



**City of Newport Beach**  
**2011-2012**  
Water Conservation & Water Quality  
Marketing & Project Report



**W**ater is the essence that intertwines the environment, economy and quality of life in Newport Beach.

Just as abundant water gives vitality to our city, a lack of water strains natural resources stifles economic growth and can periodically disrupt our daily routines.

Water conservation, also known as demand management, promotes permanent water use efficiencies and is a prudent component of water resource management. Demand reduction increases the available supply of water from existing sources to support new economic growth. It is also more immediate, significantly less costly and more energy efficient than developing new sources of water. Over the years we've developed an understanding and appreciation that when water is used efficiently it results in a direct

benefit to recreational waters. Outdoor water use often turns into urban runoff, thereby compromising the quality of the water in our ocean and bay.

The comprehensive programs embodied in this report aim to change the reactionary approach of focusing on the benefits of water conservation primarily in response to emergencies. The goal is to replace today's "as needed" thinking with a more beneficial, year-round water conservation and water quality frame of mind.



## Advertising and Direct Mail:

### Completed Components and Ongoing Outreach

**Objective:** Support outreach messaging and public awareness through advertising in multiple media and direct mail.

*Example of (front and back) municipal bill inserts*



# WaterSmartNewport.org

## Tactics:

- Developed a direct link to the Newport Beach water conservation website to encourage use and easy access through marketing and advertising campaigns. The web site contains information on water-saving tips, rebates and incentives for both business and residential customers.
- Developed and produced water bill inserts with monthly seasonal messages, (electronic bill pay customers receive a copy of the inserts with their E-billing statement). Water bill insert messages will continue to be developed and implemented throughout FY2012.
- Promote water saving rebates for Industrial and Commercial locations; HOA's, & business parks.

## Education and Partnerships

### Interest Group and Public Events

**Objective:** Promote public awareness and utilize relationships with nonprofits and interest groups through events and support.

## Tactics:

- Continue partnerships with Newport Beach Conservation and Water Quality interest groups.
- Work with stakeholders and interest groups to help promote conservation and water quality efforts.

- Participate in environmental related events alongside interest groups and nonprofits.

- Staff called upon to present at clubs and HOA e.g., Kiwanis, Rotary, Resident and Restaurant Associations and other interest groups.



Corona Del Mar Resident's Association

- Water quality web-based conservation quiz.
- Staff training of all field personnel on water quality and conservation related issues
- Non-profit partnerships help to promote water conservation and water quality awareness



- Action Sports industry support and partnerships fostering community involvement and sponsorship e.g., Volcom and Hurley



Water quality and conservation messages can be accessed via monitors installed at CDM Main Beach and the Newport Pier.

The beach information monitors are weatherproof, vandal resistant, and wirelessly connected. The monitors provide customized real-time beach information data including:

- Educational Messages;
- Current surf conditions;
- Air and water temperatures;
- Tidal conditions and
- Current water quality information



This new informational kiosk will be helpful to the beachgoer as it increases knowledge of current beach conditions and shows ways to help improve water quality. This information will be beneficial when they return home.

### **Media Outreach**

*Public Service Announcements, NBTv and Magazine Print Articles*

**Objective:** Reach a broad age demographic with Water Quality and conservation messages.

- 2011: Water quality and conservation PSAs for pre-movie display in all Newport Beach movie theatres. PSA messages will also be displayed on the large plasma screens in the movie lobbies.
- 2011: PSAs are featured on NBTv, City website, messaging and “looped” television or computer displays at events, libraries, presentations, etc.



Top Left: **Ed Begley Jr. Actor/ Environmentalist**

Top Right: **Wyland Marine Life Artist**

Bottom Left: **Ray Hiemstra/ Coast Keepers**

Bottom Right: **Rob Machado Professional Surfer/ Environmentalist**



### **Public Relations, Promotions and Events:**

*Completed Components and Ongoing Outreach*

**Objective:** Provide an avenue for more detailed information and education through print, television and multi-media channels about water conservation issues, how Newport Beach is involved and how residents can contribute.

### **Tactics:**

- Articles featured in **Newport Beach Independent**
- **City Manager's Newsletter** to residents.
- **The Rundown (Video)**

- **Daily Pilot and Orange County Register**, periodic conservation and water quality articles, including **weekly "The Coastal Gardener"**. - Ron Vanderhoff
- Staff presents at least once a month at various events and Community Outreach programs, including: **Earth Day, Coastal Clean Up Day, Children's Water Festival, Dana Point Ocean Institute** (school outreach). displays include banners with water conservation and water quality messages distribution of water-saving tips, special water-conserving promotional items, irrigation sprinkler key's, shower timers and miscellaneous water quality information.



- HOA, and community group outreach presentations, including: **Restaurant Association, Kiwanis Club, Big Canyon Community Association and Corona del Mar Resident Association.** Web site ([www.watersmartnewport.org](http://www.watersmartnewport.org)) includes a "Speakers Bureau" section.
- Twitter channel

follow us on  
**twitter.com/h2oconserve**

- **Dana Point Ocean Institute:** Presentations to K-8<sup>th</sup> grade school children on watershed and water conservation issues.

- **April 14<sup>th</sup> 2011 Leadership in Environmental Action Films (L.E.A.F)** Honoring top 5 finalists



Council Member Daigle second from left

from the over 150 entries from high schools including Newport Beach. Students are challenged to create an original 30 or 60-second "e-commercial" focused on raising awareness of key

environmental issues. The City was a lead sponsor gaining statewide acknowledgement from National Environmental Education Foundation (NEEF) Highlighting Newport Beach as an active participant in water quality and conservation.

- **OC "Be a Water Hero" Pledge Cards**—A water conservation pledge program created by MWDOC to coordinate conservation messaging for Orange County, targets every elementary school within Orange County. Students may sign up to pledge to save water and receive a free gift for being a "Water Hero".



- Each year, Newport Beach Elementary School students and teachers learn about water from Newport Beach and MWDOC's school program.

Staff has seen an increase in student interest in pursuing careers in water-related fields.

**715** Newport Beach elementary school students participated in FY 10-11.

School	Students
Anderson Roy Elementary	201
Newport Heights Elementary	514
<b>Total</b>	<b>715</b>

- **March 2011: WaterMiser Workshop**—The annual event was held on March 10, 2011. This event was met with great enthusiasm. Residents enjoyed learning how to create a water thrifty yard and garden from turf replacement to irrigation design and plant selection. Vendors displayed irrigation controllers, nozzles and a host of drought tolerant plants. Guests participated in a free raffle of gifts donated by the vendors. Participants included City of Newport Beach (host), Rogers Gardens, Hunter Industries and a long list of eco-vendors.
- **Sierra Club water Conservation Scorecard**—This study revealed in its July 2011 report that Newport Beach scored as one of the top cities in Orange County. The study ranked cities for measures in water conservation, ordinances that address appropriate water use, avoid water waste, improve building standards, and prescribe water-efficient business practices.
- **Heal the Bay's 2011 Annual Beach Report Card Honor Roll**—California's year-round monitored beaches with zero bacterial standards exceedances during dry weather.

Location	AB411 (April- Oct)	Dry Year- Round	Wet Year- Round	Winter Dry (Nov-Mar)
Orange Street	A	A	C	A
52nd/53rd Street	A+	A	A	A
38th Street	A	A	A	A
projection of 15th/16th Street	A	A	A	A
Balboa Beach Pier	A	A	A	A
The Wedge	A+	A+	A	A+
Newport Dunes, North	B	A	F	A+
Newport Dunes, East	A	A	F	B
Newport Dunes, Middle	A	A	D	A
Newport Dunes, West	A	A	F	A+
Bayshore Beach	A	A	B	A+
Via Genoa Beach	A	A	B	A+
Lido Yacht Club Beach	A	A	C	A
Garnet Avenue Beach	B	B	A	A+
Sapphire Avenue Beach	A	A	B	A
Abalone Avenue Beach	A+	A	A	A
Park Avenue Beach	A	A	A	A+
Onyx Avenue Beach	A	A	A	A+
Ruby Avenue Beach	A+	A+	A	A+
Grand Canal	A	A	A	A
43rd Street Beach	A	A	B	A
38th Street Beach	B	A	A	A+
19th Street Beach	A+	A+	B	A+
15th Street Beach	A	A	B	A+
10th Street Beach	A+	A+	B	A+
Alvarado/ Bay Isle Beach	A	A	A	A+
N Street Beach	A+	A	A	A
Harbor Patrol Beach	A	A	B	A+
Rocky Point Beach	A+	A	A	A
Corona Del Mar, CSDOC	A	A	B	A
Little Corona Beach	A			
Crystal Cove, CSDOC	A	A	B	A
Crystal Cove, weekly	A	A	A+	
Muddy Creek	A+			

## Completed Components and Ongoing Participation and Outreach

**Objective:** Coordinate and collaborate with MWD, MWDOC & SARWQCB in community awareness and outreach campaigns to ensure a clear, consistent message to our regional community and capitalize on economies of scale and audience message reinforcement.

- Newport Beach participates in what is now called “Choice Program”, in which cities and water districts can choose from various water use efficiency programs that are offered by MWDOC maximizing budgets and focusing in on programs that are important to our service area.

### Tactics:

- Newport Beach staff is highly engaged in monthly meetings discussing water quality and conservation requirements; collaborating on regional and city specific public outreach.
- Staff sits on the **Coastal/Bay Water Quality Citizens Advisory Committee** chaired by Mayor Pro-tem Gardner-pioneering water quality and conservation projects city-wide.
- Staff created a **Water Supply Task Force** to foster a collaborative approach to water quality and conservation projects. The involvement of various departments aids in a comprehensive and balanced approach to programs and projects.

## ENHANCED WATER CONSERVATION PROGRAMS AND FINANCIAL INCENTIVES

**Strategy:** Provide “how to” education along with financial incentives that will enable Newport Beach residents to implement water conservation techniques.

### Completed Components and Ongoing Outreach New Programs/Financial Incentives

### Tactics:

- Water Quality and Conservation Resident Survey—** The focus was to assess and improve our programs understanding how residents feel about ocean water quality and using water efficiently in and outside their home. A brief presentation to

Council is listed on future agenda items. (2500 surveys returned and compiled)

- **City Facilities Water Budget Program**—This effort has been entirely funded through a grant managed by Municipal Water District of Orange County (MWDOC). In the first 6 months of 2011 the city **saved \$242,000.00** in water costs by adjusting watering schedules established by the budget.
- **Commercial Rotating Nozzle Rebate**—This rebate program offers our customers a \$4-\$8 rebate for the purchase of each rotating nozzle for pop-up spray heads (25 nozzle minimum, no maximum). Rotating nozzles apply water more slowly and uniformly than conventional sprays and rotors with estimated water savings of 20 percent or more.
- **Smart Timer Irrigation Controller**—Increased program funding to offer rebates to our customers to help pay for installation of “smart” irrigation timer/controllers that fully automate landscape watering based on weather, slope, soil type and the actual water needs of plants. Newport Beach has contracted with MWDOC for the reservation of ET irrigation controller rebates totaling \$37,500 as a supplement to MWDOC’s contribution over the next two years.
- **Rogers Gardens Cal-Friendly® Native Garden Contest**—Newport Beach co-sponsors this annual event profiling homeowners that have California Friendly® landscaping. This event not only highlights the gardens but also educates residents of Newport Beach on our micro-climate, native plantings, irrigation and water conservation.



## CITY PROJECTS

**Strategy:** Ensure that the City of Newport Beach is a visible advocate for water conservation and water quality stewardship, and comply with ordinances that support water conservation and water quality efforts in Newport Beach.

## Components and Ongoing Outreach

### Tactics:

- **Centralized Smart Irrigation Controller System**—65 Smart Irrigation controllers have been installed throughout the city in 2010.
- **Urban Water Management Plan (UWMP)**—This plan is required to be submitted to the Department of Water Resources (DWR) every five years (2010). This report was a collaborative effort between Municipal Operations Department (MOD) and Public Works Environmental Section staff. The UWMP describes the City’s potable water supply, water usage, conservation and shortage contingency plan for existing and future customers. Submitted June 2011.
- **Biennial Water Use Report**—The California Urban Water Conservation Council (CUWCC) Requires retail water agencies to submit a biennial report (2010) demonstrating compliance with foundational Best Management Practices (BMPs) of water supply and conservation. This report is provided to the DWR and when compliant allows for grant opportunities offered by the State. Submitted June 2010.
- **20 x 2020 Governors Bill**—In November 2009 the Governor signed into law SB 7x-7 which requires each urban retail water supplier to develop urban water use targets to help meet the 20% goal by 2020 and an interim 10% goal by 2015. Under the law, water use is measured on a per capita

basis, calculated as gallons per capita per day (GPCD). The City's 2015 interim water use target is 228.1 GPCD and the 2020 final water use target is 202.8 GPCD. (see 2010 UWMP for details)

- **Landscape Certification Program**—This free program provided by MWDOC is designed specifically to help ensure that the city facilities (parks, medians and public land) and common areas managed by HOA's use water efficiently. The program will help monitor water use, reduce site runoff and non-point source pollution. The Orange County Landscape Performance Certification Program provides monthly status reports of landscape performance. Staff is currently auditing city medians and parks.
- **Water Budget Base Rate Structure**—Staff is working on a grant project with MWDOC studying the feasibility of customer water budget-based rates, making the cost of water and conservation incentives equitable for residents and the business community. A presentation to Council is anticipated to be in September 2011.
- **ASBS Protection Program (Award \$2,500,000)**  
*Newport Coast:* Staff was awarded a 2.5 million Prop 84 funding grant offered by the State. This grant provides the primary funding for continued efforts to improve and monitor the health of the Newport Coast Watershed designated as an Area of Special Biological Significance (ASBS). A structural BMP's creating erosion control in Buck Gully. The project also focuses on reducing landscape irrigation runoff and pollutant loading (fertilizers, pesticides, and other landscape-related contaminants) from residential accounts and large landscapes, which drain to the ASBS.

Existing irrigation systems will be replaced with adaptive controllers that adjust to weather conditions.

- **Restoration Project** (Contractor selection phase)

*Lower Buck Gully:* Addresses dry weather

pollutant loads. This project will stabilize the canyon streambed with a series of drop structures. The areas behind the drop structures will create several acres of wetland. It will be possible to engineer this area for sediment, metals and nutrient and potentially bacterial reduction.



- **Smart Irrigation Controller Installation** (Contractor selection phase)

*Newport Coast:* This project provides for the installation of an irrigation computer system and necessary equipment at existing slope and median locations in Newport Coast. Work will be performed by City staff and a private contractor. Computerized irrigation management systems reduce water consumption up to 20% and the system will have a three to five-year payback from water savings.

- **Restoration Project (design phase)**

*Big Canyon Creek:* This is a multi-agency project involving the City, Department of Fish and Game, County of Orange, State Water Resources Control Board, State Coastal Conservancy, and Newport Bay Naturalists to restore the 54-acre Big Canyon Nature Park and its major waterway, Big Canyon Creek. Talks with stakeholders are underway determining the best and economically feasible plan for the watershed.

- **Huntington Beach Seawater Desalination Project**—In Orange County there are three proposed ocean desalination projects that could



serve MWDOC, including one specifically that may benefit the City. On January 20, 2010, the City signed a non-binding LOI for 7.1 MGD (8,000

AFY) of Huntington Beach Seawater Desalination Project supplies. The Project has received specific approvals from the Huntington Beach City Council, including the Coastal Development Permit, Tentative Parcel Map, Subsequent Environmental Impact Report and Conditional Use Permit, which collectively provided for the long-term operation of the desalination facility. It is anticipated that if the project receives all required permits by 2011, it could be producing drinking water for Orange County by as soon as 2013.

- **Measure M Grant Funding Projects (Award \$250,000)**

*Newport Blvd. Bioswale:* This project will remove oil, grease, sediment and trash and debris (styrofoam, fast food containers, plastic, cigarette butts, etc...) generated in and around Newport Blvd before being conveyed via the storm drain system and discharged into Lower Newport Bay (303d listed). The CDS system screens, separates and traps the above mentioned pollutants, including capture and removal of 100% of floating pollutants.

- **Selenium Mitigation Program**—Urban runoff contains pesticides, atmospheric pollutants hydrocarbons and toxic pollutants that pose a

hazard to wildlife. Selenium has recently been documented in the tissue of insects and amphibians in Big Canyon Creek that drains to Newport Bay. The mobilization and transport of the selenium and other toxic pollutants is primarily attributable to over-irrigation practices. The selenium accumulates in wetland areas where it is ingested by wildlife. Reducing runoff will directly address the mobilization and transport of selenium to the beneficial use areas of Big Canyon.

- **Water Supply Task Force**—The Water Supply Task Force has been created to comply with NBMC 14.16 (Water Conservation and Supply Level Regulations). Its primary objective is to create “Water Shortage Response Procedures” both the administrative and field response/ enforcement of the ordinance. Additionally, this Task Force creates an interdepartmental understanding of the evolving dynamics of water supply and effective efficient water use. Current and future projects can involve divisional city staff both in action and to provide direction.
- **The Bluffs Community Turf For Turf Program**—This project will remove high water use turf and replace it with a new, low water use turf, called UC Verde Buffalo grass. UC Verde Buffalo grass is a new turf released by the University of California. It was hybridized and developed over the past 10 years to (1) be a low water need turf, (2) maintain green color throughout the year in southern California and (3) require less mowing and less fertilization than current cool and warm season grasses. This plant material change will permanently reduce the water requirement of the affected acreage by 50 percent.

## **Closing Statement**

Reducing outdoor water use in a sustainable manner is required in Newport Beach. This long-term undertaking presents a challenge in maintaining a conscious effort of water efficiency into the residential sector. It is as much behavioral and bureaucratic as it is technological.

Many are aware of the growing concerns about the State's sustainability of the infrastructure required to deliver water to the consumer. In response, Newport Beach traditionally has been a forward thinking city in water policy, investing in groundwater replenishment and most recently a desalination opportunity that may be very beneficial. In the meantime, the existing education programs have been effective over the last three years, reducing water use by 13% from 2008-2010.

Imported water pricing is expected to increase year after year and this price will play a role in our demand management. Historically Newport Beach has provided water at the lowest prices in Orange County. Customer reaction is that water is undervalued and can be overused.

The need for an analysis of a water rate that is equitable for all is not only good water management but will aid us in complying in the Governor Schwarzenegger's SB 7x-7 (page 8) compliance in the 20% reduction in our water use by year 2020.

There are many water quality issues challenging the city. Staff recognizes efficient water use has a direct positive effect on the receiving waters of Newport Beach. Therefore, continued efforts will

be made to reduce sources of pollution through continued community outreach.

Continued interdepartmental teamwork and regional cooperation will enable the city to be poised for another successful year.

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