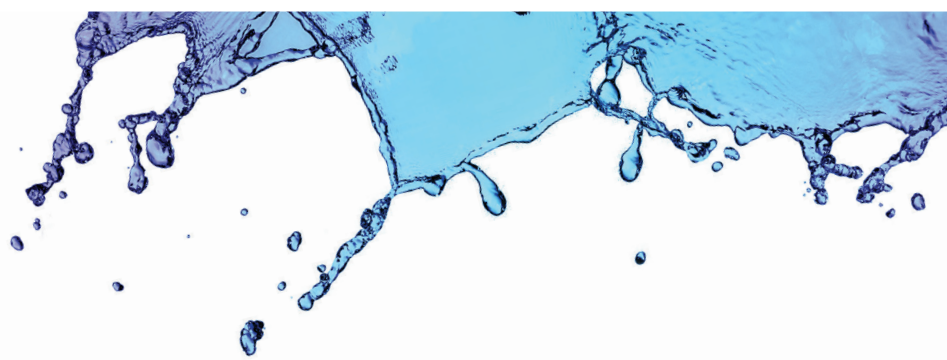




MONTEREY PENINSULA WATER SUPPLY PROJECT

Slant Wells: Improving Operational Efficiencies and Reducing Environmental Impacts

The Monterey Peninsula Water Supply Project (MPWSP) is a three-pronged plan to restore regional water supplies, prepare for droughts, support long-term water reliability and economic stability, and provide for sustainable growth. A key component is a new desalination facility.

The desalination facility will use subsurface slant wells to protect water quality, reduce environmental impacts and comply with stringent permitting requirements. One test well has been completed and will become a permanent part of the project.

What is a slant well?

A slant well is a well that is drilled diagonally from land to beneath the ocean floor, drawing naturally filtered seawater or brackish groundwater into the well.

BENEFITS OF SLANT WELLS

Unlike open-ocean intakes, slant wells reduce harm to marine life, naturally providing filtration and are less vulnerable to waves, storms and surface pollution.



ENVIRONMENTAL PROTECTION

Draws water through sand and gravel, protecting fish and plankton and filtering debris before treatment.



WATER QUALITY AND RELIABILITY

Provides cleaner, more consistent feedwater with less need for treatment.



OPERATIONAL ADVANTAGES

Intakes beneath the seafloor are shielded from waves, storms, and spills, while onshore access simplifies maintenance.



MINIMAL VISIBILITY

No visible offshore pipes or intake screens, leading to a smaller visual footprint.



MPWSP SLANT WELLS AT A GLANCE

- **5:** Number of slant wells
- **4.8 million gallons:** Water produced a day
- **2,000–3,000 gallons:** Water pumped per minute by each well
- **204':** Vertical depth of slant well piping below sea level
- **1.8 acres:** Total permanent graded, or sloped area
- **3,002 square feet:** Total impermeable footprint
- **5,778 square feet:** Total fenced area
- **0:** Paved roads or driveways
- **15' wide x 24' long:** Dimensions of slant well and surge tanks

Slant Well Sites

The MPWSP will include five slant wells located on three separate sites. The wells will extract seawater and brackish groundwater from beneath the ocean floor. Four new production slant wells will be constructed, and the existing test slant well will be converted into a production well.

SLANT WELL SITE #1: TEST FACILITY

- **Graded area:** 5,931 sf (approx. 0.14 acre)
- **Fenced area:** 2,298 sf
- **Well extension toward ocean:** 700 linear feet
- **Well depth:** Approximately 204 feet
- **Drill angle:** Approximately 19 degrees
- **Size of well screen and casing:** Both 20" and 14" diameter



SLANT WELL SITE #2: WELLS #2 AND #3

- **Graded area:** 28,343 sf (0.65 acres)
- **Fenced area:** 1,740 sf
- **Well extension toward ocean:** >1,000 linear feet
- **Well depth:** Approximately 204 feet
- **Drill angle:** 14 degrees



SLANT WELL SITE #3: WELLS #4 AND #5

- **Graded area:** 37,482 sf (0.86 acres)
- **Fenced area:** 1,740 sf
- **Well extension toward ocean:** >1,000 linear feet
- **Well depth:** Approximately 204 feet
- **Drill angle:** Approximately 14 degrees



Construction Schedule

- **October 2026:** Begin well drilling; install civil/mechanical and electrical features
- **March 2028:** Bring two new wells online; convert the existing test well to a permanent production well
- **March 2029:** Bring final two wells online