

2.0 Public Outreach and Education

Water Reuse Study

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The Council values the input and opinions of the San Diego community, especially on important policy decisions such as water supply. The findings of the California Recycled Water Task Force (*Water Recycling 2030*, 2003) also noted that successful recycled water projects typically employed key community participation principles. Those principles included:

- Involving the community in all phases of project planning,
- Disseminating adequate and understandable information in many forums,
- Understanding the values and needs of the public, and
- Providing the community with a broad understanding of water supply issues so that they would have a context in which to evaluate recycled water opportunities.

Based on these principles, the Study team proceeded with a public outreach program that focused on engaging the public as well as informing them about water issues. Stakeholders were engaged through the American Assembly-style workshop process, individual interviews, speaking events and web-based tools. These outreach activities are described in detail below.

2.1 City of San Diego Assembly on Water Reuse

The City of San Diego Assembly on Water Reuse (Assembly) process, detailed in Section 1.3, included development of white papers defining key issues, formulation of key policy questions, and facilitated workshops allowing diverse participants to come together for in-depth discussions. These discussions were usually conducted in break-out groups with detailed reports brought back to all the participants of the Assembly in a plenary session. The entire process concluded with the adoption of an Assembly Statement formalizing the views of the participants.

The first Assembly workshop was held over the course of three days in October 2004 and focused on two key questions:

- *What water reuse opportunities should be considered for the City?*
- *What criteria should be used in the Study to evaluate the water reuse opportunities?*

The result of this effort was a 14-page statement composed by the Assembly participants that summarized majority and minority viewpoints. This entire statement is included in Appendix B. The following are four key excerpts from the first Assembly summary statement:



1. Assembly participants assert strong support for non-potable uses.

The Assembly strongly believes that recycled water can and must play a significantly greater role in the City of San Diego providing added water reliability and environmental benefits. As such, the Assembly is unanimous in its support for the expansion of recycled water for non-potable uses.

2. The majority of Assembly participants support both non-potable and indirect potable opportunities, and outline critical conditions for reuse projects.

The majority of the Assembly supports the aggressive and visionary expansion of recycled water for potable and non-potable uses where the opportunities exist. There are critical conditions that must be met for any alternative that will expand this supply. First and foremost, it must be safe and protect public health. While the Assembly offered strong support for indirect potable reuse, there are clearly members of the Assembly and the community who are concerned about the public health effects of indirect potable reuse.

This issue will need to be thoroughly explored and the state of knowledge regarding treatment processes, reliability and risk assessed. A clear presentation of the technical information in a readily understandable manner is vital to ensure any public policy decision is well informed. The Independent Advisory Panel will be especially helpful in this regard.



City of San Diego Assembly on Water Reuse participants are allowed to debate and affect every aspect of the Assembly statement. Majority and minority viewpoints are included.

3. Assembly participants note the importance of information and public participation.

It is critically important to the success of any proposal that the Water Department aggressively pursue community outreach and public education activities to foster understanding of the alternatives and issues. A well-informed public will help ensure that any public policy decision of the City Council is sound. Lastly, the Assembly believes strong community and political leadership is necessary to advance the goals and objectives of the study.

4. Assembly participants weigh in on considerations and evaluation criteria.

In the view of the Assembly, the evaluation criteria listed in the white paper are reasonable. The Assembly believes there are certain refinements that would improve the quality of the assessment. In particular, there is a primary concept of “sustainability” that should guide the assessment of the alternatives. Sustainability considerations include public acceptance, protection of public health, cost-effectiveness, protecting and restoring the environment, greater regional water reliability, and diversification of supply.



Of nearly equal importance is the cost-effectiveness of the water supply, imported and recycled. Both direct and avoided costs must be compared on a common basis. The study must be sensitive to those in the community for which water costs represent a substantial economic burden. In this respect, grants, incentives and other external funding must be pursued.

The latter part of the Assembly statement above refers to evaluation criteria. The Assembly was provided with draft criteria and asked to provide input on whether the criteria were appropriate for evaluating recycled water opportunities. Modifications were made such that the criteria reflected the values of the assembled stakeholders and the community they represent. The criteria, with the Assembly revisions incorporated, are included in **Figure 2-1** on the next page.



EVALUATION CRITERIA	OBJECTIVE	PERFORMANCE MEASURE
Health and Safety	To protect human health and safety with regard to recycled water use	Meets or exceeds federal, state and local regulatory criteria for recycled water uses.
Social Value	To maximize beneficial use of recycled water with regard to quality of life and equal service to all socioeconomic groups	Comparison of beneficial uses and their effect on human needs and aesthetics, as well as public perception.
Environmental Value	To enhance, develop or improve local habitat or ecosystems and avoid or minimize negative environmental impacts	Comparison of environmental impacts and/or enhancements, environmental impacts avoided, and permits required.
Local Water Reliability	To substantially increase the percentage of water supply that comes from water reuse, thereby offsetting the need for imported water	Increases percent of water recycling and improves local reliability.
Water Quality	Meets or exceeds level of quality required for the intended use and customer needs	To meet all customer quality requirements.
Operational Reliability	To maximize ability of facilities to perform under a range of future conditions	Level of demand met and opportunities for system interconnections and operational flexibility are addressed.
Cost	To minimize total cost to the community	Comparison of estimated capital improvement costs, operational costs, and revenues for each reuse opportunity, as well as comparison of estimated avoided costs such as future regional water and wastewater infrastructure costs and costs to develop alternative water supplies (e.g. desalination).
Ability to Implement	To evaluate viability or fatal flaws and assess political and public acceptability	Level of difficulty in physical, social or regulatory implementation.

Figure 2-1 – Reuse Opportunities Evaluation Criteria



The Study held its second Assembly workshop over the course of three days in July 2005. This second Assembly focused on three key objectives:

- Reviewing research materials that had been prepared on the various water reuse options covered in the Study's June 2005 Interim Report.
- Reviewing the strategies outlined for increasing water reuse from the two reclamation plants.
- Determining how well each of the evaluation criteria identified from the first workshop were applied to each reuse strategy outlined in the June 2005 Interim Report.

In their statement adopted at the workshop's conclusion, the group gave strong support for indirect potable reuse, a reservoir augmentation process that uses "advanced treated" or "purified" recycled water to supplement imported and runoff water supplies currently stored in the City's open untreated water reservoirs. Again, the statement featured both majority and minority viewpoints and is included as Appendix C. The following are five key excerpts from the second Assembly statement:

1. The Assembly believes the Water Reuse Study provides a useful and appropriate analysis of reuse strategies that can be used to inform policy-makers.

The Assembly reviewed the technical information and believes the Study provides a sound basis for the deliberations and conclusions of the American Assembly. The Assembly is appreciative of the technical support of members of the City's Independent Advisory Panel and Study Team.

2. The Assembly unanimously agrees that current technology and scientific studies support the safe implementation of non-potable and indirect potable use projects.

The Assembly considers advanced treated (purified) water to be superior in quality to other sources (e.g. Colorado River, State Project Water). The Assembly acknowledges that upon the outset of the study, many participants had reservations regarding the safety of the purified water, but have resolved those concerns through review of this Study and the City of San Diego Assembly on Water Reuse process. The participants are confident that the current research and technological advances in water treatment will produce water of higher quality than currently available. Advanced treatment and long term storage, current water quality regulations, standards and regulatory oversight were viewed as reasonable precautions to ensure public health and safety. Some participants of the Assembly recommend that regulations be revised to allow for direct potable use.

3. The Assembly feels that there are no environmental justice issues that would act as a significant impediment to implementation of indirect potable use strategies.

The Assembly concludes that service would be provided to a wide range of social and economic communities. Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. The Assembly



believes that with proper information and community participation, any public perception of environmental justice issues can be overcome.

4. Recommended Strategy for North City

The Assembly participants unanimously support strategy NC-3 (indirect potable use from North City Water Reclamation Plant). This strategy reduces reliance on imported water, has lower long-term costs, resolves current City litigation, distributes water broadly, and leads the City on a path towards water sustainability.

5. Recommended Strategy for South Bay

The Assembly participants expressed strong support for SB-1 and SB-3. The lower cost of SB-1 and the high percentage of water that is developed were attractive. However, SB-1 does not have the sustainability benefits that SB-3 offers and questions remain regarding dependency on a single large user. Many Assembly participants would favorably consider the SB-1 strategy if NC-3 (which emphasizes indirect potable use) is implemented.

The latter two excerpts of the Assembly statement refer to the strategies discussed in Section 7 of this report.

2.2 Public Outreach Activities

The 2003 California Recycled Water Task Force and the Assembly, as noted above, asserted that information, education and outreach are critical in addressing recycled water issues. The Study team embraced the importance of public participation and incorporated additional activities to supplement the Assembly process.

Public participation and briefing tasks began at the inception of the project. The Study team developed handouts, brochures, PowerPoint presentations, and a website. Monthly updates were sent to community members who had expressed interest in its progress, and a video was produced to enhance the outreach program.

Telephone and website surveys provided valuable insight into community viewpoints. By partnering with the San Diego County Water Authority in conducting a telephone survey, the City was able to collect statistically significant information and opinions from City residents. The City's informal online informational survey allowed additional opinions and input to be submitted directly to the Study team. Survey forms were also distributed at speaking engagements to collect opinions from audience members. In addition, focus groups were conducted to provide insight on residents' opinions on recycled water issues.

Telephone Survey

In June 2004, a telephone survey sampled 406 City residents and found that they support efforts to improve reliability and diversity of regional water supplies through the utilization of recycled water. Survey respondents were asked about their support for various non-potable uses of recycled water. These were ranked in the order of respondent support.



Key Survey Findings

- *Non-potable uses of recycled water receive broad-based public support.*
- *Indirect potable reuse projects can garner public support if an intensive information and participatory process is included.*

1. Landscaping along freeways/golf courses
 2. Toilet flushing in new buildings
 3. Sports fields and parks
 4. Electronics manufacturing
 5. Industrial processing
 6. Landscape multi-family housing
 7. Residential front yards
 8. Agricultural irrigation
 9. School playgrounds
 10. Recreational parks
-

Survey respondents were also asked whether they would support using highly treated recycled water to supplement potable water supply sources – also known as indirect potable reuse or IPR. Without any conditions or further information, 26 percent of City residents favored supplementing drinking water sources with highly treated recycled water. Those not initially in favor were then provided further information explaining the additional treatment steps and regulatory approvals required. After receiving this additional information, a majority of the survey respondents supported the use of highly treated recycled water to supplement potable water supply sources.

Online Survey

An informal online opinion survey was linked to the City Water Department’s Water Reuse Study website when the site was launched in August of 2004. Paper copies of the survey were distributed at Speakers Bureau presentations and when received through other means – at presentations, or by facsimile or post – the data was added to the website survey statistics. Although not scientific, the survey was a means to gather public opinion on water recycling.

As of March 31, 2006, 432 surveys had been completed. Respondents were given the option of indicating residency and 89% provided a zip code. 312 of the total respondents provided a zip code within the City of San Diego, equivalent to 72% of the total respondents.

Of the 312 respondents indicating a San Diego zip code, 191 or 61% answered “yes” to the question “Do you favor using advanced treated recycled water as a drinking water source?” and 121 or 39% answered “no.” These percentages closely match the overall total responses to this question: 60% “yes” and 40% “no.”

Focus Groups

Decision Research, an independent research group, was contracted to conduct two focus groups made up of City residents. Their goal was to explore in detail the participants’ viewpoints on recycled water. The focus group results, as with the telephone survey results, substantiated the importance of providing information and dialogue in order to garner support for recycled water opportunities, particularly indirect potable reuse options.



Speakers Bureau

The Study team organized a Speakers Bureau and created presentations specific to the Study.



135 Speakers Bureau presentations have been made to groups throughout the City.

The team promoted the availability of this program to community organizations throughout the City. A PowerPoint presentation or the Study video was used in all presentations where the facility could accommodate visual aids. Brochures and a printed version of the online survey were made available to audience members for their personal use. From September 2004 through March 31, 2006, 135 presentations were made to various organizations. Of these 135, 58 presentations were made to groups located in the various City Council Districts, 41 to groups not specifically identified with a Council District or within San Diego County but outside the City limits, and 36 were to non-community groups, advisory groups, conferences and the like. A sample of organizations that received presentations includes:

- Local community planning groups and councils
- Rotary, Kiwanis and Optimists Clubs
- American Association of Retired Persons
- League of Women Voters
- San Diego Association of Realtors
- Science and medical organizations
- College and high school science classes

A full listing of all presentations completed through March 31, 2006 is located in Appendix F.

Media Coverage

The Study team sought media coverage of the Study as a means of informing large groups of the public about recycled water issues in San Diego. The Study team held interviews with major local print media and electronic news reporters, as well as editors and reporters from minority newspapers to keep them informed on recycled water issues and the progress of the Study. Media outlets contacted included the *San Diego Union Tribune*, *La Prensa*, *Asia Journal*, *Voice and Viewpoint*, and the *Filipino Press*. As of March 31, 2006, there were 29 newspaper articles about or referencing the Study, four television news stories and one radio interview.

Stakeholder Interviews

From the very start of the project, representative community organizations were identified that held a vested interest in the scope and findings of the Study. The Study team recognized the importance of soliciting input from these stakeholders so that their interests and concerns could be taken into account, as they would be with the implementation of a reuse project. Small group or individual interviews were held with a variety of these stakeholders representing planning, environmental, business and activist organizations. As of March 31, 2006, 27 stakeholder



interviews had been conducted. A specified format was used for each interview. A full listing of the completed stakeholder interviews is located in Appendix F. A sample of these organizations includes the following:

- Asian Business Association Government Affairs Committee
- San Diego County Medical Society
- Audubon Society Conservation Committee
- San Diego Regional Economic Development Corporation
- Building Owners and Managers Association Government Affairs Committee
- San Diego Association of Realtors Government Affairs Committee
- American Society of Landscape Architects
- Otay Mesa Chamber of Commerce
- South County Economic Development Council
- U.S. Green Building Council
- San Diego County Taxpayers Association
- San Diego-Imperial Counties Labor Council
- Urban League
- San Diego Hispanic Chamber of Commerce

Letters and Resolutions of Support

As a result of various community outreach activities and presentations, many groups have expressed enthusiastic support for the Study efforts. As of March 31, 2006, 22 letters and resolutions of support for the Study were received from community groups and organizations.

Website Visits

Since the Water Reuse Study website was launched August 5, 2004, it has resided as a prominent link on the City's Water Department homepage. Members of the public are directed to the website through the Study's written materials, media stories, educational video and Speakers Bureau presentations. There have been 6,933 visits to the Study's website through March 31, 2006.

Electronic Newsletters

Starting December 2004, an electronic newsletter or mailing list was developed about Study activities and other related recycled water news, and posted on the Study's website. Announcements of the most recent posting of this newsletter, the "E-Update," are periodically distributed to approximately 434* individual e-mail addresses and U. S. mail addresses. E-Updates have subsequently been published monthly since the inaugural edition and are ongoing. (*This figure represented as of March 31, 2006.)

Facility Tours

The Study team arranged tours of the North City Water Reclamation Plant (NCWRP), South Bay Water Reclamation Plant (SBWRP) and the Advanced Water Treatment Research Facility (AWT) at the NCWRP. Educational signage was developed for the AWT tour area. Tour participants included members of the Study's stakeholder group, local water and wastewater



officials, members of the media and other interested groups. Sixteen tours were conducted through March 31, 2006 at these various facilities.

Miscellaneous Promotions

- The Study printed an article in the fall 2005 water bill insert newsletter “Waterline” about the City of San Diego Assembly on Water Reuse Workshop II. The article included information about the Workshop II Statement which supported indirect potable reuse options and reached approximately 265,000 San Diego water customers.
- The Study had a one-page notice which identified the Study effort and provided the website address in the County Registrar’s Voters Pamphlet for the July 26, 2005, City-wide special election. The voter booklet was mailed to 600,505 registered voters in the City.
- A brief article with photo in the Water Department’s 2004 Annual Drinking Water Quality Report featured information about the Study. Again, the article included the Study’s website address. There were 565,744 copies of the report direct-mailed in June 2005 to all residents and businesses in the City of San Diego.
- The Study’s 25-minute educational video, which was created in-house, has been distributed at various community presentations and to interested parties. Since September 2005, it has been airing continuously on City Cable Access TV, available on both commercial cable providers serving the City of San Diego access channel.

Telephone Hotline and E-mail Account

The Water Reuse Study currently has a dedicated information line (619) 533-4631 and an e-mail account (WaterReuseStudy@sandiego.gov) which are checked and responded to on business days. These were established in June 2004.

2.3 Regulatory and Interagency Meetings

Regulatory agencies have a major impact on developing water reuse opportunities. State and federal regulations dictate treatment needs, water quality requirements, and allowable uses of recycled water. The Study team recognized that regulator participation was crucial in developing realistic opportunities that could be implemented in a reuse project. In addition, the required treatment processes have a major impact on regulatory costs.

The following two agencies were consulted during the Study process:

- California Department of Health Services (DHS)
- San Diego Regional Water Quality Control Board (RWQCB)

These meetings were productive in evaluating the current regulatory environment and determining the level of cooperation that will be needed should the City realize any of the reuse opportunities developed in this Study.



2.4 Council Aide/PUAC Briefings

City leaders were kept apprised of the Study's progress through briefings with aides for the Mayor's office, Council offices, Governmental Relations Department, and through periodic meetings with the Public Utilities Advisory Committee (PUAC). Council members recommended representatives from their districts to participate in the Assembly workshops. A list of the Council office briefings is included in Appendix F.

PUAC briefings were held on the following dates:

- May 7, 2004
- June 21, 2004
- August 16, 2004
- September 20, 2004
- November 15, 2004
- January 6, 2005
- February 14, 2005
- July 18, 2005
- August 15, 2005
- November 4, 2005 (PUAC Public Education Committee)
- November 21, 2005



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