

SOUTH SACRAMENTO COUNTY AGRICULTURE AND HABITAT LANDS WATER RECYCLING PROJECT

Using recycled water to irrigate agricultural land, create habitats for endangered wildlife, offset groundwater pumping and preserve our drinking water supply.



Sacramento Regional County
Sanitation District

SACRAMENTO'S ROLE IN IMPROVING STATE WATER SUPPLY PROBLEMS

California continues to be faced with an ongoing water crisis and has been forced to make better use and reuse of its water resources. Sacramento has an important role in that effort. We cannot simply rely on the plentiful water supplies of the past as we move into the future. Recycled water initiatives, along with water conservation, must be increased. Northern California has a long-standing practice of coordination among its numerous water purveyors to integrate water supply planning, but more can and must be done.

SRCSO and Water Recycling

As the region's largest wastewater treatment agency, the Sacramento Regional County Sanitation District (SRCSO) produces a large amount of treated wastewater each day. This water can be safely reused in a number of beneficial ways.

A Proven Track Record

SRCSO has experience in water recycling. SRCSO operates a small-scale water recycling facility that recycles up to four million gallons of water a day for landscape irrigation in the Elk Grove area during the dry, summer months. With additional funding and uses for recycled water, this amount could be greatly increased.

SRCSO has identified specific geographical areas and projects that could make further use of recycled water. One of the most feasible projects is the "South Sacramento County Agriculture and Habitat Lands Water Recycling Project."



Water recycling offers wide ranging benefits to the Sacramento region

Water recycling makes prudent use of limited water supplies and:

- provides a secure, safe and reliable water supply for certain types of landscape and agricultural lands;
- offsets groundwater pumping to allow water levels in aquifers to be preserved;
- helps maintain open space lands and long-term agricultural use;
- Establishes or augments water supply to foraging grounds and habitat for the endangered Swainson's Hawk and other wildlife.

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This project, as envisioned, would send recycled water from the treatment plant through a pipeline to an agricultural area south of Elk Grove and north of the Cosumnes River.

Initially approximately 2,000 acres of agricultural land, producing crops not for human consumption, would be irrigated with recycled water, putting about 10,000 acre feet of water to beneficial use each year. This is roughly equivalent to the



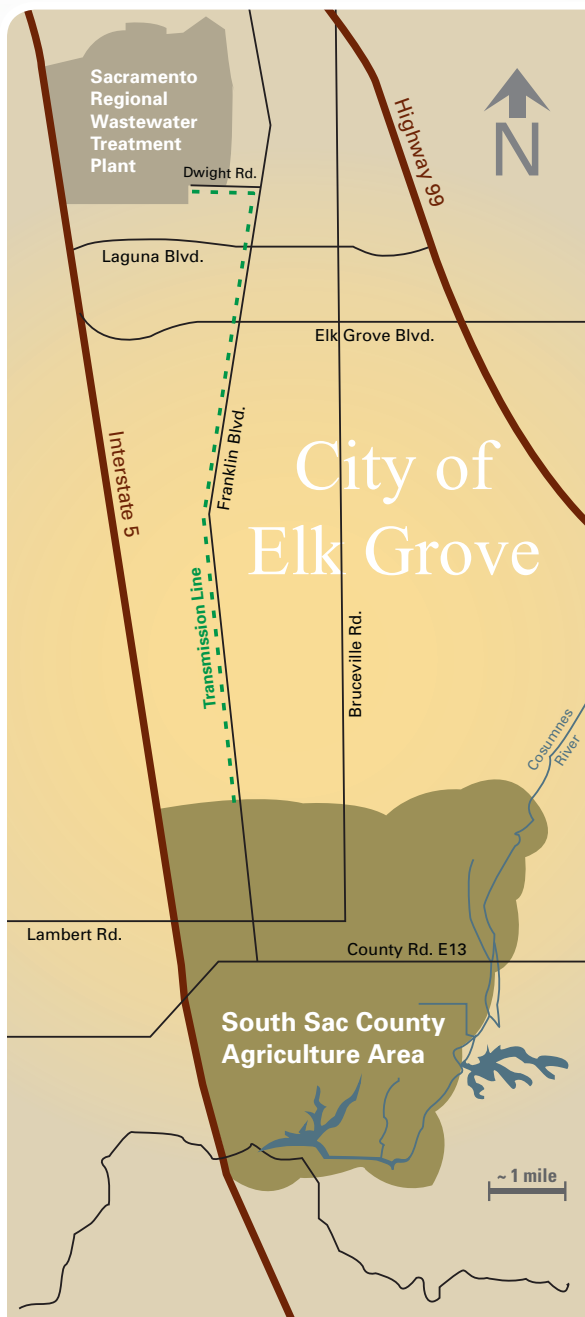
amount of water needed to serve 20,000 homes. Agricultural lands that use recycled water can also create attractive new habitat for species such as the endangered/threatened Swainson's Hawk and such lands might be designated for conservation and mitigation purposes.

During the wet months when irrigation is not needed, water would continue to be treated at the treatment plant and discharged to the Sacramento River.

Cosumnes River Flow Restoration

The Cosumnes is the only remaining free flowing river on the western slope of the Sierra Nevada; unfortunately, the lower part of the river runs dry for portions of the year, preventing the reestablishment of migratory fish species such as salmon and steelhead. It is clearly understood that the decline of the fish populations can be helped by restoring flow and habitat. Recycled water may be able to restore some of the natural flows to the Cosumnes River.

Such a project would also support the Cosumnes River Watershed's rich history. Native Americans first began populating the watershed 4,000 years ago, and it is estimated that at one time approximately 11,000 Miwoks lived in the Cosumnes region. Today, the Miwok people within the Cosumnes River watershed are taking efforts to preserve their history.



GROWING THE PROJECT IN THE FUTURE

There is great potential to increase the amount of water that is recycled and the ways it is used. Following are some possibilities:

- **Expand the Irrigated Area:** There is sufficient agricultural land available to expand the recycling areas. Studies have shown that up to 8,000 acres are feasible.
- **Customize the Level of Treatment:** Facilities could be customized to meet the level of treatment desired for a wide range of applications. These treatment facilities could be located at the Sacramento Regional Wastewater Treatment Plant site. Alternatively, a completely new treatment plant dedicated to recycling could be constructed in the south part of the County.
- **Links with Recycled Water Project in Eastern Sacramento County:** The eastern portion of Sacramento County may need recycled water projects in the future. If so, the entire corridor along the Cosumnes River could be linked with a recycled water distribution system.
- **Groundwater Recharge:** The direct injection of recycled water into the ground to recharge aquifers remains a remote possibility. The regulatory framework for this practice is not fully developed, and in the current setting extremely high levels of treatment would likely be required. However, the practice of using recycled water for irrigation has the indirect effect of offsetting the need for groundwater pumping.



Costs and Critical Funding Needs

Costs for the project are estimated to be between \$116 and \$293 million depending on the project size. Because of the broad project benefits, there is a strong rationale for funding the project from multiple sources. However, at this time, funding has not been secured. Attaining funding is critical to being able to reap the benefits of the opportunity before us.

Improving water supply reliability and efficiency is of interest to the state and nation, particularly in light of the ecosystem decline in the Sacramento-San Joaquin Delta. As an environmental steward, the SRCSD has a keen interest in the environmental benefits from increased terrestrial habitat and possibly aquatic habitat, particularly with restoration of the Cosumnes River. While treating wastewater to levels required for recycling can be a relatively expensive option, SRCSD believes it is important to invest in the future of our water supply now.



KEY QUESTIONS ANSWERED

What is the South Sacramento County Agriculture and Habitat Lands Water Recycling Project?

This project, as envisioned, would send recycled water to an agricultural area south of Elk Grove and north of the Cosumnes River. Recycled water would be used to irrigate agricultural land, create habitats for endangered wildlife, offset groundwater pumping and preserve our drinking water supply.

What is unique about the Project?

The project can be carried out in multiple phases to provide additional benefits and could be potentially expanded to augment Cosumnes River flows and help with much-needed restoration efforts.

Is it safe?

Yes. Water recycling has a long history of safe use in California and the United States. The project will be constructed and operated in accordance with state and federal environmental laws to protect human health and the environment.

Why agricultural, not urban use?

Water recycling in agricultural use is generally less expensive than in an urban setting, largely due the costs of distribution system facilities. Also, for the proposed phased project there is great synergy with the benefits to agriculture, wildlife habitat, land-use planning, preservation of open space, as well as preserving water supply. Where opportunities exist for urban use such as park irrigation, those opportunities would be pursued.

What is the State's Position on Water Recycling?

The State supports water recycling. The California Water Code states that it is a "waste or an unreasonable use" to use potable water for certain purposes such as irrigation when recycled water is available for that use.

California's Recycled Water Policy states:

"We declare our independence from relying on the vagaries of annual precipitation and move towards sustainable management of surface waters and groundwater, together with enhanced water conservation, water reuse and the use of stormwater." Included among goals is the following:

- Increase the use of recycled water over 2002 levels by at least one million acre-feet per year (afy) by 2020 and by at least two million afy by 2030."

Other questions?

Visit www.srcsd.com or contact Terrie Mitchell at (916) 876-6092 for more information.

OUR COMMUNITY SUPPORT

Moving these innovative, environmental projects forward will require a regional effort. A broad coalition of supporters has begun to work together and additional partners are encouraged to join. Continued planning, coordination, education and advocacy need to occur, and the support and efforts of these partner agencies and organizations is key. To that end, the Sacramento Water Recycling Coalition has been formed. Work is being done on stakeholder education, developing principles of agreement, and more.

The following organizations have been working with SRCSD to form the Sacramento Water Recycling Coalition:

The Nature Conservancy

The Sierra Club

Ducks Unlimited

Friends of the Swainson's Hawk

Sacramento Area Creeks Council

Sacramento County Farm Bureau

Sacramento Central Groundwater Authority

League of Women Voters

Sacramento County Water Agency

County of Sacramento

Sacramento County Regional Parks

City of Elk Grove

Southgate Recreation and Park District

Sacramento Area Sewer District

Show your support for this important project.

To learn more, please contact
Terrie Mitchell at (916) 876-6092;
or visit www.srcsd.com

