



Water Savvy

Partnership Costs and Savings

In August 2008, the cities of Lake Oswego and Tigard formally endorsed a partnership agreement for sharing drinking water resources and costs. Lake Oswego’s water supply system is near capacity and key facilities need expansion and upgrades. Tigard residents seek ownership in a water supply system. Both cities want to keep water affordable for their customers and sharing the cost of new infrastructure to serve both communities does that. The Partnership is planning to expand Lake Oswego’s existing drinking water infrastructure to serve both communities.

Lake Oswego and Tigard drinking water customers will save millions of dollars by sharing costs to jointly improve and operate Lake Oswego’s existing facilities to serve both communities.

Water Supply Options Studied

The cities of Lake Oswego and Tigard completed a comprehensive study in 2007 to evaluate possible formation of a joint water supply system to serve the two communities. **The study identified the partnership approach as the preferred supply option for both cities** based on a variety of factors: cost, permitting, governance, design, financing, and construction related issues.

The evaluation compared financial and other impacts of different water supply options for each city – from Lake Oswego “going it alone,” to fully developing Lake Oswego’s Clackamas River water rights in partnership with Tigard. The water supply options initially evaluated in 2007 are shown below.

Supply Option	Lake Oswego mgd*	Tigard mgd*	Total mgd*	Overview
1 Lake Oswego Existing System	16	0	16	The “Do Nothing” alternative. Lake Oswego contracts for the purchase of additional water from other sources/providers and repairs water system. Tigard seeks to meet its future water needs from other sources.
2 Lake Oswego “Go it alone”	24	0	24	Expands capacity to meet the projected build-out demands of Lake Oswego’s water service area. Tigard seeks to meet its future water needs from other sources.
3 Lake Oswego and Tigard	24	8	32	Develops Lake Oswego’s senior water right to supply Lake Oswego’s build-out demand, and about 40% of Tigard’s future demand.
4 Lake Oswego and Tigard	24	14	38	Develops Lake Oswego’s senior and junior water rights to meet Lake Oswego’s build-out demand, and provides about 70% of Tigard’s future demand.

* Million gallons per day

In a follow-up study in 2008, Tigard also considered other water supply options including the Tualatin Basin Water Supply Project, the Willamette River Project, and continuing to purchase water from the City of Portland.

Partnership Offers Cost Savings for Both Communities

Results of the earlier studies are documented in the *Joint Water Supply System Analysis Report* (Carollo, July 2007) and the *Tigard Supply Alternatives Analysis* (FCS Group, April 2008). These studies confirm that Option 4 –fully developing Lake Oswego’s water rights and partnering with Tigard– is the best supply option for both communities, considering cost and other evaluation factors. Selecting the lowest cost water supply option helps keep water rates affordable for customers.

Lake Oswego Customers Save Millions

With or without the Tigard partnership, Lake Oswego’s water system needs immediate, major upgrades and expansion. The partnership approach allows Lake Oswego to share with Tigard the costs for water system improvements and ongoing maintenance. Both cities will benefit from economies of scale and efficiencies in construction and operations.

An evaluation of “net present value” reveals the potential for significant cost savings. Net present value is a tool

used to evaluate long-term costs. The evaluation calculates capital costs plus ongoing operations and maintenance costs over a long period. These costs are then converted to current dollars so alternatives can be fairly compared. Net present value is not a project cost estimate.

The evaluation shows Lake Oswego customers could save \$35 million in net present value dollars by teaming up with the City of Tigard.

Net Present Value of Lake Oswego’s Supply Options

Lake Oswego “Go it Alone” (Option 2) 24 mgd	Partner with Tigard (Option 4) 38 mgd	Savings
\$118 million	\$83 million	\$35 million

The Carollo study calculated future costs of each option over a 25-year period and then converted results to 2006 dollars.

Net Present Value:

an evaluation method used to compare long-term costs between alternative projects.

Water System Ownership Best Option for Tigard

For Tigard, system ownership in partnership with Lake Oswego offers long-term savings of \$86 million over continuing to be a Portland customer. Again, the comparison of net present value for each supply option indicates the opportunity for significant savings for Tigard ratepayers who will become “owners” of their water supply rather than continuing to “rent” someone else’s system to meet their water supply needs.

Net Present Value of Tigard’s Supply Options

City of Portland	Willamette River Project	Tualatin Basin Water Supply Project	Partner with Lake Oswego (Option 4)	Savings
\$294 million	\$269 million	\$250 million	\$208 million	\$42-86 million

The FCS study calculated future costs of each option over a 50-year period and then converted results to 2008 dollars.

How Partnership Costs are Allocated

Project costs are allocated under a partnership agreement between the two cities. The capital cost split is based on preliminary calculations that take into account the peak water capacity each community will receive from the upgraded system. A preliminary estimate indicates total capital costs would be allocated 43% to Lake Oswego and 57% to Tigard. As more information is known about what repairs, replacements and expansions are needed at the water intake, water pipelines, water treatment plant, reservoirs and pump stations, the 43%/57% split will be adjusted.

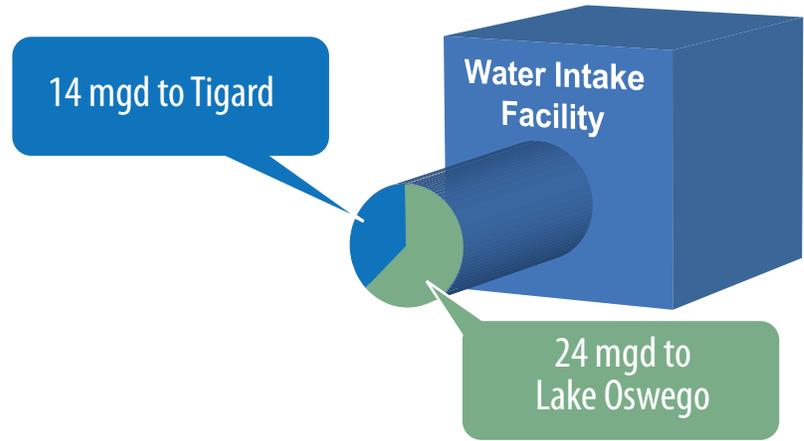
Allocating Capital Costs

Capital costs to construct new facilities will be split according to each city's share of total capacity. Wherever existing facilities are upgraded/upsized and continue in use, each city will pay for their proportionate share of added capacity. These examples show how project costs will be allocated.

New Facility Example

The water intake at the Clackamas River is completely replaced and upsized to convey 38 mgd, utilizing Lake Oswego's full water rights.

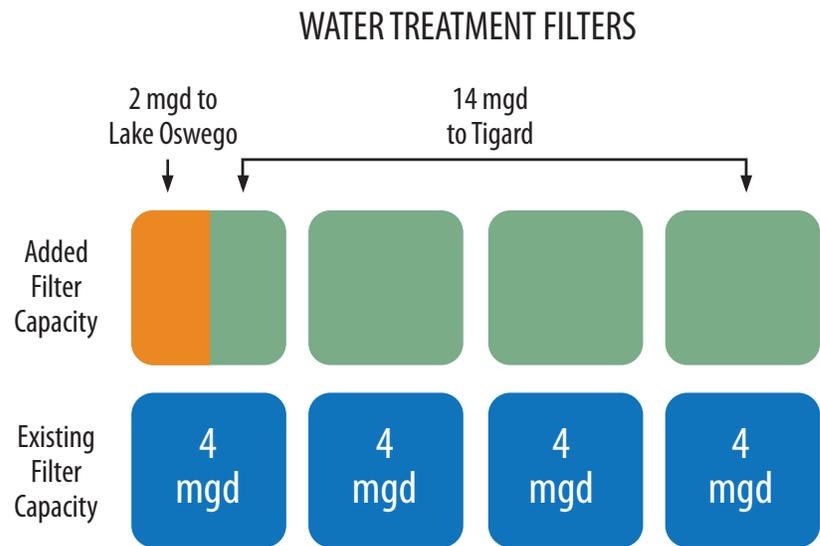
In this example, Lake Oswego would pay its proportionate share of costs (63%) for their peak water capacity (24 mgd of the total 38 mgd expansion) and Tigard would pay for its 14 mgd share of capacity (37% of costs).



Upsized Facility Example

The water treatment plant filters in West Linn are upsized from 16 mgd to 32 mgd. Of the new 16 mgd capacity, Lake Oswego will receive 2 mgd and Tigard will receive 14 mgd.

In this example, Lake Oswego would pay its proportionate share of costs (12.5%) for added capacity (2 mgd of the total 16 mgd expansion) and Tigard would pay for its 14 mgd share of the new filter capacity (87.5%).



Allocating Operations and Maintenance Costs

Costs to operate and maintain (O&M) the Partnership's joint water facilities will also be split by Lake Oswego and Tigard. Fixed O&M costs – costs that do not change with water flow – will be allocated to each city based on its share of total capacity. Variable O&M costs – those related to flow – will be allocated based on each city's actual water consumption.

Tigard Buy-In

Tigard will also pay Lake Oswego for the replacement cost of existing water system facilities (taking into account the facilities' reduced value due to wear and tear) that have capacity available to serve Tigard. For example, where an existing water pipeline will be used to provide water to Tigard, the excess capacity in that pipeline will be purchased by Tigard to help offset Lake Oswego's past investment in their water system.

Water System Ownership

The water facilities – except for the Bonita Road Pump Station that only serves Tigard – will be jointly owned by Lake Oswego and Tigard. Lake Oswego's water rights will continue to belong solely to the City of Lake Oswego but are pledged for use to the partner cities.

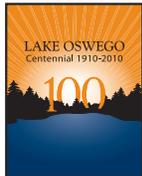
Project Costs and Funding

Project costs for the joint water system improvements are being refined along with facilities planning. The project budget is anticipated to be updated by the end of 2010, when planning for the upgraded water system is completed.

Funding sources for the Partnership project will likely include bonds issued by Lake Oswego and Tigard to be repaid over the years by customers' monthly water charges. Cities typically sell bonds to fund large capital projects, and new connections to the system pay for their respective share of capacity into the expanded system through systems development charges. Both Lake Oswego and Tigard are increasing water rates to repay the principal and interest on bonds, and to operate and maintain the joint water supply system.

Learn More

For questions about cost savings for Lake Oswego and Tigard drinking water customers, contact:



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