## Groundwater Recharge: Sandy's New Water Reuse Strategy

The City of Sandy is pursuing a new wastewater strategy – treating water to extremely high standards and then discharging the treated effluent underground. This approach aligns with the State of Oregon's goals to advance water reuse (see HB 2169).

At its core, Sandy's approach is simple:

- **Treat wastewater to a very high standard and put it to beneficial use by recharging our local aquifers, boosting our community's long-term access to clean water rather than sending it away downriver.**

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### The Existing Wastewater Challenge Sandy Is Solving

Sandy's current system reflects common constraints facing Oregon communities:

- Existing winter discharge to Tickle Creek is limited by strict dilution requirements
- Summer reuse depends on irrigation demand, which is seasonal and inconsistent
- The State's "Three Basin Rule" prevents increasing discharge, even as the city grows

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### Sandy's New Direction: A Balanced, Long-Term Solution for Wastewater

After evaluating multiple alternatives, Sandy is pursuing a three-part strategy:

**1. Advanced Wastewater Treatment**

- Upgrading our system to membrane bioreactor (MBR) technology
- Producing Class A or higher effluent through activated carbon or reverse osmosis

**2. Multiple Conventional Discharge Options**

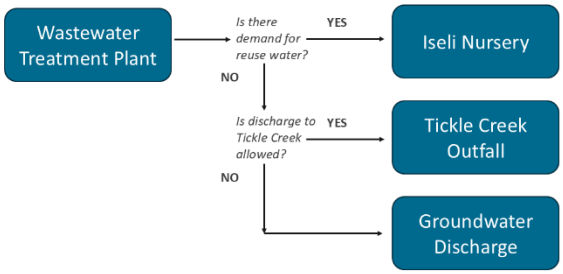
- Discharge into Tickle Creek as allowed under current permit limitations
- Maintaining irrigation reuse with nursery partner when feasible

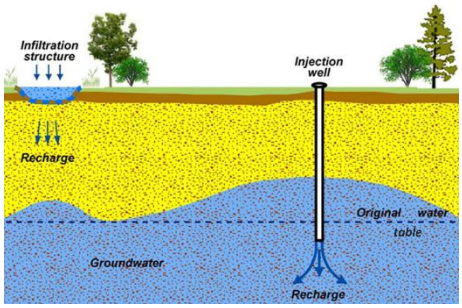
**3. Groundwater Recharge When Conventional Options Are Unavailable**

- Injection of the highly treated water into local aquifer
- Hybrid approach provides year-round flexibility and long-term compliance

## Groundwater Recharge: Proven Established Technology

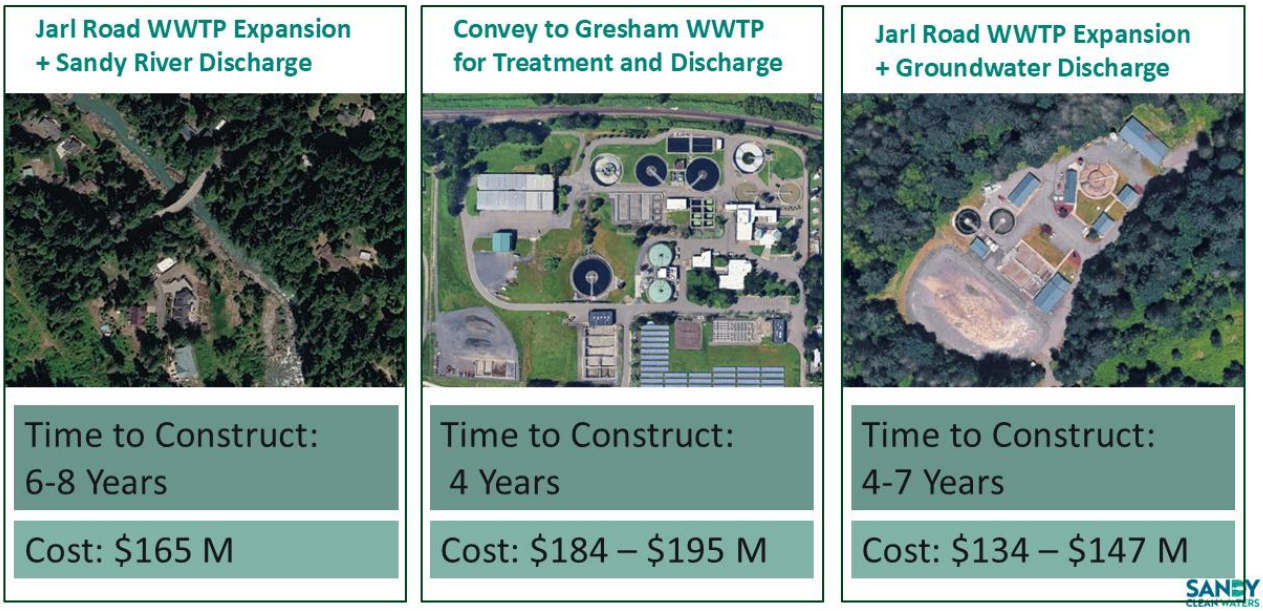
- Groundwater recharge projects have been operating in the US for over 50 years.
- Washington has allowed recharge since the 1990s
- Multi-layer treatment combined with natural soil filtration produces abundant safe water for municipal and agricultural use




## Cost Considerations

While groundwater recharge carries a substantial cost, it is the least expensive of the viable alternatives available to Sandy.




**Learn More: Read the Facility Plan Amendment on our website at: www.ci.sandy.or.us**