Salt-water intrusion found in La Selva

Evidence of salt-water intrusion, this time in the Seascape-La Selva Beach area of Santa Cruz County, has been discovered by a consultant working for the Soquel Creek Water District.

Consultant Joe Scalmanini told water district directors Monday night that recent pilot wells drilled into the Aromas Red Sands formation under La Selva Beach and Seascape showed evidence of salt water lying under the fresh water in the formation.

The "interface," district General Manager Bob Johnson quoted Scalmanini as telling the directors, lies approximately 500 feet below sea level and does not pose any threat to the fresh water wells now being drilled into the formation by the water district.

The water directors asked Scalmanini, who is based in Davis, to submit a proposal in January to further explore the formation and prepare a groundwater monitoring plan to the district.

Johnson said salt was first suspected in the area when a test hole was drilled for a new water well on Altivo Drive in La Selva Beach. Chemical analysis of the drilling fluid taken from the 1,200-foot level detected chlorides — an indicator of salt water.

"We found it again in the Sells Drive well and again in the Bonita Drive test holes," Johnson said.

Johnson and Assistant General Manager Hank Dodds told Rio del Mar Improvement Assn. directors Monday afternoon that the water district plans to have the Bonita Drive well, which can produce 1,000 gallons a minute, connected into the Rio del Mar water system this spring. The district also expects to have a natural gas-powered emergency generator ready to operate at a booster station that delivers water to the Vista del Mar-Cuesta Drive area by Christmas.

Water from the Aromas Red Sands formation does not have the high iron and manganese content found in Purisima formation water. Iron and manganese is frequently blamed for staining laundry and household fixtures.

Once the Bonita Drive well is operational, the district plans to shut down its old Cliff Drive well, which pumps from the Purisima formation — reducing the iron and manganese in the Rio del Mar water system.

Johnson said the salt water discovery in the Seascape-La Selva Beach area doesn't mean that the aquifer is being overpumped, pulling in seawater.

Johnson said the salt water has probably been in the lower part of the Aromas Red Sands formation since it was laid down millions of years ago.

"It has probably been there forever because you can't pile enough fresh water on top of the (heavier) salt water to push it out of the formation," Johnson said. "The district has to develop a management plan now to make sure that we don't draw the (salt) water into our wells."