

25. WATER– New Water Wells and Automation

The City’s water modeling system shows that the water distribution system cannot provide adequate pressure to ensure adequate production capacity during periods of high seasonal demand. This project would address water system deficiencies including inadequate pressure and flow from the western area of Whittier that includes the small boat harbor, cruise ship terminal, fish processing facility, hotel, and 37 acres of land. The City seeks to connect a well with high water production located south of town near Glacier Avenue to the water system. Connecting this well will help ensure our water system has adequate production capacity during periods of high seasonal water demand.

Estimated Cost: \$3.13 million

Recommended Funding: Federal Grant, CPV

Status of the project: Well Field Design complete. Request for Proposals advertised twice in 2024 with project costs doubling, exceed available grant funding of \$1.23 million. The project is ready to re-bid and begin construction upon receipt of additional funding.

The City previously installed two test wells to conduct aquifer pumping tests to determine the proper location and size needed to service Whittier’s production wells. Desired capacity 750 gpm each well. Design of new well building (30’ x 30’ CMU block building with concrete slab on grade floor), including controls housed in well building. Existing generator will provide emergency power for wells. Well building to be located east of and adjacent to existing Well House No. 3. Well pumps to be sized to meet desired production of 750 gpm for each well. Water from wells to be routed to new well building through new ductile iron pipe water mains connected to existing water distribution system new Well House No. 2. Controls will allow well pumps to be operated in automatic or manual mode. Controls will call for one or both bumps to operate until reservoir is full, then wells auto shut off. After water level drops to predetermined level, controls will call for one or both wells to start. Existing wells and well houses will be demolished once new well facilities are operable. Construction will be sequenced to ensure existing well houses not demolished until new facilities commissioned. Well House No. 1 to remain online as a backup.

