CASQA
California Stormwater Quality Association®
Dedicated to the Advancement of Stormwater Quality Management, Science and Regulation

September 8, 2011

Ms. Jeanine Townsend, Clerk of the Board
State Water Resources Control Board
1001 I Street
Sacramento, CA 95814

Subject: Comment Letter – Phase II Small MS4 General Permit

Dear Ms. Townsend and Members of the Board:

The California Stormwater Quality Association (CASQA) appreciates the opportunity to provide comments on the subject of the Phase II Small MS4 General Permit (draft Phase II permit). As you are aware, CASQA is a statewide association with active membership from representatives of the Phase I and Phase II stormwater community. As a result, we have extensive experience in the development and implementation of stormwater management programs to protect water quality. CASQA's Phase II subcommittee thoroughly reviewed the draft Phase II permit and developed comments and recommendations contained herein. The Phase II subcommittee includes a broad representation of Phase II traditional, non-traditional, new and existing designees.

CASQA has and will continue working closely with State Water Board staff to create programs that will protect water quality in a pragmatic and cost effective manner. The draft Phase II permit will pose significant challenges to the Phase II community. The exceptional expansion of program requirements in the draft Phase II permit is of such concern that we respectfully request fundamental changes.

Our overarching comments are summarized below and our specific comments and requests for clarification are included in the attached table (Attachment A).

Comment #1: Cumulative Impact

CASQA is concerned about the magnitude of the general program requirements that the draft Phase II permit presents. All six minimum control measures (MCMs) are significantly ramped-up in comparison with the current version of the Phase II permit (Order No. 2003-005-DWQ), and in some cases exceed Phase I program requirements. CASQA compared select draft Phase II and Phase I permit provisions; a summary is provided in Attachment B. As an example, the list of industrial and commercial facilities that must be inventoried and inspected by Phase II communities exceeds the requirements of many Phase I programs.

The draft Phase II permit requires Phase II permittees to meet these ramped-up requirements in a single permit term. Phase I permittees were accorded three to four permit terms (15-20 years) to

develop the current level of compliance programs. As proposed, new designees would be required to transition from no program (no staffing, no experience, etc.) to a comprehensive and costly stormwater program in a relatively short timeframe. Existing designees are being asked to ramp-up their current programs to the level of programs of communities many times their size that have considerably more staff and fiscal resources. The State Water Board has set the bar unrealistically high and many Phase II permittees will be unable to comply. Phase II permittees do not have the funding, staffing, experience, or resources of their Phase I counterparts. Phase II permittees should be provided with sufficient time (i.e., multiple permit terms as accorded larger communities) to develop and build their programs.

Significant additional funds and staffing will be needed to implement the new requirements. Existing Phase II permittees are estimating program costs will have to be increased in excess of three times the current program costs to implement the draft Phase II permit. These increases are immediate and take place in the first year of implementation. Many Phase II permittees are not able to obtain additional staffing; economic constraints as well as the transfer of municipal revenues to State programs have already resulted in furloughs, layoffs, and/or hiring freezes.

Additionally, Phase I and Phase II permittees must contend with Proposition 218, which severely limits municipalities' ability to raise revenues as evidenced by failed attempts in Phase I communities. With such challenges it is imperative that the State Water Board staff and the Phase II communities develop a permit that protects water quality and does so in the most cost-effective manner.

Establishing Phase II program requirements that are within the capacity of the current and anticipated resources of Phase II permittees will create a more effective tool to protect water quality. Stretching Phase II resources beyond an obtainable capacity and setting the bar too high will not result in improved water quality – it is likely to result in Phase IIs that are unable to comply with the permit, who then may be faced with costly administrative or court imposed penalties.

Recommendation: Please direct State Water Board staff to prioritize and phase-in new requirements over several permit terms. CASQA recommends that the State select two or three areas of focus/improvement that will allow Phase II permittees to make incremental improvements to their program. The table below provides CASQA's specific recommendations.

Areas for Permit Renewal Prioritization (2012 – 2017 Permit Term)	***Requirements to be Phased-In Over Several Future Permit Terms***
Pollution Prevention/ Good Housekeeping	
Require new flood management facilities to incorporate water quality and/or habitat enhancement features, if practicable	*Retrofit existing flood management facilities to incorporate water quality and/or habitat enhancement features, if practicable*
Industrial/Commercial	
Inventory of commercial and industrial facilities	*Establish inspection priorities and implement a program to inspect commercial and industrial facilities*

Post-Construction	
Conduct a desktop watershed characterization	*Refine watershed characterization with field assessment (i.e., Unified Stream Assessment)*
Receiving Water Monitoring	
If receiving water monitoring requirements are not removed, as an alternative to those requirements, provide an option of contributing to the statewide or regional SWAMP Bioassessment and Stream Pollution Trends (SPoT) monitoring programs or joining a regional monitoring program	*Permittee-specific receiving water monitoring based on water quality priorities*
Program Effectiveness	
Establish mechanisms for assessing program effectiveness per the CASQA Program Effectiveness guidance manual	*Identification of retrofit opportunities*

Comment #2: Redundancy

The State Water Board staff need to streamline regulatory requirements to improve program efficiency. As an example, the State Water Board staff or CalEPA can work with other state agencies (such as the Department of Toxic Substances Control, Department of Pesticide Regulation, Office of Environmental Health Hazard Assessment, Department of Water Resources and Office of State Architect) to identify regulatory options for stormwater compliance in the areas of industrial oversight, pesticide control, water conservation, and new development requirements for non-traditional Phase II MS4s (e.g., school districts). This will help reduce redundancy and clarify and support stormwater program implementation at all levels of government.

An example of the redundancy is the overlap between the draft Phase II permit's Construction and Industrial/Commercial provisions and the State's Construction General Permit (CGP) and Industrial General Permit (IGP) requirements. Much of the data collected via the CGP and IGP will be tracked in the SMARTS database. Asking Phase IIs to collect the same data adds unnecessary time and expense with no benefit to water quality. This redundancy not only imposes a burden on the Phase II permittees, it will impose a burden on the businesses and construction operations as the Phase II permittees will pass along new and potentially redundant fees to commercial and industrial businesses and construction sites.

Recommendation: Please direct State Water Board staff to eliminate redundancy with other state and federal requirements, with particular attention to CGP and IGP requirements. See Attachment A comments on the Industrial/Commercial and Construction Provisions for more specific recommendations.

Comment #3: Six Minimum Control Measures (MCM)/ Unfunded Mandates

The draft Phase II permit that goes beyond the national approach for smaller entities that established six minimum control measures. CASQA takes considerable exception to this approach; in fact according to the guidance promulgated in 40 CFR Section 122.34(e)(2):

> "Guidance: EPA strongly recommends that until the evaluation of the storm water program in §122.37, no additional requirements beyond the minimum control measures be imposed on regulated small MS4s without the agreement of the operator of the affected small MS4, except where an approved Total Maximum Daily Load (TMDL) or equivalent analysis provides adequate information to develop more specific measures to protect water quality." (emphasis added)

Additionally, Article XIII B, Section 6(a) of the California Constitution ("Section 6") provides that whenever "any state agency mandates a new program or higher level of service on any local government, the state shall provide a subvention of funds to reimburse that local government for the costs of the program or increased level of service . . . " Section 6 applies to stormwater permits issued by the State Water Board and the Regional Water Quality Control Boards. (County of Los Angeles v. Commission on State Mandates (2007) 150 Cal.App.4th 898, 920 (holding that Government Code section 17516(c), which purports to bar State and Regional Water Board orders from the state mandates process, is unconstitutional as applied to stormwater permits).

A comparison between the draft Phase II permit and the existing permit reveals that the draft Phase II permit contains many new programs. Program elements contained in the draft Phase II permit are not required by the existing permit and, consistent with the Commission's analysis, would represent new programs under the state mandates law. These include:

- The requirement to regulate landscape irrigation, irrigation water, lawn watering, individual residential car washing and street wash water. (Section B.3)
- The development of an Enforcement Response Plan. (Section E.4.c)
- The requirement to secure adequate resources to comply with the mandates of the draft Phase II permit. (Section E.4.d)
- The development of a trash reduction program. (Section E.10)
- The development of an industrial/commercial runoff program. (Section E.11)
- The development of a receiving water monitoring program. (Section E.13)
- The development of an effectiveness assessment program, including pollutant loading quantification. (Section E.14)

A comparison between the draft Phase II permit and the existing permit also reveals that the draft Phase II permit contains many higher levels of service. Enhanced program requirements that represent higher levels of service under the state mandates law include:

- Major components of the Public Outreach and Education Program (Section E.5.) including the requirement to use very involved Community-Based Social Marketing (CBSM) strategies or equivalent.

- Major components of the Illicit Discharge Detection and Elimination (IDDE) Program (Section E.7.) including the development priority areas that are likely to have illicit discharges and the requirement that 20% of the urbanized area be included in that designation.
- Major components of the Construction Site Storm Water Runoff Control Program (Section E.8) including very specific measures to inventory all construction sites, inspect sites at designated frequencies, and requiring staff to be certified as Qualified SWPPP Developers or Practitioners.
- Major components of the Pollution Prevention/Good Housekeeping Program (Section E.9) including assessment of "hotspots" facilities at specified intervals, prioritization of 20% of all catch basins as high, removal of trash and debris in high priority areas three times per year, and incorporation of water quality and habitat enhancement features in flood management facilities.
- Major components of the Post-Construction Storm Water Management Program (Section E.12) including a watershed baseline characterization, watershed sediment budgets, interim hydromodification management, and long-term watershed process management.

As indicated above, many of the new and enhanced programs are beyond federal requirements and should not be Phase II permittee responsibilities, unless the permittee chooses to implement these controls based on local watershed priorities and subject to local resources.

Recommendation: Please direct State Water Board staff to remove requirements beyond the MCMs (i.e., industrial/commercial, monitoring, and trash reduction provisions). Also see Attachment A for additional requirements regarding the requirements that are considered a higher level of service.

Comment #4: Timeline

Several elements of the timeline remain unrealistic. Individually, the requirements and associated timeline may be feasible, but collectively, the comprehensive and ramped-up nature of the requirements makes compliance infeasible for Phase II permittees.

As an example, the Industrial/Commercial Provision requires Phase II permittees to inventory an extensive list of commercial and industrial facilities within the first year. Inventory requirements include documentation of information, such as materials used at the facility, areas where industrial or commercial activities occur at the facility, and other aspects of the facility that can only be determined through a site visit. Larger Phase II permittees may have up to 1,000 facilities to inventory, which roughly equates to more than four site visits for every working day of the year. Given the other requirements contained within the draft Phase II permit and the staff constraints of Phase II permittees, this requirement cannot be realistically completed within the first year.

Recommendation: Please direct State Water Board staff to incorporate the revised timeline recommendations made in Attachment A. Specific timeline recommendations are provided

for the Public Outreach, Pollution Prevention/Good Housekeeping, Industrial/Commercial, and Monitoring Provisions. Additionally Attachment C provides recommended program compliance date revisions.

Comment #5: Maximum Extent Practicable (MEP)

One of the more challenging aspects of the draft Phase II permit is the attempt to provide clarification of the "maximum extent practicable" standard. On the one hand, EPA stormwater audits have noted the need to have more specific permit provisions, while on the other hand flexibility is necessary in order to address the varying conditions and needs of Phase II permittees across the state.

Water Code section 13360(a) provides that "[n]o waste discharge requirement or other order of a regional board or the State Water Board or decree of a court issued under this division shall specify the design, location, type of construction, or particular manner in which compliance may be had with that requirement, order, or decree, and the person so ordered shall be permitted to comply with the order in any lawful manner." The Draft Permit's 93 pages of prescriptive requirements are not consistent with the provisions of Section 13360.

Additionally, flexibility is imbedded in the definition of "MEP." CASQA believes that one size does not fit all when it comes to Phase II permittees, especially with the addition of many non-traditional MS4 permittees. A less prescriptive, more permittee-developed approach would result in better water quality outcomes. As an example, the Illicit Discharge Detection and Elimination (IDDE) Provision includes a requirement that "20% of the Permittee's urbanized boundary shall be identified as priority." Phase II permittees should be allowed to identify what areas are high priority using pre-defined criteria provided in the provision. The prioritization process should drive the amount identified as a priority, not an arbitrary minimum. Specifying a minimum may unnecessarily consume sparse resources where no water quality problem exists.

Achieving Permittee "buy in" with general support and compliance with the draft Phase II permit could be accomplished more efficiently by allowing Phase II permittees to structure and prioritize their individual stormwater programs within the context of their water quality goals and resources.

Recommendation: Please direct State Water Board staff to remove prescriptive requirements that have no apparent nexus with water quality improvement and instead allow Phase II permittees to identify high, medium, and low priority areas based on a pre-defined set of criteria. This includes the following requirements:

- *IDDE Element requires permittees to identify 20% of the urbanized boundary as priority (E.7.b.ii)*
- *Pollution Prevention/Good Housekeeping Element requires permittees to prioritize at least 20% of catch basins as high priority (E.9.f.ii). This Element also requires removal of trash and debris from high priority areas at least three times per year (E.9.g.ii.d)*

- *Trash Reduction Element requires that at least 20% of the Permittee's zoned, commercial, retail/wholesale, comply with a Trash Abatement Plan (E.10)*
- *Industrial / Commercial Element requires that at least 20% of inventoried commercial and industrial facilities be prioritized as high priority (E.11.c.ii.b)*
- *Program Effectiveness Assessment Element requires that at least 20% of the total BMPs must be maintained annually (E.14.d.a.ii)*

Comment #6: Retrofit Requirements

Retrofitting is mentioned or implied in several places throughout the draft Phase II permit including:

- Program Management (E.4.d.iii): "This summary shall include…the costs for…retrofitting existing BMPs to include green infrastructure…"
- Pollution Prevention/Good Housekeeping (E.9.i): "The Permittee shall identify and implement a process for incorporating water quality and habitat enhancement features into new and existing flood management facilities."
- Pollution Prevention/Good Housekeeping (E.9.i.ii): "…the Permittee shall assess at least two existing flood management projects per year to determine whether changes or additions can be made to enhance water quality and habitat functions. The Permittee shall implement changes or additions to two flood management projects per year to enhance water quality and habitat functions, unless a feasibility analysis demonstrates the infeasibility of such changes or additions."
- Industrial/Commercial (E.11.b): "The Permittee shall require industrial and commercial facilities included in the inventory to select, design, install and implement storm water BMPs."
- Program Effectiveness Assessment and Improvement (E.14.c.i): "The report shall also identify storm water retrofit opportunities."

It is our understanding that the intent is not to establish mandatory retrofitting requirements within this permit term. However, the language of the draft Phase II permit does not imply this level of flexibility. The differences between the intent and adopted permit language will lead to inconsistent and unintended implementation.

Retrofitting, during the upcoming permit term, should only be considered and conducted in the context of and under the requirements of approved TMDLs. It is the responsibility of the Permittee to allocate stormwater resources in ways that result in the greatest receiving water benefit.

Retrofitting may ultimately be the most challenging aspect of any stormwater program. Phase I programs are just now doing preliminary assessments of retrofit opportunities, so to require Phase II permittees to complete such assessments is premature at best. This is an area where Phase II permittees would benefit greatly from lessons learned from the current Phase I efforts.

Recommendation: Please direct State Water Board staff to remove all language and requirements regarding retrofitting to reduce confusion and prevent unequal interpretation and implementation of requirements across Regional Water Boards.

Comment #7: Draft or Incomplete Areas

CASQA is concerned about the number of draft Phase II permit references that are incomplete or in a draft format. Stakeholders should have the ability to review, comment, and be aware of the full extent of permit requirements. This is not possible when several key components of the draft Phase II permit require compliance with in-progress guidance. Draft incomplete references include:

- Draft California Ocean Plan (E.13. Compliance Tiers and Monitoring Requirements)
- State Water Board's Draft Effectiveness Assessment Guidance (E.14.a.ii)
- Lake Tahoe BMP Rapid Assessment Methodology (not a fully vetted/proven methodology) (E.14.b.ii)
- Attachment G: TMDL Requirements (table incomplete and conflicts with current approved WLA programs)

Recommendation: Please direct State Water Board staff to remove any references that are incomplete or draft from the draft Phase II permit and revise the draft Phase II permit accordingly.

In closing, we appreciate the opportunity to provide comments on the draft Phase II permit. We strongly urge the State Water Board staff to reconsider its approach and work with CASQA and other stakeholders to produce a revised draft Phase II permit that effectively matches water quality protection with Phase II permittees' resources by prioritizing program elements that address the relevant water quality concerns in each permittee's jurisdiction.

Sincerely,

Scott Taylor, P.E. D. WRE
Chair, California Stormwater Quality Association

cc: Eric Berntsen, State Water Board
Christine Sotelo, State Water Board
CASQA Phase II Subcommittee
CASQA Executive Program Committee and Board of Directors

Attachments
A. Detailed comment table
B. Select provision comparison with Phase I requirements
C. Recommended program compliance date revisions

General			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
1	Compliance Tiers		*CASQA Recommendation* *Provide clarification regarding the compliance tiers, such as in the glossary to define the various tiers and where to find information on them.*
2	Program Compliance Dates		Throughout the Permit there are specific calendar dates listed for some of the actions that need to be completed by the Permittees. Since it is a possibility that the Permit could be adopted later than the date currently anticipated these dates should be changed to timeframes that reference the permit effective date instead of specific calendar dates. *CASQA Recommendation* *Revise the specific calendar dates within the Permit to, instead, refer to time after permit effective date (e.g. Instead of "complete by March 15, 2012" state "complete within XX days/months/years after the effective date of the permit".). See* ***Attachment C*** *for revised dates.*
3	Program Reporting		Given the quantity of different program elements to report out on and the likelihood that a number of different individuals will need to be able to enter reporting information such as monitoring data, inspection data, or outreach efforts, we suggest providing definitions for SMARTS, authorized designated signatory or LRP, report administrator and the supporting roles for data submission in the glossary. The definitions of these roles and their responsibilities would each be clarified in the glossary. For example, a report administrator could add or subtract the administrative roles of differing data submitters. The report administrator might be the LRP. *CASQA Recommendation* *Define the roles for the different individuals that may enter information into the annual report.*

General			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
4	Headers		*CASQA Recommendation* *Every section should have a unique label for easy referencing. For example, the compliance tiers are E.12 (a) through (f), but that's followed by E.12.a Permittee located within a Phase I MS4 permit area (e.g., currently there are two E.12.a.)*
5	Permittee Populations		*CASQA Recommendation* *Add a definition for the Non Traditional MS4 Permittees identifying for each what the "population" consists of.* *For example – for schools the "population" for the implementation of the program may consist of students, faculty, and staff;* *For military installations the "population" may be military personnel, and residents* *For parks the "population" may be staff and visitors*
6	Annual Reports		Throughout the permit there are various reporting requirements that are identified both within the text as well as within "Reporting" sections within each major program element. However, the reporting requirements are, at times, conflicting and/or additive making it difficult to fully understand what the reporting requirements are. In addition, there is not one complete section that comprehensively addresses the reporting requirements other than E.16, which primarily discusses the use of the SMARTS system (which is not yet operational for the Phase II reporting needs). *CASQA Recommendation* *Modify E.16 to include a table/text that comprehensively addresses all of the reporting requirements identified within the permit as well as all of the due dates so that they are contained within one section. CASQA would also work with the State Board as the SMARTS system is brought online to ensure that the needs of the Phase II community and the State Board are met.*

General			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
7	Phase II Designations: Urbanized Areas		Currently, Phase II designations are based on (among other things) the 2000 Census defined urbanized areas. *CASQA Recommendation* *Clarify within the Fact Sheet or Designation Flow Chart how and/or when 2010 Census defined urbanized areas will be designated and notified.*
8	Opt Into Phase I MS4 Program		*CASQA Recommendation* *If Phase II designees are geographically continuous with Phase I MS4s, allow Phase IIs to opt into the Phase I program. The Draft Permit currently makes this allowance for Post-Construction requirements, but this should be expanded to include all permit provisions.*

Application Requirements			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
9	Compliance Timing	Finding 52 & A.1 [page 13]	Finding 52 states that Permittees shall comply with all the requirements of the Order 100 days after adoption by the State Water Board; A.1. states that Permittees need to file their Notice of Intent (NOI) via SMARTS within two months of the General Permit effective date (May 2012); State and Regional Water Quality Control Board (RWQCB) Staff have indicated their goal is to have the new permit adopted by Jan 2012. *CASQA Recommendation* *In addition to Comment #2 regarding the use of dates within the Permit, clarify when the Permittees have to submit their NOIs.* *Since there are staggered dates for the development and/or implementation of various components of the Permit, modify the first sentence in finding #52 to state the following:* *"This Order shall serve and become effective as an NPDES permit and the Permittees shall comply with all its requirements pursuant to the timeframes identified within the Permit ~~100 days after adoption by the State Water Board~~".*
10	Application Requirements	A.3 [page 13]	*CASQA Recommendation* *It is unclear how a regulated Phase II Permittee certifies that its discharges do not cause or contribute or potentially cause or contribute to water quality impairment.* *Provide clarification regarding the certification requirements.* *In addition, none of the waiver options allow a waiver to be given to a MS4 over 20,000 in population even if they do not contribute to water quality impairment and/or meet the waiver options. .* *Revise A.3.a. Option 2 to read:* (a) *The jurisdiction served by the system is less than ~~10,000~~ 50,000 people*

Application Requirements			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
11	Permit Coverage Fee	A.2.b [page 13]	NOIs along with appropriate fee are to be submitted by May 15, 2012. *CASQA Recommendation* *In addition to Comment #2 regarding the use of dates within the Permit, The permit fee should be pro-rated for existing Phase IIs who have paid within the previous 12 months.*

Traditional Small MS4 Permittees			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
12	Traditional Small MS4 Permittees	E.1. [page 18]	There appears to be a contradiction between Section E.1 and Table 1. The last sentence within Section E.1 states "Traditional Small MS4s with a population of 5,000 or less shall comply with specific provisions identified in Table 1". However, the title of Table 1 is "New Traditional Small MS4s with a population less than 5,000 & Non-Traditional Small MS4s". *CASQA Recommendation* *Please clarify: does Table 1 apply to <u>all</u> Traditional Small MS4s or just <u>New</u> Traditional Small MS4s?*

Non-Traditional Small MS4 Permittees (note: these comments are not limited to E.2 and address requirements throughout the permit)			
Comment #	**Permit Element/Issue/Concern**	**Location in Draft Permit**	**Comment/Recommendation**
13	Listed Non-Traditional MS4s (CSDs)	Finding #29 and Table 1	Although two Community Services Districts (CSDs) are listed in Attachment A, CSDs are not listed in Finding #29 or Table 1 as a category of Non-Traditional MS4. *CASQA Recommendation* *For consistency within the permit, include CSDs in Finding #29 and Table 1.*
14	Legal authority for Non-Traditional Permittees	E.4.a-c [pages 19-24]	Non-Traditional Permittees (such as CSDs) do not have the same enforcement powers of Traditional MS4s (cities, counties, etc.) - making it impossible for them to enforce all of the specified requirements. This limitation on Non-Traditional MS4 Permittees in general is also acknowledged on page 43 of the Permit Fact Sheet. *CASQA Recommendation* *Language should be added to permit provisions E.4.a, E.4.b, and E.4.c that allows the Non-Traditional Permittees to identify which provisions they can implement based on their available legal authority and/or enforcement powers. For the provisions that they cannot implement, they should submit, as a part of their legal certification (E.4.b), the rationale identifying why they cannot implement the provisions.* *Recommend adding the following language to E.4.b.(ii)(f): "A description of those provisions (within E.4.a and E.4.c) that the Non-Traditional Permittee cannot implement due to their available legal authority and enforcement powers. Supporting rationale should also be provided."*
15	Citizen advisory group requirements for Non-Traditional MS4 Permittees	E.6.d.ii.b [page 33]	*CASQA Recommendation* *Revise the requirement to indicate that the advisory group participants for the Non-Traditional Permittees may be limited to those who occupy or utilize the Non-Traditional MS4 owned and operated facilities, including students, staff, employees, and visitors.*

Non-Traditional Small MS4 Permittees (note: these comments are not limited to E.2 and address requirements throughout the permit)			
Comment #	**Permit Element/Issue/Concern**	**Location in Draft Permit**	**Comment/Recommendation**
16	GIS Mapping	E.7.a.i [page 34]	Requiring GIS mapping will place an undue and substantial economic burden on the permittees. Many MS4s do not have GIS systems or staff trained in GIS mapping. In addition, many facilities have security concerns that need to be considered when requiring this type of mapping (such as correctional and military facilities) *CASQA Recommendation* *Revise the language as follows:* By the second year after the effective date of the permit, ~~May 15, 2014~~, the Permittee shall maintain an up-to-date and accurate storm drain system map. The map may be in hard copy and/or electronic form such as Google earth or within a geographic information system (GIS).
17	HUC 12 Locations, Boundaries and Areas	E.13.a [page 76]	*CASQA Recommendation* *The State Water Board should identify/provide an easy-to-use tool to allow a Non-Traditional MS4 to determine the location, boundaries and area encompassed for all HUC 12 watersheds within California (in order to determine if the post-construction requirements are applicable).*
18	Planning authorities	E.12.f) [page 64]	This section should recognize that Non-Traditional Permittees (such as CSDs) that do not have planning departments (or associated staff and authority) or issue building permits, grading permits, etc. will have to coordinate with the agency that has planning authority to ensure that they can comply with the "planning authorities" related Post-Construction requirements. *CASQA Recommendation* *Modify the provision to state the following:* *"The Permittee shall use their planning authorities or work with the appropriate planning authority to include appropriate source control, site design, and storm water treatment measures in new development and redevelopment projects."*

Discharge Prohibitions			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
19	Allowable Non-Stormwater Discharges	B.3 [page 15]	Within the Federal Register[1] it states "The illicit discharge and elimination program need only address the following categories of non-storm water discharges if the operator of the small MS4 identifies them as significant contributors of pollutants to its small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water…" The Draft Phase II Small MS4 General Permit lists allowable non-stormwater discharges but does not include landscape irrigation, irrigation water, lawn watering, individual residential car washing, and street wash water. According to the Federal Register, these are allowable discharges since they have not been identified as significant contributors of pollutants to the small MS4s. *CASQA Recommendation* *Add landscape irrigation, irrigation water, lawn watering, individual residential car washing, and street wash water to the list within B.3.*

[1] Volume 64, No. 235, December 8, 1999, Page 68756

Discharge Prohibitions			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
20	Discharges of Incidental Runoff	B.4]page 16]	This permit provision is onerous and goes beyond the federal mandate. CASQA recommends that this provision be re-written to identify the multiple ways in which irrigation runoff can be addressed within the existing stormwater program framework. Some examples are provided below. *CASQA Recommendation Option #1* *Delete Section B.4 and replace it with the following provisions:* - *E.5 (Public Education and Outreach) – E.5.b.(ii)(h) – this existing provision supports the public education activities that would support water efficient landscaping.* - *E.9 (Pollution Prevention/Good Housekeeping for Permittee Operations Program) – add a provision that states "Discharges from lawn, greenbelt, and median watering and other irrigation runoff from non-agricultural operations shall be minimized through a Model Municipal Activity Maintenance Program designed to control irrigation runoff.* *If Section B.4 is not deleted and replaced with the above, see the Recommendation below.*
21	Discharges of Incidental Runoff – Incidental/Non-incidental Definition	B.4 [page 16]	*CASQA Recommendation Option #2* *If Section B.4 is not deleted and replaced with the above, replace it with the following provisions:* - *Discharges of incidental runoff shall be reduced. Water leaving an intended use area is not considered incidental if it is part of the facility design, if it is due to excessive application, if it is due to intentional overflow or application, or if it is due to negligence. Non-stormwater discharge runoff that is not incidental is prohibited, unless otherwise specified in Section B.3. above.* *Clarify the difference between incidental runoff and discharges that are not considered incidental. This may be accomplished by defining minimal overspray (incidental runoff) vs. excessive application (non-incidental).*

Discharge Prohibitions			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
22	Discharges of Incidental Runoff – Detect and Correct Timeline	B.4.a [page 16]	Correction of leaks and repairs might not be able to done in 72 hours if noticed late on Friday and if a contractor needs to be hired. Remove the reference to 72 hours and 1000 gallons (B.4.a). Repairs should be completed within a reasonable time as determined by the permittee. Permittees lack the resources and staff to correct and enforce this requirement, which is beyond the federal mandate for stormwater programs. *CASQA Recommendation* *This language should be deleted since there is already an educational requirement with reference to the Water Efficient Landscape Ordinance (see Comment #23 above that recognizes this).*
23	Discharge Prohibitions – RWQCB Notification Timeline	B.4.d [page 16]	Requiring a permittee to notify the RWQCB while determining that a discharge may happen four hours in advance of a 25-year, 24 hour storm event or larger is unreasonable. When large storm events occur, municipalities prioritize public safety first. *CASQA Recommendation* *Require RWQCB notification 48 hours after a discharge occurs.*

Program Management			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
24	Legal Authority – Overall	E.4.a-b [pages 19-21]	These sections require that all necessary ordinances or other regulatory mechanisms be in place by May 2013 and that reporting related to legal authority be completed by September 2013. However, it would be very difficult to develop and implement these requirements within year 1 of the effective date of the permit. Ordinances and regulatory mechanisms are not meaningful and implementable unless the authority they provide the MS4 is supported by a description of how that authority will be exercised and enforcement will be carried out. Therefore, developing and approving appropriate regulatory mechanisms such as ordinances will require that MS4s first determine their organizational needs and existing capabilities, develop necessary funding sources, increase or reorganize their staff resources, and define internal programs and procedures. These processes will take at least a few years for most MS4s to accomplish. *CASQA Recommendation* *CASQA requests that timelines be modified. Recommendations for revising Program Management timelines are provided in* ***Table A-1****.*
25	Legal Authority – Overall	E.4.a-b [pages 19-21]	*CASQA Recommendation* *CASQA requests that the State Water Board assist MS4s in accomplishing the requirements of E.4.a and E.4.b by providing samples of or templates for the required ordinances/regulations and certification statements.*

Program Management			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
26	Legal Authority – Definition of Illicit Discharges and Illegal Connections	E.4.a.ii.b [page 19]	This section requires permittees to have an ordinance or other regulatory mechanism that will prohibit and eliminate illicit discharges and illegal connection to the MS4. However, this section specifically includes discharges from charity car washes, mobile cleaning and pressure wash operations. CASQA recommends that the specificity be removed from this section and that charity car washes be addressed as a part of the Public Outreach section (E.5) Regulating charity car washes is unrealistic and unenforceable, given their transitory nature and permittees' limited resources, particularly for weekend work. It is impossible to know when and where most charity car washes will appear, given that many are not held by organized clubs or groups and few are widely announced in advance. A reasonable expectation for this permit term is for permittees to conduct education and outreach to organized groups about car wash activities, and identify best practices for stormwater pollution prevention. *CASQA Recommendation: Modify the Phase II permit as follows:* *"(b) Prohibit and eliminate illicit discharges and illegal connections to the MS4. ~~Illicit connections include pipes, drains, open channels, or other conveyances that have the potential to allow an illicit discharge to enter the MS4. Illicit discharges include all non-storm water discharges not otherwise authorized in this Order, including discharges from charity car washes, mobile cleaning and pressure wash operations,"~~* *Include the following definitions:* *"Illicit Discharge" – Any discharge to an MS4 that is not composed entirely of stormwater, except allowable discharges pursuant to an NPDES permit and those identified within Provision B.3. [Based on 40 CFR 122.26(b)(2)]* *"Illegal Connections" – Any constructed conveyance or drainage system, pipeline, conduit, inlet or outlet, through which the discharge of any pollutant to the stormwater drainage system occurs or may occur.* *Add charity car wash provisions to the Public Outreach Section (E.5)*

Program Management			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
27	Legal Authority – Missing Subsection	E.4.a.ii.e [page 19]	Item "e" has been omitted.
28	Legal Authority – Implementation Level	E.4.a.ii.f [page 19]	This provision should recognize that both source and treatment controls may be necessary at a facility/site. *CASQA Recommendation* *(f) Require operators of construction sites, new or redeveloped land; and industrial and commercial facilities to minimize the discharge of pollutants to the MS4 through the installation, implementation, and maintenance of source control and/or treatment control BMPs consistent with the California Storm Water Quality Association (CASQA) Best Management Practice Handbooks or equivalent.*
29	Legal Authority – Implementation Level	E.4.a.ii.g [page 19]	This section requires permittees to request a copy of the NOI as well as supporting documents. Permittees should only need to request the WDID#. *CASQA Recommendation* (g) Request from a construction site or industrial facility operator the WDID # ~~a copy of the NOI submitted to~~ obtained from the Water Boards. The Permittee may also request ~~as well as~~ supporting materials such as storm water pollution prevention plans (SWPPPs), inspection reports, and monitoring results, information required by local development policy or public health regulations, and other information deemed necessary to assess compliance with this Order and/or the local codes and ordinances. The Permittee shall also have the authority to review designs and ~~proposals~~ applications for new development and redevelopment to determine whether adequate BMPs will be installed, implemented, and maintained during construction and after final stabilization (post-construction).

Program Management			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
30	Legal Authority – Implementation Level	E.4.a.ii.i.1 [page 20]	This section requires the Permittees to require a discharger to abate and clean up their discharge, spill, or pollutant release within 48 hrs. However, this timeframe cannot always be met – it is recommended that the language be modified to allow for a 72 hour timeframe. *CASQA Recommendation: Modify the Phase II permit as follows:* *(1) Effectively require the discharger to abate and clean up their discharge, spill, or pollutant release within ~~48~~ 72 hours of notification; high risk spills should be cleaned up as soon as possible;*
31	Legal Authority – Implementation Level	E.4.a.ii.j. [page 20]	*CASQA Recommendation: Modify the Phase II permit as follows:* *(j) When warranted, a Traditional Small MS4 Permittee shall have the ability to:* *(1) Levy citations or administrative fines against responsible parties either immediately at the site, or within a few days.* *(2) Require recovery and remediation costs from responsible parties.*

Program Management			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
32	Legal Authority – Implementation Level	E.4.a.ii.l [page 20]	This section requires permittees to control the contribution of pollutants and flows from one portion of the MS4 to another portion through interagency agreements with other MS4s. Permitted MS4s should be required to control only the pollutants within their jurisdiction. *CASQA Recommendation Option #1 (Preferred)* *Delete provision.* *CASQA Recommendation Option #2* *If this requirement is retained, a longer timeframe for compliance must be provided, as it can be very time consuming to reach interagency agreements, and the timing depends on the cooperation of other parties, placing the schedule outside an individual Permittee's control.*
33	Legal Authority – Implementation Level	E.4.a.ii.m [page 20]	The Permit includes a provision that requires the Permittees to have the legal authority to "require documentation on the effectiveness of BMPs implemented to reduce the discharge of pollutants to the MS4s to the MEP and protect water quality". As it is currently written, this provision broadly applies to any aspect of the stormwater program where BMPs have been implemented – the result is that this provision sets up a process for the establishment of multiple third party monitoring programs and expenditure of a significant amount of funds to monitor the effectiveness of BMPs. If the desire is to document the effectiveness of certain types of BMPs, it would be much more effective and scientifically sound to establish special studies by entities qualified to conduct such sampling instead of requiring potentially hundreds of third parties to conduct a monitoring program for every BMP that is implemented. *CASQA Recommendation* *Delete the provision*.

Program Management			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
34	Certification – Timeline	E.4.b.iii [page 21]	The reporting timeline should be modified to year 2 to be consistent with timelines for establishing sufficient legal authority. *CASQA Recommendation: CASQA requests that timelines be modified. Recommendations for revising Program Management timelines are provided in **Table A-1**.*
35	Enforcement Measures and Tracking – Enforcement Response Plan	E.4.c [page 21]	*CASQA Recommendation Option 1 (preferred)* *CASQA recommends that this section be revised to allow for the permittees, where applicable, to demonstrate that they already have applicable ordinances or policies and the ability to implement and enforce them to the Maximum Extent Practicable (MEP), rather than developing a new plan that duplicates the processes described in the ordinances/policies.* *CASQA Recommendation Option 2* *CASQA requests that the State Water Board assist MS4s in accomplishing the requirements of E.4.c by providing a statewide template for the required response plan.*

Program Management			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
36	Enforcement Measures and Tracking – NPDES Permit Referrals	E.4.c.ii.d [pages 22-23]	This section requires the permittees to refer non-filers for construction projects or industrial facilities subject to the State's IGP as well as ongoing violations to the RWQCB. The permit should not arbitrarily determine when an ongoing violation should be referred to the Regional Board since every case is different. It should also be noted that there is an existing mechanism for reporting non-filers to the State Water Board. This section should be revised to have permittees use the reporting form within 30 days on the State Water Board's website at: http://www.waterboards.ca.gov/water_issues/programs/stormwater/nonfiler_form.shtml *CASQA Recommendation* *(2) Refer ongoing violations to the appropriate Regional Water Board provided that the Permittee has made a good faith effort of progressive enforcement to achieve compliance with its own ordinances. ~~At a minimum, the Permittee's good faith effort shall include documentation of two follow-up inspections and two warning letters or notices of violation.~~ In making such referrals, the Permittee shall include, at a minimum, the following information:* *(a) Construction project or industrial facility location* *(b) Name of owner or operator* *(c) Estimated construction project size or type of industrial activity (including Standard Industrial Classification or North American Industry Classification System if known)* *(d) Records of communication with the owner or operator regarding the violation, ~~including at least two follow-up inspections, two warning letters or notices of violation,~~ and any response from the owner or operator*

Program Management			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
37	Enforcement Measures and Tracking – Reporting	E.4.c.iii [page 23]	CASQA recommends that the Enforcement Response Plan (ERP) be submitted in year 3 of the permit cycle. *CASQA Recommendation* *CASQA requests that timelines be modified. Recommendations for revising Program Management timelines are provided in **Table A-1**.*
38	Ensure Adequate Resources to Comply with Order	E.4.d.ii [page 24]	Permittees should not be required to spend the time and resources to document expenditures outside of what is required within the Code of Federal Regulations. Further, Permittees should not be required to submit financial information to the State Board, nor make it part of the public record via the annual report. Water Code section 13360(a) states that no State Board order shall specify the manner in which compliance is achieved. *CASQA Recommendation:* *Delete provision*
39	Ensure Adequate Resources to Comply with Order	E.4.d.iii [page 24]	Consistent with the previous comment, CASQA recommends that any fiscal reporting be limited to those items identified within the Code of Federal Regulations. In addition, the reporting section should not add more fiscal reporting requirements to those outlined within E.4.d.(ii). *CASQA Recommendation:* *Delete provision*

Public Outreach			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
40	Public Outreach and Education Program – General	E.5 [page 25]	This section header has changed from "Public Education and Outreach" to "'Public Outreach and Education. Public Education and Outreach is consistent with US EPA terminology and PEO has become a familiar acronym; it will be confusing and somewhat time consuming to re-learn slightly changed acronym. *CASQA Recommendation* *Modify this section header to read "Public Education and Outreach."*
41	Implementation Level - CBSM	E.5.b – d [pages 25-32]	CBSM strategies are difficult and expensive to fully implement, given that they are based on the application of psychology-based concepts that are most appropriately implemented by professionals. These strategies are also not appropriate for all target audiences. It is estimated the Public Education and Outreach section alone will cost upwards of $600,000 in the first year and $450,000 in subsequent years to comply for a large Phase II MS4. This requirement should be replaced with one that calls for incorporating the most readily achievable principles and goals of CBSM. While it might be possible to measure an increase in knowledge about stormwater, measuring behavioral changes is very hard, if not impossible. Many Phase I communities are finding it difficult (if not impossible) to demonstrate reductions in pollutant releases within a five year timeframe. Behavioral changes often take many years to take an effect. Recycling has taken well over 20 years to get to the point it is now. *CASQA Recommendation:* *CASQA strongly recommends the removal of all requirements related to CBSM.*
42	Implementation Level - CBSM	E.5.b – d [pages 25-32]	It is unclear what it means to "Elicit commitment to implement desired behavior from target audience" *CASQA Recommendation* *Please provide examples of what this means and how it would be demonstrated as a part of the program.*

Public Outreach			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
43	Implementation Level - CBSM	E.5.b – d [pages 25-32]	The term "credible source" implies that the permittees must pay a marketing firm to develop a message. The permittee should have the ability to develop and determine individual messages. *CASQA Recommendation* *Modify the permit language as follows:* *(5) Use education messages that are specific, easy to remember, ~~from a credible source,~~ and appropriate for the target audience.*
44	Develop and Implement Program – Timeline	E.5.a.i [page 25]	If the permittees choose to contribute to a countywide or regional outreach program, this will take a minimum of 6 months to one year to set up by the time that MOUs and any contracts are developed, adopted and signed. The timeline must acknowledge the time it will take to form partnerships and coordinated multi-permittee programs. Implementation within the first permit year is too aggressive a timeline for the scope of this provision. *CASQA Recommendation* *CASQA requests that timelines be modified. Recommendations for revising the timelines are provided in Table A-2.*
45	Task Description – Timeline	E.5.b.i [page 26]	The task description requires the Permittee to develop <u>and implement</u> a comprehensive stormwater public outreach and education program by May 15, 2013 that will: • Measurably increase the knowledge of targeted communities of stormwater • Measurably change behaviors of target audiences. It would not be possible to both develop and have full implementation by May 15, 2013. *CASQA Recommendation* *Modify the permit language as follows:* *(i) Task Description – By <u>the first year after the effective date of the permit,</u> ~~May 15, 2013~~, the Permittee shall develop ~~and implement~~ a comprehensive storm water public outreach and education program <u>to be implemented over the subsequent years of the permit term.</u>*

Public Outreach			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
46	Implementation Level – Budget	E.5.b.ii.a [page 26]	This section requires the development of a strategy that must include a budget for implementing the tasks. Permittees do not break down budgets for small projects or tasks. Permittees should not be required to break the budget down further than what is required in E.4.d.ii. *CASQA Recommendation* *Modify the permit language as follows:* *(a) Develop and implement a public education strategy that establishes education tasks based on water quality problems, target audiences, and anticipated task effectiveness. The strategy must include identification of who is responsible for implementing specific tasks, and a schedule for task implementation~~, and a budget~~ for implementing the overall Public Education and Outreach Program ~~tasks~~…..*
47	Implementation Level – Water Efficient Landscape Ordinance	E.5.b.ii.h [page 27]	This section requires coordination with outreach programs for the Water Efficient Landscape Ordinance. This requirement should complement existing efforts and recognize that the traditional MS4s are already subject to water conservation program requirements to comply with AB 1881 (Water Conservation in Landscaping Act of 2006). [Note - this Act required cities, counties and charter cities and charter counties to adopt water-efficient landscape ordinances by January 1, 2010. Section 2, Article X of the CA Constitution also states the waste water from runoff, overspray, low head drainage, leaks and excessive amounts of applied irrigation water in landscapes is prohibited.] *CASQA Recommendation* *Modify the permit language as follows:* *(h) Coordination with existing outreach programs for the Water Efficient Landscape Ordinance to explain the benefits of storm water-friendly landscaping;*

Public Outreach			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
48	Implementation Level – Technical and Financial Assistance for Stormwater-Friendly Landscaping	E.5.b.ii.i [page 27]	This provision requires the traditional and non-traditional MS4s to provide technical and financial assistance as well as implementation guidance related to stormwater-friendly landscaping. *CASQA Recommendation:* *Delete this provision. Few jurisdictions have the ability to provide technical and financial resources for stormwater friendly landscaping assistance. In addition, this requirement is redundant, given that this assistance is provided by the water conservation program or designated agency, where possible.*
49	Implementation Level – Education and Environment Initiative Curriculum	E.5.b.ii.l [page 27]	*CASQA Recommendation:* *Delete this provision since this curriculum has already been developed by the California Environmental Protection Agency Office of Education and the Environment for implementation by professional educators (AB1528 and AB1721).*
50	Implementation Level – Reporting	E.5.b.iii [page 28]	*CASQA Recommendation:* *Delete the sentence "Annually report number of trainings, describe the technical and financial program and implementation, and the study and results to date." This does not directly correlate to the activities conducted pursuant to the Public Outreach and Education Program.*
51	Industrial/Commercial Outreach and Education Program – Implementation Level	E.5.c.ii [page 29]	Implementation within the first year is too aggressive a timeline for the scope of this provision, especially when a similar effort is expected to be conducted within the same time period for the general public. *CASQA Recommendation:* *This provision should be divided into phases to allow the MS4 to focus the first year on evaluating current programming or lack thereof and setting reasonable targets and then meeting the targets set in the subsequent four reporting years.*

Public Outreach			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
52	Industrial/Commercial Outreach and Education Program – Inventory	E.5.c.ii.a [page 29]	*CASQA Recommendation:* *This provision should be deleted since the inventory of the high priority industrial and commercial facilities will be developed under the Industrial/commercial Section per E.11.a.ii.a&e.*
53	Industrial/Commercial Outreach and Education Program – Reference Correction Needed	E.5.c.ii.a [page 29]	The section quoted in the draft permit E.7.b is incorrect since this section refers to high priority areas and not industrial and commercial facilities.

Public Outreach			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
54	Industrial/Commercial Outreach and Education Program – Budget	E.5.c.ii.b [page 29]	This section requires the development of a strategy that must include a budget for implementation. Permittees do not break down budgets for small projects or tasks. Permittees should not be required track and break down budget beyond what is required in E.4.d.ii. *CASQA Recommendation* *Modify the permit language for E.5.b.(ii.)(a) as follows:* *(a) Develop and implement a public education strategy that establishes education tasks based on water quality problems, target audiences, and anticipated task effectiveness. The strategy must include identification of who is responsible for implementing specific tasks, and a schedule for task implementation~~, and a budget~~ for implementing the overall Public Education and Outreach Program ~~tasks~~…..* *Modify the permit language for E.5.c(ii)(b) as follows:* *(b) Development and implementation of an industrial/commercial outreach and education strategy that establishes measurable goals and prioritizes education tasks based on water quality problems, target audiences, and anticipated task effectiveness. The strategy must include identification of who is responsible for implementing specific tasks and attaining measurable goals, and a schedule for task implementation, ~~and a budget for implementing the tasks and meeting the measurable goals~~. The strategy must include measurable goals designed to demonstrate how specific high priority storm water quality issues in the community or local pollutants of concern are addressed.*
55		E.5.c.ii.e [page 30]	*CASQA Recommendation* *CASQA recommends that the Industrial/ Commercial program be limited to inventorying and outreaching to industrial/ commercial facilities (versus inspections). As such, modify the permit language as follows:* *…and provide guidelines regarding the types of BMPs that may be implemented to prevent and/or mitigate non-storm water discharges at that facility type~~, and explain penalties for noncompliance~~.*

Public Outreach			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
56	Construction Outreach and Education Program – Implementation Level	E.5.d [page 31]	This section is focused solely on construction sites <1 acre. Instead, it should be focused on sites greater than 1 acre until a full construction education program is developed and implemented. Future Phase II permits could consider focusing on sites < 1 acre, however, for now, the program should focus on the larger sites. Outreach materials could be made available at planning counters or through other permitting processes so that all construction sites, no matter what the size, could receive this information (if they trigger the need to obtain a permit). *CASQA Recommendation:* *Modify the permit language as follows:* *(i) Task Description – By the first year after the effective date of the permit, ~~May 15, 2013~~, the Permittee shall develop ~~and implement~~, a construction outreach and education program for construction sites ~~smaller~~ greater than one acre to be implemented over the subsequent years of the permit term.*
57	Construction Outreach and Education Program – Implementation Level	E.5.d.(ii)(a) [page 31]	*CASQA Recommendation:* *This provision should be deleted since the inventory of the high priority residential and commercial construction site will be developed under the Construction Program per E.8.a.*

Public Outreach			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
58	Construction Outreach and Education Program – Implementation Level	E.5.d.(ii)(a) [page 31]	This section requires the development of a strategy that must include a budget for implementation. Permittees do not break down budgets for small projects or tasks. Typically, permittees allocate an overall budget for the public education program. The requirement to track and break down budget for the three sections is not necessary. Additionally Permittees should not be required to anticipate effectiveness – the program effectiveness guidance provided by CASQA and the State help municipalities determine effectiveness and were not intended to predict. *CASQA Recommendation* *Modify the permit language for E.5.b.ii.a as follows:* *(a) Develop and implement a public education strategy that establishes education tasks based on water quality problems, and target audiences~~, and anticipated task effectiveness~~. The strategy must include identification of who is responsible for implementing specific tasks, a schedule for task implementation, and a budget for implementing the overall Public Education and Outreach Program ~~tasks~~…..* *Modify the permit language for E.5.d(ii)(b) as follows:* *(b)Development and implementation of a construction outreach and education strategy that establishes measurable goals and prioritizes education tasks based on water quality problems, target audiences, and anticipated task effectiveness. The strategy must include identification of who is responsible for implementing specific tasks and attaining measurable goals, and a schedule for task implementation, ~~and a budget for implementing the tasks and meeting the measurable goals.~~ The strategy must include measurable goals designed to demonstrate how specific high priority storm water quality issues in the community or local pollutants of concern are addressed. Establish who is responsible for specific tasks and goals and a ~~budget~~ schedule for meeting the tasks and goals.*

Public Involvement			
Comment #	**Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
59	Public Involvement and Participation – Citizen Advisory Group	E.6.ii.b [page 33]	This section requires the permittee to establish a citizen advisory group that must include residents, business owners, and environmental organizations. The formation of citizen advisory groups is very time consuming and, for some permittees and communities, staff time may be better spent implementing other mechanisms for public involvement and participation. *CASQA Recommendation:* *CASQA recommends that the permittees be allowed the ability to create their own public involvement and participation strategy (consistent with E.6.d.(ii)(a) strategy that <u>may</u> include a citizen group, but that does not <u>require</u> the formation of a citizen group. Instead the permittees should be provided with an option to create other mechanisms to engage the public in the implementation of the stormwater program if they so choose. This would allow the permittee to choose the option that is appropriate for its community.*

IDDE			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
60	IDDE Program Costs	E.7 [page 33]	Costs associated with an IDDE Monitoring Program are prohibitive for a Phase II entity. According to pg. 37 of the Center for Watershed Protection (CWP) IDDE Program Guidance Manual, the average startup cost for a Phase II IDDE program is $62,300 and the annual implementation costs average $84,750/yr. The two highest cost elements of the IDDE program are sample analysis and program administration/staff. Performing analytical monitoring yearly is too restrictive and wasteful given the intermittent and transient nature of illicit discharges. If pollutants are not detected and there is little change to land uses or physical conditions, monitoring on perhaps a five year basis would be more reasonable. Or depending upon the nature of the pollutant, inexpensive field tests as opposed to analytical analysis should be allowed. And if illicit discharges are detected, more monitoring may be called for within a short period of time so as to narrow down and determine the source. *CASQA Recommendation – Option #1 (Preferred)* *This entire section should be replaced with an Urban Watch-type dry weather flow monitoring program [such as the program currently being implemented by the Coastal Watershed Council (CWC)] that emphasizes visual monitoring of outfalls. Monitoring stations may be selected non-randomly according to land use and pollutants of concern. Number of monitoring stations should ensure adequate coverage of priority areas. Dry weather flows will be monitored visually, and if warranted, with field test kits for odor, pH, temperature, orthophosphates, NH3, color, grease/oil film, and/or trash. <u>No monitoring should occur within 72 hours of the last rain or during snowmelt periods</u> as these will not produce representative samples of dry weather flow. Follow-up investigations are required if warranted.* *If this section is retained – CASQA offers the following comments below (Option #2)*

IDDE			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
61	MS4 Mapping	E.7.a.i [page 34]	This provision requires the permittee to map its storm drain system in GIS. GIS may be helpful but is not necessary for managing an effective IDDE Program. A GIS capability can be encouraged, but not required, by the Permit. Requiring GIS mapping will place an undue and substantial economic burden on the permittees. Many MS4s do not have GIS systems or staff trained in GIS mapping. In addition, many facilities have security concerns that need to be considered when requiring this type of mapping (such as correctional and military facilities). *CASQA Recommendation* *Revise the language as follows:* *By the second year after the effective date of the permit, ~~May 15, 2014~~, the Permittee shall maintain an up-to-date and accurate storm drain system map. The map may be in hard copy and/or electronic form such as Google earth or within a geographic information system (GIS).*
62	IDDE Program – Renewal Traditionals & Illicit Discharge Education & Training – Task Description	E.7.c and E.7.f.i [page 33 and 38]	Date stated in E.7 (c) (May 15, 2014) conflicts with E.7.f (i) (May 15, 2015).
63	MS4 Mapping – Implementation Level	E.7.a.ii.a [page 34]	*CASQA Recommendation* *Define "Outfall" within the glossary per 40 CFR 122.26.*
64	MS4 Mapping – Implementation Level	E.7.a.ii.d [page 34]	Field screening sites are not required until May 2015 per E.7.c; however, this section requires mapping them by May 2014. *CASQA Recommendation* *Please clarify timeline.*

IDDE			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
65	Identifying Priority Areas – Reword	E.7.b.ii [page 34]	If the permittee identifies all the priority areas, and they constitute less than 20% of the urbanized area, the Permittees should not have to pick another area just to meet a 20% minimum mandated threshold. *CASQA Recommendations* *The Permittee shall, ~~at a minimum,~~ identify ~~the following as~~ priority areas ~~and 20 percent of the Permittee's urbanized boundary shall be identified as priority~~ for this program element using the following screening criteria:* ~~*The Permittee shall inventory the following priority areas:*~~ *(a) Areas with infrastructure that is more likely to have illicit connections and a history of sewer overflows or cross-connections;* *(b) Industrial, commercial, or mixed use areas;* *(c) Areas with a history of past illicit discharges;* *(d) Areas with a history of illegal dumping;* *(e) Areas with onsite sewage disposal systems;* *(f) Areas that directly discharge to ~~upstream of~~ sensitive water bodies; and* *(g) Areas that drain to outfalls greater than 36" that directly discharge to the ocean.*
66	Field Screening – Task Description & Implementation Level	E.7.c.i & ii [page 35]	*CASQA Recommendations* *CASQA recommends the following language changes:* *(a) Identify stations within each priority area where field screening will take place.* *(b) Conduct dry weather field screening at each station identified above at least once a year.* *(d) Conduct a follow-up investigation if ~~the benchmarks associated with the constituents are exceeded.~~ deemed necessary*
67	Field Screening to Detect Illicit Discharges – Implementation Level	E.7.c.ii [page 35]	*CASQA Recommendation* *Define Major Outfall within the glossary per 40 CFR 122.26.*

IDDE			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
68	Field Screening - Implementation	E.7.c.ii.a [page 35]	This section states: "If the Permittee is made aware of illicit discharges that occur…outside of the priority areas, the Permittee shall include field screening stations in those areas." However, it would be overly burdensome to start a new field screening station for every illicit discharge that may be reported. Instead, the procedures for responding to an illicit discharge should be followed and new areas added if they meet the established criteria. *CASQA Recommendation* *(a) Identify stations within each priority area where field screening and analytical monitoring will take place. In addition, if the Permittee is made aware of illicit discharges a response will be initiated per section E.7.e. ~~that occur during the permit term outside of the priority areas, the Permittee shall include field screening stations in those areas~~. Stations shall be selected according to one of the following methods:*
69	Field Screening - Reporting	E.7.c.iii [page 36]	This section states "If the Permittee finds that after two subsequent field screening tests have been completed that the field screening station is dry, select an alternate station for monitoring." If this section remains, specify that if a whole area of grids is dry twice in a row, then the area can be removed from monitoring. *CASQA Recommendations* *Modify the following language:* *(iii) **Reporting** – By September 15, 2015 online Annual Report, submit a report summarizing the field screening and analytical monitoring program procedures, including a summary of the field screening and illicit discharge investigation results. If the Permittee finds that after two subsequent field screening tests have been completed that the field screening station is dry (i.e., no flowing or ponded runoff) or the flows are due to natural sources (i.e., natural spring) the station may be removed from the program ~~and an alternate station for monitoring~~. In subsequent online Annual Reports, the Permittee shall assess the IDDE program to determine whether updates are needed.*

IDDE			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
70	Source Investigations – Task Description	E.7.d.i [page 36 & 37]	Requires written procedures by May 2016; however, the spill response plan is required in year one (2013). *CASQA Recommendation* *Modify the permit language as follows:* *Recommend that this potential timeline conflict be revised (i.e., the deadline for the spill response plan be aligned with May 2016 deadline).*
71	Source Investigations – Implementation Level	E.7.d.ii.c & d [page 36-37]	*CASQA Recommendation* *Modify the permit language as follows:* *(ii) Implementation Level - At a minimum, the Permittee shall conduct investigation(s) to identify and locate the source of any illicit discharge. The investigation shall be initiated within 48 hours of the Permittee becoming aware of the suspected illicit discharge.* (*d) If the observed discharge is intermittent, the Permittee shall document that ~~a minimum of three (3) separate~~ investigations were made in an attempt to observe the discharge when it was flowing using best professional judgment. If these attempts are unsuccessful or the Permittee is unable to determine the source of the discharge, the Permittee shall include written documentation in the online Annual Report.*

IDDE			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
72	Source Investigations – Implementation Level	E.7.d.ii.e [page 37]	This section states: "…Permittee shall immediately notify the responsible party of the problem and require the responsible party to conduct all necessary corrective actions to eliminate the illicit discharge within 48 hours of notification." This may not be feasible. For example, an illicit discharge could occur and the Permittee may not be able to immediately identify the responsible party. Additionally, if the illicit discharge occurs on a weekend or during a large public event, it may not be feasible to eliminate the illicit discharge within 48 hours (i.e. contractors and equipment may not be readily available). *CASQA Recommendation* *Modify permit language as follows:* *"…Permittee shall immediately notify the responsible party of the problem and require the responsible party to conduct all necessary corrective actions to eliminate the illicit discharge within ~~48~~ 72 hours of notification; high risk spills should be cleaned up as soon as possible."*

IDDE			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
73	Spill Response Plan - Detail	E.7.e [page 37]	E.7.e requires a spill response plan to be created. However, there is little detail given as to what the plan is to cover. What detail there is tends to be ambiguous and speaks to preventing spills (see sub-section (i)) rather than how to respond to spills. *CASQA Recommendations* *Modify the permit language as follows:* *(ii) **Implementation Level** – At a minimum, the spill response plan will incorporate the information from E.7.d and outline the following:* - *The agency roles and responsibilities (e.g., County Department of Environmental Health, local police department, local fire department, etc.)* - *The procedures for responding to complaints* - *How investigations are to be conducted* - *How clean up is initiated or conducted* - *How reporting is completed and what information is required - ~~how to respond to illicit discharges and spills, including coordination of a qualified spill responder, containment and clean up procedures. In addition,~~ the spill response plan shall outline how to notify other operators…*

Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
74	General Comment – MEP	E.8 [page 38]	Overall the level of effort identified in section E.8 goes beyond MEP for small MS4s. As a result, significant effort by the small MS4s will be required in order to meet the reporting requirements, which will not necessarily improve water quality and is likely to increase fines and suits for paperwork violations. *CASQA recommendation: Reconsider the construction requirements identified in section E.8 and work with the Phase II permittees and the Regional Water Board's to develop a set of requirements focused on erosion and sediment control principles and MEP - and with less of a focus on the reporting efforts.*
75	General Comment – WDID Fee	E.8 [page 38]	The language in the draft Phase II permit appears to put the work of ensuring compliance with the CGP on the MS4 without providing them the financial resources to do so. If the State Water Board transfers this responsibility to Phase II permittees through the Phase II permit, the State must provide the financial resources to defray their costs associated with CGP compliance responsibilities. *CASQA recommendation:* *The State Water Board should develop a mechanism to share the WDID Fee currently paid by the developer and submitted to the State.*

Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
76	General Comment – Scope	E.8 [page 38]	The language of the draft Phase II permit is unclear as to the required scope of the construction program element. In various locations of section E.8 requirements are described for: • All projects that disturb soil • All project covered by grading and building permits • 1+ acre projects (presumably those that have CGP coverage) It is unreasonable to require application of the requirements of this permit or the local erosion and sediment control ordinance to **all projects that disturb soil**. *CASQA Recommendation:* *Clarify the scope of the construction program element. CASQA recommends the scope be limited to those projects covered by the CGP which are issued a local building or grading permit. Those smaller projects which trigger the need for a local building or grading permit will be addressed by the public education and outreach program.*
77	General Comment – Reporting Requirements	E.8 [page 38]	The draft Phase II permit significantly increases reporting obligations under the construction element. Increased reporting expends resources that can be better applied to assuring quality plan reviews, educational outreach, and a field presence by agency staff. With limited staff, small MS4s are forced to choose between preparing and submitting reports and taking actions to control runoff. *CASQA Recommendation: Eliminate the increased reporting requirements and reduce the current reporting burden on small MS4s. The permit should emphasize the more cost effective approach which includes plan review, educational outreach, and focused field inspections that are customized to the local jurisdiction.*

Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
78	Construction Site Inventory – Redundancy	E.8.a. [page 39]	This inventory requirement will create a redundant database to the existing SMARTS database for projects covered by the CGP. Small MS4s can access SMARTS for this information. This redundancy adds unnecessary time and expends precious resources for the small MS4s. *CASQA Recommendation: Eliminate the inventory requirement and direct small MS4s to use SMARTS to obtain inventory information for projects in their jurisdiction.* *Although CASQA strongly recommends that the inventory requirement is replaced with the ability of the Permittees to use the SMARTS system to obtain the information that they need – additional recommendations are provided below if the Board does not make this change.*
79	Construction Site Inventory – Types of projects which require compliance	E.8.a.i [page 39]	The permit inconsistently uses "all projects" versus projects which meet the requirements of the CGP. This needs to be clarified. As an example, this paragraph states "all" in the first sentence and then states "at a minimum" in the second. *CASQA Recommendation: Revise language to clarify that the intent is that only "projects that meet the CGP" are the focus of the construction program element and allow the permittees to use SMARTS for this database/inventory, rather than creating a redundant database/inventory.*

Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
80	Construction Site inventory – Clarify	E.8.a.ii [page 39]	This data is already included in SMARTS. We suggest allowing permittees to use the same criterion for determining "receiving waters" as the Construction General Permit (CGP). This is a consistent approach with the CGP, and would allow permittees to use SMARTS as their construction database, rather than create a redundant inventory system. This information is included in SMARTs and the Permittees can obtain this information with the project inventory *CASQA Recommendations* *Modify the permit language as follows* *(i) **Task Description -** Each Permittee shall maintain an inventory of active CGP projects ~~all grading and construction activity~~ within its jurisdiction. ~~At a minimum,~~ This inventory shall include all public and private construction sites that result in a total land disturbance of either one acre or more or that result in a total land disturbance of less than one acre if part of a larger common plan or development or sale.* *(ii) **Implementation Level** – ~~By August 15, 2012~~, Within the first year of the effective date of the permit, the Permittee shall complete an inventory and continuously update it as new projects are permitted and projects are completed. The inventory will be obtained from the SMARTS database and supplemented as needed by the Permittee such that the inventory contains the following:* *[include a, b, e, i - Delete c, d, h]*

Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
81	Plan Review and Approval – Quantifying Soil Loss	E.8.b.ii.b [page 40]	Quantifying soil loss potential from BMPs is not commonly performed nor is it required for projects permitted under the CGP. Requiring these calculations be included in Erosion Control Plans for small MS4s imposes a higher level of performance on projects constructed in small communities than those in Phase I communities or in areas outside the Phase I and Phase II MS4 boundaries. The unequal burden will place Phase II municipalities at a disadvantage for attracting new and redevelopment projects. The requirement to do soil loss calculation is better piloted at the state-level through the CGP. *CASQA Recommendation: Revise the language to read "Require that the erosion and sediment control plan include the rationale used for selecting or rejecting BMPs."*
82	Plan Review and Approval – Permitting	E.8.b.ii.c [page 40]	The US ACOE requires that all other permits be in place prior to issuing the 404 permit. It is not possible to have the 404 permit prior to issuing a grading and building permit. This is a classic *Chicken and Egg scenario* and costs thousands of dollars for projects whose proponents and consultants try to address order of permits. *CASQA Recommendation: Revise this language to read "Require that the Erosion and Sediment Control Plan list applicable permits including, but not limited to the State Water Board's CGP, State Water Board 401 Water Quality Certification, U.S. Army Corps 404 permit, and California Department of Fish and Game 1600 Agreement. Include as a condition of the grading permit that the Operator submit evidence to the MS4 that all permits required for the project have been obtained prior to commencing ground disturbing activities."*
83	Inspection and Enforcement – Evaluate and Update Existing Programs	E.8 c [page 41]	Footnote 26 appears to provide a welcome opportunity for currently permitted small MS4s to demonstrate that existing programs are protective of water quality. In reality however, it is unlikely that this flexibility will be exercised because it is unknown what level of water quality protection will be provided by the yet untried provisions of the draft Phase II Permit. *CASQA Recommendation: Provide guidance that is noticed concurrently with the revised permit on how a small MS4 would document and obtain approval for an 'in-lieu' program.*

Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
84	Inspection and Enforcement – Inspection Frequency	E.8.c.ii [page 41]	The prescriptive nature of the permit requirements will prevent small MS4s from applying local knowledge and priorities to the inspection program. While small MS4's can add to the inspection priorities, they cannot delete any of the mandated inspections. A potential unexpected negative consequence to mandated inspection frequencies is this: Inspectors may quickly drive around town and note every construction site they drive by as "inspected", to meet the permit, rather than productively and efficiently focusing on projects that really do need their attention. Projects in sediment impaired watersheds will be subject to the CGP risk level 2 or 3 or LUP type 2 or 3 requirements with their higher level BMPs and runoff monitoring. Given the higher state level scrutiny on these projects, local resources might be better focused on known problem sites than distributing resources across all sites in a watershed. With the realities of the resource limitations of small MS4s, it will be infeasible to focus the inspection workload within a short period of time prior to predicted rain events or following actual rain events. Small MS4s need the flexibility to uniformly distribute inspection workloads. The most frequent inspections are required for sites that will be subject to the CGP, which requires the Owner to appoint a QSP to perform routine and storm-related inspections. Requiring similar inspections by the MS4 permittee is unnecessary for these already highly inspected sites. Additionally, the presence of a local inspector will divert the QSP's attention from her/his Rain Event Action Plan, inspection, and maintenance activities. Prior to implementing any additional reporting or mandated inspection requirements, the State Board must consider the cost effectiveness of the reporting compared to improvements in water quality. *CASQA Recommendation: Establish a permit condition that requires agencies to develop an inspection program to conduct adequate inspections to control soil erosion and sediment discharge. The frequency and other inspection prioritization criteria should be suggested guidelines – not requirements, and need to be labeled as such*.

<table>
<tr><th colspan="4">Construction</th></tr>
<tr><th>Comment #</th><th>Identify Permit Element/ Issue/ Concern</th><th>Location in Draft Permit</th><th>Comment/Recommendation</th></tr>
<tr><td>85</td><td>Inspection and Enforcement – Inspection Frequency</td><td>E.8.c.ii [pages 41-42]</td><td>Suggested modifications to Table A are provided below.
Table A: Suggested Inspection Frequencies**
<table>
<tr><th>Site</th><th>Frequency</th></tr>
<tr><td>a. All sites ~~one (1) acre or larger that discharge to a tributary listed by the state as an impaired water for sediment or turbidity under the CWA § 303(d)~~ subject to the CGP</td><td rowspan="2">1) at least ~~once every two weeks~~ monthly</td></tr>
<tr><td>~~b. Other sites one (1) acre or more determined to be a significant threat to water quality*~~</td></tr>
<tr><td>~~c. All other construction sites with one (1) acre or more of soil disturbance not meeting the criteria above~~</td><td>~~At least monthly~~</td></tr>
<tr><td>~~d. Construction sites less than one (1) acre in size~~</td><td>~~As needed based on the evaluation of the factors that are a threat to water quality*~~</td></tr>
<tr><td colspan="2">~~*In evaluating the threat to water quality, the following factors shall be considered soil erosion potential; site slope; project size and type; sensitivity of receiving water bodies; proximity to receiving water bodies; non-storm water discharges; past record of non-compliance by the operators of the construction site;~~ availability of stormwater inspections staff; ~~and any water quality issue relevant to the particular MS4.~~</td></tr>
</table>
I** Each agency shall consider the suggested inspection frequency in Table A and make appropriate modifications based on local knowledge and water quality factors and incorporate in to the local Erosion and Sediment Control Ordinance.</td></tr>
<tr><td>86</td><td>Training – Compliance with CGP</td><td>E.8 d [page 44]</td><td>The last paragraph implies that all projects must comply with the BMP requirements of the CGP. If the project is under an acre, the jurisdiction should be able to determine which BMPs would be appropriate. It is not reasonable or feasible to require every project to comply with CGP BMP requirements if they do not meet the CGP acreage requirements.</td></tr>
</table>

Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
87	Training – QSD/QSP	E.8.d [page 44]	Qualification as a QSD and QSP requires an extensive background in engineering, erosion and sediment control, geology, landscape architecture, or hydrology. The plan review and inspection staff of most small MS4s tends to be early in their careers and new to the construction/erosion control field. As such they typically do not have professional registrations nor do they have the experience that would allow them to obtain the professional certifications that are the pre-requisites for QSD or QSP qualification. When needed, such as for capital projects subject to the CGP, small MS4s contract for QSD and QSP services. Training existing staff or hiring staff qualified to obtain QSP and QSD certification is beyond the resources of small MS4s and is not practical. *CASQA Recommendation: Eliminate the requirement for Phase II MS4s to obtain QSD or QSP certification for inspection, plan review staff or individuals supervising these staff. In lieu of this, CASQA recommends that the requirement be modified to require that inspection; plan review staff; or an individual supervising inspectors and plan reviewers complete the QSP and QSD training respectively. That is, require the completion of the QSP or QSD course and passing the exam, but do not require completion of the underlying certification (e.g. CPESC, CISEC, PE, PG).*
88	Training – Scope	E.8.d. [page 44]	Agencies and organization subject to the Phase II permit typically do not have staff whose primary job duties are construction stormwater programs so it is unclear how this requirement would apply. *CASQA Recommendation: .* *(i) Task Description – The Permittee shall ensure that ~~all~~ staff ~~whose primary job duties are related to~~ implementing the construction storm water program are adequately trained.* *Add the following to E.8.d.(ii)* *(d) Or designated person on staff with each credential: QSD to supervise plan review, QSP to supervise inspection operations.*

Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
89	Education – Clarification	E.8.e.ii.b [page 45]	The last clause in this item refers to providing outreach and education on BMPs "as well as overall program compliance". The scope of this outreach message is unclear. *CASQA recommendation: Delete the "as well as overall program compliance" or clarify to provide context to the outreach efforts for construction site operators.*

Pollution Prevention/ Good Housekeeping			
Comment #	**Identify Permit Element/Issue/Concern**	**Location in Draft Permit**	**Comment/Recommendation**
90	Facility Mapping – Task Description	E9.b.i [page 47]	This task should solely focus on mapping of the Permittee owned and operated facilities. Any BMPs that need to be mapped are already addressed within other sections of the Permit. *CASQA Recommendation* *(i) **Task Description –** By the second year of the effective date of the permit ~~May 15, 2013~~, submit map of the area covered by the MS4 permit and identify where the Permittee-owned or operated facilities ~~and storm water BMPs~~ are located.*
91	Facility Mapping – Reporting	E.9.b.iii [page 47]	*CASQA Recommendation* *Revise timeline to allow mapping facility locations by year 2 of the effective date of the permit and providing facility detail by year three of the effective date of the permit. See Table A-3 for recommended timeline revisions.*
92	Facility Assessment – Hotspot	E.9.c.i and ii	*CASQA Recommendation* *Move footnote #34 to the main text of the Order, Section E.9.c.i. The footnote contains a 'shall' statement and should be obvious in the requirements of the permit since the guidance manual that is referenced provides definitions and checklists for this section.*
93	Reporting	E.9.c.iii [page 48]	Reporting currently requires "identified deficiencies and any corrective actions taken" under the Facility Assessment. Since the Task description for this item includes only assessment, suggest this is only reported under section E.9.e Inspections, Visual Monitoring, and Remedial Action. *CASQA Recommendation* *(iii) **Reporting** – By the third year of the effective date of the permit, ~~September 15, 2014 online Annual Report~~, ~~include~~ summarize the results of the Permittee's annual assessment, ~~any identified deficiencies and corrective actions taken~~, and list ~~of~~ the identified pollutant "hotspots".*

Pollution Prevention/ Good Housekeeping			
Comment #	**Identify Permit Element/Issue/Concern**	**Location in Draft Permit**	**Comment/Recommendation**
94	SWPPPs – Redundant Requirement	E.9.d [page 48]	CASQA recommends that the Permittees be allowed to utilize an existing document if that document includes the necessary information required within the SWPPP. *CASQA Recommendations* *Modify the permit language as follows:* *(ii)* ***Implementation Level*** *– The Permittee shall implement the following:* *(c)At a minimum, the SWPPP will address the following:* - *Facility specific information (location, owner, address, etc.)* - *Purpose of the document* - *Key staff/contacts at the facility* - *Site map with drainage identified* - *Identification of significant materials that are handled and stored at the facility that may be exposed to stormwater* - *Description of potential pollutant sources* - *Best management practices employed at the facility* - *Spill control and cleanup – responses to spills* If a Permittee already has an equivalent document (such as a Hazardous Materials Business Plan, Standard Operating Procedure, etc.) that contains the above information, that may be utilized in the same capacity as the SWPPP. Additionally, the identification of "significant materials" should be consistent with CUPA and Environmental Health definitions.
95	SWPPP – Implementation Level	E.9.d.ii [page 48]	*CASQA Recommendation* *It is suggested that the Board provide a template or checklist on what is expected in the SWPPP. This could be provided as an attachment to the Order.*

Pollution Prevention/ Good Housekeeping			
Comment #	**Identify Permit Element/Issue/Concern**	**Location in Draft Permit**	**Comment/Recommendation**
96	Inspections, Monitoring and Remedial Action – Inspection Frequency	E.9.e.ii.b [pages 48 & 49	For a government entity with statewide facilities such as California Department of Correction and Rehabilitation, the inspection component would require at least one staff, one day per week per facility. Combined with the level of inspection and reporting required in this section, this represents a significant staff demand. In addition, the likely hotspots are buildings and structures with established storage areas, permanent BMPs, and regular staff, without much change to configuration of the sites. *CASQA Recommendation* *CASQA suggests the following inspection frequencies:* *a) Quarterly Hotspot visual inspections (not weekly)* *b) Semi-annual Hotspot comprehensive inspections (not quarterly)* *c) Semi-annual Hotspot visual observations of stormwater and non-stormwater discharges (not quarterly)* d) *Annual Non-Hotspot Inspections (same as current permit)*
97	Inspections, Monitoring and Remedial Action – Remediation of Problem Sites	E.9.e.ii.c [page 49]	The requirement to complete BMPs in 3 days is too short. Facilities consist of permanent buildings and BMPs. If structural BMPs are needed, physical alterations to the site may be necessary which will require more than 3 days to design and construct. *CASQA Recommendation* *Suggest using language such as "shall be remedied as soon as practicable and reported/tracked within the annual report."*
98	Reporting	E.9.e.(iii) [page 49]	*CASQA Recommendation* *Add the following to the reporting requirements:* *(e) Identified deficiencies at any of the facilities inspected and the corrective actions taken*

Pollution Prevention/ Good Housekeeping			
Comment #	**Identify Permit Element/Issue/Concern**	**Location in Draft Permit**	**Comment/Recommendation**
99	Assessment and Prioritization – Storm Drain System Definition	E.9.f [page 49]	*CASQA Recommendation* *Clarify Catch Basin definition—E.9.f directs Permittees to prioritize all catch basins. The definition states these are also considered drain inlets. Our interpretation of this definition is a drain inlet with structures such as grates, sumps, inlet/outlet structure, or other related infrastructure intended to convey stormwater runoff.* *CASQA suggests excluding simple culvert pipes, such as those installed under a rural driveway allowing cars to cross over roadside ditches, in the definition of catch basin. Inclusion of these in the required maintenance schedule would significantly increase the effort of this task with limited water quality benefit, especially in rural areas. Additionally, most of these are to be maintained by homeowners.*
100	Assessment and Prioritization – Minimum High Rank	E.9.f.ii Pages 49 & 50]	*CASQA Recommendation* *CASQA recommends that the minimum percentage of high priority catch basins be removed. 20% is an arbitrary number that is not MEP and has no quantifiable benefit to water quality. We suggest amending the language to include the ability to reduce or rerank high priority infrastructure as trash or debris issues are mitigated without a % minimum.*
101	Maintenance – Cleaning Frequency	E.9.g.ii.b [page 50]	Cleaning all basins that are 1/3rd full is arbitrary and not a good use of limited resources as some of the catch basins that are 1/3rd full may not be a problem – likewise, other catch basins that are less than 1/3 full may be a problem. Depending on the number of catch basin to be cleaned, cleaning within a week may not be feasible. Some catch basins may fill to 1/3 multiple times during a winter. *CASQA Recommendation* *Suggest the language be changed to:* *"Annually inspect catch basins (prior to storm season) and establish a cleaning schedule that targets high priority sites."*

Pollution Prevention/ Good Housekeeping			
Comment #	**Identify Permit Element/Issue/Concern**	**Location in Draft Permit**	**Comment/Recommendation**
102	Maintenance – Storm Drain System Definition	E.9.g.ii.d [page 50]	The visual monitoring of all open channels annually is unrealistic for many Phase IIs. For instance, even a small Phase II such as Truckee has about 150 miles of road with most having drainage ditches on both sides for an estimated total of 300 miles. This is difficult to complete in a summer in addition to all of the other requirements that can only be completed in summer. Prioritization is recommended for this requirement. Trash removal 3 times per year in all structures is not MEP and does not have a linkage to water quality benefits. For instance, in areas that are covered by snow for a significant amount of the year, this is not an efficient use of staff time as trash removal activities can only occur in the summer. *CASQA Recommendation* *CASQA suggests that this requirement be rewritten as follows: "(d) Maintenance of surface drainage structures – All permittee owned open channels, detention basins, and other drainage structures shall be identified and prioritized. High priority facilities shall be reviewed and maintained annually as needed. Non-priority facilities shall be reviewed as needed." Remove the section that states "~~At a minimum, removal of trash and debris from open channels and other drainage structures annually~~" as this will be covered by the revision below. Rewrite last sentence to: "Removal of trash and debris from high priority areas shall occur ~~at least three times per year~~ annually".*
103	O&M Activities: BMP Inspection	E.9.h.i [page 51]	*CASQA Recommendation* *Change the quarterly assessment to an annual assessment. In practice, this has been found to be adequate to demonstrate maintenance and compliance, as personnel are trained annually so that if water quality issues are noticed, then O&M personnel will take care of them. In addition, in areas that receive snow, most of the items listed such as outdoor events and outdoor maintenance activities, cannot be inspected quarterly.*

Pollution Prevention/ Good Housekeeping			
Comment #	**Identify Permit Element/Issue/Concern**	**Location in Draft Permit**	**Comment/Recommendation**
104	Incorporation of Water Quality and Habitat Enhancement Features in Flood Management Facilities – Retrofit Requirement	E.9.i.ii [page 52]	Given the extensiveness of proposed Permit requirements, any reference to retrofitting should be deferred until the following permit term. Additional problems could develop by adding habitat or vegetation into a facility which has a specified design capacity and may not have room for expansion. Additionally, having a minimum annual compliance number may be impossible to meet as retrofitting requires US ACOE and Department of Fish and Game permits which could take multiple years to receive (as well as possible need for an environmental impact study). In addition, current climate of fiscal contraction will leave no funding for retrofit projects and existing land use practices and law have long set legal precedent that only require conformance to new standards with new development applications for permits. *CASQA Recommendation* *CASQA requests the removal of this requirement from the Permit or modification of this requirement to focus solely on new facilities. It may be more appropriate to replace this requirement with one that requires new flood control facilities to incorporate water quality and habitat enhanced features, if practicable (it may not make sense for some regional flood control facilities to provide water quality treatment if it serves areas that already have water quality BMPs in place).*
105	Incorporation of Water Quality and Habitat Enhancement Features in Flood Management Facilities – Discharge into the MS4	E.9.i.ii [page 52]	*CASQA Recommendation* *Please clarify what is meant by "or that discharge into the MS4." Will it be a requirement to retrofit facilities that discharge into the MS4? This standard implies that MS4s are responsible for land uses outside our jurisdiction. In nearly all cases, MS4s have no ability to control land uses outside their jurisdictions. As indicated above, this requirement should be removed from the permit or re-focused to new facilities.*
106	Pesticide, Herbicides and Fertilizer Management – Clarification	E.9.j.ii.b.1 [page 53]	What does it mean to "Implement educational activities and permits"? Currently, it is required to have a permit under pesticide regulations. Is this to require an additional permit or just to verify that the applicator is permitted? *CASQA Recommendation* *Please reword to make intent clear.*

Pollution Prevention/ Good Housekeeping			
Comment #	**Identify Permit Element/Issue/Concern**	**Location in Draft Permit**	**Comment/Recommendation**
107	Pesticide, Herbicides and Fertilizer Management – Clarification	E.9.j.ii.b.1 [page 53]	*CASQA Recommendation* *Please clarify that this requirement only applies to the Permittee activities and no other public agencies within the Permittee's area. It is assumed the education activities are for the Permittee's staff and contractors only.*
108	Pesticide, Herbicides and Fertilizer Management – Grass Clippings	E.9.j.ii.b.2 [page 53]	*CASQA Recommendation* *Please clarify why grass mowing is a water quality issue (beyond stating that the purpose is to minimize clippings, etc.). Please clarify what the intent is behind this requirement. Are we concerned with greenwaste or greenwaste with herbicides in water?*

Trash Reduction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
109	Trash Reduction – Trash Abatement Plan	E.10.ii [page 54]	This section incorporates requirements that go beyond the Phase II program that is contemplated within the Code of Federal Regulations. Additionally, this section makes the assumption that all of the permittees require a trash reduction program and that the majority of trash is generated by the commercial retail/wholesale sector. The 20% minimum is arbitrary and has no apparent nexus with water quality. As a result, this type or program approach may not end up targeting high trash generating areas and/or targeting the pollutants of concern within a community. *CASQA Recommendation* *Delete this provision.*

Industrial/ Commercial Facility Runoff Control Program			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
110	Industrial/Commercial Inspection Program	E.11 c., E.11.d, and E.11.e [pages 62-63]	An Industrial/Commercial inspection program was never anticipated under the Federal Phase II Rule. These sections should be deleted. *CASQA Recommendation* *CASQA strongly recommends that the provisions related to industrial/commercial inspections be deleted and, instead, that the industrial/commercial provisions be limited to provision E.5.c Industrial /Commercial Outreach and Education Program, which requires inventorying business locations (per E.7.b criteria; which is different than inventory requirements in section E.11.a.) and providing outreach regarding best management practices.*
111	General – Missing Reporting Requirements	E.11.a and e [pages 58 & 63]	Reporting requirements are missing for sections E.11.a and E.11.e.
112	Inventory – Modification	E.11.a.ii.a [page 59]	The Permittee is given one year to develop the required inventory, which includes a substantial list of required information such as pollutants potentially generated by the facility/source, SIC codes, nature of the business and a narrative description of the products or services provided at each facility. For many permittees this will require a field visit to each business. The timeframe for completing this work is not reasonable. It is estimated that for a community with a population of 100,000 people, there are 1,000 I/C facilities that would fall within the inventory categories. MS4s should be allowed the first year to identify I/C facilities that fall within the required categories. The permit should limit inventory information within the first year to I/C name and location only. Expanded inventory information such as that listed in E.11.a.ii.a would be developed during the permit term with the Permittee showing progress towards completion each year. *CASQA Recommendation* *Provide a phased approach over the permit term for the development of the industrial/commercial inventory. Recommendations for revising the timelines are provided in **Table A-4**.*

Industrial/ Commercial Facility Runoff Control Program			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
113	Timeline modification	E.11.a.ii.a [page 59]	The permit requires the facility information be placed into a GIS. Since many Phase IIs do not have GIS capabilities, the Permit should not specify how or where data is kept. That should be left up to the permittee, as there are less expensive methods for tracking facilities. *CASQA Recommendation* *The use of GIS should be recommended, not required. Modify the provision to state "Incorporation of facility information into GIS is ~~required~~ recommended"*
114	Commercial Facilities/Sources – Focus on High Priority Facilities	E.11.a.ii.b.1 [pages 56 & 57]	The list of commercial facilities is extensive and should be reevaluated and paired down to a much smaller list similar to those required by the Ventura or Bay Area MS4 Permits (see **Attachment B**). The list can be modified over multiple permit cycle terms with the focus in the first permit term on higher stormwater pollutant generating facilities. *CASQA Recommendation* *Either significantly reduce the list of commercial facilities that are included within this program element or allow the Permittee to select the types of facilities that are addressed within their jurisdiction based on their local attributes and needs. The permit could identify that each Permittee select up to five facility categories to address during this permit term.*

Industrial/ Commercial Facility Runoff Control Program			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
115	Commercial Facilities/Sources – Facility vs. Activity Specific	E.11.a.ii.b.1 [pages 56 & 57]	The list is subjective. For example the 5th bullet is "Automobile (or other vehicle) parking lots and storage facilities" Is the intent that all parking lots be included? Additionally, many of the commercial facilities listed are project or activity-specific (versus facility specific) and should be removed from the list. This includes, but is not limited to cement cutting, charitable car wash areas, masonry work, power washing, painting, pest control, etc. The number and types of commercial facilities should be reduced. *CASQA Recommendation* *In addition to reducing the number of facilities (see previous comment) activities should be deleted as well. This includes:* • *Cement mixing or cutting* • *Charitable car wash areas* • *Masonry work*
116	Commercial Facilities/Sources – Mobile Businesses	E.11.a.ii.b.1 [pages 56 & 57]	The development and implementation of a commercial outreach program for mobile business is very difficult, particularly for mobile business that operate within the MS4 but have their corporate or local offices located elsewhere. For example, a pest service or carpet cleaning company will have a multitude of vans in their fleet. It is unrealistic and an inefficient use of resources to inspect each van and operator individually. *CASQA Recommendation* *The industrial/commercial program should only focus on fixed facilities – the mobile businesses, which are more difficult to outreach to, should be phased in during the next permit term.*

Industrial/ Commercial Facility Runoff Control Program			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
117	Commercial Facilities/Sources – Compost Facilities	E.11.a.ii.b.1 [page 56]	Compost facilities are included in the 1st and 2nd bullets. *CASQA Recommendation* *Delete one of the bullets to avoid duplication.*
118	Commercial and Industrial Facilities/Sources – NAICS	E.11.a.ii.b.1, 2 [pages 56 & 57]	*CASQA Recommendation* *The permit should use the North American Industry Classification System (NAICS codes) to clearly specify the types of business to be included in the program.*
119	IGP Coverage – Modification	E.11.a.ii.c [page 57]	The Permittee is required to determine, during the first year, if facilities that are required to be covered under a NPDES stormwater permit have done so. This should be an ongoing effort with no timeframe attached. *CASQA Recommendation* *This provision should be modified to indicate that this is an ongoing effort. During the first year the Permittee can identify how they intend to determine if facilities are covered and show progress in implementation during each reporting period.*
120	Facility Prioritization – Modification	E.11.a.ii.e, g [pages 57 & 58]	In section (g), the Permittee is required to annually prioritize the inventory based on extensive specific criteria. This is already requested in item e. Duplicating this work annually is not an efficient use of limited resources. *CASQA Recommendation* *Delete provision (g) since it directly duplicates provision (e).*

Industrial/ Commercial Facility Runoff Control Program			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
121	Stormwater BMPs – Remove Requirements	E.11.b [page 58]	According to the permit, the permittee must "require industrial and commercial facilities included in the inventory to select, install, implement and maintain storm water BMPs." This is stating that commercial and industrial facilities should be retrofitted. Further, the Permittees are required to notify facilities of these requirements by 2014. The expectation that businesses are going to make significant structural changes (site grading changes, berming, new roofing areas, etc.) to meet the standards in this Permit is unreasonable. Additionally, many of the businesses listed are tenant business and do not own property. How is a Permittee to compel or require a tenant business to make changes to a site they do not own? *CASQA Recommendation* *As indicated in previous comments, CASQA recommends that the Industrial/ Commercial provision be limited to inventory and outreach in this permit term. As such CASQA recommends that this section be deleted and replaced with a reference to the outreach requirements specified in E.5.c.*
122	Minimum High Priority Requirement	E.11.c.ii.b [page 61]	The minimum 20% high priority requirement is an arbitrary number and has no direct correlation or quantifiable benefit for water quality. The percentage of high priority sites should be driven by the results of the prioritization analysis using the criteria established to make the determination. *CASQA Recommendation* *Delete the sentence that requires at least 20% of facilities to be high priority.*
123	Inspections Requirements – Focus on Program Establishment	E.11.c, d, e [pages 61-63]	Sections 11.c, d and e pertain to inspections. *CASQA Recommendation* *Inspections should be removed from this permit cycle. This permit cycle should focus on inventory development, prioritization and outreach and education.*

Industrial/ Commercial Facility Runoff Control Program			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
124	Staff Training – Remove Provision	E.11.f. [pages 63-64]	*CASQA Recommendation* *Based on our earlier comments regarding the need to focus the industrial/commercial program on inventorying and outreach only, the training requirement should be deleted since it is more applicable to the inspection portion of the program element.*

Post-Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
125	General Comment – Organization	E.12 All	*CASQA Recommendation* 1) *To improve clarity, revise format such that water quality/85th percentile stands as one header, and hydromod/watershed characterization another.* 2) *Under hydromod, include the watershed characterization (do not separate the sediment budget).* 3) *Adjust the timeline to phase in post-construction requirements starting with the integration of water quality/LID criteria, followed by progress toward hydromodification criteria.*
126	General Comment – Timing	E.12 All	*CASQA Recommendation* *More time should be allotted for the development of a post-construction program. The subwatershed baseline should be developed by Year 4 after the effective date of the permit, and hydromodification criteria should be required in a subsequent permit cycle.*
127	Compliance Tiers – Timing	E.12.b [page 64]	*CASQA Recommendation* *New Traditionals with less than 25,000 population should implement this program in Year 3 after the effective date of the permit. This would be consistent with the same three-year implementation period provided in the CGP (note: CGP for post-construction becomes effective July 2013).*
128	Compliance Tiers – Applicability New Traditionals	E.12.b [page 64]	The CGP is written for implementation by a discharger, not an MS4. Some clarification should be provided. The permit should be specific as to which parts of the CGP apply. *CASQA Recommendation* *For example, the permit should read:* *The MS4 shall require the responsible construction site dischargers to replicate the pre-project volume of rainfall that ends up as runoff for all storms up to the 85th percentile storm event (or the smallest storm that generates runoff, whichever is larger)." Etc.*

Post-Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
129	Compliance Tiers – Non-Traditionals	E.12.a [page 64]	*CASQA Recommendation* *Where Non-Traditionals could be regulated by the CGP or E.12, depending upon whether the area of Urban Land Uses within any single HUC12 subwatershed exceeds ten percent, the State should develop a common map and identify those Non-Traditionals. The alternative is for each non-traditional to develop such a map. This results in numerous small agencies each individually and separately developing a GIS-based analysis of land use and watersheds. This is a highly technical expectation for very small agencies that lack the resources (staff or consultant) to develop such analysis, which in turn carries significant long-term consequences. It would be more cost-effective and reliable for the State Water Board to make this determination, and apply that determination consistently and uniformly throughout the state.*
130	Compliance Tiers: Small MS4s in ESH	E.12.a and d [page	*CASQA Recommendation* *Applicability criteria should be the same between New Traditionals and Renewal Traditionals with 5k<population<25k located within Endangered Species Habitat. See comment below.*
131	Compliance Tier – Define Endangered Species Habitat	E.12.a [page 64]	*CASQA Recommendation* *"Endangered Species Habitat" should be defined immediately following its reference on page 64. Use language from page 8 concerning discharge to sensitive water bodies. Revise:* *a) New Traditional Small MS4 Permittees with a population greater than 25,000 or with a population greater than 5,000 and <u>discharging to a water body known to provide existing habitat for salmonids (e.g. chinook, coho or steelhead)</u> ~~located within Endangered Species Habitat~~ shall comply with all requirements in this Section.*
132	Compliance Tiers – "Minimum standards" vs. "all requirements"	E.12.a [page 64]	*CASQA Recommendation* *Revise New traditionals and Non traditionals each to "meet the minimum standards of this Section" Delete "…shall comply with all requirements"*

Post-Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
133	Watershed Characterization – Methodology	E.12.b.1 [page 65]	The detailed requirement for a watershed baseline characterization/sediment budget for Phase II communities exceeds EPA's 6 minimum control measures and exceeds the ability of most MS4s to comply with this provision. Based upon similar watershed characterizations, this effort is expensive and requires sophisticated technical expertise. Even with the best professionals working together, there is no agreed-upon or commonly used method to identify "dominant watershed processes potentially affected by changes in storm water runoff caused by new and redevelopment projects" that a permittee can then use to establish development criteria. The few Phase I MS4s who have completed such studies have all utilized different approaches resulting in different criteria and applicability. The only common factor is cost: such studies have all been in the range of $500 - $1M with the bulk paid by grants. *CASQA Recommendation* *Until the state can provide a method for linking receiving water impacts to site development criteria, this requirement should be deleted or modified to a method that can be conducted using desktop watershed characterization methods and readily available information. Anything less increases MS4 exposure to third party lawsuits due to an inability to meet the permit objectives.* *At a minimum, CASQA recommends this section be integrated into the hydromodification portion of the permit, and be limited to characteristics which are readily available or easily determined using desktop techniques, and characteristics addressed in other parts of this Order (e.g. IDDE and monitoring). The characterization factors should be focused and limited to development of hydromodification controls (which should be addressed in the next permit term).*

Post-Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
134	Watershed Characterization – Methodology	E.12.b.1 [page 65]	*CASQA Recommendation* *Define the method or approach to "complete a watershed characterization." There is no direction or guidance on how to "compile, process, and interpret the data" and how to identify key subwatershed processes as they relate to development. Under item (e), it is particularly unclear how an MS4 is to "rank the health" of watershed processes as listed.* *Given the lack of guidance, this requirement should be deleted unless the State can provide detailed guidance on a desktop watershed characterization methodology using readily available data.*
135	Watershed Characterization – GIS Data Availability	E.12.b.1.c [pages 65 & 66]	*CASQA Recommendation* *The state should provide a clearinghouse of all necessary data listed in this draft Order; if not, then the requirement should be removed. The intent should not be for each permittee to search, create, or generate new GIS layers when they already exist; many small permittees lack a GIS and cannot assemble the data.*
136	Watershed Characterization – Rapid Assessment	E.12.b.1.d [page 66]	*CASQA Recommendation* *The rapid stream assessment requirement should be removed from this permit. The Watershed Characterization should be limited to desktop analyses only with the possibility of adding in a field component in future years. Center for Watershed Protection's Unified Stream Assessment is a continuous stream walk that is very time intensive. This process typically requires 40 hours of in-office preparation and 40+ hours of in-office post-processing, and results in a large amount of data that will likely go unused. Additionally, the estimate of time spent in the field depends on the number of stream miles. A team of two can typically cover 2 to 3 stream miles in a day, depending on stream conditions.*

Post-Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
137	Sediment Budget	E.12.b.2. [page 66]	*CASQA Recommendation* *If retained:* *a) Note that a sediment budget is scheduled to be developed (May 2013) before the watershed characterization (May 2015), but implementation is based upon the information gathered in Section E.12.b.1. Revise to coincide schedule with E.12.b.1.* *b) Delete this as a separate item. It is part of a watershed characterization attribute. "Sediment supply and delivery to stream channels" is already noted as a watershed process under item (e) E.12.b.1.* c) *The referenced methodology (Reid and Dunne, 1996) is not readily available, requires an extensive and costly effort to implement, and will require municipalities to hire a consultant to complete. This reference should be removed and instead specifics on the desktop, in-office sediment budgeting effort that is expected should be clearly outlined within the permit text.*
138	Water Quality Runoff Standards	E.12.b.3 [page 66]	*CASQA Recommendation* *Add the world "discretionary" to the first sentence under the title, so as to read, "The Permittee shall require all discretionary projects fitting the category descriptions…"*
139	Water Quality Runoff standards – Terminology	E.12.b.3 [page 66]	*CASQA Recommendation* *"Capture, infiltrate and evapotranspirate" should be revised to "capture and retain (infiltrate, evapotranspirate, and/or harvest)."*
140	Water Quality Runoff standards – Pre-project Conditions	E.12.b.3 [pages 66 & 67]	*CASQA Recommendation* *The Water Quality Runoff Standard should be modified from a full-retention requirement to one that requires projects to match pre-project conditions. This acknowledges the volume of rainwater that would naturally infiltrate or evapotranspirate. Due to underlying soils/bedrock, some sites would not naturally absorb that the full 85th percentile storm event. New development should not be expected to exceed these natural, background hydrologic conditions. Additionally, acknowledging pre-project conditions would provide a built-in crediting system for redevelopment projects (see comment below).*

Post-Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
141	Water Quality Runoff Standards – Redevelopment	E.12.b.3 [pages 66 & 67]	*CASQA Recommendation* *Redevelopment projects can produce less impervious cover per capita than their greenfield counterparts[2], making it desirable to encourage redevelopment projects. In addition, it may not be appropriate or feasible for redevelopment projects to either retain the full 85th percentile storm event or match pre-development (i.e., undeveloped) conditions. As such, CASQA strongly recommends that incentives or credits be applied allowing flexibility in treatment BMP selection to ensure that this type of development is not discouraged.*
142	Water Quality Runoff Standards – Redevelopment	E.12.b.3 [pages 66 & 67]	*CASQA Recommendation* *Post-construction requirements should acknowledge water quality benefits and the challenges and constraints associated with redevelopment and infill. The City of Stockton's and County of San Joaquin's new development and redevelopment guidance document and West Virginia's 2009 Small MS4 General Permit are examples of where this has been accomplished. Stockton and West Virginia require that new development and redevelopment projects reduce stormwater runoff volumes to pre-project levels for the 0.51-inch storm depth and 1-inch storm depth, respectively. Both provide an incentive in the form of credits based on the type of redevelopment. A reduction from the storm depth is additive and possible for projects that meet the following requirements: are developed in brownfields, meet a minimum standard of density, meet a minimum standard of vertical density, and are mixed use and transit oriented. CASQA recommends that this permit allow the flexibility for communities to craft similar credit systems.*

[2] US EPA. 2005. Using Smart Growth Techniques as Stormwater Best Management Practices. Washington, DC.

Post-Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
143	Water Quality Runoff Standards – Infeasibility	E.12.b.3 [pages 66 – 70]	*CASQA Recommendation* *Site conditions will exist where full retention is neither feasible and/or desirable. Infeasibility criteria should be listed (as in multiple Phase I permits including Ventura) and include the following:* • *<u>High groundwater table</u>: The bottom of the infiltration practice should be a certain minimum distance above the seasonal high groundwater table.* • *<u>Protection of source water</u>: Infiltration practices should be set back a certain minimum distance from a groundwater well.* • *<u>Potential for pollutant mobilization</u>: Infiltration practices should not be utilized in brownfield sites or other locations where pollutant mobilization is a documented concern.* • *<u>Clay soils</u>: Infiltration practices are infeasible where soils have low infiltration rates.* • *<u>Potential geotechnical hazard</u>: Water infiltration can cause geotechnical issues, including: settlement through collapsible soil, expansive soil movement, slope instability, and increased liquefaction hazard. Infiltration practices should not be used where geotechnical issues are a documented concern.* • *<u>Land use of concern</u>: To prevent groundwater contamination, infiltration practices should not be used in high-risk areas such as service/gas stations, truck stops, and heavy industrial sites. This should be acknowledged in the Special Project Category Requirements (E.12.b.3).* • *<u>Impairment of beneficial uses</u>: Locations where reduction of surface runoff or increase in infiltration may potentially impair beneficial uses of the receiving water as documented in a site-specific study (e.g., CEQA analysis) or watershed plan.* • *<u>Conflict with water conservation goals</u>: Use of evapotranspiration and other vegetated practices may conflict with water conservation goals in arid climates (e.g., a green roof that requires irrigation during the dry season).* • *<u>Lack of demand for harvested stormwater</u>: Projects must be able to demonstrate sufficient demand for harvested stormwater to be able to draw down the cistern prior to the next storm event to prevent bypass.* • *Additional implementation constraints as identified by the permittee.*

Post-Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
144	Water Quality Runoff Standard – Affordable Housing	E.12.b.3 [pages 66 – 70]	*CASQA Recommendation* *In addition to the criteria identified for new development projects, CASQA also recommends that the permit allow for a crediting system specific to affordable housing projects located in redevelopment areas or an infeasibility criteria as follows:* *Affordable Housing. Where municipalities have assigned minimum low income housing project densities, the full retention standard shall be reduced.*
145	Water Quality Runoff Standards – Off-ramps	E.12.b.3 [pages 66 & 67]	*CASQA Recommendation* *All regulated projects (including special project categories) should have the option of considering volume-based (bioretention areas) AND flow-based BMPs if the full retention requirement cannot be met. The permit should allow the use of bioretention areas with underdrains where infiltration is infeasible. Text edits specific to these sections are provided below:* • *Page 66: …Runoff from the 85th percentile storm that cannot be ~~captured,~~ infiltrated~~, and evapotranspired~~ must be treated via a volume-based or flow-through device. Flow-through devices must be designed to treat runoff at a flow rate produced by a rain event…* • *Page 67: …If this standard cannot be met, the volume ~~of runoff equivalent to the excess volume must be captured, infiltrated, and evapotranspired within the same subwatershed~~ that cannot be infiltrated must be treated via a volume-based or flow-through device. MS4s have the option of setting up an offsite mitigation program where the amount that was not retained onsite is infiltrated within the same subwatershed.* • *Where infiltration is infeasible or discouraged due to geotechnical constraints, bioretention may provide underdrains.*

Post-Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
146	Water Quality Runoff Standards – Offsite Mitigation	E.12.b.3 [page 67]	Permittees should not be required to create and administer an offsite mitigation program. Establishing an offsite mitigation program should be optional due to the administrative burden that it places on small local governments. Nationally, offsite mitigation programs have presented numerous challenges for local governments and as such have been abandoned by several communities including Clark County, WA and Howard County, MD. *CASQA Recommendation* *Revise the permit provision as follows:* *If this standard cannot be met…excess volume ~~must be~~ may be captured, infiltrated, and evapotranspirated ~~within the same subwatershed~~ through an offsite mitigation program.*
147	Water Quality Runoff Standards – High Rank Recharge and/or Discharge Subwatershed	E.12.b.3 [page 67]	*CASQA Recommendation* *Define "high rank" for groundwater recharge and/or discharge. See discussion on watershed characterization ranking above. Use the following definition:* *For regulated special projects…in subwatersheds ~~that have a high rank for groundwater recharge~~ where infiltration would result in direct groundwater recharge, …*
148	Water Quality Runoff Standards – Special Projects	E.12.b.3 [page 66 & 67]	Including Special Projects in this category of full onsite infiltration is inappropriate - many types of Regulated Special Projects (i.e. auto repair, gasoline outlets, etc.) are high risk of contamination to groundwater and should provide pre-treatment prior to infiltration onsite. Further, many redevelopment projects of this nature are located in areas with existing soil contamination. *CASQA Recommendation* *Revise the language to include the infeasibility criteria discussed above.*

Post-Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
149	Water Quality Runoff Standards – Organization	E.12.b.3.i [pages 67-70]	*CASQA Recommendation* *Overall organization suggestion for E.12.b.3.i is to list the project types altogether and then have a separate standalone threshold subsection to state whether the trigger is based on 5K or 10K square feet of impervious surface. That would avoid the confusion of commercial being listed twice, for example. And provisions that apply to all of the land use categories would not be repeated.*
150	Water Quality Runoff Standards – Regulated Projects	E.12.b.3.i [page 67]	*CASQA Recommendation* *Add the world "discretionary" to the title, so as to read, "Regulated Discretionary Projects".* *Similar comment for E.12.b.3 (i)(a) Title [p. 67] so as to read, "Regulated Discretionary Project Categories"*
151	Water Quality Runoff Standards – Define "replace"	E.12.b.3.i.a.1 [page 67]	*CASQA Recommendation* *Define "replace" 5,000 sf or more impervious as "no net increase in impervious footprint".*
152	Water Quality Runoff Standards – Exclusions	E.12.b.3.i.a.1 [page 67]	*CASQA Recommendation* *Add the following type of exemptions/clarifications in a separate subsection related to exemptions:* • *Redevelopment does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, original purpose of facility or emergency redevelopment activity required to protect public health and safety. Removing and replacing a paved surface to base course or lower, or repairing the roadway base is not considered a routine maintenance activity.* • *The following road maintenance practices are exempt: pothole and square cut patching, overlaying existing asphalt or concrete pavement with asphalt or concrete without expanding the area of coverage, shoulder grading, reshaping/regarding drainage systems, crack sealing, resurfacing with in-kind material without expanding the road prism, and vegetation maintenance.* • *Redevelopment of existing single-family structures is exempt.* • *Underground utility projects that replace the ground surface with in-kind material or materials with similar runoff characteristics are exempt.*

Post-Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
153	Water Quality Runoff Standards – Special Project Categories	E.12.b.3.i.a.1 [page 67]	This section is confusing because automotive repair shops and retail gasoline outlets are commercial developments. This section appears to mirror the SF Bay Area MRP requirements, and if so, "commercial" should be limited to restaurants. Clarify that only the parking lot is held to the standards. *CASQA Recommendation* *Revise categories as follows:* *(i) Auto service facilities described by SIC codes 5013, 5014, 5541, 7532-7534, and 7536-7539;* *(ii) Retail gasoline outlets;* *(iii) Restaurants (SIC code 5812);* (iv) *Uncovered parking ~~lots~~ that ~~are~~ is stand-alone or part of another development project….*

Post-Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
154	Water Quality Runoff Standards – Specific Exclusions	E.12.b.3.i.a.1 [page 67]	*CASQA Recommendation* *Move specific exclusions above to follow immediately below item (a) and indent bullets as follows:* *1. Regulated projects – Within two years of the effective date of the permit, the Permittee shall regulate discretionary projects. ~~Regulated projects as they are defined below do not include detached single-family home projects that are not part of a larger plan of development~~ Specific exclusions to Regulated Projects are:* • *Detached single-family home projects that are not part of a larger plan of development* • *Interior remodels* • *Routine maintenance or repair such as:* • *roof or exterior wall surface replacement* • *pavement resurfacing within the existing footprint* *(a) Regulated Special Project Categories … etc.* ~~*Specific Exclusions are:*~~ ~~• *Interior Remodels*~~ ~~• *Routine maintenance or repair such as*~~ ~~• *roof or exterior wall surface replacement*~~ ~~• *pavement resurfacing within the existing footprint*~~

Post-Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
155	Water Quality Runoff Standards – Define "alteration"	E.12.b.3.i.a.2 [page 67]	*CASQA Recommendation* *Replace "alteration" with "increase". Increased impervious footprint is clear; altered impervious is not clear. This would be consistent with WQO-2003-0005.* *Redevelopment of Regulated Special Projects, where the redevelopment 'alters' more than 50% of the total impervious surface of the existing development, the requirement to infiltrate 100% of runoff from the existing surfaces will result in challenging constraints for many businesses. CASQA suggests an MEP standard for these situations.* *Revise as follows:* *(2) Where a redevelopment project in the categories specified above results in an ~~alteration~~ increase of more than 50 percent of the impervious surface of a previously existing development, runoff from the entire project, consisting of all existing, new and/or replaced impervious surfaces, must be included in the treatment system design to the maximum extent practicable.*
156	Water Quality Runoff Standards – Deemed Complete	E.12.b.3.i.a.4 [page 68]	*CASQA Recommendation* *Provision (4) dates are unclear, since permittee must regulate projects by May 15, 2014. But regulations do not apply to projects deemed complete on or before "permit effective date" Projects deemed complete between permit effective date and May 15, 2014 should be unregulated under this WQO. Revise as follows:* *For any private development project in the categories specified above for which a planning application has been deemed complete by a Permittee on or before t May 15, 2014, the treatment standards shall not apply …* *This language may conflict with existing land use laws and vested development rights laws. State Water Board legal or land use attorney should review for legal consistency, especially as it relates to vested development rights and subsequent permit renewals, in relation to automatic map renewals allowed by the Subdivision Map Act, and in relation to the Permit Streamlining Act. Any provision affecting this draft Order should be in compliance with existing land use law.*

Post-Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
157	Water Quality Runoff Standards – Deemed Complete	E.12.b.3.i.a.4 [page 68]	*CASQA Recommendation* *Development applicants may be pursuing financing and/or in litigation on projects. Revise as follows:* *…Diligent pursuance may be demonstrated by the project applicant's submittal of supplemental information to the original application, plans or other documents required for any necessary approvals of the project by the Permittee, or may be demonstrated by the applicant's pursuit of financing, or by ongoing litigation on the project.*
158	Water Quality Runoff Standards – Deemed Complete	E.12.b.3.i.a.4 [page 68]	*CASQA Recommendation* *The grandfathering language needs to pulled out of Special Project Categories so that is can be applied to all regulated project categories.*

Post-Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
159	Water Quality Runoff Standards – Treatment Thresholds	E.12.b.3.i.a.5 [page 68]	*CASQA Recommendation* *Regulated Special Projects must infiltrate and evapotranspirate the entire 85th percentile storm event (and if that cannot be met, it must be infiltrated within the same subwatershed). However, treatment thresholds are also required. If there is no runoff generated from the 85th percentile, then how can there be treatment thresholds? What runoff do these standards apply to? Delete treatment thresholds.* *If the draft Order is revised to allow treated discharge of the 85th percentile storm, then the entire paragraph (5) describing a percent removal is not a technically valid way to address this issue. This threshold is no longer used in permits since it is recognized that percent removal does not result in effective BMPs. This is because a project can assume artificially high influent concentrations, treat to satisfy the required percent reduction threshold, and still discharge a high effluent concentration.* *For example, hydrodynamic separators can be shown to have high TSS removal efficiencies because they are typically tested with very high influent TSS concentrations. But actual performance testing data shows TSS effluent values much higher than filtration-based BMPs. In contrast, BMPs that treat stormwater runoff with low influent concentrations are likely to achieve low percent removals, although they may be reducing pollutants in the effluent to the "irreducible concentration."* *CASQA recommends the entire paragraph (5) be deleted and replaced with the following:* *<u>Treatment BMPs shall be selected based on the primary class of pollutants likely to be discharged from the project (e.g., for automotive-related land uses, TSS, metals, and oil and grease). Treatment BMPs shall be selected that have a high or medium effectiveness for the pollutants of concern as identified in the CASQA Stormwater BMP Handbook for New Development or an adopted local stormwater BMP design manual.</u>*

Post-Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
160	Water Quality Runoff Standards – Other Development Projects	E.12.b.3.i.b [page 68]	*CASQA Recommendation* *Add the world "discretionary" to the title (b), so as to read, "Other Discretionary Development Projects"* *Revise sentence within paragraph (b) as follows:* *…This category includes discretionary development projects on public or private land that fall under the ~~planning and building~~ permitting authority of the Permittee."*
161	Water Quality Runoff Standards – Other Development Projects	E.12.b.3.i.b [page 68]	Commercial is a project type listed under Other Development Projects and as a Regulated Special Project Category E.12.b.3.i.a.1. It cannot be in both categories because they have different infiltration thresholds. *CASQA Recommendation* *Delete commercial from "other" as follows:* *(b) Other Development Projects* *New development….including ~~commercial, industrial,~~ residential housing subdivisions (i.e. detached…), mixed-use, and public projects are held to the standards above.* *Note that if this revision in not made, under "Regulated Special Project Categories", commercial is regulated at 5,000 sf threshold while under "Other Development Projects" industrial is regulated at 10,000 sf. Commercial and industrial can be expected to have similar pollutant loadings, depending, and should have matching thresholds.*
162	Water Quality Runoff Standards – Other Redevelopment Projects	E.12.b.3.i.c [page 68]	*CASQA Recommendation* *Add the world "discretionary" to the title, so as to read, "Other Discretionary Redevelopment Projects"* *Revise sentence to read, "This category includes discretionary development projects on public or private land that fall under the permitting authority of the Permittee."*

Post-Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
163	Water Quality Runoff standards – Other Redevelopment Projects	E.12.b.3.i.c [page 68]	Note that Regulated Projects (E.12.b.3.i) and Other Development Projects (E.12.b.3.i.b) include exclusions for "Detached single-family home projects that are not part of a larger plan for development". *CASQA Recommendation* *If recommended revision above is not made, then this exclusion should be repeated under Other Redevelopment Projects.*
164	Water Quality Runoff standards – Other Redevelopment Projects	E.12.b.3.i.c [page 68]	This sentence is missing a verb, such as "…are held to the standards above" as noted in (b) Other Development Projects. Define "replace" 10,000 sf or more impervious as "no net increase in impervious footprint". Commercial is a project type listed under Other Development Projects and as a Regulated Special Project Category E.12.b.3.i.a.1. It cannot be in both categories because they have different infiltration thresholds. *CASQA Recommendation* *Revise as follows:* *(c) Other Redevelopment projects* *Redevelopment projects that create and/or ~~replace~~ increase footprint by 10,000 square feet or more of impervious surface….~~including commercial, industrial,~~ of residential housing subdivisions….mixed use, and public projects shall comply with the Water Quality Runoff Standards above…*
165	Water Quality Runoff standards – Routine Maintenance	E.12.b.3.i.c.1 and 2 [page 69]	*CASQA Recommendation* *Revise indent for items (1) and (2), since it seems to be referring to routine maintenance or repair exclusions.*

Post-Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
166	Other Redevelopment Projects -	E.12.b.3.i.c.1 and 2 [page 69]	*CASQA Recommendation* *Replace "alteration" with "increase". Increased impervious footprint is clear; altered impervious is not clear. This would be consistent with WQO-2003-0005.* *Revise as follows:* *(1) Where a redevelopment project in the categories specified above results in an ~~alteration~~ increase of more than 50 percent of the impervious surface of a previously existing development, runoff from the entire project, consisting of all existing, new and/or replaced impervious surfaces, must be included in the treatment system design to the maximum extent practicable.* *(2) Where a redevelopment project in the categories specified above results in an ~~alteration~~ increase of less than 50 percent of the impervious surface of a previously existing development, only runoff from the new and/or replaced impervious surfaces of the project must be included in the treatment system design.*
167	Water Quality Runoff standards – Road Projects Applicability	E.12.b.3.i.d [page 69]	Many small MS4s do not treat runoff from public roadway projects and will assume that the "building and planning authority of a Permittee" refers to the zoning code where development permits are issued. Since MS4s are exempt from issuing themselves development permits for public roadway projects, they will not apply this criteria to public road projects. *CASQA Recommendation* *Revise as follows:* *Any of the following types of road projects that create 10,000 square feet or more of newly constructed contiguous impervious surface and that are public road projects and/or fall under the building and planning authority of a Permittee:*

Post-Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
168	Regulated Projects – Trails	E.12.b.3.i.d [page 70]	Requiring treatment for impervious pedestrian/bike trail projects which are greater than 10 ft wide or are creek-side (within 50 ft of the top of the bank) is not commensurate with water quality impacts – these trails support bike and foot traffic. These projects are usually located within a narrow right-of-way where the width would not accommodate retention BMPs. *CASQA Recommendation* *Remove trails from the list of regulated projects.* ~~*(3) Construction of impervious trails that are greater than 10 feet wide or are creek-side (within 50 feet of the top of bank)*~~
169	Regulated Projects – Road Projects Modification	E.12.b.3.i.d [page 69-70]	In lieu of treating the runoff from the 85th percentile storm that cannot be infiltrated, the water quality standards for road projects should follow USEPA guidance regarding Managing Wet Weather with Green Infrastructure: Green Streets to the maximum extent practicable. *CASQA Recommendation* *Revise as follows:* *(d) Road Projects* *Any of the following types of road projects that create 10,000 square feet or more of newly constructed continuous impervious surface and that fall under the building and planning authority of a Permittee <u>shall comply with the Water Quality Runoff Standards except that treatment of runoff from the 85th percentile that cannot be infiltrated onsite shall follow USEPA guidance regarding green infrastructure to the maximum extent practical.</u>* *<u>Types of road projects include:</u> …*

Post-Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
170	Interim Hydromodification Management	E.12.b.4 [pages 70-72]	*CASQA Recommendation* *Interim hydromodification standards should be removed and implementation of the stormwater retention standard in E.12.b.3 be deemed compliance with hydromodification requirements during the interim period. Implementing one set of criteria and changing those criteria within one or two years places undue burden on MS4s and particularly on development community, whose permit approval process for projects > 1 acre of development often span several years.*
171	Hydromodification – Exemptions for Site Constraints	E.12.b.4 [pages 70-72]	If the interim hydromodification criteria is retained, it is unrealistic to assume that matching the pre-project hydrograph will be achieved for every project. In some instances it may be difficult or cost prohibitive to mimic the pre-project hydrograph. Site constraints, soil conditions, and topography all play a part in determining the hydrology of any particular site. See site constraints discussion above, under Water Quality Standards. *CASQA Recommendation* *Allow exemptions for discharges to tidal areas and concrete-lined stream channels.* *Allow a 15% tolerance for hydrograph matching.*

Post-Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
172	Hydromodification – Exemptions for Alternate Approaches	E.12.b.4 [page 70-72]	Allow permittees with existing or in-progress RWQCB-approved hydromodification development standards to fulfill this requirement. For example, Region 3 is in process of developing criteria for hydromodification based upon a similar but slightly different approach than shown in this permit. The outcome may include different criteria than an 85th percentile for volume, or a 2-yr/5-yr recurrence interval for volume and rate. Also applicability criteria should be established (i.e., hydromodification controls should only be required where there is a risk of increased creek bed or bank erosion downstream). *CASQA Recommendation* *Delete the interim hydromodification requirement; or* *Revise as follows:* *1) Task Description – By May 15, 2016, the Permittee shall use….* *Specific Exclusions* *Any RWQCB-approved long-term watershed process management plan or approach shall supersede all E12 requirements in this permit, and upon Executive Officer approval of this approach, this permit shall no longer regulate the affected MS4s.* 2) *Implementation Level…etc.*
173	Long-Term Watershed Process Management	E.12.b.5.ii.a [page 72]	All of the terms used in this subsection are vague in terms of establishing numeric criteria. *CASQA Recommendation* *These terms should either be defined and metrics provided or, preferably, the listed items should be removed and a reference to future guidance developed by the State Water Board staff (with input or assistance from CASQA) should be inserted.*

Post-Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
174	Long-Term Watershed Process Management	E.12.b.5 [page 72]	As discussed above under Watershed Characterization, hydromodification control criteria is a new and evolving area of stormwater management. There are no current models to follow or approaches with known adaptations to small MS4s. For example, in California the approach is research-oriented and highly technical, with approximately four existing models (Contra Costa, Alameda, Sacramento, San Diego), and several currently under research (Ventura, Orange County, Region 3). In each, the outcome and approach have been totally different. None have attempted to integrate groundwater recharge, ET, sediment supply/delivery, and water quality fate and transport as proposed in this permit. It is therefore unreasonable to delegate this responsibility to Small MS4s. *CASQA Recommendation* *The entire section E.12.b.5 should be deferred to another permit cycle or until such time a reasonable approach can be provided.*
175	Long-Term Watershed Process Management – Implementation Level	E.12.b.5.ii.a [page 72]	Numeric criteria and applicability thresholds are undefined and ambiguous: "to support and protect watershed processes affected by storm water" and "to maintain watershed processes necessary to achieve long-term watershed health". *CASQA Recommendation* *Clarify and define "achieve long-term watershed health" in the context of an MS4's development criteria.*
176	Implementation Strategy for Watershed Process Management – Implementation Schedule	E.12.b.6.ii [page 72]	*CASQA Recommendation* *The implementation schedule of May 15, 2017 occurs after establishment of numeric criteria (May 15, 2016). Development of an implementation strategy for numeric criteria should occur before implementing the criteria. Revise to apply in following permit term.*

Post-Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
177	Watershed-Based Storm Water Management – Implementation Level	E.12.b.7 [page 73]	Design principles are vague, such as "streets and mobility" or "use mix". These are subject to change in the following years. Better to reference reputable publications. *CASQA Recommendation* *Revise as follows:* *(3) identify how ~~the following~~ design principles such as those from Better Site Design (CWP) or Using Smart Growth Techniques as Stormwater Best Management Practices (EPA).~~can be incorporated into their regulations:~~* *~~i) Natural systems and green infrastructure~~* *~~ii) Infill and Redevelopment~~* *~~iii) Compact Design~~* *~~iv) Use Mix~~* *~~v) Streets and Mobility~~* *~~vi) Parking~~*
178	Watershed-Based Storm Water Management - Reporting	E.12.b.7 [page 73]	What does "NOI" refer to under (iii) Reporting? (Delete "City") *CASQA Recommendation* *Revise as follows:* *(iii) Reporting – By September 15, 2017, online Annual Report, submit plan ~~with NOI~~ including identified gaps/impediments and how/when ~~the City plans to~~ Permittee shall adjust its regulations accordingly.*
179	Operation and Maintenance – Clarification	E.12.b.8 [page 73-74]	*CASQA Recommendation* *Specify that this requirements applies to new development only (i.e., it does not retroactively apply to existing development).* *(i) Task Description – The permittee shall by May 15, 2014, implement and O&M Verification Program for those new development projects regulated under this Order.*

Post-Construction			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
180	Operation and Maintenance – Mosquito and Vector Control	E.12.b.8.b and c [page 74]	It is outside authority of MS4 to establish legally enforceable mechanisms requiring private property owners to provide access to other agency's staff, including vector control or State Water Board staff. *CASQA Recommendation* *Revise as follows:* *(c) Conditions of approval or other legally enforceable agreements or mechanisms for all Regulated Projects and Regulated Special Projects that require the granting of site access to all representatives of the permittee, ~~local mosquito and vector control agency staff, and Water Board staff,~~ for the sole purpose of performing O&M inspections of the installed treatment system(s) and hydromodification control(s) (if any).*
181	New – Additional Standards	n/a	In addition to water quality standards, regulated projects should also be required to implement site design techniques (e.g., minimize land disturbance) and source controls (e.g., storm drain stenciling and fueling area design) where applicable, similar to WQO-2003-0005. *CASQA Recommendation* *The permit should be revised to include these provisions for consistency and clarity throughout the state.*

Receiving Water Monitoring			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
182	General Comment – Remove Requirement	E.13 All	A monitoring program was never anticipated under the Federal Phase II Rule. This section should be deleted. Receiving water monitoring should be considered in a future permit term and after EPA's federal rulemaking is completed. *CASQA Recommendation* *Remove requirement.* [The comments below are provided to address issues with permit language if the provision is not deleted]

Receiving Water Monitoring			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
183	General Comment – Proposed Alternative		*CASQA Recommendation* *If receiving water monitoring requirements are not removed, as an alternative to those requirements, CASQA recommends Permittees should be given the option of contributing to the statewide or regional SWAMP Bioassessment and Stream Pollution Trends (SPoT) monitoring programs or joining a regional monitoring program. This approach could be cost-effective for permittees and the State. Also, this approach could produce better data quality and result in a more consistent, statistically valid, and scientifically defensible monitoring design. It would also naturally leverage knowledge of locally-important pollutants gained from existing data (Phase I, SWAMP, USGS, etc.). If these options are made available to Phase IIs, several modifications are needed to the current SWAMP program:* • *a permanent communication mechanism with partnering Phase II programs in order to ensure data sharing and that stormwater relevant issues are addressed through the monitoring* • *the cost to implement SWAMP should no longer be tied to NPDES permit fees* *The proposed broad requirements imply that Phase II discharges may have more of an impact on receiving waters than Phase I discharges. If we accept that Phase II discharges have the same impacts as Phase I discharges, it stands to reason that Phase II programs should monitor only the constituents that been shown to cause 303(d) listings in Phase I areas. We recommend that SWAMP take advantage of existing water quality information from Phase I programs to better leverage monitoring resources toward quantifying problems that are much more likely to occur.*

Receiving Water Monitoring			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
184	General Comment	E.13. All	CASQA supports that outfall monitoring has not been included in the draft permit because characterization of pollutants in urban storm water runoff is generally well established (e.g., types, loading, concentrations), and it would therefore not be an effective use of limited resources to require outfall monitoring at this time. Furthermore, outfall monitoring is an expensive and substandard tool for measuring the effectiveness of local stormwater programs. The high variability of the outfall monitoring data, due to natural factors such as rainfall, make it difficult to detect increasing or decreasing trends in pollutant levels carried by stormwater runoff. *CASQA Recommendation* *CASQA requests that outfall monitoring not be included in future iterations of this permit renewal.*
185	Phase II Stormwater Management Questions	E.13 All	Monitoring indicators should be driven by specific management/monitoring questions that are built from overall program objectives and goals, developed through a collaborative process with stakeholder input, and included at the beginning of Provision E.13. These management questions are not stated, and therefore the purpose of the monitoring is unclear. *CASQA Recommendation* *Clearly state specific management/ monitoring questions at the beginning of Provision E.13.*

Receiving Water Monitoring			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
186	General – Credit for Previous Monitoring Work	E.13 All	Lack of Consideration of Existing Monitoring Data - The Permit needs to be clarified to allow Phase II Permittees to obtain credit for previous and current monitoring work. *CASQA Recommendation* *Include a provision in the Permit that allows a stormwater program to reduce monitoring requirements contained in the Permit to the extent that it can certify that it has already completed a substantially similar body of monitoring work during the last 10 years. Such a reduction in requirements would need to be authorized by the RWQCB Executive Officer. Credit should also be given for ongoing contributions from existing Phase II Permittees to regional monitoring programs such as the Regional Monitoring Program in the Bay Area or other similar efforts throughout the state.*
187	General - Applicability	E.13 All	The receiving water monitoring section appears to apply only to freshwater bodies. *CASQA Recommendation* *Clearly state that the receiving monitoring provision applies only to freshwater bodies at the beginning of E.13.*
188	Ocean Monitoring – Remove Requirement	E.13.b. [page 76]	*CASQA Recommendation* *Remove ocean receiving water requirements and rely on an expanded SWAMP program to measure water quality in the ocean receiving waters.*
189	Ocean Monitoring – Clarification	E.13.b. [page 76]	*CASQA Recommendation* *Clarify that within any watershed where receiving water monitoring is required by this draft permit, only one type of receiving water monitoring is required, either the Ocean Plan monitoring as described in Appendix III of the California Ocean Plan, ASBS Special Protections monitoring, Bay monitoring through a program such as the Bay Area's Regional Monitoring Program, or receiving water monitoring as described in E.13.*

Receiving Water Monitoring			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
190	Ocean Monitoring – Draft Procedures	E.13.b. [page 76]	Until Appendix III – Standard Monitoring Procedures – to the California Ocean Plan is finalized, it would be infeasible for a stormwater program to implement the current monitoring procedures of Appendix III in the 2009 California Ocean Plan as the requirements are tailored to wastewater treatment plants. *CASQA Recommendation* *The California Ocean Plan monitoring procedures should not be required until/unless Appendix III is finalized.*
191	Ocean Monitoring – Organization	E.13.b. [page 76]	*CASQA Recommendation* *If this provision is not removed from the permit, move the content of E.13.b to E.13.a and move E.13.a to E.13.b. This will improve the organizational flow of the outline structure.*
192	Compliance Tiers - Thresholds	E.13.a [page 76]	The cost and the scope of the requirements in section E.13 are similar to requirements for Phase I Permittees. For example, the City of Vallejo, with a population of over 115,000, is covered by the Phase I Municipal Regional Permit. This City is required to sample as follows: 4 BMI sites/year, 1 Continuous Monitoring General Water Quality site/year, 1 temperature logger site/yr, 1 water column toxicity site/yr, 1 chlorine site/yr, 1 sediment toxicity site/yr, 1 sediment chemistry site/yr, 3 pathogen sites 2 times in the permit term, and 3 stream miles/year mapped. The requirements described in Table B of the draft Phase II permit are greater for a city with a population of 25,000 than they are for the City of Vallejo with its population of 115,000. This is not equitable. As municipal population decreases staff and fiscal resources also decrease. For this reason, resource-intensive monitoring requirements must be scaled according to population size. *CASQA Recommendation* *Change requirement to say "New and Renewal Traditional Small MS4 Permittees with a population greater than ~~25,000~~ 50,000 …"*

Receiving Water Monitoring			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
193	Compliance Tiers - Thresholds	E.13.a [page 76]	*CASQA Recommendation* *Add the following sentence at the end of E.13.a "Unincorporated Counties with population greater than 50,000 shall comply with the monitoring requirements in this Section only within Census Designated Places that fall within, or adjacent to and within the same watershed, an incorporated municipality designated as a New or Renewal Traditional Small MS4 Permittee with a population greater than 50,000.*
194	Compliance Tiers – Clarification	E.13.a [page 76]	Based on the language in section 13.a, it is unclear which municipalities are subject to these receiving water monitoring requirements. *CASQA Recommendation* *Clearly identify what municipalities are subject to receiving water monitoring requirements in E.13.a.*
195	Compliance Tiers – Define CDP	E.13.a and b [page 76]	*CASQA Recommendation* *Define "CDP" in the Order and in the glossary. CDP first appears on page 76 of the order.* *Where "CDP" is included in Figure 2 on page 84, please replace with "urbanized area" if that is what was intended in Figure 2.* *Define and include references related to "urbanized area."*
196	Compliance Tiers – Local Subwatershed Delineations	E.13.a and b [page 76]	*CASQA Recommendation* *Allow Permittees to use existing local subwatershed delineations and indicate the target subwatershed size that should be used. The HUC 12-Digit subwatershed boundaries are in some cases very different from subwatershed boundaries that are used at the local level to implement watershed-based stormwater and flood control programs.*
197	Receiving Water Monitoring – Modification	E.13.b.ii.a.3 [page 77]	*CASQA Recommendation* *Suggest the following modification: "Where multiple Permittees, <u>each with population greater than 50,000</u>, have urban land uses in an urbanized area, all Permittees must conduct, contribute to, or otherwise participate in Receiving Water Monitoring."*

Receiving Water Monitoring			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
198	Receiving Water Monitoring – Applicability	E.13.b.ii.a [page 77]	E.13.b.ii.a.3 is difficult to understand because it does not mention HUCs. Additionally, the directions of (2) and (4) seem to indicate that a Permittee that occupies multiple HUCs is to conduct monitoring using two separate criteria (or both of them). *CASQA Recommendation* *Clarify applicability for (2), (3), and (4).*
199	Receiving Water Monitoring – Modification	E.13.b.ii.a.4 [page 77]	"Bottom of the watershed" sediment quality studies will integrate the effects of land uses that are not part of the urban MS4 (i.e. agriculture) *CASQA Recommendation* *Modify this requirement such that sediment samples are taken from drainage areas that primarily consist of MS4 land uses.*
200	Receiving Water Monitoring – Organization	E.13.b.ii.a.4 [page 77]	*CASQA Recommendation* *Please clarify:* *Is the intent to have the following paragraphs moved up to be under E.13.ii a. Receiving Water Monitoring, before numbers (1) – (4):* *"Receiving water sampling locations should be selected to represent the contribution of urban storm water discharges to the receiving water. Generally, the Permittee should locate sampling stations at the farthest downstream extent of the urbanized portion of the watershed.* *The Permittee shall sample for the parameters at the frequencies listed in Table B."* • *Or do they only apply to section E.13.ii (4) as implied by the permit organization?*

Receiving Water Monitoring			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
201	Follow-up Analysis and Actions – TIE and TREs	E.13.ii.b [page 77-78]	This section exceeds MEP. The suggested methods, such as TIE and TREs, have not been proven to be technically appropriate or economically feasible through the Phase I permits per the definition of MEP. For this reason, it is recommended that this requirement be removed and follow-up analysis and actions requirements should be considered for a future permit term. Additionally, there already exists a good understanding of the causes of *Hyalella azteca* toxicity in urban runoff and at this stage follow-up TIE requirements would not provide useful additional information. At downstream locations there are potentially a large number of contributory sources, and toxicant identification (type and source) could be highly complex and unrelated to municipal sources. The TIE requirement would increase monitoring and administrative costs dramatically for the permittees. Sediment analytical chemistry is already sufficient to identify *Hyalella Azteca* toxicity from urban runoff sources. Furthermore, stormwater programs already have extensive pesticide use outreach programs that address the TRE requirements. We request that the TIE and TRE requirements be removed. *CASQA Recommendation* *Delete TIE and TRE requirements.*
202	Follow-up Analysis and Actions – TIE and TREs	E.13.ii.b [page 77-78]	*CASQA Recommendation* *If the TRE/TIE requirement is retained, the language should be rewritten to clarify that the TRE and the TIE are examples of the types of guidance that may be used to guide follow-up studies (different guidance would be used if the follow-up study was not about toxicity).* *If the Follow-up and Analysis and Actions section is not removed entirely from the Permit, move it to the end of the Monitoring Section to allow for greater continuity.*

Receiving Water Monitoring			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
203	Follow-up Analysis and Actions – TIE and TREs	E.13.ii.b [page 77-78]	*CASQA Recommendation* *If the TRE/TIE requirement is retained, at a minimum, this section should be revised to require, during the permit term, a maximum of one follow-up study by each Permittee subject to the non-ocean receiving water monitoring provisions described in E.13, or one follow-up study per every 10 Permittees participating in a regional monitoring program.* *Requiring only one follow-up study would allow the Permittee to focus on a high priority water body segment, as opposed to spreading sparse public resources to many sites. Just one TIE/TRE study would cost at least $100,000. The Phase I Municipal Regional Permit in the Bay Area requires only 10 follow-up analyses for 72 Permittees named in the permit.*
204	Reporting & Organization	E.13.b.iii [page 78]	An implementation date should be included in this section. Currently a plan is required, but no monitoring start date is included. *CASQA Recommendation* *To allow for ramping up by Permittees, CASQA recommends a start date in the 4th year of the permit term if monitoring is not removed entirely from this permit for Permittees that participate in a regional monitoring program and in the 3rd year of the permit term for Permittees that participate in an individual monitoring program. See Table A-5 for recommended timeline.*
205	Reporting & Organization	E.13.b.iii [page 78]	*CASQA Recommendation* *Reorganize the monitoring section. It should list requirements and deadlines for completing requirements in sequential order. Due dates for plan development and implementing monitoring should be stated before the reporting requirement section. Monitoring section should be easily followed (i.e. step 1, 2, 3). Move Figure 2 so that the reader sees it right after reading E.13.ii.a.*

Receiving Water Monitoring			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
206	Reporting/Water Quality Exceedances	E.13.b.iii.a [page 78]	*CASQA Recommendation* *This section should be revised to add the following onto the end of the paragraph: "The preceding reporting requirements shall not apply to continuing or recurring exceedances of water quality standards previously reported to the Water Board or to exceedances of pollutants that are to be addressed pursuant to Provision E.15 of this Permit and in accordance with Provision D."*
207	Reporting	E.13.b.iii.b [page 78]	*CASQA Recommendation* *Sentence should read: "Follow-up Analysis and Action is as needed."*
208	Table B – Footnotes	E.13 Table B [pages 80-83]	Footnotes 46 & 56 are missing. *CASQA Recommendation* *Add-in footnotes or delete associated references*.
209	Table B – Additional Information Needed	E.13 Table B [pages 80-83]	Table B last column describes "Result(s) that Trigger Stressor/Source Identification". The thresholds, water quality criteria or water quality objectives for each of the parameters that Permittees must use to compare results against are not clear. Footnotes 48 and 55 refer to journal articles that appear to contain threshold information. *CASQA Recommendation* *In the interest of reducing potential confusion and inefficiency, threshold information should be provided in the body of the permit or in a well-organized attachment. The requirements should be evident in the permit particularly for required analytes and water quality criteria/objectives/thresholds.*

Receiving Water Monitoring			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
210	Table B – General Water Quality	Table B [pages 80-83]	"General Water Quality" is not tied to a specific Phase II stormwater program management question and therefore provides an unknown benefit to Phase II stormwater programs and communities. Continuous monitoring (temp, DO, cond, and pH) will require MS4s to either purchase or rent a multi-parameter sonde as well as a protective case, chains and locks that must be used during deployment. Sondes range in price from $7,000 - $10,000. Rental sondes from a company called GeoTech out of Denver (ships to California) runs around $400/week. Installation of the data sondes in a manner that appropriately measures mid-stream, mid-depth conditions would likely require additional significant cost. Conditions in small streams are highly dependent on weather conditions and streams with naturally occurring algae may see wide swings in temperature, DO, and pH that exceed the threshold, but are still protective of local beneficial uses. Depending on the number of sites required within each subwatershed, this requirement could result in a substantial investment and the sondes may be vandalized or stolen in the field. Staff time would also be needed for equipment calibration, sonde deployment and retrieval, and data management. *CASQA Recommendation* *Remove general water quality*
211	Table B – Temperature	Table B [pages 80-83]	Temperature is not tied to a specific Phase II stormwater program management question and therefore provides an unknown benefit to Phase II stormwater programs and communities. *CASQA Recommendation* *Remove temperature*

Receiving Water Monitoring			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
212	Table B – Nutrients	Table B [pages 80-83]	A single grab sample for nutrients will provide little useful information given the variability on a daily, seasonal, and annual basis. A useful, comprehensive nutrient study to obtain average concentration is cost-prohibitive, would require automated samplers, dedicated staff to manage monitoring equipment, and consultants to permit complex data analysis and reporting. *CASQA Recommendation* *Remove this requirement*
213	Table B – Biological Assessment	Table B [pages 80-83]	Biological Assessment is not tied to a specific Phase II stormwater program management question and therefore provides an unknown benefit to Phase II stormwater programs and communities. *CASQA Recommendation* *Remove Biological Assessment*
214	Table B – Algae	Table B [pages 80-83]	The Algae bioassessment protocol for the State of California cited in footnote 54 is currently in draft form and to-date has not been fully tested. Therefore, algae bioassessment should not be required by the Permit until such protocols are finalized and the State has fully evaluated the utility of algae bioassessment results. Additionally, algal biomass reflects in-stream conditions such as substrate type, current speed, light, and temperature as much as it reflects concentrations of dissolved or particular nutrients that might be contributed by urban runoff. Stressor-response relationships are poor between nutrients and stream algal biomass. This requirement should be removed given the poor linkage between urban runoff and algal biomass. *CASQA Recommendation* *Remove algae requirement*

Receiving Water Monitoring			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
215	Table B – Bedded Sediment	Table B [pages 80-83]	The sampling method and protocol requirement for sediment toxicity refers to a range of test methods in the 2008 SWAMP QAPrP, including water column toxicity tests. The only sediment method included in this range is Table A14, the 10 day *Hyalella azteca* in sediment test. Sediment analytical chemistry is already sufficient to identify *Hyalella azteca* toxicity from urban runoff sources. *CASQA Recommendation* *Remove Hyalella azteca toxicity from Table B.*
216	Table B – Bedded Sediment, Fine Grained	Table B [pages 80-83]	Footnote 55, which contains the sampling method and protocol requirement for sediment toxicity, refers to analytical chemistry on fine-grain sediments for metals, TOC, and pyrethroids as well as analytes reported in MacDonald et al. 2000 (including copper, nickel, mercury). However, in the Table B row that addresses pollutants – bedded sediment, fine grained, the text refers to footnote 56, which does not exist in the permit. *CASQA Recommendation* *To clarify what methods and protocols apply when and where, remove footnote references and clearly identify the required analytes and water quality criteria/objectives related to the sediment chemistry monitoring in the body of the permit or in a clearly written attachment.*

Receiving Water Monitoring			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
217	Table B – Bedded Sediment, Fine Grained	Table B [pages 80-83]	It is prohibitively expensive to link receiving water constituent levels specifically to Phase II management practices and distinguishably from Phase I and other pollutant sources. As such, a logical alternative objective for receiving water pollutants might be to assess whether receiving waters are in nonattainment of water quality objectives. *CASQA Recommendation – Option #1 (Preferred)* *As indicated in previous comments, CASQA recommends the expansion of the SWAMP program as it would be better suited to answer these questions* *If this section is retained – CASQA offers the following comment (Option #2)* *It would be cost-effective to limit receiving water monitoring to the pollutants that cause 303(d) listings from neighboring Phase I communities.*
218	Relates to E.13	Attachment K	The cost and the scope of the requirements in E.10, E.12, and E.13 are excessive for a traditional MS4 of 25,000 people. Cities of this size do not have the staff or the fiscal resources to implement such costly and prescriptive requirements. *CASQA Recommendation* *Increase the threshold to 50,000.*
219	Relates to E.13	Attachment K	Attachment K lists traditional MS4s that are greater than 25,000 in population. It does not include unincorporated county governments that do exceed 25,000. We're assuming this is because unincorporated populations are usually smaller than 25,000 and tend to be scattered around the unincorporated county. *CASQA Recommendation* *Clarify that counties with more than 25,000 in population are <u>not subject</u> to the non-ocean receiving water monitoring requirement in E.13 or to the E.12 and the E.10 provisions.*

Program Effectiveness			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
220	Compliance Tiers	E.14.b.a [page 88]	*CASQA Recommendation* *Referring to requirements of an earlier permit may lead to confusion. Remove the reference to Attachment 4, Section B, Design Standards of WQO 203-0005-DWQ and instead explain which Permittees this requirement applies to.*
221	Best Management Practice Condition Assessment – Organization	E.14.b.a [page 88]	*CASQA Recommendation* *The requirements of this section should be included and the results reported under the Post-Construction Section (E.12.b.8). This requirement addresses operation and maintenance related issues for these BMPs, not effectiveness assessments.*
222	BMP Condition Assessment – Implementation Level	E.14.b.ii [page 88]	*CASQA Recommendation* *The term "urban Storm water BMPs" is not clear. This term appears to mean post construction BMPs. Please clarify.*

Program Effectiveness			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
223	BMP Condition Assessment – Implementation Level	E.14.b.ii [page 88]	The permittee is required to develop and implement a methodology similar to the Lake Tahoe BMP Rapid Assessment Methodology to inventory, map and determine the relative maintenance condition of the urban stormwater BMPs. Thus far, no community has been able to fully implement the methodology in this manual and it has not been proven. The manual requires that 3 visual inspections be done each year. Permittees do not have the staffing for this. The manual requires the permittee to have GIS which requires expensive software and knowledgeable staff. Others mapping options such as "Google Earth" should be allowed as an option to GIS for permittees without a GIS program due to the costs. In 2008-2009 the Tahoe RCD received 3.9 million dollars to fund the Best Management Practices Program. These monies were received as grants from 8 different agencies including 3 million from Prop 50. The BMP RAM Technical Document will require funding opportunities and grants to implement across the state. *CASQA Recommendation* *Instead of requiring the Lake Tahoe BMP Rapid Assessment methodology, CASQA recommends the following replacement language:* *"Develop and implement a methodology to inventory, map and determine the maintenance condition of the Post Construction BMPs. Maintenance condition may be determined through a self-certification program where permittees require annual reports by other parties demonstrating proper maintenance and operations".* *This would be in line with the language in the permit which states "The methodology shall be a simple and repeatable field observation and data management tool that determines relative condition of structural post-construction BMPs.*
224	BMP Condition Assessment – Implementation Level	E14.b.ii.a [page89]	The permittee is required to inventory and map existing and proposed post-construction BMPs in to GIS. *CASQA Recommendation* *Post-construction BMPs should not be mapped until installed – remove "proposed".* *(a) Inventory and map existing ~~and proposed~~ post-construction BMPs.*

Program Effectiveness			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft Permit**	**Comment/Recommendation**
225	Municipal Watershed Pollutant Load Quantification	E.14.c [page 89]	This section requires analyses that will be highly burdensome and resource intensive for MS4s to conduct, will be of limited accuracy and limited value because it is based on many assumptions and generalized models, and will likely be applied inconsistently from MS4 to MS4. In addition, it assumes that the constituents identified are priority constituents for all communities and/or that there is a general methodology that can be followed in order to consistently determine what the annual loads are (e.g., trash). CASQA recommends that the program effectiveness assessment be limited to the guidance provided in the CASQA manual and to the requirements contained in provision E.14.a. In addition, any attempts to assess outcome levels four and five should be closely coordinated with the monitoring program and follow the existing guidance that has already been developed. CASQA is currently assessing pollutant load reductions and methodologies for those determinations and will provide additional direction within the CASQA Manual update that is anticipated for early 2012. *CASQA Recommendation* *Delete Section E.14.c*

TMDLs			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
226	TMDL Compliance Requirements – Implementation Actions	E.15.a and b [page 91] Attachment G	Attachment G should not expand the TMDL implementation actions beyond their referenced Basin Plans. Requirements in Attachment G appear to go above and beyond what has been adopted in the Basin Plan Amendments (BPA). When the State Board includes effluent limitations in an NPDES permit based upon a TMDL, it must do so in a manner that is "consistent with the assumptions and requirements of any available wasteload allocation for the discharge . . . ." (40 CFR section 122.44(d)(1)(vii)((B).) For example, in Region 3 the SLO Creek TMDL for Pathogens includes a long list of requirements taken from the Stormwater Management Plan—not from the referenced Resolution. In Region 2, requirements referenced from pathogen BPAs for Tomales Bay, Richardson Bay, and Napa River are found in Region 3 BPAs. *CASQA Recommendation* *Attachment G should only incorporate by reference into the permit those TMDLs that have been adopted and are effective as of the effective date of the permit. For those TMDLs, there should be a reference to the corresponding Basin Plan and implementation plans, however the detail of the implementation plan or of the technical portion of the TMDL should not be reiterated within Attachment G. This is also consistent with the language provided in E.15.b – thus the detail is not necessary within Attachment G.* ***E.15.a.*** *The Permittee shall comply with all applicable TMDLs approved pursuant to 40 CFR § 130.7 for which the Permittee has been assigned a Waste Load Allocation and/or a Load Allocation ~~or has been identified in~~ (see Attachment G).* ***E.15.b.*** *Waste Load Allocations (WLA), Load Allocations (LA) and implementation requirements are specified in the adopted and approved Regional Water Board Basin Plans and authorizing resolutions which are incorporated herein by reference as enforceable parts of this General Permit. Applicable Basin Plan amendments and resolutions are identified in Attachment G. ~~Attachment G additionally contains a list of requirements developed by the Regional Boards for compliance with the implementation requirements of the relevant TMDLs. These requirements are an enforceable component of this Order.~~ …*

TMDLs			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
227	TMDL Compliance Requirements – Implementation Actions	E.15.a and b [page 91] Attachment G	*CASQA Recommendation* *Recognizing that there are over 1,300 waterbodies in California listed as impaired and needing TMDLs, the State Water Board should consider providing guidance to the RWQCBs identifying a menu of cost-effective BMPs that can be utilized for the TMDLs in order to provide some local, inter-regional, and statewide consistency. For example, the guidance could identify the typical source and treatment controls that may be utilized for sediment TMDLs, and those controls that are typically utilized for nutrient TMDLs, etc.*
228	Attachment G – Formatting	Attachment G	*CASQA Recommendations* *Formatting suggestions for Attachment G: (1) Remove the "Regional Board" column and make those subheaders instead; (2) repeat the column headers on each page; (3) make the column headers consistent.* *Attachment G - The "Compliance Due Date" column should be deleted and the "Deliverables/Actions Required/Waste Load Allocations" should include the reference to the Basin Plan and implementation plan, etc. so that the TMDL is incorporated by reference. Given the number of TMDLs being referenced and the fact that many of them will be re-evaluated and/or re-opened to incorporate new information – this will allow the Phase II Small MS4 permit the ability to remain flexible and responsive to the TMDLs.*
229	TMDL Compliance Requirements – Clarification	E.15.c [page 92]	*CASQA Recommendation* *Modify the permit language as follows:* *Notwithstanding requirements described in E.15.a. and E.15.e., the State Water Board may revise this General Permit to incorporate ~~any modifications or revisions to the TMDLs in Attachment G, or to incorporate~~ any Basin Plan Amendments that (1) modify an existing TMDL identified in Attachment G or (2) that established a new TMDL ~~new TMDLs adopted~~ during the term of this General Permit that assign a WLA to the Permittee ~~or that identifies the Permittee as a responsible party~~. In revising Attachment G, the State Water Board will allow adequate public review.* *The term "responsible party" has a significant (and different) meaning in environmental law. In this case, the deleted statement is redundant with the WLA (the Permittee would be responsible because they have a WLA).*

TMDLs			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
230	TMDL Compliance Requirements – Retroactive Compliance	E.15.b [page 91]	This section states "In some cases, dates are given that fall outside the term of this General Permit. Compliance dates that have already passed are enforceable on the effective date of this General Permit….." However, how can a jurisdiction retroactively comply or be enforced against? This requirement is of significant concern. MS4s must comply with their NPDES permits. The federal Clean Water Act does not require implementation plans and due dates, so requiring immediate compliance with a RWQCB implementation plan is not necessary under the federal NPDES program. *CASQA Recommendation* *Modify the permit language as follows* *Compliance dates that have already passed ~~are~~ <u>may be</u> enforceable on the effective date of this General Permit; <u>however, this will have to be determined on a TMDL by TMDL basis</u>.* In many cases, the effective date of the TMDL is interpreted as the effective date of this General Permit. For example, requirements due two years after the effective date of the TMDL will be enforceable two years after the effective date of this General Permit."

TMDLs			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
231	TMDL Compliance Requirements	E.15 [page 91]	*CASQA Recommendations* *The point of compliance with TMDL allocations needs to be clarified as follows:* ***E.15.a.*** *The Permittee shall comply with all applicable TMDLs approved pursuant to 40 CFR § 130.7 for which the Permittee has been assigned a Waste Load Allocation and/or a Load Allocation ~~or has been identified in~~ (see Attachment G).* *The Permittees shall comply with the Waste Load Allocations, consistent with the assumptions and requirements of the Waste Load Allocations documented in the Implementation Plans, including compliance schedules, associated with the State adoption and approval of the TMDL at compliance monitoring points established in the TMDL Monitoring Program (40 CFR 122.44(d)(1)(vii)(B)).* *The determination of compliance with the WLAs shall be based on implementation of BMPs as specified in the implementation plans for the approved TMDLs or based on plans developed as per the approved TMDLs. The Permittees obligation to meet the WLAs is met if the water quality standards in the impaired receiving waters are met through implementation of control measures approved by the Regional Board.*

Reporting			
Comment #	**Identify Permit Element/ Issue/ Concern**	**Location in Draft**	**Comment/Recommendation**
232	Reporting – Clarification	General	In various elements of the Permit, the Permittee is required to submit certain information (e.g. inventory of construction sites – E.8.a.iii). What kind of data can be uploaded into SMARTS? It will be important for the Permit to clearly state the capabilities of SMARTS so Permittees can collect data in appropriate formats to allow for easy uploads for annual reporting (pdf, word, etc). In addition, there should be a template for SMARTS once it is functioning so that the Permittees have clear direction regarding the type of information that will be required, the format that it will be required in, and the extent of the reporting and data fields for each element. *CASQA Recommendation* *Recognizing that SMARTS does not yet work for MS4s, this requirement should include a caveat such as "…with each online Annual Report via SMARTS, once it is functioning for Phase II MS4s."*
233	Category 4b – Typographical Error	E.15.e [page 92]	*CASQA Recommendation* *Suggested edits: "…associated with Clean Water Act ~~S~~sections 303(d), 30~~6~~5(b) and 314…"*
234	Regional Reporting – Clarification	E.15.b [page 91]	This section indicates that SMARTS will accept only one report on behalf of a Permittees that are involved in a regional program. This does not support regional outreach programs. In Section E.5.a.2.b, it states that Permittees can contribute to a regional outreach collaborative effort. Please clarify how a regional outreach program should report. This section could be interpreted to mean that SMARTS will only accept one report on behalf of Permittees that are involved in a regional program. *CASQA Recommendation* *Suggested re-write: "SMARTS will accept ~~only~~ one report on behalf of all Permittees that are involved in a regional program."*
235	Annual Reporting Program	E.16.a [page 92]	*CASQA Recommendation* *Syntax error: "…available during normal business hours, unless otherwise agreed to by the Regional Water Board's…"*

See **Attachment C** for additional recommended timeline modifications.

Table A-1. Recommended Timeline Revisions for Program Management (E.4)

E.4 Program Management Revised Timeline		
Section	**Description**	**Proposed Timeframe**
E.4.a.(i)	Legal Authority	Two years after the effective date of the permit
E.4.b.(iii)	Legal Authority - Reporting	Two years after the effective date of the permit
E.4.c(iii)	Enforcement Response Plan - Reporting	Three years after the effective date of the permit
E.4.d.(iii)	Ensure Adequate Resources – Reporting	Remove

Table A-2. Recommended Timeline Revisions for Public Education and Outreach (E.5)

E.5 Public Outreach and Education Program Revised Timeline		
Requirement*	**Description**	**Proposed Timeframe**
(a)	Public Education Strategy	One year after the effective date of the permit
(b)	CBSM or Equivalent	Remove
(c)	Stormwater Message	Two years after the effective date of the permit
(d)	Develop Materials	Three years after the effective date of the permit
(e)	Public Program Development	Three years after the effective date of the permit
(f)	Distribute Materials	Four years after the effective date of the permit
(g)	Water Efficient Landscape Ordinance	Remove
(h)	Technical and Financial Assistance	Remove
(i)	IDDE Message Development	Four years after the effective date of the permit
(j)	Pesticides, Fertilizer, Herbicide Message Development	Four years after the effective date of the permit
(k)	Stormwater Education for School-age Children	Four years after the effective date of the permit

E.5 Public Outreach and Education Program Revised Timeline		
Requirement*	**Description**	**Proposed Timeframe**
(l)	Reducing Discharges from Charity Car Washes, Mobile Cleaning and Pressure Washing Operations and Landscaping	Five years after the effective date of the permit

*requirements do not necessarily follow permit provision ordering but are generalized across E.5 provision requirements (i.e., Develop Materials applies to Industrial/Commercial and Construction outreach programs)

Table A-3. Recommended Timeline Revisions Pollution Prevention/Good Housekeeping (E.9)

E.9 Pollution Prevention/Good Housekeeping Revised Timeline		
Section	**Description**	**Proposed Year**
(a)	Inventory Permittee-Owned and Operated Facilities	One year after the effective date of the permit
(b)	Map of Permittee-Owned or Operated Facilities	One year after the effective date of the permit
(c)	Facility Assessment	Two years after the effective date of the permit
(d)	Stormwater Pollution Prevention Plans	Four years after the effective date of the permit
(e)	Inspections, Visual Monitoring and Remedial Action	Five years after the effective date of the permit
(f)	Storm Drain System Assessment and Prioritization	Five years after the effective date of the permit
(g)	Maintenance of Storm Drain System	Next Permit Term
(h)	Permittee Operations and Maintenance Activities	Four years after the effective date of the permit
(i)	Incorporation of Water Quality and Habitat Enhancement Features	Five years after the effective date of the permit
(j)	Pesticides, Herbicide and Fertilizer Application	Three years after the effective date of the permit
(k)	Training and Education	Two years after the effective date of the permit

Table A-4. Recommended Timeline Revisions for Industrial / Commercial (E.11)

E.11 Industrial/ Commercial Facility Runoff Control Program Revised Timeline		
Section	**Description**	**Proposed Year**
(a)	Inventory (allow MS4s to complete over time with progress each year)	Five years after the effective date of the permit
(b)	Industrial/Commercial Stormwater BMPs	Remove
(c)	Industrial/ Commercial Facility Inspections	Remove
(d)	Inspection Requirements	Remove
Note	I/C should be limited to inventory and education and outreach per PO modified section E.5.c for this permit cycle	
E.5.c Industrial/ Commercial Facility Outreach and Education Program Revised Timeline		
Section	**Description**	**Proposed Year**
(c)	Comprehensive Outreach and Education Program (need additional time to develop the program)	Two years after the effective date of the permit

Table A-5. Recommended Timeline Revisions for Receiving Water Monitoring

E.13 Receiving Water Monitoring Revised Timeline		
Section	**Description**	**Proposed Year**
(b)	Individual: Develop Monitoring Plan	Two years after the effective date of the permit
(b)	Regional: Develop Monitoring Plan	Three years after the effective date of the permit
(b)	Individual: Implement Monitoring Plan	Three years after the effective date of the permit
(b)	Regional: Implement Monitoring Plan	Four years after the effective date of the permit
(b)	Conduct Follow-up Analysis	Five years after the effective date of the permit

Requirement	Draft Phase II Permit	County of Orange, San Diego Region	Ventura Co Watershed Protection District	San Francisco Bay Region (Bay Area MRP)
Commercial/ Industrial				
List of Facilities/ Sources	• Agricultural chemical dealers • Fertilizer/pesticide mixing facilities • Compost facilities • Airplane repair • Animal facilities • Automobile painting • Automobile parking lots • Automobile repair • Boat repair • Botanical or zoological exhibits • Building material retailers • Cement mixing or cutting • Charitable car wash areas • Eating or drinking establishments • Equipment repair • Golf courses and parks • Outside Farmers Market • Landscape supply operations • Marinas • Masonry works • Meat processing • Vehicle washing • Mobile carpet cleaning • Mobile power washing services • Nurseries • Painting and coating • Pest control services; • Pool cleaning • Portable sanitary services • Preproduction plastics facility • Refuse haulers, transfer stations • Recycling centers • Retail or wholesale fueling • Industrial Facilities, including IGP • Operating and closed landfills • Facilities subject to SARA Title III • Hazardous waste treatment facilities • All other facilities tributary to an impaired water body, where the facility generates pollutants for which the water body is impaired *Permit location: pages 56 & 57*	• Automobile repair • Airplane repair • Boat repair • Equipment repair • [Automobile painting • vehicle washing; • Automobile parking lots • Retail or wholesale fueling • Pest control services • Eating or drinking establishments • Mobile carpet cleaning • Cement mixing or cutting • Masonry • Painting and coating • Botanical or zoological exhibits • Landscaping • Nurseries • Golf courses, and parks • Cemeteries • Pool and fountain cleaning • Marinas • Portable sanitary services • Building material retailers and storage • Animal facilities • Mobile pet services • Power washing services • Sites with a history of unauthorized discharges • Industrial Facilities including IGP • Operating and closed landfills; • Facilities subject to SARA Title III • Hazardous waste treatment facilities. • All other facilities tributary to an impaired water body, where the facility generates pollutants for which the water body is impaired *Permit location: pages 59 & 60*	• Commercial Facilities • Restaurants • Automotive service facilities • RGOs and automotive dealerships • Nurseries and nursery centers • US EPA Phase I, II Facilities • Other Federally mandated facilities *Permit location: pages 45 & 46*	• Outdoor manufacturing areas • Outdoor material storage areas • Outdoor waste storage and disposal areas • Outdoor vehicle storage and maintenance • Outdoor wash areas • Outdoor drainage from indoor areas • Rooftop equipment • Vehicle Salvage yards; • Metal and other recycled materials collection facilities • Vehicle mechanical repair • Corporation yards • Nurseries • Building material retailers • Plastic manufacturers • Industrial facilities, including IGP *Permit location: pages 44 and 45*

Requirement	Draft Phase II Permit	County of Orange, San Diego Region	Ventura Co Watershed Protection District	San Francisco Bay Region (Bay Area MRP)
Commercial/ Industrial				
Inventory Requirements	• Name • Address • Nature of business or activity • Physical location of storm drain(s) • Whether site is tributary to a Clean Water Act section 303(d) water body segment • Whether site generates pollutants for which the water body segment is impaired • Narrative description including SIC codes <u>Prioritization additionally requires knowledge of:</u> • Materials used • Wastes generated • Non-stormwater discharges • Facility design • Total area where I/C activities occur and areas exposed to rainfall/ runoff *Permit location: pages 55, 57 & 58*	• Name • Address • Pollutants potentially generated by the site • Whether site is tributary to a Clean Water Act section 303(d) water body segment • Whether site generates pollutants for which the water body segment is impaired • Narrative description including SIC codes <u>Prioritization additionally requires knowledge of:</u> • Materials used • Wastes generated • Non-stormwater discharges • Facility design • Total area where I/C activities occur and areas exposed to rainfall/runoff *Permit location: pages 60 & 63*	<u>Required:</u> • Name • Address • Coverage under the IGP or other permits • narrative description including SIC <u>Recommended:</u> • Material usage • Discrepancies between SIC /NAICS designations • Identify the actual type of industrial activity that has the potential to pollute stormwater *Permit location: page 46*	• Name • Address • A brief description of business activity including SIC code; • Inspection priority and inspection frequency • If coverage under IGP is required <u>Prioritization additionally requires knowledge of:</u> • Pollutant sources on site • Pollutants of concern • Proximity to a waterbody • Violation history *Permit location: page 45*
Inspection Frequency	• Facilities with high prioritization: annual • Facilities with medium prioritization: 1x/ 3yrs • Facilities with low prioritization: 1x / 5yrs • Facilities with written violation: annual • Facilities with no exposure: none *Permit location: pages 61 & 62*	At a minimum, 20 percent of the sites inventoried must be inspected each year *Permit location: page 62*	<u>Critical Sources:</u> • Inspect twice during the permit term <u>Industrial Facilities:</u> • Initial inspection at all industrial facilities • Facilities with exposure are subject to a second inspection • A permittee need not inspect facilities that have been inspected by the Regional Board within the previous 24 months *Permit location: pages 50 & 51*	Establish appropriate inspection frequencies for facilities based on priority, potential for contributing pollution to stormwater runoff, and commensurate with the threat to water quality *Permit location: page 45*

Requirement	Draft Phase II Permit	County of Orange, San Diego Region	Ventura Co Watershed Protection District	San Francisco Bay Region (Bay Area MRP)
Program Effectiveness Assessment				
Best Management Practice Condition Assessment	• Inventory and assess the maintenance condition of urban stormwater BMPs (including flood control BMPs) • Develop and implement methodology similar to Lake Tahoe BMP Rapid Assessment Methodology to determine relative condition of structural BMPs • The methodology must: ○ Rank BMPs for maintenance based on field observations ○ Establish a long-term plan for conducting regular maintenance of BMPs, including the frequency of such maintenance *Permit location: pages 88 & 89*	Verify that approved post-construction BMPs are operating effectively and have been adequately maintained through: • Designation of high priority BMPs based on likelihood of O&M issues among other factors • Verify O&M of BMPs through inspection, self-certification, surveys or other approaches • 90% public and private verified annually • 100% of high priority inspected annually • 100% of public projects inspected annually *Permit location: page 42*	<u>Operated by Permittee</u> • Incorporate an Inspection checklist • Inspection 1x/ 2 yrs • Establish and follow criteria for repair <u>Operated by Parties other than Permittee:</u> • Require annual reports by other parties demonstrating proper maintenance and operations *Permit location: page 65*	• Create a prioritized plan for inspecting all installed stormwater treatment controls • Inspect all stormwater treatment systems at least once every five years *Permit location: page 40*
IDDE				
Stations Screening Requirements	• Identify stations within priority areas [using]…one of the following methods: • Major outfalls or other outfalls points randomly located throughout the priority areas [using a grid to facility random selection of outfalls] • Stations may be selected non-randomly provided adequate coverage of the entire priority areas is ensured • Conduct dry weather field screening and analytical monitoring at each stations identified above at least once a year • Conduct a follow-up investigation if benchmarks are exceeded	Conduct dry weather field screening and analytical monitoring of MS4 outfalls and other portions of its MS4 to detect illicit discharges and connections in accordance Attachment E *Permit location: page 70*	• Conduct field screening in accordance with [CWP's IDDE Manual] or equally effective alternative methods • Conduct field screening of storm drain system that has not been previously screened in accordance with the following schedule: ○ All portions of storm drain system consisting of storm drain pipes greater than 36" in diameter ○ High priority areas identified during the mapping of IC/ID ○ All portions of storm drain system 50 years or older in age *Permit location: page 86*	• Develop and implement a screening program utilizing [CWP's IDDE Manual] • One screening point per square mile of Permittee urban and suburban jurisdiction area, less open space, including some key major outfalls draining industrial areas… • Screen once each year in dry weather conditions *Permit location: page 51*

Requirement	Draft Phase II Permit	County of Orange, San Diego Region	Ventura Co Watershed Protection District	San Francisco Bay Region (Bay Area MRP)
IDDE				
Response and Follow-up	• Identify and locate the source…within 48 hours of becoming aware of the suspected illicit discharge • If the observed discharge is intermittent, the Permittee shall document that a minimum of 3 separate investigations were made to observe discharge • Require the responsible party to conduct all necessary corrective actions within 48 hours of notification • Permittee shall conduct a follow-up investigation and field screening to verify elimination *Permit location: pages 36 & 37*	• Field screen data: Within 2 business days of receiving results that exceed action levels, initiate an investigation or document why the discharge does not pose a threat • Analytical data: Within 2 business days of receiving results that exceed action levels, initiate an investigation or document why the discharge does not pose a threat • Take immediate action to initiate steps to eliminate all detected illicit discharges *Permit location: page 71*	Illicit Connection: Termination of the connection within 180 days of completion of the investigation Illicit Discharge Respond within 1business day of a report of a suspected illicit/ illegal discharge with actions to abate *Permit location: pages 86 & 87*	All violations must be corrected no longer than 10 business days after the violations are discovered *Permit location: page 50*
Municipal Operations				
Municipal Operations: Select Inspection Frequency	Municipally-Owned Facilities • Hotspot Facilities: o Weekly visual inspections o Quarterly comprehensive inspections o Quarterly visual observations of stormwater and non-stormwater discharges • Non-hotspot inspections 1x/ yr Storm drain system Annual inspection of high priority catch basins O&M Activities Quarterly inspection of BMPs *Permit location: pages 47 – 51*	Municipally-Owned Facilities Inspect high priority 1x/ yr Storm drain system Inspect 1x/ yr O&M Activities None stated *Permit location: pages 54 – 56*	Municipally-Owned Facilities None stated Storm drain system • Priority A: inspection 3x during wet season and 1x during dry • Priority B: inspection 1x during wet season and 1x during dry • Priority C: 1x/ year O&M Activities None stated *Permit location: pages 77 - 82*	Municipally-Owned Facilities • Only applies to facilities not covered by IGP • Corporation yards must be inspected at least before the start of the rainy season (1x/ yr) Pump Stations Inspect 2x/ during wet season O&M Activities None stated *Permit location: pages 10 - 15*
Throughout				
Retrofit Requirements	• Program Management (p.24): include the costs for retrofitting existing BMPs to include green infrastructure • Pollution Prevention/Good Housekeeping (p.52): implement changes to two flood management projects per year to enhance water quality and habitat functions • Program Effectiveness Assessment and Improvement (p.90): identify storm water retrofit opportunities	• Municipal (p.55): evaluate the feasibility of retrofitting structural flood control devices • Existing Development (p. 67): evaluate and rank existing development to prioritize retrofitting; consider the results of the evaluation in prioritizing work plans for the following year; Encourage private landowners to retrofit their existing development	None	• Monitoring Projects (p. 72): Conduct one of the following projects…Inventory locations for potential retrofit projects in which decentralized, landscape-based stormwater retention units can be installed; or… • Permittees shall complete the selected geomorphic project • Additional retrofitting requirements are specified for Bay Area pollutants of concern (e.g., PCBs and Hg)

Attachment C: CASQA Comments on Phase II General Permit Deadlines*

Permit Section	Page of Permit	Action or Deliverable	Further Description	Draft Permit Deadlines (June 7, 2011)	CASQA Recommendations
A.1	13	File NOI and pay fee		…within two months of the General Permit effective date (May 15, 2012).	…within two months of the General Permit effective date ~~(May 15, 2012)~~.
E.4.a.(i)	19	Establishing/Obtaining Legal Authority	Review and revise relevant ordinances or other regulatory mechanisms, or adopt any new ordinances or other regulatory mechanisms, to obtain adequate legal authority …….	By May 15, 2013……	~~By May 15, 2013~~ Within two years of the effective date of the Permit…… [Note - one year is not long enough to establish legal authority]
E.4.b.(iii)	21	Submittal of Statement Certifying Legal Authority	Submit a statement signed by legal counsel and authorized signatory certifying the Permittee has adequate legal authority……..	September 15, 2013 (in online annual report)	…~~by September 15, 2013~~ As a part of the second annual report…… [Note - this was extended to the second year to align with the timeline in E.4.a.(i)]
E.4.c.(iii)	23	Enforcement Response Summary	Submit an Enforcement ~~Response Plan~~ summary summarizing enforcement activities including……..	September 15, 2013 (in online annual report - and annually thereafter)	1) Modify "Enforcement Response Plan" to enforcement summary" 2) Modify the following text …~~by September 15, 2013~~ As a part of the third annual report and annually thereafter…… [Note - this was extended to the third year to align with the timeline in E.4.a.(i)]
E.4.d.(iii)	24	Summary of Annual Fiscal Analysis	Submit a summary of annual fiscal analysis ……..	September 15, 2013 (in online annual report - and annually thereafter)	Recommend deletion of this provision
E.5.a.(v)	25	Summary of Elected Compliance Options (and written documentation as needed)	Identify which compliance options will be used to comply with each of the education and outreach requirements……..	September 15, 2013 (in online annual report)	…~~by September 15, 2013~~ As a part of the first annual report……
E.5.b.(i)	26	Develop and Implement a Public Outreach and Education Program	Develop and implement a comprehensive storm water public outreach program…….	By May 15, 2013……	[Note - CASQA recommends phasing: 1) Development of the stormwater message within two years after effective date.....; 2) Development of the materials to support the program within three years after the effective date..... 3) Identification of ways in which the public can participate in the program within three years after the effective date.....; 4) Distribution of public education materials within four years after the effective date.....; 5) Development of the message for pesticides, fertilizer, and herbicides within four years of the effective date.....; 6) Development of the approach for school-age children within four years after.....; 7) Outreach to charity car washes, mobile cleaners, and landscaping operations wthin five years after....
E.5.b.(iii)	28	Report of Public Education Program Progress	Report on the public education strategy and general program development and progress……	September 15, 2013 (in online annual report - and annually thereafter)	…~~by September 15, 2013~~ As a part of the first annual report and annually thereafter…..
E.5.b.(iii)	28	Report of Public Awareness and Behavior	Summarize changes in public awareness and behavior resulting from the the implementation of the program or any modifications.	September 15, 2017 (in online annual report and every five years thereafter)	…~~by September 15, 2017~~ As a part of the fifth annual report under this Permit and every five years thereafter…..
E.5.c.(i)	28	Develop and Implement an Industrial/Commercial Outreach and Education Program	Develop and implement a Comprehensive Industrial/Commercial Outreach and Education Program……	May 15, 2013	~~By May 15, 2013~~ See E.5.b.(i) above
E.5.c.(iii)	30	Report of Industrial/Commercial Outreachand Education Program Progress	Report program progress and mechanisms used for outreach and education…….	September 15, 2013 (in online annual report - and annually thereafter)	…~~by September 15, 2013~~ As a part of the first annual report and annually thereafter…..
E.5.d.(i)	31	Develop and Implement a Construction Outreach and Education Program	Develop and implement a construction outrach and education program for construction sites smaller than one acre…….	May 15, 2013	~~By May 15, 2013~~ See E.5.b.(i) above
E.5.d.(iii)	32	Report of Construction Outreachand Education Program Progress	Report program progress and mechanisms used for outreach and education……	September 15, 2013 (in online annual report - and annually thereafter)	…~~by September 15, 2013~~ As a part of the first annual report and annually thereafter…..
E.6.d(i)	32	Involvement of Public in Program Planning and Implementation	Involve the public in the planning and implementation of the activities related to the development and implementation of the program…..	By May 15, 2013……	~~By May 15, 2013~~ See E.5.b.(i) above
E.6.d(iii)	33	Report of Public Involvement Program Progress	Report will describe the public involvement program and summarize the MS4s efforts related to facilitating public involvement……..	September 15, 2013 (in online annual report - and annually thereafter)	…~~by September 15, 2013~~ As a part of the first annual report and annually thereafter…..
E.7	33	Compliance Tiers	c) Renewal Traditional Small MS4 Permittees	- By May 15, 2013 comply with Sections E.7.e By May 15, 2014 comply with Sections E.7.a, b, c, & f. - By May 15, 2015 compl with Section E.7.d	- By ~~May 15, 2013~~ Within one year of the effective date of the permit, comply with Sections E.7.e - By ~~May 15, 2014~~ Within two years of the effective date of the permit, comply with Sections E.7.a, b, c, & f. - By ~~May 15, 2015~~ Within three years of the effective date of the permit, comply with Section E.7.d
E.7.a.(i)	34	Development of MS4 Map	Maintain an up-to-date and accurate storm drain map within GIS……	May 15, 2014	~~By May 15, 2014~~ Within two years of the effective date of the Permit……
E.7.a.(iii)	34	MS4 Map	Submit the updated map of the MS4 annually.	September 15, 2014 (in online annual report and annually thereafter)	…~~by September 15, 2014~~ As a part of the second annual report and annually thereafter…..
E.7.b.(i)	34	Development of Priority Areas	Develop a list of priority areas likely to have illicit discharges…..	May 15, 2014	~~By May 15, 2014~~ Within two years of the effective date of the Permit……
E.7.b.(iii)	35	Report on Priority Areas	Submit basis for selection of each priority area and create a list of all priority areas identified in the system…..	September 15, 2014 (in online annual report and annually thereafter)	…~~by September 15, 2014~~ As a part of the second annual report and annually thereafter…..
E.7.c.(i)	35	Develop and Implement Field Screening Program	Develop and implement a dry weather field screening and analytical monitoring program procedures to detect and eliminate illicit connections and illicit discharges…..	May 15, 2015	~~By May 15, 2015~~ Within three years of the effective date of the Permit……

Attachment C: CASQA Comments on Phase II General Permit Deadlines*

Permit Section	Page of Permit	Action or Deliverable	Further Description	Draft Permit Deadlines (June 7, 2011)	CASQA Recommendations
E.7.c.(iii)	36	Report on Field Screening Program	Submit a report summarizing the field screening and analytical monitoring program procedures, including a summary of the field screening and illicit discharge investigatin results……..	September 15, 2015 (in online annual report and annually thereafter)	…~~by September 15, 2015~~ As a part of the third annual report and annually thereafter…..
E.7.d.(i)	36	Development of Illicit Discharge Source Investigation Procedures	Develop written procedures for conducting investigations into the source of all illicit discharges, including procedures to eliminate such discharges once located…..	May 15, 2016	~~By May 15, 2016~~ Within four years of the effective date of the Permit……
E.7.d.(iii)	37	Reporting of Illicit Discharge Trached investigations	Report on all tracked investigations, including date of reported discharge, date of investigations, results, follow-ups, investigation summaries, confirmation of eliminations, and date of investigation closure…	"annually"	As a part of the fourth annual report and annually thereafter…..
E.7.e.(i)	37	Development of Spill Response Plan	Develop and implement a spill response plan…..	May 15, 2013	~~By May 15, 2013~~ Within one year of the effective date of the Permit……
E.7.e.(iii)	38	Spill Response Plan	Submit the spill response plan and summaries annually thereafter.	September 15, 2013 (in online annual report - and annually thereafter)	…~~by September 15, 2013~~ As a part of the first annual report and annually thereafter…..
E.7.f.(i)	38	Develop and Implement a Illicit Discharge Training Program	Develop and implement a training program for all permittee staff …..	May 15, 2015	~~By May 15, 2015~~ Within three years of the effective date of the Permit……
E.7.f.(iii)	38	Documentation and Reporting of Training	Document and maintain records of training provided and the staff members trained.	"annually"	As a part of the third annual report and annually thereafter…..
E.8	38	Compliance Tiers	c) New Traditional Small MS4 Permittees	- By May 15, 2013 comply with Sections E.8.a, d, and e - By May 15, 2014 comply with Sections E.8. b and c	- By ~~May 15, 2013~~ Within one year of the effective date of the permit, comply with Sections E.8.a, d, and e - By ~~May 15, 2014~~ Within two years of the effective date of the permit, comply with Sections E.8. b and c.
E.8.a.(ii)	39	Inventory of Construction Sites	Complete and begin to maintain an inventory of all grading and construction activity resulting in a land disturbance of 1 acre or more or less than 1 acre if part of a larger development…	August 15, 2012	~~August 15, 2012~~ Within 6 months of the effective date of the permit…..
E.8.b.(i)	40	Development of Construction Plan Review	Develop procedures to review and approve relevant construction plan documents…..	By May 15, 2013……	~~By May 15, 2013~~ Within one year of the effective date of the Permit……
E.8.b.(iii)	40	Summary of Review Procedures	Summarize construction plan and approval review procedures…..	September 15, 2013 (in online annual report - and annually thereafter)	…~~by September 15, 2013~~ As a part of the first annual report and annually thereafter…..
E.8.c.(I)	41	Establishment of Legal Authority to Inspect and Enforce Construction Projects	Use legal authority to implement procedures for inspecting public and private construction projects and conducting enforcement of the code if necessary…..	May 15, 2014	~~By May 15, 2014~~ Within two years of the effective date of the Permit……
E.8.c.(iii)	43	Report of Construction Activities	Summarize the number and type of active construction sites, the number of inspections, the number and percent of violations……..	September 15, 2014 (in online annual report and annually thereafter)	…~~by September 15, 2014~~ As a part of the second annual report and annually thereafter…..
E.8.d.(iii)	44	Report of Permittee Staff Training	Provide a summary of the training held, who attended……	September 15, 2014 (in online annual report and annually thereafter)	…~~by September 15, 2014~~ As a part of the second annual report and annually thereafter…..
E.8.e.(iii)	45	Report of Construction Site Operator Eductaion	Regarding education of construction site operators,submit the training topics covered, dates of training…..	September 15, 2015 (in online annual report and annually thereafter)	…~~by September 15, 2015~~ As a part of the third annual report and annually thereafter…..
E.9	45	Compliance Tiers	c) Renewal Traditional Small MS4 Permittees	- By May 15, 2013 comply with Sections …. - By May 15, 2014 comply with Sections ….	- By ~~May 15, 2013~~ Within one year of the effective date of the permit, comply with Sections..... - By ~~May 15, 2014~~ Within two years of the effective date of the permit, comply with Sections .....
E.9.a.(i)	46	Development of Inventory of Permittee-owend and Operated Facilities	Develop and maintain an inventory of Permittee-owned or operated facilities within their jurisdiction that are a threat to water quality…….	By May 15, 2013……	~~By May 15, 2013~~ Within one year of the effective date of the Permit……
E.9.a.(iii)	46	Inventory Reporting	Submittal of an up-to-date inventory	September 15, 2014 (in online annual report and annually thereafter)	…~~by September 15, 2014~~ As a part of the second annual report and annually thereafter…..
E.9.b.(i)	47	Permittee-owned or Operated Facility Map	Submit map of the area covered by the MS4 Permit and identify where permittee-owned or operated facilities are located…..	By May 15, 2013……	~~By May 15, 2013~~ Within one year of the effective date of the Permit……
E.9.b.(iii)	47	Facility Map	Submittal of an up-to-date map. Map need only be submitted in subsequent years if information has changed.	September 15, 2013 (in online annual report - and annually thereafter)	…~~by September 15, 2013~~ As a part of the first annual report and annually thereafter…..
E.9.c.(i)	47	Assessment of Pollutant Discharge Potential	Conduct comprehensive inspection and assessment of pollutant discharge potential…..	May 15, 2014	~~By May 15, 2014~~ Within two years of the effective date of the Permit……
E.9.c.(iii)	48	Report on Assessment	Submittal of results of assessment, and identified deficiencies, and corrective actions taken……	September 15, 2014 (in online annual report)	…~~by September 15, 2014~~ As a part of the second annual report …..
E.9.d.(i)	48	Development of Stormwater Pollution Prevention Plan	Develop and implement SWPPP for all pollutant hotspots…..	May 15, 2015	~~By May 15, 2015~~ Within four years of the effective date of the Permit…… [Note - this timeline was extended to allow the time necessary to complete this task]
E.9.d.(iii)	48	Summary of SWPPPs	Submit summary of the most up-to-date SWPPPs developed for pollutant hot spots.	September 15, 2015 (in online annual report and annually thereafter)	…~~by September 15, 2015~~ As a part of the fourth annual report and annually thereafter….. [Note - this timeline was extended to allow the time necessary to complete this task]
E.9.e.(i)	48	Inspection of Permittee-owned and Operated Facilities	Start conducting regular inspections of permittee-owned and operated facilities….	May 15, 2016	~~By May 15, 2016~~ Within five years of the effective date of the Permit…… [Note - this timeline was extended to allow the time necessary to complete this task]
E.9.e.(iii)	49	Inspection Report	Submit summary of inspections, including total number of facilities requiring inspection, number of facilities inspected…….	September 15, 2016 (in online annual report and annually thereafter)	…~~by September 15, 2016~~ As a part of the fifth annual report and annually thereafter….. [Note - this timeline was extended to allow the time necessary to complete this task]

Attachment C: CASQA Comments on Phase II General Permit Deadlines*

Permit Section	Page of Permit	Action or Deliverable	Further Description	Draft Permit Deadlines (June 7, 2011)	CASQA Recommendations
E.9.f.(i)	49	Assessment of Storm Drain System	Develop and implement procedures to assess and prioritize the MS4 storm drain system……	May 15, 2015	~~By May 15, 2015~~ Within five years of the effective date of the Permit…… [Note - this timeline was extended to allow the time necessary to complete this task]
E.9.f.(iii)	50	Procedures and Prioritization list or Summary Report of Coordination	Submit procedures and prioritization list, If flood conveyance management is undertaken by another entity, submit a summary report of coordination.	September 15, 2015 (in online annual report and annually thereafter)	…~~by September 15, 2015~~ As a part of the fifth annual report and annually thereafter….. [Note - this timeline was extended to allow the time necessary to complete this task]
E.9.g.(i)	50	Maintenance of Storm Drain system	Begin maintenance of all high priority storm drain systems….	May 15, 2016	~~By May 15, 2016~~ Within five years of the effective date of the Permit…… [Note - this timeline was extended to allow the time necessary to complete this task]
E.9.g.(iii)	50	Annual Report	Include a summary of the storm sewer maintenance….	September 15, 2015 (in online annual report and annually thereafter)	…~~by September 15, 2015~~ As a part of the fifth annual report and annually thereafter….. [Note - this timeline was extended to allow the time necessary to complete this task]
E.9.h.(i)	51	Assesment of O&M Activities	Assess operations and maintenance activities for potential to discharge pollutants in stormwater and inspect all BMPs on a quarterly basis….	May 15, 2014	~~By May 15, 2014~~ Within four years of the effective date of the Permit…… [Note - this timeline was extended to allow the time necessary to complete this task]
E.9.h.(iii)	51	Report on O&M Activity Assessment	Submit a list of BMPs and associated pollutants for each O&M activity, a list of BMPs applied during permittee O&M activities, and a log of BMP inspections.	September 15, 2014 (in online annual report and annually thereafter)	…~~by September 15, 2014~~ As a part of the fourth annual report and annually thereafter….. [Note - this timeline was extended to allow the time necessary to complete this task]
E.9.i.(ii)	52	Water Quality and Habitat Enhancement Process	Develop and implement a process to incorporate water quality and habitat enhancement features in the design of all new and retrofitted flood management projects that are associated with the MS4 or that discharge to the MS4	May 15, 2014	Recommend deletion of this provision
E.9.i.(ii)	52	Assess and Implement WQHEP at Flood Management Facilities	Assess at least two existing flood management projects per year to determine whether changes or additions can be made to enhance water quality and habitat functions…….	May 15, 2015 and annually thereafter	Recommend deletion of this provision
E.9.i.(iii)	52	Summary Report on Water Quality and Habitat Enhancement Process	Submit a summary of the development and implementation process to incorporate water quality and habitat enhancement design into new and retrofitted flood management projects.	September 15, 2014 (in online annual report)	Recommend deletion of this provision
E.9.i.(iii)	52	List of Flood Management Projects	Submit a list of new and existing flood management projects and consideration of BMPs.	September 15, 2015 (in online annual report and annually thereafter)	Recommend deletion of this provision
E.9.j.(i)	52	Pesticide Herbicide and Fertilizer Application Management Program	Develop and implement program on pollution prevention and source control BMPs to reduce pesticides, herbicides and fertilizers used in Permitee operations…	By May 15, 2013……	~~By May 15, 2013~~ Within three years of the effective date of the Permit…… [Note - this timeline was extended to allow the time necessary to complete this task]
E.9.j.(iii)	53	Report on Pesticide, Herbicide and Fertilizer Application Management Program	Submit an evaluation of materials used and activities performed and a list of practices implemented to minimize p/h/f use….	September 15, 2013 (in online annual report)	…~~by September 15, 2013~~ As a part of the third annual report….. [Note - this timeline was extended to allow the time necessary to complete this task]
E.9.j.(iii)	53	Subsequent Reports on Pesticide, Herbicide and Fertilizer Application Management Program	Submit a report using the metric defined in the first year report to demonstrate reductions in pesticide, herbicide, and fertilizer application	September 15, 2013 (in online annual report - and annually thereafter)	…~~by September 15, 2013~~ As a part of the third annual report….. [Note - this timeline was extended to allow the time necessary to complete this task]
E.9.k.(iii)	54	Report on Training and Education	Summarize oversight procedures and identify and track all personnel requiring training…..	September 15, 2013 (in online annual report - and annually thereafter)	…~~by September 15, 2013~~ As a part of the second annual report and annually thereafter….. [Note - this timeline was extended to allow the time necessary to complete this task]
E.10.(i)	54	Adoption of Trash Abatement Plan	Develop implement and enforce trash abatement plan…	May 15, 2016	Recommend deletion of this provision
E.10. (ii).(b)	54	Require Installation of Trash Capture Devices and Maintenance Measures	Require installation of trach capture structural controls and enhanced maintenance measures….	May 15, 2016	Recommend deletion of this provision
E.10.(iii)	55	Submittal of Trash Abatement Plan	Submit Trash Abatement Plan that includes ordinance and summary of commercial/ retail/ wholesale facilities with trash capture structural controls.	September 15, 2016 (in online annual report)	Recommend deletion of this provision
E.11.a.	55	Industrial/Commercial Inventory	Create prioritiized inventory of all industrial/commercial facilities/sources within jurisdiction with discharge potential….	By May 15, 2013……	~~By May 15, 2013~~ Within five years of the effective date of the Permit…… [Note - this timeline was extended to allow the time necessary to complete this task]
E.11.b.(i)	58	Notification of industrial/commercial owner/operaters of BMP requirements	Require industrial and commericial facilities listed in E.11.a inventory ot select, install, implement, and maintain BMPs. …	May 15, 2014	~~By May 15, 2014~~ Within two years of the effective date of the Permit……
E.11.b.(iii)	61	Report on Industrial/Commercial Notification	Submit a list of Industrial/Commercial facilities notified of storm water requirements for BMPs.	September 15, 2014 (in online annual report)	…~~by September 15, 2014~~ As a part of the second annual report…..
E.11.c.(i)	61	Industrial/Commercial Facility Inspection Program	Develop and implement a program to inspect all commercial and industrial facilities included in its inventory…	May 15, 2016	Recommend deletion of this provision
E.11.c.(iii)	61	Report of I/C Facility Inspection Program Progress	Submit an update of program implementation and the Industrial and Commercial Facility Inspection Plan	September 15, 2015 (in online annual report)	Recommend deletion of this provision
E.11.d.(ii)	61	Industrial and Commercial Facility Inspections	Begin to conduct inspections of industrial aand commercial facilities….	May 15, 2016	Recommend deletion of this provision
E.11.d.(iii)	62	Industrial and Commercial Facility Inspection Report	List the facilities and inspection frequency	September 15, 2016 (in online annual report and annually thereafter)	Recommend deletion of this provision
E.11.f.(i)	63	Provide Staff Training	Ensure all staff or consultants whose primary job duries are implementing the industrial/commercial stormwater program are trained….	May 15, 2016	~~By May 15, 2016~~ Within four years of the effective date of the Permit……

Attachment C: CASQA Comments on Phase II General Permit Deadlines*

Permit Section	Page of Permit	Action or Deliverable	Further Description	Draft Permit Deadlines (June 7, 2011)	CASQA Recommendations
E.11.f.(iii)	63	Staff Training Report	Document and maintain records of the staff trained, the training provided, and the results of surveys conducted …..	September 15, 2016 (in online annual report and annually thereafter)	…~~by September 15, 2016~~ As a part of the fourth annual report and annually thereafter…..
E.12.a.(iii)	65	Summary Report on Compliance with Phase I MS4 Post-Construction Requirements	Submit a report summarizing steps to be taken to require new and redevelopment projects to comply iwht the Phase I MS4 post-construction requirements ….	September 16, 2013 (in online annual report and annually thereafter)	…~~by September 15, 2013~~ As a part of the first annual report and annually thereafter…..
E.12.b.1.(i)	65	Watershed Baseline Characterization	Conduct watershed characterization and identify dominant watershed processes potentially affected by changes in storm water runoff caused by new and redevelopment project…	May 12, 2015	~~By May 12, 2015~~ Within three years of the effective date of the Permit……
E.12.b.1.(iii)	66	Watershed Baseline Characterization Report	Submit watershed characterization and identification of dominant watershed processes potentially affected by changes in storm water runoff caused by new and redevelopment projects.	September 15, 2015 (in online annual report)	…~~by September 15, 2015~~ As a part of the fourth annual report…..
E.12.b.2.(i)	66	Development of Watershed Sediment Budgets	Develop sediment budgets for each subwatershed wholly or partially within their jurisdictions	By May 1, 2013……	~~By May 1, 2013~~ Within one year of the effective date of the Permit……
E.12.b.2.(iii)	66	Watershed Sediment Budget Reporting	Submit sediment budgets for each subwatershed	September 15, 2015 (in online annual report)	…~~by September 15, 2015~~ As a part of the fourth annual report…..
E.12.b.3.(i)	67	Regulate Stormwater Quality Runoff	Regulate storm water quality runoff for regulated projects described in E.12.b.3.(i)	May 15, 2014	~~By May 12, 2014~~ Within two years of the effective date of the Permit……
E.12.b.4.(ii)	70	Interim Hydromodification Management	Implement Interim Hydromification Standards ….	May 15, 2014	Recommend deletion of this provision
E.12.b.4.(iii)	72	Interim Hydromodification Management Report	Submit verification that the Interim Hydromodification Management procedures are being implemented.	September 15, 2014 (in online annual report)	Recommend deletion of this provision
E.12.b.5.(i)	72	Long Term Watershed Process Mangement	Develop and implement numeric criteria to protect watershed processes affected by storm water on all applicable new and redevelopment projects….	May 15, 2016	~~By May 15, 2016~~ Within four years of the effective date of the Permit……
E.12.b.5.(iii)	72	Summary of Numeric Criteria	Submit numeric criteria to protect watershed processes affected by storm water on all applicable new and redevelopment projects.	September 15, 2015 (in online annual report)	…~~by September 15, 2015~~ As a part of the fourth annual report….. [Note - this date was originally 2015, but it should have been 2016 so that it aligns with the task that it is reporting on]
E.12.b.6.(ii)	72	Numeric Criteria Implementation Strategy	Adopt enforceable mechanisms for implementing numeric criteria to protect watershed processes affected by storm water on all applicable new and redevelopment projects….	May 15, 2017	~~By May 15, 2017~~ Within five years of the effective date of the Permit……
E.12.b.6.(iii)	73	Numeric Criteria Implementation Strategy Submittal	Submit strategy for implementing numeric criteria for protecting watershed processes affected by storm water in new and redevelopment projects.	September 15, 2017 (in online annual report)	…~~by September 15, 2017~~ As a part of the fifth annual report…..
E.12.b.7.(iii)	73	Watershed-Based Stormwater Management	Submit plan with NOI including identified gaps/impediments (to development methods protecting the watershed) and how/when the city plans to adjust their regulations accordingly.	September 15, 2017 (in online annual report)	…~~by September 15, 2017~~ As a part of the fifth annual report…..
E.12.b.8.(i)	73	Implementation of O&M Verification Program	Implement an O&M verification program….	May 15, 2014	~~By May 12, 2014~~ Within two years of the effective date of the Permit……
E.13.(iii)	78	Receiving Water Monitoring Report	Report on the status of receiving water monitoring program….	September 15, 2013 (in online annual report and annually thereafter)	…~~by September 15, 2013~~ As a part of the first annual report and annually thereafter…..
E.13.(iii)	78	Water Quality Monitoring Plan (if participating in collaborative effort)	Submit water quality monitoring plan…	September 15, 2014 (in online annual report)	[Note - CASQA recommends phasing: 1) Development of the monitoring plan within three years after effective date of the permit; 2) Implementation of the monitoring plan within four years of the effective date of the permit; 3) Submit the water quality monitoring plan within five years after the effective date of the permit
E.13.(iii)	78	Water Quality Monitoring Plan (if not participating in collaborative effort)	Submit water quality monitoring plan…	September 15, 2013 (in online annual report)	[Note - CASQA recommends phasing: 1) Development of the monitoring plan within two years after effective date of the permit; 2) Implementation of the monitoring plan within three years of the effective date of the permit; 3) Submit the water quality monitoring plan within four years after the effective date of the permit
E.14.a.(iii)	88	Program Effectiveness Assessment and Improvement Plan	Submit the Program Effectiveness Assessment and Improvement Plan summarizing short and long-term progress of the SWMP….	September 15, 2013 (in online annual report)	…~~by September 15, 2013~~ As a part of the first annual report …..
E.14.b.(i)	88	BMP Condition Assessment	Inventory and assess the maintenance condition of urban storm water BMPs (including BMPs used for flood control) within the Permittee's jurisdiction….	May 12, 2015	~~By May 12, 2015~~ Within three years of the effective date of the Permit……
E.14.b.(iii)	89	BMP Inventory Summary	Submit a summary of methodology for inventory, mapping and determination of condition…..	September 15, 2015 (in online annual report)	…~~by September 15, 2015~~ As a part of the fourth annual report…..
E.14.c.(iii)	90	Quantification Report of Annual Subwatershed Pollutant Loads	Quantify annual subwatershed pollutant loadings for nutrients, bacteria, metals, and trash. Use CWP Watershed Treatment Model. Details provided in E.14.c.(i) and (ii)	September 15, 2017 (in online annual report)	Recommend deletion of this provision
E.14.c.(iii)	90	Quantification Report of Annual Subwatershed Pollutant Loads	Quantify annual subwatershed pollutant loadings for nutrients, bacteria, metals, and trash. Use CWP Watershed Treatment Model. Details provided in E.14.c.(i) and (ii)	September 15, 2015 (in online annual report)	Recommend deletion of this provision
E.14.d.(ii)	91	Implementation of Maintenance for High Priority BMPs	Commence maintenance for highest priority BMPs identified in the BMP Condition Assessment. 20% of the total number of BMPs shall be maintained annually.	May 15, 2016	~~By May 15, 2016~~ Within four years of the effective date of the Permit……
E.14.d.(ii)	91	Completion of Maintenance	Maintenance of high priority BMPs shall be completed	May 15, 2017	~~By May 15, 2017~~ Within five years of the effective date of the Permit……
E.14.d.(iii)	91	Summary of BMP Maintenance	Summarize maintenance activities of highest priority BMPs	September 15, 2016 (in online annual report)	…~~by September 15, 2016~~ As a part of the fourth annual report…..
E.14.d.(iii)	91	Summary of BMP Maintenance Completion	Summarize completion of maintenance of high priority BMPs	September 15, 2017 (in online annual report)	…~~by September 15, 2017~~ As a part of the fifth annual report…..

* Timeline does not encompass all the recommendations associated with requirements. This attachment (Attachment C) is intended to supplement the recommendations provided in Attachment A.