

A NEW EVOLUTION

In Wastewater Treatment For the Sacramento Region

Regional San is committed to protecting the environment, safeguarding the community, and keeping customer rates as low as possible. We have an excellent track record and make continual improvements at our treatment plant to ensure that commitment. Now, however, a major plant upgrade is needed to meet new, very strict regulations governing wastewater discharge into the Sacramento River. Named the EchoWater Project, this massive upgrade is currently underway and must be completed by 2023.



PROJECT BENEFITS

The EchoWater Project will treat and recycle wastewater to a clean, natural state – much like an "echo" returning to its original source. This is part of our commitment to environmental stewardship. There are many project benefits:

- Improve water quality in the Sacramento River
- Protect the fragile Delta ecosystem
- Expand opportunities for recycled water use
- Assure plant capabilities well into the future

BACKGROUND

Regional San serves more than 1.4 million people, treating the entire Sacramento region's wastewater at the regional plant near Elk Grove. The cleaned water is then discharged into the Sacramento River. The existing plant was built in the late 1970s and became fully operational in 1982. Over the decades, Regional San has worked diligently to comply with strict water quality requirements, but tough new requirements have been imposed on us by the State. To meet these requirements, the treatment plant needs a major upgrade requiring new processes, including; nutrient removal, filtering, additional disinfection, and more.



At left is an artist's rendering of the future "biological nutrient removal" (BNR) facility. This process will eliminate nearly all ammonia and most nitrate from the treated effluent. This is only one of the many new processes and facilities included in the EchoWater Project. The BNR project alone is massive – the size of approximately 20 football fields – and will cost approximately \$600 million to complete, with additional ongoing maintenance costs.

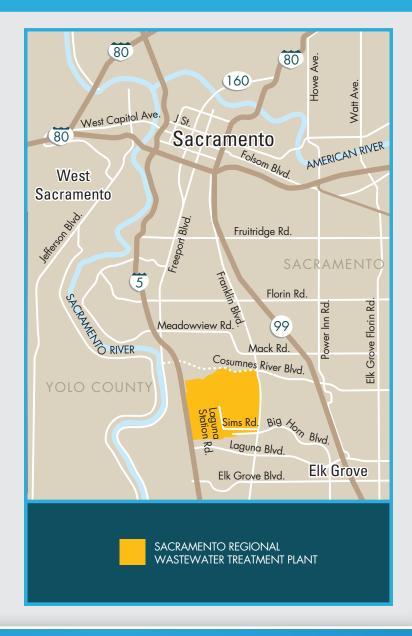
ADVANCED TREATMENT NEEDED

Regional San currently treats wastewater to a "secondary" level before discharging to the Sacramento River. To meet the new regulations, Regional San must upgrade the plant, this includes a number of specific treatment actions:

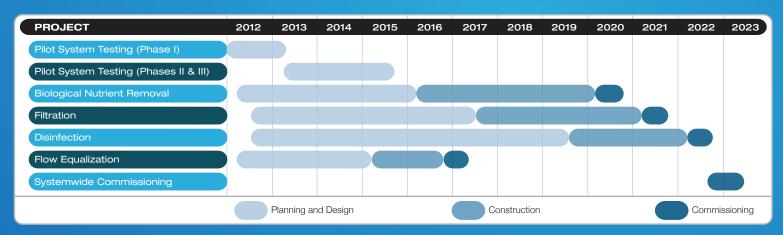
- Removal of ammonia and nitrates
- Filtration to remove very small particles and pathogens
- Higher level of disinfection to inactivate even more pathogens

MAJOR PROJECT MILESTONES & COST

The EchoWater Project will take years to design, construct, test, and begin operations. While the upgrade is being built, ongoing operations of the plant must continue, uninterrupted, which is no small task. The total EchoWater Project cost is estimated between \$1.5 and \$2.1 billion. To fund it, customer rates will gradually increase annually to be between the mid \$40s to low \$50s per month by 2023.



ANTICIPATED ECHOWATER SCHEDULE



MORE INFORMATION

