

Section E: Public Outreach and Education

Public Outreach and Education Findings

- According to tour participant feedback, comprehension of the water purification process increased following the completion of an AWP Facility tour.
- A series of public opinion polls shows a steady increase from 2004 (26 percent) to 2011 (68 percent) to 2012 (73 percent) of City residents who favor using advanced treated recycled water as an addition to the City's drinking water supply.

The public outreach and education program for the Demonstration Project continued from outreach efforts that started with the Water Reuse Study, the first phase of the City's Water Reuse Program. The outreach program for the Demonstration Project built on the foundation that had been laid during the Water Reuse Study.

In 2005, the Water Reuse Study included a public outreach program that provided valuable input on how to best increase recycled water use as part of the City's plan for a reliable, long-term water supply. A key element of that public outreach program was the City of San Diego Assembly on Water Reuse, which brought together 59 individuals who resided in San Diego and were recommended by the Mayor and City Council to serve on this group. A non-technical group, these individuals



The San Diego Assembly on Water Reuse

represented a broad range of perspectives about San Diego. They reached agreement on a number of specific recommendations related to water reuse options for the City, including that "...technology and scientific studies support the safe implementation of non-potable and indirect potable use projects" (City of San Diego 2006). In addition to the American Assembly-style workshops, the City conducted several types of public opinion research including individual interviews, focus groups, and an online and telephone survey. To inform the public about the advanced water purification process, they also made presentations to groups, worked with the media, produced electronic newsletters, and established a website.

Because of a history of misinformation about water purification, City Council instructed that public outreach be included as a component of the Demonstration Project. Based on the City Council's directive, an outreach goal was adopted "...to inform and educate San Diego's local leaders, stakeholders and residents about the Demonstration Project."

In addition to the outreach goal, the following objectives were identified at the onset of the public outreach and education program:

- Foster a clear understanding of the Demonstration Project and its goals among all stakeholder groups
- Provide a description of the Demonstration Project and its results to the public
- Provide information on the opportunities and challenges of using reservoir augmentation as a component of diversifying the City's water supply

To accomplish the goal and objectives, a strategic outreach plan was developed to guide the comprehensive public outreach program envisioned for the Demonstration Project. A dedicated public outreach team was established to implement the program and to work closely at every step in the process with the technical team, which included the AWP Facility design and operating teams. The outreach team included the following staff:

- Project director
- Senior public information officer
- Two outreach practitioners dedicated full-time to the project
- Four multicultural consultants
- Media consultant

Throughout the duration of the Demonstration Project, the Public Utilities Department has sought to ensure that information about the Demonstration Project is presented in a clear, understandable, and accessible way to residents in all areas of the City. Information about the Demonstration Project has also been provided through a variety of formats including direct contact with individuals, written and electronic informational materials, traditional and social media, group presentations, community events, and tours of the AWP Facility. Starting in mid-2010, the following activities were completed during the first year of the project:

- Developed the outreach plan
- Conducted research, including one-on-one stakeholder interviews
- Produced informational materials
- Assembled a speakers bureau composed of project team members and Public Utilities Department staff
- Created a presentation about the project for community groups that was used for Speakers Bureau engagements

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- Requested recommendations from City Council members to contact for presentation opportunities
 - Conducted project presentations to community, planning groups, service clubs and business organizations, internal staff, and the City's IROC and NR&C
 - Participated in industry conferences
 - Developed an email list database of individuals interested in the project
 - Distributed eUpdates and electronic newsletters to interested parties
 - Participated in community events
 - Provided project information to a broad group of media representatives and outlets
 - Compiled quarterly metrics reports and analyzed them to guide future outreach activities

Beginning in mid-2011, the second year saw a continuation of the outreach activities initiated during the first year such as presenting to community, planning groups, service clubs and business organizations, and participating in community events, but added the following activities:

- Launched the Urban Water Cycle Tour program, which culminated in the AWP Facility tours
- Invited elected officials and project stakeholders to visit the AWP Facility when it began operation in mid-2011
- Developed additional informational materials, such as a virtual tour video, project white papers and a tour brochure
- Established a social media presence online using Facebook, Twitter, and YouTube
- Implemented continuous improvements in the AWP Facility tours based on feedback from tour guests
- Continuously enhanced Speaker Bureau presentations based on attendee feedback

All of the numerical data in this report reflects the activity from the commencement of the outreach program in spring 2010 through December 31, 2012. The outreach program is a continuing effort to educate San Diego residents about the potential for reservoir augmentation in the City. Although there is a “cutoff date” for reporting the statistics, the outreach efforts are ongoing. The Demonstration Project outreach program is described in more detail in the following sections. Supporting materials for Section E, Public Outreach and Education, are available on the Public Outreach and Education CD (Appendix H).

Planning, Research and Monitoring

The City's Public Utilities Department was committed to a comprehensive, transparent, and inclusive public outreach program that would inform residents of San Diego about the Demonstration Project. The first step to achieving this goal was to develop a plan to guide public outreach activities and ensure all activities were implemented throughout the City. As with the Water

Reuse Study, the City incorporated research findings to identify outreach activities to ensure all potential audiences had the opportunity to learn more about the Demonstration Project. Additionally, the City tracked its progress in reaching residents in all City Council Districts (using the eight-district map that reflected district boundaries from the beginning of the Demonstration Project until late 2012) through quarterly metrics reports.

Outreach Plan

The outreach plan, completed in May 2010, identified the variety of outreach activities and informational materials necessary to ensure prospective audiences knew about and were engaged in the Demonstration Project and its core element, the AWP Facility. The key points to be presented to City residents included:

- San Diego needs to develop local, reliable, and sustainable sources of water to lessen our dependence on imported water due to multiple factors affecting California's water supply.
- The Water Purification Demonstration Project is examining the use of water purification technology on recycled water to determine the feasibility of full-scale reservoir augmentation in the future.
- The water produced by the purification process goes through multiple steps of advanced treatment and will be tested to meet all water quality, safety, and regulatory requirements.
- No purified water will be added to the San Vicente Reservoir or San Diego's drinking water system during the Demonstration Project.

It was concluded that the most effective and efficient way to achieve the goal of informing San Diego residents about the water purification process was through focusing communication efforts on community leaders, stakeholder groups, and other local organizations. Audiences for the outreach program included local business; environmental, civic, and community leaders from all areas in the City of San Diego, including its vibrant multicultural communities; members of community planning groups and neighborhood councils; elected officials at all levels of government; media representatives; special interest groups such as seniors, the health community, science students, and religious leaders; Public Utilities Department staff; and water agencies throughout the county.

The core elements of the outreach activities were the speakers bureau, community events, and AWP Facility tours. The speakers bureau provided an opportunity for community groups and organizations of all types to learn more about the Demonstration Project through a presentation and opportunity to ask questions. Hosting informational booths at community events allowed for one-on-one discussions with a breadth of San Diegans. The AWP Facility tours provided an opportunity for individuals and groups to visit the facility to see firsthand the purification process and the quality of the water produced.

Research

The outreach plan recommended following previous research protocols to learn more about what residents and stakeholders knew about water reuse in general and water purification specifically. Information was obtained from three main sources: one-on-one stakeholder interviews, a telephone survey of City residents conducted in conjunction with the Water Authority's public opinion polls, and a San Diego State University student research study. Results from the research efforts guided the Demonstration Project's public outreach and information activities.

Stakeholder Interviews

The City recognized the importance of ensuring stakeholders from all communities in the City who had a vested interest in the Demonstration Project knew about it: what it was, what it was not ("Toilet to Tap"), and how they could learn about the Demonstration Project and provide input. This led to 105 one-on-one interviews with stakeholders throughout the City from mid-2010 to mid-2011. Stakeholders were identified through City Councilmember and Water Reliability Coalition member recommendations (see the *Stakeholder and Partner Communication* section) as well as by reviewing lists of stakeholders interviewed during the Water Reuse Study.

In addition to gauging their level of awareness about the Demonstration Project and the advanced water purification process, interviewers sought to learn the best way to provide information about the Demonstration Project to the community or group represented by each stakeholder and to determine what kind of information the stakeholder would need to more clearly understand the purification process. Water quality and public health and safety were the top concerns stakeholders mentioned about the concept of reservoir augmentation. This underscored the importance of providing information about the water purification process and the multiple barriers provided by the membrane filtration, reverse osmosis, and UV disinfection/advanced oxidation steps. It also emphasized the importance of the planned AWP Facility tour program and the need to provide information about how water quality will be monitored.

Public Opinion Polls

The Water Authority regularly conducts public opinion polls to garner information about attitudes toward water issues throughout the county. For the 2012 survey, as with the 2011 and 2004 surveys, the City requested that a statistically-significant sample of approximately 400 City residents be polled to provide a good base of knowledge about water attitudes in the City. According to the findings, nearly three-fourths of City residents favored using recycled water to help diversify the City's water supply (see Figure E-1) and 71 percent believed that recycled water used for irrigation could be further treated to make the water pure and of the highest quality for drinking (see Figure E-2). When the concept of the Demonstration Project was explained to them as part of the poll, over three-fourths of the respondents expressed strong support for it.

Figure E - 1: 2012 Public Opinion Poll – Opinion about Using Advanced Treated Recycled Water as an Addition to Drinking Water Supply

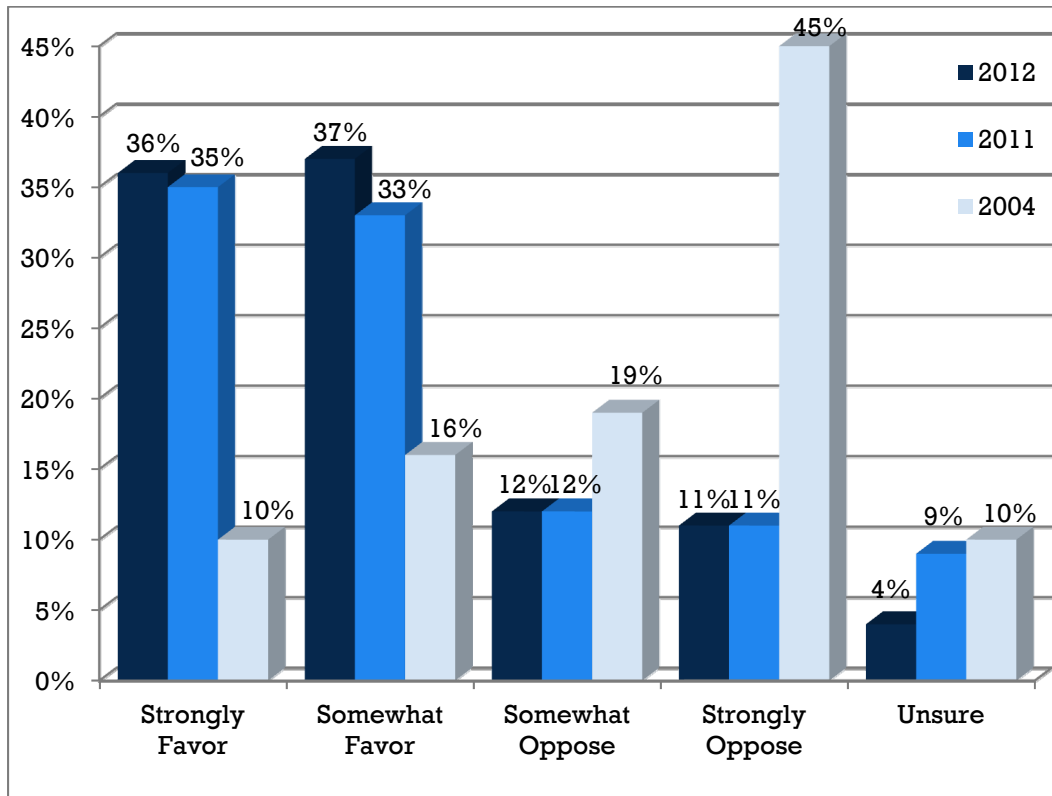
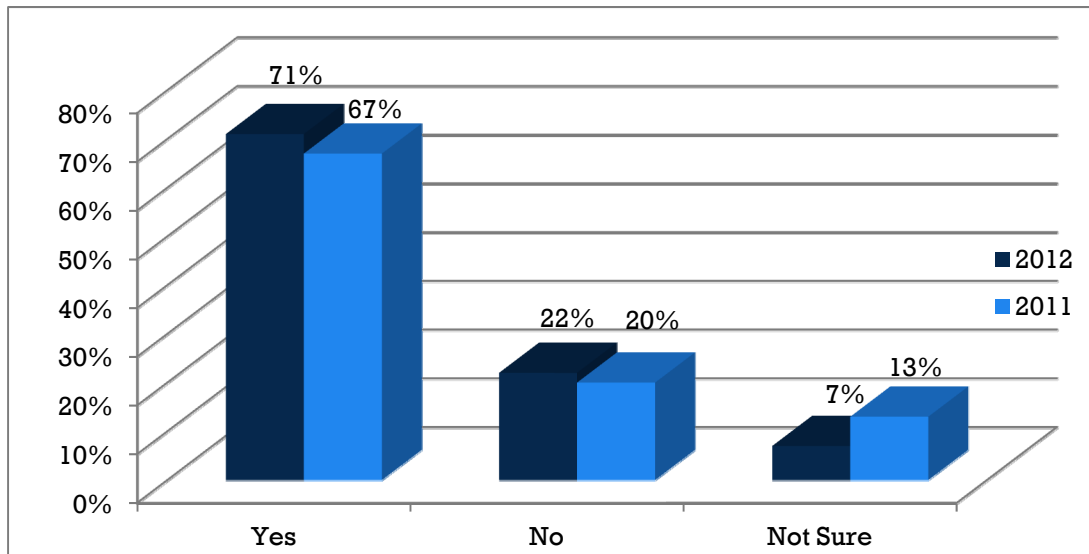


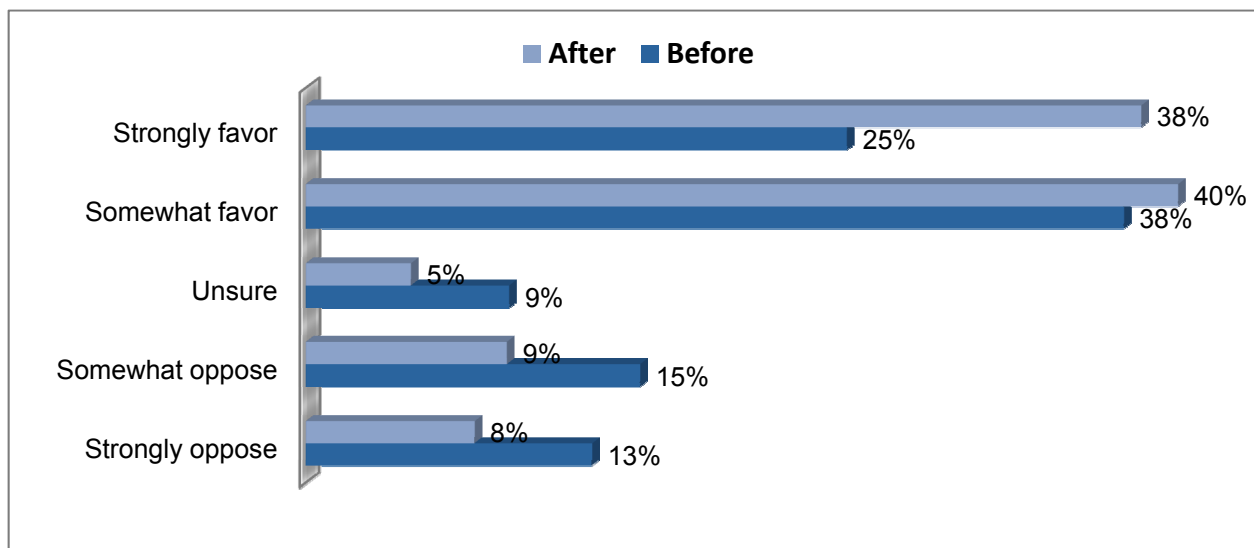
Figure E - 2: 2012 Public Opinion Poll – Is It Possible to Further Treat Recycled Water Used for Irrigation to Make It Pure and Safe for Drinking?



San Diego State University Research Study

A research study regarding the Demonstration Project was conducted in the fall of 2010 by a research methods class at San Diego State University (SDSU). The students conducted 63 in-depth interviews with City of San Diego residents. The information culled from these interviews was used to create a random digit dial telephone survey questionnaire. Students used the questionnaire to interview a statistically-significant sample of 626 San Diego residents by telephone in November 2010. After being read a description of the Demonstration Project, 63 percent of respondents said they supported it. The next step in the process was to provide more information about advanced water treatment to the respondents. This step validated the importance of informing people about the Demonstration Project, since 78 percent were supportive of the Demonstration Project once they learned more about it (see Figure E-3).

Figure E - 3: Impact of Additional Information on Support



Application of Findings

The research findings from the stakeholder interviews, public opinion polls, and the SDSU study helped determine which public outreach activities should be emphasized. For example, since the SDSU research found that people tended to trust scientists most for their water information, engineers and plant operators led AWP Facility tours and emphasized that the entire project is overseen by a team of experts from the IAP. Stakeholders also expressed concerns about water quality in the one-on-one interviews, so an extensive discussion of water quality is included in all project presentations. The purified water quality is also displayed visually at a sink that dispenses water produced at the AWP Facility at the end of the tour.

Outreach Metrics Report

The City's IROC serves as an official advisory body to the Mayor and City Council on policy issues relating to the oversight of the Public Utilities Department's operations. IROC's Outreach and Communication Subcommittee (formerly known as the Public Outreach, Education and Customer Service Subcommittee) noted the importance of measuring and evaluating the Demonstration

Project's outreach activities. The metrics reports that were developed in response to this request summarized completed outreach activities and provided direction for scheduling future activities. Outreach data were compiled into a comprehensive quarterly report that identified outreach activities completed to specific audiences during that reporting period. Included in the reports were the number of tour attendees, community presentations, eUpdates, new contacts, and more. The report also included additional details about each of these activities. A review of the metrics report guided the focus for future outreach activities. This ensured that every community in San Diego had the opportunity to learn about the project, whether through an article in a community newspaper, a water bill insert, attending a presentation, or touring the facility.

Education and Outreach Materials and Tools

Informational materials were developed as tools to explain and disseminate information about the Demonstration Project and the science behind water purification. These materials were tailored to the interests of multiple audiences and were made available in a variety of formats including both print and electronic versions. The materials were created to appeal to multicultural and age-specific audiences, and were translated into Spanish and Vietnamese. To ensure all aspects of the project were clearly understood, project informational materials were posted on the project's website, www.PureWaterSD.org, and distributed or available at presentations, tours, community events, and all other outreach activities.

Fact Sheet

An easy-to-understand fact sheet was developed early in the Demonstration Project to provide a description of the project, highlighting the need for a local, reliable source of water in San Diego and the components of the Demonstration Project. The fact sheet includes a schematic of the advanced water purification process, as well as the water treatment and distribution processes, to clarify any misconceptions about the Demonstration Project. It was written for lay audiences and translated into Spanish and Vietnamese for multicultural outreach opportunities. The fact sheet was distributed at stakeholder interviews, presentations, and community events, and available at AWP Facility tours, all City library branches, City Council offices, and the Mayor's office. It is also on the project website. The fact sheet was also condensed into a "quick facts" version with bullet points for use as reference.



An easy-to-understand fact sheet was developed for distribution and for inclusion on the project website.

Frequently Asked Questions (FAQ)

The most frequently asked questions related to the Demonstration Project were answered in an FAQ to clarify misconceptions and further explain the components of the project. The FAQ was distributed at stakeholder interviews, presentations, and community events, and available at AWP Facility tours, all City library branches, City Council offices, Mayor's office, and on the project website. The questions were updated as needed according to public feedback.

Information Card

To ensure project information was presented clearly and understandably to all audiences, it was important that information be conveyed about project components in a consistent manner. This reduced confusion and fostered clarity about the Demonstration Project. A business card-sized informational piece was created as a portable, quick-reference item to carry as a reminder of key information points, or project messages, to provide to any audience. The card also included project contact information and the website address for easy reference.

Fact Card

The project fact card was a version of the information card produced for distribution at community events and AWP Facility tours to ensure consistency of project information and to provide contact information and the project website address.

Interest and Information Card

The interest and information card was used at all outreach activities and was designed to allow interested parties, community leaders, tour guests, and presentation participants to provide their contact information, level of interest, and any requests for additional information. A simplified version was created for use at events to gather names and email addresses. The extensive list was compiled and added to an email list to receive project updates, electronic copies of the project newsletter, eUpdates, and information about project involvement opportunities. The card also allowed members of the community to request group presentations or suggest additional groups to contact for a presentation. A total of 1,056 interest cards were collected from stakeholder interviews, community events, presentations, and facility tours. The interest cards included postage and a mailing address if interested parties preferred to complete and mail in the card at a later date.

Website

The official project website (with the domain name PureWaterSD.org) was designed and hosted on the City website. The site included all project materials, updates, related media, and up-to-date



The image shows a sample of the 'Information Card' for the Water Purification Demonstration Project. The card features the project title and logos for the City of San Diego and Public Utilities. It includes a section for checking interest levels with four options: being interested in the project as a water source, wanting a presentation, wanting periodic updates, and supporting the project. Below this is a section for providing contact information, with fields for Name, Organization, Address, City, State, Zip, Phone, and E-mail. At the bottom, it provides the website URL (purewatersd@sandiego.gov), a phone number (619) 533-7572, and the website address (www.purewatersd.org).

An interest and information card allowed people to provide contact information, indicate level of interest, and request additional information.

information about the project. For ease of use, a tour sign-up link was located on the home page. The project website was publicized on all informational materials and mementos to encourage an online following.

Content on PureWaterSD.org includes the following:

- AWP Facility tour registration
- Project history
- Email subscription registration system
- eUpdates
- IAP member list and activities
- Informational materials
- White papers
- Videos
- Project PowerPoint presentations
- WaterReuse Association PowerPoint “Downstream”
- News coverage and related news clips
- Newsletters
- Completed speakers bureau presentation list
- Contact information
 - Links to project social media pages
 - Presentation request information
- Links to relevant resources or information about water reuse and water purification

Photography

Outreach efforts were documented with photographs, which were used in informational materials such as presentations, advertisements, newsletters and media outreach, and were placed on the project website and social media pages. Photographs were taken at most outreach activities, including community events, presentations, facility tours, and conferences.

Electronic Updates (“eUpdates”)

A series of electronic project updates (eUpdates) was designed and distributed by email as a way to provide project information updates as necessary to interested parties. Content included new information, recent media coverage, community involvement events, tour information, and photographs. These emails included brief updates about timely issues that may not be covered in the project newsletters.



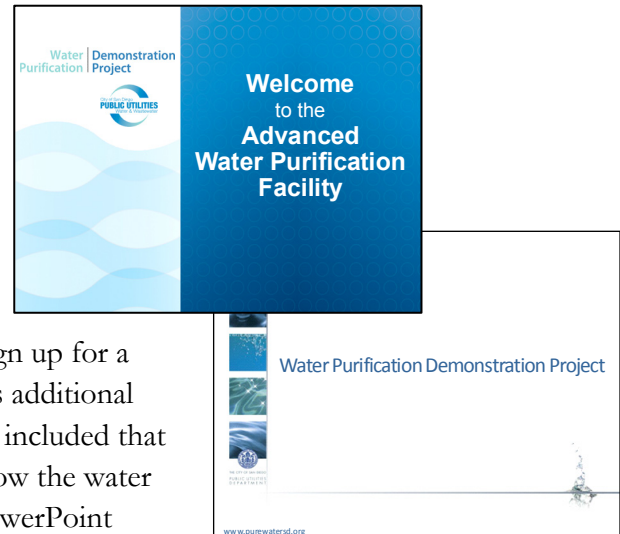
Pure News, a newsletter about the project, was published three times a year

Newsletter

A newsletter titled *Pure News* was published three times per year to provide updates on the project, highlight community outreach activities, call attention to project-related media stories, encourage readers to visit the AWP Facility, and share photographs. It was distributed electronically to a list of up to 3,890 interested parties compiled through project outreach activities (refer to the *Promoting the Demonstration Project* section for more information). Copies of the newsletter were printed for distribution at presentations and community events, and each issue has been made available on the project website.

PowerPoint Presentations

PowerPoint presentations were created for the speakers bureau and facility tour program. The presentations provided an overview of San Diego's water supply challenges and how the City is working to meet those challenges. The presentations provided the history of the project; explained its components; and encouraged public participation in the outreach program by letting audience members know how to sign up for a tour, request additional presentations, and easily access additional information about the project. A short video was also included that describes the multiple barrier treatment process and how the water purification equipment works. The objective of the PowerPoint presentations was to explain the science behind water purification. Presentation content was reviewed regularly to consider public feedback and new information. A long and short version of the project presentation was available to accommodate varying presentation timeframes. More information about the presentations and how they were used can be found in the *Business and Community Outreach and Speakers Bureau* sections.



The speakers bureau and facility tour program incorporated PowerPoint presentations to explain the science behind water purification.

Posters, Banners, and Mementos

Posters were created for display at the AWP Facility, presentations, and community events. The posters included images such as a schematic of the water distribution process, the multiple barrier treatment steps, and San Diego's imported water supply system. They provided a visual explanation of project components and referred interested parties to the project website and social media sites to continually build an online following. Banners featuring the project logo and website were also designed and produced to be used at community event exhibits.



Mementos were designed and distributed at community events and facility tours to serve an educational purpose.

Various mementos were distributed at community events and facility tours to serve an educational purpose. Useful and practical mementos featuring the project logo and website address were chosen based on the corresponding outreach activity. They appeal to a wide variety of audiences and remind them of how to get additional project information. Some mementos displayed the multiple barrier process in order to reinforce the science behind the technology.

White Papers

For those seeking in-depth information about the project, two white papers were created and posted online:

- The *City of San Diego Water Purification Demonstration Project, Advanced Water Purification*, which describes the multiple barrier processes and water quality testing in greater detail and addresses strategies that have been developed to manage potential risks from CECs
- *Potable Reuse Projects in the United States*, which includes details about other projects that use water purification processes and a timeline of their construction

Water Bill Inserts

A bilingual insert that announced the opening of the AWP Facility and tour opportunities was included in water bills and circulated for three months in 2011 and 2012. Water bills are delivered to approximately 275,000 ratepayers bimonthly. Based on findings gleaned from tour registration data, many AWP Facility tour participants found out about the tour program from the inserts.



A bilingual insert announcing the opening of the AWP Facility and tour opportunities was included in water bills.

Tour Guide Binder

As part of the tour program, a tour guide binder was developed to contain information relevant for those guiding tours of the AWP Facility. The binder included an in-depth tour script, key project information, and answers to frequently asked questions heard on previous tours. More information about the AWP Facility tours is included in the portion of this section titled *Business and Community Outreach*.

AWP Facility Brochure

To promote the project's tour program, a brochure was designed that highlights the AWP Facility. The brochure includes a brief project overview, a schematic and photos of the facility, an explanation of each of the three treatment barriers involved in the purification process, and information on how to register for a tour and follow the project online. The brochure, geared toward a general audience by using layperson's language, was intended for distribution as a take away at AWP Facility tours, community events, and presentations. It is also available on the project website.

Media Kit

A media kit was developed for distribution to local and national media representatives. The kit included the project fact sheet and FAQ, key information points, local and national news articles, the AWP Facility brochure, information about the Orange County GWRS, the white paper about related projects, a photo CD, and other relevant materials. The kit can be easily updated as needed. Project materials were provided for inclusion in media kits prepared for news conferences on related Public Utilities Department topics.

Tabletop Display Units

Two identical tabletop display units were created, one for display at the AWP Facility and the other to be used at community events. The collapsible and transportable units had Velcro panels, which allowed the display unit to be easily updated and changed as needed. The display units featured images and information about San Diego's water supply challenges, the components of the Demonstration Project, the purification process, and highlights of project media coverage locally and nationally.



The project tabletop display unit

Children's Activity Page

To incorporate children in the educational process, a worksheet was developed that introduced the concepts of water purification while engaging them in fun activities such as a maze, word search, and crossword puzzle. A solutions page was also developed for teachers and parents to check the children's work and to provide them with the correct answers. The activity page was distributed to children at tours and events.

AWP Facility Virtual Tour Video

A video was created that provides a virtual tour of the AWP Facility and the water purification process to ensure the AWP Facility tours were accessible to all San Diegans, including those who may not be able to physically tour the facility. The video includes footage of the equipment and explanations of the multiple barrier treatment process. The virtual tour is featured on the project website, YouTube page, and on DVD. DVDs were distributed to City public libraries for use in educational programs as well as to City Council offices, other elected officials, and other interested parties. The video has been viewed more than 880 times on YouTube.

Community Outreach and Tours

In order to reach a large and diverse segment of San Diego community members, various methods were used to connect with San Diegans. Through community outreach activities, these connections were used to share project information with a wide variety of audiences, such as grade school students, individuals from every community in San Diego, water industry professionals, and elected

officials. The Demonstration Project established a presence throughout San Diego by hosting informational booths at community events, , welcoming guests to tour its AWP Facility, regular updates to decision makers and additional community outreach efforts.

City Boards and Commissions

San Diego City Council requested that decision makers be kept informed about the status of the Demonstration Project. Therefore, the project director regularly presented to NR&C and IROC. Updates about the Demonstration Project components were provided at 19 NR&C meetings and five IROC meetings, including presentations to the IROC Environmental and Technical Subcommittee and the IROC Outreach and Communications Subcommittee.



Demonstration Project booth at the Sally Ride Science Festival

Community Events

Hosting informational booths at community events was an important way to communicate directly with audiences from all over the City, including those who might not have been inclined to seek out water information. The Demonstration Project was featured at 42 community events in all San Diego council districts. These events varied from science expositions to festivals. At the informational booth, educational materials were distributed, project details were discussed, and contact information from booth visitors was collected to continually build a database of interested parties for future outreach. Members of the multicultural team staffed ethnic events to provide project information in a culturally appropriate manner to all San Diego residents.

Urban Water Cycle Tour Program

One of the Demonstration Project’s most valuable outreach tools for explaining the science behind water purification technology was the Urban Water Cycle tour program. In the natural water cycle, water evaporates, forming clouds and then returning to earth as precipitation. The “urban water cycle” recognizes that used water from homes and businesses is treated at wastewater treatment plants and discharged to a water body from which it will evaporate. However, the natural process of evaporation and precipitation can be accelerated, as is done by the AWP Facility. Tours were given of water treatment, wastewater treatment, and water purification facilities to provide stakeholders with an up-close experience of the treatment process along with a better understanding of the “urban water cycle.”



Tour pathway sign

Prior to the opening of the AWP Facility, stakeholders visited the Alvarado Water Treatment Plant and Point Loma Wastewater Treatment Plant to learn more about what treatment processes are used

at each facility and the need each facility fills. Since its opening in June 2011, the AWP Facility remained the focus of the Urban Water Cycle tour program and was one of the primary outreach activities that provided project information. The tour provided San Diegans with a tangible experience of the Demonstration Project, increased the visibility of advanced water purification technology, corrected inaccurate perceptions about water purification processes, and solidified relationships with stakeholders.

AWP Facility Tour Publicity

The AWP Facility tours were publicized through email invitations, community event informational booths, newsletter articles, media coverage, email updates, social media posts, speakers bureau presentations, newspaper and online advertisements, and water bill insert announcements.

AWP Facility Tour Graphics

A variety of graphic materials were prepared to create an attractive and educational tour experience. The graphic approach reinforced the idea of the water cycle and used words and images that “connect” the viewer to the subject of water. A palette of colors was selected for the graphics to be representative of water. The backgrounds included graphics of waves and bubbles that implied technology and water purification in a simplified way. Icons were used to enhance and illustrate the AWP Facility process, such as H₂O molecule decals.

One of the main graphic elements used in the tour experience was a PowerPoint presentation featuring an animated video of the water purification process. Posters highlighting existing water purification projects, a San Diego County map for guests to identify where they live, banners displaying the urban water cycle, water-related maps, signposts featuring water-related quotations, signs explaining each step of the multiple barrier process, and a “photo-op” backdrop featuring San Vicente Reservoir were located throughout the facility to provide information and keep guests engaged during the entire tour. A blue pathway guided guests through the AWP Facility. Decals were placed along the pathway to illustrate the purification process. The decals early in the pathway showed water contaminated with a number of microorganisms. As the decals neared the end of the pathway following the three purification steps, they were clear and free of contaminants. All of these materials supplemented the messages expressed verbally by the guides throughout the tour.



Schoolchildren try to identify the purified water sample.

AWP Facility Tour Logistics

The tour experience consisted of three main parts: an introduction, a facility tour and a closing. Each tour began with a presentation about the City’s water supply situation and explanation of the various project components and treatment processes involved, followed by a tour of the facility with explanations of how the many pieces of equipment work together to create the multiple barrier process. At the conclusion, guests compared samples of recycled water, drinking water, and purified water produced at the facility.

AWP Facility Tour Attendees

Guests registered for the tours through an online registration system. Registrants provided contact information, including email addresses, and how they learned about the tour. Not only was the information collected useful for contacting guests prior to the tour, but it served a secondary purpose in expanding the project contact list. The email addresses collected were added to an interested parties email database for future communications.

Tours were offered weekly with a Saturday and/or an evening tour offered at least once a month.

Organizations also had opportunities to host meetings on site and take a tour of the facility. Since the facility opened, more than 3,200 guests have attended 243 tours. Tour attendees included many local elected officials and decision makers, such as San Diego Mayor Jerry Sanders, San Diego City Councilmembers, mayors of Del Mar and Solana Beach, councilmembers from Oceanside and Solana Beach, Assemblymembers Atkins and Fletcher, Congressman Filner, and staff from the offices of

Senator Boxer, Representative Issa, State Senator Anderson, Assemblymembers Block and Jones, the EPA, the Bureau of Reclamation, Department of the Interior, Office of Management and Budget, and the Senate Appropriations Subcommittee for Energy & Water Development⁷. The Demonstration Project attracted City residents as well as international guests from Armenia, Australia, Azerbaijan, Brazil, China, Georgia, India, Iraq, Kyrgyz Republic, Mexico, Moldova, Spain, Tajikistan, Ukraine, the United Kingdom, and Vietnam.



San Diego Mayor Jerry Sanders toured the AWP Facility with his staff.



Members of the 416th Civil Affairs Battalion (Airborne) following their AWP Facility tour

In order to further engage visitors following the tour, attendees received an email thank you note with a link to the project's Facebook page where guests could view the tour photographs. Tour participants were added to the database of interested parties to ensure they received periodic updates about the project.

Tour Feedback

Following tours of the AWP Facility, guests completed surveys to evaluate their tour experience and understanding of water purification. This tool is used to gauge the success of the information provided and identify areas of needed improvement for the tour. Based on the findings, nearly all of

⁷ Titles listed represent the office held at the time of tour. Some of these elected officials may no longer hold the office listed.

the respondents found the tour to be “very informative” (81.4 percent) or “informative” (18.2 percent), and more than 98 percent of respondents said the overall tour was “excellent” (74.6 percent) or “good” (23.7 percent).

The feedback has resulted in the tour program being adapted to meet visitors’ needs and to incorporate suggested improvements. For example, respondents who toured early in the program often reported poor audio quality on the tour. After acquiring a better sound system, the audio quality comments dropped significantly. In addition, guests commented on the lack of accessibility for participants with limited mobility. Based on this feedback, a virtual tour video was created that could be viewed in the tour conference room or from a personal computer. Other feedback led to the development of more child-friendly materials, inclusion of additional props, and fine-tuning of other aspects of the tour.

Youth Outreach

Another facet of the outreach program is the cooperative work done with students throughout San Diego, most notably those at the Elementary Institute of Science. The Elementary Institute of Science Commission on Science that Matters is an innovative program that involves students from San Diego high schools in the study of a topic that will result in greater community sustainability. For the 2011/2012 school year, Elementary Institute of Science students created a video about the water purification process to make the project’s technical aspects more understandable and appealing for children. Elementary Institute of Science posted the video on their YouTube page (youtube.com/eiscostm06), and the Demonstration Project social media pages linked to the video. The students presented the video and what they learned about the purification process to NR&C in May 2012.



Following their presentation to NR&C, EIS students pose with Project Director Marsi Steirer.

Outreach to young audiences was incorporated in many aspects of the outreach program. Elementary and high school classes, Boy Scout dens, Girl Scout troops, and home-schooled children toured the AWP Facility. Many higher education groups also toured the facility, including water treatment, engineering, law school, and medical school classes. In addition to the tours, the speakers bureau made presentations about the Demonstration Project to elementary and high school classes. Technical information was geared to a younger audience at youth-oriented events such as the Sally Ride Science Festival, the Girl Scouts World of Water Workshop, the San Diego Science & Engineering Expo, and the Greater San Diego Science & Engineering Fair.

Multicultural Organizations

With the help of multicultural experts, all aspects of project outreach were considered through a multicultural lens. Considerations included conducting one-on-one interviews with community

leaders from ethnic or faith-based organizations, producing multilingual materials, distributing news releases and template articles to ethnic media, guiding tours of the AWP Facility for ethnic media representatives, participating in multicultural community events, providing Spanish and Portuguese translators for AWP Facility tours when necessary, and welcoming people of all backgrounds to tour the AWP Facility. This cross-dimensional approach to multicultural outreach ensured diverse audiences were taken into account for all outreach efforts.

Social Media, Conferences and Awards

To promote transparency and project visibility, the outreach program aimed to inform as many City residents as possible about the Demonstration Project. With this goal in mind, social media platforms, email distribution systems, and industry conferences were used to reach a wide variety of people.

Interested Parties

Interested parties who expressed a desire to learn more about the project, either when they visited the website or signed up at events or other outreach activities, were added to a database of email contacts. Other groups, such as stakeholders, media contacts, tour participants, and potential groups for speakers bureau presentations were also included in the database. Contacts were able to easily unsubscribe from email updates if they no longer were interested in the project. After continuously collecting contact information, the database eventually consisted of 3,890 email contacts. The contacts typically received project updates once a month, keeping them informed about the project without bombarding them with emails.

Social Media

Social media sites provided effective opportunities to reach new audiences and maintain contact with existing interested parties. An active social media presence was developed on Facebook, Twitter, and YouTube. The pages were updated and monitored on a daily basis, which included responding to public comments to keep followers engaged. A social media calendar was also developed and updated monthly such that interesting and relevant information could be posted frequently. Community members were encouraged to follow the social media pages at tours and events, on the website, and in newsletters, eUpdates, and other informational materials.



An active social media presence was developed on Facebook, Twitter, and YouTube.

[Facebook \(www.facebook.com/SanDiegoWPDP\)](http://www.facebook.com/SanDiegoWPDP)

The latest project information, AWP Facility tour photos, and links to related articles and factoids were posted on the project's Facebook page, adding up to 379 wall posts. The page has received 123 page likes, 12 comments, and 93 likes on page items (e.g., photographs and wall posts).

[Twitter \(www.twitter.com/PureWaterSD\)](http://www.twitter.com/PureWaterSD)

Similar yet pithier posts and links were posted on Twitter compared to those posted to Facebook. On Twitter, dialogue about water issues and the Demonstration Project were more readily available, thanks to the social media site's structure. For example, a project mention by Council President Young on Twitter led to dialogue with a community member⁸. Eventually the community member attended the tour and later posted on Twitter about her positive tour experience and her support for the project. The Demonstration Project has 133 followers (i.e., subscribers) of its Twitter page. In addition to the project's own 537 tweets, posts were retweeted 54 times and the project's page was mentioned 75 times by others.

[YouTube \(www.youtube.com/PureWaterSD\)](http://www.youtube.com/PureWaterSD)

Project-related videos were posted on the YouTube page, including a virtual tour of the AWP Facility, an animated video explaining the water purification process, project testimonials, and a clip from *California's Gold* with the late Huell Howser that featured the Demonstration Project. The seven videos posted have received a total of 3,121 views. The YouTube page also linked to "favorite" videos posted by other YouTube channels including the video produced by Elementary Institute of Science students and a WaterReuse Foundation video about the world's water supply titled *Downstream*.



Seven videos posted about the project on YouTube have received a total of 3,121 views.

Water Agency Collaboration

Although San Diego residents were the primary target audience for project outreach, all of the cities and agencies that receive or could potentially receive (such as in an emergency) drinking water from the San Vicente Reservoir have the potential to be affected by a reservoir augmentation project at San Vicente Reservoir. Water Authority member agencies were kept informed through presentations, meetings, and facility tours. They also received information suitable for sharing on their websites and in outreach materials. All Water Authority member agencies have received information through a presentation or tour.

In addition to providing project information, there was a collaborative effort between the Demonstration Project and the Water Authority. In early 2012, the Water Authority developed a brief video that explained the region's water needs and how full-scale reservoir augmentation could produce a reliable, local drinking water supply. An additional element of this collaboration was a cross-promotion where information was shared about the AWP Facility tours and the Water Authority's San Vicente Reservoir tours at the other's tour program.

⁸ Title listed represents the office held at that time.

Trade Shows and Conferences

Since full-scale reservoir augmentation at San Vicente Reservoir would be the first project of its kind in California, the Demonstration Project drew interest from water industry professionals from across the state and the nation. There were 33 presentations made about the technical and outreach aspects of the project at local, national, and international water industry conferences. These presentations increased project visibility and encouraged connections with and learning from experiences of other water industry professionals.

Awards

The Demonstration Project has received recognition for its outreach efforts. In September 2011, the WateReuse Association honored the Demonstration Project as the Public Education Program of the Year for its outreach efforts since inception. The following year in September 2012, the WateReuse Association recognized the Demonstration Project once again, this time as the 2012 Small Project of the Year.



The Demonstration Project has received two awards from the WateReuse Association.

Media Outreach

Effective media outreach required that media representatives receive accurate and timely project information. Information was provided to reporters and editors of local, regional, and national publications, as well as multicultural print publications, online publications, and television and radio outlets at all project milestones. The project has been covered by many media outlets including the *San Diego Union-Tribune*, *North County Times*, *Los Angeles Times*, *USA Today*, *New York Times*, *National Public Radio*, and *National Geographic*.

Contact Lists

A comprehensive list of local and national media contacts was developed and information was provided at project milestones and to generate interest in the AWP Facility tour program. News releases and template articles were distributed to various publications: daily newspapers, online media, community newsletters, and trade publications. Members of the multicultural team provided contact information for local, ethnic media representatives and encouraged them to tour the AWP Facility. Stakeholders that have their own publications and newsletters were included in the list.

Media Outreach Activities

There were many components of the media outreach activities. Prior to the opening of the AWP Facility, science reporters were informed about the technical details of the project. This effort resulted in several publications writing about the multiple barrier process before the AWP Facility was operational.

Media representatives were invited to tour the AWP Facility once it became operational. On June 30, 2011, San Diego Mayor Jerry Sanders, Councilmember David Alvarez, Public Utilities Director Roger Bailey, and Demonstration Project Director Marsi Steirer announced the opening of the

one-mgd AWP Facility at a news conference covered by reporters and camera crews from local television news stations and several daily print or online publications.⁹

Template articles were prepared to provide project information through community newspapers, stakeholder publications, and local websites and extend the reach throughout the City. The articles were customized as needed for a variety of outlets and updated articles were prepared as the project progressed. A well-publicized template article from early 2012 promoted the AWP Facility tour program, increasing participation in the tours while raising awareness about the project.

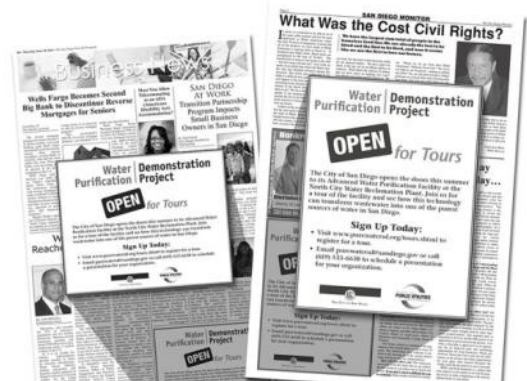
A news release highlighting a group's visit to the facility was submitted for consideration in the group's newsletter or appropriate publication. Tours were covered in several organizational newsletters and campus publications, such as Francis Parker School's online news and SOS Toastmasters' monthly newsletter, which may have otherwise not included a story on the Demonstration Project.

Advertisements

Advertisements announcing the AWP Facility opening and the availability of tours were placed in seven local, ethnic publications (*El Latino*, *Filipino Press*, *La Prensa*, *San Diego Monitor*, *Voice & Viewpoint*, *We Chinese in America* [weekend edition], and *Giving Back Magazine*) immediately following the facility opening in summer 2011.

Depending on the publication, the advertisements ranged from one-eighth to one-quarter of a page in size. Spanish text was used for the advertisements placed in Spanish language publications. These advertisements were an important part of reaching out to multicultural audiences.

Additionally, the tour program was advertised in *Voice of San Diego* (VOSD) in June/July 2012 as part of an advertising package. Since the advertisement placement coincided with the release of the newest Spiderman movie and Comic-Con 2012, a three-frame animated advertisement that featured a Demonstration Project informational booth visitor dressed as Spiderman was placed on the *Voice of San Diego* website. The advertisement included phrases about the tour program that played on Spiderman terminology. Additionally, a static advertisement about the tour program appeared eight times



Advertisements in local ethnic publications were used to reach out to multicultural



An animated advertisement featuring a Demonstration Project informational booth visitor dressed as Spiderman was placed on the Voice of San Diego website.

⁹ Titles listed represent the office held at the time of the news conference.

in the VOSD Best of the Week and Member Report weekly email blasts. Lastly, a quarter-page tour program advertisement ran in the VOSD monthly magazine.

Media Coverage

As one of the first cities in California to pursue full-scale reservoir augmentation, San Diego has been front and center in media coverage for recycled water projects in the U.S. and around the world. The project was featured in local and national newspapers, online and trade publications, and local radio and television stations. The project and the tour program were also featured in community publications. Many affiliated websites provided links to the project website, informational materials or videos. Using established multicultural media contacts, project coverage was generated in African-American, Latino and Asian publications.

In October 2010, the *Union-Tribune* published an article describing water purification and included graphic diagram of the multiple barrier process. This emphasis on the science of water purification reflected what the Demonstration Project was all about. In January 2011, the *Union-Tribune* recalled its previous criticism of water purification as “toilet to tap” with an editorial piece titled “The Yuck Factor: Get Over It”. On a national level, the *New York Times* followed suit with an article in February 2012 titled “As ‘Yuck Factor’ Subsides, Treated Wastewater Flows From Taps.” From 2010 to 2012, information has been provided for many articles such as these that have recognized and contributed to the growing understanding of the scientific efficacy of water purification technology and San Diego’s need for a local, reliable source of water. Overall, the project received media coverage from more than 100 publications and news outlets locally and nationally.

News coverage was continually monitored and compiled. Links to relevant news articles were posted on the project website and in eUpdates. A media tracking database noted project coverage by newspapers, radio, television, and blogs. Coverage of the Demonstration Project was generally accurate and discussed the technology to be employed to purify the recycled water.

The commitment to providing accurate, science-based information also resulted in more descriptive language being used by publications. Instead of sensational headlines relying on the inaccurate “toilet-to-tap” moniker, publications used more fact-based headlines. Some examples include *Union-Tribune* articles, such as “Water Recycling Key to U.S. Future” (Jan. 10, 2012), “Boosting Reservoirs



The project received media coverage from more than 100 publications and news outlets locally and nationally.

with Purified Wastewater?” (May 22, 2012), and “Recycled Water Getting Another Look” (May 23, 2012).

Speakers Bureau

An active speakers bureau gave 132 presentations about the Demonstration Project throughout San Diego and proved to be a vital component of the outreach program. These presentations shared project information with community members and provided an opportunity to receive public feedback about the project and the presentation itself so public questions and perception about water purification in San Diego could be more clearly understood.

In order to ensure an inclusive, broad reach throughout San Diego, an extensive database of community groups with potential interest in the project was created. The list began with groups that received presentations about the Water Reuse Study in 2005 and 2006. Each City Council district office was contacted for recommendations of groups to contact. Presentation scheduling began with the groups recommended by council members, those groups that had been previously involved, and community planning groups throughout the City. Contacts were researched for environmental groups, business associations, religious groups, civic organizations, and other special interest groups. They were then contacted to schedule a presentation. The speakers bureau program provided an opportunity to explain the project components and for community members to ask questions, voice concerns, and obtain accurate information about it.



An active speakers bureau gave 132 presentations about the Demonstration Project throughout San Diego.

The speakers bureau members were tasked with presenting information about the project in community group presentation settings. A PowerPoint presentation was developed to explain San Diego’s water supply situation, the components of the Demonstration Project, and how water purification technology works in layperson’s terms. The speakers bureau team participated in two workshops to become familiar with the presentation and practiced delivering it and responding to questions. Regular meetings with speakers bureau members were held to discuss feedback from presentations, develop updated presentation slides, and identify questions that should be added to the project FAQ.

The speakers bureau was regularly publicized through all aspects of the outreach program including at community events, at facility tours, on all distributed informational materials, and on the project’s website. Contacts in the speakers bureau database were contacted and offered a presentation,

responses were provided to presentation inquiries, equipment and materials were prepared, and presenter feedback forms and group evaluations were collected. Any questions and concerns from the group were recorded in the database and follow-up was performed when necessary.

The speakers bureau successfully presented to groups citywide. The groups had various interests, and many group members followed up with a tour of the AWP Facility. Presentations were made to churches, classrooms, multicultural group meetings, water industry luncheons, community planning meetings, environmental symposia, and more. A broad range of groups proved to be interested in the discussion of San Diego's water supply and receptive to the options being explored by the City, particularly the Demonstration Project.

Stakeholder/Partner Communication

Sharing educational information about the project allowed relationships to be formed with stakeholders and a network of contacts to be developed. Once identified, stakeholders were contacted to participate in one-on-one stakeholder interviews, schedule group presentations, place project information in their relevant publications, and tour the AWP Facility. All of the stakeholders were added to the interested parties' database so they would receive regular email updates about the project.

American Assembly

As mentioned previously, in 2004 and 2005 a broad-based group of City residents participated in an American Assembly-style process to review the City's Water Reuse Study findings. The American Assembly members concluded that reservoir augmentation was the most viable use of highly treated recycled water for San Diego and that it could provide a local, reliable supply of water crucial to the City's future.

Because American Assembly participants played such an essential role in the eventual development of the Demonstration Project and were already invested in it, they were immediately identified as key stakeholders. Early in the project, members of the American Assembly were updated about the project status, informed about outreach opportunities, and encouraged to remain involved. In addition to being added to the email update contact list, the American Assembly participants were directly contacted in early 2012 to encourage them to tour the facility or register for a presentation if they had not done so already.

Water Reliability Coalition

Beginning in 2009, a unique union of diverse San Diego organizations came together to form the Water Reliability Coalition (WRC; formerly the IPR Coalition) in support of the Demonstration Project. This independent, broad-based coalition consisted of 23 environmental, technical, business, and ratepayer advocacy groups that promote the exploration of water purification in San Diego (see sidebar for list of organizations). The group was instrumental in maintaining momentum for the Demonstration Project by attending and providing testimony at City Council and other civic meetings. Additionally, they provided an independent voice about water purification and the need for a sustainable water supply for San Diego. In 2010, the San Diego Chapter of WateReuse California presented special recognition awards to each WRC organization in recognition of their support of water reuse, and in particular of water purification in San Diego.

As early supporters of the Demonstration Project, the WRC was updated about the project and invited to tour the AWP Facility. The Water Reliability Coalition's role was to provide their own opinion about the project as a non-governmental group. Additional information about the WRC can be found at www.sdwatersupply.com.

Stakeholders

As mentioned previously, a number of community leaders were identified and interviewed in one-on-one meetings to gather their feedback on relevant water issues. A broad range of perspectives was sought from all sectors of the community since every industry, group, and individual is affected by the City's water supply. Stakeholder organizations were engaged, including construction, industrial, medical, education, business, and tourism sectors. To ensure the interests and concerns of all San Diego residents were captured, multicultural organizations and leaders in multicultural communities were sought to participate in the stakeholder interview process.

Following the interviews, the relationships with the community leaders and their organizations were reinforced in several ways: providing them with



Coalition Members:

BIOCOM
Building Industry Association
of San Diego
Building Owners and Managers
Association, San Diego Chapter
Citizens Coordinate for Century 3
Coastal Environmental
Rights Foundation
Empower San Diego
Endangered Habitats League
Environmental Health Coalition
Friends of Infrastructure
Industrial Environmental
Association
National Association of Industrial
and Office Properties,
San Diego Chapter
San Diego and Imperial
Counties Labor Council
San Diego Audubon Society
San Diego Regional Economic
Development Corporation
San Diego Coastkeeper
San Diego County Apartment
Association
San Diego County Taxpayers
Association
San Diego Regional Chamber
of Commerce
San Diego River Park Foundation
Sierra Club, San Diego Chapter
Surfrider Foundation, San Diego
Chapter
Sustainability Alliance of
Southern California
Utility Consumers' Action Network

information requested during the interview, sharing template articles for inclusion in their organizational outreach materials, encouraging them to host a speakers bureau presentation, and inviting them to tour the AWP Facility.

Information Lines and Emails

To promote two-way communication, project telephone information lines and an email address were set up to allow community leaders to contact project staff easily. Three information lines were set up for overall project questions, speakers bureau registration, and tour information, respectively. Also, an email address (PureWaterSD@sandiego.gov) was promoted as the point of contact for all project-related questions and concerns.

The project received, responded to, and tracked 182 email and telephone inquiries from members of the public who inquired about it and requested presentations and tours, in addition to members of the public who requested tours by email. Each email and telephone inquiry was tracked on a form that recorded contact information and the information requested. The outreach hotlines were useful for providing a central contact point for the public. The goal was to respond to telephone and email inquiries within one business day. If a question required a more technical response, technical staff assisted in developing an accurate response that addressed the contact's concerns.

Internal Department Communications

The City of San Diego Public Utilities Department's 1,414 staff members were an important audience for the Demonstration Project since they could be asked about it while working in the field, responding to customer service inquiries, attending or staffing community events, or talking with their own friends and family. Therefore, internal audiences were kept informed about the project and provided with as much information as possible.

Internal Meetings

Information about the project was presented to Public Utilities staff at internal division meetings. Since all of the division staff were invited to and typically attended these meetings, many internal staff could be reached at once. The presentations explained project details and answered questions for an audience with unique interests that varied from those of the general public.

Project information was also shared at a series of three tailgate trainings, which are required classes for field personnel. Prior to the presentation, attendees were tested to determine their water purification knowledge. Following the presentation, the attendees were tested again to show what they learned through the presentations.

Intranet

The Public Utilities Department houses its own intranet site its staff. The site provides employee resources, department information, and related news. Information about AWP Facility tours and the virtual tour video are posted on the Intranet page. Also, the project's Pure News newsletters were posted on the intranet's page of Public Utilities Department newsletters.

Pipeline

Pipeline is the Public Utilities Department's internal monthly newsletter. It is emailed to Public Utilities staff, posted in break rooms, and available on the department's intranet page. Project updates, City staff tour invitations, and general information are submitted for inclusion in *Pipeline*, as necessary. Overall, information about the Demonstration Project was included in 14 issues of *Pipeline*.

City Staff Tours

To address the unique interests and concerns of Public Utilities Department staff, 16 AWP Facility tours were provided for City staff only. These tours were publicized through internal emails, *Pipeline*, and on the intranet. Public Utilities supervisors and supervisors in other City departments, such as Storm Water, requested additional tours to accommodate their staff members. These tours proved valuable in educating a large number of City staff about the project and providing in-depth information to them.

Public Outreach and Education Findings

Key findings of the public outreach and education program are as follows:

- Feedback from individuals who have toured the AWP Facility shows that providing an opportunity to tour the facility increases understanding about water purification processes.
- Research shows a steady increase from 2004 (26 percent) to 2011 (68 percent) to 2012 (73 percent) in City residents who favor using advanced treated recycled water as an addition to the City's drinking water supply.



A Message from the Director

Happy New Year Everyone! As we embark on a new year together, providing the highest caliber of services to our customers, I want to thank you for your efforts over the last year. Looking ahead, I can assure you it will likely be a very eventful year, filled with challenges and opportunities. We have many progressive initiatives to manage within the Department and we will be busy focusing on providing excellence in what we do, while at the same time continuing to streamline and cut costs.

Take the Survey! Self-Assessment Survey Deadline January 20

It's not too late to take the self-assessment survey! Please participate in taking the AWWA Qualserve Self-Assessment Survey if you have not taken it already. If you have not taken the survey yet, another reminder email will be sent out that will have the survey attached and detailed instructions on how to complete it. For employees without email access, the survey will be administered on paper/pencil at salignates around the department. The survey takes about 30-45 minutes to complete and is anonymous; all data will be aggregated so your individual responses will not be identifiable. The purpose of the survey is to assess what employees think about how our Department is doing in the Winter.

Information about the Demonstration Project was included in 14 issues of Pipeline, the Public Utilities Department's internal monthly newsletter.



Public Utilities Department staff tour the AWP Facility.

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