A U G U S T 2005

NAPA SANITATION DISTRICT

# Strategic Plan for Recycled Water Use In the Year 2020

prepared by



#### Napa Sanitation District Strategic Plan for Recycled Water Use in the Year 2020

## Abstract

The Napa Sanitation District completed a Strategic Plan to determine a recycled water planning approach through the year 2020. Potential for recycled water production was estimated to be 9,800 acre-feet/year in 2020 if additional storage were available, and 4,540 acre-feet/year using existing storage. Various strategies were proposed for consideration ranging from minimal to full recycling, with an associated range of benefits. Recommendations for strategies include consideration of potential revenues from grants and recycled water users for each strategy. Strategy No. 3 is recommended for phased implementation, but only as funding becomes available. If outside funding is not available, then Strategy No. 2 is recommended, which delivers only enough recycled water to reliably meet NPDES permit requirements.

#### Napa Sanitation District Strategic Plan for Recycled Water Use in the Year 2020

## **Brief Summary**

The Napa Sanitation District (District) completed a Strategic Plan to determine a recycled water planning approach through the year 2020. Benefits of water recycling include:

- augmenting existing water supplies;
- preventing overdraft of groundwater resources;
- ensuring that highest quality water is reserved for potable uses; and
- increasing the District's ability to comply with summer river discharge prohibitions.

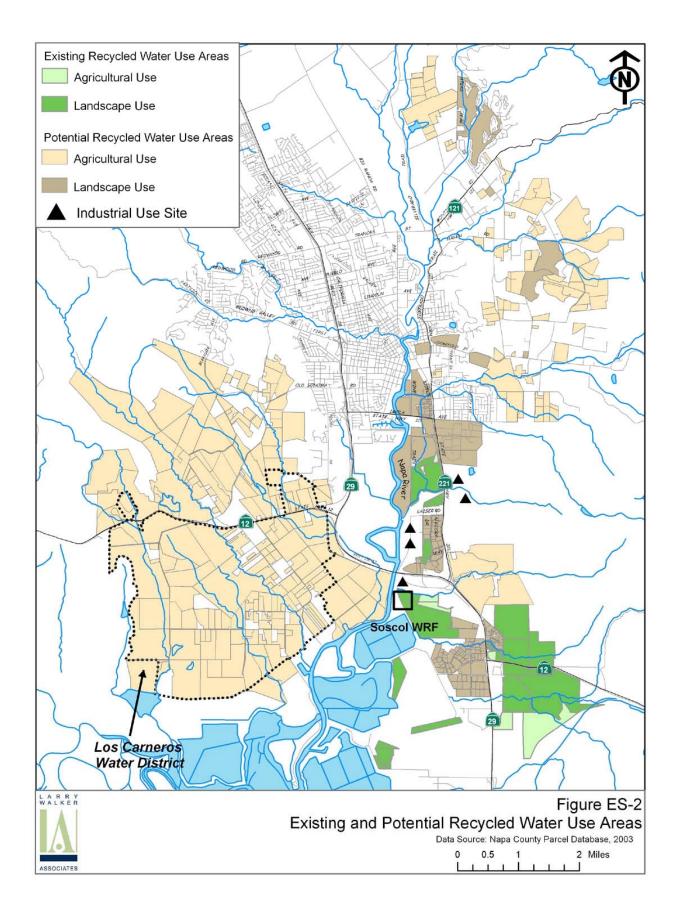
Influent flows to the Soscol Water Recycling Facility in 2020 were estimated to be approximately 9.6 mgd, an 8% increase over current flows. Potential for recycled water production was estimated to be 9,800 acre-feet/year in 2020 if additional storage was available during the winter months when irrigation does not occur. If not, the maximum amount that could be recycled was determined to be 4,540 acre-feet/year. Sufficient users were identified for all the recycled water produced.

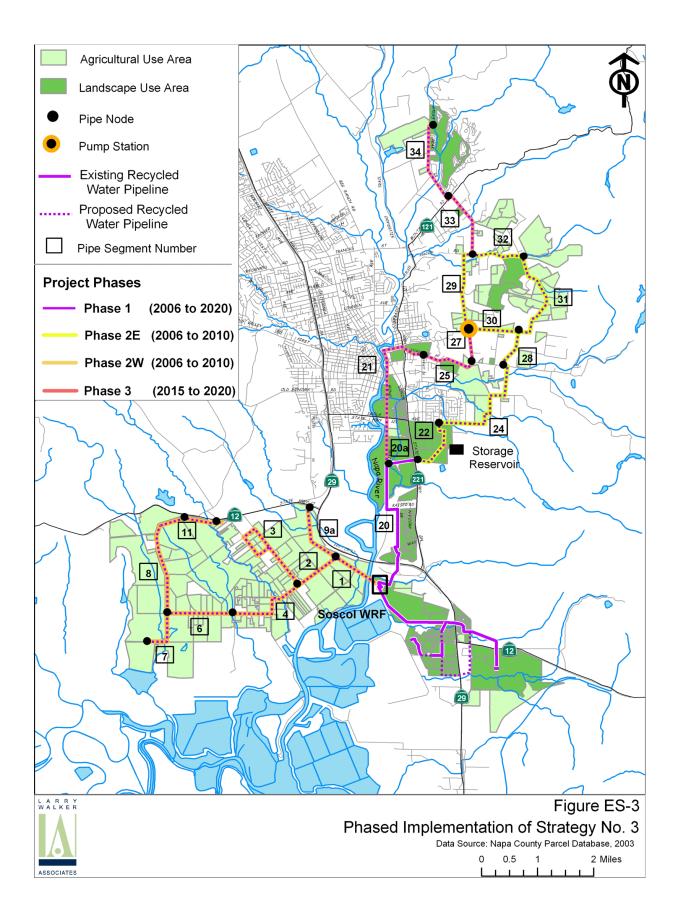
Seven strategies were proposed for consideration. These strategies fall into four groups:

- Recycle all water available, utilizing additional storage (Strategy No. 1);
- Recycle only enough to reliably meet NPDES Permit (Strategy No. 2);
- Recycle water targeted to specific geographical areas (Strategies No. 5 and 6); and
- Recycle as much as existing storage can handle (Strategies No. 3, 4, and 7).

During workshops, the Board of Directors felt that cost to sewer customers should factor heavily into the recycled water strategic plan, but also felt a responsibility to augment local water supplies where needed and possible. As a result, the recommendation for which strategy to implement includes consideration of potential revenues from grants and recycled water users.

It is recommended that Strategy No. 3, which maximizes use of existing storage, be implemented in phases but only as funding becomes available. Strategy No. 3 is estimated to cost \$64 million, and provides water to three important areas in the vicinity of Napa: Carneros, Milliken-Sarco-Tulucay (MST), and Silverado. In the event that outside funding is not sufficiently available, then it is recommended that Strategy No. 2 be implemented. This strategy provides for delivery of only enough recycled water to reliably meet NPDES permit requirements.





## Napa Sanitation District Exploring Alternatives to Expand Use of Recycled Water



The Napa Sanitation District is exploring alternative ways to extend the delivery of recycled water for irrigation and to offset dependency on groundwater and surface water. We invite you to become familiar with and comment on the various strategies and potential solutions outlined in a long term planning document under consideration called the *Recycled Water Strategic Plan*.

Your home or business may be in an area that may be eligible to receive recycled water for irrigation and other acceptable uses in the future.

Napa Sanitation District is interested in your input about proposed strategies, pipeline alignments, recycled water uses or any issues that you believe should be addressed as the District completes its decision-making process.

Bring your questions and comments. District staff and their engineering consultants will be available to talk to you about this project. Written comments on the proposed use of recycled water and the *Recycled Water Strategic Plan* are due by December 16, 2005. The Napa Sanitation District Board will consider potential revisions in early 2006.

For more information, call (707) 258-6000. The complete *Recycled Water Strategic Plan* document and other project information is available online at **www.NapaSanitationDistrict.com**.

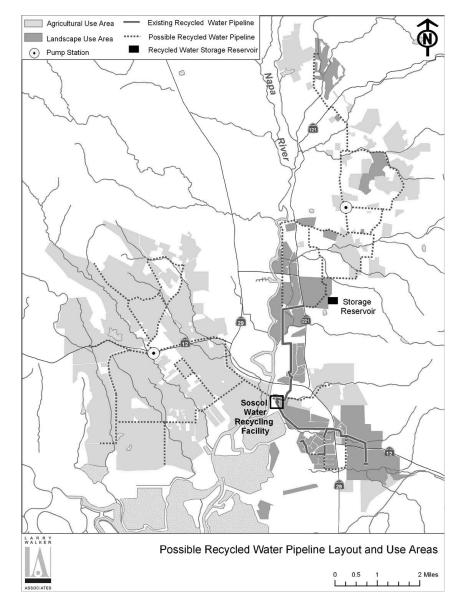
### Don't Miss an Opportunity to Provide Your Input on Strategic Recycled Water Plans at an Open House

Two Open Houses will be held for you to have an opportunity to review and discuss various recycled water plans under consideration. The same information will be available at both events; come to the one that is most convenient for you.

Drop in any time between 5:00 PM and 7:30 PM.

**Tuesday, December 6, 2005** Carneros Elementary School Library Resource Room 1680 Los Carneros Avenue, Napa

**Thursday, December 8, 2005** Silverado Middle School Multipurpose Room 1133 Coombsville Road, Napa





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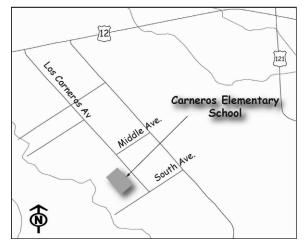
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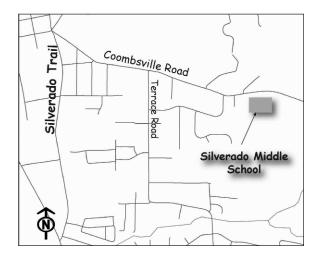
Proposed Recycled Water Important Intormation —

Project Planned for Your Area

For more information, please visit www.NapaSanitationDistrict.com.

Tuesday, December 6, 2005 **Carneros Elementary School** Library Resource Room 1680 Los Carneros Avenue, Napa





Thursday, December 8, 2005 Silverado Middle School

Multipurpose Room 1133 Coombsville Road, Napa

Open House events are an opportunity to provide your input on the Napa Sanitation District's Recycled Water Strategic Plan. Drop in any time between 5:00 PM and 7:30 PM either night. The same information will be available at both events.