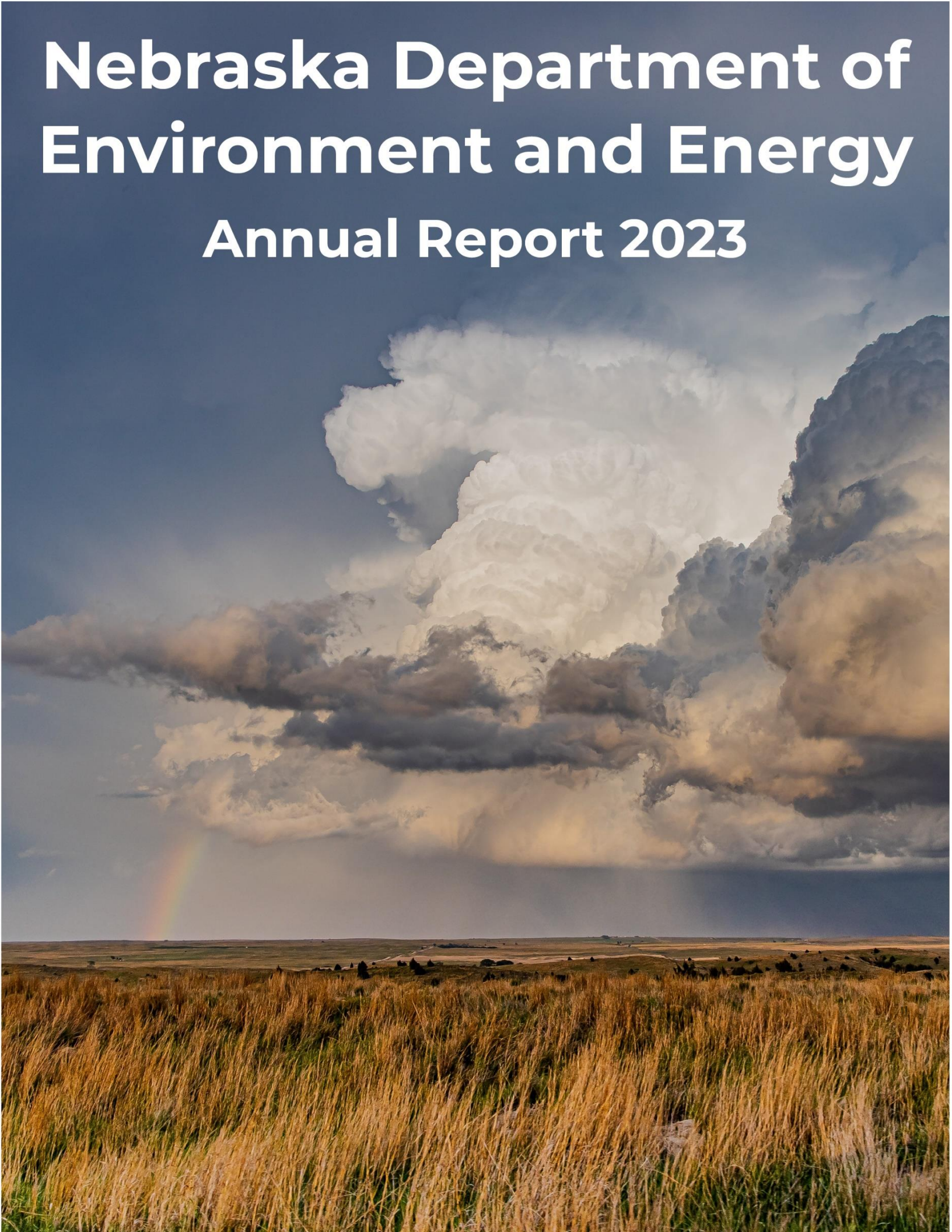
Nebraska Department of Environment and Energy

Annual Report 2023



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
- Calendar of events
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Cover photo courtesy of Jeremy Bower, JRBStorm Photography

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CHAPTER 1:
Agency Overview

The Nebraska Department of Environment and Energy (NDEE) marked its 50th 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 2023 (July 1, 2022 to June 30, 2023). During FY2023 NDEE was authorized for a staffing level of 273 full-time employees.

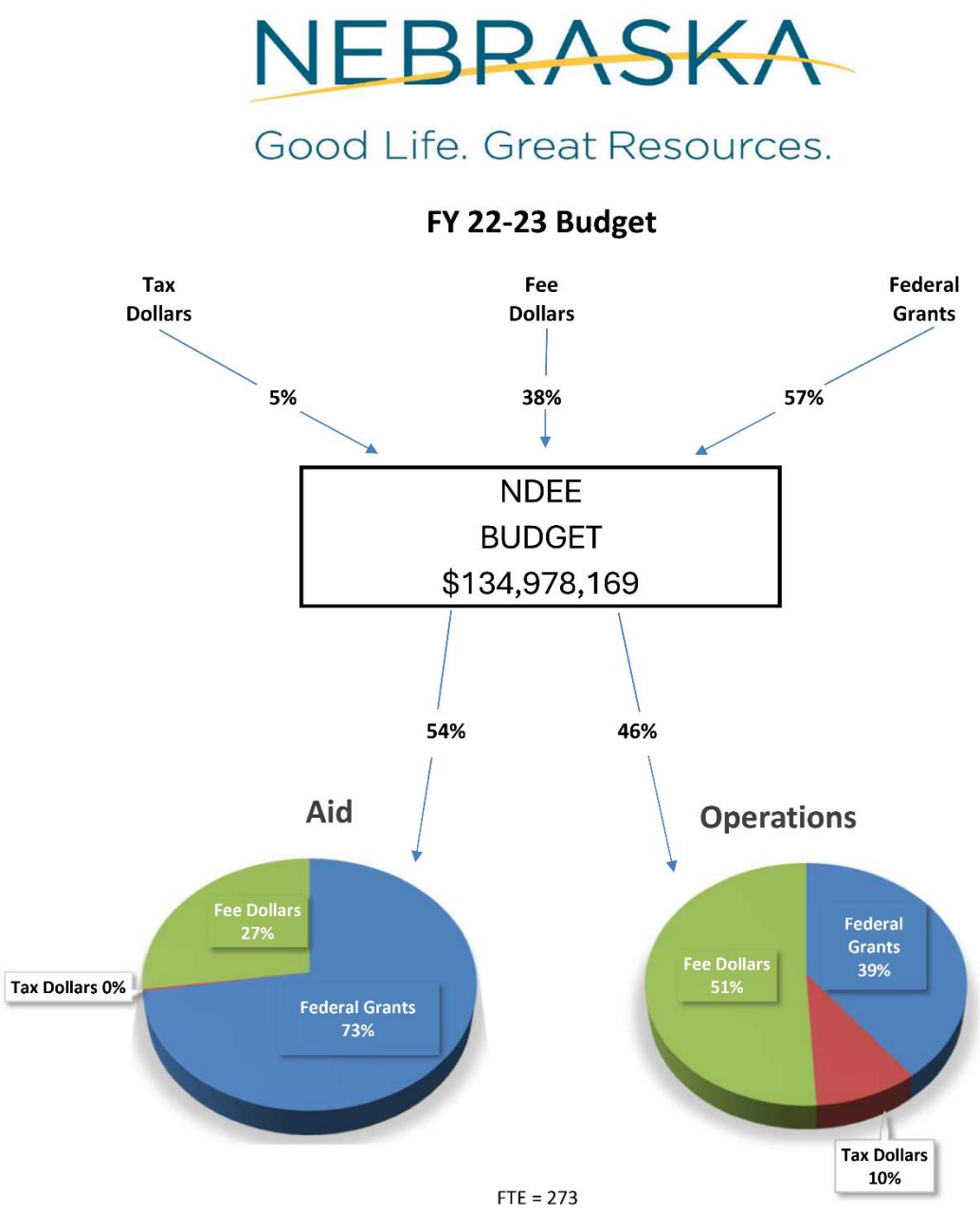
The 2021 Nebraska Legislature passed a bill transferring several EPA state-delegated environmental health programs from the Department of Health and Human Services (DHHS) to the Nebraska Department of Environment and Energy. On July 1, 2021, over 40 DHHS teammates officially became part of NDEE's team.

The NDEE has an FY2022-23 annual budget of approximately $135 million. This includes money from federal grants, state taxes, and fees.

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

Funding Type	Operations: $ Amount	Percent of Operations Budget	Aid: $ Amount	Percent of Aid Budget
Federal Funds (Grants)	$24.4 million	39.4%	$53.1 million	72.6%
State General Funds (Tax $)	$5.9 million	9.7%	$0.2 million	0.2%
Cash Funds (Fees)	$31.5 million	50.9%	$19.8 million	27.2%
Total	$61.8 million		$73.1 million	

The following graphic depicts NDEE's FY2022-23 budget by funding source and percent expended by fund type and activity (aid or operations).



Significant Topics in 2023

The following are some of the significant topics, challenges, and accomplishments that NDEE addressed in FY2023:

State Revolving Fund Programs Cross $1 Billion Threshold

In September of 2022, NDEE crossed the $1 billion threshold for funds administered through the Clean Water and Drinking Water State Revolving Loan Fund programs, commonly referred to as the SRF programs.

NDEE's SRF programs provide below market interest loans, grants, and loan forgiveness to eligible Nebraska communities to help support the development of critical drinking water and wastewater infrastructure. The Clean Water SRF became active in 1988, while the Drinking Water SRF began in 1997.

"The SRF programs are a tremendously valuable and versatile tool for communities in our state to address critical infrastructure needs," NDEE Director Jim Macy said of the milestone. "NDEE is proud to administer these programs that can help provide Nebraska communities an avenue to develop facilities that ensure reliable access to safe drinking water or initiate water or wastewater projects that spur growth and create new development."

Eligible projects under the SRF programs can include water towers and wells, lift stations and lagoons, infrastructure expansions, and upgrades and improvements to both wastewater and drinking water treatment facilities among many others. Successful SRF projects can be observed in communities all across the state; some communities, like the City of Kearney for example, have relied on the SRF programs to facilitate completion of unique, diverse projects that have spanned multiple decades.

NDEE Launches RO Rebate Program

In January of 2023, NDEE began its administration of $1.2 million in American Rescue Plan Act (ARPA) funds through rebates for private well reverse osmosis systems. This undertaking is part of a larger $4 million ARPA initiative administered by NDEE as authorized under LB 1014e Section 51.

Private well reverse osmosis system rebates were made available to property owners of private wells with drinking water test levels above 10 parts per million (ppm) of nitrate. Applicants were eligible for up to $4,000 in rebates per small treatment installation. Eligible rebate costs included testing costs, purchase price of the system, and installation costs.

Through the end of State Fiscal Year 2023, NDEE signed 45 private well reverse osmosis agreements, totaling $125,329 in obligated funds. Obligated funds are only dispersed following successful installation and demonstration of effective removal of nitrate to a level below 10 ppm.

The application period was initially set to conclude on March 31, 2023 before NDEE extended it. NDEE will continue to pursue applicants throughout State Fiscal Year 2024, and applications will continue to be accepted and reviewed for consideration on a month-to-month basis as long as funding for the program remains available.

Participation in the rebate program requires pre-approval from NDEE; the installation of any reverse osmosis small water treatment system cannot begin until a rebate agreement is signed between the private well owner and NDEE.

NDEE Releases Report on Nitrate and Drinking Water

NDEE released a 2023 mid-year report on nitrate and water quality which included nitrate data on private drinking water along with an update regarding the agency's continued effort to protect Nebraskans and the state's drinking water supply. NDEE Director Jim Macy says the findings show that Nebraska's drinking water quality remains high and that Nebraska has the necessary tools to continue improving drinking water quality.

The report highlighted some of the following points:

- *1.65 million Nebraskans (over 85% of Nebraska's population) get their water from public water systems that are protected from nitrate and other pollutants under the Safe Drinking Water Act (SDWA). The SDWA requires nitrate levels in public drinking water be at or below 10 mg/l or be properly treated; 98% of public water systems in Nebraska are in full compliance with nitrate requirements.*

- *Private wells service 300,000 Nebraskans and are not covered by the SDWA. These well owners can be at risk for nitrate, but updated data reveals that the vast majority of private wells that have been tested are at or below the recommended safe nitrate standard.*

- *The state of Nebraska has $1.2 million in grant money available for qualifying private well owners to install a reverse osmosis system that will help protect them from nitrate exposure through their drinking water.*

A copy of the report can be found here: https://deq-iis.ne.gov/zs/publications/

NDEE Receives Climate Pollution Reduction Grant

The Nebraska Department of Environment and Energy (NDEE) received a $3 million planning grant through the U.S. Environmental Protection Agency's Climate Pollution Reduction Grants (CPRG) Program funded through the Inflation Reduction Act. This program is awarding funds to cooperating state and local governments to develop and implement climate action plans to reduce greenhouse gas (GHG) emissions.

Through this award, NDEE will develop a Priority Climate Action Plan (PCAP) due by March 1, 2024, followed by a Comprehensive Climate Action Plan (CCAP) due in late summer of 2025 (within two years of the award date). The PCAP will identify high-priority, readily implemented actions to reduce GHG emissions, focusing on voluntary actions and financial incentives. The following CCAP is required to explore short-term and long-term GHG emission reduction measures across all sectors of the economy. Both plans will include participation from low-income and underserved communities and include analyses of benefits accruing to those communities along with other required elements. After NDEE submits the PCAP, state and local governmental bodies in Nebraska will be eligible to apply for competitive implementation grants to carry out actions consistent with Nebraska's plan.

Over the next two years, the Department will undertake extensive outreach to stakeholder groups and the public for ideas and comments. NDEE expects to invite stakeholders to join one or more sector-based workgroups to discuss potential GHG emission reduction measures and propose priority measures. The proposed workgroup list could include participants from agriculture, energy production, transportation, building and housing, and energy-intensive industries.

NDEE Online Records Reaches Milestone

NDEE's Records Management team hit a milestone in FY2023: more than 1 million records have been made available through the agency's public records portal.

The Records Management Section oversees the vital work of ensuring NDEE's records are properly retained, organized, and readily available for both the agency and the public. The section also responds to public records requests.

NDEE was one of the first state agencies in Nebraska to use an electronic content management (ECM) system. This system also makes NDEE's records available through the public portal: https://ecmp.nebraska.gov/PublicAccess/index.html?&MyQueryID=340. Facilities that have documents with the agency are assigned a facility ID number that stays with that site throughout ownership changes. Using this ID, anyone can conduct a search and see all public documents related to a facility.

The public records portal first launched in May 2011. The Records Management Section continues to scan new incoming documents, as well as older documents, into the ECM system. In Fiscal Year 2023, the team entered more than 144,800 records.

In addition to the public portal, NDEE also has an Interactive Map Server. Anyone can search for a facility, or for facilities with specific types of records, and pull up documents related to a facility they find on the map.

This work supports the agency's programs so they can focus on permitting and inspecting facilities, providing financial aid to Nebraskans, and monitoring the remediation of contaminated sites it the state. It also provides a transparent way to keep the public informed about how NDEE administers programs and makes decisions.

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 idea germinated in 2015 after Director Jim Macy joined the agency as a more intentional way for NDEE to operate.

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 Focuses

Focus 1: Personnel
Assess, develop, and implement personnel programs that support professional development, succession planning, training, and talent management.

Focus 2: Equipment
Identify new requirements and maintain current equipment to increase effectiveness, efficiencies, and utilization.

Focus 3: Funding
Identify and pursue the best funding options to ensure stability.

Focus 4: Innovation
Find creative and thoughtful approaches to fulfill our mission and support measurable improvements.

Focus 5: New Requirements
Develop and implement a consistent process to identify, assess, and prioritize new programs and requirements which supports our vision of a healthy environment.

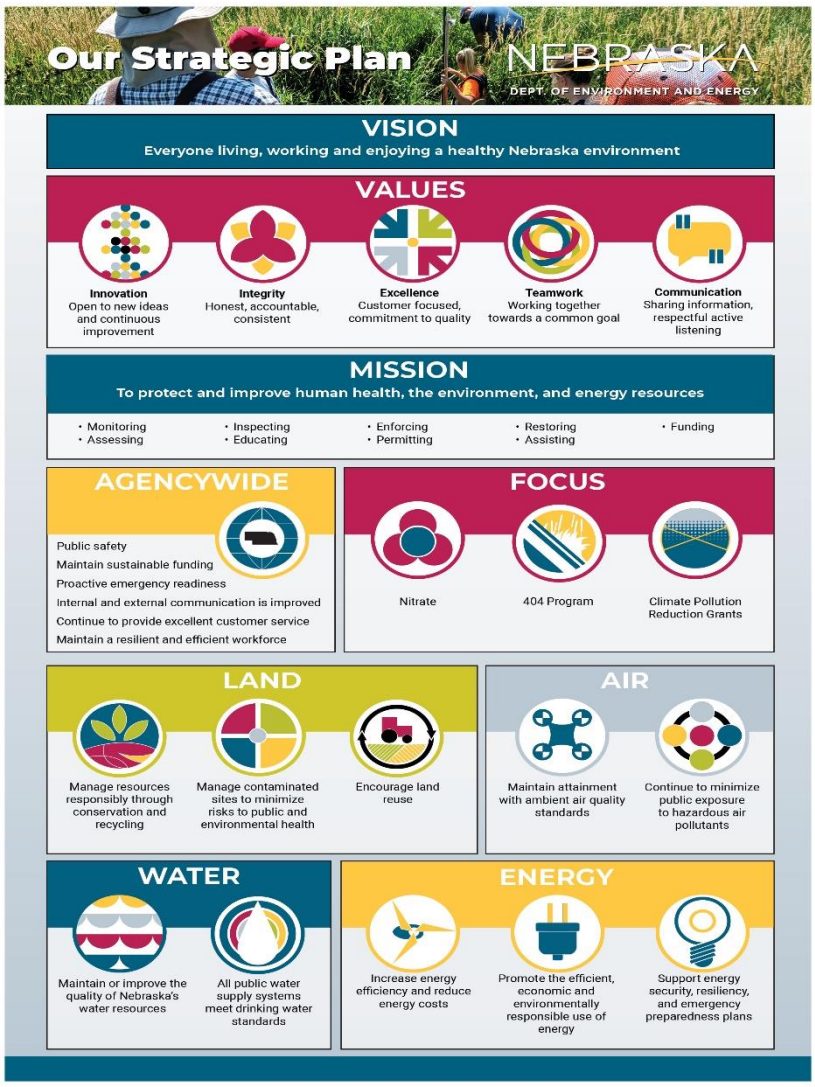
Focus 6: Change
Improve individual and organizational resilience to change by developing enhanced methods of awareness, adaptiveness, and proactiveness.

Focus 7: Communication
Establish a comprehensive internal and external communication plan which is intentional and proactive.

Strategic planning affects both internal and external components of NDEE functions. Internally, it addresses areas in need of improvement and helps teammates work more efficiently. It also allows teammates and team leaders to focus on the future and process improvement in addition to 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. As a first step in the redesigning process Agency Leadership collaborated to clarify our Key Goals and Strategic Focus Areas the agency intends to work towards and focus efforts on.

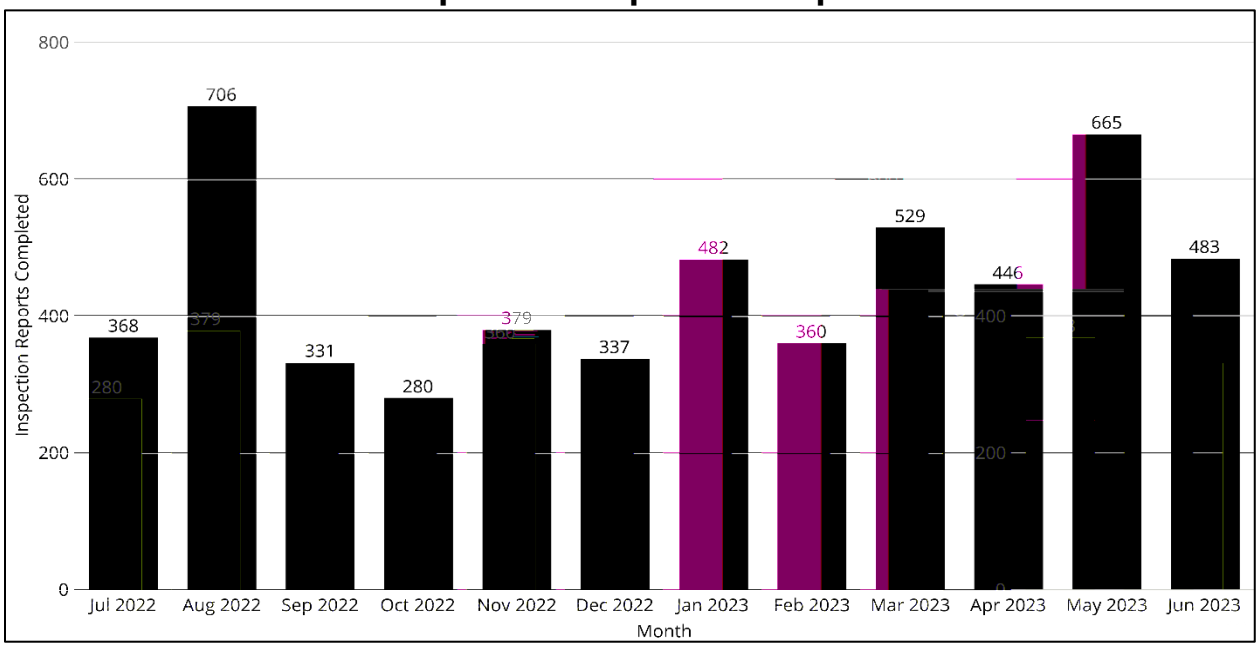


To measure progress with the Key Goals and Focus Areas, a Systems Mapping approach has been initiated to assemble the agency's current top processes and metrics we use to operate. The Systems Mapping approach is a Results-Driven approach to prioritize, connect, enable, and drive the execution of work in a way that ensures every resource is focused on the Key Goals and Focus Areas and has maximum authority to act. Systems Maps are in development for Agency-wide, each Division, and each section which identify the Primary/Core process areas and owner of each area; the Sub-Processes which work towards the Key Goals/Focus Areas; and the current metrics for each Sub-process.

Agency Annual Statistics

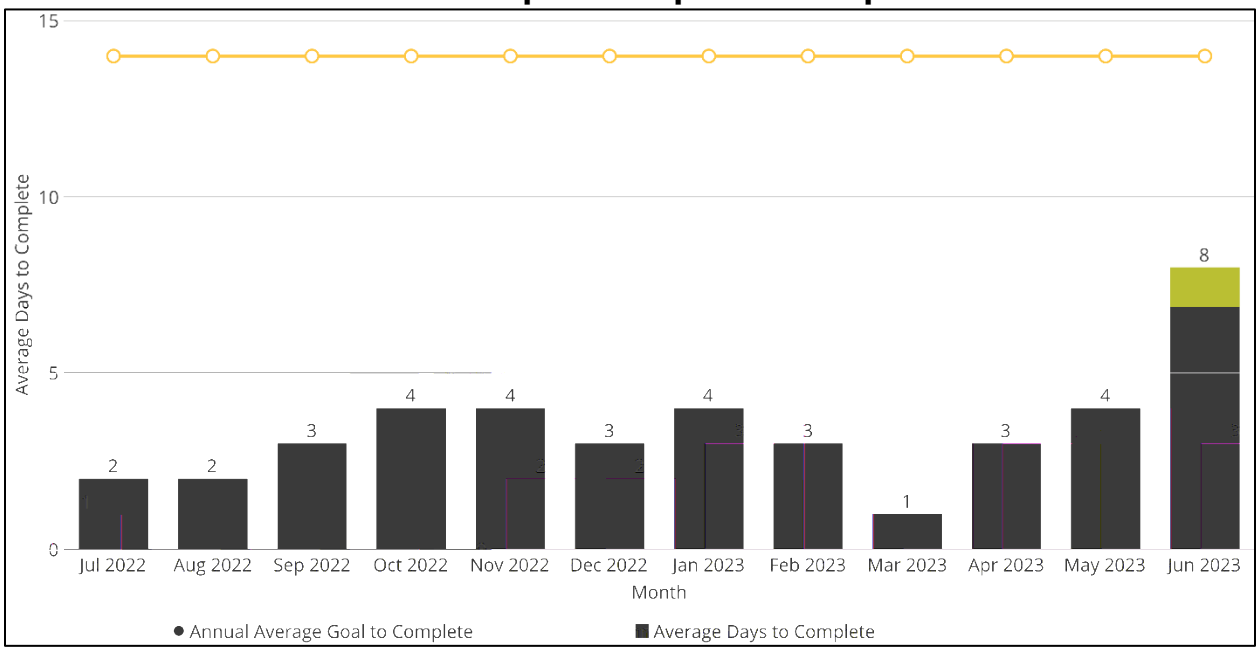
The following charts show statistics from state fiscal year 2023 (July 1, 2022 to June 30, 2023) related to State Livestock Construction and Operating Permits, Air Construction and Operating Permits and Agency Inspections. This information is updated monthly and can be found on the agency website http://dee.ne.gov by selecting the Monthly Metrics link.

Inspection Reports Completed



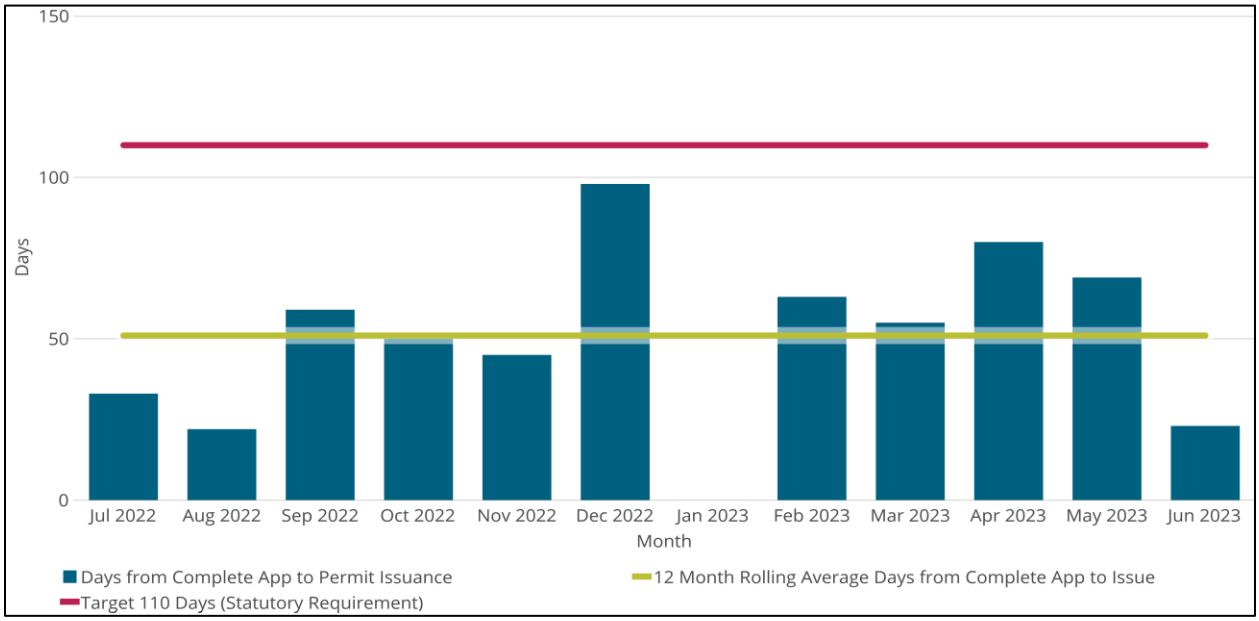
Inspectors completed all the fiscal year inspection goals set by EPA for delegated enforcement programs, while also undertaking additional inspections and complaint investigations. The jump in August inspections is primarily due to inspections of outdoor pools by our environmental health inspectors.

Time to Complete Inspection Reports



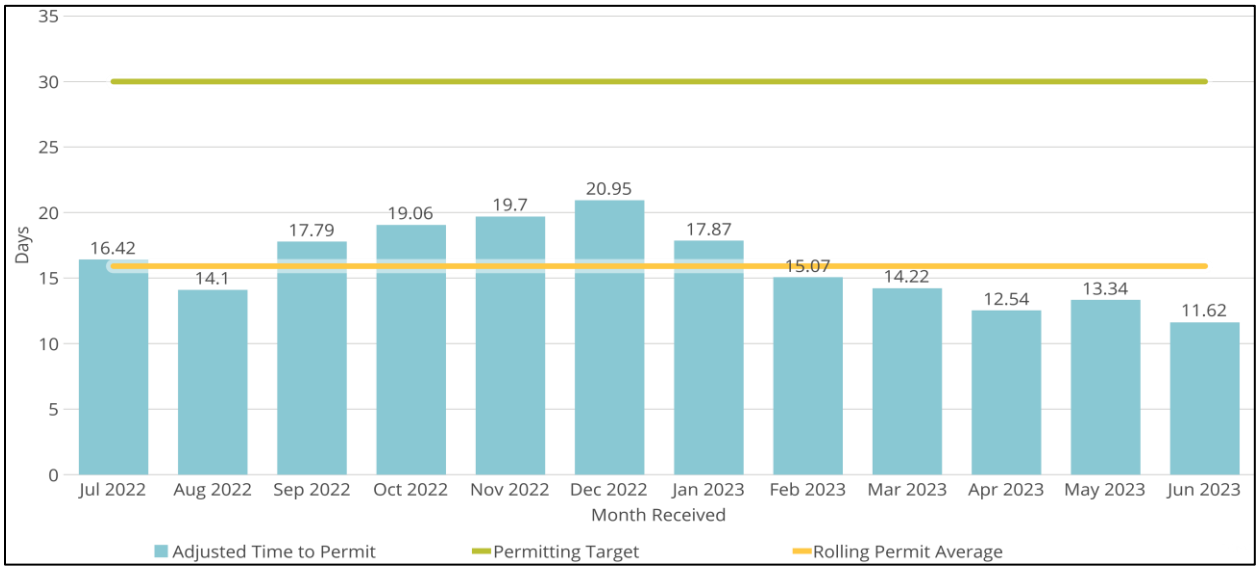
NDEE has an internal goal of no more than 14 days to complete inspection reports; that goal was met this fiscal year as shown by the chart above/below. Some inspections take a few hours while some take a few days. For purposes of consistency and timeliness of inspections, 14 days is reasonable. This 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. Throughout the 2023 fiscal year, the permitting section was challenged with staffing shortages. The December 2022 metric reflects one permit issued within 100 days and in January 2023 no permits were issued.

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



For FY 2023 the adjusted time to process water construction permits is consistently below the department's internal permitting target goal of 30 days. The variability of the monthly metrics reflects the types of projects received in the fall/winter versus spring/summer. The fall/winter months reflect applications received that are broader, more complex water/wastewater projects planned for the following construction season, and the spring/summer months numbers reflect review of less complicated projects.

2023 Legislative Summary

The Nebraska Legislature enacted three legislative bills in 2023 that had direct impact on NDEE.

LB 531: This legislation was an Urban Affairs Committee priority bill that contained provisions of twelve other pieces of legislation. Among the bills amended into LB 531 was LB 45 creating the new Revitalize Rural Nebraska Grant Program. Under this act, the governing body of a first-class city, second class city, or village can apply to the Department of Environment and Energy for approval of a dilapidated commercial property demolition grant. The Program begins in FY 2023-24. The bill describes the requirements of receiving an award, and that there are no limits on the amount that can be awarded to each applicant within the available funding. The department is to give preference to new applications. The Legislature appropriated $1 million in General Funds to carry out the provisions of this new program.

LB 814: The Legislature adopted the Governor's recommendation to appropriate $1 million dollars in General Funds for NDEE to conduct a water quality study. At the Appropriations Committee hearing, department director Jim Macy testified the $1 million will be used to hire a third-party to collect data and develop a statewide plan to reduce nitrate in groundwater. NDEE plans to partner with sister agencies across the state to advise on this plan and provide data. The resulting report will provide guidance for the prioritization, and implementation of, solutions to provide safe drinking water and reduce point source discharges of nitrates.

LB 818: This piece of legislation created the Lead Service Line Cash Fund to be administered by the Nebraska Department of Environment and Energy. The Legislature appropriated $10 million in General Funds through LB 814 to this new fund to be used for grants to utilities districts to expedite the replacement of homeowner-owned lead service lines. The genesis of these provisions was introduced in LB 613.

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 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 2023:

- Development of a new federal expenditure drawdown process. Federal awards are reconciled (draws to expenditures) during this process which occurs every other week throughout the year. This process ensures our accounting records match our federal partners' records.
- Revised State Revolving Fund Financial Statement preparation files to allow for more precise, transparent, and thorough documentation of the financial status of the State Revolving Fund's Drinking Water and Clean Water Programs.
- Reviewed and revised aspects of the agency's indirect cost rate setting and recouping approach. This revision will result in a more standardized process, trackable through electronic biweekly files, and should assist in reducing the agency's negotiated indirect cost rate, making the agency's cost to manage federal awards less costly from a federal perspective.

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 and updates the curriculum as needed.

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 5% plus a 2% performance increase for on July 1, 2023, with the engineering series receiving15% and the accounting series receiving 20% plus 2% performance increase. We are hopeful these increases will help retain our most valuable assets.

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 and 2023. With historically low unemployment, the agency has been very fortunate to have the opportunity to hire and promote 88 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 of years, as the baby boomer generation has reached retirement age. We have been actively developing redundancy in positions (succession planning) to avoid a significant loss of agency knowledge and expertise.

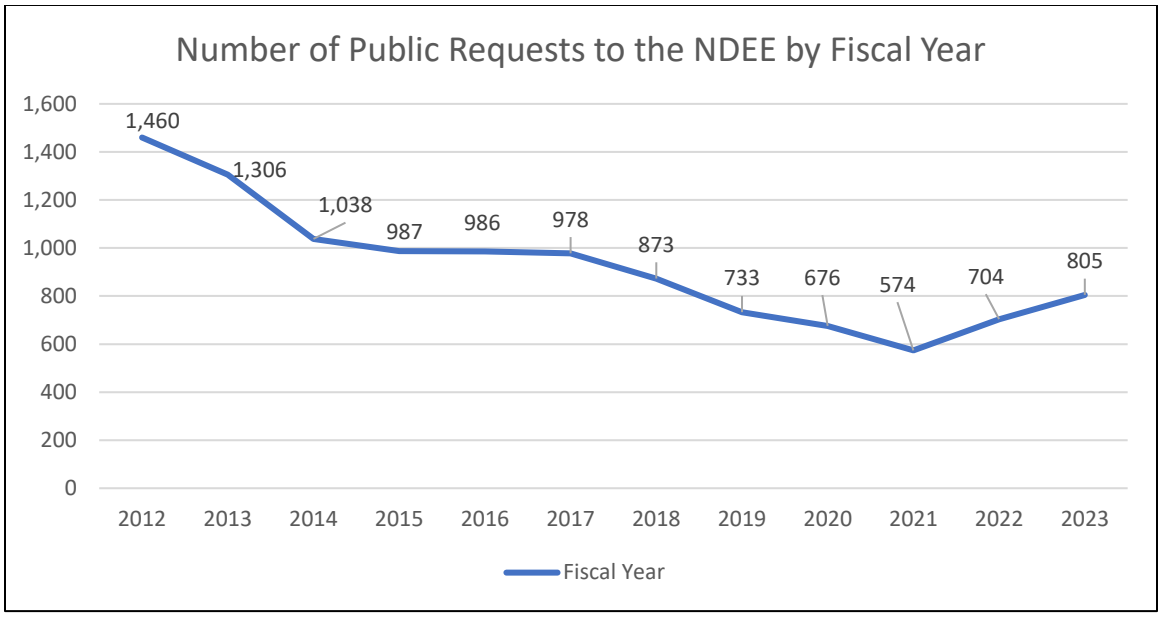
Staffing	FY21	FY22	FY23
New Hires	25	32	35
Retirements	17	9	9
Terminations	11	18	12
Transfers	4	8	6
Promotions	24	29	47

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 FY2023:

- NDEE's Records Management team hit a milestone in FY2023. More than 1 million records have been made available through the agency's public records portal.
- Over 144,800 records were stored in the Enterprise Content Management System (ECM) utilizing OnBase software applications from Hyland Software.
- Of these, more than 75,000 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 805 requests for information. The number of information requests rose in the last fiscal years due to the statutory transfer of the Department of Health and Human Services Environmental Health Programs in July 2021. Complete records for those programs are being made available through the NDEE website on a per request basis.
- In response to public requests, the Records Team imaged over 2,000 legacy paper files into the ECM system.



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 I (AS/400) server, web page support, and IIS application development.

The IT Section added two staff members to fill the vacancy for an IT Business Systems Analyst position and the vacancy for an Applications Developer position.

NDEE web developers have been maintaining and making updates to the agency web page. The agency is working towards having a new web page developed for use in 2024.

The application development staff has developing multiple interfaces to provide overall process improvement for the public and 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. The OCIO support staff has also spent a large portion of the year installing replacement desktops and laptops throughout the Agency as a part of the Hardware Leasing program.

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, http://dee.ne.gov**.**

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: NDEE.moreinfo@nebraska.gov. The Public Information Office coordinates responses to those e-mails. The site also features "Report a Problem," with a link to the e-mail address to report an environmental issue of concern at NDEE.problem@nebraska.gov. The site includes phone information and procedures relating to reporting a spill or complaint. The agency is moving toward more standardized forms, including some that can be filled online or submitted electronically.

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 agency's legislative activities, and with staffing the small business and environment assistance program. You can review the Department's legislative summary in Chapter 1 and find discussion of the Department's 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 - NDEE Operations (July 2023)

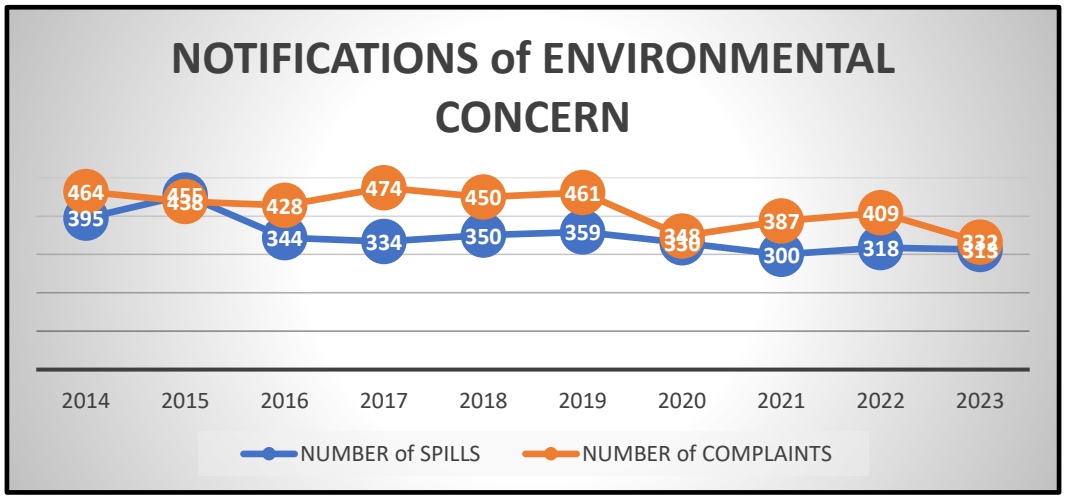
Air monitoring equipment, used for assessment and safety, have been upgraded and replaced. The program is in the process of replacing aging respiratory protection equipment (SCBAs and respirators).

NDEE participated and presented at two intrastate state/intraregional spill response meetings and exercises. One was in Torrington, Wyoming (October 2022) and dealt with a potential spill to the North Platte River. A second meeting/exercise was conducted in Yankton, South Dakota (April 2023) where the response to a spill on the Upper Missouri River was exercised.

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 manufacturer. In June (2023) NDEE trained partner agencies (NSP, SFM, etc.) in tactics used in response to spills on inland waterways and identification of unknown chemicals.

PHOTO 2 - NDEE Training (June 2023)

The NDEE recorded 313 reports of spills in FY 2023 (July 2022 – June 2023). Of the spills, 220 involved petroleum. An additional 332 citizen complaints were recorded by NDEE in FY 2023. The number of recorded spills and complaints recorded in the past eleven years are depicted in the graph below



Continuity of Operation

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 new plan was completed in January 2023. NDEE staff were trained. An exercise of the plan was completed in April and May.

Quality Assurance

The EPA has requirements for conducting quality management activities for all environmental data to ensure that the Department's decisions are supported by data of known and documented quality. In turn, the Department is responsible for reviewing the procedures a project will use to ensure that the samples participants collect and analyze, the data they store and manage, and the reports they write are of high quality. 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.

This past year, 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.

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 FY22-23.

Council Members

Representing	Council member	Term expires
Agricultural Crop Production	Kevin Peterson Osceola	June 22, 2025
Ag Processing Industry	Douglas Anderson Aurora	June 22, 2023
Automotive/Petroleum Industry	Vacant	June 22, 2025
Biologist	Amy Staples Broken Bow	June 22, 2025
Chemical Industry	Seth Harder Plainview	June 22, 2023
City Government	Marty Stange Hastings	June 22, 2023
Conservation	Norris Marshall Kearney	June 22, 2023
County Government	Vacant	June 22, 2023
Food Products Manufacturing	Jessica Kolterman Seward	June 22, 2025
Heavy Industry	Kurt Bogner Norfolk	June 22, 2023
Labor	Robert Hall Wahoo	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	Vacant	June 22, 2023
Power Generating Industry	Vacant	June 22, 2025
Professional Engineer	Dennis Grams Lincoln	June 22, 2023

Environmental Quality Council Actions
July 1, 2022, to June 30, 2023

Council Meeting Date	Regulation	Action
November 10, 2022	Public Hearing on 2023 Litter Percent Allocations	Approved
	Public Hearing on Amendments to Title 118	Approved
	Public Hearing on Amendments to Title 119	Approved
June 22, 2023	Public Hearing on 2024 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.

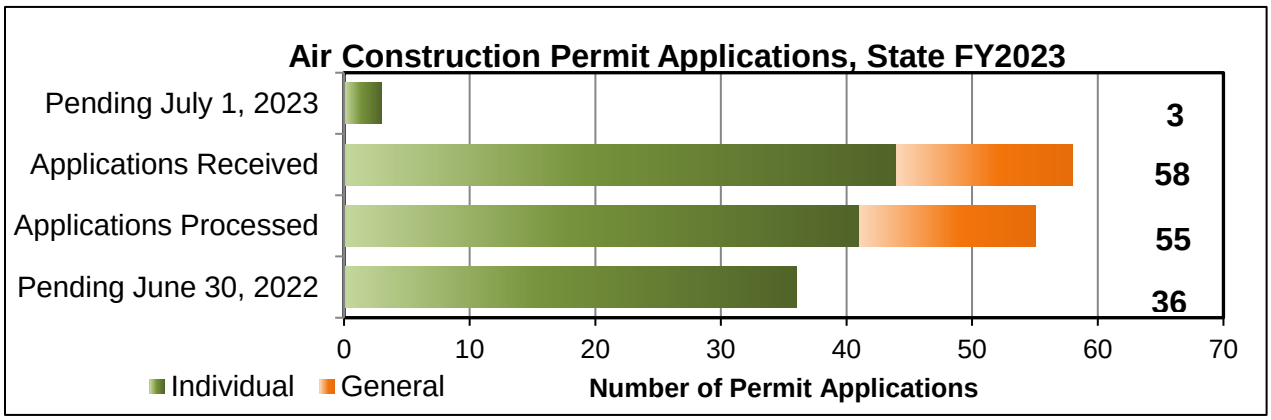
A general permit covers all sources in a particular industrial category, provided that the source meets the applicability criteria, applies for, agrees to the conditions of and obtains coverage. Requirements for a general permit are established in that general permit. Each general permit is issued only 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 2023 state fiscal year. (Note: The *Processed* category includes permits issued, withdrawn, denied, and determinations of no permit required.)

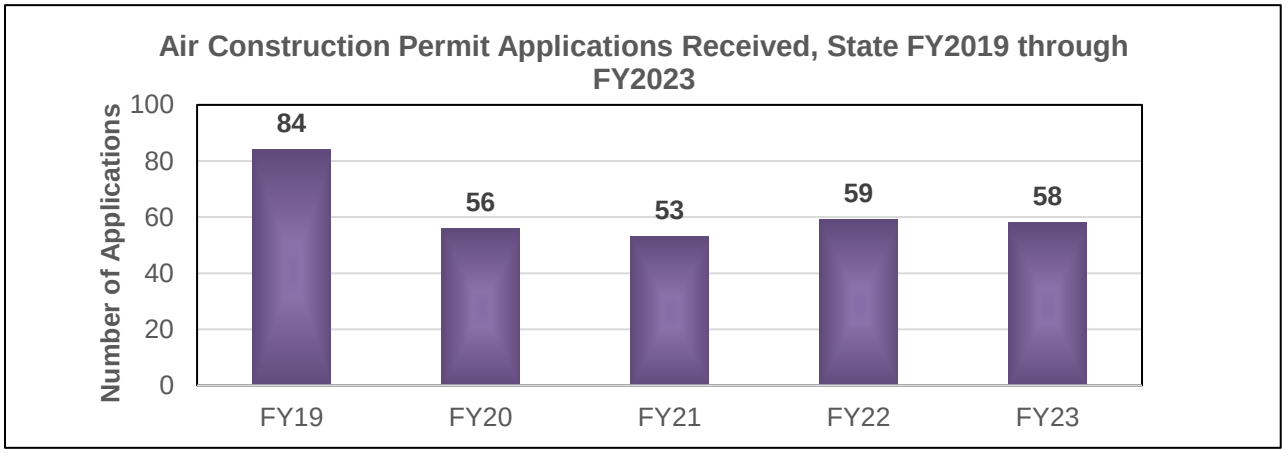


The Prevention of Significant Deterioration (PSD) program applies to construction of new major sources or modifications to existing major sources that emit significant levels of certain types of pollutants. The purpose of the PSD program is to protect air quality in areas where the air is cleaner than 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 FY2023.



Air Dispersion Modeling

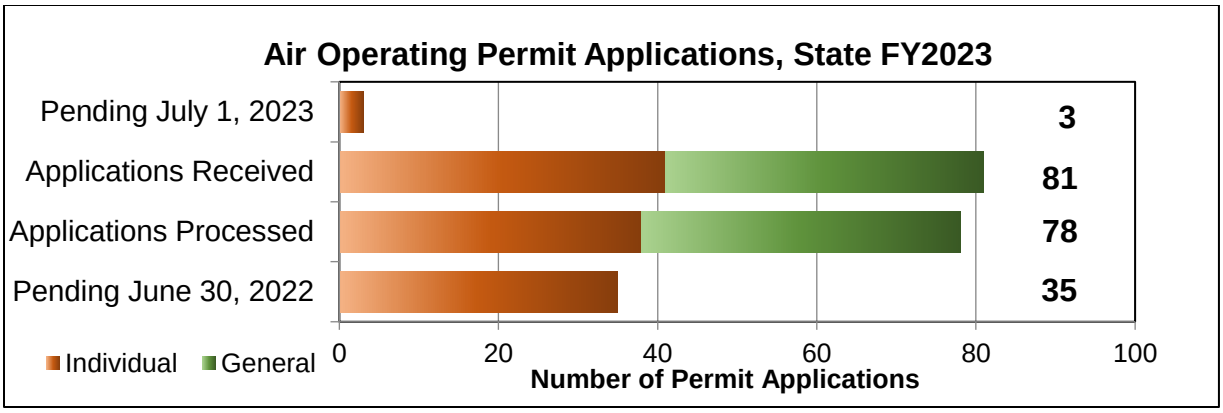
Air dispersion computer models predict how air pollutants emitted by a facility spread and disperse. These regulatory models use expected emissions, meteorological and geographical data, and other factors to estimate ground level concentrations of air pollutants at a large array of locations outside 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

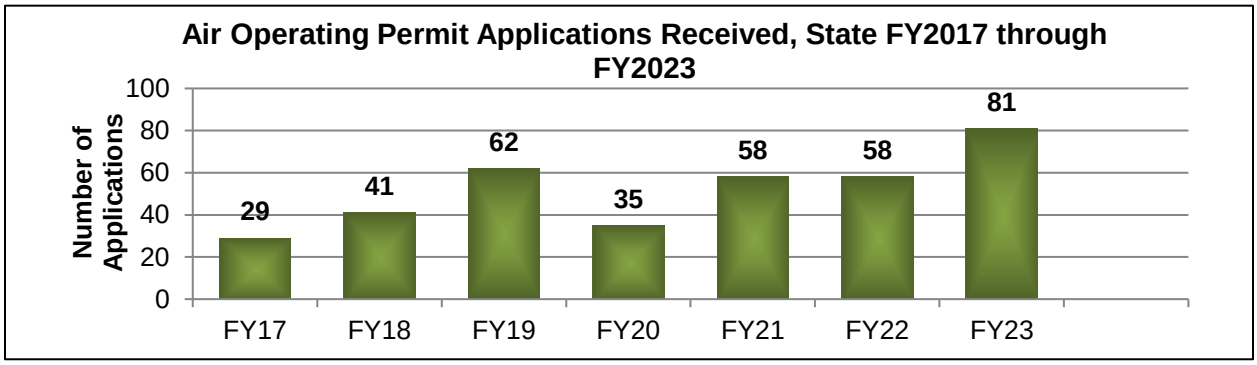
As required by Title V of the Federal Clean Air Act Amendments of 1990, Nebraska issues operating permits for Class I (major) sources of certain air pollutants. The Department also regulates minor sources using Class II operating permits as required under Nebraska law. Application for an operating permit 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 2023 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 101 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 FY2017 through FY2023 (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 112 days (including online-only general construction permit coverage) at the end of FY2023. The operating permit application backlog was also significantly improved down from approximately 120 applications a few years ago to 3 applications pending at the end of FY2023, 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. Most significantly, during FY2023, the oldest operating permit application was issued.

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_{10})
    - With a diameter of 2.5 micrometers or less ($PM_{2.5}$)
- Sulfur Dioxide (SO_2)
- Nitrogen Dioxide (NO_2)
- Carbon Monoxide (CO)
- Ozone (O_3)
- Lead (Pb)

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

Nebraska Ambient Air Monitoring Network

The State of Nebraska operates an ambient air-monitoring network to determine compliance with the NAAQS and 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.

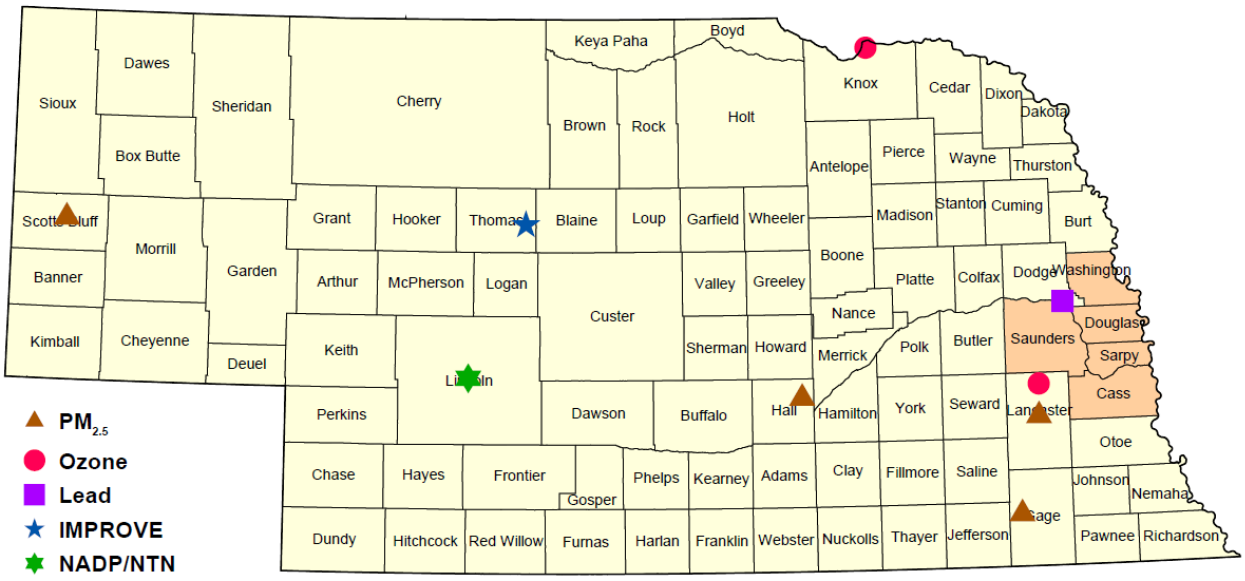
The Nebraska monitoring network includes sites at which air quality is monitored to evaluate attainment with the standards and other health and welfare-associated priorities. The Department evaluates the adequacy of its monitoring network in accordance with federal regulations each year. Changes may 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.*, $PM_{2.5}$, PM_{10}, CO, SO_2, Lead, or Ozone). Some sites monitor for more than one pollutant. The NCore site in Omaha is part of a National 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 http://nadp.slh.wisc.edu.

Nebraska Monitoring Sites Outside of the Omaha Metropolitan Statistical Area



$PM_{2.5}$
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)

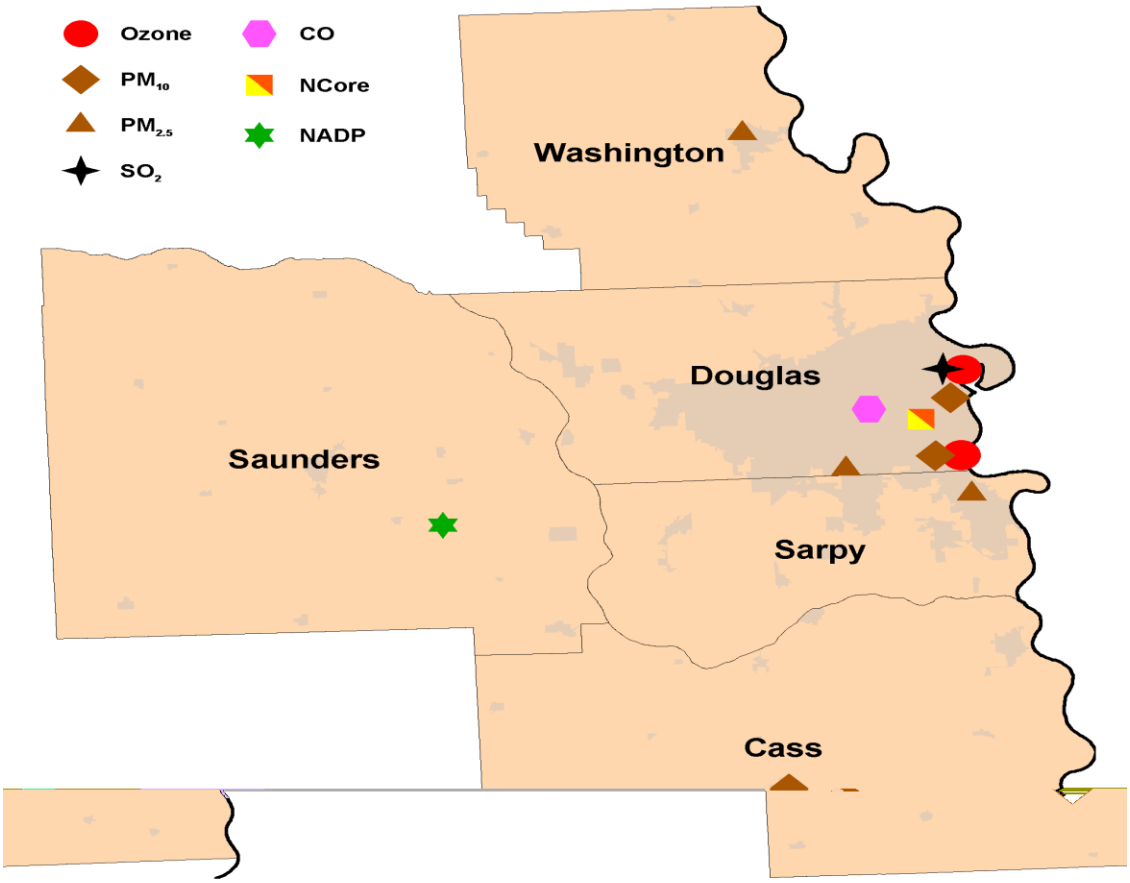
NADP/NTN
Maxwell (Lincoln County)

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_{10} 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

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

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

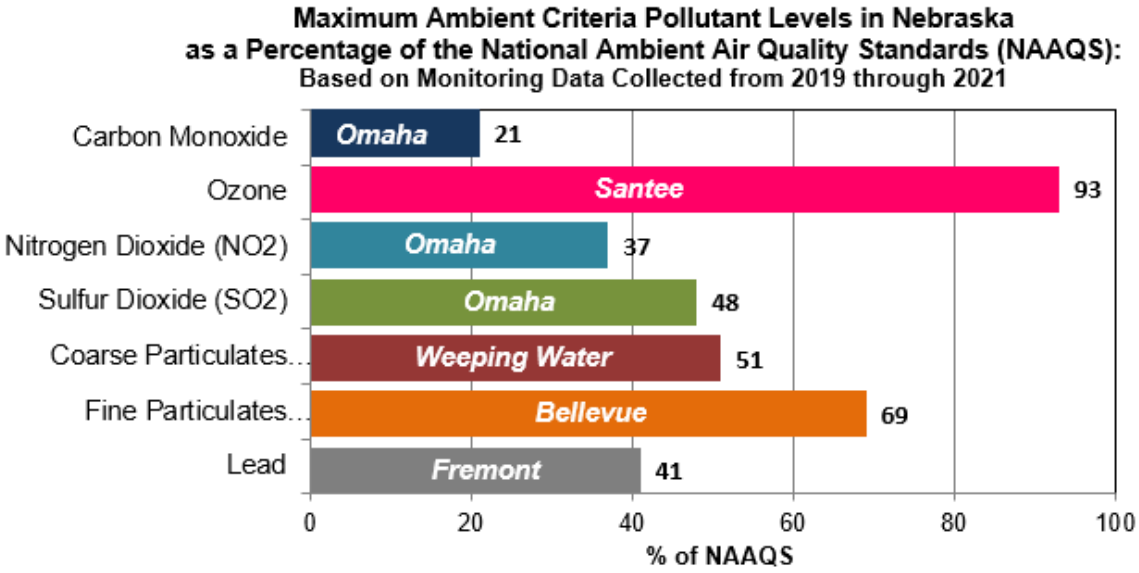
PM_{10}
Omaha, 19th & Burt Streets
Omaha, 2411 O Street
Omaha, 4102 Woolworth Avenue (NCore)
Weeping Water, 102 P Street

Monitoring Information Online

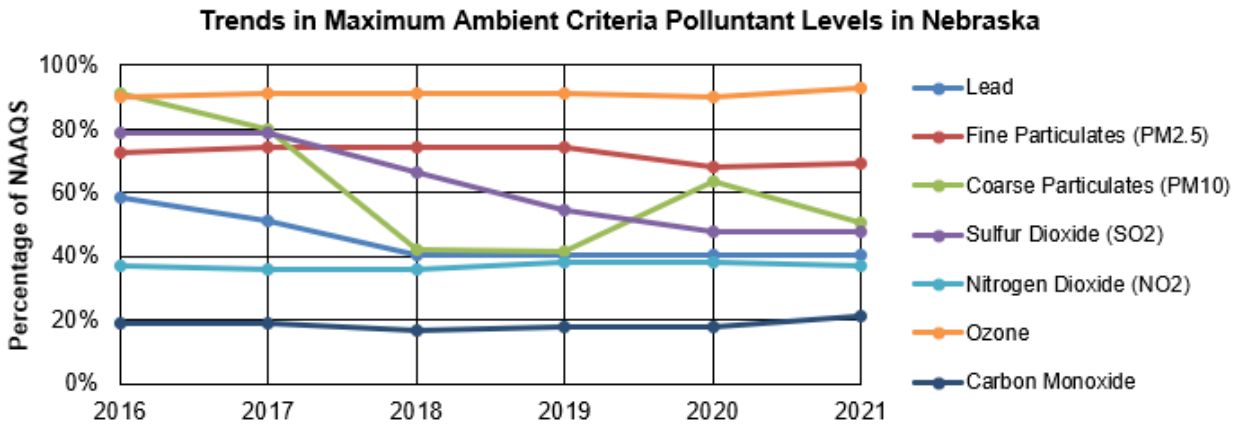
Data from continuous ozone and $PM_{2.5}$ monitors in Lincoln, Omaha, Grand Island, Homestead National Historical Park, and Scottsbluff are reported hourly to the EPA AirNow system, which makes current air quality information available to the public on the web at http://www.airnow.gov. EPA uses the data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

Compliance with National Ambient Air Standards (NAAQS)

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



EPA issued final designations of "Attainment/Unclassifiable" with respect to the NAAQS for sulfur dioxide for two Nebraska counties in 2021: Douglas County in April and Lancaster County in August. These counties include coal-fired power plants in North Omaha and near Hallam, respectively. Designations for these areas are based on data from two source-specific sulfur dioxide monitoring sites operational from 2017-2020, which demonstrate that sulfur dioxide levels at these locations are in attainment/compliance with the NAAQS. EPA had previously designated all other Nebraska counties as "Attainment/Unclassifiable" with respect to the SO_2 NAAQS.



The chart above shows trends in the maximum measured levels of criteria pollutants in Nebraska from 2016 through 2021. 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_2, CO, and $PM_{2.5}$ have remained fairly constant or have declined slightly since 2016, while the maximum SO_2 level has decreased significantly since 2017. The level and location of the maximum PM_{10} 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: http://dee.ne.gov/Publica.nsf/Pubs_Air_Amb.xsp.

Inspections and Facility Compliance

The Compliance Program is responsible for conducting compliance inspections of air pollution sources, responding to citizen complaints, observing and evaluating emission tests, and the acid rain program. Consistent with the Nebraska Environmental Protection Act, the Air Quality 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.

FY2023 Air Compliance Activity	NDEE
On-site Inspections	341
Facility Stack Tests Conducted On-Site Observations Conducted	78 41
Continuous Emission Monitoring Audits Conducted On-site Observations Conducted	35 11
Complaints Received	69
Burn Permits Issued Burn Permits Denied Burn Permits Withdrawn	105 36 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 next national inventory compiled will include emissions reported by our sources for 2021, 2022, and 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 2022 was $51 per ton.

The Department transitioned to a new online reporting system called State and Local Emissions Inventory System (SLEIS) for the 2019 calendar year. During the 2020 reporting period there were still many lower emitting sources reporting to the new system for the first time. Training sessions for those new to the system were conducted throughout 2020, 2021, and have continued into the current year.

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 must determine if they are in compliance (attainment) with the standard and, if not, take the necessary corrective action. States must also submit to EPA their recommendations for attainment or nonattainment designations for areas within the state as well as State Implementation Plans (SIPs) for each new or revised standard. A SIP describes how the Department will implement, maintain, and enforce a standard.

At the present time, Nebraska is in attainment with each of the NAAQS. Planning activities are currently underway to address state Air Quality regulations (Title 129), Regional Haze and the Municipal Solid Waste Landfill Rule. At the federal level, EPA is finalizing its review of the particulate matter standard, conducting its review of the lead standard, and just recently announced a new review of the ozone standard. EPA is also finalizing its review of Nebraska's SIP revision for Title 129 submitted in late 2022.

Sulfur dioxide (SO_2)

The 2010 sulfur dioxide (SO_2) standard requires 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_2. Nebraska chose to comply with this requirement using both air quality monitoring and pollutant dispersion modeling. 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 2023. Two facilities are subject to these ongoing requirements: Whelan Energy Center and Gerald Gentleman Station, though another facility (Nebraska City Station) was 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 EPA announced that it would reconsider the previous administration's retention decision. EPA recently announce a new review of the standard which will integrate the reconsideration as well as information from newer studies and updated analyses.

Particulate Matter

EPA is finalizing its current 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 $PM_{2.5}$ standard is expected in late 2023. Nebraska was designated in attainment with the NAAQS by EPA in 2015 and the state's SIP revision was approved that same year.

Lead

EPA's review of the lead standard is underway and no conclusions regarding revision of the standard have yet been presented. 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 (2018-2028).

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 determination 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_2 and permits trading of allotments. The remaining disapproved portion (long-term strategy) will be addressed in the SIP revision currently in development. To date, no additional control measures have been required.

The Department submitted its Regional Haze Five-Year Progress Report in April 2017. At present, the program is developing its SIP revision for the second implementation period, which was due to EPA in July 2021. This revision will address portions of the initial SIP and progress report, as well as state obligations for the current implementation period that ends in 2028.

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. This new emission guideline lowers 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). NDEE is working with EPA on implementation of the federal plan; an initial draft of the Municipal Solid Waste Landfill Plan is pending state review.

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 the Air Toxics Notebook on the Department 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 2 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 $PM_{2.5,}$ 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. Wildfire season started in the spring of 2023 with three major fires burning more than 100,000 acres, likely facilitated by drought conditions.

Impacts on air quality in Nebraska from wildfires continue to draw more interest due to recent drought conditions in the state and recurring wildfires in Canada that are becoming an annual occurrence. 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 ($PM_{2.5}$) 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.

The Department continued its collaborative efforts with key stakeholder agencies in state FY2023, which included a pre-season meeting in February 2023. Participants included NDEE, local health Departments, EPA, the Nebraska Game and Parks Commission, University of Nebraska Agronomy-Horticulture program researchers, National Weather Service, state air agencies from a four-state region (Iowa DNR, Missouri DNR, Kansas Department of Health and Environment, and Oklahoma DEQ), 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, consultation regarding the scope and extent of smoke advisories, collaboration with the National Weather Service (NWS) to implement a state air quality alert product, and planning for future burn seasons.

Tasks performed by NDEE staff during the 2023 burn season:

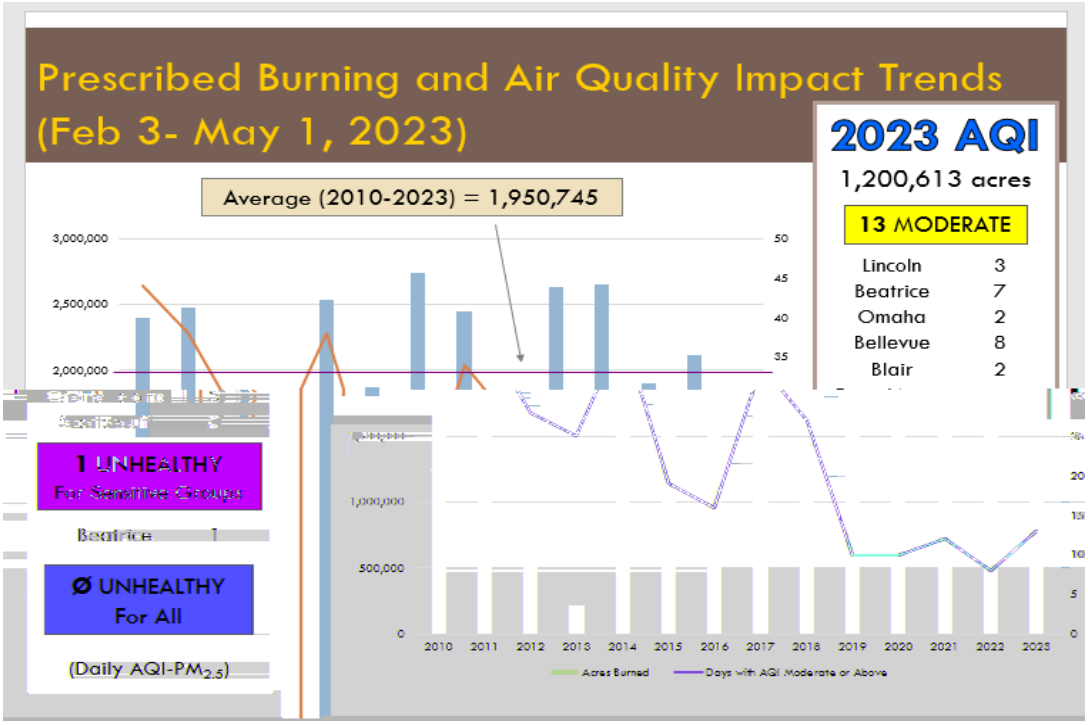
- Monitoring air quality ($PM_{2.5}$ and ozone levels)
- Generating maps showing fire locations and smoke plumes
- Reviewing weather and smoke forecasts, prescribed fire and smoke updates from Kansas and smoke prediction models
- Updating the NDEE Smoke Awareness webpage with current information on smoke 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) and Air Quality Alerts with NWS
- Implementing 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. Advisories and alerts were issued for April 7-10, May 18, June 15, July 14, July 17, and August 17, 2023. The advisory issued for June 15 and an additional alert issued for June 8 addressed elevated ozone levels associated with smoke impacts.

EPA uses the Air Quality Index (AQI) for reporting 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 level of air pollution and greater the health concern. AQI values from 0 to 50 (*Good* AQI) and those 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 2023 prescribed burn season, Nebraska experienced a total of 13 days with an Air Quality Index (AQI) for fine particulates ($PM_{2.5}$) in the *Moderate* range (17% of days) and one day (1%) in the *Unhealthy for Sensitive Groups* range, as noted in the chart below. There were 12 days (15%) with *Moderate* AQI for ozone, six of which were concurrent with *Moderate* AQI days for $PM_{2.5}$. Prescribed burn seasons in previous years (2010-2022) have averaged about one day per year in the *Unhealthy for Sensitive Groups* category and less than one day for the *Unhealthy* category.



In the 2023 wildfire season, 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. These occurrences were up significantly from 2022 (*Moderate* AQI on six days, and no days at AQI levels above *Moderate*).

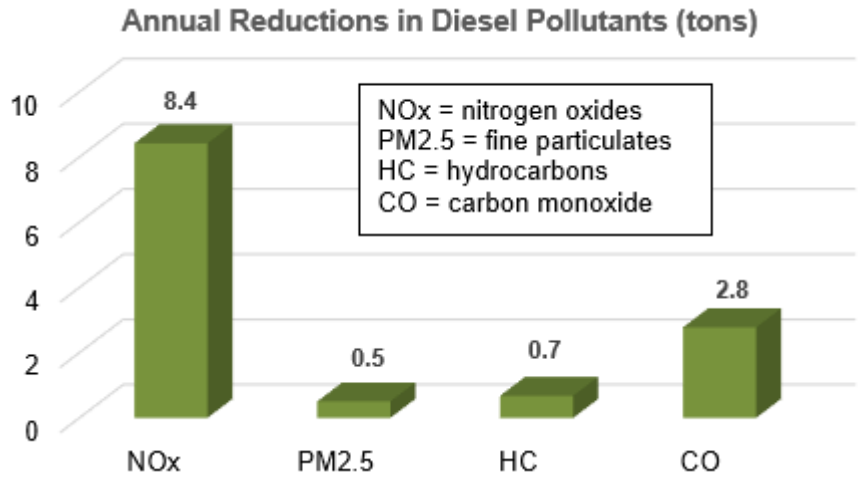
Department activities conducted with other agencies in 2023 resulted in timely health advisories/alerts and notification to the public of potential air quality impacts from prescribed burning and wildfires. Predictions of potential impacts, while cautious, were mostly accurate. The flow of information between stakeholders and agencies continues to improve, and a standardized process for dissemination of advisories and alerts is in place.

It should be noted that while both prescribed burning and wildfires affect local air quality, 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 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 2022, NDEE has awarded or expects to award $325,042 in rebates to 17 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.



2022-2023 Irrigation Engine Replacement Rebates: $325,042

Name	County	Replacement	Rebate Amount
Bartels Corporation	Franklin	Electric Motor	$20,000
Brandes, Evan	Merrick	Electric Motor	$20,000
Cockerill's Pork Chop Valley Inc.	Keith	Electric Motor	$14,881
Creutzberg, Mark	Merrick	Electric Motor	$16,147
French Farms Inc.	Holt	Electric Motor	$19,426
Greenamyre, Rodney	Antelope	Electric Motor	$16,107
H and P Land Co	Hall	Electric Motor	$20,000
Janak Farms	Butler	Electric Motor	$20,000
Kallhoff, Dorothy J Trust	Lincoln	Electric Motor	$20,000
Klabenes Trucking Inc	Rock	Electric Motor	$19,803
Nielsen, Tim	Knox	Electric Motor	$16,917
O'Brien, Dale	Hayes	Electric Motor	$20,000
Panowicz, John	Hall	Electric Motor	$14,364
Sabata, Greg	Butler	Electric Motor	$20,000
Smith, Joann D.	Perkins	Electric Motor	$20,000
Thies Farms North LLC	Holt	Electric Motor	$16,762
Yindrick Farms, LLC	Butler	Electric Motor	$20,000

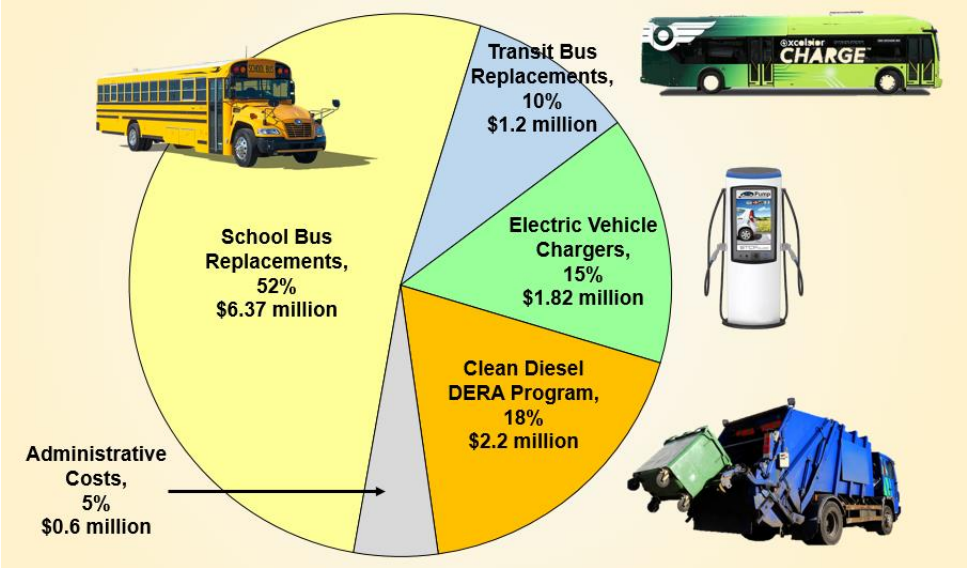
New electric motor and related equipment replacing a diesel engine at an irrigation well in Lincoln County, partially funded by the 2022 Nebraska Clean Diesel Rebate Program. Photo courtesy of the owner.

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 approximately $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 summarizes how Nebraska intends 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 expected to be allocated to each type.



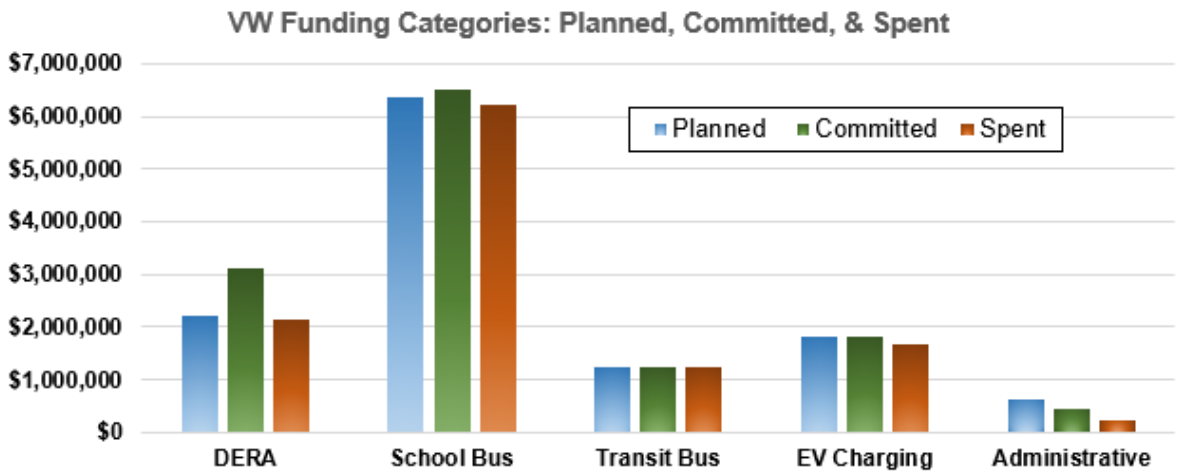
Planned Allocations of VW State Trust Funds by Mitigation Action		
Action	**Percent**	**Dollars**
Transit Bus Alternative Fuel Replacements (completed)	10%	$1,224,835
School Bus Diesel & Propane Replacements (completed)	52%	$6,369,141
Electric Vehicle Charging Infrastructure (completed)	15%	$1,818,224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

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

Nebraska's Beneficiary Mitigation Plan is intended to provide the public with insight into the Department's intentions for the use of the mitigation funds and information about the specific uses for which funding is expected to be requested. 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. As of June 2022, the Department has expended 84% of the VW funds, meeting that threshold, and has set a goal of expending Nebraska's share of the funds by the end of 2024.

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 2023, NDEE has requested Trust funds for ten projects and expended $11,509,163 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 2.1% of Trust funds spent have been for administrative costs.

Electric Vehicle Charging Rebates

The Nebraska Electric Vehicle Charging Rebate Program begun in 2019 provided financial incentives to municipalities and businesses to encourage installation of electric vehicle charging stations to serve light-duty electric vehicles in Nebraska. The program awarded rebates for 28 projects for the installation and maintenance of Level 2 and Direct Current (DC) Fast Charging equipment at public and workplace locations.

During the past year charging equipment has been installed at 5 new locations in Nebraska, including the first fast chargers in Hebron, Hastings, and Potter. The Department reimbursed $380,830 (up to 80% of the cost) for these projects, which resulted in 6 new fast charging ports

and 10 new Level 2 charging ports. The 5 projects listed below complete the Electric Vehicle Charging Rebate Program, which awarded $1,761,163 in rebates for 25 project locations overall. As a result of these projects, Nebraska's charger inventory grew by 22 fast chargers, 9 single-port Level 2 chargers, and 26 dual-port Level 2 chargers.

Electric Vehicle Charging Projects Completed 2022-2023

			# Charging Ports	
Recipient	**City**	**Rebate**	**DC**	**L2**
81 Express	Hebron	$91,048	2	2
B & R Stores – Russ's Market	Hastings	$68,048	1	2
B & R Stores - Super Saver	Columbus	$77,314	1	2
B & R Stores - Super Saver	Grand Island	$68,653	1	2
High West Energy	Potter	$75,381	1	2
TOTAL		$380,830	6	10

Level 2 (left) and DC fast charger installed at the High West Energy Service Center in Potter (2 miles from Interstate 80 in western Nebraska) and partially funded through the Nebraska Electric Vehicle Charging Rebate Program. Photo courtesy of High West Energy.

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 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 the 2023 FY included:

- Hosting and providing support to the Small Business Compliance Advisory Panel's annual meeting
- Delivering webinars on the voluntary cleanup program, municipal solid waste landfill air quality regulations, and litter and water grants applications
- Programs providing nearly 80 outreach/training events/presentations to the public and regulated community. The events provided information, trainings and updates on agency programs.
- Conducting 10 Permit Assistance Visits to municipal and industry permitees and coordinating 11 additional permit assistance meetings
- Conducting three multi program-based Compliance Assistance Visits
- Programs processing approximately 1,500 compliance assistance and permit assistance phone calls from businesses and communities with compliance questions
- Conducting 19 One-Stop meetings where a firm can talk with NDEE experts from multiple fields regarding permitting questions
- Holding three Scoping Meetings with firms to begin to determine what permits might be applicable prior to application.
- Maintaining regular engagement with the Nebraska Industrial Council on the Environment (NICE)
- Developing two new guidance documents and revising nearly 75 others to assist the public and regulated community with information or direction regarding the general application of state statutes or regulations.
- Maintaining 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.
- Maintaining agency's video events page on the NDEE website with webinar recordings, presentation slide decks, and compilations of answers to webinar participant questions
- Engaging in social media outreach via Twitter, Facebook, and LinkedIn and monitoring of metrics in conjunction with the Public Information Office

The Department continues to work on improvements to its outreach and assistance processes; develop standard operating procedures to support remote and in-person outreach events and to maintain the goal to provide necessary support for stakeholders in an effort to make 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 10, 2022, a hearing was held to decide the 2023 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 2023 were based on the actual applications received:

Category	2023 Eligible Requests	
Recycling	34%	$825,104
Public Education	63%	$1,526,992
Cleanup	3%	$81,458
Totals	100%	$2,433,554

The Department asked for the ability to adjust the percentages by up to 20% for the 2023 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, 2022 - June 30, 2023	
Fund Balance June 30, 2023	**$2,322,044**
Revenues:	
New Tire Fees	$2,559,440
Business Fee	$486,551
Solid Waste Disposal Fee	$1,605,591
Interest, Grant Returns	$49,255
Miscellaneous	$273
Operating Transfers Out	($120,000)
Net Collections for Year	**$4,581,110**
Expenditures:	
Administration	$375,068
Grant Funds Expended*	$4,352,849
Total Expenditures FY 2023	**$4,727,917**
Fund Balance June 30, 2023	**$2,175,237**

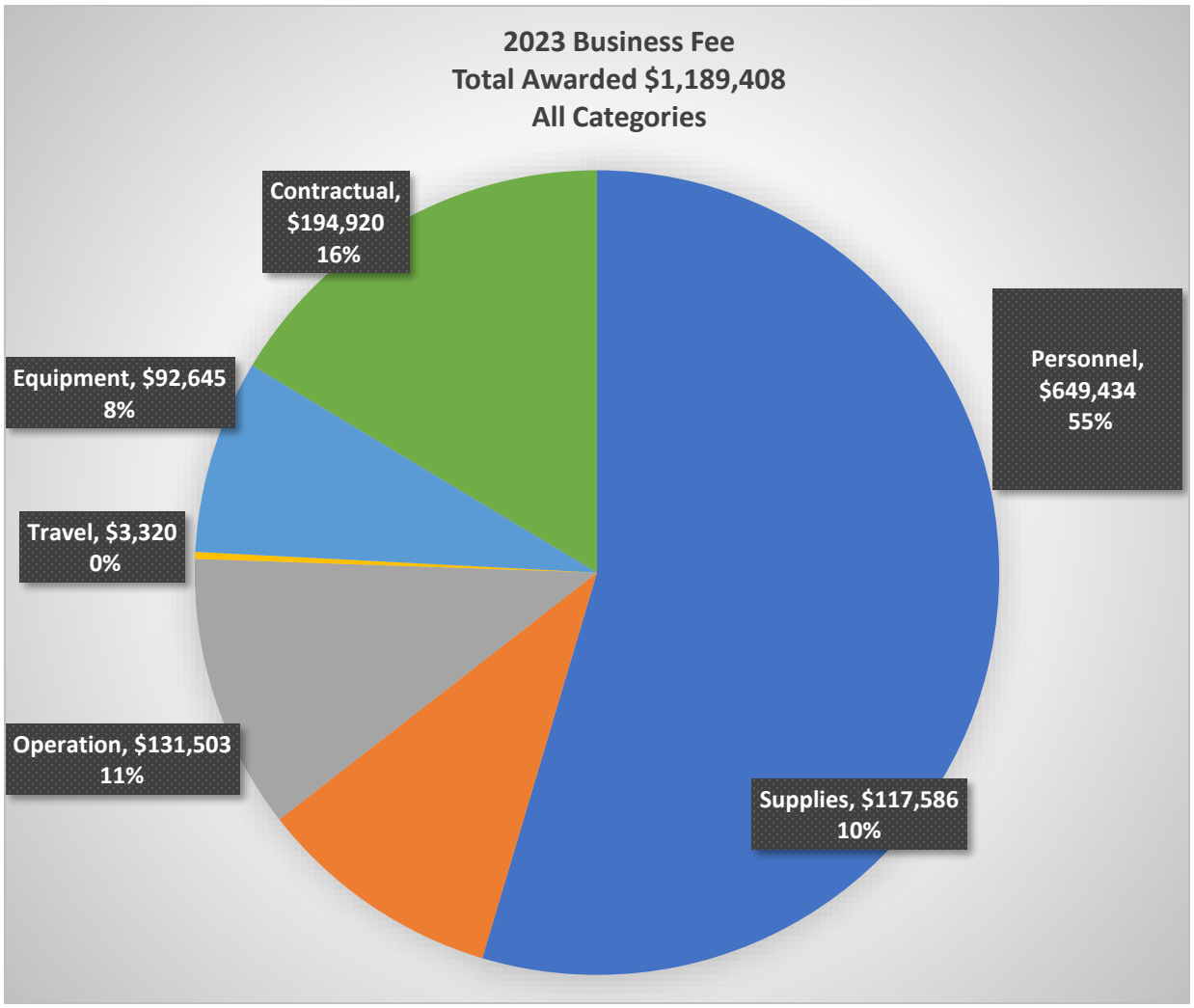
** Because grants funds are expended on a reimbursement basis, total grant funds expended in a fiscal year will differ from the amount of grants awarded in that fiscal year.*

For calendar year 2023, the department awarded $5,297,516 for Waste Reduction and Recycling Incentive Grants to 98 projects. There were 16 grants awarded from the Business Fee category ($1,189,408.00), 10 awarded from the Disposal Fee category ($1,608,610), and 72 awarded from the funds prioritized for scrap tire projects ($2,499,498.10).

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.

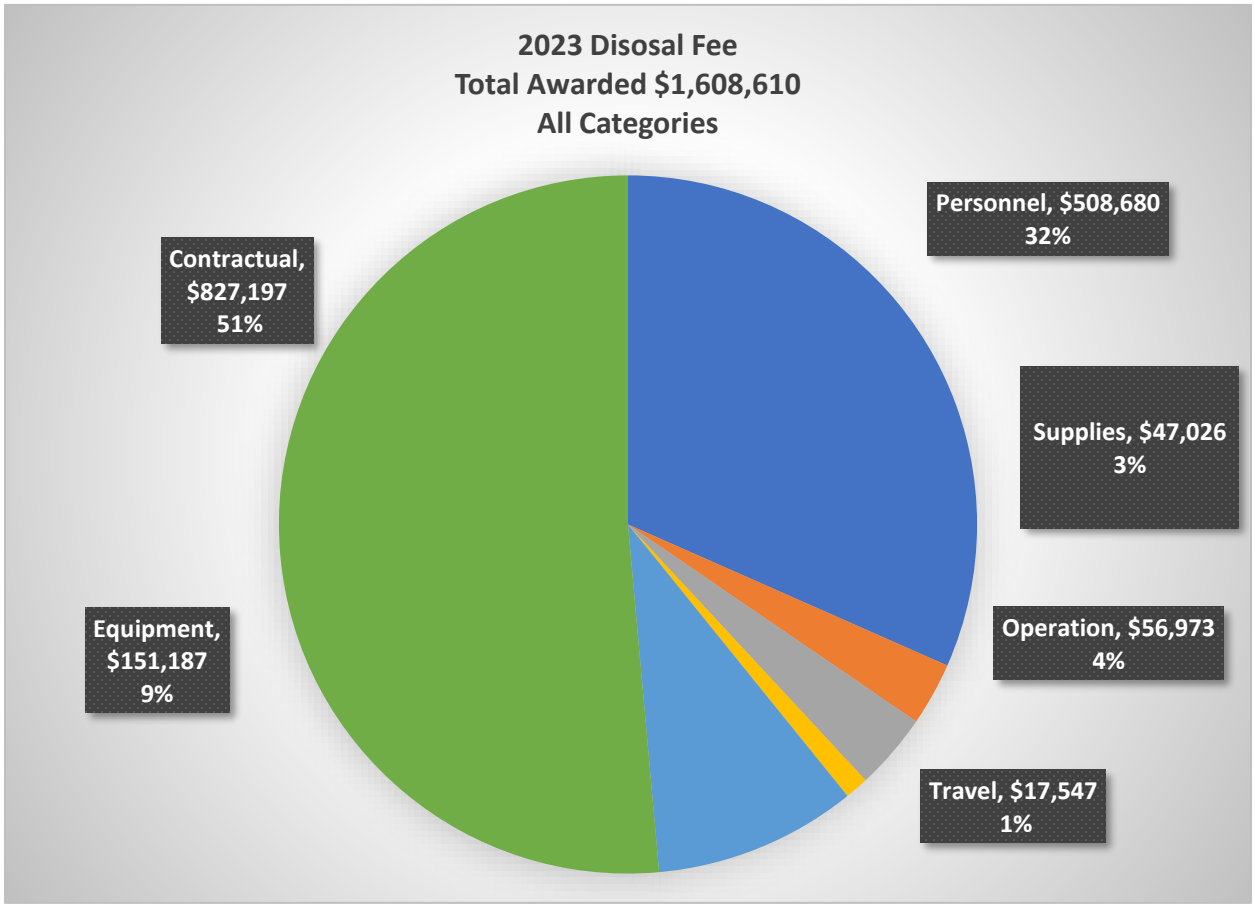
Waste Reduction & Recycling Grants for FY 2023

Business Fee



Business Fee: $1,189,408 for 16 grants			
Alliance	Keep Alliance Beautiful	$99,663.00	Funds for operation of the recycling center and education materials
Chadron	Keep Chadron Beautiful	$63,213.00	Funds to continue the cardboard and office paper recycling for the City of Chadron
Columbus	Keep Columbus Beautiful	$26,197.00	Funds for holding an HHW Event for the residents of City of Columbus and surrounding areas
Columbus	Keep Columbus Beautiful	$11,667.00	Hold one-day electronics recycling event open to Platte County residents; expect 35,000 lbs
Fremont	Keep Fremont Beautiful	$26,221.00	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	$148,166.00	Funds to continue the HHW facility and provide services to dispose waste
Kimball	Keep Kimball Beautiful	$17,094.00	Funds for pick-up services for the “Residential Alley Recycling Program,” around Kimball and rural areas
Lexington	Lexington Area Solid Waste Agency	$29,048.00	Conduct HHW collections in the Fall of 2023
Lincoln	Board of Regents, University of Nebraska, University of Nebraska-	$90,122.00	Purchasing 165 waste/recycling stations to standardize the campus recycling effort with graphics from Recycle Across America
Lincoln	Keep Nebraska Beautiful	$100,913.00	Funds to operate a food waste, material exchange, used oil collection, and a school chemical cleanout program statewide
Lincoln	Lincoln Public Schools	$78,158.00	Salary for Assistant Sustainability Coordinator to manage various district recycling and organic composting programs, plus new recycling stations and other supply costs
Oakland	Nebraska Loess Hills RC&D Council	$19,117.00	Funds to hold three HHW events in Thurston, Dodge, and Washington Counties in the late summer or fall of 2023
Ogallala	Western Resources Group	$344,157.00	Funds for the regional processing and shipping facility for recycled materials and replacing the main roll-off collection truck and office computer
Papillion	Papio Valley Nursery, INC	$66,790.00	Funds to purchase a front-end loader to increase the amount of wood waste to produce dyed mulch for the market
Plattsmouth	Keep Cass County Beautiful	$1,330.00	3 events at different locations
Scottsbluff	Keep Scottsbluff Gering Beautiful	$67,552.00	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: $1,608,610 for 10 grants			
Gretna	City Of Gretna	$81,433.00	Purchase of 2 skid loaders, UTV, Toolcat, and dump trailer to use for street repair and recycling and tree removal and recycling and planting
Kearney	City of Kearney/Kearney Area Recycling Center	$47,926.00	Purchase second skid steer loader for recycling center
Lincoln	University of Nebraska-Lincoln	$57,163.00	On-site waste reduction assistance to three Nebraska manufacturing businesses (to be recruited). Identify process improvements that reduce waste and address regulatory compliance concerns
Lincoln	Lincoln-Lancaster County Health Department	$388,797.00	Manage HHW Collection Facility in Lincoln
Lincoln	City of Lincoln - Solid Waste Management	$353,356.00	Year three of asphalt/pavement repairs for Bluff Road Compost pad
McCook	Red Willow County	$267,209.00	Manage Red Willow HW facility in McCook and transport HW for several other entities
Omaha	City of Omaha Under the Sink	$374,130.00	Operate Household Hazardous Waste Facility
Sidney	City of Sidney	$22,840.00	Salary for materials handler at recycling facility (created and NDEE-funded during previous grant year)
Wayne	City of Wayne	$8,966.00	Promote and hold annual community electronics recycling event
Wayne	City of Wayne	$6,790.00	Household battery recycling program

Tire Fee

The scrap tire grants are funded by the $1 per tire fee on retail sales of new tires. In 2023, $2,499,498.10 was awarded to 72 projects.

- Scrap tire cleanup events: 30 grants, $1,182,699 awarded
- Completed projects for the partial reimbursement of the purchase of tire-derived products and/or crumb rubber: 24 grants, $796,828.75 awarded
- Proposed projects for the partial reimbursement for the purchase of tire-derived products and/or crumb rubber: 18 grants, $519,970.35

Scrap Tire Cleanup Events

Funding is provided to political subdivisions for tire collection site cleanups. Thirty scrap tire cleanup grants were awarded in 2023 to political subdivisions. The grants totaled $1,184,155 and proposed to clean up 6,775 tons of scrap tires.

Scrap Tire Cleanup Events: 30 grants, $1,182,699 awarded			
Alliance	City of Alliance	$203,928.00	Cleanup of 800 tons
Alma	Lower Republican NRD	$15,982.00	Cleanup of 100 tons
Alma	Lower Republican NRD	$22,982.00	Cleanup of 150 tons
Alma	Lower Republican NRD	$31,107.00	Cleanup of 175 tons
Atkinson	City of Atkinson	$35,712.00	Cleanup of 200 tons
Beaver City	Furnas County	$30,752.00	Cleanup of 150 tons
Center	Knox County	$24,738.00	Cleanup of 150 tons
Central City	Merrick County	$20,610.00	Cleanup of 150 tons
Columbus	City of Columbus	$33,852.00	Cleanup of 250 tons
Cuming	Cuming County	$82,514.00	Cleanup of 650 tons
Davenport	Little Blue NRD	$37,982.00	Cleanup of 250 tons
Davenport	Little Blue NRD	$37,982.00	Cleanup of 250 tons

Davenport	Little Blue NRD	$41,732.00	Cleanup of 275 tons
Fremont	City of Fremont	$46,110.00	Cleanup of 300 tons
Grand Island	Hall County	$41,000.00	Cleanup of 250 tons
Hubbard	Dakota County Road Department	$16,277.00	Cleanup of 100 tons
Humbolt	City of Humbolt	$4,643.00	Cleanup of 25 tons
Imperial	Chase County	$29,352.00	Cleanup of 150 tons
Kimball	City of Kimball	$56,348.00	Cleanup of 250 tons
Mullen	Village of Mullen	$7,158.00	Cleanup of 30 tons
Nelson	Nuckols County Road Department	$20,270.00	Cleanup of 120 tons
North Platte	City of North Platte	$50,278.00	Cleanup of 250 tons
Pawnee City	Pawnee County	$18,152.00	Cleanup of 100 tons
Schuyler	City of Schuyler	$35,852.00	Cleanup of 300 tons
Springview	Keya Paha County	$64,638.00	Cleanup of 300 tons
Stuart	Village of Stuart	$58,638.00	Cleanup of 300 tons
Tecumseh	Johnson County	$15,970.00	Cleanup of 100 tons
Tryon	McPherson County	$31,216.00	Cleanup of 150 tons
Wayne	Wayne County Roads	$41,264.00	Cleanup of 300 tons
Wilber	Saline County	$25,660.00	Cleanup of 200 tons

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

In 2023, $1,316,799.10 was awarded to 42 projects to partially reimburse the purchase of tire-derived products and/or crumb rubber.

Pictures provided by the Gretna Public School, which was awarded for partial reimbursement of artificial turf made with 421,800 lbs. of crumb rubber for their baseball field.

The Dodge County Agricultural Society received a 50% reimbursement for the purchase of 22,000 lbs. of rubber playground mulch.

Partial Reimbursement for the Purchase of Tire-Derived Products and/or Crumb Rubber- Completed Projects: 24 projects, $796,828.75 awarded			
Atkinson	City of Atkinson	$ 459.00	25% Reimbursement for Playground Borders
Atkinson	City of Atkinson	$ 4,076.00	50% Reimbursement for Rubber Mulch
Atkinson	West Holt Public Schools	$ 49,349.00	25% Spray On Surface
David City	City of David City	$ 9,750.00	50% Reimbursement for Rubber Mulch
Elwood	William Denker	$ 5,112.00	50% Reimbursement for Rubber Mulch
Falls City	Falls City Public Schools	$ 103,125.00	25% Reimbursement for Turf
Gretna	Gretna Public Schools	$ 174,638.00	25% Reimbursement for Turf Projects
Kenesaw	Kenesaw Public Schools	$ 617.00	25% Reimbursement for Timbers
Kenesaw	Kenesaw Public Schools	$ 4,308.00	50% Reimbursement for Rubber Mulch
Lincoln	UNL Athletics	$ 4,621.00	25% Reimbursement for Poured in Place
Lincoln	St. Patrick Catholic Church	$ 5,412.00	25% Reimbursement for Turf
Lincoln	UNL Athletics	$ 109,669.25	25% Reimbursement for Turf
Lincoln	Lincoln Christian School	$ 11,475.00	25% Reimbursement for Turf
Lincoln	Lincoln Christian School	$ 1,060.00	50% Reimbursement for Rubber Mulch
Litchfield	Litchfield Public Schools	$ 15,422.00	50% Reimbursement for Rubber Mulch
Macy	Umonhom Nation Public Schools	$ 128,942.00	25% Reimbursement for Tiles, Turf, Track
Murray	Village of Murray	$ 980.00	50% Reimbursement for Rubber Mulch
O'Neill	Little Disciples Christian Childcare	$ 1,518.00	25% Reimbursement for Poured in Place
Schuyler	Schuyler Community Schools	$ 2,812.50	25% Reimbursement for Poured in Place
Tecumseh	St. John Lutheran Church & Preschool	$ 4,725.00	50% Reimbursement for Rubber Mulch
Uehling	Dodge County Agricultural Society	$ 3,852.00	50% Reimbursement for Rubber Mulch
Waverly	Waverly School District 45-Waverly	$ 148,500.00	25% Reimbursement for Turf and Track
York	Upper Big Blue NRD	$ 2,152.00	50% Reimbursement for Rubber Mulch
Sterling	Village of Sterling	$ 4,254.00	50% Reimbursement for Rubber Mulch

Partial Reimbursement for the Purchase of Tire-Derived Products and/or Crumb Rubber- Proposed Projects: 18 projects, $519,970.35 awarded			
Axtell	Cari Callan	$ 750.00	50% Reimbursement for Rubber Mulch
Blair	Blair Family YMCA	$ 69,488.00	25% Reimbursement for Turf
Bridgeport	Carla McGrath	$ 55.00	25% Reimbursement for Rubber Mats and 50% for Rubber Mulch
Bridgeport	Carla McGrath	$ 999.00	50% Reimbursement for Rubber Mulch
Columbus	Columbus Community Hospital Foundation	$ 106,422.00	25% Reimbursement for Turf
Davenport	Little Blue NRD	$ 11,957.00	50% Reimbursement for Rubber Mulch
Exeter	Village of Exeter	$ 13,570.00	50% Reimbursement for Rubber Mulch
Grand Island	Northwest Public Schools	$ 110,875.00	25% Reimbursement for Turf
Gretna	Gretna Elite Academy	$ 173,420.00	25% Reimbursement for Turf
Holdrege	Holdrege Public Schools	$ 6,091.00	50% Reimbursement for Rubber Mulch
Johnson	Johnson-Brock Public School	$ 2,313.00	50% Reimbursement for Rubber Mulch
Lincoln	Hug-A Bunch Child Care Center	$ 2,938.00	25% Reimbursement for Rubber Tiles
Lincoln	Westminster Preschool	$ 1,289.00	50% Reimbursement for Rubber Mulch
Madison	Madison Public School	$ 3,440.00	50% Reimbursement for Rubber Mulch
Norfolk	Kurours Kiddo's Public Schools	$ 250.00	50% Reimbursement for Rubber Mulch
O'Neill	Nikke Spangler	$ 325.00	25% Reimbursement for Rubber Tiles
Pawnee City	Pawnee Public Schools	$ 11,788.35	25% Reimbursement for Poured in Place
Springview	Keya Paha Public Schools	$ 4,000.00	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.

(Photo provided by the City of Oshkosh) A grant was awarded in 2020 to the City of Oshkosh for the deconstruction of the abandoned Midwec Building at 602 Main St.

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 FY2023, the program provided 25 grants, totaling $26,012.48. Funds were provided to:

Illegal Dumpsite Cleanup Awards		
Adams County - 3	City of Omaha – 5	Hamilton County - 1
Lincoln/Lancaster County - 13	Seward County - 3	

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 FY2023, the program provided $112,099 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	$ 5,685	Butler County	$ 2,377	City of Cozad	$ 80
City of David City	$ 250	City of Grant	$ 109	Jefferson County	$ 20
City of Lincoln	$ 29,472	City of North Platte	$ 3,727	City of Omaha	$ 65,695
Saline County	$ 2,442	Seward County	$ 1,767	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, 2022 - June 30, 2023	
Fund Balance June 30, 2022	**$2,690,779**
Revenues:	
Litter Taxes Collected	$2,841,090
Interest, Grant Returns	$75,457
Miscellaneous Adjustment	$273
Operating Transfer Out	($20,000)
Net Collections for FY2023	**$2,896,820**
Expenditures:	
NDEE Administration	$300,958
Grant Funds Expended*	$2,233,741
Total Expenditures FY2023	**$2,534,699**
Fund Balance June 30, 2023	**$3,052,900**

**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

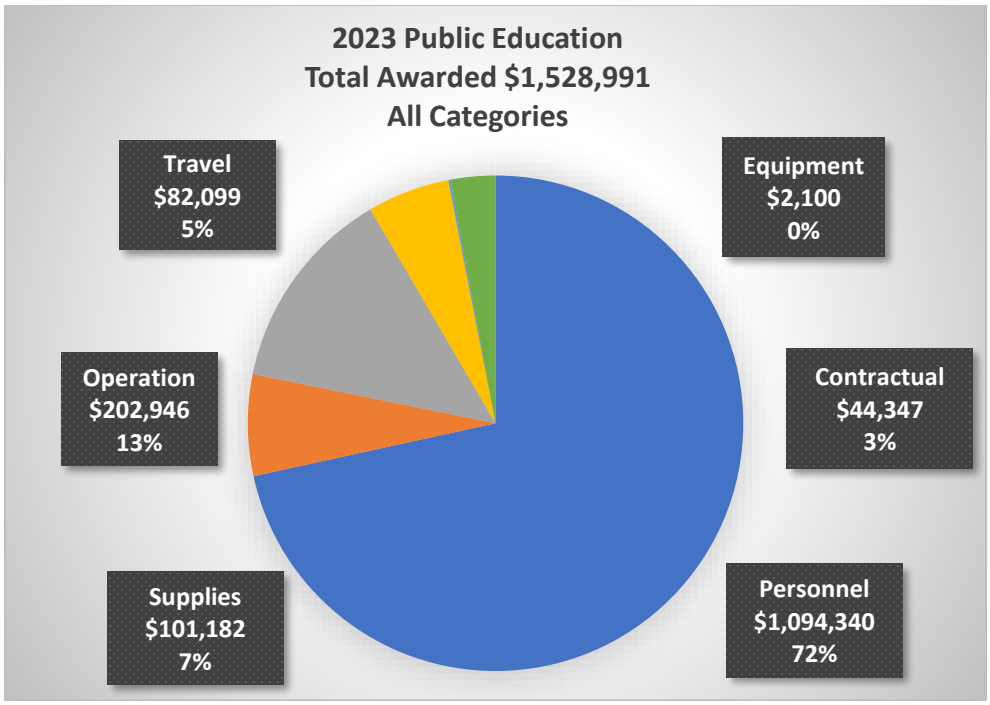
In 2023, $2,435,553 was awarded to 46 Litter Reduction and Recycling Grant recipients. Grant funding is awarded to several types of programs, including non-profit groups, public and private entities, and over 20 Keep America Beautiful affiliates. Many of these programs utilize the Litter Reduction and Recycling Grant Program funds to leverage additional dollars for a comprehensive, statewide approach to litter reduction and recycling.

The breakdown is as follows:

Public Education	(63%)	22 grants	$ 1,528,991
Cleanup	(3%)	9 grants	$ 81,458
Recycling	(34%)	15 grants	$ 825,104
Totals	**100%**	**51 grants**	**$ 2,435,553**

Public Education

In 2023, the department awarded 22 grants totaling $1,528,991 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 Lincoln-Lancaster County Health Department (KLLCB) which was awarded public education on litter reduction through classroom presentations, outreach at public festivals/events, and strategic messaging. Outreach to individuals and organizations to encourage litter cleanups.

Public Education Awards: $1,528,991 for 22 grants			
Alliance	Keep Alliance Beautiful	$54,352.00	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

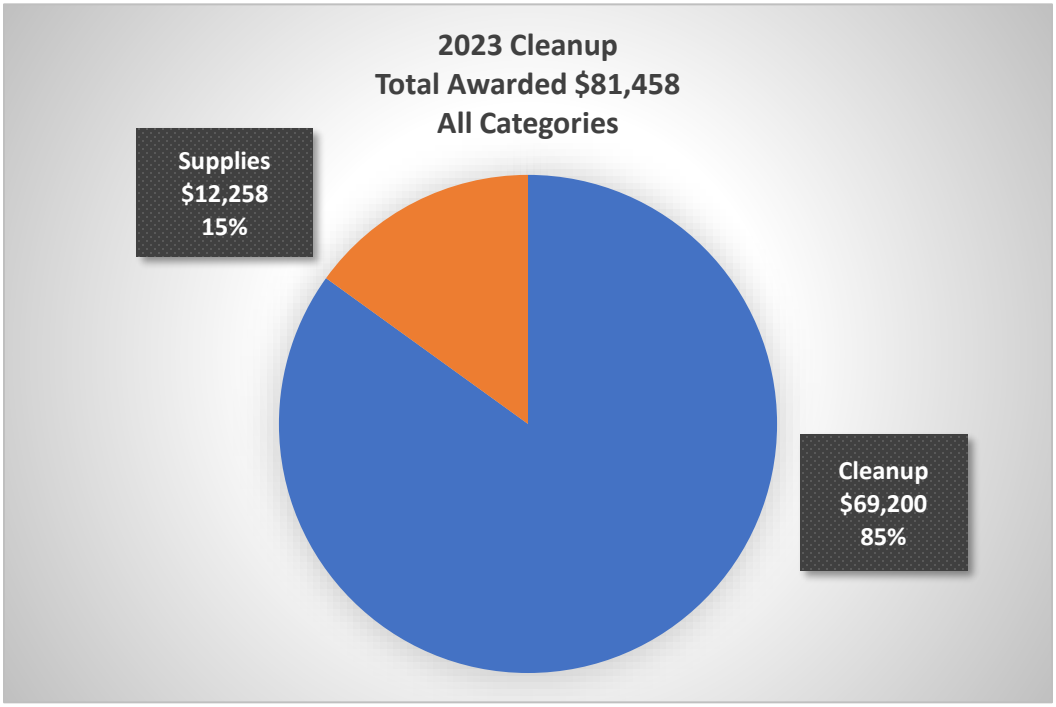
			center and at public events; advertising for community events
Beatrice	Keep Beatrice Beautiful	$39,900.00	Litterbag distribution, annual newsletter and website promoting litter reduction and recycling, Earth Day flyers, educational booths at community events, promotion of cleanup events
Burwell	Loup Basin RC&D Council/Keep Loup Basin Beautiful	$49,155.00	School and adult group presentations; booths at area fairs and events to distribute educational materials; twice-monthly KLBB radio show; plan and promote cleanup events
Chadron	Keep Chadron Beautiful	$74,220.00	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	$41,680.00	Provide educational presentations to schools and local community groups on increasing recycling and litter prevention; promote recycling drop-off program through quarterly open house events; promote and participate in litter free events
Fremont	Keep Fremont Beautiful	$93,057.00	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	$56,247.00	Variety of community outreach and educational programs. 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	$24,928.00	Educational programs on recycling in Kimball and Banner County schools and summer programs; provide printed materials with City of Kimball utility bill; publicize litter-free events via newsletters and social media
Lexington	Keep Lexington Beautiful	$50,087.00	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	Nebraska Recycling Council	$104,340.00	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	Lincoln-Lancaster County Health Department	$144,660.00	Classroom presentations, outreach at public festivals/events, and strategic messaging. Outreach to individuals and organizations to encourage litter cleanups
Lincoln	Keep Nebraska Beautiful	$116,028.00	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	$66,829.00	School and community presentations to promote recycling; advertising by mail, social media, and radio to promote litter-free event
Norfolk	Keep Norfolk Beautiful	$28,021.00	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 and Lincoln County Beautiful	$91,359.00	Community and school presentations to increase diversion rate and reduce contamination rate. Promotion of recycling drop-off sites, household hazardous waste and electronics collection site, and tire and oil recycling program
Ogallala	Keep Keith County Beautiful, Inc.	$164,064.00	School (e.g. PepsiCo Recycle Rally) programs and public/community education on source and litter reduction, recycling, food waste elimination, and sustainable waste management
Omaha	Keep Omaha Beautiful	$159,545.00	Programs on litter prevention, waste reduction, recycling, and composting: 1) school-based educational programming; 2) community outreach via events & partnerships; 3) curriculum certification workshops for educators; 4) multi-media Recycle Right education campaign
Plattsmouth	Keep Cass County Beautiful	$73,201.00	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	$16,050.00	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	$39,747.00	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 Christmas tree recycling and other recycling/clean up events
Sidney	Keep Sidney Beautiful	$35,496.00	Promote proper recycling, work with schools to establish recycling programs, host and participate in cleanup events
Wayne	City of Wayne	$6,025.00	Zero Waste marketing campaign, advertising for Earth Day public events, and lessons/presentations to elementary school students

Cleanup

In 2023, the department awarded 9 grants totaling $81,458 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 1230 road-side miles and 770 acres of public areas.

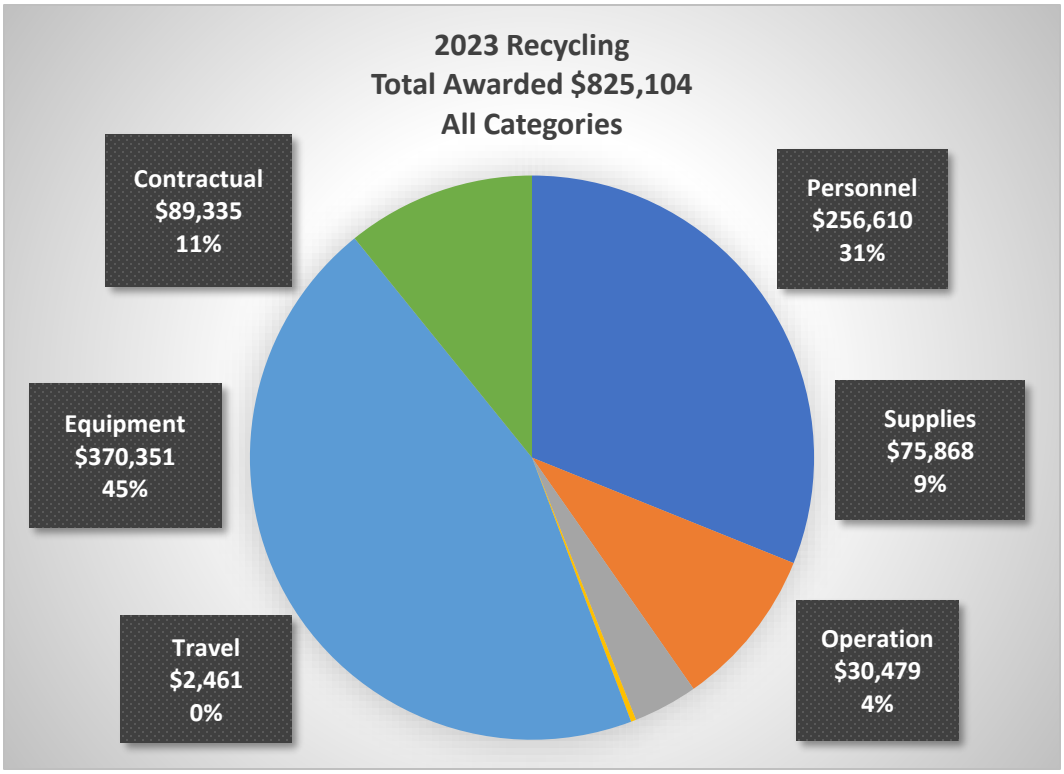


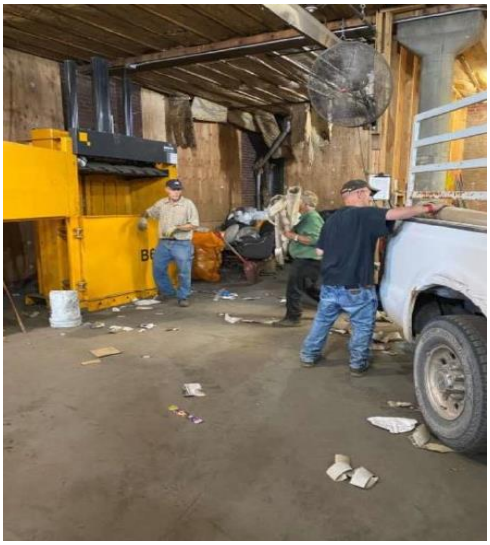
Pictures provided by Keep Omaha Beautiful (KOB), which was awarded funding to clean up public spaces around City of Omaha. As of June 30, 2023, over 2,000 KOB volunteers have cleaned up over 1,760 trash bags of litter from area parks, trails, streams, and other public spaces throughout the city.

Cleanup Awards: $81,458 for 9 grants			
Beatrice	Keep Beatrice Beautiful	$6,000.00	100 mi @ $50 = $5,000, 60 ac @ $10 = $600
Chadron	Keep Chadron Beautiful	$5,212.00	Provide cleanup mini-grants to organizations and individuals. 100 miles @ $50 = $5,000
Grand Island	Grand Island Area Clean Community System	$6,000.00	100 mi @ $50 = $5,000 + 50 acres @ $10 = $500. Supplies: gloves $500
Lincoln	Lincoln-Lancaster County Health Department	$30,000.00	Provide Community Improvement Grants to clean up litter in public places
North Platte	Keep North Platte and Lincoln County Beautiful	$16,819.00	320 mi @ $50 = $16,000
Omaha	Keep Omaha Beautiful	$6,380.00	Provide supplies for volunteer cleanups
Plattsmouth	Keep Cass County Beautiful	$1,600.00	Provide cleanup mini-grants to schools and organizations. 20 mi @ $50 = $1,000 + 60 acres @ $10 = $600
Scottsbluff	Keep Scottsbluff Gering Beautiful	$8,885.00	100 miles on roads in Scottsbluff area
Steinauer	Steinauer Community Club	$562.00	10 miles @ $50 = $500; garbage bags $62

Recycling

In 2023, the department awarded 15 grants totaling $825,104 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: $825,104 for 15 grants			
Alliance	Keep Alliance Beautiful	**$64,658.00**	Operate the recycling center and recycling program in Box Butte County
Chadron	Keep Chadron Beautiful	**$11,690.00**	Electronics collection event – one day
Columbus	Keep Columbus Beautiful	**$26,200.00**	Collect recyclables at two drop-off locations and transport to Schuyler for sorting/processing
Grand Island	Goodwill Industries of Greater Nebraska	**$23,565.00**	Purchase and installation of a baler for mixed rag textiles at McCook retail store
Kearney	Board of Regents University of Nebraska dba UNK	**$48,110.00**	Promote recycling on camps by providing more recycling stations and advertising
Kimball	Keep Kimball Beautiful	**$74,186.00**	Management and operation of Kimball Recycling Center, including collection, processing, and transportation of recyclables
Lexington	Keep Lexington Beautiful	**$27,706.00**	Manage recyclables at five drop-off locations and hold two shredding events
Lincoln	Nebraska Recycling Council	**$57,639.00**	Update data for regional hub-and-spoke recycling efforts in rural areas; make onsite visits to provide technical assistance to community recycling programs; provide 10 scholarships for recycling operators to attend a SWANA “Managing Recycling Systems” course; research on end markets for textile waste in Nebraska
Lincoln	City of Lincoln - Solid Waste Management	**$311,617.20**	Purchase 480 deskside waste and recycling containers for city offices; purchase Recycle Across America stickers for recycling containers; purchase 34 roll-off containers for two consolidated recyclables collection sites
North Platte	Keep North Platte and Lincoln County Beautiful	**$34,876.00**	Operate local recycling program and increase collection at drop-off sites and at area events through advertising
Oakland	Nebraska Loess Hills RC&D Council	**$5,750.00**	Conduct an electronic waste collection event in North Bend summer/fall 2023; anticipate 15,000 lbs collected
Omaha	City of Omaha (Environmental Quality Control)	**$45,186.95**	Purchase of solar-powered surveillance camera trailer for deployment at city recycling drop-off sites to discourage illegal dumping and reduce litter and contamination of recycling stream
Papillion	Papio Missouri River Natural Resources District	**$20,550.00**	Contract services for sorting, loading, transport, and processing of electronics at four collection events
Schuyler	Keep Schuyler Beautiful	**$48,170.00**	Personnel and some operating expenses for Colfax County Recycling Center
Thedford	Upper Loup Natural Resources District	**$25,200.00**	Contractual costs for transporting recycling trailers and collection totes from collection locations to ULNRD recycling for processing and then to Western Resources group in Ogallala.

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)
2014	$1,052,402	$887,141	$67,164	$2,006,707	$3,083,431*
2015	$1,176,580	$821,346	$97,938	$2,095,864	$2,266,267*
2016	$892,975	$819,597	$108,483	$1,821,055	$2,079,033*
2017	$1,326,206	$1,037,895	$126,986	$2,491,087	$2,644,088
2018	$603,867	$651,968	$50,569	$1,306,404	$3,571,584
****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
			Total Amounts	**$19,460,317**	**$17,662,993**

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)
2014	$1,012,371	$1,107,888	$2,120,259	$3,083,431*
2015	$1,435,558	$822,233	$2,257,791	$3,101,500*
2016	$2,116,399	$1,338,426	$3,454,825	$3,781,465
2017	$1,789,483	$833,734	$2,623,217	$4,036,801
2018	$964,113	$935,887	$1,900,000	$4,402,481
****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	$2,798,018
		Total Amounts	**$23,378,296.00**	**$27,063,191.00**

Estimate FY2019 Grant awards were for a 6-month*

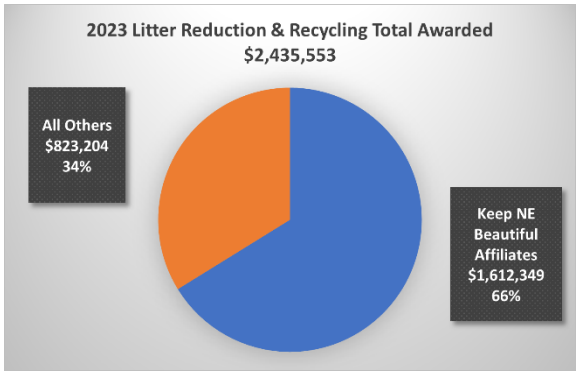
Amounts Awarded for Deconstruction, Illegal Dumpsite, and Landfill Disposal Rebates

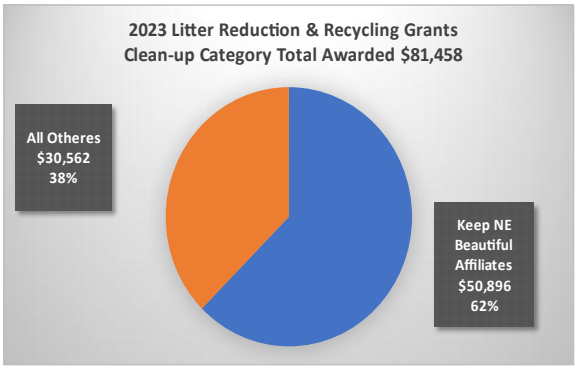
Grant Year	Awarded Deconstruction Grants	Awarded Landfill Disposal Rebate	Awarded Illegal Dumpsite
2014		$49,792	$101,810
2015		$28,058	$94,859
2016		$162,536	$80,872
2017		$75,599	$100,892
2018		$40,433	$99,341
2019		$14,935	$91,630
2020	$186,662	$23,016	$102,061
2021		$101,365	$48,579
2022		$72,591	$30753
2023		$112,099	$26,012
Total	**$478,162**	**$583,043**	**$947,380**

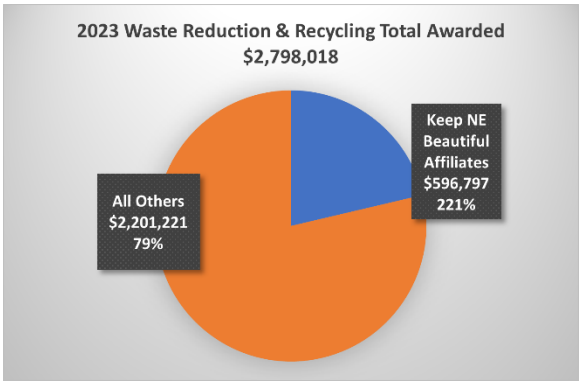
Keep America Beautiful Nebraska Affiliate Funding for 2023

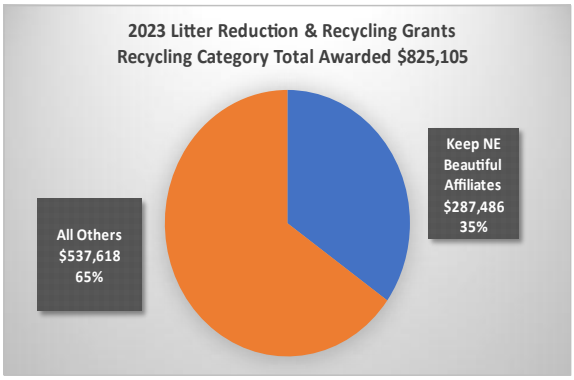
Keep America Beautiful (KAB) is a national non-profit public education organization. Keep Nebraska Beautiful is a statewide affiliate of KAB. There are 20 local KAB affiliate communities in Nebraska. Many of the KAB affiliates receive grant funding from the Litter Reduction and Recycling grant program 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.

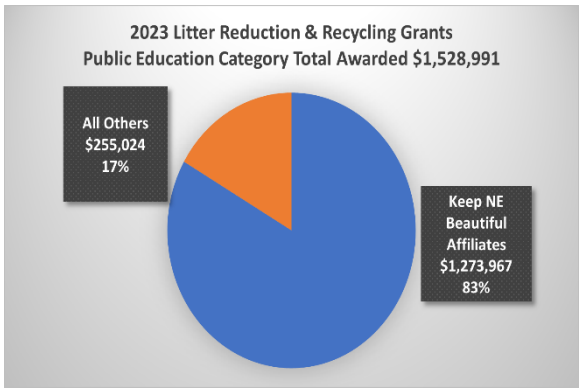

2023 Litter Reduction & Recycling Total Awarded
$2,435,553
All Others
$823,204
34%
Keep NE
Beautiful
Affiliates
$1,612,349
66%

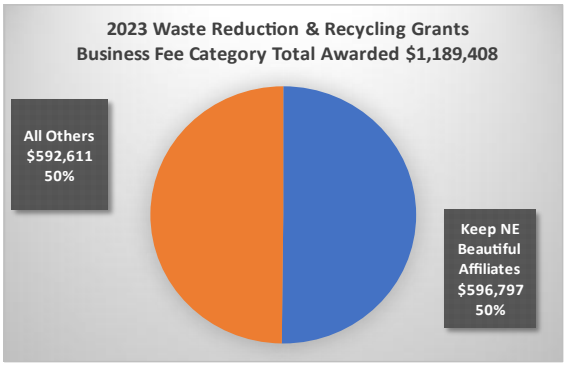

2023 Litter Reduction & Recycling Grants
Clean-up Category Total Awarded $81,458
All Otheres
$30,562
38%
Keep NE
Beautiful
Affiliates
$50,896
62%

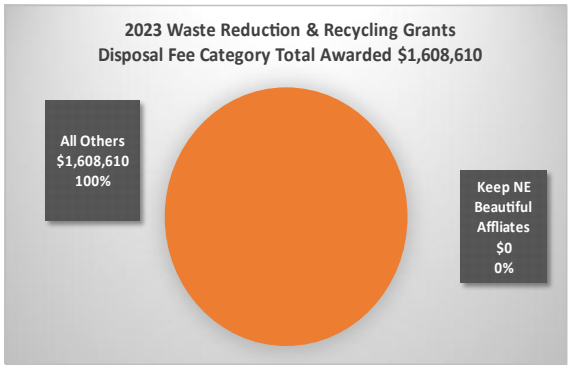

2023 Waste Reduction & Recycling Total Awarded
$2,798,018
Keep NE
Beautiful
Affiliates
$596,797
221%
All Others
$2,201,221
79%


2023 Litter Reduction & Recycling Grants
Recycling Category Total Awarded $825,105
Keep NE
Beautiful
Affiliates
$287,486
35%
All Others
$537,618
65%


2023 All Waste and Litter Grants
Total Awarded $5,233,571
Keep NE
Beautiful
Affiliates
$2,209,146
42%
All Others
$3,024,425
58%

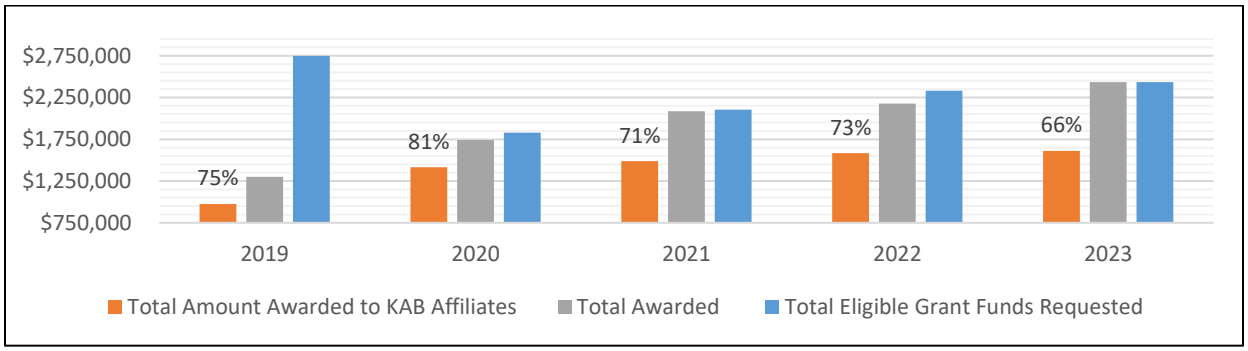

2023 Litter Reduction & Recycling Grants
Public Education Category Total Awarded $1,528,991
All Others
$255,024
17%
Keep NE
Beautiful
Affiliates
$1,273,967
83%


2023 Waste Reduction & Recycling Grants
Business Fee Category Total Awarded $1,189,408
All Others
$592,611
50%
Keep NE
Beautiful
Affiliates
$596,797
50%


2023 Waste Reduction & Recycling Grants
Disposal Fee Category Total Awarded $1,608,610
All Others
$1,608,610
100%
Keep NE
Beautiful
Affiliates
$0
0%

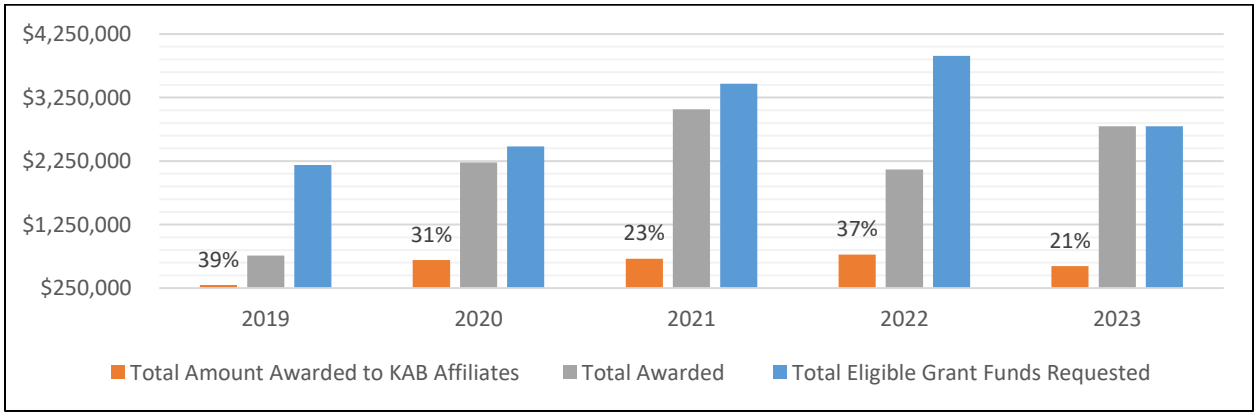
2019-2023 Awarded Litter Reduction and Recycling Grants to Keep America Beautiful (KAB) Nebraska Affiliates

Grant Year	Total Amount Awarded to KAB Affiliates	Percent Awarded to KAB Affiliates	Total Awarded	Total Eligible Grant Funds Requested
2019	$976,436	75%	$1,300,000	$2,746,775
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

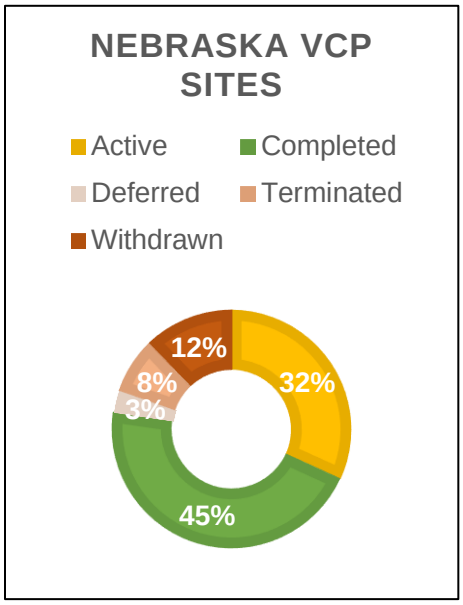


2019-2023 Awarded Waste Reduction and Recycling Incentive Grants to Keep America Beautiful (KAB) Nebraska Affiliates

Grant Year	Total Amount Awarded to KAB Affiliates	Percent Awarded to KAB Affiliates	Total Awarded	Total Eligible Grant Funds Requested
2019	$299,956	39%	$761,545	$2,188,344
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



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, 66 sites have entered the VCP. Currently, 21 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; however, there were no new properties enrolled in the VCP this fiscal year.

Investigation activities are ongoing at the Omaha Steel Castings Parish School redevelopment site in Omaha, former Goodyear Lease Location in Lincoln, Citizens Gas FMGP site in McCook, 48th & Dodge Redevelopment site in Omaha, and the former Oak Lake Landfill in Lincoln.

Cleanup activities are ongoing at the Dettmer Lease Property in Auburn, Vishay Dale Electronics site in Norfolk, International Sensor Systems, Inc. site in Aurora, J.A. Woollam Co., Inc. site in Lincoln, former Farmland Industries Urea Ammonium Nitrate (UAN) Terminal in Doniphan, Elster American Meter Company site in Nebraska City, West Haymarket Block 4 site in Lincoln, Former AAA Welding site in Omaha, and the AltEn site in Mead.

Post-remediation monitoring is ongoing at the New Holland site in Grand Island, Nebraska Solvent site in Grand Island, Archer Daniels Midland site in Lincoln, Hoover Manufacturing site in Beatrice, Appleton Electric site in Columbus, and Former Max I. Walker Cleaners – Baker Square site in Omaha. NDEE is currently reviewing Remedial Action Reports for the Lewis and Clark Landing/Heartland of America Park Redevelopment site in Omaha.

The photos on the top row show cleanup activities at the Lewis and Clark Landing Kiewit Discovery Center Foundation in Omaha. Remedial measures were taken during construction of the foundation of the Kiewit Luminarium to address and repair disturbances to the multi-layered protective capping system that was installed during cleanup of the American Smelting and Refining Company site (photos courtesy of the Remedial Action Report dated October 20, 2021). The photo on the bottom row shows the completed Kiewit Luminarium, which opened to the public on April 15, 2023, as a community space and interactive learning environment (photo modified from the Kiewit Luminarium webpage).

Voluntary Cleanup Program Sites and Status			
Site	**Location**	**Date Started**	**Progress**
Active Sites			
New Holland	Grand Island-Southwest	11/9/2000	Active
Union Pacific Railroad Nebraska Solvent	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
Vishay Dale Electronics	Norfolk	4/2/2012	Active
Appleton Electric	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 Doniphan 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

Voluntary Cleanup Program Sites and Status			
Site	**Location**	**Date Started**	**Progress**
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
Citizens Gas FMGP	McCook	11/6/2021	Active
48th & Dodge Redevelopment	Omaha	12/7/2021	Active
Flatwater Mews (Oak Lake Landfill)	Lincoln	6/28/2022	Active
Completed Sites			
KN Energy	Holdrege	4/3/1995	Completed 5/1/97
American Smelting and Refining Company (ASARCO)	Omaha-Riverfront	2/5/1996	Completed 10/11/01
Farmland Industries	Scottsbluff	2/9/1996	Completed 7/2/09
Farmland Industries	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	Lincoln-Lot 9 Havelock	4/28/1999	Completed 2/20/01
Ballpark Complex	Lincoln-Haymarket	11/9/1999	Completed 9/1/06
Progress Rail Services	Sidney-North	11/22/1999	Completed 1/3/05
Omaha Riverfront Redevelopment (3 sites)	Omaha-Riverfront	5/18/2001	Completed 6/18/03, 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	Omaha	7/17/2009	Completed 2/11/14
Former Pfizer Facility	Omaha	7/28/2009	Completed 5/18/16
CVS Pharmacy	Lincoln	10/13/2010	Completed 1/28/15
West Haymarket Redevelopment Site 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	Omaha	4/20/2012	Completed 12/29/16
West Haymarket Redevelopment Site 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
Deferred, Terminated, or Withdrawn 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

Voluntary Cleanup Program Sites and Status			
Site	**Location**	**Date Started**	**Progress**
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
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 on-site.

- 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.

During the past year, NDEE has performed 21 Phase I ESAs, five Phase II ESAs, 12 asbestos surveys, nine lead-based paint surveys, and nine mold surveys. NDEE also provided partial cleanup assistance for asbestos removal to three applicants.

The historical Maginnis building in Kimball originally served as a blacksmith shop for manufacturing galvanized steel flumes, which were used to irrigate the rough topography in the early years of Kimball County's settlement. The building also served as the Maginnis hardware store, the Maginnis Café with hotel in the upper level, and most recently as a Longhorn Steakhouse restaurant. When the restaurant closed in 2012, the building sat idle for years and began to fall into disrepair. To encourage redevelopment and help save the building, NDEE completed a Phase I ESA, Phase II ESA, asbestos-containing materials survey, and mold survey; and assisted the City of Kimball with asbestos abatement costs. In total, NDEE expended $34,034 in Section 128(a) funding to remove environmental hurdles and make the property ready for reuse. A local business owner purchased the property and raised approximately $500,000 of public and private

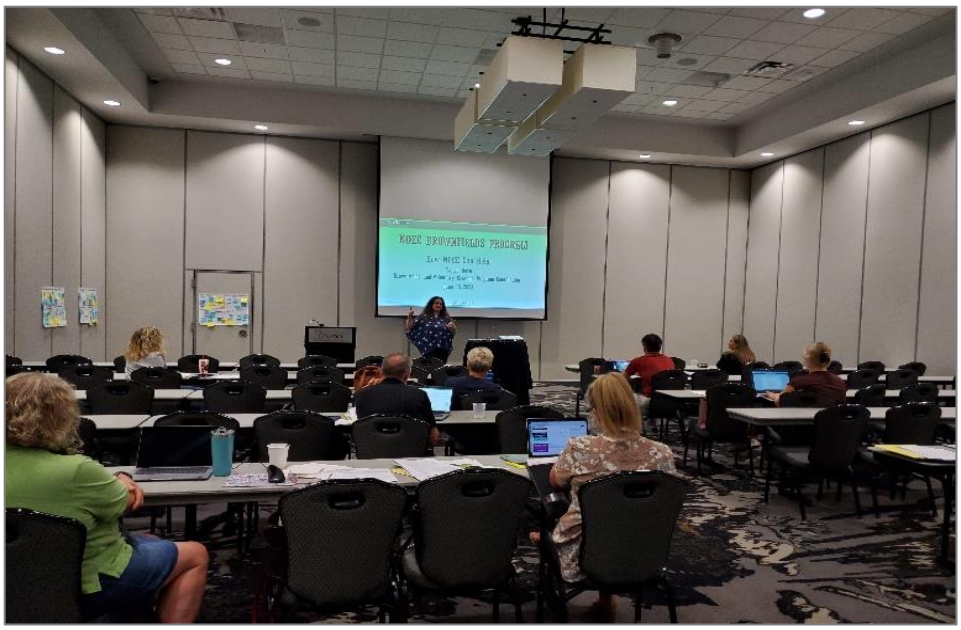
Brownfields Program Enhancement and Public Outreach

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 events held in FY2023 include:

- Kansas State University (KSU) Beatrice Public Schools Project Tour – September 16, 2022
- EPA Brownfields and Urban Agriculture Meeting with the City of Lincoln – October 20, 2022
- Beatrice Open House for KSU Urban Development Project – November 3, 2022.
- EPA Technical Assistance Dana College Open House in Blair – December 6, 2022.
- Community Revitalization Through Brownfields Redevelopment: Partners, Tools & Resources for Nebraska Communities Webinar – February 23, 2023
- Technical Assistance Meeting with the Village of Elm Creek – March 9, 2023
- Interview with WOWT – March 14, 2023
- Meeting with Beatrice Public Schools – March 29, 2023.
- Bringing Back Value to Blighted Properties in Your Community Workshop in Omaha – March 30, 2023
- Funding Workshop Open House in O'Neil – May 11, 2023
- 2023 Grant Writing Workshop in Kearney – June 14-15, 2023
- EPA Ceremonial Check Presentation to the City of Chadron, Nebraska – June 29, 2023

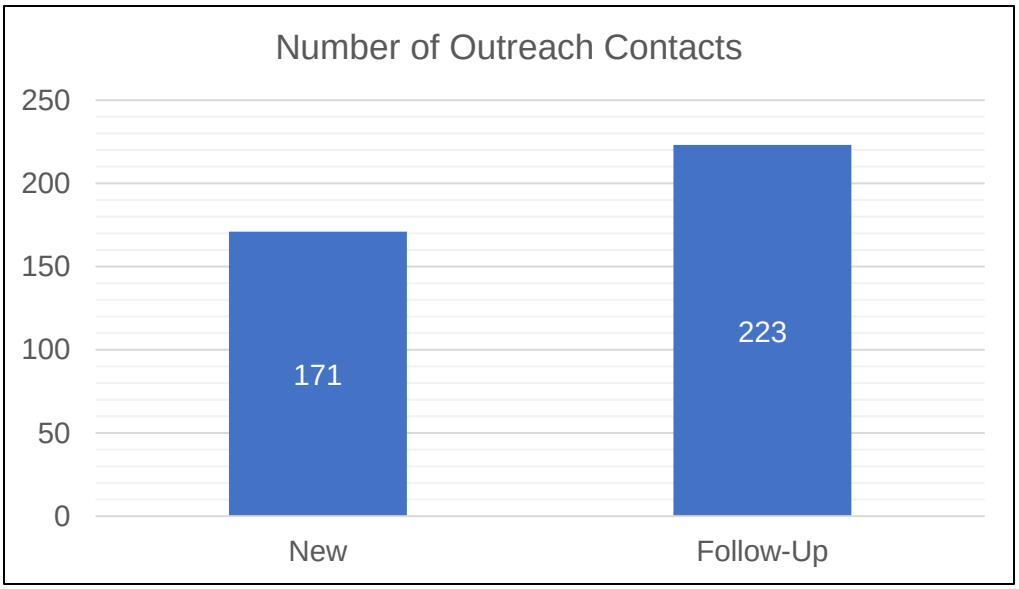
The NDEE Brownfields Program also meets one-on-one with community members as an outreach approach. NDEE, along with KSU Technical Assistance to Brownfields (TAB) and EPA, held two Partnership Resource Review virtual meetings the past year to discuss strategies to help a community develop a competitive EPA 104(k) Brownfields Assessment, Cleanup, or Revolving Loan Fund Grant Proposal, and make communities aware of the funding and technical assistance these programs have to offer. Communities that participated in a Partnership Resource Review meeting included the City of Hastings and the Metropolitan Area Planning Agency.



NDEE's Brownfields/VCP Coordinator, Taryn Horn, presented on NDEE's brownfields resources at the 2023 Grant Writing Workshop in Kearney, NE. The purpose of the two-day workshop was to deconstruct the EPA grant guidelines into manageable "bites", provide helpful hints and tips how to approach each of the required sections, step through interactive exercises, and introduce attendees to helpful resources to make their application stand out.

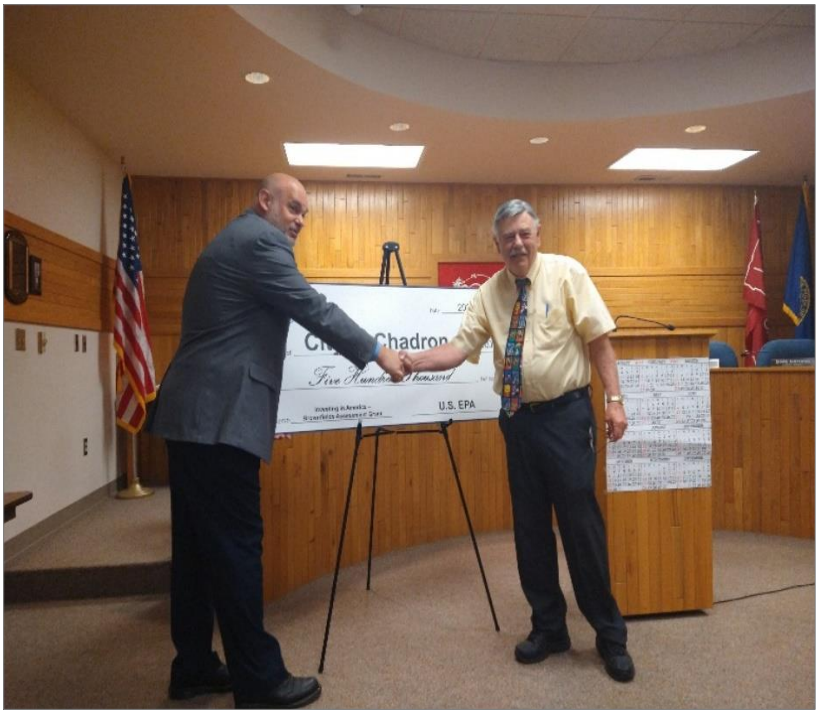
The NDEE Brownfields Program also had separate calls with the following municipalities and organizations to discuss how the Brownfields Program can help bring their projects and vision to fruition:

- City of Tekamah
- City of Omaha Planning Department
- Community Crops - Lincoln
- City of Fairbury
- Cooperative Producers - Hastings
- City of Lincoln
- City of North Platte
- York County Development Corporation
- Seward County
- Holy Name Housing – Omaha
- Kenesaw Community Development
- Cuming County Economic Development
- Village of Beaver Crossing
- Hall County Housing Authority
- Johnson County Historical Group
- Gresham Community Club
- City of Beatrice
- Village of Cedar Bluffs
- West Central Nebraska Development District
- City of Schuyler
- City of Neligh
- Southeast Nebraska Development District
- Village of Lodgepole
- Central Nebraska Economic Development District
- South Central Economic Development District
- City of Central City
- Three Rivers Housing Development
- City of Lexington
- Village of Nehawka



Overall, the NDEE Brownfields Program made 171 new contacts and followed up with 223 contacts on project progress, leveraged funding, and additional assessment work this fiscal year.

Outreach efforts by the NDEE Brownfields Program also helped the Village of Elm Creek secure a technical assistance grant from the EPA. Elm Creek has been working with L & M Homes, LLC to transform a vacant former service garage and fueling station that sits right off the Lincoln Highway. The blighted property is one of the first features that people see when driving west through Elm Creek and impacts the impression left by travelers. The property also occupies a prime piece of real estate easily accessible by the highway that is not serving as a beneficial use for the community. The technical assistance grant will help provide a feasibility study, site planning, and exploration of different use options for the property; and will map out all available resources that may assist with the redevelopment financial gaps.



On May 25, 2023, EPA announced that the City of Chadron 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 brownfields sites in their community; conduct a range of planning activities; develop site-specific cleanup plans; and conduct community engagement. NDEE has previously supported the City of Chadron by using Section 128(a) funding to complete environmental site assessments at several properties, including at least two properties that the City considers "priority sites" for

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 2022, NDEE awarded four travel stipends to Habitat for Humanity of Omaha, City of Curtis, Cozad Development Corporation, and City of Hastings to attend the National Brownfields Training Conference in Oklahoma City, OK from August 16-19, 2022. In 2023, NDEE awarded three travel stipends to the City of Neligh, City of Blair, and West Central Nebraska Development District to attend the Brownfields Grant Writing Workshop in Kearney, NE from June 14-15, 2023.

Leveraged Funding

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 this Cooperative Agreement period (July 1, 2020 through June 30, 2023), Nebraska has received $3,788,920 and has leveraged $2,224,519 in additional cleanup and redevelopment funding, 54 cleanup and redevelopment jobs, and 165 acres ready for anticipated reuse at 11 properties.

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 private citizens comply with hazardous and solid waste regulations in a non-enforcement setting. This program works with the regulated community in a partnership and promotes hazardous waste minimization and pollution prevention to help waste generators actually reduce the amount of hazardous waste being generated in the state. An additional product of these efforts is to ultimately reduce the number of regulatory requirements on our industries by helping to bring hazardous waste generators into lower RCRA threshold levels.

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

The RCRA program also conducts extensive permitting and closure activities to 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 undergoes annual performance test burns to demonstrate proper operation and compliance with applicable regulations and permit 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 FY2023 include the reissuance of the RCRA permits for both Safety-Kleen facilities (Grand Island and Omaha) and Clean Harbors Environmental Services Inc (Kimball).

EPA continues to move generators to use the e-manifest module that is part of the national RCRAInfo database. Nebraska recommends generators use the e-manifest system, which provides a more efficient way for tracking the shipment of hazardous waste in an electronic process. It provides a notification system so that those in the chain (generator, transporter, and disposal facility) can see and manage the movement of wastes, as well as for States and EPA to lessen the time spent reviewing paper manifests. The reduction in the use of paper as the system is implemented will ultimately reduce costs. This provides multiple benefits including less chance to lose copies, less solid waste, and a reduction in the need to have storage space for all that paper. This provides the public a clearer understanding of wastes generated and disposed, and the process it followed to disposal.

Nebraska's RCRA program helps generators notify and manage their generator status by having them use the myRCRAID module, also within the national RCRAInfo database. In addition, Nebraska recommends that the facility hazardous waste managers prepare their 8700-12 Hazardous Waste notification form electronically. The Department currently has over 900 facilities that have requested and received permission to file electronically. NDEE 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.

As a result of process improvement, the RCRA program emails confirmations to generators who submit 8700-12 Hazardous Waste notification through the US EPA RCRAinfo system and for contingency plan update submittals mailed in to NDEE. The electronic system helps the department save time and reduce costs.

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:

- 109 Large Quantity Generators (greater than 2,200 pounds of hazardous waste generated per month)
- 406 Small Quantity Generators (between 220 and 2,200 pounds generated per month)
- 1,478 Very Small Quantity Generators (Federal Status – less than 220 pounds per month)
- 1 Hazardous Waste Incinerator Facility
- 3 Treatment, Storage or Disposal Facilities
- 23 Hazardous Waste Transporters

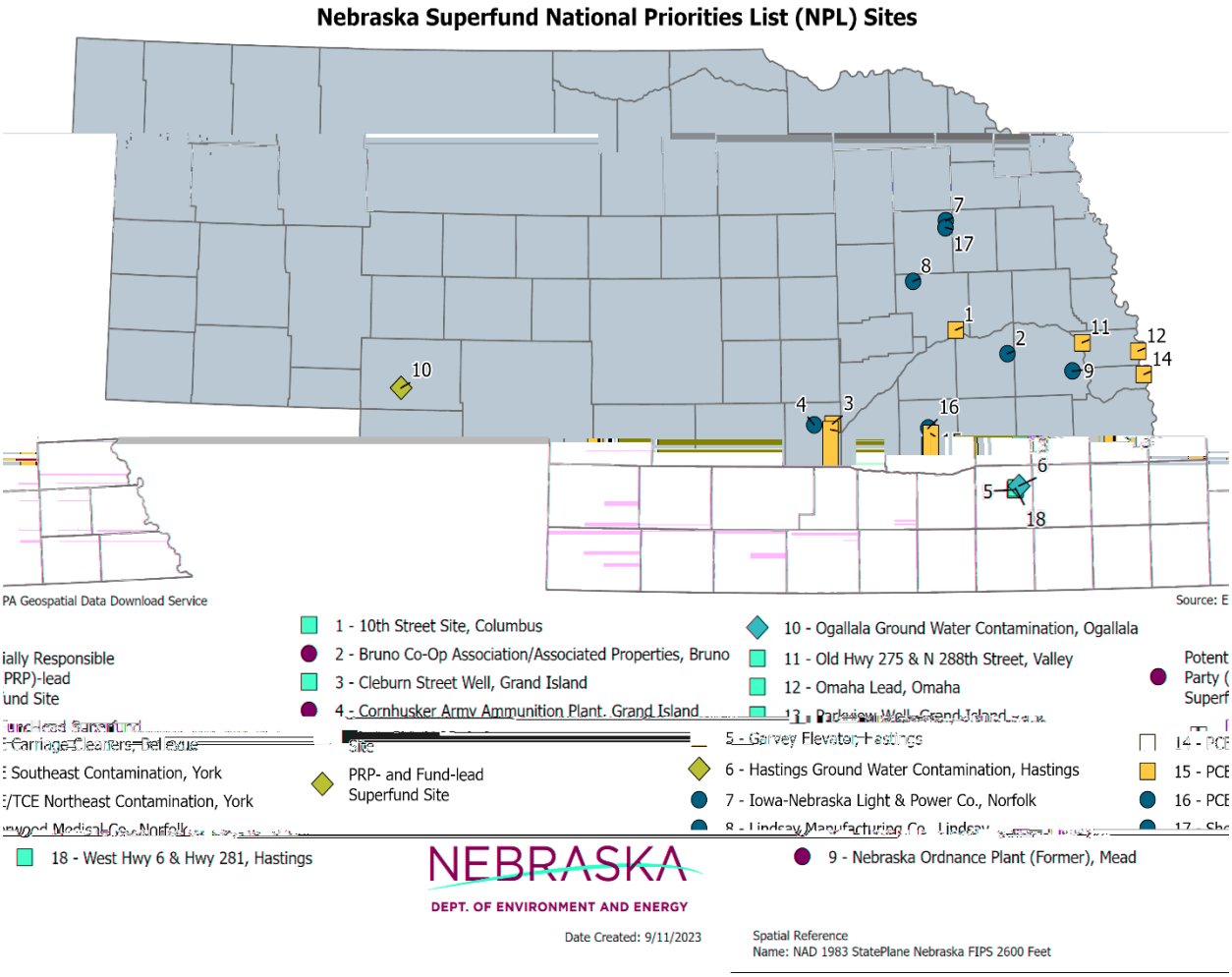
Location by County of Large Quantity Generators in Nebraska Regulated Under RCRA			
Buffalo 4	Gage 1	Madison 2	Saunders 3
Cuming 1	Hall 4	Otoe 1	Scotts Bluff 2
Chase 1	Hooker 1	Perkins 1	Seward 2
Cheyenne 2	Holt 2	Phelps 3	Stanton 1
Dakota 1	Kimball 1	Platte 4	Washington 2
Dodge 2	Knox 1	Red Willow 1	Wayne 1
Douglas 28	Lancaster 24	Sarpy 10	York 1
Franklin 1			

Summary of SFY2023 Activities		
Compliance Assistance	**State**	**EPA**
On-site Visits	2	*
Direct Assistance Contacts	601	*
Public Outreach Presentations (total 12 in attendance)	1	*
Complaints Received	7	*
Complaints Investigated	0	*
Complaints Closed	3	*
		**Data not available*
RCRA Inspections		
Land Treatment Facilities	0	0
Treatment, Disposal, and Storage Facilities	1	2
Comprehensive Groundwater Monitoring Evaluations	0	0
Operation and Maintenance Inspections	0	0
Facility Self-Disclosure	0	0
Large Quantity Generator	16	4
Small Quantity Generator	12	1
Conditionally Exempt Small Quantity Generators	1	0
Transporters	0	0
RCRA Permitting		
Closure Plans Finalized	0	0
Permits Issued/Renewed	3	0
Modifications	0	0
EPA Corrective Action Orders	0	0
RCRA Record Reviews		
Financial Assurance Closure/Post Closure	12	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 EPA, with concurrence from the State of Nebraska, determines whether a site should be listed on the NPL. 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 sites are relatively new to the NPL and are in the site study stage.



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.

In December 2022, EPA announced the addition of the Tetrachloroethene (PCE) Carriage Cleaners in Bellevue, Nebraska to the NPL. Historical dry-cleaning operations at the PCE Carriage Cleaners site released PCE and trichloroethene (TCE) into the soil and groundwater. This contamination has led to a vapor intrusion concern for overlying residential and commercial buildings, meaning that indoor air is or has the potential to exceed health-based benchmarks. NDEE's role during the NPL listing process is to pursue support from City representatives for listing, recommend Governor concurrence, provide technical assistance to EPA, identify State requirements, and represent the interests of the State.

Top: Street view of the PCE Carriage Cleaners site; now a vacant lot (photo courtesy of Google Maps)

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. 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.

Photo courtesy of the Minnesota Pollution Control Agency

What is Vapor Intrusion?

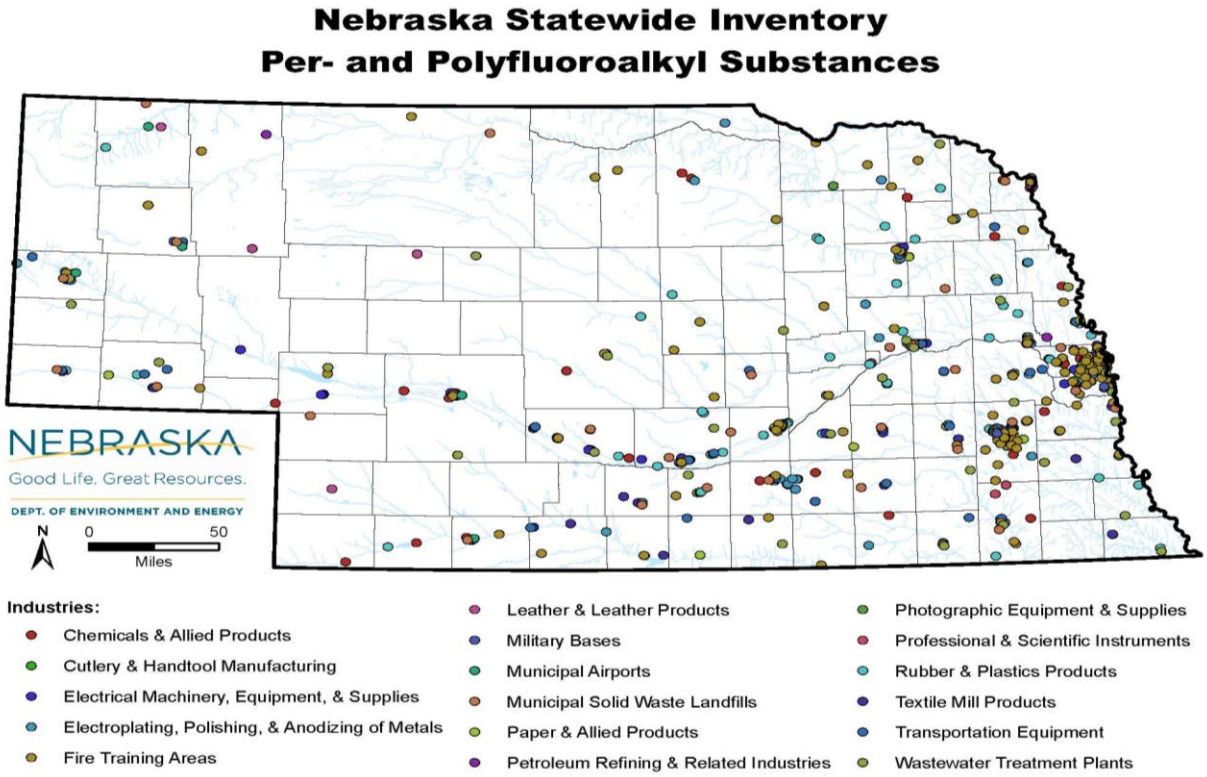
Volatile organic compounds (VOCs) are a class of chemicals that are volatile (evaporate easily) and form a vapor in the air. Vapor intrusion is a way that these volatile chemicals in soil and groundwater near and under buildings can enter and build up inside the buildings, similar to how radon can enter 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

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.
2. Abbreviated Preliminary Assessment. This step involves collecting background information such as property ownership, operational history, and geology/hydrogeology, and performing a site reconnaissance.
3. 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.

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

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 below illustrates the locations of industries present across the state that potentially used or manufactured PFAS based on the 2017 Statewide Inventory.



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. The Federal Aviation Administration requires the storage, use, and testing of AFFF firefighting foams at all airports that have a Federal Aviation Regulation Part 139 Airport Operating Certificate. Releases of AFFF to the environment may have occurred during routine training and testing exercises, or as a result of a discharge from actual aircraft rescue situations, fixed fire protection (aircraft hangar deluge) systems, or the removal and replacement of AFFF concentrate from vehicles during maintenance. Additionally, residual AFFF/ AFFF wastewater may have drained to existing infrastructure on the airport property to be directed to a wastewater treatment facility. In Nebraska, nine municipal airports have a Part 139 Airport Operating Certificate. NDEE has completed Abbreviated Preliminary Assessments at all nine of these sites to evaluate any potential impacts to the environment. Other high priority processes and facilities identified in the Statewide Inventory include metal and chrome plating facilities and fire training areas.

During the past year, NDEE evaluated one site in eastern North Platte to determine the source of PFAS that were detected in groundwater during a previous investigation. The results did not definitively identify a source area; additional sampling is warranted to determine if private well users are impacted above levels protective of human health. NDEE also initiated a new project in western North Platte to determine the source of PFAS that were detected during a previous investigation. That project will be completed during the next fiscal year.

NDEE continued to work with the EPA Region 7 Superfund Site Assessment and Removal Programs to investigate the potential trichloroethene (TCE) detections in soil, groundwater, and soil gas. Additional sampling was completed to identify the source areas for TCE contamination and determine if vapor intrusion is a concern in nearby commercial and residential buildings.

The photo on the left shows the collection of a soil boring using direct-push technology near a former dry-cleaning facility. The photo on the right shows the soil core from one boring location (photos courtesy of Tetra Tech).

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 investigation and cleanup activities at these sites are organized into several phases, including remedial investigations, groundwater modeling, baseline risk assessments, feasibility studies/engineering cost evaluations, field-scale pilot studies, remedy design/construction, and remedy operation and maintenance. NDEE also participates in public meetings with citizens and local officials in the development of cleanup plans.

EPA seeks to identify those responsible for contamination to pay for the cleanup. If it is not possible to identify the responsible party, or if the responsible party is insolvent, cleanup is paid for by a combination of Federal and State funds. Of the 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 unds. During 2004-2007, NDEE received Nebraska Environmental Trust grant funding to pay these costs. Beginning in FY18, NDEE was authorized 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 FY2023, NDEE's cost share was $666,808.79. Future projections of these costs are $747,223 in FY2024, $1,008,233 in FY2025, and $3,325,621 in FY2026. In FY2024, 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 four sites described below.

During the last year, NDEE paid 100% of operation and maintenance costs related to cleanup at the Columbus 10th Street site, Hastings Second Street Operable Unit (OU) 20 subsite, Ogallala OU 2 subsite, and Parkview Well site.

- At the Columbus 10th Street site, NDEE initiated a pilot study for in-situ treatment near the southern municipal well field. The results of this pilot study will be evaluated during the next fiscal year. NDEE is also completing ongoing groundwater sampling, vapor intrusion sampling, and vapor mitigation system inspections.

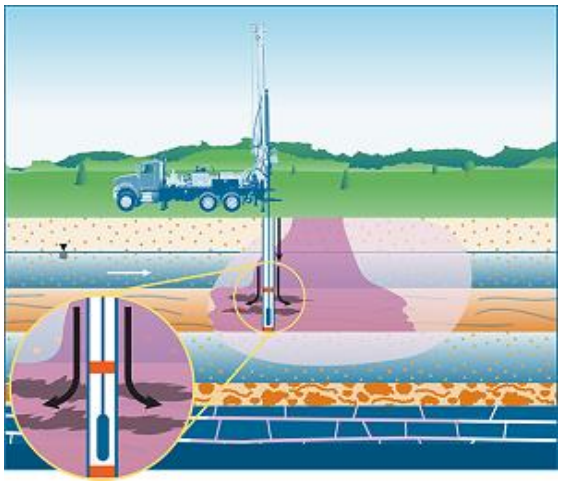


Image courtesy of the Interstate Technology Regulatory Council

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

- At the Hastings Second Street OU 20 subsite, NDEE is completing ongoing groundwater sampling and in-situ treatment.
- At the Ogallala OU 2 subsite, NDEE is completing ongoing groundwater sampling, vapor intrusion sampling, and vapor mitigation system inspections. This year, NDEE reduced the frequency for groundwater sampling from semi-annual to annual, resulting in a cost savings of ~$8,000 per year in contractual costs. This cost savings

will allow NDEE to increase its operation and maintenance efforts at other Superfund sites in Nebraska.

- At the Parkview Well OU 1 subsite in Grand Island, NDEE is operating and maintaining a groundwater extraction and treatment system. NDEE is also completing ongoing groundwater sampling, vapor intrusion sampling, and vapor mitigation system inspections.

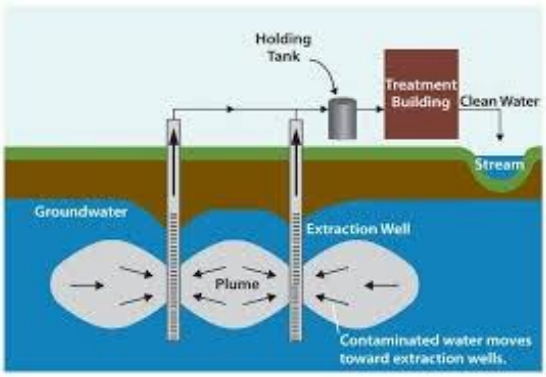


Image courtesy of the Environmental Protection Agency

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 further use.

NDEE expects that IIJA funds will be 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 expected IIJA funds is expected to result in a cost savings of $2,622,747 in NDEE's cost share.

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. NDEE concurred with the partial delisting of 13 properties this year; the partial deletion rule allows EPA to delist portions of NPL sites provided that deletion criteria are met. This allows portions of a site to be available for productive use before cleanup of the entire site has been completed. To date, a total of 2,294 partial deletions from the NPL have been made at the Omaha Lead site.

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

Active National Priorities List Sites in Nebraska	
Site Name	**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?id=0701913
Nebraska Ordnance Plant (Former), Mead	https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0702031
Ogallala Ground Water Contamination, Ogallala	https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?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?id=0703481
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?id=0710226
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?id=0702086
West Hwy 6 & Hwy 281, Hastings	https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0704738

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 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 FY2023, investigation and cleanup activities for hazardous substances were conducted at 2 active sites and 12 formerly used defense sites, and military munitions response activities were performed at 4 sites.

PFAS were found at Offutt Air Force Base and the Lincoln Air National Guard Base prior to FY2023; however, to date no threats or impacts to public or private drinking water supplies have been found. During FY2023, follow-up investigations were conducted at Offutt Air Force Base.

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 FY2023, remedial actions were conducted at three sites, investigations were ongoing at 5 sites, new groundwater investigations were started at 21 sites, and vapor intrusion investigations were begun at 14 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.

A Solid Waste Management Programs Study conducted in 2016 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 FY2023	
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 FY2023:

Summary of FY23 Activities	
Compliance Assistance	
Facility Inspections (General)	120
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	22
Major Permit Modifications	2
Public Hearings	0
Permits Transferred	1
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 FY2023, 13 operating and 4 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 FY2023, 17 operating and 3 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 FY2023 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 FY2023, 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 Permit Totals, FY2023	
Renewed Hauler Permits	23
New Permits Issued	8
Permits Expired	2
Financial Assurance Reviews	8

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.

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.

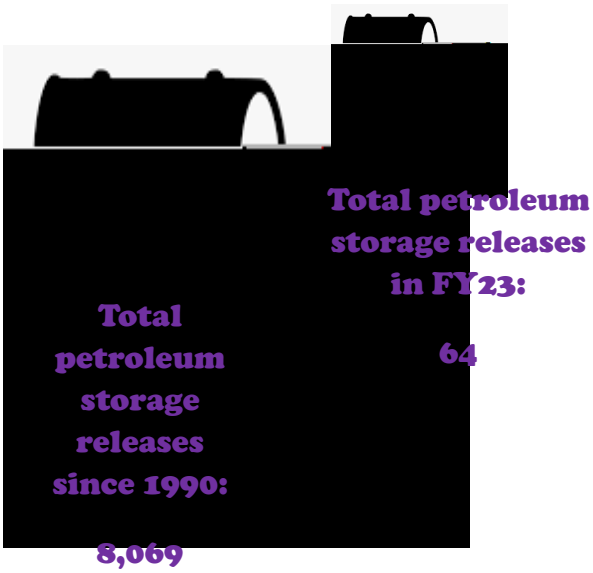
Petroleum Remediation Program

Activities regarding the Petroleum Remediation Program involve two interrelated areas:

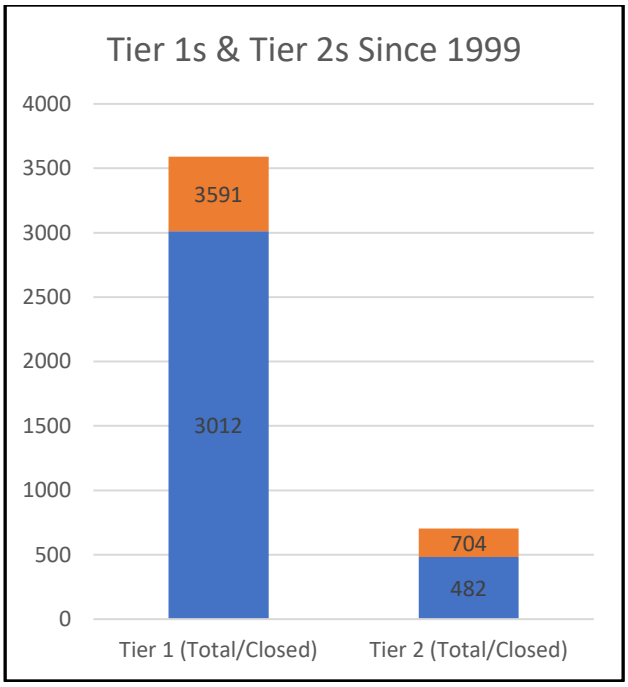
1. Overseeing the **investigation and cleanup** of petroleum contamination resulting from leaking above ground and underground storage tanks as well as other sources such as pipeline leaks and transportation spills; and
2. Administering a **financial assistance program** for persons responsible for investigation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

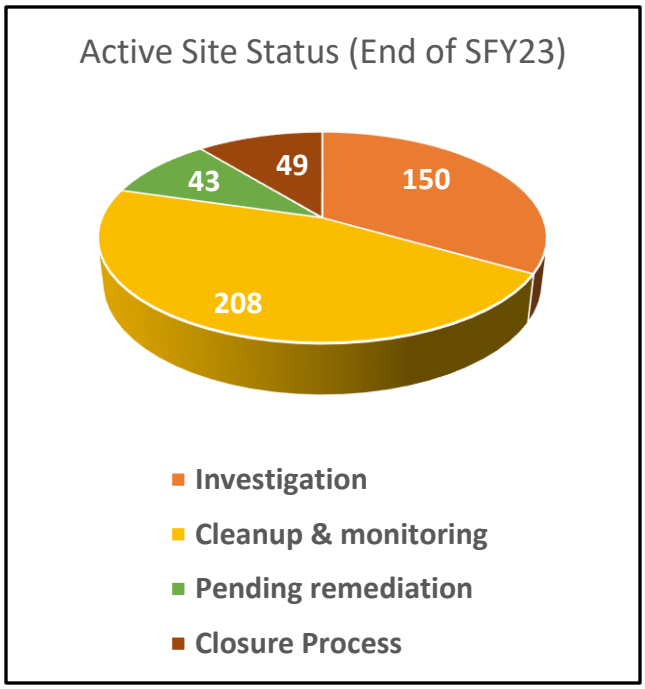
Investigation and Cleanup

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.



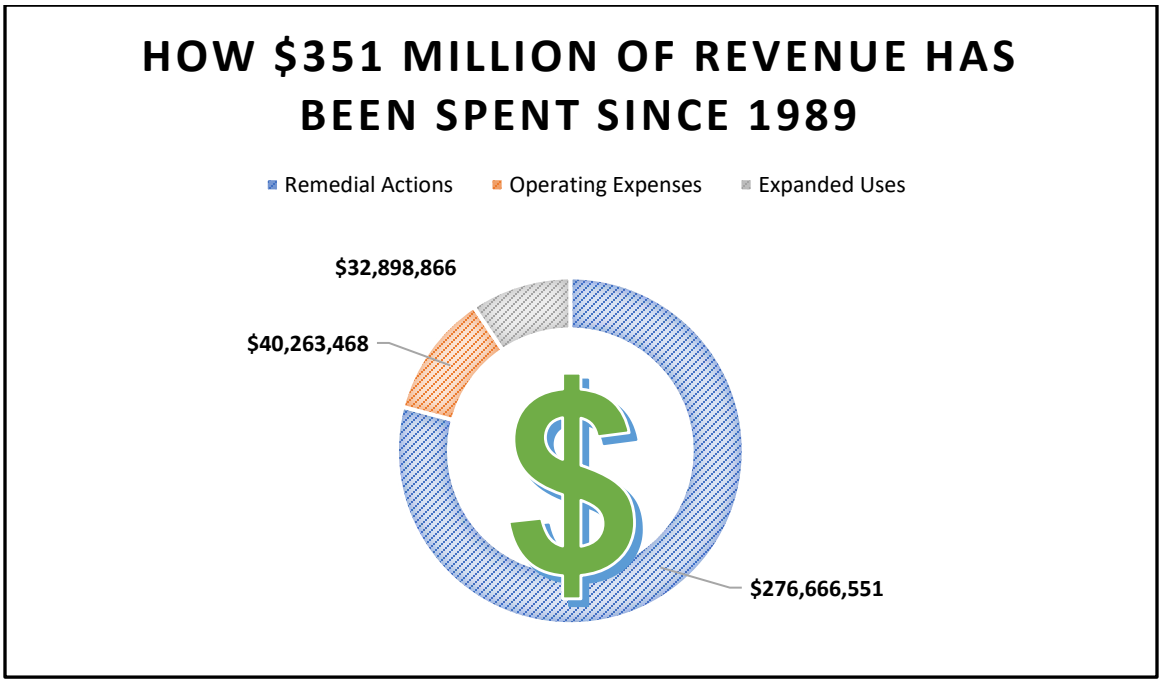
The program has incorporated Risk-Based Corrective Action (RBCA) procedures into regulations and accompanying guidance. The RBCA process allows for the evaluation of all petroleum release sites based on the risk they pose to human health and the environment. Those that pose no significant risk are closed; 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 2023, 150 Tier 1 / Tier 2 investigations were initiated. If sites fail Tier 2, they are normally scheduled for cleanup.





Financial Assistance – Petroleum Release Remedial Action Reimbursement Fund

When contamination has been found at a site and 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 leak 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 FY23. During the year, NDEE reimbursed about $3.6 million to Responsible Persons for work done at 149 different sites, and $7.3 million was spent to clean up 250 different orphan sites. An additional $666,808.79 of revenue was transferred to NDEE's Superfund program, as directed by legislation passed in 2017. As of June 30, 2023, over $276 million total has been spent on site cleanups.

Responsible Person Sites

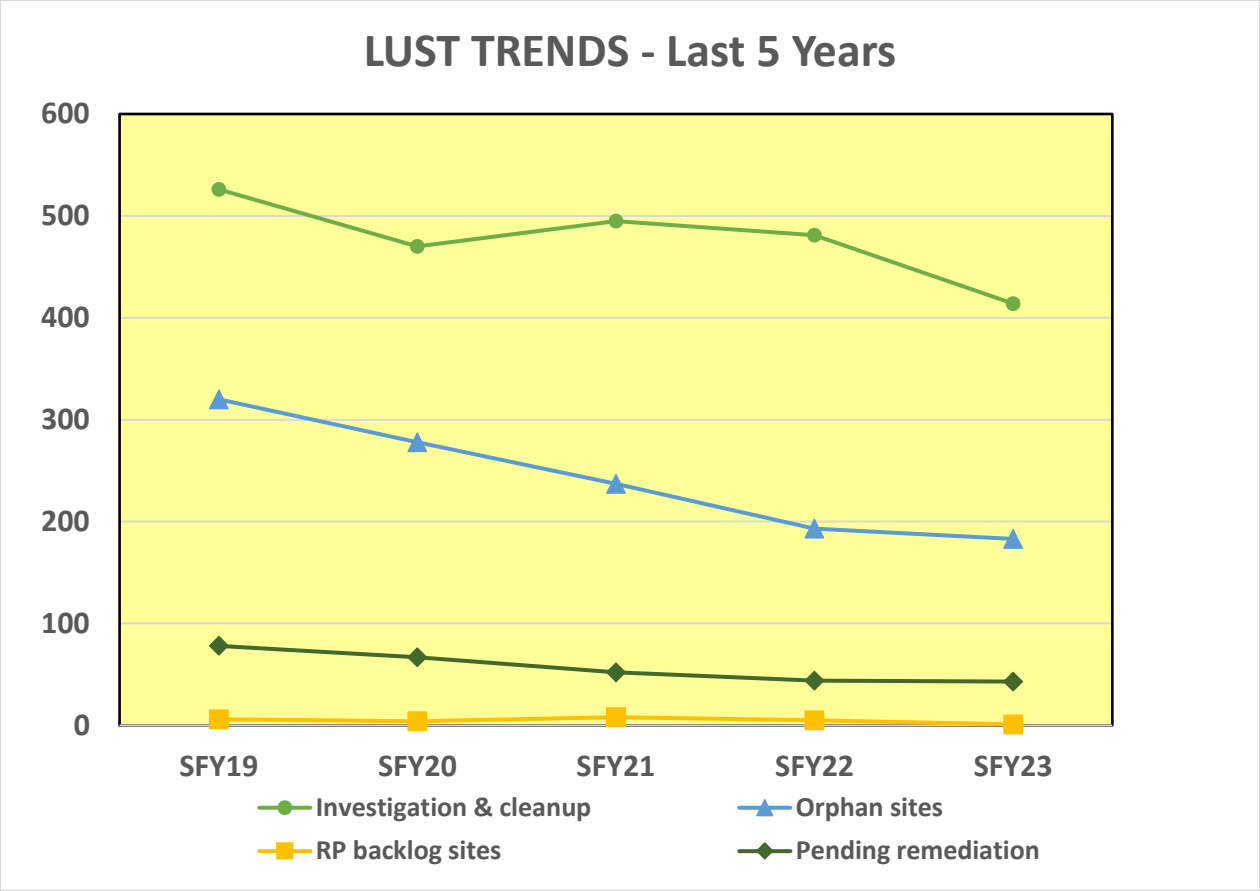
Previously, there had been hundreds of sites where the responsible person was known, but NDEE had not required work to begin. These were lower priority sites, and there was not sufficient funding to reimburse potential costs under the Reimbursement Fund. The sites were placed on a waiting list (backlogged) 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 2023, there were 232 active sites for investigation and/or cleanup using State contractors. At the end of FY 2023, there were 183 orphan sites backlogged and not yet investigated.

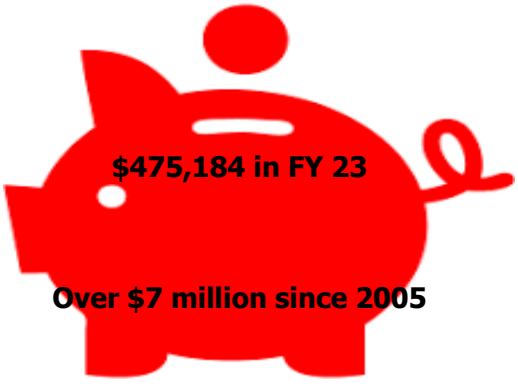
Leaking Underground Storage Tanks

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



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

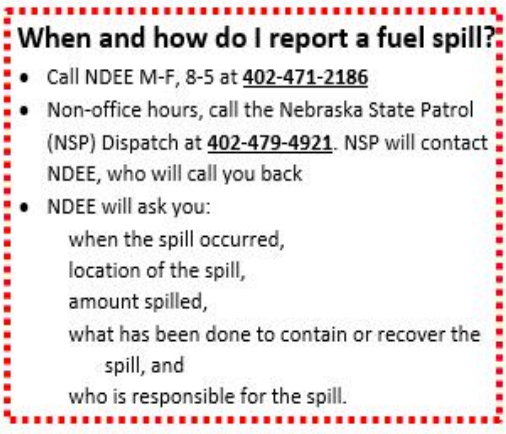
Tank owners can perform voluntary remedial action prior to NDEE's approval of their plans and still be eligible for reimbursement consideration in the future. This allows sites to move forward on their own initiative. To date, 235 suspended or backlogged leaking underground storage tank sites have been closed based on voluntary submittals.

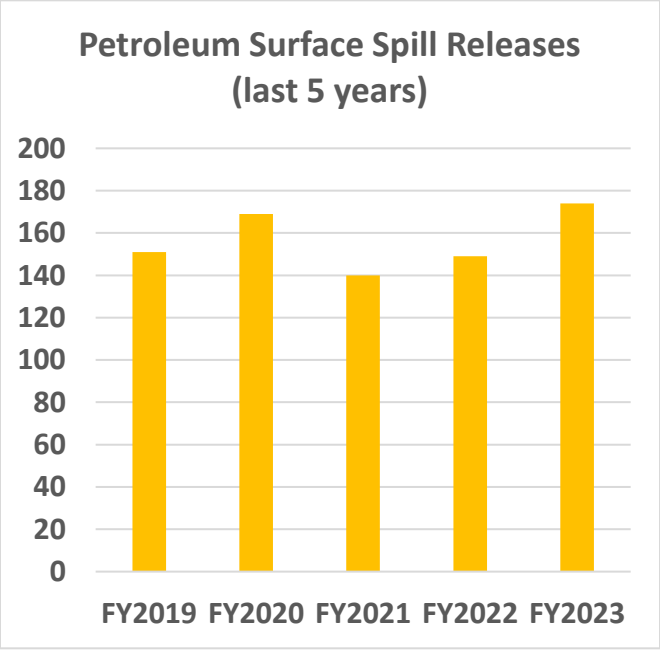
Surface Spills

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 http://dee.ne.gov/NDEQProg.nsf/OnWeb/PSS.





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/NDEQProg.nsf/OnWeb/LUST	(402) 471-2186
NDEE Records Management Section http://dee.ne.gov/NDEQProg.nsf/OnWeb/PRR	(402) 471-3557
NE State Fire Marshal-Fuels Division https://sfm.nebraska.gov/fuels-safety	(402) 471-9465

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

North Loup River in Cherry County

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 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.

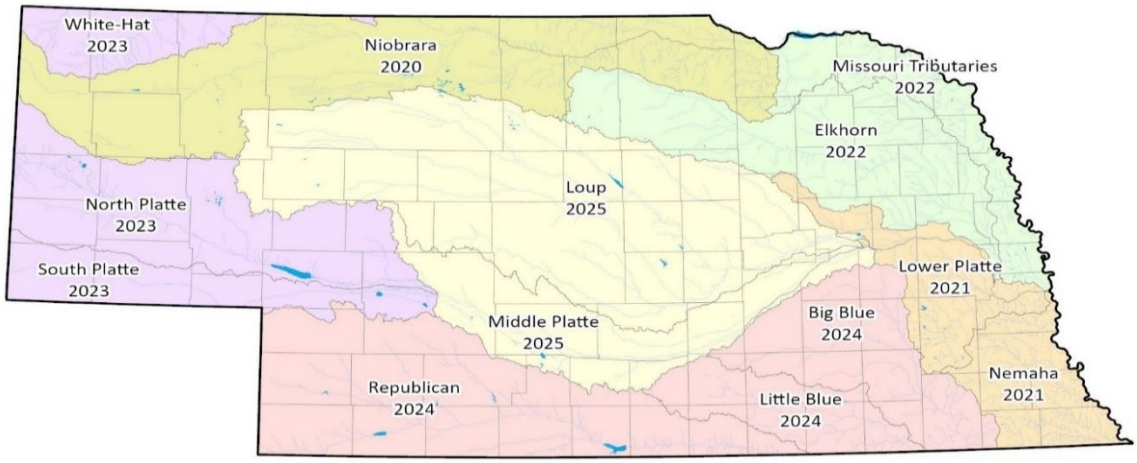
NDEE's surface water monitoring programs have different purposes. Brief descriptions of the basin monitoring strategy, as well as other water quality monitoring programs, are provided as follows. Additionally, a more detailed overview of the programs is provided in the Department's biennial publication Water Quality Monitoring Programs Report available online. http://dee.ne.gov/Publica.nsf/pages/WAT344

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 2023, NDEE sampled 40 sites within the North Platte, South Platte, and White/Hat River Basins.

Six-year Basin Rotation Monitoring Schedule

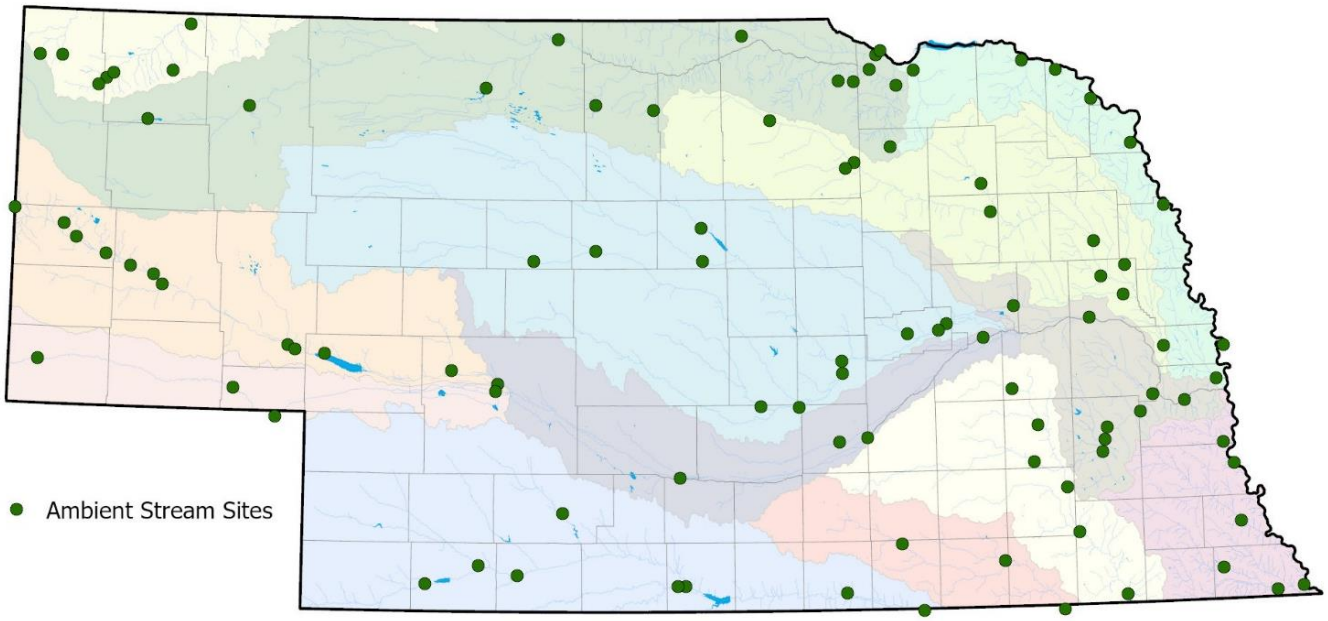


Ambient Stream Monitoring Program

- 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.

Measuring stream discharge

Locations of NDEE Ambient Stream Monitoring Program Sites



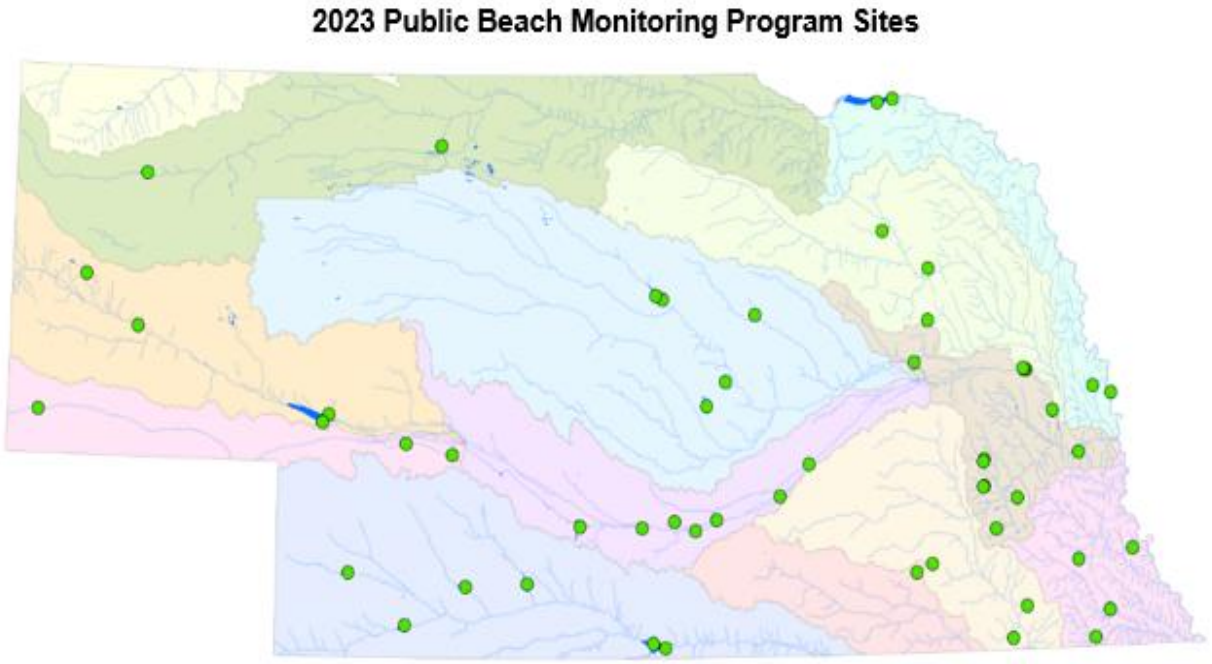
Public Beach Monitoring Program

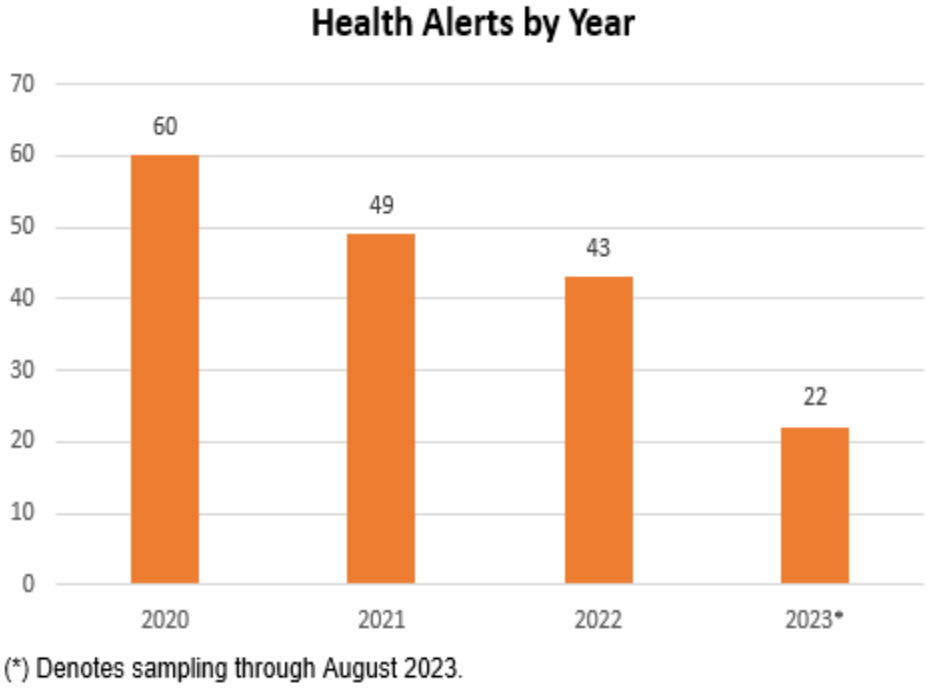

Harmful Algal Bloom on surface of lake

- 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.
- 55 public beaches at 50 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.
- 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 https://deq-iis.ne.gov/zs/bw/. 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-five sites (5 completed in partnership with Nebraska Game and Parks Commission) were sampled in 2023 within the North Platte, South Platte, and White/Hat River basins.

Electrofishing

Grass pickerel captured, identified, and released

Collecting aquatic macroinvertebrates

Caddisfly larvae with their protective cases made from sand grains in the stream

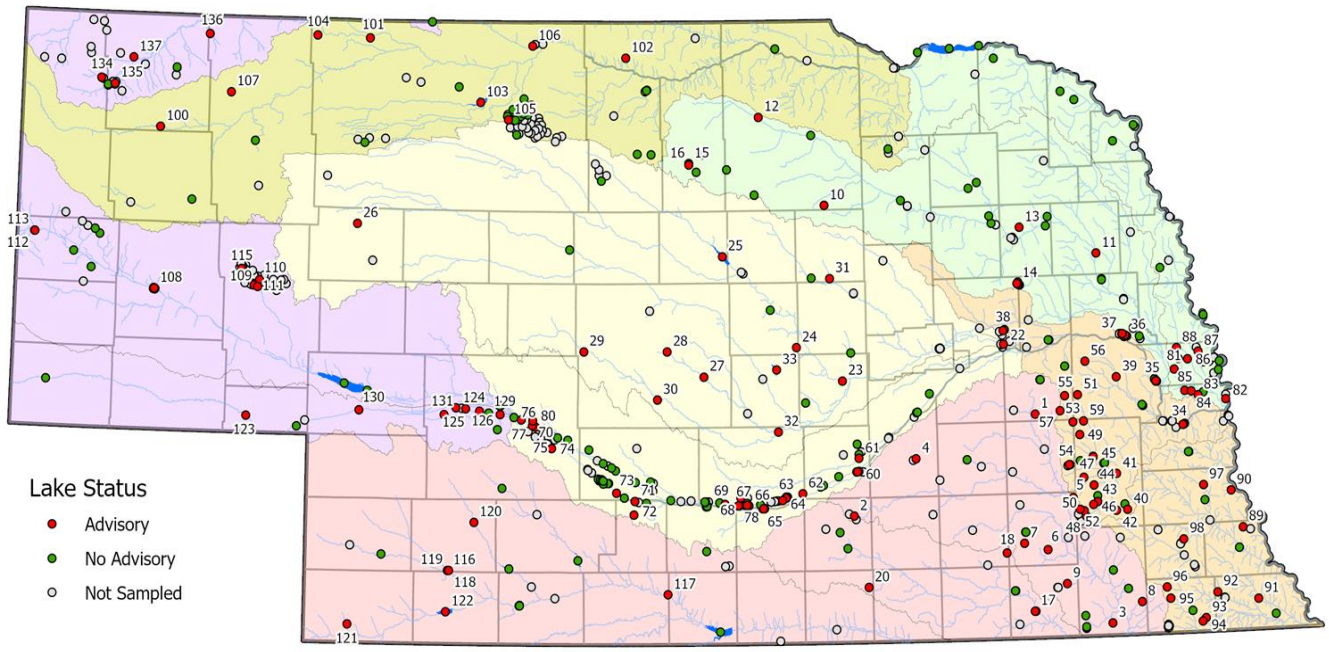
Fish Tissue Monitoring Program

- Assess fish tissue for toxins, such as mercury and polychlorinated biphenyl compounds (PCBs).
- Current fish tissue consumption advisories at 137 locations (130 lakes and 7 river/stream segments; see maps on the next page).
- In 2023, 32 lakes and 8 river and stream locations were sampled within the North Platte, South Platte, and White/Hat River basins.
- The most recent report is online at http://dee.ne.gov/publica.nsf/pages/23-013

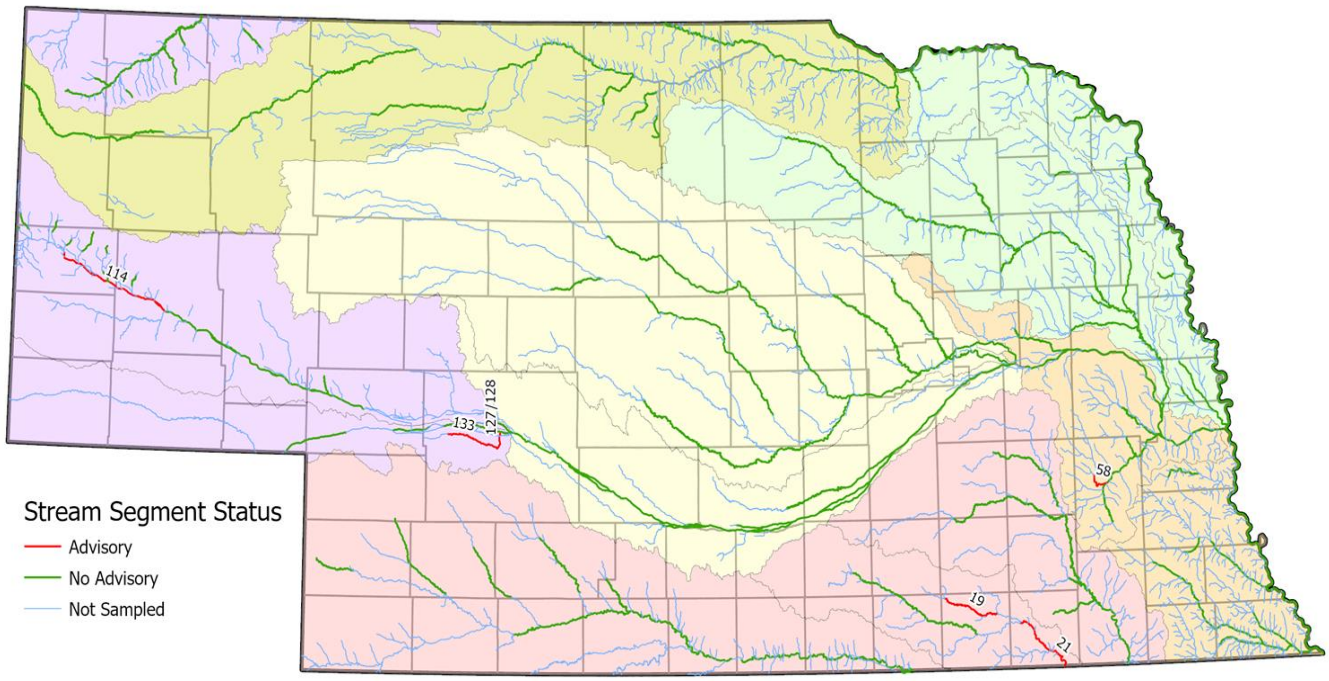
Weighing a saugeye prior to collecting tissue sample

Collecting a fish tissue sample

Lake - Fish Consumption Advisory Sites in Nebraska Through 2022



Stream - Fish Consumption Advisory Sites in Nebraska Through 2022



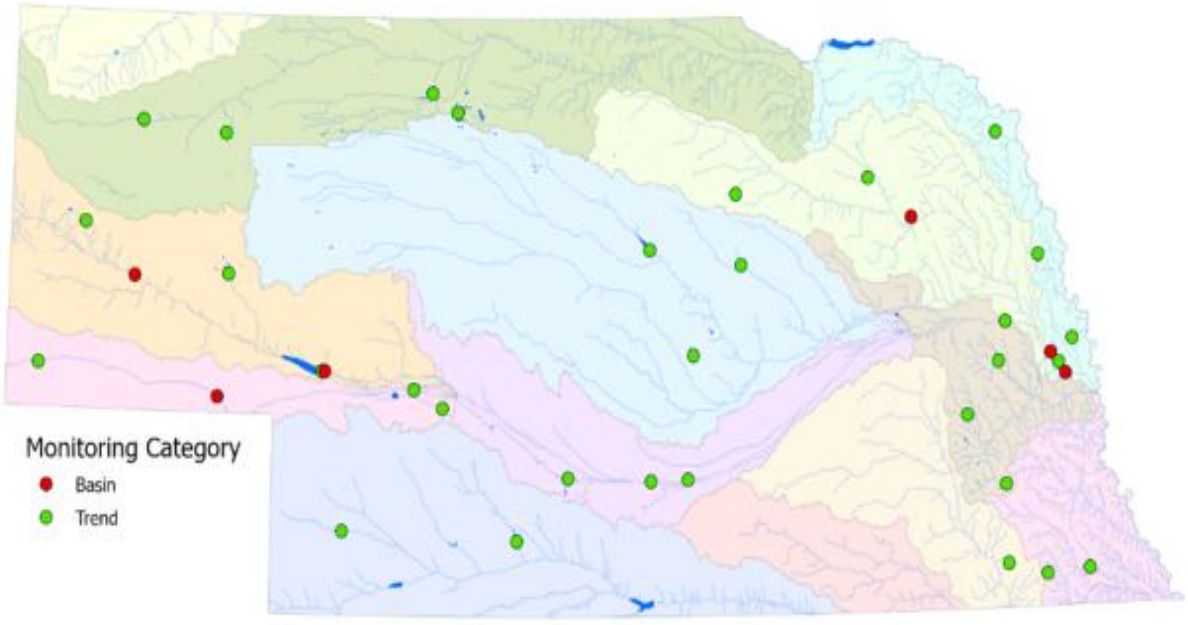
Ambient Lake Monitoring Program

- 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 2023.
- 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.

Filtering lake water samples

- Data are used to evaluate water quality suitability for fish and aquatic organisms to survive and reproduce.
- Long-term changes to water quality can be assessed.

2023 Ambient Lake Monitoring Program Sites



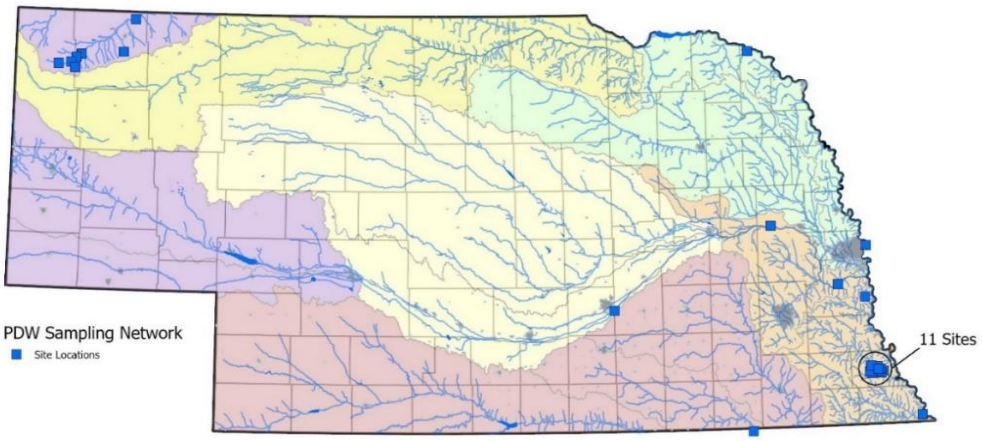
Fish Kill and Citizen Complaint Investigations

- 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.
- Seven fish kills investigated from July 1, 2022, to June 30, 2023: Five were from low dissolved oxygen levels and two resulted from unknown causes.
- Ninety-one 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 low dissolved oxygen in a farm pond

Public Drinking Water Special Study

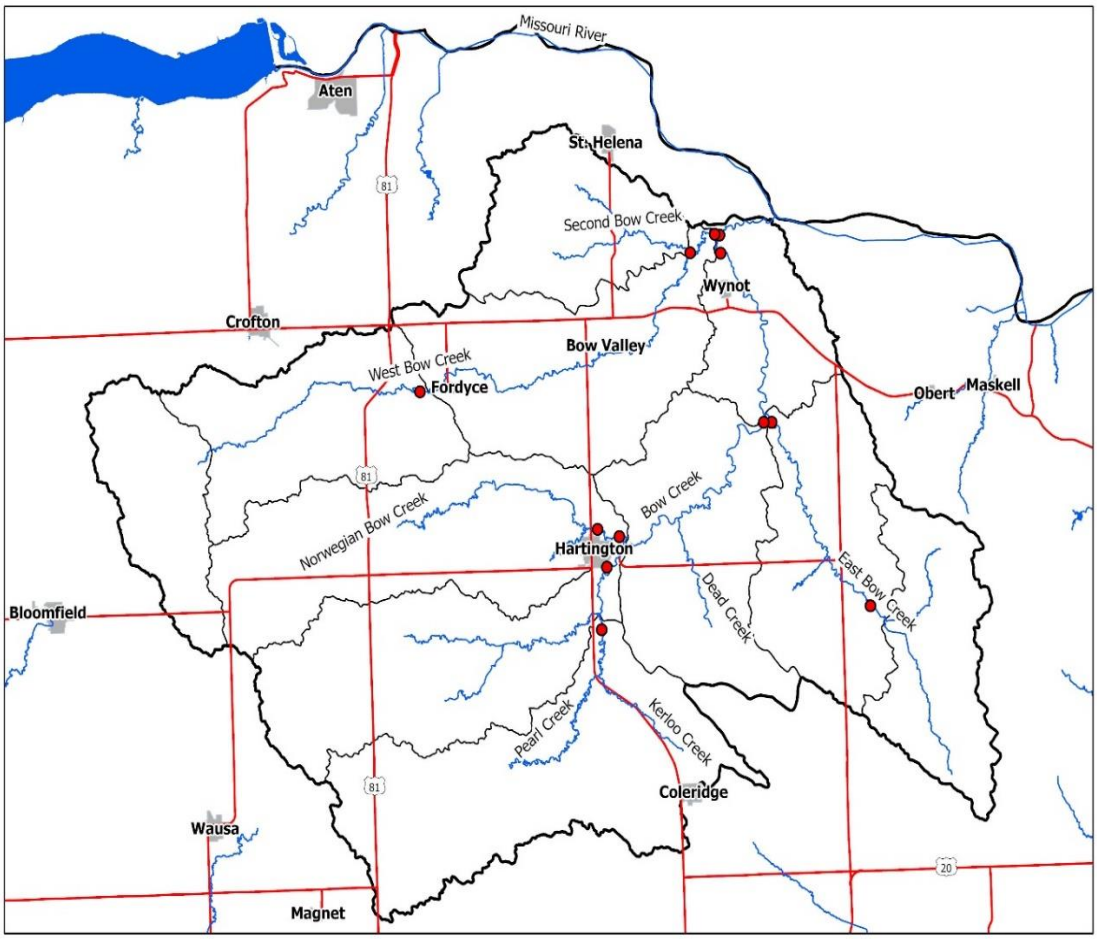
- Title 117 – Nebraska Surface Water Quality Standards (NSWQS) defines the Public Drinking Water (PDW) designation as “These are surface waters which serve as a public drinking water supply. These waters must be treated (e.g., coagulation, sedimentation, filtration, chlorination) before the water is suitable for human consumption. After treatment, these waters are suitable for drinking water, food processing, and similar uses.”
- Goal to develop a dataset that will allow NDEE to assess all stream segments that have the PDW designation. This will ensure sufficient data is collected to determine if a stream segment is impaired by pollution, as well as potentially identify whether the pollution source is from groundwater or surface water.
- Atrazine, nitrate/nitrite, arsenic, manganese, uranium, and selenium are monitored monthly with the collection of surface water samples at 26 stream location sites statewide. Sampling for this program concluded in April 2023.



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 sub-watersheds and to quantify load reductions from sub-watershed conservation projects.
- Sampling partners of Watershed Special Studies in 2023 include the Lewis and Clark NRD – Bow Creek Special Study,

Bow Creek Special Study sampling locations within the Bow Creek Watershed.



Regional Monitoring Network

- 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 28 streams for NRSA in 2023 and will sample another 16 in 2024.

Conducting stream transect measurements

Seining the North Platte River

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: http://dee.ne.gov/Publica.nsf/Pages/23-012 Work on the 2024 Integrated Report is underway and expected to be completed by the end of calendar year 2024.

Groundwater Assessment Programs

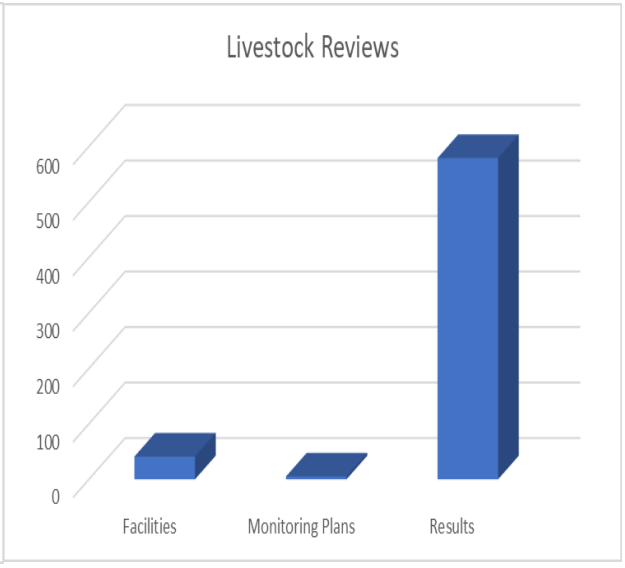
Groundwater Quality Monitoring Report

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 2022 Groundwater Quality Monitoring Report can be accessed on the NDEE website at http://dee.ne.gov/publica.nsf/PubsForm.xsp?documentId=3C9B46502ED96C8E8625890B007127DB&action=openDocument. This year's report was mainly a user's guide for the newly released Nebraska Groundwater Quality Clearinghouse (Clearinghouse). 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 http://clearinghouse.nebraska.gov.

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.



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, 2023.

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.

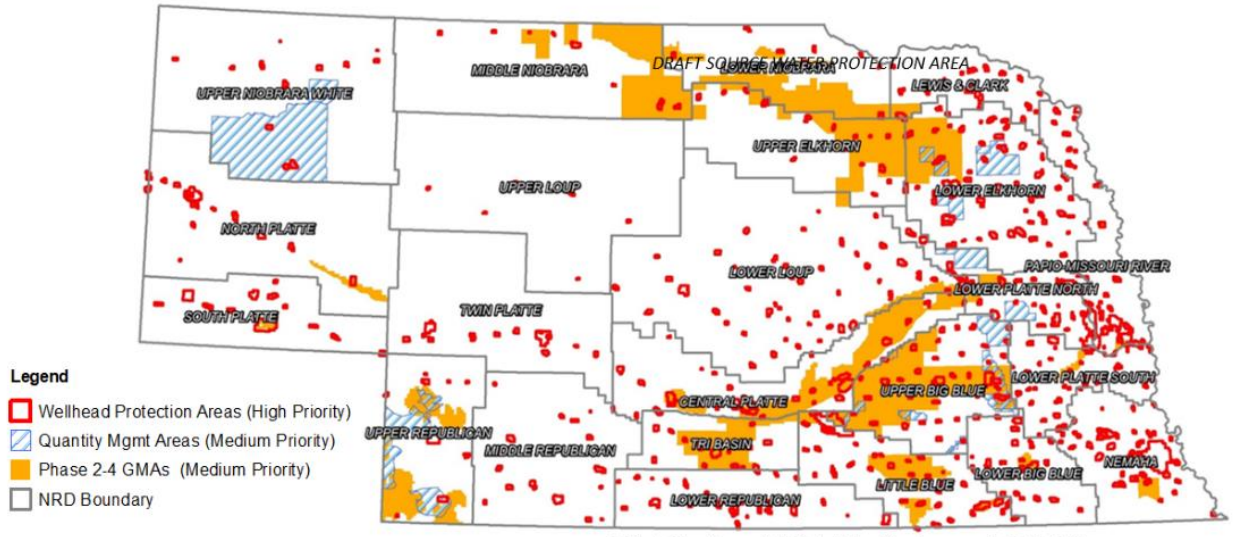
The Source Water Protection program coordinates closely with the CWA 319 program to engage Nebraska's communities and producers and develop alternative 9-element Watershed Management Plans known as Drinking Water Protection Management Plans (DWPMP) that proactively address nonpoint source contamination. 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 9-element 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.

NRCS Priority Areas for the National Water Quality Initiative



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

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

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. This is the third year the inspectors are using iPads equipped with GPS and mapping software to assist in completing inspections and are well on their way to completing their goal for the year.

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, 2022 was the renewal date for all licenses and was the first time the NDEE system was 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, 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*. The state's waterbodies have been 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, criteria for nitrogen are different for waters assigned to public water supply use than those which have an industrial beneficial use. These criteria form the basis of water quality protection for all surface water quality programs conducted by NDEE. The federal Clean Water Act (CWA) specifies that states review their water quality standards and revise where appropriate once every three years (triennial review).

Nebraska's previous triennial review was conducted in 2019, and the current triennial review process is underway. Updates to the standards are scheduled to be proposed in late 2023 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 – 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 to prepare TMDLs that include the pollution control goals and strategies necessary to improve the quality of these waters and remove the identified impairments so these waters may meet their assigned beneficial uses.

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 (IR)was finalized in

August 2023 and is available on the NDEE website along with past IRs and additional information regarding impaired waters: http://dee.ne.gov/NDEQProg.nsf/OnWeb/TMDL.

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*	Draft TMDL completed, targeted for submittal to EPA in Fall 2023.
5-alt[1]				
	--	--	--	No 5-alts currently in development.

[1]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.

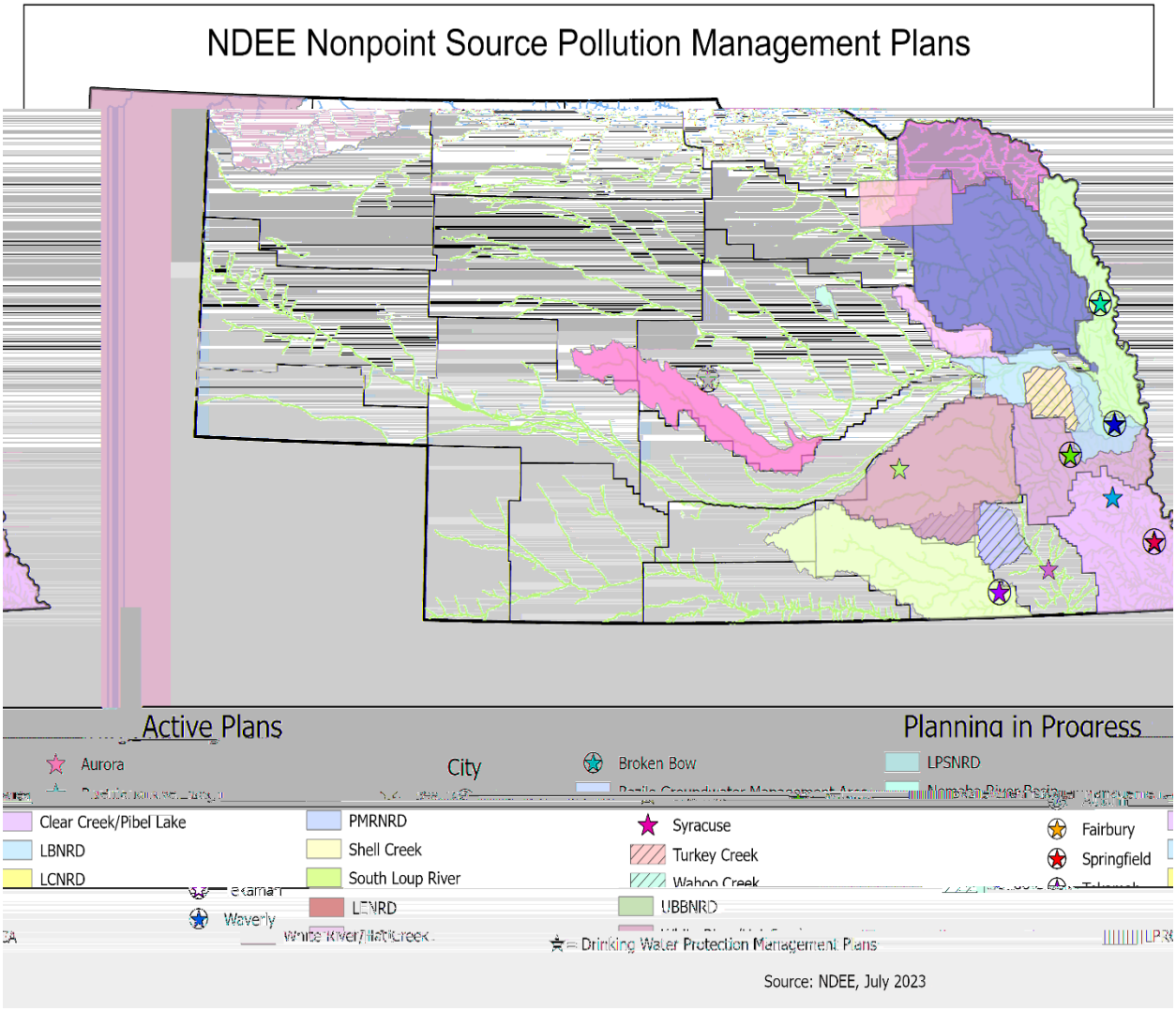
Nonpoint Source Pollution Management Program

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. 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 http://dee.ne.gov/publica.nsf/pages/WAT119. The program emphasizes watershed and groundwater management area planning, targeting of 303(d)-listed impaired waters, and community participation in 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.

Included in the major program highlights this year were the approval by EPA of Project Implementation Plans for: Lake Hastings Water Quality Management Plan, Lower Platte River Water Quality and Springfield NE Drinking Water protection Management Implementation – Phase I, Papillion Creek Watershed Enhanced Water Quality Conservation Practices Program – Phase II, Shoemaker Marsh Saline

Wetland Project, Virtual Testing Ag Performance Solutions – VTAPS, Waverly Wellhead Protection Area Implementation, Wetlands Inventory Remapping. In addition, the NPS program has continued to emphasize groundwater quality planning through development of Drinking Water Protection Management Plans (DWPMPs) as Alternative to 9-Element plans with the communities of Auburn, Aurora, Beatrice, Broken Bow, Fairbury, Syracuse, Tekamah and Waverly. Once DWPMPs are accepted by EPA, these communities are eligible to apply for 319 project funds for plan implementation.



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 https://www.epa.gov/waterdata. During FY2022, 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

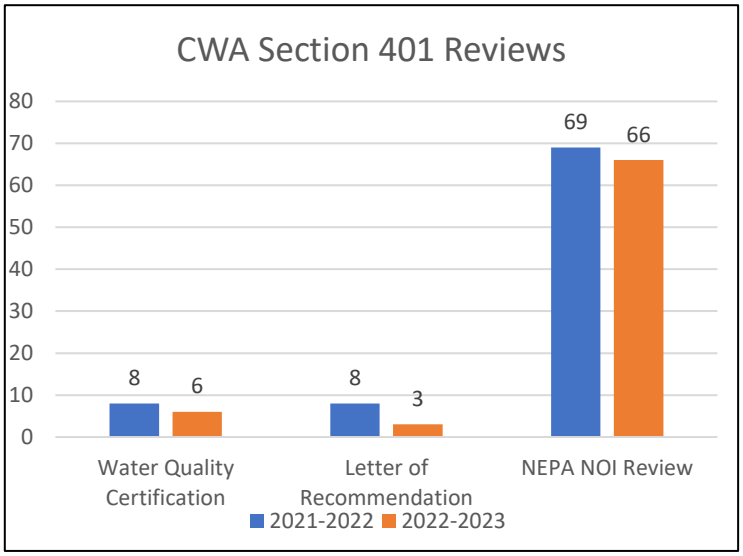
Dredge and Fill Permits

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 Department worked with multiple state and national partners in development of the CWA 404 Dredge and Fill program in an ever-changing federal regulatory environment regarding Waters of the U.S., 401 Water Quality Certification, and the 404(g) rule proposal. Progress was made developing state general permits, new regulations, Memorandums of Agreement for coordination with partnering agencies, public outreach materials, and an online permitting tool for electronic application submittal and permit tracking.

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 2022 there were six certifications issued which was down two 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 66 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

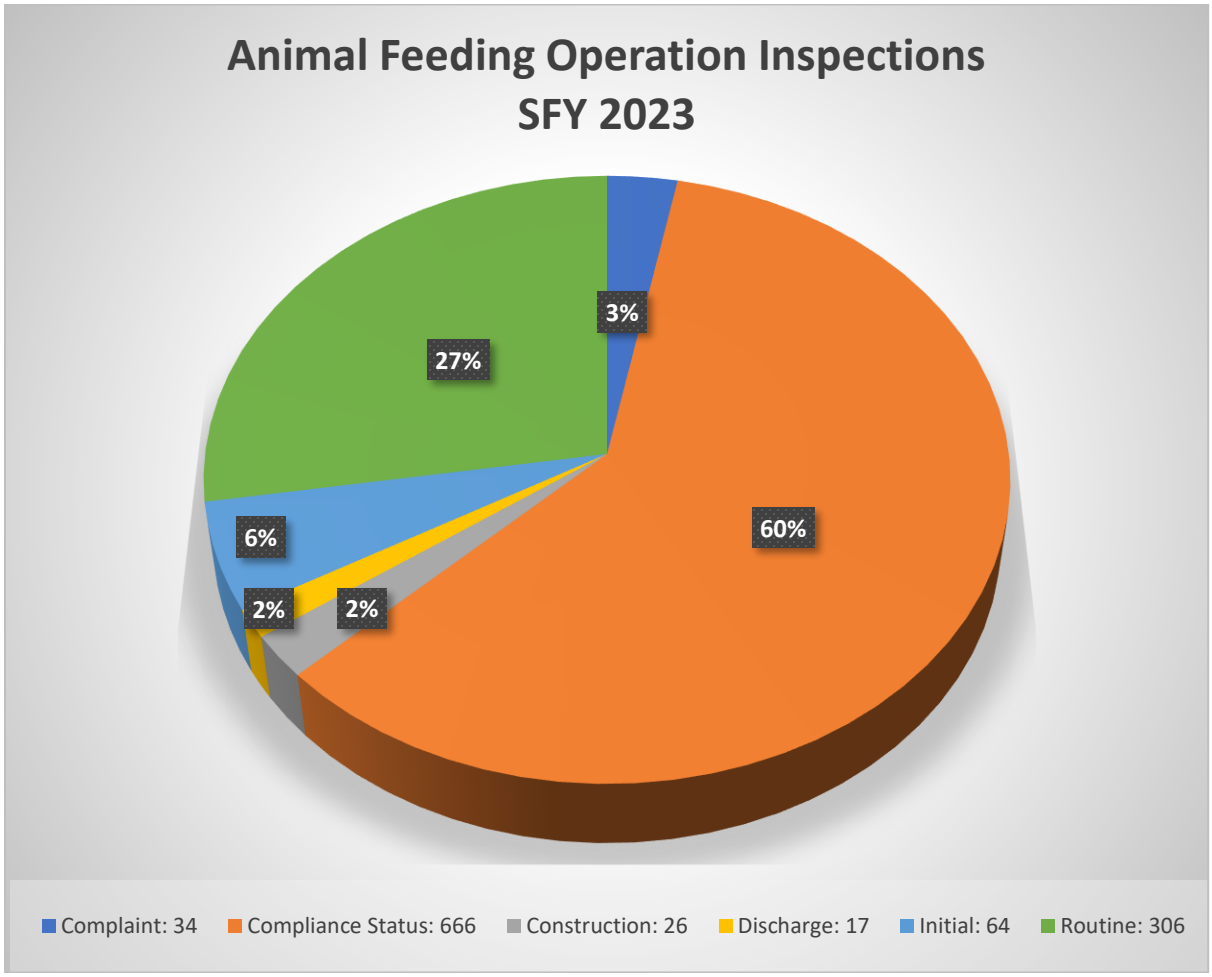
Overview

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 904 active large Concentrated Animal Feeding Operations (CAFOs) required to have permits, but also works with approximately 2,185 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 1,113 livestock waste control inspections in SFY2023. 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 has 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, non-emergency 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 facilities.

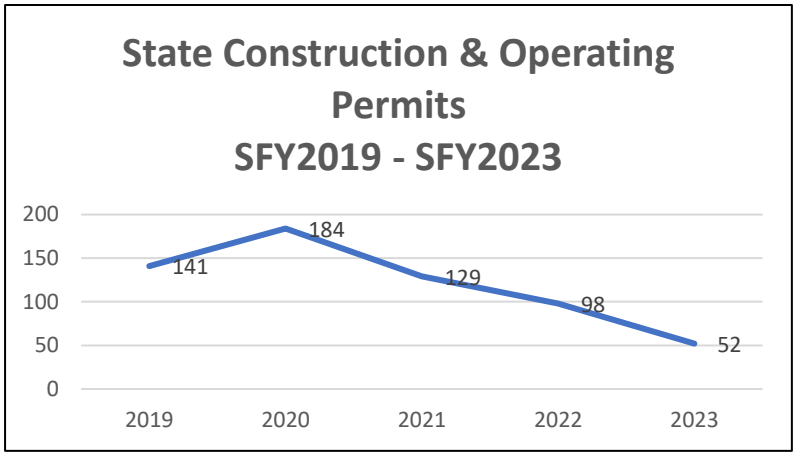
The Department received a total of 74 permit applications and issued 52 permits during SFY2023, as shown in the table to the right.

Construction and Operating Permits – SFY2023

Type of Application or Permit	Applications Received	Permits Issued
New permits	27	19
Modified permits	31	28
Transfer permits	16	8
TOTAL	**74**	**52**

Such permits are evaluated by the State 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.



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.

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 coverage.

The table at right summarizes the number of NPDES applications received and permits issued for livestock waste control facilities in FY2023.

NPDES PERMITS – SFY2023

Type of NPDES Application/Permit	Applications Received	Permits Issued
GENERAL PERMIT FOR CAFOS CONFINING CATTLE		
New Coverage	16	8
Modified or Transferred	19	4
Reissued	102	11
SUBTOTAL GENERAL PERMIT:	**137**	**23**
INDIVIDUAL PERMITS		
New Coverage	0	0
Modified or Transferred	0	0
Reissued	0	0
SUBTOTAL INDIVIDUAL PERMIT:	**0**	**0**
NPDES TOTALS:	**137**	**23**

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, yet the same, general permits. In 2022, the NDEE was working toward reissuance of the NPDES General Permit series NEG023000. 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 $296,142 in annual permit fees. In addition, the Department received $24,100 in initial inspection fees, $35,200 in permit application fees, $752 in late payment fees, and $8,008 in investment income for a total of $364,202 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 http://dee.ne.gov.

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 29,476 chemigation permits issued in Calendar Year (CY) 2022 constituted a 2.5% increase in permits issued compared to CY2021.

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 CY2022, 1,830 applicators have been trained, tested, and certified, bringing the current number of certified chemigation applicators to 5,276. Information about chemigation applicator training dates and certified applicators is available after January 1 of each year at http://dee.ne.gov/NDEQProg.nsf/%24%24OpenDominoDocument.xsp?documentId=D884FD6EE633A0AA86257CAE0077CC9D&action=openDocument. Title 195 was updated on April 19, 2020.

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, Environmental Safety and Operator Certification Program Accomplishments and Challenges

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 roughly 433 paper registrations, development hour submittals and payments. 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 40 open compliance cases that originated in past years going back to 2015.

On July 1, 2021 the Environmental Safety section was officially merged with the Department. The merger required a large amount of work from many sections to complete. This included field office leases, vehicle transfers, job classifications, letterhead and form changes, IT challenges, MOU negotiations, and regulation changes. Compliance and inspection processes are still being fine-tuned to maximize efficiency.

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, 483 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, 2023 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 1,402 systems registered in FY2023.

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 4,000 calls annually 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 non-compatible industrial facilities are classified under the following categories: Industrial I, Industrial II, Industrial III, and Industrial IV, according to the type of facility and its point rating.

This photo shows a Wastewater Treatment Facility for Lincoln.

The Wastewater Operator Certification Program currently has 944 operators with municipal/ compatible certificates. In addition, there are currently 89 certified operators with industrial certificates.

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 end at the end of 2025. NDEE has contacted approximately 300 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 state-specific exams. The table at right shows the current passing rate.

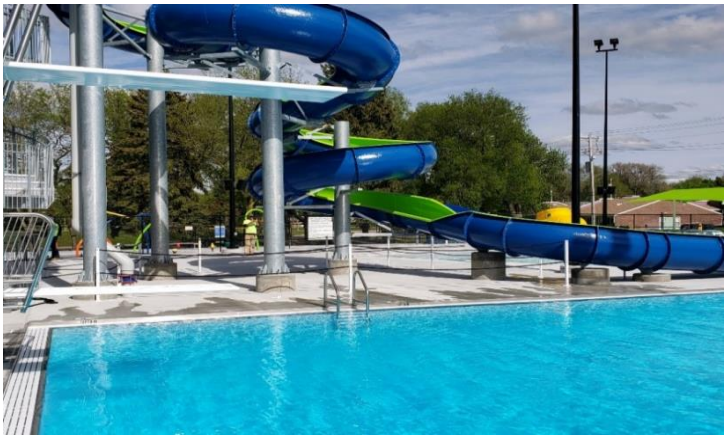
NDEE Wastewater Treatment Operator Certification Program.

	exams administered	Pass rate
Fiscal Year July 1, 2022 – June 30, 2023	102	38%

- 22 WW certification testing events
- 39 newly certified operators

Environmental Safety Program

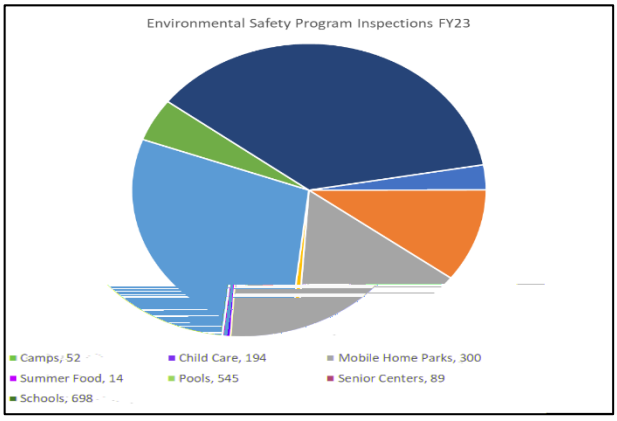
The Environmental Safety staff inspect all public swimming pools/spas located at hotels, apartments, municipalities, and recreational facilities. During inspections staff check water chemistry, safety equipment, personnel training, and mechanical areas. Recreation camps and mobile home parks are inspected 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 domestic 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 has partnerships with Douglas County Health Department, Lincoln-Lancaster County Health Department, Central District Health Department and the City of Norfolk to perform inspections at public swimming pools in their jurisdictions.

During FY2023, the seven Environmental Safety program staff completed 1,892 inspections of pools, camps, mobile home parks, childcare centers, senior centers, and schools. There were an additional 72 well and septic evaluations completed for property transfers. The following chart shows a breakdown of FY2023 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 FY2023, the Engineering Section received 227 applications for wastewater projects. The average time for review was 17 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 FY2023, the program received 73 applications for construction/operating permits and 9 applications for subdivision review and approval. The average time for review was 14 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 FY2023, NDEE received 184 projects for review which took an average of approximately 14 days to review. NDEE engineers inspected 108 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 21 systems. The three where audits were not conducted did not have projects during the 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 83 projects for review which took an average time of approximately 14 days to review. Additionally, NDEE engineers inspected 54 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 13 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 Agency continues to have quarterly meetings with the City of Omaha to discuss their combined sewer separation projects, and regulatory, engineering and funding issues.

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 2,791 active authorized discharges under other general permits. The general permits include 1,548 active authorizations under the construction general storm water permit, 382 dewatering, 108 hydrostatic testing, 825 industrial storm water, 8 pesticide, and 28 Treated Ground Water Remediation Discharge sites.

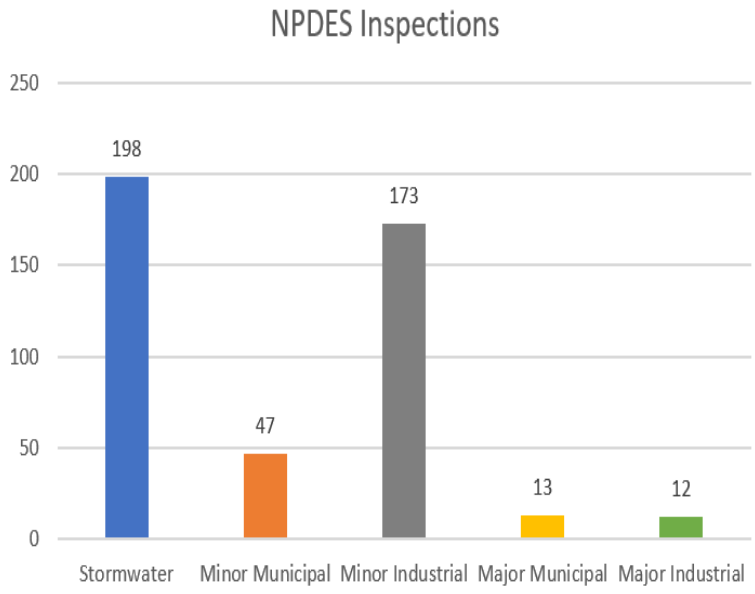
Municipal and Industrial Facilities

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.

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 436 NPDES inspections in Fiscal Year 2023. A breakdown of those inspections is provided in the chart below. The minor industrial inspections include 125 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 25 assistance visits in the 2023 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 http://omahacso.com/.

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 125 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 Small, Underserved, and Disadvantaged Communities and the Voluntary School and Child Care Lead Testing and Reduction Grant programs. Federal 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). Funding awards for traditional water and wastewater infrastructure projects, along with those to address emerging contaminants, remain on track. The Department has increased focus on the development of funding awards to address the replacement of Lead Service Lines and Lead containing drinking water appurtenances.

Separate from the BIL, and signed into law by Governor Pete Ricketts on April 13, 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:

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

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 September of 2022, the EPA awarded Nebraska's annual and BIL CWSRF capitalization grants in the amounts of $5,978,000 and 9,103,000, respectively. The required match amount of $2,105,900 was provided both through bonds, and a cash transfer from the Administrative Cash Fund. In SFY 2023, the CWSRF funded projects totaling $8,448,000 in loans, with $2,935,250 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 Central City and Coleridge. After the project is identified, the CWSRF may also provide a Small Town Grant (STG). Last year though the program opted to fund a New and Innovative Technologies grant to the Village of Plymouth for $600,000. That project will result in the installation of a post-lagoon nitrification system known as NitrOx to the existing lagoon system, resulting in a continuous discharge system.

In addition to the above, loan forgiveness has become the primary method of providing additional subsidy, through reserving up to 40% 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%

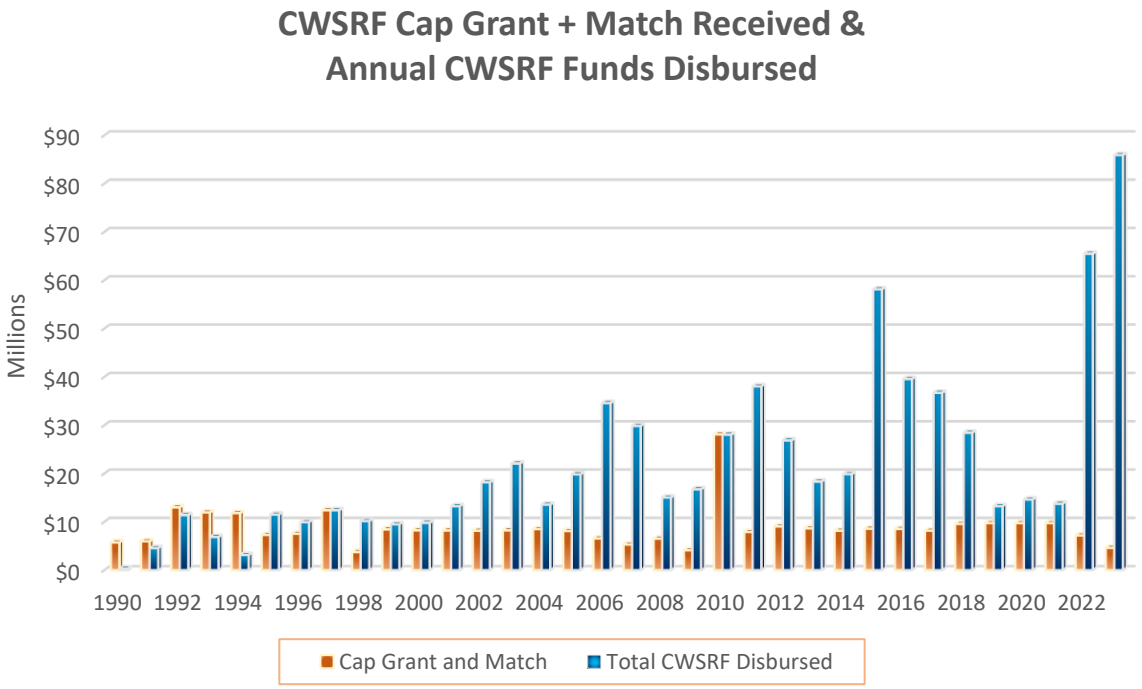
For all remaining projects and if it is assessed by the Department that the non-compliance or order was caused by negligence of the municipality, the forgiveness caps below shall apply.

- 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 35 years of activity, the Fund's Net Assets have reached $360.9 million as of June 30, 2023. Since its inception, the CWSRF has provided loans for 356 projects with a cumulative loan award amount of $868.9 million.

The following graphs provide 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 September of 2022, the EPA awarded Nebraska's annual and BIL CWSRF traditional project capitalization grants in the amounts of $7,008,000 and 17,992,000, respectively. The required match amount of $3,200,800 was provided both through bonds, and a cash transfer from the Administrative Cash Fund. Through the DWSRF, Nebraska was also awarded a grant for Lead Service Line Replacement projects in the amount of $28,350,000 and a pending award for $8,033,000 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 $46,288,000 in loans with $20,943,143 in loan forgiveness.

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.

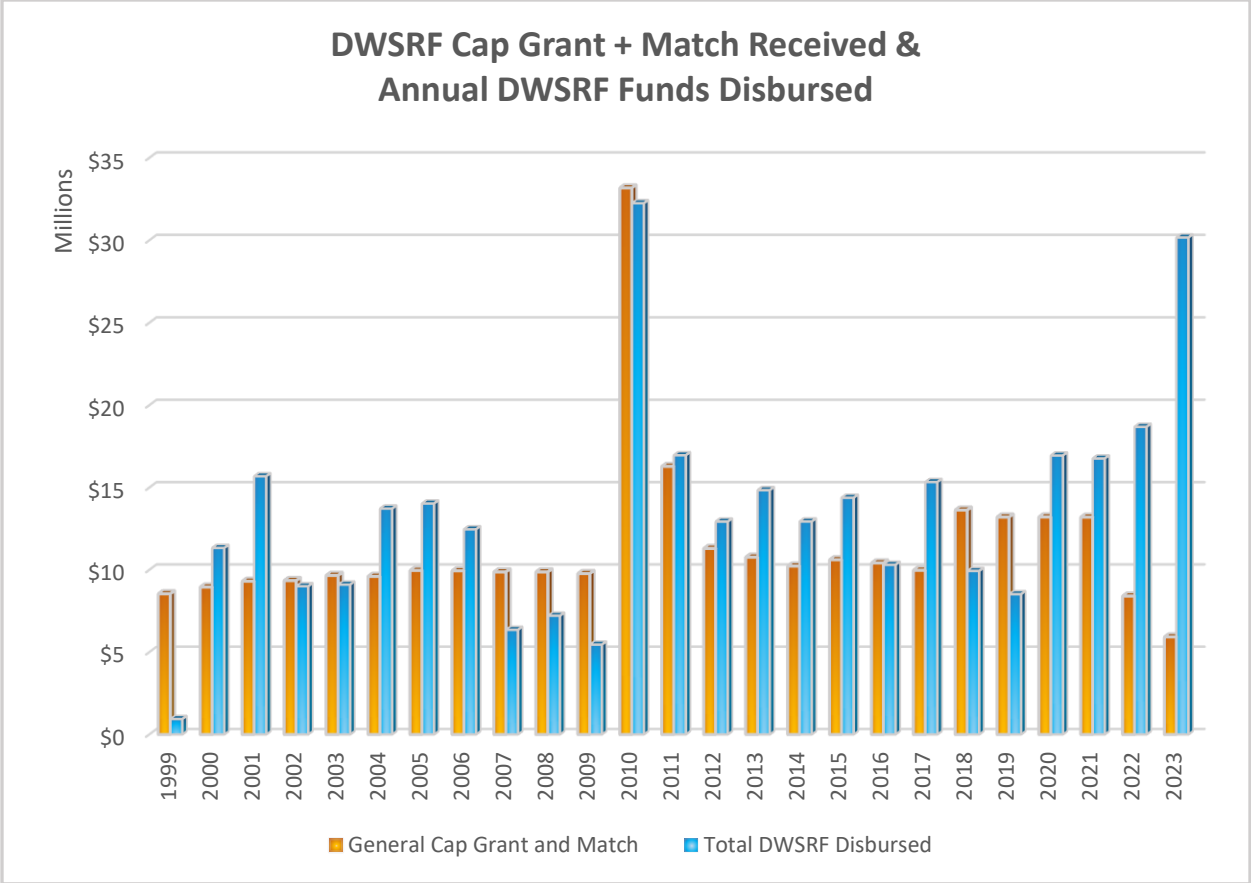
The Small System Technical Assistance set-aside (up to 2% of the capitalization grant) provides technical, managerial, and financial assistance to PWSs serving a population of 10,000 or less. This is accomplished through contracts with organizations that have expertise in dealing with small systems. 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 2023, under the Local Assistance and Other State Programs set-aside (15%), the communities of Exeter, Hildreth, and Emerald (SID#6) were selected to receive Source Water Grants totaling $30,000. Further, seven $20,000 planning grant agreements for preliminary engineering reports were awarded to high priority PWSs to address public health issues in Bassett, Dorchester, Hampton, Hemingford, Julian, Malcolm and Stuart.

From the FFY 2022 capitalization grant, $1,195,460 was allocated to the 2% ($140,140), 4% ($280,320), and 15% ($775,000) set-asides.

After 25 years of activity, the Fund's Net Assets have reached $240 million as of June 30, 2023. Since its inception, the DWSRF has provided loans for 285 projects with a cumulative loan award amount of $439.8 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

State Revolving Fund Assistance by Legislative District as of June 30, 2023

	CWSRF Funding to Districts (approximate)			DWSRF Funding to Districts (approximate)			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	$9,330,593	$1,049,006	**$10,379,599**	$34,272,729	$5,862,987	**$40,135,716**	$43,603,322	$6,911,993	**$50,515,315**
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	$0	$0	**$0**	$0	$0	**$0**	$0	$0	**$0**
4	$0	$0	**$0**	$0	$0	**$0**	$0	$0	**$0**
5	$0	$0	**$0**	$0	$0	**$0**	$0	$0	**$0**
6	$0	$0	**$0**	$0	$0	**$0**	$0	$0	**$0**
7*	$195,369,110	$1,908,000	**$197,277,110**	$6,552,655	$1,272,182	**$7,824,837**	$201,921,765	$3,180,182	**$205,101,947**
8	$0	$0	**$0**	$0	$0	**$0**	$0	$0	**$0**
9	$0	$0	**$0**	$0	$0	**$0**	$0	$0	**$0**
10	$0	$0	**$0**	$0	$0	**$0**	$0	$0	**$0**
11	$0	$0	**$0**	$0	$0	**$0**	$0	$0	**$0**
12	$0	$0	**$0**	$0	$0	**$0**	$0	$0	**$0**
13	$0	$0	**$0**	$0	$0	**$0**	$0	$0	**$0**
14	$2,745,000	$0	**$2,745,000**	$0	$0	**$0**	$2,745,000	$0	**$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	$15,528,483	$1,310,215	**$16,838,698**	$48,923,477	$13,577,396	**$62,500,873**	$64,451,960	$14,887,611	**$79,339,571**
17	$60,765,779	$1,656,301	**$62,422,080**	$17,747,257	$6,170,897	**$23,918,154**	$78,513,036	$7,827,198	**$86,340,234**
18	$0	$0	**$0**	$0	$0	**$0**	$0	$0	**$0**
19	$11,663,750	$189,394	**$11,853,144**	$2,733,027	$239,967	**$2,972,994**	$14,396,777	$429,361	**$14,826,138**
20	$0	$0	**$0**	$0	$0	**$0**	$0	$0	**$0**
21	$1,992,000	$250,000	**$2,242,000**	$2,056,127	$20,000	**$2,076,127**	$4,048,127	$270,000	**$4,318,127**
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	$27,316,099	$1,705,388	**$29,021,487**	$11,025,505	$7,375,438	**$18,400,943**	$38,341,604	$9,080,826	**$47,422,430**
24	$27,586,018	$985,130	**$28,571,148**	$17,246,724	$5,024,381	**$22,271,105**	$44,832,742	$6,009,511	**$50,842,253**
25	$0	$0	**$0**	$829,007	$112,303	**$941,310**	$829,007	$112,303	**$941,310**
26	$0	$0	**$0**	$0	$0	**$0**	$0	$0	**$0**
27*	$34,576,358	$1,250,000	**$35,826,358**	$14,977,829	$0	**$14,977,829**	$49,554,187	$1,250,000	**$50,804,187**
28	$0	$0	**$0**	$0	$0	**$0**	$0	$0	**$0**
29	$0	$0	**$0**	$0	$0	**$0**	$0	$0	**$0**
30	$4,856,586	$305,000	**$5,161,586**	$16,422,570	$1,830,051	**$18,252,621**	$21,279,156	$2,135,051	**$23,414,207**
31	$0	$0	**$0**	$0	$0	**$0**	$0	$0	**$0**
32	$13,365,352	$3,550,677	**$16,916,029**	$10,973,681	$2,993,100	**$13,966,781**	$24,339,033	$6,543,777	**$30,882,810**
33	$5,272,521	$275,989	**$5,548,510**	$1,636,858	$1,513,693	**$3,150,551**	$6,909,379	$1,789,682	**$8,699,061**
34	$16,503,884	$1,349,490	**$17,853,374**	$6,286,357	$1,663,068	**$7,949,425**	$22,790,241	$3,012,558	**$25,802,799**
35	$33,831,257	$0	**$33,831,257**	$0	$0	**$0**	$33,831,257	$0	**$33,831,257**
36	$14,613,210	$0	**$14,613,210**	$4,659,623	$650,000	**$5,309,623**	$19,272,833	$650,000	**$19,922,833**
37	$62,663,336	$0	**$62,663,336**	$23,332,392	$383,869	**$23,716,261**	$85,995,728	$383,869	**$86,379,597**
38	$16,838,094	$1,784,123	**$18,622,217**	$17,989,347	$1,846,000	**$19,835,347**	$34,827,441	$3,630,123	**$38,457,564**
39	$3,265,773	$0	**$3,265,773**	$297,522	$0	**$297,522**	$3,563,295	$0	**$3,563,295**
40	$11,718,950	$2,695,298	**$14,414,248**	$9,789,594	$2,903,256	**$12,692,850**	$21,508,544	$5,598,554	**$27,107,098**
41	$15,180,903	$1,552,126	**$16,733,029**	$8,756,849	$2,130,477	**$10,887,326**	$23,937,752	$3,682,603	**$27,620,355**
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	$5,827,983	**$28,183,099**	$10,715,913	$1,277,243	**$11,993,156**	$33,071,029	$7,105,226	**$40,176,255**
44	$50,519,905	$1,983,967	**$52,503,872**	$10,123,626	$1,830,674	**$11,954,300**	$60,643,531	$3,814,641	**$64,458,172**
45	$6,985,901	$0	**$6,985,901**	$0	$0	**$0**	$6,985,901	$0	**$6,985,901**
46	$271,286	$0	**$271,286**	$0	$0	**$0**	$271,286	$0	**$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	$0	$0	**$0**	$988,800	$0	**$988,800**	$988,800	$0	**$988,800**

**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 initial recipient of this grant was the Village of Martinsburg to help the community return into compliance with the Uranium drinking water standard and to replace a deteriorated water storage tank. This past fiscal year, $464,000 was awarded to the Village to construct a stainless-steel water tank. The next award is planned for the Village of Steele City 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 May of 2022, the first allotment of $882,000 in OSG funds were awarded to Nebraska.

This past fiscal year the initial recipients were the City of Omaha ($749,700) and the Middle Niobrara Natural Resources District (NRD) ($132,300). Nebraska presently receives 3.9% of the national OSG allotment primarily due to Omaha's CSO project, well above the 0.58% that is allocated under the CWSRF. As the City'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 Middle Niobrara NRD. The next OSG awards are planned again to the City of Omaha along with the Village of Ashton, the latter a project to remedy infiltration and inflow concerns for its 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 pre-schools, 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.

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 work plan is under development which will focus on the regionalization of small communities that have elevated levels of Manganese, in order to avoid the installation of a more costly water treatment plant alternative.

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 $2,800,000 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 $125,239.30 for RO installations for Private Well Owners. The agency continues to increase outreach efforts for ARPA funding to Private Well Owners.

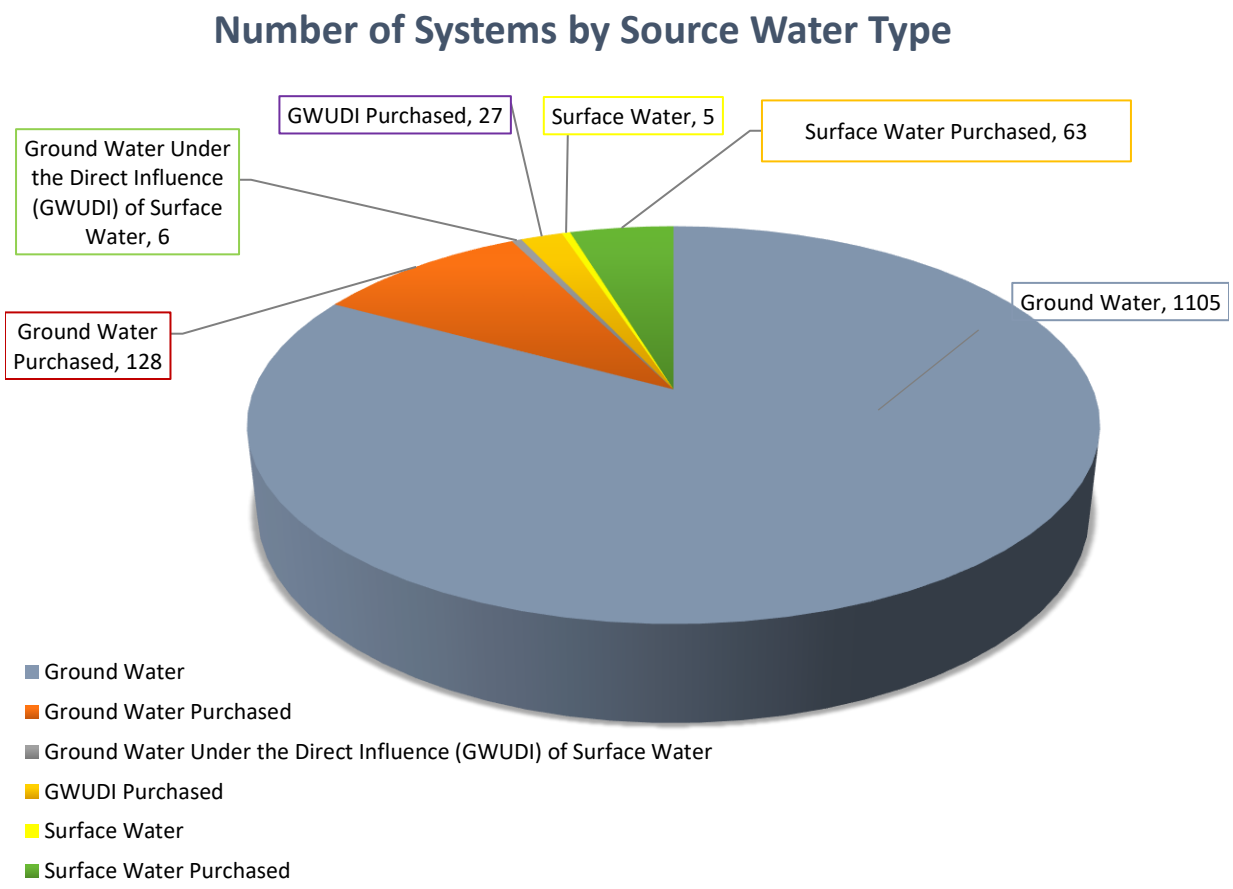
Section 52 of Legislative Bill No. 1014e states that these funds are to be used "…*for wastewater and drainage system updates at the state fairgrounds, which shall only be used for such purpose*". Wastewater and drainage system updates are eligible for assistance under the CWSRF, and therefore under 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.

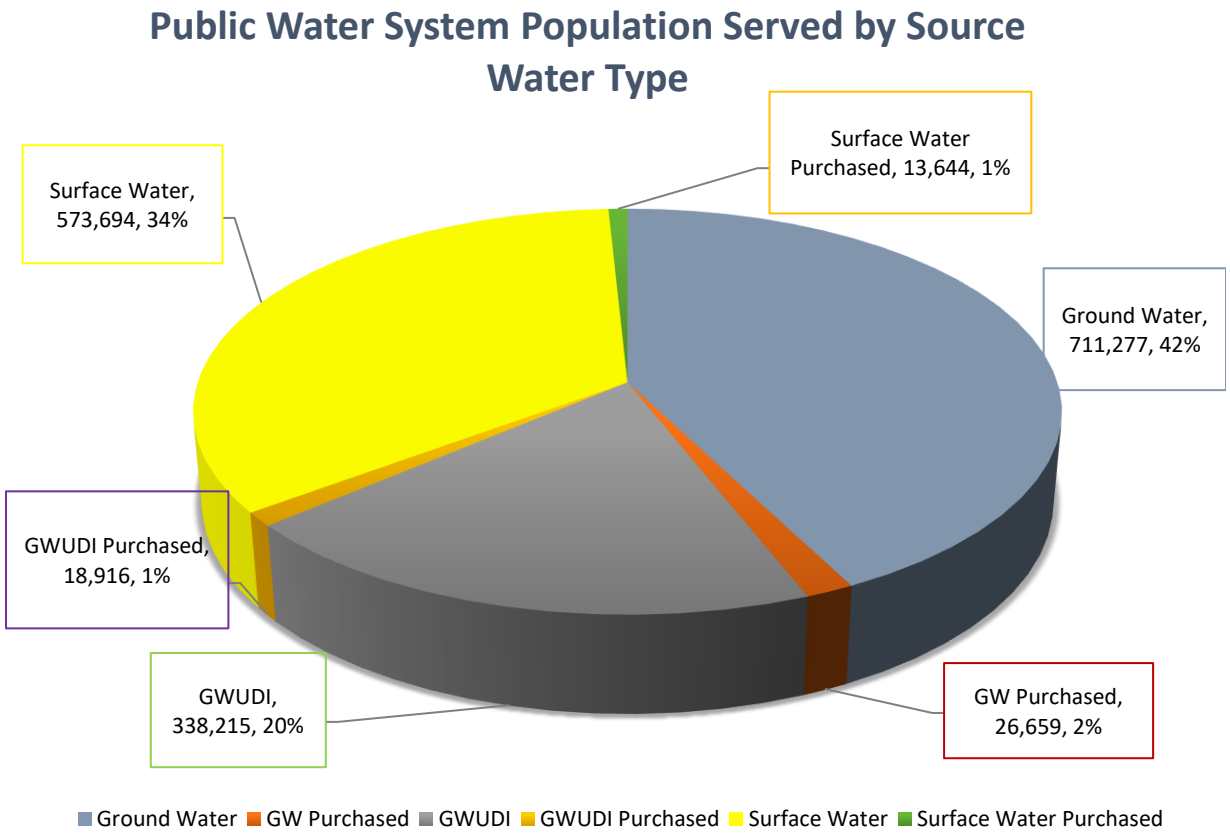
Section 53 of Legislative Bill No. 1014e states that these funds are "…*to provide grant assistance for a rural drinking water project that serves rural water connections and at least four communities in two contiguous counties in order to convert to ground water sources and to provide for water system 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.

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 the people of Nebraska. 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 63 systems purchase water from those five systems. In addition, 6 systems utilize ground water under the influence of surface water (GWUDI), and 27 additional systems purchase water from those six systems. The remaining 1,105 systems use ground water, and an additional 128 systems purchase their water from another ground water system.





**Percentages rounded to nearest 1%*

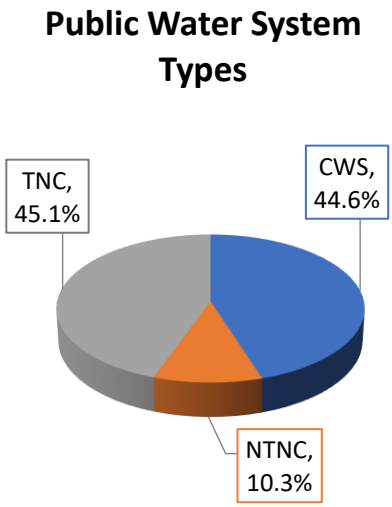
Nebraska's Public Water Systems

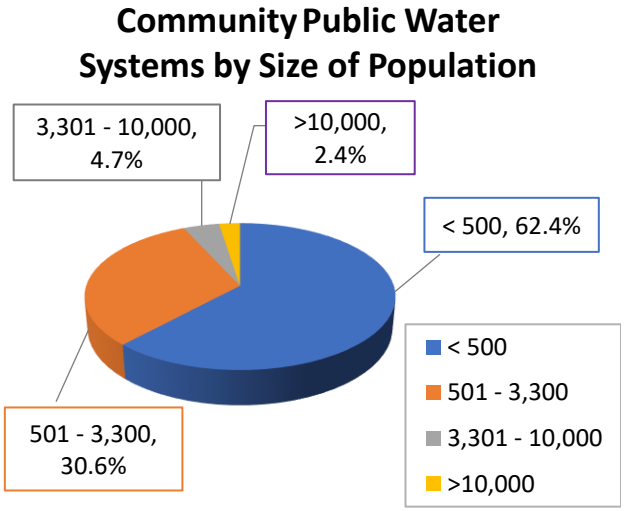
Nebraska public water systems can be broken down into categories based on the size of the population served and/or the type of population served.

Population	CWS	NTNC	TNC	Total Systems	Percentage*
<101	104	75	499	678	50.8%
101-500	267	42	96	405	30.4%
501-1000	94	10	7	111	8.3%
1001-3300	88	8	0	96	7.2%
3301-10000	28	2	0	30	2.2%
10001-50000	11	0	0	11	0.8%
>50000	3	0	0	3	0.2%
TOTAL	595	137	602	1334	100.0%

**Based on approximate population*

CWS = Community ..... 595 systems
N099TNC – Non-transient, non-community .....137 systems
TNC = Transient, non-community .....602 systems





Over 60% of Nebraska's 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
3) 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

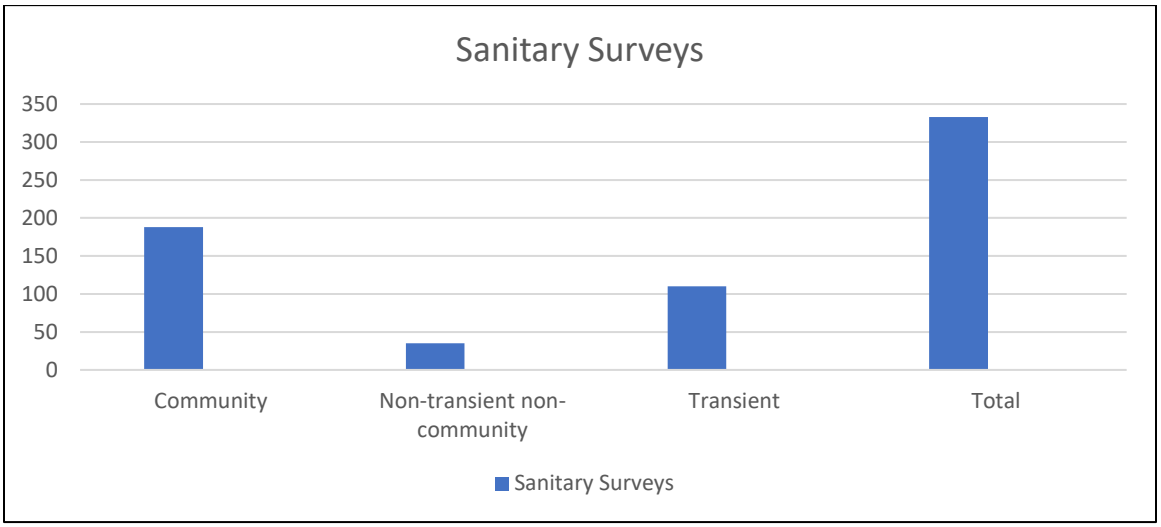
Sanitary Surveys

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 333 sanitary surveys (188 community, 35 non-transient non-community, and 110 transient public water systems). A total of 667 deficiencies were found. This reflects an overall deficiency rate of 2.0 deficiencies per sanitary survey. No deficiencies were found in 115 (35%) of the sanitary surveys completed. The average number of deficiencies found in Nebraska's public water systems has remained stable from 2020 to 2023, 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 by the confirmed presence of total coliform bacteria in a public water system. The public water system is responsible for completing a Level 1 assessment. Then field staff are responsible for completing a review of this assessment.

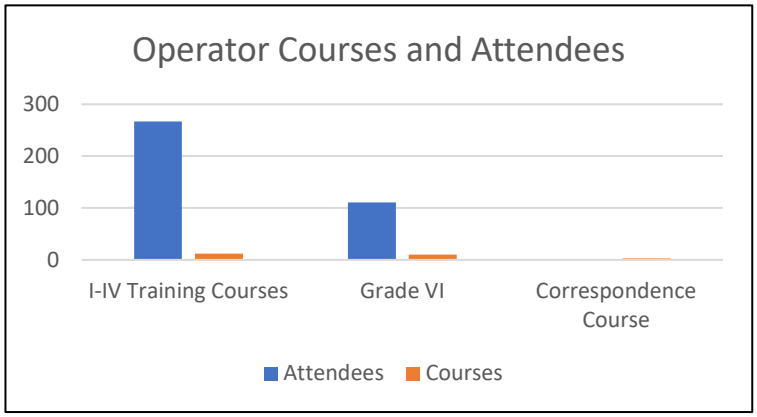
A Level 2 assessment is triggered by either multiple Level 1 assessments within a running twelve-month period, or by the confirmed presence of *E. coli* bacteria in the system. A Level 2 assessment is conducted by field staff and provides a much more detailed evaluation of the PWS.

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.

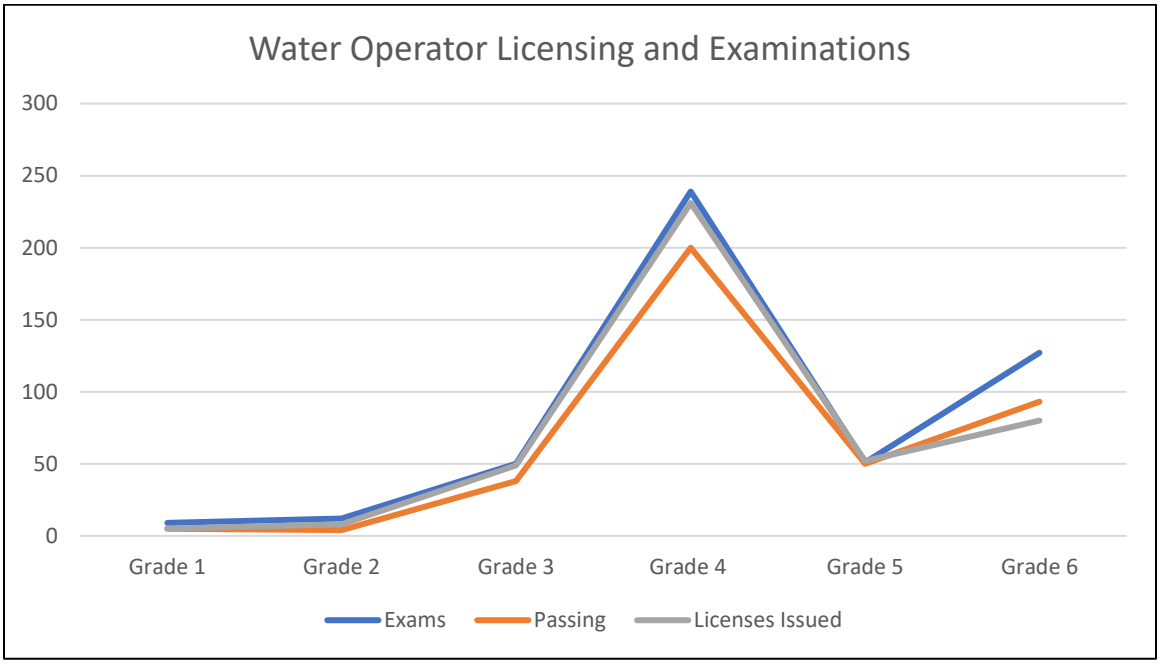
Training

Field Services and Training program personnel conducted 12 water operator training courses, Grades I through IV, with a total of 255 attendees. An additional 3 individuals completed the correspondence course that is also offered to prepare for the Grade IV licensure examination. For Grade VI licensure (backflow preventer testing and repair), 10 courses were offered with a total of 107 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
I	9	5	5
II	12	4	8
III	50	38	49
IV	239	200	231
V	51	50	52
VI	127	93	80



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 2023. 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 71 workshops/seminars/conferences were initially offered in Nebraska for the purpose of water operator continuing education. Of these, 24 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 2023 five 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. No individual trainings were held in SFY 2023.

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 completed at twenty-two 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 2023 109 completed surveys were received from community water systems with an average score of 83%, and 13 non-transient non-community systems with average score of 71%. Fourteen community, and ten NTNC systems scored below 70%.

Education and Outreach

In-person training was still a restriction for the capacity development coordinator. Outreach and training regarding capacity development was provided by other 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. During 2022, the coordinator worked with stakeholders to finalize the capacity development strategy to include the asset management component. Nebraska's revised strategy was submitted to U.S. EPA Region 7 for review on May 15, 2022, receiving approval 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 enforcement actions, provides compliance assistance internally and externally, and maintains the SDWIS database for PWSs.

Safe Drinking Water Information System

The Safe Drinking Water Information System (SDWIS) is a database developed by EPA for States to report water quality data test results, violations, compliance assistance, enforcement, compliance schedules, water operator licensure, and PWS operating permits. It receives electronic data from the State of Nebraska Environmental Health Laboratory and 4 contract laboratories (Midwest Lab, Hall County, American Ag, and Enviro Services) 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 our 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 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 149 violations from 78 public water systems in FY2023 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 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,* a type of coliform bacteria. The RTCR establishes a MCL for *E. coli*. Assessments of the PWS and corrective actions are required if *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 total coliform is found in the system. The public water system conducts the Level 1 Assessment and the Drinking Water Program then reviews it. Identified deficiencies noted in the Assessment are required to be corrected in a timely manner.

A Level 2 Assessment is triggered when a system incurs more than one Level 1 Assessment in a running 12-month period, or if a system has a confirmed *E. coli* bacteria presence within their system. The Level 2 Assessment is conducted by the Drinking Water Program with a representative of the public water system. Level 2 paperwork is completed and identified deficiencies are noted and the system is responsible for correcting deficiencies in a timely manner.

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	73	73	5.5%
Level 2	67	51	3.8%
Level 2, *E. coli* MCL triggered	5	5	0.4%

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* +	7	7	0.5%
Monitoring, Additional Routine, Major Routine	47	35	2.6%
Startup Procedures TT	1	1	0.07%

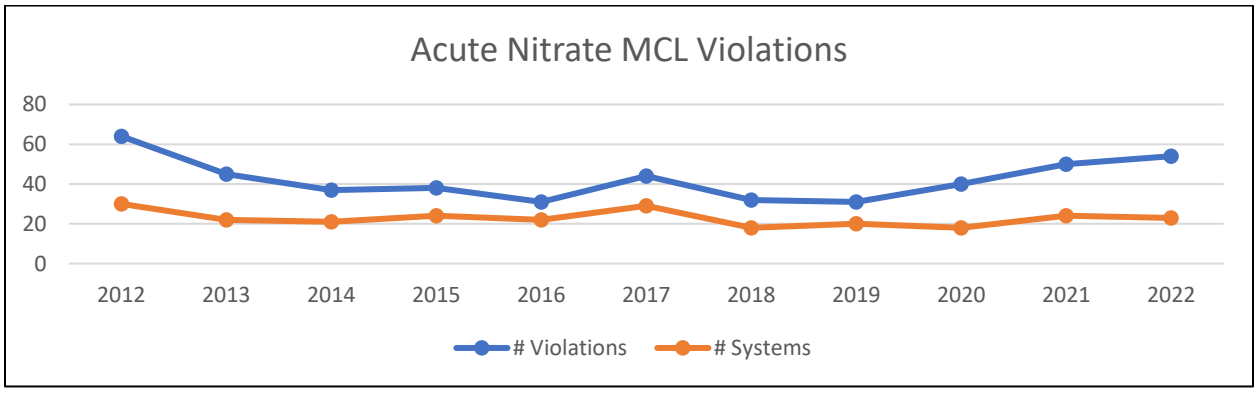
Nitrate-Nitrite Rule

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 to correct a nitrate contamination problem if two nitrate-nitrite violations are issued within a consecutive three-quarter period.

A summary of the nitrate-nitrite violations is presented below along with historic data. Nitrate MCL violations have decreased in Nebraska since 2012. The last 3 years are showing an increase in MCL violations. This can be attributed to many factors. The last several years have been very dry, drought like, conditions which typically lead to increase in contaminant levels in groundwater.

Nitrate-Nitrate Violations

Violation	Number of Violations	Number of Systems	% of Systems with Violations
MCL – 10 mg/l	54	23	1.7%
Monitoring	8	7	0.5%



Public Notification Rule

Public Notification is required if a PWS receives a MCL, Monitoring, or acute violation. There were five systems in violation of the PN Rule.

Rule	Number of Violations	Number of Systems
Public Notification Rule	7	6

Consumer Confidence Rule

The CCR Rule requires all community water systems to prepare and distribute a brief annual water quality report summarizing information regarding source water, detected contaminants, compliance, and educational information. There were zero systems in violation of the CCR Rule.

Rule	Number of Violations	Number of Systems
Consumer Confidence Rule	0	0

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 over a long period of time. Depending on the contaminant, routine monitoring occurs every year, every three years, or every six years (per 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 3 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 a health risk.

Below are 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	11	0	6	0.45%
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%

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	1	1
Total Trihalomethanes	1	1	2

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 systems monitor for Lead and Copper.)

Contaminant	Number of Monitoring Violations	Number of Systems	Systems with Violations
Lead and Copper	1	1	0.07%

Surface Water Treatment Rule Violations

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

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 Administrative Order (AO) when a public water system is significantly out of compliance. (Each contaminant has different parameters that indicate what constitutes "significantly out of compliance.") Once an AO is issued, MCL violations continue to be issued until the System 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	3	2	1
Population Affected	1364	437	150

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	11	6	1012
Selenium	0	0	0
Uranium Mass	12	3	531

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 are also developing several new programs which address grid resiliency, school energy use efficiency, and home energy use efficiency. These programs are described below.

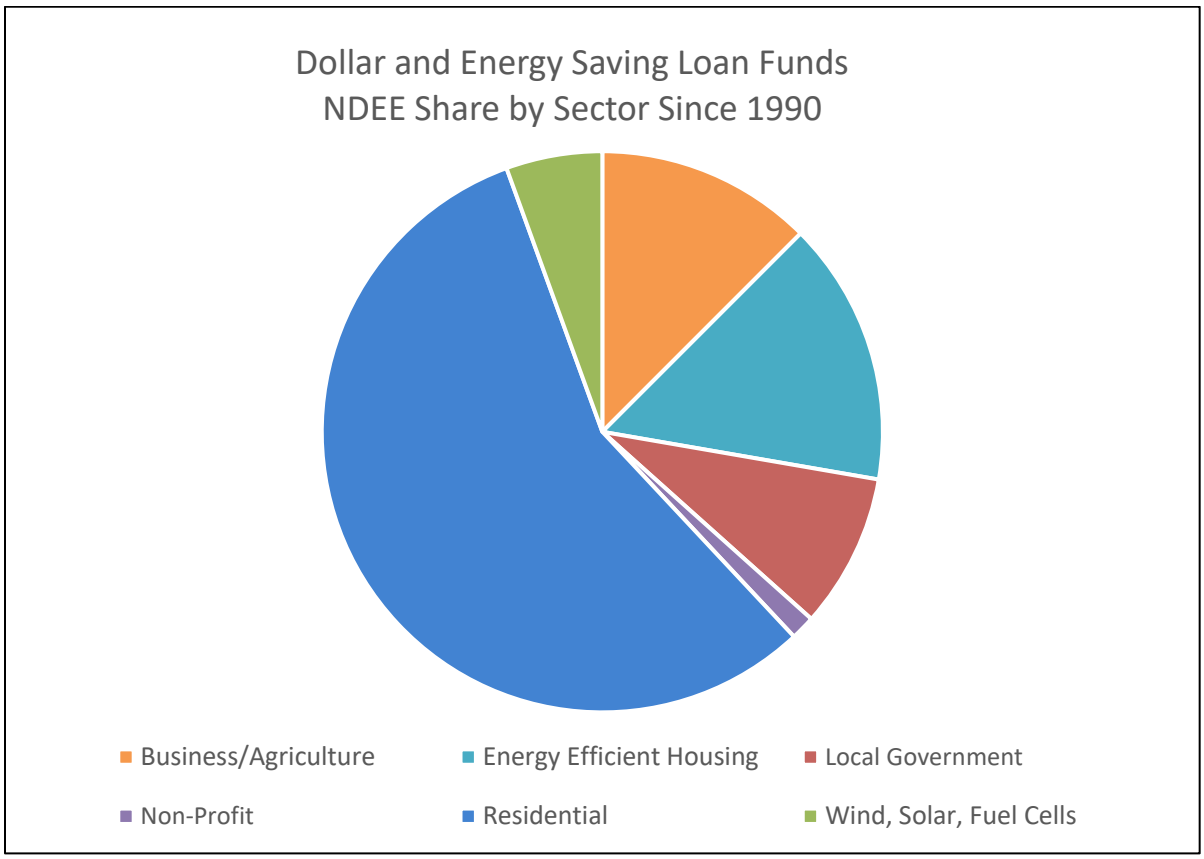
A comprehensive annual report on energy activities is required by statute; the 2023 report will be included in a separate report submitted to the Governor and the Clerk of the Legislature by February 15, 2024. The State Energy Annual Report for 2022 may be found at http://dee.ne.gov/publica.nsf/PubsForm.xsp?documentId=0A15B98518AA3D1E8625896000613CD0&action=openDocument.

Energy

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.

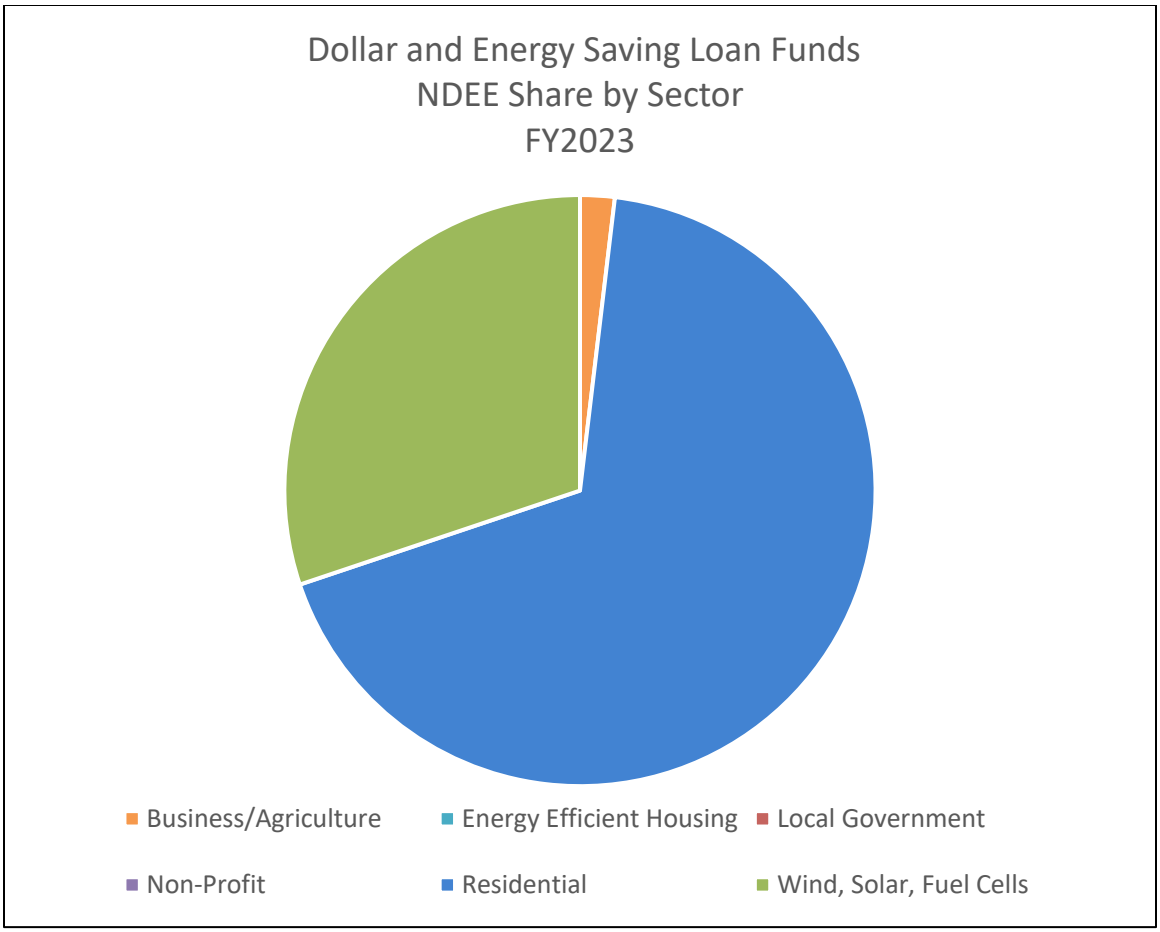
Since the inception of the program in 1990, the DESL program has helped finance 30,830 energy saving projects with the total cost of all improvements financed totaling over $389.2 million. The DESL revolving loan system will continue to provide for energy conservation loans far into the future since 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; providing better thermal resistance with added insulation and replacing old windows and doors; installing large and small-scale solar projects; and constructing new, energy-efficient housing.



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

Category	Total Loaned	NDEE Share	Total Projects
Business/Agriculture	$46,306,375	$24,326,373	1,652
Energy Efficient Housing	$79,782,209	$29,637,352	302
Local Government	$26,382,094	$17,320,369	158
Non-Profit	$6,595,648	$2,737,146	125
Residential	$213,136,924	$109,823,236	28388
Wind, Solar, Fuel Cells	$16,223,483	$10,798,987	205
Total	**2,972,092**	**224,280,633**	**30,830**

In fiscal year 2023, the DESL program helped finance over $2.9 million for 168 loans that improved energy efficiency for 171 new projects. Over that time, on residential projects alone, the DESL program is estimated to have saved 42,114 kilowatt-hours of electricity, 27,343 therms of natural gas and reduced carbon emissions by almost 3,655 tons.



FY 2023 Dollar and Energy Saving Loan Funds – NDEE Share by Sector

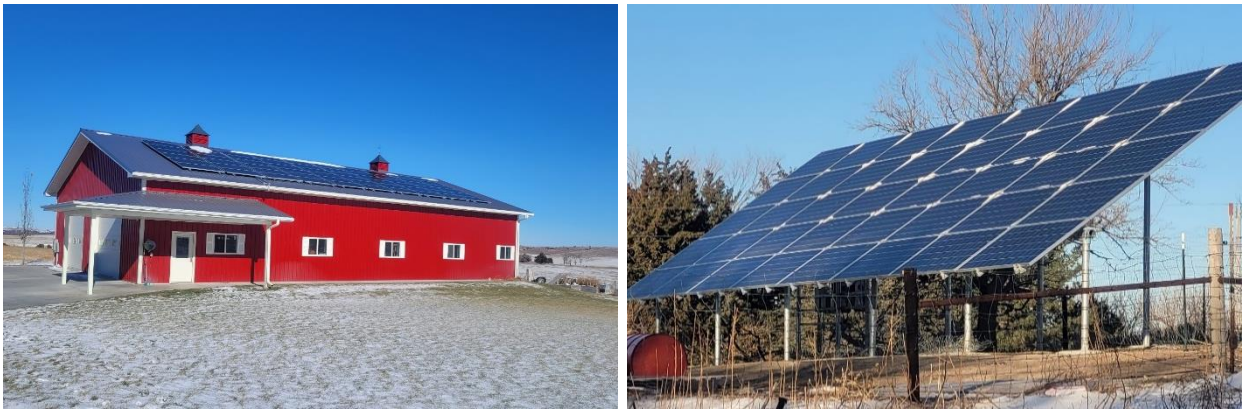
Category	Total Loaned	NDEE Share	Total Projects
Business/Agriculture	$56,159	$36,503	2
Energy Efficient Housing	$0	$0	0
Local Government	$0	$0	0
Non-Profit	$0	$0	0
Residential	$1,966,785	$1,312,030	157
Wind, Solar, Fuel Cells	$949,148	$582,134	12
Total	**2,972,092**	**1,930**	**171**

DESL Project Highlights from Fiscal Year 2023

New energy efficient windows installed with funds from the Dollar and Energy Saving Loan Program (2022).

Left: A 7.2 kW Residential Photovoltaic system, Lincoln (2022); Right: A 5 ton, 16 SEER AC unit, part of a $320K HVAC project for Broken Bow United Methodist Church, Broken Bow (2022).

Photovoltaic Installations for Agricultural Applications



Top: Roof-mounted 22.8 kW solar array, Broken Bow (2022); Bottom: Ground-mounted 15.6 kW solar array, Scotia (2022).

New Construction - Energy Efficient Housing

Construction of a new above-code, energy-efficient, single-family residence was completed with funds from the Dollar and Energy Saving Loan's Energy Efficient Housing Program, Firth (2022).

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 $91 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 plans 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.

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.

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 a clean and 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.

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. NDEE plans to support local communities in implementing high-impact, self-sustaining clean energy projects. This program will provide funding for communities based on their individual needs.

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.

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. 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.

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 have been actively involved in providing training on the new 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 in-person 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. 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, one of which is 12 - energy. Emergency Support Function 12 (ESF12) staff attended over two dozen meetings, webinars, and trainings 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, NDEE staff were briefed on energy risks, reliability and resilience, transmission planning, electrical resource adequacy, energy markets, energy needs at harvest, fuel inventory levels, energy market dynamics, fuel transportation, hours of service waivers, cybersecurity, infrastructure protection, disaster recovery, and overall energy security planning.

At other meetings, NDEE staff addressed management of the Missouri River ice jam which threatened thermal electricity generation capabilities, participated in a Phillips 66 on-site tabletop simulated fuel spill response, and worked simulated emergency response with FEMA and at the State Emergency Operations Center.

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. This year, states have been provided funding through the State Energy Program to update every part of their plans.

States' plans were submitted by September 30, 2022, to be reviewed by the U.S. Department of Energy. States, territories, and the District of Columbia were given until September 30, 2023, to fix the weaknesses and resubmit plans. The Cybersecurity, Energy Security, and Emergency Response (CESER) unit at the U.S. Department of Energy will review the plans. After their review and response, the states, territories, and District of Columbia will do an annual update and submit the plans each year to their governors for review.

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: https://neo.ne.gov/programs/stats/inf/86.html
- Heating Oil Prices: https://neo.ne.gov/programs/stats/inf/87.html
- Annual Report: https://neo.ne.gov/programs/shopp/shopp.html

Midwest Regional Petroleum Shortage Response Collaborative

NDEE has begun working with a group of states to share resources and strengths to assist each other in the event of regional energy emergencies. This new collaborative, which is named the Midwest Regional Petroleum Shortage Response Collaborative, aims to create a regional framework to guide the development of 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, South Dakota, Illinois, Missouri, Indiana, Iowa, Tennessee, Kentucky, Michigan, Kansas, and Minnesota.

NDEE met with the Collaborative monthly since March. During these meetings, the Collaborative developed 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 established 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.

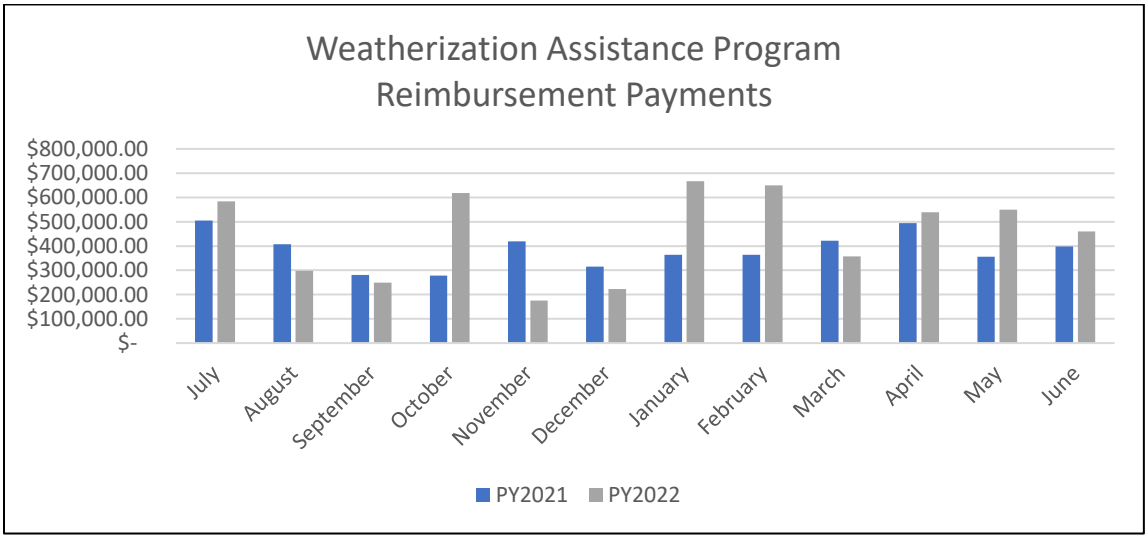
Weatherization Assistance Program

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.

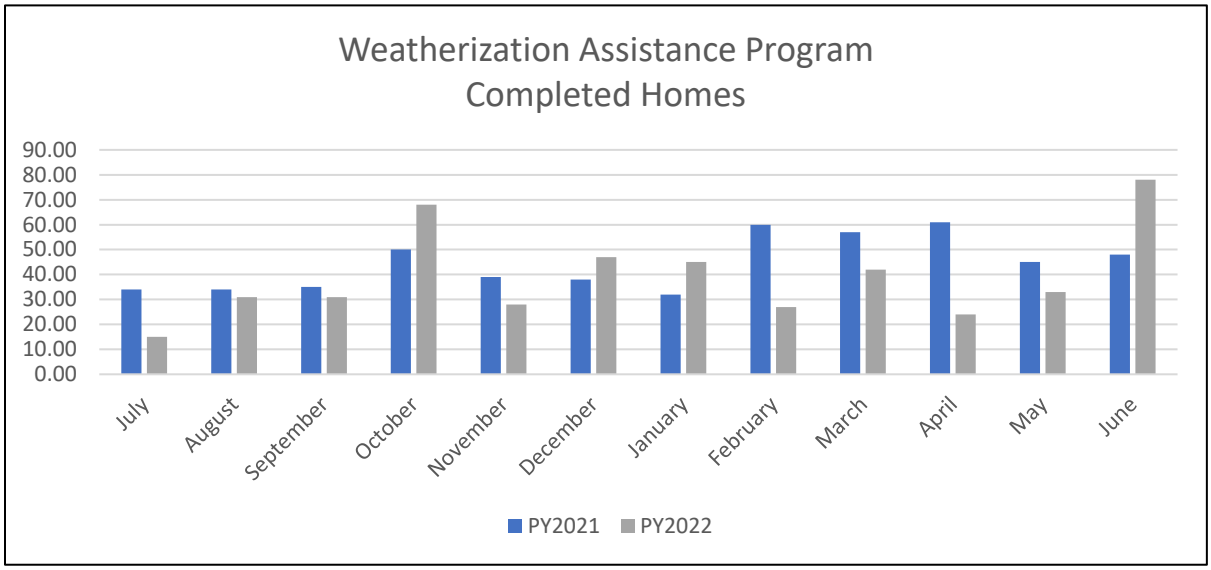
The types of improvements vary based on an energy audit analysis of the home; improvement investment averages between $6,000 and $8,000 per home, excluding the cost of health and safety improvements such as furnace repairs. The most common improvements are adding insulation, air sealing the home, repairing 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, 2022 and June 30, 2023, 448 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 PY2022 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 General Funds. Since the WAP began in 1977, $233 million has been provided to make energy efficiency improvements in 71,115 homes. The Department is allowed to use $675,000 from the LIHEAP budget for Heating and Cooling Repair and Replacement Assistance (HCRRA), with a limit of $5,000 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 FY2021/2022 and FY2022/2023.



The following chart shows the Weatherization Assistance Programs production for FY2021/2022 and FY2022/2023



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.

CHAPTER 8:
Expenditure and Budget Summary

The following information summarizes Department expenditures for fiscal year 2023 and outlines budget projections for fiscal year 2024. 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 FY23 expenditures for each federal grant, including the state match.

Chart B lists actual FY23 expenditures of programs funded by state general funds and/or cash funds. This chart lists expenditures by activity. Activity in this case is not considered a program activity but is a category of expenditure. Activities listed in this chart are personal services, operating expenses, travel, capital outlay, contracting and distribution of aid.

Chart C outlines the proposed FY24 budget for each federal grant. Chart C also lists proposed match for each program for which a non-federal match is required. Additionally, match for the 319H grant is provided by in-kind services in the Groundwater Management Area program.

Chart D outlines proposed FY24 budgets for programs funded by state funds. This chart lists proposed expenditures by activity. As in Chart B, activity is not a program activity, but a category of expenditure. Activities listed are personnel services, operations, travel, capital outlay, contracting and distribution of aid.

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

Chart A -- Actual Expenditure for Each Federal Grant for FY23

Grant / Program Title	Grant $	Match $	Total $
Drinking Water State Revolving Fund	15,664,617	406,486.89	16,071,104
Clean Water State Revolving Fund	15,519,538	404,496.60	15,924,035
Performance Partnership	4,692,484	1,578,046.28	6,270,530
Weatherization	2,864,418		2,864,418
LIHEAP - Energy Assistance Program DHHS	2,861,862		2,861,862
319 H Non-Point Source	2,499,562		2,499,562
Public Water Supply	822,136	453,366	1,275,502
Leaking Underground Storage Tanks	712,383	77,777	790,160
Dollar & Energy Savings Loan (DESL)	630,091		630,091
Section 128 (a) State Response	593,639		593,639
State Energy Program (SEP)	540,173	192,691	732,864
Clean Diesel	473,261		473,261
Section 106 Monitoring	405,179		405,179
PM 2.5 Ambient Air Monitoring	266,067		266,067
WIIN-Martinsburg	194,450		194,450
Superfund Core	178,289	1,547	179,836
Superfund Management Assistance	103,953		103,953
604 B Water Quality Management	100,168		100,168
Department of Defense	97,113		97,113
Lead in Schools/Daycares	77,472		77,472
USDA Remediation	32,236		32,236
Superfund Pre-remedial	32,670		32,670
ARPA Reverse Osmosis Private	21,233		21,233
Superfund UNL Mead	8,333		8,333
State Heating Oil and Propane	7,244	13,794	21,038
FDA Retail Flex Fund Model	2,427		2,427
Totals	**$ 49,400,998**	**$ 3,128,205**	**$ 52,529,203**
Non-grant federal expenditures*	$ 3,454,870		

*Indirect Cost Pool, EQC

Performance Partnership is made up of Water 106/NPDES, Air 105, Groundwater, RCRA 3011, a part of nonpoint source programrm, 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 38.76% was negotiated with EPA for FY23 and charged against direct payroll cost to cover agency administrative expenses

Chart B - Actual Expenditure of State Funds for State Programs for FY23 Including Aid

Program	Subprogram	Fund Type	Personal Services	Operating Expenses	Consulting /Contracting	Travel	Capital Outlay	Distribution of Aid	Total
NDEE Operations/Administration	001	G	517,682	283,734	100,339	2,356	234,617	-	1,138,728
Integrated Solid Waste Management	004	C	1,339,500	428,886	114,107	11,378	-	-	1,893,872
Clean Water Small Town Grants	006	C	-	-	-	-	-	495,832	495,832
Clean Water SRF	007	C	364,431	82,256	825	987	-	-	448,500
Ag - Livestock	011/016	G/C	1,397,088	376,930	47,290	8,057	-	4,169	1,833,534
Air Construction Permits	020	C	41,662	10,486	475	36	-	-	52,660
Superfund State Cost Share	023	G/C	27,063	5,879	559,065	144	-	23,353	615,504
Litter Reduction	024	C	193,851	95,436	11,136	536	-	2,233,741	2,534,699
Private Onsite Wastewater Cert & Registration	030	G/C	184,113	67,436	2,312	4,462	-	-	258,323
Emission Inventory - Title V	033	C	1,859,547	514,352	8,325	6,370	-	-	2,388,595
Chemigation	034	C	23,416	9,179		-	-	-	32,594
Remedial Action Plan Monitoring Act	036	C	94,329	19,138	127	-	-	-	113,594
Private Onsite Wastewater Permit & Approval	037	C	23,559	7,845		1,002	-	-	32,406
Operator Certification	040	C	52,516	13,235	18,686	1,875	-	-	86,312
Petroleum Release Remedial Action Act	051	C	1,150,687	560,845	7,191,949	10,737	-	3,668,644	12,582,862
Emergency Response	057	C	112,657	64,058	2,334	5,962	-	-	185,010
Engineering Reviews	061	G	328,944	29,287	3,612	1,340	-	-	363,183
Volkswagen	065	C	13,967	6,736		-	-	983,983	1,004,686
Waste Reduction & Recycling	091	C	285,662	81,928	7,343	135	-	4,352,849	4,727,917
Environmental Safety	209/210	G/C	558,528	152,151	4,873	5,897	-	-	721,449
Engineering Plan Review	285	G/C	340,831	74,034	-	1,925	-	-	416,790
Well Drillers	287	C	360,019	90,843	1,609	12,382	-	-	464,853
Clean Water Act 404 Program	404	G	229,850	15,190	-	2,138	-	-	247,178
Energy Loan Program	814	C	-	-	-	-	-	105,076	105,076
Energy Admin/Special Projects	816/841	G/C	46,675	20,869	-	-	-	32,024	99,568
Totals			**9,546,577**	**3,010,734**	**8,074,408**	**77,718**	**234,617**	**11,899,671**	**32,843,725**
Total State Matching Funds (From Chart A)									**3,128,205**
Agency Total									35,971,930

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 38.76% was negotiated with EPA for FY23 and charged against direct payroll cost to cover agency administrative expenses

Chart C - Proposed Budget for Each Federal Grant Program for State FY24

Grant / Program Title	Grant $	Match $	Total $
Clean Water State Revolving Fund	28,327,416	1,000,000	29,327,416
Drinking Water State Revolving Fund	21,532,962	700,000	22,232,962
Performance Partnership	8,739,701	3,296,182	12,035,883
State Energy Program (SEP)	4,114,932	611,271	4,726,203
Reverse Osmosis	3,978,767		3,978,767
319 H Non-Point Source	2,356,350		2,356,350
Weatherization	2,058,317		2,058,317
LIHEAP - Energy Assistance Program DHHS	1,752,859		1,752,859
Leaking Underground Storage Tanks	544,271	61,739	606,010
PM 2.5 Ambient Air Monitoring	448,439		448,439
Superfund Core	295,271	44,170	339,441
Lead in Schools/Daycares	255,078		255,078
Section 106 Monitoring	236,502		236,502
Section 128 (a) State Response	217,778		217,778
Clean Diesel	216,246		216,246
604 B Water Quality Management	182,105		182,105
Department of Defense	112,117		112,117
USDA Remediation Action Plan	110,763	73,842	184,605
Superfund Management Assistance	102,182		102,182
Superfund Pre-remedial	69,659		69,659
Sewer Overflow/Stormwater	52,853		52,853
WIIN-Martinsburg	50,000		50,000
Superfund UNL Mead	7,594		7,594
State Heating Oil and Propane	6,253	11,613	17,866
Totals	**$ 75,768,415**	**$ 5,798,817**	**$ 81,567,232**
Non-grant federal expenditures*	3,657,362		

*Indirect Cost Pool, EQC

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 32.80% was negotiated with EPA for FY24 and will be charged against direct payroll cost to cover

Chart D - Proposed Budget of State Funds for State Programs for FY24 Including Aid

Program	Subprogram	Fund Type	Personal Services	Operating Expenses	Travel	Capital Outlay	Consulting /Contracting	Distribution of Aid	Total
Integrated Solid Waste Management	004	C	1,881,570	119,500	16,000	-	838,342	-	2,855,412
NDEE Operations/Administration	001	G	858,055	275,570	16,008	-	10,066	-	1,159,698
Clean Water SRF	007	C	375,238	4,200	4,200	-	126,000	760,000	1,269,638
Ag - Livestock	016	G/C	1,635,848	124,500	12,000	-	-	-	1,772,348
Air Construction Permits	020	C	93,903	5,000	-	-	-	-	98,903
Superfund State Cost Share	023	C	81,173	-	-	-	600,000	400,000	1,081,173
Litter Reduction	024	C	299,591	53,000	500	-	3,500	2,000,000	2,356,591
Private Onsite Wastewater Cert & Registration	030	C	344,344	51,500	3,000	-	-	-	398,844
Emission Inventory - Title V	033	C	2,381,550	59,000	11,000	-	20,000	758,886	3,230,436
Chemigation	034	C	36,009	5,000	-	-	30,000	-	71,009
Private Onsite Wastewater Permit & Approval	037	C	18,208	69,500	-	-	-	-	87,708
Operator Certification	040	C	64,238	2,000	2,500	-	13,000	-	81,738
Petroleum Release Remedial Action Act	051	C	1,849,871	198,926	6,000	-	6,518,654	6,950,601	15,524,052
Emergency Response	057	C	83,112	15,500	2,700	-	2,500	-	103,812
Engineering Reviews	061	G	468,318	-	-	-	-	-	468,318
Volkswagen	065	C	59,373	-	467	-	-	2,976,114	3,035,954
Drinking Water SRF	087	C	506,849	512,000	7,500	-	235,000	-	1,261,349
Waste Reduction & Recycling	091	C	394,961	334,000	2,500	-	1,500	4,800,000	5,532,961
Nebraska Environmental Response	093	C		300,000	-	-	-	-	300,000
Revitalize Rural Nebraska	096	C	101,860	-	-	-	-	898,140	1,000,000
Lead Service Lines	103	C	-	-	-	-	-	10,000,000	10,000,000
Environmental Safety	209/210	G/C	668,193	52,500	15,000	-	5,000	-	740,693
Engineering Plan Review	285	C	400,950	27,500	500	-	-	-	428,950
Well Drillers	287	C	923,479	124,299	34,302	-	5,500	-	1,087,580
Clean Water Act 404	404	G	688,837	10,372	5,000	-	249,259	-	953,468
Energy Admin/Special Projects	816	C	168,571	-	-	-	-	284,180	452,751
Totals			**$ 14,384,101**	**$ 2,343,867**	**$ 139,177**	**$ -**	**$ 8,658,321**	**$ 29,827,921**	**$ 55,353,387**
Total State Matching Funds (From Chart A)									**5,798,817**
Agency Total									61,152,204

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 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 FY2023 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 2023, 46 Litter Reduction and Recycling grants were awarded, totaling $2,435,553. The grants were awarded in three categories: Public Education, $1,528,991; Cleanup, $81,458; and Recycling, $825,104. 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 CY2023, 98 projects totaling $5,297,516 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 FY2023, the program provided $26,012.48 to 25 recipients.

D. Landfill Disposal Fee Rebate Program

The Landfill Disposal Fee Rebate Program was created as an incentive to political subdivisions to support and encourage the purchasing of products, materials, or supplies that are manufactured or produced from recycled material. Funding for the program is from the Waste Reduction and Recycling Incentive Fund. In FY2023, the program provided $112,099 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 $276 million has been disbursed since the program began. The program provided $3.6 million to 149 sites for investigation and cleanup in FY2023.

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 FY2023, the CWSRF funded projects totaling $8,448,000 in loans and $2,935,250 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 FY2022, the program provided financial assistance to public water system projects totaling $46,288,000; disadvantaged communities received $20,946,143 in forgiveness funding.

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 2023, the DESL program helped finance over $2.9 million for 168 loans that improved energy efficiency for 171 new projects. Since the inception of the program in 1990, the DESL program has helped finance over 30,800 energy saving projects with the total cost of all improvements financed totaling over $389.2 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, 2022 and June 30, 2023, 448 homes were weatherized across the state, helping to reduce the energy burden for low-income Nebraskans. Since the WAP began in 1977, $233 million has been provided to make energy efficiency improvements in 71,115 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.

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 2 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

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

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.

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

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

Facility Name	Location	Permit Type	Initial Date	Obligated Amount	Current Amount Demonstrated	FA Mechanism	Guarantor
Municipal Solid Waste Disposal Areas (MSWDA), Sanitary Landfills (LF)							
Alliance Landfill	Alliance	MSWDA	03/17/94	$ 5,252,460	$ 2,140,143	Enterprise Fund	City of Alliance
Beatrice Area SW Agency	Beatrice	MSWDA	07/12/00	$ 8,074,994	$ 7,928,996	Financial Test	City of Beatrice
Butler County Landfill	David City	MSWDA	10/03/08	$ 16,036,756	$ 7,709,449	Trust Fund	US Bank
Douglas County Landfill	Bennington	MSWDA	02/16/04	$ 15,281,306	$ 1,281,306	Surety Bond	Evergreen Ntl. Indemnity Co.
G & P Dev Landfill	Milford	MSWDA	10/03/08	$ 13,238,470	$ 3,561,480	Trust Fund	US Bank
Gering Landfill	Gering	MSWDA	02/13/96	$ 2,521,643	$ 2,123,500	Enterprise Fund	City of Gering
L.P. Gill Landfill	Jackson	MSWDA	08/18/21	$ 15,307,829	$ 15,307,829	Surety Bond	Travelers Casualty & Surety
Grand Island Landfill	Grand Island	MSWDA	03/31/96	$ 11,446,915	$ 11,446,915	Financial Test	City of Grand Island
Hastings Area Landfill	Hastings	MSWDA	03/18/13	$ 6,690,984	$ 4,017,139	Enterprise Fund	City of Hastings
Hastings Landfill	Hastings	Sanitary LF	10/01/97	$ 114,572	$ 33,073	Faith & Credit	City of Hastings
Holdrege Landfill	Holdrege	MSWDA	07/29/96	$ 3,412,355	$ 2,353,397	Enterprise Fund	City of Holdrege
J-Bar-J Landfill	Ogallala	MSWDA	03/28/00	$ 7,431,411	$ 7,431,411	Performance Bond	Evergreen Ntl. Indemnity Co.
Kearney Landfill	Kearney	MSWDA	03/31/94	$ 9,484,926	$ 4,648,110	Trust Fund	Union Bank & Trust
Kimball Landfill	Kimball	MSWDA	05/10/96	$ 1,944,754	$ 1,346,467	Enterprise Fund	City of Kimball
Lexington Landfill	Lexington	Sanitary LF	07/25/96	$ 237,560	$ 291,112	Faith & Credit	City of Lexington
Lexington Area Agency	Lexington	MSWDA	01/19/97	$ 3,766,036	$ 2,479,047	Enterprise Fund	Lexington Area SW Agency
Lincoln Bluff Road Landfill	Lincoln	MSWDA	04/01/96	$ 41,565,838	$ 29,771,341	Financial Test	City of Lincoln
Loup Central Landfill	Elba	MSWDA	04/09/96	$ 3,066,945	$ 1,296,584	Trust Fund	Citizens Bank & Tr St. Paul
McCook Landfill	McCook	Sanitary LF	03/04/96	$ 269,688	$ 89,896	Faith & Credit	City of McCook
NE Ecology Landfill	Geneva	MSWDA	10/03/08	$ 3,446,372	$ 1,205,400	Trust Fund	US Bank
NNSWC Landfill	Clarkson	MSWDA	04/09/96	$ 22,595,970	$ 11,224,005	Enterprise Fund	NNSWC
Pheasant Point Landfill	Bennington	MSWDA	03/01/12	$ 37,527,020	$ 37,527,020	Surety Bond	Western Surety
Sarpy County Landfill	Papillion	MSWDA	03/31/96	$ 4,009,990	$ 4,200,000	Enterprise Fund	Sarpy County
Sidney Landfill	Sidney	MSWDA	02/11/97	$ 2,757,719	$ 1,256,984	Enterprise Fund	City of Sidney
SWANN Landfill	Chadron	MSWDA	09/25/97	$ 2,521,705	$ 905,619	Enterprise Fund	SWANN
Valentine Landfill	Valentine	MSWDA	04/09/96	$ 2,311,917	$ 1,052,652	Enterprise Fund	City of Valentine
York Landfill	York	Sanitary LF	05/14/96	$ 108,478	$ 12,059	Faith & Credit	City of York
York Area SW Landfill	York	MSWDA	05/14/96	$ 6,173,334	$ 2,702,526	Enterprise Fund	City of York

*MSWDAs are landfills that are operating under current solid waste management regulations.

**Sanitary LFs are closed facilities that have post-closure monitoring and maintenance.

Construction/Demolition Landfills							
Abe's Trash Service C & D	Blair	Const./Demol.	03/30/98	$ 630,871	$ 630,871	Escrow Account	Bank of Bennington
Alliance C & D Landfill	Alliance	Const./Demol.	12/02/99	$ 440,015	$ 138,690	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	$ 98,089	$ 53,581	Enterprise Fund	Village of Arnold
Beatrice Area SW Agency	Beatrice	Const./Demol.	10/15/12	$ 1,231,573	$ 1,231,573	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	$ 55,132	$ 55,132	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 Ntl 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	$ 341,186	$ 91,484	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	$ 113,652	$ 113,652	Escrow Account	Elkhorn Valley Bank & Trust
Kimball C & D Landfill	Kimball	Const./Demol.	04/01/01	$ 199,234	$ 76,017	Enterprise Fund	City of Kimball
Lead Waste Mgmt C&D Landfill	Waterbury	Const./Demol.	05/28/14	$ 84,632	$ 84,632	Letter of Credit	Adrian State Bank
L.P. Gill Landfill C & D	Jackson	Const/Demol.	08/18/21	$ 511,954	$ 511,954	Surety Bond	Travelers Casualty & Surety
Lexington C & D Landfill	Lexington	Const./Demol.	09/30/98	$ 364,085	$ 181,955	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	$ 203,320	$ 82,379	Trust Fund	Citizens Bank & Tr. St. Paul
NPPD Gerald Gentleman	Sutherland	Const./Demol.	04/01/95	$ 307,299	$ 307,299	Financial Test	NPPD
O'Neill C & D Landfill	O'Neill	Const./Demol.	06/01/01	$ 261,982	$ 80,824	Enterprise Fund	City of O'Neill
O'Neill Wood Resources C & D	Grand Island	Const./Demol.	10/10/18	$ 543,120	$ 75,835	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	$ 76,507	$ 73,842	Enterprise Fund	City of Plainview
1221 Rainwood Road C & D	Omaha	Const/Demol.	08/10/21	$ 342,391	$ 342,391	Surety Bond	North American Specialty Ins.
Red Cloud C&D Landfill	Red Cloud	Const/Demol.	04/04/17	$ 114,962	$ 21,440	Enterprise Fund	City of Red Cloud
Schmader C & D Landfill	West Point	Const/Demol.	07/27/12	$ 231,337	$ 31,337	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	$ 111,758	$ 2,700	Enterprise Fund	City of Valentine
York C & D Landfill	York	Const/Demol.	12/01/07	$ 943,337	$ 211,292	Enterprise Fund	City of York
Fossil Fuel Combustion Ash (FFCA), Industrial Waste Landfills, Monofills							
Ash Grove Cement Co.	Louisville	Indus. Waste	03/01/03	$ 4,160,339	$ 4,160,339	Insurance Policy	Great American E&S Ins. Co.
Clean Harbors Technology	Kimball	Monofill	07/31/20	$ 3,075,499	$ 3,075,499	Insurance Policy	Great American Ins. Co.
Fremont Utilities	Fremont	FFCA	05/28/96	$ 4,176,518	$ 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	$ 8,398,672	$ 8,398,672	Financial Test	NPPD
NPPD Sheldon Station 4	Sheldon	FFCA	07/01/01	$ 2,359,753	$ 2,359,753	Financial Test	NPPD
OPPD NE City 1	NE City	FFCA	04/04/95	$ 2,445,014	$ 2,445,014	Financial Test	OPPD
OPPD NE City 2	NE City	FFCA	06/30/09	$ 7,027,714	$ 7,027,714	Financial Test	OPPD
OPPD North Omaha	Omaha	FFCA	04/04/95	$ 10,354,177	$ 10,354,177	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	$ 1,672,924	$ 1,672,924	Surety Bond	Lexon Insurance Co.
Transfer Stations, Material Recovery Facilities, Compost Sites							
Bud's Sanitary Service	Newman Gr.	Transf. Station	05/19/17	$ 2,970	$ 2,970	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	$ 55,920	$ 55,920	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 Ntl. Indemnity Co.
Waste Connections of NE	Ord	Transf. Station	07/02/03	$ 9,317	$ 9,317	Surety Bond	Platte River Ins Co.
RCRA Closure and RCRA Post-Closure (PC)							
Loveland Products	Fairbury	RCRA PC & CA	12/10/15	$ 3,088,997	$ 3,088,997	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	$ 35,524,662	$ 35,524,662	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	$ 4,463,158	$ 4,463,158	Letter of Credit	JP Morgan/Chase Bank
Safety Kleen	Grand Island	RCRA Closure	07/31/20	$ 165,515	$ 165,515	Insurance Policy	Great American Insurance Co.
Safety Kleen	Omaha	RCRA Closure	07/31/20	$ 439,102	$ 439,102	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	$ 5,463,381	$ 5,463,381	Letter of Credit	Canadian Imperial Bank
Van Diest Supply Liquid Plant	McCook	RCRA PC	02/16/06	$ 1,907,765	$ 1,907,765	Letter of Credit	1st State Bank Webster Cty IA

Underground Injection Control (UIC)							
Crow Butte Resources, Inc.	Crawford	UIC		$ 61,582,740	$ 61,582,740	Letter of Credit	Royal Bank of Canada
Waste Tire Haulers							
360 Tire Recycling	Kado Mills, Tx	Waste Tire	06/02/23	$ 5,000	$ 5,000	Surety Bond	Berkley Insurance Co.
ABC Tire LLC	Kansas C, KS	Waste Tire	06/24/13	$ 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	$ 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
Don's Used Tires	Lincoln	Waste Tire	03/13/03	$ 5,000	$ 5,000	Surety Bond	Old Republic Surety 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
Hoke Transport LLC	Gering	Waste Tire	04/04/12	$ 10,000	$ 10,000	Surety Bond	Old Republic Surety Co.
Intrawest LLC	Fountain CO	Waste Tire	09/15/15	$ 5,000	$ 5,000	Surety Bond	U.S. Specialty Ins. Co.
J & M Steel	Hastings	Waste Tire	01/15/15	$ 5,000	$ 5,000	Letter of Credit	Five Points Bank
Kenny Frazier	Edmond OK	Waste Tire	05/26/04	$ 5,000	$ 5,000	Escrow Account	Bank of America, Inc.
Pete Langer	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
River City Recycling	Omaha	Waste Tire	04/22/16	$ 43,750	$ 43,750	Letter of Credit	Access Bank
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.