



September 19, 2014

Max Brown, Chair
Olympia Planning Commission
c/o Amy Buckler, Associate Planner
City of Olympia
PO Box 1967
Olympia, WA 98507-1967

Dear Chair Brown:

**SUBJECT: Utility Advisory Committee (UAC) 2015-2020 Capital Facilities Plan (CFP)
Recommendation for Drinking Water Utility**

At our September 4, 2014 meeting, the UAC reviewed a summary of the latest Drinking Water Utility rate study from the City's consultant FCS Group. Andy Haub, Public Works Water Resources Director, facilitated the review. The FCS Group estimated the annual Drinking Water rate increases necessary to fund four different CFP scenarios with varying levels of investment. The attached Summary of Drinking Water CFP Scenarios & Financial Impacts table presents anticipated annual rate adjustments attributable to each CFP scenario.

The four CFP scenarios evaluated are summarized as follows:

- Scenario 1: only mandatory / regulatory requirements
- Scenario 2: Scenario 1 plus critical needs
- Scenario 3: Scenario 2 plus secondary needs
- Scenario 4: Scenario 3 plus tertiary needs

Water Resources Staff recommend CFP Scenario 4 as shown in the attached 2015 – 2020 CFP List of Projects. This CFP includes \$30.8 million for 2015-2020, representing a \$12.3 million increase from the 2014-2019 CFP (\$18.5 million). Approximately \$11 million of the CFP will be funded by a State-supported low interest loan, thereby reducing funding needs.

The Drinking Water capital improvement program continues to be driven by costly projects largely mandated by State public health requirements. Additionally, the Utility needs to fund routine infrastructure retrofits and upgrades necessary to maintain existing infrastructure. CFP Scenario 4 remains consistent with the 2009-2014 Water System Plan and begins to incorporate findings from the evolving 2015-2020 Plan anticipated for completion next year.

The UAC recommends that Council adopt CFP Scenario 4 for the Drinking Water Utility. The Committee thinks the utility should unquestionably make the investments in Scenario 3, which staff described as including "proactive maintenance activities that should reduce long-term O&M costs." We went back and forth for some time about Scenario 4, but eventually arrived at a consensus on recommending it, given the relatively small additional expenses involved over the next several years of actual spending. (You will note that in 2015 the difference between Scenario 3 and Scenario 4 is

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\$16,000 in a \$5 million budget; in 2016 it's \$125,000 in an almost \$7 million budget, and in 2018 it's about \$250,000 in a \$5.5 million budget.) The UAC continues to support the CFP and the ongoing planning work of Public Works Water Resources.

If you have any questions, I can be reached at 360.352.2209 or via e-mail at curtzt@nuprometheus.com

Sincerely,

A handwritten signature in black ink that reads "T. B. Curtz". The signature is written in a cursive, slightly slanted style.

THAD CURTZ
Chair
Utility Advisory Committee

TC/lm

cc: Olympia City Council
Utility Advisory Committee
Rich Hoey, P.E., Public Works Director
Andy Haub, P.E., Water Resources Director

City of Olympia

Summary of Drinking Water CFP Scenarios & Financial Impacts

| Projected Capital Expenditures [1] | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|--------------|--------------|--------------|--------------|--------------|--------------|
| Scenario 0 - No CFP | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Scenario 1 - Mandatory/Regulatory Projects | \$ 7,347,200 | \$ 4,411,750 | \$ 800,000 | \$ 150,000 | \$ 150,000 | \$ 412,500 |
| Scenario 2 - Scenario 1 + Critical Projects | \$ 8,322,200 | \$ 6,184,250 | \$ 4,153,500 | \$ 1,857,000 | \$ 1,150,000 | \$ 3,137,500 |
| Scenario 3 - Scenario 2 + Secondary Needs | \$ 8,500,325 | \$ 6,703,000 | \$ 5,261,000 | \$ 2,784,500 | \$ 1,587,500 | \$ 3,675,000 |
| Scenario 4 - Scenario 3 + Tertiary Needs | \$ 8,516,075 | \$ 6,829,000 | \$ 5,504,500 | \$ 3,048,000 | \$ 1,853,750 | \$ 4,087,750 |

[1] Assumes that for each project, 75% of the planned cost is incurred in the first year of construction; 25% of the cost is deferred to the following year to account for typical delays in project completion.

| Water Rate Adjustments | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|-------|-------|-------|-------|-------|-------|
| Scenario 0 - No CFP | 6.00% | 2.00% | 2.00% | 2.00% | 2.00% | 2.00% |
| Scenario 1 - Mandatory/Regulatory Projects | 6.00% | 6.00% | 5.00% | 3.00% | 2.00% | 2.00% |
| Scenario 2 - Scenario 1 + Critical Projects | 6.00% | 6.00% | 5.00% | 4.00% | 2.00% | 2.00% |
| Scenario 3 - Scenario 2 + Secondary Needs | 6.00% | 6.00% | 5.00% | 5.00% | 2.00% | 2.00% |
| Scenario 4 - Scenario 3 + Tertiary Needs | 6.00% | 6.00% | 5.00% | 5.00% | 4.00% | 4.00% |

| Water Rate Adjustments (Alternate Format) | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|-------|-------|-------|-------|-------|-------|
| Rate Increases Without CFP | 6.00% | 2.00% | 2.00% | 2.00% | 2.00% | 2.00% |
| Incremental Rate Increases Attributable to CFP: | | | | | | |
| Scenario 1 - Mandatory/Regulatory Projects | 0.00% | 4.00% | 3.00% | 1.00% | 0.00% | 0.00% |
| Scenario 2 - Scenario 1 + Critical Projects | 0.00% | 4.00% | 3.00% | 2.00% | 0.00% | 0.00% |
| Scenario 3 - Scenario 2 + Secondary Needs | 0.00% | 4.00% | 3.00% | 3.00% | 0.00% | 0.00% |
| Scenario 4 - Scenario 3 + Tertiary Needs | 0.00% | 4.00% | 3.00% | 3.00% | 2.00% | 2.00% |

2015-2020 CFP - List of Projects

6/13/2014

Drinking Water Utility

Scenario 4 = Scenario 3 + Tertiary Needs

| Program # | Program Name | Project | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | | |
|-------------|--|--|--------------|--------------|--------------|------------|------------|--------------|----|------------|
| 9021 | Asphalt Overlays | | | | | | | | | |
| | (100% construction) | Asphalt Overlay | \$ 10,500 | \$ 10,500 | \$ 10,500 | \$ 10,500 | \$ 10,500 | \$ 10,500 | \$ | 63,000 |
| | | | | | | | | | \$ | 63,000 |
| 9408 | Small Diameter Water Main | | | | | | | | | |
| | (20% engineering, 80% construction) | Small Diameter Water Main | \$ 500,000 | \$ 500,000 | \$ 500,000 | \$ 500,000 | \$ 500,000 | \$ 500,000 | \$ | 3,000,000 |
| | | | | | | | | | \$ | 3,000,000 |
| 9609 | Transmission and Distribution Projects | | | | | | | | | |
| | (100% construction) | Fones Road Watermain Construction | | | | | | \$ 2,300,000 | \$ | 2,300,000 |
| | (25% engineering, 80% construction) | Fones Road Booster Rehabilitation Construction Design 2015 | \$ 1,090,000 | | | | | | \$ | 1,090,000 |
| | (20% engineering, 80% construction) | Morse-Merryman Extension to New Log Cabin (417 Zone) Reservoir | \$ 490,000 | | | | | | \$ | 490,000 |
| | (20% engineering, 80% construction) | Pressure Reducing Valve - East Bay Drive | | | | | \$ 247,000 | | \$ | 247,000 |
| | (20% engineering, 80% construction) | Kaiser Road Watermain Extension to Evergreen Park Drive | | | \$ 760,000 | | | | \$ | 760,000 |
| | (20% engineering, 80% construction) | AC Pipe Replacement- Boulevard Rd Roundabout at Morse Meryman Rd | | \$ 780,000 | | | | | \$ | 780,000 |
| | (100% construction) | Distribution System Oversizing | \$ 27,000 | \$ 27,000 | \$ 27,000 | \$ 27,000 | \$ 27,000 | \$ 27,000 | \$ | 162,000 |
| | (20% engineering, 80% construction) | Percival Creek Watermain | \$ 100,000 | \$ 400,000 | | | | | \$ | 500,000 |
| | (20% engineering, 80% construction) | West Bay Booster Station Pump and Electrical Upgrade | \$ 150,000 | | | | | | \$ | 150,000 |
| | (20% engineering, 80% construction) | AC and Aging Pipe Replacement | \$ 500,000 | \$ 500,000 | \$ 500,000 | \$ 500,000 | \$ 500,000 | \$ 500,000 | \$ | 3,000,000 |
| | (20% engineering, 80% construction) | Meridian Overflow and 36-inch Watermain | \$ 150,000 | | | | | | \$ | 150,000 |
| | (20% engineering, 80% construction) | McCormick Valve House | | \$ 150,000 | | | | | \$ | 150,000 |
| | (20% engineering, 80% construction) | Booster Station Upgrade/Rehabilitation | | | \$ 150,000 | \$ 150,000 | \$ 150,000 | \$ 150,000 | \$ | 600,000 |
| | 100% engineering | Distribution Main Condition Assessment | \$ 25,000 | \$ 25,000 | \$ 25,000 | \$ 25,000 | \$ 25,000 | \$ 25,000 | \$ | 150,000 |
| | 100% engineering | Cross Country Mains | \$ 25,000 | \$ 25,000 | \$ 25,000 | \$ 25,000 | \$ 25,000 | \$ 25,000 | \$ | 150,000 |
| | 100% Asset Management | Asset Management Program | \$ 50,000 | \$ 50,000 | \$ 50,000 | \$ 50,000 | \$ 50,000 | \$ 50,000 | \$ | 300,000 |
| | 100% equipment | On-site Generator Replacement Plan | | \$ 75,000 | | \$ 75,000 | | \$ 75,000 | \$ | 225,000 |
| | (20% engineering, 80% construction) | Corrosion Control (aeration) Tower Condition Assessment & Upgrades | | \$ 25,000 | \$ 25,000 | \$ 25,000 | \$ 25,000 | \$ 25,000 | \$ | 125,000 |
| | 100% equipment | Water Meter Replacement | | | | | | | \$ | - |
| | 100% equipment | Water Meter AMR Radio Replacement | | | | | | | \$ | - |
| | (20% engineering, 80% construction) | Eastside Street and Henderson Blvd Watermain Extension | | | | | | | \$ | - |
| | (20% engineering, 80% construction) | PRV Telemetry (Radio-based) | | | | | | | \$ | - |
| | | | | | | | | | \$ | 11,329,000 |
| 9610 | Water Storage Systems | | | | | | | | | |
| | (20% engineering, 80% construction) | New Log Cabin (417 Zone, SE Olympia) Reservoir Construction | \$ 7,350,000 | | | | | | \$ | 7,350,000 |
| | (20% engineering, 80% construction) | Hoffman Court Reservoir Interior Coating Replacement | | | \$ 578,000 | | | | \$ | 578,000 |
| | (20% engineering, 80% construction) | Fir Street Reservoir #1 and #2 Seismic Retrofit | | | \$ 1,000,000 | | | | \$ | 1,000,000 |
| | (20% engineering, 80% construction) | Elliott Reservoir Seismic Retrofit | | | \$ 1,250,000 | | | | \$ | 1,250,000 |
| | | Storage Reservoir Coating (Interior/Exterior) | | | | \$ 300,000 | | \$ 300,000 | \$ | 600,000 |
| | | | | | | | | | \$ | 10,778,000 |
| 9700 | Water Source Development & Protection | | | | | | | | | |
| | (20% engineering, 80% construction) | Briggs Well Construction | | | | | | | \$ | - |
| | (100% construction) | McAllister Wellfield Corrosion Control Treatment | | \$ 2,200,000 | | | | | \$ | 2,200,000 |
| | (20% engineering, 80% construction) | McAllister Wellfield Mitigation - Deschutes River | \$ 267,000 | \$ 100,000 | \$ 100,000 | \$ 100,000 | \$ 100,000 | \$ 100,000 | \$ | 767,000 |
| | (20% engineering, 80% construction) | McAllister Wellfield Mitigation - Woodland Creek | \$ 50,000 | \$ 50,000 | \$ 50,000 | \$ 50,000 | \$ 50,000 | \$ 50,000 | \$ | 300,000 |
| | (100% planning and design) | Olympia Brewery Water Engineering Analysis | \$ 50,000 | | | | | \$ 50,000 | \$ | 100,000 |
| | (20% engineering, 80% construction) | Indian Summer Well Chlorination | | \$ 150,000 | | | | | \$ | 150,000 |

| | | | | | | | | | | | |
|-------------|---|---|------------|---------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|
| | (20% engineering, 80% construction) | Shana Park Well Water Quality Study | | \$ 150,000 | | | | | | \$ 150,000 | |
| | (20% engineering, 80% construction) | Hoffman Well Treatment | | | | | | | | \$ - | \$ 3,667,000 |
| | | | | | | | | | | | |
| 9701 | Groundwater Protection | | | | | | | | | | |
| | (100% easements and appraisals) | Groundwater Protection Land Acquisition - (Easements, Appraisals Etc.) | | \$ 15,000 | | | \$ 15,000 | | \$ 15,000 | \$ 45,000 | |
| | (100% planning) | Wellhead Protection Program | | | | \$ 250,000 | \$ 150,000 | | | \$ 400,000 | |
| | (20% engineering, 80% construction) | Groundwater Monitoring Wells | \$ 100,000 | \$ 150,000 | \$ 200,000 | \$ 200,000 | | | | \$ 650,000 | \$ 1,095,000 |
| | | | | | | | | | | | |
| 9710 | Reclaimed Water | | | | | | | | | | |
| | (20% engineering, 80% construction) | Reclaimed Water Infrastructure | | | | | | | \$ 250,000 | \$ 250,000 | |
| | (20% engineering, 80% construction) | Port of Olympia - Eliminate Northern Dead End | | \$ 50,000 | | | | | | \$ 50,000 | |
| | (20% engineering, 80% construction) | Water Filling Stations | | | | | | | \$ 100,000 | \$ 100,000 | \$ 400,000 |
| | | | | | | | | | | | |
| 9903 | Infrastructure Pre-Design and Planning | | | | | | | | | | |
| | (100% pre-design and planning) | Pre-Design and Planning | \$ 21,000 | \$ 21,000 | \$ 21,000 | \$ 21,000 | \$ 21,000 | \$ 21,000 | \$ 21,000 | \$ 126,000 | \$ 126,000 |
| | | | | | | | | | | | |
| 9906 | Water System Planning | | | | | | | | | | |
| | | | | | | | | | \$ 300,000 | \$ 300,000 | \$ 300,000 |
| | | | | | | | | | | | |
| | | | | | | | | | | \$ 30,758,000 | \$ 30,758,000 |
| | | | | | | | | | | | |
| | | | | \$ 10,955,500 | \$ 5,453,500 | \$ 5,521,500 | \$ 2,223,500 | \$ 1,730,500 | \$ 4,873,500 | \$ 30,758,000 | |