



## Crook County Natural Resource District Water Quality Improvement Program



- The CCNRD started monitoring water quality within the Belle Fourche River Watershed in the late 1990's
- Between 1996 and 2008, various stretches of Donkey Creek and the Belle Fourche River were placed on WDEQ's 303(d) list for *fecal coliform*, *E. coli*, *ammonia*, and *chloride* impairments
- Within Crook County, Donkey Creek and two segments of the Belle Fourche River do not support their designated recreation uses because of high counts of fecal coliform or *E. coli*. Additionally, segments of the Belle Fourche River do not support their designated fisheries use due to elevated levels of ammonia and chloride
- The Belle Fourche River is a class 2ABww stream and Donkey Creek is a class 3B stream
  
- CCNRD water quality personnel currently monitor 4 sites on the impaired stretches of the Belle Fourche River and Donkey Creek during primary contact recreation season (May through September)
- The CCNRD water quality personnel sample and monitor for pollutants of concern listed on the WDEQ 303(d) list of impaired streams and collect data describing stream flow and weather conditions, as well as monitor the basic water quality parameters of temperature, pH, conductivity, Total Dissolved Solids (TDS) and turbidity
- ★ Collect Pyrosequencing samples as another tool to help hone in on the potential sources of *E. coli*, so we can more appropriately implement BMPs "454" method
- Collaboration with Campbell County Conservation District - will perform pyrosequencing
- Implement a strong informational and educational program for 4-6 years
- Currently executing 13 "Best Management Practice" (BMP) projects
- Work closely with NRCS to provide technical assistance
- The majority of the BMP projects are off-stream watering BMPs that provide better season of use, year-round

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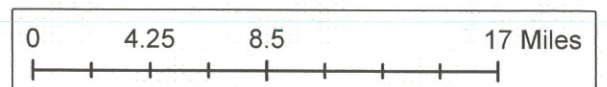
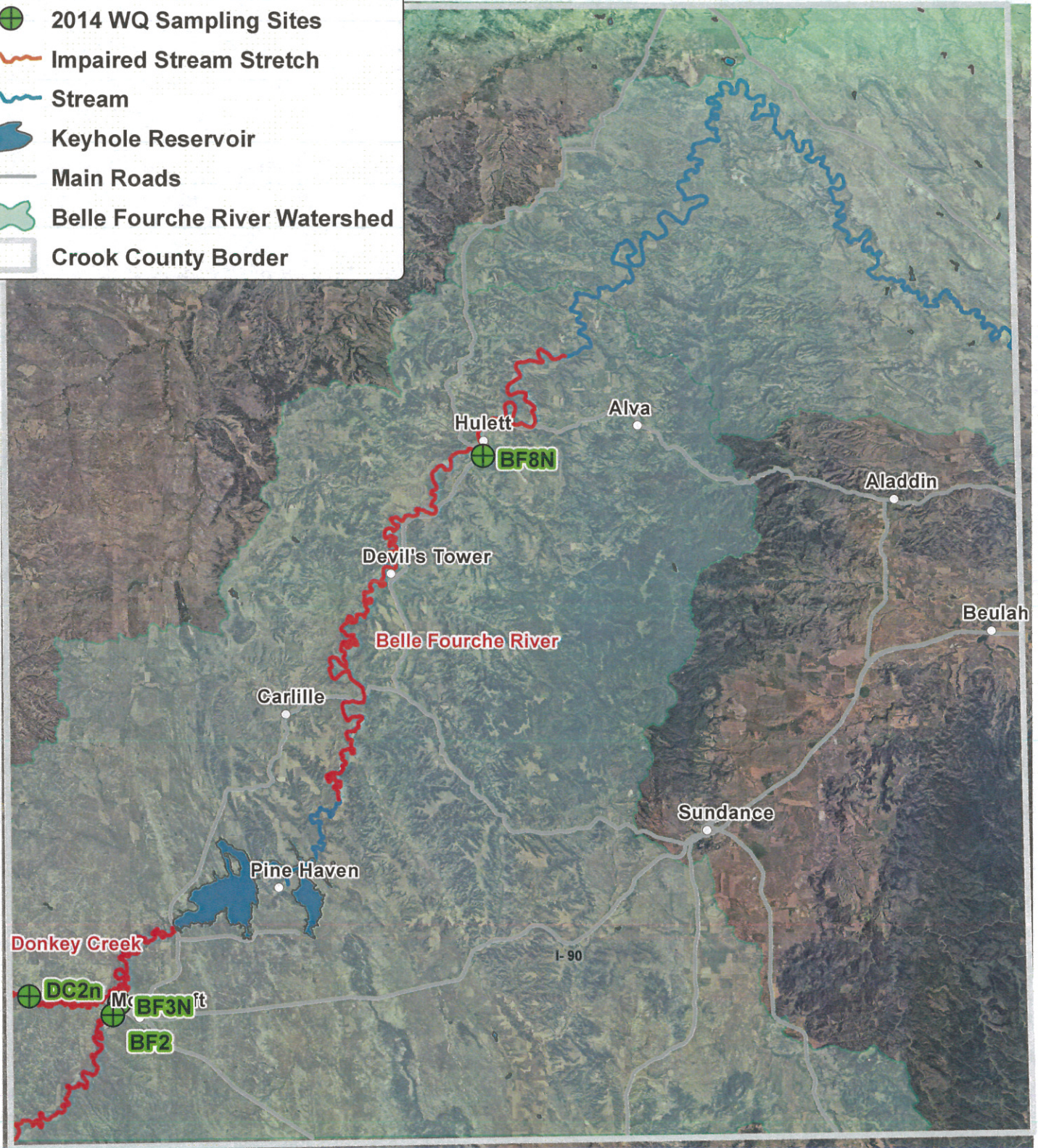
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# Crook County Natural Resource District 2014 Water Quality Sampling Locations



## Legend

- 2014 WQ Sampling Sites
- Impaired Stream Stretch
- Stream
- Keyhole Reservoir
- Main Roads
- Belle Fourche River Watershed
- Crook County Border



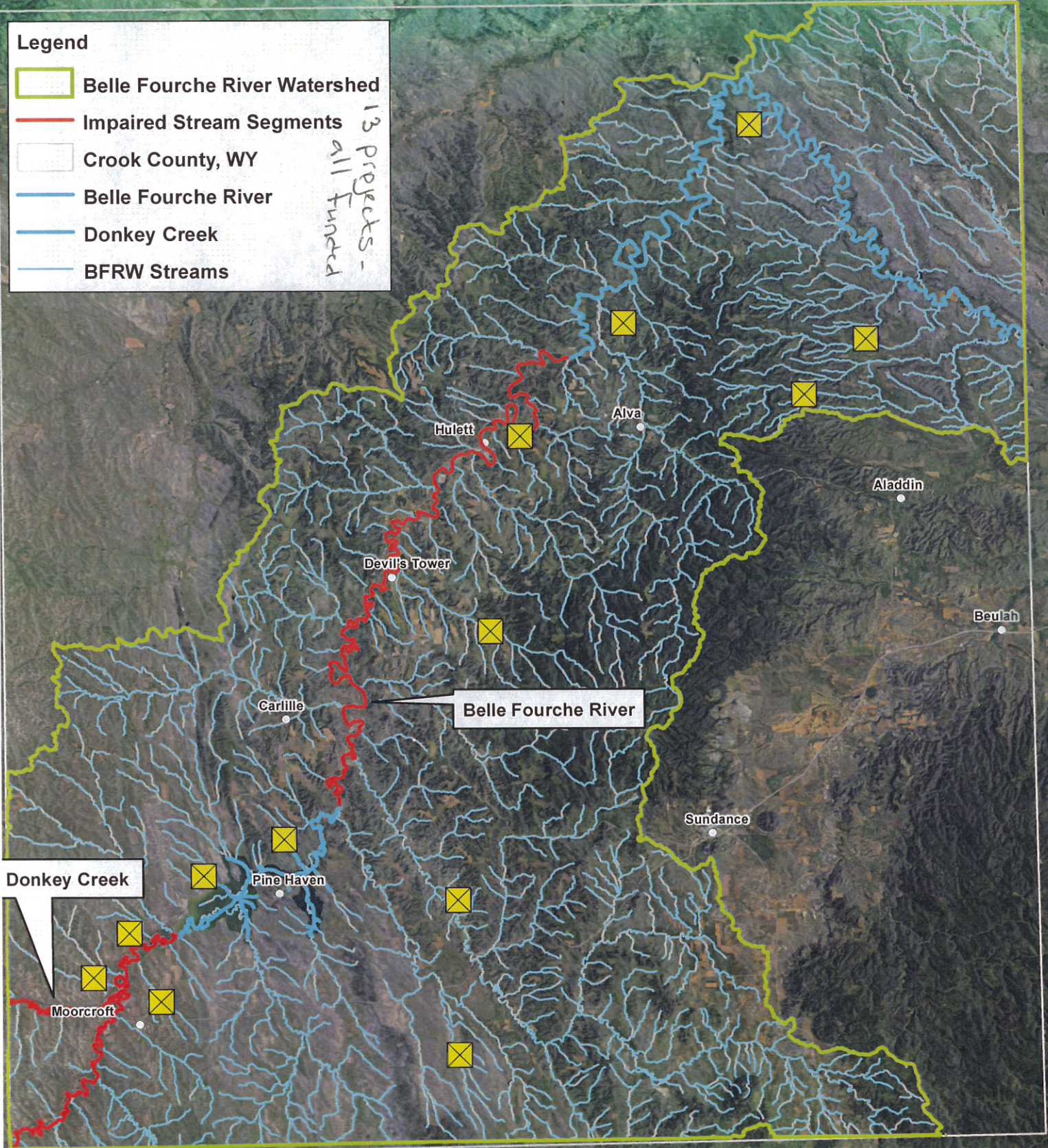
# Crook County Natural Resource District 2013-2014 Water Quality Improvement Projects within the Belle Fourche River Watershed



## Legend

- Belle Fourche River Watershed
- Impaired Stream Segments
- Crook County, WY
- Belle Fourche River
- Donkey Creek
- BFRW Streams

13 projects -  
all funded



Donkey Creek

Belle Fourche River

