

# BDCP

## BAY DELTA CONSERVATION PLAN

# FREQUENTLY ASKED QUESTIONS

## ACCESS TO PROPERTY FOR GEOTECHNICAL INVESTIGATIONS

The California Department of Water Resources (DWR) is currently completing the recommended geotechnical field investigations for the Bay Delta Conservation Plan (BDCP). The following information is reflective of questions DWR frequently receives on these activities.

### WHAT IS A GEOTECHNICAL INVESTIGATION?

Geotechnical investigations include cone penetration testing (CPT), drill holes, and test pits. All of these investigations are important to gather information on the types, engineering characteristics, and depth of soils impacted by the proposed BDCP.

**CPT** identifies soil behavior characteristics including groundwater levels, liquefaction potential, and shear-wave velocity. CPT work takes approximately four to six hours and consists of creating an approximately 1.4-inch-diameter hole by pushing a hydraulic probe into the ground. While the probe is pushed, it electronically measures and records resistance. At completion, the probe is withdrawn and the hole is filled with a cement bentonite mixture in accordance with state regulatory requirements.

**Drill Holes** provide a variety of information on composition and strength characteristics of the material present at the test site. Each hole is 6 inches in diameter, and can extend from 50 to 225 feet in depth. Drill hole work takes a maximum of 14 working days and includes site reconnaissance, restoration, and drilling. At completion, the hole is sealed with cement bentonite grout in accordance with state regulatory requirements.

**Test Pits** are used to take bulk samples, view the soil profile, and perform soil density tests. Each pit is approximately 3 feet wide by 12 feet long and about 12 feet deep, and takes two to four hours to complete. Each pit is dug using a backhoe. Once completed, the pit is filled using the previously excavated material.

### WHAT IS THE PURPOSE OF THE GEOTECHNICAL INVESTIGATIONS FOR THE BDCP? IS THE INFORMATION GATHERED NECESSARY TO FINISH THE BDCP?

The geotechnical investigations being conducted by DWR are necessary to support the preparation of the BDCP Environmental Impact Report/ Environmental Impact Statement (EIR/ EIS) and preliminary engineering. The information and data gathered may be necessary to support the planning and development of a water conveyance alternative, and assure that any required construction provides for the highest level of public and environmental safety.

### HOW WERE GEOTECHNICAL INVESTIGATION SITES DETERMINED?

Sites were selected with respect to the conceptual engineering alignments. The majority of the sites provide information and data for the intakes, river crossings, Intermediate Forebay, and the Byron Tract Forebay. Additional sites were chosen to gather information related to the pipeline/tunnel option.

### IS THE CEMENT BENTONITE MIXTURE SAFE FOR RESIDENTS AND THE ENVIRONMENT IN GENERAL?

Yes. The cement bentonite mixture is required by state regulations, and is safely used in a variety of applications including cement slurry walls in flood control projects as well as plugging drill holes.

DWR adheres to jurisdictional guidelines to set the level of bentonite in the mixture. For example, Sacramento County requires no more than 6 percent bentonite, Contra Costa County sets the limit at 5 percent, while San Joaquin County has established a range of 3 to 5 percent bentonite to cement.

### DO THE CPT AND DRILL HOLES PRESENT A FLOOD OR SEEPAGE PROBLEM FOR LANDOWNERS NEAR LEVEES?

No. The current data shows that test holes plugged with cement bentonite mixture are not prone to seepage or failure.

### HOW HAS DWR WORKED WITH LANDOWNERS, STATE AGENCIES, AND LOCAL JURISDICTIONS TO CONDUCT THIS WORK?

DWR has coordinated with landowners, the Central Valley Flood Protection Board, the U.S. Army Corps of Engineers, and other jurisdictions, such as the Reclamation Districts, to obtain Temporary Entry Permits (TEPs) and conduct field investigations.

In July 2008, DWR land agents began negotiations to obtain TEPs from landowners. The TEPs granted DWR temporary access to parcels to conduct field investigations in support of the BDCP.

Because not all landowners allowed access, DWR filed a petition with the court for permission to enter certain parcels to gather the necessary data. Since that time, there have been several court hearings associated with this issue. In February 2011, DWR was granted permission to enter parcels to conduct environmental surveys. DWR is still in the process of obtaining permission from the courts to conduct geotechnical investigations on certain parcels.

### HOW CAN DWR CONTINUE TO CONDUCT FIELD SURVEYS WHILE IN LITIGATION WITH LANDOWNERS?

DWR is conducting geotechnical activities only on parcels where landowners have signed TEPs. Geotechnical work will also continue to take place on DWR-owned property.

### WHAT IS EMINENT DOMAIN, AND WHY IS IT NEEDED FOR THIS WORK?

Eminent domain is a process that facilitates the acquisition of private land for public use. Throughout the BDCP process, DWR has negotiated permission to enter with many landowners to conduct the tests described above. Although DWR prefers to work with and negotiate with willing landowners, the agency utilizes eminent domain in cases where the landowner and DWR are unable to reach an agreement.

### WHEN DOES DWR EXPECT TO COMPLETE DRILLING AND SURVEYS?

The next round of geotechnical drilling activities is scheduled to begin in May 2012 and end by October 2012. DWR anticipates completing 115 CPT holes, and 115 drill holes down to a maximum depth of 225 feet. DWR will also complete six test pits to determine soil characteristics and geotechnical field work feasibility.

### WHAT FIELD SURVEYS ARE LEFT TO BE COMPLETED?

DWR anticipates that it will need to access private property through 2012 for environmental (wetland delineation), cultural resources, and geotechnical surveys/studies.

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**For more information on geotechnical investigations in support of the BDCP, please contact:**

**Ted Thomas**  
at (916) 653-9712  
or

**California Department  
of Water Resources**  
Attn: Carolyn Dabney  
1416 Ninth Street, P.O. Box 942836  
Sacramento, CA 94236-0001

**For more information, visit**  
[www.baydeltaconservationplan.com](http://www.baydeltaconservationplan.com)