South Dakota Regional Water Systems

Andrew Bruels, P.E.

SD Department of Environment &

Natural Resources

South Dakota

- Sparsely populated, rural state
- 75,000 square miles
- 16th largest state (land area)
- 814,000 population
- Agriculture and Tourism
- Rural water systems and regional approach by necessity



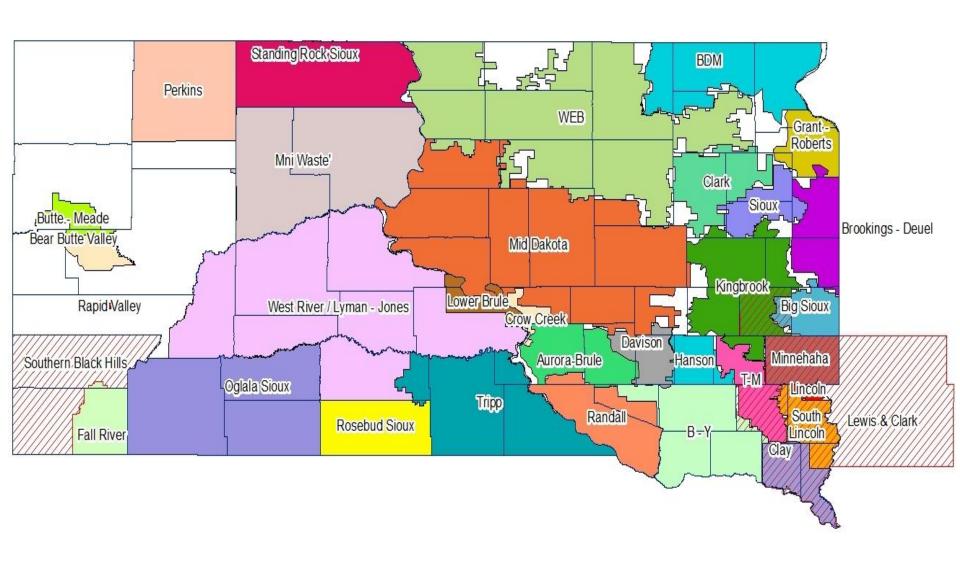
Regional Water Quick Facts

- 35 major rural water systems
- More than 45,000 miles of pipeline
- 73,500 rural connections
- Service to more than 300 communities, housing developments, and large commercial and industrial customers

Source: SD Assoc. of RWS



South Dakota Regional Water Systems



Municipalities & Regional Water

			Regional
			Water
	Pop.	# of Muni.	Source
Class 1	5,000 +	16	4
Class 2	500 - 5,000	99	70
Class 3	0 - 499	<u>194</u>	<u>149</u>
		309	223
			72.2%



Continuum of Municipal Service

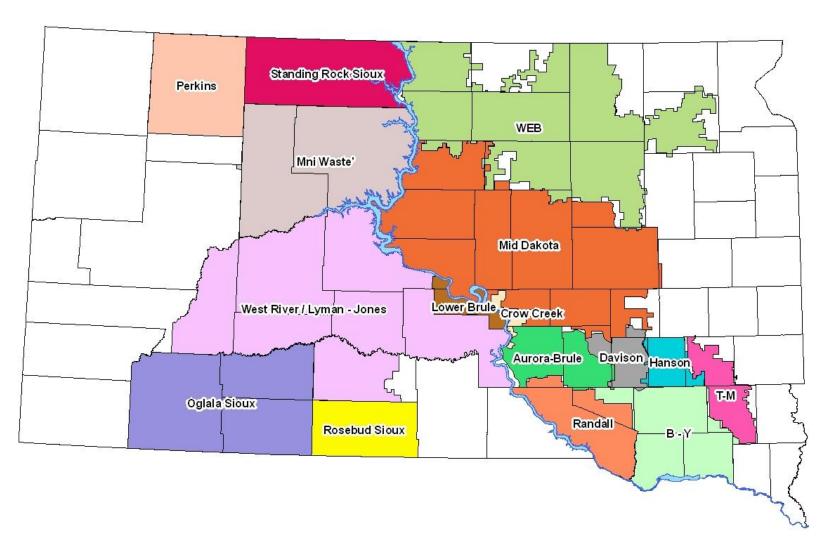
- Individual service to residents
- Water supply and contract to operate system
- Sole water supply
- Supplemental water supply
- Emergency backup connection





- Groundwater quality
- Groundwater depth
- Limited surface water sources
- Treatment costs and disposal of wastewater
- Regional approach to maximize use of high quality water supplies

Systems Using Missouri River





- Locally driven
- Rural Electric Cooperatives
- County extension agents
- PVC pipe gains general acceptance
- Three systems in service by end of decade
 - Serving portions of three counties
 - 748 miles of pipeline
 - 728 hookups



1970s

- Twelve rural water systems formed
- South Dakota Association of Rural Water Systems formed
- National Rural Water Association formed by seven state associations
- Farmer's Home Administration (FmHA) funding



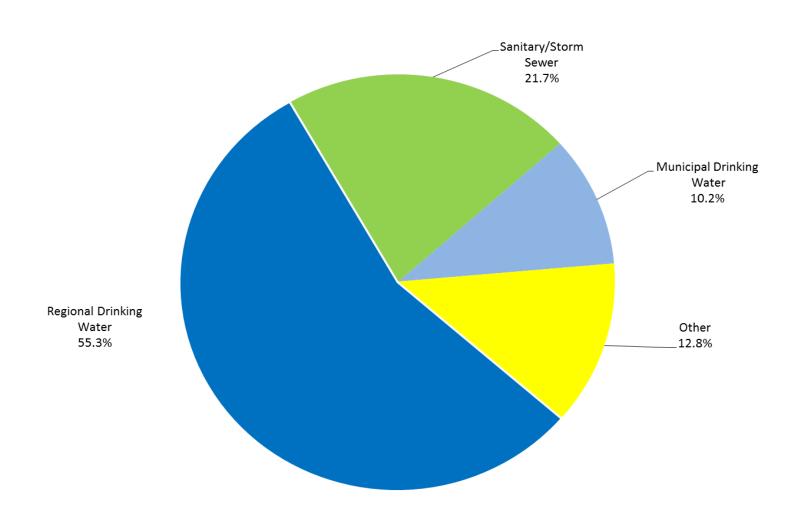
- Continue to develop new systems
- Expansion of existing systems
 - Expand service areas
 - Additional users and increasing usage
 - Peak demands
- FmHA / RUS / Rural Development
- Indian Health Service
- Community Development Block Grant
- Federal authorization of systems
- State Dedicated Funding (1993)



Dedicated Water Funding

1993 - 2015

\$216.3 Million

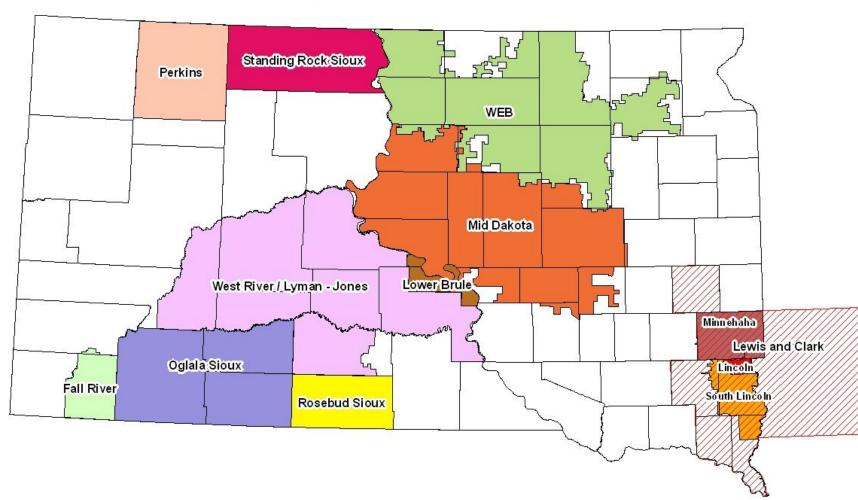




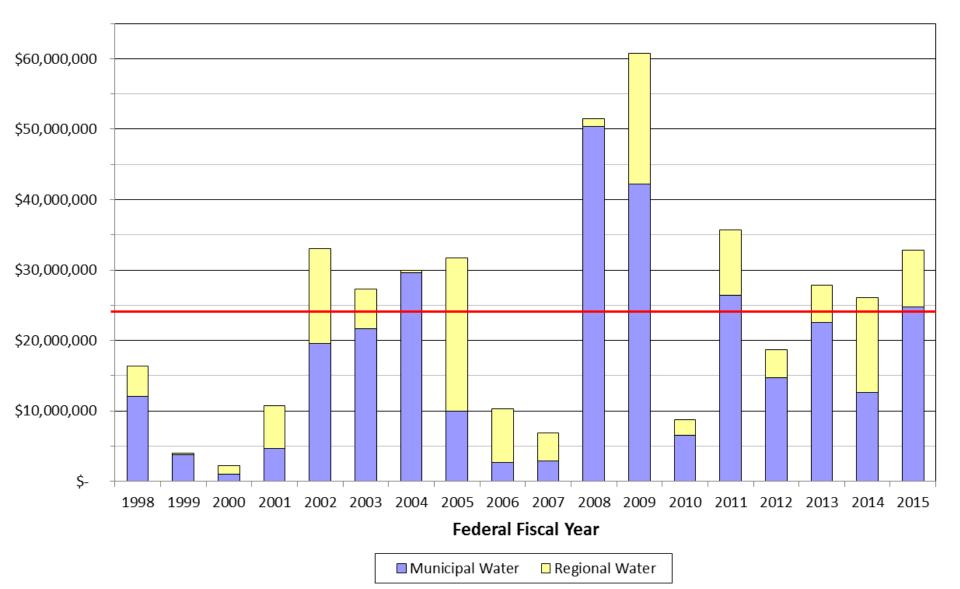
Federal Authorization of Regional Systems

- The Flood Control Act of 1944
- Federalization of Missouri River
- Unrealized Pick-Sloan promises
- WEB Water Rural Development Policy Act of 1980
- Bureau of Reclamation oversight & direct federal appropriations
- Federal Trust Responsibilities to Tribes

Federally Authorized Regional Systems



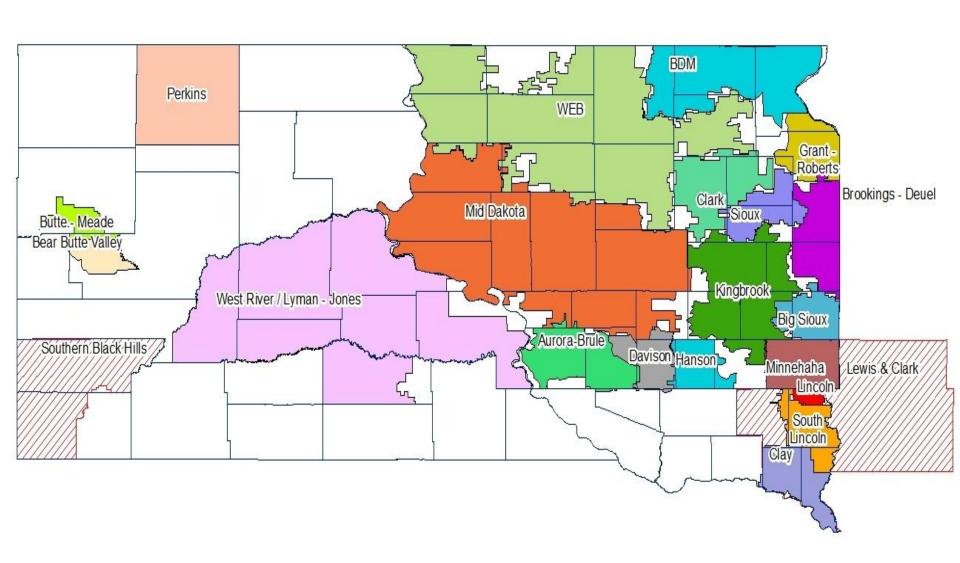
Drinking Water SRF Awards by Year



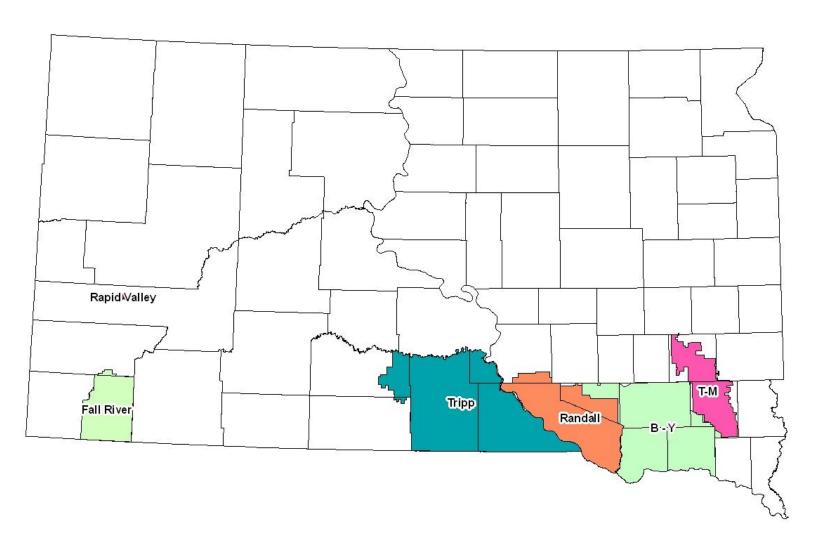
Why Not Drinking Water SRF

- Familiarity with Rural Development
- Federally authorized projects
 - Authorized Federal loan component
 - State loans initiate repayment after construction of federal project
 - Future use
- Private activity
 - Federal Cap Grants
 - Transfer of CW SRF Cap Grants

Nonprofit Systems



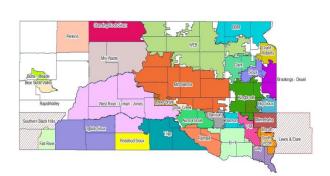
Special Purpose Districts





Drinking Water SRF

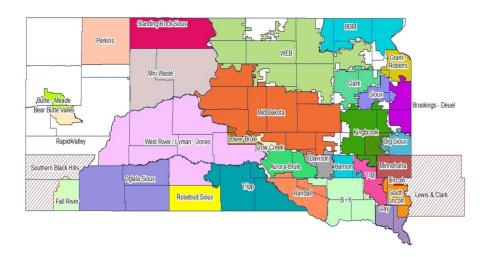
- Project Priority System
- Capacity
 - Managerial
 - Technical
 - Financial
- Disadvantaged Community rates
- State grant assistance





Keys to Success

- Locally Driven
- Federal authorizations
- Cooperation between state and federal funding agencies

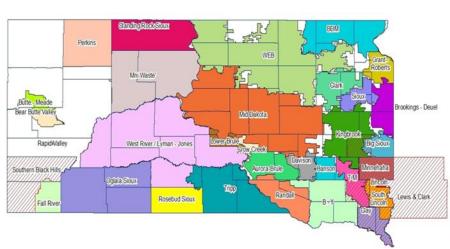


Challenges

- Easy stuff has been done
- Remote users
- Hard rock area of Black Hills

Financially viable funding

packages



Questions?

