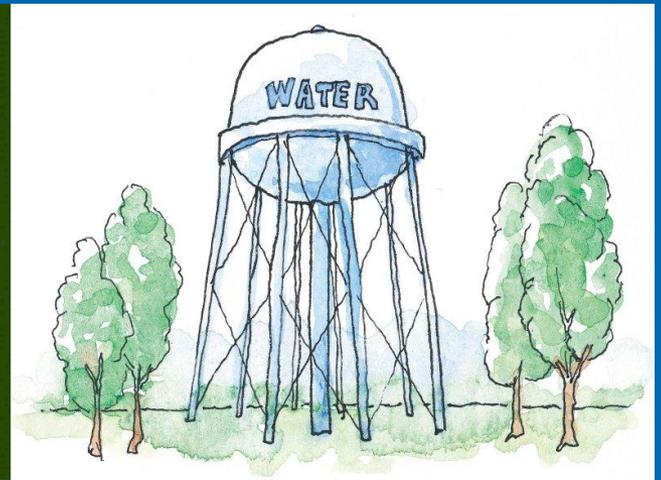


South Dakota Department of
Environment & Natural Resources



*Protecting
South Dakota's
tomorrow...today!*



Drinking Water Program

Agency Review Meeting

July 21, 2010



Purpose

- Implement the Safe Drinking Water Act (SDWA) in South Dakota
- Implement State Rules for:
 - Fluoridation of Water Supplies
 - Bottled Water
 - Public Beaches and Municipal Pools





Staffing

- 11 Full Time Employees
 - 198 years with Drinking Water Program
 - Average years with program: 18
- 4 Engineers
 - 2 Licensed Professional Engineers
 - 2 Engineers-In-Training
- 7 Scientists
 - 1 Registered Sanitarian

Drinking Water at a glance...

Water System Types:

654 Public Water Systems

Community Water Systems (CWS):

A water system that serves the same people year-round.

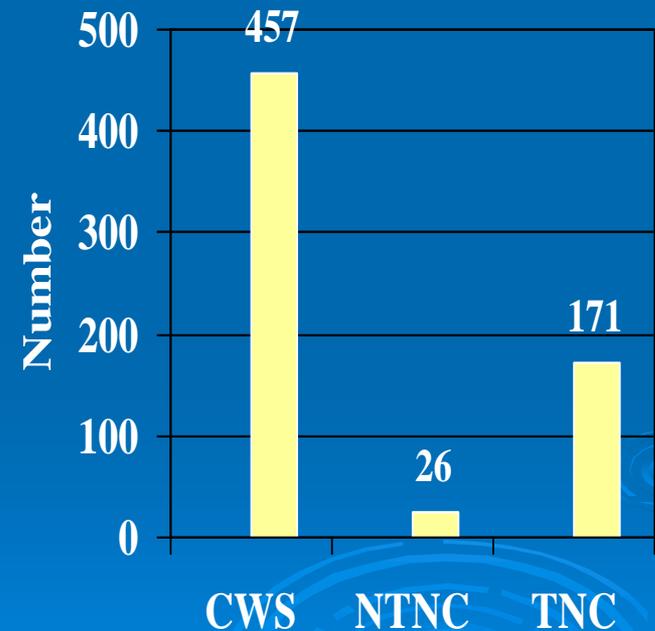
Non-Transient Non-Community (NTNC):

A water system that serves the same people for more than 6 months per year, but not year-round.

Transient Non-Community (TNC):

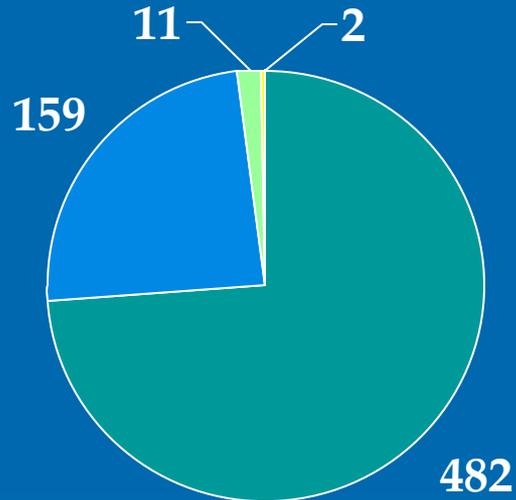
A water system that serves the public but not the same individuals for more than 6 months.

Water System Type



System Information

Water System Size

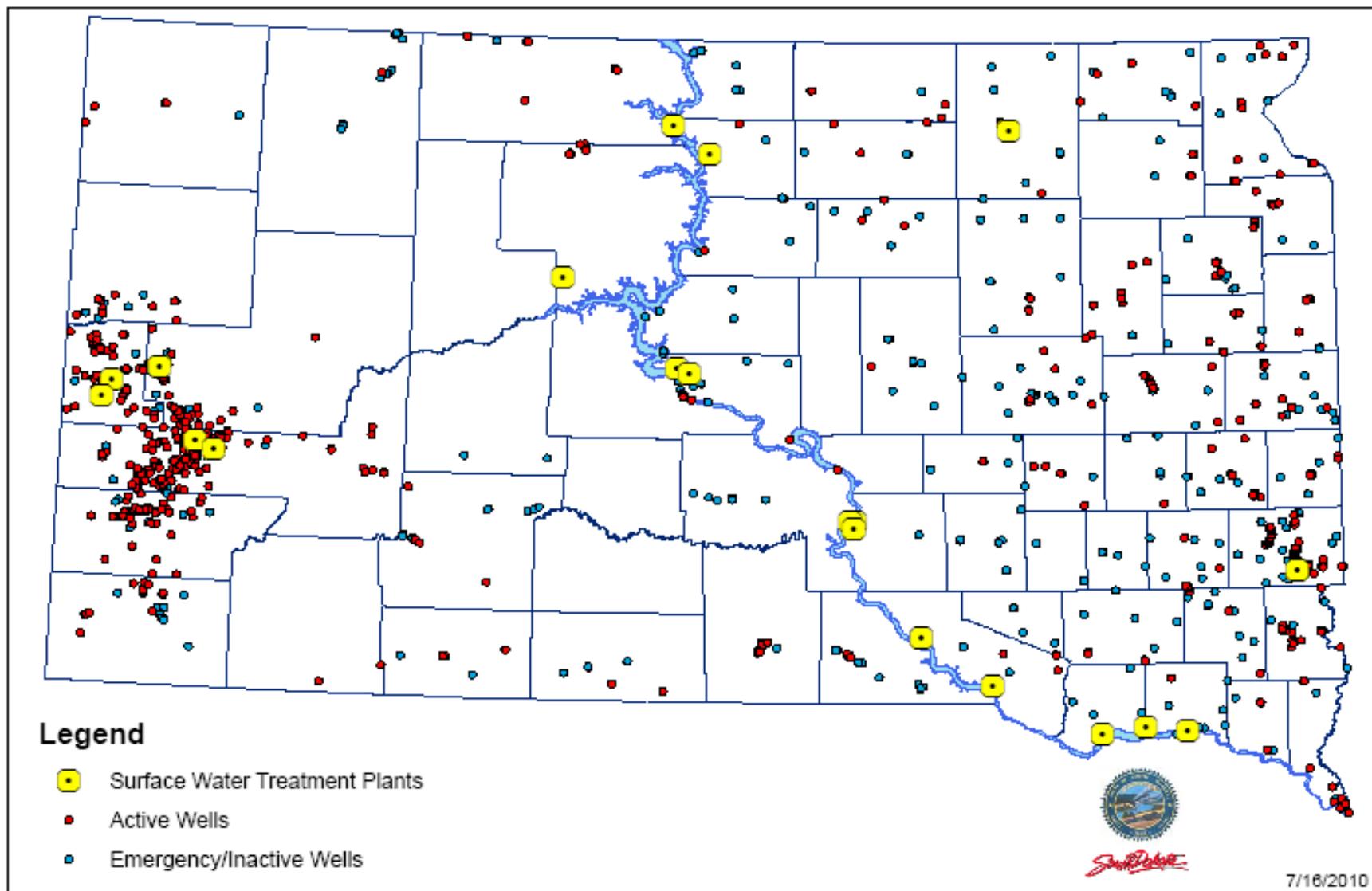


- Very Small <500
- Small <3,300
- Medium <50,000
- Large >50,000

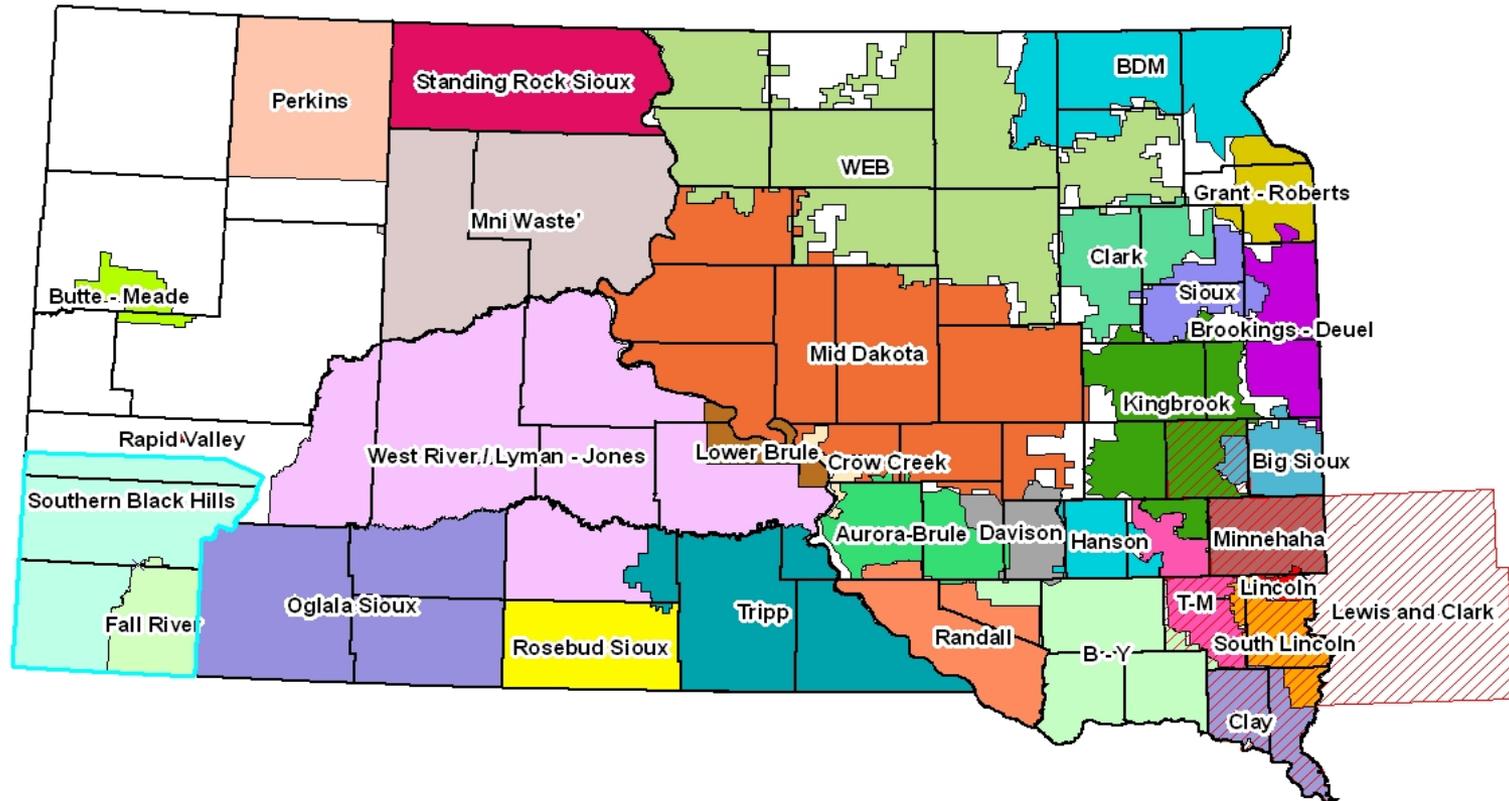
Source Water Type:

- 436 Ground Water
- 75 Purchased ground water
- 19 Surface water
- 124 Purchased surface water

Location of All Wells and Surface Water Treatment Plants Used by Public Water Supply Systems in South Dakota



South Dakota Rural Water Systems

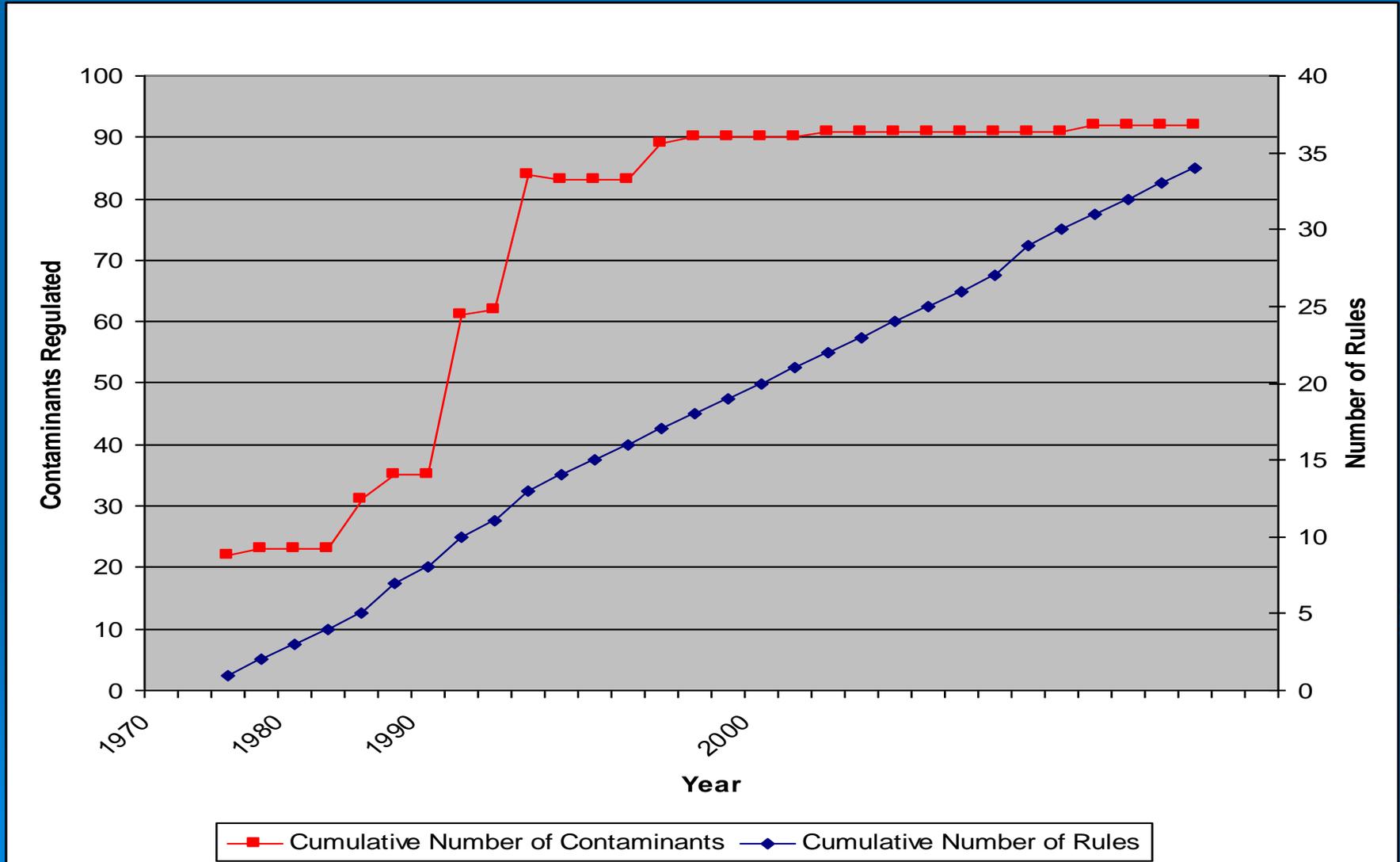


SDWA Priorities/Activities



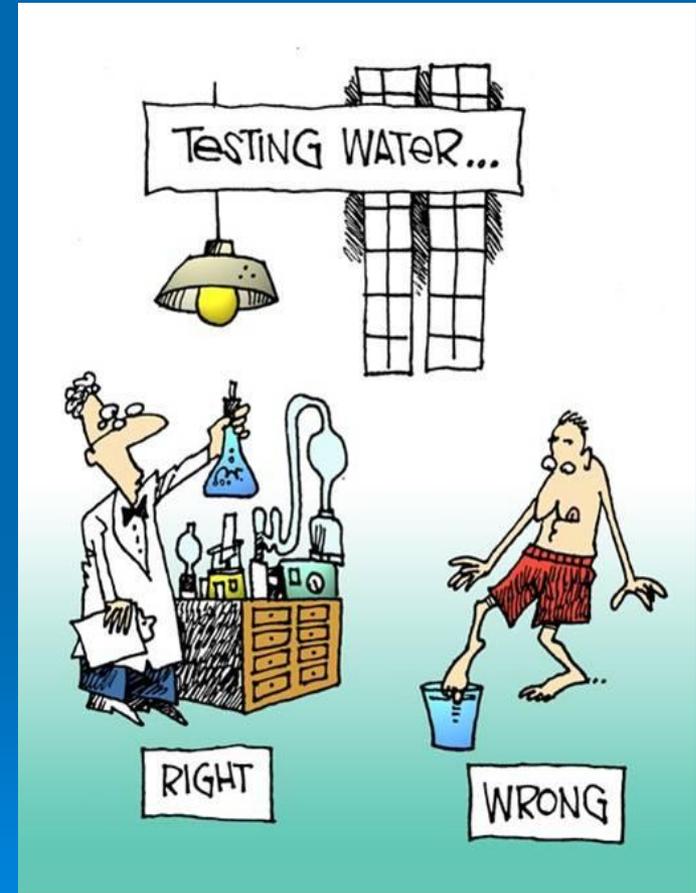
- Compliance with Safe Drinking Water Act
- Technical Assistance
- Sanitary Surveys of Public Water Systems
- Operator Certification
- Plans & Specifications Review
- Public Notice/Consumer Confidence Reporting
- Capacity Development
- Water System Security and Emergency Response

Regulatory History

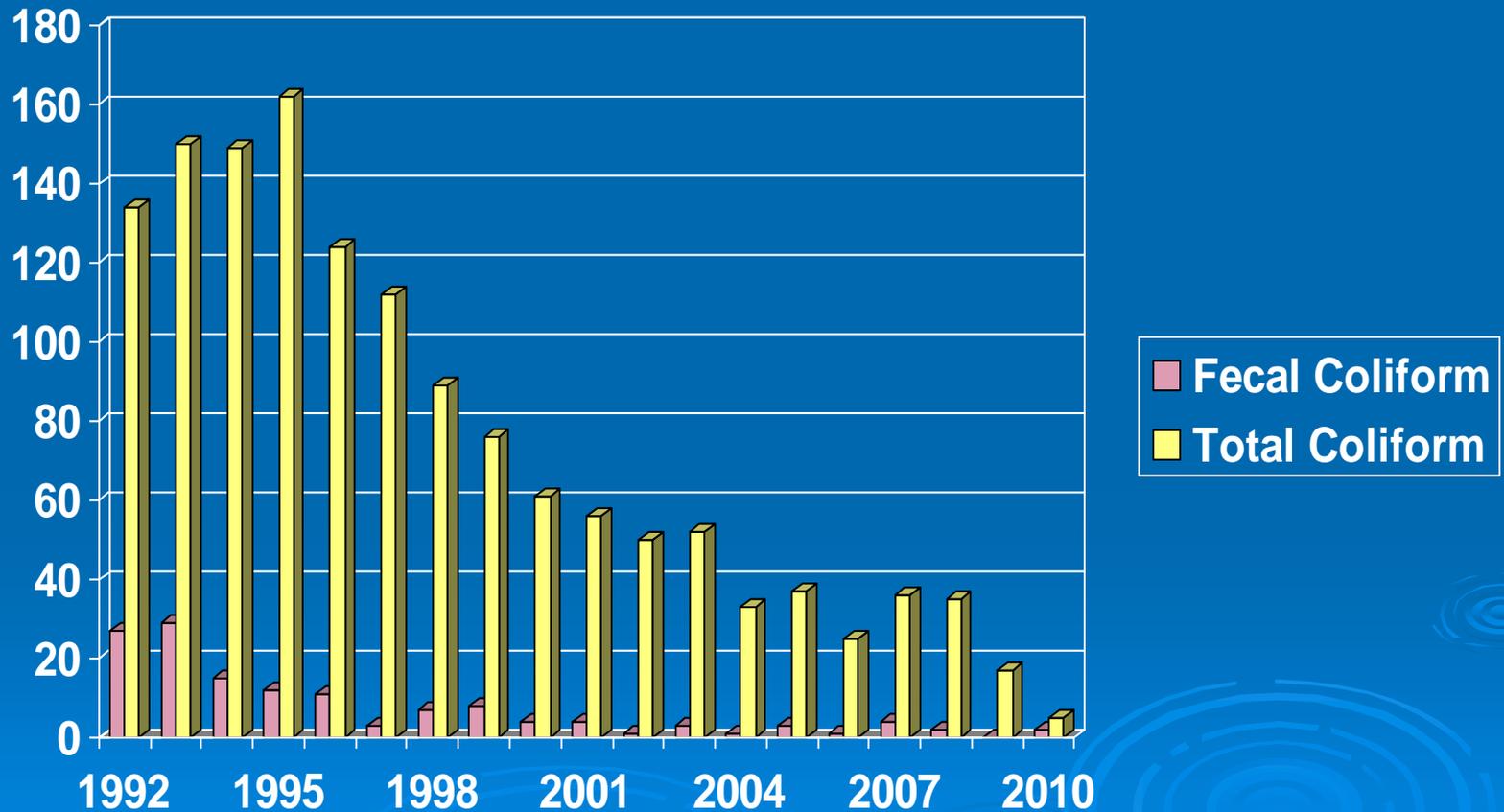


Number of Samples Per Year to Verify Safe Drinking Water

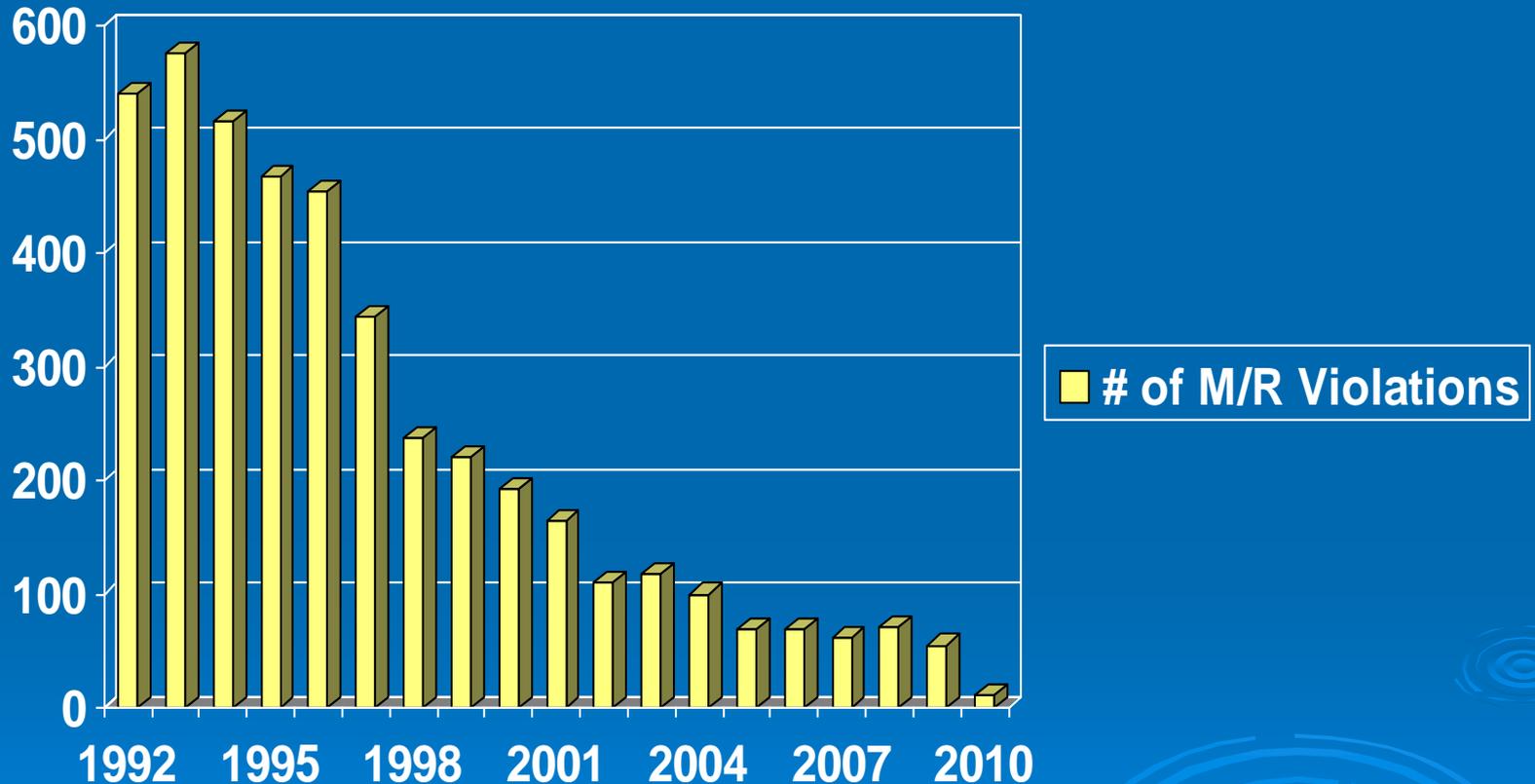
- 21,000 – number of samples collected per year for lab tests
- 76,000 – number of water quality tests run per year by operators



Total Coliform Rule - Maximum Contaminant Level Violations



Total Coliform Rule Monitoring Violations



Note-Beginning in 2005, NC systems sample on a quarterly basis.

Sanitary Surveys

- Each Community Water System is required to be surveyed every three years
- Non-Transient Non-Community and Transient Non-Community Systems are surveyed once every five years
- Average number of water system surveys per year: 198

Typical Facilities



Wellhead – Clearfield Colony



Pump house – Legion Lake
Custer State Park

Well house piping



Older System – Faith, SD



Newer System – Rapid City, SD

Surface Water Systems

Chamberlain, SD



Solids Contact Basin/Clarifier



Gravity Filters

Aberdeen, SD



Surface Water
Intake Structure

Operator Certification Program

- All community and non-transient non-community water systems are required to have an operator. All transient systems that serve over 500 and disinfect also need a certified operator
- All wastewater systems serving a population exceeding 500 must have an operator
- Approximately 1300 certified water and wastewater operators in the State
- Requires passing standardized exam and obtaining on-going training (contact hours) to stay current with regulations and technology

Engineering Plans & Specifications Review

- All works of sanitary significance are required to be designed by a South Dakota licensed professional engineer and submitted to the Department for review
- 30 day turn around
- Average 185 sets per year



Storage Tanks



Tank needing replacement –
Provo, SD

Mid-Dakota RWS Composite
Tank – Wolsey, SD



New Technologies

Membrane Filtration – Rapid Valley Sanitary District



Arsenic Removal System – Terry Trojan Sanitary District

Value Added Services

- Sampling Waivers:
 - Approximately 2700 waivers processed since 1992 saving water systems \$898,000 in lab costs
- Capacity Development Activities:
 - Assuring technical, managerial, and financial capacity for new water systems built after 1999
 - Review self-assessments completed by SRF loan applicants as part of loan approval process
- Water Security:
 - Established grant program to assist all systems with required vulnerability assessments
 - Funded SDWARN (mutual aid network)
 - Support on going security training efforts

Other Program Activities

- Fluoridation of Community Water Systems serving 500 or more people
- Water Quality at Public Beaches & Municipal Pools
- Municipal Pool Inspections
- In-State Bottled Water Quality and Inspections
- Private Well Water Quality Results Interpretation

Challenges

- Future additional federal rules
- Rule complexity
- Small system compliance
- Doing more with same or fewer resources
- Staffing
 - Future retirements/succession planning
 - Recruiting and retaining qualified staff

Questions...

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