

**Recycled Water Opportunities:**  
**Napa Sanitation District's**  
**Strategic Plan for**  
**Recycled Water Use**

Presented to Napa County Board of Supervisors  
March 14, 2006

**Contact Information**



Michael Abramson  
General Manager  
(707) 258-6000  
mabramson@NapaSan.com



Denise Conners  
Larry Walker Associates  
(408) 261-8385  
deniseC@lwa.com

*Download the full Strategic Plan at our website:*  
[www.NapaSanitationDistrict.com](http://www.NapaSanitationDistrict.com)

## *Project Purpose*

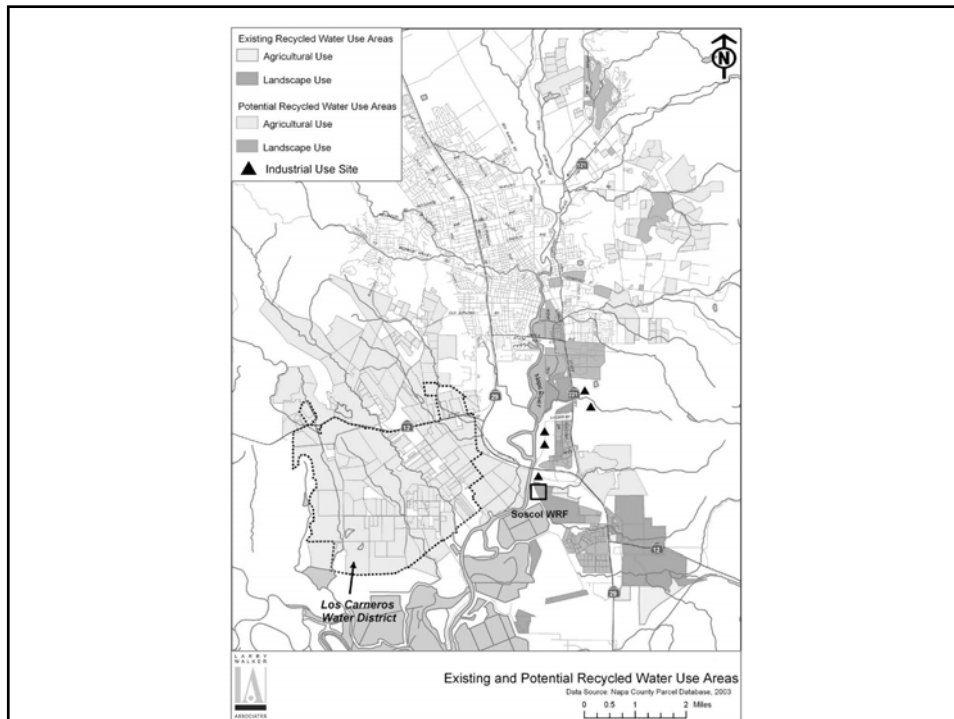
Preparation of a Strategic Plan to determine a recycled water planning approach for the District through the year 2020.

## *Benefits of Water Recycling*

- Augment water supplies in water-short areas
- Prevent overdraft of groundwater resources, with resulting environmental benefits
- Ensure that the highest quality water is reserved for potable uses
- Increase the District's ability to comply with its summer river discharge prohibition

## 2020 Projections

Plant Influent:	10,800 AF
Irrigation Demand:	7,400 AF
Recycled Water Supply:	
with Existing Storage	4,500 AF
with New Storage:	9,800 AF



## *Recycled Water Values*

1. Cost to District Ratepayers
2. Augment Water Supply
3. Reduce River Discharge

Also

- Acceptance by Outside Stakeholders
- Helps Environment
- Rapid Implementation
- Simplicity of Operation

## *Recycled Water Distribution Strategies*

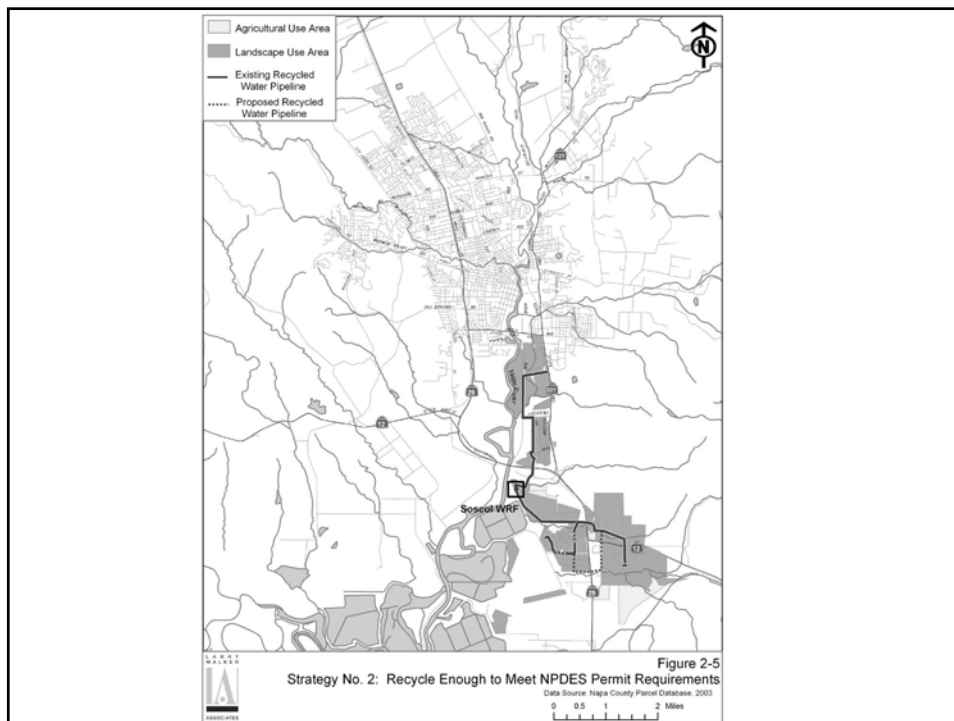
Types of Strategies Considered:

- Recycle Everything (#1)
- Reliably Meet River Discharge Prohibition (#2)
- Recycle Water in Specific Areas (#5, #6)
- Maximize Use of Existing Storage (#3, #4, #7)

## *Recycled Water Distribution Strategies*

### Types of Strategies Considered:

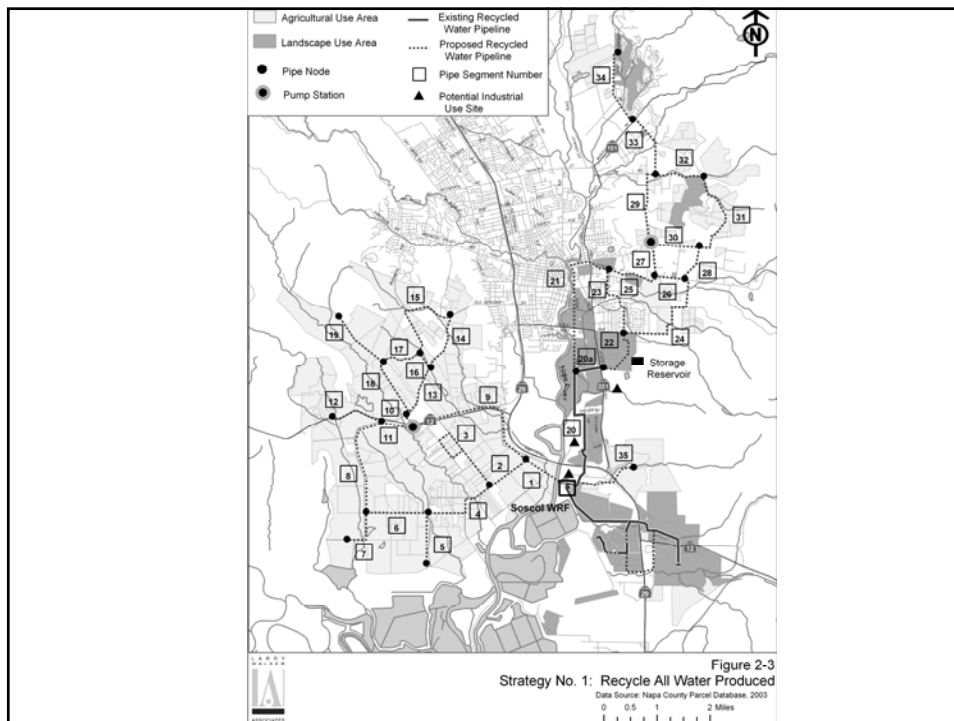
- **Reliably Meet River Discharge Prohibition (#2)**
- Recycle Everything (#1)
- Recycle Water in Specific Areas (#5, #6)
- Maximize Use of Existing Storage (#3, #4, #7)



# *Recycled Water Distribution Strategies*

## Types of Strategies Considered:

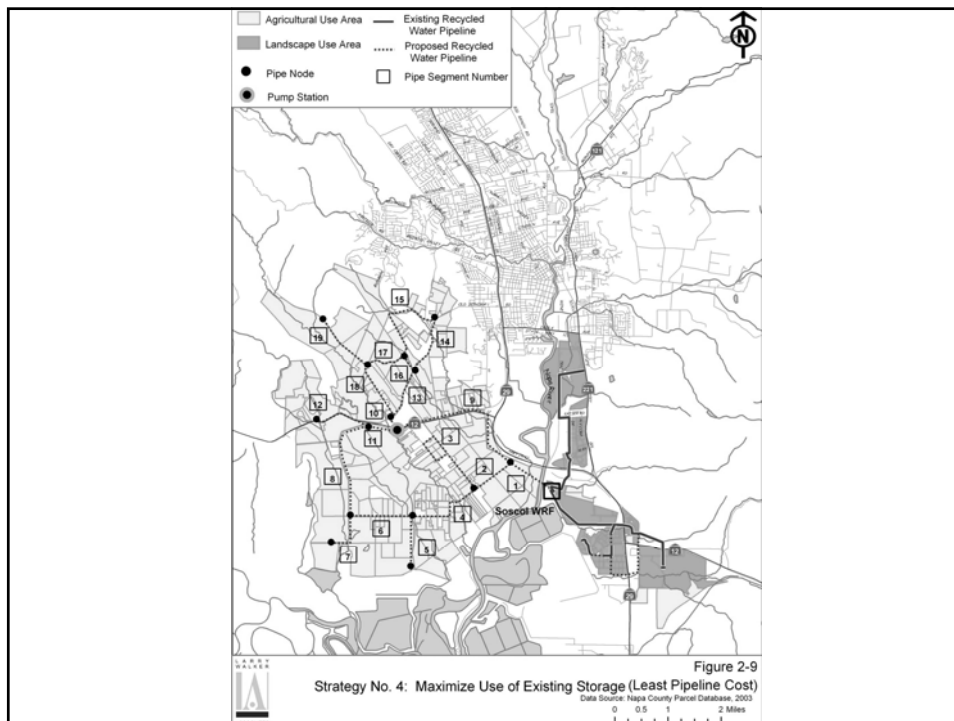
- Reliably Meet River Discharge Prohibition (#2)
- **Recycle Everything (#1)**
- Recycle Water in Specific Areas (#5, #6)
- Maximize Use of Existing Storage (#3, #4, #7)

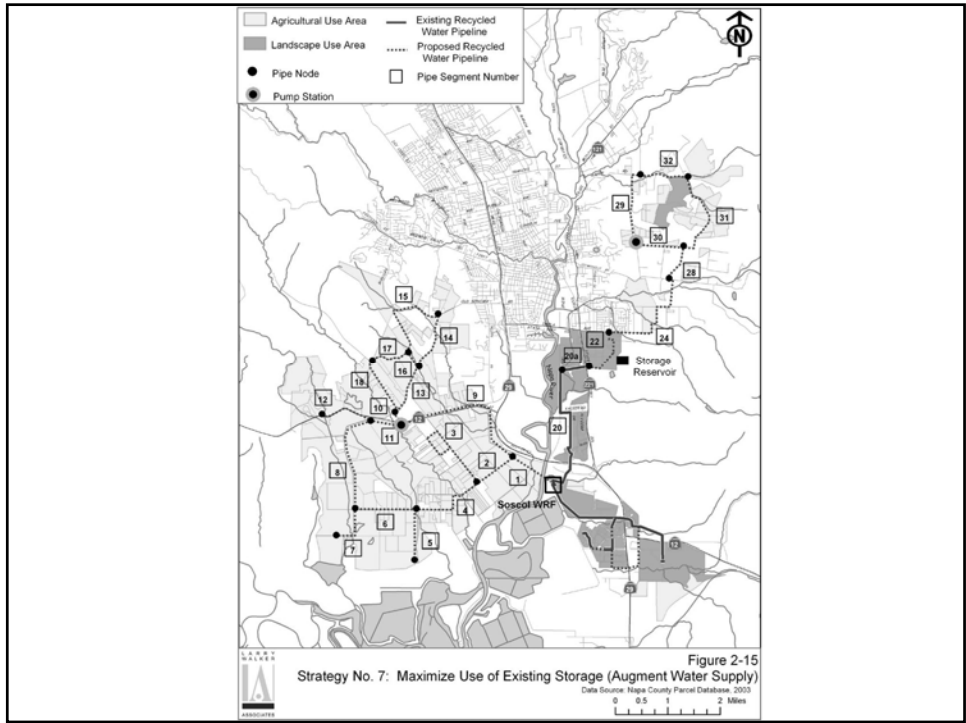
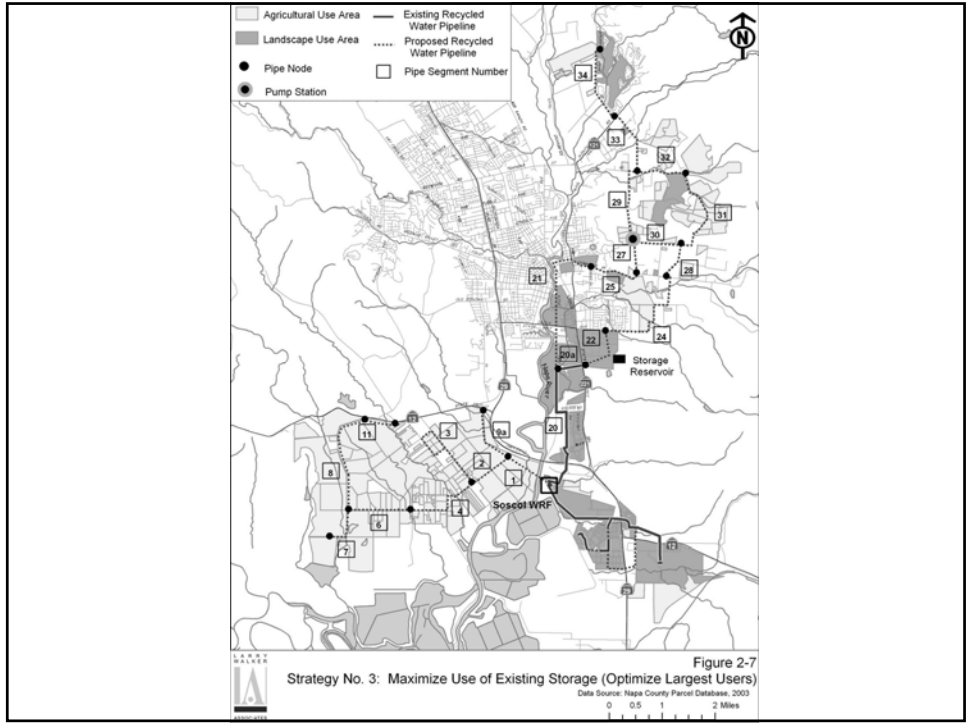


# *Recycled Water Distribution Strategies*

## Types of Strategies Considered:

- Reliably Meet River Discharge Prohibition (#2)
- Recycle Everything (#1)
- Recycle Water in Specific Areas (#5, #6)
- **Maximize Use of Existing Storage (#3, #4, #7)**





## *Selection of Strategy for Implementation*

During workshops held in early 2005, the Board determined that *cost to the District's customers* should factor heavily into the selection of a distribution strategy.

However, the Board also felt a responsibility to *augment local water supplies* where needed and possible. So...

Final strategy is being based on availability of outside funding

## *If Outside Funding Is Not Available...*

*Recommended Strategy:* No. 2

### *Benefits:*

- Utilize capacity of existing pipeline
- Minimal capital outlay (\$1.9 million)
- Minimal additional O&M (\$40,000/year)
- Increased ability to meet discharge prohibition

### *Drawbacks:*

- No assistance to water-short areas
- Continued use of operationally-intensive District reclamation sites

## *If Outside Funding Is Available...*

*Recommended Strategy:* No. 3 (as of August, 2005)

### *Benefits:*

- Utilize capacity of existing storage facilities
- Distribute water to MST, Carneros, and Silverado
- Conversion of District reclamation sites

### *Drawbacks:*

- High capital outlay (\$64 million)
- High additional O&M (\$424,000/year)

## So how much will it cost?

- Short answer is “We aren’t sure yet.”
- Longer answer is that we have been working for several years to get grant funding from state and federal sources.

Remaining funding needs will be from local sources. We are trying to identify several sources of revenue so no one source shoulders an unreasonable burden.

A user-friendly Water Cost Model that allows stakeholders to evaluate various construction and funding scenarios is available now.

## *What Now? NSD Board asking for Input...*

*The selected strategy may be revised in order to optimize meeting the community’s needs.*

*A Public Outreach Program was implemented with two community meetings in December; one in Carneros and one in MST*

## **Open Houses**

December 6: CARNEROS  
December 8: MST/COOMBSVILLE

### **Attendance**

CARNEROS = 42 signed in  
MST = 53 signed in

**However, total attendance for both events  
was approximately 105.**

## **Who Attended**

### **Carneros Open House**

- Agricultural Irrigators
- Fire District
- Small Parcel Residents

### **MST Open House**

- Residents who live near large irrigators
- Napa Valley Country Club
- Agricultural Irrigators
- Tulocay Cemetery

## Key Player Involvement

<u>Stakeholder</u>	<u>Open House</u>	<u>Letter</u>
Napa County Farm Bureau	Yes	Yes
Winegrowers of Napa County	Yes	-
Carneros Quality Alliance	Yes	-
Los Carneros Water District	Yes	Yes
Silverado Country Club	-	Yes
Napa Valley Country Club	Yes	Yes
Tulocay Cemetery	Yes	Yes
Stanly Ranch	Yes	-
UC Cooperative Extension	Yes	-
Napa County Supervisors (2)	Yes	-
Napa County Public Works	Yes	-

## What They Said - Written Comments -

Comments were generally consistent  
with what we heard at Open Houses

### **22 Comments Received – All in Favor of Project**

- 11 from Carneros Area
- 10 from MST Area
- 1 from Farm Bureau (both areas)

## **What They Said - Common Comments -**

### **General**

- Overall, very positive response
- Interested in special assessment district
- Preferred strategies that deliver water to their region
- They need the water...Now!

### **Concerns**

- Lengthy project implementation
- Costs - who will pay and how much

## **What They Said - Area Specific Comments -**

### **Carneros Concerns**

- Reliability of recycled water delivery
- Effect on ground/aquifer water quality
- Whether accepted for use on organic crops
- More water might mean more growth

### **MST Concerns**

- Perceived lack of interest among largest water users
- Will higher AV offset costs of special assessment?
- Will recycled water usage raise groundwater table?
- Effect on plants, grapes, livestock, groundwater quality

## **Conclusions**

**The public outreach program was a success!**

**Loud message received: Recycled water is wanted in both MST and Carneros areas.**

**The most common questions:**

- When will the water be available?
- What will it cost me?

**There are several comments and questions to be addressed during CEQA process.**

## **Next Steps**

**For a future NSD Board Meeting:**

- Address all public comments received
- Revise recommended strategy, if appropriate
- Prepare financing plan based on construction plan

## **Financing Plan**

### **Some thoughts...**

- Only five types of funding to build the system
  - Sale of recycled water
  - Connection fees to recycled water system
  - Benefit District(s)
  - One-time Grants/Contributions
  - Ongoing Grants/Contributions
  
- NSD ratepayers can't/won't fund expansion of Recycled Water System

## **Financing Plan**

NSD wants to help, but we understand that the lead in forming and managing benefit districts is the County's role...and County staff have expressed support for that.

District and County staff are in preliminary stages of meeting to determine exactly what additional information is needed to proceed.

## **Some of the Questions to Be Resolved:**

What level of state and/or federal grant funding is available? Should we proceed or wait for more?

Where should the water go?

If Benefit Assessment Districts are formed, where should the boundaries be? How should the costs be allocated?