



MEMORANDUM

EUGENE WATER & ELECTRIC BOARD
WATER DIVISION

Rely on us.

TO: Commissioners Farmer, Brown, Cassidy, Cunningham, and Ernst
FROM: Todd Simmons
DATE: December 29, 2009
SUBJECT: Future Water Quality Concerns

Issue Statement

At the October 6, 2009 Board meeting, Commissioner Cunningham requested a backgrounder or possibly a work session on the quality of EWEB's water, what it was projected to be like in ten years, and what it would take to maintain the quality. This backgrounder intends to provide information relating to the request.

Background

Since EWEB has tapped the McKenzie River as its water source, EWEB's customers have enjoyed some of the highest quality drinking water in the nation. This high quality drinking water can be attributed first to our excellent source. This excellent source water is further enhanced with facilities that are designed, operated, and maintained to meet or exceed federal and state drinking water standards.

Over the next 10 years, EWEB anticipates three key areas that will need to be focused on in order to protect, maintain and assure that our customers receive the highest quality of water that we can provide. These areas are Water Source Protection, upgrading and replacing our aging infrastructure, and continue to use best management practices in our day to day operations and to meet any new regulatory requirements that may be adopted.

Discussion

Source Protection

Water Utility staff as well as Karl Morgenstern in our Environmental Management Department continues to not only monitor the condition of our raw water source and seek innovative ways to protect it, but also anticipates new regulations and develops strategies to utilize the latest technology and best business practices to meet or exceed those regulations. Because of our commitment to Source Protection, EWEB is leading the industry and is often used as the example of detecting water quality trends and seeking ways to mitigate and protect a watershed that is not entirely under our control. Over the next 10 years, the McKenzie Watershed will continue to have human activities that threaten the quality of water, but EWEB staff is

networking with local residents as well as local and state agencies to minimize those impacts before our water quality is compromised.

Aging Infrastructure

EWEB's must have a robust and reliable infrastructure to treat, transmit and distribute water to our customers. As EWEB's 10-Year Capital Improvement Plan progresses, EWEB is investing to upgrade our raw water intake structures, undertaking treatment plant modifications and modernization, upgrading existing pumping and reservoir facilities, and the systematic replacement of our distribution mains.

By upgrading our facilities, EWEB is meeting and anticipating state and federal regulations and it is also providing water utility staff with the tools they need to effectively and efficiently operate the system to treat and maintain the highest water quality. Also, by upgrading and providing redundancy in our systems, especially at the Hayden Bridge Filtration Plant, we are enabling ourselves to be more flexible to respond to source water quality issues that may arise in the future.

Best Management Practices

The one area that receives the least acknowledgement but proves to be the most effective way to maintain water quality in EWEB's system is the Water Utility's staff commitment to education and being involved in the development of best management practices for the water industry. EWEB is a member of the Water Research Foundation, which is the national warehouse for research and distribution of new technologies and practices to improve water quality. EWEB is also actively involved in the American Water Works Association (AWWA) and the Association of Metropolitan Water Agencies (AMWA) which also provide a warehouse of the latest materials, methods and practices in the water industry. These associations also provide EWEB with education on upcoming water quality regulations, and EWEB staff is able to anticipate the impacts of upcoming regulations to the operations of our water facilities.

EWEB provides incentives for our water operations personnel to obtain State Water Operator Certifications at levels above those required for their current position to ensure that our staff is highly qualified and competent to produce and maintain water with the highest quality. This strategy also effectively positions employees to assume additional responsibilities as our more senior employees retire over the next several years.

EWEB continues to look at our Standard Operating Procedures and matching those procedures with Best Management Practices (BMP) of the industry. EWEB is moving forward in anticipating regulations and adjusting our operating procedures to match the BMP's set out by the industry. Ongoing and planned efforts such as installing additional water quality monitoring stations throughout the system, continuing our excellent cross-connection control program, continuous development of design and materials standards and adopting unidirectional system flushing methods all help to ensure the water quality to our customers remain at the highest level possible.

Summary

The topic of water quality and what lies in the future is quite broad and speculative. EWEB's Water Division staff is continuously working on water quality issues, working from a perspective of what our source provides for us, the facilities we have to treat and deliver water to our customers, and what talent and resources we have to keep up with industry trends and customer needs.

Water Utility staff is available to answer any questions you may have about water quality.

Action

No action is required, this is for information only. If you have any questions, please contact Todd Simmons at (541) 685-7373 or e-mail at todd.simmons@eweb.org.