

Furnace Creek Wash—Regional flow routed through wash to alluvial fan

- Routing of groundwater from regional system to alluvial fan is well understood
- Regional flow discharges to springs, supply wells, and Furnace Ck Wash (fig. 1)
- Water moves through highly transmissive wash to alluvial fan (fig. 1, 2)
- Water-level changes from seasonal diversions propagate through wash (fig. 3)

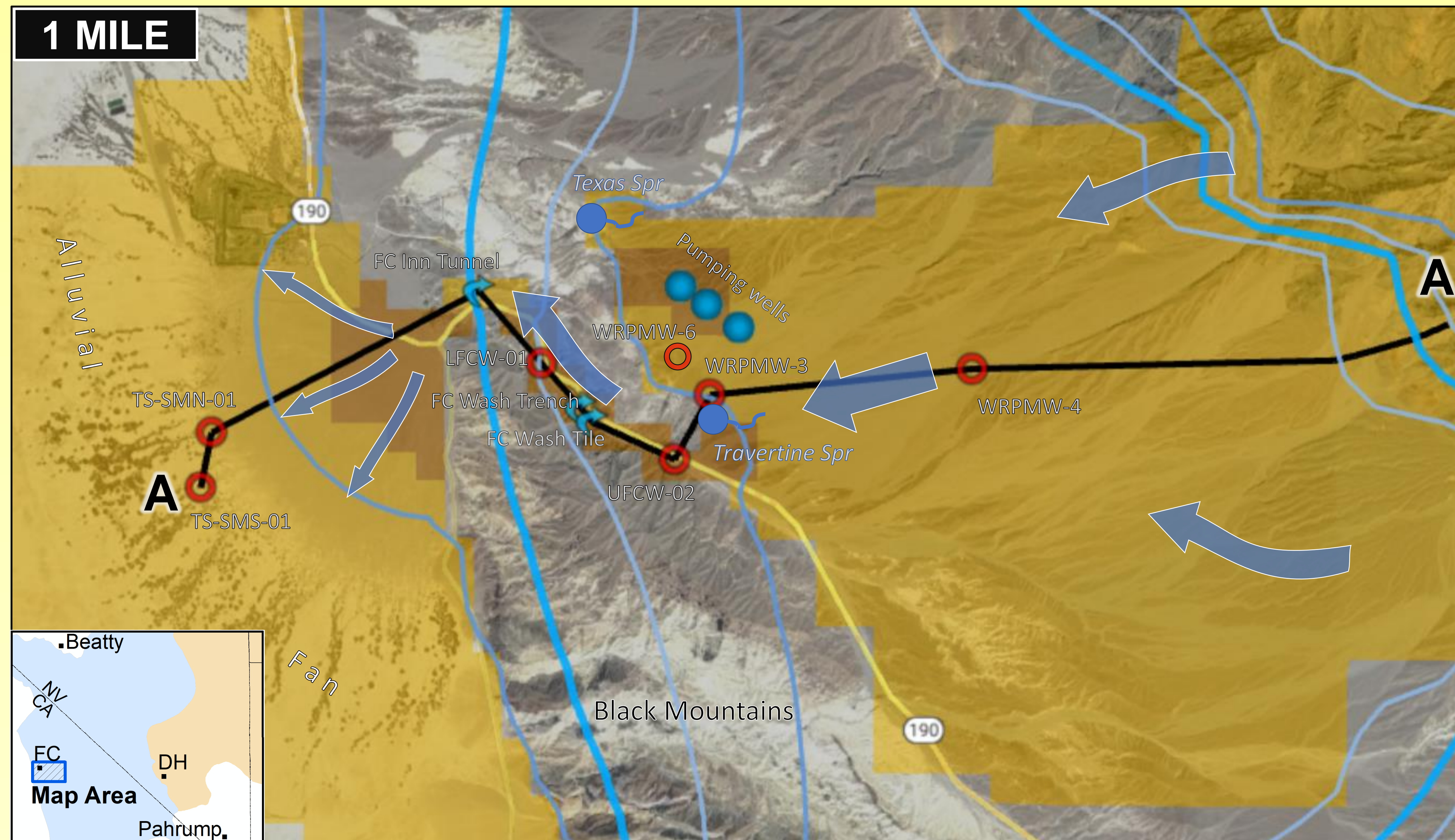


Figure 1.— Regional groundwater flow through Furnace Creek Wash.

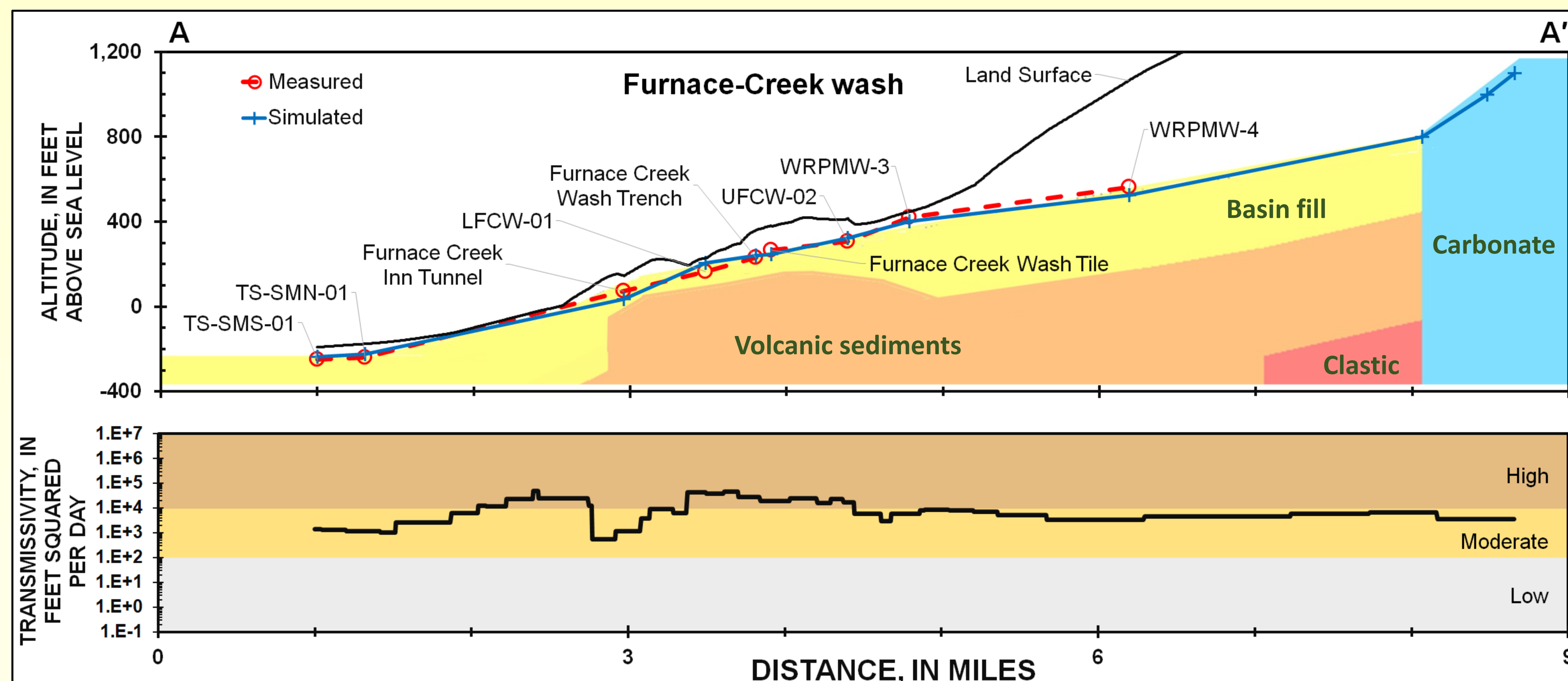


Figure 2.—Water-level profile through Furnace Creek Wash.

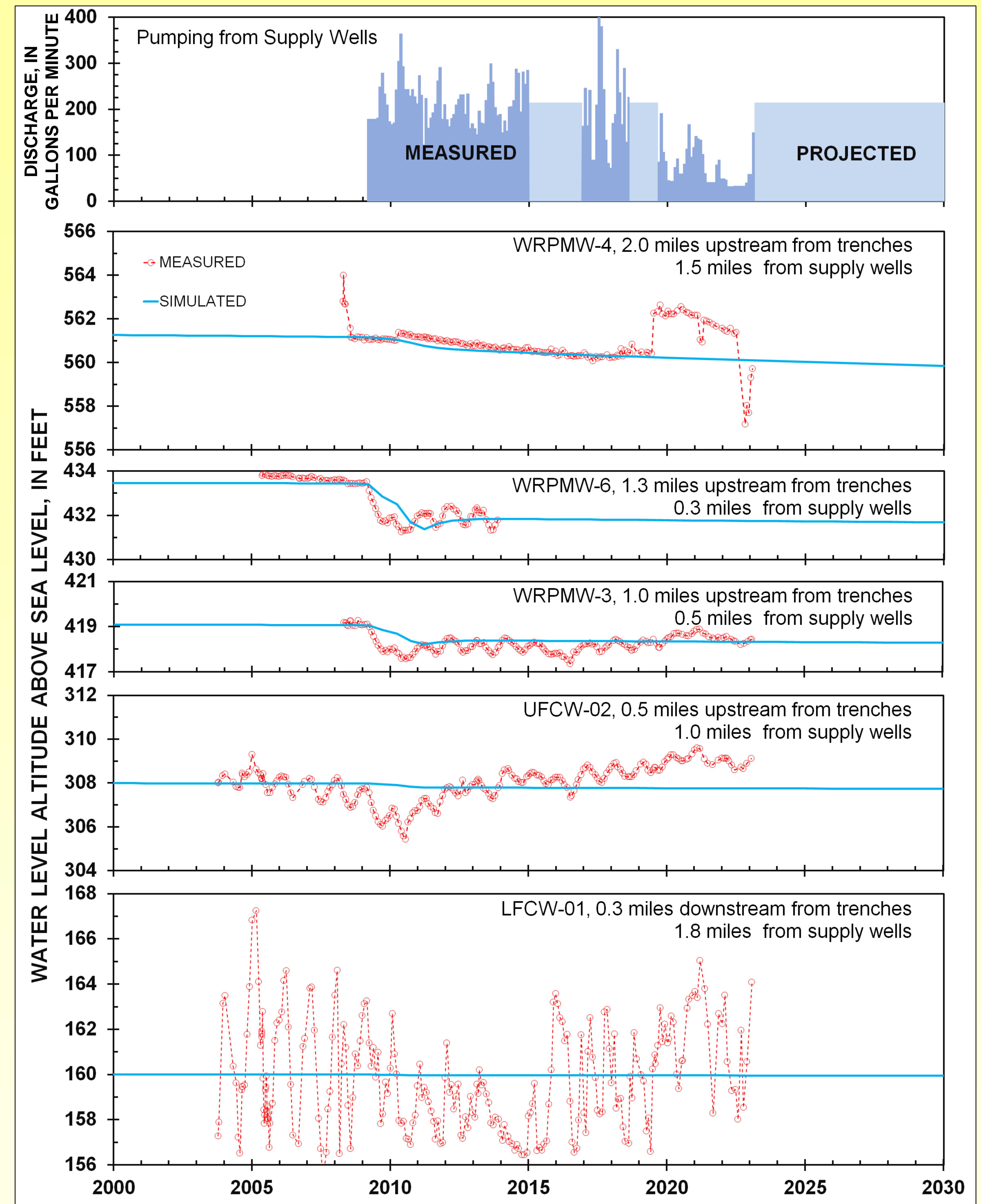


Figure 3.—Measured water levels, simulated water levels, and pumping in Furnace Creek Wash area.

Travertine Point Well—Drawdown occurs through Funeral Mountains

- Simulated drawdown from Central Amargosa Desert extends through Funeral Mountains and is limited near Devils Hole (fig. 1).
- Transmissivities are as much as 10,000 ft²/d where carbonate rocks predominate in the southern Funeral Mountains (fig. 2).
- Simulated and measured water-level changes support a consistent story (fig. 3).

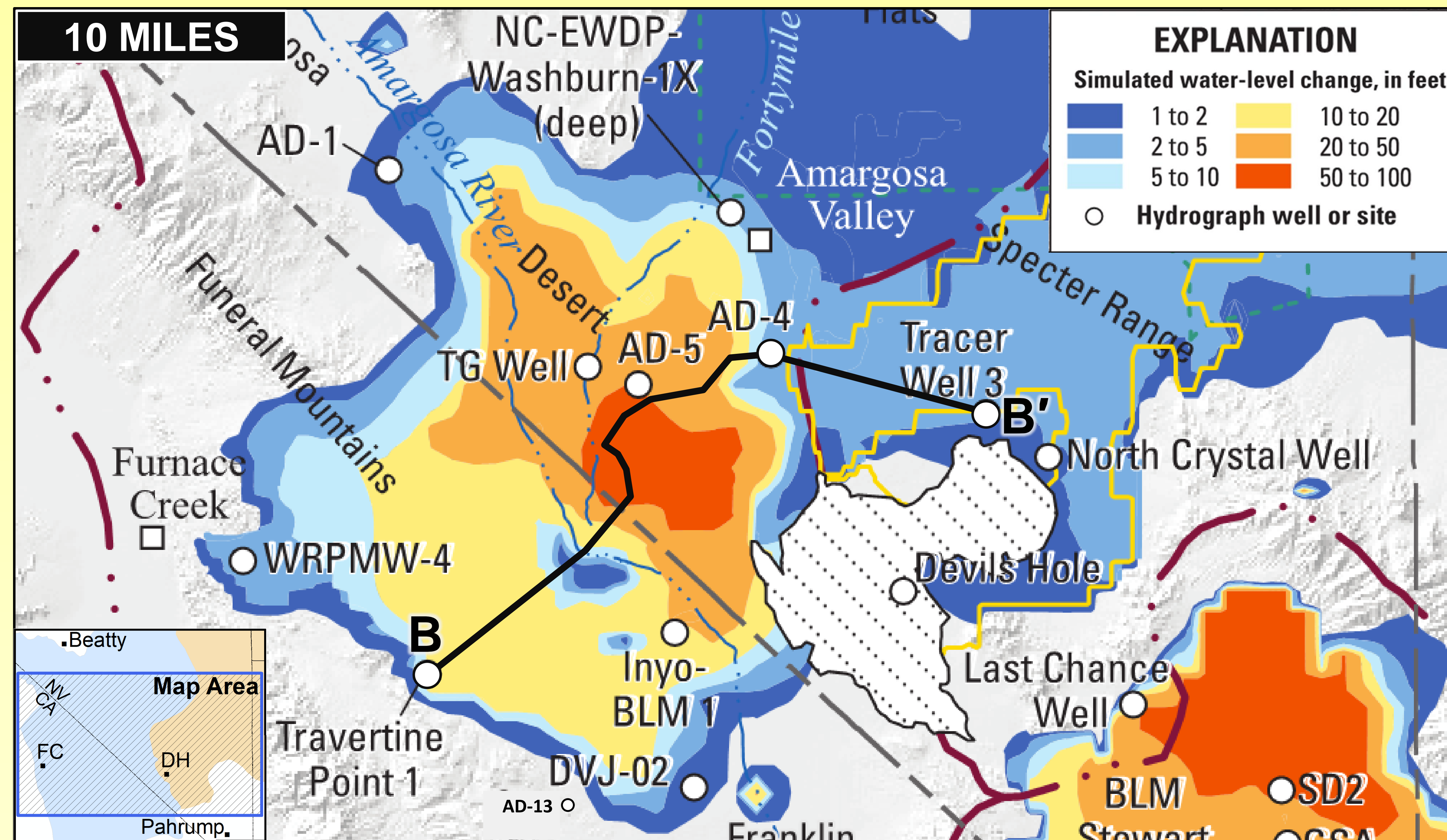


Figure 1.—Drawdown in Central Amargosa Desert from predevelopment through 2018.

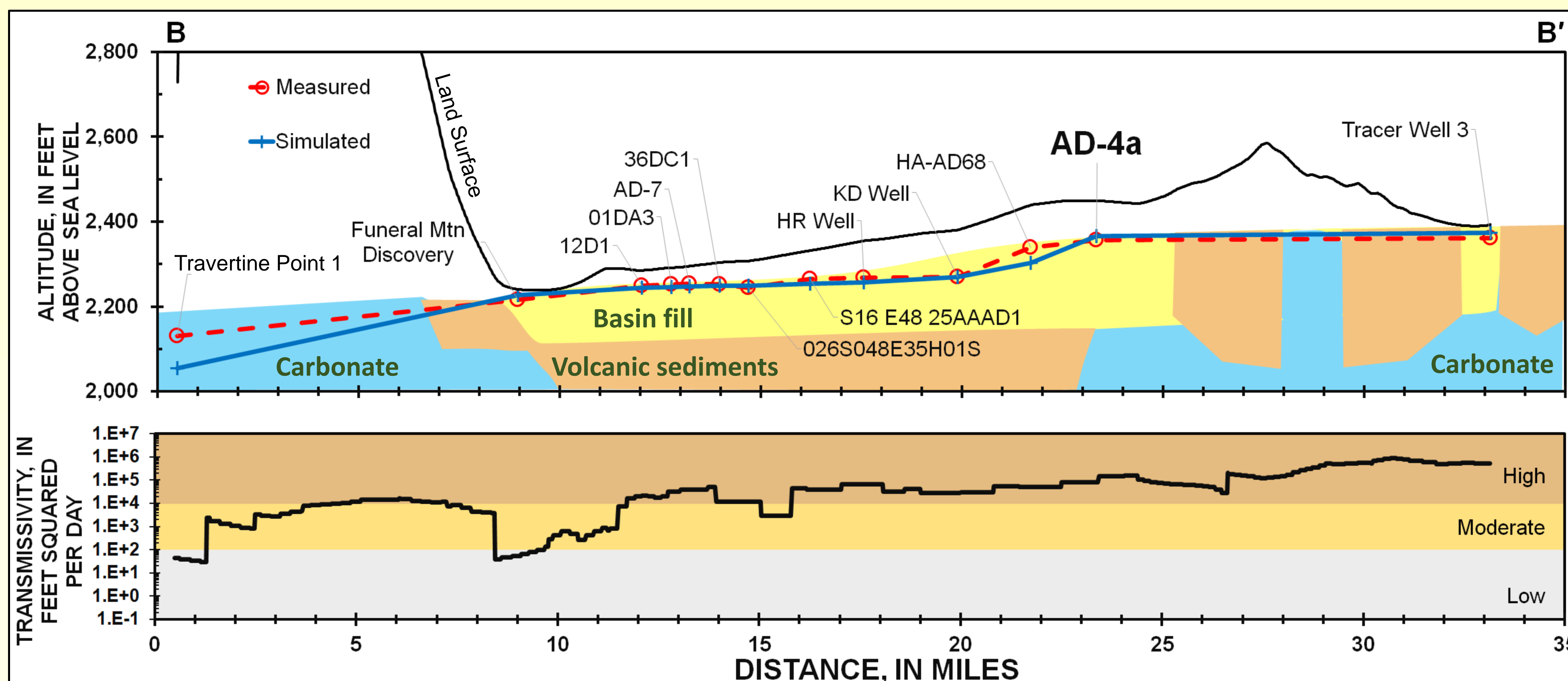


Figure 2.—Water-level profile through Funeral Mountains and Central Amargosa Desert.

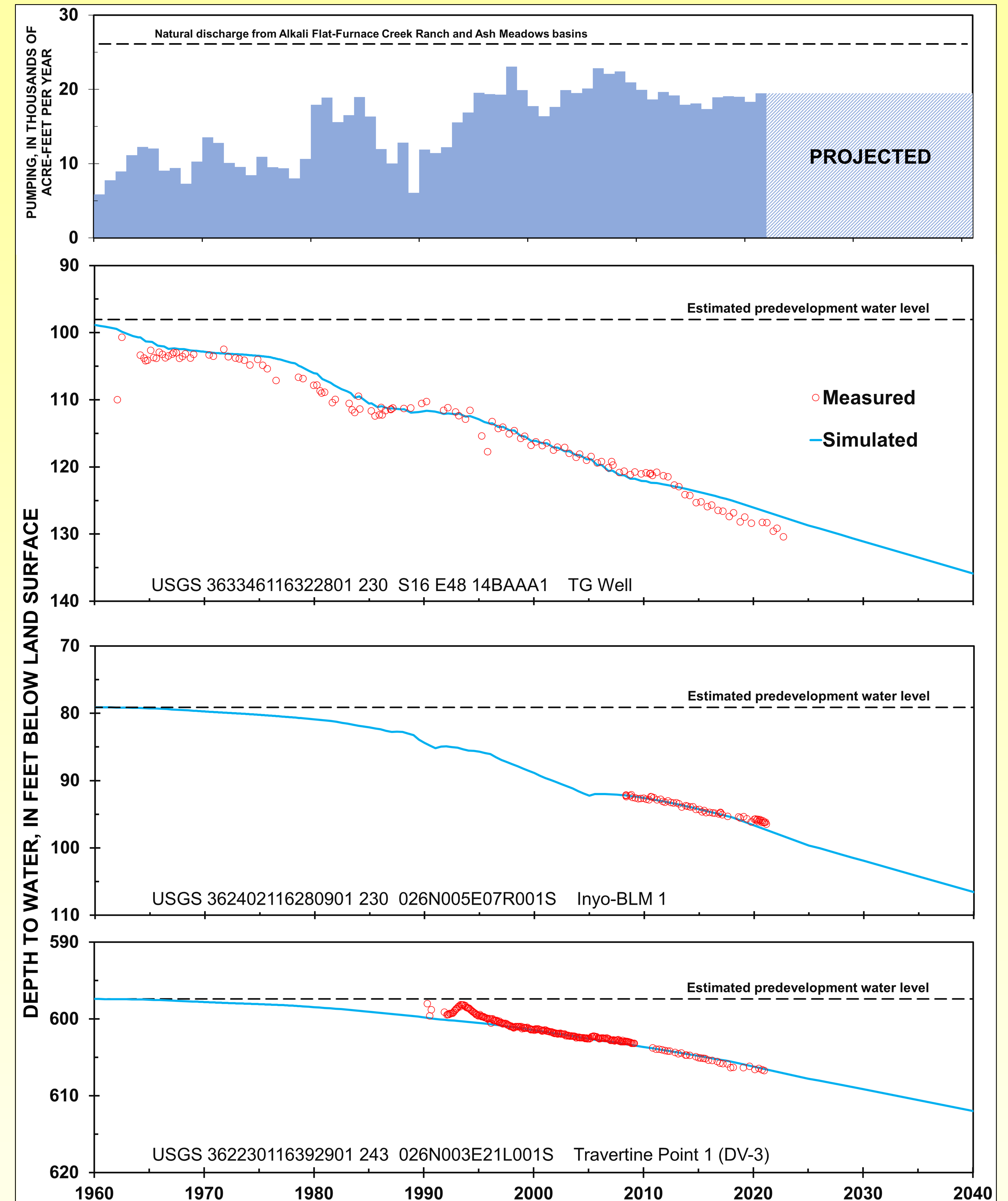


Figure 3.—Pumping from Alkali Flat-Furnace Creek Ranch and Ash Meadows basins and measured and simulated water levels in wells TG, Inyo-BLM 1, and Travertine Point 1.

Well AD-13 site—Greenwater Range bounds central Amargosa Desert

- Elevated water levels and steep hydraulic gradients support Greenwater Range as a flow barrier (figs. 1, 2).
- Erratic & elevated water levels in AD-13 indicate low transmissivity rocks (fig. 3)
- Effects of Amargosa Farms pumping evident in AD-10 but not in AD-14 (fig. 3)

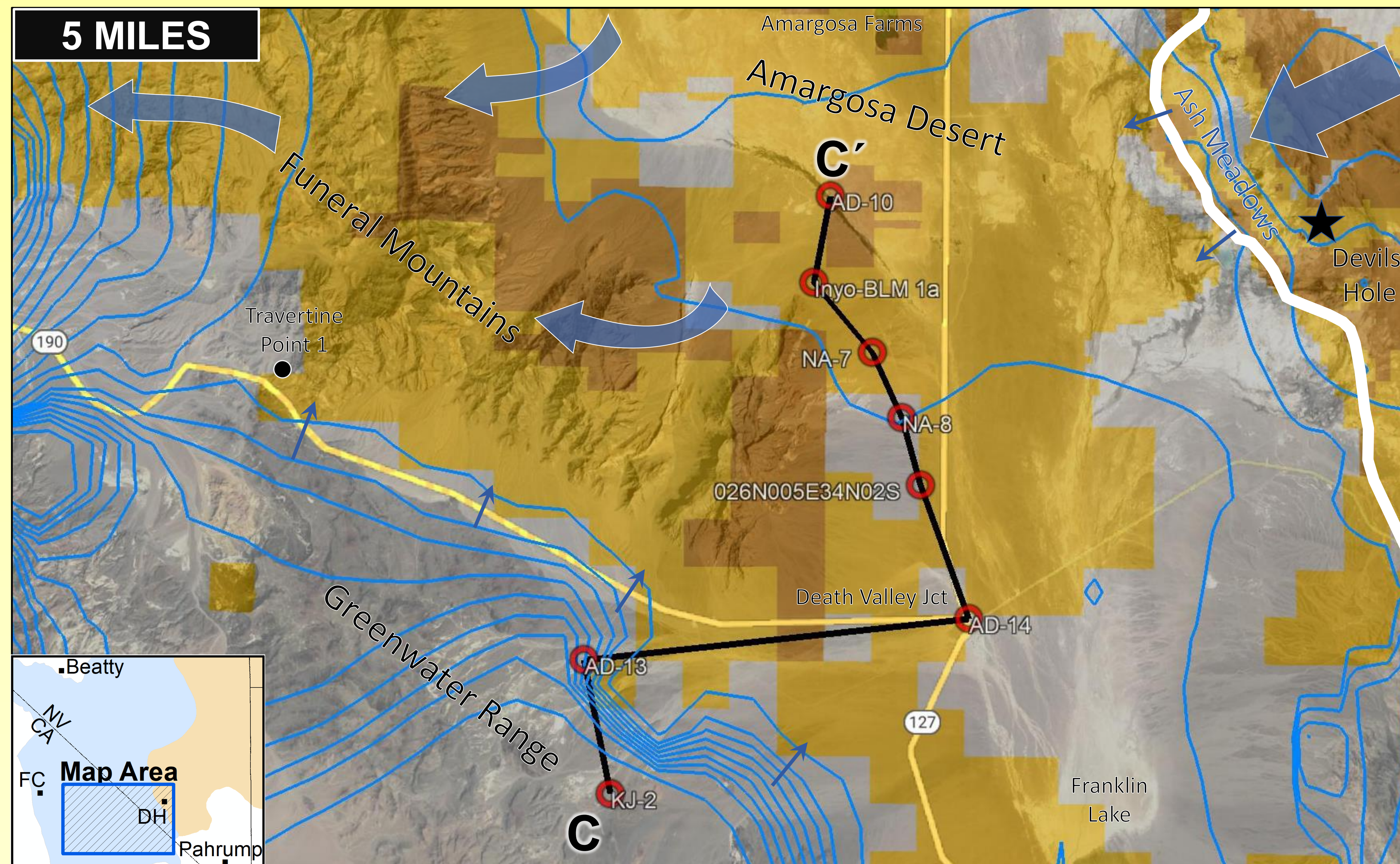


Figure 1.—Greenwater Range bounds flow through central Amargosa Desert.

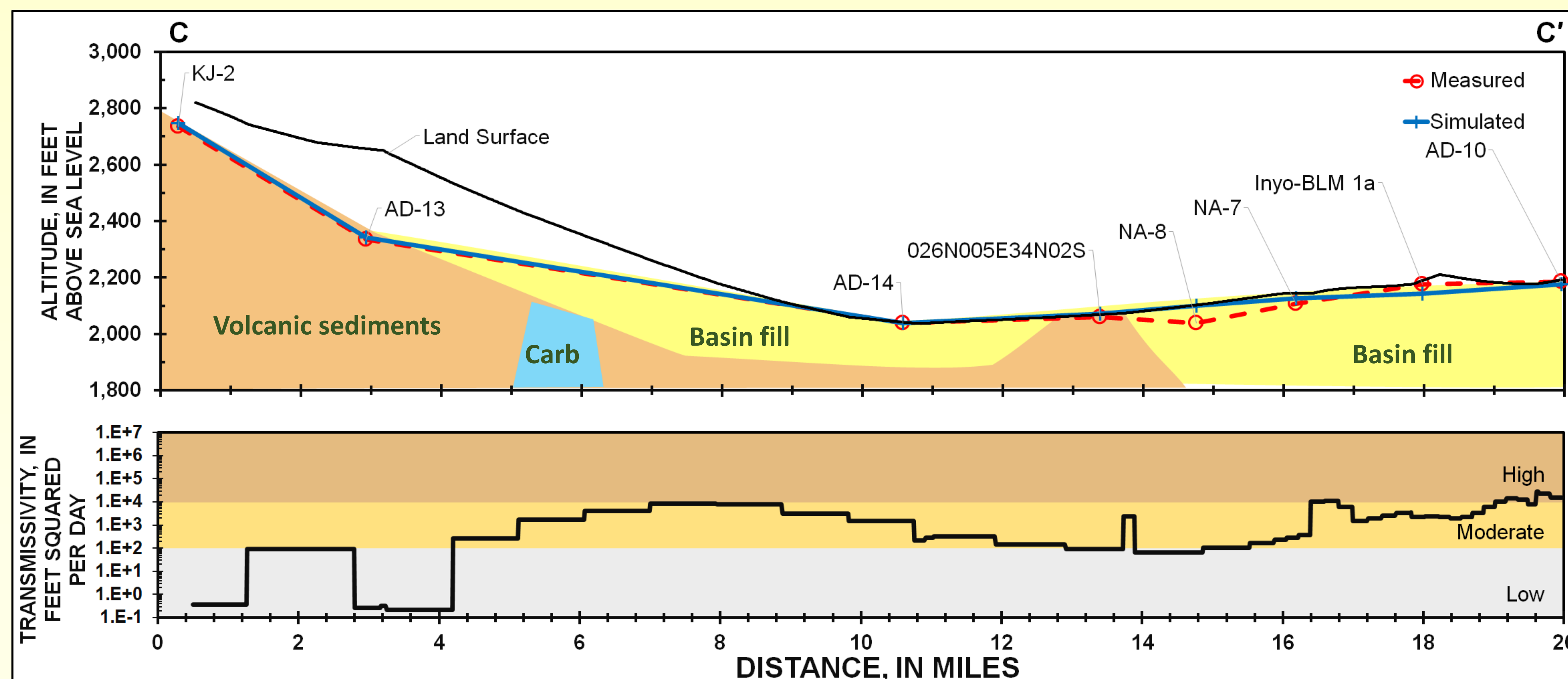


Figure 2.—Water-level profile from Greenwater Range to central Amargosa Desert.

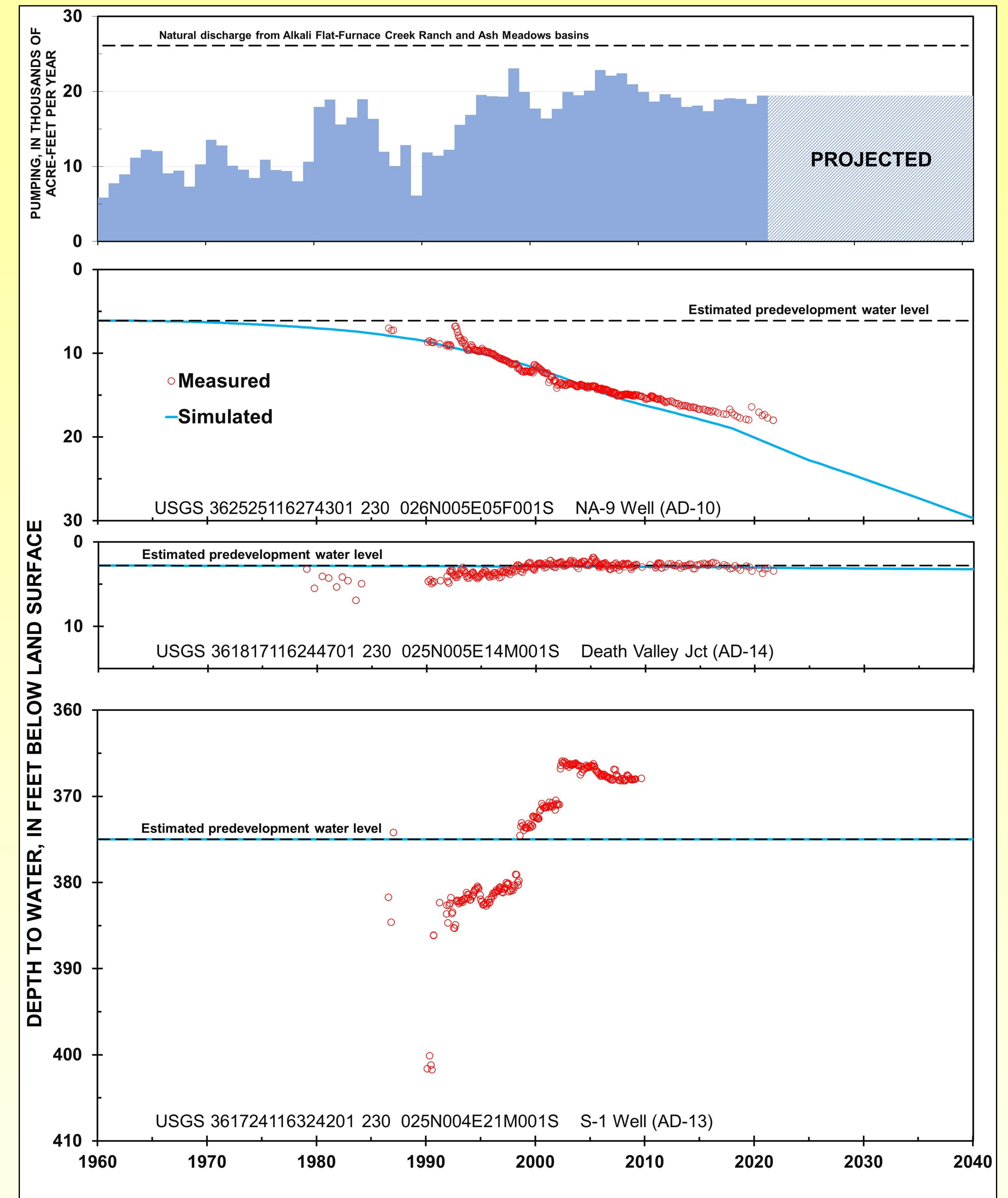


Figure 3.—Pumping from Alkali Flat-Furnace Creek Ranch and Ash Meadows basins and measured and simulated water levels in wells AD-10, AD-14, and AD-13.

Ash Meadows visitor center—Controls on water levels in Devils Hole

- Most flow in Ash Meadows basin routed through megachannel; a portion of this flow moves north of Ash Meadows into central Amargosa Desert (fig. 1).
- Water is pooled in megachannel and levels drop sharply across clay plug west of Ash Meadows (fig. 2).
- Devils hole hydrograph explained by climatic and pumping stresses (fig. 3).

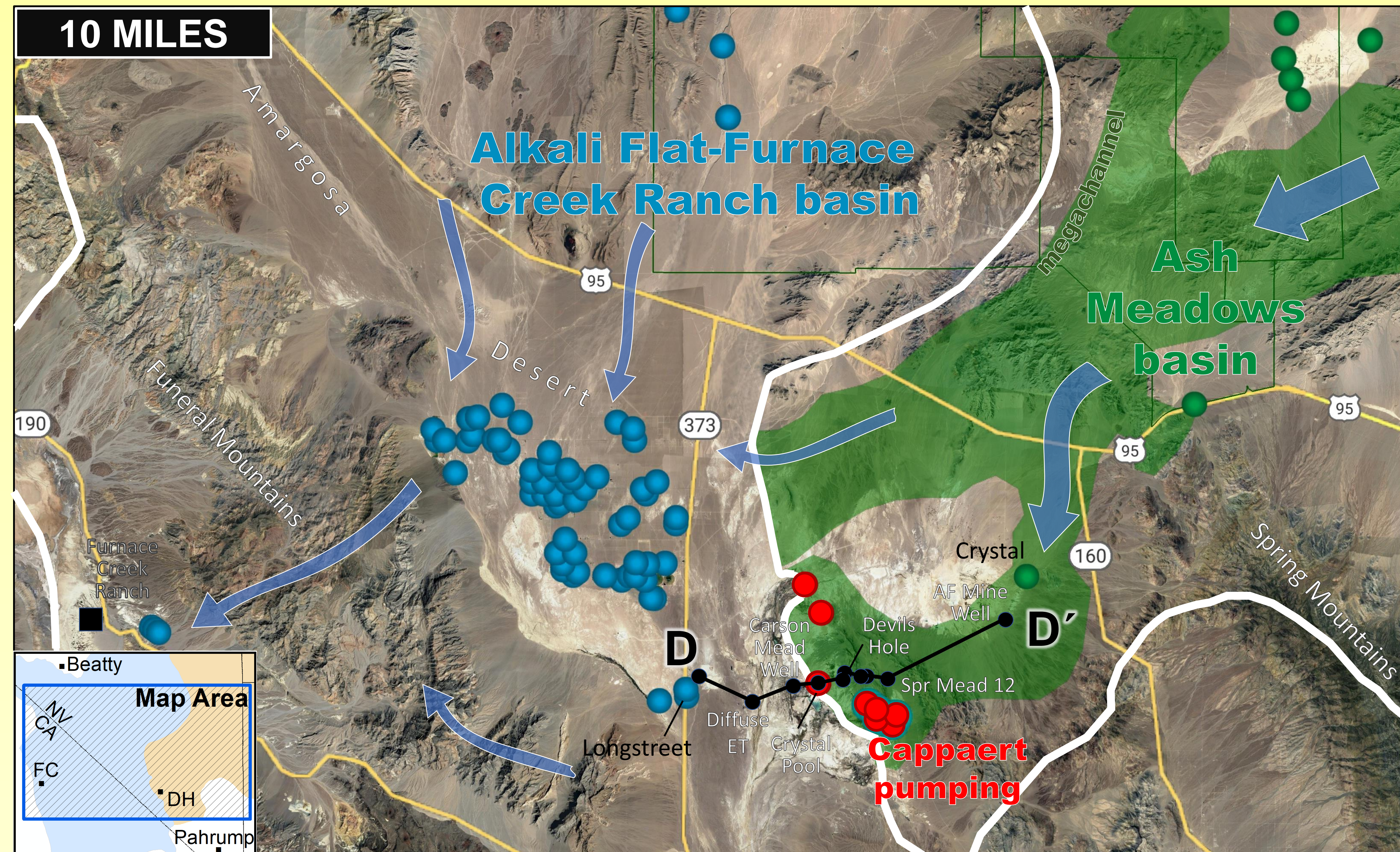


Figure 1.—Regional flow in Ash Meadows megachannel and flow-through to AFFCR basin.

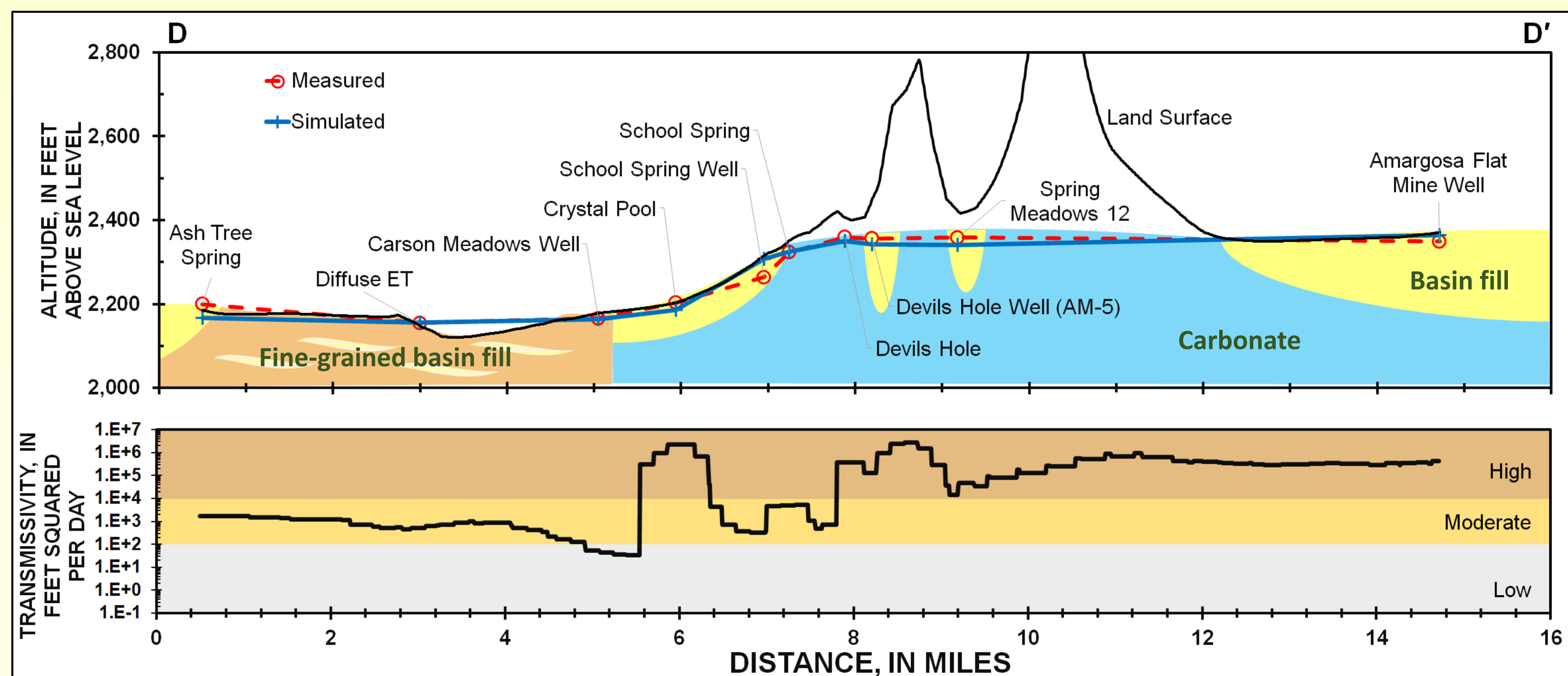


Figure 2.—Water-level profile through Devils Hole from Longstreet to Crystal, NV.

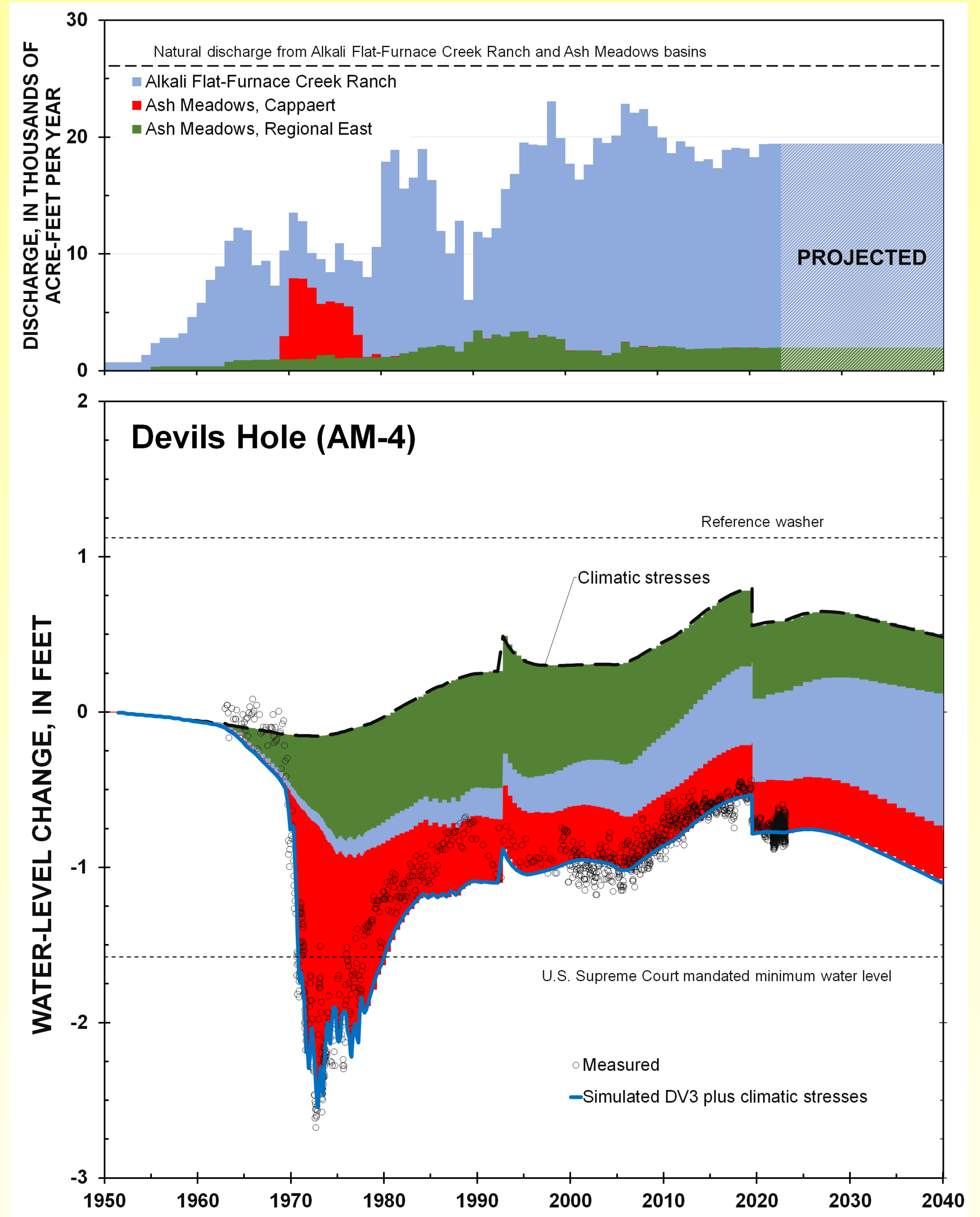


Figure 3.—Response of Devils Hole water level to climatic and pumping stresses.