Water System Preliminary Engineering Report

Deming, New Mexico

Client

City of Deming

Highlights

- Water system evaluation
- Water system hydraulic modeling
- PER for funding applications
- Developed EID

DBS&A prepared a Preliminary Engineering Report (PER) evaluating an overall water system and examining its ability to meet current and future demands. The PER compared alternatives for water system improvements and recommended a project consisting of the most critical tasks based on a prioritization process developed under the PER. The PER was prepared in accordance with U.S. Department of Agriculture Rural Development (USDA RD) Bulletin 1780-2.

DBS&A prepared a hydraulic water model to verify that adequate flows and pressures can be achieved for all customers within the service area and that required fire flows can be provided.

To evaluate the distribution and transmission system, DBS&A prepared and used a hydraulic water model to analyze two scenarios: existing conditions and future conditions. The model was used to verify that adequate flows and pressures can be achieved for all customers within the service area and that required fire flows can be provided. DBS&A updated the City's original hydraulic model to include additional waterlines, wells, tanks, and booster station.

The PER evaluates the overall water system and examines its ability to meet current and future demands of the community.

The PER compared alternatives using criteria including capital, operating and maintenance costs, and environmental impacts. The PER developed recommended alternatives and described recommended phasing of those alternatives.

DBS&A prepared an accompanying Environmental Information Document (EID) per the State Environmental Review Process. The EID provides a broad view of potential "show-stopping" issues that can be identified as areas of avoidance or areas of more focused evaluation necessary at later stages of project development. Areas of primary focus are biological and cultural resources.