



NEWS RELEASE - FOR IMMEDIATE RELEASE

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Treasure Valley Future Water Demand Study sees large increases in water use as valley population rises over the next 50 years

BOISE - (March 29, 2016) - Looking ahead 50 years into the future, the population in the Treasure Valley is expected to grow from more than 600,000 people today to 1.57 million, a 252 percent increase, according to results of a water-demand projections analysis presented to the Idaho Water Resource Board. This means the demand for water supplies may grow by 245 percent to 357 percent above today's current rates, Christian Petrich of SPF Water Engineering told the Water Board in Boise.

The projected growth would result in an increase in current water use from 110,000 acre-feet per year to a range of 270,000-390,000 acre-feet per year in the Treasure Valley. "The Treasure Valley is blessed with a much better water supply than most cities in the arid West," said Petrich who prepared the *Treasure Valley Domestic Commercial Municipal Industrial (DCMI) Water-Demand Projections* report. "But if our growth patterns continue, this is where we might end up."

Summer irrigation by domestic, commercial, municipal and industrial (DCMI) water users is one of the bigger uses of Treasure Valley water, Petrich said, showing on graphs how the water demands increase in the summer months, and then drop during the winter. He projected that DCMI irrigation demand would increase from 54,500 acre-feet per year today to somewhere between 122,000 and 167,000 acre-feet per year in the future.

This projection incorporates an estimated 10 percent increase in a long-term "precipitation deficit" resulting from higher evapo-transpiration rates due to warmer temperatures expected in the future. Indoor use of water by residential users is projected to increase from 55,700 acre-feet per year to 61,300 acre-feet per year which takes into consideration moderate levels of conservation in the home.

Petrich's findings show that it will be important to increase water supplies for the growing Treasure Valley. New supplies could be achieved through a combination of measures such as improving water conservation, increasing ground water pumping, more diversions from the Boise River, recharging aquifers with Boise River flood flows, reusing treated water from sewage treatment plants, increasing storage in existing reservoirs, and possible cross-basin diversions from the Snake River.

The future demand study is part of an ongoing joint study being conducted by the Water Board and the U.S. Army Corps of Engineers to evaluate options for meeting current and future water needs in the

Treasure Valley and ways to reduce flood risk. Measures under consideration in the joint study include raising the level of Arrowrock Dam, managed aquifer recharge, upgraded irrigation headgates, replacement of push-up dams, bridge upgrades, and controlled flooding of pits/ponds, among other things.

“Are the cities doing enough to conserve water?” asked Water Board Chairman Roger Chase. Petrich replied that Suez, formerly United Water, meters customers and encourages conservation, while some cities in the Treasure Valley do not meter customers at the present time, meaning customers pay a flat fee for unlimited use.

In a related presentation, Sean Vincent, a ground water specialist for the Idaho Department of Water Resources, briefed the Water Board about a ground water modeling study for the Treasure Valley. The model is in the process of being updated to give decision-makers a better understanding of ground water use and recharge in the valley.

Overall, ground water aquifers "are very complex" in the Treasure Valley, Vincent said. "Recharge mechanisms to the deeper aquifers are poorly understood. We'd like to fill the data gaps," he said.

"We want to get ahead of the game with these aquifer models," said Jeff Raybould, Water Board member and Rexburg-area farmer. "It will be a good planning tool moving forward."

In other action, the Water Board:

- Heard a status report on the conceptual design of a pipeline to deliver water from the Snake River to the Mountain Home Air Force Base. Knowing that ground water supplies are limited and constrained in the Mountain Home area, the Water Resource Board secured a water right from the Simplot Company in 2014 to provide a sustainable supply of water to the Air Force base. The project will include a pump station from the C.J Strike Reservoir, a pipeline conveying water to the base, and a treatment plant to provide treated water for domestic, municipal, commercial and industrial uses.

Costs for the project alternatives range from \$29.6 million to \$22.4 million. The Water Resource Board will move forward with project development and financing based on the information generated the report, officials said. The Mountain Home AFB is a recognized economic driver in the state, and the Water Board has committed resources to protect this asset and complete the project by 2021.

- Heard from water users in the Weiser River Basin about projects that would improve their ability to manage water within the basin, particularly in years with limited water supplies. The projects included improvements and automation of outlet gates at the Lost Valley and Crane Creek Reservoirs which serve a large number of water users. Water Board members encouraged the group to develop a proposal for board consideration.

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