

An Evaluation of the City of San Marcos Municipal Separate Storm Sewer System (MS4) Stormwater Program



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January, 2008

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1.0 EXECUTIVE SUMMARY

Between June and August 2007, San Diego Coastkeeper (Coastkeeper) conducted a program evaluation of the City of San Marcos (City) concerning its implementation of the San Diego Municipal Stormwater Program (Program) between 2003 and 2006. The purpose of this evaluation was to determine the City's past levels of compliance with the permit issued by the San Diego Regional Water Quality Control Board (Order R9-2001-0001), and to evaluate the current implementation status of the Copermittee's Jurisdictional Urban Runoff Management Program (JURMP) under this permit. Evaluation checklists are available as appendices to this report

The stormwater permit was updated and renewed on January 24, 2007 by San Diego Regional Water Quality Control Board Order No. R9-2007-0001. The new permit requires significant updates to the City's JURMP and program implementation. However, Copermittees are not required to implement the new provisions of Order 2007-0001 (the 2007 permit) until March 2008. This report evaluates the City's storm water practices under Order R9-2001-0001 (the 2001 permit) and provides recommendations for meeting the requirements of the new 2007 permit and to enhance program areas to better protect water quality.

This evaluation report identifies three major categories of findings: program deficiencies, positive attributes, and future actions: program areas that must be updated to meet the requirements of Order 2007-0001. This report is not a formal finding of violation. Program deficiencies are areas of concern for successful program implementation. Positive attributes indicate highlights in the overall progress in implementing the Program. Lastly, recommended updates to the program are identifications of where current program implementation (under Order 2001-01) would not be compliant with Order 2007-0001 without changes to the JURMP and program implementation. Appendices cover the checklist approach to the audit and specific questions that led to the highlights in the report.

Areas in which the City may require improvement are few, but worth mention. After several years of implementation and with the advent of new requirements under the 2007 Permit, the City should update its JURMP with more specific and revised Best Management Practices (BMPs) for all regulated areas. In reviewing past Annual Reports, the City has been continually improving implementation of the Permit. In order to continue this trend, the City would benefit from better, more centralized record-keeping either through creation of databases or linking of databases. Access to the City's current database system was limited for purposes of this report. In the future, a more thorough review of the City's record-keeping systems would be helpful.

Another relevant indicator of progress is the ability to assess the effectiveness of current strategies and tools. As noted by the Regional Water Quality Control Board (Regional Board), all Copermittees have historically been unable to fulfill the program assessment requirements. With the continual growth of the City, it will be increasingly important for San Marcos to devote more resources to implementation and assessment of the Permit programs and requirements.

This report uses the following symbols:

✓ Highlighted positive attributes

✗ Program deficiencies or areas of concern

However, with the proper resources, it is evident that the City will be able to meet these requirements and the goals of the Permit.

2.0 INTRODUCTION

2.1 *San Diego Coastkeeper*

Launched in 1995, San Diego Coastkeeper is a locally-based non-profit environmental organization focused on the protection of the San Diego region's bays, beaches, watersheds and ocean for the people and wildlife that depend on them. Coastkeeper is San Diego's official agency of the international Waterkeeper Alliance. Coastkeeper's mission includes the near-term goals of dramatically reducing pollution from stormwater runoff by ensuring effective implementation of municipal, industrial and construction stormwater permits. To further these goals of clean water and a healthy coastal ecosystem, Coastkeeper promotes community outreach and involvement programs, education, and advocacy and legal action.

2.2 *Program Evaluation Purpose*

The purpose of the program evaluation was to determine the City of San Marcos' (City) compliance with the past and current San Diego Regional Water Quality Control Board Order Nos. R9-2001-0001 and R9-2007-0001 for the Incorporated Cities of San Diego County the San Diego Unified Port District, and the San Diego County Regional Airport Authority (NPDES Permit Nos. CAS0108758 and CAS0108758) and to evaluate the current implementation status of the City's Jurisdictional Urban Runoff Management Program (JURMP) with respect to these Permits. A review of the program's positive attributes and any deficiencies will provide the City with an opportunity to improve its JURMP in several specific areas as it begins measuring compliance under the 2007 permit. Compliance with the permit will ensure a healthier coastal ecosystem for the area waters impacted by the City's stormwater runoff. Moreover, the public will experience the benefit of reduced pollution from stormwater runoff to San Diego region's bays, beaches, watersheds, and ocean.

2.3 *Permit History*

The municipal stormwater permit was first issued on July 16, 1990. It was renewed in 2001 by Order No. 2001-01. The permit was subsequently renewed on January 24, 2007 by Order No. R9-2007-0001 and will go into effect in March 2008. This current permit, the third issued to the Copermittees, requires the City to develop and implement a JURMP with specific requirements. While the evaluation was necessarily limited to data gathered under the 2001 Permit, comparisons to the 2007 Permit requirements were made where possible.

2.4 *Program Evaluation Logistics and Areas Evaluated*

In July, 2007, Coastkeeper submitted an informal document request to the City of San Marcos requesting documents related to stormwater runoff and the City's implementation of the MS4 permit requirements, and San Marcos' JURMP and stormwater program implementation. Coastkeeper then reviewed and evaluated the following program areas:

- Development Component including Land Use Planning for Development, Land Use Planning for Redevelopment Component, and Standard Urban Stormwater Mitigation Plans (SUSMPs)
- Construction Component
- Municipal Component
- Industrial/Commercial Component
- Residential Component
- Illicit Discharge Detection and Elimination Component
- Education and Public Participation Components
- Public Participation, Program Assessment, Special Investigations, Non-Emergency Firefighting, and JURMP Revisions

3.0 PROGRAM EVALUATION RESULTS

The following results highlight areas of potential concern as well as areas of positive permit implementation. Results are only included if they stood out in either category, this section is not meant to serve as a full catalog of all aspects of the stormwater permit. Complete evaluation checklists are available as appendices to this report.

3.1 *Development*

3.1.1 *JURMP Revision*



The City revised and updated key components of its JURMP, including updates of its environmental review process to accurately evaluate cumulative water quality impacts and identify measures to avoid, minimize, or mitigate those impacts for all development projects. Additionally, the City updated its treatment control BMP inventory. These revisions and updates help to ensure that the City continues to improve stormwater quality with the improvement of development practices.

3.1.2 *Application of SUSMP BMP Requirements*



The City applied SUSMP BMP requirements to all priority development projects. The City has been proactive in making improvements to the Development approval process. The City also hired an independent engineering consultant to perform reviews of the WQTR and has begun implementing new site design and source control.

3.2 *Construction*

3.2.1 *Inspection Tracking*



The City's program to monitor construction inspections cannot confirm compliance under the Permit. An adequate program would include a database containing all records of inspections or an alternative method of tracking inspection numbers, frequencies, violations, and enforcement actions. Such a program would enable the City to verify that sites are inspected to meet the minimum frequency requirements and that proper enforcement actions are taken. Instead, the City maintains records on an individual basis making it difficult to determine compliance with or

violations of the permit and adequacy of inspections. The City should compile all records in a central location and adequately track inspections and enforcement actions. The City has begun tracking inspection records electronically and should continue this effort. Ideally, all records should be kept in an electronic database for efficiency, convenience, and transparency. Coastkeeper recommends that the City invest in a program to develop such a tracking system.

3.2.2 *Proximity To Receiving Water Bodies*

✗ The City's method for determining high threat construction sites did not consider proximity to receiving water bodies. The City's method includes consideration of many factors found in the permit for determining high threat construction sites but fails to consider proximity to receiving water bodies as required. At the time the 2001 permit was adopted, San Marcos did not have any 303(d) listed impaired water bodies except for the Pacific Ocean, San Marcos Hydrologic Area for high coliform count. In 2002, the San Marcos Hydrologic Area at the Pacific Ocean shoreline was listed again for bacteria contamination. In 2006, several new water bodies were added: San Marcos Creek for phosphorous, DDE, and sediment toxicity; Cottonwood Creek (San Marcos Creek Watershed) for DDT, phosphorous, sediment toxicity; and San Marcos Lake for ammonia as nitrogen, nutrients, and phosphorous.

Although the City's *Construction Urban Runoff Requirements Manual* currently contains a placeholder for assessing proximity to sensitive water bodies, the City did not identify any environmentally sensitive water bodies. In implementing the new 2007 permit and determining which construction sites are high threats, the City should pay special attention to its proximity to receiving water bodies. In addition, the City should update its construction reference maps depicting environmentally sensitive water bodies within the City, and the adjacent and surrounding tributary areas.

3.3 *Municipal*

3.3.1 *BMP Implementation*

✓ The City identified and implemented, or required to be implemented, Best Management Practices (BMPs) for all municipal areas and activities, including special events. The City Plan thoroughly identified, explained, and required to be implemented BMPs for all municipal areas and activities in a manner that promoted performance of BMPs. By doing this, the City encouraged practices that minimized pollution into the MS4.

3.4 *Industrial and Commercial*

3.4.1 *Industrial Site Identification*

✗ The City has outlined a method in its 2002 JURMP for identifying businesses as industrial and its appropriate priority level. In 2005-2006, 82 of 288 industrial businesses screened for inspection were re-prioritized, outside the jurisdiction, had moved, or had gone out of business. This suggests that the inventory's business information is only approximately 72% accurate.

3.5 *Residential*

3.5.1 *Identification of Priority Areas and BMPs*

✓ The JURMP provided a list of high priority residential areas or activities as well as minimum BMPs for these areas or activities. Residential areas can contribute many of the more ubiquitous pollutants found in stormwater. Identifying the areas and activities most likely to contribute to urban runoff is critical to addressing these concerns.

3.5.2 *Implementation*

✗ Although identification (above) is important, the City has lacked oversight and enforcement of residential activities. Though the City provided a list of minimum BMPs and took efforts to encourage and facilitate its implementation, it remains unclear whether BMPs were actually implemented for residential activities. The JURMP does not contain a description of the steps taken to require and verify the implementation of BMPs for high priority residential activities as required by the 2001 and 2007 Permits. Additionally, the JURMP does not contain a description of efforts to evaluate methods used for oversight of residential areas and activities.

Further, the 2005-2006 Annual Report does not include any information on the number of residential violations, enforcement actions, or follow-up actions taken as necessary. The City has not exhibited that compliance has been achieved or that the City has taken action to achieve compliance with the Residential Component of the Permit. The City should make certain that oversight, inspection, and enforcement is carried out on a regular basis and included as required by the Permit.

3.6 *Illicit Discharge Detection*

3.6.1 *County Hotline*

✓ The City utilizes the county hotline that is answered during business hours and has bilingual staff available. The hotline is advertised at community events, on websites, and in various periodicals. In addition to advertising and providing the hotline, San Marcos educates the public of the importance of reporting and the critical role that the public plays in the identification and elimination of urban runoff pollution related problems.

3.6.2 *Implementation*

✓ City regulations prohibit illicit discharges and supporting documents provide additional guidance to avoid illicit discharge. As compliance with City regulations increases, illicit discharges should decrease. In order to ensure that the regulations are followed, the City must be strict and consistent in its implementation.

3.7 *Education*

3.7.1 *Staff Training*

✓ Public Works construction inspection staff provided ongoing site specific education to contractors explaining what does/does not work. The City has established an education program that begins at project initiation (development review process) and carries through to project closeout. Staff training sessions have occurred more frequently and have become more thorough each year of the permit cycle.

The Annual Reports reflect that the City has been training staff on an annual basis with special training for construction site inspection staff and engineering staff. Of particular notice is the engineering training of impacts of water quality on development; low impact design; Storm Water Pollution Prevention Plans (SWPPPs) and site design BMPs. Though fire department staff was trained annually in the past, during the 2005-2006 training session the fire department staff was only instructed of BMPs and stormwater issues in the SWMP. The City should continue annual training of fire department staff in order to keep staff up to date and to train new staff as they join the department.

3.7.2 Assessment of Storm Water Knowledge and BMP Implementation

✓ The City has been assessing knowledge in the commercial, municipal, and industrial and commercial areas through inspections and surveys. Construction site knowledge of BMPs has increased and the City should continue to measure the implementation of this knowledge through compliance with BMPs. The City's municipal surveys are a useful tool in gauging the success of education efforts. Though the survey results were not exceptional, they are an important tool for future improvement. The industrial and commercial facility surveys are a great example of quantitative assessment of education attempts.

3.8 Program Effectiveness Assessment

3.8.1 Method Selection

x The City did not utilize all of the methods listed in the 2001 or 2007 permits for assessing program effectiveness. The 2001 permit lists surveys, pollutant loading estimations, and receiving water quality monitoring as methods to assess program effectiveness. The City only utilized surveys. Loading determinations were only available for physical removal of debris because the City stated that it does not have the means to accomplish load reductions. The Tetra Tech Audit in December 2003 also noted the City's lack of program assessment.

The 2005-2006 Annual Report states that the City will participate in collection of standardized information and perform further load reduction estimates as regional standards are developed. The City should stay committed to working toward developing tools for reducing and analyzing loads. As recommended in the Tetra Tech Audit, the City should develop specific performance goals and standards for activities and measure the City's performance against those standards on an annual basis. Also, the City should incorporate receiving water quality monitoring results into assessments, as mandated by both the 2001 and 2007 permits. This is especially important in light of the recent San Marcos water body additions to the Clean Water Act 303(d) impaired water bodies list.

4.0 PROGRAM EVALUATION RECOMMENDATIONS

While the evaluation focuses primarily on compliance with the 2001 Permit, it also seeks to look ahead to recommend areas in which the City can make changes to provide full compliance with the 2007 permit, to better protect water quality, or to make its program more transparent to the public observer.

4.1 Development

4.1.1 Best Management Practices

In 2005, Regional Board staff found that the City was not properly implementing the City's requirements for site design and source control BMPs. In the 2005-2006 Annual Report, the City stated that it had begun implementing the site design and source control BMP requirements in response to the Regional Board finding. Confirmation of actual implementation of the treatment control BMPs is beyond the scope of this audit. However, under the 2007 permit, the City will be required to provide confirmation that all applicable SUSMP BMP requirements are applied to all priority development projects, including at least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs. Other reporting requirements under the 2007 permit include:

- A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible;
- An updated treatment control BMP inventory;
- The number of treatment control BMPs inspected, including a summary of inspection results and findings; and
- A description of the annual verification of operation and maintenance of treatment

Although the Regional Board found that treatment control BMPs were being effectively implemented, as the City complies with the reporting requirements of the new permit, it will be able to demonstrate effective implementation of site design, and source control BMPs as well.

4.2 Construction

4.2.1 Database Compilation

The record-keeping mechanism created a large problem for the construction component of this evaluation as there is no database of inspection records. Through FY 2005-2006, the City placed inspection forms in the project files. For FY 2006-2007, the inspection forms were kept electronically - but still on an individual basis. The City is contemplating tracking the records via Access database for the revised JURMP in 2007, although this would not take effect until 2008, if it is done at all. The City should move forward with a central database containing inspection numbers, frequencies, violations, and enforcement actions.

4.2.2 Construction Site Listings

The listing of construction sites requiring advanced treatment is a new requirement of Order 2007-0001. Coastkeeper found that during the period evaluated, the City did not include a listing or confirmation that advanced treatment was required at sites listed as having conditions requiring advanced treatment. Although the listing requirement is new to the 2007 permit, the 2001 permit does require all individual proposed construction and grading projects to implement measures to ensure that pollutants from the site be reduced to the maximum extent practicable and not cause or contribute to an exceedance of water quality objectives. Since the City should already be requiring BMPs to protect water quality objectives, the new permit simply imposes the additional reporting requirement and specific advanced treatment for sediment. In the future, the City should

incorporate the advanced treatment into its program and report projects requiring such treatment in each Annual Report.

4.2.3 Construction Site Inventory

The City should consider managing construction site inventory through the Geographical Information System (GIS) as recommended in the Permit. The City's current inventory system as managed in Excel with a map in GIS inventory from the time of the original JURMP is disjointed. Managing inventory through an updated GIS would simplify the management of construction sites as well as ensure that the construction site inventory is adequately maintained and regularly updated. Both the 2001 permit section F.2.b. and 2007 permit section D.2.b. highly recommend a GIS system. Coastkeeper strongly supports this recommendation for the City.

4.2.4 Enforcement Timeline

The City should maintain a timeline for enforcement actions needed against construction sites. In order to ensure that enforcement actions are taken promptly to protect against pollutants entering the MS4 system, the City should create a timeline for enforcement actions needed, including specific dates.

4.3 Municipal

4.3.1 Retrofit Opportunities

The City should provide a report of the review process for retrofit opportunities as required under the 2001 and 2007 permits. The 2007 permit requires Copermittees to evaluate existing flood control devices to determine if retrofitting the device to provide additional pollutant removal from urban runoff is feasible. The 2001 permit also requires retrofit examination, although not specifically for additional pollutant removal. According to City staff, such an analysis was conducted and yielded no retrofit opportunities. Though such a study was mentioned in the JURMP, the analysis was not documented and therefore is beyond the scope of this audit. However, in complying with the new permit, the City should conduct a new feasibility analysis and report the findings in an annual report.

4.3.2 Maintenance Activities

The City should provide a schedule of maintenance activities in the JURMP to ensure the proper operation of MS4s. The 2001 and 2007 permits require that the City perform inspections at least annually between May 1st and September 30th of all MS4 facilities. Although the City states in its Annual Report that these inspections were completed, the City should provide a schedule of maintenance activities to ensure that each MS4 facility was inspected annually as required by the Permit and not accidentally overlooked. This will ensure that MS4s continue to operate effectively and reduce trash and debris flow in the MS4. In order to comply with the new Permit, the City should incorporate this into its new program and report the inspections in each Annual Report.

4.3.3 Trash Control

The City should require the implementation of additional controls for activities anticipated to generate significant trash. The City currently lacks additional controls for special event type activities, allowing for pollution and potential improper operation of MS4s and MS4 facilities. The City Plan should require the implementation of additional controls and inspection for activities

anticipated to generate significant trash to ensure that pollutant removal optimization. The 2007 permit lists many different BMPs for such events, including temporary screens on catch basins and storm drain inlets and fencing. The City should incorporate these controls into its new program.

4.3.4 Catch Basins

The City should provide the design capacity of catch basins or storm drain inlets cleaned of debris. The 2007 Permit necessitates that catch basins or storm drain inlets with accumulated debris greater than 33% of design capacity be cleaned in a timely manner. However, this accumulation of debris is impossible to determine without information on the capacity of the inlets or basins. Hence although the City identified the amount of waste and litter removed from these catch basins and inlets, it is impossible to determine whether basins and inlets with excess waste were cleaned in a timely manner in order to reduce pollutants entering the MS4 and promote proper draining function. In order to comply with the new Permit, the City should incorporate the capacity information into its new program and report the cleaning schedule in each Annual Report.

4.4 Industrial and Commercial

4.4.1 Inspection Matrix

The City should develop a transparent, efficient mechanism for deciding which sites are inspected. The Annual Reports do not contain a transparent process for identifying sites for inspection. The new permit requires a substantial increase in inspections for both commercial and industrial sites. After the first permit year, the City will be required to inspect 20 percent and then 25 percent of all sites. In order to ensure that new sites are inspected in subsequent years, the City should implement a site inspection plan or database.

4.4.2 High Priority Inspections

The City has not conducted initial inspections of high priority commercial and industrial sites. The City only inspected three commercial sites during the 2005-2006 period. The 2001 permit requires inspection of high priority commercial sites "as needed." In contrast, the 2007 permit requires 50 percent of all industrial and commercial sites to be inspected during the first year of implementation of the 2007 permit, and 100 percent every year thereafter. During the 2003 Tetra Tech audit (Program Evaluation Report, San Diego Area Stormwater Program: Cities of Imperial Beach, La Mesa, San Marcos, and Vista, December 17, 2003), it was noted that 100% of all high priority sites had not been inspected during the first year of JURMP implementation. Although the City currently inspects almost all high priority industrial sites, it only inspects a minimal number of high priority commercial sites.

The City lacks resources to complete the industrial high priority inspections, and will likely have difficulty meeting this new requirement without the allocation of additional resources toward inspections. Moreover, the increased frequency of commercial inspections will also likely show the accuracy of the commercial site inventory. If the commercial inventory is similar to that of the industrial inventory, revisions will likely be necessary. However, with more frequent inspections of both industrial and commercial sites the City's inventory will likely more accurately reflect business location and priority over time.

4.4.3 303(d) Impaired Waters

The City should reassess high priority listings in light of the new additions to the Clean Water Act 303(d) impaired water bodies list. As mentioned above, San Marcos has several water bodies that have been added to the 303(d) list in recent years. In implementing the new permit and prioritizing both commercial and industrial facilities, it is imperative that the proximity of facilities to these water bodies is considered. Furthermore, the importance of an updated MS4 map, preferably in GIS, and an accurate inventory of facilities, is underscored by the need to identify these high priority sites.

4.5 Residential

4.5.1 Regional Residential Education Program

The City is required by the 2007 Permit to collaborate with the other Copermittees in order to develop and implement the Regional Residential Education Program. The Education Program is an important factor for compliance with the Residential Component of the Permit since the Residential Component relies on individual citizens acting to reduce pollutants entering the MS4. Notably, the City has participated with other North County cities at health and safety fairs, citywide clean-ups, and literature distributions at neighborhood meetings. The City is to be commended for making sure important information reaches traditionally underserved communities, and for its education efforts outside the environmental arena, such as at gang prevention events.

The City also supports the Copermittee education subcommittee, including the “Think Blue” campaign. However, the residential education collaboration will need to provide pollutant specific education which focuses educational efforts on the specific residential sources of the pollutants such as bacteria, nutrients, sediment, pesticides, and trash.

4.6 Illicit Discharge

4.6.1 Mapping

The City should develop an updated MS4 map, including locations of the MS4, dry weather field screening and analytical monitoring sites, and watersheds. Though the City has an MS4 map, it is currently only available in hard copy. The map should be updated and provided in electronic form. Specifically, newly added 303(d) impaired water bodies should be identified on this map. An electronic, GIS version of the MS4 map will enable staff and the public to easily locate and monitor the San Marcos MS4 and watersheds.

4.6.2 Dry Weather Monitoring And Inspection Program

In 2003, Tetra Tech reported that the City did not appear to be using the collected data/information to proactively find and eliminate illicit discharges or determine appropriate areas for dry weather monitoring. The City has been using the same twenty sites for inspection for the last four years. The city should conduct dry weather monitoring more than once per year and should use the data collected to change locations or conduct follow-up monitoring. A positive attribute of note is the City’s recommendations from the 2005-2006 Annual Report. Prior to 2004, the City did not eliminate any discharges from dry weather monitoring. Starting in 2004-2005, the City started to investigate dry weather monitoring results with follow-up reports and in 2005-2006 started to incorporate

recommendations into the Annual Report. Although the City should continue to make improvements in monitoring and follow-up, the City has made significant progress.

4.6.3 Enforcement Actions

The City does not provide an accurate account of violations and enforcement actions taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The Annual Report does not detail the violations in a coherent manner. For example, the violations phoned-in are fragmented from the violations found during monitoring and the methods of enforcement and compliance are not sufficiently or consistently related. A detailed report of: possible violations; the type of violation; the actions taken; enforcement actions; and the end result should be included in the Annual Reports. A searchable database of violations by type, location, and date would also help to avoid the fragmentation of data.

4.7 Education

4.7.1 Topics

Many of the topics listed in the education requirement portion of the permit were not addressed, including charity car washing, wash water disposal, BMP maintenance, de-chlorination techniques, hydrostatic testing, and the benefits of native vegetation. Some of the educational components are new additions from the 2007 permit that were not required in the 2001 permit, while others are not. In the future, the City should incorporate as many topics as possible into the education component. Untapped strategies such as educating the public about native vegetation are extremely important and effective in changing public behavior.

4.7.2 Efficacy Studies

The City has continually provided more information in the Annual Reports. The City has also been conducting surveys in order to gauge awareness and behavioral changes in industrial and commercial dischargers. However, public perceptions and changes in behavior should also be gauged in the future in addition to more quantitative assessment of the success of education efforts in general. Both the 2001 and 2007 permits require measurable increases in knowledge of target communities. Although the City should be commended for its education efforts, the results of these efforts are even more important.

4.8 Program Effectiveness Assessment

4.8.1 Assessment Levels

In the future, the City should assess the effectiveness of the JURMP components by analyzing all six levels mentioned in the guidance document prepared by the Copermittees in 2003. As the comprehensive assessment strategy focus shifts from the programmatic assessments and moves toward water quality-based assessments, the City should report on the improvements to water quality and, as the 2007 permit requires, use outcome levels.

4.8.2 Public Education Measurement

The City should undertake survey efforts similar to the partnership telephone surveys conducted in 2001 and 2003 in addition to other possible assessment tools such as surveys and quizzes provided to the public at the actual public educational events. Gauging public awareness is an important ongoing assessment tool.

4.8.3 Long-Term Assessment

The City, in its Annual Reports, consistently recommends identifying, tracking and analyzing specific data that evaluates the effectiveness of the program. As the requirements of the 2007 Permit are implemented, the City should continue to make advances in tracking and analyzing the data needed to quantitatively assess the success of the City's programs.

4.9 Carlsbad Watershed Urban Runoff Management Program

4.9.1 Shared Efforts

The City should continue to work with other Copermittees to address high priority water quality issues in the watershed and address water quality issues in general. As stated in the Carlsbad Watershed Urban Runoff Management Program Annual Report for 2005-2006, the Carlsbad Watershed Copermittees must continue to address a number of unresolved data and management issues. Among these issues are: the need to improve and best utilize monitoring; assessing discharges to water bodies and water quality improvement; and the need for additional resources to implement the programs.

Of particular importance is the recent Regional Board adoption of bacteria TMDLs, including a TMDL for the San Marcos hydrologic area at the Pacific Ocean shoreline. In order to implement the TMDLs, the City should start planning and implementing new BMPs to reduce bacteria load into the watershed. Not only will implementation of such BMPs help the City meet its requirements under the TMDL, but it will also aid the City in meeting its stormwater permit requirement. The 2001 and 2007 permits prohibit MS4 discharges from causing or contributing to the violation of water quality standards.

As an individual Copermittee and as a part of the Carlsbad Watershed, San Marcos will need to continue to allocate resources to the WURMP and to improve water quality in its own water bodies as part of the watershed.

5.0 APPENDICES

5.1 Development Checklist

Component	Target Area	Action	Question	Cite 2001 Permit	Cite 2007 Permit	Y/N	Notes (as necessary)
Development Planning							
A.1	General Revisions:						*As needed
A.1.a	General Plan	Revisions*	Was the General Plan (or equivalent) for each Copermittee amended for the purpose of providing effective and consistent water quality policy?	no equivalent but F.1.c. and F.1.d. require consideration of water quality concerns during environmental review of development projects	D.1.a	n	Optional
A.1.b	Environmental Review Process	Revisions*	Was the environmental review process revised to accurately evaluate cumulative water quality impacts and ID measures to avoid, minimize, or mitigate those impacts for all development projects?	F.1.c(1) but only if feasible	D.1.b	y	p27 - under SUSMP section of 05/06 Annual Report
A.2	URMP Requirements:						
A.2.a	All Developments	Approval	Were all development projects required to undergo Copermittee urban runoff approval?	F.1.b(1)	D.1.	y	From intro for each type of dev
A.2.b	All Developments	Min Requirements	Do the requirements include, at a minimum, implementation of the items listed in section D.1.c? (see below)	list in F.1.(b)(1)		n	
	A.2.b	Section D1C	<i>Approval Process Criteria and Requirements for all Development Projects</i>				

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	A.2.b.1		Source control BMPs that reduce storm water pollutants of concern in urban runoff, including storm drain system stenciling and signage, properly designed outdoor material storage areas, properly designed trash storage areas, and implementation of efficient irrigation systems? (this probably applies to ALL development projects, not just those that require SUSMP priority listing)	F.1.b.(1)(a)	D.1.c(1)	y	Different Wording in 2001 Permit: Requires project proponent to implement source control BMPs (maximize infiltration, provide retention, slow runoff, and minimize impervious land coverage, buffer zones)--> applies to all projects where feasible)
	A.2.b.2		Require project proponent to implement site design/landscape characteristics where feasible which maximize infiltration, provide retention, slow runoff, and minimize impervious land coverage for all development projects?	F.1.b.(1)(b)	D.1.c.(2)	y	Optional - LID optional for pre-2007 permit
	A.2.b.3		Buffer zones for natural water bodies where feasible? Where buffer zone implementation is infeasible, require project proponent to implement other buffers such as trees, lighting restrictions, access restrictions, etc.	F.1.b.(1)(c)	D.1.c.(3)	y	
	A.2.b.4		Construction activities comply with construction and grading permits (and the construction part of permit? JURMP Annual report requirement: A description of the modified construction and grading approval process (H.1.a.(1)(c)	F.1.b.(1)(e);H.1.a.(1)(c)	D.1.c.(4)	y	The 2001 Permit also required industrial applicants subject to California statewide General NPDES Permit for Storm Water Discharges Associated with Industrial Activities (Except Construction), (General Industrial Permit), to provide evidence of coverage under the General Industrial Permit. It was difficult to tell if the city actually required the construction activities to comply with construction permit, it

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							should be mentioned in the annual report
	A.2.b.5		Long-term maintenance plan for structural post-construction BMPs?	F.1.b.(1)(f)	D.1.c.(5)	n	
A.2.c	All Developments	Tracking	Is there a description of how this info was tracked?			y	
A.3	SUSMP Requirements:						
A.3.a	Priority Developments	Inventory	Is there a list of all new development projects where SUSMP requirements were applied?	F.1.b(2); I.1.a. (not specifically required -- Requires Comprehensive description of all activities conducted by Copermittee to meet all requirements of each component of JURMP section of permit)	J.3.a.3.iii;D.1.d	y	p31 of 05/06 Annual Report
A.3.b	Priority Developments	Approval	Were the SUSMP BMP requirements applied to all priority development projects?	"	J.3.a.3.iv	y	p31 of 05/06 Annual Report
A.3.c	Priority Developments	Tracking	Is there a description of how this info was tracked?	"	J.3.a.3.iv	y	p31 of 05/06 Annual Report
A.3.d	Priority Developments	Example	Did the Copermittee include an example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs?	"	J.3.a.3.v	n	
A.3.e	Priority Developments	Low Removal BMPs	Is there a listing of the priority development projects which were allowed to implement treatment control BMPs w/ low removal efficiency rankings?	"	J.3.a.3.vi	n	low removal efficiency rankings not mentioned in 2001 permit

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A.3.f	BMP		Does this listing include the feasibility analysis showing that more effective BMPs were infeasible?	"	J.3.a.3.vi		low removal efficiency rankings not mentioned in 2001 permit
A.4.	BMP						
A.4.b	BMP	Inventory	Is there an updated treatment control BMP inventory?	"	J.3.a.3.vii	y	
A.4.c	BMP	Inspection	Does the report include the number of treatment control BMPs inspected, including a summary of inspection results and findings?	"	J.3.a.3.viii	y	
A.4.d	BMP	Maintenance	Does the report include a description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings?	"	J.3.a.3.ix	y	
A.4.e	BMP		Is there confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including tracking info?	"	J.3.a.3.x	y	
A.5	Waiver			"			
A.5.a	Waiver		Is there a listing of all SUSMP waivers that were given out?	"	J.3.a.3.xi	n	No record of any noncompliance of SUSMP
A.5.b	Waiver		Is there a description of a SUSMP waiver mitigation program (if implemented)?	"	J.3.a.3.xii	n	Only record of inspection and enforcement - no waivers mentioned
A.6	Hydromodification Management Plan (HMP):			"		N	This is new requirement for 2007 Permit - not required for Annual reports under 2001 permit
A.6.a	HMP		Is there a record or evidence of collaboration and participation in the HMP (Hydromodification Management Plan) development?	"	J.3.a.3.xiii	n/a	
A.6.b	HMP	Development	Is there a list of development projects required to meet HMP requirements, including a	"	J.3.a.3.xiv	n/a	

			description of hydrologic control measures implemented?				
A.6.c			Is there a list of priority development projects not required to meet HMP requirements, including a description of why they were exempted?	"	J.3.a.3.xv	n/a	
A.6.d	HMP	Development	Is there a listing of all development projects disturbing 50 acres or more, including info on whether Interim HM Criteria were met by each project? Is there a description of hydrologic control measures implemented for each?	"	J.3.a.3.xvi	n/a	
A.6.e	HMP	Enforcement	Is there a listing of the number of violations and enforcement actions for all projects, including type of violation and information on any necessary follow up actions taken? Does this discussion exhibit that compliance has been achieved or describe actions that are being taken to achieve compliance?	"	J.3.a.3.xvii	n/a	
A.7	Other						
A.7.a	Notable Activities		Is there a description of any notable activities conducted to manage urban runoff?	"	J.3.a.3.xviii	n	Optional
A.8	LID	Development	Low Impact Development (LID) BMP Requirements	NOT IN 2001 PERMIT	D.1.d.(4)	n/a	

5.2 *Construction Checklist*

No.	Action	Question	NOTE ON QUESTION	Cite 2001 Permit	Cite 2007	Y/N	Notes (as necessary)
B.1.a	Approval	Were all Copermittee construction sites subject to the Construction Urban Runoff approval process?	2001 permit states: Each Copermittee shall implement pollution prevention methods in its Construction Component and shall require its use by construction site owners, developers, contractors, and other responsible parties, where appropriate.	I.1.a.; F.2.a.	J.3.a.3.b.i	Yes	
B.1.b	Approval	Did the Copermittee track that all construction sites were subject to the Construction Urban Runoff Approval Process and is there a description of how this information is tracked?	not specifically required -- Requires Comprehensive description of all activities conducted by Copermittee to meet all requirements of each component of JURMP section of permit	F.2.a.; H.1.a.(1)	J.3.a.3.b.i	*	* this may be found in database of inspection records, but not available for San Marcos
B.2.a	Inventory	Does the Copermittee provide confirmation that a construction site inventory was maintained and regularly updated?		F.2.d	J.3.a.3.b.ii	Yes	
B.2.b	Inventory	Is there a description detailing how the construction site inventory is managed?	not specifically required -- Requires Comprehensive description of all activities conducted by Copermittee to meet all requirements of each component of JURMP section of permit	I.1.a.;F.2.d	J.3.a.3.b.ii	Yes	JURMP describes how the inventory is managed and the department which manages the inventory, but does not describe which system was used to manage the inventory
B.3.c	Inventory	Was the inventory managed using Geographical Information System (GIS)?	not required but highly recommended in both permits	F.2.d.	D.2.b	no*	*see below, B.3.d
B.3.d	Inventory	If GIS was not used, what system was used to manage the inventory?			D.2.b	excel	The inventory is managed in excel. For the original JURMP document the city created a map in GIS of the snapshot inventory at that time. But the city maintains the inventory in excel.
B.4.a	Ordinance Update	Has the Copermittee reviewed and updated its grading ordinances?		F.2.b	J.3.a.3.b.iii	Yes	

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B.4.b	Ordinance Updates	Is there a description of modifications made to the construction and grading ordinances and approval processes?		I.1.a.;F.2.b	J.3.a.3.b.iii	yes	see section 7.2 of the JURMP
B.5	BMPs	Does the Copermittee have a designated list of BMPs that must be implemented by construction sites, including at a minimum those BMPs listed in section D.2.c.1?	BMPs in F.2.b. for 2001 permit	F.2.b; H.1.a.(1)(g)	J.3.a.3.b.iv; D.2.c.1	yes	
B.6.a	Water Quality Standards	Is there a process for determining whether the construction site is contributing to a violation of water quality standards?		F.2.c; F.2.e.	D.2.a. (2) (a); D.2.	*	* new to the 2007 permit
B.6.b	Water Quality Standards	How many construction sites were found to be contributing to the violation of WQS?		not required	no cite	*	* new to the 2007 permit
B.8	Grading	Is there confirmation that a maximum disturbed area for grading was applied to all applicable construction sites?		not required	J.3.a.3.b.v	*	* new to the 2007 permit
B.9.a	Threat to Water Quality	Does the Copermittee have a method for determining high threat sites?		F.2.e.	J.3.a.3.b.vi	yes	
B.9.b	Threat to Water Quality	Does the method at the least include consideration of the factors found in D.2.c.2? [(a) Soil erosion potential or soil type; (b) The site's slopes; (c) Project size and type; (d) Sensitivity of receiving water bodies; (e) Proximity to receiving water bodies; (f) Non-storm water discharges; (g) Ineffectiveness of other BMPs; and (h) Any other relevant factors]		F.2.e.(1)	D.2.c.2	no *	
B.9.c	Threat to Water Quality	How many high threat sites has the Copermittee identified?	not specifically required in 2001 permit, but probably necessary in Annual Reports in H.1.a.(1)(e) and (f)	F.2.e.(1); I.1.a.;H.1.a.(1) (e) and (f)	J.3.a.3.b.vi; D.2.c.2	48	

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B.9.d	Threat to Water Quality	Is there a listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites?	advanced treatment not required in the 2001 permit; in the 2007 permit advanced treatment for sediment is required for sites that pose an exceptional threat to water quality as defined by factors in D.2.c(2)	F.2.e. (1); I.1.a.	J.3.a.3.b.vi; D.2.c.(2)	yes/ no*	JURMP Annual Report contained a list of high threat sites but need compiled construction records to determine whether advanced treatment was actually required at the site
B.9.e	Threat to Water Quality	Is there an advanced treatment for sediment implemented by the Copermittee at identified high threat sites?	" "	not required	D.2.c.2	*	*new to 2007 permit
B.9.f	Threat to Water Quality	If the site is in close proximity or is tributary to a 303(d) listed water body with an impairment of sediment, are there additional controls required by the Copermittee to ensure that the site does not contribute to exceedances in the receiving water body?	check the EPA website to see what water bodies are listed and if they are mentioned http://www.swrcb.ca.gov/tmdl/docs/303dlists2006/approved/r9_06_303d_reqtmlds.pdf	F.2.e.(2)	D.2.c.4	n/a*	no sites in close proximity to 303(d) water body or tributary as of 2002 JURMP but now there are
B.10	Inspections	For each construction site within each priority category (high, medium, and low), was there:			J.3.a.3.b.vii	*	Because of the large volume of records only a few project folders were analyzed to answer the following questions.
B.10.a	Inspections	identification of the period of time (weeks) the site was active within the rainy season		not required	J.3.a.3.b.vii	*	
B.10.b	Inspections	the number of inspections conducted during the rainy season		I.1.b.2.	J.3.a.3.b.vii	*	
B.10.c	Inspections	the number of inspections conducted during the dry season		I.1.b.2.	J.3.a.3.b.vii	*	
B.10.d	Inspections	the total number of inspections conducted for all sites		I.1.b.2.	J.3.a.3.b.vii	*	
B.10.e	Inspections	What is the total number of inspections conducted?		I.1.b.2.	J.3.a.3.b.vii	*	
B.10.f	Inspections	Does the Copermittee provide an inspection checklist for inspectors?		not required but probably necessary to ensure inspections	J.3.a.3.b.vii i	yes	see Urban Runoff Construction Site Inspection Record

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				are conducted correctly			
B.10.g	Inspections	Does the inspection checklist include at a minimum the items in section D.2.d.6: (a) check for coverage under the General Construction Permit during initial inspections; (b) assessment of compliance with Permittee ordinances and permits related to urban runoff, including the implementation and maintenance of designated BMPs; (c) Assessment of BMP effectiveness; (d) Visual observations for non-storm water discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff; (e) Education and outreach on storm water pollution prevention, as needed; and (f) Creation of a written or electronic inspection report	2001 permit requires: Each Copermittee shall conduct construction site inspections for compliance with its ordinances (grading, storm water, etc.), permits (construction, grading, etc.), and this Order. Inspections shall include review of site erosion control and BMP implementation plans. (doesn't require checklist, education, and written or electronic inspection report)	F.2.g.(1)	D.2.d.6	yes	
B.10.h	Inspections	Is there a program in place to monitor the adequacy of the inspections?	Based upon site inspection findings, each Copermittee shall implement all follow-up actions necessary to comply with this Order	F.2.g.(3)	J.3.a.3.b.ix	no	
B.10.i	Inspections	Is there a database containing all records of inspections or an alternate method of tracking inspection numbers, frequencies, violations, enforcement actions, etc. so that the Copermittee can verify that sites are inspected at the minimum frequencies and that enforcement actions are taken?		not required	J.3.a.3.b.ix	no*	This created the largest problem for the construction component audit- there is no database of inspection records. Up through FY 05-06, the City placed inspection forms in the project files. For FY 06-07, the inspection forms were kept electronically - but still on an individual basis. The City is contemplating tracking the records via Access database for the revised JURMP in 2007, although this would not take effect until 2008, if it is done at all.

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B.10.j	Inspections	Were bi-weekly inspections conducted during the wet season for sites that meet the following criteria: (a) All sites 50 acres or more in size and grading will occur during the wet season; (b) all sites 1 acre or more, and tributary to a CWA section 303(d) water body segment impaired for sediment or within or directly adjacent to or discharging directly to a receiving water within an ESA; and (c) other sites determined by the Copermittees or the Regional Board as a significant threat to water quality.	2001 permit requires weekly or monthly if Copermittee filing certification of cite under F.2.g.(2)(b) with SDRWQCB	F.2.g.(2)	D.2.d	yes*	* This is hard to determine without inspection records, the JURMP requires that this be done, but it is hard to verify without the actual records – A sampling of sites was requested and the inspection frequency manually tracked
B.10.k	Inspections	During the wet season, were monthly inspections conducted for all sites over one acre, but which do not meet the above requirements?	not required in 2001 permit	not required	D.2.d	yes	*see above - One medium priority project folder was requested and tracked for the inspection frequency; for sites of this size that are not considered high threat, San Marcos assumes that they meet the inspection frequency requirement because they inspect all sites on a weekly basis.
B.11.a	Violations and Enforcement	How many violations and enforcement actions were taken for construction sites?		I.1.b.(3)	J.3.a.3.b.x		9 NOVs; 43 correction notices
B.11.b	Violations and Enforcement	Is there a discussion included with the violations that determines that compliance has been achieved, or describes actions that are being taken to achieve compliance?	Not required by 2001 permit, but probably implicit in order -->Each Copermittee shall enforce its ordinances and permits at all construction sites as necessary to maintain compliance with this Order. Copermittee ordinances or other regulatory mechanisms shall include sanctions to ensure	F.2.h.	J.3.a.3.b.x	yes	

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			compliance.				
B.11.c	Violations and Enforcement	Are sites that are in non-compliance and the enforcement actions tracked?	not specifically required but seems necessary	F.2.h.	J.3.a.3.b.x	yes	see B.11.a
B.11.d	Violations and Enforcement	Is there a timeline for enforcement actions?		F.2.h.	J.3.a.3.b.x	no	No give specific dates for enforcement actions
B.11.e	Violations and Enforcement	Are these actions taken promptly?		F.2.h.	J.3.a.3.b.x	*	*without specific dates it is hard to determine whether the actions were taken promptly
B.11.f	Violations and Enforcement	Are sanctions imposed when the site is not in compliance?		F.2.h.	J.3.a.3.b.x	yes	
B.11.g	Violations and Enforcement	Are stop work order and high level enforcement actions reported to the regional board?		F.2.h.	J.3.a.3.b.x	yes	
B.12	Management	Is there a description of notable activities conducted to manage urban runoff from construction sites?			J.3.a.3.b.xi	*	*new to 2007 permit

5.3 *Municipal Checklist*

No.	Target Area	Action	Question	NOTE ON QUESTION	Cite 2001 Permit	Cite 2007	Y/N	Notes
C.1.a	Inventory	General	Does the Copermittee have a municipal inventory?		F.3.a.(2)	D.3.a.(1)	Y	Attachment 1 of Annual Report; does not ID pollutants
C.1.b	Inventory	Qualitative	Is the inventory adequate? E.g. watershed-based, name, address (if applicable), & a description of the area/activity, which pollutants are potentially generated by the area/activity, and ID of whether the area/activity is tributary to a CWA 303(d)? AND PRIORITIZED?		not required	D.3.a.(1)	Y	Yes; but does not ID pollutants; prioritized by threat to water quality
C.1.c	Inventory	Update	Has the Copermittee updated (if applicable) the municipal inventory & its prioritization since the last report?	requires annual updates	F.3.a.(2)	J.3.a.3.(c)(i)	Y	Annual Report
C.2.a	BMP	General	Has the Copermittee identified BMPs for all municipal areas and activities? Were they site-specific where applicable?		F.3.a.(4)(a)	D.3.a.(2)(b);J.3.a.3.(c)(ii)	Y	General Municipal BMP explanation is in the City's Municipal Manual, Appendix C-1 of the JURMP; specific BMPs for Parks & Public Works are in respective SWMP.
C.2.b	BMP	Qualitative	Does the Copermittee have an explanation of their BMPs? e.g. Minimum set of BMPs for all areas/activities, Steps taken/to be taken to require and verify the implementation of designated BMPs at municipal facilities and their activities, area or activity specific where appropriate		no cite	no cite	Y	General Municipal BMP explanation is in the City's Municipal Manual, Appendix C-1 of the JURMP; specific BMPs for Parks & Public Works are in respective SWMP.
C.2.c	BMP	Update	Were the BMPs implemented or required to be implemented for municipal areas & activities, as well as special events?	in 2001 permit the BMPs are established by priority level (high, medium, low) and not for all activities	F.3.a.(4)(a)	D.3.a.(2)(b)	Y	Notable BMPs and pollution prevention BMPs that were implemented for the Public Works Yard, Fire Facilities & Park Facilities are described in the respective SWMPs. For all other areas and activities, the notable BMPs and pollution prevention BMPs were implemented as described in the Municipal Manual of the February 2002 JURMP. The Manual contains minimum BMP requirements including pollution prevention BMPs and other specific BMPs. The City

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								requires the implementation of the minimum BMPs for all municipal facilities and activities.
C.2.d	BMP	General	Did the Copermittee evaluate existing flood control devices to determine if retrofitting the device to provide additional pollutant removal from urban runoff is feasible?		F.3.a.(4)(b)(i))	D.3.a.(2)(d)	N	Established feasibility analysis for retrofitting existing structure in JURMP Section 2.5.1 (pg. 27); Retrofit matrix in JURMP (pg. 36 - 38), but did not retrofit. As explained by staff: <i>Any evaluation conducted over the past permit cycle yielded no retrofit opportunities that would require the next step – a feasibility analysis. The City reviewed its storm water system and determined that the existing inlet filters, detention facilities and private development BMPs were already in key locations and were performing as needed. There is no documentation of this review – it was performed as a table top review and discussion. Because over the past permit cycle the City has experienced private development, the City has been able to require new project development to incorporate the types of basins and BMPs discussed in the JURMP – but there has been no real opportunity to retrofit the existing conveyance systems."</i>
C.2.d	BMP	General	If the Copermittee conducted a flood control device retrofit, did the Copermittee incorporate permanent pollutant removal measures into projects where feasible?		not required	D.3.a.(2)(d)	N/A	
C.2.d	BMP	General	Did the Copermittee implement any (additional) controls for areas/activities tributary to CWA Section 303(d) to reduce stormwater pollution?		F.3.a.(4)(c)	D.3.a.(2)(e)	N/A	JURMP Section 3.1.3 (pg. 453)
C.2.e	BMP	General	Did the Copermittee implement/require implementation of additional controls for municipal areas/activities within or directly adjacent to coastal lagoons or other receiving waters within environmentally sensitive areas (as defined in Attachment C)?		F.3.a.(4)(c)	D.3.a.(2)(e)	N/A	JURMP Section 3.1.4 (pg. 453)

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C.2.f	BMP	General	Did the Copermittee implement or require implementation of additional controls for activities anticipated to generate significant trash?		not required	D.3.a.(2)(f)	N	Special events not discussed
C.3.a	Inspections	Program	Has the Copermittee implemented a schedule for inspection and maintenance activities to verify proper operation of all MS4s and the MS4 facilities (catch basins, storm drain inlets, open channels, etc)?		F.3.a.(5)(a)	D.3.a.(3)(a)	Y	Section 2.5 of AR says they do (no schedule or inspection records) & lists the amount of debris removed.
C.3.c	Inspections	Program	Did the Copermittee perform inspections occur at least once a year between May 1st & September 30th of each year for all MS4 facilities that receive or collect high volumes of trash and debris, and annually for all other facilities?	2001 permit does not distinguish between high volume areas and other areas	F.3.a.(5)(a)(i); H.1.a.(2)(f) requires JURMP to have municipal maintenance activities and schedules	D.3.a.(3)(b)(i)	Y	AR pg. 9; Catch basin and storm water channel cleaning is routinely conducted on an annual basis through the City's Drainage System Inspection and Cleaning Program; Catch basins cleaned in order of priority (not sure whether within the timeframe); Stated as yes in the JURMP, but no schedule provided. No distinction of facilities by levels of trash, but not required for 2001 permit. Timeframe is unclear.
C.3.d	Inspections	Program	Did the Copermittee inspect the minimum high priority municipal areas listed below?		F.3.a.(7)	D.3.a.(7)(a)	Y	Municipal high priority areas are listed (consistent with permit) in the MM Chapter 3 (pg. 434); However, the areas listed below are not all part of the inventory.
		-	Roads, Streets, Highways, and Parking Facilities.				N	City does not maintain all streets in their inventory, nor specifically inspect, but does conduct street sweeping & provides specific information about the schedule (required for 2007 permit, but not 2001 permit) on pg. 10 of AR
		-	Flood Management Projects and Flood Control Devices.				N	
		-	Areas and activities tributary to a C WA section 303(d) impaired water body segment, where an area or activity generates pollutants for which the water body segment is impaired. Areas and				N/A	

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			activities within or adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas (as defined in Attachment C of this Order).					
			<u>Municipal Facilities.</u>	<u>not the same list in 2001 permit</u>				
		-						
		-	[1] Active or closed municipal landfills;				N	
		-	[2] Publicly owned treatment works (including water and wastewater treatment plants) and sanitary sewage collection systems;				Y	
		-	[3] Solid waste transfer facilities;				N	
		-	[4] Land application sites;				N	
		-	[5] Corporate yards including maintenance and storage yards for materials, waste, equipment and vehicles; and				Y	
		-	[6] Household hazardous waste collection facilities.				N	
		-	Municipal airfields.				N/A	
		-	Parks and recreation facilities.	new to 2007 permit			Y	
		-	Special event venues following special events (festivals, sporting events, etc.)	new to 2007 permit			N	
		-	Power washing.	new to 2007 permit			N	
		-	Other municipal areas and activities that the Copermittee determines may contribute a significant pollutant load to the MS4.				N/A	
			Did the C provide/maintain identification of the total number of catch basins and inlets , the number of catch basins and inlets inspected the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria , and the number of catch basins and inlets cleaned ?	took out MS4s, incinerators, sites for disposing and treating sewage sludge, and uncontrolled sanitary landfills				

C.4.a	Inspections	Records		not specifically required but might fall under inspection reporting requirement I.1.b.(2) of 2001 permit	not specifically mentioned	J.3.a.3.(c)(iv)	Y	AR; no mention of exceedances required for 2001 permit
C.4.b	Inspections	Records	Did the C provide/maintain information that any catch basin or storm drain inlet that has accumulated trash & debris greater than 33% of design capacity was cleaned in a timely manner?		not required	D.3.a.(3)(b)(iii)	N	The AR discusses the amount of debris removed, but not in relation to design capacity
C.5	Inspections	Records	Did the C provide/maintain identification of the total distance (miles) of the MS4 , the distance MS4 inspected , the distance of the MS4 found with accumulated waste ?		not required	J.3.a.3.(c)(v)	N/A	Not required for 2001 permit; requirements for MS4 maintenance on pg. 27 & 28 of 2001 permit PDF file
C.6	Inspections	Records	Did the C provide/maintain identification of the total distance (miles) of open channels , the distance of open channels inspected , the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned ?		not required	J.3.a.3.(c)(vi)	N/A	Not required for 2001 permit.
C.7.a	Inspections	Records	Did the C identify the amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category?		not required	J.3.a.3.(c)(vii)	Y	AR Section 2.5 (pg. 10)
C.8	Inspections	Program	Did the C identify any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding? After 2 years, any MS4 facility that requires inspection & cleaning less than annually may be done as needed, but not less than annually.		not required	J.3.a.3.(c)(viii)	N/A	Not required for 2001 permit
C.9.a	BMP	Pesticides, Herbicides & Fertilizers	Were the designated BMPs for pesticides, herbicides, and fertilizers implemented for municipal areas and activities? E.g. a list identifying the BMPs, location, etc.		not required	J.3.a.3.(c)(ix)	Y	Disused AR Section 2.8; detailed MM & Park Facilities SWMP (General BMPs to be implemented, Appendix C)

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C.9.b	BMP	Pesticides, Herbicides & Fertilizers	Did these BMPs for pesticides, herbicides, etc. include, at minimum, (1) educational activities, permits, certifications & other measures for municipal applicators & distributors; (2) integrated pest management measures that rely on non-chemical solutions; (3) the use of native vegetation; (4) schedules for irrigation & chemical application; & (5) the collection & proper disposal of unused pesticides, herbicides & fertilizers?		F.3.a.(6)	D.3.a.(4)	Y	Park Facilities SWMP - General BMPs to be implemented (Appendix C) (1) BMP MP.1.2, 1.16 (2) BMP MP.1.12, 1.18 (4) BMP MP.1.9, 1.10, 1.13 (5) BMP MP.1.14. 1.17
C.10.a	Inspections	Sweeping	<u>High Volumes of Trash:</u> Did the Copermittee identify the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris , as well as the frequency of sweeping conducted for such roads, streets, and highways?	maintenance should include at a minimum: record keeping of cleaning and the overall quantity of waste removed	Curb miles are not specifically required but see F.3.a.(5)(c)(i ii)	J.3.a.3.(c)(x)	N/A	Not a requirement for the 2001 permit
C.10.b	Inspections	Sweeping	<u>High Volumes of Trash:</u> Was this sweeping conducted at least 2 times per month?	-	-	J.3.a.3.(c)(vii)	N/A	Not a requirement for the 2001 permit
C.11.a	Inspections	Sweeping	<u>Moderate Volumes of Trash:</u> Did the Copermittee identify the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	-	-	J.3.a.3.(c)(xi)	N/A	Not a requirement for the 2001 permit
C.11.b	Inspections	Sweeping	<u>Moderate Volumes of Trash:</u> Did this sweeping occur once a month?	-	-	J.3.a.3.(c)(vii)	N/A	Not a requirement for the 2001 permit
C.12.a	Inspections	Sweeping	<u>Low Volumes of Trash:</u> Did the Copermittee identify the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways	-	-	J.3.a.3.(c)(xii)	N/A	Not a requirement for the 2001 permit
C.12.	Inspections	Sweeping	<u>Low Volumes of Trash:</u> Did this sweeping occur	-	-	J.3.a.3.(c)(vii)	N/A	Not a requirement for the 2001 permit

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b			no less than once per year?					
C.13	Inspections	Sweeping	Did the Copermittee identify of the total distance of curb-miles swept?			J.3.a.3.(c)(xiii)	Y	AR Section 2.5 (pg. 9)
C.14	Inspections	Sweeping	Did the Copermittee identify the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping?			J.3.a.3.(c)(xiv)	N	Discussed frequency of sweeping AR Section 2.5 (pg. 9), but number of lots not required for 2001 permit
C.15	Inspections	Sweeping	Did the Copermittee identify the amount of material (tons) collected from street and parking lot sweeping?		F.3.a.(5)(c)(i ii)	J.3.a.3.(c)(xv)	Y	In AR
C.16	Inspections	Preventative	Did the Copermittee provide a description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4?		F.3.a.(5)	J.3.a.3.(c)(xvi)	N	?
C.17	Inspections	Records	Did the Copermittee identify the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections?			J.3.a.3.(c)(xvii)	Y	Discussed in MSWIP
C.18	Inspections	Records	Did the Copermittee provide a description of the general results of the inspections?		H.1.a.(2)(f)-(j)	J.3.a.3.(c)(xviii)	Y	Discussed in MSWIP
C.19	Inspections	Records	Did the Copermittee provide a confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance?			J.3.a.3.(c)(xix)	Y	Discussed in MSWIP opening letter
C.20	Inspections	Records	Did the Copermittee provide the number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken?		F.3.a.(7)	J.3.a.3.(c)(xx)	Y	Discussed in AR & MSWIP
C.21	Inspections	Records	Did the Copermittee provide a description of notable activities conducted to manage urban runoff from municipal areas and activities?		not required	J.3.a.3.(c)(xxi)	Y	Discussed in SWMPs

5.4 Industrial and Commercial Checklists

No.	Target Area	Action	Question	NOTE ON QUESTION	Cite 2001 Permit	Cite 2007 Permit	Y/N	Notes (as necessary)
F.1	Inventory							
F.1.a	Inventory	Currency	Is the inventory of all industrial and commercial sites/sources recently updated?		F.3.b.(2)	J.1.d.i	Y	See 2005/06 SM Annual Report - sites are updated via the inspection process. See also SM JURMP 3.2.1, 4.2.1 - sites are also continuously updated through business license process, see SM JURMP 3.2.1 & 4.2.1
F.1.b	Inventory	Currency	When was the last update?				See notes	Updates are continuous/ongoing, see 2005/6 SM Annual Report; SM JURMP 3.2.1 & 4.2.1
F.1.c	Inventory	Completeness	Does the inventory comprise a complete list of industrial and commercial sites/sources that could contribute a significant pollutant load to the MS4 (as of the most recent update)?		not required	D.3.b.1	See notes	Developing complete inventory through the inspection and the business license process, see 2005/6 SM Annual Report; SM JURMP 3.2.1 & 4.2.1. 82 of 288 businesses screened for inspection in 2005/6 were re-prioritized, outside the jurisdiction, had moved, or had gone out of business. This suggests that the inventory's business info is approximately 72% accurate.
F.1.d	Inventory	Completeness	How many sites/sources are listed?				See notes	1,911 high-priority commercial and industrial sites (See 2005/6 SM Annual Report, Attachment 3)
F.1.e	Inventory	Completeness	Does each listing include: name, address, pollutants potentially generated, whether the site/source is a tributary to a CWA §303(d) water body & generates pollutants for which the water body segment is impaired, and a narrative description including SIC code?	2001 Permit only required name; address; and a narrative description including SIC codes which best reflects the principal products or services provided by each facility (not pollutant and tributary location info)	F.3.b.(2) and (3)	D.3.b.1	Y	Inspection reports contain this information, suggesting it is, in fact, located in the database. SM does not have any 303(d) listed water bodies (except for SM HA Pacific Ocean, but not required under 2001 permit)

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F.1.f	Inventory	Completeness	How many sites/sources listings are incompletely described?				See notes	Cannot determine without access to database - probably beyond the scope of the audit
F.1.g	Inventory	Completeness	Are mobile businesses operating in the area identified?		not required	D.3.b.4	Y, but see notes	The SM JURMP Section 4.3.1 specifically mentions mobile businesses such as pest control, mobile cleaning services, landscaping, port-a-potty servicing, etc, suggesting that mobile businesses identified. However, these businesses seem to be tagged (like all others) with SIC codes. They do not receive a "mobile business" designation. SM does have BMPs specific to mobile businesses.
F.1.h	Inventory	Completeness	How many mobile businesses operating in the area has the Copermittee identified?				See notes	Cannot determine - see F.1.g notes
F.1.i	Inventory	Completeness	Is this inventory maintained in a database?	recommended	not required	D.3.b.1	Y	See SM JURMP 3.2.1 and 4.2.1. Also, inspection reports contain this information, suggesting that it is available in a database.
F.1.j	Inventory	Completeness	Is a geo-mapping database such as GIS used?	highly recommended but not required	F.3.b.(2)	D.3.b.1	Y, but see notes	Businesses locations not stored in GIS database, rather cross-referenced for watershed info, see SM JURMP 3.2.1 & 4.2.1
F.1.k	Inventory	Prioritization	Are all inventory listings assigned a priority?		F.3.b.(3)	J.1.f.i	Y, but see notes	2005-6 SM Annual Report 3.2 & 4.2 mentions that priority for quite a few businesses is re-assigned following site inspections. Of approx 300 inspections conducted during 2005/6, 5 reports indicate that the business has an "undesigned" priority.
F.1.l	Inventory	Prioritization	Is the prioritization scheme transparent and consistent?			see 2007 Permit D.1.e(2)(b) – development	Y	See SM JURMP 3.3 & 4.3
F.2	BMPs							

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F.2.a	BMPs	Identification	Is it straightforward to identify the minimum required BMPs for each site/source listed in the inventory?		F.3.b.(4)(a) ;F.3.C(3)	J.1.f.ii	N, see notes	See City's "Ind'l URM," appendix to the SM JURMP. Some sections of the Ind'l URM are incomplete (see 3.1.1). It's also confusing b/c it incorporates parts of the "Comm'l URM". It includes very general BMPs applicable to all ind'l dischargers (sections 2.4, 2.5, 4, and 5.2), but also asks dischargers to review portions of the Comm'l URM for "suggested BMPs" and "additional guidance" (section 2.5) or "recommendations" (section 4). The Comm'l URM is more straightforward (see sections 2.3-2.5).
F.2.b	BMPs	Identification	Are "type" categories used to match BMP with sites/sources consistent with commercial/industrial sites/sources listed in D.3.b (1) (a) and (b)?	in 2001 permit: F.3.a.(3)(b) for industrial; F.3.c.(2) for commercial		see also J.1.f.ii	Y, but see notes	See section 3.1.3 of City's "Ind'l URM" and Chapter 4 of "Comm'l URM", appendixes to SM JURMP.
F.2.c	BMPs	Identification	How many minimum BMPs are required of all Ind'l dischargers (all dischargers plus all regulated ind'l businesses)?		not required	n/a	See notes	10 (Ind'l URM sections 2.4 & 2.5)
F.2.d	BMPs	Identification	How many minimum BMPs are required of all high-priority Comm'l dischargers (all dischargers plus all regulated comm'l dischargers, plus all high-priority comm'l dischargers)?			n/a	See notes	34 (Comm'l URM sections 2.3.2-2.5.10 & chapter 3)
F.2.e	BMPs	Identification	How many minimum BMPs are identified for specific high-priority businesses (include all categories)?			n/a	See notes	118 (Comm'l URM chapter 4)

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F.2.f	BMPs	Currency	Are BMPs routinely updated?		not required	for example, see D.1.d.7 development	N, see notes	BMPs have not been substantially updated since 2002 (02-01 revisions only made small changes to BMP descriptions). Also, the SM JURMP does not outline a process for updating BMPs (see sections 3.2 & 4.2).
F.2.g	BMPs	Currency	When was the most recent BMP update completed?		not required	n/a	See notes	BMPs have not been substantially updated since the 2002 JURMP was released.
F.2.h	BMPs	Notification	Is the owner/operator of each site/source notified of required minimum BMPs and any additional requirements?		F.4.a	D.3.b.2.c and .d	See notes	Educational materials are distributed at the business licensing office. Some outreach is conducted at community events. There does not seem to be a mechanism for notifying businesses of updates to requirements, other than through inspections.
F.2.i	BMPs	Notification	How long did it take to notify owner/operator of the most recent BMP requirements update?		F.4.a	D.3.b.2.c and .d		
F.2.j	BMPs	Notification	Was education and training conducted for owners/operators on BMP requirements?		F.4.a	D.3.b.3.a. vii		
F.2.k	BMPs	Notification	How many training/ education sessions have been conducted within the last 12 months?		F.4.a			
F.3	Inspections							
F.3.a	Inspections	Completeness	Were 50% of high priority sites/sources inspected during the first year of implementation?	not required --> industrial requires all high priority to be inspected annually and commercial as needed	F.3.b.(6) for industrial; F.3.c.(4) for commercial	J.1.f.iv and D.3.b.3.b		Tetra Tech noted this deficiency in its Oct 2003 inspection on behalf of the RWQCB. (Industrial-- 98% . 39 sites were accounted for, but the 2005/6 Annual Report lists 40 hi-priority Ind'l sites. 35 of the 39 sites were actually inspected. 4 listings were updated following screening for inspection) (Commercial-- <1% . The SM 2005/6 Annual Report identifies 824 high threat-priority comm'l facilities (of which only 2 were inspected). The Annual Report states that it inspects all commercial sites "as needed".)

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F.3.b	Inspections	Completeness	Were 100% of high priority sites/sources inspected during the second year and all subsequent years?	not required		J.1.f.iv and D.3.b.3.b	N, see notes	
F.3.c	Inspections	Completeness	Were 20% of all other sites/sources inspected in the first year of implementation?	not required		D.3.b.3.b	N, see above	
F.3.d	Inspections	Completeness	Were 25% of all other sites/sources inspected during subsequent years?	not required		D.3.b.3.b	no see above	11% of all listed sites. According to the 2005/6 Annual Report, 206 of 1,911 listed businesses were inspected (11%). 288 of 1,911 were screened for inspection or otherwise accounted for (15%).
F.3.e	Inspections	Completeness	Is the system for deciding which sources/ sites to inspect and when to inspect them consistent & transparent?			J.1.f.vi	N, see notes	SM JURMP says "as needed" for medium/low threat ind'l sites (section 3.6.1); all comm'l sites inspected "as deemed necessary" including high threat priority (section 4.5.1).
F.3.f	Inspections	Third-party	Does the municipality employ third party inspectors?			D.3.b.3.d	Y	All initial and follow-up inspections are contracted to DMAX (2005/6 Annual Report sections 3.6 & 4.5)
F.3.g	Inspections	Third-party	If the municipality does employ third-party inspectors, do those third party inspectors perform no more than 30% of the permit-required inspections?	not required		D.3.b.3.d	N, see notes	All initial and follow-up inspections are contracted to DMAX (2005/6 Annual Report sections 3.6 & 4.5)
F.3.h	Inspections	Completeness	Does the municipality perform an additional inspection (above D.3.a-D.3.b requirements) for every 3 third-party inspection conducted?	not required		D.3.b.3.d	N/A, see notes	All initial and follow-up inspections are contracted to DMAX (2005/6 Annual Report sections 3.6 & 4.5)
F.3.i	Inspections	Completeness	How many total inspections were conducted over the past 12 months?			n/a	See notes	206 (2005/6 Annual Report sections 3.6 & 4.5)

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F.3.j	Inspections	Procedures	Has the municipality established its authority to enter, monitor, inspect, take measurements, review and copy records, and require annual reports from industrial/commercial sites/sources?		F.3.b(7) & F.3.c(5)	C.1.h	Y	See City Stormwater Ordinance & Ind'l Comm'l Inspection program
F.3.k	Inspections	Procedures	Is adequate QA performed to ensure the effectiveness of first and third-party inspections?	not required		n/a	N, see notes	None of the SM JURMP, the Annual Reports, nor the Ind'l Comm'l Inspection Program provide for QA
F.3.l	Inspections	Procedures	Are BMP implementation plans required from sites/sources & reviewed?	not required to have them but required to look for them during inspection; H.1.a.(3)(d) and (e) and H.1.a.(4)(c)(d) require id of which and how BMPs will be implemented	F.3.b.(6)	D.3.b.3.a.i	Y, but see notes	This is part of a "SWPPP". Inspector determines if SWPPP is required based on the Ind'l and Comm'l URM.
F.3.m	Inspections	Procedures	How many sites/sources have filed BMP implementation plans?			D.3.b.3.a.i	See notes	Approximately 52 of 206 inspections (Identified by the number of inspection reports for which indicated that the site had no SWPPP - for which a SWPPP was applicable)
F.3.n	Inspections	Procedures	Are BMPs' maintenance and effectiveness inspected?	not required		D.3.b.3.a.v	Y	Based on review of City's Ind'l/Comm'l Inspection Program. See Ind'l/Comm'l Inspection Reports section D "BMP Assessment"
F.3.o	Inspections	Procedures	Is facility runoff monitoring data required from sites/sources & assessed for compliance?	not required	-	D.3.b.3.a.i i, .iii and .iv	Y	Ind'l/Comm'l Inspection Report section E "SWPPP Review", evaluated if required by the Ind'l or Comm'l URM &/or the facility's SWPPP.
F.3.p	Inspections	Procedures	Are sites required to make and record visual inspections of runoff?	not required	-	D.3.b(3)(a)(vi)	Y	Based on review of City's Ind'l/Comm'l Inspection Program. See Ind'l/Comm'l Inspection Report section E "SWPPP Review", evaluated if required by the Ind'l

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								or Comm'l URM &/or the facility's SWPPP.
F.3.q	Inspections	Procedures	Is compliance with education and training for employees evaluated?	not required	-	D.3.b.3.a. vii	Y	Based on review of City's Ind'l/Comm'l Inspection Program. This was evaluated during inspections if required by the Ind'l or Comm'l URM &/or the facility's SWPPP.
F.3.r	Inspections	Reports	Are thorough inspection reports filed for all inspections, maintained & reviewed for trends?	-	-	n/a	Y	Based on review of City's Ind'l/Comm'l Inspection program.
F.3.s	Inspections	Reports	How many inspection reports were filed over the past 12 months?	-	-	D.4.d and h	See notes	8 (2005/6 Annual Report section 3.6.1 and review of City's Ind'l/Comm'l Inspection Program)
F.3.t	Inspections	Reports	Are all illicit discharges investigated and included in the annual report?		I.1.b.	D.4.d and h	Unkn own	No comments
F.4	Enforcement							
F.4.a	Enforcement	N/A	Are preferred enforcement mechanisms identified and used? (non-monetary penalties, fines, bonding requirements, and/or permit denials for non-compliance)		F.3.b.(7)	J.1.d.x & D.3.b.5	Y, but see notes	See SM JURMP sections 3.7 & 4.6 and 2005/6 Annual Report sections 3.6 & 4.5
F.4.b	Enforcement	N/A	How often is follow-up conducted when it is recommended after a routine inspection?			N/A	See notes	57%. 51 follow-up inspections conducted. Follow-up was recommended in approximately 90 routine inspections (21 high-priority ind'l; 2 high-priority comm'l; 1 low-priority comm'l, and 66 med-priority ind'l reports - based on 30 selected randomly from 164 total med-priority ind'l reports.) Note that according to Mikahil's 8 Aug email, DMax conducts 2 follow-up inspections before a business to Code Enforcement, except in rare egregious cases. Thus some of the 51 follow-up inspections were duplicates and the number of sites for which follow-up was conducted may be closer to 30-40%).

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F.4.c	Enforcement	N/A	How often does a violation documented in a routine inspection lead to a Notice of Violation?			N/A	See notes	<1%. Document review yielded one NoV issued for discharge of pollutants to stormwater, discovered during a building inspection. The 2005/6 Annual Report states that Correction Notices were served, but does not indicate that NoVs were issued.
F.4.d	Enforcement	N/A	How often does a violation documented in a routine inspection lead to a Correction Notice?			N/A	See notes	86%. According to the 2005/6 Annual Report, 38 Correction Notices were issued to Ind'l businesses and 39 to Comm'l businesses, 77 total of approx 90 cases where violations were documented in routine inspections. But note that these were not provided during document review.
F.4.d	Enforcement	N/A	How often does a violation documented in a routine inspection lead to a citation, fine, closure, etc.?			N/A	See notes	0%. The 2005/6 Annual Report states that enforcement actions included service of Correction Notices, but does not indicate that citations, etc. were issued.
F.4.b	Enforcement	N/A	Are active steps taken to identify non-filers?	not required specifically but required site inspections to check for compliance with all permits, ordinances, etc	F.3.b.(6)(a)	J.1.d.xi	Unknown, see notes	Unable to determine this. No procedure for this in the SM JURMP or the 2005/6 Annual Report.
F.4.c	Enforcement	N/A	Are non-filers reported to the Regional Board?	For 2001 permit: Only required to report non-compliant sites that are determined to pose a threat to human or environmental health	F.3.b.(8)	D.3.b.(6)	Y	See 2005/6 Annual Report (Section 3.6) identifying 5 businesses required to file NOI that had not done so.
F.4.d	Enforcement	N/A	How many non-filers were reported to the Regional Board in the most recent report?	" "	F.3.b.(8)	D.3.b.(6)	See notes	5 (5 Ind'l; 0 Comm'l). See 2005/6 Annual Report 3.7 & 4.6

5.5 Residential Checklist

No.	Target Area	Action	Question	Cite 2001 Permit	Cite 2007 Permit	Y/N	Notes (as necessary)
E.1	URMP Reporting	Identification	Does the Copermittee's JURMP contain a list of residential areas and activities that have been identified as high priority, including at minimum the following activities?	F.3.d.(2)	D.3.c.1	Yes	*As needed
E.1.A			Automobile repair, maintenance, washing, and parking?	F.3.d.(2)	D.3.c.1. a	Yes	
E.1.B			Home and garden care activities and product use (pesticides, herbicides, and fertilizers)?	F.3.d.(2)	D.3.c.1. b	Yes	
E.1.C			Disposal of trash, pet waste, green waste, and household hazardous waste (e.g., paints, cleaning products)?	F.3.d.(2)	D.3.c.1. c	Yes	
E.1.D			Any other residential source that the Copermittee determines may contribute a significant pollutant load to the MS4?	F.3.d.(2)	D.3.c.1. d	Yes	
E.1.E			Any residential areas tributary to a CWA section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired?	F.3.d.(2)	D.3.c.1. e	Yes	
E.1.F			Any residential areas within or directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an environmentally sensitive area?	F.3.d.(2)	D.3.c.1. f	Yes	
E.2	URMP Reporting	BMPs	Does the Copermittee's JURMP contain a list of minimum BMPs that will be implemented, or required to be implemented, for high priority residential activities?	F.3.d.(3)(a)	D.3.c.2. a	Yes	The JURMP & Annual Report refer to the "Residential BMP Implementation Manual," which is actually the <i>Residential Urban Runoff Requirements Manual</i> and is located as Appendix C-4 (p. 607-637) in JURMP.
E.3	URMP Reporting	Implementation	Does the Copermittee's JURMP contain a description of which pollution prevention methods will be encouraged for implementation, and the steps that will be taken to encourage implementation?	Not required but maybe implicit in H.1.a.5.	D.3.c.2. b	Yes	See the <i>Residential Urban Runoff Requirements Manual</i> located as Appendix C-4 (p. 607-637) in JURMP.

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E.4	URMP Reporting	BMPs	Does the Copermittee's JURMP contain a description of efforts to facilitate proper disposal of used oil and other toxic materials including educational activities, public information activities, and establishment of collection sites operated by the Copermittee or a private entity?	not required	D.3.c.2.c	Yes	Section 8.8
E.5	URMP Reporting	BMPs	Does the Copermittee's JURMP contain a description of the steps that will be taken to require and verify the implementation of prescribed BMPs for high priority residential activities?	not required but maybe implicit in H.1.a.5.(c)	D.3.c.2.d	No	
E.6	URMP Reporting	BMPs	Has the Copermittee implemented, or required implementation of, BMPs for residential areas and activities that have not been designated a high threat to water quality, as necessary?	F.3.d.(4)	D.3.c.2.e	Yes	Section 5.3, p 5-1
E.7	URMP Reporting	Implementation	Has the Copermittee implemented, or required implementation of, any additional controls for residential areas and activities tributary to CWA section 303(d) impaired water body segments (where a residential area or activity generates pollutants for which the water body segment is impaired)?	F.3.d.(3)(c)	D.3.c.2.f	Yes	See the <i>Residential Urban Runoff Requirements Manual</i> located as Appendix C-4 (p. 607-637) in JURMP.
E.7.A			Has the Copermittee implemented, or required implementation of, additional controls for residential areas within or directly adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas (as defined in section Attachment C of the Order) as necessary to comply with the Order?	F.3.d.(3)(c)	D.3.c.2.f	Yes	See the <i>Residential Urban Runoff Requirements Manual</i> located as Appendix C-4 (p. 607-637) in JURMP.
E.9	URMP Requirements	Enforcement	Does the Copermittee's JURMP contain a description of enforcement mechanisms and how they will be used?	F.3.d.(4); H.1.a.(5)(e)	D.3.c.3	Yes	Section 5.4; Also see the <i>Residential Urban Runoff Requirements Manual</i> located as Appendix C-4 (p. 607-637) in JURMP.
E.10	URMP Requirements	Evaluation	Does the Copermittee's JURMP contain a description of efforts to evaluate methods used for oversight of residential areas and activities including an assessment of inspections of residential areas and activities? The evaluation should consider various oversight and inspection approaches to identify an effective and appropriate oversight and inspection approach.	not required	D.3.c.4	No	

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E.11	URMP Requirements	Implementation	Has the Copermittee collaborated with the other Copermittees to develop and implement the Regional Residential Education Program required in section F.1 of the Order?	<-- I.1.b.4; F.4.c.	D.3.c.5	No	not required specifically as a Regional educational program, but residential education is required
E.14	Annual Reports	Identification	Does the Copermittee's annual report include an identification of the high threat to water quality residential areas and activities that were focused on?	H.1.a.5.(b)	J.3.a.3.e.i	Yes	see Residential BMP Implementation Manual
E.15	Annual Reports	BMPs	Does the Copermittee's annual report include confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities?	H.1.a.(5)(e)	J.3.a.3.e.ii	Yes	
E.16	Annual Reports	Implementation	Does the Copermittee's annual report include a description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials?	H.1.a.(7)(i); F.5.h	J.3.a.3.e.iii	Yes	Not under Residential area of AR; in 8.8 on page 40
E.17	Annual Reports	BMPs	Does the Copermittee's annual report include types and amounts of household hazardous wastes collected, if applicable?	<-- F.5.h	J.3.a.3.e.iv	Yes	not required specifically
E.18	Annual Reports	Evaluation	Does the Copermittee's annual report include a description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation?	F.7	J.3.a.3.e.v	No	Not required specifically, but Copermittees do generally need to assess
E.19	Annual Reports	Enforcement	Does the Copermittee's annual report include the number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken? The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.		J.3.a.3.e.vi	No	not required specifically by 2001 permit
E.20	Annual Reports	Implementation	Does the Copermittee's annual report include a description of collaboration efforts taken to develop and implement the Regional Residential Education Program?		J.3.a.3.e.vii	No	not required by 2001 permit
E.21	Annual Reports	BMPs	Does the Copermittee's annual report include a description of notable activities conducted to manage urban runoff from residential areas and activities?		J.3.a.3.e.viii	No	not required by 2001 permit

5.6 Illicit Discharge Detection and Elimination Checklist

No.	Target Area	Action	Question	Cite 2001 Permit	Cite 2007 Permit	Y/N	Notes (as necessary)
F.1	URMP Reporting	Enforcement	Does the Copermittee's JURMP contain a description of the program to actively seek and eliminate illicit discharges and illicit connections?	F.5.a.;H.1.a.(7)(a)	D.4.a	Y	
F.1.A			Does the program include utilization of appropriate municipal personnel to assist in identifying illicit discharges and connections during their daily activities?	not required	D.4.a	Y	This is mentioned more in the Annual Report than in the JURMP
F.1.B			Does the program address all types of illicit discharges and connections excluding those non storm water discharges not prohibited by the Copermittee in accordance with section B of the Order?	F.5.c	D.4.a	Y	The 2001 permit addresses all discharges regardless of whether they are storm water or non-prohibited
F.2	URMP Reporting	Monitoring	Does the Copermittee's JURMP contain an updated MS4 map, including locations of the MS4, dry weather field screening and analytical monitoring sites, and watersheds?	Attachment E(1)	D.4.b	N	Section 2.0 of Appendix D-1 states, "The City will be working towards completion of an up-to-date map of the entire MS4 system. Currently the City has available a." The sentence ends there.
F.3	URMP Reporting	Monitoring	Does the Copermittee's JURMP contain a description of dry weather field screening and analytical monitoring to be conducted (including procedures) which addresses all requirements included in sections B.1-4 of Receiving Waters Monitoring and Reporting Program No. R9-2006-0011?	Attachment E; H.1.a.(7)(b)	D.4.c & J.1.a.3.h	Y	
F.4	URMP Reporting	Investigation	Does the Copermittee's JURMP contain a description of investigation and inspection procedures to follow up on dry weather monitoring results or other information which indicate potential for illicit discharges and illicit connections?	H.1.a.(7)(c) ; F.5.c	D.4.d.1	Y	
F.4.A			Has the Copermittee developed, updated and/or utilized numeric criteria action levels (or other actions level criteria where appropriate) to determine when follow-up investigations will be performed?	F.5.c.	D.4.d.1	Y	2001 Permit criteria required, but not numeric. See Appendix D-1 Dry Weather Analytical Monitoring Program

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F.4.B			Do the Copermittee's investigation procedures conform to the requirement that within two business days of receiving dry weather field screening results that exceed action levels, the Copermittee either conduct an investigation to identify the source of the discharge or provide the rationale for why the discharge does not pose a threat to water quality and does not need further investigation?	Attachment E (6); F.5.c; F.5.d.	D.4.d.2	N	in 2001 permit not required within 2 business days but investigation required
F.4.C			Do the Copermittee's investigation procedures conform with the requirement that within two business days, where applicable, of receiving analytical laboratory results that exceed action levels, the Copermittee either conduct an investigation to identify the source of the discharge or provide the rationale for why the discharge does not pose a threat to water quality and does not need further investigation?		D.4.d.2	N	not required in 2001 Permit
F.4.D			Do the Copermittee's investigation procedures conform to the requirement that obvious illicit discharges (i.e. color, odor, or significant exceedances of action levels) be investigated immediately?		D.4.d.2	N	not required under 2001 Permit
F.5	URMP Reporting	Enforcement	Does the Copermittee's JURMP contain a description of procedures to eliminate detected illicit discharges and illicit connections?	I.1.a.; H.1.(7)(a)	D.4.e	Y	
F.6	URMP Reporting	Enforcement	Does the Copermittee's JURMP contain a description of enforcement mechanisms (including use of ordinances, orders, and other legal authority) and how they will be used to eliminate detected illicit discharges and connections?	H.1.(7)(e)	D.4.f	Y	See F.5.e.
F.7	URMP Reporting	Enforcement	Does the Copermittee's JURMP contain a description of the mechanism to receive notification of spills?	H.1.(7)(g)	D.4.g	Y	San Marcos does not own or maintain sanitary sewers, so they do not respond to sewage spills. But they work with the Vallecitos Water District to implement procedures to comply with the permit.
F.8	URMP Reporting	Enforcement	Does the Copermittee's JURMP contain a description of measures to prevent, respond to, contain, and clean up all sewage and other spills?	H.1.(7)(f)	D.4.g	Y	
F.9	URMP Reporting	Enforcement	Does the Copermittee's JURMP contain a description of efforts to facilitate public reporting of illicit discharges	H.1.(7)(h)	D.4.h	Y	

			and connections, including a public hotline?				
F.10	Annual Reports	Evaluation	Does the Copermittee's annual report include a correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map?	<--not required but see Appendix E section 1	J.3.a.3.f.i	N	requires an up to date MS4 map
F.11	Annual Reports	Monitoring	Does the Copermittee's annual report include a reporting of all dry weather field screening and analytical monitoring results? The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.	Appendix E section 7; H.1.(7)(b) and (c)	J.3.a.3.f.i i	Y	This is included in "City of San Marcos Dry Weather Field Screening and Analytical Monitoring Program 2006" document.
F.12	Annual Reports	Monitoring	Does the Copermittee's annual report include any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report?	not required	J.3.a.3.f.i ii	Y	
F.13	Annual Reports	Investigation	Does the Copermittee's annual report include a brief description of any other investigations and follow-up activities for illicit discharges and connections?	not required	J.3.a.3.f.i v	Y	
F.14	Annual Reports	Investigation	Does the Copermittee's annual report include the number and brief description of illicit discharges and connections identified? What is that number?	I.1.b	J.3.a.3.f. v	N	General requirement to provide reports of illicit discharges (i.e., complaints) and how each was resolved

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F.15	Annual Reports	Enforcement	Does the Copermittee's annual report include the number of illicit discharges and connections eliminated? What is that number?	Not specifically required but see H.1. (7)(D) and I.1.b.	J.3.a.3.f. vi	N	
F.16	Annual Reports	Investigation	Does the Copermittee's annual report include an identification and description of all spills to the MS4 and response to the spills?	H.1.(7)(f) requires a description of the methods used	J.3.a.3.f. vii	Y	No spills reported. I.1.a. requires description of activities conducted under each component
F.17	Annual Reports	Prevention	Does the Copermittee's annual report include a description of activities implemented to prevent sewage and other spills from entering the MS4?	H.1.(7)(f)	J.3.a.3.f. viii	N	
F.18	Annual Reports	Notification	Does the Copermittee's annual report include a description of the mechanism whereby notification of sewage spills from private laterals and septic systems is received?	H.1.(7)(g)	J.3.a.3.f.i x	Y	County public hotline
F.19	Annual Reports	Notification	Does the Copermittee's annual report include the number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls? What is that number?	not required	J.3.a.3.f. x	Y	11
F.20	Annual Reports	Notification	Does the Copermittee's annual report include a description of efforts to publicize and facilitate public reporting of illicit discharges?	H.1.(7)(h)	J.3.a.3.f. xi	Y	
F.21	Annual Reports	Enforcement	Does the Copermittee's annual report include the number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken? What is that number? The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	I.1.b.(1)	J.3.a.3.f. xii	Y	The City has a description for the phoned-in complaints and for elevated constituent follow-up. However, analysis is incomplete for the testing follow-up because it does not state the mechanism for resolution.
F.22	Annual Reports	Enforcement	Does the Copermittee's annual report include a description of notable activities conducted to manage illicit discharges and connections?	H.1.(7)(k)	J.3.a.3.f. xiii	No	

5.7 Education Checklist

No.	Target Area	Action	Question	Notes on Question	Cite 2001 Permit	Cite 2007 Permit	Y/ N	Notes (as necessary)
G.1	General							*As needed
G.1.a		Effectiveness	Did the educational efforts measurably increase the knowledge of target communities regarding MS4s, the impacts of urban runoff on receiving water, and potential BMP solutions?		F.4.	D.5	N	No studies undertaken to measure the effect of the education efforts recently
G.1.b		Media used	Did the efforts utilize all media appropriate to reach the target audiences?		F.4.	D.5	Y	The City Nights newsletter was the main mass media tool, and fridge magnets, green wrench guides, construction brochures, pens, SW coloring books, and pet waste bags were distributed at various events. Additionally, the Chamber of Commerce aided in the distribution of literature to specific types of businesses.
G.1.c		Scope	Were education efforts made for each target community?		F.4.	D.5	Y	Municipal depts. and personnel, construction site, industrial, and commercial owners and operators, residential community, general public, school children, and quasi-gov't agencies
G.1.d		Effectiveness	Did the efforts measurably change behavior of the communities, reducing the effects on the environment?		F.4.	D.e	Y	Measurable improvement in household hazardous waste disposal, hope to measure lbs of pet poop next year to make determination
G.1.e		Scope	Did the educational efforts address all the topics listed in Table 3, where appropriate?	no Table 3 but many of the same topics listed	F.4.a and b	D.5.a(1)	N	Many of the topics listed in the table were not addressed including charity car washing, wash water disposal, BMP maintenance, de-chlorination techniques, hydrostatic testing, and the benefits of native vegetation
G.1.f		Scope	How did the educational efforts emphasize underserved audiences, high-risk behaviors, and allowable behaviors and discharges including socioeconomic groups and mobile sources?		not required	D.5.a(2)	Y	Outreach efforts at crime prevention meetings - neighborhood watch, street fairs (pet waste bags); highlighted cultural predispositions to hosing down driveways
G.2	Municipal							

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G.2.a		Personnel	What educational activities, permits, certifications or other measures were implemented to help municipal personnel reduce the effects of the application, storage, and disposal of pesticides, herbicides, and fertilizers from municipal areas to MS4s?		F.3.a.(6)	D.3.a(4)	Y	Public Works and Parks staff trained 4/13 on facility SWMPs and responsibilities re storm water
G.2.b		Staffs	Did the Copermittee implement an education program so that its planning and development review staffs understand the issues listed in D.5.b(1)(a)?	in 2001 permit, list is in F.1.d. not D.5.b.(1)	F.1.d. (1). And F.1.d. (2).	D.5.b(1)(a)	Y	Land use and planning and engineering staff trained 12/14/05, 12/21/05, and 3/17/06 on impacts to water quality from development, LID, SWPPPs, site design BMPs, source control BMPs, Water Quality Technical Reports, and treatment control BMPs (05-06 Annual Report)
G.2.c		Staffs	Did the Copermittee implement an education program that includes annual training prior to the rainy season for construction, building, code enforcement, and grading review staffs, inspectors, and others have an understanding of the topics listed in D.5.b(1)(b)?	in 2001 permit, list is in F.1.d. not D.5.b.(1)	not required specifically but see F.2.j. and F.2.d.	D.5.b(1)(b)	N	Construction inspection staff trained 4/13, though this was not done prior to rainy season. All staff was trained, so code enforcement and grading review staffs likely received training on 4/20/06 – this was not prior to the rainy season (05-06 Annual Report)
G.2.d		Currency	Were staff responsible for conducting storm water compliance inspections and enforcements trained <i>this year</i> on inspection and enforcement procedures, BMP implementation, and reviewing monitoring data as required by D.5.b(1)(c)?		F.2.j.	D.5.b(1)(c)	Y	Construction inspection staff trained 4/13/06 on applicable topics (05-06 Annual Report)
G.2.e		Implement- ation	Was an education program for municipal personnel and <u>contractors</u> performing activities which generate pollutants implemented to provide understanding of the activity specific BMPs?		F.1.d. (1). And F.1.d. (2).	D.5.b(1)(d)	Y	All city staff was trained on 4/20/06 as per 05/06 Annual Report.
G.3	Construction							
G.3.a		Inspections*	What storm water pollution prevention education and outreach efforts were part of the construction site inspections required by D.2.d (1-6)?		F.4. and F.2.j.	D.2.d(1-6)	Y*	Public Works construction inspection staff provided ongoing site specific education to contractors explaining what does/does not work
G.3.b		Implement- ation	Was a program implemented to provide education for applicants, developers, contractors, property owners, community planning groups, and other parties as early in		F.1.d.(2)	D.5.b(2)	Y	Program begins at development review process and carries out until project closure

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			the planning and development process as possible and extending through construction?					
G.3.c		Scope	Did it touch on the topics is D.5.b (1) (a) and (b)? Did it emphasize the importance of further education for those in the field about construction BMPs?	in 2001 permit, list is in F.1.d. not D.5.b.(1)	F.1.d.(2)	D.5.b(1)(a,b)	Y	Utilized BMP handouts, emphasized continuing education for construction personnel
G.4	Residential							
G.4.a		Implement- ation	What programs were conducted for residents, the general public, and school children as required by D.5.b (3)?		F.4.c.	D.5.b(3)	Y	Materials distributed at Chamber of Commerce street fair, Fire Dept Open House, light bulb exchange, neighborhood watch meetings, and through the nature center at Jack's Pond Park
G.4.b		Media used	Did the plan evaluate the use of mass media, mailers, etc?		not required	D.5.b(3)	Y	Handouts were distributed/delivered to residents
G.4.c		Implement- ation	What educational activities encouraged the use of pollution prevention methods by residents?		F.4.(2)	D.3.c(3)(b)	Y	Materials distributed at Chamber of Commerce street fair, Fire Dept Open House, light bulb exchange, neighborhood watch meetings, field trips, and through the nature center at Jack's Pond Park
G.4.d		Implement- ation	What educational or public information activities helped facilitate the proper management and disposal of used oil, toxic materials, and other household hazardous wastes?		F.5.h.	D.3.c(2)(c)	Y	Household hazardous waste program
G.4.e		Collaboration	Did Copermittee collaborate w/ other Copermittees to develop and implement the Regional Residential Education Program required by section F.1?		not required	D.3.c(5)	Y	Participated in the North County Storm Water Program
G.4.f		Implement- ation	Does it include specific efforts focused on bacteria, nutrients, sediment, pesticides, and trash?		not required	F.1.a	Y	Auto workshops, construction site BMP handouts, Phone surveys, Auto and restaurant posters, Environmental fairs, other brochures
G.4.g		Scope	Does it focus on the specific residential sources of these pollutants?	impacts of urban runoff on receiving waters	F.4.	F.1.b	Y	Auto workshops, construction site BMP handouts, Phone surveys, Auto and restaurant posters, Environmental fairs, other brochures

5.8 Public Participation, Program Assessment, Special Investigations, Non-Emergency Firefighting, & JURMP Revisions Checklists

No.	Target Area	Action	Question	Cite 2001 Permit	Cite 2007 Permit	Y/ N	Notes (as necessary)
Public Participation							
H.1.a		Mechanism	Did the Copermittee incorporate a mechanism for public participation in the updating, development, and implementation of the JURMP?	F.6	D.6	Y	Public feedback through city council, public workshops, and regional hotline
H.1.b		Implementation	What efforts were made to promote, publicize, and facilitate reporting of illicit discharges? Was a public hotline created as required by D.4.h?	F.5.g.	D.4.h	Y	Regional hotline, 1-800-Cleanup
Program Effectiveness Assessment							
H.2	JURMPS						
H.2.a		Implementation	Did the Copermittee annually assess the effectiveness of its JURMP as required by I.1.a?	F.7.	I.1.a	Y	
H.2.b		Scope	Did it specifically assess each significant jurisdictional activity/BMP (or type thereof)?	not specifically required	I.1.a(1)(a)	Y	
H.2.c		Analysis	Did it assess the implementation of each major component of the JURMP?	not specifically required	I.1.a(1)(a)	Y	
H.2.d		Scope	Did it assess the implementation of the JURMP as a whole?	F.7.	I.1.a(1)(a)	Y	
H.2.e		Measurements	Did the Copermittee ID and utilize measurable target outcomes, assessment measures, and assessment methods for each activity and component of the JURMP, as well as the JURMP as a whole?	Not specifically required (see F.7.a.)	I.1.a(2)	Y	The long-term assessment strategy shall identify specific direct and indirect measurements to track the long-term progress of its

							individual JURMP
H.2.f		Measurements	Did Copermittee utilize outcome levels 1-6 to assess the effectiveness?	not required	I.1.a(2)	N	Used only 4 levels for this year, but will move to 6 next year
H.2.g		Analysis	Did Copermittee utilize monitoring data from the RWMP to assess the effectiveness?	not required	I.1.a(2)	N	
H.2.h		Analysis	Did Copermittee utilize implementation assessment, water quality assessment, and integrated assessment where applicable and feasible?	F.7.a.	I.1.a(2)	Y	Methods used for assessing effectiveness shall include the following or their equivalent: surveys, pollutant loading estimations, and receiving water quality monitoring.
H.2.i		Improvements	Did Copermittee annually review its jurisdictional activities to ID modifications or improvements needed to maximize JURMP effectiveness or otherwise comply?	F.7.b.; I.1.a.F.7.	I.1.a(2)	Y	
H.2.j		Reporting	Was the assessment included in the JURMP annual reports?	I.1.a.F.7.	I.1.a(2)	Y	
H.3	Treatment Control BMP effectiveness						
H.3.a		Reporting	Did each party responsible for the maintenance of an approved treatment control BMP provide an annual verification of the effective operation of that BMP prior to the rainy season?	F.1.b.(1)(f); F.3.a.(4)	D.1.e(2)(d)	Y	does not require verification before rainy season
H.3.b		Inspection	Were all high priority treatment control BMPs and 50% of drainage insert treatment control BMPs inspected this year to ensure effective operation and maintenance?	F.3.a.(7); F.3.a.(5);F.3.b.(5);F.3.c.(4)(Comm'l as needed not annually)	D.1.e(2)(c)	Y	Only structural control maintenance cleaning between May 1 and September 30 & as necessary between October 1 and April 30
H.4	Construction						

	Site BMP effectiveness						
H.4.a		Implementation	What BMP effectiveness assessments were made during the construction site inspections required by D.2.d (1-6)?	F.2.g.(1)	D.2.d(1-6)	Y	
H.5	Residential Oversight effectiveness						
H.5.a		Analysis	Were the methods used for oversight of residential areas and activities evaluated for effectiveness as suggested by D.3.c (4)?	I.1.a.F.7.	D.3.c(4)	Y	not specifically mentioned, but overall assessment required
Fiscal Analysis				I.1.a.F.8; F.8			
H.6.a		Analysis	Did the Copermittee conduct an annual fiscal analysis?	I.1.a.F.8; F.8	G.3	Y	
H.6.b		Budgeting	Did the analysis provide the Copermittee's URMP budget for the current reporting period?	F.8.	G.3	Y	
H.6.c		Reporting	Did the analysis include a description of the sources of funds proposed to be used, including legal restrictions on their use?	F.8.	G.3	Y	
Special Investigation							
H.7.a		Investigations	Were any special investigations conducted?	I.1.e.		Y	Bradley Park
Non Emergency Firefighting							
H.8.a		Implementation	Were any efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows?	H.1.a.(12)		Y	Fire Dept trained and given specific SWMP
JURMP Revisions							
H.9.a		Revisions	Were there any proposed revisions to the JURMP?	I.1.d.		Y	Included each year in annual report

