

REPORT

To the Honorable Mayor and City Council
From the City Manager

July 28, 2003

Subject

Redwood City Recycled Water Project

Recommendation

1. Adopt a resolution approving and confirming the Mitigated Negative Declaration as certified by the Planning Commission and making the necessary associated findings
2. Adopt a resolution finding that the use of recycled water for landscape irrigation is safe, is environmentally responsible, and can contribute to the health, safety and welfare of all Redwood City residents

Background

After the Planning Commission certified the Mitigated Negative Declaration for the Recycled Water Project ("Project") in August 2002, concerns were raised about the public health and environmental implications of using tertiary disinfected recycled water for landscape irrigation. The City prepared an Addendum focused on these concerns, which was made available for public review in May 2003. During the 28-day comment period, a total of 16 written comments were received. Of these, 9 supported the Project, 5 opposed the Project, 2 provided information on or raised questions about the use of recycled water. At the City Council study session held on June 9, there were 22 speakers. Of these, 7 supported the project, 13 expressed opposition, and 2 provided information about recycled water.

City staff assembled all written comments and summaries of oral testimony. The city's environmental consultant, CH2M Hill - in association with consulting scientists and engineers with extensive experience in public health aspects of using recycled water for non-potable uses such as landscape irrigation - provided answers to those comments which raised questions or concerns about issues of public health or the environment. The information provided by these experts is contained in the "Response to Comments on the Addendum to the Mitigated Negative Declaration" document provided to the City Council and made available to interested parties.

Having carefully reviewed all of the information developed throughout this extended review process, City staff concludes that the use of recycled water, treated and distributed for landscape irrigation in compliance with the standards of the California Department of Health Services is safe, is environmentally responsible, and can contribute to the health, safety and welfare of all Redwood City residents. The correspondence from the San Mateo County Health Services Agency (see Attachment #3) and the Santa Clara County Medical Association (see Attachment #4) indicates that the physicians, scientists and engineers professionally responsible for protection of public health are satisfied that recycled water, treated and disinfected in compliance with California regulations, is safe for use in landscape irrigation.

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For these reasons, staff recommends that the Council adopt the attached two resolutions which:

1. Approve and confirm the Mitigated Negative Declaration as certified by the Planning Commission and making the necessary associated findings
2. Find that the use of recycled water for landscape irrigation is safe, is environmentally responsible, and can contribute to the health, safety and welfare of all Redwood City residents

Alternatives

The Council could instead decide at this point not to proceed with the Recycled Water Project. The consequences of a no-project decision could include:

- An increasingly unreliable water supply for all existing customers
- Increased risk to all customers that their domestic water supply could be substantially reduced and/or rationed at levels significantly higher than any other adjacent community

Fiscal Impact

The City Council will, if it approves the attached resolutions, proceed with consideration of economic and financial analysis of the proposed project. The estimated cost to implement the project with the Council policy of non-mandatory use within existing residential areas or home owners' associations is \$43 million. A future Council meeting agenda will be devoted to Council discussion of, and decisions on, project funding.


Peter Ingram
Public Works Services Director


Ed Everett
City Manager

Attachments:

1. Resolution approving and confirming the Mitigated Negative Declaration as certified by the Planning Commission and making the necessary associated findings
2. Resolution finding that the use of recycled water for landscape irrigation is safe, is environmentally responsible, and can contribute to the health, safety and welfare of all Redwood City residents
3. Letter to Mayor Claire from the San Mateo County Health Services Agency, dated July 16, 2003
4. Letter to the director of the City of San Jose Environmental Services Department from the Santa Clara County Medical Association, dated July 10, 2002

Enclosures:

- A. *Response to Comments on the Addendum to the Mitigated Negative Declaration of the Redwood City Recycled Water Project*, prepared by CH2M Hill in association with other water reuse consultants

RESOLUTION NO. _____**RESOLUTION OF THE CITY OF REDWOOD CITY ADOPTING THE
MITIGATED NEGATIVE DECLARATION FOR THE REDWOOD CITY
RECYCLED WATER PROJECT**

WHEREAS, the City has been considering construction of infrastructure facilities (pipelines, pump stations and storage reservoirs) to deliver recycled water from the South Bayside System Authority (SBSA) wastewater treatment plant to customers in the Redwood Shores, greater Bayfront and central Redwood City areas within Redwood City ("Project"). The Project will, if approved, be implemented over several years, beginning with recycled water delivery to the Redwood Shores peninsula; and

WHEREAS, an Initial Study/Mitigated Negative Declaration was prepared for the Project and distributed for public review and comment during June and July 2002; and

WHEREAS, the Planning Commission adopted the Mitigated Negative Declaration on August 6, 2002. No one appealed the Planning Commission decision to this Council; and

WHEREAS, at the direction of the Council, City staff held a public information forum on the Project in September 2002; and

WHEREAS, City staff, with the assistance of CH2M HILL in association with other water reuse consultants, prepared an Addendum to the Mitigated Negative Declaration to provide supplemental information on issues that had been raised at the public information forum. The Addendum contained brief technical papers prepared by acknowledged experts in the field of recycled water, engineering and public health, as well as information about the use of recycled water in California compiled by the State Water Resources Control Board, and about recycled water projects in the Bay Area compiled by City staff. The Addendum was distributed for public review and comment in May 2003; and

WHEREAS, a total of 16 written comments were received by letter or email during the comment period. Of these, 9 expressed support for the Project, 5 expressed opposition to the Project, and 2 provided information on, or raised questions about, the use of recycled water for irrigation. In addition, the City received 14 telephone inquiries about the Project; and

WHEREAS, the Council held a study session on June 9, 2003 focused on the public health and environmental issues that were the subject of the Addendum. Four technically-oriented presentations were made at the study session by:

- David Spath, Chief of the Division of Drinking Water and Environmental Management, in the California Department of Health Services.

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- Joseph Cotruvo, an environmental/public health consultant who previously served as Director of the Criteria and Standards Division, Office of Drinking Water in the U.S. Environmental Protection Agency.
- Paul Loftholm, a pharmacist and clinical professor of pharmacy at the University of California at San Francisco.
- Martin Atkinson-Barr, a physicist previously employed by Rhone-Poulenc, S.A., a pharmaceutical manufacturer.

AND, WHEREAS, in addition, 22 members of the public spoke at the study session. Of these 7 expressed support for the Project, 13 expressed opposition, and 2 provided information. Among those providing information about recycled water projects were Eric Rosenblum from the City of San Jose and Robin Saunders, from the City of Santa Clara, who briefly described the experience of both cities in operating recycled water distribution systems, very similar to the proposed Redwood City project, for several years. A few speakers supplemented their remarks with written materials which, in some cases, duplicated their earlier written submissions; and

WHEREAS, City staff compiled all written comments, summarized all oral comments/questions and, together with the assistance of CH2M HILL in association with other water reuse consultants, prepared responses to those assertions/questions that addressed issues of public health or the environment. This document, entitled "Responses to Comments on the Addendum to the Mitigated Negative Declaration for the Redwood City Recycled Water Project" (July 2003), has been submitted to the Council.

NOW THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF REDWOOD CITY AS FOLLOWS:

1. The Council has considered the information provided in the following documents and at the following forums in reaching the conclusions on which the findings in paragraph 10 below are based:
 - "Initial Study/Mitigated Negative Declaration," June 2002
 - Comments on Initial Study/Mitigated Negative Declaration
 - Summary Transcript of Planning Commission hearing on August 6, 2002
 - Summary Transcript of public information forum held on September 16, 2002
 - "Addendum to the Mitigated Negative Declaration for the Redwood City Recycled Water Project" (May 12, 2003)
 - Council Study Session held June 9, 2003

- "Responses to Comments on the Addendum to the Mitigated Negative Declaration" (July 24, 2003)
- Staff report dated July 28, 2003

2. The Council finds as follows:

- A. The Mitigated Negative Declaration, as adopted by the Planning Commission, was completed in accordance with the California Environmental Quality Act (CEQA).
- B. There was no substantial evidence before the Planning Commission that the Project may have a significant effect on the environment. The action of the Planning Commission adopting the Mitigated Negative Declaration was appropriate.
- C. No substantial evidence has been presented to the Council since the Planning Commission's action that the Project, constructed and operated in accordance with the mitigation measures imposed by the Planning Commission, the requirements of the California Department of Health Services and the requirements of the San Francisco Bay Regional Water Quality Control Board, may have a significant effect on the environment. In making this finding, the Council is cognizant of the definition of "substantial evidence" for purposes of CEQA contained in 14 CCR Section 15384 and of the guidelines for determining the significance of environmental effects contained in 14 CCR Section 15064(a) through (g).
- D. The mitigation monitoring plan adopted by the Planning Commission is appropriate and adequate to ensure the implementation of the mitigation measures.
- E. The Mitigated Negative Declaration and mitigation monitoring plan, as adopted by the Planning Commission, are ratified and confirmed by the Council. The Mitigated Negative Declaration, the Addendum, and the Responses to Comments on the Addendum reflect the City's independent judgment.

* * *

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RESOLUTION NO. _____

FINDING THAT THE USE OF RECYCLED WATER FOR LANDSCAPE IRRIGATION IS SAFE, IS ENVIRONMENTALLY RESPONSIBLE AND CAN CONTRIBUTE TO THE HEALTH, SAFETY AND WELFARE OF REDWOOD CITY

THIS RESOLUTION is adopted in light of the following facts and circumstances which the City Council finds to exist:

WHEREAS, Redwood City has a relatively low level of water reliability. The Urban Water Management Plan, required by California Water Code Sections 10610 *et seq.*, as most recently amended in May 2003, states:

"The City is in a high risk, low reliability situation at this time. The City has one of the lowest levels of reliability of the 29 [wholesale water customers of the San Francisco Public Utilities Commission] . . . when the SFPUC declares a water shortage, Redwood City will be required to make relatively large water use cutbacks. . . Assuming the City does not implement new water conservation programs or develop new water supplies, the frequency and magnitude of the cutbacks will increase as [the other 28 wholesale customers] use more water in the future."

AND, WHEREAS, the Urban Water Management Plan also demonstrates that implementing the many active and aggressive water conservation measures now in place or planned will not be sufficient to bring the City's water supply and demand into balance; and

WHEREAS, based on the Urban Water Management Plan, the City cannot realistically expect to purchase supplementary water supplies from third parties to offset severe rationing during periods of water shortage; and

WHEREAS, staff analyses indicate that local groundwater resources are insufficient and of low quality and that there are significant cost and environmental issues associated with desalination; and

WHEREAS, there are serious consequences for the City if these deficiencies in our water supply are not addressed. These include:

- Increasingly severe and increasingly frequent episodes of water shortage and rationing; and
- The risk that important community facilities, such as hospitals, will relocate out of the City to neighboring communities because of their perception that the City's water supply is unreliable.

AND, WHEREAS, the State of California has found and declared that:

"The use of recycled water has proven to be safe from a public health standpoint. . . The use of recycled water is a cost-effective, reliable method of helping to meet California's water supply needs. . . Retail water suppliers . . . should promote the substitution of recycled water for potable water in order to maximize the appropriate cost effective use of recycled water in California."

(Water Code Section 13576.)

AND, WHEREAS, the State of California has also found and declared that:

"The use of potable domestic water for the irrigation of residential landscaping is a waste or unreasonable use of water within the meaning of Section 2 of Article X of the California Constitution if [recycled] water, for this use, is available to the residents and meets the requirements set forth in [Water Code] Section 13550, as determined by [the State Water Resources Control Board] after notice and a hearing."

(Water Code Section 13552.2)

AND, WHEREAS, all the water distributed by the City is purchased from the City and County of San Francisco. The majority of that water is of extremely high quality, with its source in the Sierra Nevada snowpack within Yosemite National Park. Even after it has been used once, it remains a potentially valuable natural resource, particularly in light of California's highly variable precipitation and the growing demands on its water resources; and

WHEREAS, regulations issued by the U.S. Environmental Protection Agency, enforced by the South Bayside System Authority (SBSA), restrict and/or require pretreatment of, discharges of water by industrial users to sanitary sewer systems; and

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WHEREAS, the federal Clean Water Act and complementary California law require the SBSA municipal wastewater treatment plant to provide a high level of treatment to all water it receives, including that which is now discharged to San Francisco Bay. It is that highly-treated effluent which is then further treated by filtration and disinfection to prepare it for use in landscape irrigation; and

WHEREAS, the treatment and use of recycled water is regulated by both the California Department of Health Services and the Regional Water Quality Control Boards. Recycled water meeting the requirements of the California Department of Health Services and the Regional Water Quality Control Boards has been used for landscape irrigation in numerous communities throughout California for decades. In the Bay Area, recycled water is being applied for nonpotable uses, such as landscape irrigation, in parks, playgrounds, schools, golf courses, and residential developments; and

WHEREAS, the water that is proposed to be distributed for nonpotable uses in the City will be treated to the level that the California Department of Health Services considers sufficient for it to be safely used in irrigating food crops and recreational swimming pools. It will be treated to a level that is considerably more stringent than the U.S. Environmental Protection Agency's recommendations for pathogens in water used for swimming; and

WHEREAS, the City has carefully investigated the public health implications of distributing tertiary treated disinfected recycled water for irrigation uses. As stated in Resolution No. _____, the Council has been presented with no substantial evidence that such use, as planned, may cause significant environmental impacts, including adverse public health effects. To the contrary, all of the information provided to the City Council by physicians, scientists and engineers with relevant academic training and extensive experience in the fields of medicine, public health and sanitary engineering supports the conclusion that distribution of recycled water in compliance with the applicable state regulations and as planned by City staff will be safe for all City residents.

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NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF REDWOOD CITY:

1. That the Council finds that the use of recycled water for landscape irrigation is safe, is environmentally responsible and can contribute to the health, safety and welfare of Redwood City.

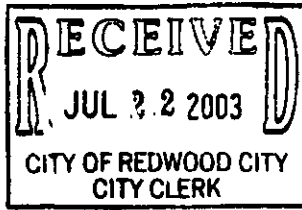
* * *

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ATTACHMENT No. 3



HEALTH SERVICES AGENCY



City Council	<input checked="" type="checkbox"/>
City Manager	<input checked="" type="checkbox"/>
City Attorney	<input type="checkbox"/>
City Clerk	<input type="checkbox"/>
Community Dev.	July 16, 2003
Finance Dept.	<input type="checkbox"/>
Fire Dept.	<input type="checkbox"/>
Public Works Dept.	<input checked="" type="checkbox"/>
Human Res. Dept.	<input type="checkbox"/>
Library Dept.	<input type="checkbox"/>
Parks & Rec Dept.	<input type="checkbox"/>
Police Dept.	<input type="checkbox"/>
Port of RWC	<input type="checkbox"/>
Planning	<input type="checkbox"/>

Mayor Richard Claire
 1017 Middlefield Road
 Redwood City, CA 94063

Dear Mayor Claire,

Water recycling, reclamation, and reuse are central elements of California's water supply policy. California has set a major policy goal of increasing water recycling over the next several years. California's water policy is based on more than 50 years of good science that supports the value, utility, and safety of water recycling. Water recycling is used even more extensively in other states and countries of the world than here. These states and nations have used recycling for decades without any evidence of health problems.

We believe that the world's extensive experience with water recycling and the science surrounding the field provide assurance that the potential public health risks associated with its use are minimal, provided all regulations pertaining to water quality, monitoring, reporting, and reliability are followed.

We support the increased use of water recycling in San Mateo County and are joined in this support by the California Water Resources Control Board; the California Department of Water Resources; the California Department of Health Services; the California Conference of Directors of Environmental Health; the United States Bureau of Reclamation, and the United States Environmental Protection Agency (EPA), Region 9. The majority of voters in the state also support water recycling and have recently passed a bond act to support the increased use of recycling.

Jurisdictions, like Redwood City, attempting to apply science and increase their use of recycled water are taking responsible action. We believe recycling is here to stay and will play a critical role in the future of our local area as well as our state.

Sincerely,

Brian J. Zamora, REHS, MPH
 Director, Public Health

Dean D. Peterson, PE, REHS
 Director, Environmental Health

Scott Morrow MD, MPH
 Health Officer

Letter from Santa Clara County Medical Association



700 Empey Way, San Jose, CA 95128
(408) 998-8350 FAX (408) 289-1064

July 10, 2002

Mr. Carl Mosher
Director
Environmental Services Department
City of San Jose
777 North First Street, Suite 300
San Jose, CA 95114

Dear Mr. Mosher:

At the recommendation of its Environmental Health Committee, the Santa Clara County Medical Association first endorsed the South Bay Water Recycling (SBWR) program in August 1997. Our support reflected our judgement that, when treated according to California Department of Health Services standards, recycled water from SBWR is a medically safe and environmentally sound alternative to the use of drinking water for nonpotable purposes such as agricultural and landscape irrigation and industrial cooling and manufacturing.

During the past five years local demand for recycled water has grown to the point that our community now uses an average of 10 million gallons per day during the summer months, and plans are underway to expand the system to further develop this valuable resource. By using non-potable recycled water for appropriate purposes we help protect endangered species, preserve our natural environment and secure an abundant water supply for future generations.

The Santa Clara County Medical Association is pleased to offer our continued support for this important program.

Sincerely,

A handwritten signature in black ink that reads "John D. Longwell MD". The signature is written in a cursive, slightly slanted style.

John D. Longwell, M.D.
President

JDL:jdb

Environmental Services

CITY OF SAN JOSE - CAPITAL OF SILICON VALLEY

City Home	City Services	About San Jose	Visitors	Feedback	Search
				Recycled Water	
Services for:	Residents	Businesses	Schools	Search ESD	Feedback

- FAQs
- Water Production
- Safety
- Visit the Lab
- Endangered Species

Is Recycled Water Safe?

The Santa Clara County Medical Association is officially endorsing South Bay Water Recycling, citing the safe reuse of highly-treated effluent from the San Jose/Santa Clara Water Pollution Control Plant for non-drinking purposes in Santa Clara County. "We strongly support and provide our endorsement for this very important project," stated Joseph E. Mason, Jr., MD, President of the Santa Clara County Medical Association.



The quality and use of recycled water is regulated by the California Department of Health, which sets strict standards for the water's treatment and disinfection. Currently, Department of Health staff monitor over 400,000 acre feet of recycled water per year. "Chronic water shortages are projected to occur in the foreseeable future here, and water recycling will be a significant drought-proof source of water to make up for these shortages," added Dr. Mason. "Recycled water is safe, practical and very necessary," stated Dr. Cindy Russell, Chairperson of the Santa Clara County Medical Association Environmental Committee, which recommended the endorsement. "It's an idea whose time has come." Dr. Russell, who graduated from the University of San Diego and completed her residency at Stanford, has

been a practicing physician and a member of the Environmental Committee for the past 10 years.

The committee investigates and studies environmental and public health concerns and makes recommendations to the Santa Clara County Medical Association on whether to support or take action. South Bay Water Recycling received a clean bill of health from the committee. "I believe many physicians, including myself, were originally concerned about recycled water," said Dr. Russell. "But the data and research support the safety of recycled water. It goes through a multi-step filtering and disinfection process and is continuously monitored. Recycled water is extremely clean." [See an example of what's in recycled water.](#)

Dr. Russell views water recycling as another aspect of recycling. "It's just like recycling your garbage and the benefits are similar too." Benefits include protecting the ecosystem of wildlife in the South Bay, conserving precious water, and educating the public that water is a limited resource. "South Bay Water Recycling is a model for other cities throughout the nation. I was impressed with the thought and research that went into building this project," added Russell. "It's imperative that we start thinking about alternative ways to protect our resources. "In the long run South Bay Water Recycling will save resources and money. People will find it is much cleaner than they ever imagined it to be," added Russell.