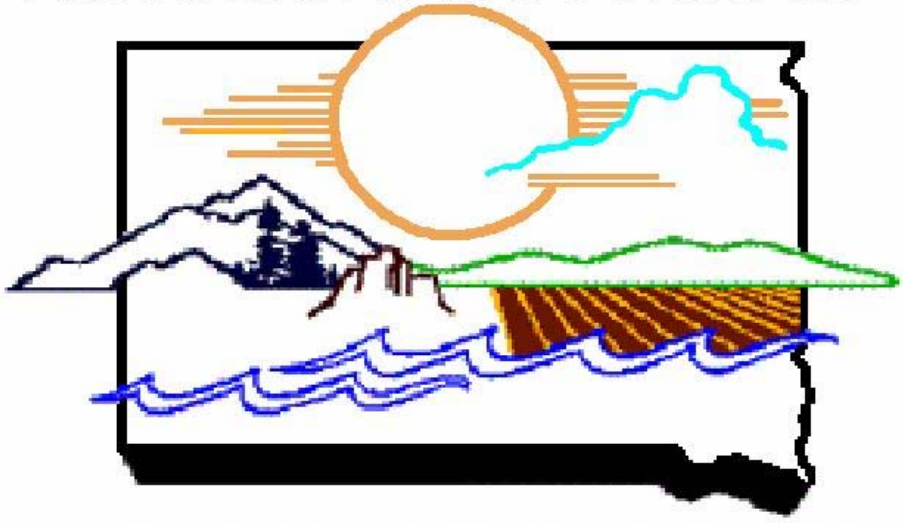
DENR FY 2011 BUDGET REQUEST

presented to the

2010 JOINT APPROPRIATIONS COMMITTEE

South Dakota Department of
Environment and Natural Resources



Protecting South Dakota's Tomorrow ... Today

February 9, 2010

Review of FY 2009 End of Year Status

1. DENR Operating Budget

- DENR utilized 94.4% of its total budget authority (excluding authority for the Regulated Substance Response and Environmental Livestock Cleanup Funds)
- No transfers between personnel services and operating were needed.
- DENR utilized 96.1% of its FTE allocation - 7 FTE not utilized due to:
  - vacancies caused by 5.3% turnover last year
    - 11 people taking other jobs
    - 2 retirements
    - 1 death
  - hiring freeze delayed advertising vacant positions
  - once advertised, we had a lack of applicants for technical positions
- Consequences of unutilized FTE
  - paid $7,516 in extra duty pay
  - customer service suffered with slower response times
  - inspections and permit renewals were some of the things that got delayed

2. Informational Budgets

- Regulated Substance Response Fund
  - Created by the 1988 Legislature to deal with environmental cleanups
  - Life of Fund expenditures - $3,282,821
  - Utilized $21,930 last year to respond to 5 cleanups where there was no responsible party or the responsible party refused to clean up
  - FY 2009 end-of-year cash balance - $2.78 million
  - Future liabilities to the Fund
    - Environmental cleanups – we have about 200 to 250 spills per year
    - EPA Brohm Mine Superfund site – state must provide 10% match for the projected $60 million EPA Superfund cleanup; the state is then 100% liable for long term water treatment costs after EPA leaves.
- Environmental Livestock Cleanup Fund
  - Created by the 1998 Legislature to act as a safety net for environmental livestock cleanups; the Legislature capped the fund at $2 million.
  - Life of Fund expenditures - $153,319
  - Utilized $0.00 last year as DENR did not have to respond to livestock cleanups during FY 2009
  - FY 2009 end-of-year balance - $1.08 million
  - Future liabilities to the Fund –
    - Veblen East and West Dairies (14,816 cows) - due to the wet spring and fall in 2009, the manure ponds were overfull in November and in danger of overtopping – emergency response estimated at $2.36 million.
    - Redfield Livestock Auction - the Fund is currently being used to assist the City of Redfield in cleaning up the closed auction.

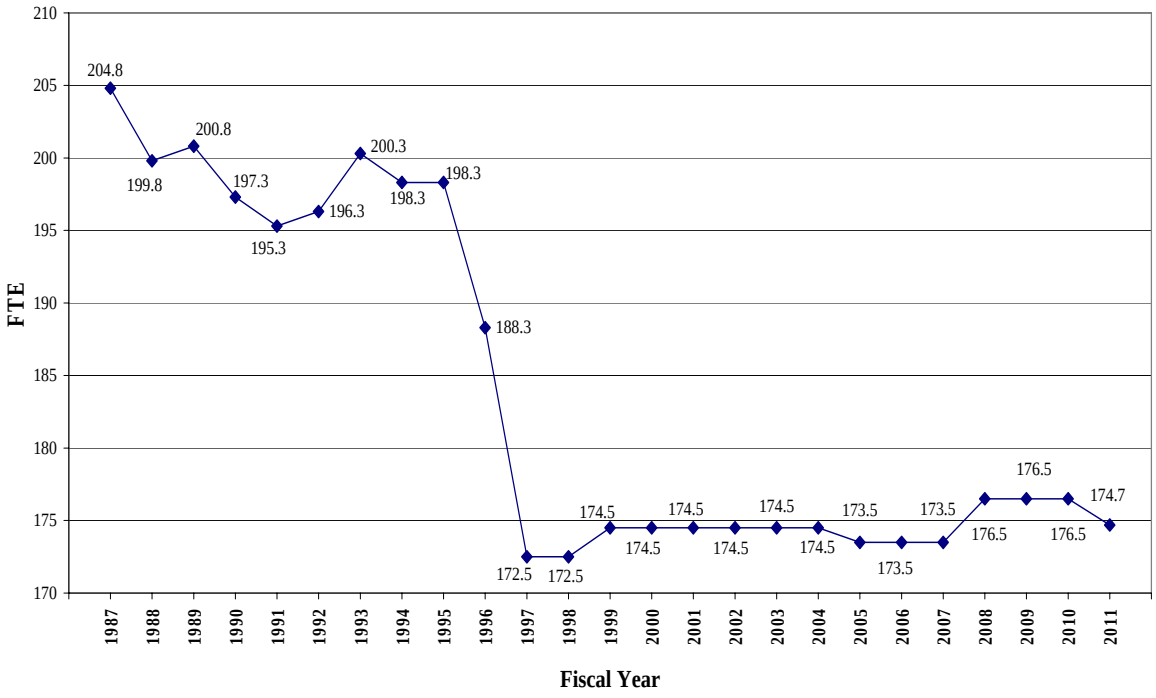
Summary of DENR's FY 2011 Budget Request

- Major differences between FY 2009 actual expenditures and budgeted FY 2010 and 2011 in operating:
  - Contractual – FY 2010 and 2011 budgets include authority for the Regulated Substance Response Fund, the Environmental Livestock Cleanup Fund, and the federal ARRA stimulus funds
  - Grants – FY 2010 and 2011 budgets include authority for the federal ARRA stimulus funds and federal EPA Clean Diesel non-ARRA funds

- Continues last year's general fund reduction of $650,765 in DENR's budget which was a 10% reduction in general - general funds in DENR's budget are now less than the amount of general funds in our FY 2005 budget.

- Governor Rounds is proposing a reduction of 1.8 FTE in DENR's 2011 budget which cuts DENR authorized FTE to 174.7 - essentially back to FY 1999 level.

DENR BUDGETED FTE HISTORY

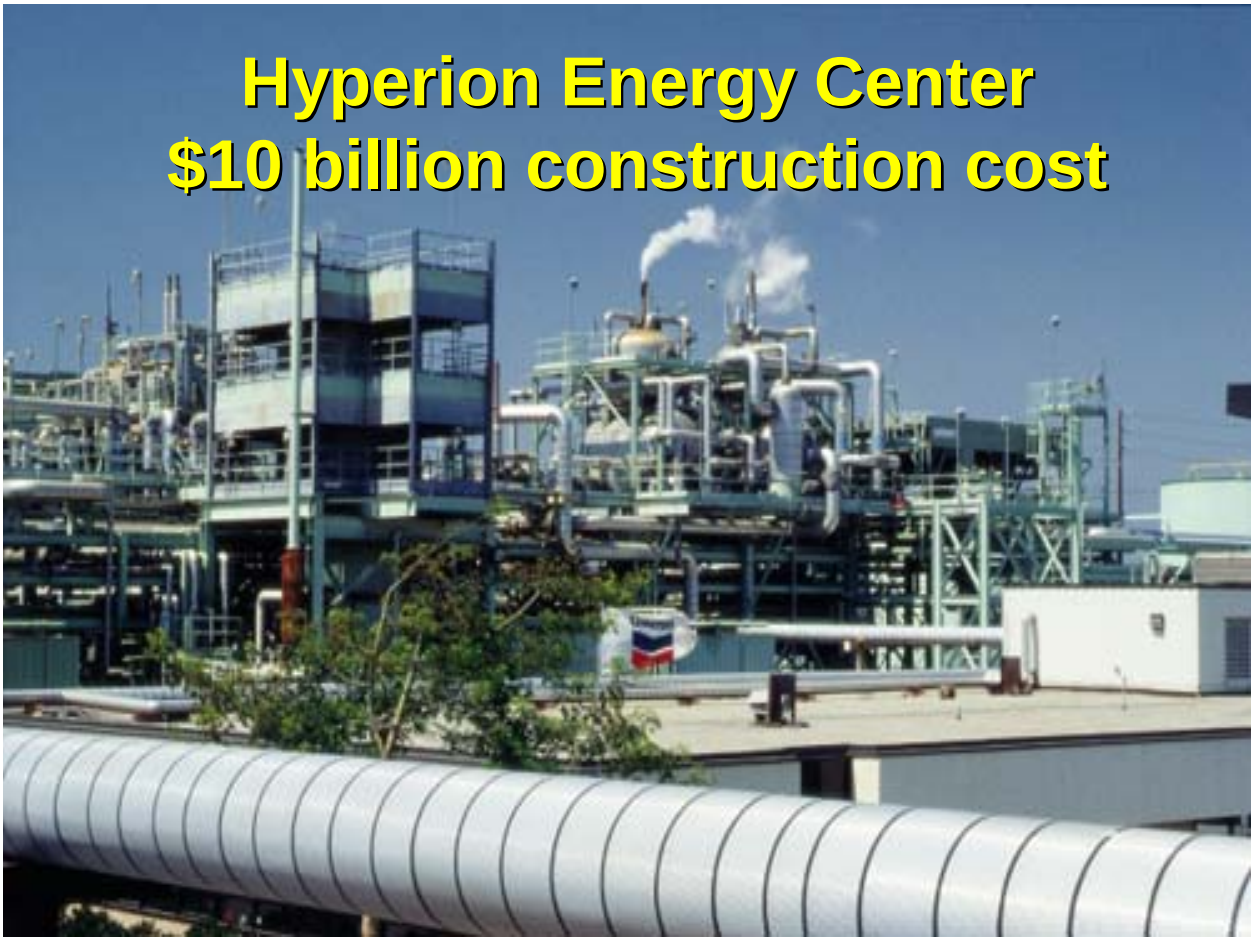


Governor's Recommended Increase/Decrease for FY 2011

- **Division of Financial and Technical Assistance**
  - General – ($ 565) FTE reduction and health insurance increase
  - Federal – ($14,064) FTE reduction and health insurance increase
  - Other – $ 3,586 FTE reduction and health insurance increase

- **Division of Environmental Services**
  - General – $12,312 FTE reduction and health insurance increase
  - Federal – $14,317 FTE reduction and health insurance increase
  - Other – $ 8,912 FTE reduction and health insurance increase

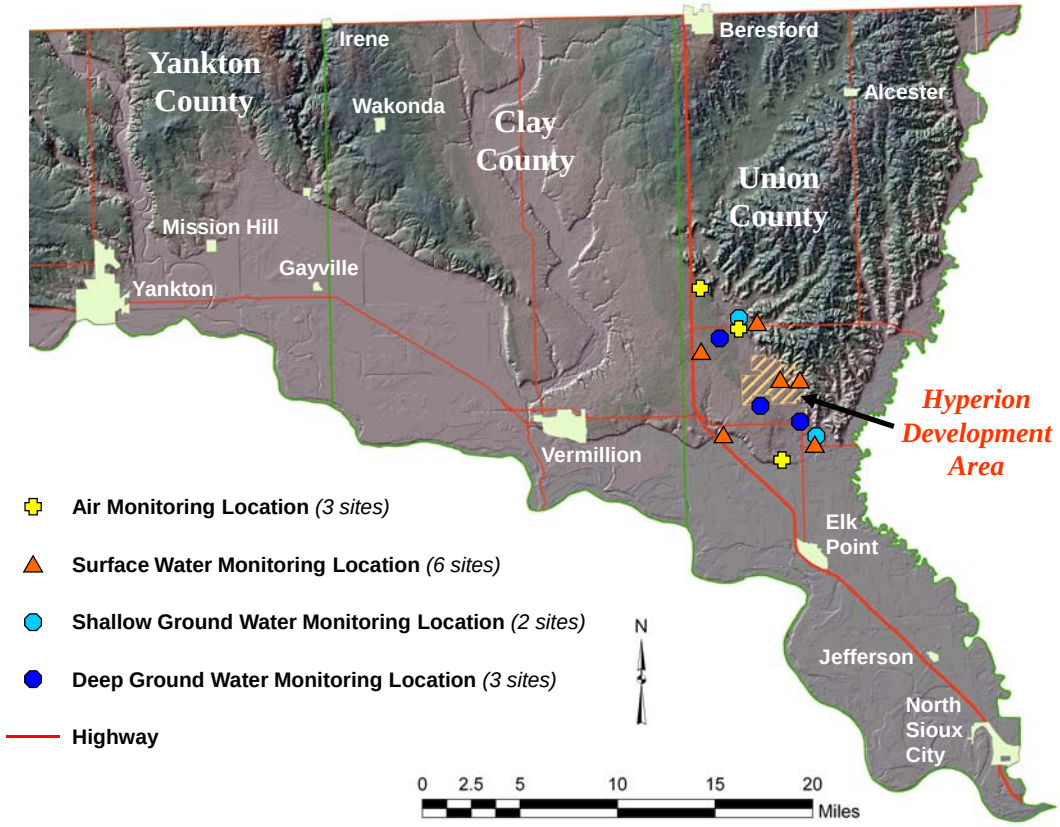
2009 IN REVIEW – MAJOR PROJECTS THAT PROTECT THE ENVIRONMENT WHILE HELPING GROW OUR ECONOMY

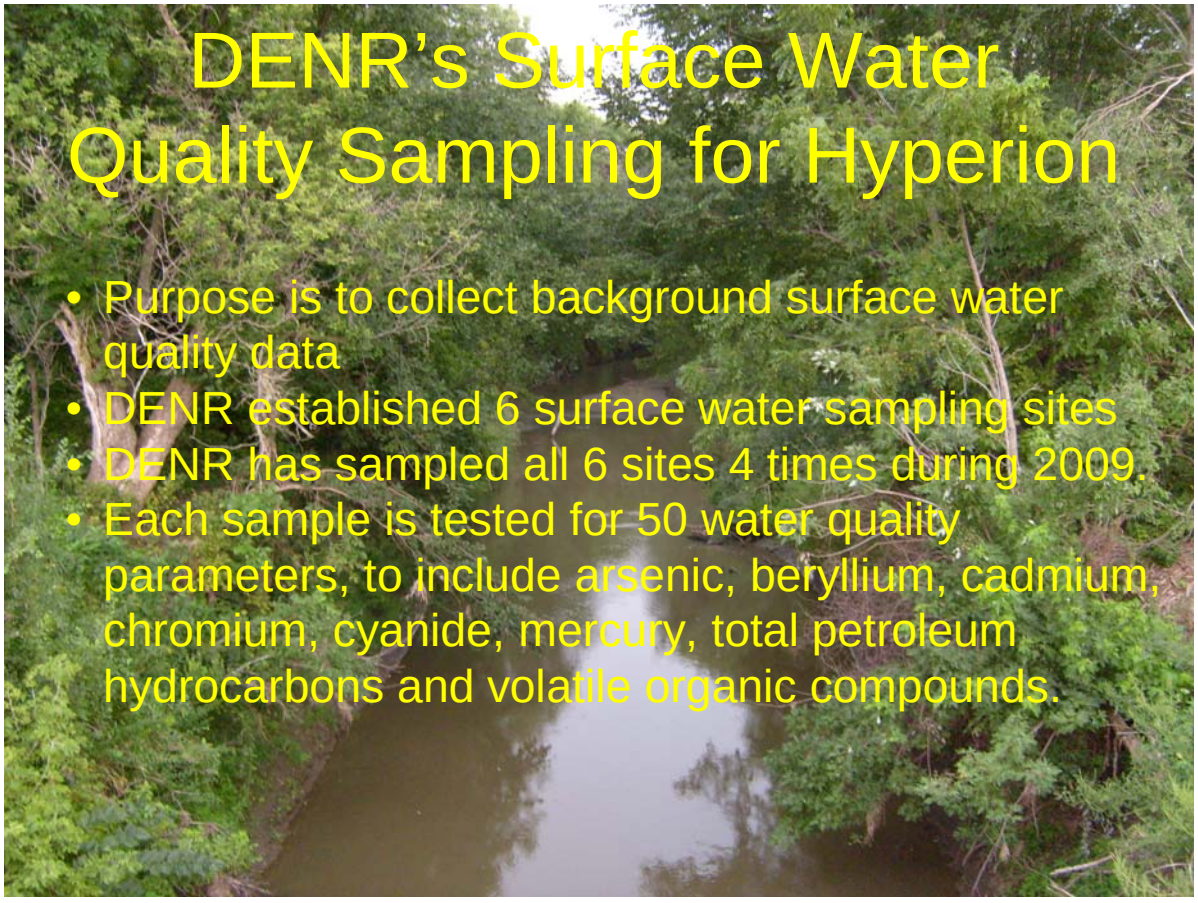


Timeline for Prevention of Significant Deterioration air permit:

- December 20, 2007 – Hyperion submits 613 page application for Prevention of Significant Deterioration preconstruction air quality permit to DENR
- February 20, 2008 – DENR notice of complete application
- September 10, 2008 – DENR public notices draft permit
- December 17, 2008 – DENR responds to comments received from 3,000 people; makes final agency decisions on permit
- January 12, 2009 – Sierra Club, Save Union County, and Citizens Opposed to Oil Pollution petition to oppose permit
- April 15-16, 2009 – Board of Minerals and Environment conducts on-site tour and holds 2-day public input meeting in Elk Point
- May 19-22, June 23-26, July 15-16, 2009 – board holds contested case hearing by listening to 8 days of expert testimony
- August 20, 2009 – contested case hearing concludes with closing arguments; board unanimously approves permit
- September 2009 – Sierra Club and Hyperion file appeals to the permit in circuit court; deadlines for briefs are January 15; March 1, and April 9; oral arguments are scheduled for June 23, 2010.

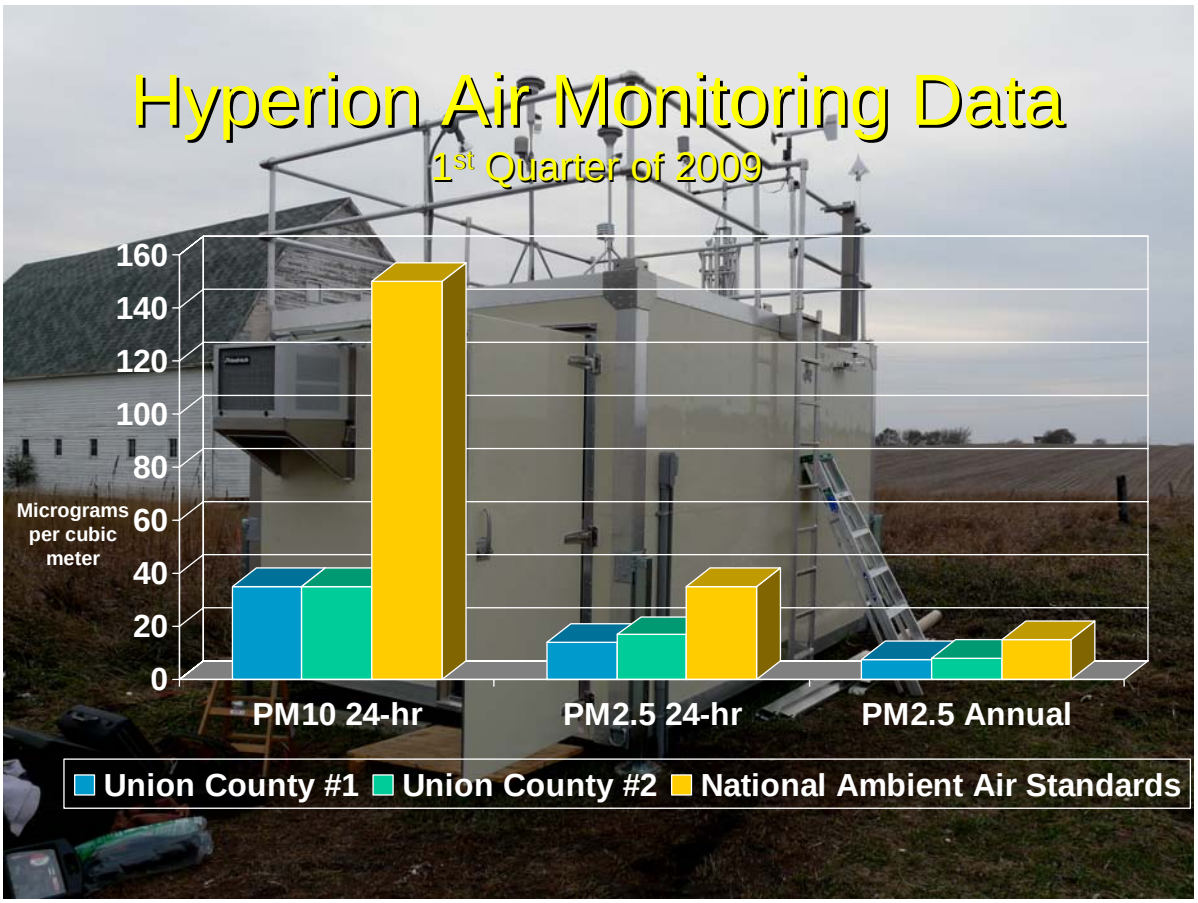
Monitoring Locations for the Hyperion Project

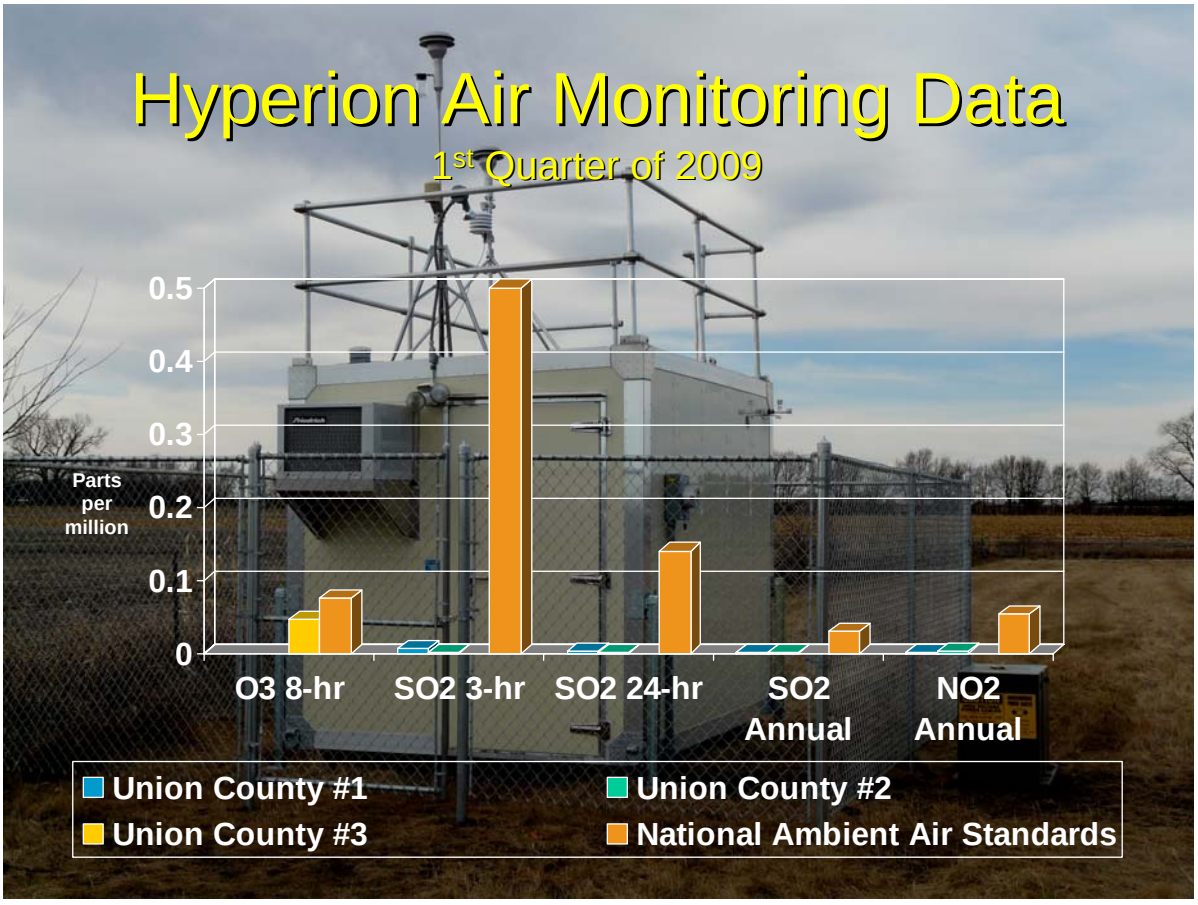




DENR test drilling near the proposed Hyperion Energy Center to collect background geologic and ground water quality data

- DENR drilled 15 test holes to further document subsurface geology and 5 were completed as ground water monitoring wells
- DENR sampled all 5 wells 4 times in calendar year 2009 (May, June, July and September)
- Water tests include: common inorganics, pesticides, trace metals, volatile organic compounds, and radionuclides
- Data on internet at http://denr.sd.gov/Hyperion/GS/hyperiongwq.pdf


Hyperion Air Monitoring Data
1st Quarter of 2009
160
140
120
100
80
60
40
20
0
Micrograms per cubic meter
PM10 24-hr
PM2.5 24-hr
PM2.5 Annual
Union County #1
Union County #2
National Ambient Air Standards


Hyperion Air Monitoring Data
1st Quarter of 2009
0.5
0.4
0.3
0.2
0.1
0
Parts per million
O3 8-hr
SO2 3-hr
SO2 24-hr
SO2 Annual
NO2 Annual
Union County #1
Union County #2
Union County #3
National Ambient Air Standards

- **Crude oil pipeline designed to carry 591,000 barrels per day from the oil sands in Alberta, Canada, to refineries in Wood River and Patoka, Illinois, and storage facilities in Cushing, Oklahoma**

- **Timeline:**

  - 2008
    - construction began in North and South Dakota
    - horizontal directional drill under the Missouri River completed November 2008

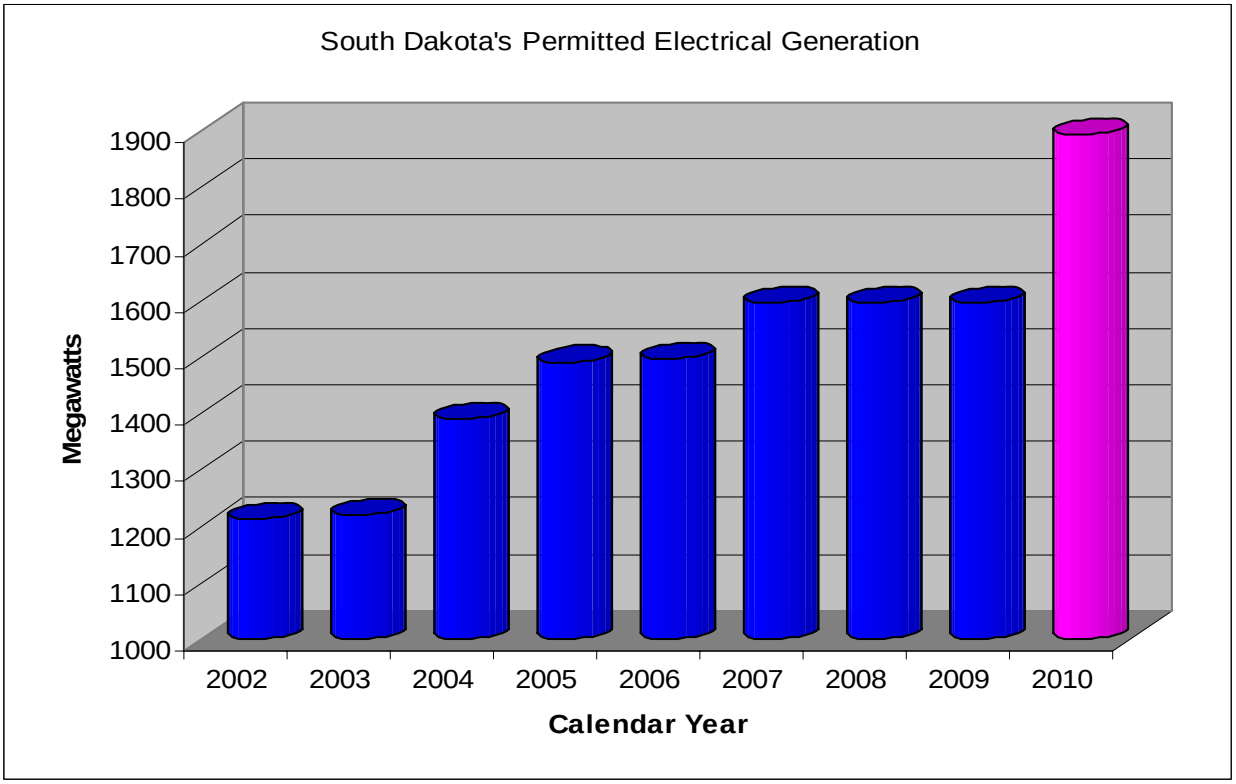
  - 2009
    - construction continues across eastern side of South Dakota

  - Late 2009 / early 2010
    - construction complete
    - pipeline operations begin

- **Proposed crude oil pipeline designed to carry up to 900,000 barrels per day from the oil sands in Alberta, Canada, to refineries along the Gulf Coast in Texas**

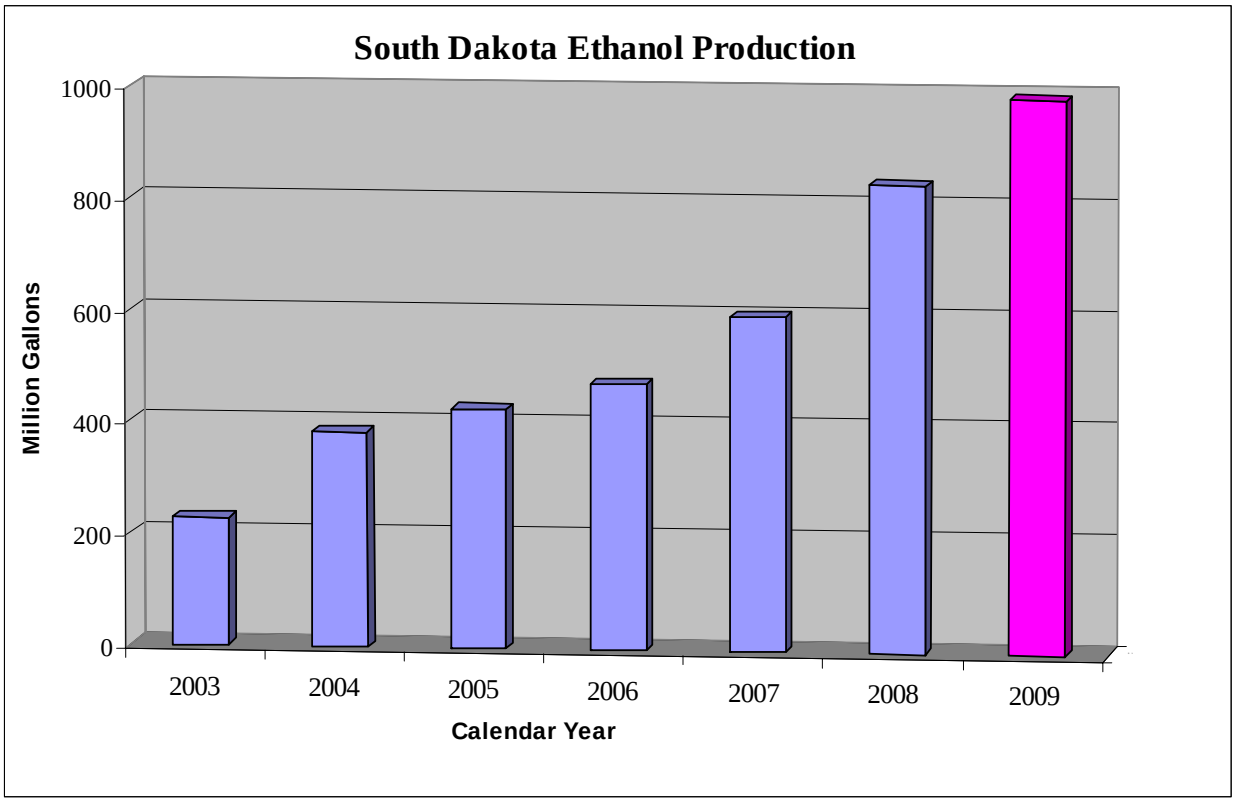
- **Timeline:**
  - 2009
    - Initiate permitting process for the federal Presidential Permit from the U.S. State Department and the South Dakota Public Utilities Commission siting permit
    - Formal hearing in front of the South Dakota Public Utilities Commission – DENR staff subpoenaed as expert witnesses
  - 2010
    - Begin construction after receiving regulatory approvals, which are anticipated in the first and second quarters of 2010
  - 2011/2012
    - Complete construction (construction in South Dakota during 2011)
    - In-service target date of 2012

- Board approved air permit – Nov. 20, 2008; EPA revisions - April 21, 2009
- September 11, 2009 – Otter Tail withdraws from partnership

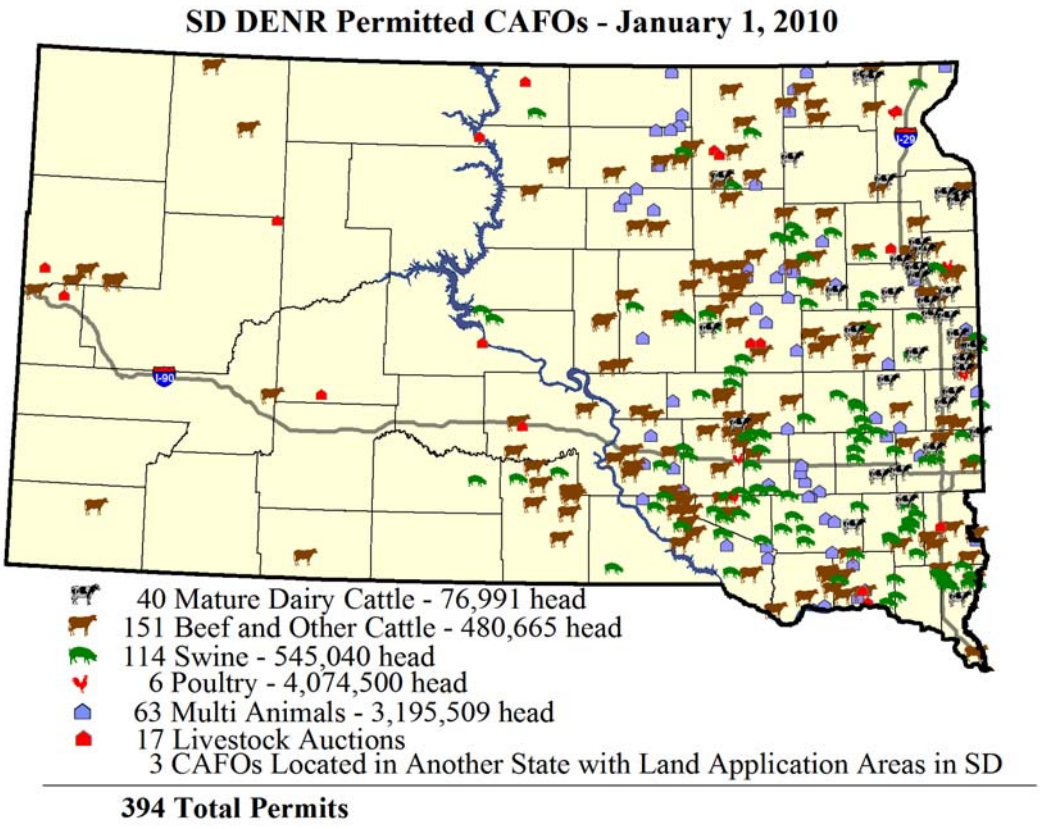


- Power generation capacity from plants with air permits will grow to 1,900 megawatts with Basin Electric's natural gas fired Deer Creek Station

Permitting of Value-Added Agriculture Activities



- Production from ethanol plants with air quality permits continues to climb.



Federal Stimulus Funding

Clean Water Revolving Fund Stimulus Funding for wastewater and storm water projects - $18.47 million

Timeline:

- March 20, 2009 – Board of Water and Natural Resources adopts emergency rules authorizing principal forgiveness awards
- March 27, 2009 – board amends intended use plan to include new projects
- May 27, 2009 – board adopts final rules
- May 27, 2009 – board awards $6.14 million to 11 projects
- June 26, 2009 – board awards $9.84 million to 9 projects
- July 23, 2009 – board awards $2.27 million to 6 projects
- August 27, 2009 – board awards $0.22 million to 1 project
    - **TOTALS…….. $18.47 million to 27 projects**
- December 10, 2009 – deadline for opening bids
- December 21, 2009 – deadline for submitting bids to DENR
- February 1, 2010 – deadline for having projects under contract

Federal Stimulus Funding

Drinking Water Revolving Fund Stimulus Funding for drinking water projects - $19.50 million

Timeline:

- March 20, 2009 – Board of Water and Natural Resources adopts emergency rules authorizing principal forgiveness awards
- March 27, 2009 – board amends intended use plan to include new projects
- May 27, 2009 – board adopts final rules
- May 27, 2009 – board awards $8.68 million to 11 projects
- June 26, 2009 – board awards $5.53 million to 12 projects
- July 23, 2009 – board awards $2.52 million to 7 projects
- August 27, 2009 - board awards $2.77 million to 12 projects
    - **Totals…….....$19.50 million to 42 projects**
- December 10, 2009 – deadline for opening bids
- December 21, 2009 – deadline for submitting bids to DENR
- February 1, 2010 – deadline for having projects under contract

Federal Stimulus Funding

EPA Clean Diesel Stimulus Funding for purchasing new school buses that have air emission controls and retrofit old school buses that have no air pollution controls - $1.7 million

Timeline:

- April 27 – DENR makes funding applications available to school districts
- July 17 – deadline for districts to submit applications for first funding round
- July 31 – DENR announced funding awards to 14 school districts
- October 12 – DENR announces opening of second funding round
- December 4 – deadline for districts to submit applications for second funding round
- December 18 – DENR announced funding awards to 23 school districts
    - **Totals……..….$1.7 million to 37 school districts**
- January 15, 2010 – deadline for school districts to accept or decline awards

Federal Stimulus Funding

EPA Leaking Underground Storage Tank Trust Fund Stimulus Funding - $1.2 million

- Funds will be used by DENR to clean up eligible leaking underground storage tank petroleum-contaminated sites to reduce risk to human health and the environment to allow redevelopment of these sites.
- Eligibility criteria include:
  - contamination must be petroleum from an underground tank
  - responsible party no longer exists or cannot be identified; responsible party refuses to clean up; responsible party cannot afford to clean up, or there is an emergency

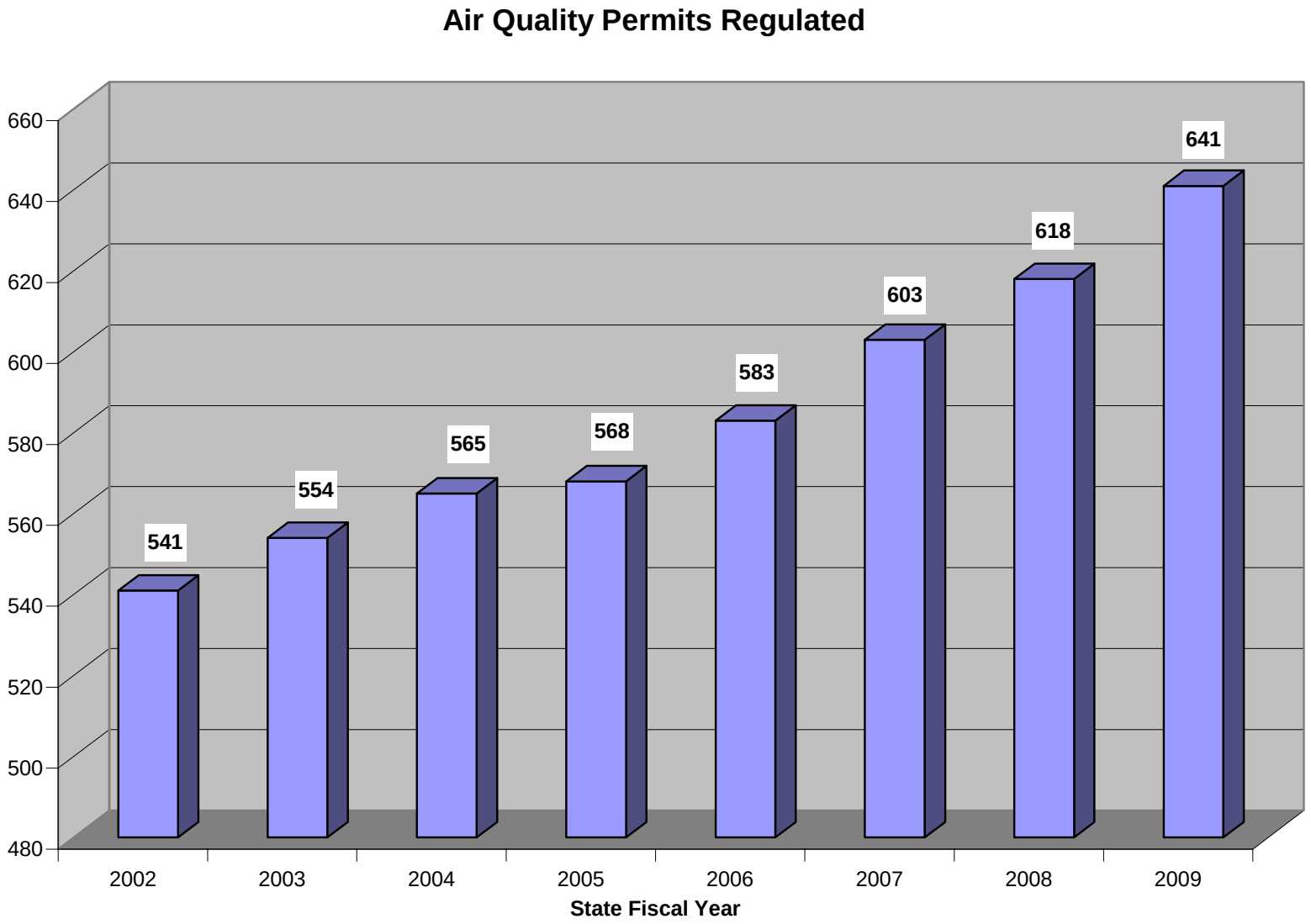
Timeline:

- May 2009 - DENR used the contractor selection process established by the 2009 Legislature to select 5 cleanup contractors
- July 2009 – DENR received $1.2 million from EPA along with 40 pages of conditions
- Work plans for 25 projects estimated to cost $465,000 approved thus far

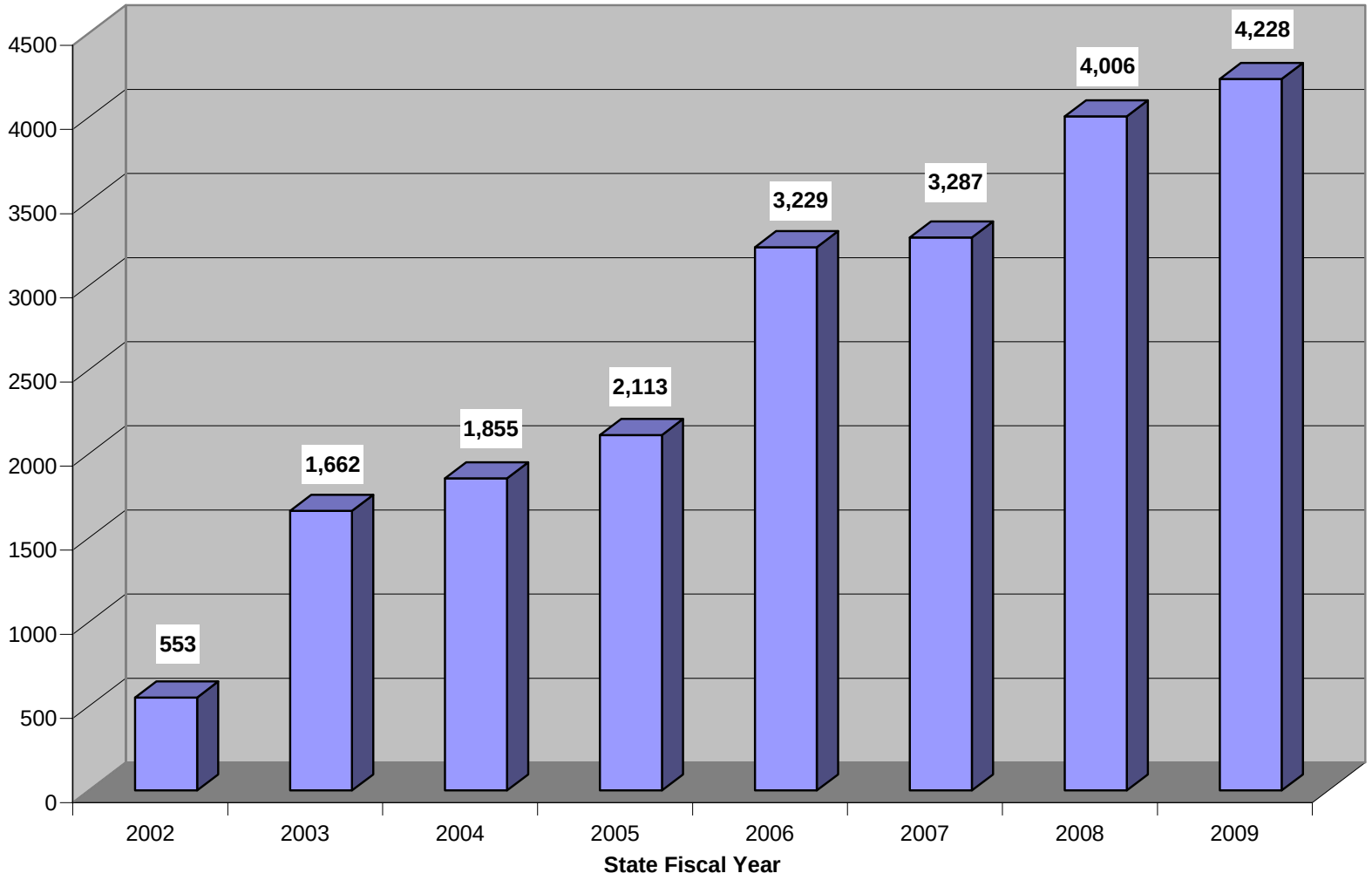
Key Program Performance Indicators

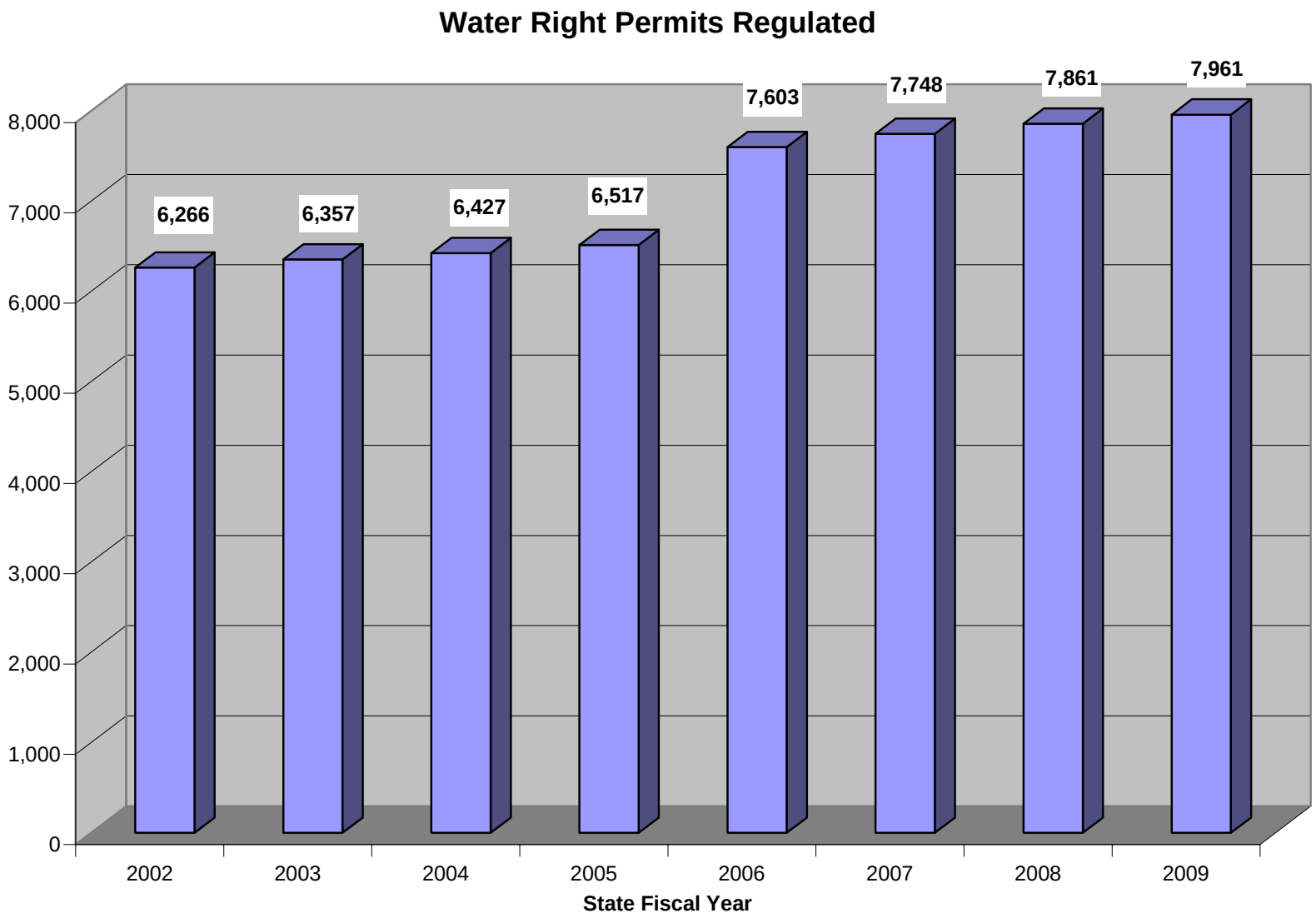
Show DENR's Workloads

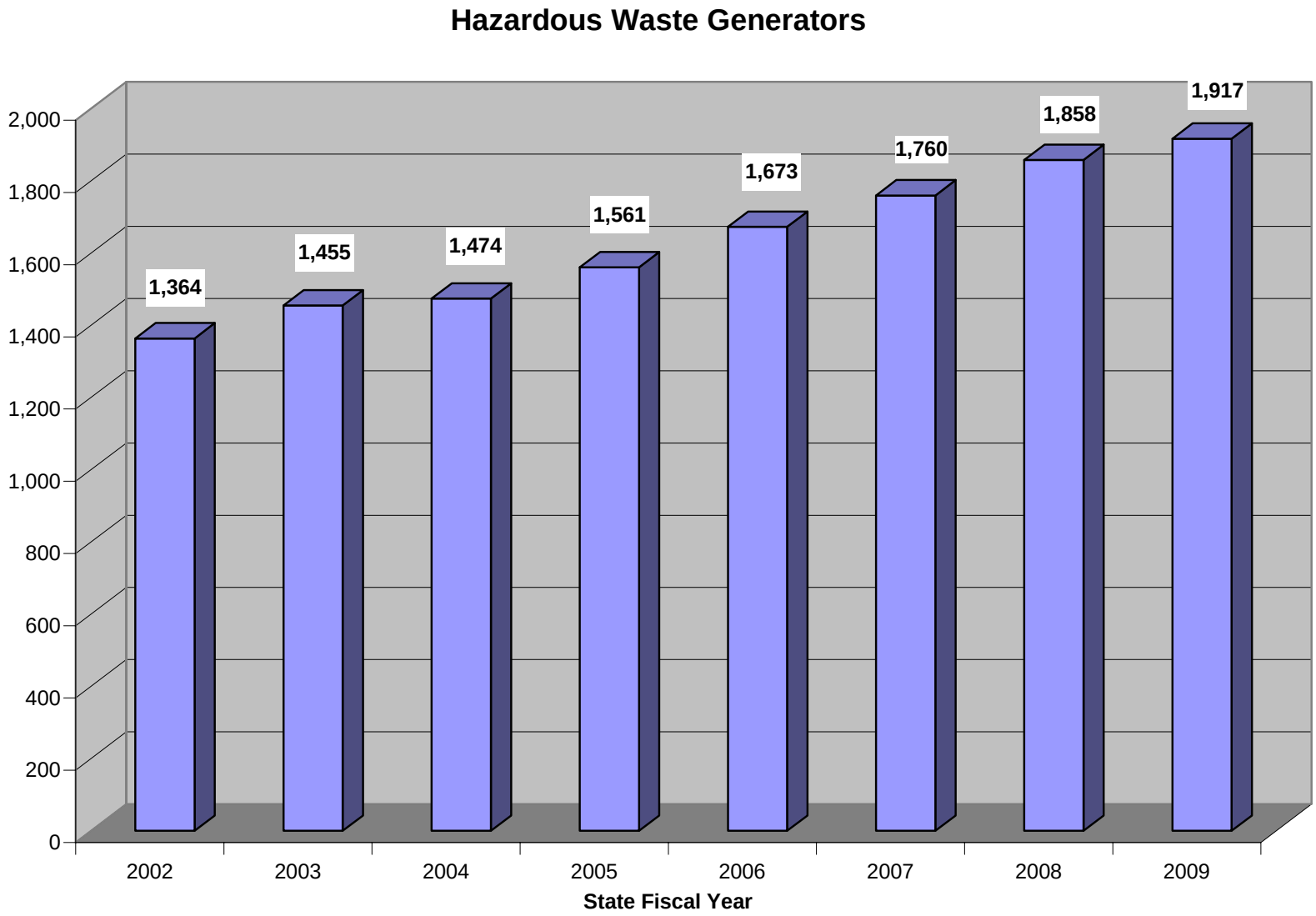
Continue to Grow


Air Quality Permits Regulated
660
640
620
600
580
560
540
520
500
480
541
554
565
568
583
603
618
641
2002
2003
2004
2005
2006
2007
2008
2009
State Fiscal Year

Surface Water Discharge Permits Regulated by DENR




Water Right Permits Regulated
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
6,266
6,357
6,427
6,517
7,603
7,748
7,861
7,961
2002
2003
2004
2005
2006
2007
2008
2009
State Fiscal Year

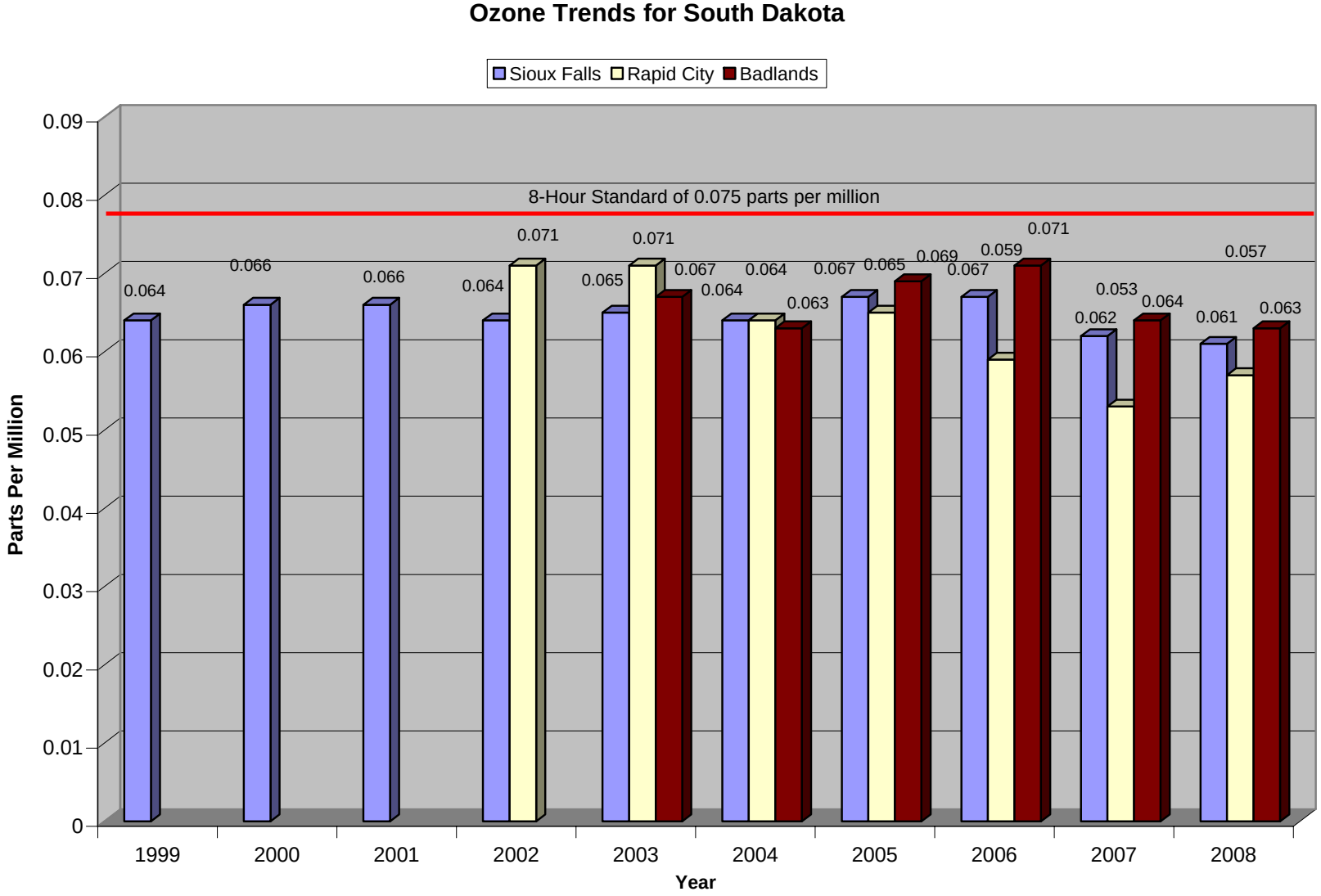

Hazardous Waste Generators
2,000
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0
1,364
1,455
1,474
1,561
1,673
1,760
1,858
1,917
2002
2003
2004
2005
2006
2007
2008
2009
State Fiscal Year

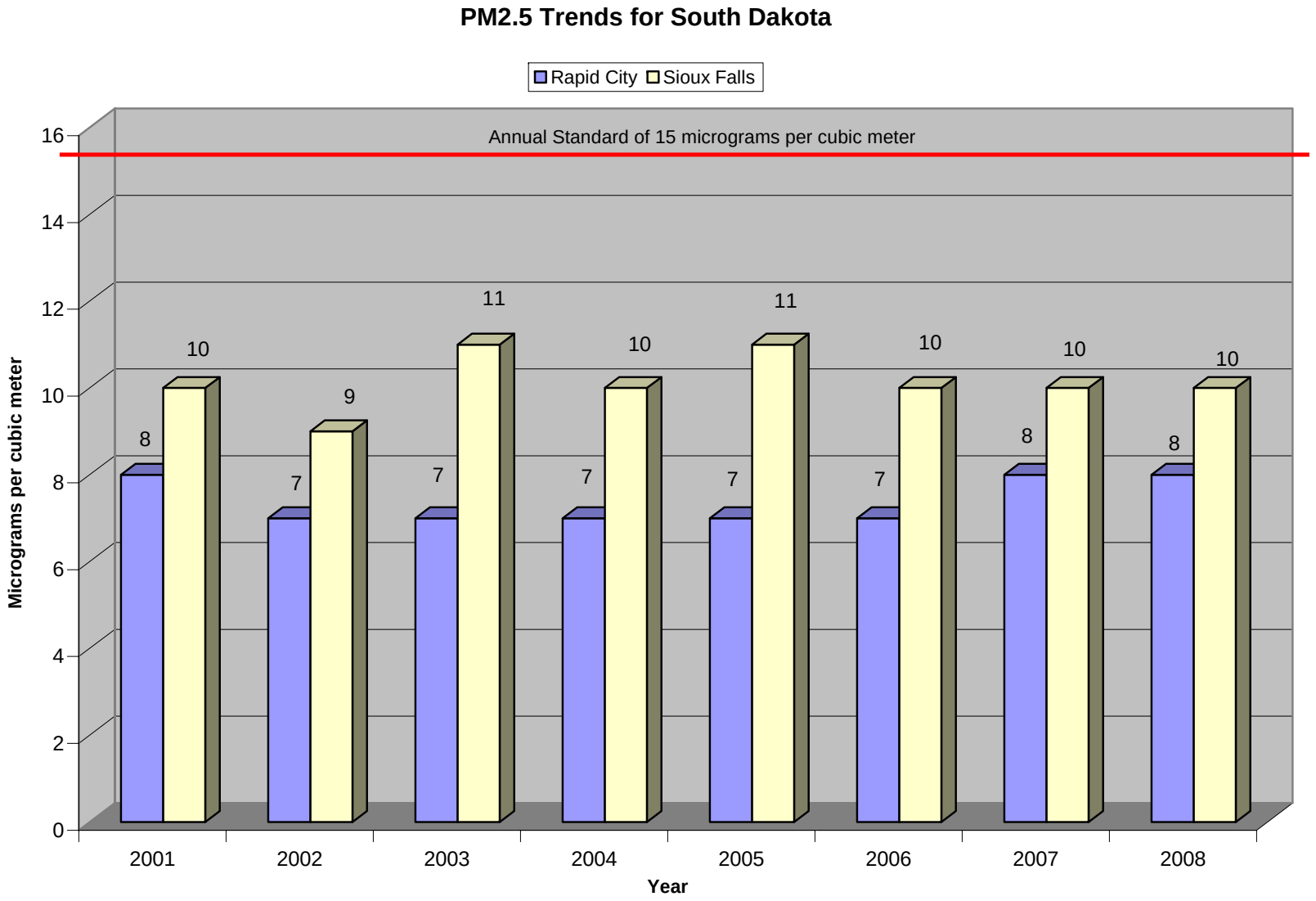
Key Environmental Indicators Show

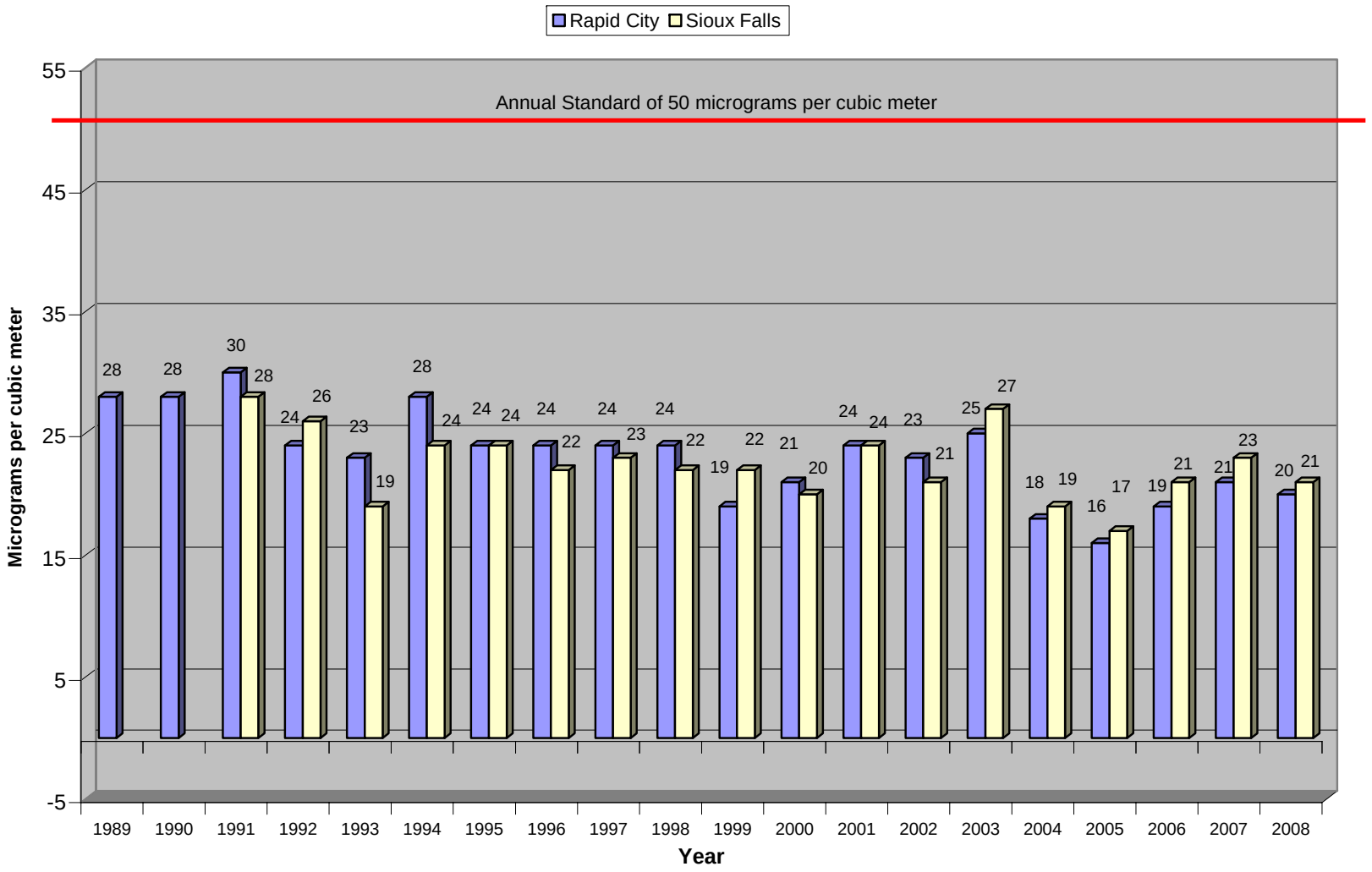
DENR is Protecting the Environment

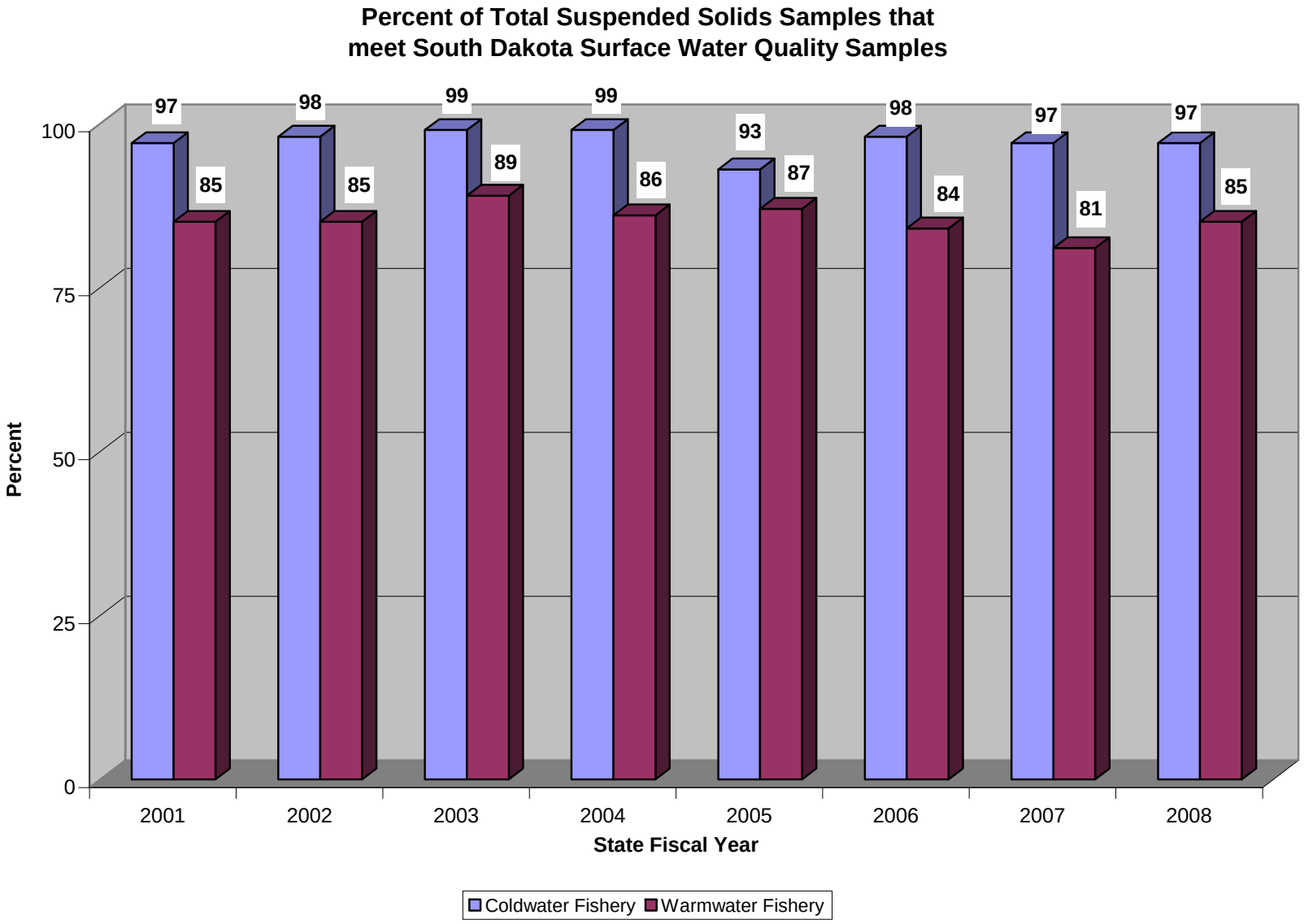
as the

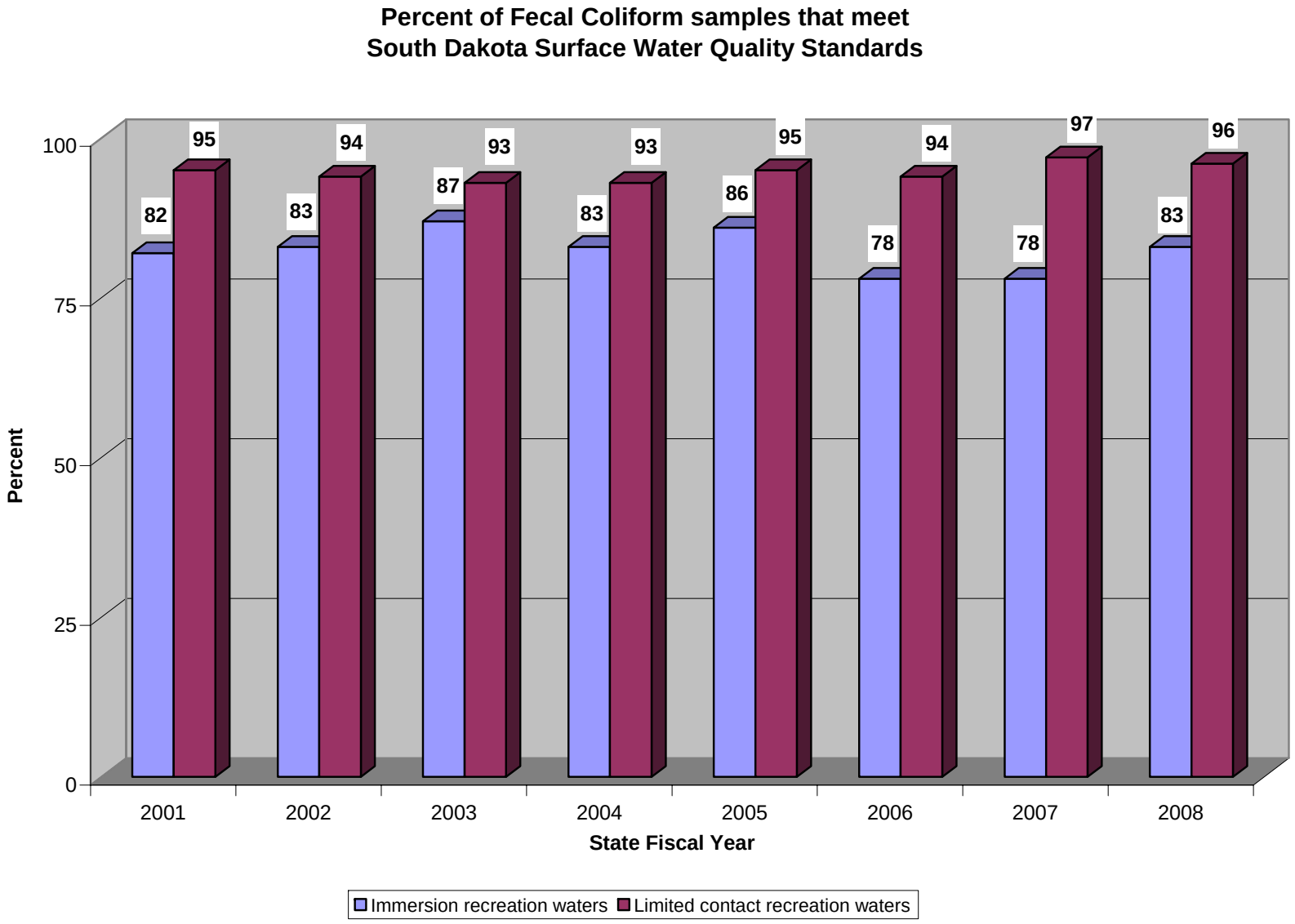
State Continues to Grow


Ozone Trends for South Dakota
Sioux Falls
Rapid City
Badlands
8-Hour Standard of 0.075 parts per million
Parts Per Million
Year
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
0.064
0.066
0.066
0.064
0.071
0.065
0.071
0.067
0.064
0.064
0.063
0.067
0.065
0.069
0.067
0.059
0.071
0.062
0.053
0.064
0.061
0.057
0.063

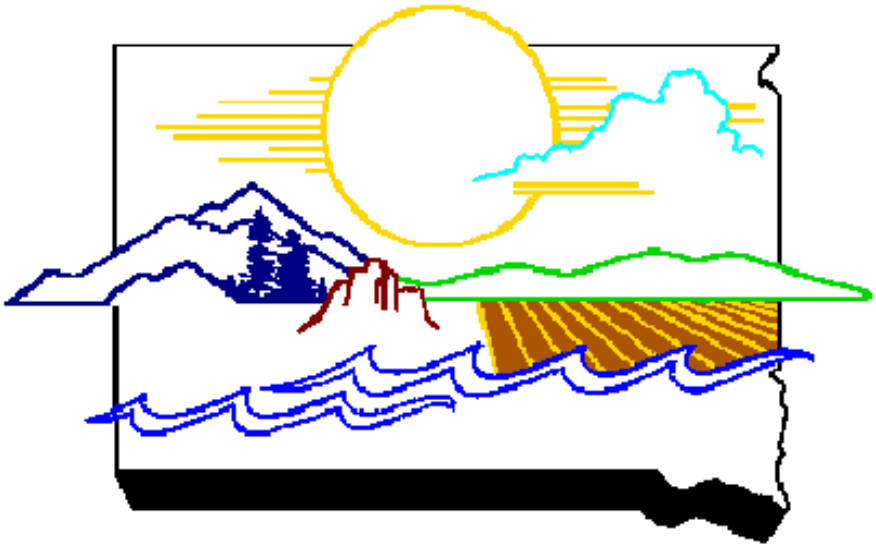

PM2.5 Trends for South Dakota
Rapid City
Sioux Falls
Annual Standard of 15 micrograms per cubic meter
Micrograms per cubic meter
0
2
4
6
8
10
12
14
16
8
10
7
9
7
11
7
10
7
11
7
10
8
10
8
10
2001
2002
2003
2004
2005
2006
2007
2008
Year


PM10 Trends in South Dakota
Rapid City
Sioux Falls
Annual Standard of 50 micrograms per cubic meter
Micrograms per cubic meter
55
45
35
25
15
5
-5
1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008
Year
28 28 30 28 24 26 23 19 28 24 24 24 24 22 24 23 24 22 19 22 21 20 24 24 23 21 25 27 18 19 16 17 19 21 21 23 20 21


Percent of Total Suspended Solids Samples that meet South Dakota Surface Water Quality Samples
Percent
100
75
50
25
0
97
85
98
85
99
89
99
86
93
87
98
84
97
81
97
85
2001
2002
2003
2004
2005
2006
2007
2008
State Fiscal Year
Coldwater Fishery
Warmwater Fishery


Percent of Fecal Coliform samples that meet
South Dakota Surface Water Quality Standards
100
75
50
25
0
Percent
82
95
83
94
87
93
83
93
86
95
78
94
78
97
83
96
2001
2002
2003
2004
2005
2006
2007
2008
State Fiscal Year
Immersion recreation waters
Limited contact recreation waters

Future Challenges and Highest Priorities for DENR



Protecting South Dakota's Tomorrow ... Today

1. LACK OF WATER – DENR must Manage and Protect Water Resources for both Today and Future Generations.

A. Background
- South Dakota is an arid State
- Prairie stream flows are seasonal and can be perennial
- Ground water supplies are limited and often naturally poor water quality

B. Benefits
- High quality of life dependent on reliable and clean water
- Maximize beneficial uses of water
  - Protect and manage water quantity
  - Protect and manage water quality

C. Solutions
- Base water quantity and quality decisions on good science
- Accurate, reliable, long-term data analysis provides basis for sound water management decisions
- Availability of both short and long term data from DENR's statewide water monitoring networks is critical
  - Ground water quantity and quality
  - Surface water quantity and quality

Stream flow gauging station that provides both real-time and historical data on water quantity.

2. WATER, WASTEWATER, & SOLID WASTE FACILITIES – DENR must Provide Financial, Technical, and Regulatory Assistance to Meet State and Federal Environmental Standards.

A. Background

- 657 public drinking water systems serving 718,173 residents
- 4,228 surface water discharge permits
- 244 solid waste permits

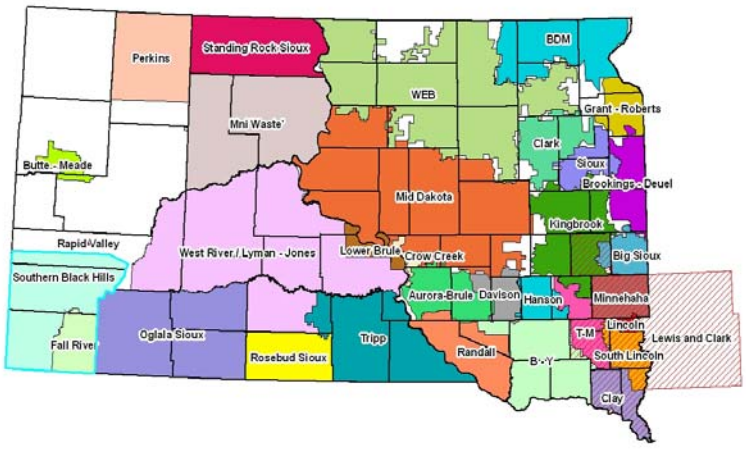
B. Benefits

- Protect public health
- Protect the environment
- Lay solid foundation for economic growth

C. Solutions

- Use state and federal funding to help local projects
- Federal partners – U.S. EPA, Bureau of Reclamation, Corps of Engineers
- State Water Planning Process and Governor's Annual Omnibus Water Funding Bill

South Dakota Rural Water Systems



11/08/2005

The number of people served by rural water systems has grown from 650,000 in 2002 to 718,173 .

3. TIMELY ENVIRONMENTAL PERMITTING – DENR must Not Cut Any Corners, but Cut the Red Tape to Help Maintain South Dakota's Successful Business Climate.

A. Background

- 7,961 active water right permits
- 641 air quality permits
- 91 gas wells; 162 oil wells; 43 large scale mine permits; and 1,795 sand and gravel pits

B. Benefits

- Aligns with Governor Rounds' 2010 Initiative
- Promotes economic development
- Provide opportunities for our children to stay, live, work, and raise their families in South Dakota

C. Solutions

- One-stop environmental permitting
- Provide highest customer service – goal is to exceed expectations of our customers
- High customer service is dependent on good people, historical experience, accurate data, and current technology

One-stop environmental permitting helps eliminate conflicts between environmental requirements.

4. TOTAL MAXIMUM DAILY LOADS (TMDLs) – DENR must Help Local Water Quality Projects Identify and Improve Impaired Waters that do not consistently Meet Water Standards.

A. Background

- A Total Maximum Daily Load requires water quality sampling and testing, data analysis, modeling, and calculations to establish pollutant loadings that a waterbody can carry and not violate water quality standards
- The federal Clean Water Act requires states to submit a new Total Maximum Daily Load list to EPA every two years
- Environmental groups sued in federal court over the 1998 list; there are 168 waterbodies on our 2008 list.

B. Benefits

- Identifies waters that do not consistently meet standards
- Targets resources to impaired waterbodies
- End result is higher quality waters

C. Solutions

- Development of site-specific standards
- Target EPA 319 Nonpoint Source grants to impaired waterbodies
- Assist locally-led water quality improvement projects to implement solutions

5. FEDERAL EPA CHALLENGES/PROJECTS – DENR must Rapidly Adjust to Ever Changing New Federal Requirements

A. Background

- This is a new, emboldened EPA
- EPA is lowering risk to public welfare regardless of the cost
- EPA finalized endangerment finding that greenhouse gases pose a threat to public health and safety which can lead to regulation of carbon dioxide and methane emissions

B. Benefits

- DENR employees have the technical knowledge to understand the changes
- DENR employees have the experience to understand the consequences
- DENR can act as a buffer between EPA

C. Solutions

- Try to provide reality checks to EPA during rule development
- Use any available flexibility to better fit federal programs to South Dakota
- Identify innovative, cost effective methods for compliance

Example of the need for innovative solutions to federal requirements is the Brohm Superfund Site with EPA's estimated $60 million cleanup cost.

SUMMARY

- **South Dakota enjoys a high quality environment.**
- **DENR employees work hard every day to maintain our high quality environment together with a successful business climate.**
- **DENR's 2011 Recommended Budget will allow us to Get the Job Done.**

Bills in the 2011 Legislature

1. HB 1013 – An Act to authorize DENR to accept environmental reports submitted with electronic signatures – has passed both houses.
2. SB 64 – Governor Rounds' 2010 Omnibus Water Funding Bill – has passed the Senate.