

ENGINEER'S REPORT
TO THE
BOARD OF SUPERVISORS
OF THE
RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT
ON THE
NPDES PROGRAM
FOR THE
WHITEWATER WATERSHED
BENEFIT ASSESSMENT AREA
JULY 2009

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INTRODUCTION

In 1987, Congress amended the Federal Clean Water Act (CWA) to require public agencies which serve urbanized areas with a population greater than 100,000 and other designated areas to obtain permits to discharge urban stormwater runoff from municipally owned drainage facilities including streets, highways, storm drains and flood control channels. In November 1990, the United States Environmental Protection Agency (USEPA) promulgated enforceable regulations establishing Municipal Stormwater Permit requirements under its National Pollutant Discharge Elimination System (NPDES) Program. In California, USEPA has delegated its NPDES permitting authority to the State Water Resources Control Board (SWRCB). The SWRCB issues and enforces NPDES Municipal Separate Storm Sewer System (MS4) Permits through its nine California Regional Water Quality Control Boards (CRWQCBs).

The Riverside County Flood Control and Water Conservation District (District) service area encompasses portions of three major watersheds (drainage areas): the Santa Ana, the Santa Margarita and the Whitewater. The discharge of stormwater from municipal storm drainage systems within each of these three watersheds is regulated pursuant to an NPDES MS4 Permit (NPDES Permit) administered by a separate CRWQCB. **The District must comply with the provisions of these NPDES Permits in order to legally operate and maintain its flood control and drainage system infrastructure.** The USEPA and the CRWQCB can impose significant penalties for non-compliance as high as \$32,500 per day per violation. In addition, private citizens can pursue enforcement actions under the Federal CWA.

In the case of the Whitewater Watershed, the District, in conjunction with the County of Riverside (County), Coachella Valley Water District (CVWD), and the cities of Banning, Cathedral City, Coachella, Desert Hot Springs, Indian Wells, Indio, La Quinta, Palm Desert, Palm Springs and Rancho Mirage (Cities), jointly submitted the required Part 1 application for an NPDES Permit on June 11, 1992 to the CRWQCB - Colorado River Basin Region (Regional Board). Part 2 of the NPDES Permit application was submitted to the Regional Board on May 17, 1994. The Part 1 NPDES Permit application consisted primarily of a compilation of existing District, County, CVWD and City information such as land use, facilities, discharge information, fiscal resources, legal authority, etc. The Part 2 NPDES Permit application outlined the Permittees' (District, County, CVWD, and Cities) proposed Stormwater Management Program and corresponding implementation schedules.

The Regional Board adopted the initial NPDES Permit (Permit) for the Whitewater Watershed on May 22, 1996. The initial Permit expired on May 22, 2001 and as required by the Permit renewal procedures, the Permittees' submitted a Report of Waste Discharge (ROWD) to the Regional Board that lead to the subsequent adoption of Permit No. 01-077 on September 5, 2001. Permit No. 01-077 incorporates the Permittees' proposed Stormwater Management Plan (SWMP) which was developed during the initial Permit term along with additional management programs that were subsequently developed; additionally, the Permit identifies certain additional activities that the Permittees must pursue in accordance with specific time schedules in order to achieve compliance with the Permit and the Clean Water Act. On May 21, 2008, the Regional Board adopted the region's third term permit, Order Number R7-2008-0001 (2008 Permit). This new Permit seeks to improve programs established in the previous term.

From the beginning, the Permittees' Stormwater Management Program has been guided by the following principles:

1. Utilize existing municipal departments/programs to meet NPDES Permit requirements whenever possible.

2. Minimize duplication of effort through coordinated Permittee compliance actions.
3. When necessary, develop new or enhanced stormwater management programs (Best Management Practices) that are both cost-effective and acceptable to the public.

The Whitewater Watershed Benefit Assessment Area (WWBAA) was established pursuant to District Ordinance No. 14 on May 14, 1991 (copy attached - see Appendix B). The WWBAA was formed to offset the District's program and administrative costs associated with the development, implementation and management of identified stormwater management activities required by the federally mandated NPDES Permit Program. The District must continue to develop and implement these stormwater management activities in order to legally operate and maintain its flood control and drainage facilities. A map showing the boundaries of the WWBAA is attached hereto as Appendix C.

The cost of the District's various Permit compliance activities fluctuates from year to year. Although some expenses do not change significantly on a yearly basis, certain costs are cyclical (e.g., preparing Permit applications and negotiating Permit provisions), while expenses associated with collecting water samples and laboratory analysis may vary according to the amount of rainfall occurring in a given year or in response to certain information requests from the Regional Board. Costs associated with the development and production of public education materials are not always incurred on a FY basis. Occasionally, additional consultant services may be needed to assist the District with the development of a particular Permit requirement or program activity. Also, certain activities or programs may be expanded or curtailed from time to time and, occasionally, new programs or activities must be developed and implemented.

Currently, the regulation and management of stormwater runoff is a topic of increasing interest amongst the public, municipalities, regulatory authorities and legislators. Although new laws and/or regulations could result in changes to the assessment rate in future years, **the proposed assessment rate for FY 2009-2010 is equal to or less than the assessment rate that was enrolled and levied for FY 1996-1997 and all subsequent years.**

APPORTIONMENT METHODOLOGY

WWBAA assessments are apportioned on the basis of proportionate stormwater runoff generated by each parcel. This method of assessment is consistent with State law and the District Act. The amount of benefit is computed based on parcel size (acreage) and use classification. A single-family residential structure on a 7,200 square foot lot (1/6 of an acre) is defined as one benefit assessment unit (BAU). The BAUs for other types of land use are calculated in proportion to the amount of runoff generated by a single-family residence on a 7,200 square foot lot.

In comparison with a typical single family residence, industrial and commercial properties typically generate more stormwater runoff and higher pollutant loads on a per acre basis. Thus, commercial/industrial parcels are assessed at a higher rate per acre than residential parcels. Because agricultural discharges are currently exempt under the NPDES Permit regulations, parcels within the WWBAA that are used for agricultural purposes are exempted from the assessment. Vacant undeveloped parcels are not assessed because they are considered to generate no increase in pollutant loading. Additionally, certain large undeveloped tracts of land such as Federally- or State-owned forest are excluded from the WWBAA. A more detailed discussion of the apportionment methodology is presented in Appendix B.

CURRENT YEAR ASSESSMENTS (FY 2008-2009)

In July 2008, the District's Board of Supervisors confirmed a benefit assessment rate for FY 2008-2009 of \$3.63 per BAU. Following is a summary of the FY 2008-2009 assessments:

Rate	Billed Parcels	BAUs	Assessments	Corrections	Amount Paid*
\$3.63	51,442	85,031	\$308,660.98	\$0.00	\$278,638.71

* Through May 31, 2009

Property owners may request a review of their assessment(s) by contacting the District. District staff considers each request by reviewing information such as assessor's parcel maps, aerial photographs, and, when necessary, conducting site visits. The Auditor/Controller is notified of any needed corrections and a new tax bill is issued or, in cases where the assessment has been paid, a refund is made. Last year, no corrections were processed.

RECOMMENDED BENEFIT ASSESSMENT RATES (FY 2009-2010)

The District recommends that for FY 2009-2010, the WWBAA assessment rate remain unchanged at \$3.63 per BAU. This BAU rate would result in an equivalent charge per acre for the following land uses:

<u>Group</u>	<u>Land Use Category</u>	<u>BAU/Acre</u>	<u>Assessment Rate*</u>
A	Commercial, Industrial	12	\$43.56/acre
B	Apartments/Mobile Home Parks, Churches and Schools	9	\$32.67/acre
C	Single-Family Residential	6**	\$21.78/acre
D	Agricultural/Vacant Undeveloped	Exempt	\$0.00/acre
E	Golf Courses	0.10	\$0.36/acre
F	Undeveloped Portions of Parcels	0.05	\$0.18/acre

* Refer to Appendix B for a detailed discussion of the Benefit Assessment methodology.

** 1 BAU per single-family residence, assuming six equally sized residential parcels per acre.

The projected revenue for FY 2009-2010, using the proposed benefit assessment rate of \$3.63 per BAU is as follows:

Rate	Parcels*	BAUs	Assessment*	Projected Revenue**
\$3.63	51,442	85,031	\$308,660.98	\$285,511.41

* Based on preliminary Assessor's information

** Assumes a 7.5% delinquency rate

The projected revenue along with a portion of the end of year balance from FY 2008-2009 will fund the District's NPDES Program for the Whitewater Watershed area in FY 2009-2010. The proposed FY 2009-2010 budget is presented in Appendix A.

During the early years of the NPDES Program, there were many uncertainties regarding start up costs (consultant costs, amount of sampling that would be required, overall program scope, etc.) since the program was new for both the regulatory authorities and the Permittees. Consequently, the initial assessment rates were set conservatively to ensure that all Permit obligations could be met. To date, the District has been able to successfully negotiate reasonable Permit conditions and implement its Stormwater Management Program in a manner that has retained a portion of the program's initial budget surpluses. As a result, a modest fund balance has been maintained since the benefit assessments were first levied in FY 1991-1992. The District is gradually reducing the fund balance by maintaining the current assessment rate while sustaining expenditure levels that are slightly above projected revenues. It is expected that the fund balance will effectively be depleted during FY 2009-2010. It should also be noted here that the current trend in California is toward more stringent regulation of municipal stormwater runoff. Thus, it is expected that the District's Permit compliance costs will increase over the next few years.

ASSESSMENT ROLL

The WWBAA Assessment Roll provides a listing by Assessor's Parcel Number of the proposed FY 2009-2010 Benefit Assessment to be levied on each parcel of property in the WWBAA. The Assessment Roll is identified as Appendix D and incorporated herein by this reference. This Engineer's Report along with the WWBAA Assessment Roll will be placed at the following locations for review by the public:

Clerk of the Board
of Supervisors
4080 Lemon Street, 1st floor
Riverside, CA 92501

Riverside County Flood Control
and Water Conservation District
1995 Market Street
Riverside, CA 92501

City of Palm Springs
3200 E. Tahquitz Canyon Way
Palm Springs, CA 92262

City of Banning
99 E. Ramsey Street
Banning, CA 92220

The Engineer's Report may also be viewed or downloaded at
<http://floodcontrol.co.riverside.ca.us/content/stormwaterNPDES.htm>

NPDES PROGRAM HIGHLIGHTS (FY 2008-2009)

For the year ending June 30, 2009, the following tasks were accomplished:

- A. Continued development with the Regional Board on the 2008 Permit compliance documents with the support of URS Corporation. New compliance programs included development and implementation of a Water Quality Management Plan for New Development and Redevelopment in the Whitewater River Region of Riverside County. The new NPDES MS4 Permit was adopted on May 21, 2008. The compliance documents are due to the Regional Board on June 29, 2009.
- B. Continued to assist the Permittees on the Coachella Valley Storm Water Channel (CVSC) Total Maximum Daily Load (TMDL) for Bacterial Indicators with the Colorado River Region RWQCB. Specifically, the TMDL regulates discharges from Riverside County and the City of Coachella.
- C. The District continued to meet with several water agencies to determine their interest in establishing an Integrated Regional Watershed Management Plan for the Coachella Valley. The plan would be a prerequisite to bringing Proposition 84 IRWM grant funds to the region. Such grant funds could be used to assist with TMDL implementation, NPDES program implementation, or other environmental issues facing the region including surface and groundwater management, habitat conservation, etc.
- D. Continued presentation of semi-annual municipal employee-training programs to provide a general orientation of the Municipal Stormwater Program including topics such as stormwater regulations and permits, storage and disposal of hazardous materials, parks and recreation activities, animal control facilities, vehicle and equipment cleaning, outdoor cleaning activities, pesticides/fertilizers, painting, dumpster areas, etc. to all Whitewater Permittees' staff. Fall training sessions were held at the Palm Springs Convention Center and Spring training sessions were held at the CVWD to provide close proximity to Permittees.
- E. Continued implementation of a Commercial/Industrial Compliance Assistance Program to conduct focused outreach to restaurants, automotive repair shops and certain other commercial and industrial establishments to encourage implementation of appropriate stormwater Best Management Practices and facilitate consistent and coordinated enforcement of local stormwater quality ordinances.
- F. Continued financial support to area-wide Stormwater Pollution Prevention Programs, including Hazardous Materials Response (HAZMAT) Team, the Household Hazardous Waste (HHW) collection events and "ABOP" (Anti-freeze, Batteries, Oil, and Paint) program.
- G. Continued distribution of New Development Guidelines and a Best Management Practices selection guide to Permittees and consulting engineers.
- H. Continued collection and analysis of water quality samples in accordance with the Permit's Monitoring and Reporting Program.
- I. Preparation of a comprehensive Annual Report to the Regional Board.

- J. Ongoing promotion (advertising) of proper household hazardous waste disposal at special hazardous waste collection events and at the Palm Springs "ABOP" (Anti-freeze, Batteries, Oil, and Paint) collection center through placement of numerous newspaper advertisements. Attending the Date Festival, Tamale Festival, and other community events to provide information and brochures on stormwater pollution prevention, recycling and proper disposal of household hazardous waste.
- K. Continued partnership with the Riverside-Corona Resource Conservation District to present the Stormwater Pollution Prevention Patrol Program in elementary school classrooms and conduct slide-show presentations on stormwater pollution prevention to local service clubs, home-owners associations and civic groups throughout the Coachella Valley.
- L. Continued partnership with the Riverside-Corona Resource Conservation District to develop and present a series of Home Gardening Workshops at local nurseries and garden centers to promote alternatives to fertilizer and pesticide usage.
- M. Continued distribution of four focused BMP Brochures targeting Construction Activities, Restaurant/Food Service Industry, Mobile Cleaning Services and Automotive Service Industry.
- N. Extension of a regional "Only Rain Down the Stormdrain" Public Education Program radio advertising campaign.
- O. Participation in two thirty-minute episodes of "Greenworks" an environmental talk show aired on Channel 18 in the Desert and KVCR in western Riverside County.

PROGRAM/WORK ITEMS (FY 2009-2010)

The 2008 Permit adopted on May 21, 2008, will require the Permittees to update the elements outlined in that Permit. This will require revision or expansion of the Permittee's Stormwater Management Program (SWMP). Work items outlined in the 2008 Permit will be developed during FY 2009-2010.

The following program activities will be emphasized for the coming year:

GENERAL CONSTRUCTION PERMIT

A draft General Construction Permit has been issued as part of the renewal of the Permit. The proposed Permit as currently written is exponentially more stringent than the current Permit. The District, as the Principal Permittee for all three MS4 Permits, has and will continue to take the lead on coordinating with the State and other interested parties on shaping the proposed Permit.

LID PROJECT

In summary, the project proposes to construct, test and evaluate a variety of integrated management practices (IMPs) that serve as hydraulic and hydrologic controls consistent with the low impact development (LID) planning and design approach. In addition, the project proposes monitoring and testing components.

The project will also provide a facility that can be used for demonstrating and evaluating the effectiveness of LID IMP techniques in southern California. The centralized location is convenient for training residents, regulators, developers, municipal employees, engineers and other interested stakeholders from many southern California communities. Construction is expected to begin in the fall.

PROGRAM MANAGEMENT

As a Principal Permittee, the District conducts certain activities to coordinate the efforts of the other Permittees and facilitate compliance with the Permit. These activities include chairing monthly meetings of the Permittees' NPDES advisory committee (Desert Task Force), administration of area-wide programs (e.g., public education, household hazardous waste collection, hazardous material spill response, stormwater sample collection and analysis), ongoing program development and preparation of the Annual Report to the Regional Board.

BEST MANAGEMENT PRACTICES

The 2008 Permit required the Permittees' to update their Stormwater Management Plan (SWMP) which identifies various activities and programs BMPs which the Permittees are to develop and implement, either collectively or as individual agencies. The Permittees' compliance with the Permit is, in part, determined by their timely implementation of these BMPs. With its adoption on May 21, 2008, development or enhancement of the area's IC/ID Program, New Development/Redevelopment Water Quality Management Plan (WQMP) Guidelines and Template, Private Construction Inspection Program will commence. The Permit required the new SWMP to be effective June 15, 2009. The SWMP is required to be submitted to the Regional Board on June 29, 2009. Once the Regional Board receives the SWMP, they will hold a hearing to approve it. The District expects to spend the balance of the fiscal year working with the Board to approve the SWMP and assisting the Permittees with addressing issues and

concerns that arise as part of the implementation of the new compliance programs. The District will also continue its involvement in CVSC TMDL monitoring and implementation programs on behalf of the Permittees.

AREA-WIDE PROGRAMS

As "Principal Permittee" the District provides funding for several key "area-wide" BMP programs, including:

Public Education

Coordination and oversight of the area-wide NPDES public education and outreach efforts, including: public outreach events, school and adult education programs, printed brochures and commercial media campaigns. Continued development and distribution of focused educational outreach materials for specific industries and businesses such as restaurants, auto repair shops, mobile cleaning businesses, and other commercial and industrial activities that are potential sources of stormwater pollution.

Hazardous Materials Emergency Spill Response

Provides financial support to the County Fire Department's Hazardous Materials Emergency Spill Response Team to ensure that hazardous chemical incidents (spills or illegal dumping) are responded to quickly and effectively cleaned up.

Household Hazardous Waste Collection / ABOP

Providing financial support to the County Waste Management Department to support ongoing mobile Household Hazardous Waste (HHW) collection events and operation of ABOP (Antifreeze, Batteries, used motor Oil, and latex Paint) that provide local residents with opportunities to properly dispose of HHW.

Compliance Assistance Program

Continuation of a partnership with the County Environmental Health Department to conduct outreach and education to specific commercial establishments and industrial facilities in conjunction with existing facility inspection programs. In addition, this program will provide feedback through survey forms concerning the compliance status of commercial and industrial facilities to both Permittees and the Regional Board.

WATER QUALITY MONITORING

In collaboration with the CVWD, a Co-Permittee, conduct wet weather and dry weather sample collection and analysis in accordance with the 2008 Permit's Monitoring and Reporting Program (Section L). The District will also continue to improve the reporting of water quality monitoring activities and results.

CONCLUSIONS AND RECOMMENDATIONS

The area-wide Municipal Stormwater Program for the Whitewater Watershed has been implemented in an efficient, cost-effective manner through the ongoing cooperative efforts of the District, the Co-Permittees, the Regional Board, the Riverside County Fire Department and Riverside County Environmental Health Department. The District's NPDES Program activities, which are funded by these WWBAA assessments, are required to comply with the current NPDES Permit for the Whitewater Watershed and enforceable provisions of the California Water Code and the Federal Clean Water Act which regulate the discharge of stormwater from municipally owned storm drains and flood control facilities. These mandatory stormwater management program activities are an essential component of the District's continuing operation and maintenance of its critical public safety facilities; therefore, the following action is recommended:

Levy a Flood Control Benefit Assessment in the Whitewater Watershed Benefit Assessment Area at an unchanged rate of \$3.63 per benefit assessment unit for the FY 2009-2010.

GLOSSARY

ABOP – A permanent collection facility that accepts Anti-freeze, Batteries, Oil and latex Paint for recycling and/or proper disposal

BAU – Benefit Assessment Unit

BMP – Best Management Practice

CAP – Compliance Assistance Program

CRWQCB - California Regional Water Quality Control Board

CVWD - Coachella Valley Water District

CWA – Clean Water Act

District – Riverside County Flood Control and Water Conservation District

FY – Fiscal Year

HAZMAT Team – Hazardous Materials Emergency Response Team

HHW – Household Hazardous Waste. Commonly used household chemicals that may be toxic or require special handling for proper disposal, e.g., automotive fluids, pesticides, fertilizers, paint, cleaning products, pool chemicals, etc.

NPDES – National Pollutant Discharge Elimination System

Order R7-2008-0001 – Colorado River Basin Regional Board Order adopted on May 21, 2008

Regional Board - California Regional Water Quality Control Board – Colorado River Basin Region

SWMP – Storm Water Management Program

WWBAA – Whitewater Watershed Benefit Assessment Area

SWRCB – State Water Resources Control Board

USEPA – United States Environmental Protection Agency

WQMP – Water Quality Management Plan

APPENDIX A

Proposed NPDES Program Budget for FY 2009-2010

APPENDIX A

WHITEWATER WATERSHED BENEFIT ASSESSMENT AREA PROPOSED NPDES PROGRAM BUDGET FOR FY 2009-2010

STAFFING

Staff Salaries	\$217,600
Staff Benefits	88,800
Staff Standby/Differential/Overtime Pay	<u>5,000</u>

Subtotal **\$311,400**

ADMINISTRATION & OVERHEAD

Administration & Overhead	\$90,280
County Counsel Services	1,000
Equipment Lease / Rental	0
Vehicle Mileage	7,010
Photocopying / Reproduction	2,000
Miscellaneous (Photography, Communications, Supplies, etc.)	<u>4,430</u>

Subtotal **\$104,720**

GENERAL CONSULTANT SERVICES

Technical / Regulatory Support	\$38,500
Benefit Assessment Services	<u>3,250</u>

Subtotal **\$41,750**

PUBLIC EDUCATION PROGRAM

Education Program: Contract Services / Presentations	\$39,040
Education Program: Production / Materials / Media	<u>26,210</u>

Subtotal **\$65,250**

WATER QUALITY MONITORING PROGRAM

Laboratory Services/Monitoring	\$57,300
Small Tools & Equipment	<u>600</u>

Subtotal **\$57,900**

POLLUTION PREVENTION PROGRAMS

HAZMAT Response Team (Fire Dept.)	\$36,500
Compliance Assistance Program (Environmental Health Dept.)	64,080
Household Hazardous Waste Program (Waste Management Dept.)	30,000
TMDL Compliance Agreements	<u>0</u>

Subtotal **\$130,580**

PROGRAM SUBTOTAL

\$711,600

CONTINGENCY (10%) **\$71,160**

Assessor's/Treasurer's Office Line Item Charges (\$0.45/parcel) \$23,149

TOTAL EXPENDITURES **\$805,909**

FUND BALANCE FROM FY 2008-2009 (est.) \$470,660

PERMITTEE REIMBURSEMENTS \$356,641

PROJECTED REVENUE \$285,511

CASH AVAILABLE **\$1,112,812**

PROJECTED FUND BALANCE **\$306,903**

APPENDIX B

**RCFC&WCD Ordinance No. 14
(May 14, 1991)**

APPENDIX C

Map of Whitewater Watershed Benefit Assessment Area

APPENDIX D

WWBAA Assessment Roll (FY 2009-2010)