#### Greater Los Angeles County Integrated Regional Water Management Plan South Bay Steering Committee West Basin MWD Carson, CA

#### Tuesday November 4, 2008 2:30 – 4:30 pm

#### **Meeting Notes**

#### **Present:**

Frank Kuo, LA County Flood Control District Leighanne Reeser, West Basin MWD Rich Nagel, West Basin MWD Marilyn Lyon, South Bay Environmental Services Center Patrick Arakawa, LA County Flood Control District Robb Whitaker, Water Replenishment District Theresa Wu, Water Replenishment District Mary Zauner, LA County Sanitation Districts Chris Sellers, LA County DBH Rob Beste, City of Torrance Persephene St. Charles, RMC Shirley Birosik (phone), Regional Water Quality Control Board Chris Sellers (phone), LA Department of Beached and Harbors Meredith McCarthy (phone), Heal the Bay George De La O (phone), LA County Flood Control District

Agenda Item	Topic/ Issue	Discussion	Action Item/Follow Up
1	Welcome, Introductions	Rich Nagel led introductions	
2	October Steering Committee Meeting Notes	Notes were approved as is.	
3	Overview of October Leadership Committee Discussion and Outcomes	<ul> <li>A hand-out was provided that summarized the Leadership Committee (LC) meeting key highlights were:</li> <li>Integrated Regional Water Management Plan (IRWMP) News – Roundtable of Regions on November 12 and regional workshops on November 18</li> <li>Conservation, Disadvantaged Communities (DAC) and other IRWMP project ad-hoc committees will be started and should have met before November 12 Roundtable meeting</li> <li>New highlights in the State Water Resources Control Board's (SWRCB) Recycled Water (RW) policy were discussed</li> </ul>	

The Mission of the Greater Los Angeles County IRWMP is to address the water resources needs of the Region in an integrated and collaborative manner.

		Steering Committee Chair reports were provided	
		<ul> <li>Consultant Activities – IRWMP update on hold, Planning Needs Technical Memorandum (TM) was distributed, Memorandum of Understanding (MOU) has one signature left, water gap analysis nearly complete.</li> </ul>	
		• Group discussion : The current practice of meeting every month may be unnecessary given that the overall IRWMP grant schedule is extended and then there is need to pay for more meetings in between funding cycles – the rate of return on money spent becomes weak and should be considered in the future. The need to create sustainable funding was encouraged.	
		Interim DAC plan approved	
4	Selection of Representatives for As	The following Steering Committee (SC) members were selected for the three new ad-hoc committees.	
	Hoc Committees	Conservation Projects – Leighanne Reeser	
		IRWMP Projects – Robb Whitaker	
		DAC Projects – Meredith McCarthy	
5	Funding Contribution Status	A table was distributed summarizing contributions pledged and paid. Leighanne reported that things are on track.	
8	Steering Committee Vice-Chair (Next 3 years)	Robb Whitaker was re-appointed for another 3 year term as Vice-chair.	
7	Project Database Next Steps	Persephene stated that currently it is thought that the Proposition 84 implementation grant application could be due in March/April 2009 and will follow similar guidelines to those used for Prop 50 funds. In order to meet such a schedule, sub regions must have their top projects prioritized and finalized at the January 2009 SC meetings so that the regional project selection can occur at the February 2009 LC meeting. It was noted that funding is tighter than under Prop 50 and so it would only be realistic to assume that the best 1-3 projects that are ready to proceed could be selected for each sub-region. The group discussed how the South Bay Sub-region will conduct their process in light of that schedule and requirements agreed to the following:	Persephene and Leighanne will compose a project update email and distribute to SC members for comments, revise and then distribute by November 7.
		<ul> <li>All projects must be updated in the LA IRWMP on-line database by November 26. Update criteria include, construction start date,</li> </ul>	

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		<ul> <li>project sponsor, funding as well as those items identified in the previous project update email sent out in spring 2008. Proponents should also determine their top project if they have multiple projects in the database.</li> <li>At the December 2 SC meeting, SC members will review the list of those projects that meet the update criteria and discuss which projects should be further considered at a project workshop to be held sometime in mid-December.</li> <li>An email inviting those selected proponents should come prepared to speak to all of those criteria as written documentation will be required as part of the grant application. Criteria discussed included economic analysis, water quality/water supply benefits, available staff resources to prepare application materials, sufficient matching funds, project assessment and evaluation plan, budget at level of effort detail, schedule.</li> <li>At the January 6th SC meeting, SC members will finalize their subregional list.</li> </ul>
		also be flagged for consideration once the ad hoc committees have determined how to proceed on those project groups.
6	DAC Next Steps	This item was not discussed
7	Future agenda items, Items to report at Leadership Committee meeting, Other Items	<ul> <li>Project review and prioritization discussion</li> <li>DAC projects</li> </ul>
8	Next Meetings	Leadership Committee November 26, 2008, 9:30 am to 12:00 pm LA County DPW South Bay Steering Committee December 2, 2008, 1:30 pm to 3:30 pm West Basin MWD

Pro	ject Type								Ben	efits	
DAC	Conservation	Priority by Agency	ID#	Proponent Agency	Proponent Name	Title	Start Date	Water Supply (AFY)	Water Quality (MGD)	Ground Water (AFY)	Habita (acres
			345	City of Carson	Patricia Elkins	Groundwater Recharge Sump for Carson City Hall	1/1/2008	0	0.012	0	0
			362	City of Carson and Sanitation Districts of Los Angeles County	Patricia Elkins	Monitoring Program for JWPCP Marshland Enhancement Project	1/1/2006	0	2	0	0
			312	City of Carson, Carson Redevelopment Agency	Patricia Elkins	Carson Freeway Wetland	6/1/2008	0	3	0	0
X	X			City of Hawthorne	Akbar Farokhi	Storm Drain Improvements BMP 131st Street, Simms & Chadron Ave.	1/1/2009	0	0	0	0

labitat	Description
acres)	Description
0	Construction of two groundwater recharge sumps to
	receive roof drain runoff from City Hall Buildings.
	Currently the roof drains are routed directly to the
0	storm drain system. Develop and implement project assessment and
0	evaluation plan and monitoring plan in accordance
	with SWRCB guidance and AWQGP guidelines to
	assess water quality benefits and pollutant load
	reductions achieved by 17 acre wetland restoration
	and enhancement project that will function as an
	offline wetland treatment system for 2.16 million
	gallons per day of water from the Wilimington Drain.
	(The marsh construction program is fully funded but
	no funds are currently provided for monitoring and
	assessment.)
0	Acquire Brownfield property between the
	Dominguez Channel and the San Diego Freeway in
	the City of Carson and construct an engineered
	wetland to provide treatment of freeway storm water
	runoff and local dry weather flows from golf
	courses, local storm drains and/or the Dominguez
	Channel. Project includes linear jogging/bike path to
	provided critical recreational open space and
	enhance local redevelopment activity. The project is
	adjacent to two local golf courses and a planned mixed use development known as Carson
	Marketplace.
0	This project will construct drainage improvements
U U	on 131st Street, Simms and Chadron Avenue in the City
	of Hawthorne one area in the City that has frequent and
	sever flooding due to aging and deficient storm drain
	system. Implementation of the project elements include
	the replacement of storm drains, drainage pipes, cross
	gutters, and installation of filtering devices to improve
	flood management and enhance the quality of storm drain
	runoff. Best Management Practices will be implemented,
	bringing this area into compliance with State and Federal
	requirements.

Pro	ject Type								Bene	efits		
DAC	Conservation	Priority by Agency	ID#	Proponent Agency		Title	Start Date	Water Supply (AFY)	Water Quality (MGD)	Ground Water (AFY)	Habitat (acres)	Description
X	X			City of Hawthorne	Akbar Farokhi	Storm Drain Improvements BMP Kornblum Avenue & Cranbrook Avenue	1/1/2009	0	0	0	0	This project will construct drainage improvements on Kornblum Avenue and Cranbrook Avenue in the City of Hawthorne one area in the City that has frequent and sever flooding due to aging and deficient storm drain system. Implementation of the project elements include the replacement of storm drains, drainage pipes, cross gutters, and installation of filtering devices to improve flood management and enhance the quality of storm drain runoff. Best Management Practices will be implemented, bringing this area into compliance with State and Federal requirements.
X	X			City of Hawthorne	Akbar Farokhi	Storm Drain Improvements BMP Hawthorne Boulevard between El Segundo Blvd. and Rosencrans Ave.	1/1/2009	0	0	0	0	This project will construct drainage improvements along Hawthorne Boulevard between El Segundo Boulevard and Rosecrans Avenue in the City of Hawthorne one area in the City that has frequent and sever flooding due to aging and deficient storm drain system. Implementation of the project elements include the replacement of storm drains, drainage pipes, cross gutters, and installation of filtering devices to improve flood management and enhance the quality of storm drain runoff. Best Management Practices will be implemented, bringing this area into compliance with State and Federal requirements.
X	X			City of Hawthorne	Akbar Farokhi	Storm Drain Improvements BMP Prairie Avenue & El Segundo Boulevard	1/1/2009	0	0	0	0	This project will construct drainage improvements on Prairie Avenue and El Segundo Boulevard in the City of Hawthorne one area in the City that has frequent and sever flooding due to aging and deficient storm drain system. Implementation of the project elements include the replacement of storm drains, drainage pipes, cross gutters, and installation of filtering devices to improve flood management and enhance the quality of storm drain runoff. Best Management Practices will be implemented, bringing this area into compliance with State and Federal requirements.

Project Type	ject Type Benefits										
DAC Conservation	Priority by Agency	ID#	Proponent Agency	Proponent Name	Title	Start Date	Water Supply (AFY)	Water Quality (MGD)	Ground Water (AFY)	Habitat (acres)	Description
	2			Kathleen McGowan	Hermosa Strand Low Flow Infiltration Trench	3/1/2008	0	2	0	0	Dry and wet weather low flow runoff from eleven storm drains along a 1.5 mile stretch of beach including the downtown commercial corridor will be diverted into an engineered infiltration trench. The project will take advantage of the unsaturated coastal sandy soil to effectively distribute and infiltrate these low flows. The storm drains discharging along this stretch of beach will be equipped with a structural diversion system to allow pump low flows into the engineered trench while allowing higher flows to bypass the trench and flow directly to the existing ocean outfall. The storm drain flows discharging from the downtown commercial area will receive pretreatment for oil and grease removal before entering the engineered trench.
	1	14315	City of Hermosa Beach	Frank Senteno	Upper Pier Avenue LID Retrofit	4/1/2009	0.7	2.4	37	0	The Upper Pier Avenue LID Retrofit is part of streetscape improvement plan which arose from a community consensus process. The project provides the opportunity to retrofit for treatment of stormwater/urban runoff from streets and existing development in the downtown commercial corridor. Modular treatment/infiltration units along the 1800 feet of Upper Pier Avenue from Valley Drive to Hermosa Avenue will treat runoff from a 36-acre drainage area. Pretreatment for trash and gross solids will be followed by biofiltration and infiltration. The project will include significant drainage improvements through construction of a new storm drain to reduce flooding, while at the same time providing treatment and infiltration of dry weather and wet-weather baseline flows to reduce pollutant loading at the beach. The streetscape improvement also provides the opportunity to bring reclaimed water service for landscape irrigation on Pier Avenue, Hermosa Avenue, Noble Park, and the beach public restrooms.

Pro	Project Type							Ben	efits			
									Water		_	
DAC	Concernation	Priority by	104	Drevent Areney	Dreven en tit Neme	Title	Ctart Data	Water Supply	Quality	Ground	Habitat	Description
DAC	X	Agency	ID# 355	Proponent Agency City of Los Angeles Council District 5	Paul Backstrom	Title Lower Franklin Canyon Park	Start Date 1/1/2010	(AFY) 190	(MGD) 1.3	Water (AFY)	(acres) 4	Description Features and natural resource restoration activities planned for the new park include, daylighting of the Higgins storm drain to create a constructed wetlands, 5,562 lineal feet of recreational paths and trails, 2 shade structures, 3 acres of orange groves, outdoor classroom, facility and interpretive signage, scenic overlooks, and restoration of the targeted reaches of the stream channel and riparian plant communities on the north and south sides of the inactive earthen dam. The project will restore 510 feet of the upper stream channel and 270 feet of the lower stream channel and will result in the creation of approximately 4 acres of riparian habitat. While the proposed project primarily addresses water quality, habitat and recreation needs, flood management is also addressed. The overall recreational objective of the projects is to make this area available for public parkland and open space uses, and to create an important link to the 600 acres of parkland immediately north that is part of the SMMNA.
			7582	City of Los Angeles, Department of Public Work	Kosta Kaporis	Catch Basin Cover Phase	10/1/2007	0	3296.21	0	0	This project proposes the installation of CB opening screen covers in medium and low trash generation areas of the City. As trash is the primary target pollutant and will be either eliminated or significantly reduced by the installation of the CB covers. In addition, these CB covers will also reduce organic debris and sediment loading to the storm drain system. The CB opening screen covers are coarse screeens that are installed in the CB opening and prevent trash from entering the City storm drain system system. Each CB opening screen cover has a self-opening device activated by a presetermined street gutter flow to disengage its locking mechanis. These covers are designed to remian closed during both dry weather as well as small storms.

Pro	ject Type									efits	
DAC	Conservation	Priority by Agency	ID#	Proponent Agency	Proponent Name	Title	Start Date	Water Supply (AFY)	Water Quality (MGD)	Ground Water (AFY)	Hab (aci
X	X				Kosta Kaporis	Machado Lake Ecosystem Rehabilitation Project	6/1/2010	0	370	0	2
X				City of Los Angeles, Department of Public Works		Peck Park Canyon Project	11/30/2009	0	0	0	C
				City of Los Angeles, Department of Public Works	Kosta Kaporis	PENMAR WATER QUALITY IMPROVEMENT AND RUNOFF REUSE PROJECT	7/1/2008	122	3.75	0	(

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cres)	Description
20	Machado Lake will be enhanced through removal of contaminated sediments, installation of an aeration system, installation of an outlet device and spillway, trash capture devices in storm drain outlets, and creation of low flow channel (through the marsh to separate low lake flow from storm water flow). Habitat improvements in the marsh zones will be achieved by removal of non-native invasive plants, planting native species and debris removal. The park will be enhanced through a series of park improvements that will also include installation of pervious paving material in parking lot, installation of bioswales along portions of parking lots and facilities, and installation of a "smartâ€ irrigation system.
0	The project proposes a combination of Best Management Practices (BMPs) to enhance the stream and surrounding canyon as a result of erosion and sediment control measures, flood control, and water quality improvements through the infiltration of stormwater and associated pollutants. The BMPs include vegetated bio-swales/infiltration strips, catch basins, armoring and revegetation for bank stabilization, and creation of a step pool channel configuration. This network of BMPs will reduce downstream flow velocity and slope erosion, control stormwater runoff, filter and degrade stormwater pollutants, and capture trash and debris. The improvements will improve water quality in the Canyon's stream and ultimately the Los Angeles Harbor and San Pedro Bay (impaired water bodies) into which the stream flows.
0	The Penmar Water Quality Improvement and Runoff Reuse Project includes installation of hydrodynamic separators , underground detention tank, chlorination facility, pump station and overflow systems. Off-site surface runoff will be diverted to project site. The diverted runoff shall be treated/disinfected. The disinfected effluent will be pumped through a smart irrigation system to decrease the current landscaping irrigation demand.

Pro	oject Type									efits	
DAC	Conservation	Priority by	ID#	Proponent Agency	Proponent Name	Titlo	Start Date	Water Supply		Ground Water (AEX)	Hab (acr
DAC	Conservation	Agency	ID# 4302	Proponent Agency City of Los Angeles, Department of Public Works	Kosta Kaporis	Title Rosecrans Recreation Center Stormwater Enhancement	Start Date 8/1/2009	(AFY) 6.14	(MGD) O	Water (AFY) 0	(acı
			1617	City of Los Angeles, Department of Public Works	Kosta Kaporis	TEMESCAL CANYON RECREATION CENTER STORMWATER BEST MANAGEMENT PRACTICES	7/1/2008	27	2.5	0	C
			2117	City of Los Angeles, Department of Public Works	Kosta Kaporis	Westchester-LAX Stormwater Best Management Practices	7/1/2008	0	10.5	0	C

abitat	
acres)	Description
0	Stormwater runoff from a site has the potential to contribute trash, oil and grease, suspended solids, metals, gasoline and pathogens to the storm water conveyance system. The Rosecrans Recreation Center Stormwater Enhancements project goal is to minimize, to the maximum extent practicable, the introduction of pollutants of concern to site runoff entering the storm water conveyance system. Pollutants of concern conveyed through runoff may result in significant impacts in the watershed. Stormwater enhancements include a "smart†irrigation system, interlocking porous pavers in an existing parking lot and a new parking lot bioswales, vegetated retention basins, decomposed granite pathways, and a synthetic soccer field. The site will also be graded and landscaped to provide better drainage in the vicinity of the proposed sports fields and at the southern end of the park to direct flows to the treatment bioswales and retention basins. In addition, two new baseball fields will be furnished at the location
0	The BMPs proposed for the Temescal Canyon Recreation Center Stormwater Best Management Practices Project includes: 1-Diversion of off-site stormwater from existing stormdrain system to the project site. 2-Pretreatment of diverted stormwater through hydrodynamic separators. 3-Retention of pretreated stormwater in one underground detention tank. 4-Disinfection of the stormwater
	prior to irrigation. 5-Beneficial reuse of the treated stormwater through landscape irrigation and potentially firefighting through out the year.
0	The BMPs proposed for the Westchester-LAX Stormwater Best Management Practices Project includes: Diversion of off-site stormwater from existing stormdrain system to the project site, Pretreatment of diverted stormwater through hydrodynamic separators, Retention of pretreated stormwater in one underground detention tanks, Possible infiltration/re-use of the treated stormwater, Return of excess treated stormwater to the LFD during dry-weather conditions, which will then be diverted to the Hyperion Treatment Plant for further treatment.

Pro	oject Type								Bene	efits		
DAC	Conservation	Priority by Agency	ID#	Proponent Agency		Title	Start Date	Water Supply (AFY)	Water Quality (MGD)	Ground Water (AFY)	Habitat (acres)	Description
			1603	City of Los Angeles, Department of Public Works	Kosta Kaporis	WESTMINSTER DOG PARK STORMWATER BEST MANAGEMENT PRACTICES	1/1/2008	0.9	0.02	0	0	The Westminster Park (Dog Park) project includes installation of modular constructed wetland Best Management Practices (BMPs) within this project site. By installing these BMPs, on-site runoff, which is highly contaminated by dog feces, will be captured and treated prior to discharging into the storm drain system.
			3786	City of Los Angeles, Dept of Public Works	Kosta Kaporis	Imperial Highway Sunken Median	4/1/2008	0	0.5	0	0	The Imperial HWY stormwater BMP project will retrofit approximately a 1.3 miles stretch of Imperial Highway, by installing a sunken median Infiltration/Vegetated Buffer Strip Stormwater Best Management Practice. By retrofitting Imperial Highway to divert the surface runoff into the median, runoff will be allowed to infiltrate and pass through a median prior to discharging into storm drain system. 91 infiltration trenches are needed to provide the required retaining volume to capture and percolate 0.75 inches of a rainfall. A vegetated buffer strip per three trenches is proposed to provide pretreatment and protect the trenches from excessive sediments build up.
		1	344	City of Manhattan Beach	Jim Arndt	Greenbelt Low-flow Infiltration Project	11/1/2009	30	0.15	55	0	The project will utilize the linear greenbelt parkland which runs through the City of Manhattan Beach (City) to intercept and infiltrate dry weather and wet weather low flows from existing storm drains that intersect the parkway. The project will preserve the existing recreational benefits of the linear parkland as a jogging/walking path. The low flows will be screened for trash and gross solids removal and will then be directed by gravity flow to a subsurface infiltration system which will also provide limited storage of storm flows for subsequent percolation into the sandy soils below the greenbelt. Storm flows which exceed the infiltration or storage capacity of the percolation lines will return by gravity flow to the storm drain system for discharge at the storm drain outfall. The Greenbelt Low Flow Infiltration system will effectively divert year-round dry-weather and wet-weather low flows from the storm drain system.

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				City of Manhattan Beach	Jim Arndt	Manhattan Strand Low Flow Infiltration Trench	1/1/2009	0	11	0	0	Dry and wet weather low flow runoff from 16 storm drains along a 1.5 mile stretch of beach including the commercial areas will be diverted into an engineered infiltration trench. The project will take advantage of the unsaturated coastal sandy soil to effectively distribute and infiltrate these low flows. The storm drains discharging along this stretch of beach will be equipped with a structural diversion system to allow diversion of low flows into the engineered trench while allowing higher flows to bypass the trench and flow directly to the existing ocean outfalls.
		1	2006	City of Rolling Hills Estates	Andy Clark	Model Equestrian Center	6/1/2009	0.22	0.001	0	0	Site design will reduce pollutant loads by retaining stormwater on site and directing drainage from upgradient areas away from contact areas where horses are housed, groomed, or exercised. Water utilized for washing down horses is to be diverted to the sanitary sewer, while all other water utilized for dust control and irrigation will be applied in a manner to prevent dry weather runoff. Design objectives/elements will include: erosion and sediment control, structural controls for integrated pest management (IPM), landscape & exterior design to reduce heat islands, water conservation including cisterns to capture and reuse roof runoff for landscape irrigation and/or dust control, equine- safe drought-tolerant landscaping and native plant buffers, trail connectivity, use of local/regional materials, and construction waste minimization. Interpretive signage placed throughout the facility will identify environmental design elements and a central display board with tip cards will provide more detailed information.

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DAC	Conservation	Priority by Agency	ID#	Proponent Agency	Proponent Name	Title	Start Date	Water Supply (AFY)	(MGD)	Ground Water (AFY)	Habitat (acres)	Description
				Estates		Peninsula Village Regional Stormwater Mitigation Program	9/1/2008	22	0.916	0	0	The project will integrate a system of stormwater BMPs into the Streetscape Master Plan for public rights-of-way in a mixed-use overlay zone. Grant funding will support the portion of the stormwater mitigation for public streets and existing development, while mitigation banking from developers will fund SUSMP mitigation to benefit private redevelopment projects. The project will reduce the effective impervious area of the overlay zone and remove stormwater pollutants through: low impact redevelopment, integrated water resources management, multi-benefit natural features, and structural treatment control BMPs. Project will increase safe pedestrian access throughout the district and provide connectivity to recreational trails. Project features include: porous paving for walkways and parking lots, reuse of rainwater from roof drains for landscape irrigation, water efficient landscaping with smart irrigation controllers, curb cuts to route street runoff into curbside swales/biofiltration systems.
		1	301	City of Santa Monica	Neal Shapiro	16th Street Watershed Runoff Use Demonstration Project	4/1/2010	0	250000	0	0	2 or 3 stage treatment, storage, infiltration and/or reuse project for all dry weather runoff, and up to 80% wet weather. Primary stage to remove trash, debris, and sediments. Secondary stage to filter out soluble pollutants, like heavy metals and organics, oil and grease. Final stage for storage and reuse, overflow to infiltration zone.
			337	City of Santa Monica	Neal Shapiro	Freeway Runoff Infiltration Demonstration Project	7/1/2011	0	0.1	0		Divert runoff from a section of the Santa Monica Freeway within the City of Santa Monica, treat and infiltrate within the adjacent landscape of the shoulder along the side of the freeway. The infiltration zones will be augered features that go into the side of the freeway landscape, underutilized land. There will be pre-treatment before infiltration to remove trash, oil/grease, sediments. It will be a passive system, i.e. gravity-fed and low into the system. The treatment-infiltration areas will be areas either already with a storm drain in the area, or the creation of new ones to harvest the runoff. The goal will be to keep runoff out of the existing storm drains and out of the storm drain system.

Pro	ject Type									efits	
DAC	Conservation	Priority by	ID#	Proponent Agency	Proponent Name	Title	Start Date	Water Supply (AFY)	Water Quality (MGD)	Ground Water (AFY)	Hab (aci
DAC	Conservation	Agency 2	1623	City of Santa Monica	Neal Shapiro	Memorial & Ozone Parks Runoff Treatment and (Re)Use Project - 1	5/15/2012	300	250000		(26)
		3	382	City of Santa Monica	Neal Shapiro	Storm Drain Runoff Retrofit & Infiltration Stations	6/1/2012	0	80000	0	
		2	318	City of Torrance	Rob Beste	Conversion of 237th Street Sump Trib. to Machado Lakes for BMPs	1/1/2010	0	1.5	65	

labitat acres)	Description
0	These projects (or one park depending upon grant award) will involve 2-3 treatment systems in series, harvesting stormwater and dry weather runoff from the main storm drain and surface gutters passing by the parks. Runoff will diverted to a primary screening/separation system to remove floatables and larger materials (trash, debris, sediments), then a secondary system to remove soluble pollutants and then a tertiary storage/reuse vault. The stored runoff will be used for landscape irrigation and/or infiltation into the ground (overflow, excess storage). The systems will be underground.
0	Retrofit existing storm drain nexus points with deep infiltration zones for dry and wet weather capture and infiltration to remove a variety of pollutants of concern. Cored or augered infiltration zones will be installed to capture runoff for infiltration. Runoff fills the zones and infiltrates over time. Once filled, the runoff bypasses and continues as it normally does along the storm drain system. The zones will be filed with rock or plastic matrix to store runoff for infiltration. Trash/debris will be removed at the top of the zone and carried away by runoff flows or by city staff.
0	This project would convert the 237th St. Sump (4.5 acre-feet) into a retention/infiltration basin BMP for trash and nutrient TMDL compliance and provide open spaces for wildlife habitat. This project would install diversion structures that would divert the first 4.5 acre-feet of stormwater from a 71 acre tributary area away from the system tributary to Machado Lake (Wilmington Drain) to be retained and infiltrated in this basin. Trash screens would be installed at the basin outlet as a subregional BMP for easier trash collection. During the dry season the basin would remain an open space for wild life and retain urban run-off and nutrients form 71 acres. By diverting stormwater back into this basin, the City and County storm drain systems would have more capacity during rain events. This project would also increase groundwater recharge.

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		4		City of Torrance	Rob Beste	Conversion of Pioneer Storm Drain Sump Tributary to Dominguez Channel into	1/1/2009	0	0	45	0	This project would convert the Pioneer Sump into an infiltration or bio-filtration BMP for pending TMDL compliance and provide open spaces for wildlife habitat. This sump is tributary to the Dominguez Channel.
		3	319	City of Torrance	Rob Beste	Conversion of Walnut Ave. Sumps Tributary to Machado Lake for BMPs	1/1/2010	0	0	30	1	This proposed project would convert the Walnut Ave. Sumps back into a retention/infiltration basin BMP to address trash TMDL and pending nutrient TMDL compliance and provide open spaces for wildlife habitat. Flows that previously went to these sumps are now tributary to the Machado Lake. A diversion structure and piping would be constructed, using abandoned inlet pipes, to divert flows back into the basin until the basin was full up to the existing storm drain elevation. Trash screens would be installed at two inlets into the basin to collect trash. This project would maximize the drainage area that could be tributary to the retention basin and urban runoff would restore the area for wildlife use during dry weather. By diverting storm water into the basin, this project would increase capacity of the County storm drain systems downstream of the basin, SD 1040 & SD-1031. Infiltrating storm water also increases ground water recharge.
		1	320	City of Torrance	Rob Beste	Stormwater Basin Enhancement Program	1/1/2010	135	105	360	18	This project would convert the Amie, Henrietta and Entradero Stormwater Basin into stormwater treatment systems using trash screens, wetlands treatment and infiltration basins as BMPs for Santa Monica Bay Bacteria TMDL compliance and provide 26 acres of open space for wildlife habitat. These BMPs are also effective for addressing sediment, nutrients, trash, metals, oil, grease, organics and oxygen demand. SCADA controlled valves at the Amie Basin Pump Station will divert dry weather run off to the Dominguez Channel and reduce flows at the County's low flow diversion pump station for Herondo Drain. Infiltration basins at each site also contribute to groundwater recharge. The Pre- design, cost estimates and CEQA process are complete. The City owns the properties so with funding this project can go through final design and to construction with in a year. Recycled water proposed at Entradero Basin would reduce potable water consumption by 25 afy.

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	X			City of Torrance	Rob Beste	Yukon Well Field Development	1/1/2009	5000	4.5	0	0	The project will construct four wells to reduce dependence on imported MWD water. The project will include land acquisition, well, treatment, and distribution construction.
				Coastal Conservancy, Dept. Fish and Game	Jack Liebster	Ballona Wetlands Restoration	8/1/2009	0	580	0	60	The project is currently in the feasibility stage, with a broad range of potential restoration scenarios being evaluated for their hydrologic, water quality, habitat, recreational, flood control and economic benefits and costs. These alternatives range from increasing water flow to existing and potential wetland areas with little grading to significant excavation of filled areas and modification of levees to dramatically increase the wetted area with both full tidal and muted tidal water regimes and reconnect Ballona Creek to its historic floodplain. Increases to the tidal prism could provide increased flushing of Ballona Creek and areas of Marina del Rey. Plans include construction of treatment wetlands at locations where tributary drainages enter the project area.
				Friends of Gardena Willows	John Thomlinson	Gardena Willows Wetlands - Education	1/1/2007	0	0	0	9	Interpretation and education of Gardena Willows Wetlands. Contract for development and installation of two interpretive panels and related brochures.
				Friends of Gardena Willows	John Thomlinson	Gardena Willows Wetlands - Erosion		0	0	0	9	Correct erosion problems and improve maintenance of existing paths. Construct the remaining paths within the preserve making all paths handicap accessible.
				Friends of Gardena Willows	John Thomlinson	Gardena Willows Wetlands - Weeds	9/1/2006	0	0	0	9	Control of basic and exotic weeds and restoration of the wetlands preserve. Control of non-native plants. We will use mechanical modes of removal, primarily by manual means.
				Friends of Gardena Willows	John T	Restoration and Education at the Gardena Willows Wetland Preserve	1/1/2007	0	0	0	9	Further restoration and management of the Preserve and development of a Nature Center and educational programs

Pro	ject Type					Benefits						
									Water	0		
DAC	Conservation	Priority by Agency	ID#	Proponent Agency	Proponent Name	Title	Start Date	Water Supply (AFY)	Quality (MGD)	Ground Water (AFY)	Habitat (acres)	Description
X	X		1517	LADWP	Mark Aldrian	Manhattan Well Field Rehabilitation	10/1/2008	3000	0	0	0	The project consists of the construction of six new production wells at LADWP's Manhattan Well Field in the Central Basin to increase our total groundwater extraction capacity from 24 to 34 cfs. This will improve our operational reliability and flexibility and allow LADWP to enter into a conjuctive use program with the Water Replenishment District in the range of 15,000 - 30,000 acre-feet. Currently, the structrual integrity of the existing forebay and pump station are being evaluated to determine their life expectancy. Groundwater quality has not been an issue and no special groundwater treatment is expected at this time. The nature of the conjunctive use program will need to be developed in conjuction with the Water Replenishment District; however, it is expected that LADWP will be able to store water through in-lieu practices then extract the water as needed in a manner that will not cause harm to other water right holders in the basin.
			7105	Light Rail for Cheviot	Jonathan Weiss	Exposition Green Corridor	11/9/2009	0	100	0	4	Reconfiguring 20 acres of rail right of way to redirect perennial Stone Canyon Creek and storm drains into swale, detention basins, treatment wetlands, and micro-pools for cleaning and conserving dry weather and storm flow on unused railway right of way consistent with potential transit and parkland construction.
			11488	Los Angeles County Department of Public Works	Lani Alfonso	Santa Monica Canyon Channel, LFD No. 2, Rubber Dam	4/1/2010	0	7.8	0	0	The Santa Monica Canyon Channel, Low Flow Diversion No. 2 Project consists of the construction of a 6' high by 40' wide air-inflatable rubber dam in the concrete channel to capture and prevent urban runoff from discharging into Will Rogers State Beach. A control building will be required to house the rubber dam's air compressor and control panel. The runoff stored behind the rubber dam will be diverted into the diversion's intake system, which includes a trash separator, wet well, and pump. The diverted flows will be pumped into the City of Los Angeles' Coastal Interceptor Sewer for treatment at their Hyperion Treatment Plant.

Pro	oject Type								Ben	efits		
		Priority by						Water Supply	Water Quality	Ground	Habitat	
DAC	Conservation	Agency	ID#	Proponent Agency	Proponent Name	Title	Start Date	(AFY)	(MGD)	Water (AFY)		Description
			331	Los Angeles County Flood Control District	angela george	Dominguez Channel Greenway	1/1/2009	0	0	0	4	Development of a native landscaped greenway and bikeway/pedestrian trail along the Dominguez Channel. The project will include the following access/maintenance road improvements for the new/improved bikeway; AC repair and replacement, slurry seal, American Disability Act (ADA) access ramps and bikeway/pedestrian signage and striping. Lanscaping improvements include landscaping using native and drought-tolerant plants, irrigation, as-needed fencing repair/replacment. Elucational/interpretive signage will also be included along the bikeway/pedestrian trail. A study is also recommended to consider additional pedestrian corsswalks with street lamp lighting for added safety.
			354	Los Angeles County Flood Control District	angela george	Los Angeles Harbor Bacteria TMDL - Low Flow Diversion	1/1/2009	0	2	0	0	Develop low-flow diversions within the Los Angeles Harbor watershed to comply w/ the Harbor Bacteria TMDL.
			394	Los Angeles County Flood Control District	Eric Batman	West Coast Basin Seawater Barrier Telemetry System	1/1/2009	1000	0	0	0	This project involves the installation of equipment to remotely monitor injection and observation wells to improve the overall effectiveness and efficiency in the operation of the West Coast Basin Seawater Barrier.
		2	328	Marina del Rey Watershed Responsible Agencies	Angela George	DBH Parking Lot 5 Bioretention	8/1/2010	0	0.23	0	0	Installation of Bioretention filter system to capture sheet flow from the parking lot. This parking lot is adjacent to Basin F. Due to the high groundwater table in the area, appropriate structural BMPs are very limited. Infiltration BMPs such as porous pavement are not feasible because the soil depth to groundwater is insufficient to allow proper filtration. Typical pollutants such as oil and grease from the parking lot would infiltrate into the groundwater and gradually seep out to Basin F.
		3	329	Marina del Rey Watershed Responsible Agencies	Angela George	DBH Parking Lot 7 Bioretention	8/1/2010	0	0.13	0	0	Installation of bioretention filter system to capture sheet flow from the parking lot. Runoff from this parking lot discharges to Basin E.

Pro	ject Type								Bene	efits		
DAC	Conservation	Priority by Agency	ID#	Proponent Agency	Proponent Name	Title	Start Date	Water Supply (AFY)	Water Quality (MGD)	Ground Water (AFY)	Habitat (acres)	Description
		1			Angela George	Oxford Retention Basin Flood Relief and Multiuse Enhancement Project	3/1/2011	0	0.014	0	0	This project includes the excavation of sediments in Oxford Retention Basin, the construction of a connecting relief drain, and the installation of a technology based on the principle of water rejuvination to improve the quality of the water discharged into Basin E. Other multi-use features will also be included as part of this project such as upland habitat landscape improvements, ornamental fencing, jogging/walking paths, interpretive signs and observation decks. Operational and maintence features will also be improved.
			304	Palos Verdes Peninsula Land Conservancy	Becky Harper	Restoration of Altamira Canyon at Abalone Cove Ecological Reserve	11/15/2009	0	0	0	2	Restoration and enhancement of 2 acres of riparian and upland native habtiat in Altamira canyon will stabilize soils and minimize surficial land movement and discharge of sediment into the Abalone Cove State Ecological Preserve. Habitat restoration will be conducted in a manner that limits/minimizes surface water infiltration into the landslide complex by planting deep-rooted native shrubs and trees along the canyon to assist in stabilizing surficial soils and absorb surface water and shallow groundwater to prevent infiltration into deeper geologic structures.
	X		341	Water Replenishment District of Southern California	Theresa Wu	Goldsworthy Desalter Expansion	01/01/1753	3000	3	0	0	This project will remediate an existing saline plume located in the West Coast Groundwater Basin through advanced treatment consisting of reverse osmosis. The existing Goldsworthy Desalter products approximately 3,000 acre-feet per year and is provided to the City of Torrance.

Pro	Project Type						Benefits					
		Priority by						Water Supply	Water Quality	Ground	Habitat	
DAC	Conservation	Agency	ID#	Proponent Agency		Title	Start Date	(AFY)	(MGD)	Water (AFY)	(acres)	Description
	X			Municipal Water District		25-mgd Seawater Desalination Plant in West Basin	1/1/2015	25	25	0	0	The project proposes to construct a 25mgd Seawater Desalination Plant in West Basin's service area for potable water use. First, a Demonstration Plant will be necessary to evaluate the water quality performance and treatment stability, assess efficient energy recovery devices, optimize operational performance utilizing full scale process equipment, and to acquire the necessary data to achieve regulatory compliance and approval. West Basin and its partners will perform the full battery of water quality analyses to ensure that the demonstration project meets all Federal and State Drinking Water Standards. With the knowledge gained by operating the Demonstration Plant, West Basin expects to move forward with the planning, design, and construction of a full scale 25,000 AFY seawater desalination and education facility. West Basin anticipates operating the Demonstration Plant for at least two years while plans are being completed and finalized for the full- scale plant. The Demonstration Facility is in design.
	X			West Basin Municipal Water District	Leighanne Reeser	C. Marvin Brewer Desalter Brackish Groundwater Facility Expansion	1/1/2009	500	5	0	0	The Desalter currently has the capacity to extract up to 2,000 acre-feet annually of brackish water. In 2003 the old wells at the site were decommissioned and construction began in 2005 for the first replacement well. The facility became operational in 2006 at a reduced capacity using the new well and the original RO unit. The facility has not been operating to its full capacity since it came online again in 2007 because of water quality issues. Funding is also needed to correct the water quality problems in order to get the facility to its full operating capacity. The proposed 500 AFY capacity expansion will allow the facility to become operational at its full capacity of 2,000 acre-feet per year. The site is already owned by California Water Service Co. and leased by West Basin and is developed as a desalting facility. The expansion will include the installation of a new production well, and the addition of an acid pretreatment unit and a reverse osmosis treatment unit on the existing site.

Pro	oject Type								Bene	efits		
		1							Water			
DAC	Concentration	Priority by	10#	Dremement America	Dremenent Norme	<b>T</b> :415	Ctort Data	Water Supply		Ground	Habitat	Description
DAC	X	Agency	ID# 14102	Proponent Agency West Basin Municipal Water District	Proponent Name Leighanne Reeser	Title Carson Redevelopment Center Recycled Water Pipeline	Start Date 11/1/2008	(AFY) 85	(MGD) 0	Water (AFY) 0	(acres) 0	Description The Carson Redevelopment Center Recycled Water Pipeline Extension will convey 85 acre-feet per year to serve multiple customers and uses within the City of Carson, California. The Carson Redevelopment Center (called Avalon at South Bay) includes a 168-acre development project and provides for a potential mix of approximately 2 million square feet of commercial, retail and entertainment uses, a 300-room hotel, and up to 1,550 residential units (1,150 for-sale and 400 rental). Recycled water will primarily serve irrigated landscape of the 168-acre site. This site is anticipated to use 20 acre-feet per year of recycled water of the total 85 acre-feet per year. The Dominguez Golf Course will also use approximately 65 acre-feet per year of recycled water for turf and landscape irrigation as part of this Project. This pipeline requires construction under or through the freeway overpass but completion of this pipeline will allow for future users to hook up to receive the
	X	2 (Recycled Water)	313	West Basin Municipal Water District	Leighanne Reeser	Carson Regional Water Recycling Project	1/1/2009	9200	9.2	0	0	recycled water. The Carson Regional Water Recycling Expansion Project includes the expansion of the existing recycled water treatment facility and the construction of several laterals. This is a new demand on the system and will require expansion of treatment process capacity and conveyance to include; lateral pipelines, pump stations, treatment units, storage tanks, and waste management facilities. The BP Refinery requires single-pass reverse osmosis treatment units. BP Refinery is estimating a need of 7,200 acre-feet per year (AFY), WRD is estimating a need of 2,000 AFY for the Dominguez Gap Barrier. The project will be further expanded to serve customers within the City of Los Angeles' jurisdiction for the refineries in the port area. The City will need recycled water to satisfy a use of 15,000 AFY. The City is in the preliminary design stage.

Pro	ject Type								Ben	efits		
DAC	Conservation	Priority by Agency	ID#	Proponent Agency	Proponent Name	Title	Start Date	Water Supply (AFY)	Water Quality (MGD)	Ground Water (AFY)	Habitat (acres)	Description
	X			West Basin Municipal Water District	Leighanne Reeser	Commercial Laundromat Incentive Program	1/1/2009	10	0	0	0	This is a new program that offers substantial incentives from multiple utilities (The Gas Company, Southern California Edison, and the Metropolitan Water District of Southern California) to replace non- efficient washers and dryers with more water and energy efficient devices. Some utilities currently provide funding for energy-efficient washer machines, so additional funding will expand the program to allow for more rebate incentives. Approximately 60 commercial laundromat sites have been identified within West Basin's service area that could participate in the program.
	X			West Basin Municipal Water District	Leighanne Reeser	Commercial, Industrial and Institutional Incentive Program (Recirc & Save)	1/1/2009	120	0	0	0	This is a new program that provides prescriptive incentives for installation of conductivity and pH controllers and process water equipment. Funding for this program will allow the District to hire a vendor to perform a water audit of the CII users' equipment and educate them about the rebates available for equipment that conserves water. The benefits would include a reduction of wastewater generated, benefiting the County Sanitation Districts of Los Angeles County, and potable water used. Partners will include Metropolitan Water District of Southern California, and West Basin's customer agencies. This project duration is for a period of two years but can be extended with additional funding.

Pro	ject Type											
									Water			
DAC	Conservation	Priority by Agency	ID#	Proponent Agency	Proponent Name	Title	Start Date	Water Supply (AFY)	Quality (MGD)	Ground Water (AFY)	Habitat (acres)	Description
X	X	Ageney	1250	West Basin Municipal Water District	Leighanne Reeser	Complete Restroom Retrofit Program	1/1/2009	274	0	0	0	This program provides free hardware devices for commercial and public facility restrooms including high-efficient toilets, waterless urinals, and sensor faucets. This program is currently being implemented with a State grant but on a small scale. Additional funding is needed in order to retrofit more locations and ultimately save more water. This project will have the involvement of the local businesses and public facilities within West Basin's service area. Their indoor restroom devices will be upgraded with the highest efficiency devices including high-efficiency toilets, waterfree or waterless urinals, and sensor faucets. This program is already being implemented in approximately 248 throughout restrooms the service area and has been so successful that we would like to extend the program to include more businesses and public facilities. This program not only provides the devices free of charge, but also the installations.
X				West Basin Municipal Water District	Leighanne Reeser	Dry-weather Runoff and Stormwater Capture Study	1/1/2009	0	0	0	0	This project would look at alternative uses of dry- weather runoff and stormwater that can potentially be captured, treated to reduce contaminants and beneficially reused where feasible rather than sending it to the rivers and ocean. There are major water quality issues within the region and cities are mandated to comply with TMDL levels. Often this task is daunting due to issues of timing, funding, and resources to meet the TMDL regulations. This study would look at ways to capture the polluted runoff, treat it, and then reuse the water for irrigation, groundwater recharge, and other water supply uses. This is an important study for our service area because it can be a model for other areas to use and the fact that our service area lies along the coast, not only are the rivers affected but the Santa Monica Bay receives all the untreated runoff.

Pro	ject Type								Ben	efits		
DAC	Conservation	Priority by	10.4	Brononont Agonov	Proponent Name	Title	Start Date	Water Supply (AFY)	Water Quality (MGD)	Ground Water (AFY)	Habitat (acres)	Description
DAC	X	Agency		Proponent Agency West Basin Municipal Water District	Proponent Name Leighanne Reeser	Extension of Recycled Water Lateral to Palos Verdes Peninsula	1/1/2009	(AFY) 875	(MGD) 0	0	0	This project expands the West Basin Water Recycling distribution line from the city of Torrance to the Palos Verdes Peninsula to landscaped areas such as golf courses, parks and school fields for a potential of 875 acre-feet per year. Potential sites include: New Horizons Golf Course (10AFY),Hickory Elementary School (7AFY), Hickory Park (11 AFY), Zamperini Field (40AFY), Nansen Field (3 AFY), DePortola Park (28 AFY), Alta Loma Park (11 AFY), Rock Bluff Park (2AFY), Howlett Park (3AFY), Charles Wilson Park (32 AFY), Madrona Middle School (7AFY), Palos Verdes Golf Course (188 AFY), Landfill (150 AFY), Rolling Hills Country Club (100 AFY), Green Hills Memorial (233 AFY), and Naval Reservation (50 AFY)for a total of 875 AFY.
	X			West Basin Municipal Water District	Leighanne Reeser	Food Facilities Audit, Incentive and Training Program (Cash for Kitchens)	1/1/2009	15	0	0	0	This program would target large to medium sized food service facilities to market water efficient equipment to replace older existing equipment and promote water saving training. West Basin proposes to conduct audits of the food service facilities to provide the customer with a quick summary of water saving and energy saving recommendations. Some of the recommendations can be implemented immediately, such as minor leak repair, aerator and pre-rinse spray head replacement while others would be long term changes including investment in equipment upgrades. Recommendations could also include conducting training in both English and Spanish to assist staff to use existing equipment as efficiently as possible.

Pro	ject Type											
									Water			
DAC	Conservation	Priority by	חו#	Proponent Agency	Proponent Name	Title	Start Date	Water Supply (AFY)	Quality (MGD)	Ground Water (AFY)	Habitat (acres)	Description
X	X	Agency 3 (Conserv.)		Proponent Agency West Basin Municipal Water District	Proponent Name Leighanne Reeser	Hotel Restroom Retrofit Program	Start Date 1/1/2009	(AFY) 132.7	(MGD) 0	0	0	Description The project will assist hotel facilities financially to encourage them to retrofit older, inefficient fixtures. Fixtures can be found in lobby areas (usually flushometer type toilets), in-room bathrooms (tank- type toilets) and in staff areas (back of the house, type of toilet may vary). Technical assistance will be provided to hotel management applying for rebate incentives. MWD provides a baseline incentive of \$165 for High-Efficiency Toilets and \$400 for Ultra Low to Zero-Water Urinals. Additional incentives will be funneled through MWD's existing channels to streamline the process for customers and ensure readiness to implement. This project would increase water-use efficiency in the West Basin service area and would also help meet BMP #9, Conservation Programs for CII accounts would be addressed through this project. The project will also increase public awareness of water conservation practices and make device retrofit more accessible to hotel facilities in West Basin's service area.
	X			West Basin Municipal Water District	Leighanne Reeser	Irrigation Equipment/Water Budget Program	1/1/2009	58	0	0	0	This program offers landscape audits and customized incentives for matching heads, pressure regulators and weather-based irrigation controllers for customers including multi-family, commercial, industrial and institutional and provides water audits on the landscape sites. The water budgets will be created and the budget and a listing of recommended equipment upgrades will be given to the large landscape customers. The targets sites will have a landscape area of one acre or greater. This project is currently a pilot project that West Basin is conducting with funding assistance from Metropolitan Water District. The Pilot project will take place within one year, through end of 2008. Since this project has been successful, additional funding will be needed to expand this project to more participants that will result in additional water savings.

Pro	ject Type								Ben	efits	
DAC	Conservation	Priority by Agency	ID#	Proponent Agency	Proponent Name	Title	Start Date	Water Supply (AFY)	Water Quality (MGD)	Ground Water (AFY)	Habit (acre
X			13736	West Basin Municipal Water District	Leighanne Reeser	Ocean-Friendly Landscape Program	1/1/2009	0	0	0	0
	X	3 (Recycled Water)		West Basin Municipal Water District	Leighanne Reeser	Recycled Water Extension to the Dominguez Refineries in the Port of LA	1/1/2010	10000	10	0	0
X	X			West Basin Municipal Water District	Leighanne Reeser	Residential High-Efficiency Clothes Washer Rebate Program	1/1/2009	36	0	0	0

labitat	Description
acres) 0	Description West Basin has formed a formal partnership with the Surfrider Foundation to develop an innovative program called the "Ocean Friendly" Program. This program will be implemented throughout West Basin's service area and will include the implementation of native landscape demonstration gardens and classes that teach residents the importance of having a drought-tolerant landscape. The "Ocean Friendly" classes will not only teach residents the importance of having an "Ocean Friendly†landscape that uses innovative techniques and materials to reduce runoff and water, but incentives will be provided for the purchase of "smart" irrigation controllers that both conserve water and reduce urban runoff. The
	program also involves installation of smart irrigation controllers for large landscapes greater than 1 acre in size.
0	This project proposes to extend the existing West Basin Water Recycling System distribution line through Carson and the LA Harbor area. It will connect major refineries and industry. This project will include a nitrification treatment in Carson. This distribution line will also connect to another portion of West Basin's service area that will supply recycled water to the Palos Verdes Peninsula area. The Port of Los Angeles has several refineries that would benefit from using recyled water instead of groundwater and/or imported water supplies. The recycled water can be treated to high purity that can be used in the refinery processes.
0	This program provides rebates to residents for high- efficiency clothes washer machines. This program has both water and energy savings components. The Metropolitan Water District of Southern California currently provides rebates in the amount of \$135 per washer machine. This program would continue the rebates but matching Metropolitan's amount of \$135 for a total amount of \$270 per washer machine. This program would provide 2,000 rebates per year at approximately \$270,000 for a total of \$540,000. The water savings amount to approximately 36 acre-feet per year.

Pro	ject Type									efits	
DAC	Conservation	Priority by Agency	ID#	Proponent Agency	Proponent Name	Title	Start Date	Water Supply (AFY)	Water Quality (MGD)	Ground Water (AFY)	Hab (acr
X	X		13823	West Basin Municipal Water District	Leighanne Reeser	Residential Indoor Plumbing Retrofit Kits	1/1/2009	588	0	0	C
X	X	2 (Conserv.)		West Basin Municipal Water District	Leighanne Reeser	Schools & Parks Retrofit in the Disadvantaged Communities	1/1/2009	203	0	0	(

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0	West Basin would like to expand its exiting project to educate and mobilize a larger student population to conduct 20,000 residential water and energy audits and to install water and energy retrofit devices in their households over a 2 year period. The total project cost is \$932,960 to supply educational device retrofit kits to 20,000 students during the 2-year period. The average cost for each audit and retrofit kit is \$43.00. Typically, this includes teacher resource materials, audit directions, recordkeeping booklet and water saving devices including 1 high-efficiency shower head, 1 kitchen faucet aerator, 2 bathroom faucet aerators, 1 packet of leak detection tablets, 1 leak detector calculator, 1 flow rate test bag and 1 water temperature check card. Energy saving devices typically includes 1 CFL bulb, 1 Limelite night light, and 1 Filtertone alarm. In support of educating students on the connection between water and energy savings, Edison and The Gas Company will contribute matching funding
0	West Basin has already been working with the DAC areas (school districts and park offices) to quantify the existing water using devices for both the indoors and outdoors: for the schools, the indoor devices that are in the restrooms, cafeterias and other facilities and the outdoor devices used for the landscaped areas; and for the parks, the indoor devices for the restroom facilities and building facilities, and outdoor devices for the landscaped areas. There are a total of 10 parks, 48 public and 34 private schools within the project's area. This project is \$1,262,030 and includes 431 high-efficiency toilets, 140 waterless urinals, 489 faucet aerators, 50 waterbrooms, 5 connectionless steamers, 41 pre-rinse spray heads, 100 flow restrictors, 12 showerheads, 40 conductivity controllers, 41 controllers, 289 irrigation nozzles, water audits/budgets for each site, and California Friendly Landscape Classes for the maintenance personnel.

Pro	ject Type	-								Benefits						
DAC	Conservation	Priority by Agency	ID#	Proponent Agency	Proponent Name	Title	Start Date	Water Supply (AFY)	Water Quality (MGD)	Ground Water (AFY)	Habit (acre					
X	X		1270	West Basin Municipal Water District	Leighanne Reeser	Supermarket Retrofits	1/1/2009	12	0	0	0					
	X		4800	West Basin Municipal Water District	Leighanne Reeser	Temporary Seawater Demonstration Project	1/1/2009	560	0.5	0	0					
X	X		1268	West Basin Municipal Water District	Leighanne Reeser	The Green Garden Program	1/1/2009	67	0	0	0					

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cres)	Description
0	This is a new program that will provide and install free pre-rinse spray valves, high-efficiency toilets, waterfree urinals, and waterbrooms for supermarkets and food stores. This program has been identified in West Basin's Conservation Master Plan as having the potential to conserve 12 acre-feet per year. West Basin would partner with its customer agencies to identify facilities to participate and help pay for the local cost share.
0	This Demonstration Facility will provide the necessary research and data to construct a full- scale 25 million gallons per day seawater desalination facility. The Temporary Demonstration Facility will treat approximately 0.5 mgd of seawater to test the treatment process. This project will demonstrate environmentally acceptable ways to intake ocean water for desalination. This project will demonstrate intake structures including subsurface intakes and wedgewire screens.
0	West Basin will implement the "Green Garden Program,†a Residential Landscape Survey and Smart Irrigation Controller Exchange Program to customers within its service area. This program involves four phases: pre-installation site surveys, Smart Irrigation Controller Exchange Events (including a 1-hour training session), a post- installation site visit, and water savings verification research. The pre-installation site survey will pre- qualify the resident for an irrigation controller and rotating sprinkler nozzles and provide irrigation and landscape recommendations. The Exchange Event will allow the pre-qualified resident to exchange their old controller for a new controller, receive up to 11 nozzles and a 1-hour training course on programming the controller. The post-installation site visit verifies that the new controller and the rotating nozzles were installed properly and if they weren't, the vendor will correct the problem. This program is expected to generate 67 acre-feet per year of water savings.

Pro	ject Type Benefits											
DAC	Conservation	Priority by Agency	ID#	Proponent Agency		Title	Start Date	Water Supply (AFY)	Water Quality (MGD)	Ground Water (AFY)	Habitat (acres)	Description
X		1 (Conserv.)		Municipal Water District	Leighanne Reeser	Turf Buy-Back Program	1/1/2009	0	0	0	0	This project will provide incententives for owners to remove their turf lawn for \$1.00 per square foot. They can replace their lawn once removed with native landscaping, porous cover, artificial turf, rocks, etc. There will be follow-up visits to ensure that the owner complies with the regulations of the program and do not replace the turf with new turf cover. Not only will this program reduce water use, it will also reduce water runoff since 70% of wtaer applied to turf runoss the landscape and into the storm drains. Runoff from landscapes contribute significantly to the TMDL problem in Santa Monica Bay and its tributaries. This project will help to address those issues while saving water at the same time. This project is very much needed within our service area because the cities are adjacent to the Santa Monica Bay where runoff enters and pollutes the ocean. The \$1.00 pre square foot; the incentive is higher for a resident to take advantage of.
X	X			West Basin Municipal Water District		Water & Energy Efficiency Multi-Family Program	1/1/2009	243	0	0	0	This program will directly install both water and energy efficiency devices in multi-family dwellings. Replacement includes: 3,000 HETs (1.28 gallons per flush), that replace older 3 †5 gallon toilets; 9,000 13Watt twist CFL bulbs; 3,000 (1.5 GPM) Low-Flow Showerheads, 3,000 (1.5 GPM) Kitchen Aerators and 3,000 (1.0 GPM) Bathroom Aerators. The program will also disseminate conservation education literature, thus providing a "full service†water and energy efficiency program. Based on the demographics and rate of natural replacement and saturation data collected within West Basin's service area, there is an opportunity to reach over 77,000 multi-family dwelling units in West Basin and roughly 10,000 in the City of Torrance. 3,000 HETs will save an estimated 176 AF of water per year. Also, additional water will be saved (335 AF over the useful life) by providing multi-family dwelling units with water conservation educational materials, and water efficient showerheads and aerators.

Pro	oject Type		Benefits									
DAC	Conservation	Priority by Agency	ID#	Proponent Agency	Proponent Name	Title	Start Date	Water Supply (AFY)	Water Quality (MGD)	Ground Water (AFY)	Habitat (acres)	Description
	X			West Basin Municipal Water District	Leighanne Reeser	West Coast Basin Groundwater Aquifer Protection Project	1/1/2009	50000	45	0	0	This project will provide reliability of the groundwater supplies in the West Coast Basin Groundwater Aquifer. This project proposes to upgrade the existing Barrier with new equipment in order to protect approximately 50,000 AFY of water from seawater intrusion. Because southern California is highly dependent on imported water supplies, if these supplies were at risk, the constituents within our service area will rely on West Basin MWD to provide adequate amounts of water. To ensure water reliability, West Basin relies on the groundwater aquifer to supply water for its service area. This aquifer needs to be protected from seawater intrusion.
X	X			West Basin Municipal Water District		Zero-Runoff Street Median Water Conservation Program	1/1/2009	83	0	0	0	The Zero-Runoff Street Median Water Conservation Program (Program) will specifically target street medians by developing a simple grant program within West Basin's service area to reduce water use and improve irrigation practices on street medians. Cities will be asked to propose designs to retrofit existing street medians using the "zero- runoff†concept. This concept replaces existing median vegetation or irrigation with any of the following components to provide a zero net runoff: artificial turf, porous cover, native and/or drought tolerant plants, drip irrigation, and/or Smart Irrigation Controllers. Under this pilot program, a team convened by West Basin will review proposed designs and fund grant applications that provide the maximum reduction in water use (with a minimum reduction of 50%) and zero runoff. It is proposed that fifty percent of the costs be awarded up-front and the other 50% of the costs reimbursed upon project completion.

Project Type								Benefits				
DAC	Conservation	Priority by Agency		Proponent Agency	Proponent Name	Title	Start Date	Water Supply (AFY)	Water Quality (MGD)	Ground Water (AFY)	Habitat (acres)	Description
	X	1 (Recycled Water)	372	West Basin Munipical Water District	Leighanne Reeser	Water Recycling Facility- Phase V Expansion	1/1/2009	4500	4.5	0	0	This project is needed to offset imported water and groundwater supplies with the use of recycled water. Increased use of recycled water is needed in this area because of the demands put on imported water and groundwater supplies; and therefore water reliability is the goal of West Basin MWD. The project proposes to provide 100% recycled water for injection into the West Coast Barrier. West Basin MWD currently injects 75% of recycled water and 25% of imported water into the Barrier. This expansion will provide a total of 17,500 AFY of potable water supply. This project reduces the amount of imported water injected into the barrier by 25%, which is between 2.5 and 5.0 MGD. In addition, Chevron and El Segundo Power require recycled water for their processes in the amount of 0.43mgd and 0.32mgd, respectively. Two of the three sites currently receive recycled water. Chevron Refinery receives 9.3 mgd and the West Coast Basin Barrier receives 15 mgd.