

**SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

239



FROM: Executive Office, Riverside County Flood Control and Water Conservation District, and TLMA

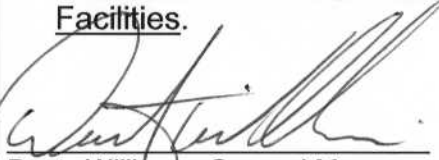
SUBMITTAL DATE:
March 22, 2006

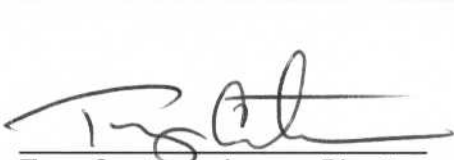
SUBJECT: Report to the Board on the National Pollutant Discharge Elimination System Program (NPDES)

RECOMMENDED MOTION: That the Board of Supervisors:

1. Receive and file the attached report, entitled National Pollutant Discharge Elimination System (NPDES) Regulatory Requirements, County Programs, Program Costs and Funding; and
2. Direct the Executive Office to hire a consultant to perform an assessment of the NPDES Program, develop a Work Manual, and funding recommendations, and report back to the Board; and
3. Receive and file the attached status report, entitled Status Report on Detention Basins and Other Water Quality Facilities: Public Maintenance and Design Standards for Water Quality Facilities.

iDepartmental Concurrence


Dusty Williams, General Manager
Flood Control & Water Conservation
District


Tony Carstens, Agency Director
Transportation & Land Management
Agency


Alex Gann, Sr. Management Analyst
County Executive Office

FINANCIAL DATA	Current F.Y. Total Cost:	N/A	In Current Year Budget:	No
	Current F.Y. Net County Cost:	N/A	Budget Adjustment:	No
	Annual Net County Cost:	N/A	For Fiscal Year:	FY 05-06

SOURCE OF FUNDS:	Positions To Be Deleted Per A-30	<input type="checkbox"/>
	Requires 4/5 Vote	<input type="checkbox"/>

C.E.O. RECOMMENDATION:

APPROVE



County Executive Office Signature

- Policy
- Policy
- Consent
- Consent

Dep't Recomm.:
Per Exec. Ofc.:

BACKGROUND: This workshop will address the following issues related to the NPDES program in Riverside County:

1. The attached report entitled: National Pollutant Discharge Elimination System (NPDES) Regulatory Requirements, County Programs and Funding, provides an overview of the County's NPDES Program including information related to permit requirements, funding and costs of future program needs.
2. The attached report entitled Status Report on Detention Basins and Other Water Quality Facilities: Public Maintenance and Design Standards for Water Quality Facilities updates the Board on this ongoing effort.

Based on the findings of the National Pollutant Discharge Elimination System (NPDES) Regulatory Requirements, County Programs and Funding report, the Executive Office has determined that a thorough analysis of the NPDES program is necessary to determine current and future program needs, organizational structure, department responsibilities and funding strategies. It is recommended that the Executive Office hire a consultant to prepare this assessment and develop a Work Manual that will assist departments implementing the NPDES program. It is vital that County departments, including EDA, Fire, Planning, Environmental Health, Facilities Management, Flood, Transportation, County Counsel and Building and Safety, provide input into this study. The results of the study will be presented to the Board of Supervisors for their consideration.

To meet immediate NPDES requirements, the Board recently approved an expanded Commercial/Industrial Compliance Program for Riverside County. The funding for this program and other required NPDES programs for mapping water quality facilities, catch basin cleaning, facility inspections, permits and administration will be included in the FY 06-07 budget requests for the Executive Office, Transportation and Building and Safety.

This workshop is also a follow-up of the April 6, 2005 presentation on water quality requirements for new developments. At that hearing, the Executive Office, TLMA and Flood Control District gave a presentation regarding water quality requirements for new developments and indicated that they would return with additional information regarding the development of a design manual and financing mechanism for maintenance of water quality facilities.

The attached report, entitled Status Report on Detention Basins and Other Water Quality Facilities: Public Maintenance and Design Standards for Water Quality Facilities, which was prepared by the Flood Control District and Transportation Department, summarizes the status of this effort. The Flood Control District and Transportation Department will initiate work to develop a Benefit Assessment District or equivalent funding structure for the public maintenance of water quality facilities. The Flood Control District and Transportation Department are also preparing a guidance manual to formalize standards and provide clear direction to developers on required standards to meet Regional Board requirements. The draft manual will be discussed with the development community prior to presenting the document to the Board for its approval.



**REPORT TO THE RIVERSIDE COUNTY BOARD OF
SUPERVISORS ON:**

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
(NPDES)**

**REGULATORY REQUIREMENTS, COUNTY PROGRAMS AND
FUNDING**

Submitted By:

**County Executive Office
Riverside County Flood Control and Water Conservation District
Transportation and Land Management Agency**

April 4, 2006

INTRODUCTION

With the recent adoption of the National Pollutant Elimination System (NPDES) permits in the Santa Ana and San Diego Regions, county departments have brought to the Board new policies and programs to comply with new NPDES regulations. In the last year, the Board has considered:

- April 5, 2005 - Nuisance issues related to detention basins and NPDES requirements related to land development.
- April 26, 2005 – Support of a state constitutional amendment for levying assessments related to flood control and NPDES.
- July 26, 2005 – Benefit Assessments for Santa Ana, Santa Margarita, and Whitewater Watersheds.
- September 27, 2005 – Development of an Environmental Registration and Compliance Program.
- March 21, 2006 – NPDES Commercial/Industrial Compliance Program and Business Registration and Licensing Program.

At several of these hearings, the Board has asked for a report on the County's NPDES program, permit requirements, costs and funding. This report provides this information and outlines the challenges of implementing the NPDES program given higher technical requirements, limited departmental resources, and the resulting increase in requests for general fund support. Based on this assessment, the report recommends a detailed assessment of the County's current NPDES program, the development of a work plan to meet the requirements of the new permits, and, working with affected departments, the development of a Work Manual that will assist County departments in program implementation.

BACKGROUND

Federal and State Regulations: The urban runoff pollution control effort is the result of over thirty years of legislative effort beginning with the Federal Water Pollution Control Act, which, as amended in 1972, is now referred to as the Clean Water Act (CWA). The CWA authorized that the discharge of pollutants to Waters of the United States from a point source is effectively prohibited unless the discharge is in compliance with a NPDES permit. In 1987 Congress amended portions of the CWA and included Section 402(p), which set requirements for permitting storm water discharges. Section 402(p) of the CWA required that the United States Environmental Protection Agency (USEPA) establish regulations setting forth a program of NPDES applications and corresponding permits for storm water discharges associated with industrial activities and for storm water discharges from Municipal Separate Storm Sewer Systems (MS4s¹), e.g., storm

¹ See Attachment D for a list of NPDES acronyms and their definitions.

drains and open channels. Section 402(p) of the CWA also requires that NPDES permits include:

- A requirement to effectively prohibit non-storm water discharges into the MS4; and
- Controls to reduce the discharge of pollutants in storm water discharges to the maximum extent practicable (MEP), including management practices, control techniques and system, design and engineering methods and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.

The storm water regulations require that the management program for an MS4 include a comprehensive planning process which involves public participation and necessary intergovernmental coordination to reduce the discharge of pollutants to the MEP using management practices, control techniques and systems, design and engineering methods, and such other provisions which are appropriate. The storm water regulations also specify covered activities; prescribes a variety of required information-gathering, planning, and reporting activities; and sets forth a schedule for compliance. The storm water regulations also set forth requirements for specific industrial activities, including construction.

The CWA, in conjunction with the State's Porter-Cologne Water Quality Control Act (Porter-Cologne), provides the primary legal basis for controlling discharges to California's waters. The CWA requires issuance of NPDES permits for discharges of pollutants from public storm drainage systems. California is authorized to issue NPDES permits under Section 402 of the CWA, per agreement with the USEPA. In California, the CWA and Porter-Cologne Act are administered by the State Water Resources Control Board ("State Board") and the nine Regional Water Quality Control Boards (RWQCBs). Ultimately, the responsibility for cleaning up non-point source pollution that enters the local storm drainage systems has been directed to counties and cities, with RWQCBs levying large fines against local jurisdictions and developers that fail to comply with permit requirements. (See Attachment A for a list of recent court decisions.)

The most recent NPDES permits require regulated local agencies, including Riverside County, to increase its inspection and enforcement efforts to achieve water quality standards. Large public and private expenditures are being required to achieve this goal and these expenditures are expected to increase. The CWA requires the elimination of pollutants at their source, prior to entering the publicly owned storm drain system, streams, rivers, creeks and water bodies. The CWA specifies a variety of control measures for commercial and industrial land uses, often referred to as Best Management Practices (BMPs). The CWA considers "end of pipe" solutions as a last resort, with a preference towards identification and mitigating the impacts of pollutants at their source. Potentially, this can reduce costs as it is usually less expensive to develop proactive inspection programs of on-site facilities than to develop the infrastructure to treat storm water runoff off-site, like sewage.

The CWA requires inspection and enforcement programs to eliminate pollutants from municipal, commercial, industrial and residential sources. The NPDES permits adopted pursuant to the CWA further requires local governments to adopt and/or amend ordinances utilizing their police powers in order to prevent pollutants from industrial and commercial sources from entering the publicly owned storm drain system.

Local Regional Boards: The Santa Ana, Colorado River and San Diego RWQCBs regulate water quality activities in Riverside County. (See Attachment B for a map of the RWQCB areas.) Riverside County is required to review its legal authority, ordinances and administrative procedures when permits are issued by each RWQCB within a typical five year permit cycle. The primary shift in focus with permits issued for the Santa Ana and Santa Margarita watersheds is for more quantifiable activities and reporting. The current schedule for permit renewals is shown in Table 1.

**Table 1
Regional Water Quality Control Board Permit Cycle**

RWQCB	Watershed Area	Permit Issued	Permit Expires
San Diego	Santa Margarita Watershed	July 2004	July 2009
Colorado	Whitewater Watershed	November 2001	September 2006
Santa Ana	Santa Ana Watershed	October 2002	October 2007

Urban runoff discharged to MS4s in Riverside County ultimately flows to various surface water bodies (inland streams, lakes and reservoirs) and typically carries pollutants that originate from numerous dispersed and uncontrolled sources. Examples of pollutants that may be present in urban runoff are fertilizer, heavy metals, nutrients, petroleum products, sediment, bacteria, chemicals, and litter.

In addition to permit requirements, there are increased regulations under Section 303(d) of the CWA, which requires the development of lists of impaired water bodies, referred to as the "303(d) List." The listed water bodies are considered impaired because they do not meet water quality standards necessary to maintain designated beneficial uses, even after point sources of pollution have installed the minimum required levels of pollution control technology. Lake Elsinore and Canyon Lake are two 303(d) listed water bodies. Riverside County, as a member of the Lake Elsinore San Jacinto Watershed Authority (LESJWA), has participated in programs to improve the water quality in these lakes. In 2000, the State committed \$15 million in Proposition 50 funds to improve water quality in the two lakes. The County will be involved in increased efforts to improve water quality in listed water bodies. Continued oversight of

these programs is required to ensure that funding results in tangible water quality benefits.

COUNTY PROGRAM:

The Riverside County Flood Control District is identified as the Principal Permittee in all three Regional Board permits. The County of Riverside is also listed as a Principal Permittee in the Whitewater Permit, and a Co-Permittee, along with cities in the region, in all three regions. As Principal Permittee, the Flood Control District is responsible for managing the overall Urban Runoff program by implementing areawide management, monitoring and reporting programs and conducting inspections and maintaining Flood Control MS4s. As a Co-Permittee, the County is responsible for maintaining legal authority to manage the MS4s, conduct inspections and enforcement actions, provide sufficient funding to implement NPDES programs, coordinate with internal departments and agencies to implement the permits, and respond to emergency situations such as accidental spills to prevent or reduce the discharge of pollutants to MS4s and the Waters of the U.S.

The Executive Office has been responsible for NPDES coordination for the County since July 1997. In that capacity, Executive Office staff has served as the primary point of policy development, grant efforts, contact with the regional boards, annual report preparation, and cross-departmental coordination. The Executive Office has also been active in LESJWA and other NPDES-related programs. With the recent adoption of the Santa Ana and Santa Margarita permits, the Executive Office, working in its coordinating role, has seen that the new regulations place increased burdens on County departments and require a higher level of program oversight. As shown in Attachment C, many County departments are directly involved with a variety of NPDES-related programs. A program reassessment is needed to maintain program efficiency, control NPDES program costs, and ensure that other central departmental responsibilities are met.

Table 2 provides an overview of NPDES required programs and which departments are responsible for some aspect of these duties. To reduce costs, NPDES programs have historically "piggy-backed" on existing County programs. While this approach has been largely successful, there are certain technical components to the current NPDES permits that may require specialized training or materials to meet permit requirements. NPDES requirements do not follow traditional departmental roles and coordination of activities is often necessary. Often multiple departments are involved in implementing a single permit requirement. Conversely, a single NPDES program, such as municipal inspections can affect several departments. In this instance, the program would affect all departments that have fueling, garage or on-site storage.

**Table 2
NPDES REQUIRED PROGRAMS & DEPARTMENTAL RESPONSIBILITIES**

	PROGRAM MGT	DEVELOPMENT PLANNING	CONSTRUCTION ACTIVITY	MUNICIPAL PROGRAMS	IND/COMM SOURCES	EDUCATION	IC/ID	Monitoring
DEPARTMENT								
Executive Office (policy)	X	X	X	X	X	X	X	X
Transportation	X	X	X	X		X	X	X
Bldg & Safety	X	X	X		X	X	X	
Planning		X				X		
Flood Control	X	X	X	X	X	X	X	X
Environmental Health	X				X		X	
Fire				X			X	
Facilities Mgt.				X				
EDA				X				
Fleet Services				X				
Waste Mgt.				X				
Parks				X				

Most NPDES program requirements affect departments within the “public works” area. Since Riverside County has a decentralized public works process, several departments such as TLMA, Transportation, Building and Safety, Planning, Flood Control and Environmental Health are involved in a variety of permit requirements, including inspections of commercial/industrial facilities, inspections of construction sites, requirements to include site-specific water quality treatment controls during the land development process, proactive illicit connection and illegal discharge detection programs (IC/ID), maintenance of municipal facilities and construction sites, and enforcement of the County’s Stormwater Ordinance (Ordinance 754.1).

To facilitate inter-departmental coordination, the Executive Office formed a Water Quality Committee (WQC) that meets monthly to discuss permit implementation and funding issues. The WQC includes line-staff representatives from the departments listed in Table 2. The WQC has been an effective resource for departments, but increased direction is required from the Executive Office to “translate” complex regulations and assist departments in developing programs that comply with permits. Programs that were sufficient in earlier permits are no longer considered sufficient. To comply with permits, departments are submitting costly budget adjustments that may require ongoing General Fund support.

NPDES requirements can be overshadowed by other departmental objectives and many departments have limited time to assist in the preparation of the increasingly detailed annual reports to the RWQCBs. A reevaluation of the County's administration and implementation of the NPDES program is needed to improve program efficiencies, further define departmental responsibilities, and improve program reporting.

NPDES Program Expenditures

It is difficult to get an accurate assessment of the full costs of implementing the County's NPDES program for several reasons. First, many of the NPDES requirements are integrated within existing departmental programs to reduce program costs. For example, code officers may observe and respond to water quality violations as part of their ongoing work at a site but Code Enforcement does not segregate the costs of the NPDES portion of their activities from other code duties. Second, many departmental budgets have not been set up to distinguish costs related to NPDES activities. For these reasons, cost tracking varies greatly across departments.

Annually, the Executive Office requests that departments identify NPDES expenditures to be included, as required, in annual reports to the RWQCBs. In many cases, the departments estimate expenditures, based on a variety of assumptions. Table 3 provides the estimated expenditures in FY 05/06 in terms of "NPDES Program Direct Costs" and "County Programs Benefiting NPDES." This is done to acknowledge the difference between programs that are directly required by RWQCB permits from those programs that have a beneficial effect on the NPDES program but were not originally developed to meet permit requirements. Staff included the projected cost through the 4th Quarter of FY 05-06, so that the Board could see an estimate of a full year's cost.

Table 3 also lists the wide number of revenue sources that are used for NPDES programs, including: general fund (GF), county service areas (CSA), flood control benefit assessment districts (BAD), gas tax, developer agreement fees (DA), deposit based fees (DBF), franchise fees, tipping fees and flood control district zones. These funding sources are discussed in greater detail in the next section of this report.

**Table 3
NPDES Program Costs for FY 05/06**

Department	Program	FY 05/06 NPDES Program Direct Costs	FY 05/06 County Programs Benefiting NPDES	Revenue Source
Executive Office				
	Program Costs (fees, invoices, agreements)	455,000		GF
	Program Administration (staffing in EO)	100,000		CSA & Other
Subtotal		555,000		
Transportation				
	Highway O & M, Repairs, SWPPPs		*5,517,147	Gas Tax
	Litter Control Program		*692,677	DA/Gas Tax
	Street Sweeping		*347,000	CSA
	Storm Drain/MS4 Mapping	120,088		Gas Tax
	Catch Basin Inspection & Clean-out	440,666		Gas Tax
	Program Management	67,024		Gas Tax
	Municipal Facilities Inspection	92,000		
Subtotal		719,778	6,556,824	
Building and Safety				
	IC-ID	1,600,000		GF
	Construction Inspection & Admin.	485,000		DBF
	Industrial/Commercial Compliance Program	50,000		GF
Subtotal		2,135,000		
Planning				
	CEQA & General Plan Review	5,000		DBF
	Revise municipal codes: incorporating WQMP requirement.	15,000		DBF
	Review of Project-specific WQMPs	15,000		DBF
Subtotal		35,000		
Environmental Health				
	C/AP Ind.-Commercial Surveys	124,000		BAA
	IC/ID Investigation	10,000		Franchise
	Street Sweeping	27,000		Franchise
	Road side Cleanup	97,000		Franchise
	HHW Collection		*230,000	BAA
	Health Haz-Mat Team (Spill Response)		*700,000	GF & Fees
	Environmental Crimes Task Force	40,000		BAA
	Sewage/Septic Response	200,000		Franchise
Subtotal		498,000	930,000	

Department	Program	FY 05/06 NPDES Program Direct Costs	FY 05/06 County Programs Benefiting NPDES	Revenue Source
Flood Control				
	Admin	1,085,000		BAA/IA
	Legal Authority	160,000		BAA
	Enforcement	435,000		BAA
	Monitoring	685,000		BAA & IA
	Dev. Planning	1,860,000		DBF
	Construction	150,000		Dist. Zone
	Municipal	60,000		Dist. Zone
	Ind. - Commercial	300,000		BAA
	Education	680,000		BAA
	Subtotal	5,415,000		
Fire				
	Fire Haz-Mat ER Team		*365,000	BAA
	Subtotal		365,000	
Waste Management				
	IDCUP - Illegal Dumping Cleanup		*176,000	Tip Fees
	Facility SWPPP Maintenance	100,000		Tip Fees
	Subtotal	100,000	176,000	
Total		\$ 9,457,778	\$ 8,027,824	

Note – The following acronyms are used the above table: BAD - Benefit Assessment Area, CSA – County Service Area, IA – Implementation Agreement, GF – General Fund and DBF – Deposit Based Fee.

* These programs are not NPDES mandated, but provide an indirect benefit to water quality issues.

As shown in Table 3, the direct and indirect costs of NPDES-related activities are in the range of \$17 million. Program costs continue to rise with each permit cycle. Since 2003, costs have risen steeply for the Santa Ana and Santa Margarita permit regions due to new or enhanced permit requirements for increased commercial and industrial inspections, increased catch basin inspection and cleanout schedules, and new development requirements. Each permit requires additional quantification of activities, tracking and funding.

NPDES program costs have come under increased scrutiny over the last few years. This is due in part to the RWQCBs (and others) seeking confirmation that municipalities are fully funding their permit obligations. The San Diego RWQCB recently held a workshop and invited representatives from San Diego, Orange and Riverside Counties to discuss the financial assurance requirement contained within the CWA. All three counties indicated their concerns that each county has its own governing structure and that cost comparisons should not be used as a basis for determining program compliance. However, the San Diego RWQCB expressed continued interest in developing a standard fiscal analysis matrix that

could eventually be used as an enforcement mechanism for the NPDES Permit. Draft requirements for the new San Diego County permit includes provisions that would standardize fiscal reporting.

It is imperative that the County closely monitor the costs related to the NPDES effort and improve its reporting of costs, for the benefit of its own analysis and future requirements. The County continues to work with the RWQCBs so that economic considerations are included in the development of new program requirements.

Revenue for NPDES Programs

As shown in Table 3, the County of Riverside and the cities within Riverside County utilize a variety of funding sources in order to finance their MS4 NPDES permit compliance activities. The following provides a short description of current and alternative funding sources:

County Service Area 152

The County of Riverside formed County Service Area 152 (CSA 152) in December 1991 to provide funding for MS4 NPDES Permit compliance activities. Originally, the CSA 152 assessment was collected through property tax bills as an annual parcel charge in the unincorporated portions of the county. Under the laws that govern CSAs, sub-areas may be established within the overall service area with different assessment rates set within each sub-area. For example, the Cities of Corona, Moreno Valley, Murrieta, Norco, Riverside, Lake Elsinore, and San Jacinto elected to participate in CSA 152. Under the CSA 152 program, individual cities determine their respective assessment rates and have broad discretion over how to allocate the funds.

In response to the provisions of Proposition 218, the County restructured its CSA 152 funding program to a voter approved street sweeping assessment in certain unincorporated areas. At the same time, the County has allowed the participating cities to continue their previously existing CSA 152 assessments relatively unchanged.

Gas Tax, Local and Federal STP funds, Measure A

The Transportation Department has several funding sources available to construct and maintain the Riverside County's Road System and related NPDES facilities. Gas Tax allocations are based on road miles and the number of registered vehicles. Gas Tax projects include the planning, engineering, construction, operation, and maintenance of the County's Maintained Road System. Measure A funds are generated from Riverside County's one-half percent sales and use tax for transportation purposes. Measure A projects include highway projects, local street and road programs. STP Funds are utilized

for resurfacing, traffic signals, and other capital improvements. Funds are restricted and must be used on roadways which are designated as major collector or above, on the federally functional classification system established by federal legislation.

The construction of new facilities is placing a heavy demand on all these funds. Limited funding is available for complying with NPDES regulations in previously developed areas without new sources of revenue.

Benefit Assessment Area

The Flood Control District established the Santa Ana, Whitewater and Santa Margarita Watershed Benefit Assessment Areas (WBAA) in 1991. The WBAA revenues fund both watershed-wide Urban Runoff management program activities and the District's individual MS4 Permit compliance activities. The WBAA covers the "urbanized" portions of the three watershed regions within Riverside County including both incorporated and unincorporated areas. Property owners are assessed for the benefit derived from the development and implementation of the Urban Runoff management programs supported or conducted by the District. Certain areas, e.g., the more rural and remote mountainous regions were excluded from the WBAA, since little or no urban runoff is generated in those areas. Undeveloped vacant parcels and agricultural parcels are exempted from the benefit assessment.

WBAA assessments are calculated by the District and enrolled on the property tax bills generated by the County Tax Assessor's Office. The amount of the assessment is based on a parcel's proportionate contribution to urban runoff, which is a function of parcel size and its use.

Since the WBAA is an area-wide revenue source, certain activities and programs that are considered of common and equal benefit to the entire area are financed, either wholly or in part, by the funds generated by the District's annual benefit assessment revenue. These area-wide activities include:

- Monitoring Program,
- Hazardous Materials Emergency Response Team (HAZMAT Team)
- ABOP/Household Hazardous Waste (HHW) Collection Program
- StormWater/CleanWater Protection Program Public Education
- Commercial/Industrial Compliance/Assistance Program
- Administrative/Program Management

WBAA funds are limited particularly in the Santa Margarita and Whitewater areas. To address this shortfall, the Flood Control District is beginning to request increased funding support from the co-permittees, e.g. cities and county.

Deposit Based Fees, Tipping Fees, Franchise Fees

Certain NPDES functions, such as grading inspections, building permits, planning review, can be supported as part of the fees levied for these programs. NPDES-related activities at landfills are supported by tipping fees. Street sweeping, IC/ID investigations, road-side cleanup, and sewage/septic complaint response are provided through franchise agreements and are supported through the associated fees.

General Fund

In recent years, due to increased costs, general fund has been used for staffing, permit costs and water quality facilities. Cities also utilize general fund revenue to finance their NPDES activities.

Other Revenues

In November 1996, California voters approved Proposition 218 ("The Right to Vote on Taxes Initiatives") amending Article XIII of the State Constitution.² Proposition 218 produced changes to local jurisdictions' historic funding sources. The County discontinued the CSA 152 fee in unincorporated areas over concerns regarding compliance with Proposition 218 provisions. The provisions of Proposition 218, requiring voter approval of new taxes and assessments, have significantly diminished the prospects for developing new or alternative funding sources.

Federal funds in the form of grants (Section 319h) are not a reliable source of funding due to limitations on their use for NPDES program implementation and non-point source programs. State funding, including State Revolving Fund and Water Bonds (Propositions 13 and 50) are generally slated for wastewater and water resource infrastructure projects. Riverside County was successful in being awarded Proposition 13 funding for cleanup and land acquisition in the San Jacinto River, north of Canyon Lake. The County will continue to seek additional funding for eligible projects, such as TMDLS, but overall, state funding has not proven to be a reliable funding source for local governments.

The Board asked staff to investigate the use of redevelopment funds. Currently, there does not appear to be a direct nexus to the use of redevelopment funds for NPDES programs. Supervisor Norby of Orange County is attempting to modify existing laws to broaden the definition of redevelopment so that these funds can be used for stormwater programs.

² The Proposition 218 amendments require voter approval of any new taxes, fees, assessments, etc. In addition, certain existing taxes and assessments were subject to the Initiative's voter approval requirements. "Special taxes," as defined by the Initiative, require a 2/3rds majority while other types of assessments may only require a simple majority. In addition, voter approval is required to raise any existing special tax or assessment rates.

Staff continues to investigate other sources of revenue, but finds certain limitations as a county. The cities of Hemet, Riverside, and Moreno Valley fund a portion of their NPDES program through a utility charge. Program-specific revenues can be developed, as in the case of the Commercial/Industrial Compliance Program, but a countywide funding program may require a reevaluation of the WBAA assessment or development of alternative funding sources.

New Program Requirements

Immediate Term: The Executive Office continues to work with county departments to develop programs that will meet permit requirements. The FY 06-07 budget requests related to NPDES address immediate term NPDES program needs. They include:

- As approved by the Board on March 21, 2006, Building and Safety will develop a NPDES Compliance Program and Business Registration and License Program. County Counsel and Building and Safety have been directed to develop the necessary ordinances, budget and staffing request. It is estimated that startup costs will include \$100,000 for the NPDES Compliance Program and \$200,000 for the Business Registration and Compliance Program that will support it. Long-term these programs will be fee-supported.
- To meet increased NPDES compliance requirements, Building and Safety may be seeking funding for additional code enforcement officers in FY 06-07.
- The County is required to implement its catch basin inspection and clean-out program, develop a storm drain/MS4 mapping, and conduct its municipal facility inspections. To meet these requirements, the Transportation Department has requested general fund support of \$2.1 million within their proposed FY 06/07 budget. Some of these programs may require long-term general fund support
- To address the expanded role required by the NPDES program, the Executive Office will request additional general fund support for increased staffing, permitting costs, and maintenance of facilities, such as the Lake Elsinore Aeration Project.

Long-Term: The RWQCBs are also seeking the development of new programs as listed below. The costs of these programs are currently unknown.

Municipal Public Works/Capital Improvement Projects – The County will need to develop a funding source for the ongoing maintenance of the post-construction water quality mitigation features in new capital projects. Further, the

County is required to maintain Storm Water Pollution Prevention Plans (SWPPPs) on existing County facilities. The Executive Office will work with Facilities Management and EDA to determine if the SWPPPs are currently in place at existing County facilities and that maintenance activities comply with RWQCB requirements.

Effectiveness Assessment - The San Diego RWQCB has required the development of an effectiveness assessment as part of the annual reporting process. This assessment requires programs to be evaluated in a quantitative and qualitative manner to document program implementation and effectiveness.

Maintenance of Post-Construction Water Quality Mitigation Features - The County currently requires that a Homeowners Association (HOA) maintain water quality facilities. The RWQCBs have made it clear that municipalities are ultimately responsible for the function and maintenance of these BMPs and this could become a liability issue for the County. In response to this concern, the Transportation Department and the Flood Control District are working together to develop a maintenance mechanism for these BMPs. This program will be discussed at the April 4, 2006 Board workshop.

Total Maximum Daily Load Programs - Recently, the State adopted procedures for the implementation of Total Maximum Daily Load (TMDL) requirements for impaired water bodies. A TMDL specifies the maximum amount of a pollutant that a water body can receive and still meet water quality standards and allocates pollutant loadings among point and nonpoint pollutant sources. The CWA requires that priority rankings be established for impaired waters and that TMDLs be developed taking into account the severity of pollution and the beneficial uses of the water (fishing, swimming, municipal water supply, etc.)

Long-term, TMDLs may prove to be the most costly element of the overall NPDES program. A TMDL has been developed for Lake Elsinore and a Task Force Agreement will appear on the Board's calendar in April or May. The County's contribution for FY 06/07 is expected to be \$45,000 because in-kind services by Flood Control meet some of the County's and cities' obligations. The cost of this program is expected to increase in future phases of the project. It should be noted that other TMDLs are under development along the Santa Ana River, Canyon Lake and Murrieta Creek. Cumulatively, the costs of TMDL implementation is expected to exceed several million dollars over the next decade.

Findings:

1. The cost and complexity of increased NPDES permit regulations are requiring a reassessment of the County's NPDES program.

2. County departments are seeking additional definition regarding permit requirements and examining the impact of increased requirements on their staffs and central missions. The Executive Office will face an expanded leadership role in coordinating internal departmental efforts and negotiating with the regional boards on new permits, TMDLS and other NPDES requirements.
3. The RWQCBs are demanding increased financial assurances regarding revenues and detailed accounting of NPDES program costs.
4. County departments have limited revenues to fund new NPDES programs and will be seeking increased general fund support in the FY 06-07 budget.
5. The County's NPDES program would benefit from a detailed program assessment. The goals of this assessment are to recommend: an improved management structure, establish stronger communication between departments and within departments, identify staffing needs, develop new funding sources, and better identify NPDES-related expenditures. A Work Manual will be developed that defines departmental responsibilities in implementing NPDES programs.

Recommended Actions:

1. Receive and file this report.
2. Direct the Executive Office to hire a consultant to perform an assessment of the NPDES Program, develop a Work Manual, and funding recommendations, and report back to the Board.

The attached F11 also recommends:

3. Receive and file the attached status report, entitled Status Report on Detention Basins and Other Water Quality Facilities: Public Maintenance and Design Standards for Water Quality Facilities.

ATTACHMENT A

REGIONAL WATER QUALITY CONTROL BOARD ENFORCEMENT ACTIONS

Failure to comply with the federal Clean Water Act and/or the NPDES permit could subject the County to administrative civil liability in the amount of up to \$10,000 per day, per site, pursuant to California Water Code § 13385(c)(2). In addition, the County could also be subject to significant civil or even criminal sanctions under federal and/or state law. Under both federal and state law, civil liability may accrue at \$25,000 per day for each violation and criminal sanctions for a first offense generally accrue at up to \$50,000 per day of violation, or by imprisonment for not more than 3 years, or by both. (See 33 U.S.C. § 1319(c, d and g) and California Water Code §§ 13385(b) and 13387(c).

Failure to comply with RWQCB-issued NPDES permits can be costly for businesses and local jurisdictions. In a recently reported case, a criminal fine in the amount of \$600,000 for industrial runoff from a collection pit into the Los Angeles and San Gabriel Rivers was imposed on a Southern California soft drink bottler, 7-Up/RC Bottling (Los Angeles Times, 11/11/05 at B5). Similar penalties have been levied against governmental agencies and developers by the Regional Water Quality Control Boards (hereinafter "RWQCBs") that have jurisdiction over Riverside County

SANTA ANA RWQCB ENFORCEMENT ACTIONS (Sample)

- 1) SARWQCB v. City of Stanton (March 2005) – administrative civil liability in the amount of \$100,000 for alleged violations including failure to develop an industrial facilities and commercial facilities/companies inventory list, failure to adequately train inspection staff, failure to timely submit required annual report, etc.

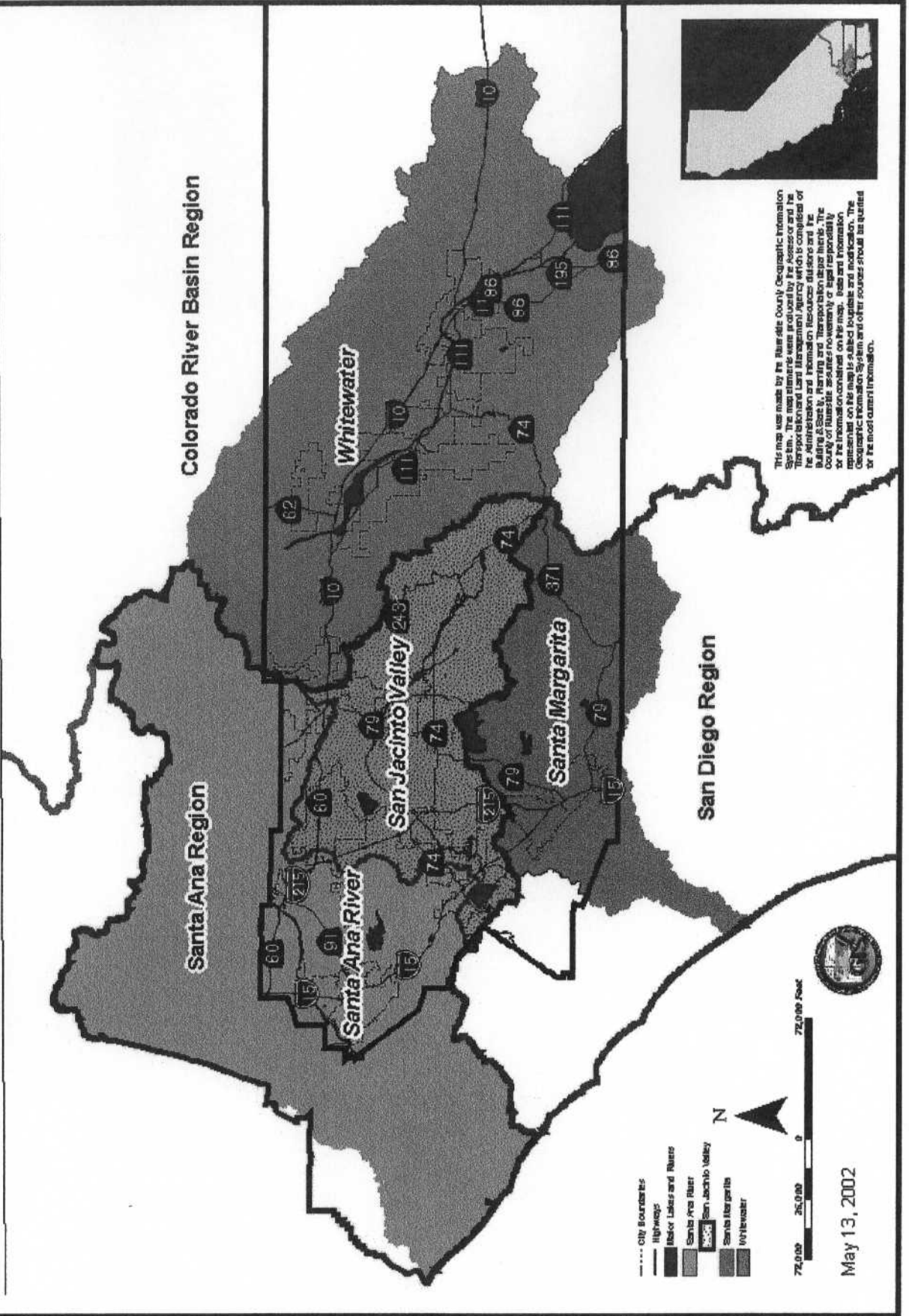
- 2) SARWQCB v. City of Buena Park (March 2005) – administrative civil liability in the amount of \$90,000 for alleged violations including failure to develop an industrial facilities inventory database, failure to conduct timely inspections of high priority industrial facilities, failure to clean catch basins, etc.

- 3) SARWQCB v. City of La Habra (March 2005) – administrative civil liability in the amount of \$75,000 for alleged violations including failure to develop an industrial facilities inventory database, failure to adequately train inspection staff, failure to conduct adequate inspections of high priority industrial facilities, etc.

SAN DIEGO RWQCB ENFORCEMENT ACTIONS (Sample)

- 1) SDRWQCB v. City of Escondido (September 2005) – administrative civil liability in the amount of \$129,000 for alleged violations including failure to require developer to implement BMPs at construction site for the Escondido Research and Technology Center.
- 2) SDRWQCB v. JPMC Real Estate, Inc. (September 2005) – administrative civil liability in the amount of \$1,260,600 for alleged violations including failure to prohibit discharges into Escondido Creek, failing to implement and/or maintain BMPs at construction site for the Escondido Research and Technology Center.
- 3) SDRWQCB v. Ryland Homes of California, Inc. (June 2003) – administrative civil liability in the amount of \$158,350 for alleged violations including failure to prohibit runoff discharges into waters of the United States, failing to implement and/or maintain BMPs at construction site for Serenada project in Murrieta, Riverside County.
- 4) SDRWQCB v. Ashby USA, LLC (May 2003) – administrative civil liability in the amount of \$84,500 for alleged violations including failure to prohibit runoff discharges into waters of the United States, failing to implement and/or maintain BMPs at construction site for Roripaugh Ranch project in Temecula, Riverside County.
- 5) SDRWQCB v. City of San Diego (January 2003) – administrative civil liability in the amount of \$129,000 for alleged violations including effluent exceedances for chronic toxicity, acute toxicity, total suspended solids and copper as reported in self-monitoring reports concerning San Diego Convention center groundwater dewatering discharges to San Diego Bay.
- 6) SDRWQCB v. City of San Diego (September 2000) – administrative civil liability in the amount of \$532,000 for alleged violations including failure to prohibit runoff discharges into Los Penasquitos Lagoon, failing to implement and/or maintain BMPs along dirt road as part of City construction site.

Regional Water Quality Control Board Areas



May 13, 2002

ATTACHMENT C

NPDES PERMIT REQUIREMENTS AND DEPARTMENT ROLES AND RESPONSIBILITIES

Program Element	Department	Responsibilities
Program Management	Executive Office	Coordinate Permit Compliance, Assist with Program Implementation, reporting, etc.
	Executive Office	Coordinate with Principal and other Permittees for development and implementation of countywide DAMP
	Executive Office	Coordinate County Water Quality Committee for all departments
	Executive Office, {TLMA: including Transportation, Planning, Building and Safety}, DEH, EDA, Facilities Mgmt., Parks, Waste Mgmt., Fleet Services, Fire, Sheriff	EO to coordinate & ensure implementation of the County Stormwater Management Plan by County Departments. Each department manages its own implementation activities under the direction of its department head.
Elimination of Illicit Connections & Illegal Discharges (Sec. J)	Transportation: Highway Operations	Routine MS4 maintenance activities, active search for illegal discharges/illicit connections, source tracking, complaint response, interagency communication, discharge elimination
	DEH:HMMD & Fire	Hazardous Material Spill Response
	DEH	Sanitary sewer spills (notification recipient only)
	Building & Safety: Code Enforcement	Special Enforcement Taskforce/Illegal Dumping Enforcement (Proactive Field Reconnaissance)
	Building & Safety: Code Enforcement	Central Clearing House for incoming Complaints, Investigation and Response, Referral to appropriate authority, Enforcement of Ord. 754.1
Municipal Facilities & Activities (Sec. .1)	Transportation	MS4 Inspection and Maintenance activities of storm drains/catch basins
	Transportation	Inventory of MS4 system
	EDA & Transportation	Street sweeping Operations/Contracts
	Executive Office, Facilities Mgt., Transportation, Parks	Inventory of Municipal Facilities
	Transportation, Parks, Facilities Mgmt., EDA, Fleet Services, Sheriff, Fire, Waste Mgmt, DEH/HMMD	Implementation of best management practices specified within the departments Pollution Prevention Plans for Municipal Facilities, Operations and Activities.
	Executive Office, Transportation, EDA, Facilities Management	Develop and maintain an inventory of municipal construction projects
	Transportation, EDA, Facilities Management	Public Agency construction projects to implement the County Water Quality Management Plan requirements for project specific WQMPs.

Program Element	Department	Responsibilities
Development Planning (Sec. F)	Planning	Manages General Plan, reviews for water quality protection
	Planning	Manages environmental planning review (CEQA, initial study checklist, increased runoff, downstream erosion)
	Planning/Flood Control	Requires compliance with water quality requirements (WQMP Processing)
Private Construction (Sec. G)	Building & Safety: Grading Division	Grading Plan Review, Erosion/Sediment control measures, Grading Ordinance
	Building & Safety: Grading Division	Construction site inspections and enforcement of Ord. 457.93
Industrial & Commercial Sources (Sec. H.2)	Department of Environmental Health	Compliance Assistance Program for commercial/industrial facilities; conduct stormwater surveys during facility permit site inspections, maintains facility database; enforcement of Health & Safety Code Violations
	Building & Safety: Code Enforcement (TBA)	Establish and maintain Commercial/Industrial Facility Database; conduct facility re-inspection program, enforcement of Stormwater Ordinance violations
Residential Sources (Sec. H.3)	Building & Safety: Code Enforcement Division	Identify BMPs for Residential Activities
	Executive Office & Code Enforcement	Provide Public Education to residents regarding minimum BMPs
Public Education & Outreach (Sec. E.3 and I)	Executive Office	Work with the Principal Permittee to develop and implement the Regional Educational Program
	Flood Control	Prepare brochures, posters, and educational materials for the general public. Attends community outreach events
	DEH/Waste Mgt.	Attend community outreach events, educate public, distribute educational materials
	Executive Office & (TLMA: Planning, Transportation, Building and Safety)	Placement of educational materials at local permit counters
	Executive Office & (TLMA: Planning, Transportation, Building and Safety)	Web-site information related to Stormwater Permits
Monitoring	Flood Control	Implements the Consolidated Monitoring Plan for the Permittees
	Flood Control	Implements Dry-Weather Monitoring Program: Sampling element
	Code Enforcement and/or DEH:HMMMD	Implements Dry-Weather Monitoring Program: Source Tracking
	Code Enforcement and/or DEH:HMMMD	Initiate follow-up through IC/ID Program for problems identified through the water quality monitoring program
Program Reporting, Evaluation, and Revision	Executive Office & all departments	Preparation of Annual Reporting, Evaluation or programs

ATTACHMENT D

ACRONYMS AND DEFINITIONS FOR NPDES

BMP – [Best Management Practice] – As defined in federal code as schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of Waters of the U. S.

CASQA – California Stormwater Quality Association

CWA – Federal Clean Water Act.

Desert Task Force – Co-Permittees within the Whitewater River Watershed are referred to as the DTF. Meetings are held monthly at CVAG

DAMP – [Drainage Area Management Plan] The DAMP is a programmatic document developed by the Permittees that outlines the major programs and policies that the Permittees individually and/or collectively implement to manage Urban Runoff in the Permit Area.

Illegal Discharge – illegal discharge means any disposal, either intention

LESJWA – [Lake Elsinore San Jacinto Watershed Authority] LESJWA was created from a Prop. 13 Grant to provide clean up and treatment funds to both lakes that are listed as impaired water bodies.

MS4 – [Municipal Separate Storm Sewer System] – An MS4 is a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, natural drainage features or channels, modified natural channels, man-made channels, or storm drains)

NPDES – National Pollution Discharge Elimination System (National program for issuing permits under the Clean Water Act.

NPS – Non-point Source (diffuse, widespread sources of pollution) Can include: agriculture, urban, commercial/industrial, roads, highways, construction sites, communities served by septic systems, and physical alteration of land such as timber harvesting, mining and stream alteration.

“Non-Storm Water” – discharges that do not originate from precipitation events (i.e., all discharges from a conveyance system other than storm water). Includes: illicit discharges, non-prohibited discharges and NPDES permitted discharges.

Point Source – Any identifiable conveyance from which a source can be determined.

PPP - Municipal Facility Pollution Prevention Plan -

SWRCB – [California] State Water Resources Control Board

RWQCB - Regional Water Quality Control Board – California Regional Water Quality Control Board (Santa Ana Region, San Diego Region, Colorado River Region).

SWPPP – Storm Water Pollution Prevention Plan – A construction document that identifies the potential pollutants of concern from the construction activity and identifies the mitigation measures that will be used on the site to control erosion and sediment.

TMDL – Total Maximum Daily Load (TMDL is the maximum amount of a pollutant that can be discharged into a water body from all sources (point and non-point) and still maintain water quality standards. Under CWA Section 303(d), TMDLs must be developed for all water bodies that do not meet water quality standards after application of technology-based controls.

Urban Runoff – Urban Runoff includes those discharges from residential, commercial, industrial, and construction sites within the Permit Area. Urban Runoff discharges consist of storm water and non-storm water surface runoff from drainage sub-areas that discharge into the Waters of the U.S.

Waste Discharge Requirements – It is equivalent to the term permit as used in Fed. Water Pollution Control Act.

Waters of the U. S. – Broadly defined as navigable surface waters and all tributary surface waters to navigable surface waters. In our area, this also includes intermittent streams and lakes.

Watershed – That geographical area which drains to a specified point on a watercourse, usually a confluence of streams or rivers (also known as a drainage area, catchments, or river basin).

**Status Report to the Riverside County Board of Supervisors on
Detention Basins, and Other Water Quality Facilities:
Funding, Public Maintenance and Design Standards**

By

**The Riverside County Flood Control and Water Conservation District
and
The Riverside County Transportation Department**

April 4, 2006

Introduction and Background

On April 5, 2005 the Board of Supervisors received a report from the Flood Control and Water Conservation District ("District") and the Transportation Department regarding nuisance complaints related to Home Owner Association (HOA) maintained detention basins. Staff reported that newly imposed NPDES requirements will vastly increase the number of detention basins and water quality facilities in the County and that addressing this potentially escalating problem will require a new long-term approach and a change in Board Policy A-48 which presently states that these facilities shall be the responsibility of HOAs.

The Board directed staff to return with specific recommendations for a public maintenance funding mechanism for detention basins and water quality facilities and to report to the Board on policies, ordinances, budget and staffing requirements for implementation.

Public Funding for Maintenance - The Transportation Department and District commissioned a study by Muni Financial Group to make recommendations on appropriate maintenance funding vehicles. This study recommended that the 1982 Benefit Assessment Act be employed for funding long-cycle replacement, structural repair, and rehabilitation of water quality facilities. It was also determined that Landscape Maintenance Districts (LMDs) and/or Recreation and Parks Districts be used for performing ordinary maintenance of landscaping within these facilities. The District and Transportation Department plan to issue an RFP to selected firms along with instructions to have these firms recommend alternative financial mechanisms (e.g., Community Facilities Districts) so that the best available funding mechanism can be selected.

Facility Selection Hierarchy – During the past year staff has performed literature research, held discussions with staff from the Planning Department, Valley-Wide Recreation and Park District, Regional Water Quality Control Board, and the development community. Based on this work, the Transportation Department and District have determined that a policy that emphasizes natural treatment systems integrated into landscaped areas is preferable to underground mechanical filtration systems for long-term economy and effectiveness. This is important because the expedient route to permit compliance is to simply place underground vaults with various filtration devices in all projects.

Natural treatment systems, when properly designed, are effective and have the following advantages over the more technology-based mechanical filtration systems:

- Landscape-based facilities can provide aesthetic benefit. Under most normal circumstances, there is no justifiable reason to use underground facilities in areas of new urban development or significant redevelopment. All of the above-ground facilities require less than the 10% minimum landscaped area required by most zoning ordinances. These facilities can be integrated into the site landscape plan. This approach will require the services of an informed landscape architect to integrate site landscaping and stormwater management.
- Landscape-based facilities provide for easy inspection and maintenance. This is especially important because the County expects increased permittee responsibility in documenting water quality facility effectiveness and maintenance regardless of ownership.
- Above ground facilities do not have "Confined Space Entry" issues.
- Underground facilities are "Out of Sight, Out of Mind." Other jurisdictions have found that underground facilities are simply not maintained to the level required to assure their effectiveness.
- Current County policy and new NPDES requirements have resulted in very small-scale subdivisions being required to form HOAs for water quality facility maintenance. Tiny HOAs may not be reliable, placing the County at risk of being found in violation of its Municipal NPDES permit if these facilities are not maintained.

Success will depend on a multidisciplinary approach that incorporates planners, engineers, landscape architects and architects at the initial phases of the project. Failure to address these issues at the initial site design phase is, by far, the single largest hindrance to successfully meeting regulatory requirements and attaining timely project approval.

Design Standards - Staff has also determined that the County needs to publish standards of design so that the public maintenance entity can efficiently maintain these facilities. A second volume of the "Stormwater Quality BMP Design Handbook" (a subsidiary document to the County's Water Quality Management Plan (WQMP)), will be prepared. The current "Handbook" contains general design guidance on sizing. Volume 2 will provide more specific geometric design standards, standard drawings, maintenance protocols and shortcut design methods for the most common types of water quality facilities. This new document is still being developed and will be circulated to the development community for review and comment prior to coming back to the Board of Supervisors for approval.

The new expanded manual is based in large part on the guidance published in the Denver Urban Drainage and Flood Control District's Urban Storm Drainage Criteria Manual and King County Washington's, King County Surface Water Design Manual.

Volume 2 will contain standards for swales and basins using the following considerations:

SWALES -

- Swales will be placed adjacent to collector roads (i.e., the swales would generally not cross driveways).
- Swales would be located within a widened road right of way.
- The proposed "collector" standard has 15 foot from curb face to right-of-way. This standard may be widened to 23 and 41 feet from curb face to right-of-way.

BASINS - Volume 2 of the handbook will contain standard drawings for inlet and outlet structures so that these basins will have common maintenance requirements. Geometric design standards will assure that these facilities will be integrated amenities, including:

- A Planning Department recommendation for green space for small basins and active uses for any basins exceeding 1-acre.
- Mild side-slopes for at least 50% of the site perimeter and adjacent to trails and roadways.
- No fencing be required adjacent to the mildly sloped portions.
- Specifications for ramps to the bottom, setbacks and limits on embankment height to speed up the design process.

Future Actions:

The District and Transportation Department will return to the Board of Supervisors with a recommendation for a financing mechanism for water quality facilities. Further, the Flood Control District and the Transportation Department will develop a water quality facility selection hierarchy mandating the use of landscape-based water quality features over mechanical water quality facilities, and design standards that assure proper function, efficient maintenance and positive aesthetics.