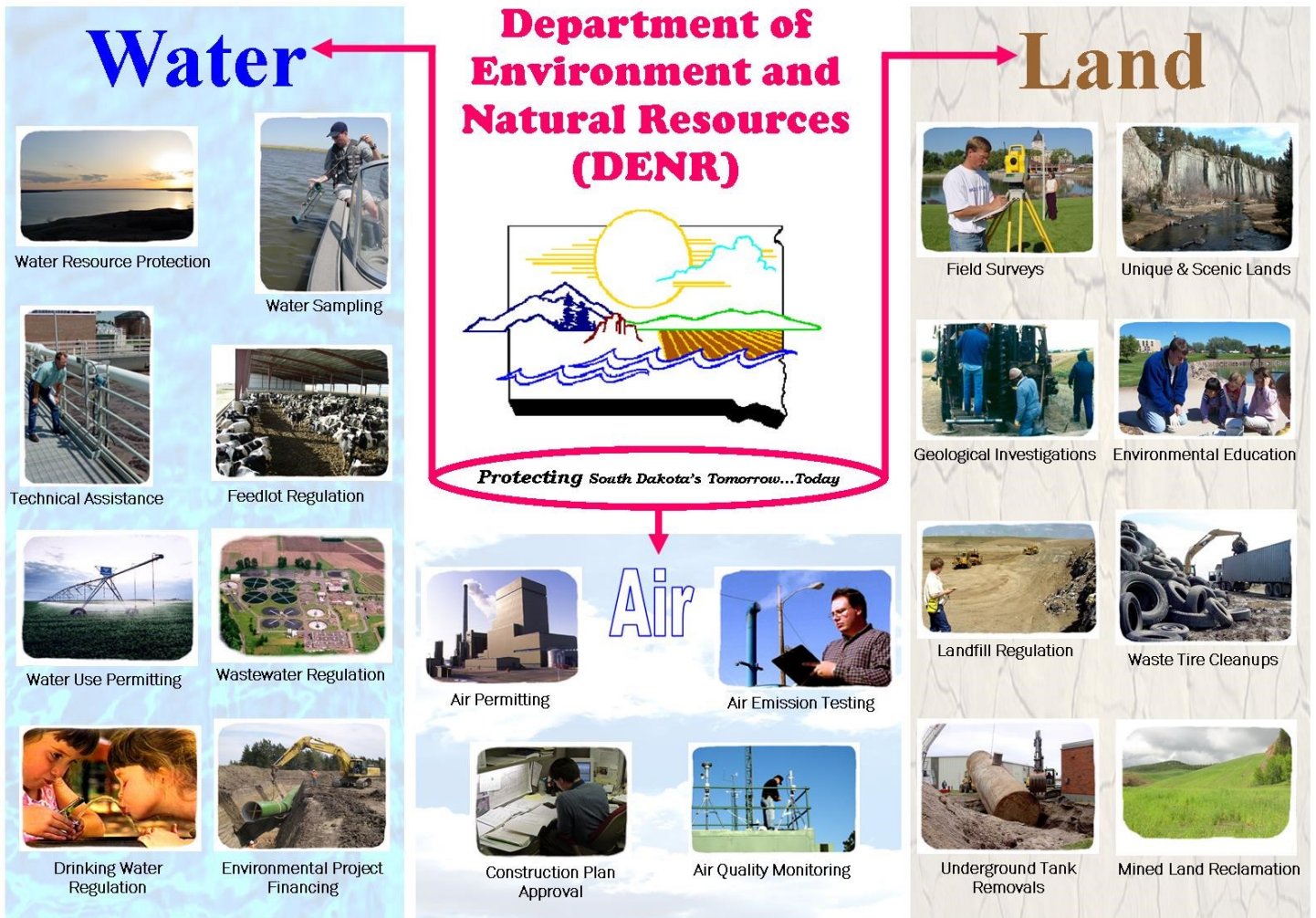


SOUTH DAKOTA DEPARTMENT of ENVIRONMENT & NATURAL RESOURCES (DENR) FY 2020 BUDGET REQUEST

**presented to the
JOINT APPROPRIATIONS COMMITTEE**

January 14, 2019



DENR - Your One-Stop Environmental Shop in South Dakota



DENR's Operating Principles:

- **Protect public health and the environment**
- **Maintain a business-friendly climate**
- **Treat everyone as our customer**

“DENR Outcomes & Metrics to Measure Success”

In accordance with SDCL 2-6-38, DENR completed its annual *“report highlighting up to six performance measures that show the progress being made toward the desired outcomes.”*

DENR's Executive Performance Summary - "Outcomes & Metrics to Measure Success"

<u>Outcomes</u>	<u>Background Statement</u>	<u>How to Measure Success</u> Goals yellow highlighted	<u>Dashboard for FY17-18</u> Performance yellow highlighted
1. Public Health Protected 	DENR regulates two substances that have direct impacts on public health because everyone takes them into their body every day – the water we drink and the air we breathe.	No public health outbreaks caused by poor drinking water or poor air quality. 	2017 Public Health Outbreaks Number due to drinking water 0 Number due to air quality 0 2018 Public Health Outbreaks Number due to drinking water 0 Number due to air quality 0
2. Air and Water Quality Protected 	DENR establishes air and surface water quality standards that must meet federal criteria and be approved by EPA, and then operates air and water quality monitoring networks to collect samples that verify whether the standards are being met.	100% of the state meets national air quality standards; and DENR completes the biennial Integrated Water Quality Report which uses EPA methodology to compare all water quality data collected in the state against water quality standards and filed every two years with EPA.	2017 Air and Water Quality Metrics Air quality in attainment 100% 2016 Integrated Report filed 08/25/2016 *Lake acreage supporting uses 19% *Stream miles supporting uses 21% 2018 Air and Water Quality Metrics Air quality in attainment 100% 2018 Integrated Report filed 03/30/2018 *Lake acreage supporting uses 15.7% *Stream miles supporting uses 26.5% *due to ever more stringent standards
3. Pollution Prevented  	It is better to be proactive and prevent pollution than to have to be reactive and clean it up or seek other remedies.	100% of the federal EPA 319 money is obligated each year to prevent nonpoint source water pollution in watershed projects; and 100% of old abandoned underground tanks are pulled to prevent groundwater pollution.	2017 Pollution Prevention Metrics EPA 319 money obligated \$1,864,000 EPA 319 money obligated 100% Abandoned tanks reported 62 Abandoned tanks pulled 100% 2018 Pollution Prevention Metrics EPA 319 money obligated \$1,861,000 EPA 319 money obligated 100% Abandoned tanks reported 37 Abandoned tanks pulled 100%
4. Mined Lands and Spills Cleaned Up  	Lands disturbed by mining activities and spills can pose public health hazards and be sources of pollution to the air, land, and water.	90% of reclamation liabilities are released for reclaimed mines; and 90% of all cumulative spills are cleaned up and closed out with no further action needed.	2017 Cleanup Metrics Mine sites reclaimed 88 Reclamation liability released 75% Spills reported 211 Cumulative spills closed out 96% 2018 Cleanup Metrics Mine sites reclaimed 61 Reclamation liability released 98% Spills reported 240 Cumulative spills closed out 97%
5. Adequate and Affordable Environmental Infrastructure Available  	Adequate and affordable publicly owned environmental infrastructure – drinking water, wastewater, and waste disposal systems – is critical to protecting public health and the environment plus it lays a solid foundation for future economic growth. But many systems in South Dakota have small customer bases and cannot pay for upgrades even with household water and sewer rates in the \$45 to \$50 per month range for community water systems and \$100 to \$120 per month range for rural or regional systems, so they need financial assistance.	90% of State Water Plan project applications are funded using grants and low interest loans from state Water and Environment Fund and EPA State Revolving Fund financial assistance programs to provide environmental infrastructure upgrades and expansions. 	2017 Infrastructure Awards State Consolidated \$10,100,000 State Water Resource \$550,000 State Solid Waste \$2,740,000 EPA Revolving Loans \$104,900,000 Small Community Plan \$160,000 Water Quality Grants \$1,030,000 Total dollars awarded \$119,480,000 Project applications funded 44/100% 2018 Infrastructure Awards State Consolidated \$8,163,000 State Water Resource \$10,000 State Solid Waste \$2,741,500 EPA Revolving Loans \$51,755,700 Small Community Plan \$156,000 Drinking Water Grants \$1,100,000 Water Quality Grants \$650,000 Total dollars awarded \$64,576,900 Project applications funded 55/98%
6. Environmental and Business Friendly Climates Maintained   	To operate in South Dakota and be a good neighbor, businesses need to know the rules; environmental permits are the roadmaps to state requirements for protecting public health and the environment.	100% of contested environmental permits are upheld by the appropriate permit issuing authority, state board, or court which confirms DENR has drafted the permits to be technically correct and legally defensible.	2017 Permits Issued by DENR Air Quality permits 79 Feedlot permits 20 Ground Water Discharge permits 4 Mine permits 3 Oil and Gas Board Orders 1 Surface Water Discharge permits 157 Underground Injection Control permits 1 Waste Management permits 26 Water Right permits 88 Total 379 Contested permits 7 or 2% Contested permits upheld 100% 2018 Permits Issued by DENR Air Quality permits 95 Feedlot permits 24 Ground Water Discharge permits 6 Mine permits 1 Oil and Gas Board Orders 5 Surface Water Discharge permits 45 Underground Injection Control permits 2 Waste Management permits 27 Water Right permits 115 Total 320 Contested permits 9 or 3% Contested permits upheld 100%

1. DENR ISSUES SURFACE WATER DISCHARGE PERMIT to BIG SIOUX RIVER for \$250 MILLION EXPANSION of AGROPUR CHEESE PLANT in LAKE NORDEN

- One of the largest private investments in history of state.
- Expansion will add 125 employees and increase milk processing capacity from 3.3 million pounds per day to 9.3 million pounds.
- For wastewater treatment, the existing plant uses a mechanical treatment system followed by artificial wetlands.
- Not feasible to expand artificial wetlands; best alternative was to expand mechanical treatment system and discharge through a 14-mile pipeline to the Big Sioux River.



- Following public notice of the proposed surface water discharge permit, comments were received in opposition due to concerns primarily about nitrate and ammonia levels in the treated water.
- To address concerns, DENR did more water quality modeling and revised those discharge limits.

- No appeal to circuit court, so the reissued permit became effective on November 1, 2018.
- If Agropur complies with the final surface water discharge permit, the water quality of the Big Sioux River will be fully protected under the existing surface water quality standards.



2. DENR and EPA OPEN BROHM GOLD MINE SUPERFUND SITE to EXPLORATORY DRILLING

- Brohm quit mining in 1992; the waste-rock dump turned acidic in 1993.
- To generate cash flow, Brohm opened a new pit called the Anchor Hill pit, but was stopped when the pit wall breached the border of U.S. Forest Service land.
- After environmental groups appealed Brohm's expansion of the Anchor Hill pit onto U.S. Forest Service land, Brohm filed for bankruptcy on July 29, 1999.
- Governor Janklow authorized DENR to use the state Regulated Substance Response Fund to keep the site environmentally safe for a year.
- EPA listed the mine as a federal Superfund site in 2000.
- Under the federal Superfund law, the state has to match EPA's cleanup costs by 10%, but after EPA leaves, the state is responsible for 100% of the cost to treat the acid mine drainage forever.
- DENR worked with Agnico Eagle Mines Limited, USA and EPA to allow Agnico to drill up to 18 holes and perform geologic tests for EPA and DENR to find sources of high cadmium levels in the groundwater.



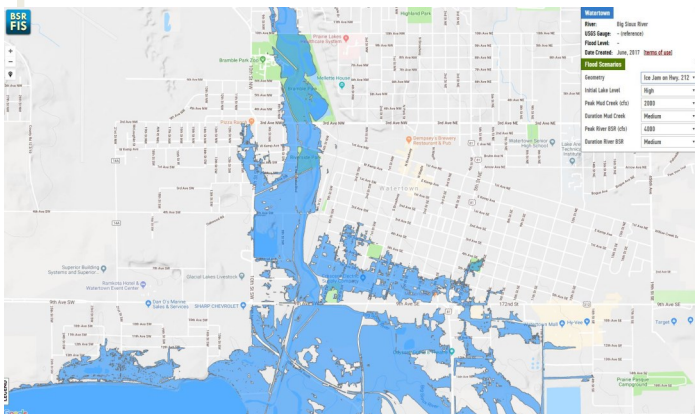
Agnico Borehole Locations ☆



- In return, Agnico is allowed to test the cores for precious metals to confirm if ore reserves remain under the site.

3. DENR CREATES an ONLINE FLOOD INFORMATION SYSTEM for the BIG SIOUX RIVER BASIN

- After the Big Sioux Flood of 2014, it was apparent that existing flood models were not accurate and did not work, especially in the lower part of the basin.
- Because about 40 percent of our state's population lives in the basin, something needed to be done to better predict and react to potential flood events that could seriously threaten the health, welfare, and property of those people.
- A Flood Task Force determined the solution was to develop an accurate hydrologic computer model that could be linked to a real time, flood information system to better predict inundated areas during high flows.
- The 2016 Legislature approved funding from the state Water and Environment Fund in the Governor's Annual Omnibus Water Funding Bill.



- Using a request for proposal process, DENR selected a consulting firm to produce two online, flood information systems with mapping tools.

1. The first system contains 8,500 possible flood scenarios that can be accessed by the general public to evaluate flood risks to their families and property.

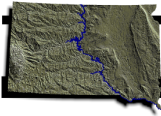
2. The second system is for local, state, and federal officials as it can use real

time data to assess immediate flood conditions and determine appropriate response actions to protect communities and critical infrastructure such as water systems.

- The system has been calibrated and verified during high flow events in 2018.
- The system was built on-time, on-budget, and it works.



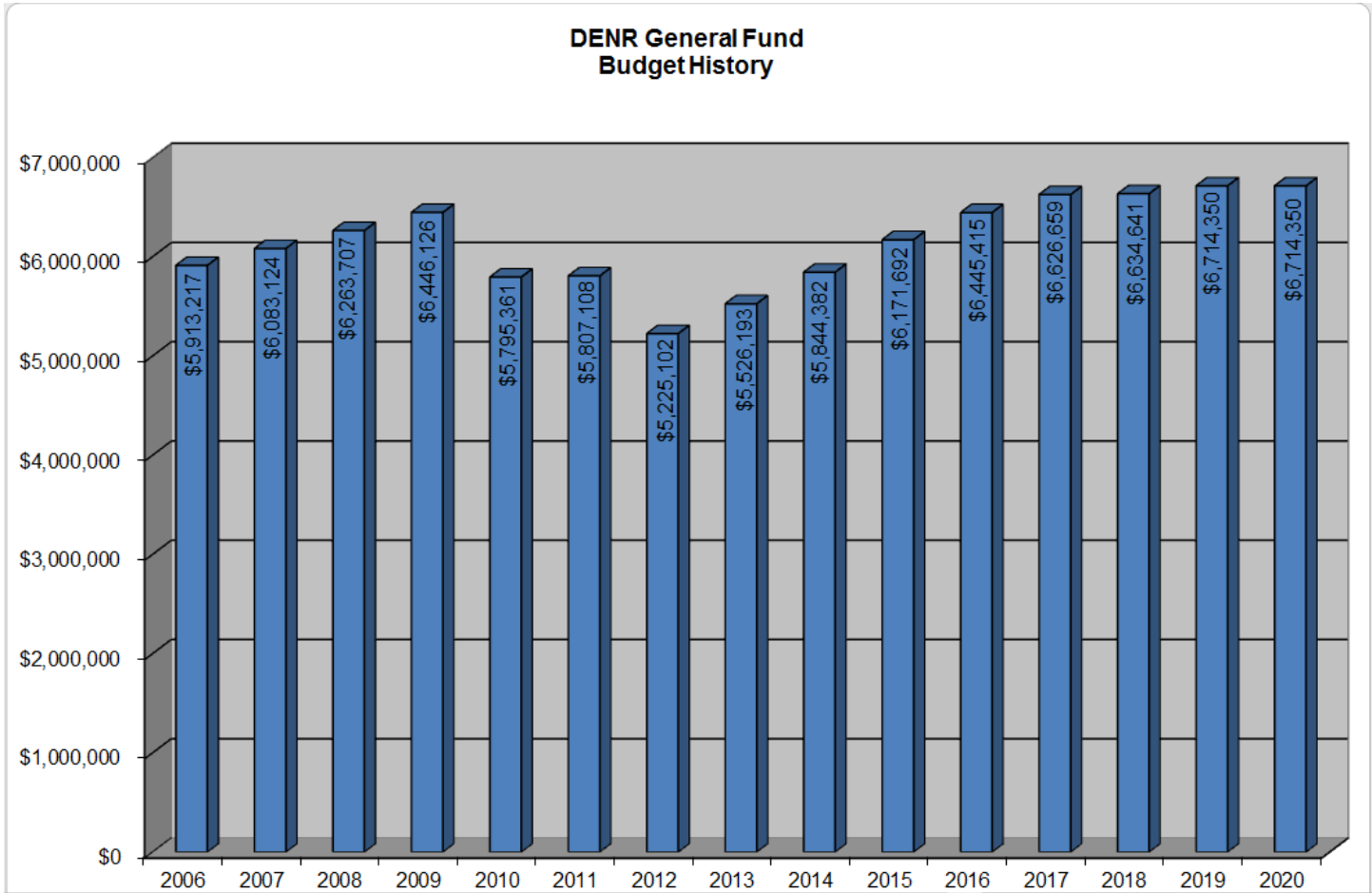
DENR's Budget History:



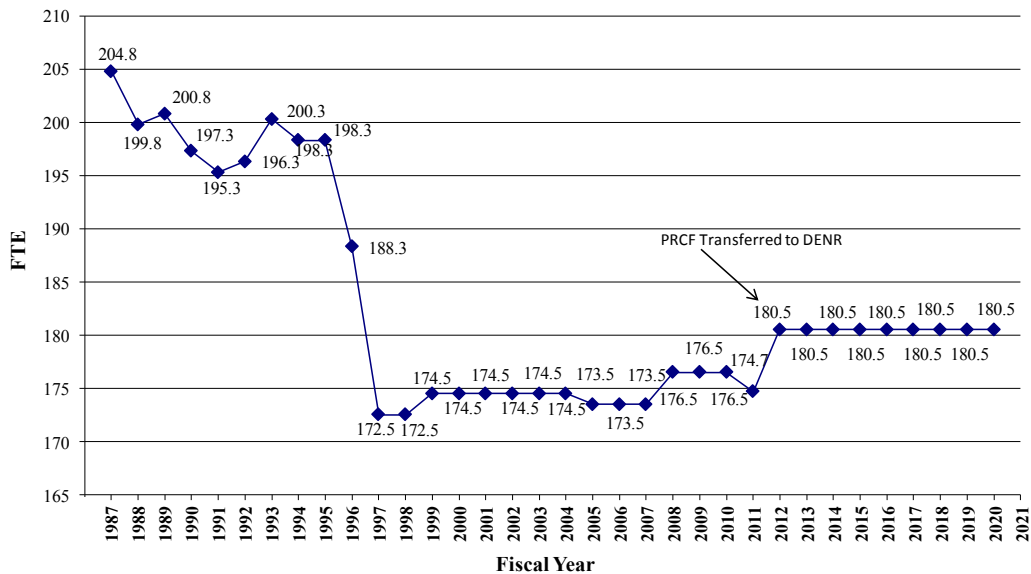
South Dakota
 Department of Environment
 & Natural Resources
 Protecting SD's Tomorrow... Today

*"Getting the Job Done with No Expansions for
 More than a Decade"*

For Historical Budget Changes, see the last page (i.e. page 38) of your LRC FY 20 Budget Briefing.

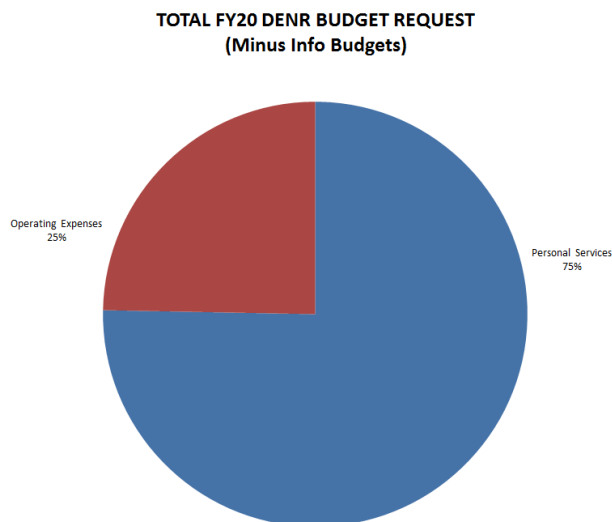


DENR BUDGETED FTE HISTORY



DENR's FY 2020 BUDGET REQUEST

- DENR is again submitting a Status Quo Budget Request as can be seen in the graphs on page 1 of the LRC Budget Briefing and in the numbers on page 2.
 - a. DENR is requesting no expansion in FTEs
 - b. DENR is requesting no expansion in personal services
 - c. DENR is requesting no expansion in operating expenses
 - d. 75 percent of DENR's budget is in personal services



No Requested Increases - Finding DENR Budget Details in LRC's Budget Brief

You can find the budget request for DENR's **Division of Financial and Technical Assistance** on pages 5 thru 8 of the LRC Budget Brief. This division administers the financing of environmental projects and no increases are being requested. The funding sources budget can be found on pages 5 and 6 for this division.

The **Division of Environmental Services** is our regulatory division and as you can see from the LRC Budget Brief, it also shows no increases for this division. This information can be found on pages 9 thru 23 in your LRC briefing. The funding sources budget for this division can be found on pages 9 and 10.

The **Regulated Substance Response Fund** is a statutory fund and is where all fines levied by the department, outside of feedlots, are deposited. These funds are used to clean up environmental issues in the state and it is an informational budget. The information on this fund can be found on pages 24 thru 27 of the LRC briefing.

The **Livestock Cleanup Fund** is also a statutory fund and it is where all feedlot fines are deposited. These funds are used to clean up discharges or spills from animal feeding operations during emergencies, and it also is an informational budget. The information on this fund can be found on pages 28 thru 30 of the LRC briefing.

Finally, the **Petroleum Release Compensation Fund** is found on pages 31 thru 37. The first four pages are budgeted funds used to administer the fund. The next three pages deal with the fund itself. It is an EPA approved financial assurance mechanism for owners of petroleum storage tanks and is an informational budget.



NPDES Fee Revisions in SB 25 Last Year Being Phased In

- Most of DENR's federal funds come from EPA's Performance Partnership Grant (PPG) for administering federal environmental programs in South Dakota - i.e. the Clean Air Act, Clean Water Act, Safe Drinking Water Act, and Resource Conservation and Recovery Act.
- During the last six years, DENR's federal PPG grant has been shrinking or flat.
- On top of the flat federal funding, President Trump's first two budget proposals cut EPA's State and Categorical Grants by 40%.
- In light of all the unknowns, DENR brought to the 2018 Legislature a fee-based plan to make it through FY18 and FY19 with no increase in general funds.

Step I – Internal FTE Freeze on Filling Vacant Positions

- Because 75 percent of DENR's budget is in personal services, we implemented an internal hiring freeze to maintain flexibility to adjust to wide fluctuations in federal funding, but the results of that freeze were criticized by the South Dakota News Watch which reported on August 22, 2018:
 - ⇒ *"State inspections of municipal and industrial facilities with permits to dump pollution in South Dakota rivers or wetlands have fallen by nearly half in the past five years, from 158 inspections in 2013 to only 80 in 2017."*
 - ⇒ *"As of mid-August, 121 surface water discharge permits were considered 'administratively continued' in South Dakota, meaning the parameters of facility operations and pollution limits have not been updated in the past five years or more."*

Step II – Fee increases

- **Air quality permit fees**
 - * DENR held a rules hearing on October 18, 2018, to raise the air fees eight percent; no one appeared at the hearing.
 - * Total increase about \$30,000 per year.
- **SB 25 - Surface water discharge permit fees (known as National Pollutant Discharge Elimination System (NPDES) permits in the Clean Water Act)**
 - * Total increase of about \$470,000, but fees are phased in over three years.
 - * Majority of new fees due for first time on January 30, 2019, plus rules still needed for final category of stormwater permit fees.
 - * NPDES fee increase in SB 25 did NOT grow state government, but allows DENR to fill vacancies in order to keep delegation of the federal NPDES permitting program.

Step III - Federal government starts paying its fair share with increased grants

- **America's Water Infrastructure Act of 2018 (S 3021) most recent example**
 - * Increased Safe Drinking Water funding by \$25 million.
 - * Senate passed it 99-1.
 - * Signed by President Trump on October 23, 2018.

DENR in Transition - Losing our Experience to Retirements

Fiscal Year 2017 — DENR lost 10 employees to retirement

No.	Classification	Years of Experience	Reason	Date
1	Engineer Manager III	40	Retired	Sept 2016
2	Division Director	31	Retired	Jan 2017
3	Env Scientist Manager II	27	Retired	April 2017
4	Environmental Scientist IV	19	Retired	June 2017
5	Secretary	25	Retired	June 2017
6	Engineer III	26	Retired	June 2017
7	Environmental Scientist III	28	Retired	June 2017
8	Engineer III	31	Retired	June 2017
9	Engineer Manager I	37	Retired	June 2017
10	Env Scientist Manager I	40	Retired	June 2017
Total =		304	years of experience lost	

Fiscal Year 2018 — DENR lost 10 employees to retirement

No.	Classification	Years of Experience	Reason	Date
1	Environmental Scientist II	19	Retired	Dec 2017
2	Environmental Scientist II	24	Retired	Jan 2018
3	Division Director	38	Retired	Mar 2018
4	State Geologist	39	Retired	April 2018
5	Env Scientist Manager II	36	Retired	April 2018
6	Engineer II	13	Retired	June 2018
7	Secretary	18	Retired	June 2018
8	Information Specialist	21	Retired	June 2018
9	Environmental Scientist II	32	Retired	June 2018
10	Engineer IV	40	Retired	June 2018
Total =		280	years of experience lost	

Fiscal Year 2019 — DENR lost 4 employees to retirement so far

No.	Classification	Years of Experience	Reason	Date
1	Engineer Manager I	32	Retired	Oct 2018
2	Engineer III	30	Retired	Nov 2018
3	Env Scientist Manager II	43	Retired	Dec 2018
4	Engineer Manager I	38	Retired	Jan 2019
Total =		143	years of experience lost	

Total years of experience lost to retirement during last 2.5 years - 727 years.

Percentage of DENR employees lost to retirement during last 2.5 years - 13.3%.

DENR employees who were eligible for retirement 11/7/18 - 26%.

DENR in Transition:



“DENR Manages Workloads and Available Budget to Replace Turnover and Retiring Employees with New People”

DENR is actively trying to recruit new employees to fill the following vacant positions that have been announced by the Bureau of Human Resources, but getting qualified applicants has been difficult:

No.	Classification Advertised by the Bureau of Human Resources	Date Announced by the Bureau of Human Resources
1	Engineer I	July 31, 2018
2	Engineer I	October 2, 2018
3	Engineer I	October 26, 2018
4	Engineer Manager I	November 1, 2018
5	Engineer I	November 5, 2018
6	Engineer I	November 19, 2018
7	Senior Secretary	November 25, 2018

Longer term vacant positions being held while the new Surface Water Discharge Permit fees are fully phased in, but will be announced when events occur that trigger high priority workload needs:

No.	Classification that	Events that will trigger high priority workload needs that must be met
1	Exempt Division Directors	When the Department Secretary needs to appoint their own team to streamline management of DENR by reinstating 2 division directors.
2	Environmental Scientist I	When the PowerTech Insitu Uranium Mine in Fall River/Custer counties is permitted by EPA which will drive state permitting and inspections of the PowerTech uranium mine.
3	Environmental Scientist I	When new federal underground tank rules take effect which will increase the number of tank cleanups which will drive more open cases for the Petroleum Release Compensation Fund.
4	Environmental Scientist I	When the oil and gas market comes back and drilling and production in South Dakota picks up again which will drive more state permitting and more inspections of oil and gas operations.
5	Engineer I	When FEMA mandates the state increase Safety of Dams activities and functions that include inspections, reporting, and training for dam owners to maintain the Safety of Dams grant.
6	Engineer I	When the appointments of the four temporary engineers hired to conduct backlogged water right licensing inspections expire and are not renewed.
7	Environmental Scientist I	When EPA mandates that the state increase the completion of Total Maximum Daily Loads to reduce the number of impaired waters listed in the Integrated Water Quality Report.

To stretch personal services dollars, DENR uses temporary, seasonal, and intern positions as follows:

Classification	Job Title and Function	Number Employed
Temporary	Attorney to review contracts.	1
Temporary	Engineers to conduct backlogged water right licensing inspections.	4
Temporary	Environmental Scientist to conduct backlogged wastewater treatment plant inspections.	1
Seasonal	Water well readers to collect data from DENR's groundwater monitoring network of 1,588 wells.	4
Seasonal	Roughnecks to help operate DENR's two drill rigs collect geologic and hydrologic data.	4
Intern	Eng. Intern to review nutrient management plans for concentrated animal feeding operations.	1
Intern	Environmental Scientist Interns to collect data for beneficial use reviews of rivers and streams.	2
Intern	Environmental Scientist Interns to collect data for Total Maximum Daily Load analyses.	3



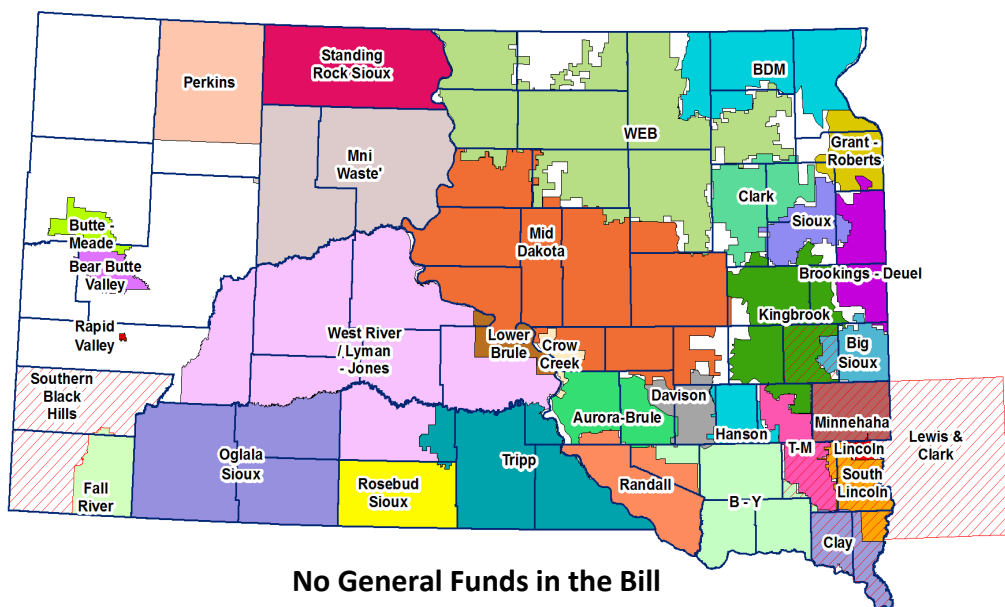
Governor’s Annual Omnibus Water Funding Bill

- Revenues to the Water and Environment Fund are all dedicated and federal funds - no general funds in the bill.
- The funds in the bill are critical to provide financial assistance to construct needed water, wastewater, and solid waste projects while keeping rates affordable.
- It has been extremely successful in helping to upgrade water, wastewater, and solid waste projects statewide that are needed to protect public health and the environment.

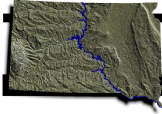
Governor Noem’s 2019 Water and Environment Funding Bill

Dedicated Water and Waste Funds are
Building a Better South Dakota

Map of South Dakota Rural Water Systems Bringing High Quality Water to Nearly Every Corner of the State



Revenues to the Water and Environment Fund are Other Funds that have been dedicated to the Water and Environment Fund by the Legislature



Governor’s Volkswagen Settlement Trust Mitigation Bill

- The bill provides DENR authorization to use the Volkswagen Settlement funds.
- South Dakota’s share of the settlement is \$8.125 million and is held in the Volkswagen Environmental Mitigation Trust.
- The Trust funds will be used to reduce nitrogen oxide emissions by assisting in purchasing new diesel vehicles (trucks and buses) that have the latest pollution controls, alternative fuel vehicles, and/or electric vehicles to replace older diesel vehicles with little or no controls and install new infrastructure for electric vehicles.



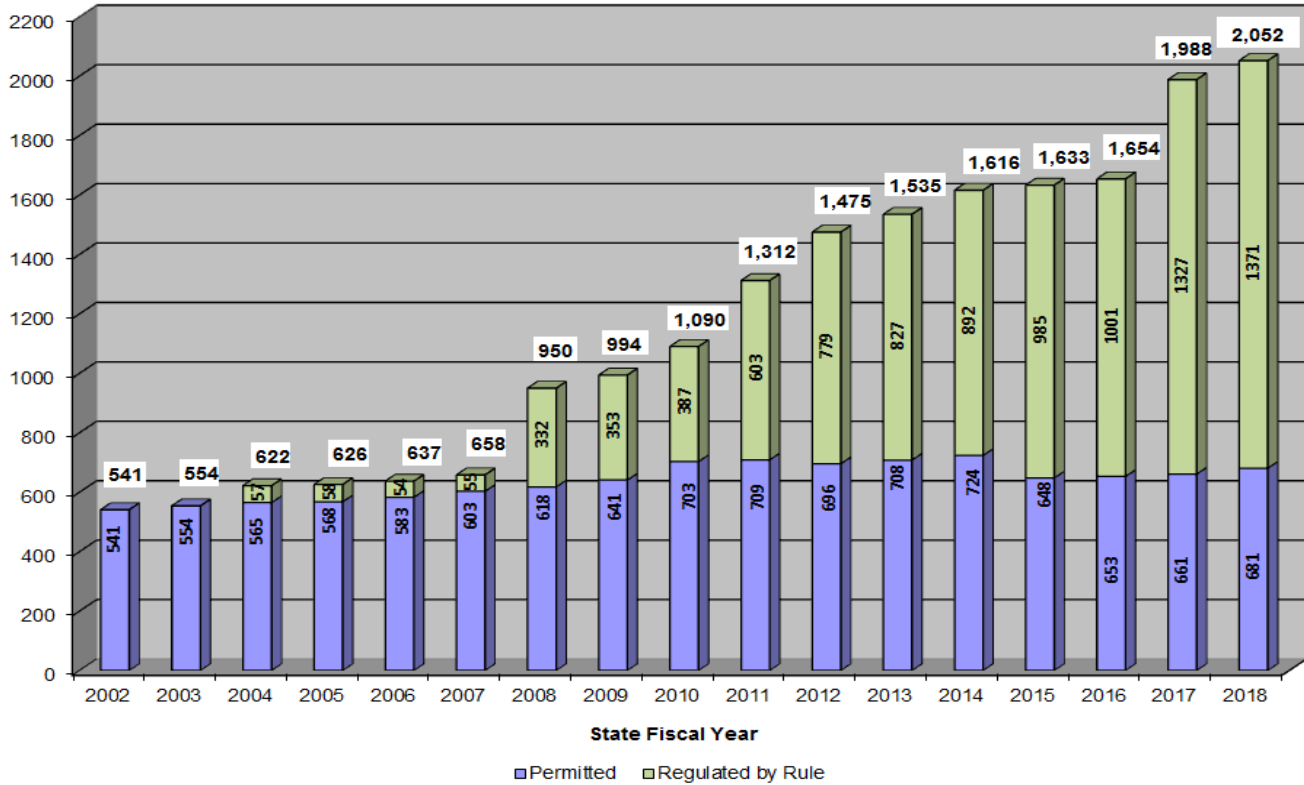
Modified Picture from <https://www.epa.gov/vw>

No General Funds in the Bill

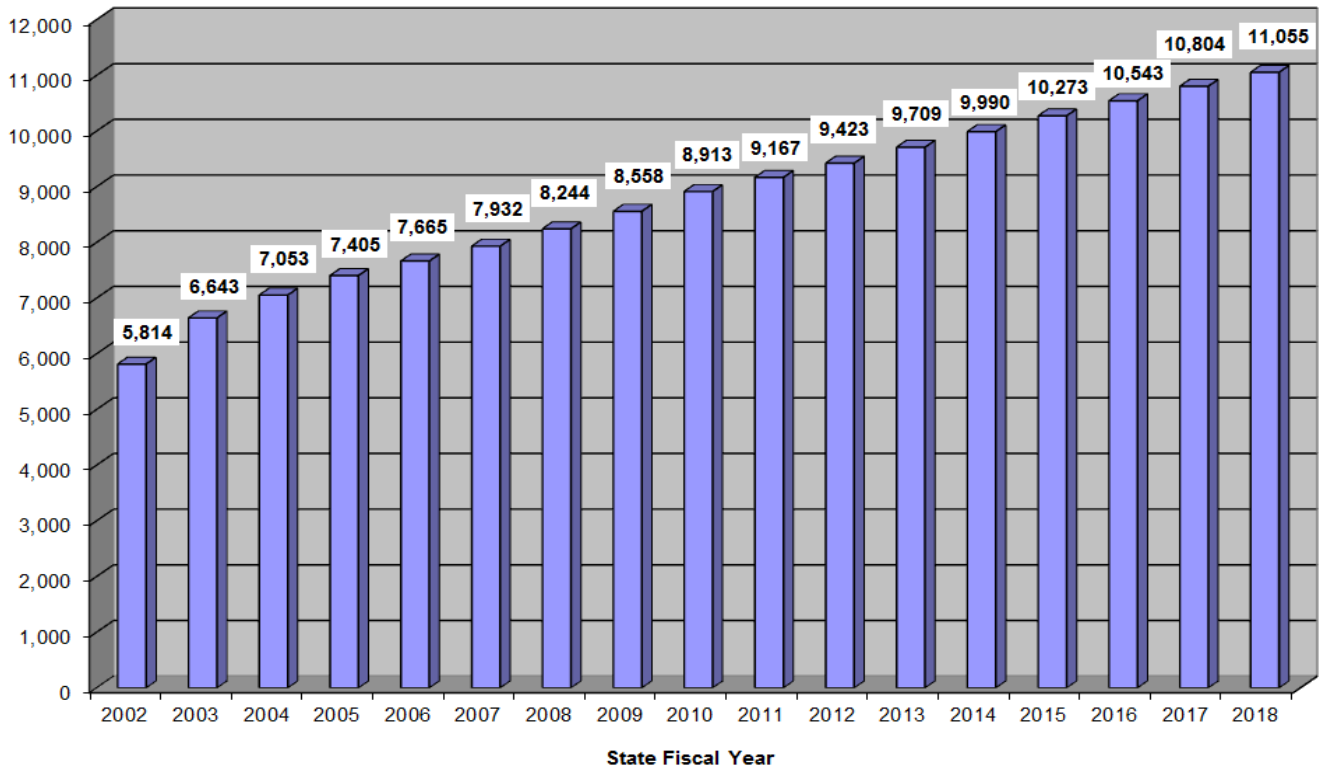
A portion of the Trust funds will be used for match under EPA’s Diesel Reduction Act Program. The Diesel Reduction Act Program has been successful in helping South Dakota’s school districts purchase new buses with pollution controls to reduce nitrogen oxide emissions.

Meanwhile, DENR Keeps Dealing with Increasing Workloads

Regulated under Air Quality

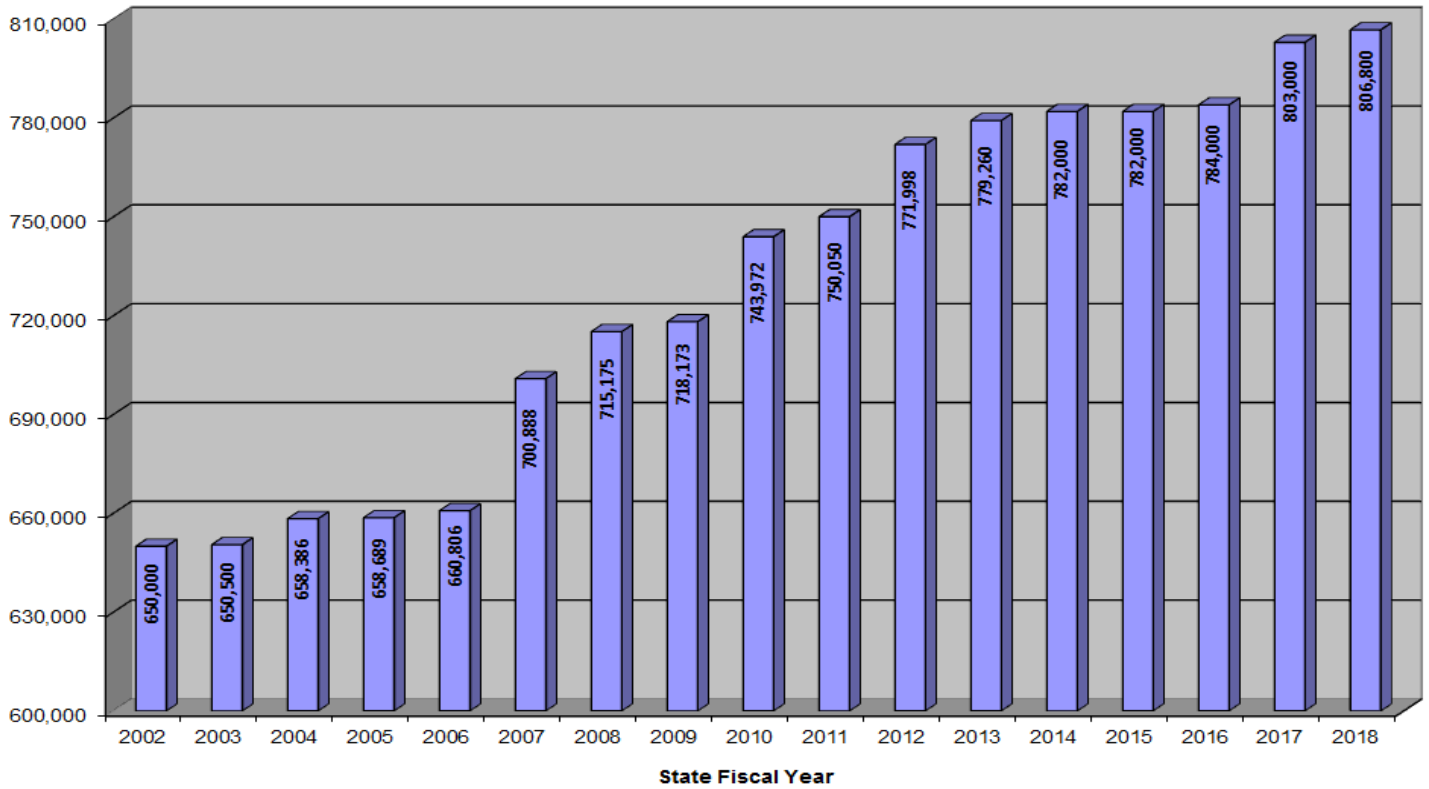


Spill Sites Cleaned Up Since 1972

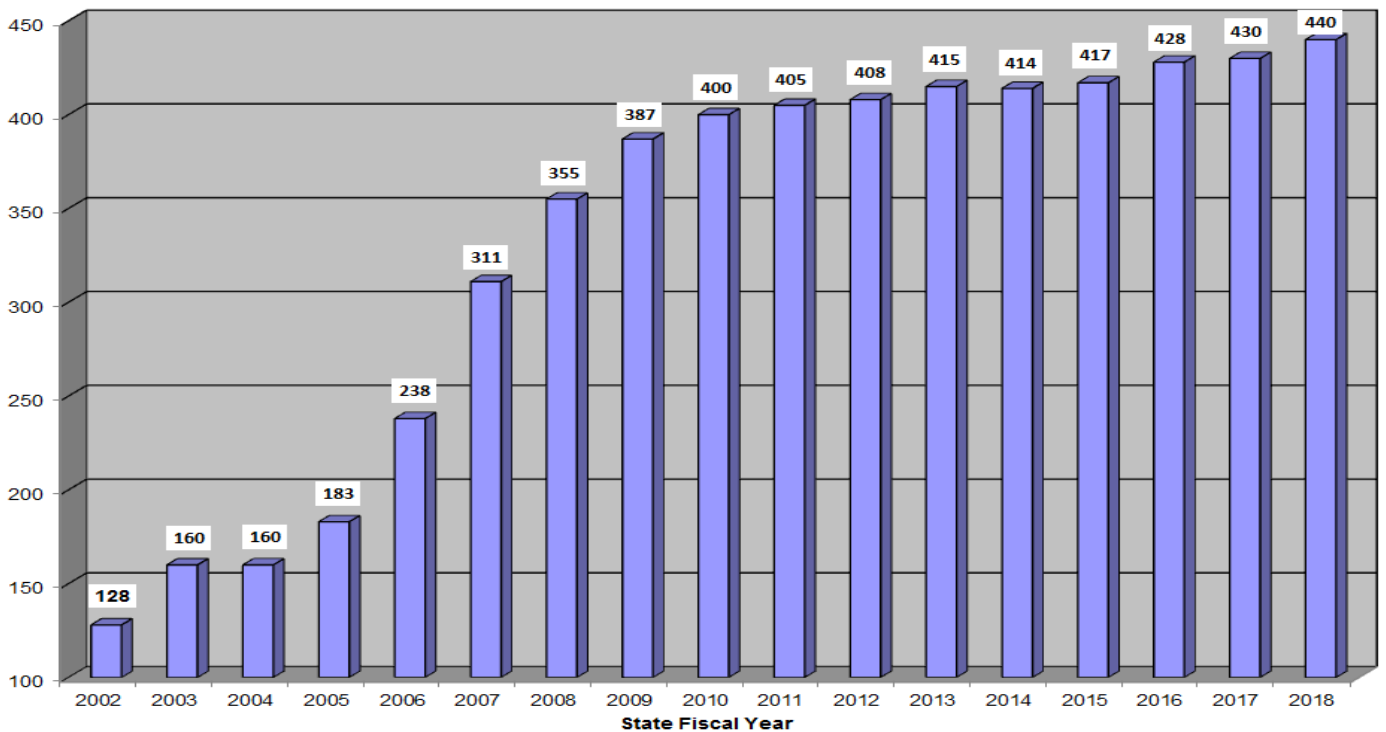


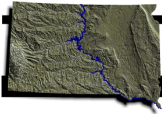
Examples of DENR's Increasing Workloads

People Served by Regulated Public Drinking Water Systems



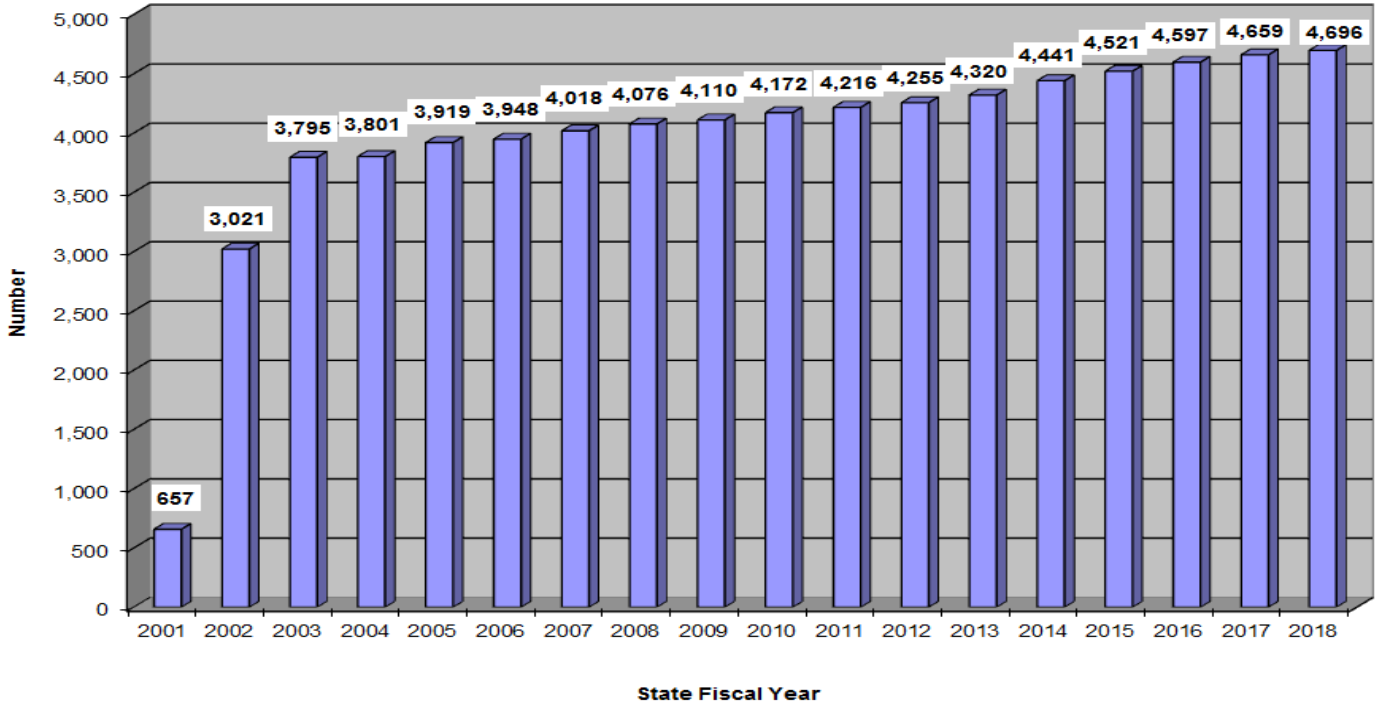
Permitted Concentrated Animal Feeding Operations



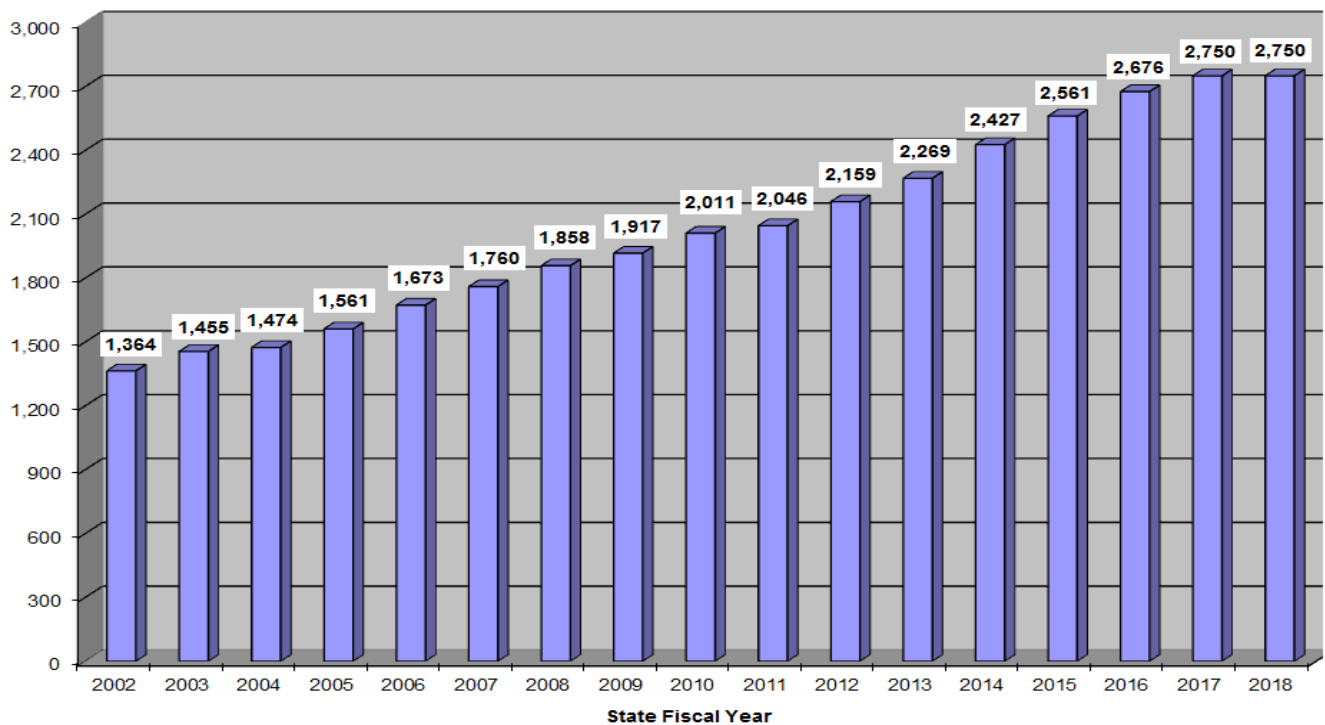


Examples of DENR's Increasing Workloads

Abandoned Underground Petroleum Tanks Removed (Cumulative)

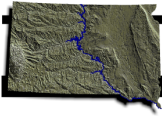


Hazardous Waste Generators



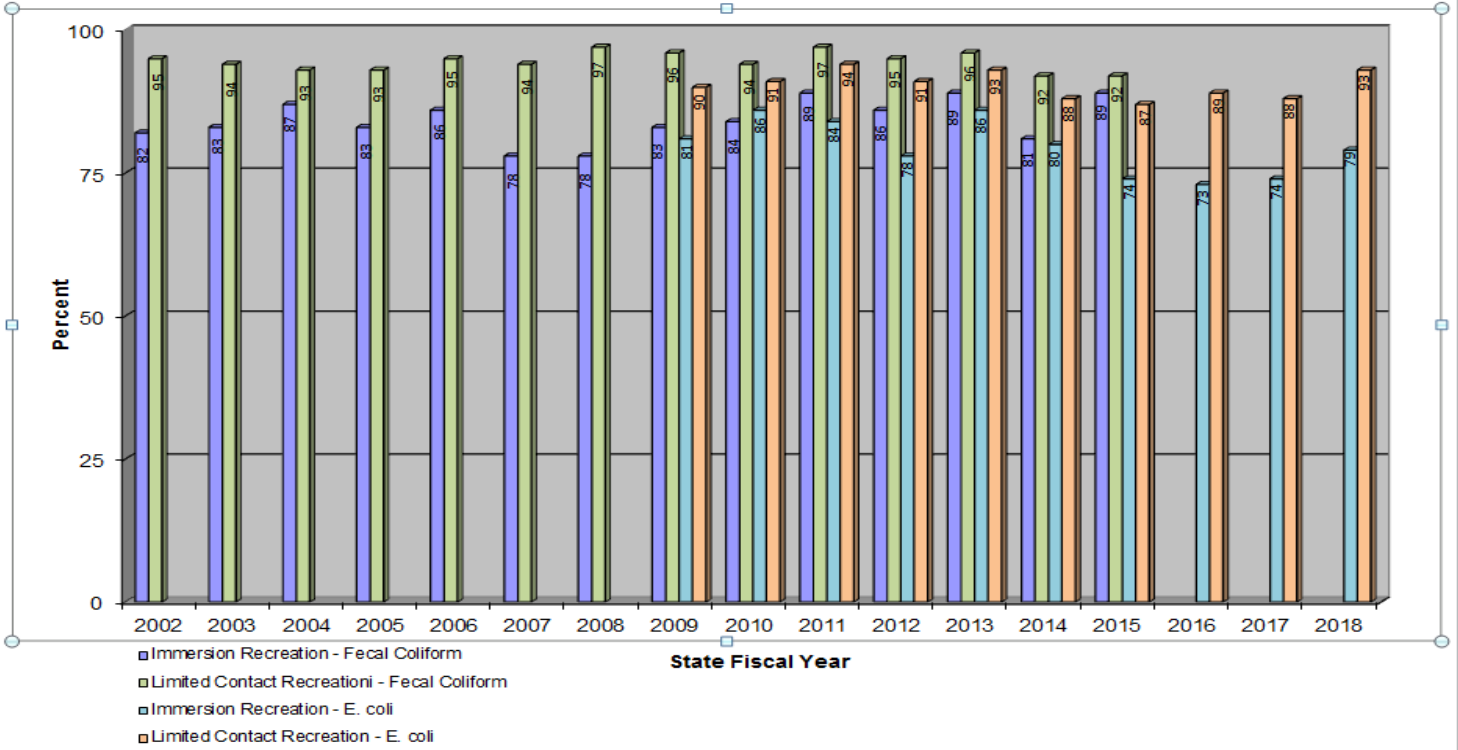
Key Environmental Indicators show DENR is still Protecting the Environment

"Surface Water Quality Standards"

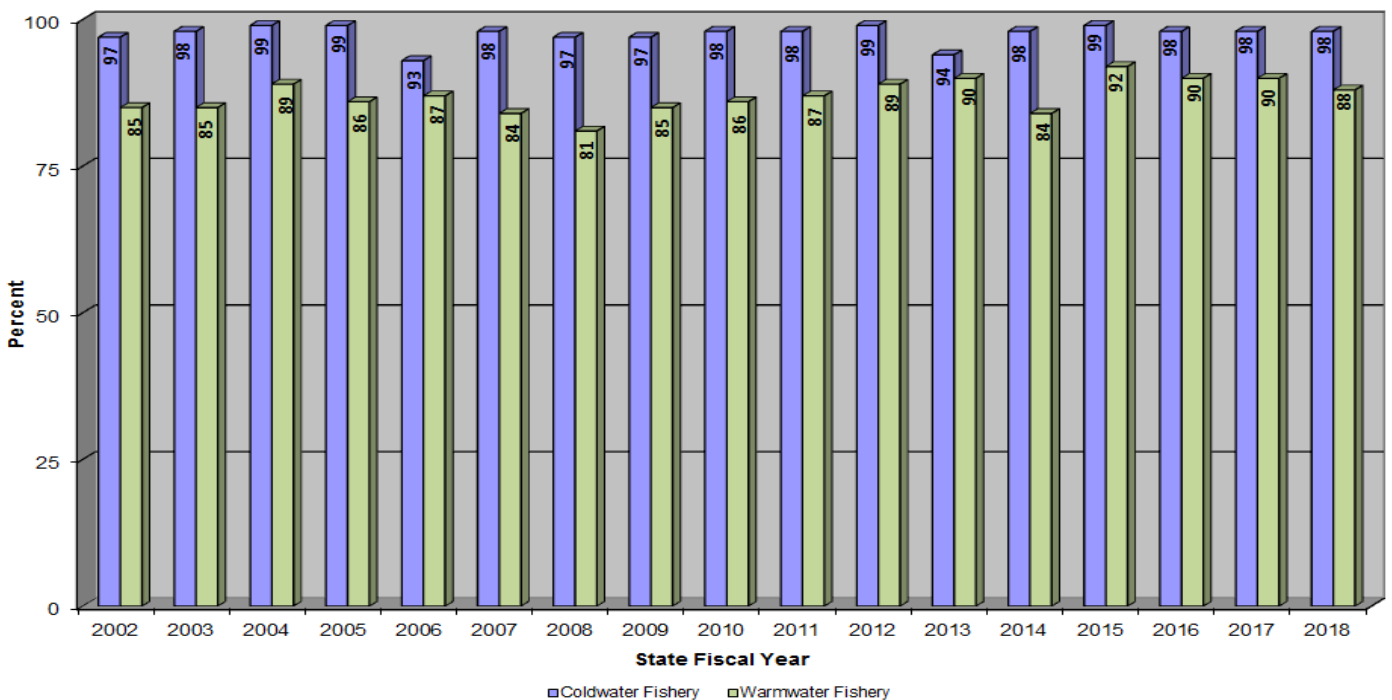


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Percent of Water Quality Samples That Meet South Dakota Surface Water Quality Standards for Fecal Coliform and E. coli



Percent of Total Suspended Solids Samples That Meet South Dakota Surface Water Quality Standards



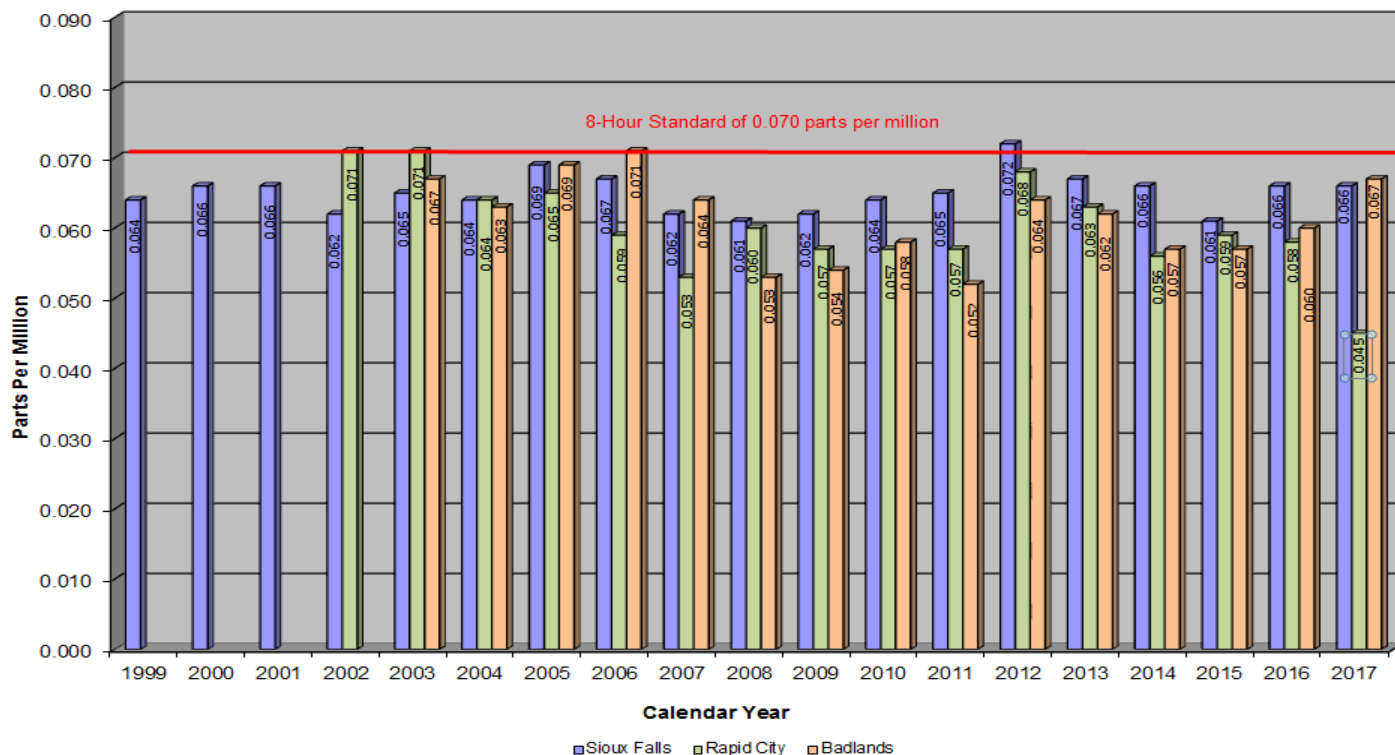
Key Environmental Indicators show DENR is still Protecting the Environment



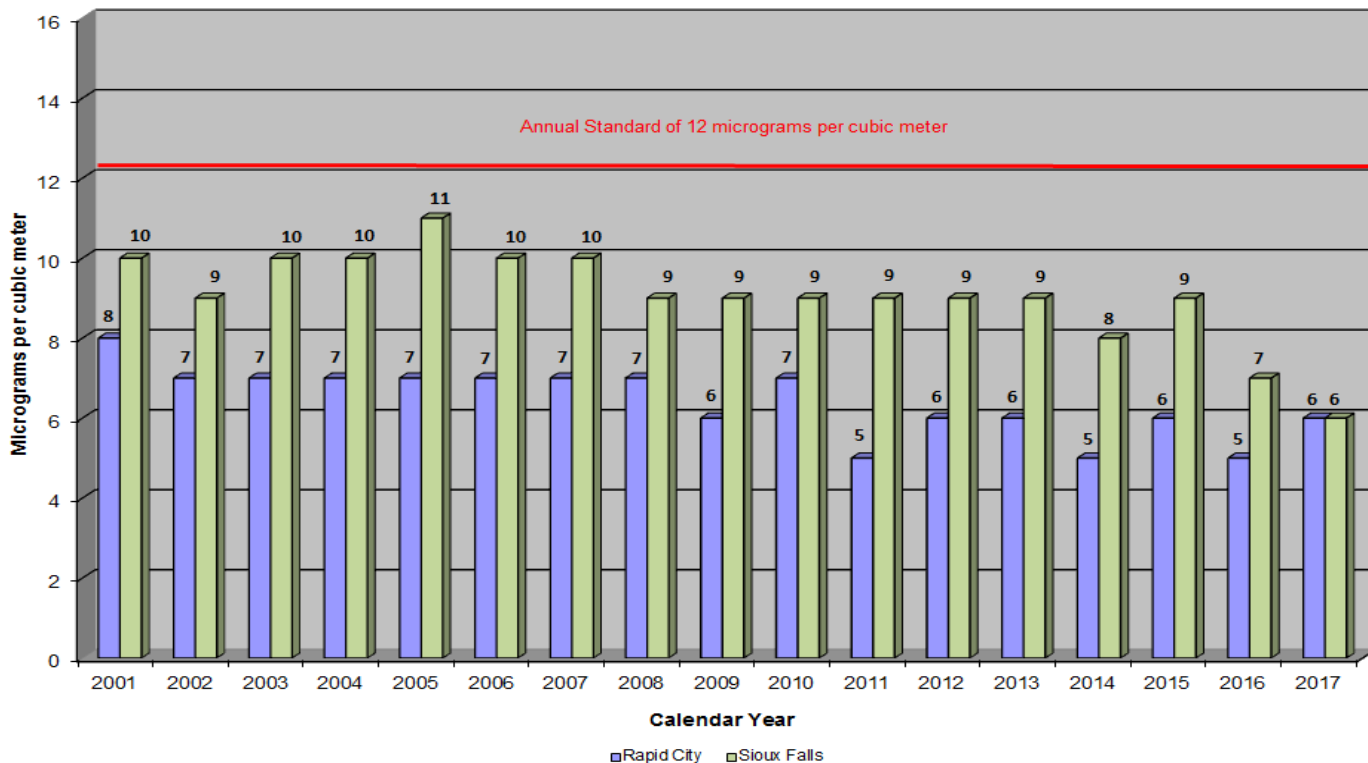
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"Air Quality Standards"

Ozone Trends for South Dakota



Particulate Matter 2.5 Trends for South Dakota



RECAP of LEGISLATIVE AGENDA FOR 2019

- **Governor Noem's 2019 Water and Environment Funding Bill, also known as the Governor's Annual Omnibus Water Funding Bill**
"Help us keep building a better South Dakota that our citizens can afford."
- **Governor Noem's Act to create and make appropriations from a Volkswagen settlement fund and to declare an emergency**
"Help us use VW's \$8.125 million to reduce nitrogen oxide air emissions."

RECAP OF DENR'S FY 2020 BUDGET REQUEST

- **After losing 13.3% of our employees to retirements during the last two and a half years who took 727 years of experience with them, DENR is using its phased Surface Water Discharge Permit fees as revenues are available to rebuild with new people to prepare for the present and future with no increase in general funds.**
- **DENR's FY 2020 Budget Request is a Status Quo Budget Request:**
 - a. **DENR is requesting no expansion in FTEs**
 - b. **DENR is requesting no expansion in personal services**
 - c. **DENR is requesting no expansion in operating**
- **DENR's FY 2020 Budget Request will give us flexibility to continue to rebuild without growing state government.**