



# MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

*Rely on us.*

TO: Commissioners Simpson, Brown, Helgeson, Manning and Mital  
FROM: Steve Newcomb, Environmental Management Department Manager, and Karl Morgenstern, Environmental Supervisor  
DATE: May 25, 2016  
SUBJECT: Watershed Protection Strategic Planning and 2017 Budget Direction  
OBJECTIVE: 2017 Budget Direction

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## Issue

EWEB Management is in the process of developing a 10-year strategic plan for the Source Water Protection Program. The purpose of the plan is to evaluate efforts to date, provide recommendations for future priorities, and assess how to best incorporate the proposed new Water Filtration Plant on the Willamette River. Management requests Board input on two things: 1) level of investment in 2017 for initiating source protection efforts in the Willamette watersheds; and 2) agreement on assumptions for guiding strategic planning efforts in both the McKenzie and Willamette watersheds. Management plans to engage the Board over the next 8-9 months to finalize a strategic plan that will inform future watershed protection budgets starting in 2018.

## Background

EWEB has pursued a variety of partnerships with local, state, and federal agencies and other organizations in order to protect water quality and the overall health of the watershed. EWEB invests about \$726,000 annually to implement and maintain a comprehensive drinking water source protection program and to mitigate project impacts associated with Leaburg-Walterville and Carmen Smith hydroelectric facilities within the McKenzie Watershed. This funding is often matched with a similar amount of outside funding.

Over the last 15 years, EWEB has invested in risk-based watershed protection programs that: a) are collaborative and build lasting relationships with partners, stakeholders, landowners and communities; b) leverage outside funding and resources; c) are based on best available science; d) address multiple economic, social and environmental issues; e) are sustainable over the long term; and, f) are monitored for effectiveness. Following is a list of the major initiatives that have been implemented with various partners and which address the highest priority threats in the watershed:

- McKenzie Watershed Emergency Response System (MWERS)
- Comprehensive Water Quality Monitoring
- Healthy Farms Clean Water Program
- Septic System Assistance Program
- Voluntary Incentives Program
- Urban Runoff Treatment and Mitigation
- Research and Education

More detailed information about each of these programs is contained in the EWEB Board Memo dated August 18, 2015 found in the link below.

[http://eweb.org/public/commissioners/meetings/2015/150901/Corr\\_WaterShedProtection\\_DWSPOViewandFarm.pdf](http://eweb.org/public/commissioners/meetings/2015/150901/Corr_WaterShedProtection_DWSPOViewandFarm.pdf)

As EWEB pursues development of the proposed new Water Filtration Plant, expansion of source protection efforts into the Middle Fork and Coast Fork Willamette watersheds is recommended. The current strategic planning effort will look at the level of investment and watershed protection programs necessary over the next 10 years to maintain exceptional water quality and address high priority threats to Eugene's drinking water.

## Discussion

### 1) Willamette Watershed 2017 Budget

The final draft of the strategic plan currently under development will not be approved by the Board until early 2017, and budgets for 2017 will be finalized by August 2016. Therefore, Management is requesting direction from the Board on the level of investment for Willamette watershed protection for 2017. It should be noted that withdrawals from the Willamette will not occur until 2022 at the earliest, however, initiating watershed protection efforts in the Willamette watersheds ahead of filtration plant construction and operation has a number of benefits for EWEB. These include gaining a thorough understanding of water quality and associated threats, developing partnerships and identifying opportunities to align efforts, implementing actions with partners that address the higher priority threats, and attracting outside investment that assists in implementing actions that protect the upper Willamette basin.

Management developed three initial investment options for 2017 for the Board to consider:

Base Investment \$70,000	Base Plus Investment \$150,000	Extended Investment \$230,000
Threat Assessment	Threat Assessment	Threat Assessment
GIS/Data Collection	GIS/Data Collection	GIS/Data Collection
Water Quality Monitoring <ul style="list-style-type: none"><li>▪ baseline/storm event at intake site</li><li>▪ opportunistic monitoring</li><li>▪ 1 continuous monitoring station</li><li>▪ focused harmful algal bloom</li></ul>	Water Quality Monitoring <ul style="list-style-type: none"><li>▪ baseline/storm event at intake site</li><li>▪ 1 continuous monitoring station (EWEB)</li><li>▪ focused harmful algal bloom</li><li>▪ baseline/storm event lower Mid Fork</li><li>▪ baseline/storm event lower Coast Fork</li><li>▪ WWTP/Stormwater outfalls</li></ul>	Water Quality Monitoring <ul style="list-style-type: none"><li>▪ WWTP/Stormwater outfalls</li><li>▪ baseline/storm event full Mid Fork</li><li>▪ baseline/storm event full Coast Fork</li><li>▪ expanded harmful algal bloom</li><li>▪ 1 continuous monitoring station (USGS)</li></ul>
	McKenzie Watershed Emergency Response System <ul style="list-style-type: none"><li>▪ drill</li><li>▪ trailer/equipment</li><li>▪ minimum strategy development</li></ul>	McKenzie Watershed Emergency Response System <ul style="list-style-type: none"><li>▪ drill</li><li>▪ trailer/equipment</li><li>▪ full strategy development</li><li>▪ partner coordination/training</li></ul>
	Septic Systems <ul style="list-style-type: none"><li>▪ targeted areas near intake</li><li>▪ targeted zero percent loan</li></ul>	Septic Systems <ul style="list-style-type: none"><li>▪ both watersheds, all areas</li></ul>
	Homeless Camps	Homeless Camps

Current strategic planning efforts will assess threats in the Willamette watersheds at a high level, identify partnerships and opportunities, and design approaches for watershed protection that address and mitigate priority threats. The proposed threat assessment work for 2017 will build off the strategic planning effort and provide much more detailed analysis based on existing data and information.

The base level of investment (\$70,000) is the minimal effort needed to obtain all existing water quality data and Geographic Information System (GIS) data layers, load all data and GIS data layers into EWEB's databases for analysis, and collect detailed information on the various threats in the two watersheds to complete a comprehensive threat assessment. This level of investment also includes water quality monitoring at the future intake site for a comprehensive suite of contaminants associated with storm events, harmful algal blooms, and seasonal changes, as well as establishing a real-time monitoring site for basic water quality parameters.

The base plus level of investment (\$150,000) adds to the base level by increasing water quality monitoring upstream of the future intake site at key monitoring sites in the Middle Fork and Coast Fork watersheds, and monitoring upstream and downstream of wastewater treatment plants and stormwater outfalls to assess impacts. Staff will also implement a watershed emergency response system with partners to develop key spill response strategies, stage response equipment/trailer, and organize and coordinate a drill that uses this equipment to test one of the developed strategies with our partners. The septic system assistance program will be expanded into specific areas with higher density of septic systems immediately upstream of the future intake site. Staff will play an active role in coordinating efforts to identify and cleanup illegal camps along the Middle Fork and Coast Fork Rivers.

The extended investment option (\$230,000) adds to the base and base plus levels of investment by increasing harmful algal bloom monitoring to the major reservoirs in the two watersheds, increasing storm event water quality monitoring sites to better assess high priority threats, establishing a USGS stream flow gage and real-time water quality station for more accurate data and analysis, developing spill response strategies throughout both watersheds, and incorporating partner information into the web-based watershed emergency response system and training response personnel on its use to coordinate efficient and effective spill response efforts. The Septic System Assistance Program would be expanded to include all portions of both watersheds.

## *2) Strategic Planning for Source Protection in the McKenzie and Willamette Watersheds*

Management wants to check-in with the Board on current assumptions that are directing development of a draft strategic plan that will inform future investments in watershed protection efforts associated with the McKenzie and Willamette watersheds.

### McKenzie Watershed Protection Planning Assumptions

1. EWEB will maintain existing programs at stable funding levels with increased partner roles. These programs include the McKenzie Watershed Emergency Response System, Healthy Farms Clean Water Program, Septic System Assistance Program, Comprehensive Water Quality Monitoring Program, and Urban Runoff Treatment and Mitigation.
2. Launch the Voluntary Incentives Program (VIP) that is currently completing a comprehensive pilot testing phase with landowners. The VIP, which will be re-branded as Pure Water Partners, aligns funding from multiple sources, and provides incentives for

- landowners to protect and/or restore riparian forests.
3. Develop a land acquisition fund over time to take advantage of conservation easement and acquisition opportunities in priority areas.
  4. Continue research and education efforts with U of O, OSU, LCC, and local school districts.
  5. Develop additional funding mechanisms for watershed protection and restoration as opportunities arise (e.g., local carbon off-set market).

#### Willamette Watershed Protection Planning Assumptions

1. Protection efforts in the Middle Fork and Coast Fork Willamette Watersheds will be smaller in scope than current efforts in the McKenzie Watershed.
2. Risk-based watershed protection methods as outlined in the background section of this memo will be the methods utilized for the Willamette Watershed.
3. The initial strategic planning approaches may need to be re-evaluated and updated once the threat assessment is completed in 2017.
4. Opportunities for attracting outside investment for watershed protection and restoration may increase for some areas (e.g., water quality credit and carbon off-set markets) if EWEB takes a regional approach (i.e., Upper Willamette Basin).

The June 7, 2016 Board meeting will be an opportunity for Management and the Board to discuss these assumptions to help inform the strategic planning process.

#### **Recommendation**

For the 2017 budget, Management recommends increasing the source protection budget for 2017 by the base plus level of investment (\$150,000 in Water funds) to accommodate increased efforts associated with the proposed new Water Filtration Plant on the Willamette River. Management's recommendation has been vetted with Water Operations, Engineering, and Financial services. This recommended increase in source protection budget for 2017 has little impact on Water's Long Term Financial Plan.

#### **Requested Board Action**

Board direction on strategic planning assumptions and level of investment for 2017 drinking water source protection budget that increases funding for initial efforts in the Willamette watersheds.