

## Who We Are



**BRCW** offers a diverse staff of technical and construction professionals recognized by many as leaders in their respective fields. Our core personnel have over 150 years of collective experience in water resource development, both throughout the United States and internationally. This unique combination of experience and knowledge helps the company provide innovative solutions for water supply and geotechnical projects for municipalities and industries worldwide. For special project requirements, Brechtel also has available the resources of BHG Brechtel, the leader in collector well and geotechnical construction in Europe, to bolster our position as front runners in the water supply industry.

## Range of Services



### Water Supply

- Collector Well Design and Construction
- Lateral Screen Installation
  - Preussag Gravel Packing Method
  - Fehlmann Method
  - Slotted Pipe Direct-Push Method
  - Prepack Gravel "Muni-Pak"
- Surface Water Intake Construction
- Riverbank Filtration Systems
- Well Rehabilitation and Maintenance
- Well Inspections and Service
- Hydrogeologic Investigations
- Record Keeping and Monitoring Systems
- Seawater Filtration Systems
- Infiltration Gallery Construction
- Pumping Efficiency Evaluations
- Well Field Design and Management

### Geotechnical Construction

- Caisson and Shaft Construction
- Sheet piling and Shoring
- Dewatering Well Construction
- Effluent Outfall Diffuser Installation

### Environmental Management

- Groundwater Monitoring
- Remediation Systems



### CONTACT

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## Brechtel Radial Collector Wells, LLC



**Brechtel Radial Collector Wells, LLC**

is a water supply contractor serving the municipal, industrial, and power markets. An American company based near Columbus, Ohio, we specialize in the design, construction, and rehabilitation of high-capacity water supply systems from both groundwater and surface water sources.

**Constructing Water  
Supply Solutions  
for Your World**





## JOHN W. TURK POWER PLANT

Fulton, Arkansas

### Large Diameter Caisson For Raw Water Intake System



**BRCW** was contracted by Robinson Construction Company to install a caisson 28' OD by 24' ID to a depth of 64 feet for the John W. Turk Power Plant. Our team used new innovative technology to successfully complete this project ahead of schedule, within budget and with an impeccable safety performance throughout each phase. Our outstanding safety record was one of the reasons Brechtel was selected and we were delighted our team contributed to Shaw's Million Hour Safety Record on this job. This recognition symbolizes our safety achievements as well as our overall goal to continually strive for excellence in every aspect of our work. Brechtel delivered a top quality product in spite of demanding and sensitive environmental and specification issues pertaining to this site. Additionally, collaboration with Robinson Construction is another way in which we attain the highest quality product in the business. We believe in maintaining strong partnerships with industry leaders on behalf of our clients. Interested parties may contact Frank Robinson, President, Robinson Construction Co. at 573-547-8397.



## CITY OF DARDANELLE,

Dardanelle, Arkansas

### New Radial Collector Well with Gravel Packed Laterals

**BRCW** was contracted by Robinson Construction Company to build a radial collector well with gravel packed laterals for the City of Dardanelle, Arkansas. The project is located adjacent to the southwest bank of the Arkansas River and was completed



May, 2010. The caisson was sunk 45 feet below ground level, after which 1181 feet of 12 inch diameter stainless steel gravel packed lateral screens were installed using the Preussag Method. This exclusive method of Gravel Packing is a significant addition that Brechtel offers to the industry. During the initial caisson installation, BRCW encountered finer sediments than reported and recommended this gravel packing method. Brechtel and the client adapted to complete the project on time, on budget, and with no safety incidents. Interested parties may contact Bill Smith, Manager, Dardanelle Water Department at 479-229-3992.



## SONOMA COUNTY WATER AGENCY

Sonoma County, California

### Performance Evaluation

**BRCW** and ERM were selected to complete the maintenance and capacity analysis of Sonoma County's six radial collector wells. In addition to conventional observation of pumping rate,

drawdown and flow distribution among the laterals at the caisson, a more specific procedure was also used to profile flow along the length of the laterals. These flow profiles were determined by inserting a mechanical flow meter throughout the full

accessible length of each lateral, using an underwater dive team while the well was in operation. Velocity measurements were obtained at ten foot increments inside each lateral and monitored by a hydrogeologist at the surface. This procedure allowed direct observation of variations of in-line flow velocity and distribution of unit-length capacity along the entire length of collector laterals. In addition, a camera was inserted through the accessible length of the laterals to provide direct observation of the condition of screen pipe and slot openings. This project represents the first documented profiling of flow through the length of collector laterals in Sonoma County, CA. Interested parties may contact Wendy Gjestland, P.E., Sonoma Water Agency Engineer at 707-521-1866, or Jim Warner, Principal/John Lucio, P.G. Project Manager at Environmental Resources Management 925-946-0455.



## CITY OF MT. PLEASANT

Mt. Pleasant, Michigan

### Maintenance on Existing Radial Collector Well

Maintenance consisted of the mechanical cleaning and rehabilitation of approximately 900 lineal feet of 12 inch diameter carbon steel lateral screen utilizing high pressure jetting techniques. Pre-maintenance inspection and flow evaluation of individual laterals assisted Brechtel in determining the appropriate redevelopment strategy for each screen. Results of the maintenance work proved very successful. Collector inflow was more evenly distributed among the laterals and efficiency of the well, as evidenced



by specific capacity and differential values, was essentially restored. Interested parties may contact Malcolm Fox, Water Plant Superintendent for the City of Mt. Pleasant, at 989-779-5426.