

U.S. Army Corps of Engineers
Disadvantaged Community Planning
Final Report
City of Maywood, CA



Prepared for:

United States Army Corps of Engineers
Los Angeles District

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U.S. Army Corps of Engineers
Disadvantaged Community Planning Charettes/Community Workshops
Final Report

Executive Summary

Section 22 of the Water Resources Development Act (WRDA) of 1974, as amended, provides authority for the U.S. Army Corps of Engineers (Corps) to assist the States, local governments, and other non-federal entities in the preparation of comprehensive plans for the development, utilization, and conservation of water and related land. The State of California created the Integrated Regional Water Management (IRWM) concept to spur regions into considering a holistic approach to water management. IRWM plans identify regional water management issues and the projects that would help solve water management issues. Agencies and municipalities, led by the County of Los Angeles Flood Control District, partnered to develop the Greater Los Angeles Integrated Water Management Plan, resulting in the establishment of a leadership committee to provide overall guidance to the steering committees and the region-wide planning effort. This report details work done as part of the ongoing process of integrated regional water management. The County, through the Corps Public Assistance to States (PAS) program, is working with the Corps to identify issues and potential solutions that have been identified by the community. The goal is to identify projects eligible for funding under IRWM and those that meet Corps missions and programs.

In 2008 the Leadership Committee of the Greater Los Angeles County (GLAC) IRWM formed a committee to focus on development of a Disadvantaged Community (DAC) “Interim Outreach Plan.” The result of the work of this committee led to selection of the City of Maywood for the first planned outreach efforts in the region, using a needs assessment framework produced by the Council for Watershed Health in collaboration with the DAC. A local non-profit, Union de Vecinos, was selected to perform initial outreach efforts and hear first-hand from the community about their perceived water quality and other environmental issues.

As a result of this outreach, two public meetings were held to address these issues. The first meeting discussed a number of issues identified by the community including: poor water quality within the city; having three different water companies delivering water; the razing of homes for a new LAUSD school; the state of the Pemaco superfund site; and the state of local parks, including one that has had soil stockpiled on it for several years. The team tabulated the results of this meeting and addressed the issues raised by the participants. These are outlined in the report. The majority of the attendees were concerned about the water quality.

The second meeting presented the findings and potential solutions to the community and further refined the focus of the report. For example, comparisons of water rates and water usage for various cities within the County were calculated to address the perception of high water rates. A timeline was developed to indicate how and when water quality issues were being addressed.

Finally, an Action Plan recommends a three-pronged approach: 1) Develop a comprehensive capital improvement plan for the three water companies based on the best information available about their infrastructure needs. 2) Conduct an economic, environmental, and community analysis to determine if

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the water companies should be restructured or unified. 3) Using the results from a California Department of Toxic Substances Control (DTSC) study, investigate whether individual building water treatment would be cost-effective and would improve water quality.

1 Background

1.1 Project Inception: Planning Assistance to the States

Section 22 of the Water Resources Development Act (WRDA) of 1974, as amended, provides authority for the U.S. Army Corps of Engineers (Corps) to assist the States, local governments, and other non-federal entities in the preparation of comprehensive plans for the development, utilization, and conservation of water and related land. The Planning Assistance to States (PAS) Program is funded annually by Congress. These studies are cost-shared on a 50 percent federal and 50 percent non-federal sponsor basis. Typical studies include the planning process and selected alternative, but do not include detailed designs for project construction. The studies generally involve the analysis of existing data for planning purposes using standard engineering techniques, although some data collection is often necessary. Most studies become the basis for state or tribal and local planning decisions.

The State of California created the Integrated Regional Water Management (IRWM) concept to spur regions into considering a holistic approach to water management. California funded the development of IRWM Plans through bond measures. IRWM plans identify regional water management issues and the projects that would help solve water management issues. Agencies and municipalities, led by the County of Los Angeles Flood Control District, partnered to develop the Greater Los Angeles Integrated Water Management Plan, resulting in the establishment of a leadership committee to provide overall guidance to the steering committees and the region-wide planning effort. The Flood Control District has received grants for the planning effort and they are responsible for managing all aspects of the grants, while the West Basin Municipal Water District has fiscal and accounting responsibilities for non-grant funds. (See organization chart below).

This report details work done as part of the ongoing process of integrated regional water management. The County, through the Corps PAS program, is working with the Corps to identify issues and potential solutions that have been identified by the community. This study is a narrative of the work done and an aggregation of the existing data on water-related needs in Maywood. The goal is to identify projects eligible for funding under IRWM and those that meet Corps missions and programs.

Figure 1 Federal/Local Partnership

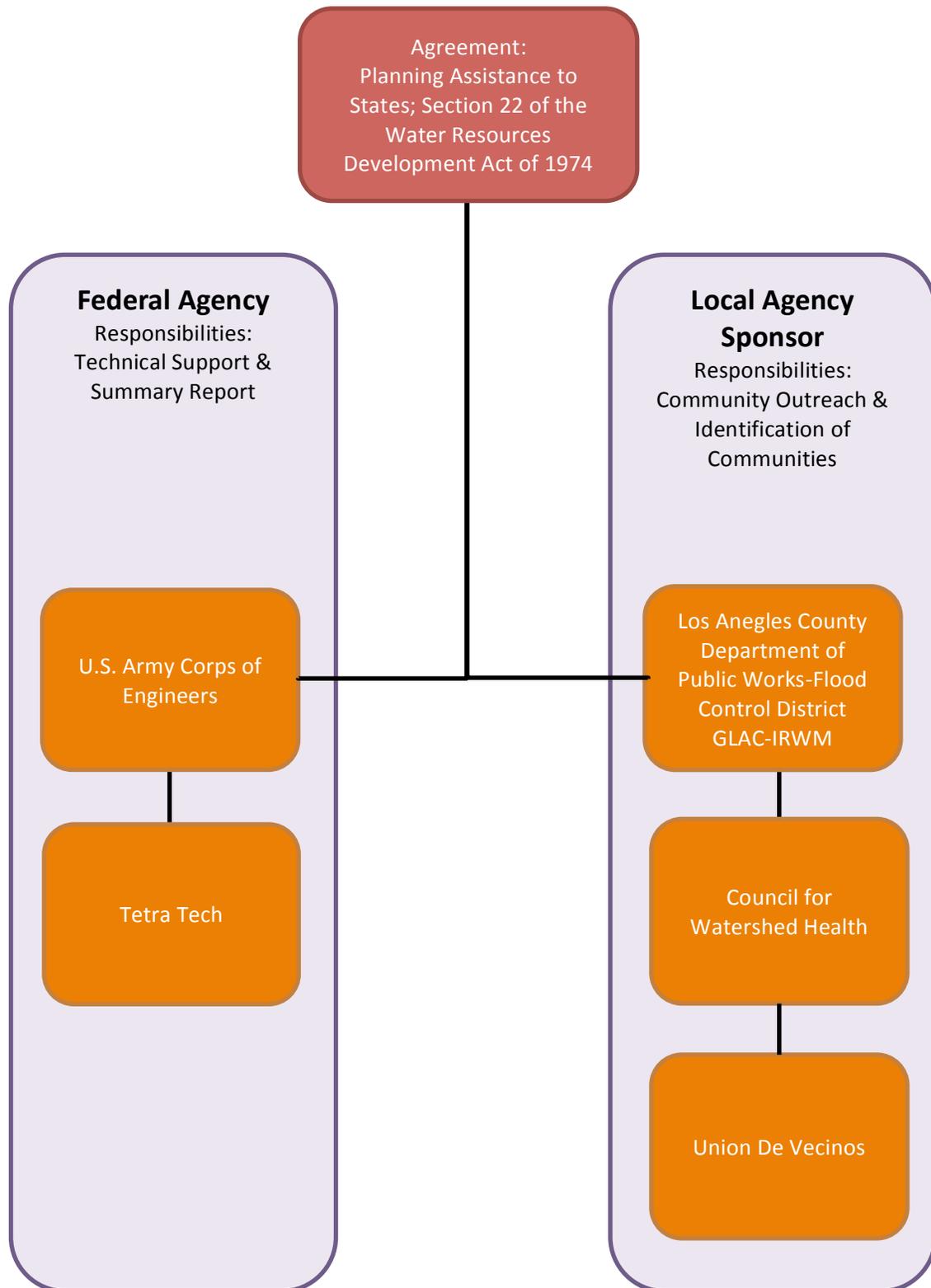
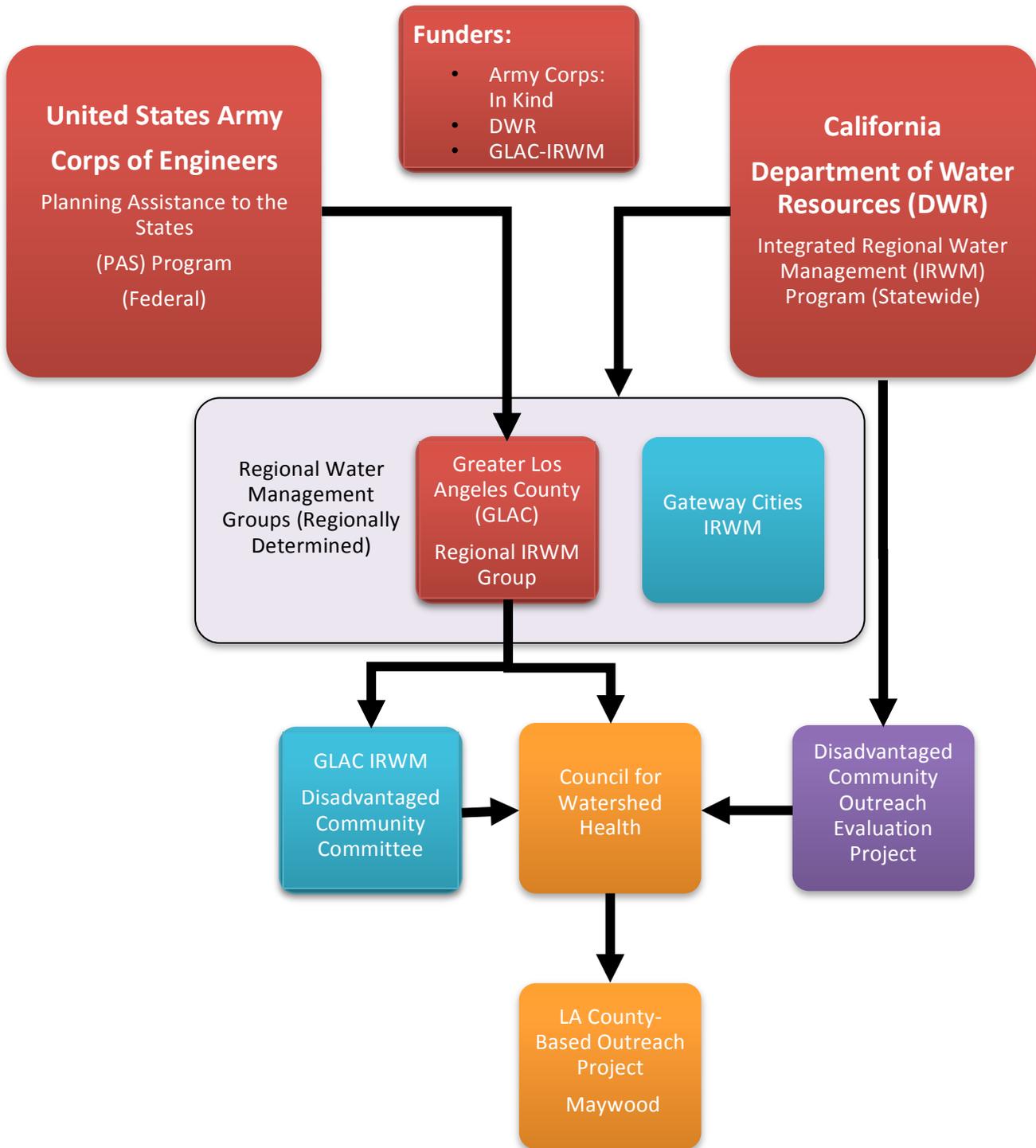


Figure 2 State of California Integrated Regional Water Management Program



1.2 Greater Los Angeles County Integrated Water Management and Council for Watershed Health Disadvantaged Community Selection Process

In 2008 the Leadership Committee of the Greater Los Angeles County (GLAC) IRWM formed an ad-hoc committee to focus on development of a Disadvantaged Community (DAC) “Interim Outreach Plan.”¹ This DAC Committee completed the plan in September 2008 and it was adopted by the Leadership Committee. In the plan, the IRWM Leadership and Steering Committees identified “outreach to disadvantaged communities” as one of its highest priorities. There was recognition that outreach would need to be conducted at the steering committee level but that resources were not available to fund much of the work.

Since adoption of the Interim Outreach Plan, the DAC committee continued to meet and develop criteria to prioritize projects that were identified as benefiting DACs. The ad hoc committee was elevated to standing committee status in January 2011. Currently one of the functions of the DAC Committee is to serve as the technical advisory committee for this DAC Outreach Evaluation Project of which this project is part of that effort.

The activities of the DAC Committee since its inception have been to:

- Improve the Interim DAC Outreach Plan
- Pursue funding to enable DAC stakeholder participation
- Pursue funding for capacity-building and technical assistance activities to help DACs develop eligible projects
- Identify the water-related needs of DACs
- Expand DAC indicators in the GLAC-IRWM region to enhance the precision with which DACs are targeted
- In general, improve the link between DAC projects and the water-related needs of the specific communities where they are proposed, in order to benefit IRWM projects claiming DAC status.

In December 2009, the Council for Watershed Health (Council), at the direction of the LA County Flood Control District (LACFCD) and the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy (RMC), drafted a funding proposal built on:

- Past analysis of the Interim DAC Outreach Proposal led by the Council, and RMC
- A past funding proposal to the Annenberg Foundation written by the Council

¹ “Disadvantaged Community” is a term defined by the California Public Resources Code (PRC), Section 75005(g)¹:

“Disadvantaged community” means a community with a median household income less than 80% of the statewide average. “Severely disadvantaged community” means a community with a median household income less than 60% of the statewide average.

Full public resources code text is available at: Code available at:
<http://codes.lp.findlaw.com/cacode/PRC/1/d43/1/s75005>

The proposal identified a project for the Council to execute, with the DAC Committee acting as a technical advisory committee. The selected Outreach Evaluation Project would involve researching and demonstrating a more sophisticated outreach effort for IRWM-funded agencies to use, while working with DACs throughout the region. During this development process, the GLAC-IRWM Leadership Committee provided a 10% cash match and the Los Angeles District of the Corps added a match of in-kind services for project concept development.

In December 2010 the GLAC-IRWM Leadership Committee instructed the Council to begin the Outreach Evaluation Project using their matching funds. The work described in this report is the result of the first of five planned outreach efforts in the region, using a needs assessment framework produced by the Council in collaboration with the DAC.

The DAC Committee selected two communities in the GLAC-IRWM region by using the Hidden Hazards document², published by the Liberty Hill Foundation in December 2010. Hidden Hazards mapped environmental hazards in selected communities across the region and identified cumulative impacts. These communities were also DACs.

The two communities selected from the Hidden Hazards document by the DAC Committee were the combined area of the Cities of Maywood and Commerce (considered by the report to be one community) and the Pacoima neighborhood of the City of Los Angeles, in the East San Fernando Valley.

A Request for Qualifications (RFQ) was distributed to DAC members e-mail lists and responses to the RFQ were gathered by the Council. Five members of the DAC Committee made a contracting decision, scored the RFQ responses and then had a qualitative discussion with the other decision makers about the responses. The final component of the decision-making process was to select Union de Vecinos as the outreach contractor for the pilot project.

1.3 Demographics and Statistics on the City of Maywood

The City of Maywood was incorporated in 1924 and covers 1.14 square miles. Its residents are predominantly Latino and comprise 97.4% of the population. Persons identifying themselves as White (non-Hispanic) comprise 1.8% of the population, while other races and ethnic groups are each less than 1% of the population. Table 1 illustrates the City of Maywood against County statistics.

² Available: <http://www.libertyhill.org/document.doc?id=202>

Table 1 Demographics of Greater Market Area for Maywood		
Community	Los Angeles County	City of Maywood
2010 Population¹	9,818,605	27,395
Age Distribution¹		
≤ 9 yrs.	13.1%	18.4%
10-19	14.6%	18%
20-54	51.2%	50.7%
≥ 55	21.2%	13.1%
Ethnicity⁴		
Asian	13.5%	0.2%
Black	8.3%	0.2%
Latino	47.7%	97.4%
Native American	0.2%	0.1%
Pacific Islander	0.2%	0.1%
White	27.8%	1.8%
Other	2.3%	0.2%
Household Size¹	2.98	4.16
Square Miles of Area Searched	4,060.87	1.2
Median Household Income^{1,2}	\$52,684	\$35,965
Individuals Living Below Poverty Level^{1,2}	17.5%	21.7%
High School Graduates or Higher^{1,3}	75.8%	40.9%
Bachelor's Degree or Higher^{1,3}	29.2%	3.6%
Living With a Disability^{1,2}	9.3%	8.6%
Language Spoken at Home		
English only	43.6%	8.1%
Spanish	39.4%	91.1%
Other	17%	0.9%
¹ Data taken from 2010 Census, American FactFinder. ² Data taken from 2008-2010 American Community Survey, Census. ³ Data taken from 2006-2010 American Community Survey, Census. ⁴ Mixed-race ethnicities reported resulting in a total greater than 100%.		

Congressional District 111th Congress: Congressional District 34 (111th Congress), California

County: Los Angeles County, California

School District, Unified: Los Angeles Unified School District, California

State Legislative District, Upper Chamber 2011: State Senate District 33 (2011), California

State Legislative District, Lower Chamber 2011: Assembly District 63 (2011), California

1.4 City of Maywood Water Supply and Water Quality

The City of Maywood is served by three mutual water companies that rely on groundwater from local wells and imported water sources from the Water Replenishment District. Each company is responsible for maintaining its own water supply wells, treatment system, and distribution network. Parts of the water companies' infrastructure are over 90 years old. Figure 3 shows the service areas in Maywood for each of the water companies.

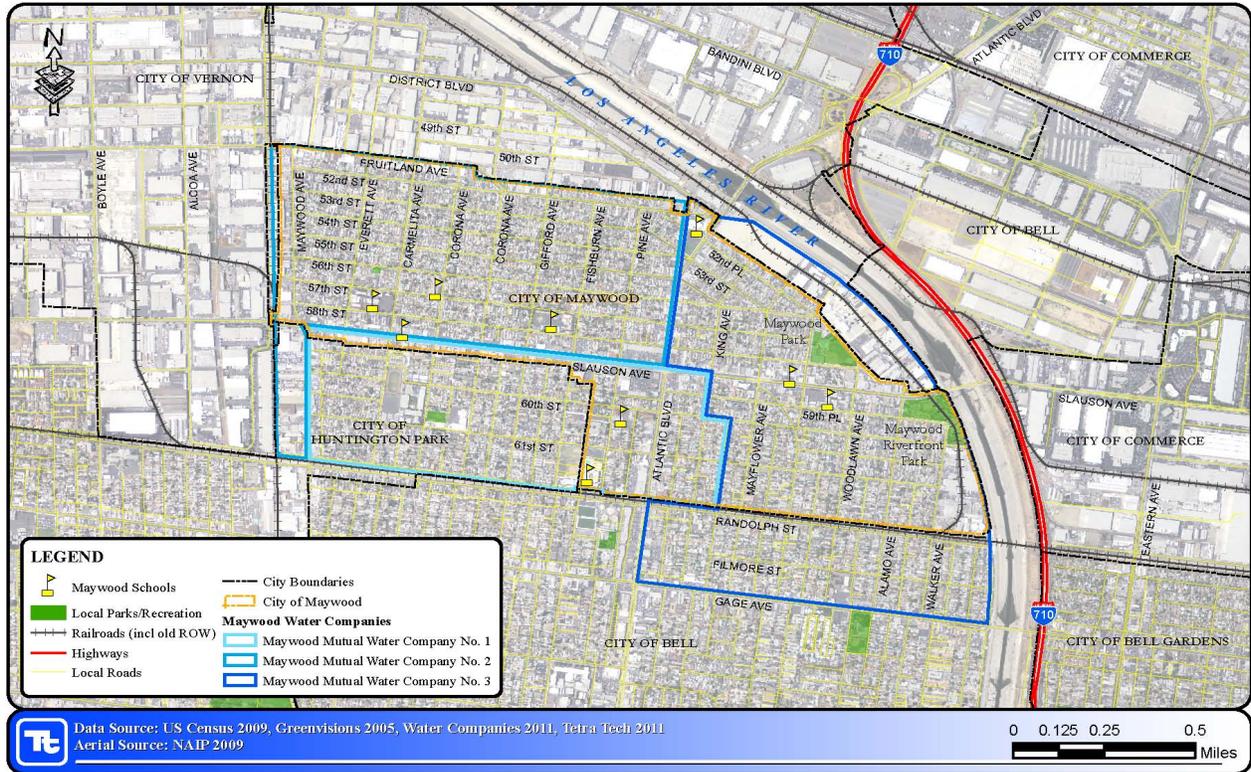


Figure 3 Service Areas of Maywood Water Companies

1.4.1 Drinking Water Regulation in California: California Safe Drinking Act Authority

California’s legal authority to carry out the federal Safe Drinking Water Act is defined in the California Health and Safety Code (CHSC), Chapter 4, “California Safe Drinking Water Act”, Sections 116270-116751. California Department of Public Health (CDPH), Drinking Water Program, regulates public water systems and certifies public drinking water treatment and distribution operators.

The U.S. Environmental Protection Agency (EPA) standards for drinking water fall into two categories: primary standards and secondary standards. Primary standards are based on health considerations and are enforced by the EPA. They protect residents from three classes of toxic pollutants: pathogens, radioactive elements, and toxic chemicals. Secondary standards regulate contaminants that cause offensive taste, odor, color, corrosion, foaming, and staining. EPA and California do not enforce secondary standards. They are established only as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor.

The 1996 Safe Drinking Water Act mandated that California develop Public Health Goals (PHGs) for chemical contaminants found in drinking water. The Office of Environmental Health Hazard Assessment (OEHHA) is responsible for developing PHGs. A PHG is defined as a level of a chemical contaminant in drinking water that does not pose a significant health risk. PHGs are not regulatory standards, however State law requires the Department of Public Health to set drinking water standards as close to PHGs as is economically and technically feasible.

Contributions to poor water quality can occur from 1) the source of the water, that is from the groundwater or water imported into the system 2) from the main distribution system and 3) from the residential piping. In order to accurately pinpoint contamination, all three need to be investigated.

Manganese has been identified as a problem in the drinking water supply of Maywood.³ In 1994, the EPA Office of Water issued a health advisory to provide guidance to communities that may be exposed to drinking water contaminated with high manganese (Mn) concentrations.⁴ The advisory provides guidance on the concentrations below which health risks and problems with odor, taste, and color, would be unlikely to occur.⁵ Manganese is a naturally-occurring element that can be found commonly in the air, soil, and water. Manganese is an essential nutrient for humans and animals. Although manganese is an essential nutrient at low doses, chronic exposure to high doses may be harmful. The health effects from over-exposure to manganese are dependent on the route of exposure, the chemical form, the age at exposure, and an individual's nutritional status. Regardless, the nervous system has been determined to be the primary target organ with neurological effects generally observed. According to the EPA Advisory, in order to enhance consumer acceptance of water resources, EPA recommends reducing manganese concentrations to or below 0.050 mg/L, the EPA's Secondary Maximum Contaminant Level (SMCL) for Mn.⁶ The SMCL is based on staining and taste considerations. The lifetime health advisory value of 0.3 mg/L will protect against concerns of potential neurological effect.⁷ The EPA Advisory is available on the Internet at:

http://www.epa.gov/ogwdw/ccl/pdfs/reg_determine1/support_ccl_magnese_dwreport.pdf

1.4.2 California Assembly Bill AB 890 *City of Maywood Water Quality Assessment*

California Assembly Bill AB 890 was introduced by Assemblymember John Perez and was successfully passed in October 2009. The bill passed into law as section 116335 to the Health and Safety Code requires public water systems to assess and address the impacts of manganese in their water supply. In response to this bill, the City of Maywood conducted a study to determine the level of manganese in their water supply at the wells which resulted in *City of Maywood Water Quality Assessment* report prepared December 2010 by GeoTrans, a Tetra Tech Company (hereinafter referred to as AB 890 Report). Results within the study stated that:

“The public water systems serving the City of Maywood have not been found to exceed federal and state primary drinking water standards, therefore, not in violation of their permits. However, a number of Maywood's water source wells have manganese concentrations that are above Secondary Maximum Contaminant Level (SMCL) of 50 micrograms per liter (ug/L or parts per billion). Manganese concentrations greater than this level are undesirable because they cause a rusty appearance, poor taste, and a discoloration of plumbing and laundry. The manganese problems have affected consumer acceptance of water resources.”

³ *City of Maywood Water Quality Assessment* report prepared December 2010 by GeoTrans.

⁴ http://www.epa.gov/ogwdw/ccl/pdfs/reg_determine1/support_ccl_magnese_dwreport.pdf

⁵ Drinking Water Health Advisory for Manganese; United States Environmental Protection Agency; p.36;
http://www.epa.gov/ogwdw/ccl/pdfs/reg_determine1/support_ccl_magnese_dwreport.pdf

⁶ Ibid

⁷ Drinking Water Health Advisory for Manganese; United States Environmental Protection Agency; pp. 30-31;
http://www.epa.gov/ogwdw/ccl/pdfs/reg_determine1/support_ccl_magnese_dwreport.pdf

The study conducted a review of available data, identified potential sources of manganese, evaluated the extent of manganese impact in the City of Maywood's public drinking water supply, and presented potential courses of action that the water companies could consider to mitigate water quality concerns. A complete copy of the report is included in Appendix A. Potential mitigation actions are described in Section 3.3.

Statistics are taken from the AB 890 Report.

Source		Water Served to the City of Maywood (Acre-Feet)	%
Maywood Mutual Water Co. #1*	Well #3	91	4
	Well #4	136	6
	CBMWD (imported water)	12	1
Maywood Mutual Water Co. #2	Maywood Avenue Well (Well #1)	747	35
	52 nd Street Well (Well #2)	397	18
	CBMWD (imported water)	0	0
Maywood Mutual Water Co. #3	Prospect Well (Well #1)	371	17
	Warehouse Well (Well #7)	228	11
	District Well (Well #4)	173	8
Total		2155	100
Data Source: Maywood Mutual Water Companies. * July 2009 to June 2010 period for Maywood Mutual Water Co. #1. CBMWD – Central Basin Municipal Water District; imported surface water.			

Maywood Mutual Water Company #1 produced a total of approximately 795 acre-feet of water in fiscal year ending June 30, 2010, of which approximately 30% (239 acre-feet) was served to the City of Maywood.

Maywood Mutual Water Company #2 produced a total of approximately 1,179 acre-feet of water in 2009, of which approximately 97% (1,144 acre-feet) was served to the City of Maywood.

Maywood Mutual Water Company #3 produced a total of approximately 1,502 acre-feet of water in 2009, of which approximately 52% (772 acre-feet) was served to the City of Maywood.

Levels of manganese from the wells are high in the City of Maywood (Table 3), leading to complaints about water quality due to its color, taste, and appearance. Complicating this situation is the age of the delivery infrastructure including main lines, laterals, and residential plumbing systems, which may be contributing to the condition of the water. In addition, trichloroethene (TCE) was found in the water supply of Maywood Mutual Water Company #3 (Table 4).

Table 3 Manganese Contribution from Maywood Water Sources in 2009.					
	Source	Water Served to the City of Maywood (Acre-Feet)	Average Manganese Concentration (ug/L)	Amount of Manganese Contributed from Each Source	
				(lbs/day)	(%)
Maywood Mutual Water Co.#1	Well #3	91	13.9	0.01	1
	Well #4	136	82.2	0.08	11
	CBMWD (imported water)	12	ND(20)	<0.01	<1
Maywood Mutual Water Co.#2	Maywood Avenue Well	747	61.7	0.34	45
	52 nd Street Well	397	73.3	0.22	29
	CBMWD (imported water)	0	-	0	0
Maywood Mutual Water Co.#3	Prospect Well	371	ND(20)*	0.03	4
	Warehouse Well	228	ND(20)*	0.02	3
	District Well	173	26*	0.05	7
Total		2155	-	0.75	100
Data Sources: CDPH water quality database. Manganese data for CBMWD water was obtained from the 2009 CCR for Maywood Mutual Water Co.#1. Production data provided by the Mutual Water Companies. ND(20) - Not detected above the reporting limit indicated. *4/24/2008 sample results. Not sampled in 2009. For non-detect results, an estimated value of 10 ug/L, a half of the laboratory reporting limit, was used for calculation purposes. Note one well in water company #3 has since failed and is now out of commission.					

Table 4 TCE Levels in Maywood Mutual Water Company #3 Water Sources in 2009.				
	Water Source	Number of Samples	TCE Concentration (ug/L)	
			Average	Range
Maywood Mutual Water Company #3	Prospect Well (Well #1)	4	2.7	1.8-4.5
	District Well (Well #4)	1	ND(0.5)	ND(0.5)
	Warehouse Well (Well #7)	4	3.5	2.8-4.2
The wells were sampled by WRD quarterly in 2009 and TCE was analyzed by EPA Method 524.2 at the State of California certified laboratories.				

1.4.3 Maywood Community Inter-Agency Partnership

The Maywood Community Inter-Agency Partnership is a collaboration of agencies and organizations that are working together to try and address the community concern of poor drinking water quality. As part of the Maywood Community Inter-Agency Partners Drinking Water Task Team, the California Department of Toxic Substances Control (DTSC) agreed to conduct water quality sampling in Maywood. The team consisted of five DTSC scientists, a DTSC Public Participation Supervisor, one DTSC student intern, one EPA student intern, multiple Maywood community members, and the Los Angeles Environmental Justice Network Coordinator. The objective of the sampling effort was to test the quality of the water from residences and public locations within the City of Maywood, as it enters a building. Since wellhead testing was done under AB 890, by testing the water before it enters a building, deterioration of the quality of the water could be potentially attributable to the distribution lines, and not plumbing fixtures inside of a residence or public building. Testing was completed in late 2010 on a representative sample of

4 public sites and 18 residences covering all 3 water companies. Additional testing was conducted in August 2012 on source wells of the three mutual water companies, three Maywood residential homes and City Hall. In January 2013 testing was conducted at Water Company #3 Well #7. According to the DTSC Community Notice, “The purpose of the Phase II Maywood Drinking Water Sampling was to assess the quality of the drinking water from selected wells representing all three water companies; as wells as the drinking water distribution system of a selected number of households and public locations based upon the Phase I sampling results (October 2010).” The result of the testing was that all samples were found to be within the EPA established primary and secondary standards before treatment with the residential water filter. The Community Notice further states, “However, a portion of the samples exceeded public health goals for lead, arsenic, and the chlorinated by-product chemicals resulting from the disinfection process at the water company site.”⁸ Recommendations by DTSC can be found in Section 6.3 of this report and the full Community Notice can be found in Appendix B.

1.5 Union de Vecinos Maywood Outreach Process

Union de Vecinos Maywood, a non-profit organization, has been working with the Maywood community since 2002.⁹ The organization started in 1996 working for the preservation of the Pico Aliso public housing projects in Boyle Heights.¹⁰ Union de Vecinos focused on a variety of issues including drinking water quality. Union de Vecinos was selected by the GLAC-IRWM Disadvantaged Community Committee to conduct a series of outreach meetings to help the Army Corps and GLAC-IRWM group hear first-hand from the community about their perceived water quality issues.

Union de Vecinos’ membership “...consists of low income families and primarily Latino immigrant workers in Boyle Heights and the City of Maywood. This includes tenants, homeowners, families, youth, seniors, low income families, working class families, and small business owners.”¹¹ Union de Vecinos engages the community through door-knocking, one-on-one visits, neighborhood and issue committees, and by organizing community events to promote educational and social exchange.¹² Union de Vecinos members are responsible for outreach by communicating with their neighbors through one-on-one visits and recruiting new members.¹³

Union de Vecinos held a total of 20 community meetings where more than 400 people were contacted. The prevailing issue for this DAC was concern regarding water quality, especially the smell, color, and taste:

- Create a treatment plant to clean Maywood’s water supply
- Change piping in the city
- Clean and recycle gray water from homes
- Create local cisterns to collect water
- Remove dirt piles from and expand Riverfront Park (effect of adjacent Superfund site)

⁸ Cal/EPA Department of Toxic Substance Control, *Community Notice: Summary of the August 8, 2012 Technical Findings for the Phase II Maywood Drinking Water Sampling*, June 2013.

⁹ From a response to a Request for Qualifications submitted by Union de Vecinos to the Council for Watershed Health in May, 2011: “Union de Vecinos has been organizing in the City of Maywood since 2002.”; p. 5.

¹⁰ Ibid; p. 1

¹¹ Ibid; p. 4

¹² Ibid; p. 4

¹³ Ibid; p.5

- Install water-saving devices in homes
- Filter the water before it enters the homes
- Filter and clean the water from the wells
- Dig new wells in Maywood
- Develop a plan to use empty lots on 58th Avenue (lots condemned by LAUSD)
- Clean street sewer system

These issues cluster around three main themes: 1) the quality of the drinking water, 2) the status of lots that were condemned and cleared through eminent domain by LAUSD and then held up by a lawsuit, and 3) the status of a former piece of Riverfront Park and superfund site.

These issues were then established as the basis for meeting participants to divide into groups and further discuss the issues and identify potential solutions.

2 Charette/Workshop Planning

2.1 Pre-charette/Workshop Planning Summary

A series of team meetings were held beginning in early July 2011 prior to the charette/workshop in order to prepare and determine the issues to be covered, speakers, attendees, and logistics. Team meeting attendees included representatives of the Corps, Los Angeles County, the Council, Union de Vecinos, a City Councilmember, and Tetra Tech. Most of the meetings were held at the offices of Union de Vecinos in the City of Maywood. In addition to the meetings, there was a walking tour of the City to see first-hand some of the locations that are issues for the residents.

Discussion was first centered on the role and mission of each agency and how these could intersect into a viable project for the City of Maywood. For example, the County Flood Control District, the local sponsor with the Corps, is a separate legal entity from County Public Works although they are housed in the same facility and share the same staff. They are the lead agency for the GLAC IRWMP.

The Corps mission includes navigation, flood risk management, ecosystem restoration, recreation at its facilities, and water supply, among others. The Los Angeles River, directly adjacent to the City of Maywood, is one of the best known projects of the Corps in the region, along with the flood risk management basins that provide valuable open space and recreation in addition to managing flood risk.

The Council for Watershed Health, previously known as the Los Angeles and San Gabriel Rivers Watershed Council, formed in 1996 to create a dialog among the agencies and stakeholders working on watershed issues in the region. They have also been a key player in the IRWM program.

Union de Vecinos was initially formed to find a way to preserve the Pico Aliso public housing project in Los Angeles neighborhood of Boyle Heights which were threatened with demolition. Union de Vecinos expanded to the City of Maywood in 2002 to with tenant rights issues and have later expanded to other issues important to the Maywood community.

During the charette/workshop planning process, Union de Vecinos was conducting its outreach program and it was becoming increasingly clear that the primary issue of concern to the residents was the quality of the drinking water. This shifted the initial thoughts of the team for the focus of the charettes from

identifying a construction project and preparing preliminary designs for it, such as a park, to identifying steps for solving the water quality issues. The charette-planning team included information on parks; interested participants would be organized into an individual group to discuss these park concerns.

A date was selected after the Labor Day weekend when people would be back from vacation and school in session. Originally the site chosen to hold the workshop was St. Rose of Lima Church in Maywood but there was a conflict at the church for that date. Maywood Councilmember Aguirre volunteered use of the City Council Chambers and the team agreed it would be a good location since it is well-known and centrally located. The facility would also be able to provide translation headsets. Councilmember Aguirre opened the session since he was involved in the planning of the workshop, following standard protocol of inviting elected representatives to give the opening and welcome.

Residents that are directly adjacent to the stockpiled soil are concerned about whether the soil is contaminated and because the plastic coverings do not adequately prevent the particulates from becoming airborne and entering their homes. Because the issue of the Pemaco Superfund site and stockpiled soil was raised as an issue, the team requested that EPA project manager Rose Marie Caraway speak to the group and give an update of the status of the environmental cleanup. She agreed and brought along a power point presentation explaining the current condition and outlook for the future.

A month before the date, Alex Kenefick of the Council for Watershed Health sent invitation letters to all City Council members, the water companies, and political offices. Alex Kenefick spoke at the Maywood City Council meetings and he made a point to remind the Council and public of the upcoming workshop. The team also spoke to representatives of the Water Replenishment District (WRD) and the Central Basin Municipal Water District (CBMWD) prior to the meeting to inform them of the workshop, the intent of the project and to solicit their support.

Union de Vecinos arranged for lunches for all participants for the day and hired a Spanish/English translator. Because of the anticipated high number of Spanish speaking participants, it was also decided to display the power point presentation in both English and Spanish.

2.2 Minutes of the meeting

The charette/workshop was held on Saturday, September 17, 2011 at the City of Maywood Council Chambers. The meeting was scheduled to start at 10:00 am and run until 2:00 pm.

The project team created one group to focus on the Maywood Riverfront Park and Pemaco Site issues and potential solutions. If people primarily concerned with the park were not sorted into their own group, then the issue may have been brought up in more groups and may have ranked higher in *Figure 4 Top Comments – Maywood Community Workshop 1*, and *Figure 5 Top 5 Comments – Maywood Community Workshop 1*.

The following are the minutes of the meeting.

- Meeting began at 10:15 am, which allowed a large number of late arriving attendees to come in and get settled.
- Total attendance reached over 120 people by 11am.
- All attendees and project team members stood and introduced themselves individually.

- Power point slides were presented starting at 10:30 am. Two power point presentations were given simultaneously, one in English and one in Spanish.
- Previous outreach efforts were described.
- Previously voiced concerns regarding cleanup of the superfund site, Pemaco, were addressed by Rose Marie Caraway from the EPA. She described the success of the past 3 years in remediating the site of chlorinated solvents, and said continued remediation had been slated for 5 additional years.
- Ms. Caraway also clarified that the Pemaco site was not contributing to contamination of household drinking water in the City of Maywood.
- The Mayor of Maywood spoke and stated that he felt that this meeting had not been adequately advertised and that Union de Vecinos (who had assisted in organizing the meeting) was misleading the public. He said that he did not feel that the meeting was worth attending and would be leaving. Maywood residents then insisted that if he was working to help the people of Maywood, then he should stay and participate in the meeting. The Mayor remained through the rest of the meeting.
- Meeting attendees were then invited to participate in a workshop session, intended to allow everyone to contribute their input regarding clean water in Maywood. A total of 13 groups formed and each were asked to answer the following questions:
 - What would Maywood be like with clean water?
 - What measures do you wish to see taken to improve water quality in Maywood?
- Group 1 comments were primarily regarding the park adjacent to the superfund site. Points made included:
 - Regarding the parks in Maywood, there are not enough swings, bathrooms are too dirty, and the pool is too small to accommodate all visitors.
 - If City won't address these issues, let volunteers step in and make changes.
 - The pile of dirt adjacent to the superfund site must be moved.
- Additional groups responded just to water concerns.
- Group 2 comments
 - The 3 different water companies of the City of Maywood should be consolidated into just one company.
 - A filtration system is wanted to clean water.
 - A referendum is wanted to vote on the number of water companies.
 - Change entire drinking water system so that it provides clean water.
 - Use grants and federal assistance to help pay for changes.
- Group 3 comments
 - Change water pipes, they are old and causing dirty water.
 - Seek source of dirty water and find a solution to the problem within a year.
 - Additional time will be needed to implement the solution.
 - Consolidate water companies and make them public.
 - Health is the most important thing.
 - It is also too expensive to buy bottled water.
- Group 4 comments
 - Water should be pure, clean, and healthy.
 - Need new pipes.

- Need funding from state or federal agencies to assist with creating a treatment system for water.
- Investigate alternatives for rehabilitating pipes instead of replacing.
- Find ways to prevent trash from entering the sewer/drainage system.
- This group also indicated an interest in improvements to the park, including better maintenance, more trees, more seats, and more lights.
- Group 5 comments
 - Need better water management in the system. Need additional oversight and improved communication between residents of Maywood and the people in charge of the water companies.
 - Consolidate water companies.
- Group 6 comments
 - Need clean water to save money on bottled water and for health.
 - Water company managers need to be available for open communication with the public.
 - Consolidate water companies and make a single public company.
 - Better water management.
 - Change the piping.
- Group 7 comments
 - Dirty tap water means health issues and money spent on bottled water.
 - Experts should be consulted to determine cause of problem, to help with educating the public, and to get legal advice.
 - Want a vote on making the water companies public.
 - Need better-organized meetings with public and water companies and need to get better answers about water quality from the water companies.
- Group 8 comments
 - It is expensive to buy bottled water and expensive to pay for the dirty water in our taps.
 - Additional information is needed regarding the prices, options, and plans with the water company.
 - It's difficult to know how to fix poor water quality when information about the source and problem is not available.
 - Need the facts from the water companies.
 - Want the health department involved.
 - Want workshop with the people who know what's going on and can give accurate and helpful information on the problem and the solution.
 - Solicit grants to pay for filtration system.
 - Investigate grey water use options.
- Group 9 comments
 - Improved water equals less stress, improved health, saved money.
 - Want to know what regulations the water companies are supposed to follow.
 - Need information about rates and regulations (prices).
 - Need solution soon.
 - Should make water companies public and put this choice up for a vote.
- Group 10 comments
 - Perhaps filtration could happen within the home.

- Pipes should be replaced and should be completely done within a maximum of 5 years.
- Need open communication with water companies.
- Need education pamphlets about water quality.
- Water companies say their wells are clean, but private citizens should be invited to provide oversight.
- Group 11 comments
 - Clean water means we save money not buying bottled water, have less illness, are healthier, and pay lower rates.
 - Prioritizing solutions requires knowing how much funding is available.
 - Solve issues for all of Maywood at the same time.
 - Need specialists to investigate solutions and give estimate of how long solutions will take to implement.
 - Need more serious setting for additional meetings (no kids allowed).
 - Provide water filters but rates should not go up.
 - We could collect signatures to petition for help and change.
 - Raise awareness and motivate people to activism.
 - See water quality fixed within a 3 year timeframe.
- Group 12 comments
 - Consolidate water companies and make it public.
 - The people need to be heard.
- Group 13 comments (This group included the water company managers)
 - Maywood Water Company #1 manager, spoke for his company:
 - Our company has been given a grant of \$2.5 million from state. It's just been received and it will be used for
 - A new water tank
 - Treatment plant
 - Rates will go up to pay back only \$500K of this grant.
 - Have been given 3 years to finish these upgrades.
 - Councilman was noted as refusing to sign in support of the original grant proposal that awarded this \$2.5 million dollars.
 - Maywood #1 makes 1 cent on water (did not give a unit) that they have to buy from the Water Replenishment District.
 - The water company has done its job well.
 - Maywood has all new piping but Huntington Park doesn't have new piping.
 - Manager of Water Company #2 spoke for his company:
 - In 2007 we installed a plant for \$1.1 million to remove the sludge
 - It is in and started working in April-May.
 - We are in talks with Speaker John Perez.
 - Started project to reduce manganese in wells. This is the element that is turning water yellow or brown.
 - In April a new treatment plant started working.
 - Another treatment plant needs to be put in place.
 - Then we need to clean and line the main lines.

- The City of Maywood was discriminated against by being forced to remediate its water quality problems when other cities/companies are not being singled out by the state.
- Central Basin Municipal Water District (CBMWD) and the Water Replenishment District increased their rates to us by 33%, yet we increased our rates by only 13%.
 - Water from CBMWD costs 4 times what Maywood water costs.
 - So new treatment well will reduce costs since they won't need to get water from CBMWD
 - The treatment plant can be paid for in 2 years by using that well.
- \$15 is an assessment fee and not a meter reading fee.
- Manager of Water Company #3 spoke for his company:
 - Trichloroethene (TCE) is an issue.
 - We are meeting on Wednesday to discuss designs of a new treatment plant to be put in next year.
 - We are operating at a loss.
 - Treatment plant will be \$50,000 - \$75,000 for operations and maintenance every year or a cost of \$.25 for every liter of water.

After some questions to the individual water company managers, the next steps were outlined including 1) creating a report of the meeting that addresses concern raised and potential solutions, 2) bringing the report back to the community for further feedback and input, and 3) presentation of the final report.

3 Charette/Workshop Response

3.1 Most frequently heard comments

Comments from the break-out sessions were analyzed and sorted by frequency of the overall comments and then grouped by major theme as shown in Figure 4. Figure 5 shows the top 5 most commonly made comments during the workshop.

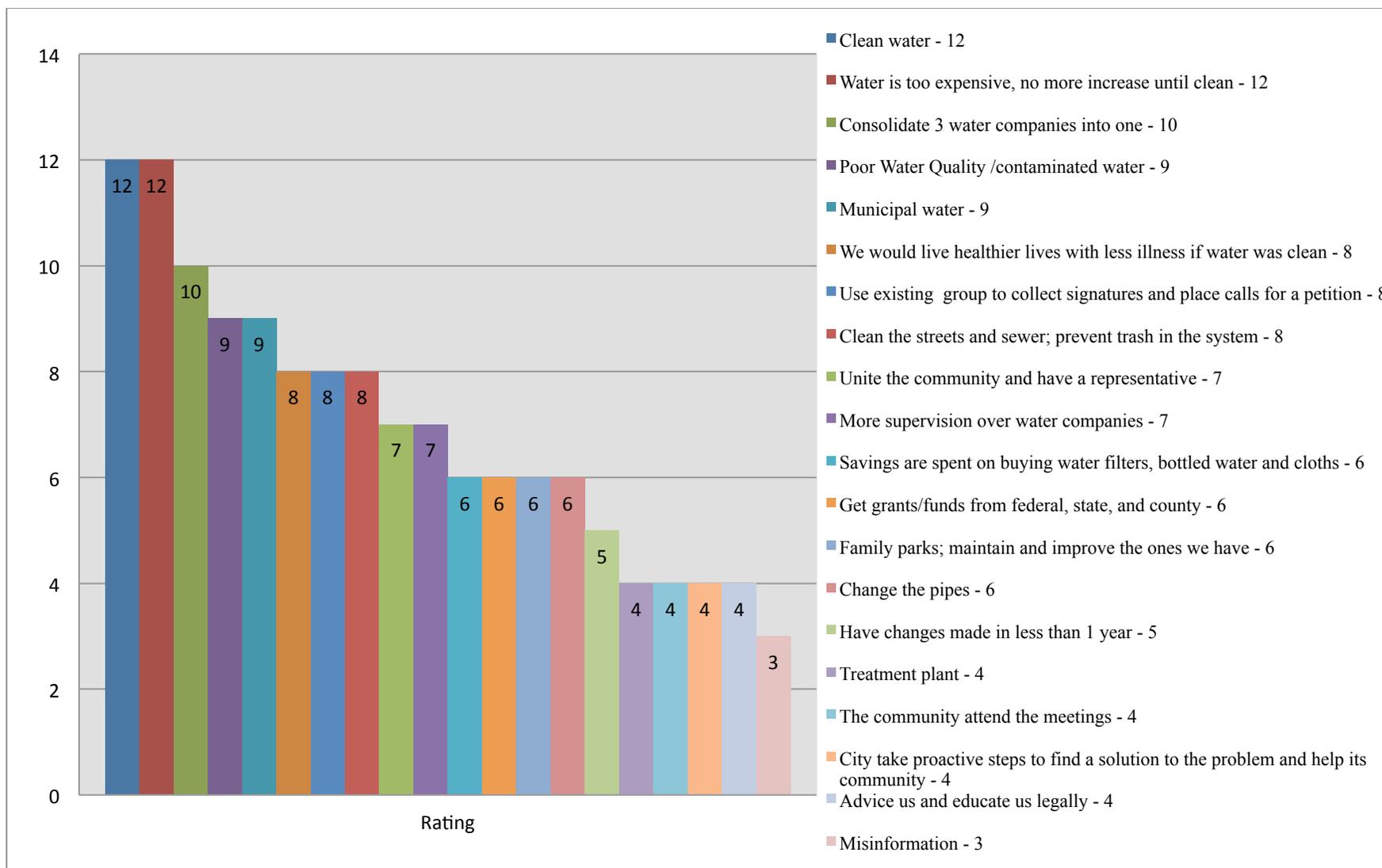


Figure 4 Top Comments – Maywood Community Workshop 1

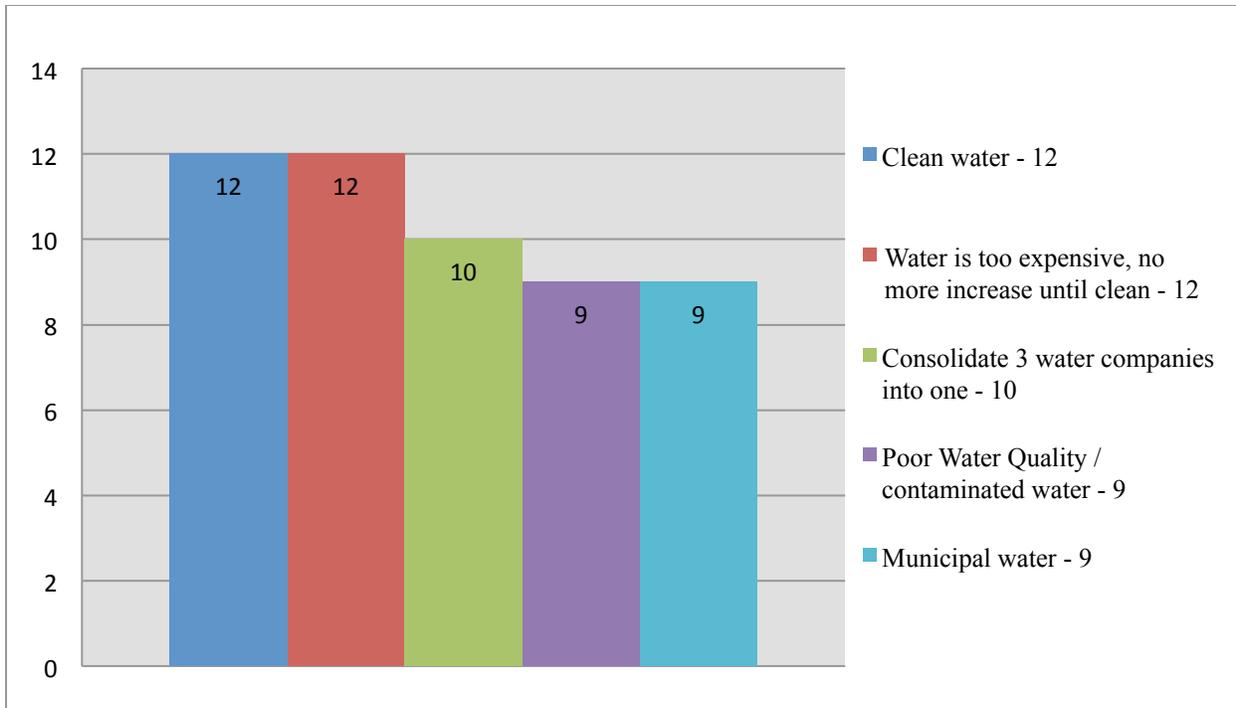


Figure 5 Top 5 Comments – Maywood Community Workshop 1

3.2 Analysis of Issues (In Order of Priority):

3.2.1 Clean Water

The AB 890 Report came to the conclusion that the water from wells in Maywood is safe enough to drink, but do not meet secondary standards due to poor appearance, taste, and causing a discoloration of plumbing and laundry. From the feedback given during the workshop, it is clear that the current state of the water is not acceptable and most people would be hesitant to drink water that has a rusty appearance, no matter what laboratory results indicate. When the report indicated that the water met primary drinking standards, many people in the community felt they were not heard and their concerns not taken seriously enough. The water quality report also went on to indicate actions that could be taken to improve the water from the wells and some of these steps are already being taken.

It is important to note that the AB 890 Report only looked at the source of the water, that is, the wells. Further adding to the poor water quality may be old main lines that run from the wells to residences as well as lateral lines that take water into each home. The main lines that serve Water Company #1 have been replaced in Maywood, but the manager of Water Company #2 indicated their main lines also need to be replaced. It is unclear the state of the main lines for Water Company #3.

In discussion with the manager of Water Company #1, he indicated that old piping in residences may also be contributing to the rusty appearance of the water and has a collection of old rusted pipes taken from various residences to illustrate that these pipes may also be the source of the brown water coming out of the residents’ faucets. According to the manager of Maywood Mutual Water Company #1, this can be

evidenced when water samples are taken from different water faucets in the same house such as a kitchen and bathroom and the color of the water is different.

3.2.2 Water is too expensive, no more increases until the water is clean

The issue of the price of the water is complex, since bills may include a flat monthly service fee and prices vary depending upon whether the end consumer is a residence or business. All three managers of the water companies indicated that they are operating at or near a loss. Some of the local water companies blend water from Metropolitan Water District (via CBMWD) in order to meet demand and to reduce the level of manganese and other constituents to standards. CBMWD water is expensive, and water companies use as little of it as possible. There have been price increases from CBMWD that have resulted in higher consumer prices, but the water company managers stressed that they have not passed on all of the price increases to customers.

In addition, because there are three water companies in such close proximity, neighbors can each have water supplied by a different water company and have a different appearance to their water bill, making comparisons difficult.

3.2.3 Consolidate three water companies into one

Many participants at the meeting felt that one water company would have a distinct advantage because of its increased ability to garner grants and loans. In addition, many people voiced the opinion that one company would result in greater accountability than three separate ones.

3.2.4 Poor Water quality/contaminated water

In addition to the manganese problems contributing to unacceptable taste and appearance discussed above, Water Company #3 has problems with TCE in two of their wells, Well #1 and Well #7. One of these wells failed and is no-longer being used.

The Pemaco Superfund site has contaminated groundwater, but this is being cleaned and studies show that this does not affect the drinking water supply since the Maywood wells access water far deeper than the water at this site. The EPA is handling this problem and they report the results of the cleanup on a recurring basis.

3.2.5 Municipal water

Similar to the issue raised about consolidating the three water companies into one, this issue looks to take the water supply out of private hands and into the public, municipal domain.

3.2.6 Park Conditions

There are two concerns here: 1) the overall state of the parks, and 2) a small park that was destroyed by stockpiling soil on it and now abandoned.

The first concern is that the Maywood parks are too small for the number of visitors, and not adequately maintained or cleaned. For example, the Maywood Activities Center has a pool, but is inadequate to meet the demand in summer, and there are not enough swings and play equipment.

The second concern is about soil that has been stockpiled on what was a mini-park built by the Mountains Recreation and Conservation Authority with County of Los Angeles Proposition A Bond funds and to be maintained by the City of Maywood. This was to be the first phase of a larger Riverfront Park (that was subsequently built).

According to Councilmember Aguirre, the soil on the site is imported clean fill and was placed there to be part of a hillside and soccer field that was to be constructed. This never took place.

Since the soil is two stories high and the plastic sheeting is coming apart that once covered them, residents complained of airborne dust, and that it attracts and provides habitat for rats, gophers, raccoons and possums. The former park is directly across the street from a number of apartment buildings that house families with children.

3.3 Potential Solutions to Concerns

3.3.1 Legislative/legal Solutions to Concerns

3.3.1.1 Clean Water and Poor Water Quality /Contaminated Water

The issues of clean water and poor water quality /contaminated water can be dealt as one issue. The Department of Public Health oversees water quality and adherence to Title 22 that dictates drinking water standards including monitoring and testing. WRD provides water quality testing services for the water companies. The water companies do additional water quality testing in their own. AB 890 Report verified that water coming from the water company wells met primary standards for drinking water, although it did not always meet secondary water quality standards. Actions have been or are being taken to clean up these wells including wellhead treatment. When all the treatment plants come on line, it is possible that the wells will also meet secondary standards.

The quality of water entering the residences in Maywood is currently being assessed. The source of the water – the wells – has been assessed but it still has to flow through the main lines and the plumbing inside the residences. Any one of these lines could contribute to the problem of brown water. Older water supply lines and residential plumbing systems can rust and corrode over time and contribute to the water quality problem. While AB 890 was passed to study the source of the water, the Maywood Community Inter-Agency Partnership is now trying to isolate the problems of poor drinking water quality through representative sampling after the water leaves the wells.

3.3.1.2 Water is too expensive, no more increases until the water is clean

Pursuant to California law, the three water companies serving Maywood are mutual water companies and are private companies that provide water to their shareholders at cost. They are non-profit organizations. Public shares are not available, only shareholders own an interest in the mutual and it is unclear who are the shareholders or the market mechanism for buying and selling such shares. Costs include but are not limited to the cost of the water itself if purchased or leased from an outside entity (such as another water company or agency), operations, maintenance, capital improvements, and debt service. The water companies each own wells that draw up water for delivery within their service area (see Figure 1) and may blend the water with outside purchased water. Water can be “leased” from another entity such as a City or other water company if they have a surplus. Water can also be purchased from Metropolitan

Water District through CBMWD, who may add an additional charge to the water being provided. Water may be purchased or leased for a number of reasons: to add additional capacity when pumping supplies are inadequate to meet demand, to cover downtime from well pumping due to maintenance or treatment upgrades, or to blend a higher quality water to meet water quality standards or aesthetics.

Water prices, whether leased or purchased, can vary as any other commodity based on supply and demand. In recent years the cost of purchased water has risen and these costs may or may not be passed fully on the end consumer. Maywood Mutual Water Company #1 indicated at the public meeting that purchased water had increased 33%, but they had raised prices by only 13% and had actually lost money in the last three years. The least expensive water according the manager of Maywood Mutual Water Company #1 is water that is pumped from the ground water aquifer. Since mutual water companies are privately owned, rates are set by the Board of Directors who balance the sources, quantities, and prices of water.

There is a perceived lack of transparency into the Maywood mutual water companies that tend to frustrate those trying to understand these companies. For example:

- Public shares are not available. Only shareholders own an interest in each mutual but it is not clear how to purchase shares.
- Since they are separate companies, billing differs from company to company, creating a confusing situation for residents.
- No standard level of data exists, and it is hard to convert data about one water company into terms where it can be compared to data about another company.

The issue with “no price increases until the water is clean” ignores the additional burden the water companies may be taking on such as well head treatment to actually improve the water quality, in addition to the price increases for leased or purchased water. It would appear that legislation freezing prices could actually backfire, since it may preclude making capital improvements to the water system. In addition, until the rest of the delivery system is fully assessed and repaired, clean water may still not come out of the tap even after all well head improvements are made.

3.3.1.3 Consolidate three water companies into one

The three mutual water companies in Maywood are separate corporations that own their own assets: wells and attendant infrastructure including pumps, tanks, treatment facilities, delivery lines, etc. They are governed by a number of state laws, including corporation codes and water codes.

If so desired, the three mutual water companies could merge into one corporation. According to California Section 8010: “A mutual benefit corporation may merge with any domestic corporation, foreign corporation, foreign business corporation, or other business entity (Section 5063.5). However, a merger with a public benefit corporation or a religious corporation must have the prior written consent of the Attorney General.” The law further states in 8011 that “The board of each corporation that desires to merge shall approve an agreement of merger. The constituent corporations shall be parties to the agreement of merger and other persons may be parties to the agreement of merger.”

Thus, in order for there to be one corporation, the boards of all three water companies would have to be in agreement for this action to take place. Unless the boards of all three companies agreed to this action, it could not take place.

3.3.1.4 Municipal Water District

California State Law provides for the formation of Municipal Water Districts. These are formed through a public petition and voting process. Boundaries of such districts need not be contiguous with actual city boundaries. Once established, the district is divided into 5 divisions with a board member representing each division. According to State law, Municipal Water Districts have among others, the following powers:

71610. A district may acquire, control, distribute, store, spread, sink, treat, purify, recycle, recapture, and salvage any water, including sewage and storm waters, for the beneficial use or uses of the district, its inhabitants, or the owners of rights to water in the district.

71610.5. A district may undertake a water conservation program to reduce water use and may require, as a condition of new service, that reasonable water-saving devices and water reclamation devices be installed to reduce water use.

71611. A district may sell water under its control, without preference, to cities, other public corporations and agencies, and persons, within the district for use within the district. As used, the term "water" includes potable water and nonpotable water.

Municipal Water Districts may also tax:

72090. A water district may cause taxes to be levied, in the manner provided in this part, for the purpose of paying any obligation of the district, including its formation expenses and any warrants issued therefore. The amount of this levy shall not exceed the amount permitted by any maximum property tax rate limitation in the Revenue and Taxation Code, provided, however, that if no tax was levied by the district in either the 1971-1972 or 1972-1973 fiscal year and the district incurred expenses in such years, which expenses were paid from revenues other than taxes, then the maximum levy shall not exceed fifty cents (\$0.50) per one hundred dollars (\$100) of assessed valuation per year.

Thus, a Municipal Water District could potentially be formed in the City of Maywood, if all the procedures were followed according to the law. However, it is unclear that the new district could take over the assets of the mutual water companies, since the law states:

71032. The inclusion in, or annexation or addition to, a district, of the territory of any public corporation or agency shall not destroy the identity or legal existence, or impair the powers, of the public corporation or agency, notwithstanding the identity, or substantial identity, of purpose of the district.

If the water companies remain as separate entities, the new water district may add another layer of government and taxation and may not bring the benefits that residents are seeking. Residents indicated that they felt a municipal water district would be less expensive and more accountable to the public. A full economic and legal analysis would need to be conducted in order to determine the efficacy of forming such a district. This analysis is beyond the scope of this report.

3.3.2 Structural Solutions to Concerns

The structural changes that could improve water quality relate primarily to upgrading the public and private infrastructure, from wellhead treatment through the delivery systems to residential plumbing upgrades. When the Maywood Community Inter-Agency Partnership completes its sampling, an assessment of the infrastructure will better pinpoint the causes of poor water quality.

Improvements have been made to the main lines by the water companies, however, these vary according to company and further down to the individual street level. The short-term and long-term solutions outlined by the AB 890 Report are reproduced below.

3.3.3 Water Quality Improvement Solutions by Water Company

A description of the options that Maywood Mutual Companies may consider to reduce the amount of manganese in the drinking water supply is presented in this section. The goal is for the manganese concentrations to be at least as low as a level consistent with the average concentration in communities within a 20-mile radius of the City of Maywood (e.g., 13.7 µg/L or less than the detection limit of 20 µg/L).

3.3.3.1 Maywood Mutual Water Company #1

Well #4 in the Maywood Mutual Water Company #1 system has levels of manganese over the SMCL. The remaining Well #3 and the CBMWD imported surface water sources have lower manganese levels.

Short Term Measure

A short term measure is limiting the use of Well #4 and blending Well #4 water with Well #3 and/or CBMWD water. Maywood Mutual Water Company #1 has submitted a Blending Plan (Appendix A) to CDPH for approval to blend to 80% (40 µg/L) of the manganese SMCL and has been blending Well #3 and Well #4 water since fall of 2009. The manganese concentrations in the blended water ranged from less than the detection limit of 20 µg/L to 40 µg/L in the distribution pipeline within the City of Maywood. In order to meet the AB 890 requirements (13.7 µg/L or less than the laboratory reporting limit of 20 µg/L) additional blending would be required at a higher cost. However, existing facilities are adequate to meet the blending requirements.

Long Term Approaches

Long term approaches to the system include the following:

- Modify existing wells or install new wells to produce water from aquifers or water-bearing units that have low manganese levels; and/or
- Treat existing water sources.

In 2010 WRD began well profiling of Well #4 to determine whether aquifers low in manganese concentrations are present and whether the zones that have high manganese concentrations can be sealed off. The well profiling results are being reviewed by WRD for further action. Alternatively, install a replacement well completed in aquifers low in manganese concentrations, if feasible. This option requires further investigation.

The other long term approach is to install a manganese removal plant to treat the water from Well #4. Maywood Mutual Water Company #1 has applied for several grants including the Safe Drinking Water State Revolving Fund in the amount of \$2.4 million to build a treatment plant at Well #4, along with a new storage reservoir. Manganese levels at Well #4 can be reduced to below the AB 890 requirements with available treatment technology such as oxidation followed by filtration.

3.3.3.2 Maywood Mutual Water Company #2

Maywood Avenue Well (61.7 µg/L) and 52nd Street Well (73.3 µg/L) in the Maywood Mutual Water Company #2 system have levels of manganese over the SMCL. The CBMWD source has lower manganese levels and is available but was not used in 2009.

Maywood Mutual Water Company #2 is completing construction and testing of a manganese removal system at the 52nd Street site. Once the system is tested and permitted manganese from this well will be below the AB 890 levels. The capacity of the treatment plant is 1,100 gallons per minute.

Short Term Measure

The short term plan is to operate the 52nd Street treatment plant. Maywood Avenue Well water is available to blend with the treated 52nd Street water to produce water at 80% of the SMCL for manganese, if necessary. In order to meet AB 890 requirements significantly more blending will be required at an additional operational expense.

Long Term Approaches

A long term solution to the problem could be to pipe Maywood Avenue Well water to the 52nd Street site for treatment, if feasible. A dedicated pipeline of approximately 6,000 linear feet of 10-inch pipe would be required. The capacity of the existing plant would also need to be increased. Estimated cost for these improvements would be in the order of \$1 to 1.5 million. Alternatively, it could be investigated whether the Maywood Avenue Well can be modified or a new replacement well can be installed to produce from aquifers that have low manganese levels, if appropriate.

3.3.3.3 Maywood Mutual Water Company #3

The manganese levels in the Maywood Mutual Water Company #3 wells were below AB 890 standards.

In addition to manganese, available water quality data were reviewed to determine whether “other contaminants” of concern were present in the City of Maywood water sources. AB 890 indicated that “other contaminants,” if present, be addressed in the water quality study.

The TCE analytical data from the CDPH database are summarized in Table 5.

Table 5 TCE Levels in Maywood Mutual Water Company #3 Water Sources in 2009				
	Water Source	Number of Samples	TCE Concentration (ug/L)	
			Average	Range
Maywood Mutual Water Company #3	Prospect Well (Well #1)	4	2.7	1.8-4.5
	District Well (Well #4)	1	ND(0.5)	ND(0.5)
	Warehouse Well (Well #7)	4	3.5	2.8-4.2
The wells were sampled by WRD quarterly in 2009 and TCE was analyzed by EPA Method 524.2 at the State of California certified laboratories.				

TCE levels in the Prospect Well and Warehouse Well were found to be as high as approximately 80 to 90% of the Primary MCL of 5 µg/L in 2009. The water production from Prospect Well was lowered from 48.1% of the system total in 2009 to 19.6% in 2010 due to concerns with TCE.

Additional TCE data for communities located within a 20-mile radius of the City of Maywood were reviewed to determine the TCE levels in their drinking water. Based on data from a total of 113 water providers in 2009, the average TCE concentration for a 20-mile radius area is 0.47 µg/L (which is below the TCE laboratory reporting limit of 0.5 µg/L). TCE was reported as not detected or less than the reporting limit of 0.5 µg/L in approximately 85% of the CCRs.

Short Term Measure

On a short term basis the Maywood Mutual Water Company #3 has reduced its use of the Prospect well and is blending this water with other sources. This option can reduce the TCE concentration to within 80% (4.0 µg/L) of the MCL, but not to the AB 890 level (0.47 µg/L, or less than the TCE laboratory reporting limit of 0.5 µg/L).

Long Term Approaches

Long term approaches to the problem need to be investigated. They include the following:

- Modify existing wells by sealing off sections that are producing the TCE, if appropriate (Estimated costs for well modifications would be in the order of \$250,000);
- Install a TCE removal plant at the Prospect Well or Warehouse Well (Estimated cost to construct a treatment plant would be in the order of \$1 million); and/or
- Install new wells to produce from aquifers or water-bearing units that do not produce TCE (Estimated cost for new wells would be in the order of \$1.5 million).

3.3.4 Non-structural (Programmatic) Solutions to Concerns

Education and programs may hold the best promise to making improvements in the very near term horizon.

An education and outreach program that shows how rates are derived, explaining the improvements being made, and how their costs are covered and amortized by the water companies may help residents better understand their bills. A uniform and easy-to-understand billing system consistent across all three water

companies could clear up confusion about water costs among residents and neighbors who may be served by different water companies although living next door to each other. It would also allow for comparisons of cost and efficiencies among the water companies.

Perhaps residents could be employed to track the times when water quality deteriorates, to help pinpoint where and when problems are occurring.

Conservation programs to save water could reduce individual water bills through less demand. WRD has outreach materials that explain how changes in landscaping or indoor water-saving devices (such as low flow shower heads and low-flush toilets) can save water. While many of these programs have been underway for many years, there may still be opportunities for improvements.

3.3.5 Funding and Programs Solutions to Concerns

This project was developed as a result of the County asking the Corps for planning assistance to help determine the needs and identify potential projects for disadvantaged communities under the IRWMP. The strategies under this program will be explored to determine which grants could help the water companies and residents to solve the issues of poor water quality in Maywood. AB 890 Report also included funding opportunities:

Table 6 Potential Funding Sources		
Sponsoring Agency	Potential Funding Program	Status
California Department of Public Health	<ul style="list-style-type: none"> • Safe Drinking Water State Revolving Fund • Proposition 50 <i>Water Security, Clean Drinking Water, Coastal & Beach Protection</i> • Proposition 84 <i>Safe Drinking Water, Water Quality & Supply, Flood Control, River & Coastal Protection</i> 	
California Department of Water Resources	<ul style="list-style-type: none"> • <i>Integrated Regional Water Management Program</i> • <i>Proposition 82 New Local Water Supply Construction Loans</i> 	<i>Third and final round of Proposition 84 funds expected in Autumn 2013</i>
State Water Resources Control Board	<ul style="list-style-type: none"> • Clean Water State Revolving Fund 	
Metropolitan Water District of Southern California	<ul style="list-style-type: none"> • Community Partnering Program 	
U.S. Bureau of Reclamation	<ul style="list-style-type: none"> • <i>Water 2025: Preventing Crises and Conflict in the West – FY 2008</i> 	
U.S. Army Corps of Engineers	<ul style="list-style-type: none"> • Planning Assistance to States 	<i>Used to assist County with IRWM DAC</i>

3.3.6 Park Conditions

Potential solutions about the two main issues about the parks, 1) the condition and maintenance, and 2) the stockpiled soil are discussed below.

3.3.6.1 Park Overcrowding and Maintenance

The City of Maywood Open Space Element of the General Plan recognizes the inadequacy of parks in Maywood. It also recognizes that the City is completely built-out with little opportunities for additional open space. However, one issue that has galvanized the community may provide a potential solution.

When LAUSD came into Maywood and condemned homes for another school, they actually went through the process of razing some of the existing homes. While this is the subject of a court battle, and beyond the scope of this report, the subsequent empty lots could be re-purposed into parks and open space if this is the will of the community, and depending upon the outcome of ruling of the court case. An overall park plan that would integrate with the neighborhood and reflect the will of the community would need to be developed, along with funding for building the parks and maintaining them.

The issue of maintenance of the existing parks is primarily related to funding. Additional park staff and janitorial services are needed to rectify the situation. Creating new parks and maintaining them would only add to this burden.

However, some cities have created special landscape and lighting districts whereby property owners vote to create a special district and tax themselves to specifically pay for the servicing of the parks (and often street lighting). This would be a fund and entity separate from the general fund of the city. Depending on the financial strength of the new district, bonds may be able to be issued with a portion of future tax revenue as collateral. This would provide an immediate infusion of cash to pay for capital improvements.

3.3.6.2 Stockpiled Soil on Former Park Site

The stockpiled soil is in all likelihood a violation of the terms of the County Proposition A park funds, since the park was to be maintained in perpetuity by the City of Maywood. The City should look back to the original agreement in accepting the soil. Were funds received by the City to accept the soil? If so, why were they not used to create the hillside and soccer field? Where exactly did the soil come from and who authorized disposing it on a park site?

It can be a cost to either get rid of it or purchase it, and often this depends on the current state of construction regionally. There are a number of businesses that buy and sell soil. City staff should investigate these businesses regionally and see how to best remove and dispose of the soil most cost effectively with all due haste and return the park to its former, or better condition. The airborne dust particles represent a hazard to the community and especially to those directly across from the park, in addition to possibly providing habitat for urban pest animals.

3.4 Lessons Learned

3.4.1 Logistics for Conducting the Meeting

The City of Maywood has a number of issues that have polarized the community over the years ranging differences of opinion on a new Los Angeles Unified School District (LAUSD) site to City services. This polarization has led to a significant level of distrust among the various groups and factions, and this was not fully known by the planning team in advance of the meeting.

Therefore the team was not fully prepared for how the meeting unfolded. A larger than capacity crowd arrived and were primarily interested in water quality issues to such an extent that they did not understand why the Superfund site was even being discussed. The Mayor announced that this was not an “official” City event and that he even disagreed with staying for the meeting. At this point, the meeting broke down. Instead of continuing with the prepared agenda, it was decided to immediately break into groups to work on the issues, and make the meeting productive again. Thus, some background information was never formally shared with the participants, which may have better aided the participants in understanding the issues and potential solutions. The lesson learned was that City facilities may not be the best venue for a meeting since it may not represent neutral territory, and the sponsors of the workshop may not be differentiated from the local issues and organizations. In addition, if one issue is overriding, it may be best to deal only with that issue, or deal with it first, to avoid getting the participants impatient about getting to their issue.

The break-out sessions were particularly useful for smaller discussions and allowed for solutions and ideas to come forth. By asking people to envision how a changed Maywood would feel, it got to the heart of people’s desires. However, solutions were somewhat limited, and this may be due to skipping a number of presentation slides when the meeting became unruly. By asking how long people thought solutions should take to be implemented, the predominant answer was one year, which is not a realistic timeframe. Nonetheless, it points to the importance of educating the populace on the process and timeframe of implementing solutions.

3.4.2 Water Quality Issues in Maywood

The team learned that the water quality issues in Maywood are complex due to the following factors:

- Three Water Companies:
 - The community is confused and frustrated because water company rates and bills are not easily compared.
 - The quality of the water source varies among the water companies due to differences in wells, well-head treatment and blending.
- Aging Infrastructure:
 - The infrastructure is highly variable in condition; some, but not all water mains have recently been upgraded
 - In the past, there has not been sufficient data to make conclusions about the source of water quality problems, however monitoring at the wellhead, in the distribution systems, and at the faucet has recently been completed.
- Community Confusion, Frustration and Coordination:

- Concerns about poor water quality have been an issue for the residents for many years and there is a high level of frustration about the inability to solve the problems.
- The team subsequently learned in discussion with WRD, that many years ago, a program was instituted to install water filters, but that this failed on a number of levels contributing to the history and frustration about water quality solutions.
- The team also learned subsequent to the workshop about the water quality sampling program being conducted by DTSC and its community partners. Even in a small city such as Maywood and despite the outreach effort, it is still difficult for agencies to coordinate programs.

4 Charette/Workshop II

4.1 Pre-meeting Summary

Because of the conflicting politics and issues in the City of Maywood, the team felt upon further analysis that the public (and even members of the City Council) were unclear about the role of the Corps and their leadership role in facilitating the workshop and running the program. In order to clear up any misperceptions, the Corps through its Public Affairs Office (PAO) decided to conduct independent outreach to the City and its residents. The Corps' mascot, Bobber the Water Safety Dog, appeared at some special events at the City of Maywood prior to the second workshop in order to spread the word of the Corps' overall mission and potential role in solving water and flood-related issues.

The purpose of the second workshop was to report back to the community on the findings by the Corps of potential solutions to issues raised in the first workshop. It was decided that the Corps would play a strong primary role throughout the second workshop to further reinforce its leadership position. This would be achieved by having the speaker/facilitator a bilingual Corps employee. Corps staff attending the meeting would be clearly identified by wearing Corps shirts. In response to a stated desire by some participants at the prior workshop to have activities for the children, and to keep the meeting on an upbeat, friendly note, Bobber the Water Safety Dog would be part of the activities.

It was decided that the meeting would be conducted in Spanish with English simultaneous translation. Also, in order to conduct the meeting in a "neutral space" the team met with the pastor of St Rose of Lima Church and arranged to hold the meeting there. Flyers were sent to City Hall, the Church, and other locations.

The meeting was set for 7:00 pm on 2 February 2012 at St. Rose of Lima Church. There was conflicting information in the community that the meeting started at 6:00 pm so many people arrived early.

4.2 Minutes of the meeting (Appendix has actual transcripts of notes in English and Spanish)

Maywood Public Participation Meeting Minutes February 2, 2012

Tables were set up at the entry to the hall to capture the names of the attendees and manned by Corps and Tetra Tech employees who were fluent in Spanish. As soon as the meeting began, they went to the front of the room and took down comments in Spanish on flip charts. A Corps employee conducted the meeting in Spanish, giving the presentation (in Appendix C3) and facilitating comments and feedback. The following is a translation of the comments taken in Spanish during the meeting.

Comments made by individuals:

Unknown

- Who knows which water company transports the water?
- How much more money is going to be needed?

Mr. Castro (Customer company #2)

- The priority is the health of the community.
- Do schools have filters?
- Some community members want to unify the three water companies and make water companies public.
- Tired of buying water for cooking, etc.

Guillermo (Customer company #2)

- The problem is company #2.
- Is the benefit of making one company published?
- How much will it cost if the companies are made public?

Euberto

- I want to change the political structure.

Unknown

- The propositions that have been passed for water should be realized. We don't want lies.
- People are ill informed and want more information on the quality of the water.

Unknown

- Do not agree that the companies should be made public.
- The only problem is the quality of the water and the cost.

Martha

- Most of the community wants the companies to be public.
- The community wants to know if it is better to have the companies public or private.

Enrique Huerta

- Problems
 - Land Use
 - Water
 - Atmosphere
 - Sustainability
- The problem is not in the water.
- [Assembly Speaker] John Pérez not going them to give any money.
- Something has to be done, a solution that benefits all.

City of Maywood Mayor

- Wants all information in Spanish (would appreciate the effort on this).
- People don't understand the report in English, and would better understand the situation if it were translated.

Councilmember Felipe Aguirre

- Has talked with local, state, and federal agencies but nothing gets done.
- Suggests putting the decision on whether the companies should be public or not on a ballot.

Unknown

- Wants to know how deep the water is [assuming in the wells].
- Local government can't help us; the federal government can.

Unknown

- The wells have clean water but the companies have to change pipes and also increase their capacity.
- It would be good to change the pipes of the houses.
- The city should care for its citizens.
- Water has a bad color and bad taste and we need to change this.

Héctor Padilla

- There has been a lot of poverty [in this community]. I have been a member of many groups.
- The report has deceived us; we [the community] are being misled.
- If the companies are not made public, the public won't see any federal money.
- Maywood will never see those millions of dollars. There is no representative here that can send Maywood the money.
- If the water companies become public companies of Maywood, the current companies say that they are not going to pay taxes, but they are lying.
- They [the water companies] are dictators.

José Cárdena (Customer company #3)

- TCE was found in the system of the company # 3. A filter is being set up.
- [Note there was much side discussion about additional funding from the California legislature.] Question – are the state funds going to stay with the water companies' funds? The funds are not for the water companies, they are to replace pipes.
- Question - where is the money to change the pipes, and who will be the [water] company? The same [water company and structure]? Response - it is unclear right now.

Enrique Gasca – Employee of then Speaker of the Assembly John Perez, Author of AB 890

- What you draw from AB 890 is a report that reports on the quality of the water.
- There are \$8 million in public funds in the State of California that was set aside by Representative Perez.
- The state will not give money to any company. The funds are the Maywood Community funds and money will be going to a public agency. It may be US Army Corps of Engineers, the public water district, or a new and free agency.
- Huntington Park and Maywood could be combined as [single water] public agency.
- The most important thing that people want to know is where are the contributions [revenue] that companies have?
- Where is the money going? People pay bills and the water companies collect revenue, but want to know where the funds are being spent, for example what are the salary structures?

Javier Gonzales (Customer company #2)

- Every company that is made public does not necessarily work. We make \$400 or \$500 in water payments; we pay almost as much to rent the house! I have receipts here for these; [water company employees] who come here say there is no money for us, but here [the bills] say there is money.

Unknown

- Private companies should not leave Maywood. The water companies have never told us how much money is spent where. Tell us where the money is going (crowd: he doesn't live here).

Manuel (Customer company #3)

- The City of Bell does pay a lot for water.
- We should sell the water companies.

- Union de Vecinos wants to grab our signatures to sell our companies, but we don't want that. We want the tiny companies, which we can find when we have questions.

Unknown

- I drink the Maywood water every day. Everything that is happening here is all political.

Unknown

- I call attention to the report which says that the water companies are trying to improve the water, but they are using our money. We are already spending money buying water.
- The water companies should put a system in place that cleans the water but the cost does not come out of our pockets.
- We do not want to give this water to our babies.

Leticia Arellano

- When will the report come out in Spanish? [Response: The report is out today.]
- What is the purpose of this meeting?
- Report talks about funds. How can we provide comments if the report is not out?

Eduardo Lopez

- How involved is the EPA?
- [Response:] They are sources of support and financing.

Representative of Water Company #1

- Our companies are not private.
- Those who own their own houses here, you are my bosses.
- If you call me I go. You have not called any time.
- You are my bosses.
- I have changed all pipes.
- Do you want a public company controlled by people who do not know what they are doing?

Hernández

- I have 70 years living here, and this [poor water quality] did not happen until now.
- We have to buy 3 gallons of drinking water.
- The water companies are stealing our money.
- The water companies do not understand; here it says there is no money.
- If the water companies are made public, the Government will be forced to help us.

4.3 Water Bill Analysis

The feedback from the participants at the meeting raised a number of questions, most notably, “How much does the water from the three companies cost on a water rate and fixed cost basis compared to other cities or water companies in the region?” Further, “What is the average monthly water usage per person?” Based on feedback from the meeting, the following charts help to illuminate water rates and average consumption in Maywood compared to other cities in the region.

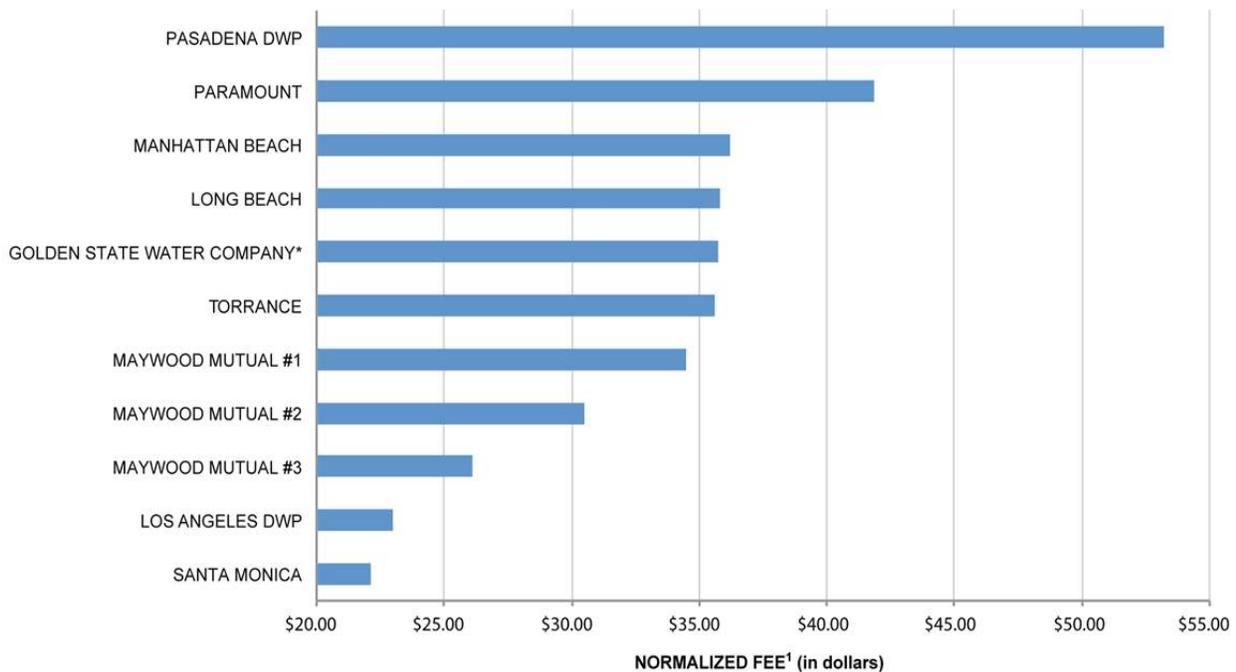
Across the region, both rates and pricing policies vary considerably. Some water companies have adopted a tiered pricing policy, whereas the Maywood companies for example, do not have tiered pricing. Among those organizations with tiered pricing, there is considerable variability. A standard unit is HCF which stands for a Hundred Cubic Feet and is 748 gallons. The City of Manhattan Beach bills \$2.73 for 0-14 HCF and \$3.74 for 15-54 HCF and \$7.88 for water over 55 HCF. The City of Long Beach bills \$2.20 for 0-5 HCF, \$2.44 for the next 10 HCF and \$3.66 for over 15 HCF. Los Angeles Department of

Water and Power (LADWP) bills \$3.36 for Tier 1 and \$3.74 for Tier 2, yet these are averages; the rates and amounts for each tier are determined by five lot size categories, three temperature zones, household size, and vary by season. The amounts used in the charts are averages, and if only one or two tiers exist, the highest tier is used across all tiers.

Further complicating comparisons are fixed amounts that are billed for the basic water service. This is determined by the meter size or pipe size, with increasing charges for larger pipes. A standard residential size is 5/8th or 3/4th inch pipe. However, not all organizations bill a fixed amount; Los Angeles DWP for example, does not have a fixed fee.

In order to try and make meaningful comparisons, a unit of 10 HCF was multiplied by the water rate and the fixed rate added to that.

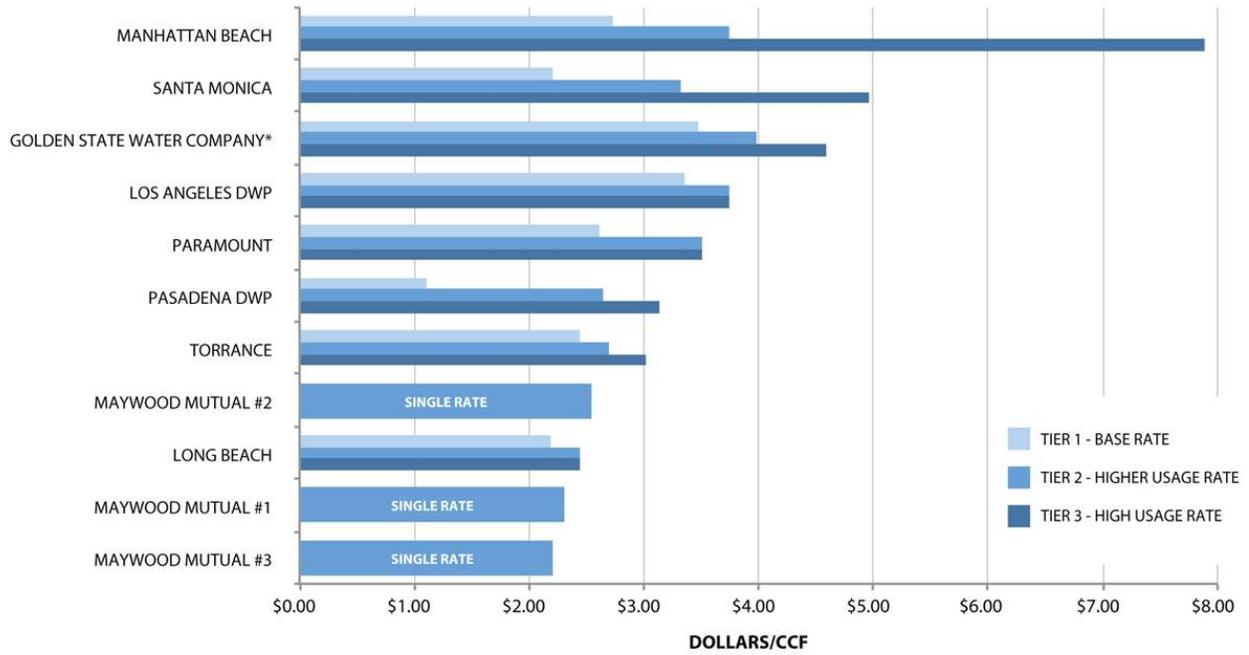
Figure 6 Residential Water Rate Comparison – 5/8” meter



* Covers Cities or portions of Cities of Artesia, Bell, Bell Gardens, Carson, Cerritos, Compton, Cudahy, Culver City, Downey, El Segundo, Gardena, Hawaiian Gardens, Hawthorne, Huntington Park, Inglewood, Lakewood, La Mirada, Lawndale, Long Beach, Norwalk, Paramount, Santa Fe Springs, South Gate.

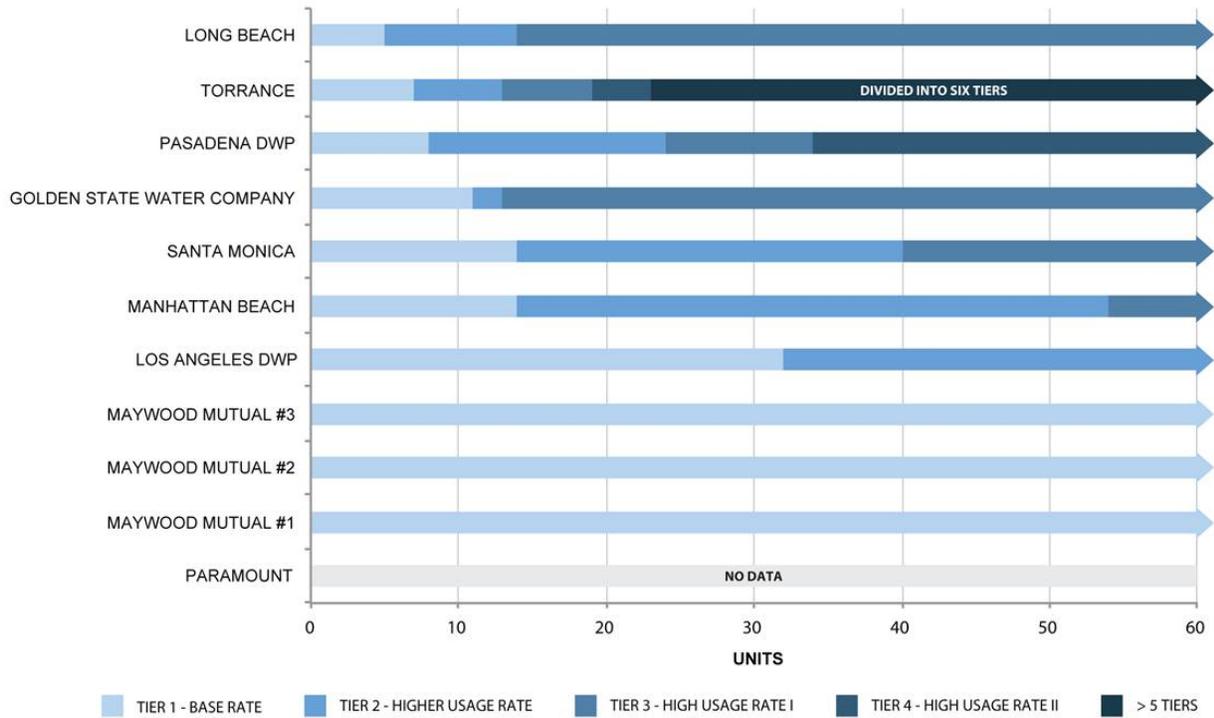
¹ Normalized Fee = Tier 1 x 10 units + Hookup Fees

Figure 7 Residential Water Rate in 2011



* Covers Cities or portions of Cities of Artesia, Bell, Bell Gardens, Carson, Cerritos, Compton, Cudahy, Culver City, Downey, El Segundo, Gardena, Hawaiian Gardens, Hawthorne, Huntington Park, Inglewood, Lakewood, La Mirada, Lawndale, Long Beach, Norwalk, Paramount, Santa Fe Springs, South Gate.

Figure 8 Units Per Tier Comparison



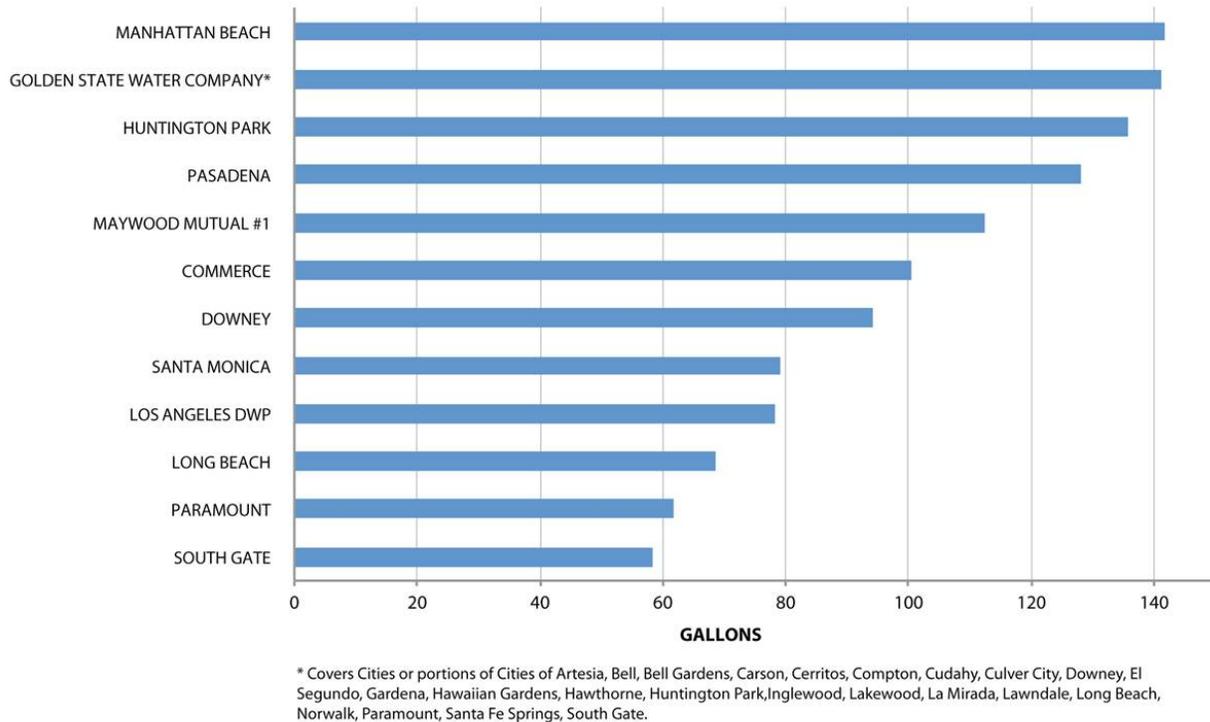
4.4 Water Usage

The following chart illustrates water usage across water companies and cities in the region. This data comes from the California Department of Water Resources. Cities or companies that supply water to over 5,000 connections are required to file these reports. Maywood Mutual Water Company #1 has over 5,000 connections and does file, so that data is readily available. The average of all of these cities or companies was 406 units per person. At 457 units, Maywood Mutual Water Company usage is 12.6% higher than average, suggesting that water conservation measures could be employed to save residents money on their water bills.

However, this is not as straightforward as it seems. Water utilities earn revenue based upon water consumption and if water usage falls too much, revenues are reduced and rates may need to go up to cover fixed costs and capital improvements to the system. In addition, water systems may have leakage especially as they get older. For this reason, the water usage numbers may not reflect true consumption, and residents may already be conservative in their water use.

In the larger picture, water conservation is always beneficial as population increases and variability in supply means that there is increased demand pressure on water supplies. This applies not just to the southern California region but throughout the west and its interdependent water system.

Figure 9 Average Daily Water Usage Per Person



4.5 Lessons Learned

The second workshop went much more smoothly having done more advance work in terms of outreach to the community by the Corps separate from this process, a neutral meeting site, and the meeting conducted primarily in Spanish. A single microphone for participants to speak to provide feedback helped to keep

order by focusing comments from one person at a time (although members of the audience often still reacted verbally to each speaker). It also enabled the staff taking notes on the flip charts time to write down the comments.

Overall, however, the project would have benefitted with a more defined process and desired outcome, although the process from the beginning was to solicit open-ended comments from the community. To a large degree this was an experiment to see how to engage a disadvantaged community and learn what were their issues regarding water. This led to dealing with issues that are outside the scope and mission of the Corps, and to a large degree, the goals of the IRWM program. A better process would have been to first educate the community on the mission and programs of the Corps and the IRWM program and then solicit issues that can be resolved within the context of the available programs.

4.6 Refinement of Analysis and Solutions

After the second workshop, the team realized that despite strides that were being made, many residents were unaware of the progress and improvements to the water systems. The first workshop revealed how quickly residents wanted to see improvements without grasping how long it actually takes to apply for and obtain funding to make improvements. Many programs were already underway; the public simply did not know about them.

One way to illustrate the actions taken to clean the water and to show future programs is through a timeline. By putting events along the timeline, residents can see steps taken to date and what is planned for the future. The timeline illustrates actions taken to clean the water in Maywood.

The team also looked at the other suggestions that were brought up in Workshop II. The one suggestion frequently heard was the consolidation of all three companies and/or making them public or creating a special district for water in Maywood. At the second workshop there seemed to be much less consensus on this concept with some residents voicing doubts or concerns over this option. This option was explored earlier in this report. As stated previously, the companies cannot be combined without agreement of all three boards. A special district could be formed at considerable time and expense, and this may not result in lower rates or cleaner water. In comparing regional rates, many water companies or municipalities have raised water rates substantially in response to a critical need to upgrade aging infrastructure and increased costs of imported water. Maywood falls in the middle of the group for cost and water usage and it is unclear what efficiencies in delivery, cost, or water quality improvements could be made by the consolidation of all three companies.

However, increased cooperation among the companies could benefit all of them. A coordinated, targeted effort to identify and apply for grants could allow the companies to upgrade infrastructure and put more treatment plants in place. While it may seem that they are in competition for such funds, the team believes that a comprehensive, overall grant to focus, identify and clean all the water in Maywood could result in a very competitive application that could garner IRWM funds from the state. This will be a recommendation for the Action Plan.

5 Charette/Workshop III

5.1 Pre-meeting summary

The team met with the three water companies as a group to solicit their input and feedback on the charts that were developed and to see if there could be a consensus for moving forward together. The goal of the meeting was to ensure that information in the charts was correctly captured and determine if there was a way to jointly develop an Action Plan to solve Maywood’s water quality issues.

5.2 Minutes of the meeting (Appendix has actual transcripts in English and Spanish of notes)

5.3 Most Frequently Heard Comments

A number of written comments were received at the meeting, and subsequently Union de Vecinos delivered a substantial amount of written comments to the project team. In order to fairly represent what was received at the meeting and subsequent to the meeting, we show the results below three ways:

- All written comments received including Union de Vecinos
- Written comments without those received from Union de Vecinos
- Written comments from Union de Vecinos only

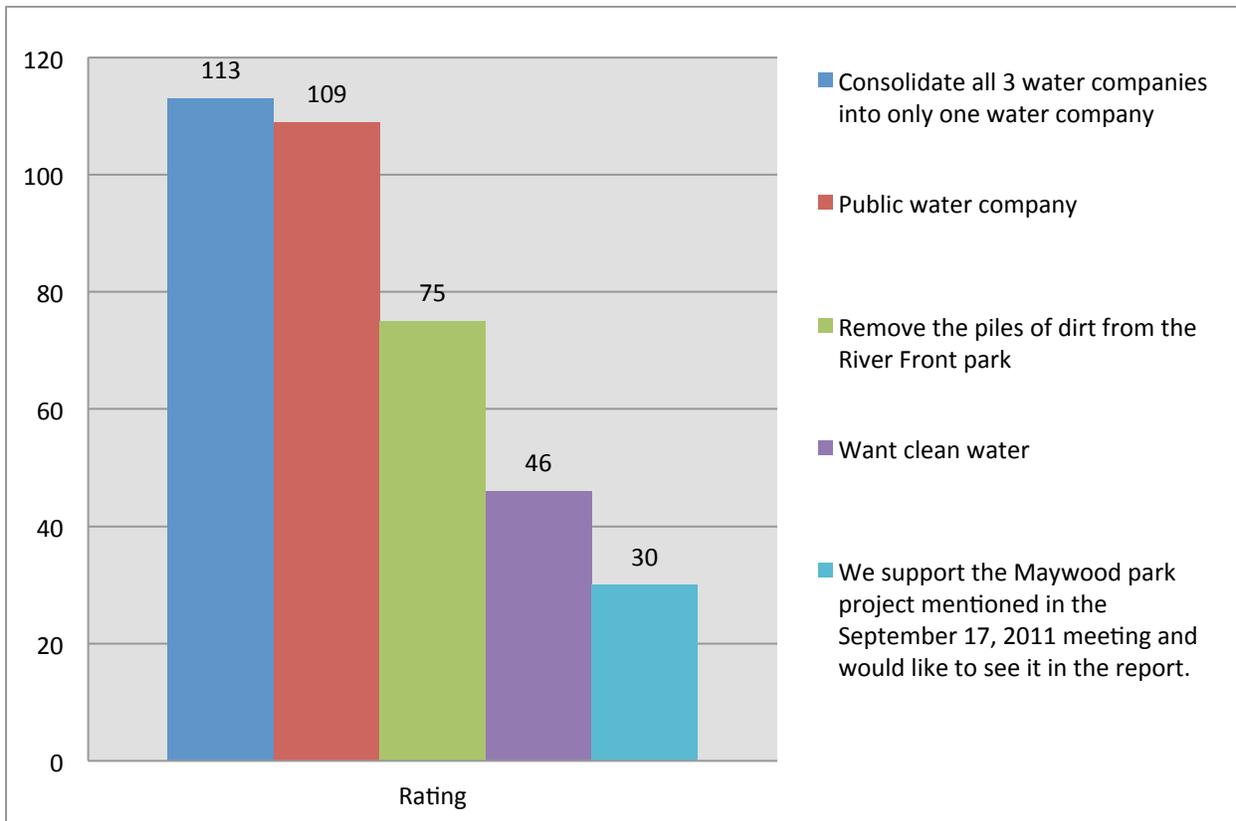


Figure 11 Top 5 Comments from All Received Comments – Maywood Community Workshop 2

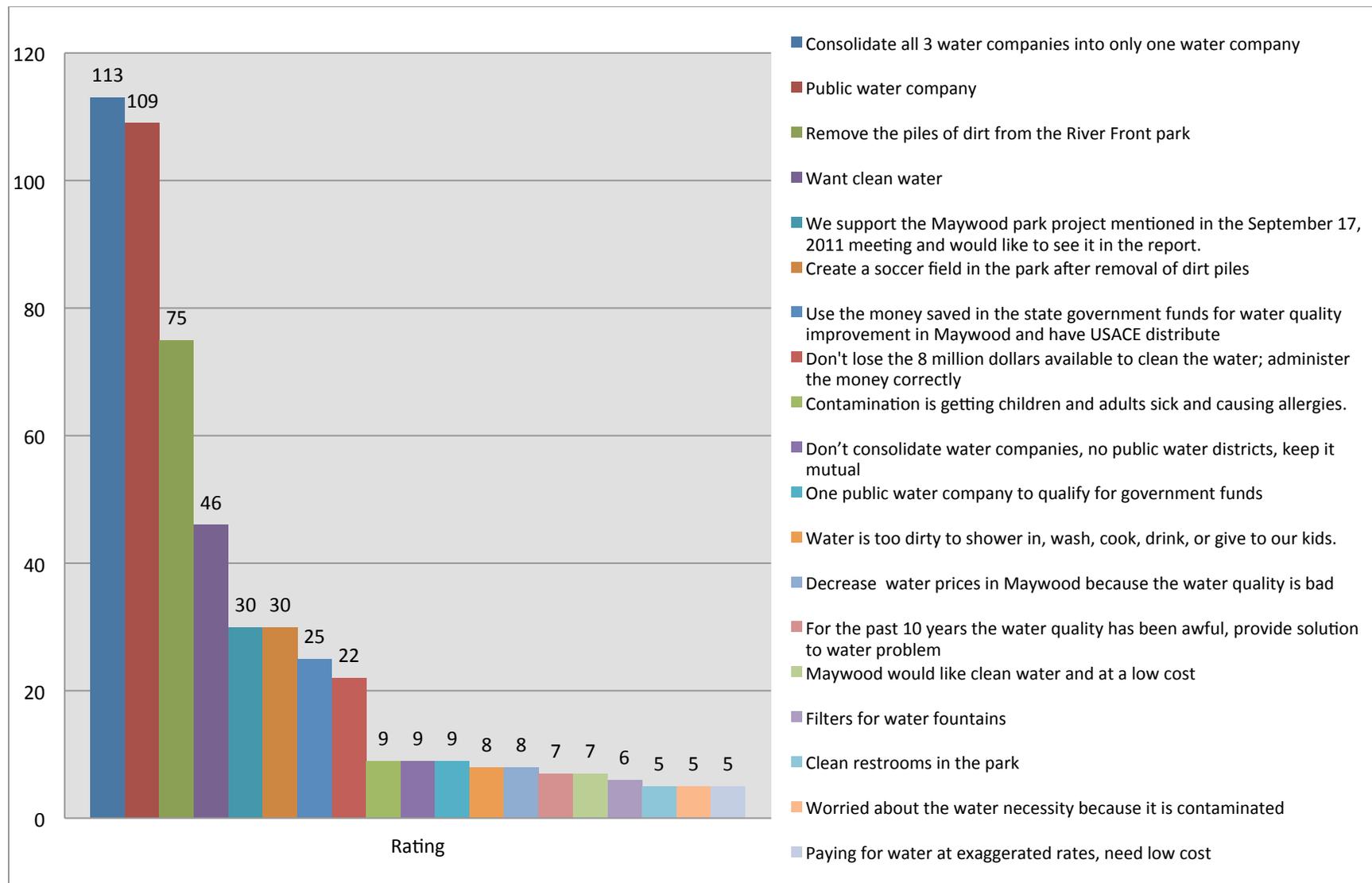


Figure 12 Top Comments from All Received Comments - Maywood Community Workshop 2

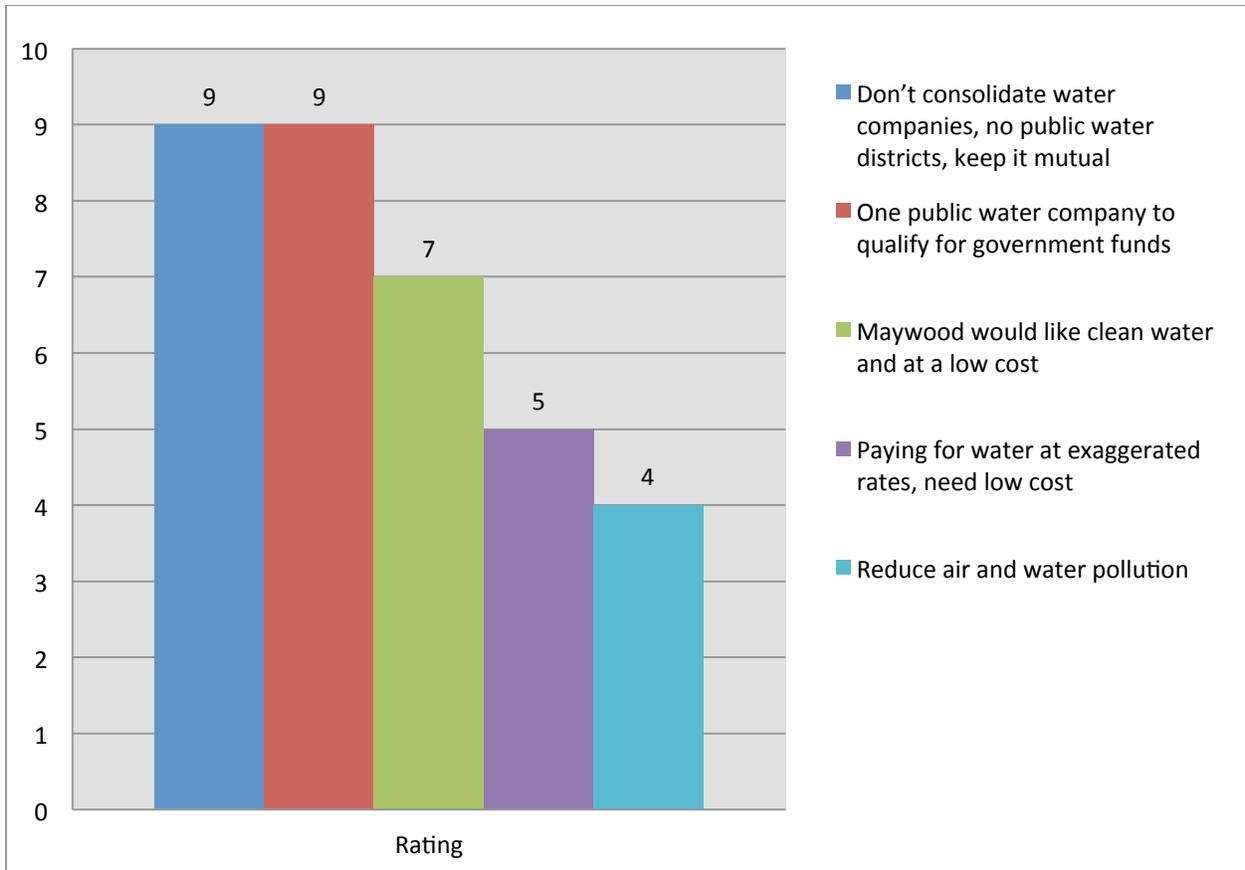


Figure 13 Top 5 Comments without U.V. - Maywood Community Workshop 2

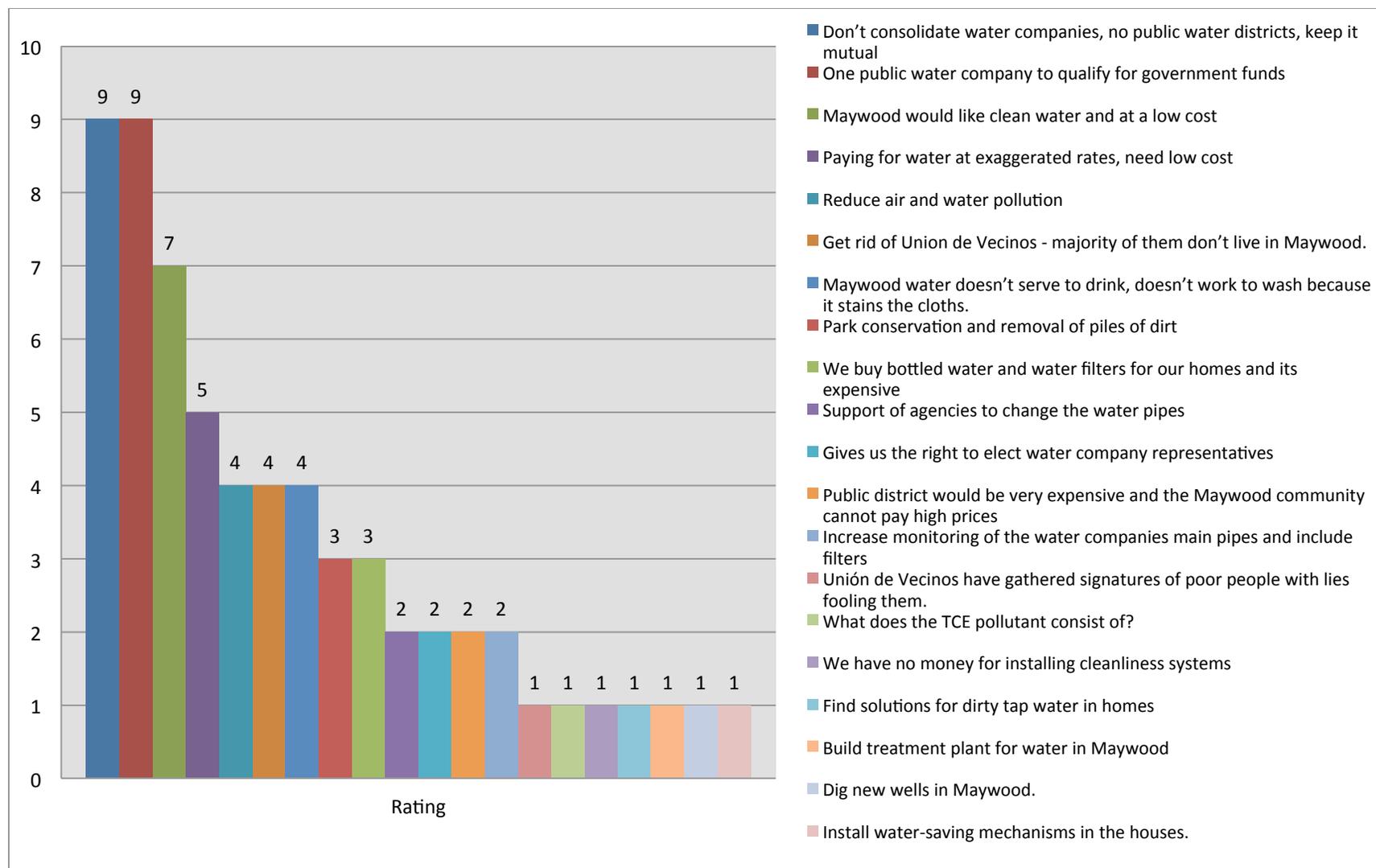


Figure 14 Top Comments without U.V. - Maywood Community Workshop 2

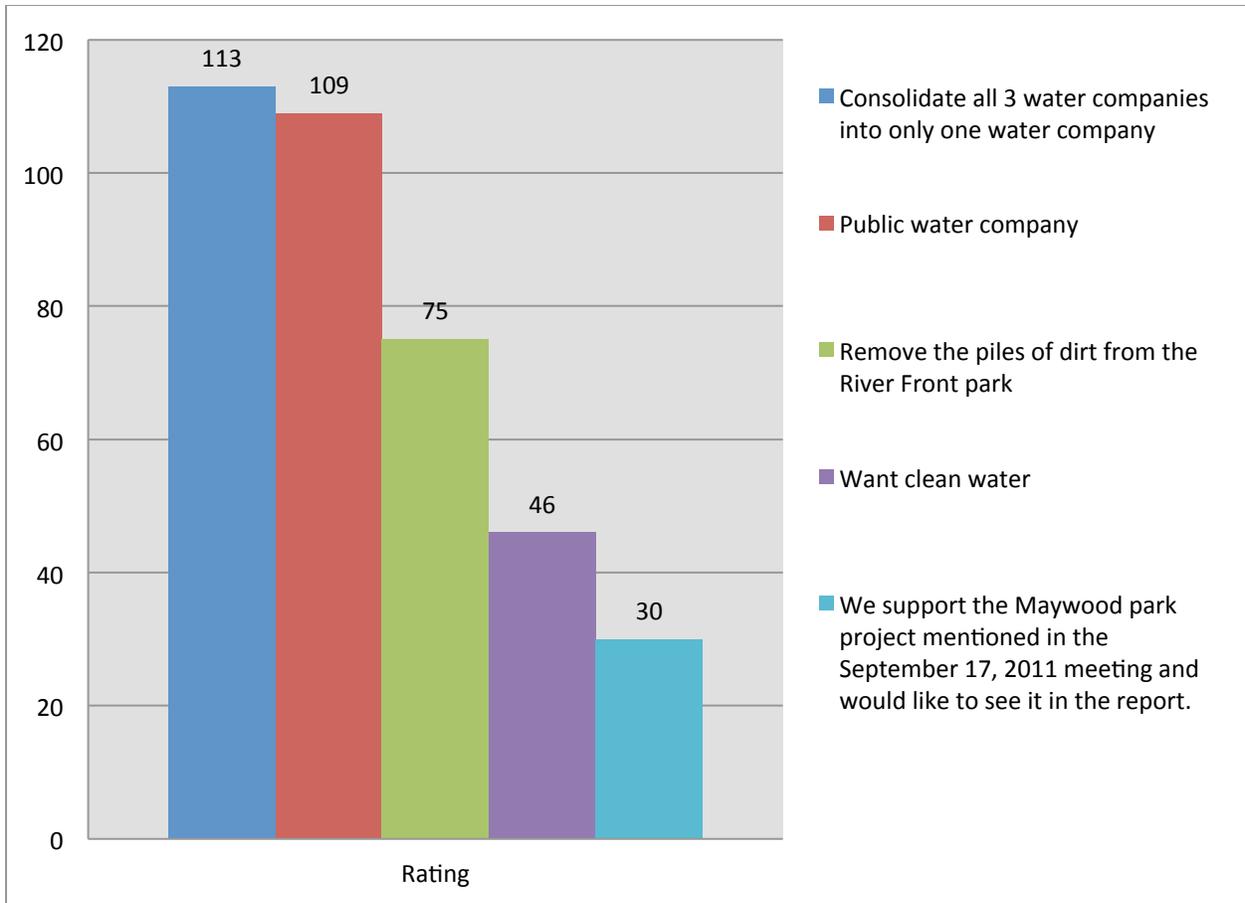


Figure 15 Union de Vecinos Top 5 Comments - Maywood Community Workshop 2

In addition, there was a questionnaire prepared and distributed by Union de Vecinos. A total of 58 participants took part and all answered in the affirmative to the following questions:

- Do you agree to the unification of the 3 water companies in a single company?
- Do you agree to transform this company from private to public?
- Do you agree that the US Army Corps of Engineers manage the 8 million dollars to resolve the water problem in Maywood?
- Do you agree to the removal of the mountains of dirt from the park River Front 59th St. and Walker Ave.?

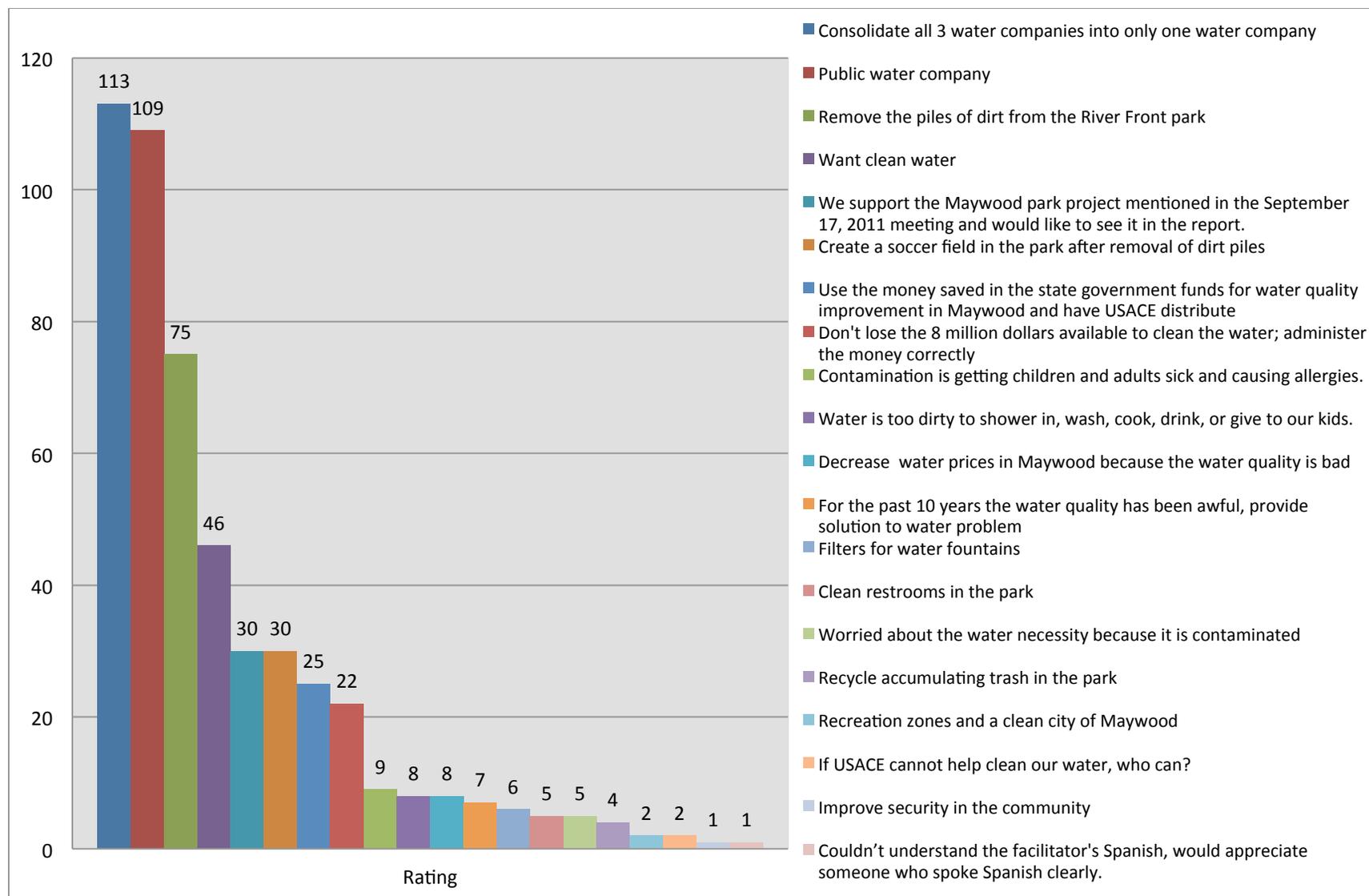


Figure 16 Union de Vecinos Top Comments - Maywood Community Workshop 2

5.4 Lessons learned

To summarize, the overall lessons learned were:

- Have a more defined process for soliciting public input in the context of the Corps mission and/or goals of a program such as the IRWM.
- Gather more information on the current and past history of issues before publicly going into a community
- Gain a better understanding of all of the players (elected officials, non-profit organizations, faith-based organizations) and their relationships to each other early in the process. Meet with these groups individually to understand their issues and relationships.
- Keep the lead agency and sponsoring agency front and center as the “face” of the project or program.
- Be prepared to conduct the meeting in the language of the community, which may not be English.

5.5 Final Analysis and Solutions

Restructuring and/or Reorganization of Water Companies

In the final analysis, it is beyond the scope of the Corps and its mission and that of the LA County Flood Control District to recommend or discourage the restructuring or unification the current water companies' configuration as advocated by some individuals or groups. It is further important to note that the act of restructuring or reorganizing the water companies may not have the desired effects on current water quality, infrastructure, or rates in the City of Maywood. Restructuring the water companies to be a single entity, for example, would push the number of connections and people served over the current 'small water company' thresholds, which would reduce compliance time and increase the amount of water quality monitoring required. While the shortened time for compliance and increased requirements for water quality monitoring would seem to be desirable by the community, the additional costs accompanying those activities would be less palatable.

Additional work needs to be done to project these costs before a conclusion to restructure or unify the companies can be made. Agreed upon by all parties in Maywood are that costs need to be contained and water quality should be improved.

Cost Containment

The charts in Section 4.3 illustrate that water rates in Maywood are among some of the lowest in the region, and that water usage is average. There may various reasons for the high water usage including leaking delivery pipes and the need to periodically flush the system because of “dead-ends” in the system that trap particulates.

There are a number of programs by indirect water purveyors such as Central Basin Municipal Water District and the Water Replenishment District that educate residents on water conservation. These programs are already in effect and have been for a number of years. Water conservation on the whole, given state-wide water supplies, is good long-term policy. Residents can reduce their individual water bills by using less water.

However, for the water companies who have fixed costs such as maintenance and capital improvements, rates would necessarily have to rise over time to cover these costs as they would be spread over a lower amount of water units consumed. Therefore, the best conservation may come from elimination of the dead-ends in the system and thus the need to flush the system periodically which represents only a cost and not revenue source to the water companies. In addition, new mainlines and laterals could prevent any leakage and eliminate particulates coming from the pipes themselves.

Water Quality

The presence of manganese in the Maywood wells that supply water to residents is the primary reason for poor water quality in Maywood. The AB 890 Report quantified the quality of the water at the wells and some of the recommendations from that report have been implemented already as the water companies already had plans to make the changes mandated by the AB 890 report.¹⁴ Where the water companies have installed treatment plants at the well, the water is greatly improved, as indicated in the June 2013 Community Notice by DTSC (See Appendix B). Water Company #1 is installing a manganese treatment unit and additional water quality improvements are expected. Replacement of aging delivery pipes should also help improve water quality. Finally, the plumbing in residents' homes may be a contributor to the problems as well.

Recommended Solution

With the demands from numerous community members to improve water quality while containing costs, the best solution would be a multi-pronged solution where funding to solve the immediate cost containment and drinking water quality needs would be leveraged, while the Maywood community would continue on the process to determine whether or not they want their water companies restructured, unified, or reorganized. This is the basis for the Action Plan.

6 Action Plan

The Action Plan consists of three simultaneous parts:

1. Develop a comprehensive capital improvement plan for the three water companies based on the best information available about their infrastructure needs.
2. Conduct an economic, environmental and community analysis to determine if the water companies should be restructured or unified.
3. Using the results from the DTSC study, investigate whether individual building water treatment would be cost-effective and would improve water quality.

6.1 Capital Improvement Plan for the Three Water Companies

Capital Improvement Plans for the water companies would identify and prioritize the infrastructure needs and costs to improve water quality such as:

- Eliminating the “dead-ends” in the system to reduce water consumption and particulates building up in the lines

¹⁴ AB 890 required that the three Maywood water companies write the AB 890 report. The content of the report is endorsed by the three water companies.

- Adding water treatment plants at the wells to remove manganese
- Drilling for new wells to replace aged infrastructure
- Replacing or rehabilitating the main lines to eliminate any water leakage or degradation of water quality.

The capital improvement plans could be written as a modular grant proposal, so that as appropriate IRWM and other funding sources became available, segments of these capital improvement plans could be used as individual grant applications.

Key to this effort will be to demonstrate a strong partnership among the water companies and other agencies. This effort has already begun by the Council for Watershed Health. The Council has facilitated this effort and added project concepts from MMW #1 and MMW#2 to IRWM project list in preparation for a grant application. Because IRWM is focused primarily on reducing local dependence on imported water, the project concepts are far from a total solution: they focus on improvements that will help improve the community's drinking water quality but also primarily increase water efficiency at the water companies. Other sources of funding will be needed to fully implement the replacement and rehabilitation of the water system.

6.2 Conduct an Economic, Environmental, and Community Analysis to Determine if the Water Companies Should be Restructured or Unified

At the same time as concrete actions towards improving the Maywood drinking water system are being undertaken, the unanswered questions about the economic and environmental costs and benefits of water company consolidation should be fully addressed. The economic analysis should include the capital costs of combining the infrastructure and re-routing lines; combining different billing, metering, and financial systems; potentially increased administrative and reporting requirements due to consolidation, to name a few. The environmental analysis would determine how combining all systems could impact the streets, businesses, and residences if major lines and streets need to be opened and water lines replaced and re-routed.

It will be important to facilitate the community discussion to ensure stakeholders are engaged to decide about the water companies. A respectful and open discourse must be held so that the community can agree to a course of action. This work must be done by an entity trusted by all. It is possible that a portion of reserved state money could be used for this facilitation; this state funding was mentioned by the staff of Speaker of the Assembly John Perez in the second meeting.

Numerous comments were made about the transparency of the water companies. Because these companies are mutual and serve their shareholders, they do not appear to be required to release audits, financial statements, capital improvement plans, roles of board members, and compensation levels. Since the choice to release this information is voluntary, the water companies are more likely to release this information into a situation where they will not feel attacked by community members. The water companies, and those wishing for more transparency from the water companies, could gain important benefits from engaging in a dialogue about the costs of water company operation. Instead, all parties suffer from not engaging in a dialogue.

Perhaps absolute consensus is not possible, but each party could respect other viewpoints; this mutual respect will result in a more sensible dialogue and the formation of common solutions.

6.3 Investigate Individual Building Water Treatment

DTSC is trying to determine the quality of the water after it leaves the wells: as it enters buildings; and finally, as it comes out of the faucets within the buildings.

If water entering buildings is impaired yet water from the wells is acceptable, it would indicate that the water mains and laterals are problematic. This would be the subject of a capital improvement program, mentioned above. However, an intermediate measure would be to install water filtration units on individual buildings just as water enters the internal plumbing system. Sometimes referred to as “whole-house filtration” these units intercept the water and thus improve the quality of the water throughout the building.

If there is a problem with the internal plumbing, then similar to replacing main lines or laterals, one could re-plumb the buildings to remove old rusted pipes that contaminate the water. Alternatively, water filtration units could be installed on the individual faucets.

In considering either option for individual buildings, that is replacing the internal plumbing or installing water filtration units on the faucets, the following should be considered:

- Installation Cost – Replacing entire plumbing can be extremely costly, but may provide the highest quality water. The cost of filtration units and their installation needs to be considered under this category.
- Maintenance Costs – Filters need to be replaced periodically and the filters themselves can be nearly as much as the initial cost. Most manufacturers indicate replacing units based on a time factor, but the level of contamination and overall water use is what should determine the frequency of filter replacement. Training of community members on the use filters is planned by DTSC.
- Useful Life – How long will these improvements continue to provide benefits? Replacing plumbing systems probably has the longest life, but can be expensive. Filtration units also wear out, and market changes may result in products that are no longer supported and require starting over.
- Specificity - Filtration units must specifically remove the manganese and other constituents in the water that are causing problems. Filters vary as to their effectiveness and removal properties, so it must be clear that the filters installed will address the problems identified in Maywood. The DTSC Community Notice reported, “The use of a California Department of Public Health certified activated carbon faucet filter showed a reduction of heavy metals (including lead and arsenic) and is recommended as a lower cost residential water treatment option. Please note that this filtration system is not intended to enhance clarity of the water, but reduce concentrations of heavy metals.”¹⁵

The problems identified through this process are far ranging and do not lend themselves to quick, easy solutions. The Maywood Community Inter-Agency Partnership with DTSC is yielding insight into the

¹⁵ Ibid. p.19

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specific water quality issues in the Maywood water system and plans additional testing of groundwater sources and school water fountains. This supports the vision of the community, agencies, and companies working cooperatively in a spirit of open and honest dialog, to solve these problems to the benefit of everyone.

7 Acronyms

CBMWD	Central Basin Municipal Water District
CCR	Consumer Confidence Report
CDPH	California Department of Public Health
CHSC	California Health and Safety Code
Corps	U.S. Army Corps of Engineers
DAC	Disadvantaged Community
DTSC	California Department of Toxic Substances Control
EPA	U.S. Environmental Protection Agency
FY	Fiscal Year
GLAC	Greater Los Angeles County
HCF	Hundred Cubic Feet
IRWM	Integrated Regional Water Management
LACFCD	LA County Flood Control District
LADWP	Los Angeles Department of Water and Power
LAUSD	Los Angeles Unified School District
Lb	pound
MCL	Maximum Contaminant Level
mg/L	milligrams per liter
Mn	manganese
ND	Non Detect
OEHHA	Office of Environmental Health Hazard Assessment
PAO	Public Affairs Office
PAS	Planning Assistance to States
PHG	Public Health Goals
PVC	polyvinyl chloride
RFQ	Request for Qualifications
RMC	Rivers and Mountains Conservancy
SMCL	Secondary Maximum Contaminant Level
TCE	Trichloroethene
ug/L or µg/L	micrograms per liter
WRD	Water Replenishment District
WRDA	Water Resources Development Act

APPENDICES

APPENDIX A CITY OF MAYWOOD WATER QUALITY ASSESSMENT

APPENDIX B **CAL/EPA DEPARTMENT OF TOXIC SUBSTANCES CONTROL**
COMMUNITY NOTICE

APPENDIX C

OUTREACH MATERIALS

APPENDIX C.1 FLYERS

APPENDIX C.2 AGENDA

APPENDIX C.3 POWER POINTS

APPENDIX C.4 INSTRUCTIONS TO FACILITATORS

APPENDIX C.5 FLIP CHART TRANSCRIPTIONS