

Attachment A

MRP Impacts to Contra Costa County and Contra Costa Flood Control and Water Conservation District, By Provision

C.2 - MUNICIPAL OPERATIONS

C.2.a Street and Road Repair and Maintenance - Although the specific section to conduct regular municipal street sweeping operations has been removed from the C.2 provision, this section requires sweeping and/or vacuuming to remove debris and residues from street and road repair maintenance work sites. The MRP further expects Permittees will continue municipal sweeping activity as a trash removal control measure in C.10 and as a pilot program element for evaluating the effectiveness of street sweeping as a best management practice (BMP) for mercury and PCBs removal in C.11 and C.12.

Furthermore, Finding 17. of the MRP notes that specific extraneous pollutants found in urban run-off, including heavy metals, dioxin and PBDEs, can be deposited on paved and other impervious surfaces which an effective street sweeping program can be one of the most effective ways to prevent these pollutants from entering the storm drain system.

C.2.b & c Pavement Washing & Bridge and Structure Maintenance - As expected and currently being implemented, C.2 requires adequate BMPs be in place to prevent non-stormwater discharges for mobile surface cleaning activities like pressure washing parking lots, when working on bridges over water, when doing work over storm drains or when conducting other washing activities. Coordination with sanitary districts is a continued requirement in order to encourage sanitary sewer disposal of wash water, following pre-treatment, in lieu of prohibited wash water disposal to the storm drain system.

C.2.d Stormwater Pump Stations - The County has one stormwater pump station in our unincorporated jurisdiction that discharges to the San Francisco Bay, Region 2. The North Richmond Pump Station is operated by the West County Wastewater District, on behalf of the County and the City of Richmond whose jurisdiction it drains. New requires at the pump station beginning July 1, 2010 include the reduction of pollutant loads to comply with water quality standards, the exploration of the use of the pump station for trash capture including the requirement to remove debris and trash, the collection of dissolved oxygen (DO) readings twice a year during the dry season and undertaking corrective actions if DO levels are below 3 mg/L such as increased pumping or aeration to increase oxygen levels in discharge water and increased inspections, and reporting of trash loads and water quality effects from storms related flows.

C.2.e Rural Roads - Under the rural roads and public works construction and maintenance section of C.2.e, as expected and as we are currently carrying out but

could improve on, requirements include proper erosion and sediment controls particularly at sites in proximity to creeks and wetlands; proper planning, design, and construction that includes training, permitting and implementation of permit conditions to avoid water quality impacts; and design of new and replacement of existing culverts that provide migratory fish passage.

C.2.f Corporation Yard BMP Implementation - Prohibit non-stormwater discharges from wash waters, street sweeping, vector wastes and vehicle and equipment cleaning. If sanitary services are not available, Permittees now need to collect and haul the wash water for disposal to a municipal wastewater treatment plant or dispose of it by land application in order to not adversely impact surface waters. This will pose a significant operational change for Public Works Maintenance Road crews who currently decant wash water used for catch basin cleaning back into the storm drain system.

C.3 - NEW DEVELOPMENT AND REDEVELOPMENT

C.3.b: The benchmark for “grandfathering” private projects under previous NPDES permits’ requirements is changed from when a project has been deemed complete to when the project has “received final, major, staff-level discretionary approval.” Changing this distinction may negatively affect a number of projects that have already been deemed complete, but have yet to receive their “final, major, staff-level discretionary approval,” creating an undue burden on project proponents required to modify their plans late in the development process. This language may be inconsistent with the California Environmental Quality Act, the Permit Streamlining Act, the Subdivision Map Act, and Planning and Zoning Law, which make use of the date that a project is “deemed complete” as the determinant for whether the project is “grandfathered” under other existing regulations (as well as other purposes).

The benchmark for grandfathering public improvement projects is changed from having had project funding committed and construction scheduled prior to specified dates to having funding committed and construction scheduled *to begin by* specified dates. This may affect some projects that have been partially designed, but while some projects will be required to implement stormwater controls to a greater extent, others will be subject to less stringent requirements than under the current NPDES permit.

C.3.b.ii.(1): The MRP reduces the impervious surface threshold for the requirement to treat stormwater runoff from a development project for certain land uses (automotive service facilities, retail gasoline outlets, restaurants, and uncovered parking lots. Such projects that create and/or redevelopment of 5,000 square feet will be required to implement stormwater treatment controls (reduced from a 10,000 square foot threshold).

C.3.b.ii.(4): Requirements to treat and provide flow control for runoff from road reconstruction projects is reduced in some situations (when the project does not involve addition of travel lanes, and does not alter more than 50% of the road’s impervious

surface, and the runoff from the previously existing impervious surface does not flow to stormwater management facilities implemented for portions of a road project required to implement stormwater controls).

Runoff from development of sidewalks, bicycle lanes and trails will be subject to treatment and flow control requirements in some situations, dependant on their designs. This will increase the cost of providing such projects, and may provide a disincentive to including these amenities.

A number of County road projects that are already in planning/design phases may be impacted by these changes.

C.3.b.iii: A minimum of two "Green Street Pilot Projects" must be implemented in Contra Costa County (inclusive of the County and the incorporated cities within the County). The County will not necessarily be required to implement one of these projects.

C.3.c: The MRP requires that "Low Impact Development" (LID) be utilized to treat stormwater runoff from regulated development projects that are required to implement permanent stormwater controls. LID has historically meant use of stormwater treatment and flow control such as bioretention areas. The MRP, however, redefines the term and expresses preferences for harvesting and reuse, infiltration, and evapotranspiration. Bioretention type facilities are only to be employed when use of the preferred methods is infeasible. The Permittees will have the opportunity to provide a report to the Water Board that sets forth criteria and procedures for determining when the use preferred methods is infeasible for projects. Due to soil conditions in the County, it is likely that these preferred methods will not be feasible in very large portions of the County.

C.3.i: Development projects that create and/or redevelop more than 2,500 square feet of impervious surface will be required to implement one or more of the designated site design measures (directing roof runoff to cisterns; directing runoff from roofs, sidewalks, walkways, patios, driveways, or parking lots to vegetated areas; or using permeable materials in construction of bike lanes, driveways, uncovered parking lots, sidewalks, walkways, or patios. It may be very difficult to implement any of these site design measures for some projects, such as urban projects that are built up to the property lines, do not have any vegetated areas, and do not involve driveways, walkways, parking lots, or bicycle lanes. This requirement appears to apply to projects that solely involve paving, for which no permits are currently required by the County.

C.4 - INDUSTRIAL AND COMMERCIAL SITE CONTROLS

C.4.a Legal Authority for Effective Site Management – The County will be required to continue to conduct industrial and facility inspections and follow-up enforcement, in order to abate stormwater violations according to the County's

Enforcement Response Plan (ERP) which will need to be developed and implemented by April 1, 2010. CWP will need to work with County Counsel to ensure our County's Code 1014, Stormwater Management and Discharge Control along with Title 1 General Provision, Chapter 14-8 Criminal Enforcement provides the necessary legal enforcement authority required in C.4, which will allow stormwater inspectors to obtain effective stormwater pollution control including escalated enforcement capability to ensure expedient compliance.

This section includes the expected requirement for corrective action for stormwater violations by businesses within 10 business days or before the next rain event but also allows an exception to this timeframe, for example if major capital investments are required to correct the violation(s), as long as appropriate rationale is documented. In certain cases where several departments may be involved in regulating the violation(s), increased collaboration between departments will be required, as well as streamlining various procedures required by different departments for accepting case referrals.

C.4.c. Enforcement Response Plan (ERP) – CWP will be able to develop the required model ERP reference document required for consistent and standardized handling of environmental enforcements utilizing a model plan that will be developed by the Program which can be adapted to reflect the County's current 'tool box' of enforcement procedures which vary considerably between different departments implementing C.4 such as Public Works, Flood Control District, Health Services-Hazardous Materials Programs, Health Services-Environmental Health, and Conservation and Development, Building Inspection-Code Enforcement. Enforcement options we currently employ which are adequate to meet the provisions in this section include verbal warnings, issuing warning letters, Notice of Violations, public nuisance process, referral to the County District Attorney's Environmental Crimes Unit for criminal proceedings, or referral to other State (ex. CA Dept. of Fish and Game, Regional Waterboards) or Federal (ex. USEPA, US Army Corp of Engineers) agencies for egregious, willful or chronic violations.

C.5 - ILLICIT DISCHARGE DETECTION AND ELIMINATION

This provision requires development and implementation of an illicit discharge program that includes an active surveillance component to target non-stormwater illicit discharges and centralized complaint tracking system for documenting the County's accountability in investigating, abating and reporting of illicit discharges. The County is currently deficient in both requirements.

Public Works Maintenance Road and Flood Control crews regularly monitor their service area and bring violations to CWP or another more appropriate department's attention. But there are countless miles of unnamed tributaries within unincorporated County that fall out of their maintenance responsibility hence jurisdiction. Many of these smaller creeks are perennial waterways which flow through private property and are the responsibly of parcel owners to maintain and protect.

An active and regular screening of a significant portion of natural waterways in unincorporated jurisdiction will not be possible with our current right of entry statutes without sufficient evidence or belief that a discharge has occurred and even then different departments have their own ordinances and policies that may prohibit County inspectors from trespassing on private residential property in order to preserve property rights and privacy or for their own health and safety reasons. For example, Health Services-Environmental Health, Solid Waste Div. Code Enforcement investigates illegal dumping incidents on private property but inspectors must be able to view the violation from a public area in order for them to move forward in code enforcement proceedings and nuisance abatement.

Regarding a centralized tracking system, Public Works department is fortunate to have MaintStar, an electronic complaint tracking system which CWP has adapted for tracking or illicit discharges. MaintStar has been very instrumental in streamlining the referral of PWD complaints and incidents between divisions. Other County departments that may be the lead agency for investigating or following-up on various types of discharges such as sanitary sewer overflows (SSOs) which are handled by the Health Services-Env. Health, Land Use Div. often require referrals to their departments using specific 'Complaint Referral Form's or via on-line Complaint Forms such as that utilized by C&D Building Inspection Code Enforcement. A Countywide complaint tracking system or expansion of MaintStar by different departments would help reduce the number of days that commonly go by before discharges are brought to the attention of the appropriate responding department which often is too far after the fact to make a difference.

C.5.a Legal Authority – As with C.4, the County will need to ensure Code 1014, Stormwater Ordinance allows sufficient legal authority to prohibit, discover, investigate, conduct surveillance and abate illicit connections and non-stormwater discharges.

C.5.b Enforcement Response Plan (ERP) – As with C.4, this section requires development and implementation of an ERP and timely correction of violations (also within 10 business days with the goal of before the next rain event.) Although the County requested the timeline for abatement of certain discharges be increased to 30 days such as those that are "neither prone to mobilization nor pose an imminent threat to water quality," this comment was not incorporated and the abatement requirement within 10 business days, consistent with that in C.4 remains.

However, CWP is concerned this requirement cannot be met by PWD road crews who are struggling to keep up with the significant increase in illegal dumping incidents and have dedicated the last Thursday of each month to recover all of the dumps that have occurred throughout their respective service areas. In addition, some dumping locations especially within waterways are not accessible for safe recovery of large debris, such as mattress and couches, and crews often must deploy costly boom trucks with operators.

Although the County continues to agree that a 10-day abatement window is reasonable to abate active liquid discharges (although all efforts are made to abate discharges quickly,) this may not be appropriate for most of the incidents of solid waste dumping we respond to and we may need to alter procedures and increase dumping recovery in order to be in compliance with this timely abatement provision.

Moving on, section C.5 expands on the ERP requirement with the inclusion of 'guidelines' on when to employ various regulatory actions and specifically names citations, cleanup and cost recovery and administrative penalties, several of which CWP currently does not utilize.

Although the County Code 1010 Drainage Ordinance allows for the latter (administrative penalties,) CWP believes stormwater violations in Code 1014 as written, are considered a misdemeanor unless relegated down to an infraction both of which require criminal or civil action with no administrative penalty option. This may be an issue in order to be in compliance with the full spectrum of enforcement capability and may require modification of Code 1014. CWP recommends County Counsel review the legal authorities and enforcement capability called for in C.4 and C.5 to ensure our current Codes are adequate.

C.5.c Spill, Dumping, Complaint Response - PWD's spill response flow charts and CWP's clean water/illicit discharge contacts list should be revisited and updates to be consistent with the ERP and current operating procedures for handling spills, investigating discharges and required notifications and referrals to other County departments and agencies.

C.5.e MS4 Collection System Screening – Develop and implement an Illicit Discharge Detection and Elimination (IDDE) screening program using USEPA's Center for Watershed Protection's guidance manual which will require physical observation/screening of one point per square mile of our suburban and urban unincorporated jurisdiction, less open space. EPA's IDDE program also will require we identify (map) all outfalls where stormwater conveyances discharge to receiving waterways. CWP will need to work with PWD Flood Control field crews and our GIS Div. to find out if our current Flood Control Arc Viewer currently identifies the location of all outfalls or if we will have to compile this list from detailed, unmaintained and often outdated paper base maps. We will also need to begin reporting on our collection screening program including providing a summary of the problems found.

C.6 - CONSTRUCTION SITE CONTROL

Generally, it will not be especially problematic for the County to bring its practices into line with the C.6 requirements. A number of implementation and reporting deadlines, however, are not realistic, especially when considered in conjunction with the MRP's numerous other implementation and reporting dates.

C.6.b: It is required that the County have authority to ensure that site controls to prevent impacts to water quality are in place at all construction sites year round.

C.6.b: The County is required to create an Enforcement Response Plan (ERP) that details enforcement procedures to ensure adequate controls to prevent surface water pollution from construction sites. The ERP must detail actions of increasing severity to enforce requirements as necessary.

C.6.d/C.6.e/C.6.f: The County is required to review plans for construction site controls, including review to ensure that projects required to file for coverage under the state Construction General Permit have done so. These sites and other high priority sites must be inspected at least once a month throughout the rainy season to ensure adequate construction controls. More specific requirements for inspection, tracking, and reporting are also included.

C.6.e.ii.(4): Due to the implementation dates for various sections of C.6 compliance with the modifications to C.6 should be required beginning with the 2011 Annual Report. Reporting regarding progress made toward compliance with C.6 should be included in the 2010 Annual Report.

C.7 - PUBLIC INFORMATION AND OUTREACH

Section C.7 contains more stringent requirements than in County's previous NPDES permit. However, the requirements themselves remain mostly unchanged from the previous permit.

C.7.e.ii and C.7.g.ii: The Flood Control District will be required to hold 6 public outreach events and 2 community involvement events for a total of 8 outreach events. In the past the Flood Control District was not required to hold any outreach events, so currently no staff or funding are budgeted for this requirement.

C.8 - WATER QUALITY MONITORING

The majority of the water quality monitoring called for in this section as well as the constituent monitoring requirements in later sections C.11 Mercury, C.12 PCB's, C.13 Copper and C.14 PBDEs, Legacy pesticides and Selenium will be carried out via the Program or conducted regionally via the San Francisco Estuary Institute's Regional Monitoring Program (RMP), or overseen by Bay Area Stormwater Management Agencies Association (BASMAA), Association of California Agencies, United States Geological Society (USGS) or similar multijurisdictional/inter-County organization.

Currently, the Contra Costa Clean Water Program contributes existing funding levels of \$129,000 per year to the RMP for Bay wide sampling efforts. This funding will increase

significantly due to the increased emphasis the MRP places on water quality monitoring, special studies and pilot programs by Permittees. The County's goal in fulfilling this section's requirements, is to fund and expand on existing sampling programs in order to answer the questions our sampling plans identify, standardize sampling efforts and save costs in laboratory quality control and annual reporting.

Currently through the Contra Costa Clean Water Program, the County is exceeding all biological monitoring requirements in this section of the MRP with our Volunteer Monitoring Program for Benthic Macroinvertebrate Index (BMI) Assessments and GPS Monitoring that samples anywhere from 20 to 65 sites annually. Our monitoring program does include several consultant companies and costs the Program approx. \$450,000 in annual sampling, consultant and administration costs. However, other than a special Trash Assessment study undertaken by Department. of Conservation and Development earlier this year, little has been done to continuously monitor our creek reaches in a coordinated and prescriptive manner as required in C.8 and C.11-14.

The extent of highly prescriptive monitoring being proposed in the MRP will demand an increase in costs of the current \$450,000 Program-wide over the five year permit cycle to an estimated \$5.9M in order to engage the expertise of multiple environmental/water monitoring consultants to manage all of the various monitoring projects, investigations and special studies that are now required including:

- San Francisco Estuary Receiving Water Monitoring
- Annual Status Monitoring of 8 specific County watersheds (Kirker, Mt. Diablo, Walnut, Rodeo, Pinole, San Pablo, Alhambra and Wildcat)
- Long term Monitoring of Walnut or Kirker Creek w/Fixed Monitoring Stations located at the floodway
- Monitoring Projects including Stressor/Source Identification, BMP Effectiveness and a Geomorphic Project
- Pollutants of Concern Monitoring at Rheem and Walnut Creek
 - Sediment Delivery Budget
 - Emerging Pollutants Load & Source Analysis
- SWAMP Monitoring for sediment toxicity and chemistry during June

Oversight of such an intensive sampling plan that historically has not been the responsibility of municipal stormwater programs, will take a lot of coordination, resources and cost that may unnecessarily drain efforts being spent in other sections of the MRP to improve source control efforts and actually make noticeable water quality improvements.

C.9 - PESTICIDE TOXICITY CONTROL

C.10 - TRASH REDUCTION

C.10.a/C.10.c: The MRP requires to County to create and implement plan to reduce trash impacts for the County's storm drain system by 40% by 2014, to reduce the impacts by 70% by 2017, and to eliminate 100% of trash impacts by 2022. There is a degree of flexibility in how the reduction is achieved (the County may use structural controls, outreach activities, ordinance amendments to disallow certain common trash items and/or discourage littering, etc.), but more prescriptive requirements are included in other sections of C.10.

C.10.a.iii: The County is required implement "full trash capture devices" (FTCDs) to remove trash from stormwater. The FTCDs must be designed to trap all particles retained by a 5mm mesh screen, and must be installed to remove trash from storm drain infrastructure serving at least 157 acres of land (30% of the County's total Retail/Wholesale Commercial Land, per ABAG's 2005 data). The County must operate and maintain the FTCDs (presumably in perpetuity).

The Flood Control District is required implement structural controls to remove trash from Flood Control District owned and operated stormwater facilities. The Flood Control District must implement a minimum of either 4 outfall "full trash capture devices" (FTCDs), 2 trash booms, or equivalent measures, to remove trash from stormwater. If outfall FTCDs are used, they must be designed to trap all particles retained by a 5mm mesh screen, and must be installed on outfalls with a minimum 2-foot diameter. The Flood Control District must operate and maintain the structural controls (presumably in perpetuity).

C.10.b: The County is required to select a minimum of 5 Trash Hot Spots located in creeks or along shorelines. The Trash Hot Spots (minimum 100 foot creek length or 200 foot shoreline length each) must be cleaned annually to a level of "no visual trash impact." After initially establishing baseline trash loads for each hot spot, the County will be required to assess trash levels and annually report on reductions below the baseline trash load.

The Flood Control District is required to select a minimum of 6 Trash Hot Spots located in creeks or along shorelines. The Trash Hot Spots (minimum 100 foot creek length or 200 foot shoreline length each) must be cleaned annually to a level of "no visual trash impact." After initially establishing baseline trash loads for each hot spot, the Flood Control District will be required to assess trash levels and annually report on reductions below the baseline trash load.

C.11 - MERCURY CONTROLS

The purpose of this provision is to implement the urban run-off requirements of the San Francisco Bay mercury TMDL. This will be accomplished via many programs the County

already engages in such as Mercury collection and recycling at our three household hazardous waste facilities and by various municipal maintenance operations including street sweeping and catch basin cleaning. Even so, C.11 will require a substantial investment in new mercury analysis and reduction requirements many of which have been researched in the past and found to be infeasible such as street flushing and subsequent capture, collection and routing to sanitary sewer or stormwater diversion to publically owned treatment works (POTWs).

Historically, sanitary districts have been challenged by influent and infiltration, or the additional volume of rainwater making its way into their piping system and maxing out flows and their ability to effectively treat the massive volumes of water coming in. Additional stormwater loads from first flush flows may dilute wastewater to the point that they cannot effectively treat either and as a result would be in violation of their own NPDES permits.

Following is a summary of the mercury projects the County will now have to engage in:

- Monitoring for methyl mercury, stormwater mercury pollutant loads and load reductions;
- Investigative pilot projects for mercury sources and hot spots;
- Evaluative pilot projects for mercury load reductions, municipal BMP effectiveness, and onsite stormwater treatment via retrofit;
- Diversion of dry weather and first flush flows to POTWs
- Fate and transport studies of mercury in urban runoff;
- Development of risk reduction program, and
- Development of an allocation sharing scheme with Caltrans

It should be noted that many of the above requirements will be handled via the Program or regionally but the County will be responsible for supporting these efforts by collaboration and monetary support.

C.12 - POLYCLORNIATED BIPHENOLS (PCBs)

It should be noted this section of the MRP mimics the majority of the requirements called for in C.11 above with the similar goal of implementing the Bay's PCB TMDL and reducing the PCB load allocation from urban runoff.

This section has the same monitoring, pilot projects and diversion studies called for above including:

- Monitoring for stormwater PCB pollutant loads and load reductions;
- Conduct pilot projects to evaluate the management of PCB containing waste during demolition activities.
- Investigative pilot projects for PCB abatement of hot spots and sediments with elevated PCB concentrations

- Evaluative pilot projects for PCB load reductions, municipal BMP effectiveness, and onsite stormwater treatment via retrofit;
- Diversion of dry weather and first flush flows to POTWs
- Fate and transport studies of PCBs in urban runoff;
- Development of risk reduction program

But also includes new responsibilities for municipal Building Inspectors to identify PCB source and PCB containing equipment, report to appropriate regulatory agencies such as Health Services-Env. Health, or State agencies such as the Dept. of Toxic Substances Control. Inspectors will need additional training and personal protective apparel made available to them to carry out the oversight of the PCB sampling and analysis plan called for in C.12 during demolition of PCB containing structures.

C.13 - COPPER CONTROLS

The County will again be required to conduct monitoring and studies to reduce copper pollutant impact uncertainties including technical studies to investigate copper sediment toxicity and copper's sub-lethal effects on salmonids – studies that historically have been topics for securing a post-doctorate degree and not for conducting a County stormwater compliance program but the MRP goes above and beyond in some sections and C.13 is no exception.

Additionally, the County, probably via Health Services-HazMat and Env. Health as well as Building Inspection will be required to ensure that adequate BMPs are in place to prevent copper discharge during washing, construction, demolition and from pool, spa, and fountain draining, including the requirement to prohibit through ordinance, its specific discharge. Currently the discharge of copper containing chemicals/products is not specifically addressed in our County's stormwater Code 1014. We will need to certify adequate legal authority for this requirement in our 2011 Annual Report.

Furthermore by 2012, the County will be required to educate installer and operators of copper features on appropriate copper reduction BMPs which will also be required to be communicated when issuing building permits. Both implementation measures (training and permitting and any subsequent enforcement activities) will need to be reported beginning in 2012 and 2013, respectively.

C.15 - EXEMPTED AND CONDITIONALLY EXEMPTED DISCHARGES

Provision C.15 outlines discharges that are exempt from the MRP, and also sets forth categories of conditionally-exempted discharges. Conditionally-exempted discharges may be allowed only if they are identified as not constituting threats to water quality or if appropriate control measures are implemented to ensure that they do not impact water quality.

C.15.b.i.(2): The County will be required to oversee discharges of more than 10,000 gallons per day from foundation drains, crawl space pumps, footing drains and air conditioner condensate. Controls to prevent impacts to water quality from these activities, and sampling and reporting requirements are included.

C.15.b.ii: The MRP mandates that the County require that condensate from air conditioners be directed to "landscaped areas or the ground." If this is not feasible, discharge to the sanitary sewer system is allowable. No distinction is made to specify that it pertains to new air conditioners, so it is to be presumed that existing air conditioners must have their condensate lines rerouted.

C.15.b.iii.(3): The County must require fire fighting personnel to implement practices to prevent impacts to water quality associated with emergency response activities. This provision does allow efforts to preserve life and property to be prioritized above water quality protection.

C.15.b.v: The MRP requires the County to prohibit discharge of water from pools, hot tubs, spas, and fountains, unless the water has been treated to remove chlorine, algaecides, filter backwash, and other pollutants. New water features of these types must be plumbed to the sanitary sewer system to facilitate draining. The County must enforce discharges that contain the above-noted pollutants.

C.15.b.vi: The County is required to initiate illicit discharge enforcement responses for ongoing large-volume discharges of irrigation runoff that enter the storm drain system.

Attachment B - Contra Costa County
OVERVIEW OF MUNICIPAL REGIONAL PERMIT (MRP) COMPONENT HIGHLIGHTS

Provision	Components	Current	Proposed	Implementation Dates	Current Cost	Estimated Cost by Year					Policy Implications
						FY09/10	FY10/11	FY11/12	FY12/13	FY13/14	
C.2	MUNICIPAL OPERATIONS										
C.2.a	STREET SWEEPING STREET & ROAD REPAIR & MAINTENANCE	Public curbed streets swept once a month.	Street sweeping requirement removed (but still implicitly required to reduce pollutants to the maximum extent practicable as well as explicitly in C.11 and C.12).	7/1/2010 Progress Report due on two evaluations; 3/1/2014 Integrated Monitoring Report due	\$160,000	\$180,000	\$180,000	\$180,000	\$180,000	\$200,000	Sections C.11.d and C.12.d imply that continuing street sweeping is expected, though it is no longer explicitly required by the permit. Since current levels of street sweeping contribute to current levels of water quality, this permit implicitly requires that the County continue to conduct this activity. The County will presumably continue to provide current levels of street sweeping service.
C.2.b	SIDEWALK/PLAZA CLEANING	Use BMP's Bay Area Stormwater Management Agencies Association (BASMAA) mobile surface cleaning certification program to reduce pollutants.	All wash water is prohibited from being discharged to the stormdrain system, and must be captured on site and disposed of through other means. Coordinate with sanitary sewer agencies to determine if disposal to sanitary sewer is available.		\$0	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	May result in reduction in cleaning of public spaces.
C.2.c	BRIDGE AND STRUCTURE MAINTENANCE AND GRAFFITI REMOVAL		(1) Implement BMPs to prevent polluted stormwater and non-stormwater discharge from bridges and structural maintenance activities directly over water or into storm drains (2) Implement BMPs to prevent pollution associated with graffiti removal.		\$0	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	
C.2.f	CATCH BASIN CLEANING	Inspect and clean (if necessary) once a year.	Catchbasin cleaning requirement removed (but still implicitly required).	N/A	\$775,000	\$775,000	\$775,000	\$775,000	\$775,000	\$775,000	Sections C.11.d and C.12.d imply that continuing catch basin cleaning is expected, though it is no longer explicitly required by the permit. Since current levels of catch basin cleaning contribute to current levels of water quality, this permit implicitly requires that the County continue to conduct this activity. The County will presumably continue to provide current levels of catch basin cleaning.
C.2.d	STORMWATER PUMP STATIONS	Inspect and clean at least once a year.	(1) Establish inventory of all pump stations in jurisdiction (2) Inspect and collect dissolved oxygen data from all pump stations twice a year during the dry season beginning 2010; (3) If dissolved oxygen content is at or below 3 mg/L apply corrective actions; (4) Inspect pump stations in the first business day after ¼-inch within 24 hour and larger storm events.	3/1/2010 (Inventory) 7/1/2010 Dissolved Oxygen monitoring Fall 2010 (Inspections and Trash Removal)	\$45,000	\$75,000	\$90,000	\$90,000	\$90,000	\$90,000	Assumes that sanitary districts will be willing/able to cooperate.
C.2.e	RURAL PUBLIC WORKS CONSTRUCTION AND MAINTENANCE	None	(1) Consider potential impacts water quality (erosion potential, slope steepness, stream habitat resources) when prioritizing projects. (2) Develop BMPs for erosion and sediment control during and post construction for rural roads. (3) Increase maintenance on rural roads adjacent to streams and riparian habitat to prevent impacts to water quality. (4) Ensure that replaced/new culverts and bridge crossings do not impede fish passage or impact natural stream geomorphology.		\$260,000	\$350,000	\$350,000	\$350,000	\$350,000	\$350,000	If new/additional funding is not developed, will result in reduction in the number of annual road maintenance projects (more deferred maintenance).
			Subtotal		\$1,240,000	\$1,460,000	\$1,475,000	\$1,475,000	\$1,475,000	\$1,495,000	

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Provision	Components	Current	Proposed	Implementation Dates	Current Cost	Estimated Cost by Year					Policy Implications	
						FY09/10	FY10/11	FY11/12	FY12/13	FY13/14		
C.3	NEW DEVELOPMENT AND REDEVELOPMENT											† These estimates only account for additional costs associated with MRP (excludes cost of public projects under current permit). Project costs vary. No projects incorporating permanent stormwater management facilities have been completed to date.
C.3.b	REGULATED PROJECTS	<p>(1) Public and private projects that create and/or redevelop at least 10,000 square feet of impervious surface area to install permanent stormwater management facilities (PSWMFs) to treat runoff and control its flow rate, and requires the operation and maintenance of the PSWMFs in perpetuity.</p> <p>(2) Road re-construction is largely excepted from PSWFM requirements (unless project substantially entirely reconstructs the road).</p> <p>(3) Trails, sidewalks, and bicycle lanes excepted from PSWFM requirements.</p> <p>(4) Projects on previously developed sites that create and/or redevelop impervious surface in excess of 50% of the previously existing impervious surface must provide treatment for all project impervious surface (including previously existing impervious surface).</p> <p>(5) Private projects "grandfathered" if deemed complete prior to specified dates.</p> <p>(6) Public projects will be "grandfathered" only if funds have been committed and the project is scheduled prior to specified dates.</p>	<p>(1) Threshold for PSWFM requirements reduced to 5,000 square feet of new/redeveloped impervious surface area for certain projects, including auto service facilities, retail gasoline outlets, restaurants, uncovered parking lots. Various changes to how road projects' requirements to provide stormwater treatment and flow control are determined.</p> <p>(2) Road reconstruction projects almost entirely excepted from PSWFM requirements (unless part of a project that also includes adding additional impervious surface).</p> <p>(3) Impervious sidewalks and bicycle lanes subject to PSWFM requirements unless they drain to landscaped areas and away from creeks/levees.</p> <p>(4) Substantially unchanged.</p> <p>(5) Private projects will be "grandfathered" only if all "final discretionary approvals" have been granted prior to specified dates.</p> <p>(6) Public projects will be "grandfathered" only if funds have been committed and project is scheduled to begin prior to specified dates.</p> <p>(7) A minimum of 2 "Green Street" pilot projects must be installed in Contra Costa County (inclusive of cities).</p>	<p>12/1/2011 Changes to PSWFM requirements for private development projects.</p> <p>12/1/2012 Changes to PSWFM requirements for public projects.</p> <p>12/1/2014 Green Street pilot projects must be completed.</p>	<p>currently limited to planning and design stage; the County has yet to install any PSWMFs).</p> <p>Estimated annual costs of designing and installing PSWMFs as required by the current permit are provided at right.</p> <p>This only evaluates costs for Public Works Projects (excludes General Services Department projects, which will vary more than Public Works Department costs).</p> <p>*Private development related costs borne</p>	<p>Estimated Cost Under Current Permit: \$2,300,000</p> <p>MRP: \$2,300,000</p>	<p>Estimated Cost Under Current Permit: \$2,900,000</p> <p>MRP: \$2,900,000</p>	<p>Estimated Cost Under Current Permit: \$2,600,000</p> <p>MRP: \$2,600,000</p>	<p>Estimated Cost Under Current Permit: \$3,300,000</p> <p>MRP: \$3,300,000</p>	<p>Estimated Cost Under Current Permit: \$3,300,000</p> <p>MRP: \$3,300,000</p>	<p>Requires amendments to County Ordinance Code.</p> <p>Increased development costs. More new projects will incorporate permanent stormwater management facilities; owners will be required to maintain the facilities in perpetuity.</p> <p>Increased project design/construction costs for some public and private projects, reduced costs for others. Provides disincentives to providing bicycle lanes and sidewalks for some projects.</p> <p>Changes to benchmarks for "grandfathering" regulations under previous NPDES permits will cause some projects that are at sufficiently advanced design/planning stages that they were assumed to be "vested" under current/previous will be required to comply with updated C.3 regulations. This will involve an increase in regulatory requirements for some projects and a reduction in requirements for others. This affects certain projects that have yet to receive final discretionary approval, including those projects that have been working toward compliance with C.3 pursuant to the existing permit, and projects that were "grandfathered" under the current/previous NPDES permits because they were deemed complete prior to the effective date of C.3 (existing permit). The County may be required to modify recommended conditions of approval for projects that have already received final recommended conditions, but have not yet been granted final discretionary approval, to ensure compliance with the MRP.</p>	
C.3.c	LOW IMPACT DEVELOPMENT(LID)	<p>Projects required to implement PSWMFs must install facilities designed in accordance with specified criteria. These types of facilities had previously been considered Low Impact Development (LID).</p>	<p>Projects must implement newly defined LID requirements. These requirements now explicitly prefer on-site "harvesting and reuse" of specified quantities of runoff (consistent with current sizing), infiltration and evapotranspiration. "Biotreatment" (the type of PSWFM currently used in Contra Costa County) is only permitted if the preferred methods infeasibility can be demonstrated. A report must be submitted outlining situations in which harvesting and reuse, infiltration and evapotranspiration are infeasible.</p>	<p>12/1/2011 Private projects.</p> <p>12/1/2012 Public projects.</p> <p>5/1/2011 Report on criteria and procedures for determining infeasibility of preferred LID methods (with several follow-up reports subsequently required).</p>	<p>* Currently Bioretention facilities are considered LID</p>	<p>\$0</p> <p>MRP: \$20,000</p>	<p>\$20,000</p> <p>MRP: \$20,000</p>	<p>\$20,000</p> <p>MRP: \$20,000</p>	<p>\$20,000</p> <p>MRP: \$20,000</p>	<p>\$20,000</p> <p>MRP: \$20,000</p>	<p>May require amendments to County Ordinance Code and/or Stormwater C.3 Guidebook.</p> <p>Requires projects to comply with C.3 stormwater treatment and flow control requirements using rainwater harvesting and reuse, infiltration, or evapotranspiration. Bioretention, which has been used thus far, is only allowed when the other methods infeasibility is demonstrable.</p> <p>Not possible to estimate cost difference if other methods of stormwater treatment and flow control are required for county projects</p>	
C.3.h	OPERATION AND MAINTENANCE OF STORMWATER TREATMENT SYSTEMS	<p>County is required to operate and maintain PSWMFs owned by the County, and is required to ensure that PSWMFs owner by other parties are adequately operated and maintained.</p>	<p>County is required to operate and maintain PSWMFs owned by the County, and is required to ensure that PSWMFs owner by other parties are adequately operated and maintained.</p> <p>County is required to utilize a database or (other tabular format) to track operation and maintenance of PSWMFs.</p>	<p>12/1/2010 Database (or other tabular format) for tracking PSWFM operation and maintenance.</p>	<p>†*County has not installed any PSWMFs to date.</p> <p>Estimated annual costs of operating and maintaining PSWMFs as required by the current permit are provided at right.</p> <p>Solely inclusive of costs relative to PSWMFs developed by the Public Works Department (see note regarding General Services District, above (C.3.b).</p>	<p>Estimated Cost Under Current Permit: \$0</p> <p>MRP: \$0</p>	<p>Estimated Cost Under Current Permit: \$45,000</p> <p>MRP: \$45,000</p>	<p>Estimated Cost Under Current Permit: \$130,000</p> <p>MRP: \$130,000</p>	<p>Estimated Cost Under Current Permit: \$160,000</p> <p>MRP: \$160,000</p>	<p>Estimated Cost Under Current Permit: \$180,000</p> <p>MRP: \$180,000</p>	<p>Requirements to operate and maintain stormwater management facilities do not change significantly, but the County will be required to absorb the expense of implementing a database (or other tabular tracking system) to track operation and maintenance.</p>	

Attachment B - Contra Costa County
 OVERVIEW OF MUNICIPAL REGIONAL PERMIT (MRP) COMPONENT HIGHLIGHTS

Provision	Components	Current	Proposed	Implementation Dates	Current Cost	Estimated Cost by Year					Policy Implications	
						FY09/10	FY10/11	FY11/12	FY12/13	FY13/14		
C.3.i	REQUIRED SITE DESIGN MEASURES FOR SMALL PROJECTS AND DETACHED SINGLE-FAMILY HOME PROJECTS	Incorporate stormwater treatment to "maximum extent practical" for projects not explicitly required to implement PSWMFs designed and sized according to specified criteria.	Requires projects creating between 2,500 and 10,000 square feet of impervious surface to implement at least one of six specified site design measures to manage stormwater runoff. This includes development of individual single family residences, and may also include projects, such as paving driveways, that currently do not require any permits whatsoever from the County.	12/1/2012	\$0 *Private development related costs to be borne by developers.	\$0	\$25,000	\$75,000	\$75,000	\$75,000	Requires amendment to County Ordinance Code. Small projects (creating at least 2,500 square feet of impervious surface), including individual single family residences, will be required to implement one of several specified stormwater management site design features. The County may also be bound to implement this requirement for projects that solely involve paving, which can currently be conducted without securing permits. Adds a potentially expensive requirement to many private development projects. None of the listed site design measures may be feasible for certain development sites.	
			Subtotals		* Current cost shown as average	\$2,983,000	\$2,320,000	\$2,990,000	\$2,825,000	\$3,555,000	\$3,575,000	

Attachment B - Contra Costa County
OVERVIEW OF MUNICIPAL REGIONAL PERMIT (MRP) COMPONENT HIGHLIGHTS

Provision	Components	Current	Proposed	Implementation Dates	Current Cost	Estimated Cost by Year					Policy Implications
						FY09/10	FY10/11	FY11/12	FY12/13	FY13/14	
C.4	INDUSTRIAL AND COMMERCIAL SITE CONTROLS										
C.4.a	LEGAL AUTHORITY FOR EFFECTIVE SITE MANAGEMENT	Inspect restaurants and auto related business at least once every five years. Work with them to improve practices. Enforcement for blatant violators is handled by the DA's office.	(1) Legal authority to oversee, inspect, and require expedient compliance and pollution abatement at all industrial and commercial sites which may be reasonably considered to cause or contribute to pollution of stormwater runoff. (2) Violations corrected prior to next rain event or within 10 business days after violations are noted. (3) Develop and implement a prioritized Inspection Plan. (4) Annually update and maintain a list of priority facilities to inspect. (5) Develop and implement an Enforcement Response Plan for inspection staff to take consistent actions to achieve compliance from all public and private construction site operators. (6) Train inspectors within 5 year Permit term.	4/1/2010 (ERP); subsequent increased inspections	\$400,000	\$450,000	\$550,000	\$550,000	\$550,000	\$550,000	Requires County to enforce State General Permit provisions. Expands County responsibility to include businesses that already have coverage under the State General Permit.
			Cost Totals		\$400,000	\$450,000	\$550,000	\$550,000	\$550,000	\$550,000	
C.5	ILLICIT DISCHARGE DETECTION AND ELIMINATION										
C.5.a	LEGAL AUTHORITY FOR ILLICIT DISCHARGE DETECTION 7 ELIMINATION	Respond to reports of illicit discharges and conduct enforcement activities. Report to RWQCB.	(1) Legal authority to prohibit and control illicit discharges and escalate stricter enforcement to achieve compliance. (2) Defines a range of illicit discharges to be addressed (though County responsibility is not limited to those discharges). (3) Perform routine inspections in an attempt to locate violators or potential violators. Conduct dry weather surveys (at least one per square mile, excluding open space) in an effort to locate illicit discharges. Create a map and a report of all investigations (including dry weather surveys) and make information available to the public. (4) Develop Enforcement Response Plan defining procedures for responding to illicit discharges, providing for escalating enforcement responses. (5) Develop a database (or "tabular system") to record illicit discharge control activities. (6) Increases oversight of Mobile Sources (i.e. power washing, carpet cleaning).	4/1/2010 ERP	\$200,000	\$300,000	\$350,000	\$350,000	\$350,000	\$350,000	County role will shift from oversight and assistance to enforcement, punishment, and cleanup. County may need to expand authority to utilize escalating penalties for illicit discharges, and may need to change procedures to require cease and desist. Requires County to regularly patrol for NPDES violations.
					\$200,000	\$300,000	\$350,000	\$350,000	\$350,000	\$350,000	

Attachment B - Contra Costa County
OVERVIEW OF MUNICIPAL REGIONAL PERMIT (MRP) COMPONENT HIGHLIGHTS

Provision	Components	Current	Proposed	Implementation Dates	Current Cost	Estimated Cost by Year					Policy Implications
						FY09/10	FY10/11	FY11/12	FY12/13	FY13/14	
C.6	Construction Site Control										
		(1) Require erosion and sediment controls on active construction sites between October 1st and April 30th. Inspection primarily conducted in conjunction with grading operations. (2) Require plans for erosion and sediment controls (stormwater pollution prevention plan – SWPPP). Inspect construction sites (as part of normal business) to make sure no sediment is discharged at the construction site (as needed).	(1) Requires seasonally- and project-appropriate pollution controls (in six categories) be in place at all construction sites through all phases of construction. Erosion control plans must be reviewed, including verification that sites disturbing more than an acre of land have filed for coverage under the Construction General Permit. (2) Requires development and implementation of prescriptive Enforcement Response Plan detailing procedures for escalating enforcement activities to ensure adequate construction site pollution control. (3) Requires review of erosion control plans, and verification that sites disturbing more than an acre of land have filed for coverage under the Construction General Permit. (4) Requires monthly inspections of high priority sites. (5) Detailed tracking and reporting requirements.	6/30/2010 Verify adequacy of legal authority to implement requirements. 4/1/2010 ERP must be implemented.	*\$0 *Excluded - currently funded entirely by development permit fees; anticipated additional costs shown at right.	\$30,000	\$20,000	\$20,000	\$20,000	\$20,000	May require amendments to County Ordinance Code. Although mostly overlapping the state Construction General Permit, this potentially increases costs for both public and private development projects. Increased costs for private construction projects would be mainly be borne by developers. Increases tracking and reporting expenses for County.
			Cost Totals			\$30,000	\$20,000	\$20,000	\$20,000	\$20,000	
C.7	PUBLIC INFORMATION AND OUTREACH										
		(1) 90% of public stormdrain inlets need to be marked "no dumping" and markers shall be maintained as necessary. (2) No Requirement (3) Participate in or conduct at least eight outreach events per year. (4) Unchanged. (5) No requirement, but we do currently fund and promote this.	(1) 80% of municipally-maintained stormdrain inlets shall be marked by end of permit. 80% of inlet markers shall be inspected and maintained at least once every 5 years. (2) Two advertising campaigns (trash and pesticides) with pre- and post-campaign surveys of the public. (3) Annually participate in and/or host 5 public outreach events and 2 citizen involvement events. (4) Encourage and support watershed stewardship collaborative efforts of community groups. (5) Annually conduct outreach activities targeted towards school age children.	(1) 2013 Annual Report (2-5) Begin 12/1/2010	\$460,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	
			Cost Totals		\$460,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	

Attachment B - Contra Costa County
OVERVIEW OF MUNICIPAL REGIONAL PERMIT (MRP) COMPONENT HIGHLIGHTS

Provision	Components	Current	Proposed	Implementation Dates	Current Cost	Estimated Cost by Year					Policy Implications
						FY09/10	FY10/11	FY11/12	FY12/13	FY13/14	
C.8	WATER QUALITY MONITORING		<p>Requires San Francisco Estuary Receiving Water Monitoring contribution to Regional Monitoring Program</p> <p>Requires Status Monitoring of 8 watershed in CCCounty including:</p> <p>(1) 10 bioassessments w/physical habitat and general water chemistry per year</p> <p>(2) Chlorine at 10 sites once per year in Spring and 2 times during dry season.</p> <p>(3) Nutrients at 10 sites once per year in conjunction w/ biological assessments</p> <p>(4) General water quality at 10 sites / year in Spring</p> <p>(5) Temperature at 4 sites / year at 60 min. intervals from April - Sept.</p> <p>(6) Toxicity in water column at two sites twice per year.</p> <p>(7) Toxicity in bedded sediment two sites per year.</p> <p>(8) Pollutants in bedded sediment two sites per year.</p> <p>(9) Pathogen indicators five sites per year.</p> <p>(10) Stream survey six stream miles per year.</p> <p>Long Term Monitoring of Kirker or Walnut Creek to include metals, organics, suspended sediments, toxicity and Monitoring Projects:</p> <p>(1) Stressor/Source identification</p> <p>(2) BMP Effectiveness Investigation</p> <p>(3) Geomorphoc Project</p> <p>Pollutants of Concern Monitoring to develop waste load allocations for TMDL's at Rheem Creek and Walnut Creek four times per year for Copper, Mercury, Methyl Mercury, PCB's, Suspended Sediments, Total Organic Carbon and twice in Years 2 and 4 for Selenium, PBDE's, PAH, Chlordane, DDT's, Dieldrin, Nitrate, Pyrethroids, Phosphorous and Speical Projects:</p> <p>(1) Sediment Delivery Estimate/Budget</p>								<p>Developing data for potential future TMDLs (Total Maximum Daily Loads); traditionally a State responsibility.</p> <p>Significant costs placed upon County that would traditionally have been borne by the Water Board.</p>
		None (Current volunteer monitoring program fulfills future bioassessment requirements).		Regional monitoring agreement by 7/1/2010; commence data collection by 10/2011; Various deadlines for different studies/requirements.	\$72,000	\$190,000	\$200,000	\$210,000	\$250,000	\$250,000	
			Cost Totals		\$72,000	\$190,000	\$200,000	\$210,000	\$250,000	\$250,000	

Attachment B - Contra Costa County
OVERVIEW OF MUNICIPAL REGIONAL PERMIT (MRP) COMPONENT HIGHLIGHTS

Provision	Components	Current	Proposed	Implementation Dates	Current Cost	Estimated Cost by Year					Policy Implications
						FY09/10	FY10/11	FY11/12	FY12/13	FY13/14	
C.9	PESTICIDES TOXICITY CONTROL										
		Integrate IPM to the Maximum Extend Practicable (MEP).	(1) Adopt Integrated Pest Management (IPM) Policy or Ordinance (2) Require use of IPM in municipal operations (3) Train County employees in IPM (4) Require County-hired contractors to implement IPM (5) Track and Participate in Regulatory Processes (6) Require agricultural businesses to implement IPM (7) Evaluate source control actions (8) Conduct additional public outreach promoting IPM (9) Interface with County Agricultural Commissioners	7/1/2010 (IPM Policy and Ordinances, County/Contractors Implement IPM)	\$25,000	\$40,000	\$120,000	\$120,000	\$120,000	\$120,000	Review IPM ordinance/policies for compliance with new requirements. Require IPM-certified contractors. Outreach to pesticide sellers/users.
			Cost Totals		\$25,000	\$40,000	\$120,000	\$120,000	\$120,000	\$120,000	
C.10	TRASH REDUCTION										
		None	(1) Requires establish of baseline trash load from storm drain system. Reports must be submitted describing the County's short term and long term plans to eliminate trash impacts, and monitoring levels of trash load reduction below the baseline trash load. (2) Identify a minimum of 5 Trash Hot Spots within creeks and shorelines in the County's jurisdiction (with minima of 100 yards of creek or 200 yards of shoreline) and establish their baseline trash loads. Clean Trash Hot Spots to level of "no visual impact" a minimum of once per year. Conduct trash surveys to monitor trash levels at each Trash Hot Spot, and report on reductions in trash impairment relative to their baseline trash loads. (3) Install "Full Trash Capture Devices" (FTCD) which must trap all particles retained by a 5mm (0.2 inch) mesh screen. FTCDs must be installed to capture trash from a 157 acre catchment area (MRP specifies an area equivalent to 30% of the County's Retain/Wholesale Commercial Land (per ABAG 2005 Land Use Survey)). Operate and maintain FTCDs. (4) Implement plans eliminate 40% of trash loads discharged from storm drain system by 2014, 70% by 2017, and 100% by 2022.	7/1/2010 Propose Trash Hot Spots. 2/1/2012 Baseline trash load, reports on short and long term plans to eliminate trash impacts. 7/1/2014 FTCD Installation Complete. 7/1/2014 40% trash load reduction. 2017 70% trash load reduction. 2022 100% trash load reduction.	\$225,000	\$360,000	\$425,000	\$1,400,000	\$1,300,000	\$1,100,000	Substantial costs to County associated with implementing FTCDs; ongoing costs of maintaining FTCDs. Increased costs to businesses and increased enforcement. Encourages passage of new ordinances to reduce trash (i.e. litter control, illegal dumping, bans on styrofoam / plastic bags.) Implicitly encourages County to eliminate homeless persons' contribution to trash impacts (i.e. removal of homeless encampments near waterways).
			Cost Totals		\$225,000	\$360,000	\$425,000	\$1,400,000	\$1,300,000	\$1,100,000	
C.11	MERCURY CONTROLS										
		None	Implement urban runoff requirements of the mercury TMDL to reduce mercury loads. Develop allocation sharing scheme with Caltrans. Conduct pilot projects to evaluate on-site stormwater treatment via retrofit. Conduct pilot projects to evaluate and enhance municipal sediment removal and management practices. Divert dry weather and first flush flows to POTWs. Conduct fate and Transport Study of Mercury in urban run-off. Develop a risk reduction program throughout the region. Conduct pilot projects to investigate and abate mercury sources in drainages. Develop and implement a mercury collection and recycling program.	Progress report in 2010 Annual Report (July); 3/15/2014 Integrated Monitoring Report	\$0	\$10,000	\$15,000	\$25,000	\$25,000	\$25,000	Requires cooperation with sanitary sewer districts and CalTrans (and potentially ties our compliance with their willingness to cooperate).
			Cost Totals		\$0	\$10,000	\$15,000	\$25,000	\$25,000	\$25,000	

Attachment B - Contra Costa County
OVERVIEW OF MUNICIPAL REGIONAL PERMIT (MRP) COMPONENT HIGHLIGHTS

Provision	Components	Current	Proposed	Implementation Dates	Current Cost	Estimated Cost by Year					Policy Implications
						FY09/10	FY10/11	FY11/12	FY12/13	FY13/14	
C.12	PCB CONTROLS										
		None	Implement urban runoff requirements of the PCB TMDL to reduce PCB loads. Implement regional project for PCB containing equipment identification and reporting during industrial inspections. Conduct pilot projects to evaluate management of PCB containing wastes during demolition and renovation. Conduct pilot projects to investigate and abate on-land locations w/ elevated PCBs. Conduct pilot projects to evaluate and enhance municipal sediment removal and management practices. Divert dry weather and first flush flows to POTWs. Conduct Fate and Transport Study of PCBs in urban run-off. Develop a risk reduction program throughout the region.	Report in Annual Reports due 2010 Identify suspent drainage locaitons; 2011 sampling and chemical analysis results at pilot locaitons; 2012 proposed abatement activities; 3/15/2014 abatement program effectiveness	\$0	\$20,000	\$25,000	\$30,000	\$30,000	\$30,000	Requires cooperation with sanitary sewer districts and CalTrans (and potentially ties our compliance with their willingness to cooperate).
			Cost Totals		\$0	\$20,000	\$25,000	\$30,000	\$30,000	\$30,000	
C.13	COPPER CONTROLS										
		None	Ensure proper management of washwater from copper features and discharges from pools, spas and fountains. Ensure that construction projects and industrial facilities do not discharge copper. Requirement to participate in non-profit Brake Pad Partnership (intended to phase copper out of brake pads). Conduct technical studies of copper toxicity in sediments and on samonids.	7/1/2011 (Report to certify adequate legal authority); 2012 Annual report training, permitting and enforcement; 2013 BMP effectiveness	\$0	\$30,000	\$20,000	\$20,000	\$20,000	\$20,000	Increased development costs. Requires adoption of ordinance. Increased restrictions on use of private property. Increased enforcement.
			Cost Totals		\$0	\$30,000	\$20,000	\$20,000	\$20,000	\$20,000	
C.14	PDBE'S, LEGACY PESTICIDES AND SELENIUM										
		None	Gather concentration and loading information on pollutants of concern for which TMDLs are planned including PBDEs, DDT, dieldrin, chlordane, selenium. Develop a program to identify, and manage controllable sources of these contaminants found in urban runoff.	Report on Progress in 2010 and 2011 Annual Reports; Characterization study results in 2012 Annual Report; Load computation and control measures in 2013 Annual Report	\$0	\$10,000	\$15,000	\$20,000	\$20,000	\$20,000	Increased costs to businesses that utilize identified chemicals. May increase County's level of involvement in business and residential activities that involve these chemicals.
			Cost Totals		\$0	\$10,000	\$15,000	\$20,000	\$20,000	\$20,000	

Attachment B - Contra Costa County
OVERVIEW OF MUNICIPAL REGIONAL PERMIT (MRP) COMPONENT HIGHLIGHTS

Provision	Components	Current	Proposed	Implementation Dates	Current Cost	Estimated Cost by Year					Policy Implications
						FY09/10	FY10/11	FY11/12	FY12/13	FY13/14	
C.15	EXEMPTED AND CONDITIONALLY EXEMPTED DISCHARGES										
C.15.b	CONDITIONALLY EXEMPTED DISCHARGES	Non-specific requirements to oversee conditionally-exempt discharges. (*Interim guidance released by the Water Board has established oversight of potable water discharges regardless of whether the purveyor is the County.)	Sets forth categories of conditionally exempt non-stormwater discharges that may only be allowed by the County if the County ensures that required BMP's and control measures are implemented: (1) Pumped groundwater, foundation drains, water from crawl space pumps and footing drains (10,000 gallon per day minimum). (2) Air conditioning condensate. (3) Planned and unplanned discharges of potable water (only if discharged by the County is the water purveyor). (4) Emergency discharges (requires oversight of Fire Districts). (5) Swimming Pools, hot tubs, spas and fountains. (6) Irrigation water, landscape irrigation, and lawn or garden watering Requires the County to track, monitor, and report these discharge types. Requires outreach to discourage individual carwashing that discharges into storm drain systems, and encourage lower-impact car washing practices.		\$10,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	Requires amendments to County ordinance code. Restrictions on use of private property. The County is expected to regulate existing and new facilities (foundation drains, pools, etc.); the County has not developed comprehensive records of which properties contain such facilities. Expands County oversight/regulation/enforcement responsibility for homeowners and businesses, as well as fire districts. (1, 2, 5) Requires County to oversee/regulate several types of previously exempted discharges that are now conditionally exempted. (3, 4) Requires County to impose requirements on Fire Districts' discharges. Onerous requirements, with no implementation dates (it is assumed that implementation must be immediate).
					\$10,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	
Misc*	COUNTY WATERSHED PROGRAM ADMINISTRATION	Inclusive of all activities currently conducted through County Watershed Program (i.e. NPDES permit administration, tracking activities, serving as clearinghouse for NPDES compliance information, preparation of annual reports to RWQCB, drafting NPDES-related ordinances, etc.)	Heightened levels of activities conducted by County Watershed Program required to maintain compliance with MRP.		\$500,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	
TOTAL ESTIMATED MRP COSTS					\$6,115,000	\$6,750,000	\$7,735,000	\$8,575,000	\$9,245,000	\$9,085,000	\$41,390,000

NOTES:

- * Note costs listed above as excluded from cost calculations.
- * All future costs estimated in 2009 dollars, with no adjustment for inflation.
- * Capital costs annualized when not specified by implementation dates.
- * Costs are specific to NPDES compliance-related portions of County activities.
- * For provisions where implementation dates are not specified, assume implementation date of December 1, 2009, the effective date of the permit.
- * Assume for costs near high end of anticipated range.
- * Excluded are a number of pilot projects (that would occur in one or more municipalities) that are required to be conducted either on a County-level or a Region-wide level. It is not known whether any of these projects would be undertaken by the County; if so, grant funding will be pursued.

Attachment B - Flood Control
COST IMPLICATIONS OF MUNICIPAL REGIONAL PERMIT (MRP) COMPONENT HIGHLIGHTS

Provision	Components	Current	Proposed	Implementation Dates	Current Cost	Estimated Cost by Year					Policy Implications
						FY09/10	FY10/11	FY11/12	FY12/13	FY13/14	
C.5	ILLICIT DISCHARGE DETECTION AND ELIMINATION										
		Respond to reports of illicit discharges and conduct enforcement activities. Report to RWQCB.	(1) Legal authority to prohibit and control illicit discharges and escalate stricter enforcement to achieve compliance within 10 days or before next rain event. (2) Develop Enforcement Response Plan defining procedures for responding to illicit discharges, providing for escalating enforcement responses. (3) Develop a database (or "tabular system") to record illicit discharge control activities for tracking and follow-up including data on response times and timeliness of corrective action. (4) Increases oversight of Mobile Sources (i.e. power washing, carpet cleaning). (5) Implement a screening program in above ground check points in the MS4 collection system (storm drains) 1 screening per square mile of urban & suburban jurisdiction area, less open space.	2) 4/1/2010 3) 4/1/2010 5) 7/1/2010	\$200,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	County role will shift from oversight and assistance to enforcement, punishment, and cleanup. County may need to expand authority to utilize escalating penalties for illicit discharges, and may need to change procedures to require cease and desist. Requires County to regularly patrol for NPDES violations.
					\$200,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	
C.7	PUBLIC INFORMATION AND OUTREACH										
			(1) Two advertising campaigns (trash and pesticides) with pre- and post-campaign surveys of the public. (2) Annually participate in and/or host 6 public outreach events and 2 citizen involvement events. (3) Encourage and support watershed stewardship collaborative efforts of community groups. (4) Annually conduct outreach activities targeted towards school age children.	7/1/2010	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	
			Cost Totals		\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	
C.10	TRASH REDUCTION										
		None.	(1) Identify a minimum of 6 Trash Hot Spots within creeks and shorelines in the Flood Control District's jurisdiction (with minima of 100 yards of creek or 200 yards of shoreline) and establish their baseline trash loads. Clean Trash Hot Spots to level of "no visual impact" a minimum of once per year. Conduct trash surveys to monitor trash levels at each Trash Hot Spot, and report on reductions in trash impairment relative to their baseline trash loads. (2) Install a minimum of either 4 "Full Trash Capture Devices" (FTCD) at storm drain outfalls (which must trap all particles retained by a 5mm (0.2 inch) mesh screen), 2 trash booms, or equivalent measures. Operate and maintain trash capture devices	7/1/2010 Propose Trash Hot Spots. 7/1/2014 FTCD Installation Complete.	\$225,000	\$400,000	\$410,000	\$875,000	\$875,000	\$800,000	Costs to Flood Control District associated with monitoring and cleaning Trash Hot Spots. Significant costs associates with implementing FTCDs and operating and maintaining FTCDs. Likely requires increased level of enforcement actions to prevent/abate trash impairment. Implicitly encourages Flood Control District to eliminate homeless persons' contribution to trash impacts (i.e. removal of homeless encampments near waterways).
			Cost Totals		\$225,000	\$400,000	\$410,000	\$875,000	\$875,000	\$800,000	

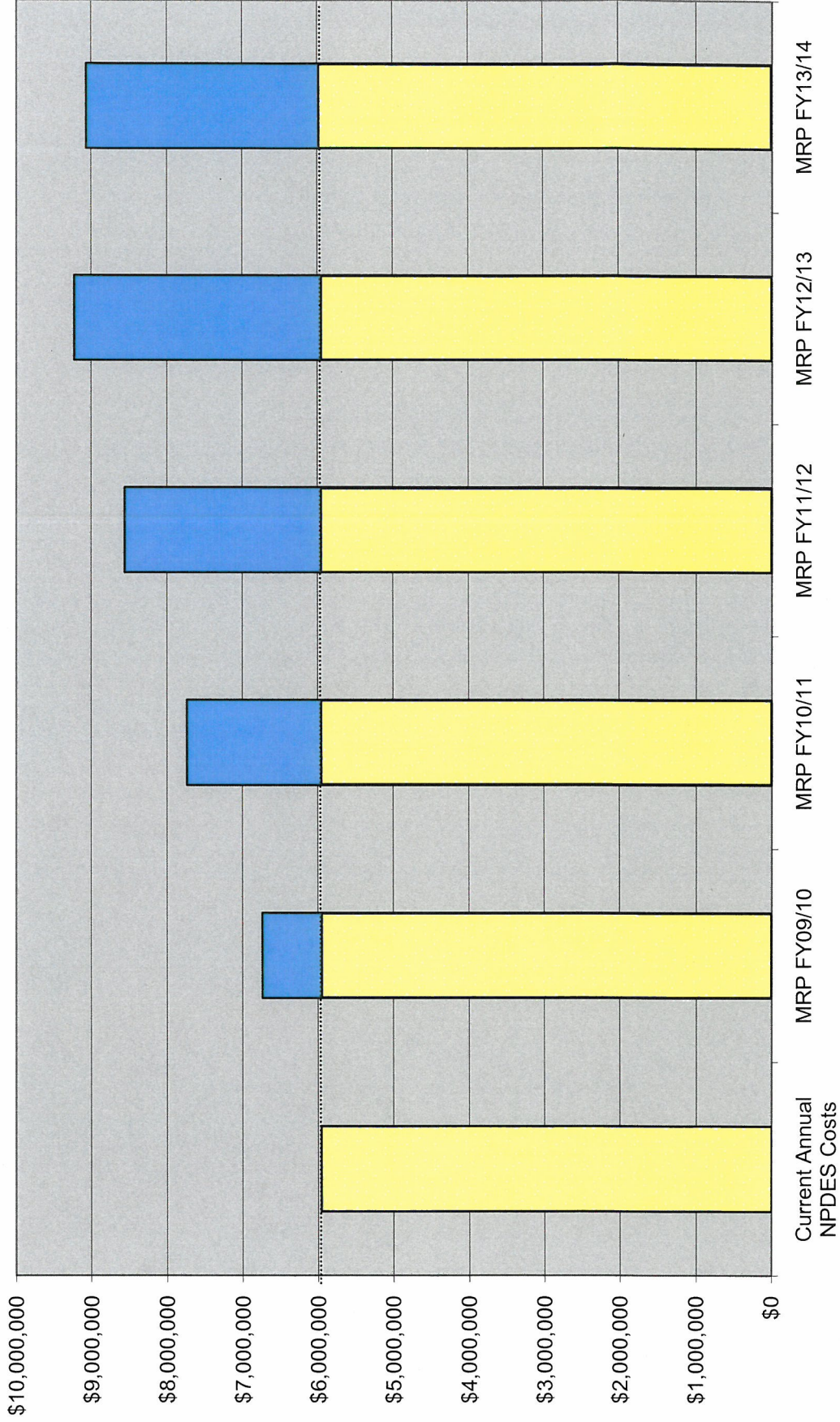
Attachment B - Flood Control
 COST IMPLICATIONS OF MUNICIPAL REGIONAL PERMIT (MRP) COMPONENT HIGHLIGHTS

Provision	Components	Current	Proposed	Implementation Dates	Current Cost	Estimated Cost by Year					Policy Implications
						FY09/10	FY10/11	FY11/12	FY12/13	FY13/14	
TOTAL ESTIMATED MRP COSTS					\$425,000	\$800,000	\$810,000	\$1,275,000	\$1,275,000	\$1,200,000	

NOTES:
 * Note costs listed above as excluded from cost calculations.
 * All future costs estimated in 2009 dollars, with no adjustment for inflation.
 * Capital costs annualized when not specified by implementation dates.
 * Costs are specific to NPDES compliance-related portions of County activities.
 * For provisions where implementation dates are not specified, assume implementation date of December 1, 2009, the effective date of the permit.
 * Assume for costs near high end of anticipated range.

Attachment C
 Contra Costa County

Total Cost for NPDES Implementation by Fiscal Year*

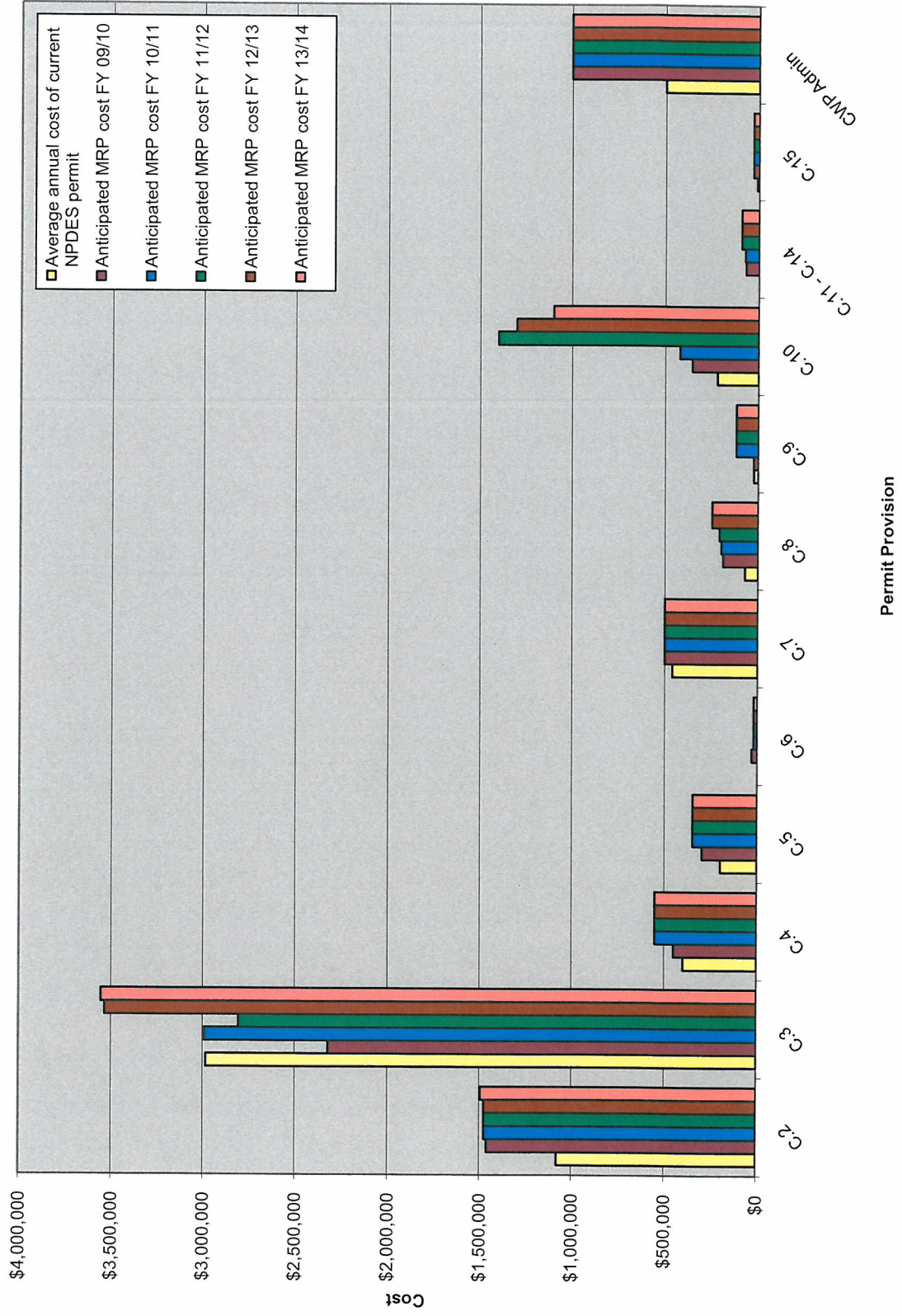


* See Attachment B for assumptions, exclusions, and notes.

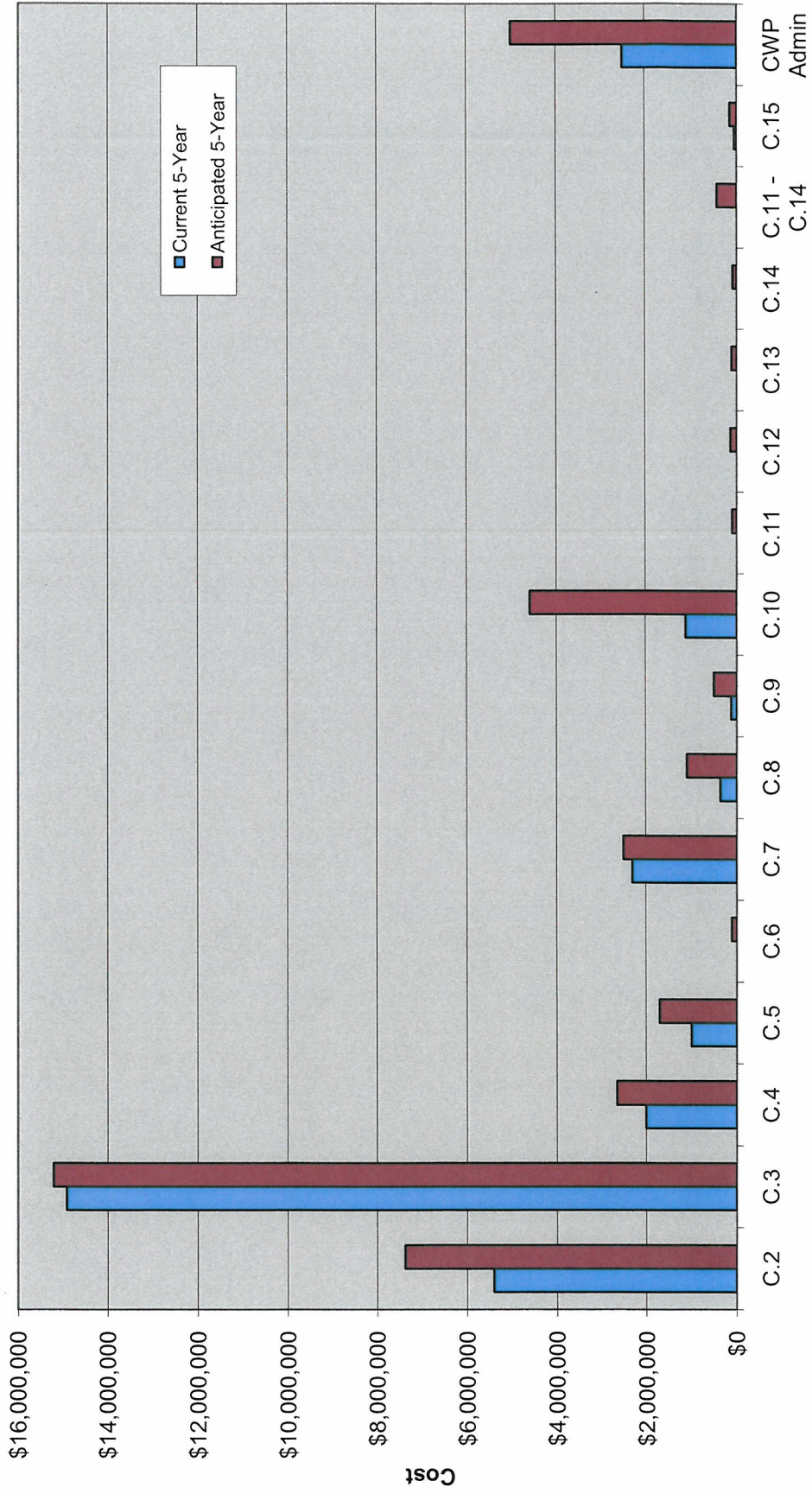
* Costs expected to be consistent with FY13/14 until permit reissuance. Higher costs in preceding years are due to installation of Full Trash Capture Devices (must be completed in FY12/13)

Attachment C
 Contra Costa County

Annual MRP Implementation Cost

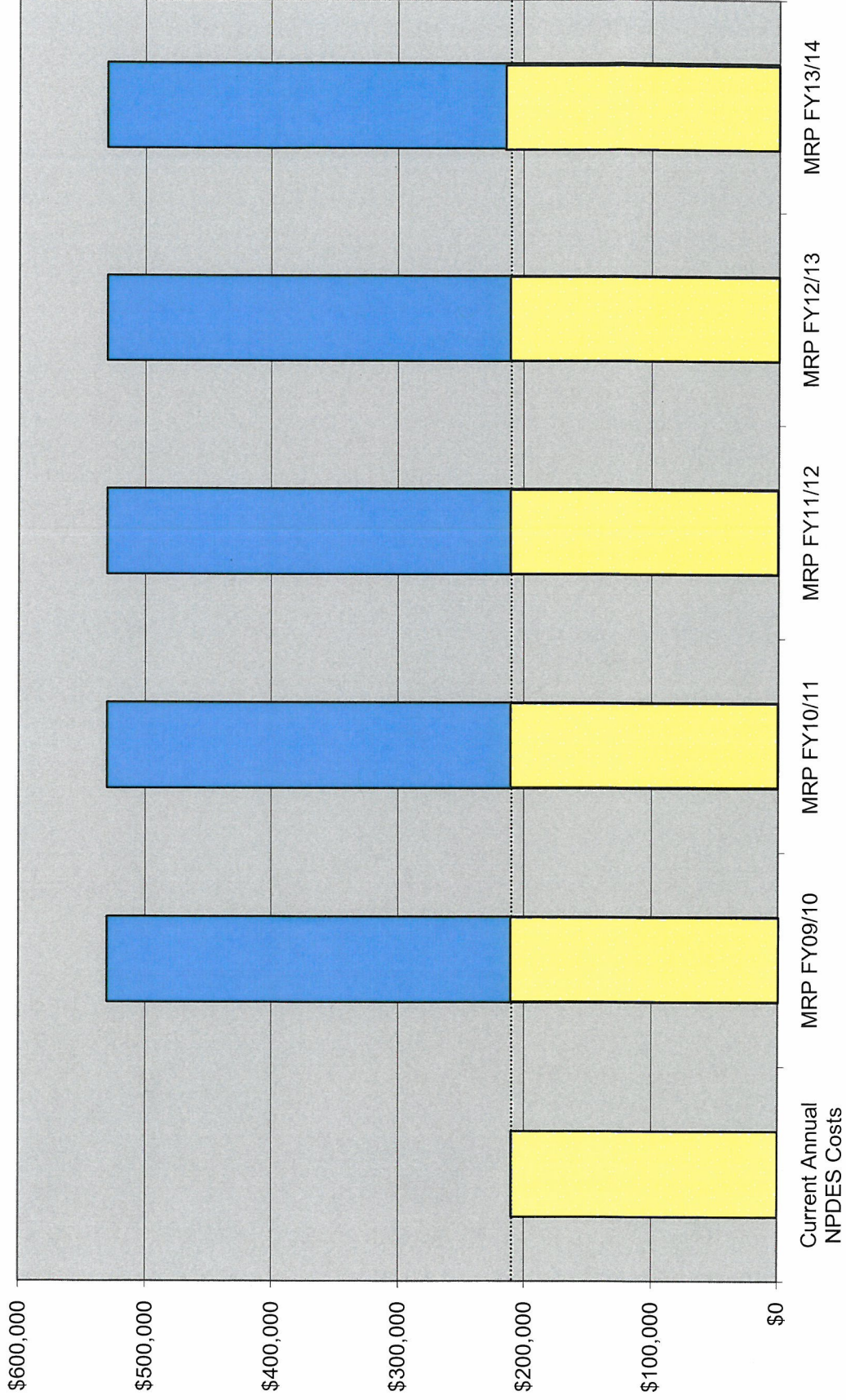


Five Year MRP Implementation Cost



Attachment C
Flood Control District

Total Cost for NPDES Implementation by Fiscal Year*

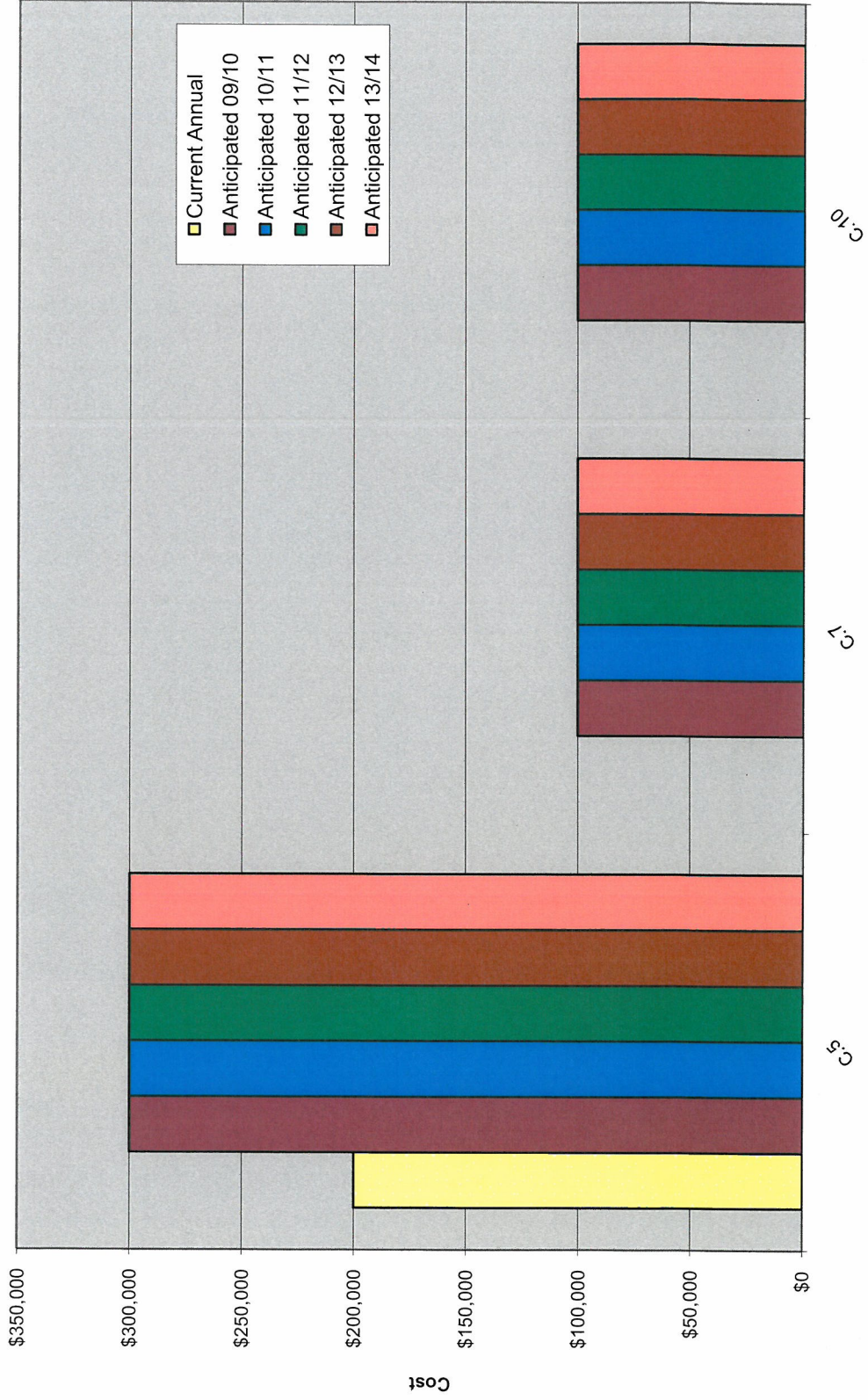


* See Attachment B for assumptions, exclusions, and notes.

* Costs expected to be consistent with FY13/14 until permit reissuance. Higher costs in preceding years are due to installation of Full Trash Capture Devices (must be completed in FY12/13)

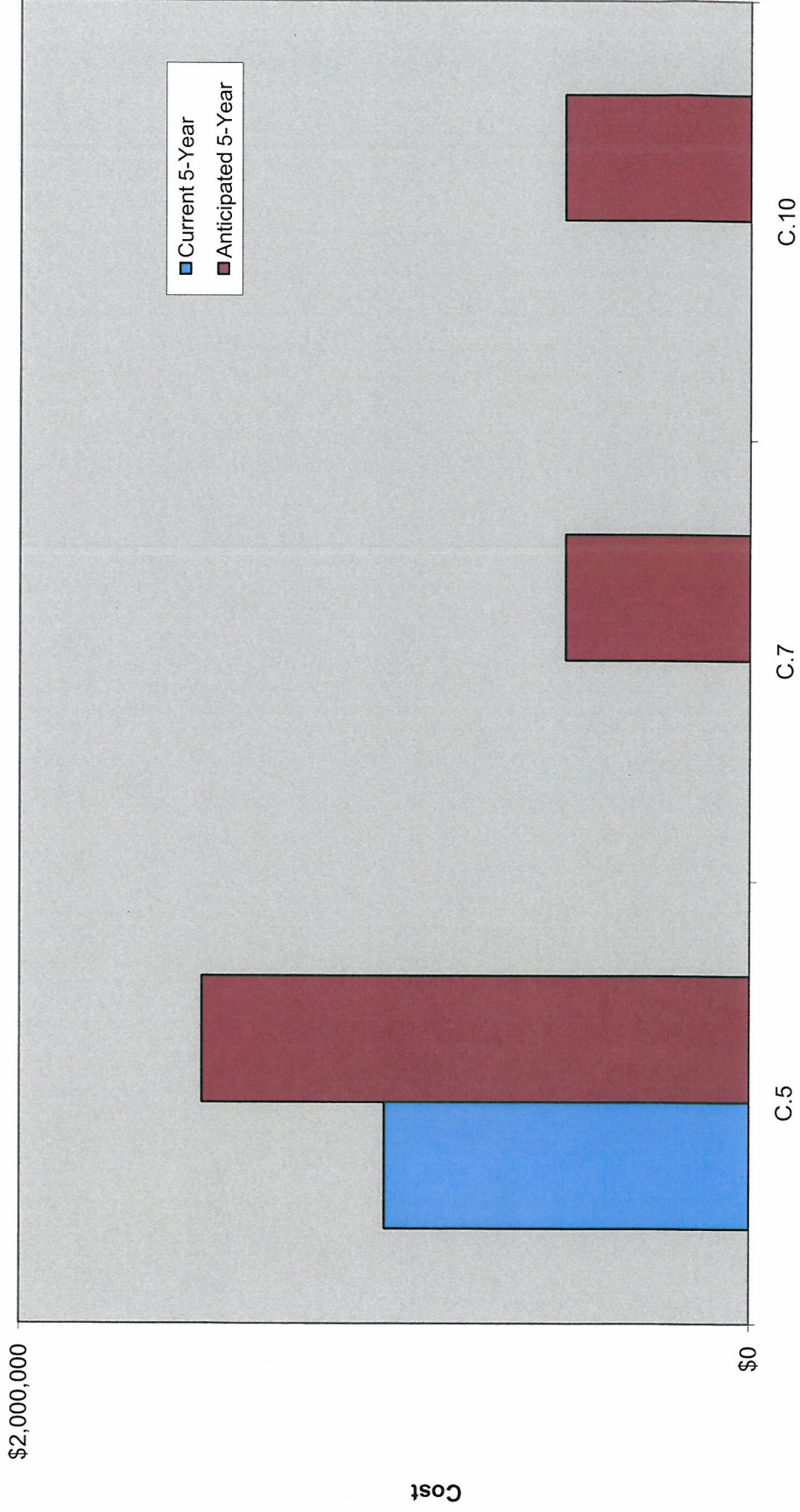
Attachment C
Flood Control District

Annual MRP Implementation Cost



Permit Provision

Five Year MRP Implementation Cost



Permit Provision