CHAPTER 8: PUBLIC INFORMATION PLAN

8.1 Introduction

This chapter summarizes, based on published case studies, several water reuse programs that implement and maintain a public outreach program. Typically these programs do not experience the time delays and financial setbacks that are common for projects that ignore or do not maintain the outreach programs. The chapter begins with a discussion of public relations issues and examples of public outreach programs and their roles in reclaimed water projects. The role that a public outreach program plays in the success or failure of a water reclamation project is also addressed. The second part of this chapter provides a summary of the meetings held with the public information committee (PIC) for reclaimed water and the public meetings held in conjunction with this project. Finally, an approach to working with the public to implement the reclaimed water implementation plan is discussed.

8.2 Public Relations Issues Associated with Reclaimed Water Projects

Because the principal source of reclaimed water is wastewater, there are often challenges that must be overcome with respect to public perception. Most of the time, these challenges manifest as concerns that the water is still contaminated with pathogens and therefore unsafe for public exposure. However, even with proper education, people still have an instinctual aversion to using that which they think is "gross". Fundamentally, this is the most difficult and most critical hurtle that reuse projects have to overcome. Public reluctance at incurring additional costs associated with dual distribution systems, treatment plants, etc. is also a problem, but often only because the public good gained from employing reuse water is not properly communicated to the community.

8.3 Examples of Public Outreach Programs in Other Communities

The following sections summarize public outreach programs that have been developed in other communities throughout the United States.

8.3.1 Projects that Benefited from a Public Outreach Program

The following water reuse projects benefited from a public outreach program. While the components of the public outreach programs varied from project to project, it is apparent that early implementation of a public outreach program typically resulted in timely public acceptance.

8.3.1.1 El Paso Water Utilities, Texas

Since its water resources are limited to aquifers and the Rio Grande River, El Paso Water Utilities (EPWU) made the decision in 1963 to begin delivering reclaimed water to the community. EPWU has successfully completed multiple water reuse projects including the NW Wastewater Reclamation Facilities project, Haskell R. Street Reclaimed Water project, and the Bustamante Wastewater Plant to the Riverside International Industrial Center project. Because EPWU already had a strong water conservation program in place prior to initiating these reuse projects, public response was favorable when reuse projects were proposed.

The EPWU water conservation program includes brochures and pamphlets, online resources, financial incentives in the form of lower water rates for reclaimed water users, workshops, and direct access for the public to EPWU senior staff to ask questions or discuss concerns. In addition, the EPWU maintains a good relationship with the media by continually updating and educating them on new water reuse developments. As a result, media coverage and public response to proposed water reuse projects has been favorable.

8.3.1.2 Irvine Ranch Water District, California

The Irvine Ranch Water District (IRWD) was formed in 1961 to provide water and irrigation to a rapidly growing community. Two years after its inception, the IRWD made the decision to begin collecting and treating wastewater as well as producing reclaimed water. By 1967, this reclaimed water was being supplied to agricultural users to irrigate crops. As part of its aggressive water conservation program, the IRWD has since broadened its use of reclaimed water. Reclaimed water is now used on crops, golf courses, parks, school grounds, greenbelts, street medians, and freeway landscaping. Furthermore, it is supplied to local high-rise office buildings and individual homeowners for flushing toilets and is scheduled to be supplied to office towers and other buildings for similar use.

These highly successful, innovative projects have placed this community among the nation's water reuse leaders. Much of this success is a result of an aggressive public outreach program that is part of the IRWD's water conservation program. This outreach program includes: 1) a residential tour program, 2) an in-school education program, and 3) newsletters and brochures.

The residential tour program is free and provides area residents an opportunity to learn more about the district facilities and water supply issues. A member of IRWD's board of directors as well as the senior staff begin the tour with a presentation and question and answer session on the district's history, water sources, conservation information, and other similar topics. Participants are supplied with packets that include district information and free conservation devices like low-flow shower heads and faucet aerators. Following this presentation, participants are taken on walking and driving tours of the Michelson Water Reclamation Plant (MWRP) and IRWD points of interest (i.e., reservoirs, reuse sites, wells, etc). The tour is concluded with a lunch at the Duck Club, an historic building adjacent to the MWRP during which additional water conservation techniques are discussed and a survey rating the tour's educational effectiveness is provided. Based on the positive responses documented by this survey, the residential tour program has been an effective method to educate the public on water conservation and water reuse.

An in-school education program was created to educate students on the importance of water to Southern California's arid region. It was developed not only to correlate with, but also supplement, the school district's social science curriculum by offering free classroom presentations, videos, workbooks, tours, and special projects. Students are taught a variety of topics including water pollution prevention, water conservation, and point versus nonpoint source pollution. Teachers receive "leave behind" materials (i.e., booklets, posters, and stickers) as well as an evaluation sheet, the results of which assist the IRWD in refining the program so it will maintain pace with current academic trends. Many students also participate in the IRWD's residential tour program each year. IRWD staff members are also involved in the program by not only serving as guest speakers in the students' classrooms but also as science fair judges. The winning students get their projects displayed at district headquarters, are recognized at a board of

directors meeting, and a financial award is given to the student's school district for the purchase of science materials.

In order to keep teachers abreast of new programs, presentations, and materials, the IRWD publishes newsletters and brochures twice annually. These materials provide educational program highlights, announcements of student award winners, and other information such as how to book a speaking engagement. Finally, the IRWD provides teachers educational mini-grants each year that supplement school budgets and allow teachers to provide water or other environmental education programs that might not otherwise be possible.

8.3.1.3 Orange County, California

The Irvine Company, located in Monterrey, Orange County, California, has been irrigating produce with reclaimed water for over 20 years; however, this method was not advertised to the public. In order to determine if there was a need or desire to label the produce to indicate the source of irrigation, a series of interviews was conducted with brokers, receivers, and wholesale and non-wholesale buyers.

The results of these interviews indicated that labeling was not recommended unless it would add some value to the product. Nevertheless, the growers remained concerned about how the public would perceive the source of the irrigation water. Therefore, three approaches were developed to help control public perception: 1) operate the treatment plant beyond regulatory requirements, 2) conduct an education program, and 3) plan for real or perceived problems.

The public education program included an active school education component with multiple classroom demonstrations. Booths were set up at county fairs and other local events and speakers were available to civic or service groups. Furthermore, tours of the water reclamation plant were conducted and education materials were included as part of bi-monthly billing materials. Finally, a crisis communication manual was prepared to deal with possible scenarios and educate growers on how to deal with the press. While growers remain concerned about the possibility of negative public perception, they are confident they have the tools in place to deal with it if needed.

8.3.1.4 Phoenix, Arizona

The 91st Avenue Wastewater Treatment Plant (WWTP) located near Phoenix, Arizona, utilizes reclaimed water for agricultural irrigation and industrial purposes. The reclaimed water supply is the greatest during the winter months due to the influx of winter visitors, while the supply is lowest during the summer months as a result of higher demand. Because this WWTP is located in a desert environment where water is such a valuable resource, the Subregional Operating Group (SROG), which owns the WWTP, began researching methods to capture the unused portions of reclaimed water present during the winter months.

Groundwater recharge was proposed as an efficient method to store the excess supply for later recovery during periods of higher demands. This proposal became known as the Agua Fria Linear Recharge Project (Agua Fria Project). This project specifically involved transporting reclaimed water from either the 91st Avenue WWTP or a series of constructed wetlands into the Agua Fria River. The reclaimed water would supplement the renewable water supply, improve

the habitat along the river, and provide recreational and educational opportunities to the community.

Stakeholder coordination and public information was the first phase of a four-phased plan that was developed to create stakeholder consensus, address technical issues, and secure all necessary permits. During this first phase, stakeholders were identified along with issues of concern. Meetings were then conducted with several stakeholder groups while others were interviewed via telephone. A project newsletter was distributed to the public within a one-mile radius of the proposed project, and then two public meetings were conducted to gather public input. The input was compiled and organized into common themes and several technical committees were assigned to address these concerns.

This public involvement program proved to be very successful. The efforts conducted as part of this program led to the creation of one document that addressed the public's concerns and provided recommendations and guidelines that will be invaluable as the next phase of the Agua Fria Project begins.

8.3.1.5 Pinellas County, Florida

Pinellas County Utilities (PCU) recognized a public educational opportunity after it renovated its South Cross Bayou Water Reclamation Facility. To help students and residents better understand water reclamation, the importance of clean water, how people can help manage their limited water resources, and the various careers in water and wastewater treatment, the PCU created a hands-on educational program.

This program included supplemental educational materials for teachers to use in the classroom. It also included a hands-on tour of the South Cross Bayou site in which tour participants are able to conduct their own water quality testing and compare it to results reported from a professional laboratory. Finally, video presentations before and after the tour highlight various aspects of the water reclamation process.

8.3.1.6 Scottsdale, Arizona

Scottsdale, Arizona proposed and successfully implemented a water reclamation project known as the "Water Campus." The "Water Campus" is a water reclamation plant that discharges approximately 20 million gallons of reclaimed water per day. This water is then utilized as irrigation water at several local golf courses. In an effort to conserve the water during periods of low demand, it is treated to drinking water standards, and then fed back into the aquifer. Due to the potential for negative public perception of recharging the aquifer with reclaimed water, the City implemented a three-step process. First, a technical advisory committee was formed at the onset of the proposed project that included local professors and other members of the community. Efforts were made to educate these members about the importance of reclaimed water and how it related to the proposed project. Once educated, the members of the technical committee became strong allies for the project. Second, several neighborhood meetings were held to educate the community as well as give them a chance to ask questions about the proposed project. Finally, an open house was conducted at the plant with invitations to local residents as well as the media. The open house was heavily attended and many residents left with positive views of the proposed project. Furthermore, these positive views were then broadcast to the community at large during

interviews with the local media. The cumulative results of these efforts worked to educate the community and create a positive perception of the proposed project.

8.3.1.7 St. Petersburg, Florida

St. Petersburg, Florida, began supplying reclaimed water to be used for residential irrigation in 1977. Nearly 20 years later, the popularity of the program had increased, so the program was expanded to include additional customers. Incentives such as lower water rates were offered and neighborhood participation rates were lowered to encourage additional hookups.

In addition to these incentives, the City conducted a public outreach program. The public outreach program consisted of speaking engagements, educational materials such as books, CD-ROMs, and videos permanently on display at the local library, and the creation of two Xeriscape demonstration sites. Furthermore, the City has sponsored various educational programs, contests, and forums to educate the public on how to conserve and protect the valuable water resources.

8.3.1.8 Yelm, Washington

In 2001, the City of Yelm, Washington, began producing reclaimed water. This water is used for irrigation at schools and churches, for automobile wash water, and supply for fire hydrants. The reclaimed water is produced at the City's award-winning water reclamation facility that is composed of an eight-acre memorial park, a fishing pond, and a constructed wetlands system. These facilities have been very popular to the public who frequent the facility to fish, view wildlife, and even hold weddings.

The City has an active program to promote its reclaimed water use. As a part of this program, the City sponsored a contest to see which student could create the most imaginative water reuse mascot. This contest was taken a step further by local teachers who created a skit with the winning mascot ("Mike the Pipe") along with other characters ("Water Sprite," "Little Bug," and "Sledge") to teach what the different options are with water that is disposed down a drain.

8.3.2 Projects that Suffered Due to Poor Public Outreach

The following are examples of water reuse projects that were negatively impacted due to a poor public outreach program. In both cases, the proposed project was technically sound; however, project delays were realized due to either the lack of or failure to maintain a strong public outreach program.

8.3.2.1 Cape Coral, Florida

The City of Cape Coral, Florida is a rapidly growing community with a fluctuating winter population. Due to water supply concerns, along with the need to dispose of wastewater effluent, the City developed the Water Independence in Cape Coral (WICC) project. This project involved the installation of a dual water system that would deliver potable and reclaimed water in parallel pipelines to the community. The project was created without any public outreach activities. Consequently, when the public did become aware of the project, their negative reaction resulted in delaying the project for six and a half years. Had a public outreach program

been formed early in the planning stage, it could have addressed the public's concerns prior to finalizing the program.

The project was a major success once it was finally constructed, by conserving more than four billion gallons of potable water in the project's first eight years. Soon, however, residents began excessive use of the reclaimed water, and it became necessary to apply restrictions on reclaimed water use. Having learned its lesson, the City implemented a new education campaign to encourage responsible reclaimed water use. "Cape Coral Alligator" was created to remind users of proper watering times and other water conservation practices. Furthermore, a hotline was also formed that residents could call to confirm watering schedules. As a result of the now successful reclaimed water programs, the City is prepared to be able to supply water for its anticipated future growth.

8.3.2.2 City of San Diego, California

The City of San Diego has very limited local water supply sources; therefore, it is forced to import the majority of its water supply from outside sources. In an effort to supplement the limited local water supplies, the City proposed the "Water Repurification Project" in which treated reclaimed water would be piped into and blended with surface water reservoirs thus increasing the available water supply.

Due to the nature of the proposed project, the City of San Diego recognized that public acceptance was critical to the project's success. Consequently, the City initiated public involvement efforts as soon as technical studies began. Telephone surveys, focus groups, and stakeholder interviews were conducted to identify local supporters for the use of repurified water, and other education efforts were targeted towards the local media. City and San Diego Water Authority (the Authority) staff conducted a community outreach program using print and visual materials. Tours of the pilot plant were provided and policymakers and their staffs were briefed on the proposed project. While these initial efforts resulted in early public approval, numerous factors emerged as the project progressed that changed the public perception.

Shortly after moving from the concept to the design phase, the City changed the project team from the Water Repurification project team to the Wastewater Department. This change may have sent a mixed message to the public and caused them to view the project as a wastewater disposal rather than as a water supply solution. As the project neared final approval, key election dates were ignored and final approval of the project by the City Council was scheduled concurrently with several competitive elections. Consequently, final approval was delayed until after these competitive elections. Misinformation generated by various political candidates running for office was not promptly addressed by members of the proposed project and resulted in the misinformation being perceived as the truth. Early education efforts and relationships with the media were not maintained and resulted in negative media coverage. Finally, early efforts to identify all interested stakeholders overlooked a group of residents that lived outside the City's jurisdiction. As a result, these residents, who had not received any mailings with accurate information, began to aggressively oppose the project at various public meetings. As a result of the collapse of the public information program and failure to include several key stakeholders, the San Diego project was defeated and delayed several years.

8.4 City of Fort Worth Reclaimed Water Priority and Implementation Plan Public Meetings

The City of Fort Worth has conducted three public meetings related to the Recycled Water Implementation Plan. The first public meeting was held early in the study and provided information about the project team and the scope of work to be performed. The second meeting was held following development of the initial project alternatives and provided information about proposed service areas and preliminary project costs. The third public meeting was held following submission of the draft report and presented a summary of the final recommended alternatives, feasibility evaluation and implementation plan. (FILL IN MORE AFTER THIS MEETING) A brief description of the topics discussed at each of these meetings and the public response is presented below.

Public Meeting No. 1- July 20, 2005

This meeting provided an overview of the study goals and objectives and summarized the specific project tasks. Background information related to reclaimed water was also presented. A questionnaire was provided and, if attendees were interested in receiving reclaimed water in the future, they were encouraged to fill out the questionnaire and return it to the City. Those in attendance were very supportive of the study and were interested in the project schedule and potential timing for future implementation of projects.

Public Meeting No. 2- March 23, 2006

At this meeting, preliminary project alternatives for each service area were presented. The approach to identifying potential customers and defining the service areas was discussed. Preliminary opinions of probable cost were also summarized. Again, attendees were very supportive of the proposed alternatives. There was some discussion about financing of the projects and potential phasing of facilities. Potential regional support of the reclaimed water system was also discussed.

Public Meeting No. 3- April 4, 2007

At this meeting, an overview of the study goals and objectives was presented, together with a review of each of the recommended alternatives. Opinions of probable cost were summarized. Again, discussion following the presentation was supportive of the projects.

8.5 Public Information Committee

In order to facilitate communications with community leaders about the proposed reclaimed water program, a public information committee (PIC) was established. The reclaimed water PIC is a subcommittee of the City's water conservation advisory committee. City staff and its consultant met with the committee on XX occasions during the course of this study. A summary of meeting dates and topics discussed with the committee is provided below.

PIC Meeting No. 1- August 25, 2005

At this meeting, general background information related to reclaimed water was presented, together with an overview of the project scope for the current study. The agenda included a

review of reclaimed water definitions, national, regional and local perspectives on the use of reclaimed water, regulatory issues and financing of reclaimed water projects. The role of the PIC was also discussed.

PIC Meeting No. 2- November 29, 2005

The focus of this meeting was on a discussion of policies and procedures for reclaimed water programs. A review of policies and procedures for other reclaimed water programs in Texas was presented, followed by a discussion of considerations associated with developing policies and procedures for the City of Fort Worth program.

PIC Meeting No. 3- January 26, 2006

At this meeting, funding and pricing strategies for reclaimed water systems were discussed. Factors impacting the marketability of reclaimed water were considered, together with approaches to financing of reclaimed water systems. A review of reclaimed water rates in other communities was presented an potential strategies for developing a reclaimed water rate for the City of Fort Worth were discussed.

In addition to these focused meetings, the PIC was invited to attend each of the public meetings described above. As the City moves forward with implementation of the reclaimed water program, it is recommended that meetings with the PIC continue.

8.6 Proposed Public Information Program

Since well-designed public outreach programs have been demonstrated to contribute to the success of reclaimed water projects, an important component of the City's implementation plan will be the development of an effective public outreach program. Such a program would identify key stakeholder groups and use a phased approach to informing these groups, soliciting input and gaining trust and support.

Potential components of a public information program include:

- Identification of and partnership with allies
    - ✓ Identification of a "public champion"
- Engagement of stakeholder groups
    - ✓ Identification of target stakeholders
    - ✓ Stakeholder workshops
- Development of a broad-based awareness campaign
    - ✓ Identification of key messages
    - ✓ Production of collateral materials and tools
- Development of media relations program
    - ✓ Media packets
    - ✓ Briefings

Target stakeholders in the initial phases of the reclaimed water program will likely include industries, park facilities, and golf courses. The City has already had initial meetings with many of the key stakeholders identified as potential customers. Future expansion of the reclaimed water program will most likely depend on generating interest with additional stakeholders for reclaimed water uses. Public involvement with existing stakeholders and revised outreach materials will need to be developed as appropriate to bring additional stakeholders on board.

8.6.1 Public Announcements and Responses

To ensure that Fort Worth reclaimed water projects are not misrepresented in the public domain, press releases are suggested as a means of disseminating the project parameters accurately and the goals of the project.

Upon release of project announcements of a reclaimed water project in the press, the public and City leaders may have questions or be asked questions about the project. City staff and leaders will need to be aware of and have been briefed on the project to respond knowledgeably to public inquiries. A "Glossary of Terms" that relate to reclaimed water projects are included in Appendix J. An example of "Frequently Asked Questions" about reclaimed water uses is included in Appendix K.

There are many approaches available for public outreach programs. Ultimately, the most appropriate approach for the Public and Customer Awareness Program will be developed based on the projects being implemented, the City's preferences for interaction with the public, and the identity of the stakeholders.

8.6.2 Public Information Documents

Several draft public information documents have been developed as a part of this project. These include the following:

- Draft logo for the reclaimed water program
- Draft information for incorporation into the City's website, including general information about the reclaimed water program, the application process for potential users, and frequently asked questions;
- Draft "Do not drink" sign for display at reclaimed water user sites.

Examples of each of these documents are provided in Appendix L.

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