



# Water Reuse Program

**PROGRAM PARTNERS**

*Program established in 1980*

City of Los Altos

City of Mountain View

City of Palo Alto

East Palo Alto Sanitary District

Stanford University

Town of Los Altos Hills

**EXISTING REUSE SITES:**

Greer Park

Emily Renzel Marsh

Palo Alto Golf Course

Shoreline Golf Course

Regional Water Quality Control Landscaping

**PRIMARY USES:**

Golf Course, Park and Landscape Irrigation

Industrial Processes

Wetlands Enhancement

**RECENT AWARDS:**

2002 US EPA Outstanding Pretreatment Program

2002 City of Palo Alto certified as Santa Clara County Green Business

2000 CWEA Plant of the Year Award

1998 National Pollution Prevention Roundtable "Nation's Most Valuable Pollution Prevention Program"

**T**he Regional Water Quality Control Plant (RWQCP) Water Reuse Program has historically brought a reliable, sustainable and drought-proof supply of water to the South Bay and Santa Clara County.

Through the water reuse program, more than 10 billion gallons of water have been reused locally since 1980—keeping golf courses, parks, and other landscaping green and healthy without using precious drinking water. Reused water—cleaned and treated wastewater from homes and businesses—is also suitable for habitat restoration and industrial applications.

## Pipeline Must Be Replaced

The Water Reuse Program is in the midst of a new task, the Mountain View /Moffett Area Water Reuse Project. The goal is to replace an existing deteriorating pipeline to Shoreline Golf Course and to extend that pipeline to the Mountain View /Moffett area. The upgraded pipeline will ensure a sustainable water supply for previous and new landscape irrigation sites.

### *Permits and Funding*

To mitigate the discharge of treated wastewater to San Francisco Bay, the RWQCP is required to operate and maintain the Water Reuse Program. However, the deteriorated pipeline has prevented water delivery to the Shoreline Golf Course resulting in interrupted service. To fulfill permit obligations, the service to Shoreline must be restored.

To minimize costs, the RWQCP secured state funding for the current planning phase of this project. State funding eligibility for design and construction hinges on the completion and approval of the plan by February 2004.

**For more information about this project, visit: [www.cityofpaloalto.org/waterreuse](http://www.cityofpaloalto.org/waterreuse) or call (650) 329-2287.**



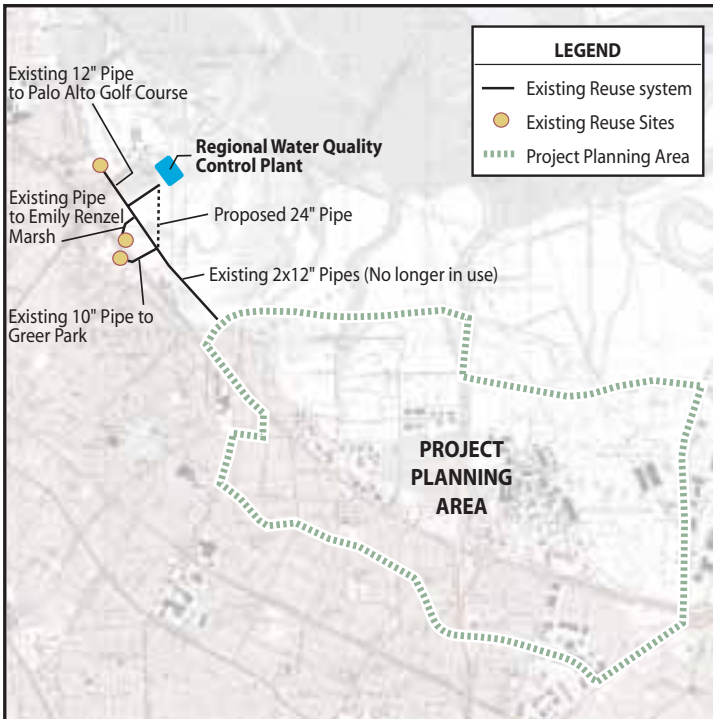
*"We applaud the pipe replacement and extension project which enhances local opportunities for water reuse. The entire community loses all future benefits from this valuable fresh water source when it is discharged into San Francisco Bay."*

Trish Mulvey  
CLEAN South Bay



# Mountain View Pipeline Extension Plans

The goal of the Mountain View project is to replace the existing pipeline to the Shoreline Golf Course and extend the pipeline to reach the Mountain View/Moffett area for landscape irrigation.



## Where is the project area?

The proposed pipeline will likely follow the levees near the Palo Alto Refuse Center, along Matadero Creek and will be located adjacent to East Bayshore Road.

## How much will it cost?

The state is funding 50 percent of the planning phase and may fund as much as \$5 million of the pipeline design and construction.

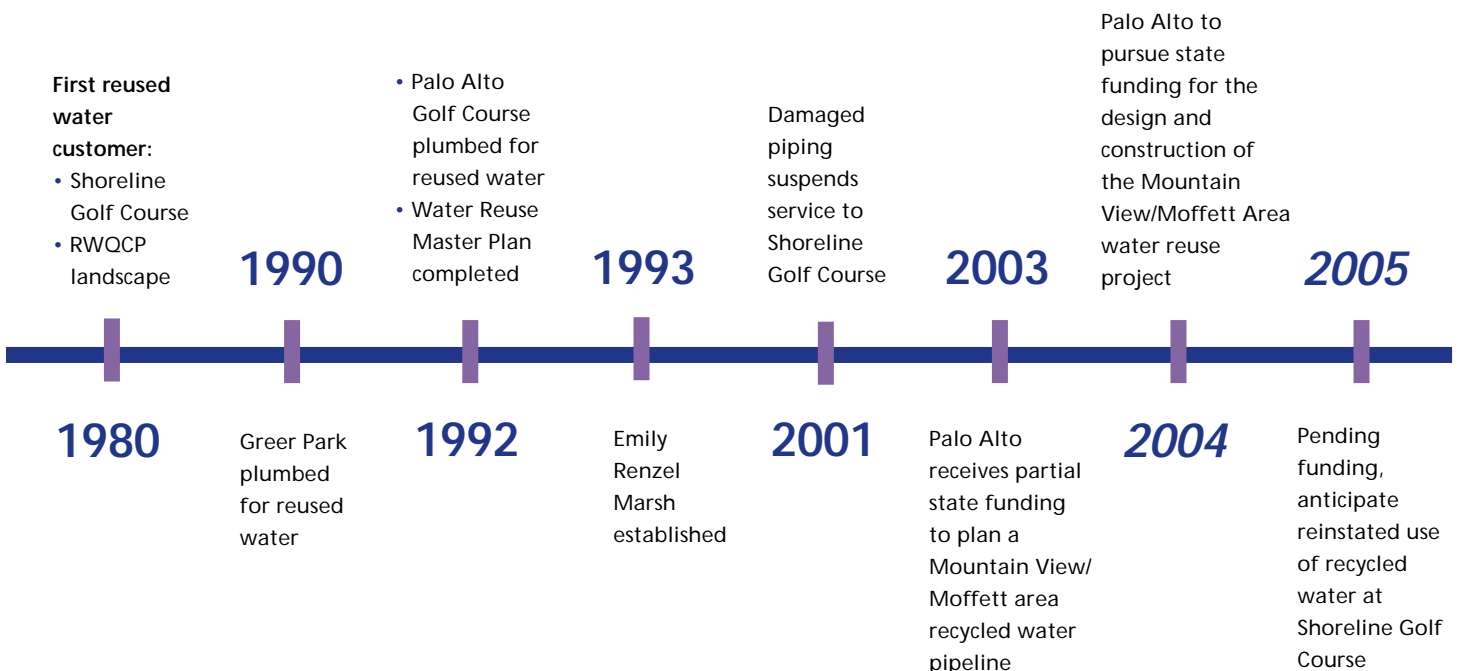
## When would the project start and end?

Pending availability of state funding, the design and construction is anticipated to occur in mid-2004. Shoreline Golf Course would then be reconnected in 2005.

## Will there be an environmental review?

A California Environmental Quality Act review will be conducted based on the 1995 Environmental Impact Report results. The proposed pipeline is a component of the overall 1995 Environmental Impact Report.

## RWQCP Water Reuse Program Timeline



# The Water Reuse Program Protects Human Health

*RWQCP Program meets and exceeds standards set by the state Department of Health Services*

The California Department of Health Services (DHS) has strict water quality criteria for recycled water. DHS has concluded that water meeting those criteria is safe for a variety of uses, including landscape irrigation. The RWQCP Program water meets or exceeds all the criteria, and employs additional precautions to minimize human contact with the water.

## Precautions include:

- Irrigation at night.
- Advisory signs prominently posted at each facility entrance.
- Irrigation systems designed to minimize overspray, runoff, and ponding.
- No cross-connections allowed between the recycled water pipes and any other water system.
- Recycled water pipes installed after 1993 are colored purple and labeled with the words "RECYCLED WATER—DO NOT DRINK."
- No hose connectors are allowed on pipes that are accessible by the public.
- Spray, mist, or runoff is not allowed to enter outdoor eating areas, drinking fountains, dwellings, or food handling facilities.

*"Recycled water is safe, practical, and very necessary in these times of diminishing water resources."*

Dr. Cindy Russell  
Santa Clara County Medical Association  
Chair, Environmental Health Committee

## Environmental and Economic Benefits of Water Reuse

*Water reuse provides important environmental and economic benefits. Reusing water:*

### ✓ *Reduces dependency on imported water and provides a dependable supply for landscaping*

The Santa Clara Valley Water District estimates that by the year 2020, the South Bay could experience severe water shortages during a drought unless efforts are made to increase water supplies. Recycled water provides local and dependable landscaping irrigation. This reduces the need for precious drinking water to be used as irrigation and ensures that parks and golf courses can survive droughts and infrastructure upgrades.

### ✓ *Restores and preserves saltwater and tidal marshland habitats*

Reducing the amount of treated

wastewater discharged into the South Bay decreases negative impacts on saltwater marshes. When treated wastewater is discharged into South Bay marshes, it can decrease the salinity and alter the plant communities that grow there. Using treated water for irrigation helps preserve Palo Alto's saltwater marshlands, the sensitive habitat of two endangered species, the California clapper rail and the salt marsh harvest mouse.



### ✓ *Highest and best resource use*

Treated wastewater becomes a resource when it is reused for irrigation rather than being discharged to San Francisco Bay without a secondary use. Reusing water for irrigation extends tax dollars to keep parks and golf courses green and healthy.

# FAQs

## Frequently Asked Questions...

### *What is recycled water?*

Water used in homes and offices travels through pipes to the RWQCP. The water is cleaned through physical, chemical and biological processes so that it ends up looking much like drinking water. These complex cleaning processes require careful maintenance and monitoring to make sure that the water can be discharged safely into San Francisco Bay without harm to the ecosystem, and safely used for many purposes.

### *What about contaminants that are not removed from the water?*

There are microcontaminants found in reclaimed water, including persistent organic compounds. Due to concerns about the existence of such compounds in reclaimed water, Program staff monitor research regarding treatment technologies, mechanisms of human exposure, and health risk assessments to ensure that reuse practices protect human health. Meanwhile, the use of recycled water for landscape and industrial purposes is not a direct exposure route for these compounds to humans, because significant quantities of reclaimed water are not ingested.

### *Is it safe for children to play on grass irrigated by this water?*

The California Department of Health Services has very high treatment standards for recycled water. The Program's reclaimed water meets or exceeds state standards for water used for irrigation and other uses with similar public exposure.

According to Dr. Stanley Deresinski, Clinical Professor, Stanford School of Medicine, one would have to drink at least 12 gallons of reclaimed water, in a single sitting, in order to ingest an infectious dose of coliform bacteria.

### *Is recycled water used elsewhere?*

Recycled water is used in thousands of locations nationwide. More than 170 billion gallons of water are recycled in California each year.

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