



PROJECT DESCRIPTION SHEET



GEOTECHNICAL AND WATER RESOURCES ENGINEERING

KEY ENGINEERING ELEMENTS:

- Geotechnical Analysis
- Seepage Analysis
- Stability Analysis
- Field Investigations

CLIENT BENEFITS:

- Increased water storage
- Design concept that reduces quantity of expensive imported clay materials

RJH Consultants, Inc.
9800 Mt. Pyramid Court, Suite 330
Englewood, CO 80112
Phone: 303-225-4611
Fax: 303-225-4615
Toll Free: 866-900-1930
www.rjh-consultants.com

RAWLINS RAW WATER STORAGE PROJECT LEVEL II STUDY, CARBON COUNTY, WY WYOMING WATER DEVELOPMENT COMMISSION

The Wyoming Water Development Commission (WWDC) is currently evaluating construction of a new raw water storage reservoir due to increased water demand and decreased water supply from drought conditions. The City of Rawlins current reservoir, the Atlantic Rim Dam and Reservoir, has storage restrictions due to excessive seepage and cannot provide the water supply that was originally intended.

RJH consultants, Inc. (RJH) was contracted by WWC Engineering to evaluate the feasibility of constructing a new raw water storage reservoir for the City of Rawlins. A site designated as "Fivemile Site" was proposed as the location for the new water storage.

RJH completed the following scope of services for this project:

- Reviewed available geologic literature, including maps and reports, containing information pertinent to the site.
- Performed a geologic reconnaissance.
- Excavated seven test pits at the site.
- Observed the Atlantic Rim Dam and Reservoir and collected a sample of the reservoir bottom to evaluate its potential for reuse as a liner for the proposed Fivemile Reservoir.
- Performed laboratory tests on representative samples of soil collected during subsurface exploration.
- Based on the data obtained, developed an interpretation of the subsurface materials and conditions at the site.
- Prepared a Level II Geotechnical Data Report to present the data collected.
- Evaluated the geologic and geotechnical conditions at the Fivemile Site for suitability of a dam and reservoir.
- Performed slope stability and wave run-up analyses to assist in development of a dam and reservoir concept.
- Developed a typical dam section and concept to control leakage from the reservoir. The reservoir foundation consists of highly fractured sandstone bedrock.
- Estimated quantities for embankment fill, imported clay fill, and sand filter material.

