

City of Newport Beach

Coastal/Bay Water Quality Citizens Advisory Committee Minutes

Date: January 12, 2012
Time: 3:00 p.m.
Location: Fire Conference Room

1. Welcome/Self Introductions

Committee Members present:

Chairwoman/Mayor Nancy Gardner
Dennis Baker
George Drayton
Tom Houston
Jim Miller

Guests present:

Monica Mazur
Dr. William Cooper, UCI
Anthony Christopher, My Clean Water Act
Dan Purcell
Jim Mosher
Jack and Nancy Skinner, SPON

Staff present:

John Kappeler, Water Quality Manager
Shari Rooks, Public Works Specialist

2. Approval of Previous Meeting's

The minutes from the December 8, 2011, meeting were approved.

3. Old Business

(a) Bay and Ocean Bacteriological Test Results

Monica Mazur reviewed recent water quality test results within Newport Bay and along the ocean shoreline.

4. New Business

(a) Dr. William "Bill" Cooper, from the University of Irvine My Clean Water Act Group gave a presentation in honor of the upcoming 40th Anniversary of the Clean Water Act. (See attached PowerPoint Presentation.)

- Pre-launch celebration on March 22nd at Chapman University – coinciding with International Water Day.
- UCI is launching the celebration on April 5th & 6th because that coincides with National Public Health Week.
- Goal is to reach 34 million people and launch a nationwide awareness and start a conversation about clean water.
- Would like the City to partner with them as a local strategic sponsor by contributing \$5K. Post Meeting Note: Mayor Nancy Gardner and the committee recommended that the City of Newport Beach be a strategic sponsor and contribute \$5K.

- (b) **John Kappeler** presented an update and review of the Executive Summary for the City's Annual (NPDES) Water Quality Report. (See attached PowerPoint presentation).
- John advised if he is provided a photo with a date stamp on it he can issue a Notice of Violation. He cannot issue a citation without personally seeing the violation.
 - Restaurants are doing a good job as the grease trap program is well under way.
 - City has 3 large Vactor trucks and 1 small one as well as MOUs in place with other agencies for use of their trucks in an emergency.
- (c) **John Kappeler** gave a presentation and project update on the Irvine Ranch Water District – Syphon Reservoir Recycled Water Storage Project. (See attached).
- IRWD wants to convert the 60-year old Syphon Reservoir to a recycled water seasonal storage facility, including upgrading the reservoir and augmenting the storage capability from its current 500 acre feet to potentially up to 5,000 acre feet.
 - By providing the additional storage the project would allow IRWD to recycle 100% of the District's wastewater and reduce the District's dependence on imported water.

ACTION: Draft letter of support to Senators Feinstein and Boxer from the City of Newport Beach for the Irvine Ranch Water District's Water Resources Development Act authorization request for the Syphon Reservoir Recycled Storage.

5. Public Comments on Non-Agenda Items

- Chair, Nancy Gardner announced that Randy Seton ordered the "tool kit" from the Dana Point Harbor and he'll be coordinating with the Harbor Commission.
- George Drayton announced he will be retiring from the CBWQ Committee and will submit his letter to Chair Nancy Gardner with the official date so that the application process to fill the vacancy can be initiated.
- Dan Purcell showed a historic photo of the oil fields and reminded the committee of the upcoming consultant selection for the oil field installations.

6. Topics for Future Agendas

- (a) Bacteriological Dry-Weather Runoff Gutter Study (Phase III)
- (b) Prop 84 ASBS Grant Program
- (c) Green Streets Program
- (d) Big Canyon Project
- (e) Coastal Dolphin Research Program
- (f) Rhine Channel Project Wrap Up
- (g) G3 – The Green Gardens Group
- (h) Report on current pump out stations and boat waste discharge (Chris Miller)
- (i) Coastal Flooding and Beach Erosion (Brett Sanders – UCI)

Set Next Meeting Date

The next meeting date was set for February 9, 2012, at 3 PM in the Fire Conference Room.

7. Adjournment

The meeting was adjourned at 4:16 pm.

2012

- 40th Anniversary of the Clean Water Act
- This was enacted on Oct. 18, 1972! President Nixon vetoed it (after he had passed the Clean Air Act in 1970 and established the US Environmental Protection Agency) what was he thinking or maybe if you are a cynic who was paying him (in the broadest sense) to veto this Act?

UCI – My Clean Water Act

- We are launching a National Celebration of the Clean Water Act here at UCI – April 5 and 6th (first week of the spring semester) for the 40th Anniversary of the first “modern” water laws passed in the US.
- The national bus tour will hit as many campuses as possible and end up in DC Oct 18 – the anniversary of the enactment – for a day-long celebration and conversation at the Capital Visitor Center

Why was this act passed? #!

- 1962 Rachel Carson's book "Silent Spring" thought by many to have been one of the most important catalysts for the modern environmental movement – or better yet, the start of people thinking about sustainability!
- Cuyahoga River, Cleveland, Ohio – BURNED

Cuyahoga River #2

- Discharges to Lake Erie
- Around Cleveland a fish survey resulted in 9 fish being caught!
- Industrial point sources and 'storm water' and other non-point sources were being dumped into the river

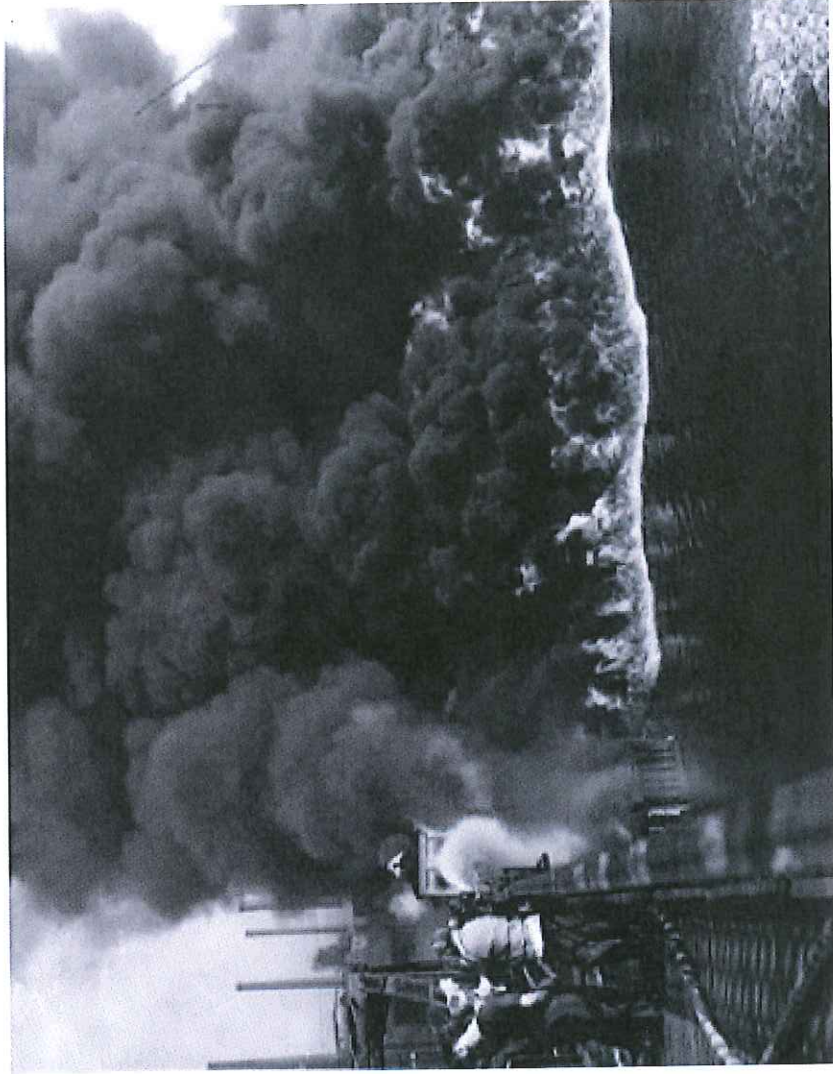
Cuyahoga River, Cleveland, Ohio



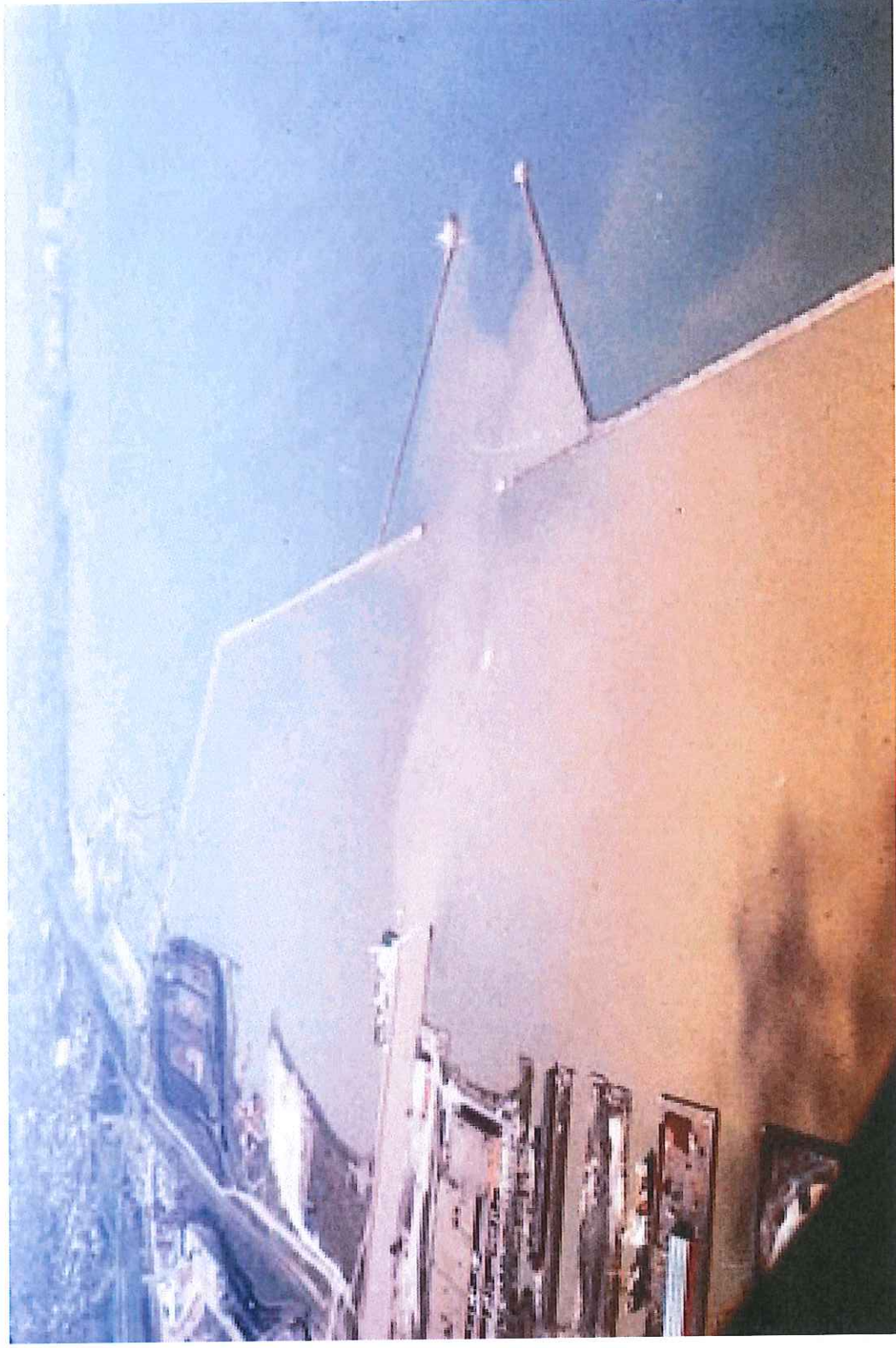
Cleveland - Plain Dealer file

Former reporter Richard Ellers says he didn't appreciate the thickness of the pollution on Cuyahoga River until he dipped his hand into it. The photo was taken in the 1960s.

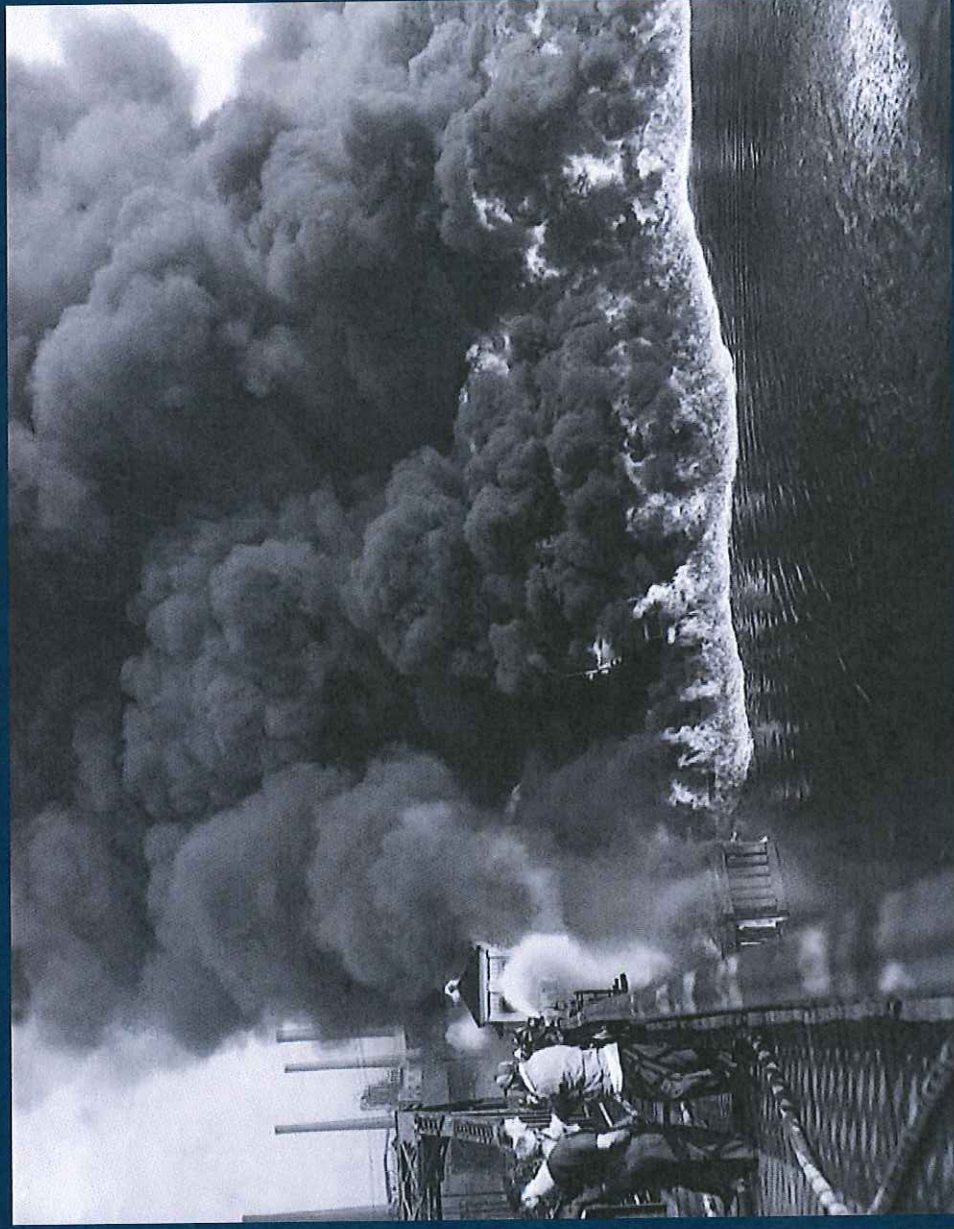
Cuyahoga River



Orange-brown water from the Cuyahoga River spills out of Cleveland harbor and into Lake Erie, a regular occurrence during the late 1960s when this photo was taken by members of the city's Bureau of Industrial Wastes.



Cleveland Ohio



Cuyahoga River Fires of 1868, 1912, 1936, 1952, 1969. Cleveland, Ohio

Water Pollution Peaked in the 1960s

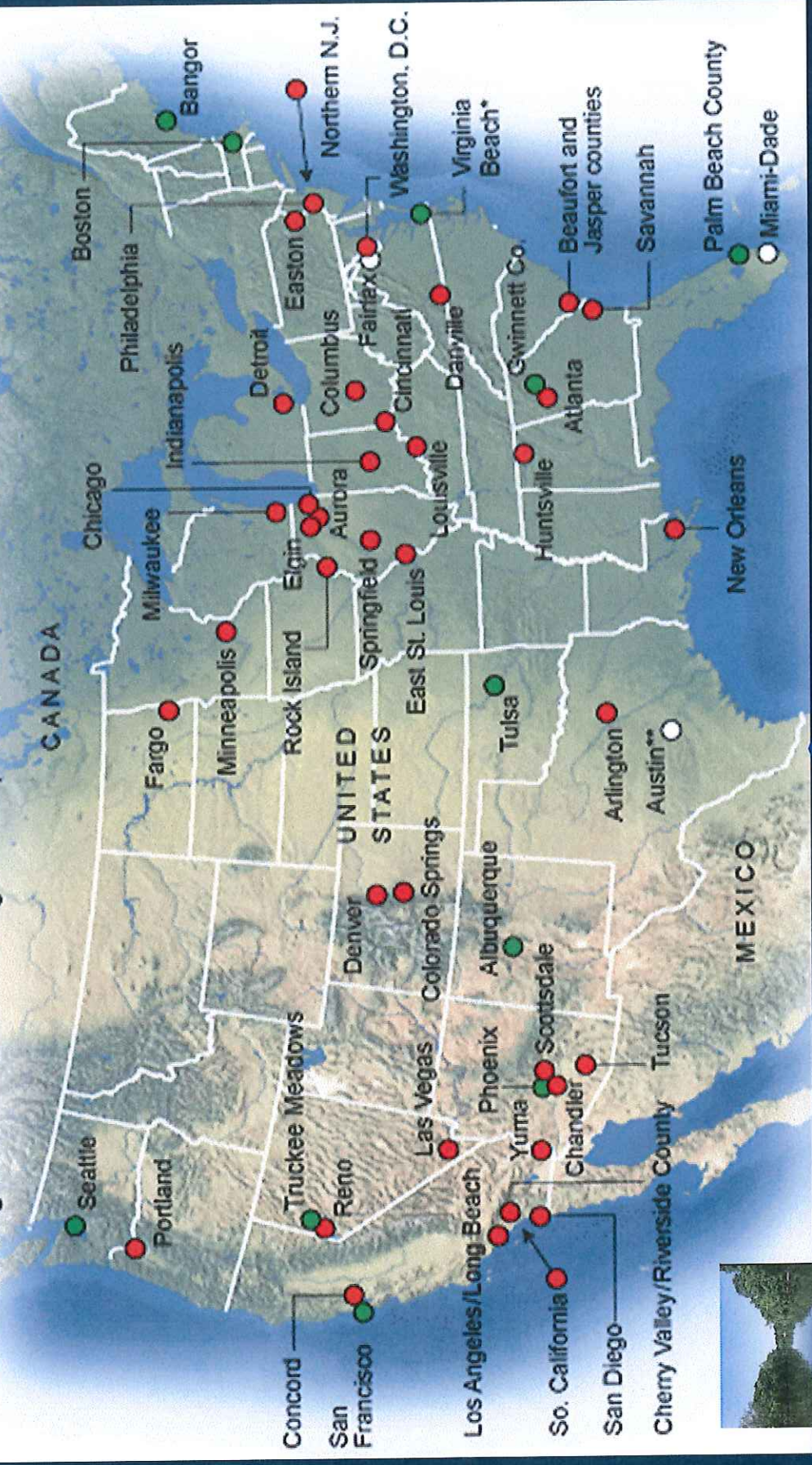


Then and Now

- Tremendous benefit has come from water regulation in the U.S..
- We have come a long way, we have the traditional pollutants under control.
- There is a new generation of pollutants.
 - ❖ Pharmaceuticals - New chemical compounds and molecules that didn't exist a decade ago.
 - ❖ Carcinogens and Endocrine Disruptors.
 - ❖ Nanoparticles and nanomaterials

Pharmaceuticals in Drinking Water

● Tested positive for pharmaceuticals in drinking water
 ● Tested negative for pharmaceuticals
 ○ Test results pending



Water Milestones by U.S. Congress

| Regulation Milestone | What it Did |
|--|--|
| 1882: Congress passed <u>Rivers and Harbors Act</u> vetoed by Pres. Chester Arthur (#21) | No U.S. Environmental Laws or restrictions |
| 1899: <u>Rivers and Harbors Act</u> passed under Pres. McKinley (#25) | First Fed Env. Law. Misdemeanor to discharge refuse into navigable waters |
| 1948: Name changed to <u>Federal Water Pollution Control Act</u> | Minor Revisions |
| 1971: <u>U.S. EPA</u> created under President Nixon due to public concerns of environmental/ water pollution. | Federal government begins to regulate environmental pollutants. |
| 1972: <u>Clean Water Act (CWA)</u> – Passed by Congress in 1977, vetoed by Nixon, veto over-ruled by Congress | This is the primary Federal law governing water pollution . The goal was to make all waters of the U.S. “fishable and swimmable” |
| 1974: <u>Safe Drinking Water Act</u> - Addresses drinking water only. | Established maximum allowable level of pollutants in drinking water. |

Executive Summary

The City of Newport Beach has submitted the 2010 – 2011 Program Effectiveness Assessment (PEA) to provide a written account of the activities the City has undertaken to meet the requirements of the Fourth Term Permit, 2003 DAMP and make meaningful improvements in water quality.

Program Highlights:

NPDES Compliance

- Enforcement Efforts: Conducted **824** “Knock & Talks”, issued **138** Notices of Violation and **137** Administrative Citations (monetary penalties for water quality prohibited discharges)
- Completed all required Food Facility Inspections (**390** restaurant FOG inspections)
- Completed all required Industrial Inspections
- Completed all required Commercial Inspections
- Completed all required Municipal Inspections
- Completed all required Construction Site Inspections (private and public – **an estimated 1,020 inspections**)
- For the 10th consecutive year inspected and cleaned 100% of the City’s catch basins and v-ditches (**3225 catch basins**)
- Continued to expand our catch basin screening program (currently **435** catch basins screened)
- For the 10th consecutive year continued our alley sweeping program (not mandated)
- Continued support of a staff of two Inspectors within Public Works – Environmental Section and three within our Code and Water Quality Enforcement Division, including a dedicated water conservation coordinator
- Continued enforcement of a high profile special water quality enforcement zone in West Newport
- A strong sanitary system overflow (SSO) prevention plan, which includes good investments in our Wastewater Master Plan, CCTV-ing of our system, and one of the regions most aggressive hot spot and lift station cleaning programs
- Continued work on the NSMP and TMDL Studies

Water Quality Education & Administration

- A City Council appointed 7 member citizens committee on Water Quality that meets monthly to monitor our progress. Council Member Nancy Gardner, former president of the Newport Beach Surfrider Chapter, chairs the Committee
- Produced a Water Conservation PSA with 12 time World Champion surfer Rob Machado, currently playing on all Newport Beach Regal Cinemas, the Newport Beach Film Festival and on www.watersmartnewport.org
- 3rd Annual “Water Miser” Workshop educating the public on water conservation and water quality issues (180 attendees)
- Annual funding and sponsorship of an existing 5th grade education program on water quality
- A resident survey was sent and results were received. Presentation was delivered to Coastal Bay Water Quality committee.
- “Zero Trash Newport” program for trash and debris removal on many of our ocean and bay beaches
- Residential Water Quality letter and fact sheets were sent to residents in the designated environmentally sensitive locations.
- Promoting Smart Irrigation Month – public outreach reminders to repair faulty irrigation systems, install ET controllers and other water quality and water conservation issues
- Participation in the Annual Children’s Water Festival
- MiOcean Beach Monitors – water quality and educational monitors installed at Corona del Mar State Beach and Newport Pier
- Leadership in Environmental Action Films (LEAF) – continued sponsorship for this statewide water quality and water conservation program
- OC “Be a Water Hero” Program – continued support of this program designed to help students and teachers learn about water conservation issues
- Continued support of www.watersmartnewport.org and www.cleanwaternewport.com

Water Quality and Water Conservation Projects

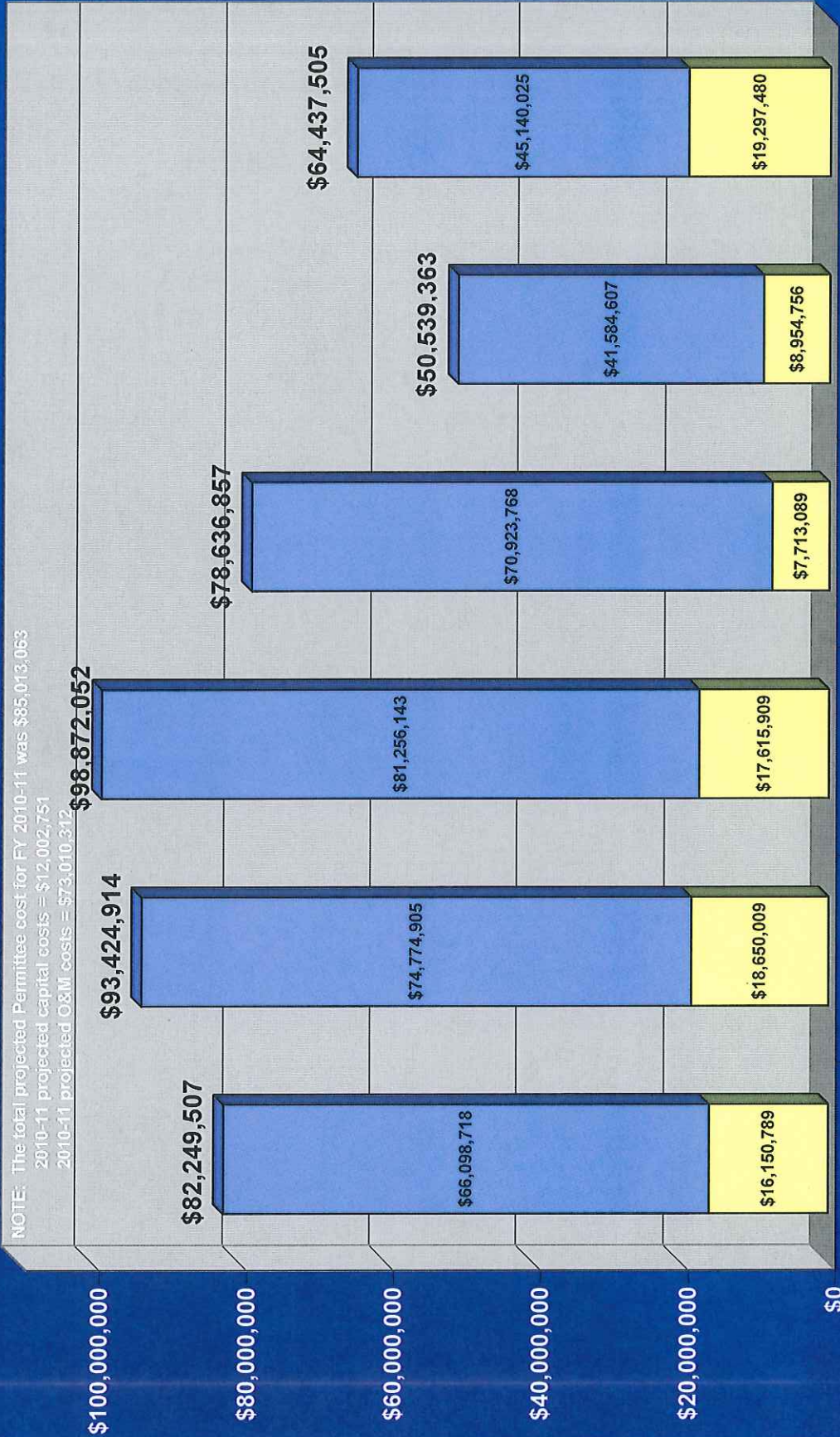
Water Quality

- Areas of Special Biological Significance (ASBS) – Received a \$2.5 million Proposition 84 Grant for projects designed to decrease adverse impacts to the sensitive marine life areas adjacent to Newport Coast
- Big Canyon Creek Restoration – Continued planning to restore a 60 acre nature park
- Buck Gully Resource Management Plan – Completed preparation of the Resource and Recreation Management Plan for Buck Gully detailing a 20 year work plan and defining a series of capital improvement projects to address public access, fire safety, water quality and native restoration
- Upper Newport Bay Ecosystem Restoration Project – Completed a multi-year, \$47 million dredging project to restore the Upper Newport Bay
- Buck Gully Erosion Control Project - Streambed restoration project began construction in the Fall of 2011.
- Harbor Area Management Plan (HAMP) – Identifying challenges and goals for Upper Newport Bay and the Harbor areas
- Rhine Channel Remediation Project – removed approximately 80,000 cubic yards of material from the Rhine Channel and other areas
- Upper Bay Comprehensive Resource Management Plan - This project has created a database of all documents pertaining to Upper Newport Bay
- The Central Orange County Integrated Regional and Coastal Watershed Management Plan (IRCWMP) – This watershed master plan was completed in August 2009 and includes a list of 130 water resource projects broken down into six planning areas within the watershed
- Semeniuk and Newport Slough Restoration Projects – This project is in the pre-engineering phase and will restore the waterway depths of these sloughs

Water Conservation

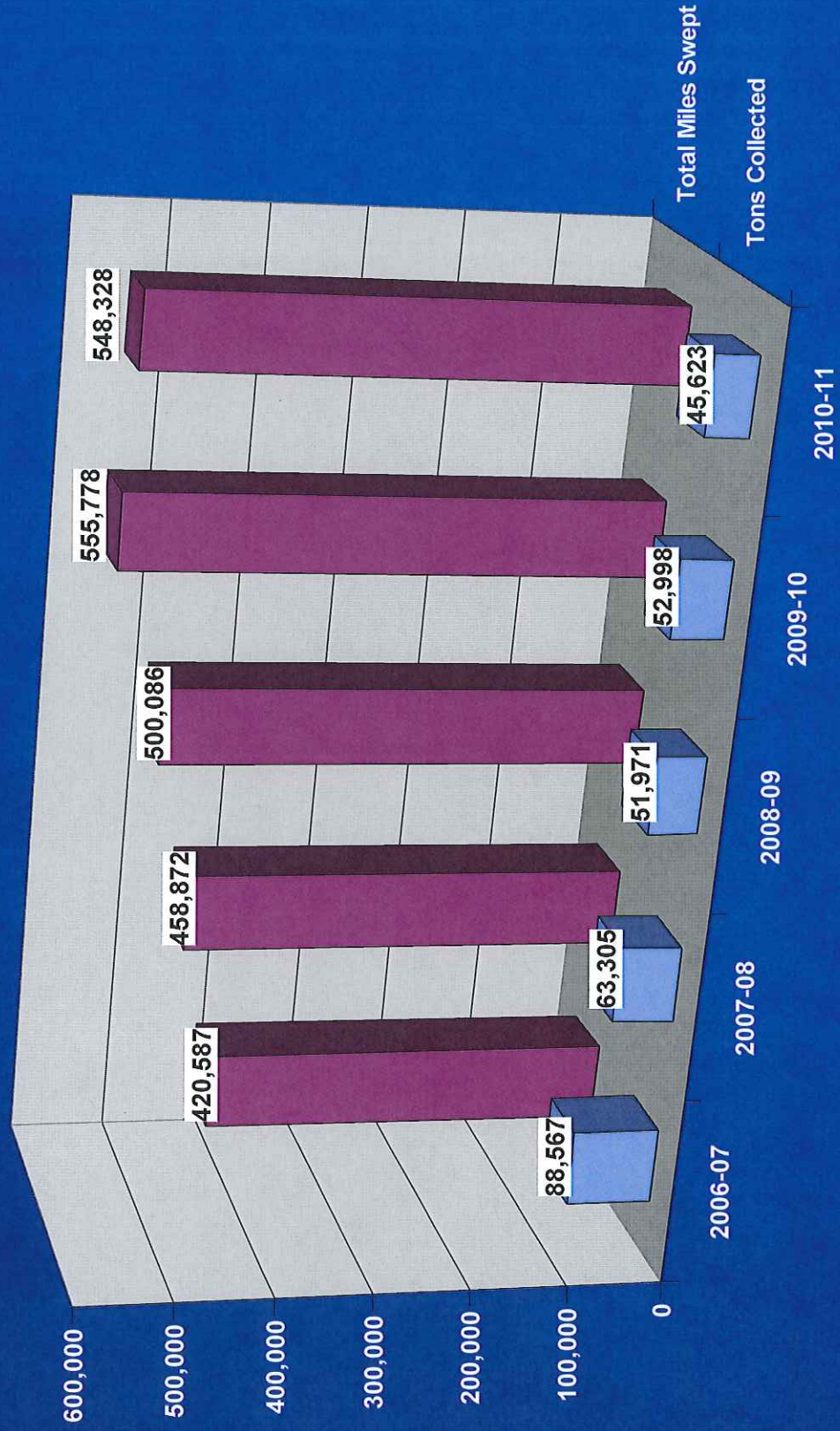
- Irrigation - Citywide Central Computer System – This project provides for the installation of an irrigation computer system and necessary equipment at various City park satellite locations. The Castaways Park was recently added to the central system for monitoring water application.
- Landscape Certification Program – Water budget audits are currently underway on all parks and city medians. Water budget reports based on plant type, soil, slope and ET factors. Reports will assist city staff in applying water efficiently. (water saved in 2011 value \$410,000)
- A Water Supply Task Force group has been formed to discuss water supply and internal programs and processes.
- Tiered rate software and customer service analysis was performed by Red Oak Consulting this effort is anticipated to receive a \$34,000.00 reimbursement from a grant administered by MWDOC.
- For a detailed look at activities please see the Water Conservation and Water Quality Marketing and Project Report.

Headline Measure: Program Management (Permittee Costs)

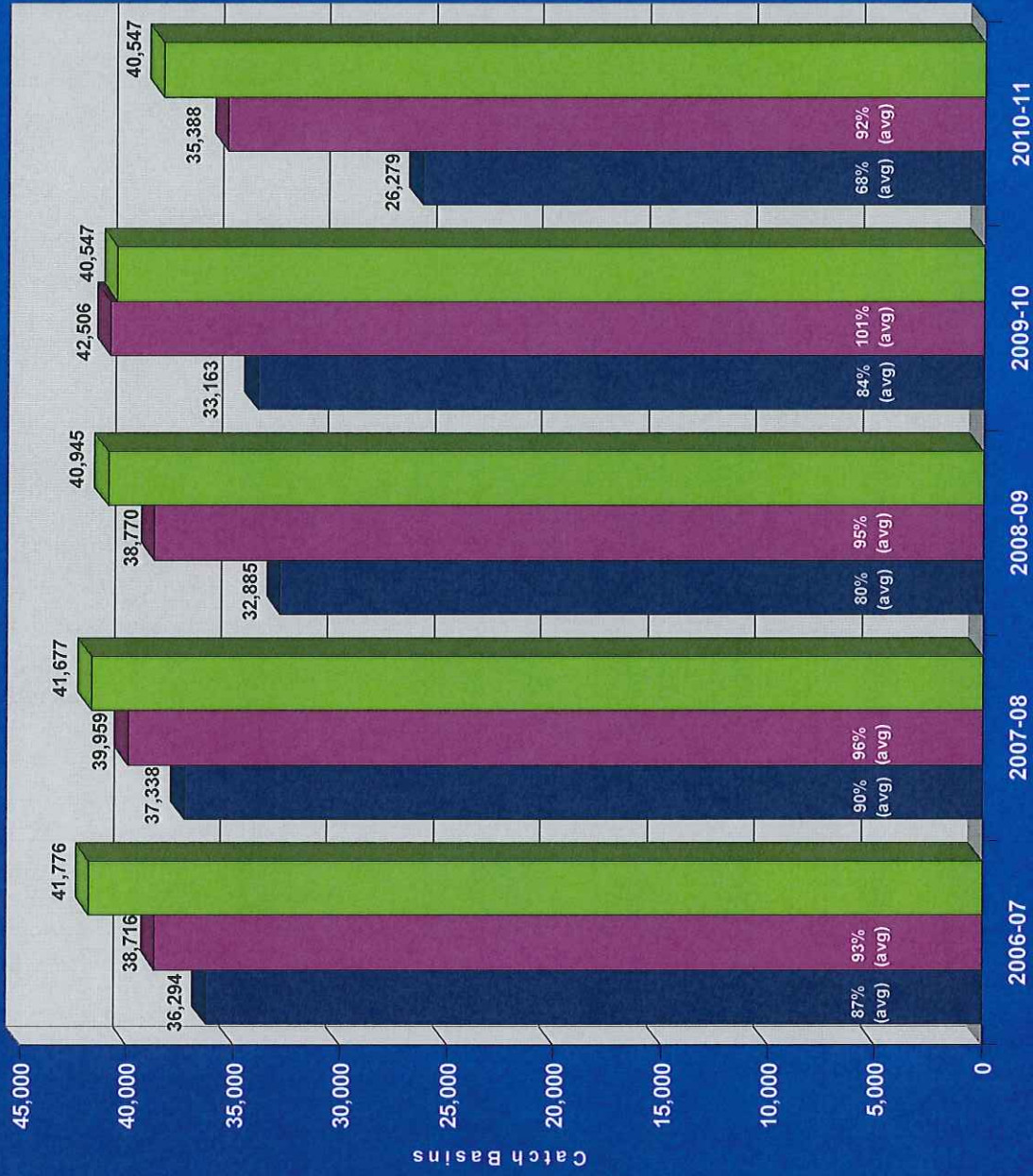


NOTE: The total projected Permittee cost for FY 2010-11 was \$85,013,063
 2010-11 projected capital costs = \$12,002,751
 2010-11 projected O&M costs = \$73,010,312

Headline Measure: Street Sweeping



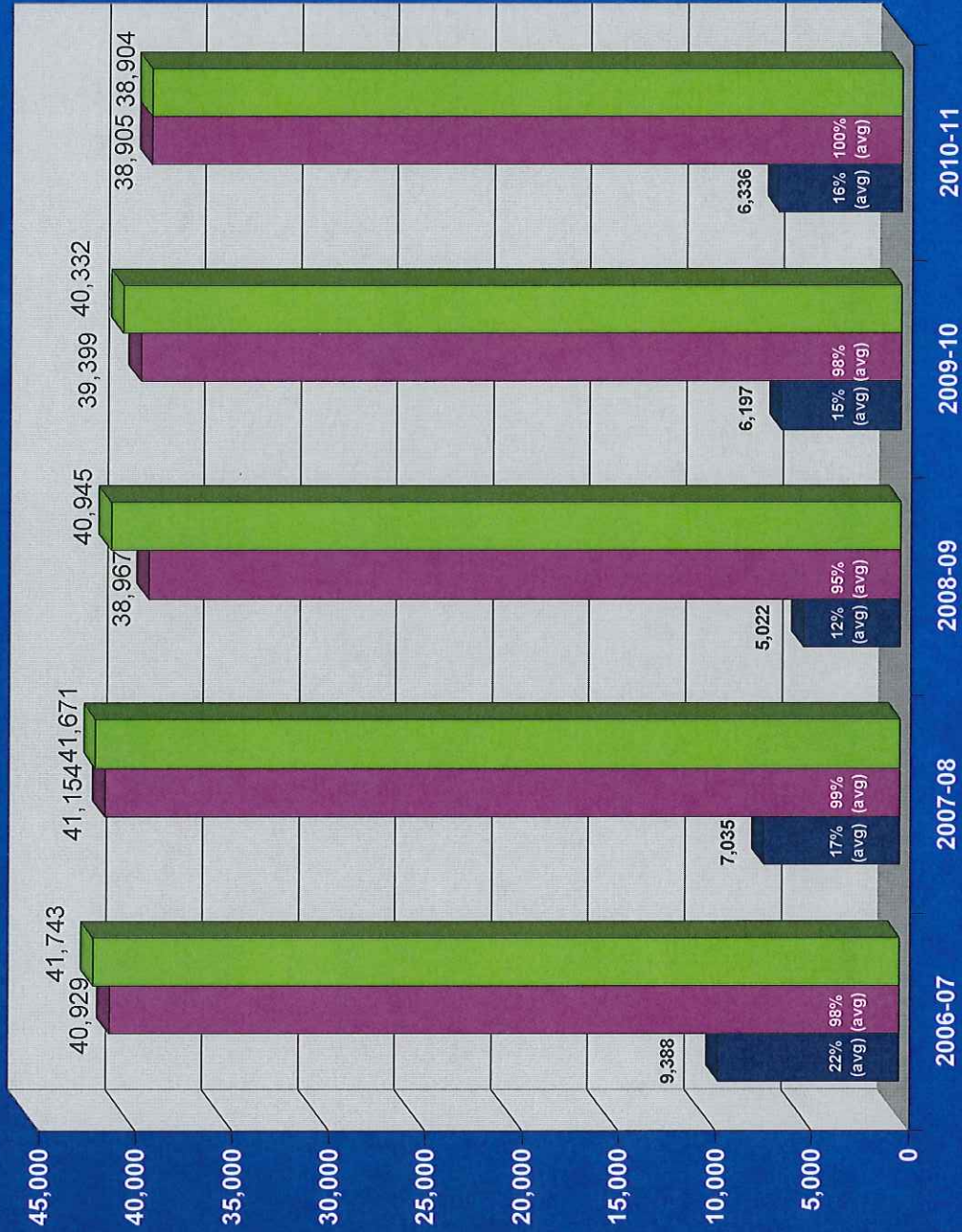
Headline Measure: Catch Basins Inspected & Cleaned



■ Number of Catch Basins Cleaned ■ Number of Catch Basins Inspected ■ Total Number of Catch Basins



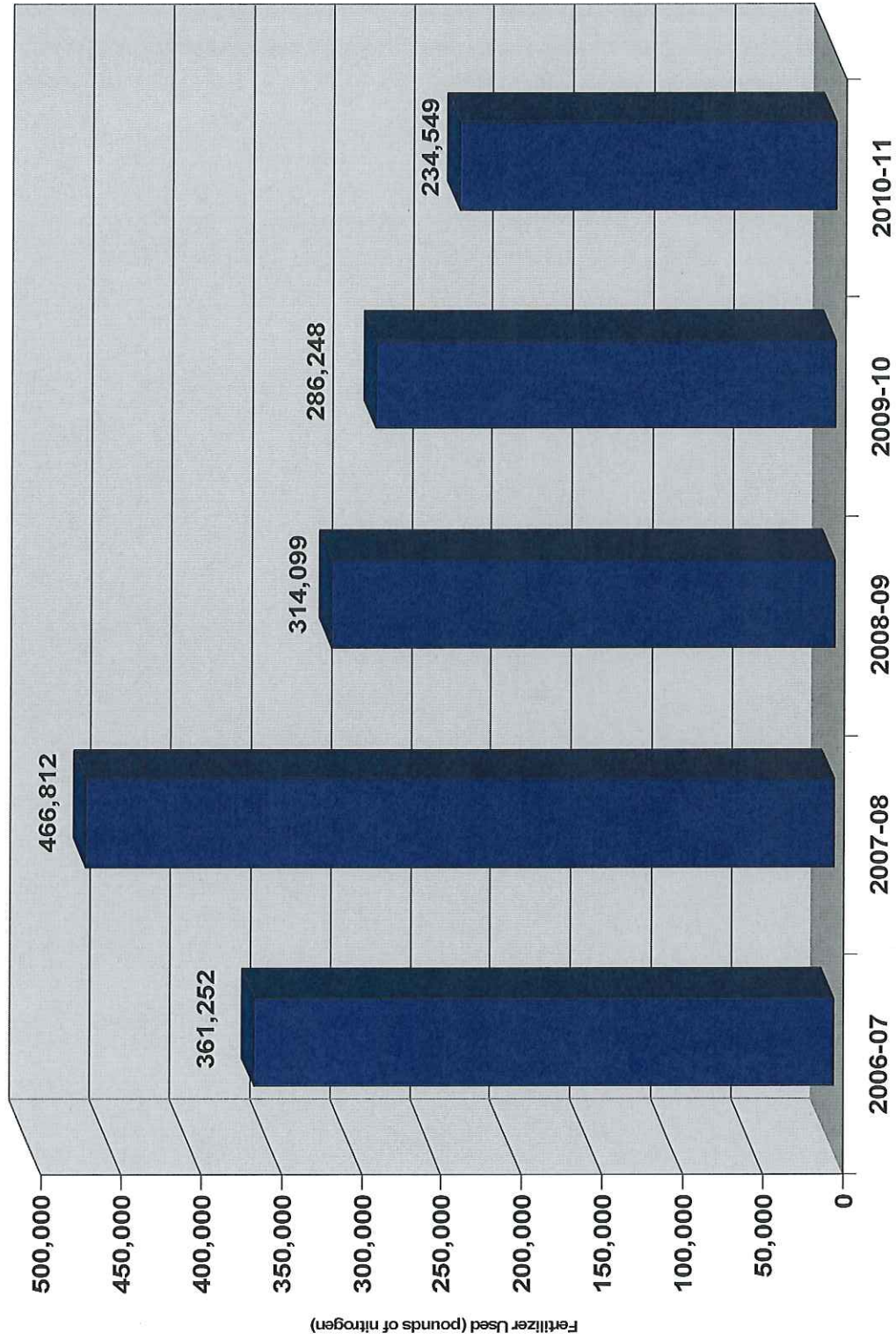
Headline Measure: Catch Basins Stenciled / Restenciled



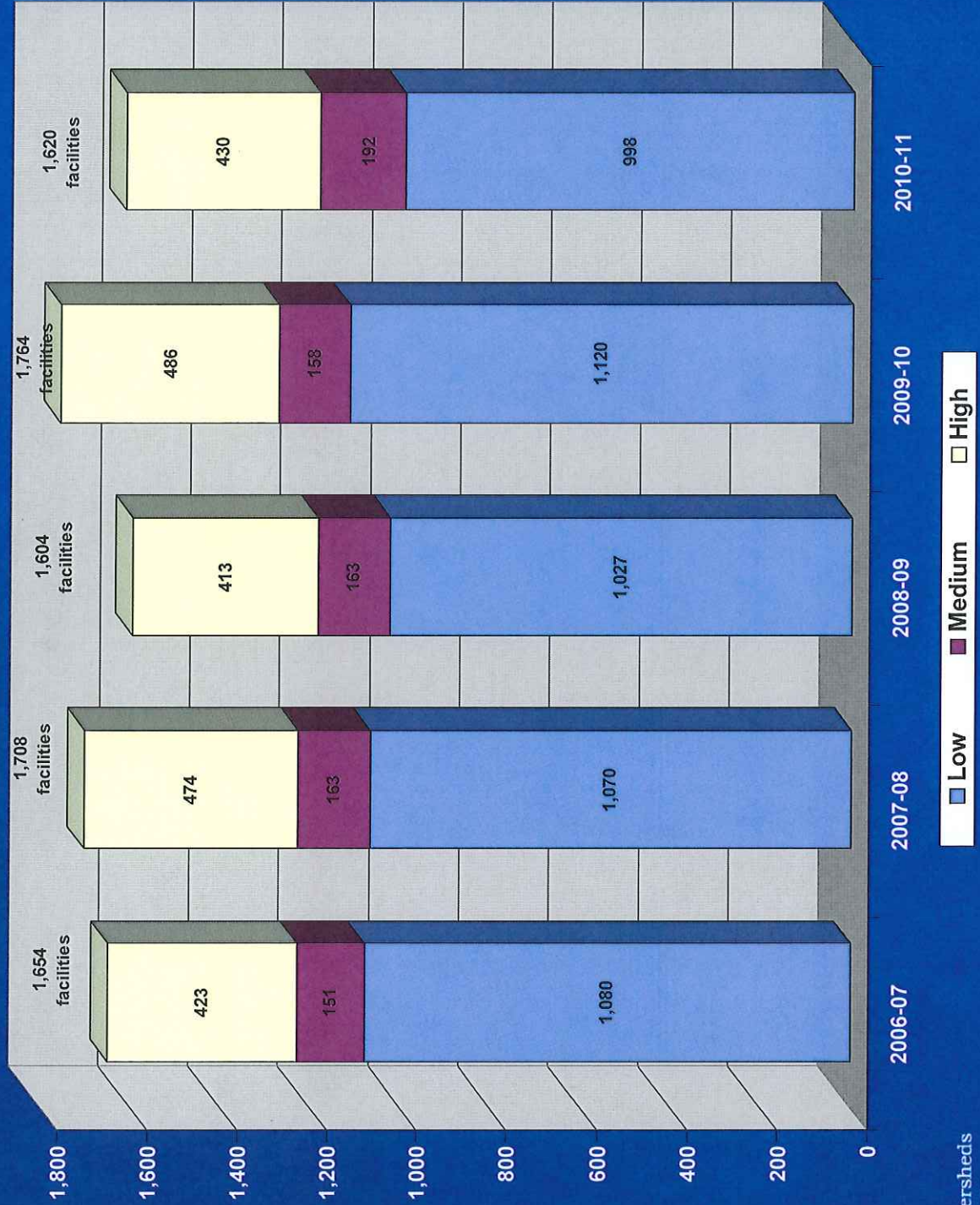
■ Number of Re-stenciled Catch Basins ■ Number of Stenciled Catch Basins ■ Total Number of Catch Basins



Headline Measure: Fertilizer Usage (pounds of nitrogen)



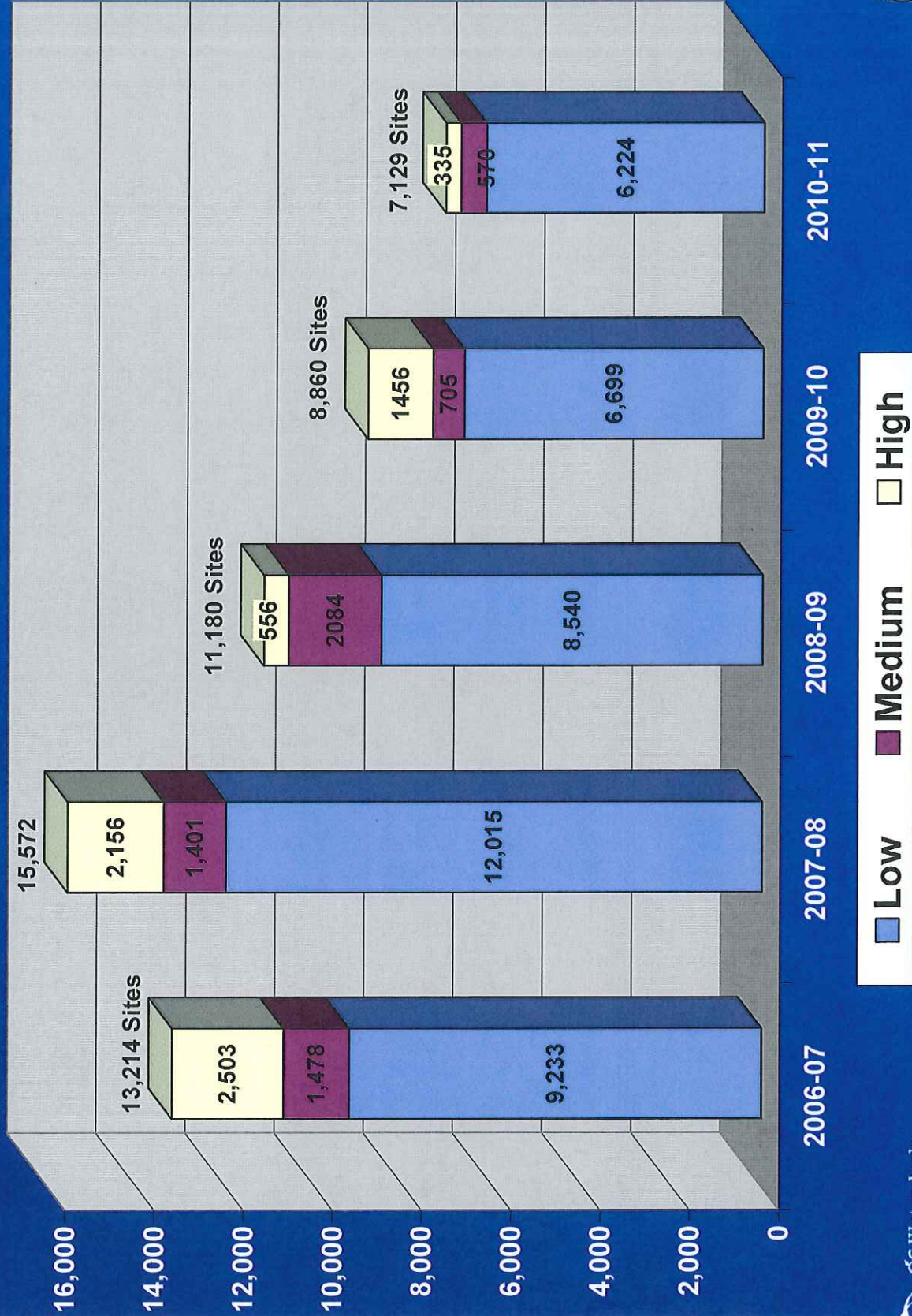
Headline Measure: Municipal Facility Prioritization



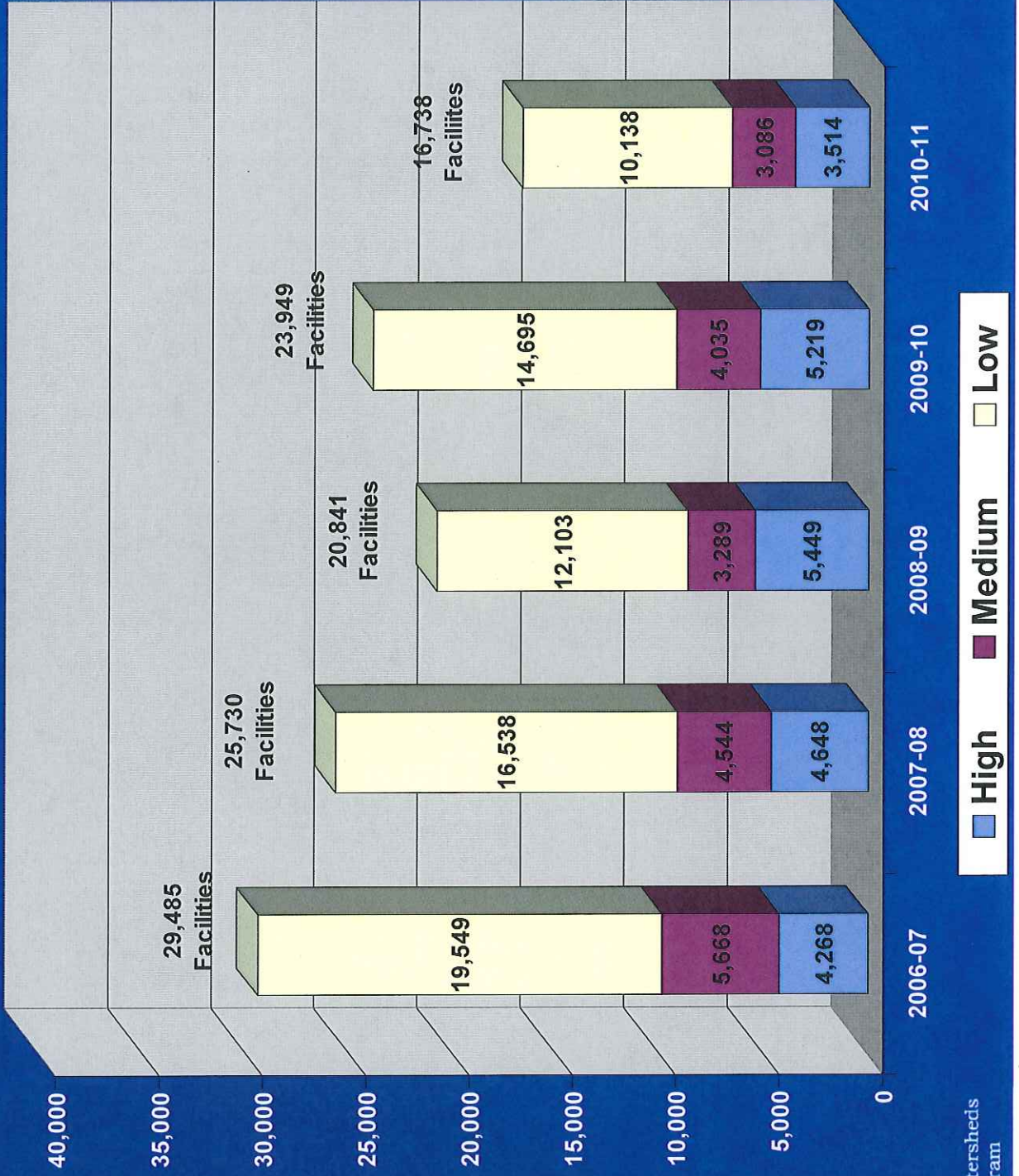
Headline Measure: Total Number of WQMPs and Acres Covered



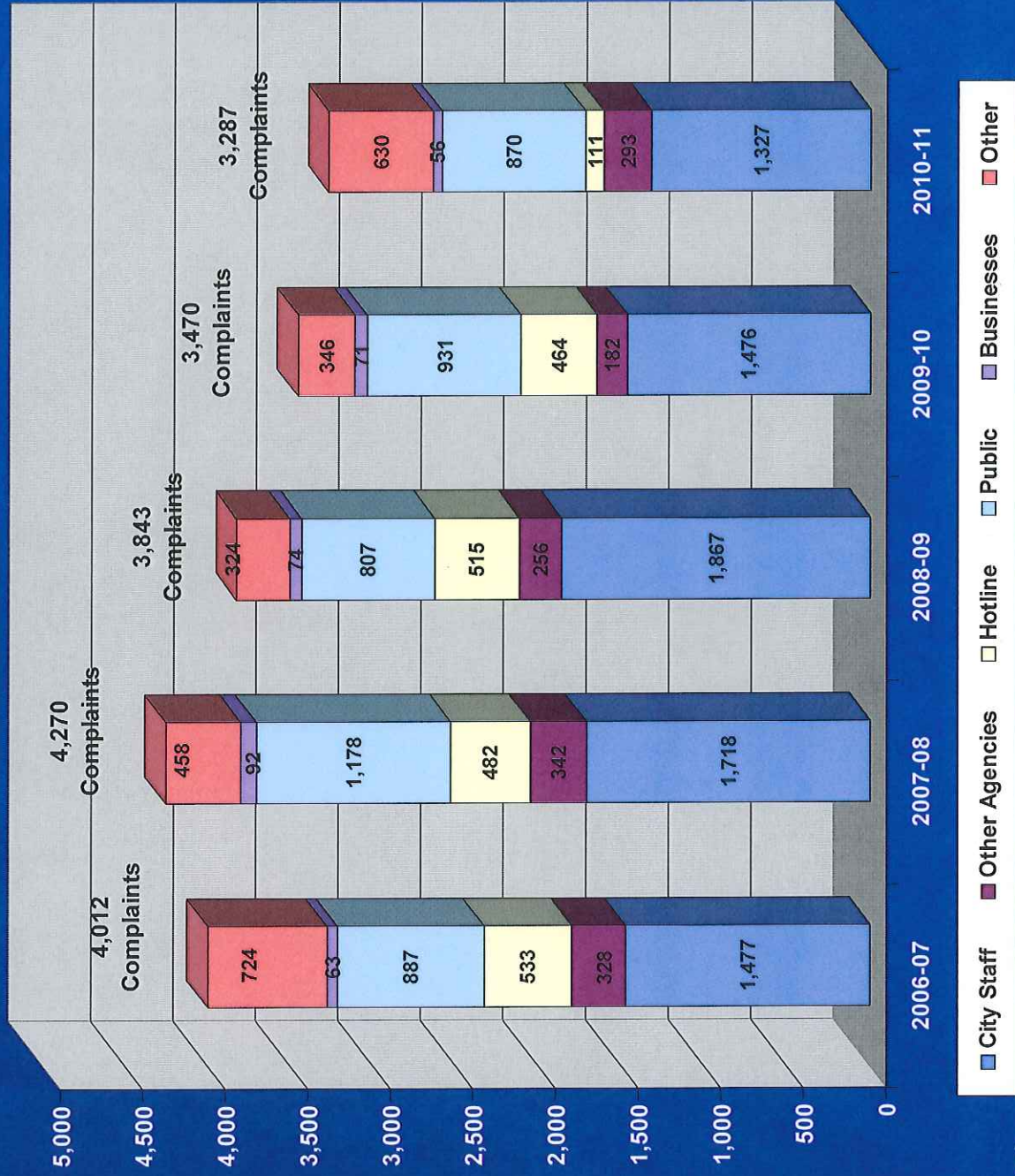
Headline Measure: Construction Site Prioritization



Headline Measure: Industrial & Commercial Facility Prioritization



Headline Measure: ID/IC Source of Complaints







Syphon Reservoir Recycled Water Storage Project

Project Overview

The Irvine Ranch Water District (IRWD) is in the planning stages of the Syphon Reservoir Recycled Water Storage Project. Syphon Reservoir, located in the northern portion of the City of Irvine, is a sixty-year-old facility historically used to store irrigation water supplies. The Syphon Reservoir Recycled Water Storage Project has two components. (1) Conversion of Syphon Reservoir to a recycled water seasonal storage facility including upgrading the reservoir to contemporary design standards. (2) Capacity augmentation to increase storage capability from its current 500 acre feet to potentially up to 5,000 acre feet. By providing additional storage, this project will allow IRWD to recycle 100% of the District's wastewater and reduce the District's dependence on imported water supplies.

The cost to integrate Syphon Reservoir into the IRWD recycled water system as a seasonal storage facility is approximately \$7.5 - \$10 million. This includes both on- and off- site improvements such as new outlets and pipes, a pump station and disinfection facility, renovations to the existing spillway and environmental mitigation costs. The cost to upgrade the reservoir to contemporary design standards and increase its current capacity could be up to approximately \$40-50 million. This includes, among other things, potential de-silting, dam construction, upsizing pumps and conveyance systems and environmental mitigation.

As part of the planning stage, the District is developing the necessary feasibility studies and environmental compliance documents and will be working with adjacent property owners to provide for environmental mitigation



Background: IRWD's Recycled Water Program

IRWD boasts one of the most robust recycled water systems in the country. With nearly 400 miles of recycled water pipelines, 12 storage reservoirs, and almost 4,500 metered recycled water connections, the District delivers approximately 24,000 acre-feet of recycled water per year. IRWD promotes the use of recycled water for non-potable purposes by providing a 10% discount for irrigation uses and a 40% discount for industrial uses. Roughly a quarter of the District's total water demand is met through the use of recycled water.

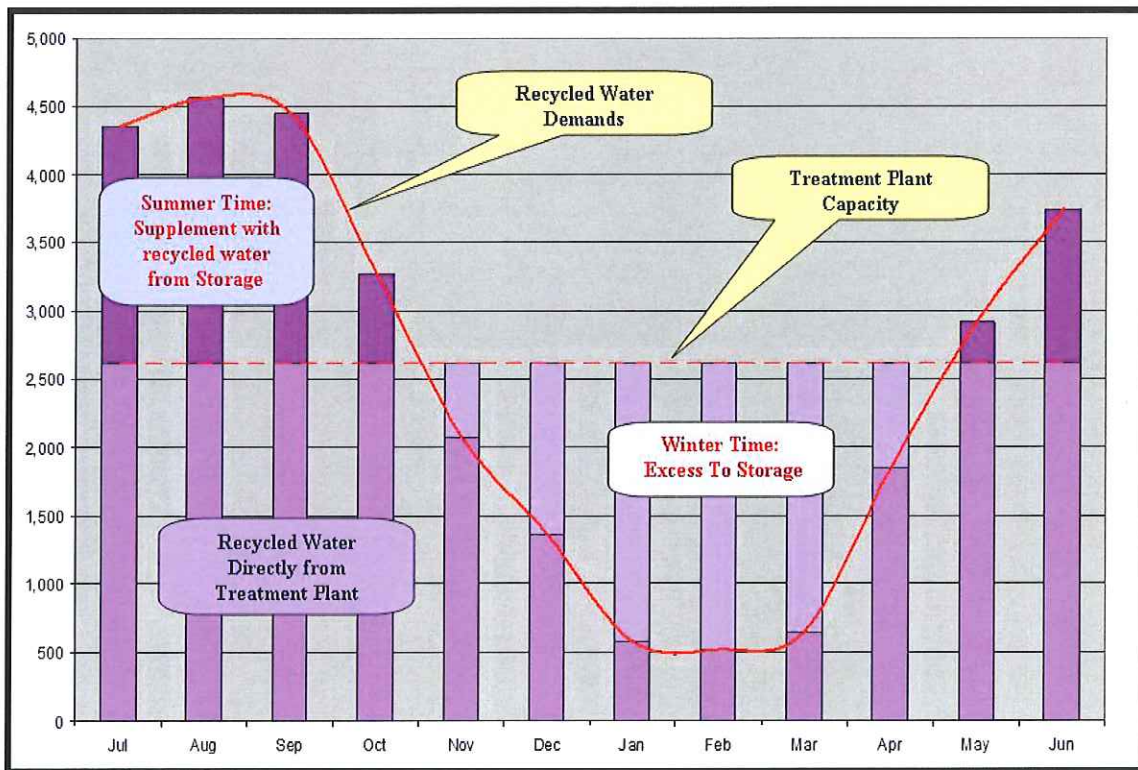
Recycled water is used within the District's service area for:

- Landscape irrigation: 80% of all public, commercial and school landscapes are irrigated with recycled water.
- Agriculture irrigation: including orchards and row crops.
- Commercial uses: 48 commercial buildings use recycled water for toilet/urinal flushing and in cooling towers.
- Industrial uses: including concrete production, and composting.

Seasonal Storage of Recycled Water

While recycled water production remains relatively stable throughout the year, recycled water demands, dominated by irrigation uses, vary considerably due to variations in weather patterns. IRWD's recycled water storage reservoirs allow for excess recycled water produced in the cooler and wetter winter months to be stored for use in the hotter and dryer summer months when irrigation demands are higher. Without adequate seasonal storage, the excess supplies are lost to ocean disposal and operational costs to purchase supplemental imported water to meet summer demands increase.

The addition of Syphon Reservoir to IRWD's existing network of seasonal recycled water storage reservoirs will allow the District to utilize 100% of its recycled water. Every gallon of recycled water used for irrigation, toilet flushing or industrial processes, saves a gallon of drinking water for potable purposes.



IRWD Staff Contacts:

Paul Cook, Interim General Manager: Phone: (949) 453-5310 / E-mail: cook@irwd.com

Hal Furman, Washington, D.C. Representative: Phone: (202) 737-0700 / E-mail: hwfurman@furmangroup.com

(DATE)

The Honorable Dianne Feinstein
United States Senate
331 Hart Senate Office Building
Washington DC 20510

The Honorable Barbara Boxer
United States Senate
112 Hart Senate Office Building
Washington DC 20510

RE: WRDA Request – Syphon Reservoir Recycled Water Storage Project

Dear Senators Feinstein and Boxer:

On behalf of *(your organization)*, I write in strong support of the Irvine Ranch Water District's Water Resources Development Act authorization request for the Syphon Reservoir Recycled Water Storage and I urge you and your colleagues to move forward with a WRDA authorization in 2012. As you are aware, the development of alternative local water supplies is a key component of the State's water supply portfolio. The Syphon Reservoir project will provide additional water supply reliability for the citizens of Orange County by allowing increased recycled water use in the District's service area, helping augment and secure our local supplies, while keeping rates low for our customers.

Syphon Reservoir, located in the northern portion of the City of Irvine, is a sixty-year-old facility currently used to store irrigation water supplies. The Syphon Reservoir Recycled Water Storage Project will have two components. (1) Conversion of Syphon Reservoir to a seasonal storage facility for IRWD's recycled water system and upgrading the facility to contemporary standards. (2) Augmenting the reservoir's capacity to increase storage capability from the current 500 acre feet to potentially up to 5,000 acre feet. By providing additional storage, this project will allow IRWD to recycle approximately 100% of the District's wastewater and reduce the District's dependence on imported water supplies.

IRWD boasts one of the most robust recycled water systems in the country. With nearly 400 miles of recycled water pipelines, 12 storage reservoirs, and almost 4,500 metered recycled water connections, IRWD delivers approximately 24,000 acre feet of recycled water per year, meeting approximately 23% of the District's demand. The rehabilitation and expansion of Syphon Reservoir will allow IRWD to expand the use of reliable recycled water and reduce demand for expensive imported water sources.

The addition of Syphon Reservoir to IRWD's existing network of seasonal recycled water storage reservoirs will allow the District to utilize 100% of its recycled water. Every gallon of recycled water used for irrigation, toilet flushing or industrial processes, saves a gallon of drinking water for potable purposes. *(Your organization)* is very supportive of IRWD's Syphon Reservoir Recycled Water Storage Project as it will provide valuable local water supply stability benefits. We strongly urge you to work with your colleagues to move a WRDA authorization forward in 2012 that includes the IRWD Syphon Reservoir Recycled Water Project. If we can be of additional assistance, please do not hesitate to contact me at *(your number)*. Thank you for your consideration of this important project.

Sincerely,

(Your name)

(Your Organization)

Cc: Irvine Ranch Water District
Colonel R. Mark Toy, U.S. Army Corps of Engineers, Los Angeles District
The Honorable Representative John Campbell
The Honorable Representative Gary Miller
The Honorable Representative Ed Royce, Jr.
The Honorable Representative Loretta Sanchez
The Honorable Representative Dana Rohrabacher
The Honorable Representative Ken Calvert



CITY OF NEWPORT BEACH

OFFICE OF THE MAYOR

Mayor

Keith D. Curry

Mayor Pro Tem

Michael F. Henn

Council Members

Leslie J. Daigle

Nancy Gardner

Steven Rosansky

Edward D. Selich

Don Webb

April 30, 2010

The Honorable Barbara Boxer

United States Senate

112 Hart Senate Office Building

Washington DC 20510

The Honorable Ed Royce

United States House of Representatives

2185 Rayburn House Office Building

Washington DC 20515

RE: WRDA Request – Syphon Reservoir Recycled Water Storage Project

Dear Senator Boxer and Representative Royce:

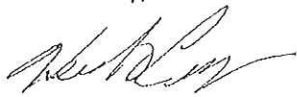
On behalf of the City of Newport Beach, I write in strong support of the Irvine Ranch Water District's Water Resources Development Act (WRDA 2010) authorization request for the Syphon Reservoir Recycled Water Storage. As you are aware, the development of alternative local water supplies for the citizens of Orange County is a key component of the State's water supply portfolio. The Syphon Reservoir project will allow for increased recycled water use in the District's service area, augmenting and securing our local supplies, while keeping rates low for our customers.

Syphon Reservoir, located in the northern portion of the City of Irvine, is a sixty-year-old facility currently used to store irrigation water supplies. The Syphon Reservoir Recycled Water Storage Project will have two components. (1) Conversion of Syphon Reservoir to a seasonal storage facility for IRWD's recycled water system. This component would include upgrading the facility to current standards to create a contemporary recycled water facility. (2) Capacity augmentation to increase storage capability from 500 acre feet, currently, to potentially up to 5,000 acre feet. By providing additional storage, this project will allow IRWD to recycle 100% of the District's wastewater.

IRWD boasts one of the most robust recycled water systems in the country. With nearly 400 miles of recycled water pipelines, 12 storage reservoirs, and almost 4,500 metered recycled water connections, the District delivered more than 24,000 acre-feet of recycled water in fiscal year 2008-2009 meeting approximately 25% of the District's demand. The rehabilitation and expansion of Syphon Reservoir will allow IRWD to expand the use of reliable recycled water, and reduce demand for expensive and unreliable imported water sources.

The addition of Syphon Reservoir to IRWD's existing network of seasonal recycled water storage reservoirs will allow the District to utilize 100% of its recycled water. Every gallon of recycled water used for irrigation, toilet flushing or industrial processes, saves a gallon of drinking water for potable purposes. (Your organization) is very supportive of IRWD's Syphon Reservoir Recycled Water Storage Project. We strongly urge you to support the District's WRDA request as this project will provide valuable local water supply stability benefits. If we can be of additional assistance, please do not hesitate to contact me at (your number). Thank you for your consideration of this important project.

Sincerely,



KEITH CURRY

Mayor of Newport Beach

cc: Members of the Newport Beach City Council
Beth Beeman, Irvine Ranch Water District