

NEWBERG WATER PLANT DESIGN REQUEST FOR THE HONORABLE OREGON WAYS AND MEANS COMMITTEE

A Short White Paper Illuminating Our Request

Presented by: Will Worthey | City Manager will.worthey@newbergoregon.gov Dillon Peck | Grant Writer dillon.peck@newbergoregon.gov





This page is intentionally left blank.

OVERVIEW

The city of Newberg is facing an existential crisis, the very essence of being caught between a rock and a hard place. As one of Oregon's fastest growing communities with

many struggling homeowners trying to enter the housing market, we have seen unprecedented pressure placed on our water and wastewater infrastructure.

Key Dates	Population
Newberg 2020	24,000
Newberg 2025	26,000
Newberg Estimate 2035	30,000



Newberg: Population (2023)

Data from www2.census.gov via Data Commons

Figure 1: Newberg Population trends 26K folk - 7,159 rate paying units and growing fast

The City of Newberg's drinking water comes from groundwater wells on the south side of the Willamette River in Marion County, which is then transferred to Newberg Water Treatment Plant at 2200 NE Wynooski Rd. The water undergoes a filtration process that strips iron and manganese from the water. When the plant was new in 1953, so was Perry Como.

Housing unit growth is a mixed blessing for medium sized communities such as our own. While the state has set ambitious goals for housing production it is at the municipal level that the rubber meets the road. We face twin threats to our rates fund liquidity and ending fund balances. First, we have an active Oregon DEQ letter, a pre-cursor to a housing construction shut down that states that despite no discharges into the Willamette River "our winter flows are beyond current plant capacity". The likely cost of yet another waste water upgrade driven by housing starts - over \$35M!

Simultaneously, well-meaning state efforts such as HB2001 and an easing of lot partition restrictions have added pressure to our water rates model. In the two 2025 – 2029 biennia, HB2001 projects alone are going to gobble up \$5.5M of our water fund revenue. Debt funding the whole cost of a new water plant is also not an option since we are still paying down the debt from a previous DEQ loan for our last wastewater projects. We cannot hammer the poorest members of our community that heavily.

For full transparency we believe that Newberg is a very efficiently run city and we are not

THE PROBLEM

In the mid-2030s, if Newberg does its share of meeting the Governor's housing production goals, we will not be able to make sufficient water with our archaic eighty year old ground water treatment plant. Housing production and water / waste water infrastructure go hand in hand.



Figure 2: Newberg's current Water Treatment Plant C. 1953 dilapidated and not in compliance with OHA standards

Our engineers have run a series of models based upon how successful we can be to ramp up housing production. Please note for context that the city of Newberg has already reformed its SDC model with steep cuts to promote housing production.

Each year for the last four years we have had between 200 and 100 units added to our housing stock. This adds directly to our peak months of water demand. As another context item we need to keep approximately 5.5 MG in fire reserve, so demand cannot be allowed to outstrip supply. projecting the spending deficits that many other communities have forecasted. Instead, our issue is a simple cash flow problem. We will need to build our new ground water plant long before we can save up the likely price tag of \$33 -\$35M.

Below is our 2024 graph that shows a **peak month** water needs forecast for new housing units equal to 75/yr, 130/yr, 200/yr, and also shows a forecast based on the latest PSU population forecast.

The forecast uses Newberg's August 2023 water usage per water account to calculate the additional water requirements for the annual new home build rates. July and August are the two peak months and both are conveniently 31 days each.

For this model we used the peak month daily rate rather than an average of June, July, and August (or some other metric) because it is that peak month usage will represent the problem period. If the demand was 5.7MG / day for 30 days and the difference was made up from the reserve, the 12MG would draw down to 6MG putting the city in a precarious position.



Figure 3: The coming crisis – where the line crosses above 5.5 MG/day represents the point of crisis.

CASH ON HAND

Despite raising the water SDC by approximately 20% the city of Newberg currently has no water SDCs available due to previous projects including the mandated HB2001 work.

We have \$16.1M in water funds as of the January ledger report. If you deduct an intelligent 17% reserve this leaves us with about \$13M that can be used from this source.

The city is already planning on getting into yet more debt, most likely by the mechanism of a federal WIFIA loan. This type of debt instrument has a 50% match requirement. Let us remember that city-rates-paid debt hits our poorest residents the most since it elevates their ratebased cost of living usually by far more than the rate of social security COLAs.

WIFIA thinking \$13M x 2 = \$26M, an internal loan from another fund could get us to \$30M. We are therefore still short on the likely cost of \$33 – \$35M and even this assumes prices do not spike again.

WHAT WE'VE DONE (and tried to do) SO FAR

First, a previous attempt to build a new water plant at another site collapsed due to ballooning construction costs (due to the 50% match restrictions of a previous federal WIFIA loan). Back in 2021 the estimated price tag for the water plant was \$21.5M or less. When cost estimates rose above \$30M the Consor Engineering contract and previous WIFIA loan had to be cancelled, putting us back to square one.

Starting from scratch, Geotechnical evaluation of two potential sites for the proposed groundwater treatment plant was launched in 2024 and is nearly complete. The full data will be ready in May of 2025. Both sites are already owned by the City of Newberg and will require no property acquisition. We have already received preliminary results that the northern site has a good stable geotechnical profile. We hope that this can contain the costs to the \$33 -\$35M level.

The City of Newberg has determined that our existing water rights are sufficient to accommodate a groundwater treatment facility of this size and capacity. We project that design work for this project will need to begin by July 2027 to keep us on schedule to meet Newberg's rising water needs. Once design is completed, we will have a clearer picture of required next steps, including building permits and approvals. We fully anticipate that we will need to raise more money to meet the demands of a future WIFIA loan.

IN SUMMARY...

To prevent a situation in which our reserve capacity is depleted during peak summer months, our treatment plant needs to be replaced with a newer, larger-capacity system of at least 9.0 MG per day. In order to do so, we are seeking funding for design work on a new groundwater treatment plant to replace our aging plant.

The City of Newberg is spending millions of dollars annually to support state housing goals.

The City of Newberg must meet DEQ demands to completely re-build its waste water plant (over \$30M).

The City of Newberg *must* have a new \$33 -\$35M water plant within the decade to simply keep pace with growth and for fire safety.

This is a practical & non partisan question, *will the State of Oregon help Newberg?*

