



**DEPARTMENT of AGRICULTURE  
and NATURAL RESOURCES**

2050 WEST MAIN SUITE 1  
RAPID CITY SD 57702-2493  
danr.sd.gov

#10

March 29, 2022

Dwane Russell, Board President  
Spring Creek/Cow Creek Sanitary District  
PO Box 623  
Pierre, SD 57501

RE: Spring Creek/Cow Creek Sanitary District (EPA ID 2089) Drinking Water SRF Loan Application  
for the Water Storage and Infrastructure Project

Dear President Russell:

The Department of Agriculture and Natural Resources received a capacity self-assessment associated with the above referenced Drinking Water State Revolving Fund (SRF) loan application for the Spring Creek/Cow Creek Sanitary District. Based on that self-assessment, the department has conducted an evaluation of the Spring Creek/Cow Creek Sanitary District to determine its technical, managerial, and financial capacity. The Safe Drinking Water Act requires this evaluation be completed of all Drinking Water SRF applicants. Loans cannot be made to systems that lack technical, managerial, or financial capacity to operate unless steps are taken to improve operation of the system.

In cooperation with Midwest Assistance Program (MAP), we concur with the attached evaluation suggesting that the Spring Creek/Cow Creek Sanitary District has the required technical, managerial, and financial capacity. Please refer to the attached letter from MAP that offers the recommendations to continue to improve certain aspects of your system.

The loan application is contingent upon approval by the Board of Water and Natural Resources at the April 2022 meeting. If you have any questions, please feel free to contact me at (605) 394-6780.

Sincerely,

Erin Fagnan  
Engineer III  
Drinking Water Program  
Erin.Fagnan@state.sd.us

Attachments

cc: Stephanie Riggle, Water Resources Assistance, via email only  
Drinking Water Program, Pierre Office, via email only



02/04/2022

Mark S. Mayer, P.E.  
Drinking Water Program  
523 East Capitol  
Pierre, SD 57501

**RE: Spring Creek Cow Creek Sanitary District (SCCCSD)**

Dear Mark,

At the request of DANR, the Midwest Assistance Program (MAP) conducted a review of the Capacity Assessment with Spring Creek Cow Creek Sanitary District (SCCCSD). The Spring Creek Cow Creek Sanitary District is a newly formed board as of September, 2020, that was obtained from Hughes County, South Dakota. A site visit was conducted with President Russell and Water Superintendent Zuber and a review of the communities Technical, Managerial, and Financial Capacity was completed. There were areas that needed clarification and questions that were not answered.

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**TECHNICAL CAPACITY COMMENTS:**

- *The system purchases all pre-treated water from Mid-Dakota Rural Water System.*
- *The system has a new Water Superintendent (Zuber) as the long-time operator (Ripley) has retired in recent months.*
- *The system is experiencing substantial growth due to summer recreational camping (Codgers Cove) and putting a strain on the system.*
- *SCCCSD does have a water right 5294-3 (Missouri River/Lake Oahe).*
- *No emergency back-up power exists.*
- *The current water storage tank is not inspected every three years; however, it is maintained periodically by Ron Luden's Tank Services.*
- *System is currently not free from water-hammer.*
- *No Current Emergency Response Plan exists.*
- *No Emergency or Supplemental water supply exists.*

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**MANAGEMENT COMMENT:**

- *Policies and rules describing customer rights and responsibilities exist.*
- *System Compliance records for the new board will be held indefinitely.*
- *No formal Safety program exists at this time.*
- *No cross-connection or back-flow policies exist; however, inspections are made with meter replacement/repair.*
- *Records such as preventive maintenance, test results/compliance status, and system performance are provided to the board/council on a monthly basis.*
- *No asset management plan.*

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**FINANCIAL COMMENTS:**

- Rates have been recently reviewed (\$21.95/1000 gal +\$1.92/1000 gal after).
- Financial Statements have not been audited by a Certified Public Accountant.
- No Capital Improvement Plan (CIP) at this time; however, long term planning should be addressed as future expansion of the system (Codgers Cove second development) is currently being constructed.

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**Identified tasks in which MAP can assist:**

- Conduct a rate study.
- Develop a Vulnerability Assessment (VA) and Emergency Response Plan (ERP).
- One-on one operator Training.

I believe Spring Creek Cow Creek Sanitary District has sufficient Technical, Managerial, and Financial capabilities to operate and maintain their water system. I have identified areas where improvement can be made. These tasks should be addressed, because when implemented they will foster further stability and continuity.

If you have any further questions, please feel free to contact me.

Sincerely,



Kevin Coldsmith  
Technical Assistance Provider  
Midwest Assistance Program  
(605) 204-0673

# Spring Creek Cow Creek SD

System Applicant: Spring Creek Cow Creek Sanitary District (SCCCSD)  
 Reviewed by: Kevin Coldsmith (MAP)  
 Email: [kcoldsmith@map-inc.org](mailto:kcoldsmith@map-inc.org).

## The Technical Portion of your System

Water Supply and Existing Demands		Yes	No	Unknown	NA
1	Do you know how much water you pump on an average day? <b>Amount: 77,430 gal/day June-September 2021, Nov. 22,000 gal/day</b>	X			
2	Do you know how much water you pump on a peak day? <b>Amount: 149,000 gal</b>	X			
3	Do you know the maximum amount of water you can pump from your source? <b>Amount: 100 gpm from Mid-Dakota RWS or 144,000 gpd</b>	X			
4	Is your source capacity higher than you peak day demand? <b>Percentage higher or lower: 3% Lower</b>		X		
5	Can you meet peak demand without pumping at peak capacity for extended periods? <b>Longest time pumping at peak demand: 72 hrs.</b>		X		
6	Have you been able to provide adequate volumes of water during drought cycles?		X		
7	Have you had to restrict usage at any time for any reason? <b>Please specify: 72 hrs./ July 4 Holiday</b>	X			
8	Does your system have an emergency or supplemental water supply? <b>Please specify: MDRW is only source</b>		X		
9	Do you have an Emergency Response Plan that will allow you to meet system demand during a drought or shortage, such as the loss of the largest source? <b>If yes, please attach.</b>		X		
Water Demand		Yes	No	Unknown	NA
10	Do you know whether your system demands will be growing, declining, or remain stable over the next ten years? <b>X growing declining stable</b>	X			
11	Does your source have additional water available for appropriation?		X		
12	Do you have a water right? <b>Water right permit number(s): 5294-3</b> <b>Corrected from No to Yes.</b>	X			
13	If you have large commercial, industrial, or irrigation users, do you know their long-term plans and understand their needs?		X		
Purchased Water		Yes	No	Unknown	NA
14	If you purchase water from another system or a wholesaler, do you know their long-term plans?	X			
15	Do you have a contract to purchase water? <b>If yes, with whom? Mid Dakota Rural Water</b>	X			

# Spring Creek Cow Creek SD

16	Are you currently staying within your contract?	X			
17	Are you knowledgeable about other demands being placed on the same water source that you are using?	X			
<b>Alternative Sources</b>		<b>Yes</b>	<b>No</b>	<b>Unknown</b>	<b>NA</b>
18	Are alternative water sources possibly available to you?		X		
<i>Corrected from Unknown to No.</i>					
19	Are you knowledgeable of the characteristics and cost of using alternative sources?	X			
<i>Corrected from Unknown to Yes.</i>					
<b>Water Source</b>		<b>Yes</b>	<b>No</b>	<b>Unknown</b>	<b>NA</b>
20	Do you know the depth of your well?				X
<b>Depth:</b>					
21	Do you know the geologic name of the aquifer system from which you water is drawn?				X
<b>If yes, geologic name:</b>					
22	Are all abandoned water sources properly managed and disconnected to prevent accidental contamination or problems with current water system facilities?				X
<b>Treatment - Microbiological Contamination</b>		<b>Yes</b>	<b>No</b>		
Is your system using surface water or ground water under the influence of surface water?			X		
<i>(If you checked "No", skip to the next section - Ground Water Systems – unless your water system requires treatment other than just disinfection.)</i>					
<i>Surface Water Systems</i>					
<b>SURFACE WATER SYSTEMS</b>					
<b>Filtration Plant Condition</b>		<b>Yes</b>	<b>No</b>	<b>Unknown</b>	<b>NA</b>
23	Is your filter plant in good physical condition (free from spalling concrete, peeling paint)?				
24	If constructed more than 20 years ago, have treatment processes been upgraded to meet current standards?				
25	Are repair parts available?				
26	Do you have redundancy (back-ups/automatic switch-overs) for all major mechanical units?				
<b>If no, list units you do NOT have redundancy for:</b>					
27	Can your plant achieve a filtered water turbidity of 0.3 NTU?				
28	Do you have on-line continuous turbidimeters on each filter?				
29	Have you adopted a turbidity goal lower than the standard?				
<b>If yes, list goal:</b>					

# Spring Creek Cow Creek SD

30 Do you have the capability to add coagulant before the filter?

## Ground Water Systems

### Ground Water Under the Influence of Surface Water

Yes No Unknown NA

31 Is your water free from variations in turbidity and temperature after storm events?

X

### Well Construction and Protection

Yes No Unknown NA

32 Do you know when your well was constructed?

X

**List year:**

33 Is your well(s) constructed according to current South Dakota regulations?

X

34 Do you have a source water protection plan?

X

35 Is your wellhead finished with a pitless adapter that will prevent contamination from surface water?

X

## Disinfection

Yes No

Do you disinfect?

X

(If "No", skip to the Infrastructure - Pumping section)

### Disinfection

Yes No Unknown NA

36 Do you regularly inspect and maintain your disinfection / chlorination equipment?

**Type of Equipment:**

**How Often?**

**Disinfectant used:**

37 Do you have back-up equipment?

**Type:**

38 Do you have adequate contact time following disinfection and before the first user in the distribution system (30 minutes for ground water systems)?

**Contact time:**

39 Can you detect a chlorine residual at taps at the ends of the distribution system?

**Free Chlorine Residual**

**Total Chlorine Residual: 2.02 mg/L**

(if using Chloramines)

## Disinfection By-Products

### Treatment for Control of Disinfection By-Products

Yes No Unknown NA

40 If you treat surface water, are you already practicing or could you adopt "enhanced coagulation" in your current plant?

X

**Unanswered.**

41 If you treat surface water, could you still meet current contact-time requirements if disinfection were not allowed before sedimentation?

X

**Unanswered.**

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## Treatment - Security

Treatment Security		Yes	No	Unknown	NA
42	Has the system implemented procedures to improve security of its facilities? (i.e. limiting access to sensitive sites, protecting computer and control equipment etc.)				X
<b>Unanswered.</b>					
43	Are chemicals used for treatment properly stored and secure?				X
<b>Unanswered.</b>					
44	Does the water system track chemical usage? (i.e. a sudden increase in usage may signal potential contamination or tampering.)				X
<b>Unanswered.</b>					

## Infrastructure - Pumping

Condition of Pumping Equipment		Yes	No	Unknown	NA
45	Do you routinely inspect for signs of pump or pump motor problems? <b>How often: Weekly</b>	X			
46	Once diagnosed, are problems corrected in a timely enough manner to avoid crisis financing, costly repairs, and unscheduled downtime?	X			
47	Do you hire a qualified pump contractor to perform an inspection of all pumping equipment, identify potential problems, and perform maintenance, on an annual basis?	X			

## Standby/Emergency Power Equipment

Standby/Emergency Power Equipment		Yes	No	Unknown	NA
48	Is there sufficient standby/emergency power capacity to supply 100% of the average daily demand of the system (excluding fire demand)?		X		
49	Are any existing standby/emergency power equipment, controls and switches tested or exercised routinely under load conditions, for at least 30 minutes at a time?				X
50	Has the local electric utility been made aware of the standby/emergency power provisions made by the water system, so that they can reinforce and safeguard the electrical facilities serving the water operations?				X

## Infrastructure - Storage

Storage Capacity		Yes	No	Unknown	NA
51	Does the system have sufficient gravity-flow (non-pumped) or emergency generator-supported pumping capability to ensure adequate distribution storage to provide safe and adequate service for up to 24 hours without power? <b>If no, how long: 8 hrs. in summer months</b>		X		
52	Is there reserve capacity in the tank for fire protection support? <b>Amount:</b>		X		

# Spring Creek Cow Creek SD

<b>Security Measures</b>		<b>Yes</b>	<b>No</b>	<b>Unknown</b>	<b>NA</b>
53	Are any openings, such as vent pipes, screened to protect against the entrance of small animals, birds, and small insects?	X			
54	Are access hatches locked?	X			
55	Is the tank and the immediate surrounding area fenced?		X		
<b>Control Systems</b>		<b>Yes</b>	<b>No</b>	<b>Unknown</b>	<b>NA</b>
56	Is there a high and low water level signal system to control the pumps?	X			
57	Is there a drain valve or hydrant to allow for draining of the tank?	X			
<b>Tank Maintenance</b>		<b>Yes</b>	<b>No</b>	<b>Unknown</b>	<b>NA</b>
58	Is the tank inspected at least every three years by a qualified tank contractor for evidence of corrosion or pitting, leakage, and structural weakness.		X		
59	Is the tank contractor capable of analyzing the coating of paint on the interior and exterior surfaces of the tank to determine if it contains lead or other hazardous materials?			X	
<b>Corrected from N/A to Unknown.</b>					
<b>Infrastructure - Distribution System Maintenance</b>					
		<b>Yes</b>	<b>No</b>	<b>Unknown</b>	<b>NA</b>
60	Do you have an accurate map of your distribution system that indicates main sizes and valve locations?	X			
61	Does the operator routinely flush, test, and maintain the hydrants in the system?	X			
<b>How often: Annually</b>					
62	Are the locations of valves in the mains and curb stops on the service lines precisely known?	X			
63	Does the system keep a log of distribution system breaks to identify weak areas in the system?	X			
64	Are histories, locations, size, and type of mains and service lines detailed on records in a secure area?	X			
65	Are all valves exercised and lubricated periodically?	X			
66	Is the system free of severe "water hammer" problems?		X		
67	Are meter pits, pressure regulating valves, altitude valves, blow-offs, and other appurtenances maintained on a regular basis?	X			
<b>Unaccounted-for Water</b>		<b>Yes</b>	<b>No</b>	<b>Unknown</b>	<b>NA</b>
68	Is unaccounted-for water in the water system monitored and analyzed each month?		X		
69	Is the unaccounted-for water less than 15 percent of the total water delivered to the mains?		X		
<b>List percentage of unaccounted for water: 15%</b>					
<b>Corrected from Unknown to No. Added the percentage that was unmarked and currently 15%.</b>					



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70	Are the normal operating pressures in the distribution system between 25 psi and 125 psi? <b>Normal operating pressure:</b> 50 PSI	X			
71	Do you have a routine leak detection and repair program?		X		
72	Are all sources of supply and customers metered?	X			
73	Are the meters calibrated and tested routinely to ensure their accuracy and reliability?		X		
<b>Water Quality in Distribution System</b>		<b>Yes</b>	<b>No</b>	<b>Unknown</b>	<b>NA</b>
74	Does your system have an active cross-connection control program? <b>Corrected from Unknown to No.</b>		X		
75	Are any inspections for cross-connections performed? <b>Corrected from Unknown to Yes.</b>	X			
76	Is there a program for installing and testing backflow prevention devices where potential contamination is present? <b>Corrected from Unknown to No.</b>		X		
77	Is there a program to eliminate "dead-ends" in the mains, where feasible? <b>Corrected from Unknown to No.</b>		X		
<b>Construction Standards</b>		<b>Yes</b>	<b>No</b>	<b>Unknown</b>	<b>NA</b>
78	Are the majority of your mains 6 inches in diameter or larger? <b>List percentage:</b> 80%	X			
79	Is there a program to gradually replace sub-standard sized mains? <b>Corrected from Unknown to Yes.</b>	X			
80	Are there suitable rights-of-way and easements provided to the water system for expansion, maintenance, and replacement of mains and services?	X			
81	Is there sufficient earth cover (six feet) to protect the mains from frost damage or heavy loads, if driven over?	X			
82	Are materials of mains designed and selected to resist corrosion, electrolysis, and deterioration?	X			
<b>Distribution System Problems</b>		<b>Yes</b>	<b>No</b>	<b>Unknown</b>	<b>NA</b>
83	Do you receive any complaints regarding water quality (taste, odor, color, etc.)? <b>List number of complaints/year:</b> <b>Most common complaint:</b>		X		
84	Can you maintain adequate pressure in the distribution system under all conditions of flow?		X		

# Spring Creek Cow Creek SD

## The Management Portion of your System

<b>Distribution System Problems</b>		Yes	No	Unknown	NA
1	Does the person operating your system have current water treatment plant and water distribution operator certification credentials from DENR? <i>If yes, list classification(s):</i> <b>See letter.</b>	X			
2	Does your operator receive additional training on an ongoing basis to keep current on new developments in the field?	X			
<b>Future Operational Demands</b>		Yes	No	Unknown	NA
3	Does your water system obtain any regular or occasional technical assistance from outside sources, such as DENR, your engineer, other utilities or organizations specifically dedicated to providing technical assistance?  <i>If yes, who:</i> <b>DANR</b>	X			
<b>Management &amp; Administration</b>					
<b>Who's in Charge?</b>		Yes	No	Unknown	NA
4	Is there a clear plan of organization and control among the people responsible for management and operation of the system?	X			
5	Does your system have written personnel policies and job descriptions signed by the employees?	X			
6	Are the limits of the operator's authority clearly known?	X			
7	Does everyone involved in operations know who is responsible for each area?	X			
8	Is someone responsible for scheduling work?	X			
<b>Security</b>		Yes	No	Unknown	NA
9	Does the system have procedures for handling new and terminated employees (i.e. collecting keys, changing locks and computer passwords)?	X			
<b>Rules and Standards</b>		Yes	No	Unknown	NA
10	Do you have explicit rules and standards for system modifications?	X			
11	Do you have rules governing new hook-ups?	X			
12	Do you have a water main extension policy?	X			
13	Do you have standard construction specifications to be followed?	X			
14	Do you have measures to assure cross-connection control and backflow prevention?	X			
15	Do you have policies or rules describing customer rights and responsibilities?	X			
<b>Regulatory Compliance Program</b>		Yes	No	Unknown	NA
16	Do you fully understand monitoring requirements and have a scheduling mechanism to assure compliance?	X			

# Spring Creek Cow Creek SD

- 17 Do you know how to obtain clarification or explanation of requirements? X
- 18 Do you have a mechanism to obtain the most recent information on regulatory requirements? X
- 19 Do you maintain adequate records to document compliance? X

*If yes, for how long? Indefinite*

*Corrected from 10 yrs./ Hughes County, 1 yr./SCCCSD to indefinite.*

- 20 Did your system have any violations of the primary drinking water standards in the last year? X
- 21 Did your system have any monitoring or reporting violations in the last year? X
- 22 Do you know what to do in the event of a violation? X

## Emergencies

Yes No Unknown NA

- 23 Do you have an Emergency Response Plan? X
- 24 Is there a contingency for making emergency interconnections to neighboring systems, and do you know they will work if needed? X
- 25 Does everyone involved in operations know what they are to do in the event of contamination from a toxic hazardous waste spill in your source water or a main break or a tank failure? X
- 26 Do you have a clear chain-of-command protocol for emergency action? X
- 27 Is someone responsible for emergency operations, for communications X

*If yes, who (title): Superintendent*

## Safety

Yes No Unknown NA

- 28 Do you have a safety program defining measures to be taken if someone is injured? X
- 29 Has the entire staff been properly trained in the location and use of safety equipment? X
- 30 Does everyone understand the risks and safety measures involved in handling water treatment chemicals? X
- 31 Do you have written operating procedures for both routine and emergency system operations? X
- 32 Are you fully aware of Occupational Safety and Health Administration (OSHA) confined space (such as trenches/manholes) regulations? X
- 33 Does the system work with customers to promote their awareness of security? X
- 34 Does the system have a communication plan to alert customers of a natural or intentional threat to public health? X

## Maintenance

Yes No Unknown NA

- 35 Do you have a planned maintenance management system -- a system for scheduling routine preventive maintenance (line flushing, pumps, meters, storage tanks, etc.)? X

# Spring Creek Cow Creek SD

36	Do you have a system for assuring adequate inventory of essential spare parts and back-up equipment?	X
37	Do you have relationships with contractors and equipment vendors to assure prompt priority service?	X
38	Do you have records and data management systems for system operating and maintenance data, for regulatory compliance data, and for system management and administration?	X

## Management Capability

Yes No Unknown NA

39	Are you getting the outside services and technical assistance you need? Do you have adequate legal counsel, insurance, engineering advice, technical/operations assistance, rate case preparation, and financial advice?	X
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## The Financial Portion of your System

Please mark the appropriate box: *Yes*, *No*, or *Unknown* for each section. Please try to determine the answer to every question. *If a section does not apply to your system, please write NA for not applicable.*

### Financial Planning Mechanisms

Yes No Unknown NA

1	Does your system develop and follow an annual budget that is approved by the governing body?	X
2	Does the governing body review a monthly summary of revenues and expenses of the utility system?	X
3	Do you have within the annual budget separate reserve accounts for equipment replacement, capital improvement, depreciation or security upgrades?	X

*If so, list accounts:*

**Corrected from Yes to No.**

4	Does the system have reserve funds available in the event of an emergency?	X
5	Do you have a capital budget or capital improvement plan that projects future capital investment needs some distance (at least five years) into the future?	X
6	Do you have a process for scheduling and committing to capital projects?	X
7	Does your planning process take account of all the potential capital needs suggested by your answers to the technical questions in these worksheets?	X
8	Does your long-term planning incorporate analysis of alternative strategies that might offer cost saving to customers, such as consolidation with other nearby systems or sharing of operations and management expenses with other nearby systems?	X

### Rates/Billing - Are they Adequate?

Yes No Unknown NA

9	Do you regularly review your rates? How often? <b>Annually</b>	X
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# Spring Creek Cow Creek SD

- 10 Do you have a plan in place for periodic increases in rates? X
- 11 Is the rate structure based on metered watered use? X

List rates per 1000 gallons:

**\$21.85/1000 gal + \$1.92/1000 gal after**

(i.e. \$22 minimum plus \$2.50/1000 gallons)

- 12 Does the rate per 1000 gallons change as consumption increases ? X

If so, please describe :

- 13 Does the rate structure assure proportionality among users? X

- 14 Do you have procedures for billing and collection? X

- 15 Is your billing collection rate greater than 95%? X

- 16 Do you have collection procedures specifically for delinquent accounts? X

## Financial Planning Mechanisms - Are they Adequate?

Yes No Unknown NA

- 17 Does your system have audited financial statements prepared by a certified public accountant (CPA)? X
- 18 Does your water system income exceed operating expenses (including debt service)? X
- 19 Does your water utility support other enterprise funds or the general fund? X
- 20 Does your system require revenues from other enterprise funds or the general fund for normal operations? X
- 21 Do you employ standardized accounting and tracking systems? X
- 22 Do you track budget performance? X
- 23 Do you keep records to substantiate depreciation of fixed assets and accounting for reserve funds? X
- 24 Are financial management recordkeeping systems organized? X
- 25 Are controls exercised over expenditures? X
- 26 Are controls exercised to keep from exceeding your budget? X
- 27 Are there purchasing procedures? X
- 28 Did your system's governing body review this assessment before returning it to the South Dakota Department of Environment and Natural Resources? X

### Financial Spreadsheet Notes:

This system was taken over from Hughes County, SD recently and there is no past financial history with the county.