THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
ACTION AGENDA SUMMARY

DEPT: Public Works BOARD AGENDA # C-3

Urgent ☐ Routine ☑ AGENDA DATE February 10, 2015

CEO Concurs with Recommendation YES ☐ NO ☐ (Information Attached) 4/5 Vote Required YES ☐ NO ☑

SUBJECT:

Approval to Adopt the Implementation Plan for the Phase II Municipal Separate Storm Sewer System National Pollutant Discharge Elimination System Permit; Approve Amendment 1 to the Agreement for Professional Design Services with WGR Southwest; and Adopt a Fiscal Year 2014 - 2015 Financial Plan for Implementation

STAFF RECOMMENDATIONS:

1. Adopt the Implementation Plan for the Phase II Municipal Separate Storm Sewer System National Pollutant Discharge Elimination System Permit (Permit) as prepared by WGR Southwest, dated February 2, 2015.

2. Approve an Amendment 1 to the Agreement for Professional Design Services with WGR Southwest in the amount of $51,943.

3. Authorize the Public Works Director to sign the contract with WGR, Southwest.

(Continued Page 2)

FISCAL IMPACT:

The Department of Public Works has spent $24,263 to date year one of the permit renewal, and $78,632 for the contract with WGR Southwest (WGR). The total estimated cost for Fiscal Year (FY) 2014-2015 is $114,826, and includes State Permit costs for FY 14-15 in the amount of $29,133.00, additional contract costs with WGR for $51,943 to perform tasks necessary for Permit Year 2, and $33,750 for a Personal Services Contract to help manage the permit implementation for the remainder of this permit year.

(Continued Page 2)

BOARD ACTION AS FOLLOWS:

No. 2015-57

On motion of Supervisor Monteith , **Seconded by Supervisor** Chiesa
and approved by the following vote,
Ayes: Supervisors: O'Brien, Chiesa, Monteith, De Martini, and Chairman Withrow
Noes: Supervisors: None
Excused or Absent: Supervisors: None
Abstaining: Supervisor: None

1) X **Approved as recommended**
2) _____ **Denied**
3) _____ **Approved as amended**
4) _____ **Other:**

MOTION:

Christine Ferraro

ATTEST: CHRISTINE FERRARO TALLMAN, Clerk **File No.**

STAFF RECOMMENDATIONS (Continued):

4. Designate the Chief Executive Officer as the Legally Responsible Person for the Permit.

5. Adopt the Financial Plan for Implementation in Fiscal Year 2014 - 2015.

6. Designate the Director of Public Works as the Duly Authorized Representative.

FISCAL IMPACT (Continued):

Previously, there has not been a General Fund (GF) contribution for the permit or the contract with WGR. It is recommended that beginning in FY 14-15 permit costs will be shared between the GF/other funds and Road funds based upon the calculated responsibility split moving forward.

Based upon WGR's analysis, 50% of program implementation and permitting is an eligible expense by Roads revenue sources. Therefore, the calculated responsibility for each department is split 50/50 between Road Funds and other funding sources. This represents a $57,413 commitment from Public Works and a $57,413 collective effort from all partner departments. The calculated responsibility for each partner department is shown in the following table, funded by Departmental Fund Balance or Net County Cost Savings.

Department	Partner % Share	FY 14-15 Cost
DER	23 %	$ 13,205
AG Commissioner	9 %	5,167
GSA Facilities Maint.	48 %	27,558
Planning	11 %	6,315
Parks	9 %	5,168
Total FY 14-15	**100 %**	**$ 57,413**

The future needs for the stormwater program will be identified in the participating departments normal budget process for Fiscal Year 2015-2016 and future years.

DISCUSSION:

In 1990, the U.S. Environmental Protection Agency (EPA) established a set of rules which started Phase I of the National Pollutant Discharge Elimination System (NPDES) storm water program. The NPDES regulates stormwater discharges from municipal separate storm sewer systems (MS4). MS4 permits were issued in two phases:

- The large Cities were all regulated in Phase I in the 1990s.
- Stanislaus County as a rural county was part of the Phase II Permit which was adopted in 2003 by the State Water Resources Control Board.

The State of California, State Water Resources Control Board (SWRCB) has been working on an update to the existing 2003 permit for several years. The new Phase II permit with the SWRCB was adopted in February 2013 and effective July 1, 2013. This permit is a phased implementation; we are in year 2 of this 5-year permit. Prior to 2013, Public Works had solely implemented the 2003 MS4 Permit.

The following are a summary of the major changes that are required with the new permit from the terms of the old permit:

- The Legally Responsible Person (LRP) has and will maintain full legal authority to implement and enforce each of the requirements contained in the Order, which recommends that the Principal Executive Officer (CEO) or Ranking Elected Official (Chairman of the Board) be the LRP. The LRP can designate a Duly Authorized Representative, which is proposed to be the Public Works Director.
- Need to modify and/or adopt new ordinances for stormwater to be in compliance with the 2013 permit.
- Requires development of an Enforcement Response Plan for the permit.
- Education and outreach now need measureable goals and performance measures within 5 categories.
- Required Illicit Discharge Detection and Elimination (IDDE) - Outfall mapping, Facility Inventory, Field Sampling, Source Investigations & Spill response plans.
- Additional Construction Site Stormwater Runoff Control - Construction Site Inventory & construction inspection for stormwater.
- Requires management of all County Facilities - GSA / Parks / Public Words - preparation of Stormwater Pollution Prevention Plans (SWPPP) for all County owned facilities.
- Requires Post Construction Stormwater Management Program - Low Impact Development Standards need to be adopted.
- Requires tracking private Operations and Maintenance (O&M) for on-site control measures.
- Water Quality / Total Maximum Daily Load (TMDL) Requirements for Tuolumne and San Joaquin Rivers - will propose to team with regional partners, Modesto, Turlock, Oakdale.
- Grading Permits are now necessary for very small projects, no lower bound on size of disturbance that we are supposed to track.
- More rigorous documentation of our maintenance on high priority storm drainage systems.
- Increased monitoring and management of installed post-construction stormwater treatment controls.
- Hydromodification and Low Impact Development concepts are now part of the permit process, where before it was pre- and post-construction runoff requirements.

The new permit has a much wider scope than the previous permit and requires a coordinated, County-wide response with several departments having a role in the implementation effort.

Public Works advertised a Request for Proposal (RFP) due on October 30, 2013, for a stormwater consultant to assist the County with an implementation plan. Four proposals were received, and based upon qualifications, WGR Southwest (WGR) of Lodi, California, was selected.

WGR was tasked with developing a cost effective, minimum, NPDES program for Stanislaus County. They were instructed to maximize opportunities for leveraging resources in overlapping areas. This included recommendations, timelines for implementation and which departments should be responsible for particular program elements.

WGR developed the Implementation Plan for the Phase II MS4 NPDES Permit, which is a phased approach for implementation. Each year has tasks and milestones that must be completed. The year 1 permit requirements that were required and completed in Fiscal Year (FY) 2013-2014 by Public Works were:

- A hybrid (regional and County effort) outreach program was selected;
- Development of a process to maintain spill response plans;
- Conducted a review of the County's landscape code; and
- Submitted the annual report.

Year 2 is a task intensive year within the permit. These tasks are to be completed by June 30, 2015, and the annual report submitted no later than October 15, 2015. The Year 2 permit requirements that are required and should be completed during Fiscal Year 2014-2015 are:

- Stanislaus County needs to modify our stormwater ordinances; and,
- Begin public outreach; and,
- Perform staff training on Phase II permit process; and,
- Complete public participation program; and,
- Map outfalls and conduct dry weather sampling (completed); and,
- Create industrial database, inspect construction sites (ongoing); and,
- Inventory all County facilities and create a map; and,
- Create procedures and document operations and maintenance for storm drain infrastructure, landscape design and maintenance tasks related to chemicals and runoff, begin post construction stormwater management program and submit program effectiveness assessment.

Multiple planning and program brainstorm sessions have been held with partner departments. The implementation strategy of the permit includes the following:

- The Chief Executive Officer be the Legally Responsible Person, and

the Public Works Director be designated as the Duly Authorized Representative.

- Public Works (PW) will continue to be the Lead Department for implementing the permit requirements which includes:
    - Data depository and lead department;
    - Prepare annual reports, program effectiveness, educate other departments, keep abreast of permit and regulatory requirements;
    - Illicit Discharge Detection and Elimination (IDDE) Detection, grading plan review, Total Maximum Daily Load (TMDL) monitoring, construction management and post-construction management;
    - Review grading and erosion control plans;
    - Maintain MS4 system within Stanislaus County; and
    - Coordinate outreach effort with effective partners, such as schools and library.
    - The level of effort for PW is estimated at 50% of the costs for implementing the permit.

- The Department of Environmental Resources will be the lead on performing public outreach and education related to spills, hazardous waste, illegal dumping, and general pollution prevention; which is a natural extension of the public outreach that they are currently performing. The level of effort here is estimated at 12% of the costs for implementing the permit.

- The Agricultural Commissioner is recommended to oversee the pesticide and herbicide program requirements as well as the required public outreach for those elements. The level of effort here is estimated at 4.5% of the costs for implementing the permit.

- The General Services Agency Facilities Maintenance Division will oversee the administration of the pollution prevention program for County owned/operated facilities. The level of effort here is estimated at 23.5% of the costs for implementing the permit.

- The Planning and Community Development Department Building Permits Division will maintain the inventory of regulated construction projects and an inventory of projects having to comply with the post-construction requirements. The level of effort here is estimated at 5.5% of the costs for implementing the permit.

- The Parks and Recreation Department will be responsible for the stormwater requirements for County Parks. The level of effort here is estimated at 4.5% of the costs for implementing the permit.

- Staff is recommending to continue to contract with WGR to perform year 2 tasks. These tasks include developing a standardized Post Construction Design Manual, provide a Public Outreach Plan, and to assist us with modifying our stormwater ordinance.

- Staff also recommends hiring a Personal Services Contract (PSC) to provide stormwater program management oversight. The stormwater program manager will be responsible to ensure the implementation of the permit requirements, which will include coordinating with all partner departments. The stormwater program manager will manage all elements of the stormwater program and be a resource for all departments in stormwater related issues.

Staff has recommended the following timeline for next steps to be in compliance with the MS4 Permit:

- Begin recruitment for a Personal Services Contract February 2015.
- Recommend approval for additional scope, cost and schedule in consultant contract by February 2015
- Develop a potential alternative funding strategy for stormwater in calendar year 2015, in coordination with CEO, County Counsel and PW.
- Year 2 implementation tasks completed by June 30, 2015, with the Annual Report filed by October 15, 2015. Should the Board of Supervisors approve this item in February, there is less than four months to complete many time intensive tasks.
- Year 3 through 5 tasks will be executed by the responsible departments with the yearly tasks completed by June 30 of that Fiscal Year, and the Annual Reports filed by October of the following year.

POLICY ISSUES:

The recommended actions are consistent with the Board's priorities of providing A Healthy Community, Effective Partnerships and A Well Planned Infrastructure System by adopting the Implementation Plan for the Phase II MS4 NPDES Permit that serves the citizens of Stanislaus County.

STAFFING IMPACT:

Public Works will continue to be the lead department for implementing the permit requirements, with support from the Chief Executive Office, County Counsel, Agricultural Commissioner's Office, Department of Environmental Services, General Services Agency, Department of Parks and Recreation, and the Department of Planning and Community Development. The recommendation also includes a Personal Services Contract to assist with training, coordination, and management of the permit in FY 14-15. It is anticipated that the PSC would be equivalent to an Assistant Engineer classification level in Public Works.

Approval to Adopt the Implementation Plan for the Phase II Municipal Separate Storm Sewer System National Pollutant Discharge Elimination System Permit; Approve Amendment 1 to the Agreement for Professional Design Services with WGR Southwest; and Adopt a Fiscal Year 2014 - 2015 Financial Plan for Implementation

CONTACT PERSON:

Matt Machado, Public Works Director. Telephone: (209) 525-4130.

ATTACHMENTS:

1. Amendment 1 to the Agreement for Professional Design Services
2. WGR Proposal for Permit Year 2
3. Implementation Plan for the Phase II MS4 NPDES Permit

DL/dm

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AMENDMENT NO. 1

Professional Design Services Agreement between County of Stanislaus and WGR Southwest, Inc.

Phase II – MS4 NPDES Permit -- Contract No. 9611

This Amendment is made and entered into this 10th day of February, 2015, in the City of Modesto, State of California, by and between the County of Stanislaus ("County") and WGR Southwest, Inc., ("Consultant"), for and in consideration of the promises, and the mutual promises, covenants, terms, and conditions, hereinafter contained.

WHEREAS, a Professional Design Services Agreement ("Agreement") was approved by the Purchasing Department in the amount of Seventy-Eight Thousand Six Hundred Thirty-Two Dollars ($78,632) for Phase II MS4 NPDES Permit.

WHEREAS, an increase of $51,943 to the original Agreement is necessary to cover additional work as stated in Exhibit "A", attached hereto and made a part of this Amendment.

$78,632	Original Agreement
+51,943	Amendment No. 1
$130,575	Revised Agreement

NOW THEREFORE, the parties agree as follows:

Section 1.1 Scope of Services is amended to include additional services as shown in Exhibit "A" attached hereto and made a part of this Amendment.

Section 2.1 Compensation is amended to include additional fees of $51,943 as shown in Exhibit "A" attached hereto and made a part of this Amendment. Consultant's compensation shall in no case exceed One Hundred Thirty Thousand Five Hundred Seventy-Five Dollars ($130,575).

IN WITNESS WHEREOF, the parties have executed this First Amendment effective on the date written above.

COUNTY OF STANISLAUS

By:_____
Matt Machado, Director
Department of Public Works

WGR SOUTHWEST, INC.

By:_____
John M. Teravskis, CPESC, QSP/QSD
Operating Manager
Senior Compliance Specialist

APPROVED AS TO FORM:
John P. Doering
County Counsel

By:_____
Thomas E. Boze
Deputy County Counsel

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WGR SOUTHWEST, INC.

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Operating Manager
Senior Compliance Specialist

APPROVED AS TO FORM:
John P. Doering
County Counsel

By: _____
Thomas E. Boze
Deputy County Counsel

WGR
Natural Resource Specialist Consultants

Exhibit A

October 9, 2014

Mr. David Leamon
Stanislaus County
1010 10th Street, Suite 4204
Modesto, CA 95354

RE: Proposal for Compliance Support for Year 2 of the Phase II MS4 NPDES Permit

Dear Mr. Leamon,

WGR Southwest, Inc. (WGR) is pleased to provide you with this proposal to provide support for the County's Phase II MS4 NPDES Permit compliance program. The following is a summary of the **new** activities required by the current Phase II MS4 permit for Year 2, for which WGR is able to supply support for the County. In addition, WGR is providing a cost proposal for general compliance support and project management for the implementation of the Phase II MS4 Permit. This proposal is organized into the following sections:

Section A: *A list of Year 2 Permit-Required Tasks*
Section B: *General Compliance Support and Project Management Tasks*
Section C: *Collaboration Tasks*

Section A: Year 2 Permit-Required Tasks for July 1, 2014 – June 30, 2015:

The following is a detailed summary of the **new** activities required by the permit during Year 2 in accordance with the Phase II MS4 permit as extracted from the Guidance Document that was submitted last year by the MS4 to the State Water Board. Please remember that many of the activities required in the previous permit are required to continue until newer requirements become effective in this permit (e.g. you must continue to perform construction inspections, require post-construction design standards on applicable projects, and perform outreach as was performed under the previous permit.)

Permit Section and Element		Compliance Year	Recommended Approach
E.6	PROGRAM MANAGEMENT ELEMENT		
E.6.a	Legal Authority (update or create ordinance)	2015	*WGR has developed a template ordinance and provided it to the County. We will assist the County with the process of revising the existing ordinances, obtaining public input, and preparing for presentation to management and County Board of Supervisors*
E.6.b	Certification		

E.7	**EDUCATION AND OUTREACH PROGRAM**		
E.7.a	**Public Outreach and Education**		
	(a) Develop and implement comprehensive education and outreach program	2015	*WGR is advocating that the County and other municipalities collaborate in the development of an Education & Outreach template that will be 80% complete and can be easily customized by each municipality. Please refer to Section C of this proposal. The County can customize the template plan using internal staff or WGR, as needed.*
	(d)Disseminate education materials to target audiences and translate as appropriate		
	(e)Utilize public input in developing outreach program		
	(g)Provide water efficient/ storm water friendly landscaping information		
	(h)Promote reporting of illicit discharges		
	(i)Provide pesticide/fertilizer application information		
	(j)Provide materials to school children		
	(k,l,m)Develop messaging to reduce discharges from organized car washes, mobile cleaning and pressure washing		
	(a) Annual Permittee Staff Training		
	Biennial employee training		
E.8	**PUBLIC INVOLVEMENT AND PARTICIPATION PROGRAM**		
	Develop program with input of the public and implement	2015	*The public involvement program will be developed in concept with the above described E&O program. As mentioned above, the County will need to customize the plan to incorporate County-specific public involvement opportunities. WGR can assist the County, as needed, to identify existing programs and events that can be used to meet this permit requirement.*
	(a) Develop Public Involvement strategy		
	(b) Consider Citizen Advisory Group		
	(c) Create Involvement Opportunities		
	(d) Ensure public can access info about program		
	(f) Engage in IRWMP or equivalent		
E.9	**ILLICIT DISCHARGE DETECTION AND ELIMINATION**		
E.9.a	**Outfall Mapping**		
	Create and maintain accurate outfall map including a site visit to each outfall	2015 (Summer 2014)	*These tasks will ultimately be performed with MS4 staff. But, during Year 2, WGR will most likely need to take the lead in this area to accomplish it before the rainy season. We will provide guidance, develop procedures for sampling, and provide sample kits, as needed.*
E.9.b	**Illicit Discharge Source/Facility Inventory**		
	Create inventory of all industrial/commercial facilities and update annually		
E.9.c	**Field Sampling to Detect Illicit Discharges**		
	Sample any flowing outfalls while conducting E.9.a		
	Conduct follow up investigation within 72 hours if action levels exceeded		
E.9.d	**Illicit Discharge Detection and Elimination Source Investigations and Corrective Actions**		
	Develop written procedures for investigations and corrective actions		
	Once source of discharge is identified, require responsible party to correct within 72 hours of notification and verify with follow-up investigation		

	Conduct follow up investigation within 72 hours if action levels exceeded		
E.10	**CONSTRUCTION SITE STORM WATER RUNOFF CONTROL PROGRAM**		
E.10.c	**Construction Site Inspection and Enforcement**		
	Inspect construction sites	2015	*Storm water compliance inspections of construction sites will need to be performed or supervised by a QSP. WGR can provide the QSP oversight to MS4 staff until they become QSPs or until the County's QSPs are trained. WGR can provide training, forms, and guidance to MS4 staff. Also, note that the construction inventory criteria changes once the new ordinances have been adopted. The MS4 will need to determine how they are going to track the smaller projects that will now need to be included on the inventory.*
E.11	**POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR PERMITTEE OPERATIONS PROGRAM**		
E.11.a	**Inventory of Permittee-Owned and Operated Facilities**	2015	*These tasks will most likely be performed predominately by MS4 staff using the Planning Department's ACCELA database. WGR can provide the procedures for assessing and prioritizing maintenance of storm drain systems. WGR will work with MS4 staff and provide guidance as needed.*
	Develop and maintain inventory of all permittee owned or operated facilities that are a potential threat to water quality		
E.11.b	**Map of Permittee-owned or Operated Facilities**		
	Develop a map of inventoried facilities		
E.11.f	**Storm Drain System Assessment and Prioritization**		
	Implement procedures to assess and prioritize maintenance of storm drain system infrastructure. Assign a priority to each facility based on accumulation of sediment, trash and/or debris		
E.11.j	**Landscape Design and Maintenance**		
	Implement a landscape design and maintenance program to reduce the amount of water, pesticides and fertilizers used by Permittees	2015	*WGR has prepared an overview presentation of the requirements of this area and it would be most likely very helpful for applicable MS4 staff (i.e. Public Works, DER/ Parks & Rec) to see the presentation. Much of this program will be implemented by MS4 staff, but WGR can help clarify the permit requirements, and provide direction for compliance with these permit requirements.*
	Evaluate use of pesticides, herbicides and fertilizers		
	Implement best practices to reduce pesticides and fertilizers		
	Proper disposal of unused chemicals		
	Evapo-based irrigation and rain sensors		
	Record amount of chemical usage		
E.12	**POST CONSTRUCTION STORMWATER MANAGEMENT PROGRAM**		
E.12.a	**Post-Construction Treatment Measures**	2015	*WGR is recommending a regional approach to the Post-Construction Storm Water Management Program. We are advocating that the County and other municipalities collaborate*
	Regulate development to comply with the following sections, E.12.b through E.12.l		
E.12.b	**Site Design Measures**		

	Require implementation of site design measures on projects that create or replace 2,500-5,000 SF impervious area (incl single family homes)		*in the development of a standardized Post Construction Design Manual (as required by the permit). The Design Manual will address all of the E.12 requirements and LID / hydromod design criteria. Not only will the MS4 be able to share costs with the other MS4s for the development of the manual, but the MS4 will also be able to share training costs in which applicable staff from all of the collaborating municipalities can participate in a single training event. Another advantage of a standardized Storm Water Construction Design Manual is that developers in the region will have a consistent standard and expectation in all of the municipalities. Please refer to Section C of this proposal for the collaboration cost quote.*
E.12.c	**Regulated Projects**		
	Implement standards on projects that create or replace >5,000 SF impervious area, aka Regulated Projects		
	Road and Utility Projects creating 5,000 sf or more that are public or fall under planning authority of a MS4 shall comply with LID except 85th % can follow EPA Guidance on green infrastructure		
E.12.d.	**Source Control Measures** - Regulated Projects shall implement source control measures		
E.12.e	**LID Standards** - all Regulated Projects shall implement LID standards to treat storm water and provide baseline hydromod mgmt to meet numeric sizing criteria under E.12.e(ii)c		
E.12.h	**Operation and Maintenance of Post-Construction Storm Water Management Measures**		
	Implement an O&M verification program for storm water treatment and baseline hydromod (defined in E.12.e.ii.f) on all regulated projects		
E.12.j	**Planning and Development Review Process**		
	Conduct review using an existing guide such as Municipal Regulatory Update Assistance Program		
	Complete any changes to landscape code to administer post-construction requirements		
E.14	**PROGRAM EFFECTIVENESS ASSESSMENT**		
E.14.a	**Program Effectiveness Assessment and Improvement Plan (PEAIP)**		
	Submit PEAIP	2015	*WGR recommends that this task be performed in collaboration with other MS4s and based on the CASQA and USEPA PEAIP guidance documents. Please refer to Section C of this proposal for the collaboration cost quote.*
E.16	**ANNUAL REPORTING PROGRAM**		
E.16.a	**Use SMARTS to report and certify**	2014-2018	*The County has already submitted the Year 1 report.* *The Year 2 report will be started during Sumer 2015 and will be due on Oct. 15, 2015.*
E.16.b	**Complete and retain annual reports and make available to RWQCB during working hours**		
E.16.c	**Submit detailed written or oral report to RWQCB if directed.**		
E.16.d	**May coordinate reporting if regional programs**		

The following are the ***estimated*** WGR resources and hours to perform the above tasks. We have attempted to provide a realistic cost estimate for WGR's ancillary support of the County's in-house implementation of these tasks. We based the level of our support on how we were utilized by the County during Year 1. ***The actual degree of involvement from County staff may increase or decrease the actual WGR expense.*** The collaboration costs for five specific Year 2 tasks are presented in Section C of this proposal.

Task Number	Section and Estimate of Resources and Hours	Task Sub-total
E.6	PROGRAM MANAGEMENT AND LEGAL AUTHORITY	$2,000
E.6.a and b	Senior compliance specialist 16 hours	
E.7 & E.8	EDUCATION AND OUTREACH AND PUBLIC INVOLVEMENT PROGRAM	$3,000
E.7.a & E.8	Senior compliance specialist 24 hours to work with County staff to customize the template created by the collaborative effort and assistance with the coordination with DER and other departments ***(plus the collaboration cost in Section C of this proposal)***	
E.9	ILLICIT DISCHARGE DETECTION AND ELIMINATION	$12,000
E.9.a - d	Senior compliance specialist 4 hours for support and questions by the County staff. Compliance Specialist 80 hours for performing first round plus training County staff Compliance Technician 40 hours, plus mileage and minor supplies Costs do not included analytical testing or the purchase of field test kits.	
E.10	CONSTRUCTION SITE STORM WATER RUNOFF CONTROL PROGRAM	$2,384
E.10.c	Senior compliance specialist / QSD 16 hours for support and questions by the County staff Compliance specialist / QSP 4 hours for support and questions by the County staff (Inspections, and ESCP / SWPPP reviews will be conducted by County staff.)	
E.11	POLLUTION PREVENTION / GOOD HOUSEKEEPING PROGRAM	$8,840
E.11.a, b, f, and j	Training, assistance with the inventory and mapping process and the drainage system maintenance prioritization, and coordination with DER, GSA, and the Ag Commissioner departments Senior compliance specialist 40 hours Compliance specialist 40 hours	
E.12	POST CONSTRUCTION STORMWATER MANAGEMENT PROGRAM	$4,000
E.12	Senior compliance specialist 32 hours to work with County staff to customize the template created by the collaborative effort and training of the Planning Department ***(plus the collaboration cost in Section C of this proposal)***	
E.13 & E.15	WATER QUALITY MONITORING & TMDL REQUIREMENTS	$1,000
E.13.b. E.15.a E.15.b E.15.d	Although this is not a Year 2 activity, some of it is a continuation from Year 1 and is for the Monitoring Plan preparation as required by the CVRWQCB by June 30, 2014. Senior compliance specialist 8 hours to work with County staff to customize the template created by the collaborative effort ***(plus the collaboration cost in Section C of this proposal)***	
E.14	Program Effectiveness Assessment and Improvement Plan	$768
E.14.a	Compliance specialist 8 hours to work with County staff to customize the template created by the collaborative effort ***(plus the collaboration cost in Section C of this proposal)***	
E.16	ANNUAL REPORTING PROGRAM	$4,340
E.16.a	Senior compliance specialist 4 hours Compliance specialist 40 hours (Assumes assistance from County staff and departments in the compilation and provision of supporting data and information.)	

Total Estimated Annual Cost for Section A: $38,332

The following are the hourly rates for the above-described personnel. These rates are valid through December 31, 2015.

Senior Compliance Specialist / QSD	$125/hour
Compliance Specialist / QSP	$96/hour
Compliance Technician	$82/hour
Project related mileage	$0.56/mile

When requested, WGR can provide a similar task identification, recommendation, and labor estimation for the remaining three years of the permit term.

Section B: General Permit Compliance Support and Project Management Tasks
WGR can provide support for the following general support tasks on an as-needed basis. The number of hours are *estimated* based on the utilization of WGR during Year 1 by the County and it is assumed that County staff will provide the same level of support. ***The actual degree of involvement from County staff may increase or decrease the actual WGR expense in this area.***

- Task B.1. Project meetings
- Task B.2. Miscellaneous permit compliance support
- Task B.3. Communication with the Water Board staff
- Task B.4 Monitor the development of the Regional MS4 Permit and the Trash Amendments

Resource	Rate	Estimated Quantity for all of the above tasks	Subtotals
Senior Compliance Specialist / QSD	$125/hour	40 hours	$5,000
Compliance Specialist / QSP	$96/hour	40 hours	$3,840
Compliance Technician	$82/hour	8 hours	$656
Project related mileage	$0.56/mile	500 miles	$280

Total Estimated Annual Cost for Section B: $9,776

Section C: Year 2 Collaboration Tasks

WGR is pleased to provide you with this proposal to participate in Phase II MS4 permit collaboration efforts for selected Year 2 tasks. The collaboration task agreement is between the individual municipalities and WGR Southwest, Inc. In effort to maintain the participation-based costs, by signing accepting Section C of this proposal you are agreeing to be invoiced for the sum of each agreed upon collaboration task. WGR will invoice the County at the completion of each agreed upon task for the pre-arranged amount. Completion is defined for document preparation tasks as when the template is first delivered to the municipality. For the training task, completion is defined as when the first training event has been held. The anticipated task completion schedule is based on the permit and is subject to change. ***Although we have strived hard to confirm and secure the number of collaborating municipalities before issuing Section C of this proposal, WGR reserves the right to withdraw and nullify this part of the proposal should the number of municipalities signing and accepting this collaboration proposal be less than those anticipated below.*** Should that happen, WGR will reissue a proposal with costs divided by the adjusted number of collaborating

municipalities. Should we have more than the number of anticipated collaborating municipalities, WGR will adjust the fee downward accordingly. The following is a summary of the tasks that the County has indicated interest to collaborate with other Phase II MS4s.

Year 2 Task	Description of the collaborative approach	Final Shared Collaborative Task Cost	Anticipated Schedule
Education & Outreach Plan (Task C.1.) - Permittee shall develop and implement a comprehensive storm water public education and outreach program. The public education and outreach program shall be designed to reduce pollutant discharges in storm water runoff and non-storm water discharges to the MS4 through increased storm water knowledge and awareness in target communities. The Public Education and Outreach Program shall be designed to maasurably increase the knowledge and awareness of targeted audience regarding the municipal storm drain system, impacts of urban runoff and non-storm water discharges on receiving waters, and potential BMP solutions for the target audiences, thereby reducing pollutant releases to the MS4 and the environment.	WGR will prepare a template document that can be used and customized by participating municipalities. We believe the template can be easily adapted by many of the Central Valley MS4s because, although there are unique water quality concerns and objectives for different MS4s, there are enough similarities in the watersheds, pollutants of concern, and the TMDLs to allow for a basic approach to E&O which then can be customized to accommodate to more local issues.	$10,000 / 15 MS4s = **$667/MS4**	Oct. – Dec. 2014
Post Construction Standards Plan (Task C.2) – Develop standards that incorporate the Phase II MS4 Permit's LID and hydromodification requirements that can be used by developers and municipal staff to assure that projects comply with the new requirements.	WGR believes that a Post Construction Standards Plan template would be 90% applicable to any MS4 and would only require minor customization to make it specific to any particular municipality. The document would adhere to the Phase II MS4 permit requirements but would also incorporate by reference other available resources such as CASQA's post construction manual and the Bay Area post construction reference materials. An advantage is that the standardization of the plan will assist contractors and developers in knowing what is required from one municipality to another. Another advantage is it will facilitate collaborative training of municipal staff on the implementation of this plan.	$25,000 / 15 MS4s = **$1,667 / MS4**	Oct. – Dec. 2014

<u>Regional TMDL Monitoring Program Study Design and Implementation Schedule Plan (Task C.3) -</u> Permittees are strongly encouraged by the Water Board to develop and/or participate in a regional water monitoring program. Permittees should collectively submit a single regional monitoring study design and implementation schedule for Executive Officer approval instead of individual monitoring plans. If Permittees would like consideration under this regional monitoring option, they need to contact the Central Valley Water Board staff no later than June 30, 2014.	WGR has researched existing monitoring data resources and potential monitoring scenarios for the Lower San Joaquin River and has developed a conceptual regional monitoring program. We have received positive initial feedback from our preliminary consultations with the Central Valley RWQCB staff on the proposed approach. Our approach is to utilize existing data sources and to have each participating municipality collect representative data that could be shared by the other participating MS4s, thus minimizing the amount of monitoring that any one municipality would have to do. We were able to meet the Water Board's June 30th notification deadline and we have been recognized as a Central Valley regional monitoring group.	$5,000 / 10 MS4s = **$500 / MS4** Cost to develop the Study Design and Implementation Plan (does not include performing the monitoring, also outfall information and other drainage system information will need to be provided to WGR by MS4)	January 2015
<u>Program Effectiveness Assessment and Improvement Plan (Task C.4) –</u> The Permittee shall develop and implement a Program Effectiveness Assessment and Improvement Plan that tracks annual and long-term effectiveness of the storm water program. The Program Effectiveness Assessment and Improvement Plan will assist the Permittee to document compliance with permit conditions and to adaptively manage its storm water program and make necessary modifications to the program to improve program effectiveness at reducing pollutants of concern, achieving the MEP standard, and protecting water quality. The Program Effectiveness Assessment and Improvement Plan shall identify the strategy used to gauge the effectiveness of prioritized BMPs and program implementation as a whole. Prioritized BMPs include BMPs implemented based on pollutants of concern. Where pollutants of concern are unidentified, prioritized BMPs are based on common urban pollutants (i.e., sediment, bacteria, trash, nutrients). The annual effectiveness assessments will help identify potential modifications to the program to ensure long-term effectiveness. The Program Effectiveness Assessment and Improvement Plan may be modeled upon the most recent version (if applicable) Municipal Storm Water Program Effectiveness Assessment Guidance (CASQA, May 2007) or equivalent.	WGR has prepared similar documents for Phase I MS4 permittees and we based our document, as the Water Board suggested, on the CASQA guidance manual. We will prepare a template document to be used by each participating municipality that we believe will be 80 – 90% complete and can be easily customized with local MS4-specific information. There is enough similarity in the Central Valley MS4s and their pollutants of concern / TMDLs to accommodate a good template that will be largely applicable to all MS4s collaborating in this task.	$10,000 / 15 MS4s = **$667 / MS4**	Mar. – May 2015

Training Events (Task C.5) – Provide a day of training with sessions applicable to plan checkers, construction inspectors, field crews, and other municipal staff that need to be trained on the following topics: • Review of Erosion and Sediment Control Plans • Performing construction site storm water inspections • Post-construction standards training • IDDE training • Biennial pollution prevention training for municipal operations • Landscape management BMPs	WGR will provide a day of training by providing various workshops on the topics required by the permit. Collaborating municipalities can send their personnel to any of the workshops that are appropriate for their staff. Personnel would only have to attend classes that apply to their job duties	$5,000 / 15 MS4s = **$334 / MS4** *WGR will host up to two centrally located regional workshops for municipalities to send appropriate staff for training. WGR will attempt to host two separate workshops. Dates and times will be chosen by participant consensus. It is the individual municipality's responsibility to attend one of the two training workshop opportunities. Costs include presentation preparation time, materials, and the workshop presentations. Costs do not include the rental of a facility and meals/food & drinks. Perhaps one of the collaborating facilities could donate the use of one of their large meeting rooms*	Spring 2015

Total Estimated Cost for all Collaboration Tasks in Section C: $3,835

Total Estimated Year 2 Cost for Sections A, B, & C: $51,943

We thank you for this opportunity to serve you and we look forward to working with the County of Stanislaus to accomplish the Year 2 permit requirements. If I can answer any questions concerning our proposal or the MS4 permit requirements, please do not hesitate to call me or to schedule a meeting to discuss the proposed scope of work.

Respectfully submitted,
WGR Southwest, Inc.

John M. Teravskis

John M. Teravskis, CPESC, QSD/QSP
Senior Compliance Specialist and
Operations Manager for Northern California

Implementation Plan for the Phase II MS4 NPDES Permit

for

Stanislaus County
Public Works Department

February 2, 2015

Implementation Plan for the Phase II MS4 NPDES Permit
for
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Public Works Department

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Appendices:

1. Project Scope and Objectives

On October 7, 2013, Stanislaus County Public Works Department solicited bids to develop an implementation plan and provide expert advice on the Phase II NPDES General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems Order No. 2013-0001-DWQ (Phase II MS4 Permit). In November 2013, WGR Southwest, Inc. (WGR) was awarded the project and commenced by meeting with Mr. David Leamon, P.E., Senior Civil Engineer, with the Public Works Department to further define the scope of work, priority objectives, schedule, and project approach.

The objectives established for this implementation plan are as follows:

1. Provide a clear understanding of what is required by the Phase II MS4 Permit.
2. Provide an evaluation of existing internal programs that can be adapted and/or utilized to meet the requirements of the permit.
3. Provide an evaluation of external resources and opportunities for collaboration with other MS4s with the goal of sharing program development and implementation costs – thereby reducing the overall programmatic cost for the County.
4. Provide an evaluation and recommend the best approach for implementing the MS4 Permit in the following ways: by specifically addressing the County Departments responsible for the various aspects of the permit, the administration and management of the permit compliance program, the use of internal and external resources to perform the required permit activities, and the funding of the permit required activities.
5. Since this Implementation Plan was being developed during the first year of the Phase II MS4 Permit cycle, an additional objective was to identify **Year 1** obligations and determine a short term plan of action in accomplishing them by their June 30, 2014 due date.

The scope of work included all of the elements identified in the Bid Submittal Worksheet, which was provided by the County as a part of the Request for Proposals package. The worksheet is organized in such a way as to identify the tasks by program element as described in the Phase II MS4 Permit. A copy of the worksheet is included in **Appendix A** of this Implementation Plan.

In the kickoff meeting with the County, it was decided that WGR would start the project by conducting a group meeting with representatives from the various County Departments to describe the overall requirements of the permit and to discuss the approach to the project. Subsequent to the meeting, WGR set up individual meetings with representatives of the various Departments to identify existing programs, communication systems, and data gathering mechanisms that could be used to comply with the permit. In these meetings, WGR asked each representative about their existing training, inspection, and documentation practices. After gathering this information from the various Departments, WGR began to evaluate the new permit requirements and compare them to existing internal programs, performing a “gap-analysis” to identify which additional activities and documentation may be needed to comply with each permit element. Finally, WGR prepared this Implementation Plan to address the five objectives to provide an evaluation and list of recommendations for an effective permit compliance program. The following is the general schedule that was followed in performing this work:

Week #	Activities
1-4	Hold project kick off meeting; organize group meeting with representatives from all of the County Departments; and interview/survey County departments. Project commences in December 2013 with the meetings and in January 2014 with the interviews and surveys.
2 - 10	Review and edit ordinances
	Meet with Regional Water Quality Control Board and other Stanislaus MS4s on TMDLs, regional monitoring, and other opportunities for collaboration.
	Evaluate and provide recommendations for the following: • Education and outreach program • IDDE program • Post-Construction program • Pollution Prevention / Good Housekeeping program • Construction Program • Water Quality Monitoring and TMDLs • Program Effectiveness Assessment and Improvement Plan • Trash Reduction Program.
11-13	Prepare and deliver the Implementation Plan, incorporating the program evaluation and recommendations. Due March 31, 2014

The draft Implementation Plan was submitted to the County's Department of Public Works by the due date and was reviewed with Public Works in a meeting on April 4, 2014. From April through August 2014, the Public Works Department reviewed and commented on the draft document. In September 2014, the revised draft Implementation Plan was distributed by Publics Works to the Chief Executive Officer's (CEO's) office and the other County Departments for review and comment. On September 16, 2014, a meeting was held with the CEO's office and the Department heads to discuss the results and recommendations of the Implementation Plan and to solicit comments and input. The Department heads asked for more time to review the Implementation Plan and another follow up discussion was held on October 7. In that meeting, Keith Boggs, the Chief Executive Officer, gave his review and evaluation of the Implementation Plan. Mr. Boggs' comments and directives have been incorporated into Section 14 of this Implementation Plan.

2. The Phase II MS4 Permit

In order to properly understand this Implementation Plan, it is necessary to first have a basic understanding of the Phase II MS4 Permit. We will divide this discussion into three parts. First, we will discuss the regulatory background and applicability of the permit to Stanislaus County and the permit application process. Second, we will cover the requirement for the County to establish legal authority to implement the permit and the certification required by a Duly Authorized Representative. Third, we will provide an overview of the MS4 Permit program elements, the schedule for implementation of permit required tasks, and the on-going administrative and reporting obligations.

2.1. Regulatory Background, Permit Applicability, and Application Process:

In 1990, the U.S. Environmental Protection Agency (U.S. EPA) established a set of rules which started Phase I of the National Pollutant Discharge Elimination System (NPDES) storm water program. The Phase I program for MS4s requires operators of "medium" and "large" municipalities, that is, those that generally serve a population of 100,000 or greater, to implement a storm water management program as a means to control polluted discharges from these MS4s. A MS4 is a conveyance or system of conveyances that is: 1) owned by a state, city, town, village, or other public entity that discharges to waters of the United States; 2) designed or used to collect or convey storm water (including storm drains, pipes, ditches, etc.); 3) not a combined sewer; and 4) not part of a Publicly Owned Treatment Works or sewage treatment plant. On December 8, 1999, U.S. EPA promulgated Phase II storm water regulations under authority of the Clean Water Act section 402(p)(6). It required the State Water Resources Control Board (SWRCB) to issue NPDES storm water permits to operators of Small MS4s. On April 30, 2003, the SWRCB adopted Water Quality Order No. 2003-0005-DWQ for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (Phase II MS4 Permit) to comply with Clean Water Act section 402(p)(6). Stanislaus County was listed as a mandated participating municipality under Order 2003-0005-DWQ. NPDES permits have a 5-year permit cycle. Order 2003-0005-DWQ expired in 2008 but remained in effect until it was replaced by the current Phase II MS4 Permit (Order No. 2013-0001-DWQ) which was issued on February 5, 2013 and became effective on July 1, 2013. Stanislaus County was listed in this new permit as a "renewal" permittee. Phase II MS4 permit boundaries are required to be based on 2010 Census data. For cities, the permit area boundary is the city boundary. For Counties, permit boundaries must include urbanized areas and places identified in Attachment A of the permit which are located within their jurisdictions. The boundaries must be proposed in the permit boundary map and may be developed in conjunction with the applicable Regional Water Board. A copy of the Stanislaus County's permit boundary map, which was submitted to the Water Board, is included in **Appendix B** of this Implementation Plan. As required by renewal municipalities, before July 1, 2013, Stanislaus County applied for permit coverage by submitting onto the SWRCB's online SMARTS permitting interface tool the following information: a Notice of Intent (NOI), the boundary map, and a completed guidance document, which outlines the permit requirements over the 5-year permit term and shows how the County will comply with the various required tasks. A copy of these permit application documents is included in **Appendix B**. In addition, the annual permit fee of $24,263 was mailed to the SWRCB.

2.2. Legal Authority and the Certification Required by the Duly Authorized Representative:

By July 1, 2015, the County is required to review and revise the existing (or adopt any new) relevant ordinances or other regulatory mechanisms, in order to obtain sufficient legal authority to control pollutant discharges into and from its MS4 and to fulfill any other requirements of the Phase II MS4 Permit. According to Section E.6 of the permit, the County is required to have, at a minimum, the adequate legal authority to:

a. *Effectively prohibit non-storm water discharges through the MS4. Exceptions to this prohibition are NPDES-permitted discharges of non-storm water and non-storm water discharges identified in section B.3 of the permit that are considered non-significant contributors of pollutants.*

b. *Detect and eliminate illicit discharges and illegal connections to the MS4. Illegal 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 permit, including discharges from organized car washes, mobile cleaning and pressure wash operations.*

c. *Respond to the discharge of spills, and prohibit dumping or disposal of materials other than storm water into the MS4.*

d. *Require parties responsible for runoff in excess of incidental runoff to implement adequate controls to detect, repair, and prevent incidental runoff as defined in Section B.4.a-e of the permit.*

e. *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, or maintenance of BMPs consistent with the California Storm Water Quality Association (CASQA) Best Management Practice Handbooks or equivalent.*

f. *Require information deemed necessary to assess compliance with the Phase II MS4 Permit. The Permittee shall also have the authority to review designs and proposals for new development and redevelopment to determine whether adequate BMPs will be installed, implemented, and maintained during construction and after final stabilization (post-construction).*

g. *Enter private property for the purpose of inspecting, at reasonable times, any facilities, equipment, practices, or operations for active or potential storm water discharges, or non-compliance with local ordinances, standards, or requirements of the Phase II MS4 Permit, as consistent with any applicable State and federal laws.*

h. *Require that dischargers promptly cease and desist discharging and/or cleanup and abate a discharge, including the ability to:*

    1. *Effectively require the discharger to abate and clean up their discharge, spill, or pollutant release within 72 hours of notification (high risk spills should be cleaned up as soon as possible);*

    2. *Require abatement within 30 days of notification, for uncontrolled sources of pollutants that could pose an environmental threat;*

    3. *Perform the clean-up and abatement work and bill the responsible party, if necessary;*

    4. *Provide the option to order the cessation of activities until such problems are adequately addressed if a situation persists where pollutant-causing sources or activities are not abated;*

    5. *Require a new timeframe and notify the Regional Water Quality Control Board (RWQCB) when all parties agree that clean-up activities cannot be completed within the original*

timeframe and notify the RWQCB in writing within five business days of the determination that the timeframe requires revision.

i. When warranted, 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.

j. Impose more substantial civil or criminal sanctions (including referral to the District Attorney) and escalate corrective response, consistent with the County's Enforcement Response Plan developed as required in Section E.6.c. of the permit, for persistent non-compliance, repeat or escalating violations, or incidents of major environmental harm.

Also by July 1, 2015, Stanislaus County is required to certify by its Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative[1] that the Permittee has and will maintain full legal authority to implement and enforce each of the requirements contained in the Phase II MS4 Permit. The County's certification statement is required to include the following:

1. Identification of all Departments within the County that conduct storm water-related activities and their roles and responsibilities under Phase II MS4 Permit
2. Citation of storm water runoff related ordinances, identification of the topics each ordinance addresses
3. Identification of the local administrative and legal procedures and ordinances available to mandate compliance with storm water-related ordinances and therefore with the conditions of Phase II MS4 Permit
4. A description of how storm water related-ordinances are reviewed and implemented
5. A statement that the County will implement enforcement actions consistent with its Enforcement Response Plan which will be developed in accordance with Section E.6.c. of the permit.

2.3. Overview of the Phase II MS4 Program Elements and Schedule:

The Phase II MS4 Permit requirements are predominately contained in the ten program elements contained in Section E of the permit. They are as follows:

E.6. Legal Authority

E.7. Education and Outreach Program

E.8. Public Involvement and Participation Program

E.9. Illicit Discharge Detection and Elimination Program

[1] As described in 40 Code of Federal Regulations section 122.22(b)

E.10. Construction Site Storm Water Runoff Control Program

E.11. Pollution Prevention / Good Housekeeping for Permittee Operations Program

E.12. Post-Construction Storm Water Management Program

E.13. Water Quality Monitoring

E.14. Program Effectiveness Assessment and Improvement

E.15. Total Maximum Daily Loads Compliance Requirements

E.16. Annual Reporting Program

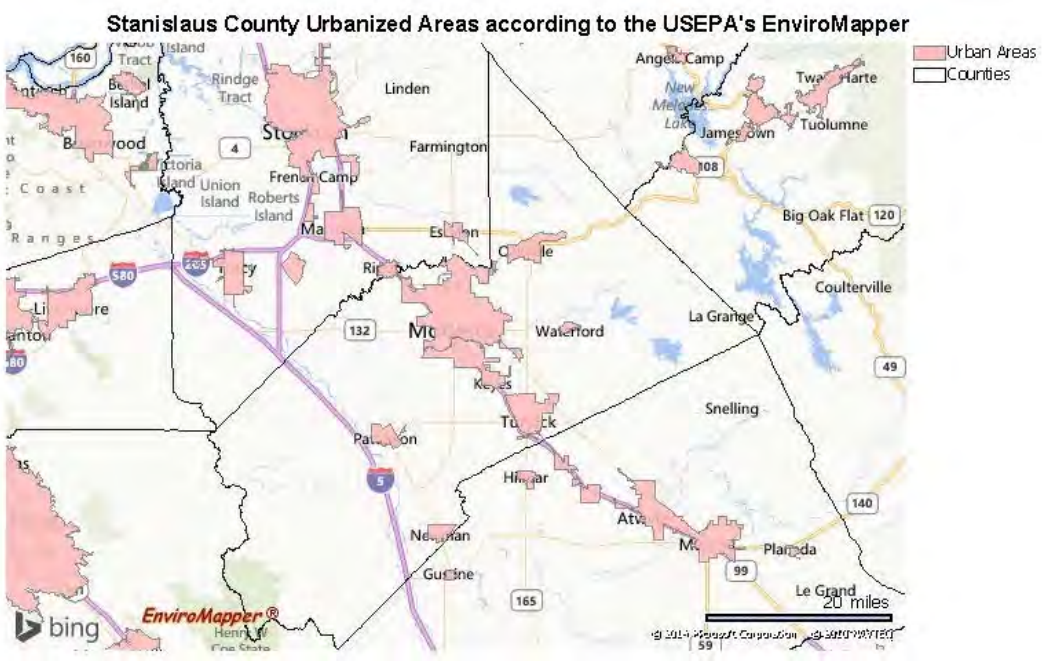
The permit breaks many of these sections down by giving a description of the task, providing guidance on the minimum implementation requirements for each task, and detailing the reporting requirements for each activity or task. Because so many of these tasks are new programs that need to be developed or significantly revised by the permittees, the SWRCB has specified in this permit a progressive schedule for the implementation of the required program elements and tasks. Each task has been given a due date that is based on the anniversary date of the permit's effective date of July 1, 2013. Thus, all permit activities have been assigned to either the first, second, third, fourth, or fifth year of the permit's term. The permit and storm water years, due dates, and reporting dates are shown in the following table.

Permit Year Number	Storm Water Year	Due Date	Annual Report Due
Year 1	July 1, 2013 – June 30, 2014	July 1, 2014	October 15, 2014
Year 2	July 1, 2014 – June 30, 2015	July 1, 2015	October 15, 2015
Year 3	July 1, 2015 – June 30, 2016	July 1, 2016	October 15, 2016
Year 4	July 1, 2016 – June 30, 2017	July 1, 2017	October 15, 2017
Year 5	July 1, 2017 – June 30, 2018	July 1, 2018	October 15, 2018

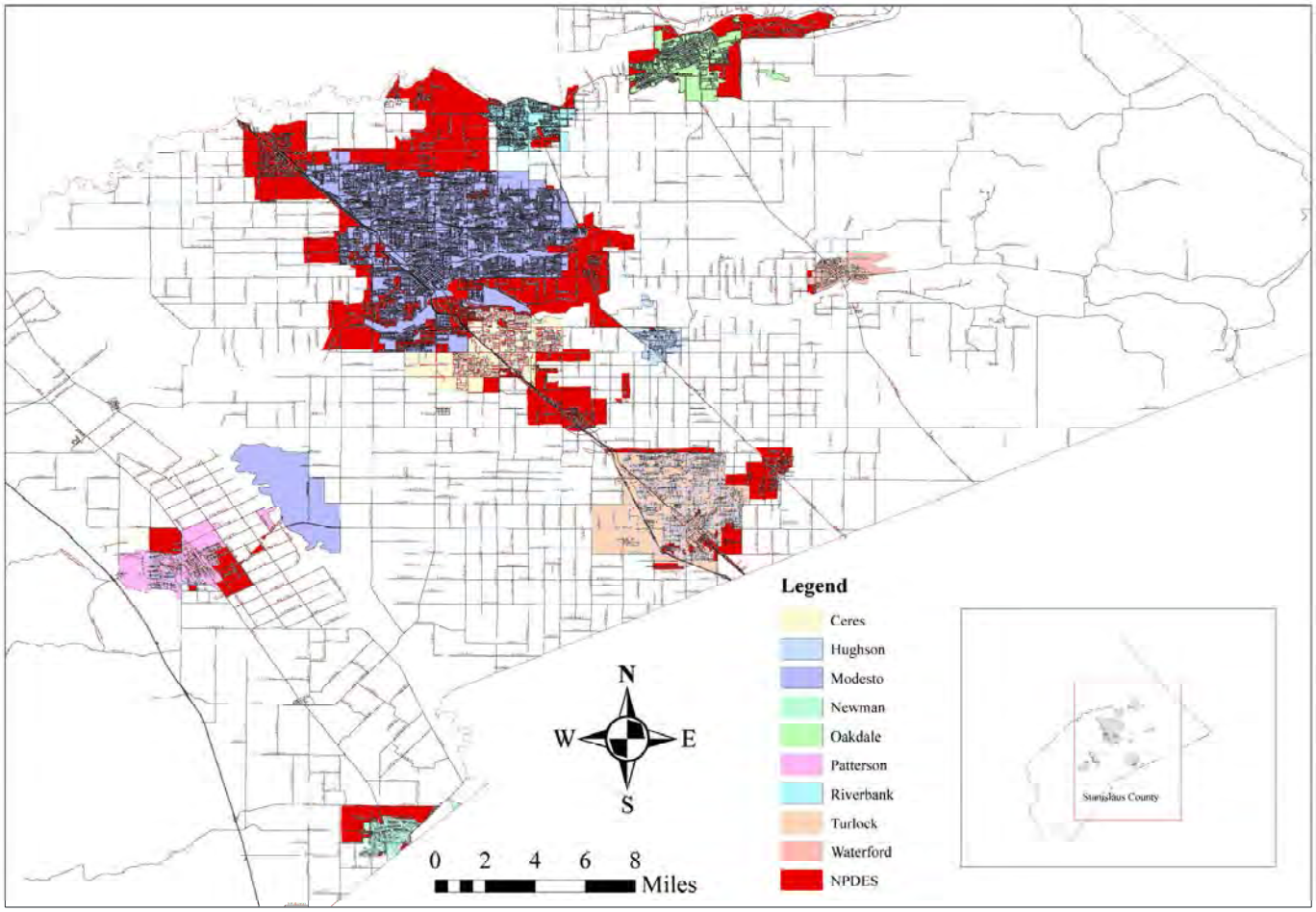
The Guidance Document which was submitted as part of the County's permit application provides an overall view of the permit requirements and the respective due dates for each activity. A copy of the Guidance Document is included in **Appendix B** of this Implementation Plan. An annual report will be due by October 15th of each year to describe the previous year's compliance activities and achievements. As a part of the annual report preparation process, the Performance Effectiveness Assessment will be performed.

3. Stanislaus County's Permit Boundary

According to the 2010 census data, Stanislaus County, located in the heart of the Central Valley, has an approximate population of 514,450. However, the population of those urbanized areas required to be under the Phase II MS4 Permit (shown in pink within the County, *see map at right*) is estimated at 76,134.



Stanislaus County submitted a permit boundary map (*see below*) with its NOI submittal which is consistent with the above indicated urbanized areas. The County's permit boundary does not include the incorporated portions of the other municipalities that are required to have coverage under the Phase II MS4 Permit.



It is important to remember that the permit boundary only applies to the urbanized areas shown in the red shading on the County's permit boundary map. Therefore, the permit requirements and program elements that are discussed in this Implementation Plan only apply to these permitted areas. The two tables below list out the communities in the County that fall under the jurisdiction of the Phase II MS4 Permit. Table A is a list of the municipalities located within Stanislaus County that are separate permitted entities. Table B is a list of the communities that have either been identified in the Phase II MS4 Permit by name or are included in the US EPA's definition of urbanized areas. The City of Modesto has a Phase 1 MS4 Permit and, therefore, is not included in the County's permit boundary. However, unincorporated urban areas outside of the city limits of Modesto and those municipalities listed on Table A are included within Stanislaus County's permit boundary.

TABLE A – Stanislaus Municipalities having MS4 Permit Coverage

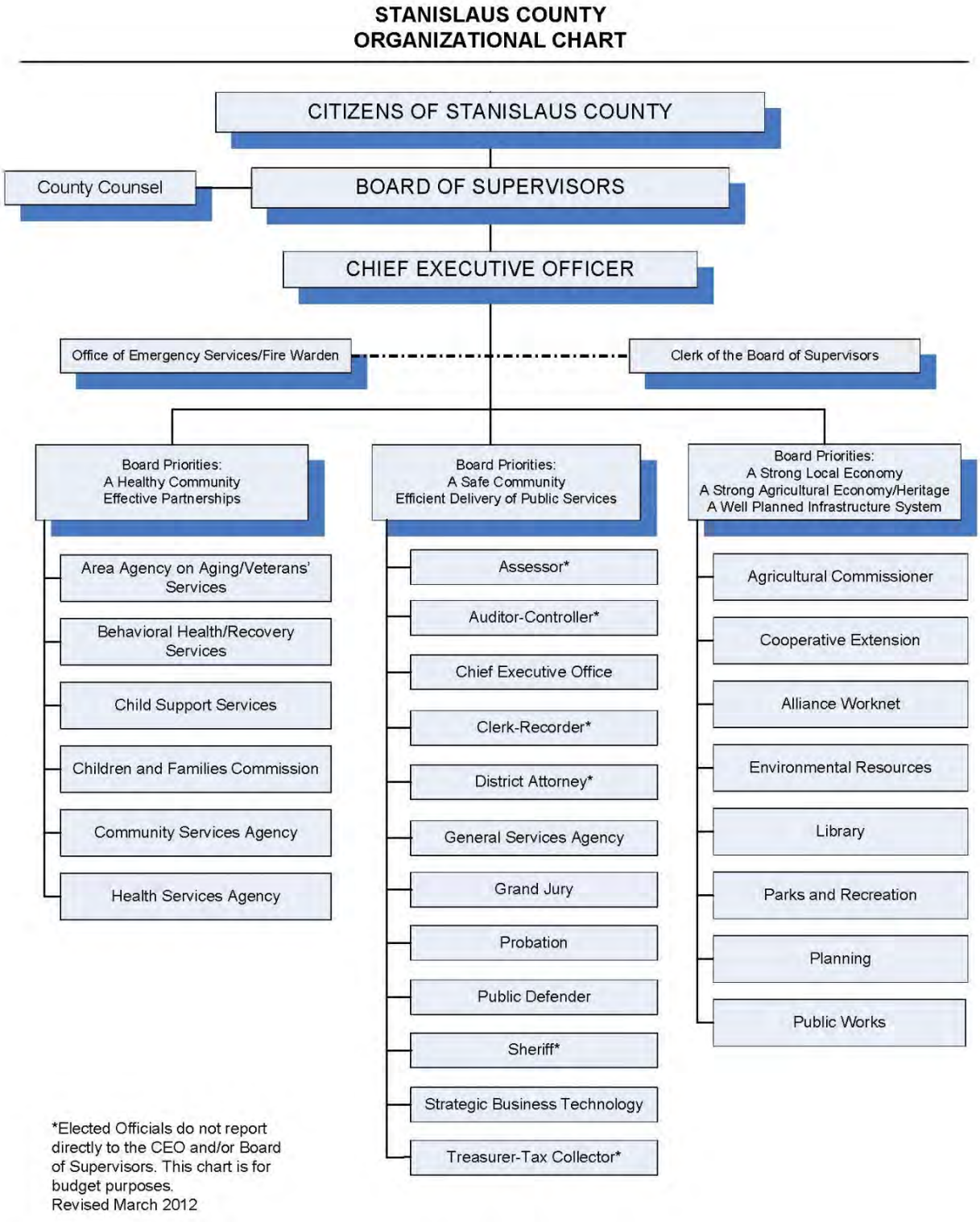
Municipality	MS4 Permit Status	Direct Discharge to a Receiving Water	Discharge to Irrigation District
Ceres	Active Phase II MS4 Permit WDID # 5S50M2000040	2 direct discharge locations to the Tuolumne River	25 locations discharge to Turlock Irrigation District
Hughson	Active Phase II MS4 Permit WDID # 5S50M2000117	No	3 discharge points to Turlock Irrigation District
Modesto	**Active Phase I MS4 Permit R5-2008-0092**	**Multiple direct discharges to Dry Creek and Tuolumne River**	**Multiple discharge points to Modesto Irrigation District**
Newman	Active Phase II MS4 Permit WDID # 5S50M2000090	No	4 discharge points to Central California Irrigation District
Oakdale	Active Phase II MS4 Permit WDID # 5S50M2000052	Multiple direct discharges to Stanislaus River	9 discharge points to Oakdale Irrigation District
Patterson	Active Phase II MS4 Permit WDID # 5S50M2000113	Discharges to Salado Creek	Multiple discharge points to Patterson Irrigation District
Riverbank	Active Phase II MS4 Permit WDID # 5S50M2000081	7 discharge points to the Stanislaus River	2 discharge locations to Modesto Irrigation District
Turlock	Active Phase II MS4 Permit WDID # 5S50M2000084	No	Multiple discharge points to Turlock Irrigation District

TABLE B – Stanislaus County Urbanized Areas included in Permit Boundary

Municipality	Urbanized Area?	Direct Discharge to a Receiving Water	Discharge to Irrigation District
Bret Harte	Yes	Tuolumne River	Possibly Modesto Irrigation District
Denair	Yes	No	Turlock Irrigation District
Del Rio	Yes	No	Unknown at this time
Empire	Yes	No	Modesto Irrigation District
Keyes	Yes	No	Turlock Irrigation District
Salida	Yes	Stanislaus River	Modesto Irrigation District
Sunset Oaks Estates (unincorporated Oakdale)	Yes	Stanislaus River	No
Waterford	Yes	Possibly Stanislaus River	Possibly Turlock Irrigation District
West Modesto	Yes	Tuolumne River	Possibly Modesto Irrigation District
Unincorporated urban areas outside of cities shown on Table A	Yes	Varies	Varies

4. Stanislaus County's Organization

As will be demonstrated in the following sections of this Implementation Plan, the Phase II MS4 Permit contains requirements that will affect many, if not all, of the Departments of Stanislaus County in one way or another. The following figure is an organization chart showing the County's structure:



To illustrate the wide scope of this permit, Table C lists the program elements of the Phase II MS4 Permit and shows which County Departments will have permit obligations to meet under each element.

TABLE C – Phase II MS4 Program Elements and Affected Departments

	Education & Outreach (E.7)	Public Participation (E.8)	Illicit Discharge, Detection & Elimination (E.9)	Construction Management (E.10)	Pollution Prevention (E.11)	Post-Construction Design & Management (E.12)	Annual Reporting (E.16)
Agricultural Commissioner	✓	✓			✓		✓
Environmental Resources	✓	✓	✓		✓		✓
Parks and Recreation	✓	✓	✓	✓	✓	✓	✓
Planning & Community Development	✓			✓		✓	✓
Public Works	✓	✓	✓	✓	✓	✓	✓
General Services Agency	✓		✓	✓	✓	✓	✓

The following sections of this Implementation Plan will address each of these Phase II MS4 Permit program elements discussing the permit-required tasks, identifying existing County activities and programs that can be used to comply with requirements, and provide recommendations for implementing the permit. Each section will also identify the County Departments that will have permit obligations for the program element and provide a detail of what will be required by the Department. Certain tasks, such as annual reporting, will need to be managed by a single entity in the County, but will rely on input and data from all the other Departments.

5. Legal Authority (Section E.6.)

Basic Permit Requirements:

Under Section E.6. of the permit, the County is required to do the following:

1. During **Year 2** – Revise and/or adopt new ordinances that will provide the County with adequate legal authority to implement the permit, including the ten specific areas listed in Section E.6.a.ii of the permit.
2. During **Year 2** – Have its Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative certify that the County has and will maintain full legal authority to implement and enforce each of the requirements contained in the Phase II MS4 Permit.
3. During **Year 3** – Develop and implement a written Enforcement Response Plan that will contain enforcement procedures and actions; identify the County's responses to violations; and describe how the County will respond to repeat and continuing violations.

Evaluation of Existing County Program Element:

Stanislaus County tasked WGR to review, edit, update, and/or recommend relevant ordinances or other regulatory mechanisms to obtain adequate legal authority to meet the requirements of the 2013 Phase II Permit. WGR performed a review of the existing ordinances and performed a side-by-side analysis of the permit requirements with the existing ordinance. More specifically, WGR listed the permit requirement and the applicable existing County code, and provided an evaluation of the adequacy of the existing code and any recommended modifications to make the code compliant with the permit. This side-by-side evaluation is included in **Appendix C** of this Implementation Plan. Subsequently, WGR inserted the recommended modifications into the existing ordinances (using "track changes"). The revised ordinances are also provided in **Appendix C**.

The permit requires that the Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative certify that the County has and will maintain full legal authority to implement and enforce each of the requirements contained in the Phase II MS4 Permit. More specifically, the certification must address the following:

a. *Identification of all departments within the Permittee's jurisdiction that conduct storm water-related activities and their roles and responsibilities under this Order.* **WGR Evaluation:** This Implementation Plan identifies the County Departments and their roles and responsibilities under the permit.
b. *Citation of storm water runoff related ordinances, identification of the topics each ordinance addresses; WGR* **Evaluation:** Essentially, the table in Appendix C (or some variation of it) meets this requirement.
c. *Identification of the local administrative and legal procedures and ordinances available to mandate compliance with storm water-related ordinances and therefore with the conditions of this Order.* **WGR Evaluation:** This also is included in the table in Appendix C and in the existing Enforcement Response Plan (ERP) that will need to be revised in Year 3, see ERP evaluation below.
d. *A description of how storm water related-ordinances are reviewed and implemented.* **WGR Evaluation:** This description can be imbedded into the ERP and/or the Year 2 Annual Report.

e. *A statement that the municipality will implement enforcement actions consistent with its Enforcement Response Plan developed pursuant to Section E.6.c.* **WGR Evaluation:** Note that the ERP is not required to be revised until Year 3, but this statement is required in the Year 2 Annual Report. Nonetheless, the above statement can be made in the Year 2 Annual Report, which is due October 15, well into Year 3.

WGR reviewed the existing 3-page County Enforcement Response Plan (ERP), and, although it meets many of the permit requirements, it will need substantial revisions and additional policies and procedures to fully comply with the permit. The areas needed to be revised or added to the ERP are identified in the permit citation provided below as indicated by magenta highlighting. Although some of the highlighted areas may exist or are implemented by the County, they are not described in the ERP.

(i) The Enforcement Response Plan shall describe how the Permittee will use each of the following types of enforcement responses based on the type of violation:

(a) Verbal Warnings – Verbal warnings are primarily consultative in nature. At a minimum, verbal warnings shall specify the nature of the violation and required corrective action.

(b) Written Notices – Written notices shall include nature of the violation and the required corrective action, with deadlines for taking such action.

(c) Escalated Enforcement Measures – The Permittee shall establish legal authority to employ any combination of the enforcement actions below (or their functional equivalent), and to escalate enforcement responses where necessary to correct persistent non-compliance, repeat or escalating violations, or incidents of major environmental harm:

1) Citations (with Fines) – The Enforcement Response Plan shall describe when the Permittee will assess monetary fines, which may include civil and administrative penalties.

2) Stop Work Orders – The Enforcement Response Plan shall describe when the Permittee will issue stop work orders that require construction activities to be halted, except for those activities directed at cleaning up, abating discharge, and installing appropriate BMPs.

3) Withholding of Plan Approvals or Other Authorizations – Where a facility is in non-compliance, the Enforcement Response Plan shall describe how the Permittee's own approval or authorization processes that affect the facility's ability to discharge to the MS4 can be used to abate the violation.

4) Additional Measures – The Enforcement Response Plan may also describe other escalated measures the Permittee has under its local legal authorities. For example, the Permittee may need to improve erosion control measures and collect the funds to pay for work and materials from the responsible party by either collecting against the project's bond or directly billing the responsible party.

(d) NPDES Permit Referrals–For those construction projects or industrial facilities subject to the State's Construction General Permit (CGP) or Industrial General Permit (IGP), the Permittee shall:

1) Refer non-filers

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

e) Enforcement Tracking –Track instances of non-compliance via hard-copy files or electronically. The enforcement tracking documentation shall include, at a minimum, the following:

(1) Name of owner/operator

(2) Location of construction project or industrial facility

(3) Description of violation

(4) Required schedule for returning to compliance

(5) Description of enforcement response used, including escalated responses if repeat violations occur or violations are not resolved within the time specified in the enforcement action.

(6) Accompanying documentation of enforcement response (e.g., notices of noncompliance, notices of violations, etc.)

(7) Any referrals to different departments or agencies

f) Recidivism Reduction – The Permittee shall identify chronic violators of any provision of this Order or of any related local ordinance or regulation and reduce the rate of noncompliance recidivism. The Permittee shall develop incentives, disincentives, or increase inspection frequency at the operator's sites to prevent chronic violations.

Recommendations for Program Element Modifications:

WGR recommends the following modifications for the Legal Authority program element:

1. During **Year 2**, circulate the proposed ordinance modifications contained in **Appendix C** of this Implementation Plan among the various affected Departments, the Chief Executive Office, and the County's legal counsel for review and comment. Incorporate any recommended changes and propose the adoption of ordinance modifications to the Board of Supervisors.
2. During the first part of **Year 3** (or earlier, but no later than September 30, 2015), revise the Enforcement Response Plan to comply with the requirements of the Phase II MS4 Permit.
3. In the **Year 2 Annual Report**, which is due by October 15, 2015, provide the certification statement of the County's legal authority as required by the permit.

6. Education and Outreach and Public Involvement Programs (Sections E.7. & E.8.)

Under Section E.7. in the permit, the County is required to implement an Education and Outreach Program; and under Section E. 8. the County must have developed a Public Involvement Program. For the evaluation process, WGR separated these two program elements into the following five categories.

1. Public Education and Outreach
2. Illicit Discharge Detection and Elimination Training
3. Construction Outreach and Education
4. Pollution Prevention and Good Housekeeping for County Staff
5. Public Involvement and Participation

In each sub-section below, we will provide an overview of the basic permit requirements, an evaluation of the existing program, and recommendations for program modifications.

6.1. Public Education and Outreach (Year 1):

Basic Permit Requirements:

*Within the **first year** of the effective date of the permit, the County shall comply with the requirements in this Section by selecting one or more of the following Public Education and Outreach options:*

1) Contributing to a countywide storm water program, as determined appropriate by the Permittee members, so that the countywide storm water program conducts outreach and education on behalf of its members; or

2) Contributing to a regional outreach and education collaborative effort (a regional outreach and education collaborative effort occurs when all or a majority of the Permittees collaborate to conduct regional outreach and education. Regional outreach and education collaboration includes Permittees defining a uniform and consistent message, deciding how best to communicate the message and how to facilitate behavioral changes, then collaboratively applying what is learned through the pooling of resources and skills from local jurisdiction groups); or

3) Fulfilling outreach and education requirements within their jurisdictional boundaries on their own; or

4) A combination of the previous options, so that all requirements are fulfilled.

*By the **first year Annual Report**, the County shall submit information indicating which Public Education and Outreach option it will use to comply with this Section. For each option involving a contribution to a countywide storm water program or regional outreach and education collaborative effort, the County must complete and have available in the first year Annual Report documentation, such as a written agreement, letter or similar document, which confirms the collaboration with other MS4s.*

*Within the **second year** of the effective date of the permit, the County shall develop and implement a comprehensive storm water public education and outreach program. The public*

education and outreach program shall be designed to reduce pollutant discharges in storm water runoff and non-storm water discharges to the MS4 through increased storm water knowledge and awareness in target communities. The Public Education and Outreach Program shall be designed to measurably increase the knowledge and awareness of targeted audience regarding the municipal storm drain system, impacts of urban runoff and non-storm water discharges on receiving waters, and potential BMP solutions for the target audiences, thereby reducing pollutant releases to the MS4 and the environment.

In Section E.7.a., the permit lists thirteen specific activities that the County must incorporate into its comprehensive Education and Outreach Program.

Evaluation of Existing County Program Element:

Based on discussions with County staff, the County will select the fourth option to take a "hybrid" approach where some of the education and outreach is performed internally and some of the education effort is on a countywide or regional basis participating with the other Stanislaus MS4s and with the San Joaquin Valley Storm Water Quality Partnership.

Recommendations for Program Element Modifications:

WGR recommends the following modifications for the Pollution Prevention / Good Housekeeping program element:

1. During **early Year 2** (July – September), the County should develop the written comprehensive Education and Outreach Program.
2. **At the same time**, so that it can be reported in the first year annual report due on October 15, 2014, the County should obtain written agreements with the other Stanislaus MS4s and/or with the San Joaquin Valley Storm Water Quality Partnership concerning the areas of collaboration for the education and outreach program.

Teaming Up Opportunity

During the last meeting of the Stanislaus MS4s, most, if not all of the municipalities expressed interest in collaborating in this area. We recommend that a follow-up meeting be held with these MS4s to specifically address areas of the E&O program that can be shared.

6.2. Illicit Discharge Detection and Elimination Training (Year 3):

Basic Permit Requirements:

*Within the **third year** of the effective date of the permit, the County shall develop and implement a training program for all County staff who, as part of their normal job responsibilities, may be notified of, come into contact with, or otherwise observe an illicit discharge or illegal connection to the storm drain system.*

The training program shall include at a minimum:

- *Identification of an illicit discharge or illegal connection.*
- *Proper procedures for reporting and responding to the illicit discharge or illegal connection.*
- *Follow-up training shall be provided as needed to address changes in procedures, techniques, or staffing.*
- *An annual assessment of their trained staff's knowledge of illicit discharge response and refresher training as needed.*
- *Training for new staff who, as part of their normal job responsibilities may be notified of,*

come into contact with, or otherwise observe an illicit discharge or illegal connection shall be trained no later than six months after the start of employment.

- *Contact information, including the procedure for reporting an illicit discharge, shall be included in each of the County's fleet vehicles that are used by field staff.*
- *Focused education on identified illicit discharges and associated illicit discharge locations.*

Evaluation of Existing County Program Element:

Interviews with Public Works Engineering & Roads divisions revealed no real established IDDE activities or training. Instead, self-trained Encroachment Permit Inspectors are tasked with IDDE follow up as needed. Roads supervisors are trained every two years on first responder training in which minor storm water drainage protection is covered. Parks and Recreation, Department of Environmental Resources (DER) and the Agricultural Commissioner's Office (Ag Office) has not performed IDDE training.

The County's website has tips, information, and materials that promote awareness of pollution prevention for garages, homes, construction projects, yard and garden, landscaping, boats, farms, painting, pesticide management, swimming pool discharges, and other similar topics. The website also has an online reporting (complaint) form. IDDE activity can be reported by the public and the County will follow up on the situation. The "Only Rain Down the Drain" message has been successfully used in transit bus signage and drain inlet markers. The Parks and DER Departments do not currently promote illicit discharge notifications other than through the 1(800) 2-ASSIST hotline and the online reporting form. Literature about illegal dumping of used oil cites 1(800) CLEANUP, which is not a County line.

Public works previously generated or used shared materials from other agencies (i.e. Tuolumne River Trust). The last outreach materials (fliers) were developed for distribution by the City of Modesto at their annual Earth Day event. Paul Saini indicated that Public Works does not have the staff or funding to develop or distribute E&O materials.

The Parks and DER Departments have outreach materials, but these mainly have a recycling theme (oil, e-waste, household hazardous waste). However, even though the primary focus of these outreach materials is on recycling, this message can easily be applied towards IDDE (i.e., illegal dumping alternatives). These outreach materials are available in the lobby of Parks and DER, and are distributed at community events (such as Earth Day) and at other promotional opportunities.

Recommendations for Program Element Modifications:

In accordance with the recommendations that WGR made for the IDDE program (see Section 7 of this Implementation Plan), all staff members who are involved in the IDDE program must be properly trained. This would include the implementing staff (the Roads Division), the potential reporting staff (all departments and divisions with a field presence, or who receive and convey reports of an illicit discharge or connection), and the oversight staff. A comprehensive initial training should be performed with all departments and staff mentioned above. The training should include how to identify illicit discharges or illegal connections (ID/ICs), and the procedure for reporting and responding to an ID/IC.

Follow-up training should be provided as programmatic or procedural changes occur. New employees who are hired into any of the departments or positions mentioned above are required to be trained within 6 months of hire date.

The County is required to perform an annual assessment of their trained staff's knowledge of illicit discharge response. The County should consider a computer-based training video and examination that can self-guide users through a refresher course, and assess their knowledge through an online quiz after the course. The storm water coordinator or oversight department will need to review quiz results and determine if any additional review is necessary. The quiz results will satisfy documentation of training and the Performance Effectiveness Assessment requirements.

Educational materials are required to be developed and implemented for staff and focused locations. The County should consider developing ID/IC response cards that can be kept in each fleet vehicle used by field staff. The card should include contact information for reporting and requesting response, and a decision-making procedural tree in accordance with the County's response protocols. Areas that see high ID/IC concentrations (i.e. Beard Tract) should receive a stronger emphasis on education and outreach. The County should target business, industries, and residential neighborhoods in the up-gradient area with ID/IC educational materials, inspection and enforcement. Surveys should also be utilized to gauge the understanding and raised awareness of the County's effort in these areas.

Teaming Up Opportunity

The County should explore options for teaming up with other Phase II MS4 permit holders for the development of training modules and practical field training workshops. Teaming up will allow the County to share development cost and have a uniform training program with other local municipalities.

6.3. Construction Outreach and Education (Years 2 & 3):

Basic Permit Requirements:

*Within the **second year** of the effective date of the permit, the County shall ensure that all staff implementing the construction site storm water runoff control program are adequately trained.*

The County may conduct in-house training or conduct with consultants. Training shall be provided to the following staff positions of the MS4:

- *Plan Reviewers and Permitting Staff - The County shall ensure plan reviewers and permitting staff are qualified individuals, knowledgeable in the technical review of local erosion and sediment control plans, (including proper control measure selection, installation, implementation, and maintenance, as well as administrative requirements such as inspection reporting/tracking and the use of the County's enforcement responses), and are certified pursuant to a State Water Board sponsored program as a Qualified Storm Water Pollution Prevention Plan (SWPPP) Developer (QSD), or a designated person on staff possesses the QSD credential.*
- *Erosion Sediment Control/Storm Water Inspectors - The County shall ensure inspectors are qualified individuals, knowledgeable in inspection procedures, and are certified pursuant to a State Water Board sponsored program as either (1) a Qualified SWPPP Developer (QSD); (2) a Qualified SWPPP Practitioner (QSP); or (3) a designated person on staff possesses each credential (QSD to supervise plan review, QSP to supervise inspection operations).*

*Within the **third year** of the effective date of the permit, the County shall develop and distribute educational materials to construction site operators.*

The County shall do the following:

- *Each year, provide information on training opportunities for construction operators on BMP selection, installation, implementation, and maintenance as well as overall program compliance.*
- *Develop or utilize existing outreach tools (i.e. brochures, posters, etc.) aimed at educating construction operators on appropriate selection, installation, implementation, and maintenance of storm water BMPs, as well as overall program compliance.*
- *Distribute appropriate outreach materials to all construction operators who will be disturbing land within the MS4 boundary. The Permittee's contact information and website shall be included in these materials.*
- *Update the existing storm water website, as necessary, to include information on appropriate selection, installation, implementation, and maintenance of BMPs.*

Evaluation of Existing County Program Element:

The County has the following QSDs / QSPs on staff:

- David Leamon
- Paul Saini
- Mark Hamblin
- Colt Esenwein
- Chris Brady

The County's website has tips, information, and links for construction activity BMPs. Public Works (Engineering) is the only department / division that reviews Erosion and Sediment Control Plans (ESCPs). At this point, it is unclear if anyone performs regular construction compliance inspections. Staff members periodically attend relevant storm water educational workshops. There is no existing systematic approach to distributing outreach or educational materials to contractors or developers.

Recommendations for Program Element Modifications:

WGR recommends the following modifications for the Construction program element:

1. During **Year 2**, identify which staff members need to obtain QSD or QSP certifications, and make sure they receive the certification. An alternative to this recommendation is to outsource the oversight responsibilities to a qualified consultant who has the proper certifications.
2. During **Year 2**, train all staff members who work under the QSDs/QSPs reviewing erosion and sediment control plans and performing storm water compliance inspections of construction projects. An alternative to this recommendation is to outsource the training of the plan reviewers and project inspectors to a qualified consultant with the proper certifications.

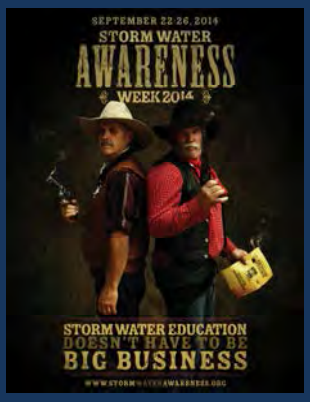
3. Starting in **Year 3**, the County will need to publicize applicable training opportunities for construction operators.

   The County is required to distribute appropriate outreach materials to all construction operators who will be disturbing land within the MS4 boundary. A trigger system should be put in place during the plan review process to determine if any of the training opportunities apply to the proposed construction activities. If so, promotional and informational material for these opportunities should be included in the permitting materials packet that will be received by the project manager. The County will need to add contact information and its storm water educational website address on all distributed materials.

   The County currently has an existing Storm Water Program web page operated by Public Works. The *Construction Activities Pollution Prevention Page* will need to be updated to include information on appropriate BMP selection, installation, implementation, and maintenance. These topics could be supplemented with electronic versions of the educational materials discussed in the Teaming Up Opportunity box, and links to industry standard sites like CASQA.

Teaming Up Opportunity

The County could consider promoting free regional educational events such Storm Water Awareness Week and PDU Week (PDU = professional development units). These annual free events provide storm water education for people from municipality, industry, and construction backgrounds. The wide range of courses offered will meet the permit minimum requirements of referring operators to training on BMP selection, installation, implementation, maintenance, and overall program compliance.



The County should seek to partner with other municipalities to combine existing outreach tools and resources, and if necessary share in the development of new materials (i.e. brochures, posters, etc.). The materials will need to cover appropriate BMP selection, installation, implementation and maintenance, and overall permit compliance.

6.4. Pollution Prevention and Good Housekeeping Staff Training (Year 2):

Basic Permit Requirements:

*Within the **second year** of the effective date of the permit, the County shall develop a biennial employee training program for appropriate employees involved in implementing pollution prevention and good housekeeping practices as specified in Section E.11. Pollution Prevention/Good Housekeeping for County Operations of this Order. The County shall determine the need for interim training during alternate years when training is not conducted, through an evaluation of employee Pollution Prevention/Good Housekeeping knowledge. All new hires whose jobs include implementation of pollution prevention and good housekeeping practices must receive this training within the **first year** of their hire date.*

The training program shall include the following:

- *Biennial training for all employees implementing this program element. This biennial training shall include a general storm water education component, any new technologies, operations, or responsibilities that arise during the year, and the permit requirements that apply to the staff being trained. Employees shall receive clear guidance on appropriate storm water BMPs to use at municipal facilities and during typical Operation and Maintenance (O&M) activities.*
- *A biennial assessment of trained staff's knowledge of pollution prevention and good housekeeping and shall revise the training as needed.*
- *A requirement that any contractors hired by the County to perform O&M activities shall be contractually required to comply with all of the storm water BMPs, good housekeeping practices, and standard operating procedures described above.*
- *The County shall provide oversight of contractor activities to ensure that contractors are using appropriate BMPs, good housekeeping practices and following standard operating procedures.*

Evaluation of Existing County Program Element:

No regular or routine pollution prevention training was identified for any department or division. Previously, some County staff had attended *gotSWPPP*, a storm water training workshop that provided storm water related education regarding the former edition of the Construction General Permit.

Annual housekeeping and inspections are performed at applicable parks and DER facilities, reviewing proper storage and containment of liquid materials and wastes. Applicable Roads and Parks facilities that use pesticides are annually inspected by the Ag Department. Some pollution prevention measures are discussed during these inspections such as keeping chemical containers closed and stored properly, and verifying proper usage of pesticides.

The County provides pollution prevention messages and tips on Public Work's Storm Water Pollution Prevention webpage. The tips are directed to industry, construction / developers, home owners, educators and the general public.

The Ag Department, DER, and Parks also offer educational brochures that focus on recycling and proper pesticide application tips. Although these messages are not specifically geared for storm water pollution prevention, some of the messages are similar (i.e. no dumping of used oil).

Recommendations for Program Element Modifications:

WGR recommends the following modifications for the Pollution Prevention / Good Housekeeping program element:

1. During **Year 2**, the County should consider developing a single biennial (every other year) training workshop event for applicable employees. The workshop would include general storm water education components, review of new technologies, operations, or responsibilities that have come up during the last year. The training should include specific modules that applies to each staff being trained (Roads, Fleet, Parks, etc.). The training will cover pollution prevention practices, BMP selection and implementation, and O&M activities.
2. Beginning in **Year 2**, to meet the biennial assessment requirement, pre- and post-exit surveys (quizzes) could be developed and utilized before and after the training to track and document increase in knowledge and determine if the training workshops are being effective. If less-than-desired scores are achieved, by evaluating missed questions the County can determine if additional review with staff is necessary or if training needs to be more focused or expanded in certain areas. If such training is necessary, it could be conducted in non-biennial training years (during the off years). All training records, quiz results, and training related data should be compiled and included in the County's storm water management database and summarized for the annual reports. Training records and aptitude scores will be assessed as part of the Performance Effectiveness requirements of the permit.
3. Commencing in **Year 2**, new applicable employees will need to be trained within the first year of employment. Materials, videos, and presentations from the most recent biennial training should be maintained and provided to new employees as needed.
4. Beginning in **Year 2**, contractors who have been hired by the County to perform O&M activities will need to be contractually required to comply with the County's storm water BMPs, good housekeeping practices and standard operating procedures (SOPs). The County will need to review and revise its contract and bid documents to include its expectations and requirements for compliance with the Pollution Prevention and Good Housekeeping Program. Where applicable the bid specs and contract conditions should reference BMP manuals and cut sheets (i.e. CASQA's BMP handbooks).
5. Beginning in **Year 2**, the County will need to field verify compliance and provide oversight of pollution prevention practices and BMP implementation. Records of field visits and compliance achieved or corrections needed should be logged. The records should be compiled and included in the County's storm water management database. Contractor compliance records will be assessed as part of the Performance Effectiveness requirements of the permit and included in each annual report.

Teaming Up Opportunity

The County should explore options for teaming up with other Phase II MS4 permit to hold a pollution prevention / good housekeeping workshop to which all of the municipalities send their applicable staff. This workshop could be held in conjunction with the illicit discharge detection and elimination training.

6.5. Public Involvement Participation Program (Second Year):

Basic Permit Requirements:

*Within the **second year** of the effective date of the permit, the County shall involve the public in the development and implementation of activities related to the program. The public participation and involvement program shall encourage volunteerism, public comment and input on policy, and activism in the community. The County shall also be involved in their Integrated Regional Water Management Plan (IRWMP) or other watershed-level planning effort, **if applicable**.*

At a minimum, the County shall:

- *Develop a public involvement and participation strategy that establishes who is responsible for specific tasks and goals.*
- *Consider development of a citizen advisory group (either a stand-alone group or utilize an existing group or process). The advisory group may consist of a balanced representation of all affected parties, including residents, business owners, and environmental organizations in the MS4 service area and/or affected watershed. The County may invite the citizen advisory group to participate in the development and implementation of all parts of the community's storm water program.*
- *Create opportunities for citizens to participate in the implementation of BMPs through sponsoring activities (e.g., stream/beach/lake clean-ups, storm drain stenciling, volunteer monitoring and educational activities).*
- *Ensure the public can easily find information about the County's storm water program.*
- *Actively engage in the County's IRWMP or other watershed-level planning effort.*

Evaluation of Existing County Program Element:

The County has participated in and utilized annual clean-up and awareness events like Earth Day (each April) and Coastal Cleanup Day (each September) to encourage environmental awareness and public participation. In previous years, the County has teamed up with the City of Modesto to facilitate Earth Day activities. Future Earth Day events could be planned to incorporate volunteers from the public and the citizen advisory group members.

Coastal Clean Up Day is another great annual public participation event that, if publicized and marketed to community service organizations (Boy Scouts, Schools, Faith-Based Organizations, etc.), can result in a good turnout. CCU Day is beneficial to the County's Storm Water Management Program as cleanup activities can be focused on hot-spot and high-risk areas that could use the extra attention. CCU Day is also the easiest event to gauge effectiveness as part of the County's

Performance Effectiveness evaluation requirements. Cleanup participants identify and separate all collected refuse into categories (recyclable, general trash, etc.). Prior to recycling or disposal, the materials are weighed to document amount of materials removed. This is also an excellent awareness tool for the public as they will see firsthand the materials that are dumped or allowed to wash into local waterways.

The County currently uses its website to host storm water program documents and messages. The County should consider adding a public comment mechanism to the website where the public can give input on the storm water program and its implementation. Public Works has previously developed a survey to collect public opinion. Since two surveys are required during the permit term, the County could revise the last survey to include targeted public awareness, public opinion, and outreach campaign effectiveness gauging questions. The surveys should be made available online and publicized through mailers and outreach fliers. The data received through the online public comment areas and completed surveys can be reviewed and applicable comments can be considered during the storm water program planning and/or implementation. Survey data should be entered into the County's storm water management database to track and report trending data and gauge program effectiveness.

The County is already involved in two separate regional watershed-level planning efforts. One is the Stanislaus Groundwater Advisory Committee which is a coalition of 21 agencies who meet on groundwater issues and are responding to the Governor's sustainable groundwater initiative. The other is the East Stanislaus Integrated Regional Water Management Plan (IRWMP) which was adopted by the County's Board of Supervisors on July 29, 2014.

Recommendations for Program Element Modifications:

WGR recommends the following modifications for the Public Involvement program element:

1. During **Year 2**, the County will need to develop a public involvement and participation strategy. The strategy will need to create involvement opportunities for the public to participate in the County's implementation of the storm water program. We recommend that this strategy be incorporated into the same document as the Public Education and Outreach Program.
2. During **Year 2**, the County should attempt to develop a storm water citizen advisory group. In doing so, the County should look for existing groups, individuals, businesses, and other organizations that already have a vested interest in the County's water quality. For instance, the organization committee for annual Earth Day held in Modesto's Graceada Park may be a good place to start looking for potential advisory group members.
3. During **Year 2**, the County will need to document its involvement in the two regional watershed-level planning efforts.

7. Illicit Discharge Detection and Elimination Program (Section E.9.)

Under Section E.9. of the permit, the County is required to implement an Illicit Discharge Detection and Elimination (IDDE) Program. This section of the MS4 permit has associated with it the following tasks:

1. Outfall Mapping
2. Illicit Discharge Source / Facility Inventory
3. Field Sampling to Detect Illicit Discharges
4. Source Investigations, Corrective Actions, and Spill Response Plan

In each sub-section below, we will provide an overview of the basic permit requirements, an evaluation of the existing program, and recommendations for program modifications.

7.1. Outfall Map (Year 2):

Basic Permit Requirements:

The County will need to develop and maintain an up-to-date and accurate outfall map. The outfall map at a minimum will show the following:

- *The location of all outfalls* ***that are operated by the County within its jurisdiction that drains to receiving water****. The map must also include the drainage areas and land uses contributing to each of the outfalls. Each mapped outfall shall be located using GPS coordinates and given an individual alphanumeric identifier (noted on the map). Photographs or an electronic database shall be utilized to provide baseline information and track operation and maintenance need over time.*
- *The location and name of all receiving waters* ***which receive direct discharges from those outfall pipes****.*
- *Priority areas (to be updated annually)*
    - *Areas with older infrastructures that are more likely to have illegal connections and a history of sewer overflows or cross-connections.* (Roads indicated that they perform annual "pre-season" system maintenance on areas that are prone to flooding or blockages. They should be able to help establish this list through current practices.)
    - *Industrial, commercial, or mixed use areas* (Overlays of general use)
    - *Areas with a history of past illicit discharges* (Utilize the County's complaint forms, storm water program database, fire incident logs, and DER incident records)
    - *Areas of illegal dumping* (Roads can identify these hotspot areas susceptible to dumping)
    - *Areas with onsite sewage disposal systems*
    - *Areas upstream of sensitive water bodies*
- *Field sampling stations*
- *Permit boundary*

- *Submerged outfalls or other outfalls that may pose a threat to public safety and/or that are inaccessible are not required to be inventoried.*

It is important to properly define what is to be included on the outfall map. According to the above permit reference, the outfall map must show:

- ⇨ The location of all outfalls **that are operated by the County within the urbanized area** (Note: this does not include outfalls operated by other entities such as farmers, Caltrans, other cities, or irrigation districts; and it does not include outfalls outside of urbanized areas [i.e. the red shaded parts on the permit boundary map in **Appendix B**]).
- ⇨ Drainage areas and land uses contributing to those outfalls that are operated by the County and discharge to a receiving water within the County's jurisdiction.

The outfall map may be in hard copy and/or electronic form or within a geographical information system (GIS).

Evaluation of Existing County Program Element:

The County has a GIS map that is available in part online at:

http://gis.stancounty.com/giscentral/public/map/esri/flex/waterAtlas/index.jsp#

The map does show receiving water and appears to have layers for the irrigation districts (although at the time of this report, WGR could not make the irrigation district layers function). Currently there are no layers available to the public for the storm drainage system or the outfalls. Upon questioning Public Works staff, it did not appear that this information is readily available to County staff either. Information about the storm drainage system appears to be mostly on hard copy County maps, with newer areas possibly on AutoCAD. According to Public Works staff, not all outfalls are identified on the maps.

Recommendations for Program Element Modifications:

WGR recommends the following modifications for the outfall mapping task of the IDDE Program Element:

1. During the early part of **Year 2 (during the dry season)**, the County should utilize its own field crews or contracted resources to perform a survey of all of the receiving waters within the permit boundary to identify qualifying outfalls. The field crews will need to be trained and equipped to perform the outfall surveys. We recommend that the procedures for outfall mapping and verification included in **Appendix D** of this Implementation Plan be used by the field crews.
2. Since the County has a GIS system, we recommend that during **Year 2** it starts to populate the system with the outfall mapping and storm drainage system information.

7.2. Facility / Source Inventory (Year 2):

Basic Permit Requirements:

The County shall maintain an inventory of all industrial / commercial facilities and sources within the County's jurisdiction (regardless of ownership) that could discharge pollutants in storm water to the MS4.

*The inventory shall include at **minimum** the following information for each industrial facility / source the following:*

- *Facility name*
- *Address*
- *Nature of business or activity*
- *Physical location (decimal latitude-longitude) of storm drain receiving discharge*
- *Name of receiving water and if the facility/source is tributary to a Clean Water Act Section 303(d) listed water body segment or water body segment subject to a TMDL*
- *Incorporation of facility information into GIS is **optional***

*At **minimum**, the following industrial and commercial facilities / sources shall be included in the inventory (to be updated annually):*

- *Vehicle salvage yards*
- *Metal and other recycled materials collection facilities*
- *Waste transfer facilities*
- *Vehicle mechanical repair, maintenance or cleaning*
- *Building trade central facilities or yards*
- *Corporation yards*
- *Landscape nurseries and greenhouses*
- *Building material retailers and storage*
- *Plastic manufacturers*
- *Other facilities designated by the County or Regional Water Boards to have reasonable potential to contribute to pollution of storm water runoff.*

The County shall determine if facilities which require IGP coverage have done so and are required to report non-filers to the Water Board and during annual reporting.

The County shall develop procedures to assess priority areas for the presence of illicit discharges at least once over the length of the permit term. The procedures shall include:

- *Field observations*
- *Field screening*
- *Inspections*

- *Other appropriate and effective survey methods*

Alternatively the County may establish a self-certification program where the County would require reports from authorized parties demonstrating the prevention and elimination of illicit discharges at their facilities in priority areas at least once over the length of the permit term.

Evaluation of Existing County Program Element:

Although the County does not currently maintain a separate list of industrial and commercial facilities as categorized in the Phase II MS4 permit, the County's business licensing database can be utilized to query business types, establish an inventory of industrial/commercial businesses within the County's permit jurisdiction. In addition, GSA's list of County owned/operated properties should also be integrated into the inventory for facilities that could reasonably be considered industrial/commercial in nature (i.e. fleet & corp. yards). Other existing databases can also be used. The federal government has a number of databases that may help identify locations for investigation. The United States Environmental Protection Agency (USEPA) operates two such databases. The first is the Enforcement and Compliance History Online (ECHO) database. With this system, facility compliance history can be queried and facilities can be found based on geographic location (county level), or zip code.[2] The other database is Envirofacts.[3] This website provides access to multiple USEPA databases to provide information about environmental activities (including Resource Conservation and Recovery Act [RCRA] and Toxic Release Inventory [TRI] facilities) that may affect air, water, and land anywhere in the United States. The website also provides access to Enviromapper, which will display the location of regulated facilities. In addition, the County may want to cross reference the SWRCB's SMARTS database[4] to view industrial facilities that have filed Notice of Intents (NOIs).

Recommendations for Program Element Modifications:

WGR recommends the following modifications for the facility/source inventory task of the IDDE Program Element:

1. During **Year 2**, the County will need to develop an inventory of industrial/commercial facilities within the County's permit boundaries. The permit requires that facilities with potential to discharge pollutants in storm water to the MS4 be inventoried. There is potential for almost every facility in some way to discharge pollutants. We recommend taking a conservative approach to this task by inventorying all industrial/commercial business within the County's permit jurisdiction. The purpose of this database is to identify facilities for inspections of potential illicit discharges. We recommend that the County begin this task by utilizing internal or contracted staff to evaluate a queried report from the County's business license database. Additional information can be obtained from the other federal and state databases referenced in the above section.
2. Once an inventory is established, the County is required to determine whether any of the facilities applicable to the State's Industrial NPDES General Permit (IGP) have not filed a Notice of Intent for permit coverage. This is done by cross referencing the newly formed

[2] http://www.epa.gov/echo/index.html
[3] http://www.epa.gov/enviro/
[4] http://www.waterboards.ca.gov/water_issues/programs/stormwater/databases.shtml

industrial/commercial inventory with the SWRCB's SMARTS database to view industrial facilities that have IGP coverage. In the current IGP, coverage requirements are based upon SIC codes. For facilities that do not have coverage under the IGP, their SIC codes will need to be reviewed to determine if coverage is required. If facilities are found that require IGP coverage but have not filed an NOI, the County must notify the RWQCB.

3. During **Year 2**, the County will need to implement procedures to assess the priority industrial/commercial facilities for the presence of illicit discharges at least once over the length of the permit term. This can be accomplished in one of two ways:

   a. Through a field verification procedure which will involve field observations, field screenings, inspections and other methods of survey.

   b. Through establishing a self-certification program where the County would require reports at least once during the permit term from the owners of priority industrial/commercial facilities demonstrating the prevention and elimination of illicit discharges at their facilities. Refer to the example self-certification form in **Appendix D**.

   WGR recommends the self-certification option as it will likely require less County staff and resources to implement. A self-certification form can be developed to fact-find about potential pollutant discharge sources and facility management of those sources. Other IDDE program related information, such as the facility's SIC Code, business description, and IGP status, can also be queried from the respondent using the self-certification form. However, inspections and follow up may be required for non-responsive facilities, unsatisfactory questionnaire responses, or where clarification is needed.

7.3. Field Sampling to Detect Illicit Discharges (Year 2):

Basic Permit Requirements:

While conducting the outfall inventory, the County shall sample any outfalls that are flowing or ponding more than 72 hours after the last rain event. The County shall also conduct dry weather sampling (more than 72 hours after the last rain event) of outfalls annually identified as priority areas…Conduct follow up investigations if the action level concentrations are exceeded.

Evaluation of Existing County Program Element:

The County does not currently inspect outfalls on a routine basis.

Recommendations for Program Element Modifications:

WGR recommends the following modifications for the field sampling task of the IDDE Program Element:

Table 2. Action Level Concentrations for Indicator Parameters

Indicator Parameter	Action Level Concentration
Ammonia	>= 50 mg/L
Color	>= 500 units
Conductivity	>= 2,000 µS/cm
Hardness	<= 10 mg/L as CaCO3 or >= 2,000 mg/L as CaCO3
pH	<= 5 or >=9
Potassium	>= 20 mg/L
Turbidity	>= 1,000 NTU

1. Beginning in **Year 2**, outfalls will be inventoried, and sampled when appropriate. It is scheduled for the dry period July - September 2014. Waiting until the warm dry season will eliminate any likely leftover ponding from possible late spring storms. The County will need to sample any outfalls in which flow or ponding is observed. The permit requires that outfalls with flow or ponding are

sampled for indicator parameters (Table 2 on p. 35 of the permit). The County may use these parameters, or suggest alternate parameters based on local knowledge of Pollutants of Concern (POC). Alternative monitoring and a justification of alternative monitoring shall be identified within SMARTS. We recommend that field crews (internal or contracted) who will be performing the outfall survey be trained to collect samples and equipped with sample kits and procedures. Subsequently, the outfalls will need to be inspected each year and any outfalls having a dry weather discharge will need to be sampled. Sample results from the outfall sampling will need to be reviewed and compared to the Table 2 Action Level Concentrations. If the County has elected to use alternative parameters based on local knowledge, the County may select Action Levels base on those POCs.

7.4. IDDE Spill Plan, Source Investigations, and Corrective Actions (Years 1 and 2):

Basic Permit Requirements:

*During **Year 1**, the County is required to develop an IDDE Spill Plan. At **minimum**, the Spill Response Plan will incorporate the following:*

- *Roles and responsibilities* (DER, Public Works, Police, Fire, 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*

*During **Year 2**, the County shall establish procedures to investigate and follow up with illicit discharges and suspected illicit discharges. The procedures will establish protocol for follow up with the above-referenced dry weather outfall inspections within 72 hours of discovery and/or becoming aware of a suspected illicit discharge.*

Suspected sanitary sewer and/or significantly contaminated illicit discharges shall be investigated within 24 hours.

A prioritization of response shall be established (i.e. response to SSO prior to wash water).

Report immediately the occurrence any flows believed to be an immediate threat to human health or the environment to the local Health Department (DER).

Determine and document through investigations the source of all non-storm water discharges. If the discharge is determined to be allowable, no further action is required.

Corrective Action to Eliminate Illicit Discharge – Once the source of the Illicit Discharge/Connection has been determined, the County shall notify the responsible party of the problem, and require the party to conduct all necessary corrective actions within 72 hours of notification. Once notification is received that the discharge has been eliminated, the County shall conduct a follow-up investigation and field screening to verify that the discharge has been eliminated using BMPs or other corrective action. The investigation shall be documented. The County may seek recovery and remediation cost from the responsible parties or require compensation for the cost of field screening and investigations. Resulting enforcement actions shall follow the County's Enforcement Action Plan.

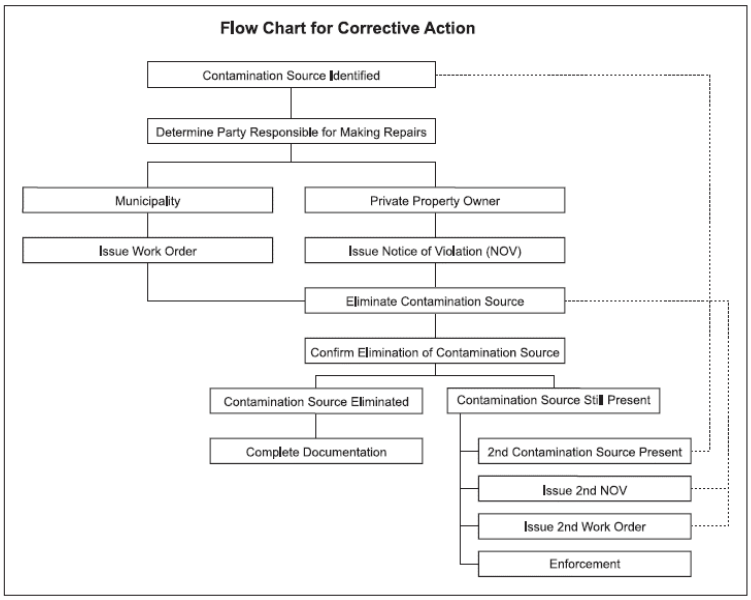
Evaluation of Existing County Program Element:

The County has related programs that can be cross referenced into the Spill Plan such as the Fire Department's Hazardous Materials Response Plan. Although the County maintains an on-line storm water pollution complaint form and a call-in number (209) 525-6550; there is no written procedure for responding to other types and more common forms of illicit discharges, such as a resident washing paint into the storm drain.

Recommendations for Program Element Modifications:

WGR recommends the following modifications for the Spill Plan, Investigation, and Corrective Action tasks of the IDDE Program Element:

1. During **Year 1**, the County will need to develop a written protocol (Spill Plan) to outline IDDE response, notification, and follow up measures within 72 hours of discovery of a suspected illicit discharge, within 24 hours of a SSO or significantly contaminated illicit discharge and immediate referral to Public Works of illicit discharges that are an immediate threat to human health or the environment. The Spill Plan should incorporate by reference existing procedures and systems for responding to SSOs and hazardous material spills. The County will need to develop procedures for responding to other illicit discharges and include them in the Spill Plan. The procedures can be reduced to an easy-to-use flow chart that can be referenced in the field when responding to an illicit discharge. On the right is an example flow chart that incorporates County procedures with the Enforcement Response Plan to show how illicit discharges move from discovery and identification to response and resolution.



2. As a part of the Spill Plan development during **Year 1**, the County will need to identify how submittals of the on-line report forms and calls into the IDDE hotline are handled, tracked, and followed-up.
3. During **Year 2**, the County will be required to develop procedures for identifying, investigating and performing corrective action for illicit discharges. However, this activity is so intricately associated with the Spill Plan, that WGR suggests it be done during **Year 1** in conjunction with the Spill Plan development.
4. As discussed in Section 6.2 of this Implementation Plan, training of applicable County Departments and personnel is not only key for identifying illicit discharges and establishing an effective reporting system, but is also required during **Year 3**. We recommend that all County inspectors receive IDDE training. The training will teach all local inspectors to recognize discharges, make a determination if they are authorized or unauthorized (illicit) and how to

report the discharge for follow up and/or enforcement. We recommend that fire, building, plumbing, health, safety, erosion control, vector, streets, and other local inspectors understand illicit discharges and know whom to contact with the County for enforcement.

8. Construction Site Storm Water Control Program (Section E.10.)

Under Section E.10. of the permit, the County is required to implement a Construction Site Storm Water Runoff Control Program. This section of the MS4 permit has the following tasks associated with it:

1. Construction Site Inventory
2. Construction Plan Review and Approval Procedure
3. Construction Site Inspection and Enforcement

In each sub-section below, we will provide an overview of the basic permit requirements, an evaluation of the existing program, and recommendations for program modifications.

8.1. Construction Site Inventory (Year 1)

Basic Permit Requirements:

*Within the **first year** of the effective date of the permit, the Permittee shall maintain an inventory of all projects subject to the local construction site storm water runoff control ordinance within its jurisdiction.*

The Permittee shall develop, implement, and enforce a program to prevent construction site discharges of pollutants and impacts on beneficial uses of receiving waters. The program shall include the development of an enforceable construction site storm water runoff control ordinance for all projects that disturb less than one acre of soil. The construction site storm water runoff control ordinance shall include, at a minimum, requirements for erosion and sediment controls, soil stabilization, dewatering, source controls, pollution prevention measures and prohibited discharges.

The inventory shall contain, at a minimum:

a. *Relevant contact information for each project (e.g., name, address, phone, email, etc. for the owner and contractor)*
b. *The basic site information including location, status, size of the project and area of disturbance*
c. *The location of the project with respect to all water bodies, water bodies listed as impaired by sediment-related pollutants, and water bodies listed as impaired for sediment or turbidity under the CWA Section 303(d) and approved by U.S. EPA*
d. *Project threat to water quality*
e. *Current construction phase*
f. *The required inspection frequency per the local construction site storm water runoff control ordinance*
g. *The project start and anticipated completion dates*
h. *The date the Permittee approved the erosion and sediment control plan in accordance with this Section*

There are two issues with this:

1. The ordinance during **Year 1** is different than the required revised ordinance during **Year 2**.

    a. The MS4 Permit states the following:

    *Within the **second year** of the effective date of the permit, the Permittee shall review and revise relevant ordinances or other regulatory mechanisms, or adopt any new ordinances or other regulatory mechanisms, to obtain adequate legal authority…*

    b. The current County ordinance states:

    "Construction activity" means activities subject to NPDES construction permits. These include construction projects resulting in land disturbance of one acre or more. Such activities include, but are not limited to, clearing and grubbing, grading, excavating and demolition.

    c. As required by the Phase II MS4 Permit, the proposed revised County ordinance will state:

    "Construction activity" includes any public or private projects involving roadwork, paving, utility installation, structural construction (new or redevelopment), demolition, grading, excavation, or landscaping that has soil disturbance or has pollutants exposed to storm water. It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purposes of a facility, nor does it include emergency construction activities required to immediately protect public health and safety.

    Therefore, during **Year 1** (until June 30, 2014), an inventory based on the current ordinance would only include those projects subject to the Construction General Permit (CGP). However, sometime during **Year 2**, a revised ordinance must be adopted and will include any construction activity that has soil disturbance or has pollutants exposed to storm water.

2. The MS4 permit provides no minimum amount of soil disturbance, making it necessary to include all projects with soil disturbance. ***This is a significant problem*** because there is no mechanism to track and inventory projects that are not required to go through plan review or obtain a grading / building permit but yet fall with the State's inventory criteria. WGR communicated with Ms. Genevieve Sparks of the Central Valley RWQCB and with Ms. Ali Dunn of the SWRCB to obtain clarification of these permit requirements. We have included a copy of the email replies and responses in **Appendix E** of this Implementation Plan. ***In a subsequent telephone conference with Ms. Sparks, she stated that the Water Board is considering requiring projects to have a building or grading permit and have areas of soil disturbance exposed to storm water in order to be included on the inventory.*** WGR requested that the Water Board consider issuing a FAQ on their website to provide documentation of this interpretation.

Evaluation of Existing County Program Element:

Currently, a monthly inventory is created by downloading the list of active projects within Stanislaus County from the Water Board's SMARTS database. The inventory of construction projects that were active at any time during July 1, 2013 through June 30, 2014 is included in **Appendix E**.

The MS4 permit requires the following information to be included in the inventory, all of which is accessible from SMARTS, the Erosion and Sediment Control Plan (ESCP), the Storm Water

Pollution Prevention Plan (SWPPP) that was submitted by the project proponent, or other publicly accessible data sources:

a. *Relevant contact information for each project (e.g., name, address, phone, email, etc. for the owner and contractor);* **WGR Evaluation:** For projects subject to the Construction General Permit (CGP), this information can usually be found on the NOI form. There will be an additional step to download the NOI form, extract the data, and enter it into the County's inventory. However, for smaller projects this information can be gathered from the project proponent during the permitting / plan review process. WGR has developed an ESCP Worksheet for Small Projects that will help gather this information plus the information needed for the following sections.

b. *The basic site information including location, status, size of the project, and area of disturbance;* **WGR Evaluation:** This can usually be found on the NOI form or the ESCP Worksheet.

c. *The location of the project with respect to all water bodies, water bodies listed as impaired by sediment-related pollutants, and water bodies listed as impaired for sediment or turbidity under the CWA Section 303(d) and approved by U.S. EPA; WGR* **Evaluation:** This information can be found on the NOI, but it tends to be confusing, and can cause the CGP applicants to inadvertently enter wrong information. It is also not a mandatory entry field for the CGP NOI on SMARTS. It may be best for County staff to make a determination based on the location of the project. In Stanislaus, this is fairly straight forward.

d. *Project threat to water quality; WGR* **Evaluation:** The project's threat to water quality includes soil erosion potential, site slope, the project's size and type, sensitivity of receiving water bodies, proximity to receiving water bodies, non-storm water discharges, projects which are greater than one acre but are not subject to the CGP (sites that have obtained an Erosivity Waiver), and past record of non-compliance by the operator of the construction site. Inspection frequencies are required to be conducted based on the prioritization criteria described above. WGR recommends categorizing threat in the following way to correspond with the CGP (Not subject to the CGP; Erosivity Waiver; Risk 1 / LUP Type 1; Risk 2 / LUP Type 2; and Risk 3 / LUP Type 3). Since LUP projects can have multiple types, the highest type level for a specific LUP project would be its "threat to water quality". During **Year 2**, the County's construction ordinances need to be changed to incorporate these risk levels. The revised ordinances are contained in **Appendix C** and include this inspection and risk rating language (highlighted in yellow). We have also added the above recommended threat levels to the inspection form included in **Appendix E**.

e. *Current construction phase;* **WGR Evaluation:** This is not in the current ordinances and would not apply to the inventory until **Year 2**. This information will come from MS4 construction inspections.

f. *The required inspection frequency per the local construction site storm water runoff control ordinance;* **WGR Evaluation:** This is not in the current ordinances and would not apply to the inventory until **Year 2**. If a project has been issued two consecutive notices of violation or does not correct a previously issued notice of violation by the due date set by the inspector, the project's "threat to water quality" will be elevated to the next highest category. Inspection frequencies will be as follows:

- Projects not subject to the CGP or that have an Erosivity Waiver will have a pre-soil disturbance inspection and a project completion inspection.
- Projects that are Risk 1 / LUP Type 1 or Risk 2 / LUP Type 2 will have a pre-soil

disturbance inspection, monthly inspections, and a project completion inspection.

- Projects that are Risk 3 / LUP Type 3 will have a pre-soil disturbance inspection, bi-monthly (twice per month) inspections, and a project completion inspection.

g. *The project start and anticipated completion dates;* **WGR Evaluation:** This information will come from the NOI form.

h. *The date the Permittee approved the erosion and sediment control plan in accordance with this Section.* **WGR Evaluation:** This information will come from the County Department who is reviewing the E&SCP / SWPPPs.

Recommendations for Program Element Modifications:

WGR recommends the following modifications for the inventory task of the Construction Program Element:

1. During **Year 2**, the County needs to obtain clarification from the SWRCB and the Central Valley RWQCB concerning the minimum size of soil disturbance or any other quantified threshold value that will be used to determine if a construction project needs to be included on the inventory. The County needs to also obtain clarification about which projects are required to be in the inventory – only those projects passing through the County's plan review/permitting process, or all construction projects with soil disturbance.
2. Before the end of **Year 1**, the County should take the inventory list compiled by WGR and included in **Appendix E**, remove any projects that were outside of the County's permit boundary, and populate it with the other required information fields as identified in Section E.10.a.(ii).
3. Before the end of **Year 1**, the County should designate and train a staff member or contracted resource who will maintain the inventory on an on-going basis.

8.2. Construction Plan Review and Approval Process (Year 1)

Basic Permit Requirements:

The MS4 Permit states the following:

*(i) Within the **first year** of the effective date of the permit, the County shall develop procedures to review and approve relevant construction plan documents. The review procedures shall meet the following minimum requirements:*

1. ***Prior to issuing a grading or building permit**, the County shall require each operator of a construction activity within its jurisdiction to prepare and submit an erosion and sediment control plan for the County's review and written approval. The County shall not approve any erosion and sediment control plan unless it contains appropriate site-specific construction site BMPs that meet the minimum requirements of the County's construction site storm water runoff control ordinance. If the erosion and sediment control plan is revised, the County shall review and approve those revisions.*
2. *Require that the erosion and sediment control plan include the rationale used for selecting BMPs including supporting soil loss calculations, **if necessary**.*
3. *Require that the erosion and sediment control plan list applicable permits directly associated with the grading activity, 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 County that all permits directly associated with the grading activity have been obtained prior to commencing the soil disturbing activities authorized by the grading permit.

4. *Conduct and document review of each erosion and sediment control plan using a checklist or similar process.*
5. *The SWPPP developed pursuant to the CGP may substitute for the erosion and sediment control plan for projects where a SWPPP is developed. The County is responsible for reviewing applicable portions of the SWPPP for compliance with the County's construction site storm water runoff control ordinance and the Phase II MS4 Permit.*

Evaluation of Existing County Program Element:

Currently, for projects with soil disturbance greater than one acre or part of a larger common plan, the County requires the project proponent to submit proof of coverage of the CGP (i.e. the WDID number) and to provide a copy of the SWPPP or Erosion and Sediment Control Plan (ESCP). However, the County does not currently perform a detailed or thorough review of the submitted plans.

Recommendations for Program Element Modifications:

WGR recommends the following modifications for the plan review task of the Construction Program Element:

1. Before the end of **Year 1**, the County should develop and begin to implement an ESCP/SWPPP review checklist. WGR has prepared a plan review checklist for the County's consideration and use. The checklist is included in **Appendix E**. The County will need to develop a spreadsheet or other system to track how many and which projects submitted an ESCP or SWPPP, who reviewed the plan, the date of the review, and whether the plan was acceptable or needed revisions. The tracking spreadsheet and all of the completed checklists should be maintained in an electronic format on the County's server so that the data is readily accessible for the annual report preparation or if the County's storm water program is audited.
2. Before the end of **Year 1**, the County should designate and train one or more staff members or contracted resources who will review the submitted ESCPs and SWPPPs on an on-going basis. The plan reviewer must either be a QSD or supervised by a QSD.

8.3. Construction Site Inspection and Enforcement (Year 2)

Basic Permit Requirements:

Within the **second year** of the effective date of the permit, the County shall use legal authority to implement procedures for inspecting public and private construction projects and conduct enforcement if necessary. The County may leverage existing inspection procedures and personnel to conduct construction site inspections and enforcement. The inspection procedures shall be implemented to verify compliance with the County's construction site storm water control ordinance. At a minimum, inspections must be conducted at priority construction sites (defined below) prior to

land disturbance (during the rainy season), during active construction and following active construction. Construction site inspections shall include assessment of compliance with the County's construction site storm water runoff control ordinance, and other applicable ordinances.

Prior to allowing an operator to commence land disturbance during the rainy season, the County must perform an inspection, to ensure all necessary sediment controls are in place. During active construction, the County shall conduct inspections, based on prioritization of construction sites. Active construction inspections shall include at a minimum: inspection of maintenance of BMPs, effectiveness of BMPs installed and verification that pollutants of concern are not discharged into receiving water bodies.

Prioritization criteria shall be based on project threat to water quality. Project threat to water quality includes soil erosion potential, site slope, project's size and type, sensitivity of receiving water bodies, proximity to receiving water bodies, non-storm water discharges, projects more than one acre that are not subject to the CGP (sites that have obtained an Erosivity Waiver) and past record of non-compliance by the operator of the construction site. Inspection frequencies shall be conducted based on the prioritization criteria described above.

At the conclusion of the project, the County must inspect to ensure that all disturbed areas have been stabilized and that all temporary erosion and sediment control measures that are no longer needed have been removed as required by the local construction site storm water control ordinance.

Evaluation of Existing County Program Element:

Currently, the County does not conduct routine storm water compliance inspections at construction sites.

Recommendations for Program Element Modifications:

WGR recommends the following modifications for the inspection task of the Construction Program Element:

1. During **Year 2**, the County will need to begin conducting storm water compliance inspections of construction sites at "priority sites". The inspections will need to be performed by a QSP or by an inspector who has been appropriately trained and is supervised by a QSP.
2. During **Year 2**, to address the prioritization requirement, WGR recommends that the County consider the following priority categories and inspection frequencies:
    a. Projects on the inventory list that are not subject to the CGP or that have an Erosivity Waiver will have a pre-soil disturbance inspection and a project completion inspection.
    b. Projects on the inventory list that are Risk 1 / LUP Type 1 or Risk 2 / LUP Type 2 will have a pre-soil disturbance inspection, monthly inspections, and a project completion inspection.
    c. Projects on the inventory list that are Risk 3 / LUP Type 3 will have a pre-soil disturbance inspection, bi-monthly (twice per month) inspections, and a project completion inspection.

    If a project has been issued two consecutive notices of violation or does not correct a previously issued notice of violation by the due date set by the inspector, the project's "threat to water quality" will be elevated to the next highest category. The County will most likely not have any Risk 3 / LUP Type 3 projects within its permit boundary, unless the project is elevated

to that level by the County due to non-compliance.

3. During **Year 2**, the County will need to develop and start using a construction site inspection checklist and a system to track the inspections. WGR has included a draft inspection checklist in **Appendix E**.

9. Pollution Prevention/Good Housekeeping Program (Section E.11.)

Under Section E.11. of the permit, the County is required to implement a Pollution Prevention/Good Housekeeping Program for its own operations and facilities. This section of the MS4 permit involves the following tasks:

1. Inventory of County-owned and Operated Facilities
2. Map of County-owned and Operated Facilities
3. Facility Assessment
4. Storm Water Pollution Prevention Plans
5. Inspections, Visual Monitoring, and Remedial Action
6. Storm Drain System Assessment and Prioritization
7. Maintenance of the Storm Drain System
8. BMPs for County Activities
9. Design and Maintenance of County-owned Landscaping and Flood Management Facilities.

In each sub-section below, we will provide an overview of the basic permit requirements, an evaluation of the existing program, and recommendations for program modifications.

9.1. Inventory of Permittee-Owned and Operated Facilities (Year 2)

Basic Permit Requirements:

*Within the **second year**, the County will need to develop and maintain an inventory of owned or operated facilities within its jurisdiction that are a threat to water quality. The inventory shall include all owned or operated facilities within their jurisdiction that are potentially significant sources of pollution in storm water, including the following if applicable:*

- *Airports*
- *Animal control facilities*
- *Chemical storage facilities*
- *Composting facilities*
- *Equipment storage and maintenance facilities (including landscape-related operations)*
- *Fuel farms*
- *Hazardous waste disposal facilities*
- *Hazardous waste handling and transfer facilities*
- *Incinerators*
- *Landfills*
- *Materials storage yards*
- *Pesticide storage facilities*
- *Public buildings, including schools, libraries, police stations, fire stations, Permittee (municipal) buildings, restrooms, and similar buildings (i.e., buildings with a similar potential to be sources of storm water pollution as the examples provided)*
- *Public parking lots*
- *Public golf courses*
- *Public swimming pools*
- *Public parks*
- *Public works yards*
- *Public marinas*
- *Recycling facilities*
- *Salt or de-icing storage facilities*
- *Solid waste handling and transfer facilities*
- *Transportation hubs (e.g. bus transfer stations)*
- *Vehicle storage and maintenance areas*
- *Vehicle fueling facilities*
- *Other (as directed by appropriate Regional Water Board)*

Evaluation of Existing County Program Element:

The County's GSA division already has in place a fairly complete inventory of County-owned and operated facilities. The County should do some verification, but the GSA list of facilities may be nearly sufficient to meet inventory requirement.

Recommendations for Program Element Modifications:

WGR recommends the following modifications for the facility inventory task of the Pollution Prevention Program Element:

1. During **Year 2**, the County should verify that the GSA inventory is complete and up-to-date. It is WGR's opinion that all County-owned/operated facilities be included on the inventory. Opinions of significant pollution sources could vary and could result in potential litigation if a facility is omitted due to difference of interpretation of what is considered significant pollutant source. For example, most people may not consider a typical park to be a "significant pollution source." However, there are third party organizations that, for instance, may point out that a County park ultimately discharges to receiving waters which can become low in dissolved oxygen due to organic enrichment and pesticides. Such a group might also point out that parks are likely sources of organic material and pesticides in storm water runoff. To avoid litigation, WGR recommends that all County-owned or operated facilities appearing on the above list be included in the inventory of facilities.

9.2. Map of Permittee-Owned and Operated Facilities (Year 2)

Basic Permit Requirements:

*Within the **second year**, the County is required to submit a map identifying the location of the inventoried County-owned or operated facilities and shall identify the storm water drainage system (e.g., storm water outfalls or other mechanisms in which storm water leaves the site) corresponding to each of the facilities as well as the receiving waters to which these facilities discharge. The map shall also show the facility and the manager of each facility, including contact information.*

Evaluation of Existing County Program Element:

During the interview process, GSA stated that they visit each site on the inventory at least once a year. It may benefit the County to have GSA markup printed Google Earth aerial images of the sites and hand-sketch each facility's drainage system.

Recommendations for Program Element Modifications:

WGR recommends the following modifications for the facility inventory task of the Pollution Prevention Program Element:

1. During **Year 2**, an initial analysis of each facility will need to be conducted for each identified County-owned/operated facility. The analysis will need to review and roughly map the facility's drainage and outfall(s). Where applicable, the facility manager's name and contact information will need to be collected. The sketch mapping will need to be formalized and submitted via SMARTS. Verification of the map accuracy can be performed during the facility assessment in **Year 3** (see below). WGR recommends that the GSA perform the initial site inspections and mapping of the facilities.

9.3. Facility Assessment (Year 3)

Basic Permit Requirements:

*Within the **third year**, the County is required to begin conducting an annual review and assessment of all County-owned or operated facilities to determine their potential to impact surface waters. The assessment shall include the following:*

- *Identification of pollutant hotspots:*
    - *Based on the annual assessment, **the County shall identify those facilities that have a high potential to generate storm water and non-storm water pollutants as pollutant hotspots** and assign them a high priority. Among the factors to be considered are the type and volume of pollutants stored at the site, the presence of improperly stored materials, activities that should not be performed outside (e.g., changing automotive fluids, vehicle washing), proximity to water bodies, poor housekeeping practices, and the discharge of pollutant(s) of concern to receiving water(s). Pollutant hotspots shall include, at a minimum, the County's maintenance yards, hazardous waste facilities, fuel storage and/or dispensing locations, airports marinas, and any other facilities at which chemicals or other materials have a high potential to be discharged in storm water.*
    - *Documentation of the comprehensive assessment procedures and results:*

      The County shall document the procedures it uses for conducting the comprehensive assessment along with a copy of any site evaluation checklists used to conduct the comprehensive assessment.

Evaluation of Existing County Program Element:

No facility assessments for impact to surface waters are currently being conducted.

Recommendations for Program Element Modifications:

WGR recommends the following modifications for the facility assessment task of the Pollution Prevention Program Element:

During **Year 3**, the County will need to investigate each hotspot facility to identify the pollution generating activities. The permit states that the County shall *use the Center for Watershed*

Protection's (CWP) Restoration Manual Series guide on Urban Subwatershed and Site Reconnaissance, or equivalent when identifying priority areas. The CWP's guidance document refers to a site evaluation investigation. This investigation, known as the **Hotspot Site Investigation (HSI)**, can be used to systematically evaluate the six categories of pollution-generating activities that commonly contribute to storm water quality problems:

- Outdoor Materials Handling
- Physical Plant Maintenance
- Storm water Infrastructure
- Turf/Landscape Management
- Vehicle Operations
- Waste Management

Table 18: HSI Assessment Factors and Possible Restoration Recommendations

Hotspot Factor Assessed	Pollution Prevention Activity*
Potential, Confirmed or Severe Hotspot	Permit enforcement (D-12)
Vehicle Source Areas	Vehicle pollution prevention practices (H-1 to H-4)
Outdoor Storage Source Areas	Storage pollution prevention practices (H-5/6)
Waste Management Source Areas	Waste pollution prevention practices (H-7/8)
Physical Plant Operations	Maintenance pollution prevention practices (H-9 to 11)
Turf/Landscaping Source Areas	Landscaping pollution prevention practices (H-12/13)
Uncontrolled Storm Water Discharge	Parking lot retrofit (SR-6, OS-7 through 11)
Suspected Source of Illicit discharge	Investigate discharges (M6)
Observed Spill or Illicit Discharge	Contain and fix discharges (M6 and H-7)
Unique Hotspot	Special pollution prevention practices (H-14/15)
Catch Basin Accumulation	Catch basin clean-outs (M-9)

**The code in parentheses refers to the appropriate restoration profile sheet in the Restoration Manual Series. Codes are as follows:*

- *OS- and SR- sheets can be found in Manual 3: Storm Water Retrofit Practices*
- *H- sheets can be found in Manual 8: Source Control Practices*
- *M-9= Manual 9: Municipal Practices and Programs*
- *M-6= Illicit Discharge Detection and Elimination Guidance Manual (Brown et al. 2004)*

The HSI provides a way to quantify the impacts of hotspot activities on urban sub-watersheds (or facilities), and identify possible restoration practices that may be needed. The HSI asks the inspector to assess six distinct pollution sources at each site, and to identify targeted pollution prevention techniques or corrective action practices to address those sources (as shown on Table 18). The result of the HSI is a comprehensive database of confirmed hotspots, each of which is ranked in terms of its severity. The database can be used to determine what, if any, pollution prevention or discharge prevention strategies need to be incorporated into the overall facility corrective action plan. We recommend that the County utilize the checklist for performing a HSI, which is included in **Appendix F** of this Implementation Plan.

9.4. Storm Water Pollution Prevention Plans (Year 4)

Basic Permit Requirements:

*Within the **fourth year**, the County is required to develop and implement a site-specific SWPPP that identifies existing storm water BMPs and a set of storm water BMPs to be installed, implemented, and maintained to minimize the discharge of pollutants to protect water quality. If a County has an existing document for any given facility (such as a Hazardous Materials Business Plan (HMBP), Spill Prevention Plan, or other equivalent document), it is not required to develop a SWPPP for that facility.*

A SWPPP shall be kept on-site at each of the County-owned or operated facilities' offices for which it was completed. The SWPPP shall be updated as necessary.

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 storm water*
- *Description of potential pollutant sources*
- *Facility BMPs*
- *Spill control and cleanup – response to spills*
- *Inspection schedule*
- *Inspection procedures and checklist for inspections conducted to ensure proper selection, implementation, and maintenance of all BMPs*

Evaluation of Existing County Program Element:

The permit allows for facilities that have plans such as an HMBP, SPCC / spill plan, or other equivalent document, to utilize that document in lieu of a SWPPP for that facility. During the department interview process, WGR discovered that the Morgan Road facility has a SPCC plan. County landfills have IGP coverage and should have site-specific SWPPPs already in place. Some of the reservoirs and parks that perform vehicle/equipment maintenance may have HMBPs. SWPPPs will need to be developed for all of the other facilities that are designated as pollutant hotspots through the facility assessment during **Year 3**.

Recommendations for Program Element Modifications:

WGR recommends the following modifications for the SWPPP preparation task of the Pollution Prevention Program Element:

1. During **Year 3**, in conjunction with the assessment of each facility, the County needs to verify which of the inventoried facilities have other plans (SWPPP, SPCC, spill plan or other equivalent) that can be used in lieu of developing a new SWPPP.
2. During the Year 3 facility assessments to provide information for the SWPPP development, WGR recommends that in addition to completing the HSI form, an evaluation also be performed of the pollution prevention practices currently being used or the need for additional pollution prevention activities at each location. We recommend that the evaluation be done by referencing the fifteen Hotspot Pollution Prevention Practice Profile Sheets contained in Chapter 6 of the Urban Sub-watershed Restoration Manual 8[5]. We also recommend that the reviews be performed by GSA or DER during the facility assessment. The inspection checklist and procedures need to be standardized for ease of implementation across the spectrum of facilities.
3. During Year 4, the SWPPPs will need to be developed for those facilities which do not already have a plan that meets the permit's allowance for plan alternatives. A template for the SWPPP

Teaming Up Opportunity

Rather than pay all of the SWPPP development costs, the County could possibly team up with other local MS4s to prepare SWPPP templates for each type of facility. The templates could then be easily modified for specific locations. This could be done either by contracting the template development work out and splitting the cost among the MS4s, or by having each MS4 develop one or two templates for different types of facilities and then share the templates with the participating municipalities.

[5] Available as a free download at www.cwp.org .

should be first developed (see the Teaming Up Opportunity box) to facilitate the plan development and to assure that plans are complete, compliant, and standardized. The SWPPPs will need to be distributed to each of the facilities. The County should develop a protocol for the SWPPP distribution, storage and retention, training of facility personnel on the SWPPP, and the periodic review and revision of the plan.

9.5. Inspections, Visual Monitoring, and Remedial Action (Year 5)

Basic Permit Requirements:

*Within the **fifth year**, the County shall conduct regular inspections of County-owned and operated facilities.*

Evaluation of Existing County Program Element:

No facility inspections for impact to surface waters are currently being conducted.

Recommendations for Program Element Modifications:

WGR recommends the following modifications for the Inspection, Visual Monitoring, and Remedial Action tasks of the Pollution Prevention Program Element:

1. The County will need to conduct the following inspections beginning in **Year 5** of the permit. To maintain consistency with the permit requirements and from one facility to another, WGR recommends that these inspection activities be performed by GSA.

   Quarterly ***visual*** hotspot inspections – The County will need to perform quarterly inspections of those facilities identified as hotspots during the facility assessment during **Year 3**. A checklist for each applicable facility will be developed as part of the SWPPP preparations in **Year 4**. This checklist should guide the inspector through the following items:

   - Materials and equipment are clean and orderly
   - Minimization of potential pollutant discharges
   - Ensure effective selection, implementation, and maintenance of BMPs
   - Look for evidence of spills (clean up if identified)
   - Log any facility deficiencies and corrective actions

   Annual Hotspot ***comprehensive*** inspections - The County will need to perform a ***more in-depth and comprehensive*** annual inspection of those facilities identified as hotspots during the facility assessment during **Year 3**. A checklist for each applicable facility will be developed as part of the SWPPP preparations in **Year 4**. This checklist should walk the inspector through the following items:

   - Pollution prevention at waste storage areas, dumpsters, vehicle and equipment maintenance/fueling areas, material handling areas, and similar areas.
   - Log any facility deficiencies and corrective actions

   Quarterly Hotspot visual observation of ***storm water and non-storm water discharges*** - The County will need to perform quarterly inspections of those facilities identified as hotspots during the facility assessment during **Year 3**. Where discharges are observed, identify any observed problems (e.g., color, foam, sheen, turbidity) associated with pollutant sources or activities.

Identified problems shall be remedied as soon as practicable or before the storm event, whichever is sooner. Inspection report shall log any facility deficiencies and corrective actions.

Non-Hotspot Inspections – At least once per permit term, all non-hotspot facilities included on the inventory established during **Year 2** must be inspected.

Electronic data from each facility's inspections should be incorporated into the storm water management database. A copy of all inspections and records must be kept with each facility's SWPPP.

9.6. Storm Drain System Assessment and Prioritization (Year 2)

Basic Permit Requirements:

The County shall develop and implement procedures to assess and prioritize MS4 storm drain system maintenance, including but not limited to, catch basins, pipe and pump infrastructure, above-ground conveyances, including receiving water bodies within the County's urbanized area and detention basins.

If flood conveyance maintenance is undertaken by another entity (i.e. an irrigation district or the City of Modesto), *the County shall coordinate with the flood conveyance management entity by* ***year three*** *to assess and prioritize maintenance of the MS4 storm drain system.*

Evaluation of Existing County Program Element:

According to Public Works staff there is no systematic written maintenance program or procedure that has assessed and prioritized the storm drainage system and is ready to be used to direct preventative maintenance and cleaning activities. Currently there is not a comprehensive storm drain system map or inventory in place, which makes it difficult to prioritize various components of the system. Maintenance is currently performed on an "as-needed" basis or routine maintenance is scheduled by the knowledge of experienced County staff.

Recommendations for Program Element Modifications:

WGR recommends the following modifications for the Storm Drain System Assessment and Prioritization task of the Pollution Prevention Program Element:

1. During **Year 2**, the County will need to develop written procedures to assess and assign a priority levels to its storm drainage system for maintenance. At the same time, as identified in Section 7.1 of this Implementation Plan, the County will need to develop a storm drainage system and outfall map. A "high" priority level should be assigned to a catch basin, pipe line, basin, or any other drainage structure if it meets any of the following criteria:
    1. Accumulates a significant amount of sediment, trash, and/or debris
    2. Handles large volumes of runoff
    3. Collects/conveys runoff from areas that do not receive regular street sweeping
    4. Collects/conveys runoff from drainage areas with exposed or disturbed soil
    5. Has received citizen complaints/reports

    Execution of these tasks would likely be best suited to the Public Works Road Division as they currently perform maintenance on various County roadways and right-of-ways.

9.7. Maintenance of the Storm Drain System (Year 3)

Basic Permit Requirements:

*Within the **third year**, the County shall begin maintenance of all high priority storm drain systems on an ongoing schedule.*

Evaluation of Existing County Program Element:

According to Public Works staff, the Road Division currently maintains storm water drainage areas associated with County roads and right-of-ways. Although maintenance activities are performed, there are no written guidelines, established frequencies of maintenance, or any log of specific maintenance performed.

Recommendations for Program Element Modifications:

It is highly recommended that the County implement a tracking/preventative maintenance reminder system such as Maximo[6] (an integrated maintenance management software that issues work orders based on schedule). An inspection log will need to be established to track completion of inspection, maintenance, and record system information. During **Year 3**, WGR recommends the following modifications for the Pollution Prevention Program Element task of maintaining the storm drain system. At a minimum, the maintenance of the storm drain system should include:

1. Inspect storm drains – Drainage systems that were assigned a high priority as defined in the section above will need to be inspected at least once per year. The department tasked with these inspections will need to implement a reminder/tracking system to assist with the inspection process.
2. Clean storm drains – The County will need to develop and implement a schedule to clean high-priority catch basins and other drainage system components (pipe, pump infrastructure, culverts, detention basins, etc.). Cleaning schedule will be based upon priority, with higher priority areas receiving a higher frequency of maintenance. The department tasked with these cleanings must implement a reminder/tracking system to assist with the cleaning and records process.
3. Labeling catch basins – The County must ensure that each catch basin in high foot-traffic areas includes a legible storm water awareness message. Currently, the County's Division of Roads places a drain marker with the message "No Dumping Drains to River" on catch basins within the County. Catch basins with illegible or missing labels must be recorded and re-labeled within one month of inspection.

4. Dispose of waste materials – The permit requires the County to develop and implement a procedure to dewater and dispose of materials extracted from catch basins. The procedure will ensure that the water removed during the catch basin cleaning process does not reenter the MS4. The Division of Roads says that debris collected by the catch basin cleaning crew is currently taken to a dedicated pad at the Morgan Road facility to decant excess water. Water is allowed to evaporate. A debris contractor then hauls the debris to the landfill. At the landfill, the weight of debris is recorded and submitted to the County for invoicing and payment. The

[6] As described at http://www-03.ibm.com/software/products/en/maximoassetmanagement .

Division of Roads has previously tracked disposed material tonnage through disposal bills-of-lading (BOLs).

9.8. County Operation and Maintenance Activities (Year 3)

Basic Permit Requirements:

*Beginning during the **third year**, the County is required to assess their operation and maintenance (O&M) activities for potential to discharge pollutants in storm water and inspect all O&M BMPs on a quarterly basis.*

Evaluation of Existing County Program Element:

There are currently no programs or methods in place to assess County O&M activities for pollutant discharge potential.

Recommendations for Program Element Modifications:

WGR recommends the following modifications for the Operations and Maintenance Activities task of the Pollution Prevention Program Element:

1. During **Year 3**, perform an assessment of the following activities for potential to discharge pollutants:
   a. Road and parking lot maintenance: Includes sidewalk repair, curb and gutter repair, pothole repair, pavement marking, sealing, and re-paving.
   b. Bridge maintenance: Includes re-chipping, grinding, saw cutting, and painting.
   c. Cold weather operations: Includes plowing, sanding, and application of de-icing compounds and maintenance of snow disposal areas.
   d. Right-of-way maintenance: Includes mowing, herbicide and pesticide application, and planting vegetation.
   e. County-sponsored or sanctioned events relevant to storm water: Includes large outdoor festivals, parades, or street fairs (e.g. Earth Day, Coastal Cleanup Day, and Farmer's Market).
   f. Green waste deposited in the street
   g. Graffiti removal
   h. Hydrant flushing


Parking/Storage Area Maintenance SC-43

Objectives
- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

Targeted Constituents
- Sediment ✓
- Nutrients
- Trash ✓
- Metals ✓
- Bacteria
- Oil and Grease ✓
- Organics ✓

Description
Parking lots and storage areas can contribute a number of substances, such as trash, suspended solids, hydrocarbons, oil and grease, and heavy metals that can enter receiving waters through stormwater runoff or non-stormwater discharges. The protocols in this fact sheet are intended to prevent or reduce the discharge of pollutants from parking/storage areas and include using good housekeeping practices, following appropriate cleaning BMPs, and training employees.

Approach
The goal of this program is to ensure stormwater pollution prevention practices are considered when conducting activities on or around parking areas and storage areas to reduce potential for pollutant discharge to receiving waters. Successful implementation depends on effective training of employees on applicable BMPs and general pollution prevention strategies and objectives.

Pollution Prevention
- Encourage alternative designs and maintenance strategies for impervious parking lots. (See New Development and Redevelopment BMP Handbook)
- Keep accurate maintenance logs to evaluate BMP implementation.

CASQA California Stormwater Quality Association

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2. During the **Year 3** assessment, the County will need to identify materials that could be discharged from the above O&M activities. These pollutant materials may include metals, chlorides, hydrocarbons, sediment, green waste, herbicide, pesticide, dried paint, and trash. The County will need to identify and implement a set of BMPs that will reduce pollutants in storm water and non-storm water discharges. The permit requires the County to use the CASQA Municipal Handbook or equivalent for guidance of BMP selection. Implemented BMPs for O&M activities shall be evaluated quarterly. Departments and divisions associated or performing any of the above O&M activities should take ownership of the BMP implementation and evaluations.

9.9. Design and Maintenance of County-owned Landscaping and Flood Management Facilities (Years 2 & 3)

Basic Permit Requirements:

*Within the **second year**, the County is required to implement a landscape design and maintenance program to reduce the amount of water, pesticides, herbicides and fertilizers used during County operations and activities.*

*Within the **third year**, the County is required to develop and implement a process for incorporating water quality and habitat enhancement features into new and rehabilitated flood management facilities.*

Evaluation of Existing County Program Element:

Landscape design and maintenance program:

- The Agricultural (Ag) Department inspects and inventories pest/herbicide usage among County departments and licensed applicators. Currently the Ag Department does not provide storm water-friendly application education or evaluate the licensed users on pollution prevention and source control. The Department also does not regulate or manage fertilizer applications. However, similar messages and methodology are given as part of the Ag Department's pesticide and herbicide drift management.
- The County is required to collect and properly dispose of unused pesticides, herbicides and fertilizers. The Ag Department tracks usage of pesticides and herbicides by County Departments, divisions, and contractors. The County currently sends unused materials to the Household Hazardous Waste collection site. The Ag Department does not track or regulate fertilizers.
- The County is required to minimize irrigation run-off by using an evapotranspiration-based (ET) irrigation schedule and rain sensors. Two of the County's Parks have ET-based irrigation in place. A representative from the Parks and Recreation Department stated that Sterling Ranch Park (Denair) and Country Stone Park (Salida), both of which are relatively new parks, have ET-based irrigation which was funded by grants.

Flood Management Facilities:

Public Works indicated that a Regional Flood Management Plan is currently being developed. A draft should be available soon, with the final plan slated for January 2015. The plan discusses habitat enhancement for flood basins.

Recommendations for Program Element Modifications:

According to WGR's research it appears that the Ag Department is in the best position to evaluate landscape chemical application activities and assist the County in identifying pollution prevention and source control opportunities. During **Year 2**, WGR recommends that the County Ag Department collaborate with the Parks and Recreation Department to develop a program that accomplishes the following tasks:

1. Develop an educational program for all internal staff and contractors who apply fertilizers, pesticides, and herbicides at County owned or operated properties.

2. Develop a management program that will incorporate policies, procedures, and best management practices to implement the following landscape management measures at County owned or operated properties:
    a. Create drought-resistant soils by amending soils with compost
    b. Create soil microbial community through the use of compost, compost tea, or inoculation
    c. Use native and/or climate appropriate plants to reduce the amount of water, pesticides, herbicides and fertilizers used
    d. Practice "grasscycling" on decorative turf landscapes to reduce water use and the need for fertilizers
    e. Keep grass clippings and leaves away from waterways and out of the street by mulching or composting, or by taking the green waste to the landfill
    f. Prevent the application of pesticides, herbicides and fertilizers during irrigation or within 48 hours of predicted rainfall with a 50% or greater probability, according to the forecast from the National Oceanic and Atmospheric Administration
    g. Limit or replace herbicide and pesticide use (e.g., conducting manual weed and insect removal)
    h. Prohibit the application of pesticides, herbicides and fertilizers to surface waters, as required by the California Department of Pesticide regulation DPR 11-004[7]
    i. Reduce mowing of grass to allow for greater pollutant removal, but without jeopardizing public safety
3. Collect, track, document, and properly dispose of unused pesticides, herbicides and fertilizers. The County will need to formalize the tracking of disposed materials and maintain a materials tracking log. Fertilizer tracking will need to be incorporated into disposal protocols and tracking.
4. Minimize irrigation run-off by using an evapotranspiration-based (ET) irrigation schedule and rain sensors. The County will need to investigate the retrofitting of existing irrigation systems with ET-based irrigation and rain sensors. The County should investigate alternative funding sources (grants) that may be available for upgrades.
5. Verify that a process for incorporating water quality and habitat enhancement features has been included in the Regional Flood Management Plan for new and rehabilitated flood management facilities.

[7] http://www.cdpr.ca.gov/docs/legbills/rulepkgs/11-004/11-004.htm

10. Post Construction Storm Water Management Program (Section E.12.)

Under Section E.12. of the permit, the County is required to comply with the following Sections:

- E.12.b Site Design Measures
- E.12.c. Regulated Projects
- E.12.d. Source Control Measures
- E.12.e. Low Impact Development (LID) Design Standards
- E.12.f. Hydromodification Measures
- E.12.g. Enforceable Mechanisms
- E.12.h. Operation and Maintenance of Storm Water Control Measures
- E.12.i. Post-Construction Best Management Practice Condition Assessment
- E.12.j. Planning and Development Review Process
- E.12.k. Post-Construction Storm Water Management Requirements Based on Assessment and Maintenance of Watershed Processes
- E.12.l. Alternative Post-Construction Storm Water Management Program

Basic Permit Requirements:

Most of the Post-Construction Storm Water Management Program requirements take effect during **Year 2**. This is the largest section of the current Phase II MS4 Permit and contains very detailed requirements for low impact development (LID) and hydromodification of applicable private and public development and redevelopment projects. The former Phase II MS4 Permit also had post construction program requirements; however, the current requirements represent a significant paradigm shift in how the program is implemented. The significant changes include the following:

i. There are now two levels of projects: "small" and "regulated". "Small projects" are defined as those that create and/or replace between 2,500 square feet and 5,000 square feet of impervious surface, including detached single-family homes that are not part of a larger plan of development. "Regulated projects" are defined as projects that create and/or replace 5,000 square feet or more of impervious surface. Regulated projects do not include detached single family homes that are not part of a larger plan of development, interior remodels, routine maintenance, and linear utility projects that do not have a discrete location where 5,000 square feet or more of new construction impervious surface is built. Small and regulated projects follow different steps in complying with this section of the permit. Refer to the Post-Construction Program flow chart in **Appendix G** of this Implementation Plan.

ii. There are no more "priority projects." This fundamental concept from the previous permit has been replaced with "regulated" projects. Under the old permit, only certain types of development would trigger the Post Construction requirements. Under this permit, all types of projects can be "regulated."

iii. This permit introduces the 50% rule, which states that where a redevelopment project results in an increase of **more than 50 percent** of the previously existing impervious surface, runoff from the entire project (including existing, new, and/or replaced impervious surfaces) must be

included in the treatment design to the extent feasible. Where a redevelopment project results in an increase of **less than 50 percent** of previously existing impervious surface, only runoff from the new and/or replaced impervious surface of the project must be included in the treatment design.

iv. The new Phase II MS4 Permit greatly expanded the list of activities/site features that require pollutant source control measures. In addition, the permit now mandates that source control measures be implemented to comply with the California Stormwater Quality Association's (CASQA's) specifications for source controls (available at www.casqa.org).

v. Perhaps one of the biggest paradigm shifts is for Site Design Measures:

1. In this permit, there are no volume reduction requirements. In other words, there is no requirement to assure and quantify that post-construction runoff volume does not exceed pre-construction runoff volume. There is no requirement to utilize water balance "offset credits" or a water balance calculator (such as the one that the County was developing). This concept, suggested in the previous permit and promulgated largely through Phase I MS4 permits, has been replaced with the double layer of LID and hydromodification requirements (as explained below).
2. As in the previous permit, treatment controls must still be sized to the storm water quality design flow (SQDF) of 0.2 inches/hour, or the storm water quality design volume (SQDV) of 85th percentile 24-hour storm runoff volume of 0.5 inches.

vi. At the earliest planning stages of the project, all "regulated projects" are required to assess and evaluate how site conditions (such as soils, vegetation, and flow paths) will influence the placement of buildings and paved surfaces. Specifically, the County is required to assure that the project proponent performs the following site assessment:

1. Define the development envelope and protected areas, identifying areas that are most suitable for development and areas to be left undisturbed.
2. Concentrate development on portions of the site with less permeable soils and preserve areas that can promote infiltration.
3. Limit overall impervious coverage of the site with paving and roofs.
4. Set back development from creeks, wetlands, and riparian habitats.
5. Preserve significant trees.
6. Conform the site layout along natural landforms.
7. Avoid excessive grading and disturbance of vegetation and soils.
8. Replicate the site's natural drainage patterns.
9. Detain and retain runoff throughout the site.

In addition, the County is required to direct the project proponent to supply a map or diagram that shows the developed portions of the project divided into discrete Drainage Management Areas (DMAs). The project proponent will then need to include, in the design of each DMA, one or more **Site Design Measures** that infiltrate, evapotranspire, or harvest/reuse storm water runoff equal to the volume of the SQDV.

The Site Design Measures that can be used to meet this LID requirement include the following:

- **Stream Setbacks and Buffers** - a vegetated area including trees, shrubs, and herbaceous vegetation. Can be used to protect a stream system, lake reservoir, or coastal estuarine area.
- **Soil Quality Improvement and Maintenance** - improving and maintaining soil through soil amendments and creation of microbial community.
- **Tree Planting and Preservation** - planting and preserving healthy, established trees, include both evergreens and deciduous, as applicable to the site.
- **Rooftop and Impervious Area Disconnection** - rerouting of rooftop drainage pipes to drain rainwater to rain barrels, cisterns, or permeable areas instead of the storm sewer.
- **Porous Pavement** - pavement that allows runoff to pass through it, thereby reducing the runoff from a site and the surrounding areas and filtering pollutants.
- **Green Roofs** - a vegetative layer grown on a roof (rooftop garden).
- **Vegetated Swales** - a vegetated, open-channel management practice designed specifically to treat and attenuate storm water runoff.
- **Rain Barrels and Cisterns** – a system that collects and stores storm water runoff from a roof or other impervious surface.

vii. ***Here is where the double layer comes into effect.*** Not only must the project proponent implement appropriately sized LID elements; but the County must also require the project to incorporate hydromodification measures into the design. The permit states under the LID section, "Any remaining runoff from impervious DMAs may then be directed to one or more bioretention facilities as specified in Section E.12.e.(ii)(f)." The referenced E.12 section states, "**After implementation of Site Design Measures**, remaining runoff from impervious DMAs **must be directed** to one or more facilities designed to infiltrate, evapotranspire, and/or bioretain the amount of runoff specified in Section E.12.e(ii)(c):

> "Numeric Sizing Criteria for Storm Water Retention and Treatment. The facilities must be demonstrated to be at least as effective as a bioretention system with the following design parameters:
>
> a) Maximum surface loading rate of 5 inches per hour, based on the flow rates calculated. A sizing factor of 4% of tributary impervious area may be used.
>
> b) Minimum surface reservoir volume equal to surface area times a depth of 6 inches.
>
> c) Minimum planting medium depth of 18 inches. The planting medium must sustain a minimum infiltration rate of 5 inches per hour throughout the life of the project and must maximize runoff retention and pollutant removal. A mixture of sand (60%-70%) meeting the specifications of American Society for Testing and Materials (ASTM) C33 and compost (30%-40%) may be used.
>
> d) Subsurface drainage/storage (gravel) layer with an area equal to the surface area and having a minimum depth of 12 inches.

e) Underdrain with discharge elevation at top of gravel layer.

f) No compaction of soils beneath the facility, or ripping/loosening of soils if compacted.

g) No liners or other barriers interfering with infiltration.

h) Appropriate plant palette for the specified soil mix and maximum available water use."

The permit provides for some allowed variations and exceptions of the above listed bioretention parameters. However, within **Year 3**, the County will be required to develop and implement hydromodification management procedures that require "regulated projects" that create and/or replace at least one acre of impervious surface to take measures to assure that the post-project runoff flow rate does not exceed that of the pre-project value for a 2-year, 24-hour storm event (which ranges from 1.2 to 1.8 inches for urbanized areas in Stanislaus County). Note that this is not runoff volume, but rather the flow rate.

viii. The current MS4 permit is much more specific than the previous permit in requiring the County to develop and implement a program to assure that owners of approved post-construction storm water treatment controls maintain them in their proper condition. This includes obtaining a written O&M plan and certification from the project owner promising to maintain the control measures in an effective condition. This program would necessarily entail coordination with the County and the County's Vector Control agency in regards to these agreements, along with the preparation of a written implementation plan that describes all of the regional projects and control measures that are owned or operated by the County, and a database to track the status and condition of the post-construction control measures. The County is required to develop and implement a plan to inventory, map, and determine the relative maintenance condition of structural post-construction BMPs. The permit requires the County to determine the maintenance condition of structural BMPs through a self-certification program where the County must receive annual reports from authorized parties demonstrating proper maintenance and operations.

ix. The County is required to review their planning and permitting process to assess any gaps or impediments which could negatively impact the effective implementation of these post-construction requirements. If any gaps or impediments are found, the County must seek solutions to promote correct implementation of the permit requirements within the context of public safety and community goals for land use. During **Year 1**, the County is required to review the landscape code (detailing landscaping requirements and considerations for protecting environmental quality) to correct gaps and impediments impacting effective implementation of post-construction requirements. As a part of the scope of work, WGR reviewed the County's landscaping codes (Chapter 21.102 and the Cal Green Code). No real gaps or impediments were identified in the existing code that would hamper or prevent the new post-construction requirements from being implemented. Furthermore, the landscape standards are broad enough to allow the incorporation of the LID and hydromodification measures required in the MS4 permit. WGR also reviewed Chapter 4 of the County's Standards and Specifications, which addresses Storm Drainage. Overall, the standards appeared to be in alignment with the MS4 permit's requirements and there were no obvious impediments to the LID or hydromodification measures required by the permit. Only one minor revision was found to be

needed; Section 4.18 “Erosion, Sediment, and Water Pollution Control” needs to be updated to the current Construction General Permit. The reviewed ordinance is included in **Appendix G** of this Implementation Plan.

Evaluation of Existing County Program Element:

WGR reviewed and commented on the following documents:

- Stanislaus County’s DRAFT Post-Development Storm Water Quality Design Manual (First Edition, Sept. 1, 2011)
- City of Riverbank’s Model Standards & Specifications for Low Impact Development Practices (AECOM, January 2013)
- CASQA’s BMP Handbook for New Development
- Stanislaus County’s Standards and Specifications, Chapter 4 Storm Drainage (2007 Edition)

The following is a summary of the review of the County’s DRAFT Post-Development Manual:

1. For a comprehensive review, please see the comments that WGR imbedded into the document (provided to the County separately from this Implementation Plan).
2. The document appears to have been adapted from the City of Tracy’s SWQCCP which was written by Larry Walker and Associates. The County reportedly obtained permission from Larry Walker and Associates to use and modify the document.
3. References in the document to the Construction General Permit and the MS4 Permit need to be updated to the current permits. For the most part, references to the CGP are not relevant and can cause confusion for the developer. The CGP addresses post-construction control measures for projects outside of the County’s permit boundary.
4. As discussed in the preceding section, the new Phase II MS4 Permit significantly changed the compliance approach to meeting the State’s post-construction control measure requirements. For example, the concept “Priority Project” is no longer supported in the current permit, which significantly changes the flow of the document and the post-construction design process.
5. The County should carefully consider whether the Volume Reduction Requirement (VRR) should be included in the County’s post-construction development standards plan. The MS4 permit does not require volume reduction, nor does it necessarily encourage the use of a calculator. The permit states that developers must use evapotranspiration, infiltration, harvesting/re-use, or biotreatment to treat storm water runoff. The treatment must be sized using the specified volume-based (SQDV) or flow-based (SQDF) criteria. In addition to this “LID” requirement, the permit states that any remaining runoff from impervious areas must be directed to facilities that infiltrate, evapotranspire, or bioretain.[8] The VRR does not appear to take this into account, a fact which can easily cause confusion, and can result in the County potentially approving project designs that are not fully compliant. WGR does not recommend using a calculator, instead suggesting the use of a flow chart and/or narrative description to walk the developer through the permit’s post-construction design measure

[8] See the hydromodification requirements on p. 54 of the permit.

requirements.

6. The four basic categories of the storm water quality measures should be changed from Site Design Control Measures, Source Control Measures, Volume Reduction Measures, and Treatment Control Measures to the following:

    i. Site Design Measures

    ii. Source Control Measures

    iii. LID Design Standards

    iv. Hydromodification Management Measures

    Although the first two categories shown above have similar names, the concepts required by the new Phase II MS4 permit are somewhat different. The State has provided a list of "Site Design Measures" on p. 49 of the permit. The list of required Site Control Measures on p. 52 of the permit is more extensive than the list in the draft document. Both of these lists are included on the Post-Construction Program Flow Chart included in **Appendix G** of this Implementation Plan.

The following is a summary of WGR's review of the City of Riverbank's Model Standards & Specifications for Low Impact Development Practices:

1. The document provides a user-friendly and aesthetically pleasing presentation of the LID concepts along with the selection and design criteria, but is lacking many details needed for compliance with the permit.
2. The document was based on the previous permit's Attachment 4 post-construction requirements.
3. The document states: *post-construction peak storm water discharge rates shall be equal or less than the peak pre-development rates for developments where the increased runoff rate will result in increased potential for downstream erosion.* This is not necessarily required by the new Phase II MS4 permit.
4. Similar to the County's draft plan, the document references "priority projects" – a concept no longer presented in the new permit.
5. For volume-based sizing criteria, the Riverbank Plan lists only one of the two sizing options provided in the new MS4 permit. The County's document lists the other one.
6. Riverbank's specifications for a bioretention area are fairly close to the permit's requirements.

Finally, here is a brief summary of WGR's review of CASQA's Bioretention Standard (TC-32)[9] from the New Development Handbook:

1. The CASQA TC-32 cutsheet does not contain any of the detailed specifications contained in the permit. It appears to be outdated.

WGR also reviewed Stanislaus County's Standards and Specifications, Chapter 4 Storm Drainage (2007 Edition). In it, we found no significant conflicts with the new post construction requirements.

[9] www.casqa.org/sites/default/files/BMPHandbooks/TC-32.pdf

Recommendations for Program Element Modifications:

WGR recommends the following modifications for the Post Construction Program Element:

1. During **Year 2**, the County needs to revise its Post-Construction Storm Water Quality Design Manual to incorporate the new requirements of the current Phase II MS4 Permit. After reviewing the County's draft plan from the previous permit, Riverbank's LID guidance document, and the other available reference material, it became apparent that, although it will require significant changes, the County's draft plan is a much better starting point for developing a Post Construction design manual. WGR recommends that the County use its existing draft plan and collaborate with other Stanislaus MS4s to develop a County-wide Post Construction Storm Water Quality Design Manual.
2. Once the Post Construction Design Manual has been developed, during **Year 2**, it will need to be implemented. This means that County plan reviewers and engineers will need to be trained on the process of reviewing and conditioning both private and public projects with LID and hydromodification requirements. WGR suggests that this training be held jointly with other collaborating MS4s.
3. During **Year 2**, as a part of implementing the Post Construction Program, the County will need to develop a tracking system capable of the following:
    a. Maintaining a record of all projects that have been reviewed for applicability to the Post Construction Program requirements.
    b. Track the status of applicable projects proceeding through plan review and record the type of post-construction LID and hydromodification measures selected by the project proponent to fulfill the permit requirements.
    c. Maintain a record of the operation and maintenance plan submitted by the project proponent for the selected control measures.
    d. Generate a list of existing development sites and property owners having post construction control measures.
    e. Track each property owner's annual submission of their control measure self-certification, which includes the effectiveness of the installed control measures and the implementation of on-going and long-term maintenance.
4. During **Year 3**, develop and implement a plan to inventory, map, and determine the relative maintenance condition of structural post-construction BMPs. In accordance with the permit, maintenance condition will be determined through a self-certification program where the County requires annual reports from property owners demonstrating proper maintenance and operations of LID and hydromodification control measures installed at their property.

Teaming Up Opportunity

Rather than pay for all of the Post Construction Plan development costs, the County could team up with other MS4s inside and outside of the County to prepare a County-wide or Regional Post Construction Storm Water Quality Design Manual. This would not only provide significant cost savings to each of the MS4s participating in the plan development, but will also result in further cost savings by having combined training sessions for plan review staff and engineers from all municipalities. Another benefit of this method is the creation of one standardized plan affecting all developments within the County or region instead of the current confusing variation of requirements.

11. Water Quality Monitoring / TMDL Program (Sections E.13. and E.15.)

Basic Permit Requirements:

Under Section E.13. of the permit, the County is required to monitor all discharges to TMDL-impaired water bodies. TMDL stands for Total Maximum Daily Load, and is an outcome of the Federal Clean Water Act. The Clean Water Act requires each State to identify all of the water bodies (including streams, creeks, rivers, lakes, bays, etc.) within the State. Then, each State is required to identify all of the beneficial uses of the water bodies they have identified, which can include drinking water, agriculture irrigation water, recreation, and biological uses such as cold, spawn, or migratory. The next step in the process is to identify all of the impairments that are hindering one or more of the water body's beneficial uses. These impairments may be a physical condition such as low dissolved oxygen, pH, or temperature; or they can include toxic impairments such as mercury, pesticides, or pathogens. The impairments are recorded on what is called the "303d List," referring to the section of the Clean Water Act where such a listing is required. The next step is to determine the maximum amount of each impairment the water body can assimilate on a daily basis without jeopardizing any of its beneficial uses – the total maximum daily load or TMDL. Once the TMDL has been established by the State's Water Board, the daily allowed pollutant load is then divided up among the stakeholders. The term "stakeholders" refers to every entity that discharges to the water body, including NPDES permit holders (municipalities, industrial facilities, and construction sites); and other entities, such as agricultural operations. Each stakeholder's "slice of the TMDL pie" is called a waste load allocation (WLA) and is typically expressed as a concentration.

Section E.15 of the permit requires the County to comply with all TMDLs and WLAs that have been associated with the County's receiving waters as identified in Attachment G of the permit. Specifically, the County ultimately discharges to the Stanislaus and Tuolumne Rivers, which are tributaries of the San Joaquin River. No TMDLs have been identified in the permit for the Stanislaus and Tuolumne Rivers; however, TMDLs have been assigned to Stanislaus County for the San Joaquin River for low dissolved oxygen/organic enrichment and the pesticides diazinon and chlorpyrifos. Section E.13 of the permit states that all Permittees that are assigned a WLA or identified as a responsible party in a TMDL are required to comply with the monitoring requirements included in Attachment G of the permit. The Phase II MS4 Permit encourages the Permittees to participate in a regional monitoring program in which there is a collaboration of local and regional monitoring programs designed to provide a more comprehensive picture of water quality conditions in the watershed. The permit suggests asking the following management questions to assist in guiding the development of a regional monitoring program, as applicable:

1. Are water quality standards being met in receiving waters?
2. What is the extent and magnitude of the current or potential receiving water problems?
3. What is the relative urban runoff contribution to the receiving water problem(s)?
4. What are the sources to urban runoff that contribute to the receiving water problem(s)?
5. Are conditions in receiving waters getting better or worse?

Regional monitoring programs are required to be reviewed and approved by the Executive Officer of the Central Valley RWQCB. Section E.13.b of the permit states that all Permittees that are assigned a waste load allocation, or are identified as a responsible party in a U.S. EPA-approved TMDL with urban runoff listed as the source, must comply with the monitoring requirements included in Attachment G and

consult with the Regional Water Board by July 1, 2014 to determine the monitoring study design and a monitoring implementation schedule. On June 12, 2014, Pamela Creedon, the Executive Officer of the Central Valley RWQCB, sent a letter to the Phase II MS4s stating that the Regional Board has proposed revisions to Attachment G of the Phase II MS4 Permit which is tentatively scheduled for adoption in late summer or early fall 2014. The proposed revisions would apply to all permittees subject to TMDLs (which includes Stanislaus County). The letter stated that it served as meeting the July 1, 2014 consultation requirement.

The Attachment G revisions referenced in the June 12, 2014 letter include those made in November 2013 by the Central Valley RWQCB and were only for the **Lower San Joaquin River Diazinon and Chlorpyrifos TMDL monitoring program**. The proposed changes, which have not yet been approved by the SWRCB at the time of this writing, provide the following description of the monitoring program:

> "Permittees shall complete an assessment to determine the diazinon and chlorpyrifos levels in receiving waters. Monitoring may be done in conjunctions with other municipalities and/or discharges. Permittees are responsible for providing the necessary information. The information may come from the dischargers' monitoring efforts; monitoring programs conducted by State or federal agencies or collaborative watershed efforts; or from special studies that evaluate the effectiveness of management practices. The purposes of the study are to evaluate compliance with established water quality objectives applicable to diazinon and chlorpyrifos for the receiving water and to determine compliance with wasteload allocations. Assessment shall also consider whether alternatives to diazinon and chlorpyrifos are causing surface water quality impacts and if toxicity impairment is being caused or contributed to due to synergistic effects of multiple pollutants. **At a minimum, monitoring data must be collected four times per year during one year of the permit cycle, two times during storm runoff events and twice during the dry season.**
>
> "In cases where the Permittees are not in compliance with the wasteload allocations, those dischargers will be required by the Executive Officer to submit a management plan describing actions that will be taken to reduce diazinon and chlorpyrifos discharges to meet the applicable allocations. The Executive Officer may require revisions to the management plans if compliance with wasteload allocations are not attained or the management plan is not likely to attain compliance. Management plans may be submitted by individual dischargers or discharger groups and may refer to actions required by other agencies or actions required elsewhere in this permit.
>
> "Management plan provisions addressing diazinon and chlorpyrifos can be included in pesticide management plans covering current use pesticides with the goal of reducing the discharge of pesticides from municipal storm water to receiving water. Pesticide management plans should address the discharger's own use of pesticides, and to the extent authorized by law, the use of such pesticides by other sources within their jurisdictions. Pesticide management plans should include identifying and promoting within the context of integrated pest management (IPM) programs, the use of pest management practices that minimize the risk of pesticide impacts on surface water quality resulting from urban runoff discharges and the integration of IPM into the Permittee municipal operations and promoted to residents, businesses, and public agencies through public outreach.
>
> "Modifications to these requirements may be made through approval from the Executive Officer in order to facilitate discharger participation in the Delta Regional Monitoring Program or other collective monitoring efforts."

No such detail has yet been proposed (as confirmed in June 2014) for the **Lower San Joaquin River Organic Enrichment and Low Dissolved Oxygen TMDL monitoring program**. In January 2014, WGR attended a meeting with Christine Joab and Sue McConnell of the Central Valley RWQCB in which they were discussing the TMDL monitoring program for low dissolved oxygen and organic enrichment. Through the presentation and subsequent discussions, it was apparent that the RWQCB is not prepared at this time to provide specific direction for the monitoring program. However, the RWQCB staff did provide useful information concerning other data sources that may be used as a part of a regional TMDL monitoring program.

Evaluation of Existing County Program Element:

As a part of the scope of this project, WGR developed a conceptual model of a regional TMDL monitoring program that can be utilized for the pesticide and low dissolved oxygen / organic enrichment TMDLs. This monitoring program consists of utilizing other available data sources such as receiving water monitoring by the irrigated lands water coalitions, United States Geological Services (USGS) monitoring stations, the State's Surface Water Ambient Monitoring Program (SWAMP), the State's Department of Water Resources (DWR) monitoring program, the City of Modesto's monitoring data obtained through its Phase I MS4 Permit, and receiving water monitoring performed by other NPDES permit holders. This conceptual regional monitoring plan combines all of this outside publically-accessible monitoring data and incorporates it with monitoring performed by Phase II MS4s. However, instead of all of the municipalities performing virtually the same type of monitoring for discharges that flow to a receiving water or an irrigation district, the monitoring responsibilities would be categorized into types of discharges. Monitoring assignments would then be given to participating municipalities to perform a representative segment of the monitoring program. To illustrate how this could work, consider the following simplified and somewhat fictional example:

	Direct Discharge to a Receiving Water			Discharge to an Irrigation District			
	Residential	Commercial	Industrial	Residential	Commercial	Industrial	Mixed
Stanislaus County	X	**X**	**X**	X	X	X	X
City of Ceres	**X**	X		**X**	X		
City of Hughson				**X**	**X**		
City of Newman				X	**X**	**X**	
City of Oakdale	**X**		X	X	X	X	**X**
City of Patterson	X	**X**		X	X	**X**	
City of Riverbank	**X**	X		**X**			
City of Turlock				X	**X**	**X**	X

X = discharge to the sub-watershed; X = Selected to sample discharge

Instead of every municipality sampling at each type of discharge point and sub-watershed, representative sampling points would be selected so that each participating municipality would sample fewer locations, but still cover the full spectrum of sampling locations and types needed to properly evaluate the discharge of potential pollutants to the San Joaquin River.

In informal conversations with Genevieve Sparks of the Sacramento Regional Water Board and with Matt Scroggins of the Fresno Office of the Central Valley Water Board, WGR has presented this conceptual plan in its various forms of early development. Both RWQCB staff members have stated that, although a formal plan will need to be prepared and submitted to the RWQCB, the conceptual regional monitoring plan (as described above) is consistent in approach with the monitoring program their agency would like to see happen. On June 27, 2014, WGR received an email from Ms. Sparks of the CVRWQCB which recognized WGR as meeting the June 30, 2014 deadline to inform the Regional Water Board on the creation of a regional TMDL monitoring group. A copy of the email communication is included in **Appendix H**.

Recommendations for Program Element Modifications:

WGR recommends the following for the TMDL Monitoring Program Element:

1. During **Year 1**, track the developments and adoption of the proposed Attachment G revisions.
2. Before the end of **Year 1**, consult with the Central Valley RWQCB staff on TMDL monitoring study design and implementation schedule.
3. Before the end of **Year 1**, obtain formal confirmation from the other Stanislaus MS4s that they would like to participate with the County in a regional TMDL monitoring program. Consider formalizing the agreement and financial commitment with a memorandum of understanding (MOU).
4. During **Year 2**, develop a detailed monitoring plan that identifies the external data sources and the monitoring that will be performed by the participating MS4s. Before the end of the year, submit the plan to the RWQCB for review, comment, and approval.
5. Target **Year 4** for the implementation year of the program (assuming that the proposed Attachment G revisions are adopted and that the low dissolved oxygen monitoring program follows the same pattern). This will give the County time to research more external data sources and to coordinate the monitoring with other possible regional monitoring (i.e. the Merced County MS4 partnership).

Teaming Up Opportunity

The MS4 Permit encourages collaboration for the monitoring programs. This makes particular sense for the Lower San Joaquin River. Phase II municipalities are listed for the same TMDLs from Madera County to San Joaquin County. There are at least twenty different MS4s that could potentially collaborate with a regional monitoring program. The research that WGR has done so far and the input that we have received from Water Board staff seems to indicate that the approach identified in this Implementation Plan is not only viable but will also save each participant a considerable amount of expense, effort, and time. We encourage the County to start building a network of municipalities, inside and outside of the County, willing to team up on this effort. On June 27, 2014, WGR received an email from Ms. Sparks of the CVRWQCB which recognized WGR as meeting the June 30, 2012 deadline to inform the Regional Water Board on the creation of a regional TMDL monitoring group.

12. Trash Reduction Program

Basic Regulatory Requirements:

The State Water Resources Control Board (SWRCB) has developed proposed amendments to the State Water Quality Control Plans to implement a statewide trash policy. The amendments are designed to preempt the need for a watershed-by-watershed TMDL for trash. The proposed amendments would require Phase II MS4 Permittees to select one of two compliance "tracks" to achieve what the SWRCB refers to as a "zero trash" Water Quality Objective (WQO).

Track 1 would require the County to install, operate and maintain full capture systems for storm drains that capture runoff from priority land uses (i.e. high density residential, industrial, commercial, mixed urban, public transportation stations). The proposed amendments define full capture systems as treatment controls (either a single device or a series of devices) that traps all particles that are 5 mm or greater and has a design treatment capacity that is either: a) of not less than the peak flow rate, resulting from a one-year, one-hour, storm in the subdrainage area, or b) appropriately sized and designed to carry at least the same flow as the corresponding storm drain.

Track 2 the County would develop and execute an implementation plan of any combination of controls, such as full capture systems, other treatment controls (e.g., partial capture devices and green infrastructure and low impact development controls), institutional controls, and/or multi-benefit projects to achieve the same performance as Track 1 would achieve. The proposed amendment would require an implementation plan to be drafted if the Track 2 approach is selected. The implementation plan would require a description of the combination of controls selected by the County, the rationale for the selection, and a description of how the controls will achieve the same performance results as Track 1.

The new draft amendment was released on June 10, 2014. The public hearing and close of public comment period is August 5, 2014.

Recommendations for Program Element Modifications:

The proposed amendments state that the trash amendments could be included in the current MS4 Phase II Permit as allowed by the reopener clause. However, according a discussion WGR had with a SWRCB representative, it is more likely to be included in the next round of permitting. Once the trash amendments are incorporated in the County's MS4 permit, it is appears likely that the County will need to select their compliance track approach (Track 1 or 2) within 18 months of the permit's implementation date. Full compliance with the trash amendments would then be required within 10 years. It is WGR's opinion that the County should continue to monitor the proposed amendments and implementation developments and make public comment by August 5, 2014.

13. Program Effectiveness Assessment and Improvement Program and Annual Reporting (Sections E.14. and E.15.)

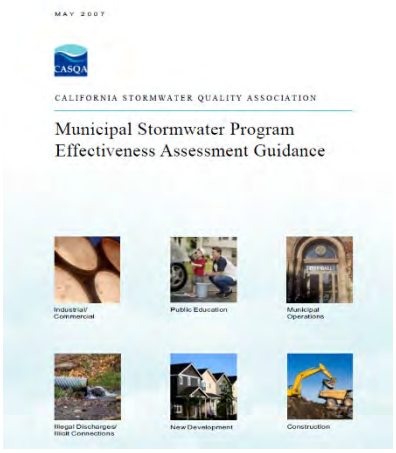
Basic Permit Requirements:

*Before the release of the County's **Year 2** annual report, the County is required to develop and implement a Program Effectiveness Assessment and Improvement Plan. The plan will track annual and long-term effectiveness of the storm water program **annually over the permit term**.*

*Within **Year 5**, the County shall identify and summarize BMP and/or program modifications identified in program areas including:*

- *Improving upon BMPs that are underperforming;*
- *Continuing and expanding upon BMPs that proved to be effective, including identifying new BMPs or modifications to existing BMPs designed to increase pollutant load reductions;*
- *Discontinuing BMPs that may no longer be productive and replacing with more effective BMPs; and*
- *Shifting priorities to make more effective use of resources*

The Program Effectiveness Assessment and Improvement Plan may be modeled upon the most recent version (if applicable) Municipal Storm Water Program Effectiveness Assessment Guidance (CASQA, May 2007) or equivalent.



*The County is **annually** required to use the State Water Board SMARTs to submit a summary of the past year's (July 1 – June 30) activities for each program element and certify compliance with permit requirements. The detailed Annual Report must clearly refer to the permit requirements and describe in quantifiable terms, the status of activities undertaken to comply with each requirement.*

Evaluation of Existing County Program Element:

The County has previously submitted annual reports as required by the previous permit. At that time, a hard copy of the Annual Report was delivered or mailed to the Regional Board instead of utilizing the Water Board's SMARTS system. The reporting efforts of previous annual reports were primarily focused on compliance progress and accomplishments.

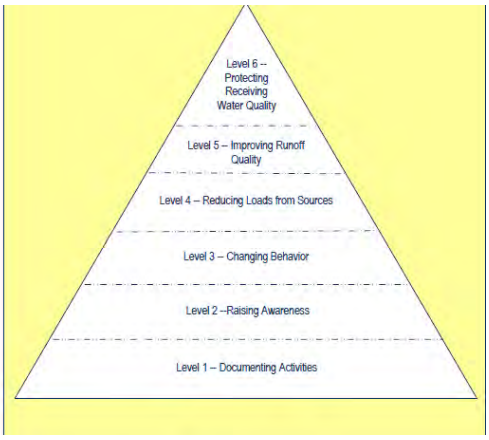
Recommendations for Program Element Modifications:

WGR recommends the following modifications for the Program Effectiveness Assessment and Improvement Plan:

1. The County is required to develop a Program Effectiveness Assessment and Improvement Plan and submit it to the RWQCB prior to **Year 2**'s Annual Report. WGR has prepared the plan in accordance with CASQA's Municipal Stormwater Program Effectiveness Assessment Guidance document. The Plan can be found in **Appendix I** of this document. The plan will walk the County through its assessment of each permit element and provide a goal-oriented focus for

completing annual tasks.

The Program Effectiveness Assessment and Improvement Plan utilizes six ***outcome levels*** to assess the effectiveness of the Storm Water Program and BMPs:



1. Storm water program activities (Document / Tabulate)
2. Awareness (Gauging awareness raised through activities)
3. Behavior (Assessing the change in the target's behavior through activities)
4. Pollutant load reductions (Amount of pollutants lessened due to activities)
5. MS4 discharge quality (where assessment is supported by MS4 discharge quality data) (Improvement of discharge based on activities)
6. Receiving water conditions (Improvement of receiving waters based on activities)

The County will need to focus on data collection efforts during BMP prioritization, implementation, and maintenance. Pollutant removal data from the implementation and maintenance of the BMPs will need to be evaluated as specified above. The data will be used as measurable data in BMP effectiveness assessment.

In the illustration below, the County's permit task was to organize and participate in stream clean-up events. The implementation of this task would include soliciting volunteers, determining the number of events and volunteers participating, and documenting the total volume and types of trash/materials removed during clean up events. Each step must be fully documented, including the methods used to dispose of the recovered waste materials.

			from municipal program)
Organize and participate in stream clean up events	Solicit volunteers	1	Confirmation • Identify how volunteers were solicited Tabulation • # events and volunteers from year to year • Volume and types of materials removed from year to year (% change over time) • Amount of material disposed of correctly
	Number of events and volunteers participating in the events	1	
	Total volume and types of trash/materials removed during clean up events	2-4	

The County will determine the outcome levels based upon the documentation of permit activities and achievements. For example, if the County is assessing the BMP of street sweeping; the effectiveness would be assessed in the following manner:

- Confirmation (Level 1): Were sweeping activities performed? (Yes/No)
- Tabulation (Level 1): Amount of materials swept?
- Reducing Loads from Sources (Level 4): Demonstration of reduction of pollutant loads as a result of sweeping activities.

The plan identifies the assessment methods the County will use to quantitatively assess BMP performance at reducing pollutant loads wherever feasible, using the following or equivalent methods:

1. Measure and quantify pollutant load removed by BMPs;
2. Science-based estimates of pollutant load removals where direct measurement is overly challenging;
3. Direct quantitative measurement of behaviors that serve as indicators of pollutant removal or reduction; and
4. Visual comparison of improvements.

WGR recommends using the Assessment Plan during the annual reporting to capture permit performance trending. Modification to the program should be made during the permit term based on assessment results. For example, the County may make outreach efforts to a specific group – If there have not been any changes in behavior over the permit term based on outreach efforts, a program modification would be warranted to the outreach message or method of conveyance.

1. The County is required to modify BMPs and/or the program as a whole to improve compliance. During **Year 5**, the County will need to identify and summarize program modifications and submit to the RWQCB. In the final year of the permit, the County will need to do a comprehensive assessment of program efforts, modify under-performing priority program areas and BMPs, build on to effective BMPs, and shift program focus to more effective use of resources.
2. The County will be required to **annually** summarize program activities, progress, and compliance with the permit requirements in the Annual Report. The County will need to submit each year's annual report by **October 15th** through the State Water Board's SMARTs. The Annual Report must clearly refer to the permit requirements and report results in quantifiable terms, as well as provide a status update on the progress of compliance activities. The County will need to retain all documentation and supporting information for the Annual Report of the previous year (June 30 – July 1). The County is required to make the documentation and supporting information readily available for review to the RWQCB during normal business hours.

14. Implementation Plan Recommendations

This section of the Implementation Plan summarizes the recommendations for the implementation of the Phase II MS4 Permit by Stanislaus County. The recommendations started with those initially developed by WGR as an outcome of the process described throughout this document, and have been modified through subsequent discussions and input from the County department heads and Senior Staff within the Chief Executive Office. These program implementation recommendations attempt to answer the following questions:

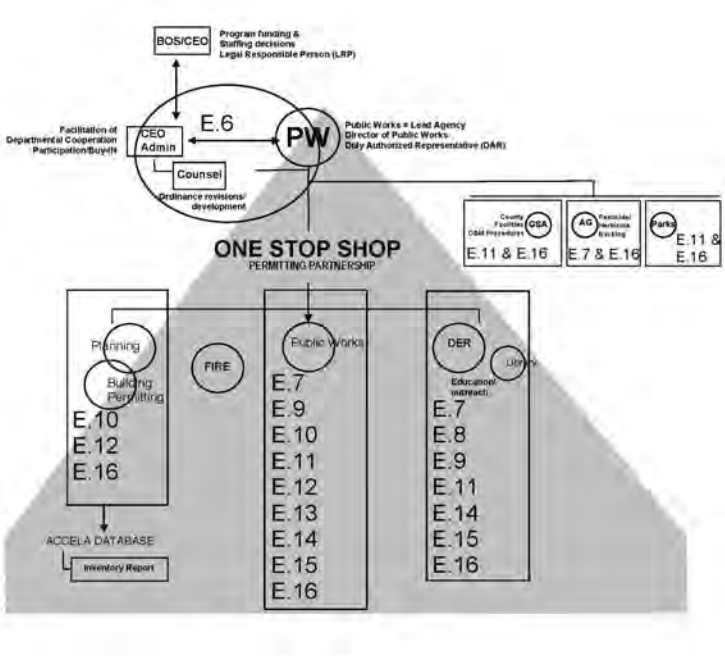
Questions to Answer:

1. Chain of command – who should manage the permit?
2. What departments should be responsible for each of the permit requirements?
3. How much of the County's staff time will be needed?
4. How much consulting services will be needed?
5. How much will the permit requirements cost?

The County's Recommendations and Responses to the above Questions:

- The CEO's office made a decision that the Public Works Department should occupy the position of lead agency in implementing the storm water management program for the County. The CEO will continue to occupy the Legal Responsible Person (LRP) role, but the Director of Public Works will act as the Duly Authorized Representative (DAR) and be the point of contact between the State and the County. The DAR is able to certify reports and permitting documents on behalf of the LRP.

- The CEO's office will coordinate with the County's Legal Counsel and Public Works to develop the legal authority required by the permit. As a part of this Implementation Plan, Public Works has drafted changes and additions to the County's municipal code language that complies with the Permit, which can be reviewed by the County legal counsel and other County departments prior to it going to the Board of Supervisors for adoption.



- The CEO's office has made the decision that the **Public Works Department** will continue to act as the lead agency for the County in the implementation of the Phase II MS4 Permit. This decision was made because of the history that the Public Works Department

has had with the Permit and the experience it has gained in implementing the Permit. The CEO did not want to lose this level of experience by switching the Permit lead role to another department. As the lead agency, Public Works will continue to act as the data repository in which they gather the required information, perform the program effectiveness evaluations, prepare annual reports, communicate with the various departments about program requirements and changes, and monitor the changes to the permit and regulations. Public Works will continue to be responsible for managing the IDDE, pollution prevention program, construction management program, and post-construction activities as it applies to roadways, the storm drainage system, and the Public Works facilities. Publics Works will also continue to be responsible for developing and implementing the post-construction program including the review of discretionary private and public projects for compliance with the program requirements and coordination with Planning. Public Works will review ESCPs / SWPPPs submitted to them by the Planning Department and will perform storm water compliance inspections at discretionary construction projects that are 1 acre or larger and are applicable to the Construction General Permit. Public Works will oversee the implementation of the TMDL monitoring program. Public Works will continue to be responsible for internal training of their staff and contractors as well as external outreach to the Stanislaus residents and businesses about not putting anything into the County's drainage system and waterways.

- **Department of Environmental Resources (DER)** will oversee the IDDE, pollution prevention, construction, and post-construction requirements as they apply to County parks, which is part of their current responsibilities. The CEO's office has proposed that DER take the lead on performing public outreach and education related to spills, hazardous waste, illegal dumping, and general pollution prevention; which is a natural extension of the public outreach that they are currently performing. Because DER already has a public interface and participates in other similar outreach, the CEO's office has concurred with the recommendation that they oversee the Public Involvement requirement.

- **Agriculture Commission's Office** will oversee the pesticide and herbicide program requirements and the related internal and external education program; which is a natural extension of their current programs.

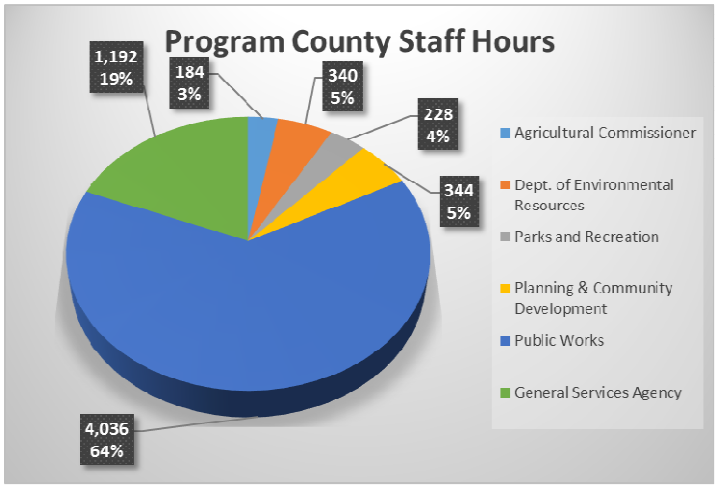
- **General Services Agency** will oversee the administration of the pollution prevention program for County owned / operated facilities and the training of personnel at those facilities. GSA will be responsible for preparing procedures of the O&M activities, listed in E.11.h of the Permit, for which they are responsible.

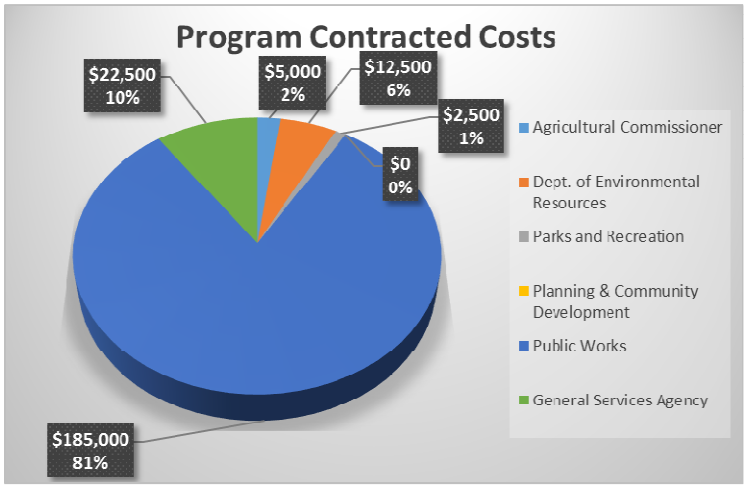
- **Planning Departments** will be responsible for maintaining the inventory of regulated construction projects and an inventory of projects having to comply with the post-construction requirements through its management of the County's ACCELA permitting software. Planning will provide the initial evaluation to determine which projects are applicable to construction requirements, and will route submitted plans to Public Works for reviewing and commenting. The Department's ACCELA database will be used to manage the maintenance agreements and track the on-going maintenance of the properties having post-construction requirements and manage the request process of self-certified annual reports from property owners. The Department building inspectors will assist in performing storm water compliance inspections at small projects that are not applicable to the Construction General Permit.

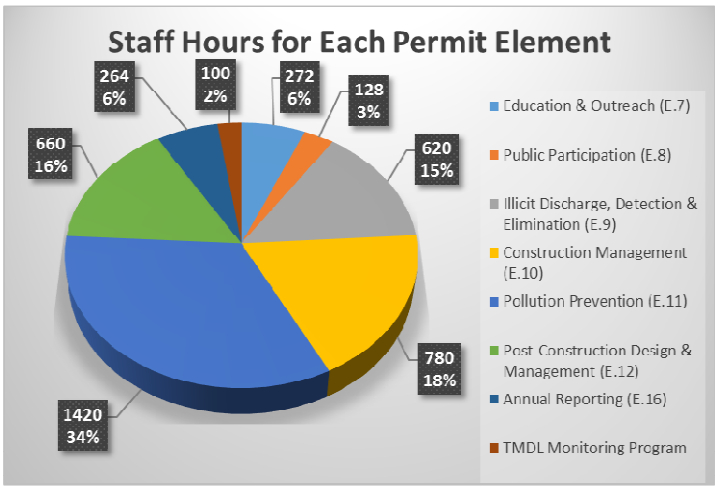
- **Parks and Recreation** will be responsible to make sure that their personnel are trained on the permit's Landscape Design and Maintenance requirements (E.11.j) and ensure that these requirements are implemented for County parks.

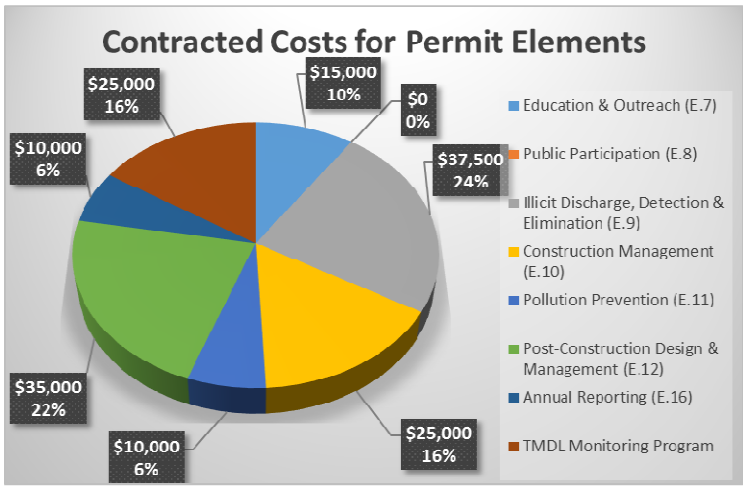
- WGR estimates that to effectively **<u>manage</u>** the compliance program for the County's MS4 permit it will require the utilization of approximately 1 or 2 full-time equivalent staff members. In addition, there will be activities that are better suited to be performed by an outside consultant because the required tasks are complex and require expertise beyond what is available from internal staff, are single-occurrence, or are labor-intensive but short in duration, causing the County to staff up beyond the typical work load of the dedicated resources. WGR estimates that the outside consulting costs will average approximately $50,000 - $75,000 per year. In our estimation, the new fulltime staff members dedicated to this permit's compliance program, should be assigned to the lead agency, ***which the CEO's office has designated as the Public Works Department***.

- The following charts delineate WGR's estimation of the required contributions from each department to effectively implement the Phase II MS4 program. Public Works hours and costs include those for the management of the entire program.









Annual Staff Hours and Consulting/Laboratory Cost Projections:

In the following table, the estimated hours are for internal County staff ***and the estimated dollar amounts are for contracted resources.***

	Management Task	Education & Outreach (E.7)	Public Participation (E.8)	Illicit Discharge, Detection & Elimination (E.9)	Construction Management (E.10)	Pollution Prevention (E.11)	Post-Construction Design & Management (E.12)	Program Effectiveness (E,14) / Annual Reporting (E.16)	TMDL Monitoring Program	**Total by Dept.**
Agricultural Commissioner		80 hours & $5,000	16 hours			What is already being done plus 80 hours		8 hours		**184 hours $5,000**
Dept. of Environmental Resources		What is already being done plus 80 hours & $10,000	80 hours	40 hours $2,500		40 hours		100 hours		**340 hours $12,500**
Parks and Recreation		24 hours for supervisors and 4 hours /field staff	16 hours	40 hours $2,500		100 hours	40 hours	8 hours		**228 hours $2,500**
Planning & Community Development		24 hours for supervisors and 6 hours /field staff			200 hours		80 hours	40 hours		**344 hours + 6 hrs/field staff**
General Services Agency		24 hours for supervisors and 4 hours /field staff		40 hours $2,500	80 hours	1,000 hours $10,000	40 hours $10,000	8 hours		**1,192 hours +4 hrs/field staff $22,500**
Public Works – Roads Related		40 hours for supervisors and 8 hours /field staff	16 hours	500 hours $25,000	500 hours $25,000	200 hours	500 hours $25,000	100 hours $10,000	100 hours $25,000 for one year of the permit	**4,036 hours + 8 hrs/field staff $185,000**
Public Works – Program Management	2,080 hours $75,000									
Total by Permit Element:	**2,080 hours $75,000**	**272 hours + staff training $15,000**	**128 hours**	**620 hours $37,500**	**780 hours $25,000**	**1,420 hours $10,000**	**660 hours $35,000**	**264 hours $10,000**	**100 hours $25,000 for one year of the permit**	**6,324 hours $227,500**

Appendix A

Scope of Work for the Implementation Plan

(*Bid Submittal Worksheet*)

DEPARTMENT OF PUBLIC WORKS

Matt Machado, PE, LS
Director

Colt Esenwein, PE
Deputy Director, Engineering/Operations

Diane Haugh
Assistant Director, Business/Finance

1716 Morgan Road, Modesto, CA 95358
Phone: 209.525.4130 Fax: 209.541.2505

www.stancounty.com/publicworks

REQUEST FOR SCOPE AND FEE FOR PROFESSIONAL SERVICES
FOR AN
IMPLEMENTATION PLAN FOR PHASE II MS4 NPDES PERMIT
October 7, 2013

Stanislaus County Public Works Department (County) is requesting a scope and fee for Professional Services for an implementation plan and expert advice on the 2013 National Pollutant Reduction Elimination System (NPDES) Phase II Permit. The objective of the overall project is to assist the County with 2013 Phase II Permit compliance by assistance in developing a plan to implement and/or completing specific tasks and deliverables required by the permit.

Background

The Municipal Storm Water Permitting Program regulates storm water discharges from municipal separate storm sewer systems (MS4s). MS4 permits were issued in two phases; the large Cities were all regulated in Phase I. Stanislaus County, as a rural county, was part of the Phase II Permit, which was adopted in 2003 by the State Water Resources Control Board.

The County is currently in the process of a permit renewal with the State of California, who has issued a new Phase II MS4 permit effective July 1, 2013. The County has filed the Notice of Intent (NOI) to comply with the MS4 permit on June 27, 2013. The MS4 permit requires the County to develop and implement a Storm Water Management Plan/Program with the goal of reducing the discharge of pollutants to the maximum extent practical (MEP). The program areas include public education and outreach; illicit discharge detection and elimination; construction and post-construction; and good housekeeping for municipal operations.

The purpose of the Phase II Small MS4 General Permit is to further reduce adverse water quality and aquatic habitat conditions by instituting the use of controls the conveyance of storm water run-off into streams, river, and creeks. The new permit requires the County to: track illicit discharge detection and elimination on private property; inventory industrial/commercial facilities; monitor Tuolumne and San Joaquin rivers for organic enrichment, low dissolved oxygen, Diazinon and Chlorpyrifos, and manage all County owned facilities storm water.

Scope of Work

Stanislaus County Public Works Department (County) is seeking proposals from qualified consultants to assist the County with technical and regulatory permit compliance tasks associated with the newly adopted 2013 National Pollutant Discharge Elimination System (NPDES) Phase II Municipal Storm Water Permit (Phase II Permit). The objective of the overall project is to assist the County with 2013 Phase II Permit compliance by assistance in developing a plan to implement and/or completing specific tasks and deliverables required by the permit. The County is seeking a single consultant to provide all of the listed services.

The consultant task may include (but may not be limited to) the following permit implementation deliverables: preparation of documents to support annual reporting and the development or review of brochures, webpages, maps, model contract language, tracking systems, workflows, procedures, plans, ordinances, policies, and other implementation tools such as technical memos, forms, fact sheets, guidance manuals, etc. The consultant tasks are as follows:

a. Legal/Regulatory/Administrative Services Tasks.
    1) Provide expert legal or regulatory guidance on Permit implementation;
    2) Interview and survey County departments for what tasks they are doing today, in support of or in implementation of the new Phase II NPDES permit;
        i. It is the intent of the County that the Consultant identify "low hanging fruit", i.e. to identify those tasks and duties that may already being performed by various County Departments and those tasks that can be performed with existing or minimal extra resources;
        ii. It is also the intent of the County for the Consultant to identify and recommend an implementing Department for the tasks as listed below under Task b;
        iii. Consultant should seek and/or identify partner opportunities, other agencies, non-profits, etc., for the County to help implement the terms and conditions of the 2013 Permit.
    3) Provide guidance on and interpretation of the new requirements (prohibitions, limitations and provisions) in the 2013 Phase II Permit (Guidance and interpretation may include technical, economic and regulatory analysis and communication of complex technical or regulatory information.).

b. For all elements listed below, develop the most cost effective and efficient methodologies either by partnering opportunities or in County departments performing similar functions. The general intent is to maximize our current efforts in implementation of the new Phase 2 permit.
    1) Program Management Tasks (Provision E.6):

i. Review, edit, update, and/or recommend relevant ordinances or other regulatory mechanisms to obtain adequate legal authority to meet the requirements of the 2013 Phase II Permit; and

ii. Develop recommendations, policies, and procedures to achieve compliance with the Tuolumne and San Joaquin River for organic enrichment, low dissolved oxygen, Diazinon and Chlorpyrifos Total Maximum Daily Loads (TMDLs).

2) Education and Outreach and Public Involvement and Participation Programs (Provisions E.7 and E.8).

i. Provide recommendations for public education strategy based on requirements of Provision E.7; and,

ii. Review, edit, and/or recommend elements of the required staff training programs.

3) Illicit Discharge Detection and Elimination (IDDE) Program (Provision E.9). Consultant to provide recommendations on how to implement an IDDE Program; to identify and assess priority areas, identifying and inspecting specific types of businesses and storm water pollution sources, conducting illicit discharge detection and elimination source investigations and corrective actions, and, preparing or reviewing spill response plan update. Recommend cost effective methodologies for outfall mapping.

4) Construction Site Storm Water Runoff Control Program (Provision E.10). Assist/provide support in developing recommendations for maintaining construction site inventory, reviewing and approving construction plans, and inspecting and enforcing local ordinance at sites during construction.

5) Pollution Prevention/Good Housekeeping (Provision E.11). Assist/provide support in recommending best practices and most efficient methodologies to assess facilities, identifying facility BMPs, preparing site specific Storm Water Pollution Prevention Plans, inspecting facilities, assessing and prioritizing storm drain system maintenance, implementing BMPs associated with permittee operations and maintenance activities, and implementing landscape design and maintenance BMPs.

6) Post-Construction Storm Water Management Program (Provision E.12). Provide recommendations on how to implement requirements such as conducting planning and development review process, conducting post-construction BMP condition assessment, and developing and/or modifying enforceable mechanisms or other Provision E.12 requirements. This task should include Low Impact Development Standards (LID) and hydromodification standards. Review the 2013 City of Riverbank Model Standards & Specifications for Low Impact Development Practices (attached), evaluate the standard for compliance with the requirements of the 2013 Phase II MS4 Permit, and make a recommendation of how it could be incorporated into the County's program.

7) Water Quality Monitoring (Provision E.13).
   i. Develop recommendations for implementing a Monitoring Plan and Quality Assurance Project Plan (QAPP) based on monitoring requirements described in Attachment G of the new 2013 Phase II permit under the Tuolumne River and San Joaquin River organic enrichment, low dissolved oxygen, Diazinon & Chlorpyrifos Toxicity Total Maximum Daily Loads (TMDLs); or,
   ii. Provide recommendations and opportunities with potential implementation of a regional water quality monitoring compliance option.
8) Program Effectiveness Assessment and Improvement (Provision E.14): Develop or review a Program Effectiveness and Improvement Plan that can be used to track annual and long-term effectiveness of the storm water program.
9) Total Maximum Daily Loads (TMDLs) (Provision E.15).
   i. Review Provision E.15 waste load requirements (including Attachment G), and current TMDL compliance plans (in Action Plan 2010 and plans provided by County);
   ii. Make recommendations/suggestions for future implementation;
   iii. Prepare memo with recommendations for complying with existing, adopted TMDLs; and,
   iv. Incorporate a description of the regulatory and implementation implications of Section E.15.e.
10) Anticipated Trash Reduction Program (Provision E.16): Assist/provide support in preparing for and implementing trash control requirements that will be based on Amendments to Statewide Water Quality Control Plans for trash (Trash Amendments).[1] Additionally, recommend methodologies and implementing department(s) for annual reporting.

[1] The State Board plans to adopt Trash Amendments by the end of 2013 and plans to re-open the Phase II Permit in FY 14-15 in order to add Trash Reduction Program that will incorporate Trash Amendments requirements. Municipalities will be required to eliminate discharges of trash from municipally owned storm drain systems to waters of the State using a combination of trash capture devices and other controls with a focus on high trash-generating land uses.

Schedule of Work

October 9, 2013 – County Issues Request for Proposal
October 23, 2013 – Last Day for Questions
October 25, 2013 – Last Addendum
October 30, 2013 at 5:00 PM – Proposals Due
Week of November 4th, 2013 – Select Consultant & Begin Contract
Week of November 11, 2013 – Anticipated Notice to Proceed
November 16 through February 7, 2013 – Perform Contract, deliver Executive Summary & Preliminary recommendations
February 28, 2014 – Deliver final report

Scope and Fee Requirements

Only that information specifically requested shall be submitted. In order to be considered a responsive and responsible proposer, the following information shall be included with the scope and fee proposal:

- Phase II MS4 Compliance Support Bid Submittal Worksheet (complete the attached worksheet)
- Rate Schedule that includes staff hourly rates, travel costs, and other project-related incidental costs.
- Names of consultant's project manager, staff to be utilized on the project, and the individual authorized to negotiate the contract on behalf of the consulting firm. Include a one-page resume for each staff member who will be utilized on this project.
- Experience and references (maximum of 3 pages)

The proposal should be combined, not to exceed 10 pages single-sided or 5 pages double-sided, single space, no less than 11pt font size, not including resumes and the cover letter. Resumes shall be added as an Appendix to the proposal. The use of the County logo is permissible. Consultant must be able to sign Stanislaus County Professional Services without modifications, see attached agreement.

Proposal Scoring and Evaluation Criteria

Criteria	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score
1. Composition of the proposed team (professional and technical level personnel) to fulfill the requirements of the Scope of Work in the RFP.	2.0		
2. Experience of the Project Manager.	1.0		
3. Education and experience of the key personnel to be assigned.	1.0		
4. Availability of the Project Manager and the proposed team. Accessibility to the County and ability to respond to County requirements.	1.0		
5. Nature of completed relevant projects.	2.0		
6. Cost effectiveness – low bid to high bid	3.0		
		Total	

Fail (0 points): Zero (0) points are given when the category being evaluated is nonresponsive.
Below Average (1 - 4 points): One (1) to four (4) points are awarded to responses that are considered to be minimally acceptable.
Average (5 points): Five (5) points are awarded if qualifications fully satisfy the requirement(s).
Above Average (6 - 9 points): Six (6) to nine (9) points are awarded if qualifications more than satisfy the requirement(s) and experience specifically applies to the project under consideration.
Exceptional (10 points): Ten (10) points are awarded if a firm's qualifications far exceed those required. Scores of ten (10) points generally are infrequent.

This scoring system is provided as a guideline for evaluating proposals that are submitted in response to the RFP and for evaluating consultant proposals. All relevant experience will be considered equally.

If you wish to be considered for Professional Services For An Implementation Plan for Phase II MS4 NPDES Permit, submit your proposal to this office by 5:00 p.m., on October 30, 2013 to:

David A. Leamon, PE
Senior Civil Engineer
Stanislaus County Department of Public Works
1010 10th Street, Suite 4107
Modesto, CA 95354

All questions regarding this request must be submitted in writing. Questions shall be submitted to David Leamon at leamond@stancounty.com or fax to (209) 525-6507.

ATTACHMENTS

1. MS4 Bid Submittal Worksheet
2. 2013 City of Riverbank Model Standards & Specifications for Low Impact Development Practices
3. Stanislaus County Professional Design Services Agreement

REFERENCES

STATE WATER RESOURCES CONTROL BOARD, WATER QUALITY ORDER NO. 2013-0001-DWQ, NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES), GENERAL PERMIT NO. CAS000004

Appendix B

Stanislaus County's Permit Application Submittal

(*NOI, Guidance Document, Permit Boundary Map*)

State Water Resources Control Board

NOTICE OF INTENT

GENERAL PERMIT TO DISCHARGE STORM WATER
ASSOCIATED WITH SMALL MS4s
(WQ ORDER No. 2013-0001-DWQ)

WDID:

Discharger:

Type: County Agency

Name: Stanislaus County Public Works

Contact Name: Matt Machado

Address: 1716 Morgan Road

Title: Director of Public Works

Address 2:

Phone #: 209-525-4130

City/State/Zip: Modesto CA 95358

Email: machadom@stancounty.com

Billing:

Name: Stanislaus County Public Works

Contact Name: Matt Machado

Address: 1716 Morgan Road

Title: Director of Public Works

Address 2:

Phone #: 209-525-4130

City/State/Zip: Modesto CA 95358

Email: machadom@stancounty.com

Additional Information:

Population: 76134

Traditional

Co Permittee : No

Waiver: No

RWQCB Jurisdiction:

Phone:

Email:

Certification:

Name: David Leamon

Date: June 27, 2013

Title: DAR

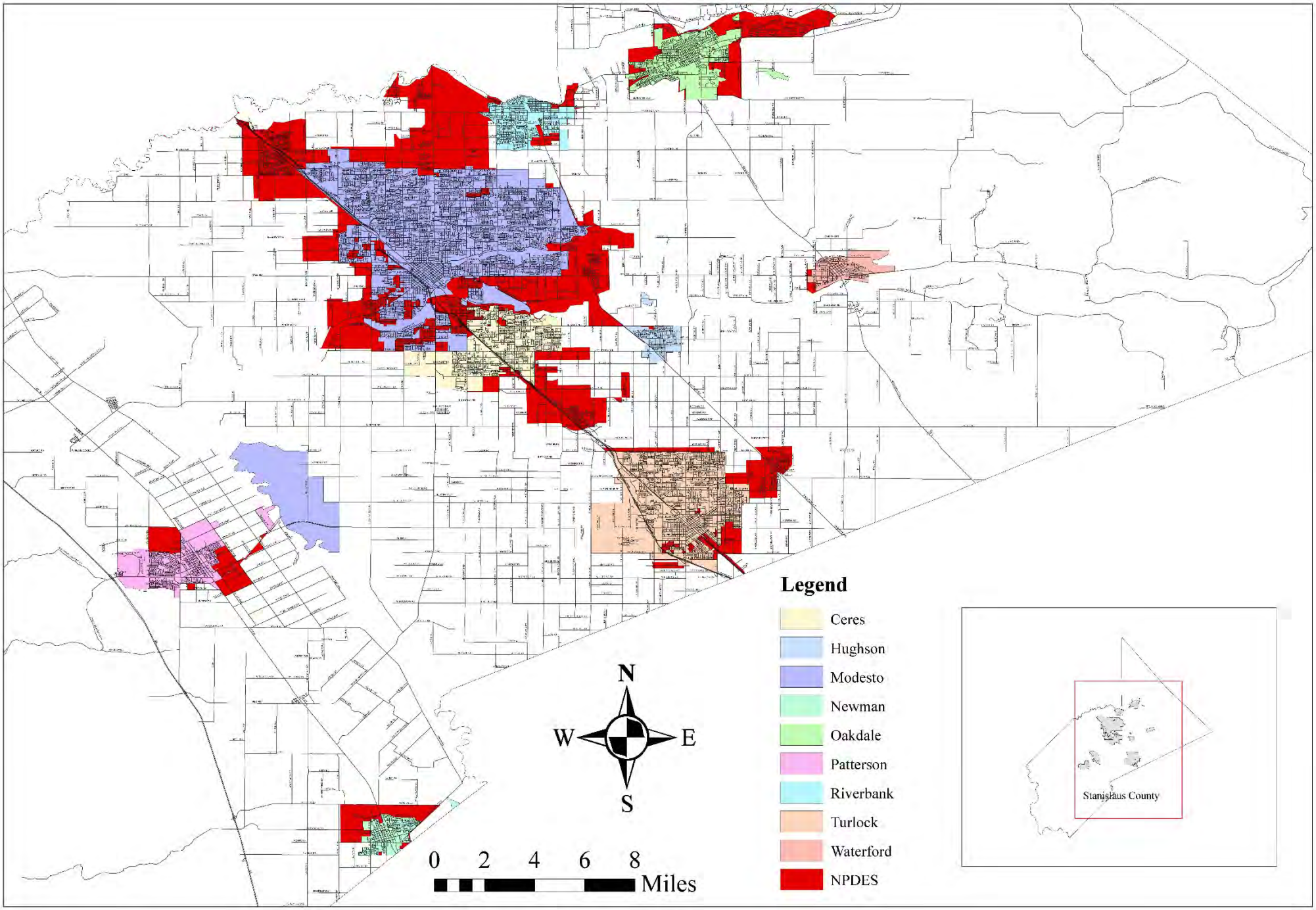
Corresponding Permit Section										
A.1.b.4.a: Overall Planning										
A.1.b.4.b							A.1.b.4.c and d (Required for Renewal Permittees only)			
PERMIT SECTION AND ELEMENT		Permit Compliance Year (June 30th unless otherwise noted)	Permit Year	Responsible Implementing Party		Additional implementation notes (i.e., goals, milestones, etc.)	A Is/are existing locally specific SWMP BMP(s) more protective of water quality than minimum requirements of this order? [Y/N] If yes, complete column B.	B If Column A is "Yes", indicate if you will Maintain, Reduce or Cease BMP(s) and complete Column C. If Reduce or Cease, also complete column D.	C Provide brief description of locally specific SWMP BMP(s) that is more protective of water quality, including measurable goal(s). Include specific reference to location in existing SWMP.	D Demonstrate that Reduction or Cessation of more protective BMP(s) is in compliance with this Order and the maximum extent practicable standard, and will not reslt in increased pollutant discharges (Justification for Reduction or Cessation of BMP(s))
				Local MS4 Department	SIE, Regional Organization or, Co-permittee					
E.6	**PROGRAM MANAGEMENT ELEMENT**									
E.6.a	Legal Authority (update or create ordinance)	2015	2	X			N			
E.6.b	Certification	2015	2	X			N			
E.6.c	Enforcement Response Plan	2016	3	X						
E.7	**EDUCATION AND OUTREACH PROGRAM**									
E.7.a	**Public Outreach and Education**									
	Select outreach option. If regional program, develop agreements	2014	1		X		N			
	(a) Develop and implement comprehensive education and outreach program	2015	2	X	X		N			
	(b)Conduct surveys 2x during permit term (1)	2016	3	X		CSU Stan?	N			
	(b)Conduct surveys 2x during permit term (2)	2018	5	X		CSU Stan?	N			
	(c)Develop & Convey Storm Water Message	2015	2	X		CSU Stan?	N			
	(d)Disseminate education materials to target audiences and translate as appropriate	2015	2	X			N			
	(e)Utilize public input in developing outreach program	2015	2	X			N			
	(f) Distribute educational material	2015	2	X			N			
	(g)Provide water efficient/ stormwater friendly landscaping information	2015	2	X		borrow other agency's materials	N			
	(h)Promote reporting of illicit discharges	2015	2				N			
	(i)Provide pesticide/fertilizer application information		2	X		DER Already does?	N			
	(j)Provide materials to school children	2015	2	X		$100/school for materials	N			
	(k,l,m)Develop messaging to reduce discharges from organized car washes, mobile cleaning and pressure washing	2015	2	X		On-line	N			
E.7.b.	**Staff and Site Operator Traning**	2016	3	X			N			
E.7.b.1	**Illicit Discharge Detection and Elimination Training**	2016	3	X			N			
E.7.b.2	**Construction Outreach and Education**			X			N			
	(a) Annual Permitee Staff Training	2015	2	X		CASQA Conference / training opportunities	N			
	(b) Construction Site Operator Education	2016	3	X		Grading contractor/general contractor outreach	N			
E.7.b.3	**Pollution Prevention and Good Housekeeping Staff Traning**			X			N			
	Biennial employee training	2015	2	X		cost for in-service training on-site	N			
E.8	**PUBLIC INVOLVEMENT AND PARTICIPATION PROGRAM**									
	Develop program with input of the public and implement	2015	2	X			N			
	(a) Develop Public Involvement strategy	2015	2	X			N			
	(b) Consider Citizen Advisory Group	2015	2	X			N			
	(c) Create Involvement Opportunities	2015	2	X		Hold annual clean the Tuolumne River	N			
	(d) Ensure public can access info about program	2015	2	X		website	N			
	(f) Engage in IRWMP or equivalent	2015	2	X		Staff time to participate	N			
E.9	**ILLICIT DISCHARGE DETECTION AND ELIMINATION**									
E.9.a	**Outfall Mapping**									
	Create and maintain accurate outfall map including a site visit to each outfall	2015 (Summer 2014)	2	X		County owned and opperated	N			
E.9.b	**Illicit Discharge Source/Facility Inventory**									
	Create inventory of all industrial/commercial facilities and update annually	2015	2	X		Private business	N			

	Assess priority areas once during permit term	2017	4	X			N			
E.9.c	**Field Sampling to Detect Illicit Discharges**									
	Sample any flowing outfalls while conducting E.9.a	2015 (Summer 2014)	2	X		Add budget to current sampling program	N			
	Annually sample priority area outfalls determined in E.9.a.	Summer 2015	3	X		included above	N			
	Conduct follow up investigation within 72 hours if action levels exceeded	2015 (Summer 2014)	2	X		new inspector	N			
E.9.d	**Illcit Discharge Detection and Elimination Source Investigations and Corrective Actions**									
	Develop written proceedures for investigations and corrective actions	2015 (Summer 2014)	2	X		new inspector	N			
	Once source of discharge is identified, require responsible party to correct within 72 hours of notification and verify with follow-up investigation	2015 (Summer 2014)	2	X		new inspector	N			
	Conduct follow up investigation within 72 hours if action levels exceeded	2015 (Summer 2014)	2	X		new inspector	N			
E.9.e	**Spill Response Plan**									
	Develop plan	2014	1	X		Associate Civil	N			
E.10	**CONSTRUCTION SITE STORM WATER RUNOFF CONTROL PROGRAM**									
E.10.a	**Construction Site Inventory**									
	Create inventory of all projects subject to local stormwater ordinance	2014	1	X		Coordinate w/Building Department	N			
E.10.b	**Construction Plan Review and Approval Procedures**									
	Develop procedures to review and approve construction plan documents (i.e., erosion and sediment contol plans)	2014	1	X		Coordinate w/ Building Dept - Grading Ordinance	N			
E.10.c	**Construction Site Inspection and Enforcement**									
	Inspect construction sites	2015	2	X		1-FT inspector Stormwater	N			
E.11	**POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR PERMITTEE OPERATIONS PROGRAM**									
E.11.a	**Inventory of Permittee-Owned and Operated Facilities**									
	Develop and maintain inventory of all permittee owned or operated facilities that are a potential threat to water quality	2015	2	X		CEO - Capital Facilities Team	N			
E.11.b	**Map of Permitte-owned or Operated Facilities**									
	Develop a map of inventoried facilities	2015	2	X		GIS team	N			
E.11.c	**Facility Assessment**									
	Conduct comprehensive annual assessment and identify subset of facilities that could be considered hotspots	2016	3	X		coordinate w/ CEO Capital Facilities	N			
	Document comprehensive assessment procedures and results	2016	3	X		coordinate w/ CEO Capital Facilities	N			
E.11.d	**Stormwater Pollution Prevention Plans**									
	Develop SWPPPS for hotspots	2017	4	X		PW or consultant	N			
E.11.e	**Inspections, Visual Monitoring and Remdial Action**									
	Quarterly visual inspection of hotspots	2018	5	X		Stormwater inspector	N			
	Annual comprehensive hotspot inspection	2018	5	X		Stormwater inspector	N			
	Quarterly hotspot visual observation of storm water and non-stormwater discharges	2018	5	X		Stormwater inspector	N			
	Non-Hotspots - Inspect each inventoried facility that is not a hotspot once during permit	2018	5	X		Stormwater inspector	N			
E.11.f	**Storm Drain System Assessment and Prioritization**									
	Implement proceedures to assess and prioritize maintenance of storm drain system infrastructure. Assign a priority to each facility based on accumulation of sediment, trash and/or debris	2015	2	X		PW Design QSP/QSD or consultant	N			
E.11.g	**Maintenance of Storm Drain System**									
	Inspect storm drain systems based on assigned priorities. Inspect high priority catch basins annually	2016	3	X		Roads Operations	N			
	Clean high priority storm drains	2016	3	X		Roads Operations	N			
	Label catch basins	2016	3	X		Roads Operations	N			
	Maintain surface drainage structures	2016	3	X		Roads Operations	N			
	Develop proceedure to dispose of waste materials removed from catch basins	2016	3	X		Roads Operations	N			
E.11.h	**Permittee Operations and Maintenance Activities (O&M)**									
	Develop program to assess O&M activites for potential to discharge pollutants and inspect all O&M BMPs quarterly	2016	3	X		Roads Operations	N			
E.11.i	**Incorporation of Water Quality and Habitat Enhancement Features in Flood Management Facilities**									
	Develop and implement process for incorporating water quality and habitat enhancement into new and rehabilitated flood management projects	2016	3	X		RD 2092 RFMP	N			
E.11.j	**Landscape Design and Maintenance**									

	Implement a landscape design and maintenance program to reduce the amount of water, pesticides and fertilizers used by Permittees	2015	2	X		Consultant	N			
	Evaluate use of pesticides, herbicides and fertilizers	2015	2	X		Consultant	N			
	Implement best practices to reduce pesticides and fertilizers	2015	2	X		DER/Ag Commissioner	N			
	Proper dispoal of unused chemicals	2015	2	X		DER	N			
	Evapo-based irrigation and rain sensors	2015	2	X		Ag Commissioner	N			
	Record amount of chemical usage	2015	2	X		DER	N			
E.12	**POST CONSTRUCTION STORMWATER MANAGEMENT PROGRAM**									
E.12.a	**Post-Construction Treatment Measures**									
	Regulate development to comply with the following sections, E.12.b through E.12.l	2015	2	X		PW/Planning/ Building	N			
E.12.b	**Site Design Measures**									
	Require implementation of site design measures on projects that create or replace 2,500-5,000 SF impervious area (incl single family homes)	2015	2	X		PW/Planning/ Building	N			
E.12.c	**Regulated Projects**									
	Implement standards on projects that create or replace >5,000 SF impervious area, aka Regulated Projects	2015	2	X		PW/Planning/ Building	N			
	Road and Utility Projects creating 5,000 sf or more that are public or fall under planning authority of a city shall comply with LID except 85th % can follow EPA Guidance on green infrastructure	2015	2	X		PW/Planning/ Building	N			
E.12.d.	**Source Control Measures -** Regulated Projects shall implement source control measures	2015	2	X		PW/Planning/ Building	N			
E.12.e	**LID Standards -** all Requlated Projects shall implement LID standards to treat storm water and provide baseline hydromod mgmt to meet numeric sizing criteria under E.12.e(ii)c	2015	2	X		PW/Planning/ Building	N			
E.12.f	**Hydromodification Management**	2016	3	X			N			
E.12.g	**Enforceable Mechanisms**									
	Develop or modify enforceable mechanisms to implement E.12.b - E.12.f	2016	3	X			N			
E.12.h	**Operation and Maintenance of Post-Construction Stormwater Management Measures**									
	Implement an O&M verification program for stormwater treatment and baseline hydromod (defined in E.12.e.ii.f) on all regulated projects	2015	2	X		includes coordination with County counsel, vector control	N			
E.12.i	**Post-Construction BMP Condition Assessment**									
	Inventory and assess the maintenance condition of structural post-construction BMPs within permittees jurisdiction	2016	3	X		includes a review of all BMP's Public and Private	N			
E.12.j	**Planning and Development Review Process**									
	Conduct review using an existing guide such as Municipal Regulatory Update Assistance Program	2016	1-3	X		revise landscape design details Building/Planning	N			
	Conduct an analysis of the landscape code to correct gaps hindering post construction requirements	2014	1	X		revise landscape design details Building/Planning	N			
	Complete any changes to landscape code to administer post-construction req	2015	2	X		revise landscape design details Building/Planning	N			
E.12.k	**Post Construction Storm Water Management Requirements Based on Assessment and Maintenance of Watershed Processes**	TBD				N/A if we dop E.12a-j	N			
E.12.l	**Alternative Post-Construction Storm Water Management Program**					N/A	N			
	For multiple benefit projects a permittee may propose alternative Post Const. Requirements (address water quality, supply, flood control, habitat enhancement, open space preserv, recreation, climate change)	No date provided - permittee may propose if desired				Recommend: N/A alternative equal or better than E.12a-j	N			
E.13	**WATER QUALITY MONITORING**									
E.13.a.	**ASBS Monitoring** - MS4s that discharge to ASBS and are covered by an Ocean Plan exception comply with Attachment C	2014	1	X		N/A we're not ASBS	N			
E.13.b.	**TMDL Monitoring -** MS4s w TMDLs must comply with Attachment G and consult with Regional Board within 1 year of effective date to determine monitoring requirements and schedule. And shall implement TMDL monitoring as specified by RB Executive Officer	2014	1	X		Yes, Tuolumne & SJ River Diazanon & Chloropyrifos; also Dissolved oxygen and organic enrichment	N			

E.13.c.	**303(d) Monitoring -** MS4s discharging to 303(d) listed waterbodies shall consult with Regional Board within 1 year of effective date to determine whether monitoring is necessary.	2014	1	X			N			
E.13.d.	**Receiving Water Monitoring and Special Studies (Select either Receiving Water Monitoring or Special Studies, if not already conducting E.13.a, b or c monitoring)**		1	X		unsure if we have to do receiving water monitoring and above TMDL monitoring	N			
E.13.d.1	**Receiving Water Monitoring**	2014	1	X						
	Select one urban/rural site and one urban area site to monitor	2014	1	X		regional group?	N			
	Monitor urban/rural and urban area sites	2015	2	X		regional group?	N			
	Complete and have available a report that includes a summary of baseline data collections and discussion of monitoring program results	2015	2	X		regional group?	N			
	Complete and have available a report that includes a comparison of data collection to baseline data and discussion of monitoring program results	2018	5	X		regional group?	N			
E.13.d.2	**Special Studies**						N			
	Develop and implement special study monitoring program and submit to Regional Board for review and approval	2014	1	N/A		none proposed	N			
	Implement approved special study plan	2015	2	N/A		none proposed	N			
	Complete and have available a report that includes a summary of baseline data collections and discussion of monitoring program results	2015	2	N/A		none proposed	N			
	Complete and have available a report that includes a comparison of data collection to baseline data and discussion of monitoring program results	2018	5	N/A		none proposed	N			
E.14	**PROGRAM EFFECTIVENESS ASSESSMENT**									
E.14.a	**Program Effectiveness Assesment and Improvement Plan (PEAIP)**						N			
	Submit PEAIP	2015	2	X			N			
E.14.b	**Storm Water Program Modifications**						N			
	Identify and summarize BMP and/or program modifications identified in priority program areas that will be made in the next permit term	2018	5	X			N			
E.15	**TOTAL MAXIMUM DAILY LOADS COMPLIANCE REQUIREMENTS**									
E.15.a	Comply with all approved TMDLs (Attachment G)	2014	1	X			N			
E.15.b	Waste load allocations are incorporated herein by reference as enforceable parts of this Order	2014	1	X			N			
E.15.c	Regional Board reviews TMDLs within one year of effective date and may propose modifications to requirements	2014	1	X			N			
E.15.d	Report status of implementation via SMARTS	2014	1	X			N			
E.15.e	Comply with Clean Water Act Sections 303d,306b and 314	2014	1	X			N			
E.16	**ANNUAL REPORTING PROGRAM**									
E.16.a	**Use SMARTS to report and certify**	2014-2018	all years	X			N			
E.16.b	**Complete and retain annual reports and make available to RWQCB during working hours**	2014-2018	all years	X			N			
E.16.c	**Submit detailed written or oral report to RWQCB if directed.**	2014-2018	all years	X			N			
E.16.d	**May coordinate reporting if regional programs**	2014-2018	all years	X			N			

Stanislaus County NPDES



Appendix C

County Ordinances

(*Side-by-Side Comparison and Evaluation* and *Existing Ordinances with Recommended Revisions using Track Changes*)

Side-by-Side Permit / Ordinance Comparison and Evaluation

MS4 Legal Authority Requirement E.6.a	Stanislaus County Corresponding Code	Evaluation of the Adequacy of the Existing Code and Recommended Modifications
Effectively prohibit non-storm water discharges through the MS4. Exceptions to this prohibition are NPDES-permitted discharges of non-storm water and non-storm water discharges in B.3 that are considered non-significant contributors of pollutants. Discharges through the MS4 of material other than storm water to waters of the U.S. shall be effectively prohibited, except as allowed under this Provision or as otherwise authorized by a separate NPDES permit. The following non-storm water discharges are not prohibited provided any pollutant discharges are identified and appropriate control measures to minimize the impacts of such discharges, are developed and implemented under the County's storm water program. This provision does not obviate the need to obtain any other appropriate permits for such discharges. a. water line flushing; b. individual residential car washing; c. diverted stream flows; d. rising ground waters; e. uncontaminated ground water infiltration (as defined at 40 C.F.R. §35.2005(20)) to separate storm sewers; f. uncontaminated pumped ground water; g. discharges from potable water sources; h. foundation drains; i. air conditioning condensation; j. springs;	14.14.50 Discharge of nonstormwater prohibited. A. Except as provided in Section 14.14.060, it is unlawful for any person to make or cause to be made any nonstormwater discharge. B. Notwithstanding the exemptions provided by Section 14.14.060, if the Regional Water Quality Control Board or the enforcement official determines that any otherwise exempt discharge causes or significantly contributes to violations of any stormwater permit, or conveys significant quantities of pollutants to a surface water or stormwater conveyance, or is a danger to public health or safety, such discharge shall be prohibited from entering the stormwater conveyance system. (Ord. CS 1047 §1, 2008). 14.14.60 Exceptions to discharge prohibition. Subject to the authority granted by the Regional Water Quality Control Board and the enforcement official in Section 14.14.050, the following discharges to the stormwater conveyance system are exempt from the prohibition set forth in Section 14.14.050. A. Any discharge or connections regulated under a NPDES permit issued to the discharger and administered by the state to Division 7, Chapter 5.5 of the California Water Code, provided that the discharger is in compliance with all requirements of the permit and all other applicable laws and regulations; B. Discharges from the following activities, which do not cause or contribute to the violation of any NPDES permit: 1. Water line flushing and other discharges from potable water sources, 2. Landscape irrigation and lawn watering, 3. Rising ground waters or springs, 4. Passive foundation and footing drains, 5. Water from crawl space pumps and basement pumps, 6. Air conditioning condensation, 7. Natural flows from riparian habitats and wetlands, 8. Dechlorinated swimming pool discharges, 9. Flows from fire suppression activities, including fire hydrant flows, 10. Waters not otherwise containing wastes as defined in California Water Code Section 13050(d) and	The current County code for non-storm water discharges is largely compliant with the MS4 permit requirement. The following minor modifications should be considered: 1. Change the following allowable non-storm water references to read as shown in the markup. ~~Landscape irrigation and lawn watering~~ Incidental runoff from landscaped areas defined as unintended amounts (volume) of runoff, such as unintended, minimal over-spray from sprinklers that escapes the area of intended use. ~~Noncommercial vehicle~~ Individual residential car washing~~, the washing and rinsing of passenger vehicles~~ on private property in which no commercial enterprise or non-profit fund raising is being conducted in the washing of those vehicles. Uncontaminated ground water infiltration or pumped to separate storm sewers,

MS4 Legal Authority Requirement E.6.a	Stanislaus County Corresponding Code	Evaluation of the Adequacy of the Existing Code and Recommended Modifications
k. water from crawl space pumps; l. footing drains; m. flows from riparian habitats and wetlands; n. dechlorinated swimming pool discharges; and o. incidental runoff from landscaped areas (as defined and in accordance with Section B.4 of this Order). Incidental runoff is defined as unintended amounts (volume) of runoff, such as unintended, minimal over-spray from sprinklers that escapes the area of intended use. 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.	California Health and Safety Code Section 25117, 11. Diverted stream flows, 12. Uncontaminated ground water infiltration to separate storm sewers, 13. Any discharge that the enforcement official, the local health officer or the Regional Water Quality Control Board determines, in writing, is necessary for the protection of the public health and safety, 14. Any discharge caused by flooding or other natural disaster, which could not have been reasonably foreseen or mitigated for in advance by the discharger, as determined by the enforcement official, 15. Noncommercial vehicle washing, the washing and rinsing of passenger vehicles on private property in which no commercial enterprise is being conducted in the washing of those vehicles. (Ord. CS 1047 §1, 2008).	

MS4 Legal Authority Requirement E.6.a	Stanislaus County Corresponding Code	Evaluation of the Adequacy of the Existing Code and Recommended Modifications
Detect 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 organized car washes, mobile cleaning and pressure wash operations,	14.14.50 Discharge of nonstormwater prohibited. A. Except as provided in Section 14.14.060, it is unlawful for any person to make or cause to be made any nonstormwater discharge. B. Notwithstanding the exemptions provided by Section 14.14.060, if the Regional Water Quality Control Board or the enforcement official determines that any otherwise exempt discharge causes or significantly contributes to violations of any stormwater permit, or conveys significant quantities of pollutants to a surface water or stormwater conveyance, or is a danger to public health or safety, such discharge shall be prohibited from entering the stormwater conveyance system. (Ord. CS 1047 §1, 2008). 14.14.90 Illicit connections prohibited. Prohibition of Illicit Connections. 1. The construction, use, maintenance or continued existence of illicit connections to the stormwater conveyance system is prohibited. 2. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection. 3. A person is considered to be in violation of this chapter if the person connects a line conveying sewage to a stormwater conveyance system, or allows such a connection to continue. (Ord. CS 1047 §1, 2008).	The current County code for illicit discharges is compliant with the MS4 permit requirement no changes recommended other than the ones indicated above for allowable non-storm water discharges.
Respond to the discharge of spills, and prohibit dumping or disposal of materials other than storm water into the MS4.	14.14.080 Discharge in violation of permit. It is unlawful for any person to cause, either individually or jointly, any discharge to the stormwater conveyance system that results in or contributes to a violation of this chapter and the county NPDES permit. (Ord. CS 1047 §1, 2008). 14.14.130 Containment and notification of spills. Any person owning or occupying a premises, who has knowledge of any release of pollutants or nonstormwater discharge from or across those premises that might enter the stormwater conveyance system, other than a release or discharge that is permitted by this chapter, shall immediately take all reasonable action to contain and abate the release of pollutants or nonstormwater discharge, and shall notify the enforcement official at Stanislaus County within twenty-four hours of the release of pollutants or nonstormwater discharge. (Ord. CS 1047 §1, 2008). 14.14.150 Enforcement authority. C. Administrative Enforcement Powers. The enforcement official may also exercise any of the following supplemental	The current County code meets the permit legal authority requirement for response to spills and prohibiting dumping or disposal of unauthorized materials into the MS4.

MS4 Legal Authority Requirement E.6.a	Stanislaus County Corresponding Code	Evaluation of the Adequacy of the Existing Code and Recommended Modifications
	enforcement powers as may be necessary or advisable in the enforcement official's judgment under the circumstances. 4. Emergency Orders and Abatements. a. The enforcement official may order the abatement of any discharge from any source to the stormwater conveyance system when, in the opinion of the enforcement official, the discharge causes or threatens to cause a condition that presents an imminent danger to the public health, safety, welfare or environment, or a violation of a NPDES permit. b. In emergency situations, where the property owner or other responsible party is unavailable and time constraints are such that service of a notice and order to abate cannot be effected without presenting an immediate danger to the public health, safety, welfare or environment, or a violation of a NPDES permit, the county may perform or cause to be performed such work as shall be necessary to abate the threat or danger, or permit violation. c. The costs of any such abatement shall be borne by the property owner, and shall be collectable in accordance with the provisions of subsection (C)(6).	
Require parties responsible for runoff in excess of incidental runoff to implement Discharge Prohibition B.4.a-e. B.4. Discharges in excess of an amount deemed to be incidental runoff shall be controlled. Regulated Small MS4s shall require parties responsible for such to implement Sections B.4.a-d below. Incidental runoff is defined as unintended amounts (volume) of runoff, such as unintended, minimal over-spray from sprinklers that escapes the area of intended use. 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. Parties responsible for controlling runoff in excess of incidental runoff shall: a. Detect leaks (for example, from broken sprinkler heads) and correct the leaks within	Chapter 14.12 WATER CONSERVATION 14.12.010 Purpose of regulations. The board of supervisors of the county of Stanislaus finds and declares that the state of California, including the county of Stanislaus, is experiencing a drought and that conservation of water is a prudent and desirable goal necessary for the public health and safety. The board further finds that it is timely for the county to take those steps necessary to ensure an adequate local supply of water, and that a water conservation program will assist that goal. (Ord. CS 399 § 1, 1990). 14.12.20 Rules and regulations. The following water conservation program, within the unincorporated area of the county or which is otherwise subject to the jurisdiction or control of the county, shall be as follows: A. No outdoor water use between noon and seven p.m. on any day. B. Dwellings or establishments with odd number street addresses shall water only on Wednesdays, Fridays and Sundays.	The existing water conservation code (Chapter 14.12) appears to be more restrictive than the incidental runoff permit requirements in that all water must be retained on-site and not allowed to escape to roads or streets. The current code does not allow "incidental runoff"; therefore, no response measures to incidental runoff beyond the current code enforcement measures should be required.

MS4 Legal Authority Requirement E.6.a	Stanislaus County Corresponding Code	Evaluation of the Adequacy of the Existing Code and Recommended Modifications
72 hours of learning of the leak; b. Properly design and aim sprinkler heads; c. Not irrigate during precipitation events; and d. Manage pond containing recycled water such that no discharge occurs unless the discharge is a result of a 25-year, 24-hour storm event or greater, and the appropriate Regional Water Board is notified by email no later than 24 hours after the discharge. The notification is to include identifying information, including the County's name and permit identification number. Non-storm water runoff discharge that is not incidental is prohibited, unless otherwise specified in Section B.3 above.	C. Dwellings or establishments with even number street addresses shall water only on Tuesdays, Thursdays and Saturdays. D. No outdoor water use on Mondays. E. Hosing concrete or paved areas, buildings, sidewalks, and paved parking lots is prohibited. F. Car washing is subject to the above-cited limitations with the use of a positive shutoff nozzle. G. Restaurants are encouraged to serve water only upon request. H. Water must not be wasted and must be retained on-site and not allowed to escape to roads or streets. I. New landscaping shall comply with modern methods, keeping water conservations as a goal. (Ord. CS 870 § 1, 2004; Ord. CS 399 § 1, 1990).	
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, or maintenance of BMPs consistent with the California Storm Water Quality Association (CASQA) Best Management Practice Handbooks or equivalent. The County shall develop, implement, and enforce a program to prevent construction site discharges of pollutants and impacts on beneficial uses of receiving waters. The program shall include the development of an enforceable construction site storm	14.14.120 Reduction of pollutants in stormwater. Any person engaged in activities that may result in pollutants entering the stormwater conveyance system shall, to the maximum extent practicable, undertake the measures set forth below to reduce the risk of non- stormwater discharge and/or pollutant discharge. A. Business-related Activities. Stormwater Pollution Prevention Plan. The enforcement official may require any business in the county engaged in activities that may result in pollutant discharges to develop and implement a stormwater pollution prevention plan, which shall include an employee training program. An employee training program is a documented employee training program that may be required to be implemented by a business pursuant to a stormwater pollution prevention plan, for the purpose of educating its employees on methods of reducing discharge of pollutants to the stormwater conveyance system. Business activities that may require a stormwater pollution prevention plan include, but are not limited to, maintenance, storage, manufacturing, assembly, equipment operations, vehicle loading or fueling, or cleanup procedures carried out partially or wholly out of doors. B. Construction. 1. Any person performing construction activities in the county shall prevent pollutants from entering the stormwater conveyance system and comply with all applicable federal, state and local laws, ordinances or regulations, including but not limited to, the general permit for stormwater discharges associated with construction activity and the County Stormwater Management and Discharge Control Ordinance.	Other than specifying that BMPs must be consistent with the CASQA BMP Handbooks (or equivalent), the current codes are compliant with the MS4 permit requirements. We recommend making the following modifications: B.1. Any person performing construction activities in the county shall prevent pollutants from entering the stormwater conveyance system and comply with all applicable federal, state and local laws, ordinances or regulations, including but not limited to, the current California Construction NPDES General Permit for stormwater discharges associated with construction activity and the County Stormwater Management and Discharge

MS4 Legal Authority Requirement E.6.a	Stanislaus County Corresponding Code	Evaluation of the Adequacy of the Existing Code and Recommended Modifications
water runoff control ordinance for all projects that disturb less than one acre of soil. The construction site storm water runoff control ordinance shall include, at a minimum, requirements for erosion and sediment controls, soil stabilization, dewatering, source controls, pollution prevention measures and prohibited discharges.	(2) Any person subject to a construction activity NPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the enforcement official prior to, or as a condition of, a subdivision map, site plan, building permit, grading permit, or development or improvement plan, upon inspection of the facility, during any enforcement proceeding or action, or for any other reasonable cause. Prior to issuance of a construction permit or approval of the proposed improvement plans, a copy of the notice of intent (NOI) and the SWPPP shall be submitted to the county. C. Development. The enforcement official may require controls as appropriate to minimize the long- term, post-construction activity discharge of stormwater pollutants from new development(s) or modifications to existing development(s). Controls may include source control measures to prevent pollution of stormwater a n d /or treatment controls designed to remove pollutants from stormwater. D. Compliance with Industrial or Construction Activity Stormwater Permit. 1. Any person subject to a state industrial activity stormwater permit for stormwater discharge shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the enforcement official upon inspection of the facility; during any enforcement proceeding or action; or for any other reasonable cause. 2. Any person subject to a state construction activity stormwater permit for stormwater discharge shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the enforcement official prior to or as a condition of a subdivision map, site plan, building permit, and development or improvement plan; upon inspection of the facility; during any enforcement proceeding or action; or for any other reasonable cause. E. Compliance with Best Management Practices. Every person undertaking any activity or use of premises that may cause or contribute to stormwater pollution or contamination or illicit discharges shall comply with best management practice guidelines or pollution control requirements, including the storage and parking of vehicles, as may be reasonably established by the enforcement official. (Ord. CS 1047 §1, 2008).	Control Ordinance. All construction projects, regardless of size, having soil disturbance or activities exposed to storm water must, at a minimum, implement BMPs for erosion and sediment controls, soil stabilization, dewatering, source controls, pollution prevention measures, and prohibited discharges. E. Compliance with Best Management Practices. Every person or entity, including the above listed categories, undertaking any activity or use of premises that may cause or contribute to stormwater pollution or contamination or illicit discharges shall comply with best management practices (BMPs) consistent with the California Storm Water Quality Association (CASQA) Best Management Practice Handbooks or equivalent guidelines ~~or pollution control requirements, including the storage and parking of vehicles, as may be reasonably established by the enforcement official~~. (Ord. CS 1047 §1, 2008).
Require information deemed necessary to assess compliance with this Order. The County shall only require information in compliance with the Homeland Security Act or any other federal law that concerns security in the United States. The County shall also	14.14.120 Reduction of pollutants in stormwater. Any person engaged in activities that may result in pollutants entering the stormwater conveyance system shall, to the maximum extent practicable, undertake the measures set forth below to reduce the risk of non- stormwater discharge and/or pollutant discharge. A. Business-related Activities. Stormwater Pollution Prevention Plan. The enforcement official may require any business in the county engaged in activities that may result in pollutant discharges to develop and implement a stormwater pollution prevention plan, which shall include an	The existing codes are largely adequate, but to provide further clarification, we suggest the following modifications: B. Construction. 2. … Prior to issuance of a construction permit or approval of

MS4 Legal Authority Requirement E.6.a	Stanislaus County Corresponding Code	Evaluation of the Adequacy of the Existing Code and Recommended Modifications
have the authority to review designs and proposals for new development and redevelopment to determine whether adequate BMPs will be installed, implemented, and maintained during construction and after final stabilization (post-construction).	employee training program. … B. Construction. (2) Any person subject to a construction activity NPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the enforcement official prior to, or as a condition of, a subdivision map, site plan, building permit, grading permit, or development or improvement plan, upon inspection of the facility, during any enforcement proceeding or action, or for any other reasonable cause. Prior to issuance of a construction permit or approval of the proposed improvement plans, a copy of the notice of intent (NOI) and the SWPPP shall be submitted to the county. C. Development. The enforcement official may require controls as appropriate to minimize the long- term, post-construction activity discharge of stormwater pollutants from new development(s) or modifications to existing development(s). Controls may include source control measures to prevent pollution of stormwater a n d /or treatment controls designed to remove pollutants from stormwater.	the proposed improvement plans, for projects subject to the State's Construction General NPDES Permit, ~~a copy of the notice of intent (NOI)~~ the WDID number and the SWPPP shall be submitted to the County. For projects with less than an acre of soil disturbance or not subject to the Construction General Permit, an Erosion and Sediment Control Plan must be submitted to the County. [New Section] 3. Project threat to water quality includes soil erosion potential, site slope, projects size and type, sensitivity of receiving water bodies, proximity to receiving water bodies, non-storm water discharges, projects more than one acre that are not subject to the CGP (sites that have obtained an Erosivity Waiver) and past record of non-compliance by the operator of the construction site. The County will set storm water compliance inspection frequencies of construction sites based on the prioritization criteria described above. The County will use the following categories, which correlate with the Construction General Permit, to assess "threat to water quality": Not subject to the CGP; Erosivity Waiver; Risk 1 / LUP Type 1; Risk 2 / LUP Type 2; and Risk 3 / LUP Type 3. Since LUP projects

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		can have multiple risk types, the County will use the highest type level for a specific LUP project for its "threat to water quality". If a project has been issued two consecutive notices of violation or does not correct a previously issued notice of violation by the due date set by the inspection, the project's "threat to water quality" will be elevate to the next highest category. Inspection frequencies will be as follows: a. Projects not subject to the CGP or that have an Erosivity Waiver will have a pre-soil disturbance inspection and a project completion inspection. b. Projects that are Risk 1 / LUP Type 1 or Risk 2 / LUP Type 2 will have a pre-soil disturbance inspection, monthly inspections, and a project completion inspection. c. Projects that are Risk 3 / LUP Type 3 will have a pre-soil disturbance inspection, bi-monthly (twice per month) inspections, and a project completion inspection. C. Development. The enforcement official may require controls as appropriate to minimize the long-term, post-construction activity discharge of stormwater pollutants from new development(s)

MS4 Legal Authority Requirement E.6.a	Stanislaus County Corresponding Code	Evaluation of the Adequacy of the Existing Code and Recommended Modifications
		or modifications to existing development(s). Controls may include source control measures to prevent pollution of stormwater, and ~~/or~~ treatment controls designed to remove pollutants from stormwater, low impact development measures, and/or hydromodification measures to offset the difference between the pre and post-construction peak flow runoff rates and volumes. Proponents of all applicable development and redevelopment projects will be required to meet the requirements and design standards specified in the current State of California Phase II MS4 NPDES Permit.

MS4 Legal Authority Requirement E.6.a	Stanislaus County Corresponding Code	Evaluation of the Adequacy of the Existing Code and Recommended Modifications
Enter private property for the purpose of inspecting, at reasonable times, any facilities, equipment, practices, or operations for active or potential storm water discharges, or non-compliance with local ordinances/standards or requirements in this Order, as consistent with any applicable state and federal laws.	14.14.140 Inspection authority. A. Right of Entry. 1. Whenever necessary to make an inspection to enforce any of the provisions of this chapter, or whenever an authorized enforcement official has reasonable cause to believe that there exists in any building or upon any premises any condition constituting a violation of this chapter, the enforcement official may enter such building or premises at all reasonable times to inspect the same or perform any duty imposed upon the officer by this chapter. 2. Any request for entry shall state that the property owner or occupant has the right to refuse entry, and that in the event such entry is refused, inspection may be made upon issuance of a warrant issued by a court of competent jurisdiction. 3. In the event the owner or occupant refuses entry after such request has been made, the enforcement official is empowered to seek assistance from any court of competent jurisdiction in obtaining such entry. B. Sampling Authority. Inspections shall be based upon such reasonable selection processes as may be deemed necessary to carry out the objectives of this chapter, including but not limited to, random sampling and/or sampling in areas with evidence of stormwater contamination, illegal discharge, nonstormwater discharge to the stormwater conveyance system, or similar factors. C. Sampling Methods. 1. During any inspection, the enforcement official may take samples as necessary in order to implement and enforce the provisions of this chapter. 2. This authority may include the installation of sampling and metering devices on private property, or requiring the person owning or occupying the premises to supply samples. D. Monitoring, Analysis and Reporting Authority. 1. The enforcement official may require monitoring, analysis and reporting of discharges from any premises to the stormwater conveyance system. 2. Upon service of written notice by the enforcement official, the burden, including cost, of these activities, analyses and reports incurred in complying with the requirement shall, to the extent permitted by law, be borne by the property owner or occupant of the facility or activity for which testing and monitoring has been requested. (Ord. CS 1047 §1, 2008).	The current County codes appear to provide adequate legal authority for performing inspections. No modifications recommended.
Require that dischargers promptly cease and desist discharging and/or cleanup and abate a discharge, including the ability to: 1) Effectively require the	14.14.150 Enforcement authority. A. General Enforcement Authority. 1. Except as otherwise provided herein, the director of public works shall administer, implement and enforce the provisions of this chapter (Title 1, Chapter 1.24.040). 2. The director of public works may delegate any powers granted to or duties imposed upon the director of public	The following code language modifications are recommended to comply with the MS4 Permit: 4.a. The enforcement official may order the immediate abatement of

MS4 Legal Authority Requirement E.6.a	Stanislaus County Corresponding Code	Evaluation of the Adequacy of the Existing Code and Recommended Modifications
discharger to abate and clean up their discharge, spill, or pollutant release within 72 hours of notification; high risk spill should be cleaned up as soon as possible. 2) Require abatement within 30 days of notification, for uncontrolled sources of pollutants that could pose an environmental threat; 3) Perform the clean-up and abatement work and bill the responsible party, if necessary; 4) Provide the option to order the cessation of activities until such problems are adequately addressed if a situation persists where pollutant-causing sources or activities are not abated; 5) Require a new timeframe and notify the appropriate Regional Water Board when all parties agree that clean-up activities cannot be completed within the original timeframe and notify the appropriate Regional Water Board in writing within five business days of the determination that the timeframe requires revision.	works to other Stanislaus County personnel. B. Violations Deemed a Public Nuisance. 1. In addition to the penalties herein provided, any condition caused or permitted to exist in violation of any of the provisions of this chapter is a threat to the public health, safety or welfare, and is thus deemed a nuisance. 2. Any such nuisance may be abated as provided herein. C. Administrative Enforcement Powers. The enforcement official may also exercise any of the following supplemental enforcement powers as may be necessary or advisable in the enforcement official's judgment under the circumstances. 1. Notice and Order to Abate. a. Whenever the enforcement official finds that a discharge has taken place, or is likely to take place, in violation of this chapter, or order issued hereunder, the enforcement official may serve a written notice and order to abate upon the property owner and the person responsible for the discharge, by personal service or by registered or certified mail. b. Within thirty days of the receipt of this notice, or shorter period as may be prescribed in the notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, which shall include specific required actions, shall be submitted to the enforcement official. c. Submission of this plan shall in no way relieve the person of liabilities for violations occurring before or after receipt of the notice and order to abate. d. Failure to comply with the terms and conditions of a notice and order to abate shall constitute a violation of this chapter. If a person fails to comply with the notice and order to abate, the director of public works may perform, or cause to be performed, such work as shall be necessary to correct the violation. The costs of any such abatement shall be borne by the property owner, and shall be collectable in accordance with the provisions of subsection (C)(6). 2. Contents of Notice … d. The date by which the violation must be corrected, which shall be a reasonable period of time. 3. Administrative Citation. 4. Emergency Orders and Abatements. a. The enforcement official may order the abatement of any discharge from any source to the stormwater conveyance system when, in the opinion of the enforcement official, the discharge causes or threatens to cause a condition that presents an imminent danger to the public health, safety, welfare or environment, or a violation of a NPDES permit. b. In emergency situations, where the property owner or other responsible party is unavailable and time constraints are such that service of a notice and order to abate cannot be effected without presenting an immediate danger to the public health, safety, welfare or environment, or a violation of a NPDES permit, the county may perform or cause to be performed such work as shall be necessary to abate the threat or danger, or permit violation. c. The costs of any such abatement shall be borne by the property owner, and shall be collectable in accordance with the provisions of subsection (C) (6). 5. Appeal. a. Any person served with a notice and order to abate, or administrative citation, or required to perform monitoring, analyses, reporting and/or corrective activities by an authorized enforcement official, or disputing the costs of enforcement, or otherwise grieved by the decision of the authorized enforcement official, may file a written appeal with the public works	any discharge from any source to the stormwater conveyance system when, in the opinion of the enforcement official, the discharge causes or threatens to cause a condition that presents an imminent danger to the public health, safety, welfare or environment, or a violation of a NPDES permit. Abatement and cleanup of spills, illicit discharges, or dumping to the storm drainage system must occur within 72 hours of notification; or sooner for high risk spills or discharges. For areas of uncontrolled pollutant sources, abatement must be performed within 30 days of notification. [New Section] 4.d. The enforcement official may order the immediate cessation of any activities that cause an illicit discharge or cause or potentially cause uncontrolled pollutants to enter the stormwater conveyance system when, in the opinion of the enforcement official, the activities present an imminent danger to the public health, safety, welfare or environment, or a violation of a NPDES permit. Activities may not resume until the enforcement official has verified that the threat to the environment and the County's MS4 has been abated. [New Section] 5.f. If all parties involved (at a minimum, the discharger and the County enforcement official) agree that

MS4 Legal Authority Requirement E.6.a	Stanislaus County Corresponding Code	Evaluation of the Adequacy of the Existing Code and Recommended Modifications
	director within ten days following the effective date of the notice and order, administrative citation, the enforcement official's decision or the delivery of an invoice for enforcement costs. b. Upon receipt of the written appeal, the director of public works shall request a report and recommendation from the authorized enforcement official, and shall set the matter for hearing at the earliest practical date. c. Due notice of the hearing shall be provided to the person appealing. d. At the hearing, the director of public works may hear additional evidence, and may reject, affirm or modify the authorized enforcement official's decision, or the costs of enforcement. e. Upon conclusion of the hearing, the director shall serve written notice of his or her decision in the manner provided for service of a notice and order to abate herein. The director of public works shall present the decision to the board of supervisors, and the board may adopt such decision, with or without modification, without further notice of hearing.	clean-up activities cannot be completed within the original timeframe, a new timeframe may be set as long as notification is made by the County to the Regional Water Quality Control Board in writing within five business days of the determination that the timeframe requires revision.
When warranted, 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.	14.14.150 Enforcement authority. 3. Administrative Citation. a. If the owner, or person responsible for the violation, fails to correct the violation within the time specified in the notice and order to abate, the director of public works or designee, may cause an administrative citation imposing an administrative fine or penalty to be issued to the owner of the property (California Government Code Section 53069.4). b. Any citation issued shall: i. Identify the date, time and circumstances of the violation; ii. State the amount of the administrative fine or penalty to be imposed; iii. Advise the person of their appeal rights as provided herein. c. The citation shall be served in the same manner as the notice of order to abate. The amount of the administrative fine imposed shall be set by the director of public works or designee; provided, however, where the violation would otherwise be an infraction, the administrative fine or penalty shall not exceed the maximum fine or penalty amounts for infractions set forth in Section 1.36.020. In determining the amount of civil penalty to be assessed, consideration will be given to the following: i. The extent to which the owner or person responsible for the violation had knowledge or reasonably should have known that the action taken was a violation of this chapter; ii. The magnitude of the violation; iii. The extent to which the owner or person responsible for the violation derived a financial benefit from the violation; iv. Any prior history of related violations by the same person on the subject property or on other parcels within the county; and c. Any corrective action, or lack thereof, taken by the owner or person responsible to eliminate the violations, and any other mitigating circumstances justifying a reduction of the amount of the penalties. 6. Enforcement Costs Recovery. a. The cost of enforcement, abatement and restoration shall be borne by the owner of the property, and the costs therefore shall be invoiced to the owner of the property. Costs recoverable herein include all costs of abatement incurred by the county, including, but not limited to, administrative costs, and any and all costs incurred in the physical	The current County code appears to be adequate to allow the County to levy citations or fines when warranted and to recover costs to correct the violations and mitigate the problem.

MS4 Legal Authority Requirement E.6.a	Stanislaus County Corresponding Code	Evaluation of the Adequacy of the Existing Code and Recommended Modifications
	abatement (California Government Code Section 25845). 7. Mitigation. The enforcement official shall have authority to order the mitigation of circumstances that may result in or contribute to illegal discharges.	
(j) Impose more substantial civil or criminal sanctions (including referral to a city or district attorney) and escalate corrective response, consistent with its Enforcement Response Plan developed pursuant to Section E.6.c., for persistent non-compliance, repeat or escalating violations, or incidents of major environmental harm.	14.14.150 Enforcement authority. D. Civil Action. 1. In addition to any other remedies provided in this chapter, any violation of this chapter may be enforced by civil action brought by the county. 2. Moneys recovered under this section shall be paid to Stanislaus County to be used exclusively for costs associated with monitoring and establishing stormwater discharge pollution control systems and/or implementing or enforcing the provisions of this chapter. 3. In any such action, the county may seek, as appropriate, any or all of the following remedies: a. A temporary and/or permanent injunction; b. Assessment of the violator for the costs of any investigation, inspection or monitoring survey that led to the establishment of the violation, and for the reasonable costs of preparing and bringing legal action under this division; c. Costs incurred in removing, correcting or terminating the adverse effects resulting from the violation; d. Compensatory damages for loss or destruction to water quality, wildlife, fish and aquatic life. (Ord. CS 1119 §1, 2012; Ord. CS 1047 §1, 2008).	The existing code is largely compliant with the MS4 Permit requirements for progressive enforcement, but we suggest the following addition to assure that the requirements are met: [New Sections] D.3. e. Referral of the discharger to the State Water Board. f. Referral of the discharger to the district attorney for criminal prosecution.

Existing Stanislaus County Enforcement Response Plan

County Code 14.14.150 and this Enforcement Response Plan (ERP) may be used for NPDES violations, seasonal and recurrent nuisances and emergency orders and abatements. The enforcement actions denoted might be used independently depending on the seriousness of the violation(s). The County's approach to ensuring compliance with its County Code is based on a progressive enforcement procedure. In general the County will initially use the least stringent enforcement action available for the subject violation with each successive enforcement action based on the Party's responsiveness and the type of violation. In some cases the County may need to advance the enforcement actions noted in the ERP based on the severity of violation, history of the party, and responsiveness of the party.

Triggers	Enforcement Action	Description
• Conditions that may potentially result in ordinance violations due to poor housekeeping or management practices • Party is cooperative and willing to remedy situation	Written Warning	• Identify conditions or potential violations, document and take photographs • Recommend (on the spot) appropriate BMPs to prevent violations • Follow up with written inspection summary within one week, take photographs • Party should take all reasonable steps to comply with recommendations • Conduct follow-up inspection within four weeks and document, take photographs
• First-time violation, isolated incident • Failure to implement appropriate BMPs after receiving a written warning • Minor infractions with minimal impact on the storm drain system and the environment • Seasonal and recurrent nuisances may include overflow of irrigation water onto the public right of way • Party is cooperative and willing to remedy situation	Notice and Order to Abate	• Issue Notice and Order to Abate. Complete Attachment "A" specifying code section violations, corrective actions and compliance dates. Include photographs. • Follow Service Methodology in §14.14.150.C.1 (a) • Party may request Extension of Time per §14.14.150 C.1 (d) • Address any request for Extension of Time per §14.14.150 C.1 (d) • Party to submit a written explanation of the violation and a plan for the satisfactory correction and prevention thereof, which shall include specific required actions to the Director within the time prescribed in the notice and order (Attachment A). §14.14.150.C.1 (b) • Conduct follow-up inspection after anticipated completion date for corrective actions; document, photograph concerns • Party may appeal the notice and order per §14.14.150 C.4.

• Failure to comply with Notice and Order to Abate • Failure to submit discharge abatement plan • Violations with significant impacts on the storm drain system and the environment • Party economically benefits from the violation • Party is non cooperative or minimally cooperative to remedy situation • Party may contest the violation	**Administrative Civil Citation § 14.14.150** C.3.	• Issue administrative civil citation (Attachment B) • Follow Service Methodology in §14.14.150.C.1 (a) • Determine civil penalty §14.14.150 C.3(c) $100, $200 or $400 • Record Notice of Noncompliance with County Recorder (withdraw when corrected). §14.14.150 C. 1(f) • Conduct follow-up inspection after completion date for corrective actions; photograph concerns • Report violation to Central Valley Regional Water Quality Control Board within 30 days of violation • Party may appeal per §14.14.150 C.3 (e) and §14.14.150 C.4.
• Failure to respond appropriately to written notices • Failure to comply with notice and order and/or citations • Party is not cooperative • Multiple offenses of similar nature • Minor to moderate infractions with minimal to moderate impact on the storm drain system and the environment • Third serious violation within a 12-month period • Ongoing discharges of pollutants to the storm drain system or to the roadways, including flooding over a county roadway	**Criminal Prosecution or Civil Action** § **14.14.150 D** § **14.14.180** **Civil Code 1.36.010 or 1.36.020** **Business and Professions Code 17200**	• Refer to District Attorney for prosecution per §14.14.150 D or §14.14.180 • A civil injunction may be requested at any time, for any violation, if appropriate in the opinion of the Director and County Counsel.
• Unsafe Conditions • Major violations of § 14.14(e.g., large spills, gross negligence in housekeeping or management practices) possibly requiring emergency spill response • Ongoing discharges of pollutants to the storm drain system or to the environment • Significant impact to the environment caused by violation requiring immediate abatement to protect	**§14.14.150 C.3 Emergency Orders and Abatements**	• Notify Party of unsafe condition, if possible • Follow Service Methodology in §14.14.150.C.1 (a) • Costs of abatement billed to owner and recording of a lien on property §14.14.150 C.3 (d) • Owner may file appeal contesting costs §14.14.150 C.4 (a) • Director may abate any emergency condition without prior notice to owner. Director shall report actions to BOS. §14.14.150 C.

The director or his/her designee, shall cause the notice and order to abate and/or administrative civil citation to be served on the owner(s) of the property as shown on the last equalized assessment roll, or upon the person responsible for or committing the act that constitutes a nuisance, and upon the mortgagee, lienor, lessee or holder of an interest of record in the subject property. Service of the notice and order to abate may be made in the following manner:

1. By personal service; or

2. By mail, certified, return receipt requested, to the owner of the property at the address shown on the last equalized assessment roll, or to the person responsible for or committing the act that constitutes a nuisance at that person's permanent mailing address. Should the service by certified mail, return receipt be returned as "refused or unclaimed," service may be made by posting a copy of the notice and order to abate prominently and conspicuously upon the property where the nuisance exists and mailing a copy of the notice by regular U.S. mail to the owner and any known tenant; and

3. By posting a copy of the notice on the property, if real property is involved.

When service of the notice and order to abate is made by personal service, or posting, proof of service shall be certified to at the time of service by a written declaration. When service is made via certified mail, the card returned in acknowledgment of receipt shall be affixed to a copy of the notice and order retained by the director or his/her designee. The failure of any person to receive the notice does not affect the validity of any proceedings taken under this chapter.

Chapter 14.14 STORMWATER MANAGEMENT AND DISCHARGE CONTROL

14.14.~~0~~10 Title.

This chapter shall be known as the Stanislaus County "Stormwater Management and Discharge Control Ordinance," and may be cited as such. (Ord. CS 1047 §1, 2008).

14.14.20 Purpose and intent.

A. The purpose of this chapter is to protect and promote the health, safety and general welfare of the citizens of Stanislaus County (all that portion of Stanislaus County excepting that area lying within the incorporated cities of said county, hereinafter referred to as the "County") by controlling ~~nonstormwater~~non-stormwater discharges to the stormwater conveyance system from spills, dumping or disposal of materials other than stormwater, and by reducing pollutants in urban stormwater discharges to the maximum extent practicable.

B. This chapter is intended to assist in the protection and enhancement of the water quality of watercourses, water bodies and wetlands in a manner pursuant to and consistent with the Federal Clean Water Act (33 U.S.C. Sections 1251 et seq.) and any subsequent amendments thereto, by reducing pollutants in stormwater discharges to the maximum extent practicable and by prohibiting ~~nonstormwater~~non-stormwater discharges into the storm drain system. (Ord. CS 1047 §1, 2008).

14.14.30 Definitions.

For the purposes of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning:

A. "Best management practices" (BMPs) mean schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and education practices, maintenance procedures, and other management practices found in the SWPPP to prevent or reduce, to the maximum extent practicable, the discharge of pollutants directly or indirectly to waters of the United States (33 CFR Section 328.3). Best management practices also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal and drainage from raw material storage. BMPs are required to be implemented and maintained in a manner that is consistent with the California Storm Water Quality Association (CASQA) Best Management Practice Handbooks or equivalent guidelines.

B. "Construction activity" ~~means~~ includes ~~activities subject to NPDES construction permits. These include construction projects resulting in land disturbance of one acre or more. Such activities include, but are not limited to, clearing and grubbing, grading, excavating and demolition.~~any public or private projects involving roadwork, paving, utility installation, structural construction (new or redevelopment), demolition, grading, excavation, or landscaping that has soil disturbance or has pollutants exposed to storm water. It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purposes of a facility, nor does it include emergency construction activities required to immediately protect public health and safety.

~~B.~~C. "Development" means any new construction, rehabilitation, redevelopment or reconstruction of any public or private residential project (whether single- or multifamily planned unit development); industrial, commercial, retail and other nonresidential projects, including public agency projects; or grading for future construction. ~~It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or~~

~~original purposes of a facility, nor does it include emergency construction activities required to immediately protect public health and safety.~~

~~C.~~D. "Enforcement official" means the ~~director of public works~~Director of Public Works, or his or her designee, or any agent of Stanislaus County authorized to enforce compliance with this chapter.

~~D.~~E. "Hazardous waste" means any material, including any substance, waste or combination thereof, that because of its quality, concentration or physical, chemical or infectious characteristics, may cause, ~~or significantly~~or significantly contribute to, a substantial present or potential hazard to human health, safety, property or the environment, when improperly treated, stored, transported, disposed of, or otherwise managed (California Health and Safety Code Section 25117).

~~E.~~F. "Illegal discharge" means any discharge to the stormwater conveyance system that violates this chapter, or is prohibited by ~~federal~~Federal, ~~state~~State or local laws, or that degrades the quality of receiving waters in violation of any plan standard.

~~F.~~G. "National ~~pollution~~ Pollutant ~~discharge~~ Discharge ~~elimination~~ Elimination ~~system~~ System (NPDES) permit" means a permit issued by the Regional Water Quality Control Board or the State Water Resources Control Board, pursuant to Division 7, Chapter 5.5 of the California Water Code (commencing with Section 13370), to control discharges from point sources to waters of the United States.

~~G.~~H. "Noncommercial vehicle washing" means the washing and rinsing of passenger vehicles on private property in which no commercial enterprise or non-profit fundraising is being conducted in the washing of those vehicles.

~~H.~~I. "~~Nonstormwater~~Non-stormwater discharge" means any discharge to the stormwater conveyance system that is not entirely composed of stormwater.

~~I.~~J. "Person" means any person, firm, corporation, business entity, or public agency, whether principal, agent, employee or otherwise.

~~J.~~K. "Pollutant" means any contaminant that can degrade the quality of the receiving water in violation of any water quality standard or NPDES permit.

~~K.~~L. "~~Public works director~~Public Works Director" means the public works director of Stanislaus County.

~~L.~~M. "Stormwater" means surface runoff and drainage associated with storm events, which is free of pollutants.

~~M.~~N. "Stormwater conveyance system" means those artificial and natural facilities within Stanislaus County, whether publicly or privately owned, by which stormwater may be conveyed to a watercourse or waters of the United States, including without limitation, any roads with drainage systems, streets, catch basins, natural and artificial channels, aqueducts, stream beds, gullies, curbs, gutters, ditches, open fields, parking lots, impervious surfaces used for parking, and natural and artificial channels or storm drains.

~~N.~~O. "~~Stormwater pollution prevention plan~~Stormwater Pollution Prevention Plan (SWPPP)" means a document that describes the best management practices to be implemented by the owner or operator of a business, commercial development, residential development, or construction project, to eliminate ~~nonstormwater~~non-stormwater discharges and/or to reduce, to the maximum extent practicable (as defined by the State of California Regional Water Quality Control Board), pollutant discharges to the stormwater conveyance system.

~~O.~~P. "Surface water" means all water naturally open to the atmosphere (rivers, lakes, reservoirs, ponds, streams, impoundments, seas, estuaries, etc.) and all springs, wells, or other collectors directly influenced by surface water.

~~P.~~Q. "Watercourse" means any natural stream, whether flowing continuously or not, that is fed from permanent or natural sources, and includes, without limitation, rivers, creeks, runs and rivulets.

~~Q.~~R. Any term(s) defined in the Federal Clean Water Act, as amended, and/or defined in the regulations for the stormwater discharge permitting program issued by the Environmental Protection Agency, as amended, and which are not specifically defined in this section, shall, when used in this chapter, have the same meaning as set forth in such act or regulation. (Ord. CS 1047 §1, 2008).

14.14.40 Conflicts with other laws.

A. In the event of any conflict between this chapter and any ~~federal~~Federal or ~~state~~State law, regulation, order or permit, the requirement that establishes the higher standard for public health or safety shall govern.

B. To the extent permitted by law, nothing in this chapter shall preclude enforcement of any other applicable law, regulation, order or permit. (Ord. CS 1047 §1, 2008).

14.14.50 Discharge of ~~nonstormwater~~non-stormwater prohibited.

A. Except as provided in Section 14.14.~~0~~60, it is unlawful for any person to make or cause to be made any ~~nonstormwater~~non-stormwater discharge.

B. Notwithstanding the exemptions provided by Section 14.14.~~0~~60, if the Regional Water ~~Quality Control~~Quality Control Board or the enforcement official determines that any otherwise exempt discharge causes or significantly contributes to violations of any stormwater permit, or conveys significant quantities of pollutants to a surface water or stormwater conveyance, or is a danger to public health or safety, such discharge shall be prohibited from entering the stormwater conveyance system. (Ord. CS 1047 §1, 2008).

14.14.60 Exceptions to discharge prohibition.

Subject to the authority granted by the Regional Water Quality Control Board and the enforcement official in Section 14.14.~~0~~50, the following discharges to the stormwater conveyance system are exempt from the prohibition set forth in Section 14.14.~~0~~50.

A. Any discharge or connections regulated under a NPDES permit issued to the discharger and administered by the ~~state~~State to Division 7, Chapter 5.5 of the California Water Code, provided that the discharger is in compliance with all requirements of the permit and all other applicable laws and regulations;

B. Discharges from the following activities, which do not cause or contribute to the violation of any NPDES permit:

1. Water line flushing and other discharges from potable water sources,
2. Incidental runoff from landscaped areas defined as unintended amounts (volume) of runoff, such as unintended, minimal over-spray from sprinklers that escapes the area of intended use~~Landscape irrigation and lawn watering~~,
3. Rising ground waters or springs,
4. Passive foundation and footing drains,
5. Water from crawl space pumps and basement pumps,
6. Air conditioning condensation,
7. Natural flows from riparian habitats and wetlands,
8. Dechlorinated swimming pool discharges,
9. Flows from fire suppression activities, including fire hydrant flows,
10. Waters not otherwise containing wastes as defined in California Water Code Section 13050(d) and California Health and Safety Code Section 25117,

11. Diverted stream flows,

12. Uncontaminated ground water infiltration or pumped to separate storm sewers,

13. Any discharge that the enforcement official, the local health officer or the Regional Water Quality Control Board determines, in writing, is necessary for the protection of the public health and safety,

14. Any discharge caused by flooding or other natural disaster, which could not have been reasonably foreseen or mitigated for in advance by the discharger, as determined by the enforcement official,

15. ~~Noncommercial vehicle~~Individual residential car washing~~, the washing and rinsing of passenger vehicles~~ on private property ~~–~~in which no commercial enterprise or non-profit fundraising is being conducted in the washing of those vehicles. (Ord. CS 1047 §1, 2008).

14.14.~~0~~070 Reserved.

14.14.~~0~~080 Discharge in violation of permit.

It is unlawful for any person to cause, either individually or jointly, any discharge to the stormwater conveyance system that results in or contributes to a violation of this chapter and the ~~county~~County NPDES permit. (Ord. CS 1047 §1, 2008).

14.14.90 Illicit connections prohibited.

Prohibition of Illicit Connections.

1. The construction, use, maintenance or continued existence of illicit connections to the stormwater conveyance system is prohibited.

2. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

3. A person is considered to be in violation of this chapter if the person connects a line conveying sewage to a stormwater conveyance system, or allows such a connection to continue. (Ord. CS 1047 §1, 2008).

14.14.100 Concealment and abetting.

It is unlawful and a violation of this chapter for any person to cause, permit, aide, abet, or conceal a violation of any provision of this chapter. (Ord. CS 1047 §1, 2008).

14.14.110 Acts potentially resulting in violation of Federal Clean Water Act and/or Porter-Cologne Act.

Any person who violates any provision of this chapter, any provision of any permit issued pursuant to this chapter, or who discharges waste or wastewater that causes pollution, or who violates any cease and desist order, prohibition, or effluent limitation, may also be in violation of the Federal Clean Water Act (33 U.S.C. Sections 1251 et seq.) and/or Porter-Cologne Water Quality Control Act (California Water Code Section 13000 et seq.), and may be subject to the sanctions of those acts, including civil and criminal penalties. (Ord. CS 1047 §1~~, 2008~~, 2008).

14.14.120 Reduction of pollutants in stormwater.

Any person engaged in activities that may result in pollutants entering the stormwater conveyance system shall, to the maximum extent practicable, undertake the measures set forth below to reduce the risk of non- stormwater discharge and/or pollutant discharge.

A. Business-related Activities.

1. Stormwater Pollution Prevention Plan. The enforcement official may require any business in the ~~county~~County engaged in activities that may result in pollutant discharges to develop and implement a stormwater pollution prevention plan, which shall include an employee training program. An employee training program is a documented employee training program that may be required to be implemented by a business pursuant to a stormwater pollution prevention plan, for the purpose of educating its employees on methods of reducing discharge of pollutants to the stormwater conveyance system. Business activities that may require a stormwater pollution prevention plan include, but are not limited to, maintenance, storage, manufacturing, assembly, equipment operations, vehicle loading or fueling, or cleanup procedures carried out partially or wholly out of doors.

2. Coordination with hazardous materials release response plans and inventory. Any business requiring a hazardous materials release response and inventory plan, under Chapter 6.95 (commencing with Section 25500) of Division 20 of the California Health and Safety Code, shall include in that plan provisions for compliance with this chapter, including the provisions prohibiting ~~nonstormwater~~non-stormwater discharges and illegal discharges, and requiring the release of pollutants to be reduced to the maximum extent practicable.

3. Coordination with hazardous waste generator contingency plan and emergency procedures. Any business requiring a hazardous waste generator contingency plan and emergency procedures, pursuant to California Code of Regulations, Title 22, Sections 66265.51 to 66265.56, shall include in that plan provisions for compliance with this chapter, including the provisions prohibiting ~~nonstormwater~~non-stormwater discharge and illegal discharges, and requiring the release of pollutants to be reduced to the maximum extent practicable.

B. Construction.

1. Any person performing construction activities in the ~~county~~County shall prevent pollutants from entering the stormwater conveyance system and comply with all applicable ~~federal~~Federal, ~~state~~State and local laws, ordinances or regulations, including but not limited to, the current California NPDES ~~general~~ General ~~permit~~ Permit for stormwater discharges associated with construction activity (Construction General Permit) and the County Stormwater Management and Discharge Control Ordinance. All construction projects, regardless of size, having soil disturbance or activities exposed to storm water must, at a minimum, implement BMPs for erosion and sediment controls, soil stabilization, dewatering, source controls, pollution prevention measures, and prohibited discharges.

2. Any person subject to a construction activity NPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the enforcement official prior to, or as a condition of, a subdivision map, site plan, building permit, grading permit, or development or improvement plan, upon inspection of the facility, during any enforcement proceeding or action, or for any other reasonable cause. Prior to issuance of a construction permit or approval of the proposed improvement plans, for projects subject to the State's Construction General NPDES Permit, ~~a copy of the notice of intent (NOI)~~the WDID number and the SWPPP shall be submitted to the ~~county~~County. For projects with less than an acre of soil disturbance or not subject to the Construction General Permit, an Erosion and Sediment Control Plan must be submitted to the County.

(3) As required by its Phase II MS4 NPDES Permit, the County will conduct storm water compliance inspections at applicable construction sites that have areas of soil disturbance exposed to storm water. The inspection will be conducted by a County inspector or agent working for the County who is a Qualified

SWPPP Practitioner (QSP) or is supervised by a QSP. The inspection will evaluate the construction site's compliance to the County's storm water ordinances. Inspections will be billed by the County to the project owner. The following is the risk rating system and inspection frequency the County will use, which is analogous to the risk rating used by the California Construction General Permit.

- Projects not subject to the CGP or that have an Erosivity Waiver will have a pre-soil disturbance inspection and a project completion inspection.
- Projects that are Risk 1 / LUP Type 1 or Risk 2 / LUP Type 2 will have a pre-soil disturbance inspection, monthly inspections, and a project completion inspection.
- Projects that are Risk 3 / LUP Type 3 will have a pre-soil disturbance inspection, bi-monthly (twice per month) inspections, and a project completion inspection.

If a project has been issued two consecutive notices of violation or does not correct a previously issued notice of violation by the due date set by the inspector, the project's "threat to water quality" will be elevated by the County to the next highest category. This elevation of risk will not affect the risk rating for the Construction General Permit.

C. Development. The enforcement official may require controls as appropriate to minimize the long-term, post-construction activity discharge of stormwater pollutants from new development(s) or modifications to existing development(s). Controls may include source control measures to prevent pollution of stormwater~~–~~, ~~and/or~~ treatment controls designed to remove pollutants from stormwater, low impact development measures, and/or hydromodification measures to offset the difference between the pre and post-construction peak flow runoff rates and volumes. Proponents of all applicable development and redevelopment projects will be required to meet the requirements and design standards specified in the current State of California Phase II MS4 NPDES Permit.~~.~~

At the earliest planning stages, project proponents shall assess and evaluate how site conditions, such as soils, vegetation, and flow paths will influence the placement of buildings and paved surfaces. The evaluation will be used to optimize the site layout to meet the goals of capturing and treating runoff. Each project proponent will submit a map of the project dividing the site into discrete drainage management areas to show in each how runoff will be managed using site design measures, source controls, treatment controls, and hydromodification measures as defined by the current MS4 permit. All site design measures, source controls, treatment controls, and hydromodification measures must be selected, sized, and situated in accordance with the guidance provided in the current MS4 permit and the County's Storm Water Design Standards Manual for New Development and Redevelopment. Documentation of the site's post-construction storm water design measures must be submitted to the County's Planning Department for review and approval prior to the commencement of the project.

Project proponents must sign an operation and maintenance agreement in which they legally bind themselves to maintain the installed post-construction design measures in an effective and good operational condition until the property ownership is transferred. A written operation and maintenance plan for the proposed storm water design measures is required to be submitted to and approved by the County with the signed agreement. The agreement will be recorded with the deed by the County Clerk making it transferrable to the new owner; or, when there are multiple property owners responsible for the maintenance of the control measures, the agreement will consist of a legally binding covenant between the County and the homeowners association or maintenance district. The owner or association responsible for the maintenance of the control measures may be required by the County to submit an annual self-certification that the storm water control measures are effective and are being maintained in accordance with the submitted and approved Operation and Maintenance Plan.

~~C.~~D. Compliance with Industrial or Construction Activity Stormwater Permit.

1. Any person subject to a state industrial activity stormwater permit for stormwater discharge shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a

form acceptable to the enforcement official upon inspection of the facility; during any enforcement proceeding or action; or for any other reasonable cause.

2. Any person subject to a state construction activity stormwater permit for stormwater discharge shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the enforcement official prior to or as a condition of a subdivision map, site plan, building permit, and development or improvement plan; upon inspection of the facility; during any enforcement proceeding or action; or for any other reasonable cause.

~~D.~~E. Compliance with Best Management Practices. Every person or entity, including the above-listed categories, undertaking any activity or use of premises that may cause or contribute to stormwater pollution or contamination or illicit discharges shall comply with best management practice (BMPs) consistent with the California Storm Water Quality Association (CASQA) Best Management Practice Handbooks or equivalent guidelines ~~or pollution control requirements, including the storage and parking of vehicles, as may be reasonably established by the enforcement official~~. (Ord. CS 1047 §1, 2008).

14.14.130 Containment and notification of spills.

Any person owning or occupying a premises, who has knowledge of any release of pollutants or ~~nonstormwater~~non-stormwater discharge from or across those premises that might enter the stormwater conveyance system, other than a release or discharge that is permitted by this chapter, shall immediately take all reasonable action to contain and abate the release of pollutants or ~~nonstormwater~~non-stormwater discharge, and shall notify the enforcement official at Stanislaus County within twenty-four hours of the release of pollutants or ~~nonstormwater~~non-stormwater discharge. (Ord. CS 1047 §1, 2008).

14.14.140 Inspection authority.

A. Right of Entry.

1. Whenever necessary to make an inspection to enforce any of the provisions of this chapter, or whenever an authorized enforcement official has reasonable cause to believe that there exists in any building or upon any premises any condition constituting a violation of this chapter, the enforcement official may enter such building or premises at all reasonable times to inspect the same or perform any duty imposed upon the officer by this chapter.

2. Any request for entry shall state that the property owner or occupant has the right to refuse entry, and that in the event such entry is refused, inspection may be made upon issuance of a warrant issued by a court of competent jurisdiction.

3. In the event the owner or occupant refuses entry after such request has been made, the enforcement official is empowered to seek assistance from any court of competent jurisdiction in obtaining such entry.

B. Sampling Authority. Inspections shall be based upon such reasonable selection processes as may be deemed necessary to carry out the objectives of this chapter, including but not limited to, random sampling and/or sampling in areas with evidence of stormwater contamination, illegal discharge, ~~nonstormwater~~non-stormwater discharge to the stormwater conveyance system, or similar factors.

C. Sampling Methods.

1. During any inspection, the enforcement official may take samples as necessary in order to implement and enforce the provisions of this chapter.

2. This authority may include the installation of sampling and metering devices on private property, or requiring the person owning or occupying the premises to supply samples.

D. Monitoring, Analysis and Reporting Authority.

1. The enforcement official may require monitoring, analysis and reporting of discharges from any premises to the stormwater conveyance system.

2. Upon service of written notice by the enforcement official, the burden, including cost, of these activities, analyses and reports incurred in complying with the requirement shall, to the extent permitted by law, be borne by the property owner or occupant of the facility or activity for which testing and monitoring has been requested. (Ord. CS 1047 §1, 2008).

14.14.150 **Enforcement authority.**

A. General Enforcement Authority.

1. Except as otherwise provided herein, the ~~director of public works~~Director of Public Works shall administer, implement and enforce the provisions of this chapter (Title 1, Chapter 1.24.040).

2. The ~~director of public works~~Director of Public Works may delegate any powers granted to or duties imposed upon the ~~director of public works~~Director of Public Works to other Stanislaus County personnel.

B. Violations Deemed a Public Nuisance.

1. In addition to the penalties herein provided, any condition caused or permitted to exist in violation of any of the provisions of this chapter is a threat to the public health, safety or welfare, and is thus deemed a nuisance.

2. Any such nuisance may be abated as provided herein.

C. Administrative Enforcement Powers. The enforcement official may also exercise any of the following supplemental enforcement powers as may be necessary or advisable in the enforcement official's judgment under the circumstances.

1. Notice and Order to Abate.

a. Whenever the enforcement official finds that a discharge has taken place, or is likely to take place, in violation of this chapter, or order issued hereunder, the enforcement official may serve a written notice and order to abate upon the property owner and the person responsible for the discharge, by personal service or by registered or certified mail.

b. Within thirty days of the receipt of this notice, or shorter period as may be prescribed in the notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, which shall include specific required actions, shall be submitted to the enforcement official.

c. Submission of this plan shall in no way relieve the person of liabilities for violations occurring before or after receipt of the notice and order to abate.

d. Failure to comply with the terms and conditions of a notice and order to abate shall constitute a violation of this chapter. If a person fails to comply with the notice and order to abate, the ~~director of public works~~Director of Public Works may perform, or cause to be performed, such work as shall be necessary to correct the violation. The costs of any such abatement shall be borne by the property owner, and shall be collectable in accordance with the provisions of subsection (C)(6).

2. Contents of Notice.

a. The street address and/or a legal description sufficient for identification of the property where the violation exists and the address of the person responsible for or committing the act that constitutes a violation of this chapter.

b. A brief and concise description of the violation or use of the property or act that constitutes a violation of this chapter.

c. A description of the activities, practices and/or abatement methods to be performed to correct

the violation.

d. The date by which the violation must be corrected, which shall be a reasonable period of time.

3. Administrative Citation.

a. If the owner, or person responsible for the violation, fails to correct the violation within the time specified in the notice and order to abate, the ~~director of public works~~Director of Public Works or designee, may cause an administrative citation imposing an administrative fine or penalty to be issued to the owner of the property (California Government Code Section 53069.4).

b. Any citation issued shall:

i. Identify the date, time and circumstances of the violation;

ii. State the amount of the administrative fine or penalty to be imposed;

iii. Advise the person of their appeal rights as provided herein.

c. The citation shall be served in the same manner as the notice of order to abate. The amount of the administrative fine imposed shall be set by the ~~director of public works~~Director of Public Works or designee; provided, however, where the violation would otherwise be an infraction, the administrative fine or penalty shall not exceed the maximum fine or penalty amounts for infractions set forth in Section 1.36.020. In determining the amount of civil penalty to be assessed, consideration will be given to the following:

i. The extent to which the owner or person responsible for the violation had knowledge or reasonably should have known that the action taken was a violation of this chapter;

ii. The magnitude of the violation;

iii. The extent to which the owner or person responsible for the violation derived a financial benefit from the violation;

iv. Any prior history of related violations by the same person on the subject property or on other parcels within the ~~county~~County; and

v. Any corrective action, or lack thereof, taken by the owner or person responsible to eliminate the violations, and any other mitigating circumstances justifying a reduction of the amount of the penalties.

d. Any person receiving a citation may request an appeal as provided herein.

e. Notwithstanding Chapter 2.88 of the Stanislaus County Code or Section 1094.5 or 1094.6 of the Code of Civil Procedure, within twenty days after the date action is taken by the ~~board of supervisors~~Board of Supervisors on the decision of the ~~director of public works~~Director of Public Works, a person contesting that final administrative decision may seek review by ~~filing an~~filing an appeal in the Stanislaus County municipal court pursuant to subdivision (b) of Section 53069.4 of the Government Code. If no notice of appeal to the municipal court is filed within the period set forth in this section, the order or decision of the ~~county~~County shall be deemed confirmed.

f. If the owner of the property fails to pay the administrative fine or penalty imposed under this section upon demand by the ~~county~~County, the administrative fine or penalty shall be specially assessed against the parcel. The special assessment may be collected at the same time and in the same manner as ordinary ~~county~~County taxes are collected, and shall be subject to the same penalties and the same procedure and sale in case of delinquency as are provided for ordinary ~~county~~County taxes. A notice of abatement lien shall be recorded and shall become a lien on the property pursuant to the provisions of California Government Code Section 25845. The ~~director of public works~~Director of Public Works is authorized to prepare and record a notice of release of lien against the legal title of the subject property (s), if the administrative fine or penalty is paid in full.

4. Emergency Orders and Abatements.

a. The enforcement official may order the immediate abatement of any discharge from any source to the stormwater conveyance system when, in the opinion of the enforcement official, the discharge causes or threatens to cause a condition that presents an imminent danger to the public health, safety, welfare or environment, or a violation of a NPDES permit. Abatement and cleanup of spills, illicit discharges, or dumping to the storm drainage system must occur within 72 hours of notification; or sooner for high risk spills or discharges. For areas of uncontrolled pollutant sources, abatement must be performed within 30 days of notification.

b. In emergency situations, where the property owner or other responsible party is unavailable and time constraints are such that service of a notice and order to abate cannot be effected without presenting an immediate danger to the public health, safety, welfare or environment, or a violation of a NPDES permit, the ~~county~~County may perform or cause to be performed such work as shall be necessary to abate the threat or danger, or permit violation.

c. The costs of any such abatement shall be borne by the property owner, and shall be collectable in accordance with the provisions of subsection (C)(6).

~~c.~~d. The enforcement official may order the immediate cessation of any activities that cause an illicit discharge or cause or potentially cause uncontrolled pollutants to enter the stormwater conveyance system when, in the opinion of the enforcement official, the activities present an imminent danger to the public health, safety, welfare or environment, or a violation of a NPDES permit. Activities may not resume until the enforcement official has verified that the threat to the environment and the County's MS4 has been abated.

5. Appeal.

a. Any person served with a notice and order to abate, or administrative citation, or required to perform monitoring, analyses, reporting and/or corrective activities by an authorized enforcement official, or disputing the costs of enforcement, or otherwise grieved by the decision of the authorized enforcement official, may file a written appeal with the public works director within ten days following the effective date of the notice and order, administrative citation, the enforcement official's decision or the delivery of an invoice for enforcement costs.

b. Upon receipt of the written appeal, the ~~director of public works~~Director of Public Works shall request a report and recommendation from the authorized enforcement official, and shall set the matter for hearing at the earliest practical date.

c. Due notice of the hearing shall be provided to the person appealing.

d. At the hearing, the ~~director of public works~~Director of Public Works may hear additional evidence, and may reject, affirm or modify the authorized enforcement official's decision, or the costs of enforcement.

e. Upon conclusion of the hearing, the director shall serve written notice of his or her decision in the manner provided for service of a notice and order to abate herein. The ~~director of public works~~Director of Public Works shall present the decision to the ~~board of supervisors~~Board of Supervisors, and the board may adopt such decision, with or without modification, without further notice of hearing.

~~e.~~f. If all parties involved (at a minimum, the discharger and the County enforcement official) agree that clean-up activities cannot be completed within the original timeframe, a new timeframe may be set as long as notification is made by the County to the Regional Water Quality Control Board in writing within five business days of the determination that the timeframe requires revision.

6. Enforcement Costs Recovery.

a. The cost of enforcement, abatement and restoration shall be borne by the owner of the property, and the costs therefore shall be invoiced to the owner of the property. Costs recoverable herein include all costs of abatement incurred by the ~~county~~County, including, but not limited to, administrative costs, and any and all costs incurred in the physical abatement (California Government Code Section 25845).

b. If the owner of the property fails to pay the costs upon demand by the ~~county~~County, the ~~board of supervisors~~Board of Supervisors may order the costs to be specially assessed against the parcel. The special assessment may be collected at the same time and in the same manner as ordinary ~~county~~County taxes are collected, and shall be subject to the same penalties and the same procedure and sale in case of delinquency as are provided for ordinary ~~county~~County taxes. The ~~board of supervisory~~Board of Supervisors may also authorize a notice of abatement lien to be recorded. The costs shall become a lien on the property pursuant to the provisions of California Government Code Section 25845. The ~~director of public works~~Director of Public Works is authorized to prepare and record a notice of release of lien against the legal title of the subject property(ies), if the ~~county~~County is fully compensated for the amount of the lien placed upon the property (California Government Code Section 25845).

7. Mitigation. The enforcement official shall have authority to order the mitigation of circumstances that may result in or contribute to illegal discharges.

8. Stormwater Pollution Prevention Plan. The enforcement official shall have the authority to establish elements of a ~~stormwater pollution prevention plan~~SWPPP, and to require any business to adopt and implement such a plan, as may be reasonably necessary to fulfill the purposes of this chapter.

9. Best Management Practices. The enforcement official may establish the requirements of best management practices for any premises.

10. Seasonal and Recurrent Nuisance.

a. If any violation of this chapter constitutes a seasonal and recurrent nuisance, the enforcement official shall so declare.

b. Thereafter, such seasonal and recurrent nuisance shall be abated every year without the necessity of any further hearing.

D. Civil Action.

1. In addition to any other remedies provided in this chapter, any violation of this chapter may be enforced by civil action brought by the ~~county~~County.

2. Moneys recovered under this section shall be paid to Stanislaus County to be used exclusively for costs associated with monitoring and establishing stormwater discharge pollution control systems and/or implementing or enforcing the provisions of this chapter.

3. In any such action, the ~~county~~County may seek, as appropriate, any or all of the following remedies:

a. A temporary and/or permanent injunction;

b. Assessment of the violator for the costs of any investigation, inspection or monitoring survey that led to the establishment of the violation, and for the reasonable costs of preparing and bringing legal action under this division;

c. Costs incurred in removing, correcting or terminating the adverse effects resulting from the violation;

d. Compensatory damages for loss or destruction to water quality, wildlife, fish and aquatic life.

e. Referral of the discharger to the State Water Board.

~~d.~~f. Referral of the discharger to the district attorney for criminal prosecution. (Ord. CS 1119 §1, 2012; Ord. CS 1047 §1, 2008).

14.14.160 Reserved.

14.14.170 Reserved.

14.14.180 Violations.

A. It is unlawful for any person to violate any provision of this chapter or to fail to comply with any of its requirements.

B. Any person violating any provision of this chapter shall be guilty of a misdemeanor, unless such violation is declared by the ~~director of public works~~Director of Public Works or the district attorney to be an infraction.

C. If any violation is continued, each day's violation shall be deemed a separate violation. (Ord. CS 1119 §2, 2012; Ord. CS 1047 §1, 2008).

14.14.190 Remedies not exclusive.

Remedies under this chapter are in addition to, and do not supersede or limit, any and all other remedies, civil or criminal.

The remedies provided for herein shall be cumulative and not exclusive. (Ord. CS 1047 §1, 2008).

14.14.200 Disclaimer of liability.

A. The degree of protection required by this chapter is considered reasonable for regulatory purposes, and is based on scientific, engineering and other relevant technical considerations.

B. The standards set forth herein are minimum standards, and this chapter does not imply that compliance will ensure that there will be no unauthorized discharge of pollutants into the waters of the United States.

C. This chapter shall not create liability on the part of the ~~county~~County, or any officer or employee thereof, for any damages that result from reliance on the code or any administrative decision lawfully made thereunder. (Ord. CS 1047 §1, 2008).

14.14.210 Stanislaus County authority.

The enforcement official is authorized to make any decision on behalf of the ~~county~~County required or called for by this chapter. (Ord. CS 1047 §1, 2008).

14.14.220 Judicial review.

The provisions of California Code of Civil Procedures Sections 1094.5 and 1094.6 are applicable to judicial review of Stanislaus County decisions pursuant to this chapter. (Ord. CS 1047 §1, 2008).

Appendix D

Illicit Discharge Detection and Elimination

(*Procedures for Outfall Verification and Mapping*)

Outfall Mapping Protocol[10]

Outfall Mapping: The County will need to perform a reconnaissance survey of outfalls within its jurisdiction that drain to the Stanislaus and Tuolumne Rivers. Below are the guidelines for "Mapping the System" from the Center for Watershed Protections' IDDE and Tracking Guide as referenced in Section E.9.a. of the Phase II MS4 Permit.

Completing a map of the storm drain system is best accomplished through the use of geographic information systems (GIS).

Equipment List for mapping:
1. Existing paper maps
2. Field sheets
3. Camera
4. GPS unit
5. Spray paint
6. Cell phone or handheld radio
7. Clip boards and pencils
8. First aid kit
9. Flashlight
10. Protective gloves
11. Tape measure
12. Waders
13. Temperature probe
14. Stop watch
15. Sample bottles
16. Dry erase board (for photos)
17. Hand sanitizer
18. Sampling pole
19. Mirror (for light)
20. Safety vests

1. Review/Office Preparation:
   a. Check existing available mapping data in high priority areas first, then in medium priority areas, then low priority areas (planning board submittals or as-builts are a good resource for locations). (See priority area assignment section below)
   b. Decide on and document a numbering or naming system for outfalls and other structures. Establishment of a simple unique numbering system (StanCo-0001, StanCo-0002, etc.) will facilitate future inspections and documentation of maintenance.
   c. Select a method to mark outfalls in the field (using spray paint, paint pen, or signs or markers), and place an order for necessary materials. (Marking the outfalls ensures they can be consistently identified in the field, but is not required.)
   d. Obtain equipment for mapping (see Equipment List).
   e. Develop a schedule for completing (use town or city parcel grid or watershed areas).
   f. Conduct preliminary reconnaissance to evaluate if watercraft are necessary to view the banks of the water body
2. Field check:
   a. Using existing paper maps as a basis for locations, field personnel should start a mapping program by walking all named water bodies within a given area of the community and collecting outfall location and design information using global positioning system (GPS) equipment capable of sub-meter (approximately 3-foot) accuracy. Use of a data logger and data collection software, such as Pathfinder®, will allow the generation of GIS files that will be useful for many years. Utilize the Outfall Reconnaissance Inventory (ORI) form for outfall characterization.

[10] The Phase II MS4 Permit recommends the use of the Center for Watershed Protection's guide on Illicit Discharge Detection and Elimination (IDDE): A Guidance Manual for Program Development and Technical Assistance (available at www.cwp.org) or equivalent when developing an IDDE program. Guidance can also be found at: http://cfpub.epa.gov/npdes/stormwater/idde.cfm. The County may utilize existing forms such as the CWP Outfall Reconnaissance Inventory/Sample Collection Field Sheet while conducting the mapping inventory and Field Sampling as specified in Section E.9.c. of the permit (http://cfpub.epa.gov/npdes/stormwater/idde.cfm).

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed:		Outfall ID:	
Today's date:		Time (Military):	
Investigators:		Form completed by:	
Temperature (°F):	Rainfall (in.): Last 24 hours: Last 48 hours:		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	

Land Use in Drainage Area (Check all that apply):

☐ Industrial	☐ Open Space
☐ Ultra-Urban Residential	☐ Institutional
☐ Suburban Residential	Other: _____
☐ Commercial	Known Industries: _____

Notes (e.g., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☐ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

b. Collect dry weather inspection information whenever possible. Dry weather discharge information can either be collected on the paper forms for manual entry into a separate database at a later time, or can be directly entered into a database on a laptop or the data logger on-site.

c. Mark the outfall with its identifier for future location and easy reference using spray paint, paint markers, or pre-manufactured signs.

3. Develop Initial GIS Maps: If the storm drain system is being mapped as part of a larger GIS database for the municipality, the data collected can be displayed with any of the existing data sets. If the storm drain system is not part of a larger data set, the Program Manager must determine what background the maps should be displayed on, such as an aerial photograph, United States Geological Survey (USGS) quadrangles, or a set of roads, political boundaries, water bodies, and watershed information.

4. Review and field check other structures (catch basins, culverts, pipes, ditches, drain manholes, etc.):

a. Mark the outfall with its identifier for future location and easy reference using spray paint, paint markers, or pre-manufactured signs.

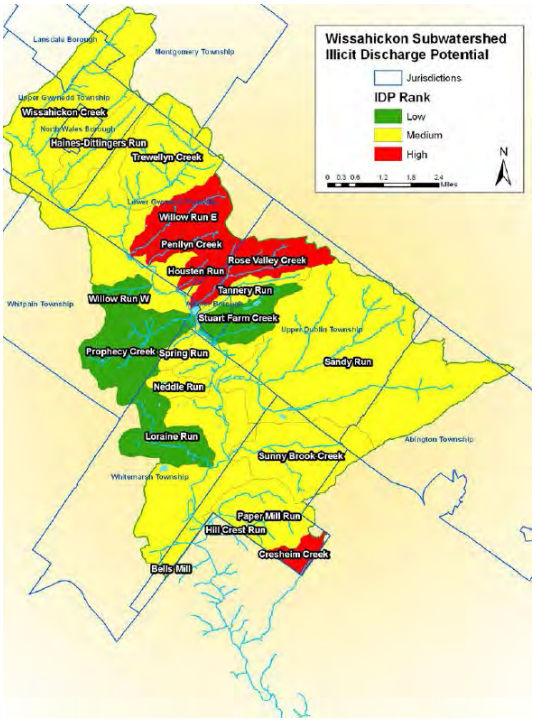
b. Field check digitized data.

c. Assign unique identifiers to remaining structures (CB-00X for catch basins, DMH-00X for drain manholes, etc.), and a set of attributes and allowable fields to describe the structure.

5. Incorporate field data into GIS and revise as necessary: Once the GPS data files have been converted into GIS layers, and revised maps have been produced, these maps should be proofed to assess their accuracy and completeness. The reviewer should document any additional data requirements, and correct any errors in the information collected. A relational database can help illustrate connections between pipes, outfalls, and other structures.

It should be noted that there are many possible mapping strategies for a given municipality depending on the amount and format of available storm drain system data and the resources that are available. The strategy described above is presented as one way to complete mapping. For a small to medium size community (6,000 to 10,000 people), this process could take approximately two years to complete, depending upon availability of resources and land use.

Outfall Prioritization: Once outfalls have been identified and mapped an illicit discharge assessment needs to be performed in order to assign a prioritization for Illicit Discharge Potential (IDP). A high, medium and low ranking system should be established as follows:



High – Older infrastructure that has a history of Sanitary Sewer Overflows (SSO) and/or illegal connections, heavy industrial/commercial areas, areas historically susceptible to illegal dumping, areas that have onsite sewage disposal systems, or have had history of illicit discharges.

Medium – Light industrial/commercial areas, infrequent SSO, illegal dumping, or history of illicit discharges.

Low – Newer infrastructures, with little to no industrial/commercial influence, no areas historically susceptible to illegal dumping, SSOs, or illicit discharges.

Using the above prioritization, drainage areas that are up-gradient of each identified outfall shall be assigned IDP level. These areas should be color coded and used as an overlay on the outfall map. Prioritization should be reassessed annually.

Illicit Discharge Self Inspection of Commercial Business

Inspection Date _____ Location Address _____

Name of Business _____ Type of Business _____

Owner/Manager's Name _____

Mailing Address _____

Phone _____

Interior Premise Checklist: (check applicable categories)

Wastewater Service: ____Unknown ____Sanitary Sewer ____On-Site Sewage System.
If on-site system, where is it located? _____

Floor Drain/Laundry Area: ____Yes ____ No
If yes, give details _____
_____

Where do floor drains/laundry drain to? _____Sanitary Sewer _____On-site sewage system
_____Storm Sewer _____Unknown

Utility/Mop Sink(s): ___Yes ___No
If yes, state number of sinks____. Location _____
_____

Sinks drain to: _____Sanitary _____Floor Drains _____Storm Sewer _____Unknown
Explain in detail what they are used for: _____
_____

Chemical Storage/Waste Oil: _____Yes _____No
If yes, what chemicals are stored? _____
_____
How are chemicals stored? _____
_____

Chemical/Hazardous Waste generation: _____Yes _____No
If yes, explain storage and disposal practices in detail _____
_____
_____
_____

Grease Trap/Oil Separator: _____Yes _____No _____Unknown
If yes, give details _____
_____
How often is it pumped? _____
Pumped by whom? _____

Equipment Wash/Rinse Area: _____Yes _____No
If yes, explain practices in detail _____
_____
_____
Where does wastewater from this area drain to? _____
_____

Description of operations, products and by-products at the facility: _____
_____
_____
_____
_____

Dishwasher/Garbage Grinder: _____Yes _____No
If yes, where do they drain to?_____
_____

Exterior Premise Inspection:

Parking lot drains: _____Yes _____No
If yes, where do they drain? _____
_____
What other purposes are they used for?_____
_____

Dumpsters on Premises: _____Yes _____No
If yes, what are they used for? _____
_____
Name of disposal company providing dumpster? _____

Fueling Areas: _____Yes _____No
If yes, are there drains in area? _____Yes _____No
If yes, where do they drain to? _____
_____

Pipes found in ditch? _____Yes _____No
If yes, where are they located? _____
_____

Pipes found in storm sewer? _____Yes _____No
If yes, describe type, size, flow and observations_____
_____

Name and title of person conducting self-inspection_____

Appendix E

Construction Site Storm Water Runoff Control Program

(*Clarification on the Ordinance and Inventory Requirement*; *Construction Inventory for July 2013 – June 2014*; the *ESCP Checklist; and the Inspection Checklist*)

From: John Teravskis
To: "Sparks, Genevieve@Waterboards"
Cc: "Dunn, Ali@Waterboards"
Subject: RE: Phase II MS4 Permit - Permit Clarification on E.10
Date: Wednesday, March 19, 2014 10:29:00 AM
Attachments: image004.png
image003.png

Hi Gen,

Thank you very much for your helpful and very prompt reply. I am trying to guide my municipal clients through this permit requirement. However, I still have some questions based on the permit and the clarifications you provided in the email below.

1. Is one of the criteria for being listed on the MS4's construction inventory that the project has applied for a building or grading permit? If so, it is not clearly stated in E.10a. Would the MS4 be out of compliance with this requirement if it did not have on its inventory a project that either did not require a building or grading permit or a project that should have applied for a building or grading permit but did not? The MS4s are concerned with being mandated to include projects subject to the ordinance, but for which the municipality has no mechanism for tracking or for projects that have avoided the plan check / permitting process. We are particularly concerned about third party litigation, in which an enviro organization compiles their own inventory list which contains projects that did not go through the permitting or plan check process.
2. You stated below in reference to requiring an Erosion and Sediment Control Plan that "one option the municipality may consider is to incorporate quantified thresholds for municipal staff's review of permit applications that would define what type of projects would actually develop an erosion and sediment control plan." By "quantified thresholds" are you talking about using the RUSLE equation or something similar? If so, who sets the minimum quantity threshold that determines if a project requires an ESCP? The State Water Board or the municipality? But, regardless of who sets it, will this threshold comply with the permit requirements? Although it is very logical and practical to set a threshold (and I like the idea), as far as I can tell, the permit doesn't allow for the setting of a threshold. The permit says the ordinance is for "**all projects** that disturb less than one acre of soil" and that "**each operator** of a construction activity within its jurisdiction" prepare and submit and ESCP?

Please forgive me, I am not trying to nitpick and make more of an issue than need be, but I am trying to reconcile the permit language with the practical implementation at the MS4 level. Please let me know if I am missing something in the permit language or if I am misinterpreting it. Thank you again for your input. I am confident that we will reach a good understanding of this section of the permit.

John M. Teravskis, QSD & CPESC
11780 N. Hwy. 99 Lodi, CA 95240
office - (209) 334-5363 ext. 110
cell - (209) 649-0877

From: Sparks, Genevieve@Waterboards [mailto:Genevieve.Sparks@waterboards.ca.gov]
Sent: Tuesday, March 18, 2014 4:41 PM
To: jteravskis@wgr-sw.com
Cc: Dunn, Ali@Waterboards
Subject: Phase II MS4 Permit - Permit Clarification on E.10

Hi, John –

This is the guidance I have provided to Permittees:

The focus of E.10 is construction sites that result in soil disturbance and/or has the potential to impact water quality. For Provision E.10.a., the construction site projects less than one acre result in soil disturbance and/or has the potential to impact water quality should be inventoried; the same applies to construction site projects over an acre. For example, installation of a water heater would presumably not cause soil disturbance and/or have the potential to impact water quality. A small re-landscaping project in someone's front yard may not either. However, an addition of a room or rooms to house or the building of a residence may. A Permittee will need to track all construction site projects, regardless of size, that fits this criteria; construction site projects larger than 1 acre will be tracked in SMARTS and can be easily integrated in the Permittee's inventory.

In anticipation you will have questions on E.10.b , I've included the following guidance for you as well:
Provision E.10.b.(ii)(a) is focused on soil disturbance that result from construction projects either under one (1) acre or over one (1) acre. Construction projects under one (1) acre would be inventoried as required under Provision E.10.a.; construction projects over one (1) acre would be captured under the CGP and inventoried in the SMARTS database for the Permittee to incorporate into their municipality's inventory.

Triggers for Provision E.10.b.(ii)(a) would be the issuance of a grading OR building permit, where the construction project results in any amount of soil disturbance and potential water quality impacts. In this instance, the Permittee would require an erosion and sediment control plan which presumably the Permittee has established some level of standards for at the local level. One option the municipality may consider is to incorporate quantified thresholds for municipal staff's review of permit applications that would define what type of projects would actually develop an erosion and sediment control plan.

Let me know if you have other questions,

Genevieve (Gen) Sparks, Environmental Scientist
Storm Water MS4 Program
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670
(916) 464-4745
gsparks@waterboards.ca.gov

From: John Teravskis [mailto:jteravskis@wgr-sw.com]
Sent: Tuesday, March 18, 2014 4:23 PM
To: Sparks, Genevieve@Waterboards
Cc: Dunn, Ali@Waterboards
Subject: Permit Clarification

Hi Gen,
I spoke to you in the past on this subject and you had mentioned that it was an issue that the Regional Board and State Board were debating. But the question is this:
Under the Construction Management Element, it states "The program shall include the development of an enforceable construction site storm water runoff control ordinance for ***all*** projects that disturb less than one acre of soil." and in the section below about the construction inventory, the permit states "The inventory shall address *all projects subject* to the local construction site storm water runoff control ordinance." In theory, this could apply to absolutely ridiculously small projects because there is no minimum specified. Has the State Board and Region Board come up with a FAQ or clarification on this? We are quickly approaching July 1 start of Year 2 and the MS4s will need to have a determination soon.

Although we may suggest a minimum in the procedures for a given municipality to which the State may even agree; it is third party litigation that we are concerned about. By providing permit clarification about the minimum size, it will help prevent some frivolous litigation.

Thank you for your consideration and response to my question. Please feel free to call me if you would like to discuss it in greater detail.

WGR
Not Your Typical Consultant
John M. Teravskis, QSD & CPESC
11780 N. Hwy. 99 Lodi, CA 95240
office - (209) 334-5363 ext. 110
cell - (209) 649-0877

Construction Inventory for Projects Occurring in Stanislaus County from July 1, 2013 – June 30, 2014

(The inventory includes projects outside of the Stanislaus Permit Boundary, which need to be removed.)

WDID	Project Start Date	Anticipated Completion Date	Termination Date	Status	Project Name	Area to be Disturbed	Units	Address	City
5S50C368529	6-Jan-14	5-Sep-14	4/23/2014	Terminated	DG Ceres CA	1.56	Acres	East Whitmore and Malik	Ceres
5S50C362779	1-Mar-12	1-Mar-13	2/18/2014	Terminated	Archway Commons	5.1	Acres	1024 North 9th Street	Modesto
5S50W001756	1-Jun-14	31-Jul-14		Active	Gallo Parking Lot 25	1.04	Acres	719 Yosemite Boulevard	Modesto
5S50C369011	1-Jul-14	31-Oct-14		Active	FMC Modesto Pre Demo Project	10	Acres	1200 Graphics Drive	Modesto
5S50C369233	31-Mar-14	27-Sep-15		Active	Riverbank Cornerstone	10.67	Acres	Corner of Oakdale Rd and Navy Dr	Riverbank
5S50C330873	1-Mar-05	?	3/3/2014	Terminated	JKB Homes Norcal	12	Acres	Gratton Rd & Tuolumne Rd	Denair
5S50C367789	1-Oct-13	28-Feb-14	4/11/2014	Terminated	Stearns Road and D Street	6.5	Acres	Highway 102 and N Stearns	Oakdale
5S50C363094	5-Mar-12	30-Aug-13	10/27/2013	Terminated	Statewide Hydrostatic Testing Project Central Valley Region	27.5	Acres	Division Road at Avenue D	Manteca
5S50C360549	1-Apr-11	1-Apr-12	4/8/2014	Terminated	Golden Corral Buffet & Grill	2.99	Acres	3737 McHenry Avenue	Modesto
5S50C363714	1-Jun-12	1-Sep-14	1/23/2014	Terminated	Pump Station 1A and Discharge Line	6.3	Acres	Alongside of East West Stanislaus Rd	Westley
5S50C368139	1-Nov-13	30-Aug-14		Active	Prime Shine Turlock	1.17	Acres	980 West Monte Vista Avenue	Turlock
5S50C369608	28-Apr-14	27-May-15		Active	Outdoor Education Center	1.49	Acres	2201 Blue Gum Ave	Modesto
5S50C363689	4-Jun-12	2-Dec-13	5/2/2014	Terminated	Modesto Toyota	9.8	Acres	4513 McHenry Ave	Modesto
5S50C368944	14-Feb-14	1-Dec-14		Active	Monte Vista Crossings Shopping Center South Site	17	Acres	2701 Countryside Drive	Turlock
5S50C364497	23-Aug-12	31-Mar-13	10/16/2013	Terminated	PATTERSON FULFILLMENT CENTER	55.5	Acres	255 PARK CENTER DRIVE	Patterson
5S50W001831	29-Sep-14	17-Nov-14		Active	Airport Neighborhood Sewer Improvement	2.07	Acres	400 Kerr Avenue	Modesto
5S50C368127	27-Oct-13	27-Oct-14		Active	Wat Cambodian Modesto	8	Acres	1538 Grimes Ave	Modesto
5S50C367039	1-Jul-13	14-May-14	5/5/2014	Terminated	Plant Propagation Facility	4.5	Acres	1618 Baldwin Road	Hughson
5S50C369071	11-Jun-12	30-Apr-14		Active	BUEHNER HOUSE EXPANSION	0.51	Acres	9241 FOXY COURT	Patterson
5S50W001601	7-May-14	26-Sep-14		Active	Gun Accessory Supply	1.8	Acres	900 Wakefield Drive	Oakdale
5S50C370164	14-Jul-14	6-Mar-15		Active	United States Cold Storage Phase 111 Expansion Turlock CA	2	Acres	537 Fransil Lane	Turlock
5S50W001245	1-May-14	31-Oct-14		Active	Del Rio Villas	4.3	Acres	Country Club Drive	Modesto
5S50C367737	12-Sep-13	12-Sep-13		Active	SCOE CERES ALT ED	3.77	Acres	3113 MITCHELL ROAD	Ceres
5S50C369721	1-May-14	15-Apr-15		Active	Claribel Road Widening Project	34.4	Acres	McHenry Ave to Oakdale Road	Modesto
5S50C368466	3-Mar-14	27-Nov-15		Active	E & J Gallo Winery	14.5	Acres	600 Yosemite Boulevard	Modesto
5S50C357666	1-Sep-09	31-Dec-13	12/10/2013	Terminated	Cornerstone at Crossroads	13.64	Acres	E Novi and N Oakdale Rd	Riverbank
5S50C369784	21-May-14	31-Dec-14		Active	Foster Farms Dairy 4	25	Acres	5372 S Hickman Road	Denair
5S50C365429	15-Apr-13	15-Aug-13	3/4/2014	Terminated	INO Modesto	1.2	Acres	1616 Sisk Rd	Modesto
5S50C369589	1-Jun-14	30-Sep-14		Active	Tesoro Subdivision Phase I	11	Acres	North Stearns Road	Oakdale
5S50C363342	30-Mar-12	31-Mar-13	8/7/2013	Terminated	Washington Road	2.82	Acres	4706 Fulkerth Road	Turlock
5S50C362672	2-Jan-12	1-Sep-12	3/21/2014	Terminated	SCOE PATTERSON ALT ED AND SPECIAL ED	7.61	Acres	513 WALNUT AVENUE	Patterson
5S50C365257	31-Oct-12	31-Dec-13	12/2/2013	Terminated	New Coal Storage Facility	6.9	Acres	2526 West Washington Street	Stockton

WDID	Project Start Date	Anticipated Completion Date	Termination Date	Status	Project Name	Area to be Disturbed	Units	Address	City
5S50C368406	11-Nov-13	30-Apr-14	6/30/2014	Terminated	Newman Dollar General	1.09	Acres	N Street South of Inyo Ave	Newman
5S50C368859	1-Feb-14	31-Dec-14		Active	Mid Valley Ag Oakdale Distribution Center	13.5	Acres	5225 Oakdale Waterford Hwy	Oakdale
5S50C370031	16-Jun-14	1-Mar-15		Active	PROJECT XX	94.4	Acres	WEST SIDE OF ROGERS RD AND KEYSTONE PACIFIC PARKWAY	Patterson
5S50C359247	1-Aug-10	1-Aug-11	12/4/2013	Terminated	Mid Valley Foods Inc	2.38	Acres	1864 Ackley Circle	Oakdale
5S50C360021	10-Dec-10	1-Jan-13	3/25/2014	Terminated	Sherman Ranch	9	Acres	Between Barrington Avenue and Hills Ferry Road	Newman
5S50C363990	1-Oct-12	30-Apr-14	4/21/2014	Terminated	Modesto DFM 7221 10	17.5	Acres	1270 Bangs Avenue	Modesto
5S50C365687	1-Mar-13	15-Sep-13	11/6/2013	Terminated	Pacific Southwest Containers	2.9	Acres	4530 Leckron Road	Modesto
5S50C368137	1-Nov-13	31-Jan-14		Active	Gallo East Park South	1.23	Acres	1305 Larkin Avenue	Modesto
5S50C354590	1-Nov-11	1-Feb-14	1/24/2014	Terminated	Rose Ln @ Patterson Garden	4	Acres	SEC of Calvinson Pkwy @ Baldwin Rd	Patterson
5S50C363222	1-Nov-11	2-Apr-12	1/10/2014	Terminated	ARCO am pm	0.98	Acres	Sperry Avenue	Patterson
5S50C363970	13-Aug-12	1-Aug-13	6/5/2014	Terminated	Primary Data Center	0.63	Acres	2201 Blue Gum Avenue	Modesto
5S50C366467	1-Feb-13	30-Sep-13	10/22/2013	Terminated	Liberty at Bridle Ridge	4.52	Acres	527 Clydesdale	Oakdale
5S50W001276	1-Oct-13	16-Jan-14	5/2/2014	Terminated	Hatch Rd and Carpenter Rd	3.87	Acres	2231 W Hatch Road	Modesto
5S50C367960	14-Oct-13	30-Sep-14		Active	Salado Substation Bank 2	1.5	Acres	Oak Flat Rd	Patterson
5S50C341209	1-May-06	30-Nov-06	2/24/2014	Terminated	Ceres River Bluff Park 4A	16.96	Acres	3643 E Hatch Rd	Ceres
5S50C365540	1-Jun-12	30-Jan-13	3/3/2014	Terminated	The River Christian Community	1.35	Acres	1351 G Street	Oakdale
5S50C368133	1-Nov-13	1-Nov-14		Active	Belmont at Bridle Ridge	9.8	Acres	7444 Crane Road	Oakdale
5S50C362739	16-Dec-11	1-Sep-12		Active	Project X	55.52	Acres	Northwest corner at intersection of Sperry Rd and Park Center Dr	Patterson
5S50C362866	15-Feb-12	28-Feb-13	2/24/2014	Terminated	Avena Bella	4.74	Acres	500 W Linwood Avenue	Turlock
5S50C369001	1-Feb-14	31-Oct-14		Active	Sunset Meadows II	1.1	Acres	Dominic Street	Oakdale
5S50C369176	17-Mar-14	24-Sep-14		Active	New Branch Building of Bank Of Stockton	2.49	Acres	1376 E F Street	Oakdale
5S50C353191	15-Sep-08	15-Mar-09	5/30/2014	Terminated	Lander Crossing	4.67	Acres	NW Intersection of Lander Ave & Hwy 99	Turlock
5S50C357425	15-Jan-10	9-Oct-10	10/23/2013	Terminated	Well No 8 Improvements	1.18	Acres	Euclid Ave Hatch Rd	Hughson
5S50C363597	11-Jun-12	10-Aug-13	6/5/2014	Terminated	Shipping & Receiving Building	1.55	Acres	2201 Blue Gum Avenue	Modesto
5S50C363341	30-Mar-12	31-Mar-13	3/19/2014	Terminated	Proposed Blue Diamond Processing Facility	14.27	Acres	4706 Fulkerth Road	Turlock
5S50W001620	16-Jun-14	13-Oct-14		Active	Howard McCracken Ingram Creek	4.6	Acres	Westley Triangle	Westley
5S50C369019	1-Mar-14	1-Dec-14		Active	Infiniti of Modesto	8.8	Acres	SE corner of Claratina and McHenry Avenue	Modesto
5S50C369371	15-Apr-14	15-Sep-14		Active	Gallo Oregon Mass Bulk Pad	17.6	Acres	Oregon Drive	Modesto
5S50C358681	1-Jun-10	31-Dec-06	5/1/2014	Terminated	Hart Ransom School	9.6	Acres	3920 Shoemaker Ave	Modesto
5S50C352675	1-Aug-08	1-Aug-09	1/10/2014	Terminated	Ceres Gateway Center	13.4	Acres	SW Corner of Mitchell Rd & Service Rd	Ceres
5S50C367773	30-Sep-13	15-Sep-14		Active	Main Canal DMC Intertie and Pump Station	5	Acres	W Stanislaus Rd	Patterson
5S50C370058	20-Jun-14	27-Oct-14		Active	Starbucks at NEC of Oakdale Road and Scenic Drive	0.29	Acres	800 Oakdale Road	Modesto

WDID	Project Start Date	Anticipated Completion Date	Termination Date	Status	Project Name	Area to be Disturbed	Units	Address	City
5S50C368801	15-Aug-05	31-Dec-14		Active	Diablo Grande Unit 2A	4.7	Acres	Diablo Grande Parkway	Patterson
5S50C364243	1-Aug-12	13-Sep-13	11/19/2013	Terminated	Honor Farm Bed Replacement	2.08	Acres	200 E Hackett Road	Ceres

Erosion and Sediment Control Plan (ESCP) Review Checklist

General Information:

Review Date:	
Project Name:	
Project Address:	
Legal Responsible Person:	
Person Performing the Review:	
Reviewer's Certification:	❑ QSD No. ❑ Working Under QSD Supervision
Supervising QSD Name & No.:	

Project Information:

Area of Soil Disturbance:			Acres		Sq. Ft.
Applicable to the CGP:			Yes		No
Small Erosivity Waiver:	R=		Yes		No
WDID Number:					
Risk Level:	❑ Risk 1 ❑ LUP Type 1 ❑ Risk 2 ❑ LUP Type 2 ❑ Risk 3 ❑ LUP Type 3 ❑ Not subject to the CGP				
Estimated Construction Start Date:					
Estimated Construction Completion Date:					
Name of Receiving Water:					
Is the Receiving Water listed on 303d list for sediment?			Yes		No
Does the Receiving Water have the beneficial uses of Cold, Spawn, and Migratory?			Yes		No
Type of Plan Submitted:	❑ Erosion & Sediment Control Plan ❑ CGP required Storm Water Pollution Prevention Plan				
Plan Developer Name:					
Plan Developer Company:					
Plan Developer QSD No.:					

Plan Review:

Risk Determination was correctly calculated:			Yes		No
Value of A in the RUSLE Equation (tons/year): *(Required for CGP applicable projects only.)*					
Applicable Permits (check all that apply): (*For any applicable permits, before a grading permit is issued, the LRP must submit evidence that all permits have been obtained.)*	❑ Construction General Permit ❑ Central Valley RWQCB Low Threat NPDES Permit for discharges of groundwater de-watering or hydrostatic test water ❑ State Water Board 401 Water Quality Certification ❑ U.S. Army Corps 404 Permit ❑ Dept. of Fish and Game Section 1600 Agreement				
Vicinity Map included:			Yes		No
ESCP or SWPPP Maps included:			Yes		No

BMP Review:

BMP NAME	MINIMUM REQUIRE-MENT[1]	BMP IN PLAN NARRATIVE?		BMP ON SITE MAP?		IF NOT USED, REASON PROVIDED	
		YES	NO	YES	NO	YES	NO
TEMPORARY RUN-ON / RUN-OFF CONTROL BMPs							
Scheduling	✓						
Preservation of Existing Vegetation							
Earth Dikes / Drainage Swales & Lined Swales							
Outlet Protection / Velocity Dissipation Devices	✓						
Slope Drains							
Streambank Stabilization							
Temporary Check Dam							
Fiber Rolls							
Temporary Gravel Bag Berm							
Temporary Sandbag Barrier							
Alternative Run-On/Run-Off Control BMPS Used[2]							
TEMPORARY EROSION CONTROL BMPs							
Scheduling	✓						
Preservation of Existing Vegetation	✓[3]						
Soil Preparation / Roughening							
Temporary Hydraulic Mulch	✓[3]						
Temporary Erosion Control (With Temporary Seeding)	✓[3]						
Temporary Soil Stabilizer	✓[3]						
Temporary Erosion Control (Straw Mulch with Stabilizing Emulsion)	✓[3]						
Temporary Erosion Control Blanket (On Slope)	✓[3]						
Temporary Erosion Control Blanket (In swale or ditch)	✓[3]						
Temporary Cover (Geotextiles and Mats)	✓[3]						
Temporary Mulch / Compost	✓[3]						
Non-Vegetated Stabilization (aggregate, paving, permanent structures / surfaces)	✓[3]						
Wind Erosion Control	✓						
Alternative Erosion Control BMP Used[2]							
TEMPORARY SEDIMENT CONTROL BMPs							
Temporary Silt Fence	✓[4]						
Temporary Fiber Rolls	✓[4]						
Temporary Gravel Bag Berm	✓[4]						
Temporary Sandbag Barrier	✓[4]						
Curb Cutback Perimeter Control	✓[4]						
Temporary Sediment Basin							
Temporary Sediment Trap							
Temporary Check Dam							
Street Sweeping	✓						
Temporary Drain Inlet Protection	✓						

BMP NAME	MINIMUM REQUIRE-MENT[1]	BMP IN PLAN NARRATIVE?		BMP ON SITE MAP?		IF NOT USED, REASON PROVIDED	
		YES	NO	YES	NO	YES	NO
Compost Socks / Biofilter Bags							
Active Treatment System							
Stabilized Construction Exit	✓						
Stabilized Construction Roadways							
Alternative Sediment Control BMPs Used[2]							
TEMPORARY NON-STORMWATER POLLUTION CONTROL BMPs							
Water Control and Conservation	✓						
Dewatering							
Paving, Sealing, Sawcutting, and Grinding Operations	✓						
Temporary Stream Crossing / Clear Water Diversion							
Illegal Connection and Illegal Discharge Detection Reporting	✓						
Potable Water / Irrigation	✓						
Vehicle and Equipment Cleaning	✓						
Vehicle and Equipment Fueling	✓						
Vehicle and Equipment Maintenance	✓						
Pipe Driving Operations							
Concrete Curing / Finishing	✓						
Material and Equipment Used Over Water							
Structure Demolition / Removal Over or Adjacent to Water							
Alternative Non-Storm Water Control BMPs Used[2]							
TEMPORARY WASTE MANAGEMENT & MATERIALS POLLUTION CONTROL BMPs							
Material Delivery and Storage	✓						
Material Use	✓						
Stockpile Management	✓						
Spill Prevention and Control	✓						
Solid Waste Management	✓						
Hazardous Waste Management							
Contaminated Soil Management							
Concrete Waste Management	✓						
Sanitary/Septic Waste Management	✓						
Liquid Waste Management							
Alternative Waste / Materials Control BMPs Used[2]							

Notes:

(1) Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the QSD.

(2) Use of alternative BMPs must have QSD approval.

(3) Must use at least one of these control measures to establish effective cover of all areas of soil disturbance after 14 days of inactivity.

(4) Must use at least one of these control measures to maintain effective perimeter control where surface water may flow offsite.

Project Name: _____ Review Date: _____

ESCP / SWPPP Assessment (check one):

- ❑ ESCP / SWPPP is satisfactory and no changes needed
- ❑ ESCP / SWPPP is satisfactory with the following minor revisions:
    - o
    - o
    - o
    - o
    - o
    - o
- ❑ ESCP / SWPPP is not satisfactory and requires the following corrections / revisions:
    - o
    - o
    - o
    - o
    - o
    - o
    - o

Additional Comments:

Appendix F

Pollution Prevention/Good Housekeeping for County Operations Program

(*Hot Spot Investigation Checklist Form*)

Hotspot Site Investigation **HSI**

WATERSHED:	SUBWATERSHED:	UNIQUE SITE ID:
DATE: ___/___/____	ASSESSED BY: / CAMERA ID:	PIC#:
MAP GRID:	LAT ___°____'____" LONG ___°____'____"	LMK #

A. SITE DATA AND BASIC CLASSIFICATION

Name and Address: _____

_____

_____

SIC code (if available): _____

NPDES Status: ☐ Regulated ☐ Unregulated ☐ Unknown

Category: ☐ Commercial ☐ Industrial ☐ Institutional ☐ Municipal ☐ Transport-Related

Miscellaneous ☐ Golf Course ☐ Marina ☐ Animal Facility

Basic Description of Operation: _____

	INDEX*
B. VEHICLE OPERATIONS ☐ **N/A** *(Skip to part C)*	**Observed Pollution Source?** ☐
B1. Types of vehicles: ☐ Fleet vehicles ☐ School buses ☐ Other: _____	
B2. Approximate number of vehicles: _____	
B3. Vehicle activities *(circle all that apply)*: Maintained Repaired Recycled Fueled Washed Stored	O
B4. Are vehicles stored and/or repaired outside? ☐ Y ☐ N ☐ Can't Tell Are these vehicles lacking runoff diversion methods? ☐ Y ☐ N ☐ Can't Tell	O
B5. Is there evidence of spills/leakage from vehicles? ☐ Y ☐ N ☐ Can't Tell	O
B6. Are uncovered outdoor fueling areas present? ☐ Y ☐ N ☐ Can't Tell	O
B7. Are fueling areas directly connected to storm drains? ☐ Y ☐ N ☐ Can't Tell	O
B8. Are vehicles washed outdoors? ☐ Y ☐ N ☐ Can't Tell Does the area where vehicles are washed discharge to the storm drain? ☐ Y ☐ N ☐ Can't Tell	O
C. OUTDOOR MATERIALS ☐ **N/A** *(Skip to part D)*	**Observed Pollution Source?** ☐
C1. Are loading/unloading operations present? ☐ Y ☐ N ☐ Can't Tell If yes, are they uncovered *and* draining towards a storm drain inlet? ☐ Y ☐ N ☐ Can't Tell	O
C2. Are materials stored outside? ☐ Y ☐ N ☐ Can't Tell If yes, are they ☐ Liquid ☐ Solid Description: _____ Where are they stored? ☐ grass/dirt area ☐ concrete/asphalt ☐ bermed area	O
C3. Is the storage area directly or indirectly connected to storm drain (circle one)? ☐ Y ☐ N ☐ Can't Tell	O
C4. Is staining or discoloration around the area visible? ☐ Y ☐ N ☐ Can't Tell	O
C5. Does outdoor storage area lack a cover? ☐ Y ☐ N ☐ Can't Tell	O
C6. Are liquid materials stored *without* secondary containment? ☐ Y ☐ N ☐ Can't Tell	O
C7. Are storage containers missing labels or in poor condition (rusting)? ☐ Y ☐ N ☐ Can't Tell	O
D. WASTE MANAGEMENT ☐ **N/A** *(Skip to part E)*	**Observed Pollution Source?** ☐
D1. Type of waste *(check all that apply)*: ☐ Garbage ☐ Construction materials ☐ Hazardous materials	O
D2. Dumpster condition (*check all that apply*): ☐ No cover/Lid is open ☐ Damaged/poor condition ☐ Leaking or evidence of leakage (stains on ground) ☐ Overflowing	O
D3. Is the dumpster located near a storm drain inlet? ☐ Y ☐ N ☐ Can't Tell If yes, are runoff diversion methods (berms, curbs) lacking? ☐ Y ☐ N ☐ Can't Tell	O
E. PHYSICAL PLANT ☐ **N/A** *(Skip to part F)*	**Observed Pollution Source?** ☐
E1. Building: Approximate age: _____ yrs. Condition of surfaces: ☐ Clean ☐ Stained ☐ Dirty ☐ Damaged	O
Evidence that maintenance results in discharge to storm drains (staining/discoloration)? ☐ Y ☐ N ☐ Don't know	O

*Index: O denotes potential pollution source; ☐ denotes confirmed polluter (evidence was seen)

E2. Parking Lot: Approximate age _____ yrs. Condition: ☐ Clean ☐ Stained ☐ Dirty ☐ Breaking up
Surface material ☐ Paved/Concrete ☐ Gravel ☐ Permeable ☐ Don't know ○

E3. Do downspouts discharge to impervious surface? ☐ Y ☐ N ☐ Don't know ☐ None visible
Are downspouts directly connected to storm drains? ☐ Y ☐ N ☐ Don't know ○

E4. Evidence of poor cleaning practices for construction activities (stains leading to storm drain)? ☐ Y ☐ N ☐ Can't Tell ○

F. TURF/LANDSCAPING AREAS ☐ **N/A** *(skip to part G)* **Observed Pollution Source?**

F1. % of site with: Forest canopy ____% Turf grass _____ % Landscaping ____% Bare Soil ____% ○

F2. Rate the turf management status: ☐ High ☐ Medium ☐ Low ○

F3. Evidence of permanent irrigation or "non-target" irrigation ☐ Y ☐ N ☐ Can't Tell ○

F4. Do landscaped areas drain to the storm drain system? ☐ Y ☐ N ☐ Can't Tell ○

F5. Do landscape plants accumulate organic matter (leaves, grass clippings) on adjacent impervious surface? ☐ Y ☐ N ☐ Can't Tell ○

G. STORM WATER INFRASTRUCTURE ☐ **N/A** *(skip to part H)* **Observed Pollution Source?**

G1. Are storm water treatment practices present? ☐ Y ☐ N ☐ Unknown If yes, please describe: _____ ○

G2. Are private storm drains located at the facility? ☐ Y ☐ N ☐ Unknown
Is trash present in gutters leading to storm drains? If so, complete the index below. ○

Index Rating for Accumulation in Gutters

	Clean				Filthy
Sediment	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Organic material	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Litter	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

G3. Catch basin inspection – Record SSD Unique Site ID here: _____ Condition: ☐ Dirty ☐ Clean

H. INITIAL HOTSPOT STATUS - INDEX RESULTS

☐ Not a hotspot (fewer than 5 circles and no boxes checked) ☐ Potential hotspot (5 to 10 circles but no boxes checked)
☐ Confirmed hotspot (10 to 15 circles and/or 1 box checked) ☐ Severe hotspot (>15 circles and/or 2 or more boxes checked)

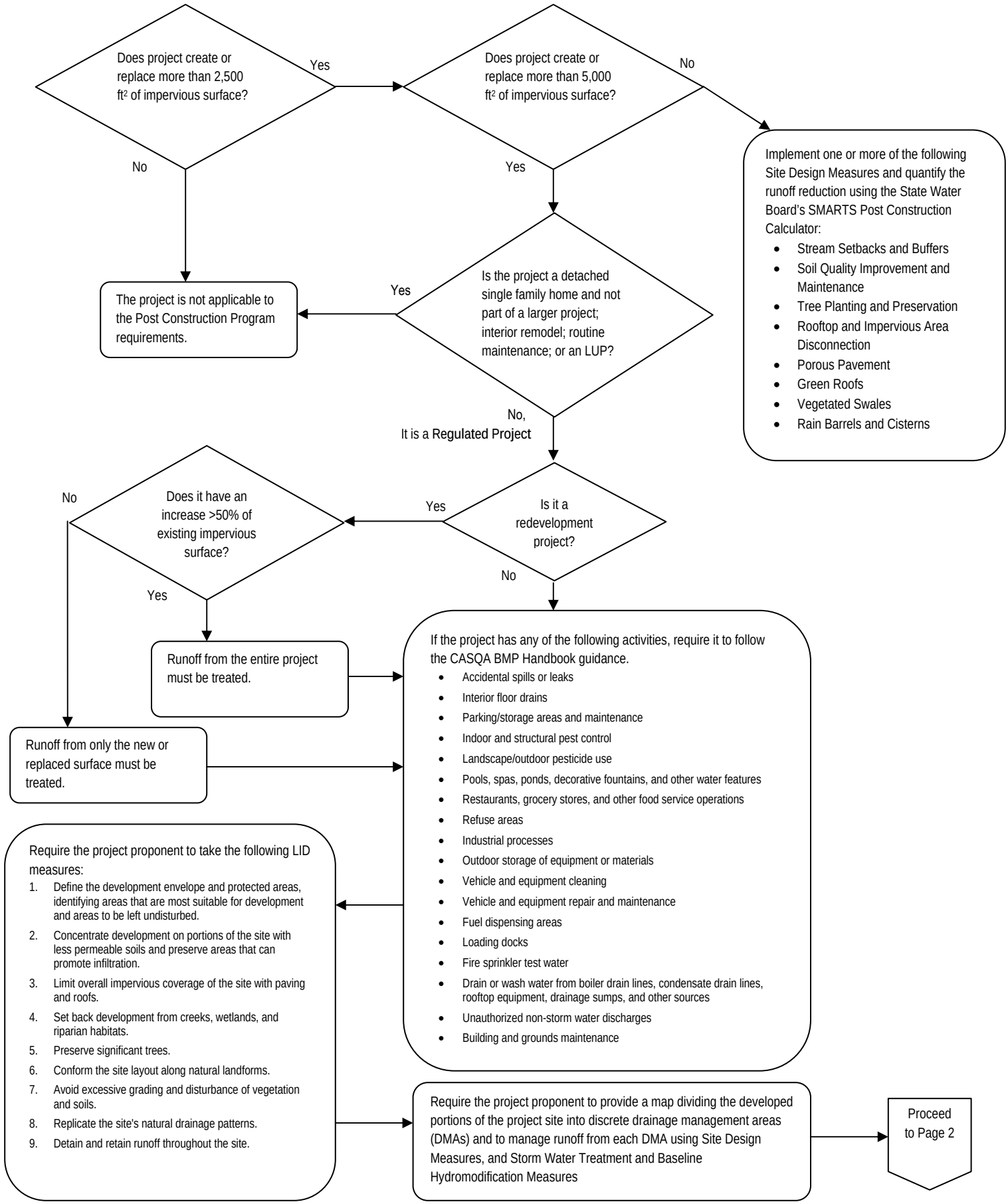
Follow-up Action:
☐ Refer for immediate enforcement
☐ Suggest follow-up on-site inspection
☐ Test for illicit discharge
☐ Include in future education effort
☐ Check to see if hotspot is an NPDES non-filer
☐ Onsite non-residential retrofit
☐ Pervious area restoration; complete PAA sheet and record Unique Site ID here: _____
☐ Schedule a review of storm water pollution prevention plan

Notes:

Appendix G

Post Construction Storm Water Management Program

(*Post Construction Program Flow Chart, Landscape Code Review Summary Table*)


Does project create or replace more than 2,500 ft² of impervious surface?
Yes
No
Does project create or replace more than 5,000 ft² of impervious surface?
No
Yes
Implement one or more of the following Site Design Measures and quantify the runoff reduction using the State Water Board's SMARTS Post Construction Calculator:
Stream Setbacks and Buffers
Soil Quality Improvement and Maintenance
Tree Planting and Preservation
Rooftop and Impervious Area Disconnection
Porous Pavement
Green Roofs
Vegetated Swales
Rain Barrels and Cisterns
The project is not applicable to the Post Construction Program requirements.
Yes
Is the project a detached single family home and not part of a larger project; interior remodel; routine maintenance; or an LUP?
No, It is a Regulated Project
No
Does it have an increase >50% of existing impervious surface?
Yes
Is it a redevelopment project?
Yes
No
Runoff from the entire project must be treated.
Runoff from only the new or replaced surface must be treated.
If the project has any of the following activities, require it to follow the CASQA BMP Handbook guidance.
Accidental spills or leaks
Interior floor drains
Parking/storage areas and maintenance
Indoor and structural pest control
Landscape/outdoor pesticide use
Pools, spas, ponds, decorative fountains, and other water features
Restaurants, grocery stores, and other food service operations
Refuse areas
Industrial processes
Outdoor storage of equipment or materials
Vehicle and equipment cleaning
Vehicle and equipment repair and maintenance
Fuel dispensing areas
Loading docks
Fire sprinkler test water
Drain or wash water from boiler drain lines, condensate drain lines, rooftop equipment, drainage sumps, and other sources
Unauthorized non-storm water discharges
Building and grounds maintenance
Require the project proponent to take the following LID measures:
1. Define the development envelope and protected areas, identifying areas that are most suitable for development and areas to be left undisturbed.
2. Concentrate development on portions of the site with less permeable soils and preserve areas that can promote infiltration.
3. Limit overall impervious coverage of the site with paving and roofs.
4. Set back development from creeks, wetlands, and riparian habitats.
5. Preserve significant trees.
6. Conform the site layout along natural landforms.
7. Avoid excessive grading and disturbance of vegetation and soils.
8. Replicate the site's natural drainage patterns.
9. Detain and retain runoff throughout the site.
Require the project proponent to provide a map dividing the developed portions of the project site into discrete drainage management areas (DMAs) and to manage runoff from each DMA using Site Design Measures, and Storm Water Treatment and Baseline Hydromodification Measures
Proceed to Page 2

From Page 1

Project proponent must select one or more of the following Site Design Measures to evapotranspire, infiltrate, harvest / re-use, or biotreat the storm water runoff:

- Stream Setbacks and Buffers
- Soil Quality Improvement and Maintenance
- Tree Planting and Preservation
- Rooftop and Impervious Area Disconnection
- Porous Pavement
- Green Roofs
- Vegetated Swales
- Rain Barrels and Cisterns

The Site Design Measure(s) must be sized using either the SQDV (0.5") for runoff detaining control measures or the SQDF (0.2"/hr.) for flow through control measures.

Year 3 Requirement
Will there be an increase of impervious area of 1 acre or more?

Yes

The post-project runoff shall not exceed the estimated pre-project runoff for the 2-year, 24-hour storm event.

No

Do any of the following apply to the project?

- Projects creating or replacing an acre or less of impervious area, and located in a designated pedestrian-oriented commercial district (i.e., smart growth projects), and having at least 85% of the entire project site covered by permanent structures;
- Facilities receiving runoff solely from existing (pre-project) impervious areas; and
- Historic sites, structures or landscapes that cannot alter their original configuration in order to maintain their historic integrity.

Yes

No

Do any of the special site conditions apply?

1) Facilities located within 10 feet of structures or other potential geotechnical hazards established by the geotechnical expert for the project may incorporate an impervious cutoff wall between the bioretention facility and the structure or other geotechnical hazard.
2) Facilities with documented high concentrations of pollutants in underlying soil or groundwater, facilities located where infiltration could contribute to a geotechnical hazard, and facilities located on elevated plazas or other structures may incorporate an impervious liner and may locate the underdrain discharge at the bottom of the subsurface drainage/storage layer (this configuration is commonly known as a "flow-through planter").
3) Facilities located in areas of high groundwater, highly infiltrative soils or where connection of underdrain to a surface drain or to a subsurface storm drain are infeasible, may omit the underdrain.
4) Facilities serving high-risk areas such as fueling stations, truck stops, auto repairs, and heavy industrial sites may be required to provide additional treatment to address pollutants of concern unless these high- risk areas are isolated from storm water runoff or bioretention areas with little chance of spill migration.

Yes

Adjust the bioretention design as appropriate and document the reason for the design modification.

No

Remaining runoff after treatment with the Site Design measures must be directed to one or more facilities sized to the SQDF or SQDV that infiltrate, evapotranspire, and/or bioretain runoff. This control measure must be demonstrated to be at least as effective as a bioretention system having the following design parameters:

1. Maximum surface loading rate of 5 inches per hour, based on the flow rates calculated. A sizing factor of 4% of tributary impervious area may be used.
2. Minimum surface reservoir volume equal to surface area times a depth of 6 inches.
3. Minimum planting medium depth of 18 inches. The planting medium must sustain a minimum infiltration rate of 5 inches per hour throughout the life of the project and must maximize runoff retention and pollutant removal. A mixture of sand (60%-70%) meeting the specifications of American Society for Testing and Materials (ASTM) C33 and compost (30%-40%) may be used.
4. Subsurface drainage/storage (gravel) layer with an area equal to the surface area and having a minimum depth of 12 inches.
5. Underdrain with discharge elevation at top of gravel layer.
6. No compaction of soils beneath the facility, or ripping/loosening of soils if compacted.
7. No liners or other barriers interfering with infiltration.
8. Appropriate plant palette for the specified soil mix and maximum available water use.

Post Construction Design Complete

Require the project proponent to submit sizing calculations, design drawings, and a written operation and maintenance plan for the proposed LID and hydromodification control measures. Require the property owner to perform annual assessments of the effectiveness and maintenance of the control measures and to submit a self-certification report.

Stanislaus County's Landscape and Irrigation Standards (Chapter 21.102)

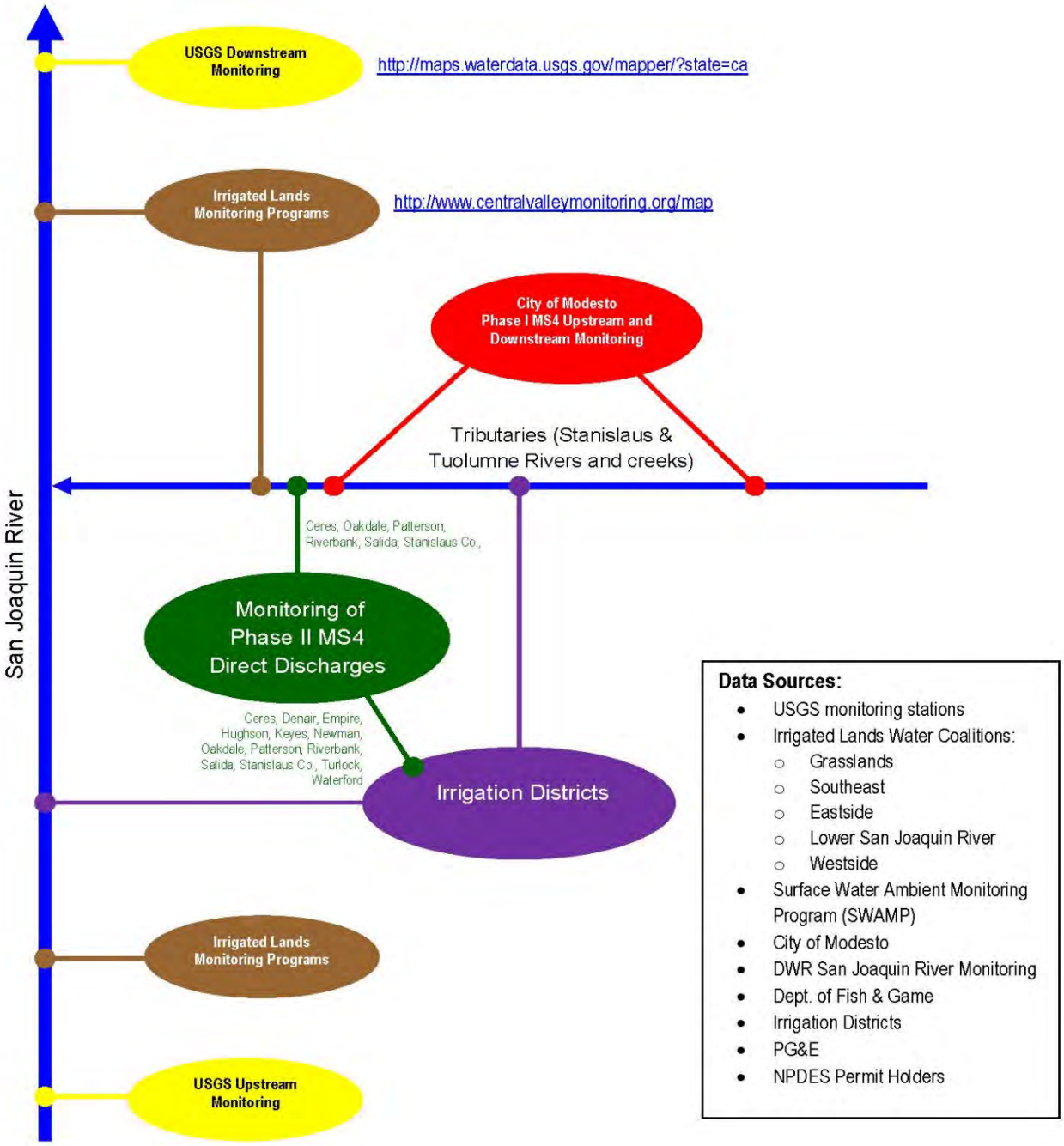
MS4 Legal Authority Requirement E.12	Stanislaus County Corresponding Code	Evaluation of the Adequacy of the Existing Code and Recommended Modifications
The Permittee shall develop and/or modify enforceable mechanisms that will effectively implement the requirements in Section E.12.b through E.12.f and may include municipal codes, regulations, standards, and specifications. • E.12.b Site Design Measures • E.12.c. Regulated Projects • E.12.d. Source Control Measures • E.12.e. Low Impact Development (LID) Design Standards • E.12.f. Hydromodification Measures	14.14.120 C. Development. The enforcement official may require controls as appropriate to minimize the long-term, post-construction activity discharge of stormwater pollutants from new development(s) or modifications to existing development(s). Controls may include source control measures to prevent pollution of stormwater ~~and/or~~, treatment controls designed to remove pollutants from stormwater, low impact development measures, and hydromodification measures to offset the difference between the pre and post-construction peak flow runoff rates and volumes. Proponents of all applicable development and redevelopment projects will be required to meet the requirements and design standards specified in the current State of California Phase II MS4 NPDES Permit *and as described in further detail in the County's Stormwater Design Standards Manual for New Development and Redevelopment.* *At the earliest planning stages, project proponents shall assess and evaluate how site conditions, such as soils, vegetation, and flow paths will influence the placement of buildings and paved surfaces. The evaluation will be used to optimize the site layout to meet the goals of capturing and treating runoff. Each project proponent will submit a map of the project dividing the site into discrete drainage management areas to show in each how runoff will be managed using site design measures, source controls, treatment controls, and hydromodification measures as defined by the current MS4 permit. All site design measures, source controls, treatment controls, and hydromodification measures must be selected, sized, and situated in accordance with the guidance provided in the current MS4 permit and the County's Stormwater Design Standards Manual for New Development and Redevelopment. Documentation of the site's post-construction stormwater design measures must be submitted to the County Planning Division for review and approval prior to the commencement of the project.* *Project proponents must sign an operation and maintenance agreement in which they legally bind themselves to maintain the installed post-construction design measures in an effective and good operational condition until the property ownership is transferred. A written operation and maintenance plan for the proposed stormwater design measures is required to be submitted to and approved by the County with the signed agreement. The agreement will be recorded with the deed by the County Clerk making it transferrable to the new owner; or, when there are multiple property owners responsible for the maintenance of the control measures, the agreement will consist of a legally binding covenant between the County and the homeowners association or maintenance district. The owner or association responsible for the maintenance of the control measures may be required by the County to submit an annual self-certification that the stormwater control measures are effective and are being maintained in accordance with the submitted and approved Operation and Maintenance Plan.*	Rather than make a very prescriptive ordinance, we recommend taking a rather broad approach to regulating post-construction requirements by cross-referencing the current State's MS4 permit and the County's Stormwater Design Standards Manual for New Development and Redevelopment (which will be revised by the Third Year of the permit). However, a few additional modifications to the existing code are merited to provide adequate legal authority to the County to implement the E.12 post-construction requirements. Refer to the proposed modifications in the middle column of this table as indicated in *blue italicized font*.

Appendix H

TMDLs, Trash Amendments, and Regional Monitoring Program

(*Diagram of the Conceptual Regional Water Monitoring Program and Comments Submitted on the Trash Amendments*)

Conceptual Regional TMDL Monitoring Program
Stanislaus Partnership



STATEWIDE STORMWATER COALITION

August 4, 2014

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-2000

RE: COMMENT LETTER – PROPOSED AMENDMENTS TO STATEWIDE WATER QUALITY CONTROL PLANS TO CONTROL TRASH AND THE DRAFT STAFF REPORT, INCLUDING THE DRAFT SUBSTITUTE ENVIRONMENTAL DOCUMENTATION

Dear Ms. Townsend and Members of the Board:

Thank you for the opportunity to comment to the State Water Resources Control Board"s ("Board") proposed amendments to Statewide Water Quality Control Plans to Control Trash and the draft staff report including the draft substitute environmental documentation. This letter presents the Statewide Stormwater Coalition (SSC) concerns with the draft. The SSC is a coalition of Phase ll permittees who share and collaborate on storm water issues affecting their jurisdictions. The Coalition represents the concerns of more than forty (40) cities through-out the state. The SSC also supports the comments submitted by the California Stormwater Quality Association.

Overall the Coalition supports the State"s efforts to reduce trash and recognizes the importance of developing efficient, cost-effective measures that will result in trash reduction. While the SSC supports the goal of incorporating feasible measures to reduce trash impacts, this goal must be balanced with practical realities. For example, the draft Amendment requires full capture of trash, which we contend is an unreasonable and unattainable goal that will ultimately make permittees vulnerable to increased legal challenges. Litter and trash has not been identified as a pollutant of concern much less the subject of a total maximum daily load (TMDL) in many of communities in the coalition that struggle with the concept and associated costs of implementing full capture systems.

The draft Amendment is also economically impracticable as written. Many municipalities are just beginning to recover from the recent economic downturn and have neither the staff nor resources necessary to comply with these increased requirements. The reality of limited funding must be addressed within the draft Amendment for permittees who are fiscally unable to comply.

The SSC respectfully requests the State Board"s consideration and response to issues brought forth by this letter. These issues are outlined below and grouped into the following categories:

- General Comments
- Specific Comments
- Issues with Track 2 and,
- Definition of Trash

GENERAL COMMENTS

General Comments:

1) The use of an asterisk throughout the document appears to be a reference to a definition contained within the Glossary but, this intension is not stated in the Amendment or its supporting documents. In addition, there are no corresponding asterisks in the Glossary.
2) As was discussed at the July 16th workshop, there is no clear path to demonstrate compliance with Track 2 nor does it appear that it is possible to achieve full compliance via Track 2 based on research perform under the Municipal Regional Permit. If Track 1 is the only viable option for compliance, it becomes an unfunded mandate.
3) The presence of other significant trash deposition mechanisms suggest that a more global and cost-effective solution to trash accumulation is the path of „true source control" as demonstrated by the Brake Pad Partnership and other similar methods such as extended manufacturer product responsibility, and redemption values. Please note that there are numerical sequencing and referencing discrepancies throughout Appendix E that are not specifically addressed below (e.g. „Draft text of…Chapter III" v. „Draft text of …Chapter IV")
4) The State should consider replacing ambiguous terms like „substantial" with „Comparative Trash Generation Rate" when defining alternative priority land uses.

SPECIFIC COMMENTS:

1) **Reference**: Draft text of the Trash Amendments proposed to be amended
Chapter III – Water Quality Objectives of the ISEEBE Plan B. Trash*:

> Trash* shall not accumulate in ocean waters, along shorelines or adjacent areas in amounts that adversely affect beneficial uses or cause nuisance."

Comment: **Define „adjacent areas":**

Suggested Language:

> *Trash* shall not accumulate in ocean waters, along shorelines or within those areas of the normal high water mark of inland waters in amounts that adversely affect beneficial uses or cause nuisance*

2) **Reference**: Draft text of the Trash Amendments proposed to be amended
Chapter IV – Water Quality Objectives of the ISWEBE Plan B. Trash* 1 Applicability a.:

> These Trash Provisions shall be implemented through a prohibition of discharge (Chapter IV. B.2.) and through NPDES permits issued pursuant to section 402(p) of the Federal Clean Water Act (as set forth in Chapter IV.B.3 below).

Comment: Include entities that have NPDES permits or WDRs but may not operate a defined MS4 system or be regulated as an industrial discharger such as special districts overseeing the collection of trash.

Suggested Language:

When an MS4 is required to fulfill the requirements of the ISWEBE Plan Chapter IV the entities holding solid waste franchising authority separate from the MS4 are required to comply with the provisions of this Chapter and participate in the strategies selected by the MS4, either by actively designing and installing the selected full capture devices in a drainage system discharging to Waters of the US, or by paying to the MS4 their share of the cost of design, installation, maintenance and reporting as required by Chapter IV. Those entities shall also have responsibility for responding to enforcement issues or violations originating from their discharges.

3) **Reference:** Draft text of the Trash Amendments proposed to be amended Chapter IV – Water Quality Objectives of the ISEEBE Plan B. Trash*:2d

Comment: Under the Prohibition of discharge for Pre-Production Plastics (PPP), please clarify if this section assigns discrete responsibilities for this prohibition to the manufacturers and/or users of PPP"s or do these requirements fall under the responsibility of the local jurisdiction (MS4)?

4) **Reference:** Draft text of the Trash Amendments proposed to Chapter IV – Implementation of Water Quality Objectives of the ISWEBE Plan B. Trash* 3.a.

MS4* permittees with regulatory authority over priority land uses shall be required to comply…
(1) Track 1: Install, operate and maintain full capture systems* for all storm drains that captures runoff from one or more of the priority land uses* in their jurisdictions: or…

Comment: The fact an entity has „regulatory authority" over a land use does not entitle that entity to install, operate or maintain a device on that private property.

Language suggestion:

(1) Track 1: Install, operate and maintain full capture systems within the MS4 system ~~for all storm drains~~ that captures runoff from one or more of the priority land uses in their jurisdictions:

5) **Reference:** Draft text of the Trash Amendments proposed to Chapter IV – Implementation of Water Quality Objectives of the ISWEBE Plan B. Trash* 3 a. (2).

Comment: Track 2 compliance is not obtainable. Its efficacy and its comparability to Track 1 may be left up to the subjective future interpretation of equivalence by the courts. As such, Track 2 is not a viable option as written. Rather,

objective criteria for the measurement of "performance results" of Track 2 should be explicitly delineated by the Amendment.

6) **Reference:** Draft text of the Trash Amendments proposed to Chapter IV – Implementation of Water Quality Objectives of the ISWEBE Plan B. Trash* 3.d.

A permitting authority* may determine that specific land uses or locations (e.g. parks, stadia, schools, campuses, or roads leading to landfills) generate substantial amounts of Trash*. In the event that the permitting authority* makes that determination, the permitting authority* may require the MS4* to comply with Chapter IV.C.3.a or Chapter IV.C.3.b (as the case may be) *(please note: this reference in the Draft Trash Amendment appears to be incorrect; it should be Chapter IV. B 3 a (1) and Chapter IV. B 3 a (2))* with respect to such land uses or locations.

Comment: A permittee may select Track 1 and identified a land use or location that may lie within the municipality"s boundaries, however those discharges may not drain through the MS4"s system to the receiving water (e.g. a nonpoint source park or facility that private drains directly into surface water). **Therefore the permittee cannot be responsible for those discharges.**

Comment: In addition, the term **"substantial"** is vague and open to subjective interpretation. Trash generation rate for these newly-identified sources should be comparable to land uses listed by the Amendment.

Language suggestion:

A permitting authority may determine that specific land uses or locations (e.g. parks, stadia, schools, campuses, or roads leading to landfills) have a Trash generation rate that is comparable to other priority land uses. ~~generate substantial amounts of Trash~~. In the event that the permitting authority makes that determination, the permitting authority may require the MS4 to comply with Chapter IV.B 3 a (1.) or Chapter IV.B.3.a (2.) (As the case may be) with respect to such land uses or locations if the land uses or locations drain into the MS4 system such that the permittee is able to cost effectively continue sole-implementation of its chosen Track.*

7) **Reference:** Draft text of the Trash Amendments proposed to Chapter IV – Implementation of Water Quality Objectives of the ISWEBE Plan B. Trash 4. Other Dischargers;

A permitting authority* may require dischargers that are not subject to Chapter IV B 3 herein to implement Trash* controls in areas or facilities that may generate Trash". Such areas or facilities may include (but are not limited to) high usage campgrounds, picnic areas, beach recreation areas, parks not subject to an MS4*permit, or marinas.

Comment: The State and Federal governments own properties that these proposed amendments define as priority land uses. However, with the exception of properties controlled by The California Department of Transportation

(Department) regulated under the provision of this Policy, a permittee has limited authority to require compliance at State or Federal facilities.

Language suggestion:

The permitting authority may determine that specific land uses, locations or activities, (e.g. State or Federally owned properties or railroads), are priority land uses or have a comparative trash generation rate to land uses specified in the Chapter. Such areas or facilities may include (but are not limited to) high uses campgrounds, picnic areas, beach recreation areas, parks not subject to an MS4 permit or marinas. In the event that the permitting authority makes this determination, an MS4 receiving flows from the designated land use may refer that facility to the permitting authority and/ or the U.S. EPA for regulatory oversight. Upon referral, the MS4 will not be held responsible for trash that accumulates in surface waters, along shorelines or adjacent areas from these facilities.

8) **Reference:** Draft text of the Trash Amendments proposed to Chapter IV – Implementation of Water Quality Objectives of the ISWEBE Plan B. Trash 5.a.(3):

For MS4* permittees that elect to comply with Chapter IV.B.3.a.1 (Track 1), full compliance shall occur within ten (10) years of the effective date of the first implementing permit (whether such permit is re-opened, re-issued or newly adopted), along with achievements of interim milestones such as average load reductions of ten percent (10%) per year. In no case may the final compliance date be later than fifteen (15) years from the effective date of these Trash Provisions*.

Comment: It is important to recognize that prior to installation of any infrastructure, MS4 permittees must perform a plethora of tasks (including but not limited to mapping of priority land uses and the systems that drains those geographic areas, modeling hydraulics and hydrology (H&H) needed to support the infrastructure changes in a manner that reduces the potential for flooding, obtaining State certification of the selected full capture devices, securing financing, adopting governing ordinances, creating bid documents and contracting). **Therefore, the MS4 may obtain an „average of ten percent installed every year." over the first five years, but it is unlikely that an MS4 could achieve that goal within the first two years of adoption of the Trash Amendment.**

Comment: The Glossary defines a Full Capture System as a system meeting certain specifications and which, **prior to installation**, has been individually approved by the Executive Director (or designee) after review of all relevant supporting documentation. Inclusion of, „prior to installation" penalizes communities that have been proactive and installed trash capture devices that meet the Full Capture System specifications. In addition, State Board staff has suggested drop inlet type devices as (at least) one method of full capture compliance. The unincorporated area of Sacramento County has nearly 50,000 drop inlets within priority use areas. While not all 50,000 would immediately be submitted for Certification, the State should anticipate

receiving 10"s of thousands of submittals (or more) per year from across the State. **The language should be modified to allow post-installation certification. If post-installation is not allowed, there needs to be language crafted that extends the compliance dates and absolves an MS4* from milestone compliance schedules if the State is unable to provide Certification in a timely (60-days) manner.**

Suggested Language:

~~Prior to installation, f~~Full capture systems must be certified by the Executive Director, or designee, of the State Water Board. If the Executive Director, or designee, of the State Water Board does not make a determination regarding of the status of certification within 60 days of request by a permittee the full capture system will be deemed as approved by the Board.

9) **Reference:** Draft text of the Trash Amendments proposed to Chapter IV – Implementation of Water Quality Objectives of the ISWEBE Plan B. Trash 6:

The permitting authority* may give MS4* permittees that are complying under the section Chapter IV.C. 3 a. up to a three (3) year time extension for achieving full compliance in areas where regulatory source controls* are employed that take effect prior to or within three (3) years of the effective date of these Trash Provisions*. Each regulatory source control* employed by an MS4* will be eligible for up to a one (1) year time extension.

Comment: As recognized during the July 16th (2014) workshop, „source control" at the local level is limited to the banning of single-use products. This may only result in a transformation of the constituents within trash and not the desired reduction of trash. Statewide source controls that encourage waste/trash reduction (including but not limited to redemption value, legislation regarding extended manufacture product responsibility/product reformulation) could achieve that which neither Track 1 nor Track 2 can which is the removal of trash from our environment. **We encourage the State to partner with a broad stakeholder group to evaluate and implement true-source control prior to implementing the Trash Amendments. We encourage the State to consider developing/adding language that recognizes (via time extensions and/or milestone adjustments) local jurisdictions that can demonstrate more global and/or statewide true-source removal efforts.**

10) **Reference:** Draft text of the Trash Amendments proposed to Chapter IV – Implementation of Water Quality Objectives of the ISWEBE Plan B. Trash 7.a.:

The permitting authority* must include monitoring and reporting requirements in its implementing permits. The following monitoring and reporting provisions are the **minimum** requirements that must be included within the implementing permits:

MS4* permittees that elect to comply with Chapter IV.C.3.a.1. (Track 1) *(Please note: this is an incorrect reference in the Draft Trash Amendment.*

The correct reference is Chapter IV.B 3.a.1) shall provide a report to the applicable permitting authority* demonstrating operation, maintenance, and the Geographic Information System (GIS) mapped location and drainage area served of its full capture systems* on an annual basis.

Comment: Although the State made clear during stakeholder meetings and the July 16th (2014) workshop there will be no monitoring required for those choosing Track 1, both the draft report associated with the Trash Amendments and the language used within this Section allow for inconsistent statewide application of the State"s intent.

Suggested Language:

Add after the existing text as defined above: „MS4 permittees that elect to comply with Chapter IV.B.3.a.(1) (Track 1), are considered to be in full compliance when the full capture systems are installed in the MS4 system servicing the listed priority land uses and exempt from future monitoring requirements."

11) **Reference:** Draft text of the Trash Amendments proposed to Chapter IV – Implementation of Water Quality Objectives of the ISWEBE Plan B. Trash 7.b.:

MS4* permittees that elect to comply with Chapter IV.C.3.a.2. (Track 2) *(Please note: this is an incorrect reference in the Draft Trash Amendment. The correct reference is Chapter IV.B 3.a.2)* shall develop and implement monitoring plans that demonstrate the mandated performance results, effectiveness of the full capture systems*, other treatment controls*, institutional controls*, and/or multi-benefit projects*, and compliance with the performance standard. Monitoring reports shall be provided to the applicable permitting authority * on an annual basis, and shall include GIS-mapped locations and drainage area served for each of the full capture systems*, other treatment controls*, institutional controls*, and/or multi-benefit projects installed or utilized by the MS4* permittee. At a minimum, the monitoring reports shall address and answer the following questions:

Comment: While the State made-clear during the July 16, 2014 workshop that there will be no monitoring required for those geographic areas within a Track 2 community that are "fully-captured", both the draft report associated with the Trash Amendments and the language used within this section allow for inconsistent statewide application of the State"s intent.

Suggested Language:

*Add after the existing text listed above: „Those areas that drain through full capture systems *, are considered to be in full compliance and therefore exempt from future monitoring requirements."*

12) **Reference:** Draft text of the Trash Amendments proposed to Chapter IV – Implementation of Water Quality Objectives of the ISWEBE Plan B. Trash 7.b.(4)/(5):

(4) Has the amount of Trash* in the MS4 decreased from the previous year? If so, by how much? If not, explain why.

(5) Has the amount of Trash* in the MS4's receiving water(s) decreased from the previous year? If so, by how much? If not, explain why.

Comment: The permittee can only be responsible for discharges from the MS4*. Therefore, **delete 7.b. (5)** as it is superfluous in light of 7.b. (4) - which requires the MS4* to report changes in the amount of trash discharged from its system. In addition, Trash assessments in receiving waters will generate highly variable data that precludes yearly comparisons and an evaluation of causal deposition mechanisms will be speculative.

13) **Reference:** Draft text of the Trash Amendments proposed to Appendix A: Glossary of the ISWEBE Plan**:**

FULL CAPTURE SYSTEM: **…**Prior to installation, full capture systems* must be certified by the Executive Director, or designee, of the State Water Board. Uncertified full capture systems* will not satisfy the requirements of these Trash Provisions*. To request certification, a permittee shall submit a certification request letter that includes all relevant supporting documentation to the State Water Board's Executive Director. The Executive Director, or designee, shall issue a written determination approving or denying the certification of the proposed full capture system* or conditions of approval, including a schedule to review and reconsider the certification.

Comment: It is unclear if each full capture system must be certified „prior to each installation" or if so long as it receives an overall technical certification by the State that it meets the specifications of a FULL CAPTURE SYSTEM. This penalizes communities that have been proactive with regards to trash-capture and provides no discernable benefit. In addition, State Board staff has suggested drop inlet type devices as (at least) one method of full capture compliance. **Delete: „Prior to installation" from the definition; or, add language that allows pre-certification by the Executive Director or designee of the State Water Board of full capture devices and/or features for a range of flows or allow certification (sign/stamp) by a Civil Engineer licensed in the State of California.**

14) **Reference:** Draft text of the Trash Amendments proposed to Appendix A: Glossary of the ISWEBE Plan PRIORITY LAND USES: (6) Equivalent alternate land uses…

. . .Equivalent alternative land uses: An MS4* permittee with regulatory authority over priority land uses* may issue a request to the applicable permitting authority* that **it** be allowed to comply under Chapter IV.B.3.a.1. with alternate land uses within **its** jurisdiction that generate rates of trash that are equivalent to or greater than one or more of the high density residential, industrial, commercial, missed urban, and/or public transportation station sites, facilities or land uses defined above. Comparative Trash* generation rates shall be established through the reporting of quantification measures

such as street sweeping and catch basin cleanup records; mapping; visual trash presence surveys, such as the "Keep America Beautiful Visible Litter Survey"; or other information as required by the permitting authority.*

Comment: As currently constructed, the reference to „it" and „its" may be misinterpreted as to referring to the applicable permitting authority. Instead the language should be clarified by using the term **"MS4"** in its place. It should be made clear under the language of this section that the MS4 should be allowed to substitute alternative land uses for the listed land uses on a one-for-one basis if they are found to generate higher rates of trash.

Suggested Language:

Equivalent alternative land uses: An MS4* permittee with regulatory authority over priority land uses* may issue a request to the applicable permitting authority* that ***the MS4*** be allowed to comply under Chapter IV.B.3.a.1. with alternate land uses within its jurisdiction that generate rates of trash that are equivalent to or greater than one or more of the high density residential, industrial, commercial, mixed urban, and/or public transportation station sites, facilities or land uses defined above.

Comment: The second sentence description of tasks necessary to establish a „Comparative Trash* Generation Rate" establishes a framework of comparative activities, removes subjectivity and should not be at the discretion of the permitting authority to approve or reject.

Suggested Language:

„Comparative Trash Generation Rate: Shall be a rate established through the reporting of quantification measures such as street sweeping and catch basin cleanup records; mapping; visual trash presence surveys, such as the "Keep America Beautiful Visible Litter Survey"; or other information necessary to establish a defensible comparison (e.g. within one standard deviation of the geometric mean) ~~as required by the permitting authority.~~.

15) **Reference:** Draft text of the Trash Amendments proposed to Appendix A: Glossary of the ISWEBE Plan TRASH

TRASH* : All improperly discarded solid material from any production, manufacturing, or processing operation including, but not limited to, products, product packaging or containers constructed of plastic, steel, aluminum, glass, paper, or other synthetic or natural materials. .

Comment: The current definition of trash is far reaching. It can be legally construed to include virtually every solid material from common trash to sand.

Suggested Language:

Trash *means macroscopic, solid objects, consisting of anthropogenic substances, that are generated by human activity and which have been*

released to the environment either as a result of intentional improper disposal, unintentionally as a result of careless handling or storage, or by accident. Prior to its release to the environment, trash would be either a material (if still considered usable), or a solid waste (once a decision has been made to discard it). "Anthropogenic substances" in this context specifically refers to the underlying substance and is intended to capture manufactured substances; it thus excludes fecal waste, green waste, food waste, soil, sand, and sediment, but includes objects made of paper, metal, plastic, glass, concrete rubble, milled wood, and other manufactured materials.

Two categories of trash are recognized:

1. *Industrial/commercial process trash: This category is any trash generated and released in conjunction with industrial or commercial activity, such as transport, handling, processing, use, manufacture, or disposal of materials or solid waste. This category includes trash generated as a result of improper handing transport, or disposal of solid waste that was initially properly disposed of by another end user.*

2. *End-user trash: This category is any trash generated and released as the result of improper disposal by the end user or consumer of a product, packaging, or materials.*

Reference: The Substitute Environmental Document page 135 Section 6.8.2 of the staff report

. . . "Full capture systems are placed at the inlet (catch basin inserts) or outlet (trash net) of the storm drain system, or inline (vortex separation system) and do not require any type of re-contouring of the surrounding area nor alteration of any stream courses. . ."

Comment: The retrofitting existing drainage systems with full capture devices that include both drain inlet screening or inline devices may result in adverse effects on the hydraulic capacities of those systems that could result in significant localized flooding and unsafe roadway conditions. The Substitute Environmental Document page 135 Section 6.8.2 of the staff report, does not adequately address this issue. The document indicates that proper maintenance is adequate mitigation for the issue of „clogged devices" that may cause flooding, mainly due to trash accumulation and leaf litter and therefore this is a less than significant impact. In areas with ice and snow accumulation, ongoing maintenance of drain inlet capture devices will not mitigate clogging devices due to ice and snow. In these higher elevations, clogged devices may exacerbate driver safety issues, cause flooding and additional erosion due to flooding, and restrict access to the storm drain system for maintaining flows in the winter. The only solution for communities subjected to these conditions is to install vortex devices within their mainlines which is more expensive and difficult to access under

snow load conditions. **The requirements of the Trash Amendment should take into consideration winter weather conditions and be seasonally relaxed to accommodate them.**

In closing, the SSC requests the State Board carefully revise the language within the draft Amendment to address the issues referred to herein. We believe it is in the best interest of the SSC and the State Board to continue discussions on these items so the final Amendment adopted by the State Board has clear, unambiguous language that will result in a reduction of trash throughout the State.

Please contact Chris Kraft, Engineering Manager, City of Roseville Development & Operations Department at (916) 774-5373 if you have questions or would like to discuss any items further.

Sincerely,

Susan Rohan,
Mayor
City of Roseville

Tricia Wotan,
Environmental Regulations Manager
City of Monterey

Paul Saini
Associate Civil Engineer
County of Stanislaus

David Mohlenbrok
Environmental Services Manager
City of Rocklin

Jason Rhine,
Legislative Representative
League of California Cities

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Senator Ted Gaines

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Assembly Member Mark Stone
Assembly Member K.H. Achadjian
Assembly Member Susan Talamantes-Eggman
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Assembly Member Mariko Yamada
Assembly Member Luis Alejo
Assembly Member Brian Dahle
Assembly Member Dan Logue
Assembly Member Frank Bigelow

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www.stancounty.com/publicworks

July 9, 2014

Felicia Marcus, Chair
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

Via FAX: (916)341-5621

Subject: **Request for Time Extension of Public Review Period to the Proposed Amendments to Statewide Water Quality Control Plans to Control Trash and the Draft Staff Report, Including the Draft Substitute Environmental Documentation**

Dear Ms. Marcus:

The State Water Resources Control Board recently issued a Notice of Opportunity for Public Comment (Notice) pertaining to the Proposed Amendments to Statewide Water Quality Control Plans to Control Trash and the Draft Staff Report, Including the Draft Substitute Environmental Documentation, hereafter referred to as the proposed amendments. The Notice was issued on June 10, 2014 and allows for a 56 day review period ending August 5, 2014. The State Water Board proposes to adopt the Trash Amendments into the forthcoming Water Quality Control Plan for Inland Surface Waters, Enclosed Bays and Estuaries of California (ISWEBE Plan), and the Water Quality Control Plan for Ocean Waters of California (Ocean Plan).

Stanislaus County staff has conducted an initial review of the proposed amendments and find that the proposed amendments include significant changes to our storm water program that will further impact our county resources and operations. Due to the scope and complexity of the proposed amendments and the timing of its release coincidental with initiating our second year implementation programming, the Stanislaus County respectfully requests an additional 59 days of review time (comment period ending Friday October 3, 2014) be added to the regulatory process. This will make the total review period 115 days.

The extra time will allow Stanislaus County staff an opportunity to better assess the operational and cost impact of the proposed amendments and to prepare and develop well-reasoned responses and alternative methods for the Board's consideration. We fully appreciate the important role of the proposed amendments in managing storm water quality in our communities. However, we also recognize the importance of finding cost effective solutions to manage those needs. This is crucial to ensure that our County agency can continue to provide the minimum level of services our community requires and expects.

I would appreciate a response from the California State Water Resources Control Board on whether the time extension for review has been granted or not. If you have any questions, please contact me at (209) 652-8458 or by sending email to paul.saini@stancounty.com.

Thank you for your attention to this request.

Sincerely,

Paul Saini, Associate Civil Engineer - RCE, QSD-P

Cc: David Leamon, Director of Public Works
Matt Machado, Deputy Director of Public Works
Chris Brady, Deputy Director of Public Works

Appendix I

Program Effectiveness Assessment and Improvement Plan

Task	Data Collected	Outcome Level	Assessment Method and Comparison Goals and Baselines
Program Management			
Legal Authority			
Effectively prohibit non-storm water discharges through the MS4	Completion of review and modifications/adoption of revised/new codes/ordinances	1	Confirmation • Identify if legal review was completed • Identify what modifications were made
Detect and eliminate illicit discharges and illegal connections to the MS4.			
Respond to the discharge of spills, and prohibit dumping or disposal of materials other than storm water to the MS4.			
Require parties responsible for runoff in excess of incidental runoff to implement the County's Discharge Prohibitions.			
Require operators of construction sites, new or redeveloped land; minimize the discharge of pollutant to the MS4 through the installation, implementation and maintenance of BMPs.			
Require information deemed necessary to assess compliance with the permit.			
Authority to enter private property			
Authority to require dischargers to cease and desist discharging and/or clean up and abate discharges.			

Task	Data Collected	Outcome Level	Assessment Method and Comparison Goals and Baselines
Authority when warranted to levy citations, administrative fines, and/or recovery and remediation costs.	Completion of review and modifications/adoption of revised/new codes/ordinances	1	Confirmation • Identify if legal review was completed • Identify what modifications were made
Authority to impose more substantial civil or criminal sanctions, and escalated corrective response in accordance with the Enforcement Response Plan.			
Certification			
Certification statement	Completion of certification statement	1	Confirmation • Identify if certification statement was completed
Enforcement Measures and Tracking			
Develop Enforcement Response Plan	Development of enforcement policy/mechanisms	1	Confirmation • Identify that the policy was developed
Implementation of the ERP	Number and types of corrective and enforcement actions	1	Tabulation • Identify number and types of enforcement actions taken • % enforcement actions major vs. minor • Identify number of referrals made to Board and repeat offenders/problem areas identified • Identify % enforcement actions from year to year
	Number of referrals made to the RWQCB	1	
	Number of repeat offenders and/or problem areas identified.	2	

Task	Data Collected	Outcome Level	Assessment Method and Comparison Goals and Baselines
Education and Outreach Program			
Public Education and Outreach			
Public outreach option	Selection of a public outreach option	1	Confirmation Identify which public outreach option was selected.
Public education strategy	Development of strategy	1	Confirmation • Identify that public education strategy was developed.
Public surveys	Conduct public surveys (twice during permit term)	1-3	Confirmation • Identify if surveys were completed Tabulation • Identify changes in results from year to year Surveys • % awareness from baseline/other surveys • % awareness for particular issues • Identify linkages between survey results and impressions. • Identify linkages between media campaigns and survey results.
Develop and convey storm water messages that focus on local POCs, target audiences, and regional water quality issues.	Develop materials for outreach campaigns	1	Confirmation • Identify that materials were developed • Identify modifications Tabulation • Identify # types of materials distributed • # website hits • # impressions made • Identify impressions year to year • % impressions by message conveyed
	Number of materials distributed	1	
	Number of website hits	2	
	Identify total number of impressions made by the program.	2	
	Translate messages into	1	

Task	Data Collected	Outcome Level	Assessment Method and Comparison Goals and Baselines
	applicable languages.		• Number of messages translated into other languages.
Public Input	Identify opportunities that public input in the development of the program	1	Confirmation • Identify what opportunities for public input were utilized
Provide schools with educational materials	Number of schools targeted	1	Tabulation • # schools targeted • # schools requesting information • % schools involved year to year.
	Number of schools requesting information	1-2	
Illicit Discharge Detection and Elimination Training (County staff)			
Conduct training for inspectors/ responders	Training modules developed	1	Confirmation • Identify that training modules were developed Tabulation • Identify # attendees at training sessions • Results from evaluation forms, quizzes Surveys • % increase in awareness before and after the training • % awareness from year to year
	Number of attendees at training session(s)	1	
	Results of evaluation forms from attendees (was presentation effective?)	2	
	Results from classroom quizzes	2	
	Percent improved before and after survey/quiz	2	
Construction Outreach and Education			
Conduct training for plan reviewers, permitting staff, inspectors, and third party plan reviewers, permitting staff or inspectors.	Number of attendees at training session(s)	1	Tabulation • Identify # attendees at training sessions • Results from evaluation forms, quizzes Surveys • % increase in awareness before and after the training • % awareness from year to year
	Results of evaluation forms from attendees (was presentation effective?)	2	
	Results from classroom and/or field quizzes	2	

Task	Data Collected	Outcome Level	Assessment Method and Comparison Goals and Baselines
	Percentage improved based on scores on before and after survey/quiz	2	
Construction site operator training	Number of training opportunities held or promoted	1	Confirmation • Identify training opportunities were held or promoted Tabulation • Identify # attendees at training sessions • Results from evaluation forms, quizzes Surveys • % increase in awareness before and after the training • % awareness from year to year
	Number of attendees at training session(s) (if applicable)	1	
	Results of evaluation forms from attendees (was presentation effective?) (if applicable)	2	
	Results from classroom and/or field quizzes (if applicable)	2	
	Percent improved based on scores on before and after survey/quiz (if applicable)	2	
Construction site operator outreach	BMP fact sheets developed	1	Confirmation • Identify that the BMP Fact Sheets were developed • Used survey results to modify/improve the fact sheets Tabulation • Identify # and method for BMP Fact Sheets distribution Surveys
	BMP fact sheets distributed	2	
	Survey users regarding usefulness of outreach materials	2	

Task	Data Collected	Outcome Level	Assessment Method and Comparison Goals and Baselines
			• % increase in awareness before and after the inspections
Pollution Prevention and Good Housekeeping Staff Training			
Biennial staff pollution prevention and good housekeeping training	Perform Biennial with employees implementing pollution prevention and good housekeeping practices	1	Confirmation • Identify if Biennial training was performed Tabulation • Identify # attendees at training sessions • Results from evaluation forms, quizzes • Identify if training revisions were required based on quiz results Surveys • % increase in awareness before and after the training • % increase in awareness after training revisions and/or additional training • % awareness from year to year
	Number of attendees at training session(s)	1	
	Results of evaluation forms from attendees (was presentation effective?)	2	
	Results from classroom quizzes	2	
	Percent improved based on scores on before and after survey/quiz	2	
	Required revisions to the training and/or additional training	2	
	Results after revisions to training and/or additional training	1-3	
Contractor pollution prevention and good housekeeping	Requirement for contractors hired to perform O&M activities to comply with pollution prevention and good housekeeping policies.	1	Confirmation • Identify if the contractors have been contractually required to comply
	Inspect contractor O&M activities for compliance with policies	1	Confirmation

Task	Data Collected	Outcome Level	Assessment Method and Comparison Goals and Baselines
			• Identify if contractors are complying with policies Tabulation • % of contractors complying with policies
Public Involvement And Participation Program			
Develop public involvement and participation strategy	Develop a public involvement and participation strategy	1	Confirmation • Identify if a strategy was developed
Organize and create opportunities for the public to participate in the development and/or implementation of the program	Number of opportunities for the public to participate in the development and/or implementation of the program	1	Confirmation • Identify if participation opportunities were created Tabulation • # of opportunities created • # events and volunteers from year to year • Volume and types of materials removed from year to year (% change over time) • Amount of material disposed of correctly
	Number of sponsored BMP implementation activities	1	
	Total volume of trash/materials removed during BMP implementation activities (Clean up events)	2-4	
Easy public access to program information	Method for communicating storm water program information	1	Confirmation • Identify if program information was easily accessible to the public

Task	Data Collected	Outcome Level	Assessment Method and Comparison Goals and Baselines
Illicit Discharge Detection and Elimination			
Outfall Mapping			
Outfall mapping	Up-to-date and accurate outfall map	1	Confirmation • Identify if an accurate outfall map was developed • Identify if priority areas were updated annually
Illicit Discharge Source/Facility Inventory			
Illicit discharge source/facility inventory	Number and location of sources/facilities included in the inventory	1	Confirmation • Identify that inventory was developed • Identify any modifications Tabulation • Identify # sites in inventory and # subject to General Permit
	Number of industrial sites subject to Industrial General Permit	1	
	Annually updated inventory	1	
Assess priority areas for illicit discharges	Number of sites subject to inspection	1	Confirmation • Identify that priority facilities were assessed at least once during the permit term. • Identify if priority areas were updated annually Tabulation • # sites subject to assessment from year to year • # of inspections completed • # and location of problem areas • % areas that were identified as problem areas form year to year
	Number of inspections completed	1	
	Number of self-certification reports received from priority facilities (if applicable)	1	
	Number and location of problem areas identified through the assessment process	1-3	

Task	Data Collected	Outcome Level	Assessment Method and Comparison Goals and Baselines
Field Sampling to Detect Illicit Discharges			
Conduct field sampling to detect illicit discharges	Number and locations of problem areas identified through the monitoring program	1-4	Confirmation • Identify that monitoring was completed Tabulation • Identify # of locations monitored • Identify # of and location of problem areas • % areas that were identified as problem areas from year to year • Identify # of action level concentrations exceeded • # of follow up investigations Monitoring • Use monitoring data to estimate load reductions
Illicit Discharge Detection and Elimination Source Investigations and Corrective Actions			
Source investigations and corrective actions	Number and location of responses conducted	1	Confirmation • Identify that responses were completed Tabulation • Types of pollutants and activities involved in the incidents • % responses requiring cleanup • % requiring additional follow up • % responses by type of pollutant and activity (source of pollutant) Monitoring • Use monitoring and inspection data if available to estimate load reductions
	Types and estimated quantity of pollutants and activities involved	1	
	Number and location of responses requiring cleanup	1, 2	
	Number and location of responses requiring follow up inspections	3	
	Available sampling results responses	4	
Spill Response Plan			
Spill Response Plan	Developed and implemented Spill Response Plan	1	Confirmation

Task	Data Collected	Outcome Level	Assessment Method and Comparison Goals and Baselines
			• Identify if the plan was developed and is being implemented

Task	Data Collected	Outcome Level	Assessment Method and Comparison Goals and Baselines
Construction Site Storm Water Runoff Control Program			
Construction Site Inventory			
Construction site inventory	Number, location and size of public and private sites included in inventory (active and completed)	1	Confirmation • Identify that the inventory was developed • Identify any modifications per year Tabulation • Identify # sites in inventory and # subject to General Permit and local erosion and sediment controls
	Number and location of sites subject to Construction General Permit as well as local erosion and sediment controls.	1	
	Routinely audit database	1	Confirmation • Identify if audit was conducted and what modifications were made
Construction Plan Review and Approval Procedures			
Construction plan review and approval procedures	Number of grading and building permits	1	Tabulation • Compare # sites subjected to erosion & sediment controls to # sites incorporating controls • # sites year to year incorporating controls
	Number of sites subjected to erosion & sediment controls	1	
	Percent of sites incorporating erosion and sediment controls	2	
	Number of erosion and sediment control plans reviewed	1	Tabulation • Compare # erosion and sediment control plans reviewed vs. # requiring revisions

Task	Data Collected	Outcome Level	Assessment Method and Comparison Goals and Baselines
	Number of erosion and sediment control plans requiring minor revision; requiring major revisions	2	• % plans year to year incorporating controls and not requiring revisions
	Number of review cycles required for each plan	2	
Construction Site Inspection and Enforcement			
Perform Inspections	Number of sites subject to inspection	1	Confirmation • Identify that inspections were completed • Identify that follow up inspections were completed Tabulation • % sites adequately implementing BMPs vs. sites subject to BMP requirements • % sites year to year incorporating controls • Compare follow up inspection results to original inspection results • % sites originally not implementing or maintaining BMPs during first inspection vs. the sites that are implementing and maintaining BMPs after the follow up inspection Monitoring • Use monitoring and inspection data if available to estimate load reductions and/or determine if additional controls are necessary • Use monitoring and inspection data if available to identify improvements from year to year • Estimate and track annual pollutant loads
	Number of inspections completed	1	
	Number of sites adequately implementing and maintaining BMPs	3	
	Number of follow-up inspections conducted	1	
	Available sampling results from inspection to inspection	4	
	Compare storm water runoff sampling results from original vs. follow-up inspections	4	

Task	Data Collected	Outcome Level	Assessment Method and Comparison Goals and Baselines
Pollution Prevention/Good Housekeeping For County Operations			
Inventory of County-Owned and Operated Facilities			
Inventory of County-Owned and Operated Facilities	Identify all County-owned and operated facilities within their jurisdiction	1	Confirmation • Identify that the inventory was developed • Identify any modifications per year
Map of County-owned or Operated Facilities			
Map of County-owned or operated facilities	Develop map of location of the facilities, contact info, drainage systems and corresponding receiving waters	1	Confirmation • Identify that the map was developed
Facility Assessment			
Facility Assessment	Identification of pollutant hotspots	1	Confirmation • Identify that the annual assessment was completed Tabulation • # of facilities identified as pollutant hotspots and assigned a high priority rating • # of high priority facilities year to year
	Documentation of the comprehensive assessment	1	Confirmation

Task	Data Collected	Outcome Level	Assessment Method and Comparison Goals and Baselines
	procedures and results		• Identify that the procedures used for conducting the comprehensive assessments were documented • Identify that the results (completed checklist) for each facility's comprehensive assessment were documented and retained.
Storm Water Pollution Prevention Plans			
Storm water pollution prevention plans	Develop and implement SWPPPs for pollutant hotspots	1-2	Confirmation • Confirm that site specific SWPPPs were developed and present onsite. • Identify if audit/inspection was conducted Tabulation • #, type, and location of BMPs Inspections • Identify # BMPs implemented and maintained, % year to year
	Identify pollutant generating activities and develop site map	2	
	Implement BMPs for pollutant generating activities	3	
	Identify inspection procedures and checklist for inspections	1-3	
Inspections, Visual Monitoring and Remedial Action			
Inspections, visual monitoring and remedial action	Quarterly visual hotspot inspections	1-3	Confirmation • Identify if quarterly visual inspections of hotspot facilities were performed. Tabulation • #, type, and location of identified deficiencies and corresponding corrective actions. • % of repeat deficiencies from year to year
	Annual Hotspot comprehensive inspections	1-3	Confirmation

Task	Data Collected	Outcome Level	Assessment Method and Comparison Goals and Baselines
			• Identify if annual comprehensive inspections of hotspot facilities were performed. Tabulation • #, type, and location of identified deficiencies and corresponding corrective actions. • % of repeat deficiencies from year to year
	Quarterly Hotspot visual observations of storm water and non-storm water discharges	1-3	Confirmation • Identify if quarterly storm water and non-storm water inspections of hotspot facilities were performed. Tabulation • #, type, of non-storm water discharges • # non-storm water discharges eliminated • #, type, and location of identified deficiencies and corresponding corrective actions. • % of repeat deficiencies from year to year
	Non-Hotspot Inspection	1	Confirmation • Identify that non-hotspot facilities were inspected at least once per permit term.
Storm Drain System Assessment and Prioritization			
Develop and implement procedures to assess and prioritize MS4 storm drain system maintenance.	Assessment and prioritization of the County's storm drain system		Confirmation • Identify that a process to assess and prioritize the storm drain system was developed • Identify that the storm drain system was assessed and prioritizations assigned. Tabulation

Task	Data Collected	Outcome Level	Assessment Method and Comparison Goals and Baselines
			• #, type, of high priority catch basins
Maintenance of Storm Drain System			
Maintenance of all high priority storm drain systems	Inspect storm drain systems	1	Confirmation • Identify that high priority systems were inspected Tabulation • # of high priority catch basins and systems annually inspected.
	Clean storm drain systems	1-4	Confirmation • Identify that protocols were developed Tabulation • # cleaned and estimate of waste removed
	Labeling catch basins	1	Confirmation • Identify that catch basins in high foot traffic areas were labeled Tabulation • # of catch basins labeled or had labels replaced year to year
	Maintain surface drainage structures	1	Confirmation • Identify that high priority surface drainage structures were maintained Tabulation • # and frequency of maintenance of high priority drainage structures

Task	Data Collected	Outcome Level	Assessment Method and Comparison Goals and Baselines
	Dispose of waste materials	1-2	Confirmation • Identify that a procedure for dewatering and disposal of catch basin material was developed Tabulation • Estimated amount of material properly disposed
County Operations and Maintenance Activities (O&M)			
County operations and maintenance activities (O&M)	Develop and assess O&M activities for pollution potential.	1	Confirmation • Identify that O&M activities have been assessed for pollutant potential.
	Develop and implement BMPs to reduce pollutant potential during O&M activities	1	Confirmation • Identify that BMPs have been implemented based upon the O&M activity's assessed pollution potential Tabulation • #, type, and designated O&M activity for BMP use.
	Quarterly evaluation of BMPs	1-2	Confirmation • Identify that quarterly assessments Tabulation • #, type, and designated O&M activity for BMP use. • # of BMPs needing modifications
Incorporation of Water Quality and Habitat Enhancement Features in New Flood Management Facilities			

Task	Data Collected	Outcome Level	Assessment Method and Comparison Goals and Baselines
Incorporation of water quality and habitat enhancement features in new flood management facilities	Process to incorporate enhancement features in the design of flood management projects.	1	Confirmation • Identify that a process has been developed to incorporate enhancement features in the design of flood management projects Tabulation • # of flood management projects where enhancement features have been implemented
Landscape Design and Maintenance			
Evaluate pesticide, herbicides, and fertilizers used and application activities performed and identify pollution prevention and source controls	Develop application protocols for municipal staff and contractors	1-2	Confirmation • Verify that protocols were developed • Audit implementation by contractors Tabulation • # of materials applied and total acreage Inspections • Identify if protocols were implemented Quantification • Estimates of materials applied and reductions over time
	Track annual use of herbicides and pesticides by active ingredient and total area for application	2-4	
	Track annual use of fertilizers by element (e.g. nitrogen) applied and total area for application	2-4	
	Audit implementation of protocols	3	
Implement practices (IPM) that reduce the discharge of pesticides, herbicides and fertilizers	Develop IPM strategy/protocols for municipal staff and contractors	1-2	Confirmation • Verify that protocols were developed Tabulation • Track IPM use by total area applied and types of IPM • Provide map overlay of areas Inspections • Identify if protocols were implemented
	Track areas and types of IPM measures that are being implemented	2-3	

Task	Data Collected	Outcome Level	Assessment Method and Comparison Goals and Baselines
Collect and properly dispose of unused pesticides, herbicides, and fertilizers	Properly disposed unused materials	1	Confirmation • Identify that collected materials have been properly disposed Tabulation • Amount of materials collected and disposed from year to year
Minimize irrigation run-off by using an evapotranspiration-based irrigation schedule and rain sensors	Verification of utilization of and evapotranspiration-based irrigation schedule and rain sensors	1	Confirmation • Identify that evapo-based irrigation and rain sensors have been implemented Tabulation • # and location of implemented evapo-based irrigation and rain sensors
Post Construction Storm Water Management Program			
Post-Construction Measures			
Regulate development to comply with post-construction measures	Completion of review and modifications/adoption of revised/new codes/ordinances	1	Confirmation • Identify that development was regulated to comply with the County's post-construction measures
Site Design Measures			
Require projects to implement one or more permit specified design measures	Development of design measure requirements	1	Confirmation • Identify that design measures were established

Task	Data Collected	Outcome Level	Assessment Method and Comparison Goals and Baselines
			• Identify any modifications
Regulated Projects			
Require all regulated projects (>5000 sq ft) to implement measures for design, source control, runoff reduction, storm water treatment, and baseline hydromodification management.	Development of design measure requirements	1	Confirmation • Identify that design measures were established • Identify any modifications
Enforceable Mechanisms			
Develop and/or modify enforceable mechanisms	Development enforcement policy/mechanisms	1	Confirmation • Identify that policy was developed
	Number and types of corrective and enforcement actions	1	Tabulation • Identify # and types of enforcement actions taken • % enforcement actions major vs. minor • Identify # repeat offenders/problem areas identified • Identify % enforcement actions from year to year
	Number of repeat offenders and/or problem areas identified	2	
Operation and Maintenance of Post-Construction Storm Water Management Measures			
Implement an O&M Verification Program	Development of a O&M verification program	1	Confirmation • Identify that the verification program was developed
Post-Construction Best Management Practice Condition Assessment			

Task	Data Collected	Outcome Level	Assessment Method and Comparison Goals and Baselines
Inventory and map of existing structural post construction BMPs	Development an inventory and map of existing BMPs	1	Confirmation • Identify that an inventory and map of existing post construction BMPs has been developed
Assessment of self-certification program annual reports	Self-certification program annual reports	1	Confirmation • Identify that BMPs are operating to remove pollutants as designed • Identify that the certifications have a long-term plan for conducting regular maintenance of BMPs Tabulation ▪ # of assessed facilities in noncompliance with maintenance agreements
Appropriate escalating enforcement	Enforcement based upon the Enforcement Response Plan (ERP)	1-2	Confirmation • Identify that escalating enforcement is being implemented as stated in the ERP Tabulation • Identify number and types of enforcement actions taken • % enforcement actions major vs. minor • Identify number of referrals made to Board and repeat offenders/problem areas identified • Identify % enforcement actions from year to year
Planning and Development Review Process			
Review landscape code to allow for effective implementation of post-construction requirements	Revised landscape code	1	Confirmation ▪ Identify that the landscape code has been modified to effectively implement post-construction requirements

Appendix J

Summary of Recommendations for Program Element Modifications

Year 1	
Program Element:	*Recommended Modifications:*
Illicit Discharge Detection and Elimination Program	During **Year 1**, the County will need to develop a written protocol (Spill Plan) to outline IDDE response, notification, and follow up measures within 72 hours of discovery of a suspected illicit discharge, within 24 hours of a SSO or significantly contaminated illicit discharge and immediate referral to Public Works of illicit discharges that are an immediate threat to human health or the environment. The Spill Plan should incorporate by reference existing procedures and systems for responding to SSOs and hazardous material spills. The County will need to develop procedures for responding to other illicit discharges and include them in the Spill Plan. The procedures can be reduced to an easy-to-use flow chart that can be referenced in the field when responding to an illicit discharge.
	As a part of the Spill Plan development during **Year 1**, the County will need to identify how submittals of the on-line report forms and calls into the IDDE hotline are handled, tracked, and followed-up.
	During Year 2, the County will be required to develop procedures for identifying, investigating and performing corrective action for illicit discharges. However, this activity is so intricately associated with the Spill Plan, that ***WGR suggests it be done during Year 1*** in conjunction

	with the Spill Plan development.
Construction Site Storm Water Control Program	Before the end of **Year 1**, the County should take the inventory list compiled by WGR (included in **Appendix E**), remove any projects that are outside of the County's permit boundary, and populate it with the other required information fields as identified in Section E.10.a. (ii).
	Before the end of **Year 1**, the County should designate and train a staff member or contracted resource who will maintain the inventory on an on-going basis.
	Before the end of **Year 1**, the County should develop and begin to implement an ESCP/SWPPP review checklist. WGR has prepared a plan review checklist for the County's consideration and use. The checklist is included in **Appendix E**. The County will need to develop a spreadsheet or other system to track how many and which projects submitted an ESCP or SWPPP, who reviewed the plan, the date of the review, and whether the plan was acceptable or needed revisions. The tracking spreadsheet and all of the completed checklists should be maintained in an electronic format on the County's server so that the data is readily accessible for the annual report preparation or if the County's storm water program is audited.
	Before the end of **Year 1**, the County should designate and train one or more staff members or contracted resources who will review the submitted ESCPs and SWPPPs on an on-going basis. The plan reviewer must either be a QSD or supervised by a QSD.

Water Quality Monitoring/TMDL Program	During **Year 1**, track the developments and adoption of the proposed Attachment G revisions.
	Before the end of **Year 1**, consult with the Central Valley RWQCB staff on TMDL monitoring study design and implementation schedule. Before the end of **Year 1**, obtain formal confirmation from the other Stanislaus MS4s that they would like to participate with the County in a regional TMDL monitoring program. Consider formalizing the agreement and financial commitment with a memorandum of understanding (MOU).

Year 2	
Program Element:	*Recommended Modifications:*
Legal Authority	During **Year 2**, circulate the proposed ordinance modifications contained in **Appendix C** of this Implementation Plan among the various affected Departments, the Chief Executive Office, and the County's legal counsel for review and comment. Incorporate any recommended changes and propose the adoption of ordinance modifications to the Board of Supervisors.
	In the **Year 2 Annual Report**, which is due by October 15, 2015, provide the certification statement of the County's legal authority as required by the permit.
Education and Outreach and Public Involvement Programs	During **early Year 2** (July – September), the County should develop the written comprehensive Education and Outreach Program.
	At the same time, so that it can be reported in the **first year annual report** due on October 15, 2014, the County should obtain written agreements with the other Stanislaus MS4s and/or with the San Joaquin Valley Storm Water Quality Partnership concerning the areas of collaboration for the education and outreach program.
	During **Year 2**, identify which staff members need to obtain QSD or QSP certifications, and make sure they receive the certification. An alternative to this recommendation is to outsource the oversight responsibilities to a qualified consultant who has the proper certifications.

	During **Year 2**, train all staff members who work under the QSDs/QSPs reviewing erosion and sediment control plans and performing storm water compliance inspections of construction projects. An alternative to this recommendation is to outsource the training of the plan reviewers and project inspectors to a qualified consultant with the proper certifications. During **Year 2**, the County should consider developing a single biennial (every other year) training workshop event for applicable employees. The workshop would include general storm water education components, review of new technologies, operations, or responsibilities that have come up during the last year. The training should include specific modules that applies to each staff being trained (Roads, Fleet, Parks, etc.). The training will cover pollution prevention practices, BMP selection and implementation, and O&M activities.
	Beginning in **Year 2**, to meet the biennial assessment requirement, pre- and post-exit surveys (quizzes) could be developed and utilized before and after the training to track and document increase in knowledge and determine if the training workshops are being effective. If less-than-desired scores are achieved, by evaluating missed questions the County can determine if additional review with staff is necessary or if training needs to be more focused or expanded in certain areas. If such training is necessary, it could be conducted in non-biennial training years (during the off years). All training records, quiz results, and

	training related data should be compiled and included in the County's storm water management database and summarized for the annual reports. Training records and aptitude scores will be assessed as part of the Performance Effectiveness requirements of the permit.
	Commencing in **Year 2**, new applicable employees will need to be trained within the first year of employment. Materials, videos, and presentations from the most recent biennial training should be maintained and provided to new employees as needed.
	Beginning in **Year 2**, contractors who have been hired by the County to perform O&M activities will need to be contractually required to comply with the County's storm water BMPs, good housekeeping practices and SOPs. The County will need to review and revise its contract and bid documents to include its expectations and requirements for compliance with the Pollution Prevention and Good Housekeeping Program. Where applicable the bid specs and contract conditions should reference BMP manuals and cut sheets (i.e. CASQA's BMP handbooks).
	Beginning in **Year 2**, the County will need to field verify compliance and provide oversight of pollution prevention practices and BMP implementation. Records of field visits and compliance achieved or corrections needed should be logged. The records should be compiled and included in the County's storm water management database. Contractor compliance records will be assessed as part of the Performance Effectiveness requirements of the permit

	and included in each annual report.
	During **Year 2**, the County will need to develop a public involvement and participation strategy. The strategy will need to create involvement opportunities for the public to participate in the County's implementation of the storm water program. We recommend that this strategy be incorporated into the same document as the Public Education and Outreach Program.
	During **Year 2**, the County should attempt to develop a storm water citizen advisory group. In doing so, the County should look for existing groups, individuals, businesses, and other organizations that already have a vested interest in the County's water quality. For instance, the organization committee for annual Earth Day held in Modesto's Graceada Park may be a good place to start looking for potential advisory group members.
Illicit Discharge Detection and Elimination Program	During the early part of **Year 2 (during the dry season)**, the County should utilize its own field crews or contracted resources to perform a survey of all of the receiving waters within the permit boundary to identify qualifying outfalls. The field crews will need to be trained and equipped to perform the outfall surveys. We recommend that the procedures for outfall mapping and verification (included in **Appendix D**) be used by the field crews.
	Since the County has a GIS system, we recommend that during **Year 2** it starts to populate the system with the outfall mapping and storm drainage system information.

	During **Year 2**, the County will need to develop an inventory of industrial/commercial facilities within the County's permit boundaries. The permit requires that facilities with potential to discharge pollutants in storm water to the MS4 be inventoried. There is potential for almost every facility in some way to discharge pollutants. We recommend taking a conservative approach to this task by inventorying all industrial/commercial business within the County's permit jurisdiction. The purpose of this database is to identify facilities for inspections of potential illicit discharges. We recommend that the County begin this task by utilizing internal or contracted staff to evaluate a queried report from the County's business license database. See section 7.2 of this Implementation Plan for more information.
	Once an inventory is established during **Year 2**, the County is required to determine whether any of the facilities applicable to the State's Industrial NPDES General Permit (IGP) have not filed a Notice of Intent for permit coverage. This is done by cross referencing the newly formed industrial/commercial inventory with the SWRCB's SMARTS database to view industrial facilities that have IGP coverage. In the current IGP, coverage requirements are based upon SIC codes. For facilities that do not have coverage under the IGP, their SIC codes will need to be reviewed to determine if coverage is required. If facilities are found that require IGP coverage but have not filed an NOI, the County must notify the RWQCB.

	During **Year 2**, the County will need to implement procedures to assess the priority industrial/commercial facilities for the presence of illicit discharges at least once over the length of the permit term. This can be accomplished in one of two ways: a. Through a field verification procedure which will involve field observations, field screenings, inspections and other methods of survey. b. Through establishing a self-certification program where the County would require reports at least once during the permit term from the owners of priority industrial/commercial facilities demonstrating the prevention and elimination of illicit discharges at their facilities. Refer to the example self-certification form in **Appendix D**. WGR recommends the self-certification option as it will likely require less County staff and resources to implement. A self-certification form can be developed to fact-find about potential pollutant discharge sources and facility management of those sources. Other IDDE program related information, such as the facility's SIC Code, business description, and IGP status, can also be queried from the respondent using the self-certification form. However, inspections and follow up may be required for non-responsive facilities, unsatisfactory questionnaire responses, or where clarification is needed.
	Beginning in **Year 2**, outfalls will be inventoried, and

	sampled when appropriate. It is scheduled for the dry period July - September 2014. Waiting until the warm dry season will eliminate any likely leftover ponding from possible late spring storms. The County will need to sample any outfalls in which flow or ponding is observed. The permit requires that outfalls with flow or ponding are sampled for indicator parameters (Table 2 on p. 35 of the permit). The County may use these parameters, or suggest alternate parameters based on local knowledge of Pollutants of Concern (POC). Alternative monitoring and a justification of alternative monitoring shall be identified within SMARTS. We recommend that field crews (internal or contracted) who will be performing the outfall survey be trained to collect samples and equipped with sample kits and procedures. Subsequently, the outfalls will need to be inspected each year and any outfalls having a dry weather discharge will need to be sampled. Sample results from the outfall sampling will need to be reviewed and compared to the Table 2 Action Level Concentrations. If the County has elected to use alternative parameters based on local knowledge, the County may select Action Levels base on those POCs.
	During **Year 2**, the County will be required to develop procedures for identifying, investigating and performing corrective action for illicit discharges. However, this activity is so intricately associated with the Spill Plan, that **WGR suggests it be done during Year 1** in conjunction with the Spill Plan development.

Construction Site Storm Water Control Program	During **Year 2**, the County needs to obtain clarification from the SWRCB and the Central Valley RWQCB concerning the minimum size of soil disturbance or any other quantified threshold value that will be used to determine if a construction project needs to be included on the inventory. The County needs to also obtain clarification about which projects are required to be in the inventory – only those projects passing through the County's plan check/permitting process, or all construction projects with soil disturbance.
	During **Year 2**, the County will need to begin conducting storm water compliance inspections of construction sites at "priority sites". The inspections will need to be performed by a QSP or by an inspector who has been appropriately trained and is supervised by a QSP.
	During **Year 2**, to address the prioritization requirement, WGR recommends that the County consider the following priority categories and inspection frequencies: a. Projects on the inventory list that are not subject to the CGP or that have an Erosivity Waiver will have a pre-soil disturbance inspection and a project completion inspection. b. Projects on the inventory list that are Risk 1 / LUP Type 1 or Risk 2 / LUP Type 2 will have a pre-soil disturbance inspection, monthly inspections, and a project completion

	inspection. c. Projects on the inventory list that are Risk 3 / LUP Type 3 will have a pre-soil disturbance inspection, bi-monthly (twice per month) inspections, and a project completion inspection. If a project has been issued two consecutive notices of violation or does not correct a previously issued notice of violation by the due date set by the inspector, the project's "threat to water quality" will be elevated to the next highest category. The County will most likely not have any Risk 3 / LUP Type 3 projects within its permit boundary, unless the project is elevated to that level by the County due to non-compliance.
	During **Year 2**, the County will need to develop a construction site inspection checklist and a system to track the inspections.
Pollution Prevention/Good Housekeeping Program	During **Year 2**, the County should verify that the GSA inventory is complete and up-to-date. It is WGR's opinion that all County-owned/operated facilities be included on the inventory. Opinions of significant pollution sources could vary and could result in potential litigation if a facility is omitted due to difference of interpretation of what is considered significant pollutant source. To avoid litigation, WGR recommends that all County-owned or operated facilities appearing on the above list be included in the inventory of facilities.
	During **Year 2**, an initial analysis of each facility will

	need to be conducted for each identified County-owned/operated facility. The analysis will need to review and roughly map the facility's drainage and outfall(s). Where applicable, the facility manager's name and contact information will need to be collected. The sketch mapping will need to be formalized and submitted via SMARTS. Verification of the map accuracy can be performed during the facility assessment in **Year 3.** WGR recommends that the GSA perform the initial site inspections and mapping of the facilities.
	During **Year 2**, the County will need to develop written procedures to assess and assign a priority levels to its storm drainage system for maintenance. At the same time, as identified in Section 7.1 of this Implementation Plan, the County will need to develop a storm drainage system and outfall map. A "high" priority level should be assigned to a catch basin, pipe line, basin, or any other drainage structure if it meets any of the following criteria: 1. Accumulates a significant amount of sediment, trash, and/or debris 2. Handles large volumes of runoff 3. Collects/conveys runoff from areas that do not receive regular street sweeping 4. Collects/conveys runoff from drainage areas with exposed or disturbed soil 5. Has received citizen complaints/reports

	During **Year 2**, WGR recommends that the County Ag Department collaborate with the Parks and Recreation Department to develop a program that accomplishes the following tasks: 1. Develop an educational program for all internal staff and contractors who apply fertilizers, pesticides, and herbicides at County owned or operated properties. 2. Develop a management program that will incorporate policies, procedures, and best management practices to implement the following landscape management measures at County owned or operated properties: a. Create drought-resistant soils by amending soils with compost b. Create soil microbial community through the use of compost, compost tea, or inoculation c. Use native and/or climate appropriate plants to reduce the amount of water, pesticides, herbicides and fertilizers used d. Practice “grasscycling” on decorative turf landscapes to reduce water use and the need for fertilizers e. Keep grass clippings and leaves away from waterways and out of the street by mulching or composting, or by taking the green waste to the landfill f. Prevent the application of pesticides, herbicides and fertilizers during irrigation or

	within 48 hours of predicted rainfall with a 50% or greater probability, according to the forecast from the National Oceanic and Atmospheric Administration g. Limit or replace herbicide and pesticide use (e.g., conducting manual weed and insect removal) h. Prohibit the application of pesticides, herbicides and fertilizers to surface waters, as required by the California Department of Pesticide regulation DPR 11-004 i. Reduce mowing of grass to allow for greater pollutant removal, but without jeopardizing public safety 3. Collect, track, document, and properly dispose of unused pesticides, herbicides and fertilizers. The County will need to formalize the tracking of disposed materials and maintain a materials tracking log. Fertilizer tracking will need to be incorporated into disposal protocols and tracking. 4. Minimize irrigation run-off by using an evapotranspiration-based (ET) irrigation schedule and rain sensors. The County will need to investigate the retrofitting of existing irrigation systems with ET-based irrigation and rain sensors. The County should investigate alternative funding sources (grants) that may be available for upgrades. 5. Verify that a process for incorporating water quality and habitat enhancement features has been included in the Regional Flood Management Plan for new and rehabilitated flood management

	facilities.
Post-Construction Storm Water Management Program	During **Year 2**, the County needs to revise its Post-Construction Storm Water Quality Design Manual to incorporate the new requirements of the current Phase II MS4 Permit. WGR recommends that the County use its existing draft plan and collaborate with other Stanislaus MS4s to develop a County-wide Post Construction Storm Water Quality Design Manual.
	Once the Post Construction Design Manual has been developed, during **Year 2**, it will need to be implemented. This means that County plan checkers and engineers will need to be trained on the process of reviewing and conditioning both private and public projects with LID and hydromodification requirements. WGR suggests that this training be held jointly with other collaborating MS4s.
	During **Year 2**, as a part of implementing the Post Construction Program, the County will need to develop a tracking system capable of the following: 1. Maintaining a record of all projects that have been reviewed for applicability to the Post Construction Program requirements. 2. Track the status of applicable projects proceeding through plan check and record the type of post-construction LID and hydromodification measures selected by the project proponent to fulfill the permit requirements. 3. Maintain a record of the operation and

	maintenance plan submitted by the project proponent for the selected control measures. 4. Generate a list of existing development sites and property owners having post construction control measures. 5. Track each property owner's annual submission of their control measure self-certification, which includes the effectiveness of the installed control measures and the implementation of on-going and long-term maintenance.
Water Quality Monitoring/TMDL Program	During **Year 2**, develop a detailed monitoring plan that identifies the external data sources and the monitoring that will be performed by the participating MS4s. Before the end of the year, submit the plan to the RWQCB for review, comment, and approval.
Program Effectiveness Assessment and Improvement Program, and Annual Reporting	The County is required to develop a Program Effectiveness Assessment and Improvement Plan and submit it to the RWQCB prior to **Year 2**'s Annual Report. WGR has prepared the plan in accordance with CASQA's Municipal Stormwater Program Effectiveness Assessment Guidance document. The Plan can be found in **Appendix H** of this document. The plan will walk the County through its assessment of each permit element and provide a goal-oriented focus for completing annual tasks.

Year 3	
Program Element:	*Recommended Modifications:*
Legal Authority	During the first part of **Year 3** (or earlier, but no later than September 30, 2015), revise the Enforcement Response Plan to comply with the requirements of the Phase II MS4 Permit.
Education and Outreach and Public Involvement Programs	In accordance with the recommendations that WGR made for the IDDE program (see Section 7 of this Implementation Plan), all staff members who are involved in the IDDE program must be properly trained **within Year 3**. A comprehensive initial training should be performed with all departments and staff. The training should include how to identify illicit discharges or illegal connections (ID/ICs), and the procedure for reporting and responding to an ID/IC. Follow-up training should be provided as programmatic or procedural changes occur. New employees who are hired into any of the departments or positions mentioned above are required to be trained within 6 months of hire date. The County is required to perform an annual assessment of their trained staff's knowledge of illicit discharge response. The County should consider a computer-based training video and examination that can self-guide users through a refresher course, and assess their knowledge through an online quiz after the course. The storm water

	coordinator or oversight department will need to review quiz results and determine if any additional review is necessary. The quiz results will satisfy documentation of training and Performance Effectiveness assessment requirements. Educational materials are required to be developed and implemented for staff and focused locations. The County should consider developing ID/IC response cards that can be kept in each fleet vehicle used by field staff. The card should include contact information for reporting and requesting response, and a decision-making procedural tree in accordance with the County's response protocols. Areas that see high ID/IC concentrations should receive a stronger emphasis on education and outreach. The County should target business, industries, and residential neighborhoods in the up-gradient area with ID/IC educational materials, inspection and enforcement. Surveys should also be utilized to gauge the understanding and raised awareness of the County's effort in these areas.
	Starting in **Year 3**, the County will need to publicize applicable training opportunities for construction operators. The County is required to distribute appropriate outreach materials to all construction operators who will be disturbing land within the MS4 boundary. A trigger system should be put in place during the plan check process to

	determine if any of the training opportunities apply to the proposed construction activities. If so, promotional and informational material for these opportunities should be included in the permitting materials packet that will be received by the project manager. The County will need to add contact info and website address on all distributed materials. The County currently has an existing Storm Water Program web page operated by Public Works. The *Construction Activities Pollution Prevention Page* will need to be updated to include information on appropriate BMP selection, installation, implementation, and maintenance. These topics could be supplemented with electronic versions of the educational materials discussed in section 6.3, and links to industry standard sites like CASQA.
Illicit Discharge Detection and Elimination Program	Training of applicable County Departments and personnel is not only key for identifying illicit discharges and establishing an effective reporting system, but is also required during **Year 3**. WGR recommends that all County inspectors receive IDDE training. The training will teach all local inspectors to recognize discharges, make a determination if they are authorized or unauthorized (illicit) and how to report the discharge for follow up and/or enforcement. WGR recommends that fire, building, plumbing, health, safety, erosion control, vector, streets, and other local inspectors understand illicit discharges and know whom to contact with the County for enforcement.

Pollution Prevention/Good Housekeeping Program	During **Year 3**, the County will need to investigate each hotspot facility to identify the pollution generating activities. This investigation, known as the **Hotspot Site Investigation (HSI)**, can be used to systematically evaluate the six categories of pollution-generating activities that commonly contribute to storm water quality problems: • Outdoor Materials Handling • Physical Plant Maintenance • Storm water Infrastructure • Turf/Landscape Management • Vehicle Operations • Waste Management The HSI provides a way to quantify the impacts of hotspot activities on urban sub-watersheds (or facilities), and identify possible restoration practices that may be needed. The HSI asks the inspector to assess six distinct pollution sources at each site, and to identify targeted pollution prevention techniques or corrective action practices to address those sources. The result of the HSI is a comprehensive database of confirmed hotspots, each of which is ranked in terms of its severity. The database can be used to determine what, if any, pollution prevention or discharge prevention strategies need to be incorporated into the overall facility corrective action plan. We recommend that the County utilize the checklist for

	performing a HSI (included in **Appendix F**).
	During **Year 3**, in conjunction with the assessment of each facility, the County needs to verify which of the inventoried facilities have other plans (SWPPP, SPCC, spill plan or other equivalent) that can be used in lieu of developing a new SWPPP.
	During the **Year 3** facility assessments to provide information for the SWPPP development, WGR recommends that in addition to completing the HSI form, that an evaluation also be performed of the pollution prevention practices currently being used or the need for additional pollution prevention activities at each location. We recommend that the evaluation be done by referencing the fifteen Hotspot Pollution Prevention Practice Profile Sheets contained in Chapter 6 of the Urban Sub-watershed Restoration Manual 8[11]. We also recommend that the reviews be performed by GSA or DER during the facility assessment. The inspection checklist and procedures need to be standardized for ease of implementation across the spectrum of facilities.
	During **Year 3**, perform an assessment of the following activities for potential to discharge pollutants:

[11] Available online at: http://www.cwp.org/online-watershed-library/cat_view/64-manuals-and-plans/80-urban-subwatershed-restoration-manual-series

	3. Road and parking lot maintenance: Includes sidewalk repair, curb and gutter repair, pothole repair, pavement marking, sealing, and re-paving. 4. Bridge maintenance: Includes re-chipping, grinding, saw cutting, and painting. 5. Cold weather operations: Includes plowing, sanding, and application of de-icing compounds and maintenance of snow disposal areas. 6. Right-of-way maintenance: Includes mowing, herbicide and pesticide application, and planting vegetation. 7. County-sponsored or sanctioned events relevant to storm water: Includes large outdoor festivals, parades, or street fairs (e.g. Earth Day, Coastal Cleanup Day and Farmer's Market). 8. Green waste deposited in the street 9. Graffiti removal 10. Hydrant flushing
	During the **Year 3** assessment, the County will need to identify materials that could be discharged from the above O&M activities. These pollutant materials may include metals, chlorides, hydrocarbons, sediment, green waste, herbicide, pesticide, dried paint, and trash. The County will need to identify and implement a set of BMPs that will reduce pollutants in storm water and non-storm water discharges. The permit requires the County to use the

	CASQA Municipal Handbook or equivalent for guidance of BMP selection. Implemented BMPs for O&M activities shall be evaluated quarterly. Departments and divisions associated or performing any of the above O&M activities should take ownership of the BMP implementation and evaluations.
Post-Construction Storm Water Management Program	During **Year 3**, develop and implement a plan to inventory, map, and determine the relative maintenance condition of structural post-construction BMPs. In accordance with the permit, maintenance condition will be determined through a self-certification program where the County requires annual reports from property owners demonstrating proper maintenance and operations of LID and hydromodification control measures installed at their property.

Year 4	
Program Element:	*Recommended Modifications:*
Pollution Prevention/Good Housekeeping Program	During **Year 4**, the SWPPPs will need to be developed for those facilities which do not already have a plan that meets the permit's allowance for plan alternatives. A template for the SWPPP should be first developed (see the Teaming Up Opportunity box) to facilitate the plan development and to assure that plans are complete, compliant, and standardized. The SWPPPs will need to be distributed to each of the facilities. The County should develop a protocol for the SWPPP distribution, storage and retention, training of facility personnel on the SWPPP, and the periodic review and revision of the plan.
Water Quality Monitoring/TMDL Program	Target **Year 4** for the implementation year of the program (assuming that the proposed Attachment G revisions are adopted and that the low dissolved oxygen monitoring program follows the same pattern). This will give the County time to research more external data sources and to coordinate the monitoring with other possible regional monitoring (i.e. the Merced County MS4 partnership).

Year 5

Program Element:	*Recommended Modifications:*
Pollution Prevention/Good Housekeeping Program	The County will need to conduct the following inspections **beginning in Year 5** of the permit. To maintain consistency with the permit requirements and from one facility to another, WGR recommends that these inspection activities be performed by GSA. Quarterly ***visual*** hotspot inspections – The County will need to perform quarterly inspections of those facilities identified as hotspots during the facility assessment during **Year 3**. A checklist for each applicable facility will be developed as part of the SWPPP preparations in **Year 4**. This checklist should guide the inspector through the following items: • Materials and equipment are clean and orderly • Minimization of potential pollutant discharges • Ensure effective selection, implementation, and maintenance of BMPs • Look for evidence of spills (clean up if identified) • Log any facility deficiencies and corrective actions Annual Hotspot ***comprehensive*** inspections - The County will need to perform a ***more in-depth and comprehensive*** annual inspection of those facilities identified as hotspots during the facility assessment during **Year 3**. A checklist for each applicable facility will be

	developed as part of the SWPPP preparations in **Year 4**. This checklist should walk the inspector through the following items: • Pollution prevention at waste storage areas, dumpsters, vehicle and equipment maintenance/fueling areas, material handling areas, and similar areas. • Log any facility deficiencies and corrective actions Quarterly Hotspot visual observation of ***storm water and non-storm water discharges*** - The County will need to perform quarterly inspections of those facilities identified as hotspots during the facility assessment during **Year 3**. Where discharges are observed, identify any observed problems (e.g., color, foam, sheen, turbidity) associated with pollutant sources or activities. Identified problems shall be remedied as soon as practicable or before the storm event, whichever is sooner. Inspection report shall log any facility deficiencies and corrective actions. Non-Hotspot Inspections – At least once per permit term, all non-hotspot facilities included on the inventory established during **Year 2** must be inspected. Electronic data from each facility's inspections should be incorporated into the storm water management database. A copy of all inspections and records must be kept with each facility's SWPPP.

Program Effectiveness Assessment and Improvement Program; Annual Reporting	The County is required to modify BMPs and/or the program as a whole to improve compliance. During **Year 5**, the County will need to identify and summarize program modifications and submit to the RWQCB. In the final year of the permit, the County will need to do a comprehensive assessment of program efforts, modify under-performing priority program areas and BMPs, build on to effective BMPs, and shift program focus to more effective use of resources.

Appendix K

Summary of Opportunities for Collaboration

Teaming Up Opportunities

Education and Outreach

During the last meeting of the Stanislaus MS4s, most, if not all of the municipalities expressed interest in collaborating in this area. We recommend that a follow-up meeting be held with these MS4s to specifically address areas of the E&O program that can be shared.

Pollution Prevention/Good Housekeeping

Rather than pay all of the SWPPP development costs, the County could possibly team up with other local MS4s to prepare SWPPP templates for each type of facility. The templates could then be easily modified for specific locations. This could be done either by contracting the template development work out and splitting the cost among the MS4s, or by having each MS4 develop one or two templates for different types of facilities and then share the templates with the participating municipalities.

Education and Outreach

The County should explore options for teaming up with other Phase II MS4 permit holders for the development of training modules and practical field training workshops. Teaming up will allow the County to share development cost and have a uniform training program with other local municipalities.

Water Quality Monitoring

The MS4 Permit encourages collaboration for the monitoring programs. This makes particular sense for the Lower San Joaquin River. Phase II municipalities are listed for the same TMDLs from Madera County to San Joaquin County. There are at least twenty different MS4s that could potentially collaborate with a regional monitoring program. The research that WGR has done so far and the input that we have received from Water Board staff seems to indicate that the approach identified in this Implementation Plan is not only viable but will also save each participant a considerable amount of expense, effort, and time. We encourage the County to start building a network of municipalities inside and outside of the County willing to team up on this effort.

Education and Outreach

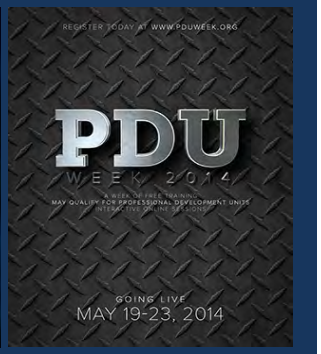
The County should explore options for teaming up with other Phase II MS4 permit to hold a pollution prevention / good housekeeping workshop to which all of the municipalities send their applicable staff. This workshop could be held in conjunction with the illicit discharge detection and elimination training.

Post-Construction Storm Water Management

Rather than pay for all of the Post-Construction Plan development costs, the County could team up with other MS4s inside and outside of the County to prepare a County-wide or Regional Post Construction Storm Water Quality Design Manual. This would not only provide significant cost savings to each of the MS4s participating in the plan development, but will also result in further cost savings by having combined training sessions for plan check staff and engineers from all municipalities. Another benefit of this method is the creation of one standardized plan affecting all developments within the County or region instead of the current confusing variation of requirements.

Education and Outreach

The County could consider promoting free regional educational events such Storm Water Awareness Week and PDU Week (PDU = professional development units). These annual free events provide storm water education for people from municipality, industry, and construction backgrounds. The wide range of courses offered will meet the permit minimum requirements of referring operators to training on BMP selection, installation, implementation, maintenance, and overall program compliance.



The County should seek to partner with other municipalities to combine existing outreach tools and resources, and if necessary share in the development of new materials (i.e. brochures, posters, etc.). The materials will need to cover appropriate BMP selection, installation, implementation and maintenance, and overall permit compliance.

Phase II Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) Permit

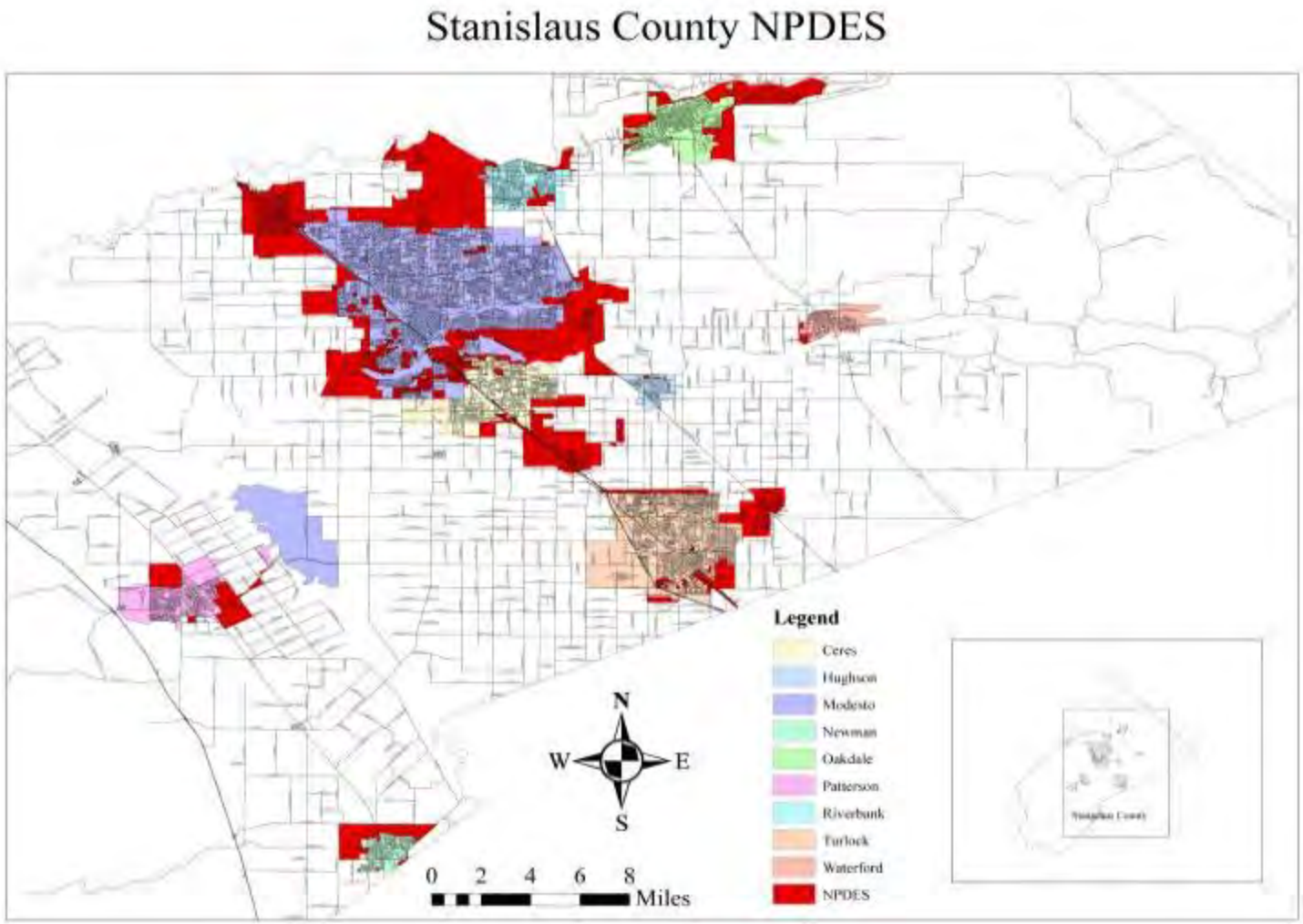
Board of Supervisors Meeting

February 10, 2015

MS4 Phase II Permit - Background

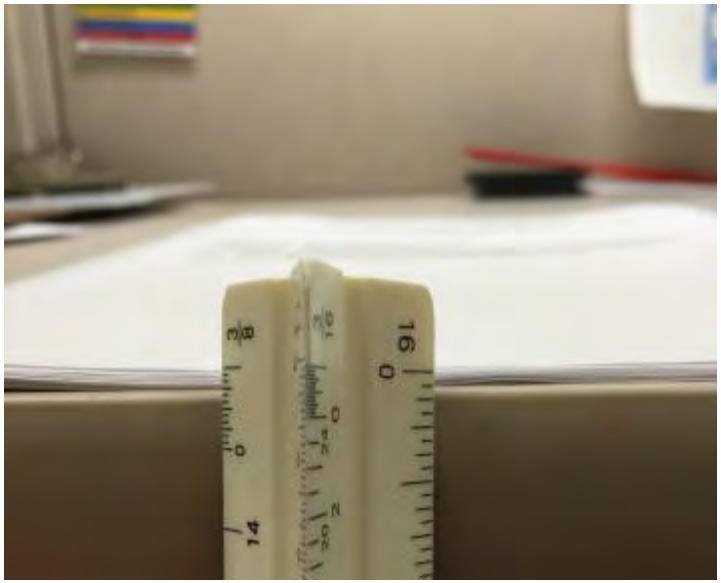
- NPDES originated with Clean Water Act (1972)
- MS4 permits were issued in two phases.
  - Large Cities in 1990s with Phase 1
  - Stanislaus Co. regulated in Phase 2 in 2003
- 2003 Permit was implemented for 10 years by Public Works

MS4 Phase II Boundary in Stanislaus County



2003 Permit (19 pages) vs. 2013 Permit (105 pages)

2003 Permit



2013 Permit

Major Changes between 2003 and 2013 Permits

- Modify and/or adopt new ordinances for stormwater.
- Illicit Discharge Detection and Elimination (IDDE) – Outfall mapping, Facility Inventory, Field Sampling, Source Investigations & Spill response plans
- Management of all County Facilities – GSA / Parks / Public Works
- Post Construction Stormwater Management Program – Low Impact Development Standards need to be adopted.
- Track private Operations and Maintenance (O&M) for on-site control measures.

Implementation Components

- 2013 Permit – Quantitative, Testing and Analysis
- Through a Request for Proposal (RFP) in October 2013, WGR Southwest (WGR) of Lodi, California, was selected to help us implement the permit
- WGR was tasked with developing a cost effective, minimum, NPDES Implementation Plan for Stanislaus County.

Implementation Components (continued)

- Year 2 is a task intensive year within the permit.
  - Modify our stormwater ordinances; and,
  - Begin public outreach; and,
  - Train Staff
  - Create industrial database, inspect construction sites
  - Inventory and map all County facilities

Implementation Components (continued)

- Multiple department collaboration. The implementation strategy of the permit includes the following:
- Chief Executive Officer to be LRP – Public Works Director to be DAR
- Public Works will be Program lead department
- Department of Environmental Resources - Lead on public outreach on spills, hazmat, illegal dumping and general pollution prevention
- Agricultural Commissioner – Pesticide and herbicide requirements
- General Services Agency – Pollution prevention for all County facilities
- Planning and Building – Maintain inventory of regulated projects in Accela
- Parks and Recreation – Manage stormwater requirements on County Parks

Fiscal Impact

- Split for funding between Roads and GF/Other is 50/50 based upon analysis by WGR

Item	Total Cost	Road Funds	GF/Other
Year 2 Permit	$ 29,133	$ 14,567	$ 14,566
WGR Contract	51,943	25,971	25,972
PSC-Permit Mgt	33,750	16,875	16,875
Total FY 14/15	**$114,826**	**$ 57,413**	**$ 57,413**

Fiscal Impact (continued)

Partner Departments share of $57,413:

Department	Partner % Share	FY 14-15 Cost
DER	23 %	$ 13,205
AG Commissioner	9 %	5,167
GSA Facilities Maint.	48 %	27,559
Planning	11 %	6,315
Parks	9 %	5,167
Total FY 14-15	**100 %**	**$ 57,413**

Timeline

- February 2015 – Amend WGR's contract
- March 2015 - Hire a Personal Services Contract
- June 2015 - Year 2 implementation tasks complete
- October 2015 - Annual Report filed
- 2015 - 2018 - Year 3 through 5 tasks will be executed by the responsible departments with the yearly tasks completed by June 30 of that Fiscal Year, and the Annual Reports filed by October.

Recommendations

1. Adopt the Implementation Plan for the Phase II Municipal Separate Storm Sewer System National Pollutant Discharge Elimination System Permit (Permit) as prepared by WGR Southwest, dated February 2, 2015.
2. Approval of Amendment 1 to the Agreement for Professional Design Services with WGR Southwest in the amount of $51,943.
3. Designate the Chief Executive Officer as the Legally Responsible Person for the Permit.
4. Adopt the Financial Plan for Implementation in Fiscal Year 2014 - 2015.
5. Designate the Director of Public Works as the Duly Authorized Representative.