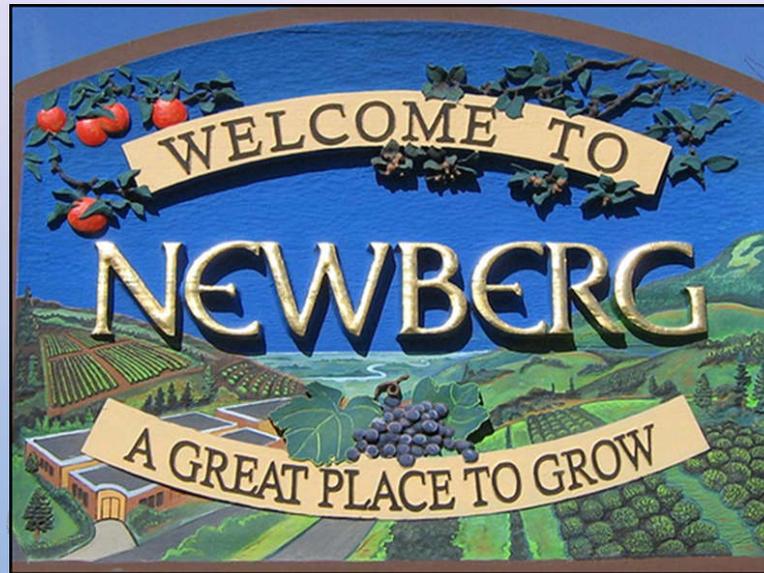


**NOVEMBER 21, 2019 CITIZENS RATE REVIEW COMMITTEE MEETING
NON-POTABLE WATER SYSTEM PRESENTATION
PRESENTATION ALSO GIVEN TO
C.P.R.D. BOARD & NEWBERG CITY COUNCIL AT
THE FEBRUARY 22, 2018 JOINT MEETING**



NON-POTABLE WATER SYSTEM

- Purpose: To reduce the demand for potable water by large irrigation and/or manufacturing users.
- The non-potable system consists of 2 water sources
 - Otis Springs
 - Recycled water from the Wastewater Treatment Plant



Recycled Water Membrane Filters

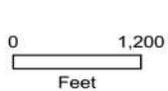
NON-POTABLE WATER HISTORY

- October 2005, a reuse system preliminary design report was completed.
- Resolution #2007-2738 authorized the City Manager to enter into an intergovernmental agreement (IGA) with the Chehalem Park and Recreation District (CPRD) for the provision of non-potable irrigation water to the Chehalem Glenn Golf Course.
- In 2008 CH2M Hill prepared a report which identified required improvements needed to provide recycled water to the Chehalem Glenn Golf Course.
- 2008 the City's DEQ-NPDES discharge permit was modified to incorporate regulations pertaining to the outfall and operation of the Recycled water system.
- System improvements were constructed in 2008 and 2009.



Chehalem Glenn Golf Course
Storage Pond

EXISTING SYSTEM MAP



City of Newberg
Non-Potable Water System Map
WWTP Reuse System & Otis Spring

1/14/2016

RECYCLED WATER

- Membrane filtration system and distribution piping was constructed in 2008/2009.
- System produces Class A Recycled Water per Oregon Administrative Rules (OAR) 340-55.
- Currently can produce 1 mg – can be expanded to 2 mg.
- Permitted by DEQ for use at the Golf Course only.
- Not currently required for our wastewater effluent discharge to the Willamette River
- Changes of use must go to DEQ for new permit.
- Regulations for use require notification at the location of use (signs).



Membrane Filter Building Chemical Storage

OTIS SPRINGS

- City used Otis Springs as a secondary water source until the 1980s.
- 1919 water right is for 2.58 million gallons per day.
- Produces 0.3-0.5 million gallons per day.
- No treatment is provided.
- Onsite storage of 300,000 gallons.
- Piping was extended to the Golf Course in 2007.

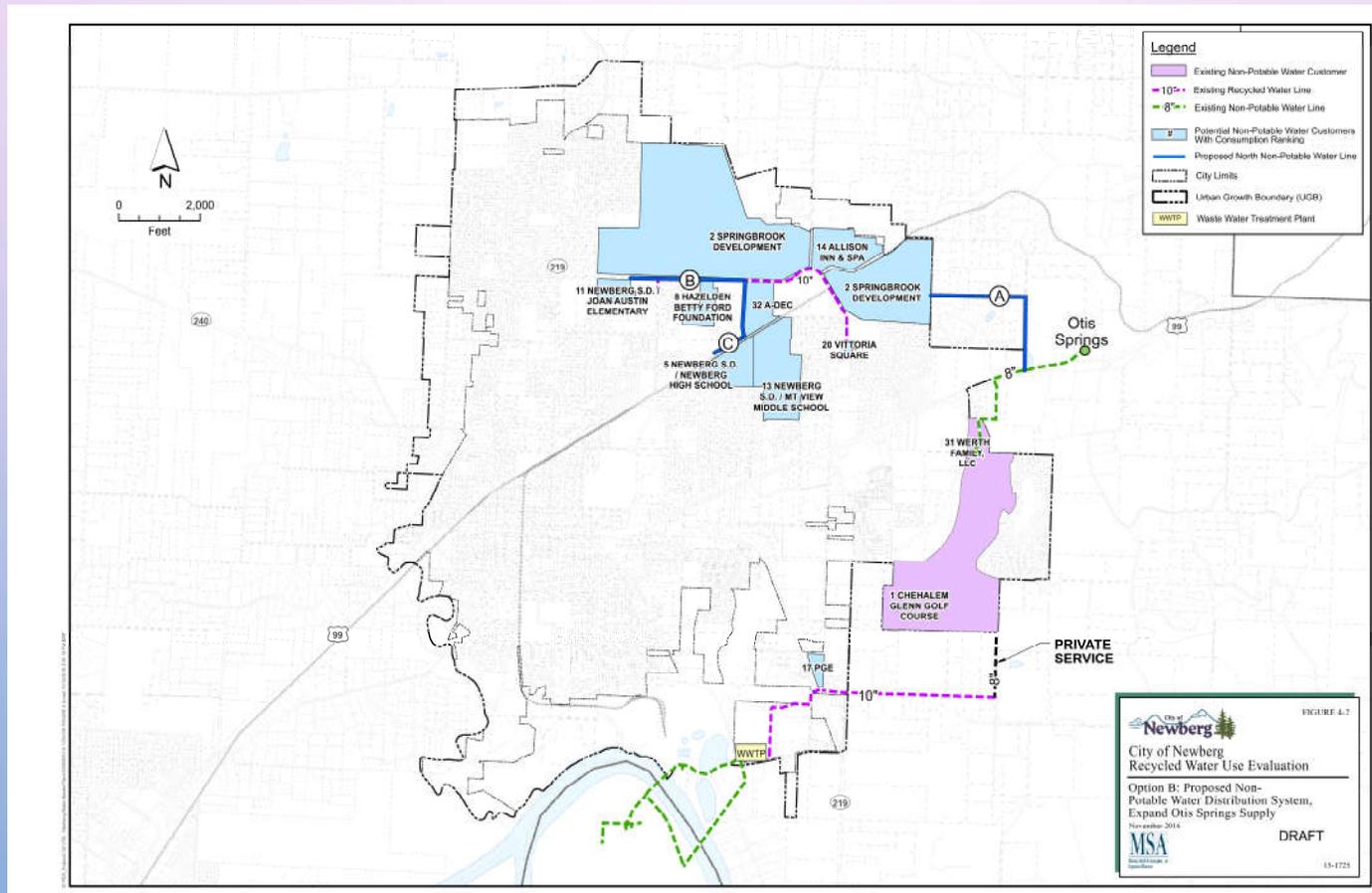


CAPITAL COSTS

- Recycled water study, engineering design, water treatment building, membrane filters, onsite storage/pumping, electrical upgrades, backup generator, public piping system: Cost \$8.2 million, May 2009 Business Oregon Loan.
- Otis Spring pipe extension to the golf course, \$432,000 (City paid costs)
- The Chehalem Glenn golf course constructed the storage pond and transmission pipeline from Wilsonville Road for recycled water and a transmission pipeline from Providence Drive for Otis Springs water.

FUTURE SYSTEM EXPANSION

2017 Water Master Plan Option B, Otis Spring expansion, was selected by Council 8-1-2016.



RATE HISTORY

- 2009 to 2016, \$3.52 per ccf, no increases for inflation
- 2016 CRRC/Council approved a rate reduction to \$2.51 per ccf, effective in January 2017. The rate reduction was based on updated operations and maintenance cost analysis and a reduction in capital cost allocations.
- 2018 CRRC is reviewing rates for 2019 and 2020. The 2016 estimated operations and maintenance, and capital cost line items have remained unchanged, except that the O&M costs should be adjusted for inflation (about 3% per year). A 3 % increase to the O&M costs would add about \$0.06 each year (2017, 2018, 2019, 2020).

NEXT STEPS

- The Citizens Rate Review Committee has their Town Hall at 6:30 on Thursday 3/1/18. Rates will then be recommended to Council for the 4/2/18 Council meeting (tentative).
- The City is in discussion with several industrial users, and the proposed Providence medical office building project, in connecting to the non-potable water systems.
- The adopted Springbrook Master Plan requires the use of non-potable water in the parks and open space areas.
- CPRD may expand the golf course by an additional 9 holes in the future.
- Use of non-potable water will be discussed as a part of the Riverfront Master Plan update.
- Refinancing of the existing 2009 Business Oregon loan may occur in near future, which may result in some future cost savings.