



MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

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TO: Commissioners Helgeson, Brown, Mital, Simpson and Carlson
FROM: Mel Damewood, Chief Engineering and Operations Officer
DATE: May 5, 2017
SUBJECT: Alternative Water Source Program – Status Update
OBJECTIVE: Information Only

Issue

The Board of Commissioners (Board) will be participating in a Strategic Planning Work Session on May 16, 2017. One of the items on the agenda is a discussion regarding the Alternative Water Source Program. To facilitate the discussion, this memo provides the current status of EWEB's efforts to date on the Alternative Water Source Program.

Background

The Alternative Water Source Program at EWEB includes several projects with the intent on developing a diversified and robust water supply system. Projects under the umbrella of the Alternative Water Source Program include:

- The 2nd Source project – the new proposed intake and water treatment plant on the Willamette River.
- The Emergency Water Supply Plan – a system of distribution and treatment trailers along with water storage and transfer equipment.
- Interties with Neighboring Utilities
- Future Expansion of Groundwater Resources.

The current status of each of the above is discussed below.

Discussion

2nd Source Project

This project includes a new intake and water filtration plant on the Willamette River below the confluence of the Coast and Middle Forks. Several previous Board Memoranda have provided the Board updates on this project. These were presented to the Board on March 3, 2015; February 2, 2015; October 4, 2016; and March 7, 2017.

The current status of this project is summarized below:

- Preliminary Design
 - Treatment Plant – Preliminary Design 80% complete, all report chapters drafted, preliminary mechanical, civil, process, and electrical drawings complete.
 - Raw Water Intake – Preliminary Design 40% complete, tunneling feasibility complete, draft report chapters submitted with drawings.

- Property Purchase
 - Two properties acquired for Raw Water Intake
 - Closing on Filtration Plant property.
- Communications/Public Outreach
 - Blue Ribbon Panel – Three sessions completed. Results documented.
 - Presentations at numerous civic organizations and neighborhood meetings completed.
 - Briefings with City and County elected officials complete.
- Total Spent to-date on 2nd Source Project (most recent effort, including amount committed for property purchase) approximately \$2.2 Million.

Emergency Water Supply Plan

This work consists of setting up a system where small quantities of water can be distributed at sites spread out amongst the service territory. In addition, the work includes a significant communication effort on personnel emergency preparedness. Much of the work accomplished to date has been Operational with the testing/mobilization of equipment.

The current status of this work is summarized below:

- Water Distribution Systems
 - Outfitted/plumbed three complete distribution trailers.
 - Purchased multiple blivets (a collapsible water tank) for transporting water to distribution sites and storage.
 - Acquired treatment plant equipment for the construction of one treatment trailer. Anticipated completion this summer. Planned capacity 60 GPM.
- Communications/Public Outreach
 - Emergency Water Bottle Program in progress. This highly successfully communication program has resulted in the distributed of over 12,000 emergency water bottle containers to date.
 - Other Communication Efforts – communication work in this area is coincident with that of the 2nd Source Project.

Interties with Neighboring Utilities

EWEB developed with Springfield Utility Board (SUB) and Rainbow Water District (RWD) a cooperative Interagency Governmental Agreement (IGA) in 2006 to plan, design, construct, and operate water system interties (i.e. connections between the three respective utilities).

EWEB has 5 interties with the Springfield Utility Board (SUB) and Rainbow Water District (RWD) where water can be shared back and forth if one of the entities loses its ability to produce water. These interties can produce up to about 5 MGD for EWEB under optimal conditions.

There are currently no further plans in place to expand intertie capacities between the utilities.

Future Expansion of Groundwater Resources

EWEB holds a ground water right for municipal purposes for 12 million gallons per day (MGD) from 12 wells. The pumping rate of wells within 1 mile of Ayers Pond cannot exceed 2.7 MGD

without mitigation. In addition, EWEB is required to have an intergovernmental agreement with SUB and RWD before using any water under the permit. The permit has a development deadline of August 13, 2028. To date only two wells have been drilled. The wells do not have power, pumps, or distribution connections because EWEB is still evaluating how best to utilize this water supply for redundancy in the system given its limitations.

It may be more cost effective to expand alternative surface water sources than to develop the groundwater source.

Recommendation/Requested Board Action

None. This is an information item only.

If you have any questions please contact Mel Damewood, Chief Engineering and Operations Officer at 541-685-7145 or email mel.damewood@eweb.org.