



Apple Springs Waterworks and Sanitary District
12267 Stagecoach Trail, Lawrence County, SD 57785
E. Applespringsdistricts@gmail.com

Boulder Canyon EPA Grant Information Sheet

1. What is the purpose of the grant?

The purpose is to protect the existing 53 wells in Boulder Canyon and the downstream Butte Creek watershed from failed septic systems. This is especially important for the 23 shallow wells between 65 - 130 feet deep. The EPA has already labeled the Boulder Canyon area as a high-risk area.

The new facility will be in a glass house structure with solar panels. The new equipment will be energy efficient such that the solar panels can power the entire facility and equipment will be designed for minimal CO₂ and methane emission such the facility will have a minimal carbon footprint.

2. Will the Boulder Canyon affected residents have to pay for the EPA Grant in future bonds/loans/taxes?

No – The grant has **NO** matching requirement and does not have to be paid back via bond/taxes.

3. How long is the grant implementation period if approved?

Once approved the grant needs to be completed within 3 years. The application deadline date is November 21, 2024.

No extra funding is available except for the grant approval amount. As the grant is executed, the priorities will be executed in the following order to ensure the success of the overall goal to reduce contamination risks. If the project is projected to exceed budget, the areas of lower priority will be reduced accordingly. These are ranked least priority first.

1. Expand Sewer Header to non-compliant lots without homes built yet.
2. Expand Sewer Header to non-compliant homes on between 0.5 acres to 1 acre with functioning septic fields and not impacting shallow wells.
3. Expand Sewer Header to non-compliant homes with functioning septic fields on less than 0.5 acres and not impacting shallow wells.

4. Is there a hook up fee for the sewer system?

During the 3-year grant implementation period the homeowner has **NO** hook up fees or costs associated with hooking up to the system. If the owner will be disconnecting an existing septic system, the grant will cover the costs of idling the septic system per the laws of South Dakota.



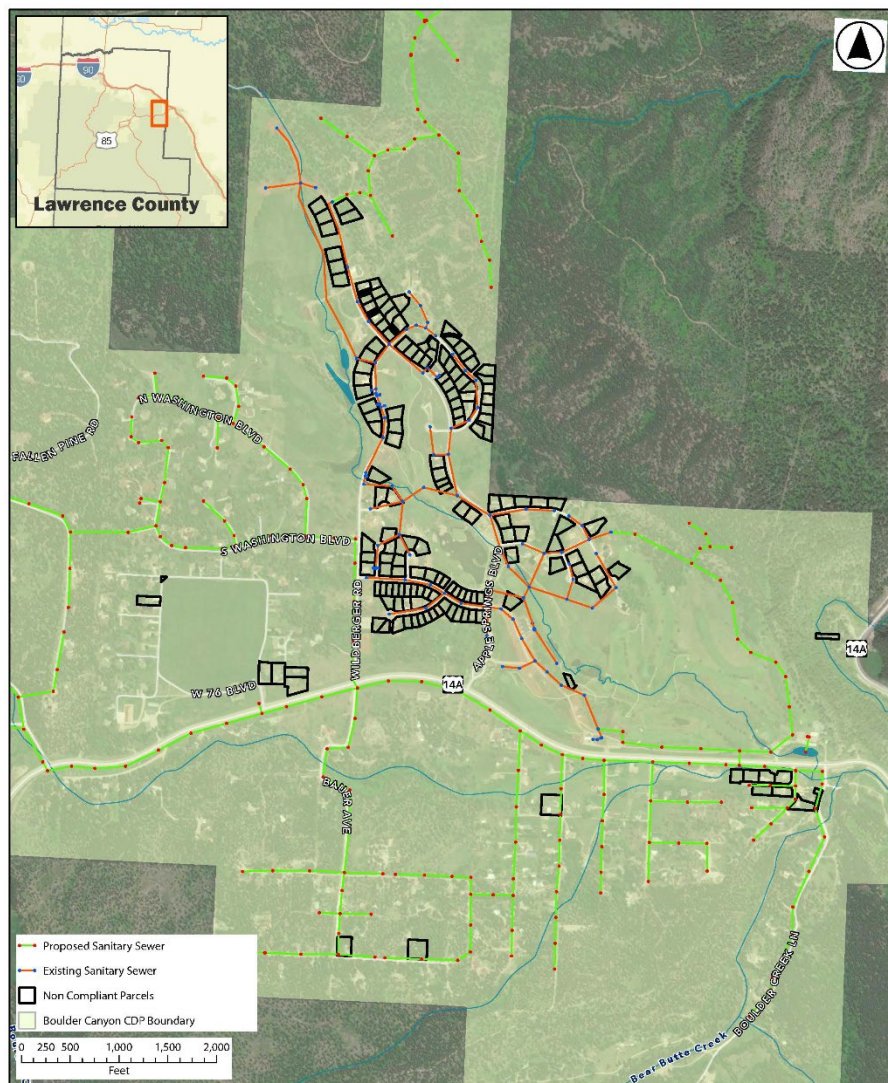
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Once the 3-year grant period has expired, the homeowner will be responsible for the hook up fee, construction costs and idling cost of the old septic system if applicable.

5. How many homes will it be sized for?

Approximately 600 homes. The facility will be sized for the expected growth in the canyon. The below picture shows the existing sewer header in red and the proposed new sewer header in green.



Apple Springs Sanitary District EPA Grant
Boulder Canyon CDP, South Dakota

All Non-Compliant Parcels



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6. Who will manage the treatment plant and sewer infrastructure?

The Apple Springs Water Works Sanitary District will own and manage the facility per state statutes. Due to the fact there is no debt from the grant and the current system, it is the goal to have sewer treatment fees close to the state recommended levels as users are added to the system.

7. Where will the treatment plant be located?

The new treatment plant will be located at the current location of the Boulder Canyon Golf Course Club House. The old club house and adjacent buildings will be demolished to make room for the new treatment plant and renewable energy array.



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Boulder Canyon CDP, South Dakota

Proposed Parcel and Facility



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8. How are the sewer headers constructed outside the current district?

Lawrence County will work with the grant team to provide the sewer header system on the county road right of ways on land outside the current Apple Springs District Map. Boulder Park subdivision will be excluded from the scope of this grant unless the right of ways are granted by the homeowners' association.

9. How are lots less than 0.5 acres affected?

These lots will now be able to build homes tied to a sewer system where before state laws prevented them to build due to septic system/well water restrictions on lots less than 0.5 acres.

10. Will new home construction be required to hook up to the sewer system?

Lawrence County will recommend all future home construction be tied into the sewer system per the state law when the sewer system is within 400 feet of the home, trailer court, commercial establishment, business, park, or institution.

11. Will existing homes with properly functioning septic systems be required to hook up to the sewer system?

No – The intent of the grant is not to require existing homes with functional septic systems to hook up. However, if the owner desires to be tied in the sewer header they are free to do so.

12. Will existing homes with improperly functioning septic systems be required to hook up to the sewer system in the future?

Lawrence County will require all suspected failing septic systems to be tested and if found deficient, the existing system will be required to hook up to the sewer system if the new system is within 400 feet of the home or commercial establishment.

13. Will the Lawrence County district maps be affected?

As the project progresses, the District Board will evaluate the potential means of remapping the district.



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14. Does this grant affect existing wells or water supply systems?

No - This grant does not impact existing wells or water supply systems.

15. How will the grant team ensure success in the design of the treatment system?

The proposed treatment system is a more modern and environmentally friendly version of the existing treatment system. The existing system is composed of wheels that turn in the wastewater, develop a layer of organisms that break down the harmful contaminants, and clean the water. The proposed system is also composed of wheels that turn in the wastewater, and the layer developed is composed of organisms but with an outer layer of algae, which eliminates odors in the plant, improves the air quality, and consumes carbon dioxide in the photosynthetic process. To ensure success, the district is partnering with the South Dakota School of Mines and Technology to conduct validation research on the treatment system. Mines will use a pilot-scale unit to test the performance of the algae in our climate and geographic location before construction of the full-scale system. They will test the water quality produced by the plant as well as quantify the amounts of carbon dioxide that can be sequestered and publish all their findings and make them available to the public.