saving projects.

Since the inception of the program in 1990, the DESL program has helped finance 31,178 energy saving projects over 30,434 loans with the total cost of all improvements totaling over \$401.8 million. The DESL revolving loan system will continue to provide energy conservation loans far into the future since the funding pool is continually replenished by loan repayments. These energy loans can be used for a multitude of energy-related projects including replacing inefficient lighting; installing highly rated, energy-efficient heating and cooling systems; adding new solar or wind generation; providing better thermal resistance with added insulation and replacing old windows and doors; installing large and small-scale solar projects; and constructing and long-term financing on new, above-code energy-efficient housing.

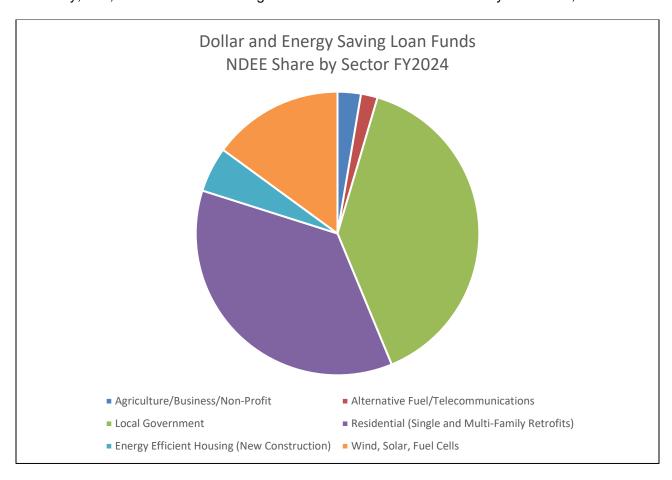
CHAPTER 7 ENERGY PROGRAMS



Dollar and Energy Saving Loan Funds – NDEE Share by Sector Since 1990

SECTOR	Tota	Total Loaned		EE Share	Total Projects
Agriculture/Business/Non-Profit	\$	42,271,529	\$	20,345,566	1,736
Alternative Fuel/Telecommunications	\$	11,473,505	\$	7,147,364	44
Local Government	\$	30,768,381	\$	21,010,369	161
Residential (Single and Multi-Family Retrofits)	\$	218,376,788	\$	113,194,746	28,711
Energy Efficient Housing (New Construction)	\$	80,589,209	\$	30,122,752	303
Wind, Solar, Fuel Cells	\$	18,417,229	\$	12,206,432	223
TOTALS	\$	401,896,640	\$	204,027,229	31,178

In fiscal year 2024, the DESL program helped finance over \$13.5 million for 347 new loans that improved energy efficiency for 353 new projects. Over that time, on residential projects alone, the DESL program is estimated to have saved 194,684 kilowatt-hours of electricity, 183,685 therms of natural gas and reduced carbon emissions by almost 25,175 tons.



FY 2024 Dollar and Energy Saving Loan Funds – NDEE Share by Sector

SECTOR	Tota	l Loaned	NDE	E Share	Total Projects	
Agriculture/Business/Non-Profit	\$	386,047	\$	250,931	2	
Alternative Fuel/Telecommunications	\$	456,962	\$	178,481	1	
Local Government	\$	4,386,287	\$	3,690,000	3	
Residential (Single and Multi-Family Retrofits)	\$	5,286,984	\$	3,402,139	328	
Energy Efficient Housing (New Construction)	\$	807,000	\$	485,400	1	
Wind, Solar, Fuel Cells	\$	2,193,746	\$	1,407,444	18	
TOTALS	\$	13,517,026	\$	9,414,395	353	

CHAPTER 7 ENERGY PROGRAMS

# DESL Project Highlights FY 2024







New energy efficient windows installed with funds from the NDEE's Dollar and Energy Saving Loan Program (2023).









Energy efficient lighting installed throughout the business and roof-mounted 100kW solar array, Grand Island (2023).

CHAPTER 7 ENERGY PROGRAMS







DESL team traveled to Loup City to see the progress of energy efficiency renovation projects at Loup City Public Schools. NDEE and Citizens Bank & Trust worked to provide a \$4 million loan for renovations to lighting, HVAC and windows at LCPS.

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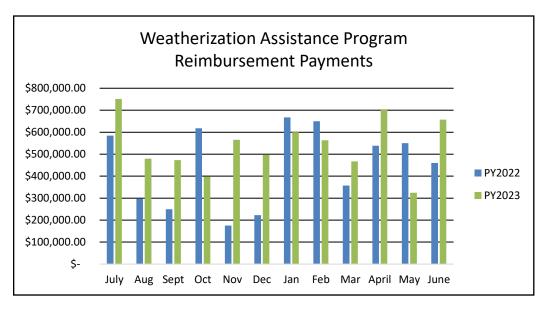
## **Weatherization Assistance Program**

This federally funded program enables low-income families in Nebraska to reduce their energy bills by making their homes more energy efficient. Program staff evaluate the homes of clients that meet income requirements and are approved for weatherization assistance services to identify the most effective energy- and dollar-saving improvements. Seven community action agencies and one non-profit agency are responsible for implementing the home weatherization improvements in Nebraska.

The types of improvements vary based on an energy audit analysis of the home; improvement investment averages between \$6,000 and \$8,000 per home, excluding the cost of health and safety improvements such as furnace repairs. The most common improvements are adding insulation, air sealing the home, repairing and replacing furnaces, installing energy-efficient lighting, and installing weather-stripping. Beyond the energy savings achieved, clients generally notice an increase in comfort due to reduced drafts and a more even temperature throughout their home. Between July 1, 2023 and June 30, 2024, 461 homes were weatherized across the state, helping to reduce the energy burden for low-income Nebraskans. Weatherization Program staff inspect a minimum of 10-15% of all completed homes to ensure the quality of work performed.

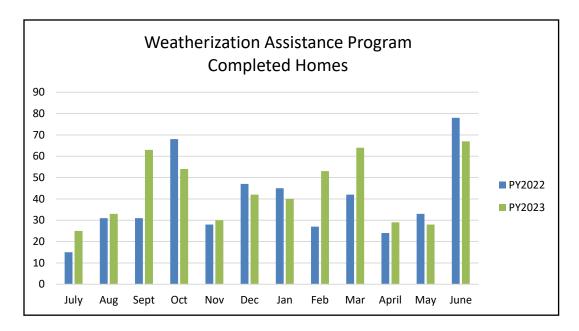
In program year PY2023 the program received funding from four sources: DOE's Weatherization Assistance Program, DOE Bipartisan Infrastructure Law (BIL), Low-Income Home Energy Assistance Program (LIHEAP) financed through the Nebraska Department of Health and Human Services, and State Petroleum Violation Escrow (PVE) Funds. Since the WAP began in 1977, \$240 million has been provided to make energy efficiency improvements in 71,576 homes. The Department is allowed to use \$800,000 from the LIHEAP budget for Heating and Cooling Repair and Replacement Assistance (HCRRA), with a limit of \$6,000 per client. This program offers furnace and AC repair or replacement assistance to extremely low-income clients.

The chart below shows the Weatherization Assistance Programs reimbursements for FY2022/2023 and FY2023/2024.



CHAPTER 7 ENERGY PROGRAMS

The following chart shows the Weatherization Assistance Programs production for FY2022/2023 and FY2023/2024.



Like many entities involved in the construction and/or rehabilitation industry, Nebraska's Weatherization network participants continue to face the challenges associated with material and labor shortages and increased costs. NDEE Weatherization Assistance Program staff continue to work with and collaborate with sub-grantees and federal funding partners to ensure Nebraska's low-income families receive safe, quality, cost-effective services and equipment.

# **State Energy Program and Special Projects**

The US Department of Energy (DOE) provides funds to states for the general operations of State Energy Offices. These funds support the day-to-day energy responsibilities of NDEE. Funds are used to monitor the price and supply of traditional energy sources throughout the year and provide support for the DESL program along with serving as a primary funding source for several other efforts that are the responsibility of the Energy Programs. A description of those efforts follows.

#### **Energy Codes**

In 2019, the Nebraska Energy Code was updated from the 2009 standards established by the International Energy Conservation Code to the 2018 standard. Nebraska was among the first states to adopt the 2018 standard. With the adoption of the updated code, homeowners of the typical three-bedroom house are projected to save between \$165 and \$206 annually on energy costs.

NDEE staff continue to be actively involved in providing training on the 2018 code through training partnerships with the Midwest Energy Efficiency Alliance (MEEA) and other organizations. Through the partnership with MEEA, more than three dozen virtual and inperson training sessions have been held on many different aspects of the Nebraska Energy Code. NDEE is continuing virtual and in-person training efforts through this partnership and will be hosting practical trainings with an emphasis on teaching stakeholders in Nebraska how to

perform the new testing and verification methods defined in the Nebraska Energy Code. NDEE and MEEA host the Nebraska Energy Codes Collaborative Meeting where stakeholders and code officials from across the state meet quarterly to discuss the hurdles that Nebraska faces in energy conservation in building practices. Strategies and experience overcoming these hurdles are shared to improve compliance with the Nebraska Energy Code. Ideas and strategies for future energy conservation in Nebraska are also discussed.

NDEE performs on-site inspections each year when receiving complaints from owners of newly built houses. If a home is found to not comply with the Nebraska Energy Code within two years after construction, NDEE issues an order to the prime contractor to take the necessary actions to bring the building into compliance.

NDEE also reviews all new buildings constructed in whole or in part with state funds to ensure that these buildings are being designed with the energy efficiency and conservation measures intended by the Nebraska Energy Code. The department reviews anywhere from two to four dozen different state funded building applications per year. This fiscal year the department reviewed 29 applications. If the designs are found to not comply with the Nebraska Energy Code, NDEE issues an order to the prime contractor to take the necessary actions to bring the building design into compliance.

## Emergency Support Function 12 – Energy

Emergency response at the state level is divided into 15 functions. Each function represents a different category, such as public health and medical services, communications, public works, and transportation Emergency Support Function 12 (ESF12) represents energy. NDEE ESF-12 coordinators attend over two dozen meetings, webinars, and trainings each year alongside partners that include DOE's Office of Cybersecurity, Energy Security and Emergency Response, National Association of State Energy Officials, Governor's Homeland Security Advisors, Federal Energy Regulatory Commission, the North American Electric Reliability Corporation, Southwest Power Pool, National Propane Gas Association, RBN Energy, Nebraska Emergency Management Agency, Pennsylvania Emergency Management Agency, Oil Price Information Service of Dow Jones, National Fusion Center, and the National Association of Regulatory Utility Commissioners.

At some of these sessions, ESF 12 coordinators were briefed on energy risks, reliability and resilience, transmission planning, electrical resource adequacy, energy markets, energy needs at planting and at harvest, fuel inventory levels, energy market dynamics, fuel transportation, hours of service waivers, cybersecurity, infrastructure protection, disaster recovery, and overall energy security planning.

ESF 12 coordinators toured the Nebraska Public Power District's Cooper Nuclear Station to see up close the operations of a nuclear station. They also participated in quarterly exercises to practice response to a radiological disaster at Cooper Nuclear Station. Each of the quarterly exercises consisted of two sessions: a dress rehearsal and an evaluation.

ESF 12 coordinators participated in quarterly internal training sessions covering a variety of topics and scenarios, such as hours-of-service waivers and who to contact in specific disasters.

## **Energy Security Plan**

An energy security plan is a comprehensive operating manual for state government leaders charged with the responsibility of ensuring the health and safety of its citizens during periods of energy emergencies. Basic information, such as contact information, is updated annually.

CHAPTER 7 ENERGY PROGRAMS

States' plans were submitted by September 30, 2023, to be reviewed by the DOE's Cybersecurity, Energy Security, and Emergency Response (CESER) office for the second time. Plans had to show that the required elements were addressed, or meaningful progress had been made. CESER determined that NDEE had fulfilled the required elements. Each year for the next two years, NDEE is to update and submit the plan to the Nebraska Governor for review. A letter from the Governor is to be sent to CESER certifying or not certifying that the plan meets the six BIL elements.

## State Heating Oil and Propane Program (SHOPP)

The Energy Information Administration (EIA), the independent statistical and analytical agency within DOE, conducts the State Heating Oil and Propane Program (SHOPP) from October to March —the heating season— each year. NDEE staff collect heating oil and propane prices for the program each week from selected Nebraska vendors, provides them to EIA which combines the data from multiple states and publishes state, regional and national average prices.

The data is used by NDEE to monitor the prices during the winter season in an effort to maintain awareness of developing price or supply irregularities. The data is also used by policymakers, industry analysts, and consumers.

#### Price data may be found at:

- Propane Prices: <a href="https://neo.ne.gov/programs/stats/inf/86.html">https://neo.ne.gov/programs/stats/inf/86.html</a>
- Heating Oil Prices: https://neo.ne.gov/programs/stats/inf/87.html
- Annual Report: <a href="https://neo.ne.gov/programs/shopp/shopp.html">https://neo.ne.gov/programs/shopp/shopp.html</a>

## Midwestern Petroleum Shortage Response Collaborative

NDEE is working with a group of states to share resources and strengths to assist each other in the event of regional energy emergencies. This collaborative, which is named the Midwestern Petroleum Shortage Response Collaborative, developed a region-wide petroleum shortage response plan. The Collaborative also leverages peer expertise to improve state energy security and response plans.

The Collaborative includes energy and emergency management agencies from Nebraska, Wisconsin, North Dakota, Illinois, Missouri, Indiana, Iowa, Tennessee, Kentucky, Michigan, Kansas, Ohio, and Minnesota.

The Collaborative accomplished three project goals:

- Create a regional fuel response framework
- Gain insights for enhanced state emergency fuel plans
- Gain a developed network collaborative of trusted, established entities that can be leveraged for future regional planning initiatives and during real-world events.

The states also achieved seven priorities:

- Establish structure and framework for collaboration
- Enhance regional coordination and response to petroleum shortage emergencies among the participating states

- Discover states' strengths to be leveraged
- Share resources
- Prioritize response actions and measures
- Standardize information flows
- Pre-identify tools and templates that may be necessary to respond to a petroleum shortage.

## **New Programs Under Development**

The Infrastructure Investment and Jobs Act (IIJA) of 2021, also known as the Bipartisan Infrastructure Law (BIL), and the Inflation Reduction Act (IRA) of 2022 provide \$97 billion in funding to the U.S. Department of Energy (DOE) for investments in climate and energy over several years.

Over time NDEE's State Energy Program expects to receive approximately \$37 million in IIJA formula funds and approximately \$93 million from IRA formula funds from the DOE for grid resilience, energy efficiency and conservation, renewable energy technologies, and workforce development. Formula funding is predetermined and noncompetitive, but NDEE must apply for it

## State Energy Program - IIJA/BIL Funding

The purpose of this formula grant is to provide funding to States for planning activities and programs that help reduce carbon emissions in all sectors of the economy. NDEE received \$4,603,380.00 from DOE to support K-12 public schools with grants for energy audits to identify retrofit projects that could improve energy efficiency and/or air quality in school buildings and other planning activities and programs to reduce carbon emissions. This program is under development.

### Energy Efficiency Revolving Loan Fund Capitalization Grant Program

This formula grant provides capitalization grants to States to establish a revolving loan fund, through which the State will provide loans and grants for energy efficiency audits, upgrades, and retrofits to increase energy efficiency and improve the comfort of buildings. NDEE plans to support energy efficient measures in residential, public, and commercial buildings, with an emphasis on K-12 schools, by providing low-interest loans to finance projects. NDEE will partner with Nebraska lenders by purchasing a percentage of the loans at zero interest, which lowers the interest rate and leverages lender funds for each loan. NDEE will use a portion of the funding to provide free energy audits to qualifying schools. NDEE's application is pending with DOE.

## Preventing Outages and Enhancing the Resilience of the Electric Grid/Hazard Hardening

The purpose of this formula award is to prevent outages and enhance the resilience of the electric grid. NDEE plans to support grid improvement projects that result in a more resilient electrical grid and promote an equitable energy economy. Eligible projects will rebuild and restore infrastructure for transmission and distribution, protect existing equipment from weather-related events, support new adaptive protection technology, and provide recruitment and retention of energy technology workers. Funding will be distributed equitably to Nebraskans, including underserved communities that are more susceptible or vulnerable to electric power outages. To date NDEE has received \$15,857,833.00 from DOE. NDEE

accepted local eligible entities applications for this funding from April 30, 2024 to June 21, 2024. NDEE will announce awards once project reviews are completed by DOE.

#### Energy Efficiency and Conservation Block Grant Program

This formula grant assists States, local governments, and Tribes in implementing strategies to reduce energy use, reduce fossil fuel emissions, and improve energy efficiency. In FY 2024, NDEE received \$1,779,420 from DOE to support local communities in implementing high-impact, self-sustaining clean energy projects.

Eligible projects include upgrades to energy efficient lighting; installation of renewable energy systems on government buildings; development of alternative transportation infrastructure such as pedestrian walkways and bicycle paths; and public education to promote energy efficiency and conservation. Projects are to provide communitywide benefits and may get special consideration if they provide local employment opportunities and workforce training. Priority may be given to projects in communities identified as having a high energy or environmental burden.

This program will provide funding for communities based on their individual needs. Subawards will be granted to communities through a competitive process. NDEE opened the application period for six weeks ending April 30, 2024. NDEE will announce awards once project reviews are completed.

## Home Efficiency Rebates (IRA §50121) (HER)

The purpose of this program is to award grants to state energy offices to develop a whole-house energy saving retrofits program that will provide rebates to homeowners for whole-house energy saving retrofits. Depending on whether a project meets several different rules, eligible projects can include attic insulation, whole home air sealing, duct sealing and insulation. NDEE received \$1,145,342 from DOE to begin developing this program.

#### Home Electrification and Appliance Rebates (IRA §50122) (HEAR)

This program provides federally funded rebates to eligible property owners who replace energy inefficient appliances with efficient ones or have other work performed to improve the energy efficiency of the property. NDEE received \$1,138,678 from DOE to begin developing this program. Example electrification projects include:

- electric heat pump water heater;
- electric heat pump for space heating and cooling;
- electric stove, cooktop, range, or oven;
- electric heat pump clothes dryer;
- electric load service center (e.g. circuit breaker panel);
- insulation:
- air sealing and materials to improve ventilation; or electric wiring.

# CHAPTER 8:

# **Expenditure and Budget Summary**

The following information summarizes Department expenditures for fiscal year 2024 and outlines budget projections for fiscal year 2025. The figures in the expenditure summaries were derived from the state accounting system. The budget projections were prepared by the Department.

Chart A shows actual FY24 expenditures for each federal grant, including the state match.

**Chart B** lists actual FY24 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** lists actual FY24 expenditures for the agency by funding source divided into aid and operational costs. The Aid category is solely Aid expenditures. All other expenditures were populated in the Operations category.

**Chart D** outlines the proposed FY25 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 E** outlines proposed FY25 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.

Grant / Program Title	G	rant \$	Match \$	Total \$	
Drinking Water State Revolving Fund		33,992,414	314,939.14		34,307,353
Clean Water State Revolving Fund		14,238,488	1,226,594.69		15,465,083
Performance Partnership		6,808,673	1,431,429.11		8,240,102
LIHEAP - Energy Assistance Program DHHS		3,607,711			3,607,711
Weatherization		3,172,954			3,172,954
319 H Non-Point Source		2,454,336			2,454,336
ARPA State Fair grounds		2,372,128			2,372,128
Dollar & Energy Savings Loan (DESL)		1,872,455			1,872,455
Leaking Underground Storage Tanks		1,038,227	152,253		1,190,480
WIIN-Martinsburg		790,946			790,946
Section 128 (a) State Response		757,677			757,677
State Energy Program (SEP)		642,596	34,815		677,412
Clean Diesel		598,470			598,470
PM 2.5 Ambient Air Monitoring		505,499			505,499
ARPA Reverse Osmosis Private		482,397			482,397
Sewer Overflow Stormwater Award		441,000			441,000
CPRG (One Red)		407,891			407,891
Section 106 Monitoring		263,861			263,861
Superfund Pre-remedial		145,717			145,717
Superfund Core		141,431	20,839		162,270
Superfund Management Assistance		141,431			141,431
604 B Water Quality Management		129,102			129,102
Department of Defense		92,590			92,590
Lead in Schools/Daycares		55,105			55,105
USDA Remediation		30,945			30,945
Electric Grid Award		25,543	2,229		27,773
Public Water Supply		15,529			15,529
Solid Waste Infrastructure Recycling		13,597			13,597
Home Energy Efficiency Rebate Grants		11,115			11,115
Superfund UNL Mead		10,232			10,232
Coal Combustion Residuals		9,134			9,134
State Heating Oil and Propane		4,959	5,168		10,126
FDA Retail Flex Fund Model					-
Totals	\$	75,274,151	\$ 3,188,267	\$	78,462,418
Non-grant federal expenditures*	\$	4,239,790			

Performance Partnership is made up of Water 106/NPDES, 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 32.80% was negotiated with EPA for FY24 and charged against direct payroll cost to cover agency administrative expenses

Chart B - Actual Expenditure of State Funds for State Programs for FY24 Including Aid									
Program	Subprogram	Fund Type	Personal Services	Operating Expenses	Consulting //Contracting	Travel	Capital Outlay	Distribution of Aid	Total
NDEE Operations/Administration	001	G	779,445	298,210	24,328	-	55,000	20,590	1,177,574
Integrated Solid Waste Management	004	С	1,298,245	338,557	58,966	6,434	-	-	1,702,202
Clean Water Small Town Grants	006	С	-	-	-	-	-	278,163	278,163
Ag - Livestock	011/016	G/C	1,456,342	333,054	41,342	11,513	-	-	1,842,251
Air Construction Permits	020	С	24,677	5,409	-	-	-	-	30,086
Superfund State Cost Share	023	G/C	23,986	5,394	548,499	-	-	-	577,879
Litter Reduction	024	С	161,131	54,461	5,532	-	-	2,075,317	2,296,441
Underground Injection Control	026	С	-	75	-	-	-	-	75
Private Onsite Wastewater Cert & Registration	030	G/C	217,401	44,915	490	2,333	-	-	265,139
Emission Inventory - Title V	033	С	1,698,304	411,687	65,441	5,018	-	-	2,180,449
Chemigation	034	С	24,758	10,834	70,541	-	-	33,532	139,665
Remedial Action Plan Monitoring Act	036	С	83,757	25,170	-	-	-	-	108,927
Private Onsite Wastewater Permit & Approval	037	С	18,385	12,063	-	-	-	-	30,447
Operator Certification	040	С	50,401	12,764	14,002	1,431	-	-	78,598
Petroleum Release Remedial Action Act	051	С	1,070,773	358,011	5,875,611	5,170	395,290	3,063,477	10,768,331
Emergency Response	057	С	106,398	29,724	608	5,007	=	-	141,738
Engineering Reviews	061	G	438,491	112,184	9,682	2,202	-	-	562,560
Volkswagen	065	С	1,510	4,777		-	-	386,616	392,902
Waste Reduction & Recycling	091	С	262,105	61,990	16,338	-	-	4,646,313	4,986,746
Revitalize Rural Nebraska	096	G	13,292	2,739	· -	-	-	239,649	255,680
Nitrate Water Quality Study	097	G	192,309	71,517	169,127	-	-	-	432,953
Environmental Safety	209/210	G/C	658,838	149,090	7,289	7,386	-	-	822,603
Public Water Supply	256	С	2,293	8,510	-	920	-	-	11,724
Engineering Plan Review	285	G/C	396,913	84,255	-	482	-	-	481,650
Well Drillers	287	С	387,805	113,993	214	9,542	-	-	511,555
Clean Water Act 404 Program	404	G	198,932	140,620	-	876	_	-	340,427
Energy Loan Program	814	C	-	-	_	-	-	131,932	131,932
Energy Admin/Special Projects	816/841	G/C	58,857	19,122	-	95	-	42,026	120,099
Totals			9,625,347	2,709,124	6,908,012	58,409	450,290	10,917,615	30,668,796
Total State Matching Funds (From Chart A)									3,188,267
Agency Total									33,857,063

### 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 32.80% was negotiated with EPA for FY24 and charged against direct payroll cost to cover agency administrative expenses

Chart C - Actual Expenditures by Aid and Operations Categories										
Program/ Category		General Funds	Cash Funds	Federal Funds	Total					
Program 106 - Energy	Aid	42,026	131,932	8,073,309	8,247,268					
	Operations	-	120,285	1,264,024	1,384,309					
Program 513 - Administration	Aid	20,590	-	-	20,590					
	Operations	1,156,983	-	4,239,790	5,396,773					
Program 586 - Water	Aid	-	3,720,977	3,855,322	7,576,299					
	Operations	4,471,917	10,768,903	8,607,265	23,848,085					
Program 587 - Waste	Aid	-	6,961,278	79,474	7,040,752					
_	Operations	419,050	2,908,335	1,993,502	5,320,887					
Program 588 - Air	Aid	32,913	386,616	1,348,784	1,768,312					
· ·	Operations	219,372	2,216,822	1,215,134	3,651,329					
Program 523 - Clean Water Loans	Aid	-	278,163	16,535,584	16,813,747					
-	Operations	-	900	-	900					
Program 528 - Drinking Water Loans	Aid	-	-	32,301,754	32,301,754					
	Operations	-	-	-	-					
Totals		6,362,852	27,494,211	79,513,941	113,371,004					
Agency Total					113,371,004					
All Programs	Aid	95,529	11,478,966	62,194,227	73,768,722					
	Operations	6,267,323	16,015,245	17,319,715	39,602,282					

Chart D - Proposed Budget for E	Chart D - Proposed Budget for Each Federal Grant Program for State FY25									
Grant / Program Title	Grant \$	Match \$	Total \$							
Drinking Water State Revolving Fund	56,002,459	1,500,000	57,502,459							
Clean Water State Revolving Fund	29,003,009	1,991,421	30,994,430							
State Energy Program (SEP)	18,805,095	1,031,761	19,836,856							
CPRG - One Red	12,342,300		12,342,300							
Performance Partnership	8,674,720	1,806,837	10,481,557							
Reverse Osmosis	3,978,767		3,978,767							
LIHEAP - Energy Assistance Program DHHS	3,019,472		3,019,472							
319 H Non-Point Source	2,571,793		2,571,793							
Weatherization	2,533,396		2,533,396							
Electric Grid BIL Award	2,172,203	325,876	2,498,079							
Home Energy Efficiency Rebates Award	1,145,342		1,145,342							
Home Electric Appliance Rebate Award	1,138,678		1,138,678							
Solid Waste Infrastructure Award	770,633		770,633							
Superfund Core	580,748	73,084	653,832							
Coal Combustion Residuals Award	631,189		631,189							
Leaking Underground Storage Tanks	544,102	61,720	605,822							
Energy Efficiency and Conservation Block Grant	595,339		595,339							
PM 2.5 Ambient Air Monitoring	448,666		448,666							
Clean Diesel	269,318		269,318							
Lead in Schools/Daycares	255,000		255,000							
Section 106 Monitoring	236,222		236,222							
Section 128 (a) State Response	216,236		216,236							
USDA Remediation Action Plan	122,191	81,461	203,652							
Department of Defense	110,969		110,969							
Superfund Management Assistance	103,249		103,249							
Superfund Pre-remedial	70,373		70,373							
604 B Water Quality Management	59,926		59,926							
Sewer Overflow/Stormwater	52,583		52,583							
WIIN-Martinsburg	50,000		50,000							
Superfund UNL Mead	7,537		7,537							
State Heating Oil and Propane	6,531	12,129	18,660							
	A 440 540 545		450 400 555							
Totals	\$ 146,518,046	\$ 6,884,289	\$ 153,402,335							

Non-grant federal expenditures\*

\*Indirect Cost Pool, EQC

5,641,201

Performance Partnership is made up of Water 106/NPDES, Air 105, Groundwater, RCRA 3011, a part of nonpoint Underground Injection Control, Public Water, 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 40.25% was negotiated with EPA for FY25 and will be charged against direct payroll cost to cover agency administrative expenses

P	0	Fund	Personal	Operating	T	Capital	Consulting	Distribution of	
Program	Subprogram	Туре	I I I I I I I I I I I I I I I I I I I	Outlay	/Contracting	Aid	Total		
Integrated Solid Waste Management	004	С	995,094	119,500	16,000	-	3,249,850	-	4,380,444
NDEE Operations/Administration	001	G	343,836	293,845	9,984	-	933,483	-	1,581,148
Clean Water SRF	007	С	88,234	1,764	587	-	100,000	760,000	950,585
Ag - Livestock	016	G/C	1,129,703	361,063	15,000	-	539,500	-	2,045,266
Air Construction Permits	020	С	76,092	24,435	-	-	-	-	100,527
Superfund State Cost Share	023	С	65,775	16,799	-	-	550,000	300,000	932,574
Litter Reduction	024	С	137,797	73,436	500	-	1,500	2,701,859	2,915,092
Private Onsite Wastewater Cert & Registration	030	С	227,090	109,550	3,000	-	1,000	-	340,640
Emission Inventory - Title V	033	С	1,862,514	4,510,949	11,000	-	20,000	-	6,404,463
Chemigation	034	С	27,292	12,099	_	-	30,000	-	69,391
Private Onsite Wastewater Permit & Approval	037	С	13,801	72,589	-	-	500	-	86,890
Operator Certification	040	С	48,688	14,661	2,500	-	13,000	-	78,849
Petroleum Release Remedial Action Act	051	С	2,493,623	582,902	6,000	-	10,560,634	6,950,601	20,593,760
Emergency Response	057	С	67,349	34,199	1,500	-	1,500	-	104,548
Engineering Reviews	061	G	415,497	200,000	-	-	-	-	615,497
Volkswagen	065	С	48,111	12,287	467	-	-	3,735,000	3,795,865
Drinking Water SRF	087	С	384,763	12,000	7,500	-	-	-	404,263
Waste Reduction & Recycling	091	С	178,843	129,674	500	-	899,642	3,300,000	4,508,659
Nebraska Environmental Response	093	С	-	300,000	-	_	-	-	300,000
Revitalize Rural Nebraska	096	С	81,678	20,181	-	-	-	898,141	1,000,000
Water Quality Study	097	G	-	12,000	-	_	_	-	12,000
Lead Service Lines	103	С	_	, _	-	_	-	10,000,000	10,000,000
Environmental Safety	209/210	G/C	498,353	91,969	15,000	-	5,000	, ,	610,322
Engineering Plan Review	285	С	316,805	3,000	500	-	-	-	320,305
Well Drillers	287	С	867,451	35,067	20,500	-	5,500	-	928,518
Energy Admin/Special Projects	816	С	325,323	-	-	-	-	224,541	549,864
Totals			\$ 10,693,712	\$ 7,043,969	\$ 110,538	\$ -	\$ 16,911,109	\$ 28,870,142	\$ 63,629,47
Total State Matching Funds (From Chart A)									6,884,289
Agency Total									70,513,759

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 40.25% was negotiated with EPA for FY25 and will be 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 and energy programs.

### **Waste Management Aid Programs**

Following is a summary of funds provided in FY2024 through Waste Grants programs, managed by the Waste Planning and Aid Section.

#### 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 Calendar Year (CY) 2024, 51 Litter Reduction and Recycling grants were awarded, totaling \$2,600,011. The grants were awarded in three categories: Public Education, \$1,766,340; Cleanup, \$106,791; and Recycling, \$726,872. 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 CY2024, 81 projects totaling \$4,097,463 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 FY2024, the program provided \$33,122 to 24 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 FY2024, the program provided \$117,410 to five counties and seven cities participating in the program.

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 NDEE, 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 Waste Grants Programs 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 \$351 million has been disbursed since the program began. The program provided \$3.0 million to 115 sites for investigation and cleanup in FY2024.

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

#### B. State Revolving Loan Fund Program

I. The Clean Water State Revolving Loan Fund (CWSRF) 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 FY2024, the CWSRF funded projects totaling \$12,410,771 in loans and \$2,580,555 in principal forgiveness and grant funds.

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

**II.** The **Drinking Water State Revolving Fund** provides low-interest loans and loan forgiveness to owners of public water systems. In FY2024, the program provided financial assistance to public water system projects totaling \$96,642,729; disadvantaged communities received \$60,313,477 in forgiveness funding and of that sum \$40,723,000 was for lead service line replacements.

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

### **Energy Aid Programs**

#### A. Dollar and Energy Savings Loan Program

The Dollar and Energy Saving Loans (DESL) program assists Nebraska residents, local businesses, school districts, and municipalities in making their homes and buildings more energy efficient. The program also helps reduce energy bills by providing low-cost financing for energy-efficient equipment and projects. NDEE provides funds to Nebraska-based lending institutions to participate in a portion (50-90%) of each energy conservation loan.

In Fiscal year 2024, the DESL program helped finance over \$3.5 million for 347 loans that improved energy efficiency for 353 new projects. Since the inception of the program in 1990, the DESL program has helped finance over 31,178 energy saving projects with the total cost of all improvements financed totaling over \$401.8 million.

#### **B.** Weatherization Assistance Program

The Weatherization Assistance Program (WAP) enables low-income families in Nebraska to reduce their energy bills by making their homes more energy efficient.

The program receives funding from two sources: DOE's Weatherization Assistance Program and the Low-Income Home Energy Assistance Program (LIHEAP) financed through the Nebraska Department of Health and Human Services. Between July 1, 2023 and June 30, 2024, 461 homes were weatherized across the state, helping to reduce the energy burden for low-income Nebraskans. Since the WAP began in 1977, \$240 million has been provided to make energy efficiency improvements in 71,576 homes.

Seven community action agencies and one non-profit agency are responsible for implementing the home weatherization improvements in Nebraska.

Additional information about these programs can be found in the Energy Programs portion of Chapter 7.

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## CHAPTER 10:

## Staffing

NDEE deals with a wide array of complex environmental issues, and it is essential to our operations to recruit and hire technically competent people. Trained, experienced, and dedicated staff within NDEE provide the foundation to support the mission of the agency to protect and improve human health, the environment, and energy resources.

Staff retention continues to be an important goal for NDEE. Staff turnover impacts continuity in NDEE's programs and activities, and results in additional costs for recruitment and training of replacement staff members. NDEE strives to foster and maintain an employee-friendly workplace by offering transfer and promotional opportunities for qualified internal applicants. The agency offers training opportunities, tuition assistance and flexible and part-time remote work schedules.

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

In 2021 the State of Nebraska classification system went through a consolidation process and eliminated some classifications and added others. The agency also merged with the Energy Office and acquired employees from Department of Health and Human Services. All these changes have changed the look of NDEE classifications. The report below is a comparison for the last 3 years, and it will continue to be updated to ultimately show trends over a 10-year period. The job classes below, as taken from the Department of Administrative Services pay plan, are summarized in the chart on the following page.

- **A = Administrative Professional Group -** Is composed of professional employees with general business responsibilities, including Administrative Specialists, It Applications Developer, IT Business Systems Analyst, It Business Systems Coordinator, Statistical Analyst, Accountants, Federal Aid Administrators, and Marketing & Communication Specialists
- **E = Engineering, Science and Resources Group -** Is composed of professional scientific occupations, including Environmental Specialists, Engineers, and Building Programs Specialists.
- **G = Management Non-Contract Group -** Is composed of jobs performing senior policy making and higher level managerial/administrative functions essential to the overall mission of the agency, board, or commission. Job classifications in this series are comprised of Budget Officer, Attorney III's, Agency Legal Counsel, Environmental Managers, Deputy Director, and Emergency Response Coordinator.
- **K = Confidential Non-Contract Group -** Is composed of specific positions at any occupational level which handle information or provide advice pertinent to the development, negotiation and/or interpretation/application of labor contracts, or issues related to such agreements, this

CHAPTER 10 STAFFING

job services is composed of Training Coordinator, HR Specialist, Legislative Coordinator, Attorney I & II's, and Paralegals.

- **N = Non-Classified Service Group -** Is used by agencies for positions not covered by the State Personnel Salary System.
- **S = Administrative Support -** Is composed of clerical and administrative non-professional classes, including Office Specialist.
- **V = Supervisory Non-Contract Group -** Is composed of employees who are supervisors as defined in Nebraska Revised Statues, section 48-801, which includes IT Supervisor, Administrative Programs Officer, Human Resource Manager, Accounting and Finance Manager, Environmental Supervisors and Professional Engineer III.
- **X = Examining, Inspection and Licensing Group -** Is composed of positions empowered to review certain public and business activities, including driver-licensing personnel, revenue agents, bank and insurance examiners who remain in the State Personnel system under sections 8-105 and 44-119, which include Environmental Health Scientists & Health Food Service Evaluation Officer.

### **Employees Assuming Agency Positions**

These figures include new hires, promotions, transfers, and classification up-grades. Figures for are from July 1st through June 30th of the designated year.

	1		
	2022	2023	2024
Administrative Professional Group (A)	10	12	16
Engineering, Science and Resource Group (E)	43	51	50
Management Non-Contract Group (G)	2	2	1
Confidential Group (K)	3	3	0
Non-Classified Service Group (N)	0	0	1
Administrative Support Group (S)	3	6	5
Supervisory Non-Contract Group (V)	8	10	6
Examining & Inspection Licensing Group (X)	0	4	0

# CHAPTER 11:

## Financial Assurance Requirements

Section 81-1505(21) provides the statutory authority for the Department to develop, and the Environmental Quality 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.

NDEE FINANCIAL ASSURANCE											
Location	Permit Type	Initial Date	Obligated Current Amount Amount Demonstrated		FA Mechanism	Guarantor					
Municipal Solid Waste Disposal Areas (MSWDA), Sanitary Landfills (LF)											
Alliance	MSWDA	03/17/94	\$ 5,695,660	\$ 2,244,406	Enterprise Fund	City of Alliance					
Beatrice	MSWDA	07/12/00	\$ 8,368,923	\$ 8,368,923	Financial Test	City of Beatrice					
David City	MSWDA	10/03/08	\$ 17,341,675	\$ 8,670,985	Trust Fund	US Bank					
Bennington	MSWDA	02/16/04	\$ 17,571,364	\$ 17,571,364	Surety Bond	Evergreen Natl. Indemnity Co.					
Milford	MSWDA	10/03/08	\$ 14,162,515	\$ 3,636,528	Trust Fund	US Bank					
Gering	MSWDA	02/13/96	\$ 2,876,531	\$ 2,346,635	Enterprise Fund	City of Gering					
Jackson	MSWDA	08/18/21	\$ 15,865,034	\$ 15,865,034	Surety Bond	Travelers Casualty & Surety					
Grand Island	MSWDA	03/31/96	\$ 11,446,915	\$ 11,446,915	Financial Test	City of Grand Island					
Hastings	MSWDA	03/18/13	\$ 7,097,878	\$ 4,224,472	Enterprise Fund	City of Hastings					
Hastings	Sanitary LF	10/01/97	\$ 114,572	\$ 33,073	Faith & Credit	City of Hastings					
Holdrege	MSWDA	07/29/96	\$ 3,783,416	\$ 2,651,705	Enterprise Fund	City of Holdrege					
					Performance						
Ogallala	MSWDA	03/28/00	\$ 7,701,915	\$ 7,431,411	Bond	Evergreen Natl. Indemnity Co.					
Kearney	MSWDA	03/31/94	\$ 11,472,148	\$ 4,858,804	Trust Fund	Union Bank & Trust					
Kimball	MSWDA	05/10/96	\$ 1,944,754	\$ 1,346,467	Enterprise Fund	City of Kimball					
Lexington	Sanitary LF	07/25/96	\$ 237,560	\$ 291,112	Faith & Credit	City of Lexington					
Lexington	MSWDA	01/19/97	\$ 4,175,304	\$ 2,120,974	Enterprise Fund	Lexington Area SW Agency					
Lincoln	MSWDA	04/01/96	\$ 41,565,838	\$ 29,771,341	Financial Test	City of Lincoln					
Elba	MSWDA	04/09/96	\$ 3,178,582	\$ 1,380,342	Trust Fund	Citizens Bank & Tr St. Paul					
McCook	Sanitary LF	03/04/96	\$ 269,688	\$ 89,896	Faith & Credit	City of McCook					
Geneva	MSWDA	10/03/08	\$ 3,446,372	\$ 1,205,400	Trust Fund	US Bank					
Clarkson	MSWDA	04/09/96	\$ 23,223,280	\$ 11,725,868	Enterprise Fund	NNSWC					
Bennington	MSWDA	03/01/12	\$ 38,893,003	\$ 37,527,020	Surety Bond	Western Surety					
Papillion	MSWDA	03/31/96	\$ 4,013,160	\$ 4,300,000	Enterprise Fund	Sarpy County					
Sidney	MSWDA	02/11/97	\$ 2,757,719	\$ 1,256,984	Enterprise Fund	City of Sidney					
Chadron	MSWDA	09/25/97	\$ 2,693,180	\$ 933,573	Enterprise Fund	SWANN					
Valentine	MSWDA	04/09/96	\$ 2,427,828	\$ 1,135,660	Enterprise Fund	City of Valentine					
York	Sanitary LF	05/14/96	\$ 108,478	\$ 12,059	Faith & Credit	City of York					
York	MSWDA	05/14/96	\$ 6,383,227	\$ 3,119,043	Enterprise Fund	City of York					
	Municip  Alliance  Beatrice  David City  Bennington  Milford  Gering  Jackson  Grand Island  Hastings  Holdrege  Ogallala  Kearney  Kimball  Lexington  Lexington  Lincoln  Elba  McCook  Geneva  Clarkson  Bennington  Papillion  Sidney  Chadron  Valentine  York  York	LocationPermit TypeMunicipal Solid WasteAllianceMSWDABeatriceMSWDADavid CityMSWDABenningtonMSWDAMilfordMSWDAGeringMSWDAJacksonMSWDAGrand IslandMSWDAHastingsSanitary LFHoldregeMSWDAKearneyMSWDAKimballMSWDALexingtonSanitary LFLexingtonMSWDALincolnMSWDAElbaMSWDAMcCookSanitary LFGenevaMSWDAClarksonMSWDABenningtonMSWDAPapillionMSWDASidneyMSWDAChadronMSWDAYorkSanitary LFYorkSanitary LFYorkSanitary LF	Municipal Solid Waste Disposal AllianceMSWDA03/17/94BeatriceMSWDA07/12/00David CityMSWDA10/03/08BenningtonMSWDA02/16/04MilfordMSWDA10/03/08GeringMSWDA02/13/96JacksonMSWDA02/13/96JacksonMSWDA03/31/96HastingsMSWDA03/31/96HastingsMSWDA03/18/13HastingsSanitary LF10/01/97HoldregeMSWDA07/29/96OgallalaMSWDA03/28/00KearneyMSWDA03/31/94KimballMSWDA05/10/96LexingtonSanitary LF07/25/96LexingtonMSWDA01/19/97LincolnMSWDA04/01/96ElbaMSWDA04/01/96GenevaMSWDA04/09/96McCookSanitary LF03/04/96GenevaMSWDA04/09/96BenningtonMSWDA03/31/96SidneyMSWDA03/31/96ValentineMSWDA09/25/97ValentineMSWDA04/09/96YorkSanitary LF05/14/96YorkMSWDA05/14/96	Location         Permit Type         Initial Date         Obligated Amount           Municipal Solid Waste Disposal Areas (MSWDA)           Alliance         MSWDA         03/17/94         \$ 5,695,660           Beatrice         MSWDA         07/12/00         \$ 8,368,923           David City         MSWDA         10/03/08         \$ 17,341,675           Bennington         MSWDA         02/16/04         \$ 17,571,364           Milford         MSWDA         10/03/08         \$ 14,162,515           Gering         MSWDA         02/13/96         \$ 2,876,531           Jackson         MSWDA         03/18/21         \$ 15,865,034           Grand Island         MSWDA         03/18/13         \$ 7,097,878           Hastings         MSWDA         03/18/13         \$ 7,097,878           Hastings         Sanitary LF         10/01/97         \$ 114,572           Holdrege         MSWDA         03/28/00         \$ 7,701,915           Kearney         MSWDA         03/31/94         \$ 11,472,148           Kimball         MSWDA         03/31/94         \$ 11,472,148           Kimball         MSWDA         05/10/96         \$ 237,560           Lexington         Sanitary LF         07/25	Location         Permit Type         Initial Date         Obligated Amount         Current Amount Demonstrated           Municipal Solid Waste Disposal Areas (MSWDA), Banitary Land Alliance         MSWDA         03/17/94         \$ 5,695,660         \$ 2,244,406           Beatrice         MSWDA         07/12/00         \$ 8,368,923         \$ 8,368,923         \$ 8,368,923           David City         MSWDA         10/03/08         \$ 17,341,675         \$ 8,670,985           Bennington         MSWDA         10/03/08         \$ 14,162,515         \$ 3,636,528           Gering         MSWDA         10/03/08         \$ 14,162,515         \$ 3,636,528           Gering         MSWDA         02/13/96         \$ 2,876,531         \$ 2,346,635           Jackson         MSWDA         03/31/96         \$ 11,446,915         \$ 11,446,915           Hastings         MSWDA         03/31/96         \$ 11,446,915         \$ 11,446,915           Hastings         MSWDA         03/18/13         \$ 7,097,878         \$ 4,224,472           Hastings         Sanitary LF         10/01/97         \$ 114,572         \$ 33,073           Holdrege         MSWDA         03/28/00         \$ 7,701,915         \$ 7,431,411           Kearney         MSWDA         03/31/96 <t< td=""><td>  Numicipal Solid Waste Disposal Areas (MSWDA)   Sanitary Landfills (LF)    </td></t<>	Numicipal Solid Waste Disposal Areas (MSWDA)   Sanitary Landfills (LF)					

<sup>\*</sup>MSWDAs are landfills that are operating under current solid waste management regulations.

<sup>\*\*</sup>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	\$	630,871	\$	630,871	Escrow Account	Bank of Bennington		
Alliance C & D Landfill	Alliance	Const./Demol.	12/02/99	\$	475,008	\$	183,663	Enterprise Fund	City of Alliance		
Anderson Excavating C & D	Omaha	Const./Demol.	11/15/12	\$	1,062,687	\$	1,062,687	Letter of Credit	Availa Bank		
Arnold C & D Landfill	Arnold	Const./Demol.	07/24/00	\$	64,299	\$	23,339	Enterprise Fund	Village of Arnold		
Beatrice Area SW Agency	Beatrice	Const./Demol.	10/15/12	\$	1,257,590	\$	1,257,590	Financial Test	City of Beatrice		
Benkelman C & D Landfill	Benkelman	Const/Demol.	10/15/06	\$	103,144	\$	30,799	Enterprise Fund	City of Benkelman		
Broken Bow C & D Landfill	Broken Bow	Const/Demol.	11/23/07	\$	339,236	\$	58,007	Enterprise Fund	City of Broken Bow		
Bud's Sanitary Service C & D	Newman Grove	Const./Demol.	06/01/97	\$	57,138	\$	57,138	Letter of Credit	First Natl. Bank Newman Gr		
Eco-Storage C & D Landfill	Omaha	Const./Demol.	06/03/10	\$	45,411	\$	45,411	Surety Bond	Evergreen Natl Indemnity Co.		
Franklin C&D Landfill	Franklin	Const./Demol.	11/08/10	\$	75,587	\$	49,816	Enterprise Fund	City of Franklin		
Gage County C & D Landfill	Beatrice	Const./Demol.	02/23/98	\$	78,027	\$	78,027	Letter of Credit	Security First Bank		
Hawkins Construction C & D	Omaha	Const./Demol.	02/11/21	\$	438,688	\$	438,688	Surety Bond	Western Surety Co.		
Holdrege C & D Landfill	Holdrege	Const/Demol.	05/01/09	\$	380,666	\$	108,124	Enterprise Fund	City of Holdrege		
Imperial C&D Landfill	Imperial	Const./Demol.	06/01/01	\$	167,988	\$	102,706	Enterprise Fund	City of Imperial		
KGP Services C & D	Norfolk	Const/Demol.	11/06/03	\$	118,796	\$	118,796	Escrow Account	Elkhorn Valley Bank & Trust		
Kimball C & D Landfill	Kimball	Const./Demol.	04/01/01	\$	199,234	\$	78,685	Enterprise Fund	City of Kimball		
Lead Waste Mgmt C&D Landfill											
(Double S Ventures)	Waterbury	Const./Demol.	05/28/14	\$	94,522	\$	94,522	Letter of Credit	Security Bank		
L.P. Gill Landfill C & D	Jackson	Const/Demol.	08/18/21	\$	530,592	\$	530,592	Surety Bond	Travelers Casualty & Surety		
Lexington C & D Landfill	Lexington	Const./Demol.	09/30/98	\$	553,748	\$	258,777	Enterprise Fund	Lexington Area SW Agency		
Lincoln North 48th St. C & D	Lincoln	Const./Demol.	04/01/96	\$	4,241,929	\$	4,095,774	Financial Test	City of Lincoln		
Loup Central C & D Landfill#2	Elba	Const./Demol.	01/28/01	\$	210,720	\$	85,238	Trust Fund	Citizens Bank & Tr. St. Paul		
NPPD Gerald Gentleman	Sutherland	Const./Demol.	04/01/95	\$	318,485	\$	318,435	Financial Test	NPPD		
O'Neill C & D Landfill	O'Neill	Const./Demol.	06/01/01	\$	271,512	\$	88,783	Enterprise Fund	City of O'Neill		
O'Neill Wood Resources C & D	Grand Island	Const./Demol.	10/10/18	\$	462,928	\$	77,403	Trust Fund	Minden State Bank & Trust		
PAD LLC C & D Landfill	Hastings	Const./Demol.	03/30/22	\$	620,959	\$	620,959	Letter of Credit	Five Points Bank		
Plainview C & D Landfill	Plainview	Const./Demol.	09/26/00	\$	79,414	\$	79,977	Enterprise Fund	City of Plainview		
1221 Rainwood Road C & D	Omaha	Const/Demol.	08/10/21	\$	354,839	\$	354,839	Surety Bond	North American Specialty Ins.		
Red Cloud C&D Landfill	Red Cloud	Const/Demol.	04/04/17	\$	117,593	\$	21,468	Enterprise Fund	City of Red Cloud		
Schmader C & D Landfill	West Point	Const/Demol.	07/27/12	\$	239,758	\$	239,758	Letter of Credit	Charter West Ntl Bank		
Sidney C & D Landfill	Sidney	Const./Demol.	11/23/99	\$	203,194	\$	73,184	Enterprise Fund	City of Sidney		
Three Valleys C & D Landfill	Indianola	Const./Demol.	02/24/10	\$	194,649	\$	194,649	Letter of Credit	McCook Ntl Bank		
Valentine C&D	Valentine	Const/Demol.	07/11/22	\$	119,986	\$	5,681	Enterprise Fund	City of Valentine		
York C & D Landfill	York	Const/Demol.	12/01/07	\$	975,410	\$	246,041	Enterprise Fund	City of York		

Fossil Fuel Combustion Ash (FFCA), Industrial Waste Landfills, Monofills

Ash Grove Cement Co.	Louisville	Indus. Waste	03/01/03	\$	4,151,872	\$	4,151,872	Insurance Policy	Great American E&S Ins. Co.
Clean Harbors Technology	Kimball	Monofill	07/31/20	\$	3,409,932	\$	3,409,932	Insurance Policy	Great American Ins. Co.
Fremont Utilities	Fremont	FFCA	05/28/96	\$	4,468,068	\$	1,084,142	Enterprise Fund	City of Fremont
Hastings Utilities	Hastings	FFCA	02/01//01	\$	7,236,898	\$	3,181,818	Enterprise Fund	City of Hastings & PPGA
NPPD Gerald Gentleman 4	Sutherland	FFCA	04/01/95	\$	8,704,384	\$	8,704,384	Financial Test	NPPD
NPPD Sheldon Station 4	Sheldon	FFCA	07/01/01	\$	2,445,648	\$	2,445,648	Financial Test	NPPD
OPPD NE City 1	NE City	FFCA	04/04/95	\$	2,443,512	\$	2,443,512	Financial Test	OPPD
OPPD NE City 2	NE City	FFCA	06/30/09	\$	7,952,950	\$	7,952,950	Financial Test	OPPD
OPPD North Omaha	Omaha	FFCA	04/04/95	\$	19,269,252	\$	19,269,252	Financial Test	OPPD
Platte Generation	Grand Island	FFCA	03/18/14	\$	2,569,969	\$	2,569,969	Financial Test	City of Grand Island
Waste Management of NE	Bennington	Indus. Waste	03/01/12	\$	1,733,819	\$	1,733,819	Surety Bond	Lexon Insurance Co.
		ansfer Stations							
		disici Otations	, materiar i	100	overy raciii	1103	, composi c		
Bud's Sanitary Service	Newman Gr.	Transf. Station	05/19/17	\$	57,138	\$	57,138	Letter of Credit	First Natl. Bank, NG
Custer Transfer Station	Broken Bow	Transf. 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
Eco-Storage Inc.	Omaha	Mat. Recovery	12/10/19	\$	70,017	\$	70,017	Surety Bond	Federal Ins. Co.
Edgetown Properties LLC	Madison	Transf. Station	06/27/12	\$	12,493	\$	12,493	Escrow Account	Frontier Bank
Fremont CRD, Inc.	Fremont	Transf. Station	07/02/03	\$	13,125	\$	13,125	Surety Bond	Capitol Indemnity Corp
King Transfer Station	Walthill	Transf. Station	04/02/96	\$	1,821	\$	2,023	Escrow Account	Charter West Bank
Medi-Waste Disposal	Lincoln	Processing Fac	01/24/18	\$	30,124	\$	30,124	Surety Bond	Cincinnati Ins. Co.
Prairieland Gold Capital LLC	Firth	Compost	07/13/22	\$	357,608	\$	357,608	Letter of Credit	United Bank & Trust
River City Recycling	Omaha	Mat. Recovery	01/01/01	\$	67,352	\$	67,352	Escrow Account	US Bank Ntl Assoc
Sarpy County	Papillion	Transf. Station	04/17/12	\$	95,650	\$	95,650	Surety Bond	Travelers Surety Co. of Amer.
Seneca Sanitation	Dubois	Transf. Station	09/27/17	\$	4,012	\$	4,012	Letter of Credit	First Heritage Bank
Stericycle	Lincoln	Processing Fac	07/01/12	\$	56,873	\$	56,873	Surety Bond	Westchester Fire Ins. Co.
Waste Connections of NE	Central City	Transf. Station	05/30/13	\$	9,223	\$	9,223	Surety Bond	Platte River Ins Co.
Waste Connections of NE	Gering	Transf. Station	08/15/03	\$	25,831	\$	25,831	Surety Bond	Evergreen Natl. Indemnity Co.
Waste Connections of NE	Ord	Transf. Station	07/02/03	\$	9,317	\$	9,317	Surety Bond	Platte River Ins Co.
	•	RCRA C	losure and	RC	RA Post-Clo	osu	re (PC)		
Loveland Products	Fairbury	RCRA PC & CA	12/10/15	\$	3,247,129	\$	3,247,129	Letter of Credit	Bank of Nova Scotia
Bosch Security Systems	Lincoln	RCRA PC	11/04/21	\$	10,344	\$	10,344	Letter of Credit	Deutsche Bank AG
Clean Harbors Technology	Kimball	RCRA Closure	07/31/20	\$	49,734,522	\$	49,734,522	Insurance Policy	Great American Insurance Co.
Douglas County Landfill	Omaha	RCRA Cor Act	08/20/18	\$	2,240,246	\$	2,240,246	Financial Test	Douglas County
Eaton Corporation	Omaha	RCRA PC	06/08/09	\$	2,604,142	\$	2,604,142	Letter of Credit	BNP Paribas
Safety Kleen	Grand Island	RCRA Closure	07/31/20	\$	177,068	\$	177,068	Insurance Policy	Great American Insurance Co.
Safety Kleen	Omaha	RCRA Closure	07/31/20	\$	469,751	\$	469,751	Insurance Policy	Great American Insurance Co.
Tenneco Automotive Inc.	Cozad	RCRA PC	07/22/15	\$	53,366	\$	53,366	Letter of Credit	Canadian Imperial Bank
Tenneco Automotive Inc.	Cozad	RCRA Cor Act	12/20/21	\$	6,086,697	\$	6,086,697	Surety Bond	US Fire Insurance Co.
Van Diest Supply Liquid Plant	McCook	RCRA PC	02/16/06	\$	1,977,207	\$	1,947,207	Letter of Credit	1st State Bank Webster City IA

		Und	derground li	njecti	ion Contro	I (UIC	;)		
Crow Butte Resources, Inc.	Crawford	UIC		\$	62,605,869	\$ 6	2,605,869	Letter of Credit	Royal Bank of Canada
			Woote	Tira	Haulers				
ABC Tire LLC	Kansas C, KS	Waste Tire	06/24/13	s s	10,000	\$	10,000	Surety Bond	Nationwide Mutual Ins.
Abe's Trash Service Inc.	Omaha	Waste Tire	02/08/19	\$	5,000	\$	5,000	Letter of Credit	Bank of Bennington
American Tire Distributors, Inc.	Lincoln, NE	Waster Tire	04/03/23	\$	5,000	Ś	5,000	Letter of Credit	Wells Fargo
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
Encore-360, LLC	Caddo Mills, Tx	Waste Tire	06/21/23	\$	5,000	\$	5,000	Surety Bond	Berkley Insurance Co.
FMS North America	DeSoto, KS	Waste Tire	06/02/23	\$	5,000	\$	5,000	Surety Bond	Western Surety
Gill Hauling Inc.	Jackson	Waste Tire	02/04/09	\$	10,000	\$	10,000	Letter of Credit	Dakota County State Bank
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.
Langer Industrial Services	Scottsbluff	Waste Tire	02/11/22	\$	60,000	\$	60,000	Surety Bond	Merchants Bonding Co.
LAL Enterprises	Alvo, NE	Waste Tire	04/03/23	\$	10,000	\$	10,000	Surety Bond	Merchants Bonding Co.
Leo Porter	Oshkosh	Waste Tire	02/21/08	\$	15,000	\$	15,000	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.
Michelle Johnson	Pawnee City, NE	Waste Tire	08/01/23	\$	5,000	\$	5,000	Surety Bond	Merchants Bonding 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
RNS Metals, LLC	Elgin	Waste Tire	10/26/21	\$	50,000	\$	50,000	Letter of Credit	Cornerstone Bank
Shockley Trucking	Octavia	Waste Tire	02/24/16	\$	10,000	\$	10,000	Surety Bond	Universal Surety Co.
Southwick Liquid Waste Inc.	Hickman	Waste Tire	12/16/20	\$	20,000	\$	20,000	Surety Bond	Atlantic Specialty Ins. Co.
Tire Cutters	Centralia, KS	Waste Tire	05/13/06	\$	5,000	\$	5,000	Letter of Credit	First Heritage Bank
Tire Town, Inc.	Leavenworth, KS	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	\$	10,000	\$	10,000	Surety Bond	Ohio Casualty Ins. Co.