California Regional Water Quality Control Board
Central Coast Region

Linda S. Adams
Secretary for Environmental Protection

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Arnold Schwarzeneg
Governor

January 8, 2007

CERTIFIED MAIL 7006 0100 0000 1777 7706
RETURN RECEIPT REQUESTED

Denise Estrada, Maintenance Services Director
Michael Ricker, Maintenance Services
Certified Mail to: 426 Work Street
Salinas, CA 93901

Vanessa Vallarta, City Attorney
Dave Mora, City Manager
Robert Russell Deputy City Manager
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Salinas, CA 93901-2639

To City of Salinas Staff:

SECOND NOTICE OF VIOLATION FOR CITY OF SALINAS, ORDER NO. R3-2004-0135, WASTE DISCHARGE REQUIREMENTS FOR CITY OF SALINAS MUNICIPAL STORM WATER DISCHARGES AND REQUIREMENT TO SUBMIT REPORT; MONTEREY COUNTY

The City of Salinas was issued a Notice of Violation (NOV) letter on September 1, 2006 for violating aspects of the City of Salinas' (City) Phase I Storm Water Permit (Permit). The Regional Water Quality Control Board (Water Board) issued a revised Permit in February 2005. The City has addressed some of the issues in the September NOV, however there are continual violations of both the Permit and the September NOV.. The purpose of this letter is to outline the status of the ongoing violations, and to summarize the pertinent actions that have occurred since the September NOV was issued. The "Timeline and Summary of Violations" table attached to this letter lists: 1) Actions taken by the City and Water Board staff which are pertinent to the violations; and 2) a summary of on-going violations and number of days of violation. The attached table "Timeline and Summary of Violations" describes over 600 violation days. The City must address these violations as quickly as possible in order to cease accruing days of violation. As restated below, the Water Board may impose civil liabilities for up to ten thousand dollars ($10,000) for each day that a violation occurs.

Order No R3-2004-0135 Required Actions

Order No. R3-2004-0135 requires the City to comply with the items described in the attached Table. The City has failed to comply with these requirements by the applicable due dates, and is therefore subject to liability. The Central Coast Water Board reserves the right to take any enforcement action authorized by law. The City's Permit is not modified by compliance with the items in this Second Notice of Violation letter, nor the September 1, 2006 Notice of Violation letter.

Pursuant to California Water Code Section 13385, the Central Coast Water Board may impose upon the City civil liability for up to ten thousand dollars ($10,000) for each day that a violation occurs.

If the City fails to comply in a timely or complete manner with the items in this Notice of Violation as documented in the attached Timeline and Summary of Violations, and in accordance with the requirements below and the requirements of Order No. R3-2004-0135, staff intends to refer these issues to the Central Coast Water Board Enforcement Unit for additional enforcement as described above.

Section 13383 Required Actions

The City has not adequately responded to our prior comments and requests for clarification. Based on the current submittal, the Water Board cannot determine whether the SWMP meets the maximum extent practicable (MEP) standard or satisfies all requirements of Section D.2 of Order No. R3-2004-0135.

The City must submit a complete Storm Water Management Plan by January 31, 2007. The Storm Water Management Plan must include all revisions in a single updated document with a complete set of appendices. If the City can respond to any comments by providing additional information or analysis that does not require a change to the SWMP, the City must also provide a single document that includes all comment responses. The updated Storm Water Management Plan must addresses the Storm Water Management Plan comments of Water Board staff in the following documents which are attached to this letter: 1. September 1, 2006 Notice of Violation Table; and 2. December 7, 2006 emailed comments. This requirement is made pursuant to California Water Code Section 13383. Pursuant to Water Code Section 13385, a violation of a requirement issued pursuant to Water Code Section 13383 may subject the City to civil liability of up to $10,000 per day for each day in which the violation occurs.

Any person affected by this 13383-ordered action of the Central Coast Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with Section 13320 of the California Water Code and Title 23, California Code of Regulations, Section 2050. The petition must be received by the State Water Board, Office of Chief Counsel, P. O. Box 100 Sacramento, 95812 within 30 days of the date of this order. Copies of the law and regulations applicable to filing petitions will be provided upon request.

If you have and questions or comments, please contact Donette Dunaway, ddunaway@waterboards.ca.gov, (805) 549-3698.

Sincerely,

for Roger W. Briggs
Executive Officer

Attachments:

1. Table: "Timeline and Summary of Violations"
2. Table that was included with the September 1, 2006 Notice of Violation
3. Copy of Water Board comments on Element 3 and 4, emailed to the City December 7, 2006

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TIMELINE AND SUMMARY OF VIOLATIONS		
Actions Required or Requested	**SWMP (Storm Water Management Plan) and Annual Report Activities**	**Alleged Violations and Number of Days of Violation**
Salinas Permit Section D.4.A states, "The Permittees shall submit an Annual Report by October 1 of each year."	**10/12/05** The City submits its Annual Report with a Draft Work Plan. The Annual Report and Draft Work Plan are, in many instances, vague or short on data.	Failure to submit Annual Report and Final Work Plan by October 1. *Days of Violation: 10/2/05 through 10/12/05 = 11 days.*
Salinas Permit Attachment 4, Section 3.b states, "Within 1 year of permit adoption, the Permittee shall develop and submit for public review and comment and Executive Officer approval, a Development Standards Plan (DSP) that describes measures to reduce pollutant discharges to the MEP from all new development and significant redevelopment projects."	**1/4/07** (date of this letter) No Development Standards Plan has been submitted to date.	Failure to submit a Development Standards Plan by February 4, 2006. *Days of Violation: 2/5/06 through 1/4/07, however these delays are not included in the tallied violation days in this NOV due to the City's ongoing collaboration with Kennedy/Jenks Consultants in creating an updated Development Standards Plan, and delays outside of the City's purview.*
Salinas Permit Section D.2.c states "Upon adoption of this Order, the Permittee shall review and modify its SWMP to address the requirements of the Storm Water Management Program Revision Requirements (Attachment 4) of this Order, and submit the revised SWMP within 180 days of permit adoption for approval by the Regional Board or its Executive Officer. " The Order was adopted February 4, 2005, therefore the SWMP was due August 3, 2005.	**7/21/06** The City submitted an incomplete (missing pages and containing handwritten changes) Draft SWMP to the Regional Board. Regional Board staff reviews portions of the 7/21/06 version, but ceases review upon learning that the draft is in flux. A finalized version is submitted 10/20/06 (see below).	Failure to submit a SWMP by August 3, 2005 as required by the Permit. *Days of Violation: 8/3/05 through 10/20/06 = 443 days*
September 1, 2006 Notice of Violation Letter to the City of Salinas stated, "The City was required to complete the Quality Assurance Program Plan (QAPP) within the first permit year as part of the SWMP	**8/4/06** The QAPP was released to Water Board staff for review.	Failure to submit a QAPP within the first permit year. *Days of Violation: 2/11/06 through 8/4/06 = 174 days*

(by February 2006).		
September 1, 2006 Notice of Violation Letter to the City of Salinas stated, "The City must finalize the Draft SWMP (Storm Water Management Plan) **by September 1, 2006...,** and provide the document no later than that day to the Water Board staff, to Kennedy/Jenks Consultants, and to the public at large for a 30-day review and comment period."	**9/1/06** City posted a draft SWMP (Storm Water Management Plan). Water Board staff is informed that a draft SWMP is posted, but that the version could not be "officially submitted" until the Salinas City Council had approved the version. No hard-copy document was submitted to Water Board. A 10/6/06 email confirmed that the posted draft SWMP was not intended as a submitted Draft for Regional Board staff review.	
	9/29/06 National Resources Defense Council submits comment letter to the City of Salinas regarding the inadequacy of the Sept. 1, 2006 draft SWMP	
September 1, 2006 Notice of Violation Letter to the City of Salinas stated, "The City must provide a detailed Annual Report and Work Plan for the 2006 – 2007 year by **October 1, 2006** (per the Permit)."	**10/1/06** Thirty-day comment period ends for the Sept. 1, 2006 draft SWMP.	
	10/2/06 Water Board receives 2005-2006 Annual Report.	2005-2006 Annual Report was *one day* late
	10/2/06 The Otter Project submits comment letter on Sept. 1, 2006 draft SWMP that requests changes to the document.	
	10/6/06 Water Board staff submitted emailed comments to City staff on the "un-official" Sept. 1, 2006 Draft SWMP. Comments point out numerous areas of concern and inadequacy.	
	10/17/06 Water Board staff coverts	

	emailed comments on "un-official" SWMP into a letter and submits to City prior to City Council hearing on the SWMP.	
	10/17/06 Salinas City staff recommend the City Council approve the Sept. 1, 2006 Draft SWMP without incorporating modifications per public comment. Salinas City Council approves Sept. 1, 2006 Draft SWMP.	
September 1, 2006 Notice of Violation Letter to the City of Salinas stated, "The City must formally address all comments received during the 30-day comment period for its Draft SWMP **by October 20, 2006.** The City's final Draft SWMP (post-public comment version) must address the concerns and comments stated in this Notice of Violation and attached table."	**10/20/06** • The City "officially" submits the Sept. 1, 2006 Draft SWMP to the Water Board. • The National Resources Defense Council, Sea Otter Project, and Water Board staff's comments are addressed in the City's Oct. 17, 2006 Staff report, however none of the comments were incorporated into the Sept. 1, 2006 Draft SWMP. City Staff Report states, "All program activities required during this Permit term are addressed to the degree of detail required by the City's permit", a statement which is contrary to the written concerns enumerated in the Water Board's email and letter. City staff advises the City Council not to require incorporating public and Regional Board to the draft Sept. 1, 2006 SWMP because, "This alternative may require significant revisions to	

	the SWMP and additional program costs." • Many items on the Sept. 1, 2006 Notice of Violation have not been addressed. • Water Board staff requests a copy of the City staff report (Staff Report was received on 12/5/06).	
	10/20/06 City submits Response to NOV letter to the Water Board	
September 1, 2006 Notice of Violation Letter to the City of Salinas stated, "If there are significant changes to the Draft SWMP, the City must release a revised Draft SWMP and re-notice the revised Draft SWMP for a second 30-day review period beginning on or before **November 3, 2006**."	**11/3/06** City submits revised Chapters 1, 3, and 4 and Append. F (describes municipal parks and the management practices that will be used in the parks). The City provides no reference as to what portions of the Sept. 1, 2006 Draft SWMP are still relevant. Water Board staff learns that other chapters and Appendix C (draft ordinances) are still under revision.	
September 1, 2006 Notice of Violation Letter to the City of Salinas stated, "However, because the City will be finalizing its SWMP as late as November 3, 2006 ..., and the Final Work Plan should align with the SWMP, a revised (if necessary) 2006-2007 Final Work Plan must be submitted to the Water Board by no later than **November 15, 2006**. The Final Work Plan must cross-reference the most recent SWMP and the Permit. The Final Work Plan must include tasks necessary to comply with all aspects of the Permit and SWMP, and must address the	**11/15/06** No Revised Work Plan was submitted.	

problems described in this (NOV) letter and attached table."		
	11/30/06 Water Board and City staff conducts phone conversation to discuss adequacy of 11/3/06 Draft version of SWMP. Water Board staff indicates there are overall concerns. Water Board staff agrees to note specific concerns using the Track Changes function in Word.	
	12/7/06 Water Board sends comments on 11/3/06 Draft SWMP, Chapters 3 and 4 to City staff.	
	12/11/06 Water Board receives full version of the Nov. 3, 2006 Appendices. (body of the SWMP is incomplete)	Failure to submit a complete SWMP (required by August 3, 2005 as stated above). *Additional Days of Violation: 10/21/06 through 12/11/06 = 51 days*
		Total Days of Violation = 680

Table that was included
with the
September 1, 2006 Notice of Violation Letter

City of Salinas Excerpt* of Due Dates Required by Order No. 2004-0135, and the Status of These Items		
Item*	**Due Date**	**Status – Questions and concerns have been bolded and italicized**
A. One-time only commitments (to be completed by the date/time shown)		
1. Review and modify SWMP	180 days from permit adoption **	**Not finished.** The City submitted a Draft to RWQCB in July 2006. The SWMP draft has not been approved by the City's attorney, nor by all of the affected City departments. ***The City verbally claims that they will have the Draft SWMP to RWQCB and Kennedy Jenks by September 1, 2006.*** If the City delays on that September 1, 2006 delivery, Kennedy Jenks will not have the time needed to review the Draft SWMP as originally planned in the contracted work plan.
4. Develop a Quality Assurance Program within the Storm Water Management Plan	1st permit year	**Not met.** The Water Board staff received the QAPP on August 4, 2006. It was due to be completed February 2006.
6. Inventory all industrial facilities	1st permit year	Completed, Appendix 10 of Annual Report. SWMP states 166 industrial facilities are identified (pg 7-3). ***Sites need to be verified. When will this occur?***
7. Coordinate with Salinas Valley Solid Waste Authority to coordinate hazardous waste disposal	1st permit year	On-going. SWMP section 8, pg. 8-4 "the City of Salinas will continue to coordinate with..." ***What methods of coordination have been undertaken and how often?***
8. Development Standards Plan – new/re-development	1st permit year	**Not met.** Kennedy Jenks retained by Central Coast Water Board and working with the City to review and rewrite Development Standards to incorporate Low Impact Development requirements. Kennedy Jenks' will provide a draft Development Standards to the City by Sept 21, 2006. The City will then seek approval by their City Council before adopting the Development Standards.

Table continued next page

9. Implement storage and maintenance facility BMPs	1st permit year	**Completed *but needs more detailed descriptions.*** The SWMP provides storage and maintenance facility BMPs. Salinas has prepared BMPs for municipal sites including storage facilities (Table 3.5 and Appendix A). Staff has received training to help them better identify sources of potential pollution and methods to prevent pollution. Staff is required to inspect their facilities as a daily routine. More in-depth inspections are documented on their NPDES Facility Inspection sheets at least quarterly. NPDES inspections of the Corporation Yard division storage areas receive managerial or supervisory second checks for compliance. The Annual Report falls short of the items described in the SWMP. SWMP has more details particularly involving parks maintenance, and states, "The City will initial a more comprehensive management approach to maintaining its sanitary and storm drain systems. (pg 3-5)", but provides no supporting evidence in Annual Report. The SWMP lists trash and chemical pesticides as the primary pollutants (page 3-3), however the Annual Report does not address these elements much if at all, and the SWMP's BMP plan is very limited. Page 3-14 SWMP discusses budget cutbacks resulting in reduces fertilizers and herbicides, and an Integrated Pest Management approach, however these "BMPs" are not described in the Annual Report, nor specifically required through the SWMP. The SWMP, pg. 3-14 states that trash BMPs consist of the City providing garbage cans. The Annual Report describes three cleanup events to remove unwanted trash (pg. 12 – 13). ***These BMPs appear to be minimal, particularly if these are the identified Pollutants of Concern.*** The Annual Report is vague on details such as the length of street swept or percentage of City drainage facilities that were cleaned out. These data were provided to Water Board staff at a later date, but ***the SWMP and Annual Report should include this level of detail at the outset.***

10. Develop and implement minimum BMPs for pesticide, fertilizer, herbicide.	1st permit year	"Completed" according to the SWMP pg. 3-14. ***The SWMP lists trash and chemical pesticides as the primary pollutants (page 3-3), however the SWMP's BMP plan is very limited.*** Page 3-14 SWMP discusses budget cutbacks resulting in reduces fertilizers and herbicides, and an Integrated Pest Management approach, ***We are concerned that budget constraints have driven the City's pesticide "management", which means that if budgets increased in the future, then pesticide use may increase without storm water considerations***. SWMP discusses a "Pesticide Hazard and Exposure Reduction Zone concept" but reviewer is unclear on what this is. ***"City staff will be trained on PHAER principles" (Pg 3-15) – how often will the training occur, and how many staff are trained?***
11. Construction brochure of BMPs	1st permit year	**Not finished.**
12. Develop SWPPPs for municipally-owned facilities	18 months from permit adoption	Completed for City Parks. **Not completed** for all other facilities (SWMP pg. 3-87)
13. Develop and implement minimum BMP's for municipal maintenance.	2nd permit year	Completed. ***Central Coast Water Board staff has concerns with some of the BMPs that are reported as being inadequate.***
15. Install signs prohibiting dumping	2nd permit year	On-going - ***How many are done and how many are still to do?***
16. Amend or adopt City development standards to match Devel. Stds. Plan	2 years (+, depending on public comment time)	In-process. Kennedy Jenks and City are working on revisions. Draft due for completion in August, 2006. City revision and adoption should occur Winter 2006-2007.
19. Inventory and prioritize commercial facilities for inspections	End of the 2nd permit year	"Completed" according to the City. However ***SWMP lists inventory as Appendix A-43, but this page doesn't exist in the SWMP. Prioritizing to occur Winter 2006.***

Table Continued Next Page

20. Write and disseminate commercial/industrial BMPs	2nd permit year	In-process. SWMP contains BMPs. ***Unclear if the BMPs have been disseminated to the businesses.***
21. Require minimum commercial/industrial BMPs	4th permit year	On target - ***What section of the SWMP discusses this? SWMP pg 7-27 does not give the percentage of industrial facilities being inspected.***
21.a Require minimum commercial/industrial BMPs be fully implemented	5th permit year	On target; ***City states this is in the Storm Water Ordinance, but Water Board has yet to see the language.***
B. On-going with definite time commitments		
22. Annual work plan submitted with the Annual Report	Year 1	**Incomplete.** ***Draft Work Plan*** submitted with Annual Report. ***Work plan is too general to determine what exactly the City is doing, or if they have met their goals at the end of the year. Annual Report is supposed to include an assessment of the effectiveness of the Storm Water Program.***
23. Storm water sampling	Year 1	In-process. August 2006 Pacific Eco Risk to conduct toxicity sampling and dry-weather sampling per the monitoring plan. Wet season sampling to begin during 2006 Fall rainy season.
24. Inspect all active construction sites once/month during wet season. Once every other month during dry season	Year 1	**"Met"** according to the City, but ***not discussed in the Annual Report***
25. Inspect high priority construction sites once per week during rainy season	Year 1	**"Met"** according to the City, but ***not discussed in the Annual Report***
26. Update commercial facilities inventory list	Year 1	Completed: ***Reviewer did not find Appendix 7-2 through 7-6 as discussed in SWMP page 7-3***
27. Inspect industrial facilities	Year 1	On-going and expanding as new sites are located that require coverage. Original list had 62 sites (Appendix 10 in Annual Report); current list has 166 sites, however new sites must be verified for accuracy in listing. ***When will all 166 sites be verified?***

26. Update commercial facilities inventory list	Year 1	"Completed." ***The SWMP lists the Inventory as being in Appendix 7-2 through 7-6, but these do not exist.***
27. Inspect industrial facilities	Year 1	On-going and expanding as new sites are located that may require Storm Water Permit coverage. Original list had 62 sites (Appendix 10 in Annual Report); current list has 166 sites, however new sites must be verified for accuracy in listing.
28. Inspect 20% of commercial facilities	Year 4	On-target; begin in 2007
29. Inspect Municipal facilities	Year 2	Completed in 2006. List of facilities included in Annual Report Appendix 10.
30. Drive-by inspect priority illicit discharge – Quarterly unless proven unnecessary	180 days	Completed and on-going. Bi-weekly inspections conducted. Annual report states staff are "routinely assigned to inspect known areas with any history or high risk of illicit discharge."
31. Dry-weather screening of 20% of major outfalls once per year		**Scheduled.** Will be conducted in August 2006. ***Add map or listing of outfall locations that were screened (or schedule of screening planned each year)***
32. Media impressions -3.5 impressions/resident/year	Year 2	Scheduled. Partnering with Solid Waste Utilities. Have committed $100,000 in July 2006. ***Will this meet the required number of media impressions?***
33. Classroom education - Offered to 75% of 3rd – 6th graders	Year 3	Working with school districts to create partnership
34. Business outreach - 2 times during permit term	Year 1	In-process. Presentation was given to City Chamber of Commerce. Environmental workshop planned to businesses in August 2006. ***When was the presentation made? How many or what percentage of business and what type of businesses are reached through this means?***
35. Annual training on planning, industrial and construction inspections, chemical application, maintenance		Completed and on-going. Listing of training and numbers of attendees are provided in the Annual Report, and an updated training list was provided to Central Coast Water Board staff in July 2006.

facilities.		
36. Update municipal facility inventory, maintenance procedures, and BMPs annually	180 days	Completed. ***Central Coast Water Board staff request more details on BMPs SWMP doesn't say what BMPs for high risk roads are. BMPs for 2 highest POC's (trash and chemical pesticides, pg 3-3) are extremely weak (pg.3-14).***
37. Public Awareness Survey		Scheduled Late Fall 2006. City to coordinate with BFI Solid Waste Company
38. Annual coordination meeting	3 months after 1st annual report (Jan. 2007)	Completed.
C. Potential Time Commitments (conditional requirements)		
39. Refer construction and industrial non-compliance to RWQCB Orally within five business days. Written notification within 10 business days	When required	"Met" - ***Where is this process described in the SWMP?***
40. Refer construction non-filer to RWQCB Within 10 business days	When required	No referrals this year - ***Where is this process described in the SWMP?***
41. Grab sample of dry weather flow	Incident dependent	Completed and on-going. ***How will the Water Board staff be apprised of incidents and follow-up actions?***
42. Respond to spills	Incident dependent	Completed and on-going.
43. Revise local ordinance re: illicit discharges	If needed	In-process.
44. Mark high visibility storm drains with "no dump"	By Permit year 2	On-going and expanded in Fall 2006
45. Report of Water Quality Exceedances	90 days from discovery	***Please describe where this requirement is discussed (what document).***

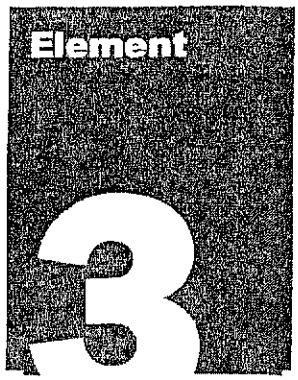
Table Continued Next Page

46. Revise SWMP to reflect RB-approved Report of Water Quality Exceedances changes to BMPs	30 days from RB approval of changes	***What section of the SWMP discusses this requirement?***

* This table is modified from Table 6 in the Permit. Some sections have been omitted, but the numeric line items have been preserved to match with the Permit's table. Because non-relevant items have been omitted, there are gaps in the item numbers.

** Gray shading are due dates that should have been met in the first permit term

Copy of Redlined Storm Water Management Plan
Elements 3 and 4
Emailed to City Staff on December 7, 2006



Municipal Maintenance

"And the dry years would come, and sometimes there would be only seven inches or eight inches of rain. The land dried up...Some families would sell out for nearly nothing and move away. And it never failed that during the dry years the people forgot about the rich years, and during the wet years they lost all memory of the dry years. It was always that way."

–John Steinbeck

3.1 Introduction

The City of Salinas is responsible for providing for the health, safety and welfare of its residents and business community, and for protecting its natural resources. Moreover, it is responsible for providing a platform that enables the community to achieve a high quality of life.

City departments have responsibilities that affect natural resource management. The City's Maintenance Services Department's (Department) primary role is to maintain municipal facilities. These include parks, buildings, streets, vehicles, and sewage and stormwater facilities. The Department maintains over 60 properties. It provides sewage conveyance and stormwater drainage maintenance services to the more than 150,000 people in an area that covers 12,000 acres.

This program element describes the City's municipal maintenance program to protect water quality through its maintenance activities. This element is comprised of measures designed to ensure municipal operations and municipal facilities are managed in such a way as to minimize the pollutants generated and potential for pollutants to enter the storm drain system. These measures consider all municipal facilities and activities that could potentially be sources of pollutants to the storm drain system. This element is prepared in compliance with Section V. of Attachment 4 to the City's National Pollutant Discharge Elimination System Permit (Municipal Permit). See Table 3.1.

3.2 Goals / Measurable Goals

Three overarching goals guide activities identified in this element:

1. Protect local water resources by reducing pollutants from municipal activities and operations to the maximum extent practicable (MEP).

2. Lead the community by example: showcase best management practices that could also be implemented in the community at-large.
3. Develop and implement management activities that use municipal resources effectively and efficiently.

In addition, the City has established the following 24 Measurable Goals. Each goal and identified performance standards, once accomplished, constitute compliance with Permit requirements. The Annual Report should cover each of these BMPs. Easiest if these have unique BMP identification names/numbers. A table with the BMP name/number, description, measurable goal, and target date of implementation would be very helpful for City staff and Regional Board staff to make sure all BMPs are completed and reported on.

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a. One hundred percent of existing municipal maintenance staff trained by Year 1, then all new employees trained within one year after hire. Annual training will take place each year after Year 1.
b. City will perform pre- and post-testing to measure training effectiveness. Training will include how each employees' respective duties relate to the larger City water quality management goals, as well as, specific BMPs for their respective duties. Success will be measured by the number of employees attending (80% of invitees);the number of employees who receive a passing score of 75-percent or above.
c. The City's Maintenance Services Department will prepare an annual employee training program that will be completed by September 15 of each year for the following reporting year. Training will include development of checklists for staff who will serve inspection functions regarding municipal facilities, appropriateness of BMPs and SWPPPs as applicable. Checklist creation and BMP evaluation are not forms of training.
d. Supervisors of respective division units will record and summarize disposal of hazardous materials such as pesticides and used motor oils in the City's Annual Report. City to re-evaluate procedures at completion of annual review and recommend changes as deemed necessary.
e. Implement management practices to minimize irrigation runoff from 80% of irrigated municipal sites by end of Year 3.
f. One hundred percent (100%) of chemical spraying applied when weather is dry and air is calm (no rain or winds of over 10-miles per hour) is predicted.
g. Streets are scheduled to be swept >95-percent of the time. This is confusing wording. Could mean sweep 95% of a 24 hour day, or some schedule will be met 95% of the time or ??? Also, this wording is not the same as the hard copy mailed in on Nov. 3. What other changes are in this version? These Draft versions need dates to keep them straight. You can insert dates into the header or footer.

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h. One hundred percent (100%) of vehicle maintenance will be performed under covered areas or indoors whenever possible.
i. Oil separators will be added and paved areas of City Corporation Yard replaced by Year 2 of Permit.
j. One hundred percent (100%) of storm drain inlets in Corporation Yard will be stenciled by Year 1 and any new inlets that are created thereafter will be stenciled at the time of installation. Stenciling will be redone in Year 5.

k. All inlets to the MS4 and municipal outfalls to receiving waters will be inventoried, mapped and submitted to the Regional Board by February 2007. Will outfalls and inlets be stenciled (separate BMP)?

l. Facilities, parks and wastewater division managers will oversee annual site inspections for each of their respective facilities. One hundred percent (100%) of all deficiencies defined by what?will be corrected or included in Maintenance Services Department's annual fiscal year budget request and/or its capital improvement program budget request.

m. This wording falls into the category of "a plan to make a plan". Need to flesh out timing, details as much as possible. Wastewater Division will develop and implement a comprehensive management approach to maintaining the City's sanitary and storm drain systems. Components for this new approach include: 1.) mapping and inventorying inlets and outfalls, 2.) itemizing regular maintenance activities by facility, 3.) documenting required maintenance and work performed, 4.) recommending additional specialized work, as needed, 5.) learning and documenting appropriate BMPs, and 6.) preparing annual maintenance schedules by either activity or facility. Park's Maintenance, and the Building's Maintenance Divisions will also each prepare similar site management plans for their respective facilities. Records will be kept on-file and summarized in writing annually to the Director by September 15 of each year. What is being done now? What is the starting point?

n. Wastewater division will inspect and clean storm drain "hot spots" based upon above identified maintenance schedules. No current schedule in place?

o. Catch basins, inlets, structural controls and municipal outlets are to be inspected and cleaned based upon identified maintenance schedules, but at minimum of once each year.

p. Maintenance Services Department to inventory and establish maintenance requirements and schedules for all municipally owned parking lots, facilities and roads. Completed and implemented by Year 1 that was this last year. This information needs to be in the Annual Report.

q. Maintenance staff will implement a program to regularly (daily) inspect and empty trash enclosures at municipal sites to prevent trash from being discharged into the community or receiving waters. One hundred percent (100%) of trash enclosures will be inspected as needed or as noted in contract with operator. Which frequency? "as needed" is weak wording. "100%" and "daily" is strong (solid) wording.

r. To avoid pollutants from residual materials within recyclable pesticide containers or the containers themselves becoming pollutants, all (100%) city-wide or just municipally-owned? recyclable containers will be disposed of/recycled at the Monterey County Agricultural Commissioner's monthly disposal events.

s. As trash reduction is a key component of this Plan, streets within business districts will be scheduled for weekly sweeping; residential streets will be scheduled for sweeping every other week. Section inserted since Nov. 3 hard copy was submitted. These Draft versions need dates to keep them straight. You can insert dates into the header or footer.

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Deleted: swept weekly, or 52 times per year

Deleted: swept every other week, or 26 times per year

t. All (100%) staff members that apply chemicals will be trained annually. All application staff will receive training on the topic of storm water protection at this annual event. The Annual Pesticide Applicator's training event will include a post-training test to determine the effectiveness of the training provided. Scores of 75% correct will be viewed as successful completion.

u. To ensure that only highly-trained staff purchase, schedule use and apply pesticides, all (100%) supervisory staff responsible for pesticide application oversight will be certified as Qualified Pest Control Applicators or Pest Control Advisors. Supervisory staff will participate in, at minimum, three meetings per year to review the application program, monitor results, and make recommendations for improvement. Integration of IPM approaches will be part of each agenda.

v. Foliar pesticide application to existing street trees will be reduced 25-percent during the term of this permit from previous level. (Make sure annual report quantifies what the "previous level" was. Should be in this year's Annual Report) Additional trees added from development projects will be taken into consideration for this calculation.

w. Tree species and varieties for development projects will exclude varieties that are known to have pesticide problems.

x. Visual inspection of streets will be performed monthly as part of the City Street Sweeping Program.

Table 3.1 Permit Requirements – Municipal Maintenance

Section	Requirement (Summary)	Municipal Permit Section
3.3	Develop a municipal maintenance program	V
3.4	Prepare an inventory and map of all inlets and outfalls to MS4	V a
3.5	Ensure storm drain system is properly operated and maintained.	V b
3.5	Inventory and establish maintenance requirements/schedules for all municipal facilities—roads, buildings, parking lots, etc.	V c
3.5	Implement BMPs within 1 year	V c i
3.5	Sweep all roads quarterly	V c ii
3.5	Designate and ensure BMP implementation for municipal maintenance activities. Include in a manual	V d
3.5	Implement BMPs to reduce the effects of pesticides/herbicides/fertilizers.	V e
3.5	BMPs shall include 5 components, including education, IPM, etc. By end of 5th year, eliminate all use of pesticides on SWRCB 303(d) list for the lower Salinas River. Annually train employees using non-registered pesticides, herbicides, or fertilizers.	V e
3.5 B	Develop and implement SWPPPs within 18 months of Permit	V f
3.5 B	Annually inspect all municipal facilities. Record results; begin by 2/07	V g

3.5 A	Annually review maintenance procedures and management practices. Make revisions < 90 days and report in annual report.	V h
3.5	Provide annual training	V I

3.3 Strategy

The fundamental strategy embedded in this and all elements of this Plan is that the City will identify and seek partners within the watershed to achieve stated goals. Activities will be based upon a collaborative approach with stakeholders within the watershed and cooperative work within departments and the private sector to achieve mutual watershed management/water quality protection goals. Additionally for this and all of this Plan's elements, the City will work to implement practices and programs for their proven benefits and their success in reducing pollutants of concern.

As municipal water sampling during the first permit term evidenced a lack of identifiable trends[1] and did not reveal specific municipal practices that were a source of pollution, activities contained within this Plan are based upon industry standards and local knowledge of conditions. For this permit term, this element primarily focuses on abating trash and eliminating adverse impacts from the use of chemical pesticides. If littering and widespread application of pesticides and fertilizers can be substantially reduced, then pollutants entering the water system can also be reduced. A total of nineteen BMPs are proposed for Municipal Maintenance operations. These are listed in Tables 3.5 and 3.6. A description of each BMP, the approach intended, suggested protocols, associated training, and inspection are individually summarized by BMP in Appendix B. I don't have Append. B in the Nov. 3 submittal packet. Programs identified within this Element also include BMPs and management activities within other elements. For example, reduction of trash is a featured program that involves several different activities. Public education and outreach activities associated with the City's trash reduction efforts are discussed in Element 6 (Public Education and Outreach) and Element 7 (Commercial and Industrial Facilities).

Deleted: In addition, because this Plan has been organized to meet Regional Water Quality Control Board format requirements, it necessarily segmented topics by BMPs that might have been integrated into one discussion.

The nineteen I count 24. BMPS contained within this element also address the following pollutants of concern: sediment, metals, nutrients, vehicle waste products, organic carbon, oil and grease, coliform, paints, concrete, fuels, automotive fluids, and other potential pollutants from municipal non-stormwater discharges (Table 3-1 a). The objectives of this element include:

- Conducting maintenance and operations of City of Salinas owned properties in a manner that protects water quality in the City of Salinas region;
- Inspecting City owned and leased properties annually for compliance with this Plan and the City's Municipal Permit; Is this an objective, or a BMP?
- Moving towards an Integrated Pest Management (IPM) approach to landscape maintenance and control pollution from pesticides, herbicides and fertilizers;

[1] Camp, Dresser, McKee, Technical Memo, *Evaluation of the Annual Environmental Monitoring Program Results, June 2004*

- Educating Maintenance Services Department staff and contractors regarding Municipal Permit requirements and City goals and objectives;
- Creating a phased schedule to implement this element along with an associated budget through the five-year term of the Municipal Permit; and
- Documenting water quality protection activities conducted by Maintenance Services Department staff as a means to better understand water quality inputs and outputs.

In addition, based upon the recent monitoring program results where upstream sources were suggested as possible dominant influences on local water quality[2], the City will pursue watershed solutions with upstream stakeholders.

3.4 Source Identification

The City has developed a watershed-based inventory of land use activities within the Reclamation Ditch watershed. This includes land uses within and outside of municipal corporate boundaries. For areas outside of the municipal jurisdiction, information was obtained form Monterey County. For this permit term, this information is contained within City and County land use maps and aerial photographs. In the long term, a shared geographical information system (GIS) database is desired. In addition to the data contained on maps and photographs, much of the source information contained within this section was obtained from the men and women who routinely maintain City facilities. City staff have first-hand knowledge of operational and management issues. The list of areas that were researched, analyzed and inventoried include:

- Roads, streets and parking facilities;
- Flood management projects and flood control devices;
- Parks;
- Areas and activities tributary to a Clean Water Act (CWA) section 303(d)-impaired water bodies, where an area or activity generates pollutants that are included within the listing;
- Municipal Golf Course; and
- Municipal waste facilities, including:
    - Sewage collection systems
    - Municipal separate storm systems
    - Corporate yards

City facilities are organized into three main groups: 1) parks, 2) streets and highways, and 3) municipal sites, including sanitary sewage collection and municipal separate storm water systems.

In addition to a review of first term monitoring results and literature review, City staff performed an urban water runoff reconnaissance of each site. These site assessments included an inventory of existing operations and management practices, a basic assessment of localized pollutants of concerns, and a review of drainage patterns. This last step included a visual assessment of drainage offsite and downstream environments. During visits, municipal employees noted the site's proximity to natural waterways and sensitive ecological habitats. These surveys and site assessments were completed in 2005 and have been included as part of the new Municipal Management

[2] Ibid.

Manuals and adjusted maintenance program. Site surveys to include an assessment of the potential pollutants of concern by municipal activity as shown in Table 3-1a.

Table 3.1a: Potential Pollutants of Concern by Municipal Activity

Potential pollutants likely associated with specific *municipal facilities*

Municipality Facility Activity	Potential Pollutants								
	Sediment	Nutrients	Trash	Metals	Bacteria	Oil & Grease	Organics	Pesticides	Oxygen Demanding Substances
Building and Grounds Maintenance and Repair	X	X	X	X	X	X	X	X	X
Parking/Storage Area Maintenance	X	X	X	X	X	X	X		X
Waste Handling and Disposal	X	X	X	X	X	X	X	X	X
Vehicle and Equipment Fueling			X	X		X	X		
Vehicle and Equipment Maintenance and Repair				X		X	X		
Vehicle and Equipment Washing and Steam Cleaning	X	X	X	X		X	X		
Outdoor Loading and Unloading of Materials	X	X	X	X		X	X	X	X
Outdoor Container Storage of Liquids		X		X		X	X	X	X
Outdoor Storage of Raw Materials	X	X	X			X	X	X	X
Outdoor Process Equipment	X		X	X		X	X		
Overwater Activities			X	X	X	X	X	X	X
Landscape Maintenance	X	X	X		X			X	X

Source: California Stormwater BMP Handbook (http://www.cabmphandbooks.com) (slightly modified)

Potential pollutants likely associated with *municipal activities*

Municipal Program	Activities	Potential Pollutants								
		Sediment	Nutrients	Trash	Metals	Bacteria	Oil & Grease	Organics	Pesticides	Oxygen Demanding Substances
Roads, Streets, and Highways Operation and Maintenance	Sweeping and Cleaning	X		X	X		X			X
	Street Repair, Maintenance, and Striping/Painting	X		X	X		X	X		
	Bridge and Structure Maintenance	X		X	X		X	X		
Plaza, Sidewalk, and Parking Lot Maintenance and Cleaning	Surface Cleaning	X	X			X	X			X
	Graffiti Cleaning	X	X		X			X		
	Sidewalk Repair	X		X						
	Controlling Litter	X		X		X	X			X
Fountains, Pools, Lakes, and Lagoons Maintenance	Fountain and Pool Draining		X					X		
	Lake and Lagoon Maintenance	X	X	X		X			X	X
Landscape Maintenance	Mowing/Trimming/Planting	X	X	X		X			X	X
	Fertilizer & Pesticide Management	X	X						X	
	Managing Landscape Wastes			X					X	X
	Erosion Control	X	X							
Drainage System Operation and Maintenance	Inspection and Cleaning of Stormwater Conveyance Structures	X	X	X		X		X		X
	Controlling Illicit Connections and Discharges	X	X	X	X	X	X	X	X	X
	Controlling Illegal Dumping	X	X	X	X	X	X	X	X	X
	Maintenance of Inlet and Outlet Structures	X		X	X		X			X
Waste Handling and Disposal	Solid Waste Collection		X	X	X	X	X	X		X
	Waste Reduction and Recycling			X	X					X
	Household Hazardous Waste Collection			X	X		X	X	X	
	Controlling Litter			X	X	X		X		X
	Controlling Illegal Dumping	X		X		X	X		X	X
Water and Sewer Utility Operation and Maintenance	Water Line Maintenance	X				X	X			
	Sanitary Sewer Maintenance	X				X	X			X
	Spill/Leak/Overflow Control, Response, and Containment	X	X			X		X		X

Source: California Stormwater BMP Handbook (http://www.cabmphandbooks.com)

3.5 Activities How are these activities different from the measurable goals pg. 3-2? Throughout the following sections, I've highlighted the BMPs that are described. These should be clearly identified as a BMP. There should be goals associated with BMPs, as well as a method to track and report if the BMP was implemented.

A. Education

Education is the foundation of each of the City's programmatic elements. Educational efforts begin with linking maintenance activities with watershed management and water quality goals contained with the City's Permit.

The focus of education during this permit term will be initiation of an annual training and education program geared to municipal maintenance staff. Experts on water quality and BMPs from the National Marine Sanctuary, Watershed Institute and other organizations will be invited to speak how often, what is the measurable goal? to Maintenance staff members about local and regional water quality issues and management practices. Maintenance Services Department staff members will present a summary of watershed issues and train staff on BMPs. Annual training and implementation of BMPs will be incorporated into each maintenance division's annual work program and budgetary request. Division managers will work with crew supervisors and others to prepare and conduct annual training see comments, pagragraph 1, page 3 of our Oct. 17 letter. Suggest cross referencing pg. 3-2 of this SWMP. Accomplishments will be summarized in the Annual Reports. Training sessions will be revised, as needed, each year based upon local issues, past program success and staff needs. Changes to the training will be documented in the City's Annual Proposed Work Programs.

Deleted: Training is further discussed in Section 3.2 Goals / Measurable Goals.

Training will be tailored each succeeding year (after Year 1 of Permit term) to build upon prior year's knowledge. Pre- and post-test results will be used to determine information that needs to be reinforced.

Deleted: As discussed in Section 3.2, some staff will be provided more than one training session per year.

B. Facility Maintenance

Facility maintenance is an integral part of the City's urban runoff and watershed protection efforts. Poorly maintained facilities add pollutants to downstream water bodies. Sanitary sewer overflows are a particular concern. Sanitary sewer overflows can occur when sewer collection lines designed to only conduct sanitary sewage become conduits for stormwater. These sewer lines either back up and discharge from manholes or other outlets or backup into homes, or through specially designed diversion structures intended to limit the amount of flow. Excessive intrusions into the sewer system result in sanitary sewer overflows.

Inflows and infiltration into the sanitary sewer system are the two principle sources of overflows. Inflows can come from design defects, such as locating manholes or other features below grade where they serve as conduits for stormwater. Gaps or breaks in the collection system are another potential source. These breaks can admit stream flow from residences. Infiltration can come from the portion of the sewer line on private property (laterals) and collector pipes. Under the Clean Water Act, sanitary sewer overflows are unlawful discharges for which a permit cannot be obtained.

In the City, sanitary sewer systems are a responsibility of the City, property owners and the Monterey Regional Water Pollution Control Agency (MRWPCA). The City is responsible for the sanitary sewer lines, and the MRWPCA is responsible for wastewater treatment. Homeowners are responsible for maintaining their house laterals. City wastewater crews maintain the City's sanitary sewer main lines, as well as the City's storm drain system. Homeowners seldom maintained their lateral lines and as a consequence these lines deteriorate. Typically, they are not replaced until a serious failure. What is being done about this? Need measurable goal to address this identified problem.

Deleted:

The City of Salinas has not had a history of significant sanitary sewer overflows. Preventative maintenance may be one reason for the safe record. Since 1998, Salinas has spent over $31 million in improving its sewer system. The City's sanitary sewer and storm drain maintenance program has proven effective in limiting overflows. Program success is, in part, also due to a well-trained responsive wastewater maintenance team. Beginning in 2005, the City has expanded its efforts and initiated a more comprehensive management approach to maintaining its sanitary and storm drain systems.

This section looks like Annual Report-material. Maintenance staff has developed a comprehensive inventory keyed to a map to manage its stormwater sanitary sewer system (MS4). Ad hoc mapping has been part of past municipal practices, but these have not been integrated into a management practice. The new method will help systematize maintenance. The City has inventoried and mapped all inlets to and outfalls from the system that discharge into creeks and other receiving water bodies. Inventories of these facilities include: 1) types of facilities, 2) maintenance requirements, and 3) maintenance schedules. Location of facilities is keyed to a map. Together, this information will serve as a management tool to ensure maintenance is performed on a time-schedule basis. As part of this effort, City investigated use of geo-spatial databases. Geographical Information Systems (GIS) is an ideal technology to meet this need. Use of GIS's would enhance maintenance operations by providing more accurate information at the ready and would enable staff members to track conditions visually and systematically. It would also provide a means to share data between departments. GIS was the desired approach, but its high cost relative to municipal budgets prevented the City from purchasing it during the initial period of the City's permit.[3] Therefore, while purchase of a GIS system has been deferred, mapping and inventory work has been completed. Further, the City has developed Stormwater Pollution Prevention Plans (SWPPPs) for all of its facilities. SWPPPs are contained in a management manual. To ensure compliance with SWPPPs, City staff members will conduct annual inspection of facilities beginning by the end of 2006, results will be noted and a follow-up record kept.

The City has also refined this word is not explained by the following sentences. How has the mapping been refined? mapping of sanitary and stormwater systems. The collection system of pipes previously mapped as part of the City's *2004 Storm Water Master Plan* have been integrated into maintenance department activities. Mapped work is now part of maintenance activities? What is this saying? Work on this effort will be completed in 2007. Is this paragraph trying to explain a BMP? If so, it should be moved to the measurable goal section.

[3] Costs started at $11,000 to $22,000 for a sub-meter accuracy system to as high as $50,000 for survey-grade equipment.

C. Street Maintenance

The City maintains approximately 270 centerline miles of streets. This includes a total of 24 major arterial miles, 23.5 miles of minor arterials and 222.5 miles of residential streets. Several roads and streets within municipal boundaries are state roads and are under the jurisdiction of the California State Department of Transportation (Caltrans). State roads include: State Route 68A, South Main Street between John Street and Blanco Road, State Route 68B--John Street from South Main Street to Wood Street, State Route 183--Market Street between Monterey Street and Davis Road, and N. Main Street from Market Street to U.S. 101.

Whether owned by the City or Caltrans, activities occurring on roads and streets affect water quality. This includes car and truck vehicle use, minor and major street repairs, repaving activities and debris carried from adjacent properties. Constituents of concern include heavy metals from brake linings; oil and grease from leaking vehicles; herbicides and pesticides from vegetation and animal control; paints and solvents from pavement painting and spills; battery acid; anti-freeze from leaking radiators and other spills from vehicles. This could include petroleum products as well as litter and vegetation from construction and earth-moving activities. Since roads are impervious, pollutants discharged onto them have the potential to collect and concentrate until runoff from a rain event conveys contaminants directly into nearby creeks or other receiving waters. Roads within 300 feet of an open waterway are shown on Figure 3-1; and listed on Table 3.1.b.

To protect downstream waterways, the City employs the following BMPs. Reference where in the document these are more completely discussed (measurable goals section?) It would help if the BMPs had ID numbers to cross reference different sections of the SWMP that discuss the same BMP, or consolidate the information to one location.
:

1) visual inspection,
2) regular street sweeping,
3) annual storm drain inspection and cleaning,
4) maintenance during dry weather, and
5) a trained spill clean-up response team.

Throughout the year, Street Division personnel perform a visual inspection of roads, streets and highways to assess roadway conditions. In addition, street sweeping crews note roadway conditions and report potential issues to street division personnel. The City also maintains a hotline for residents to call in concerns. The Street Division Manager records this information in a database. This database is used to develop work programs and modify maintenance schedules. Roadway maintenance is performed consistent with BMPS SC-70 and NS-3 (Appendix B).

In addition to the semi-independent work that the Streets Division performs on street maintenance, all Maintenance Services Department division managers (facilities/fleet, parks, wastewater, and streets) will meet monthly to review potential issues that might affect more than one division and establish management plans. This includes

development of training programs. Above 2 paragraph highlighted sections are BMPs. Are these not included in the measurable goals section? Would they be included on a summary table, along with timelines?

Roadways that carry high volume traffic, heavy truck traffic or drain to sensitive areas, such as 303(d) listed waterways are a concern. As shown in Figure 3-1, many City roadways and Caltrans owned streets are proximate to open drains. These roadways have also been identified as a high priority. Roadways within 200 feet of a 303(d) listed waterway or sensitive area are listed in Table 3.1b that follows. A comprehensive list of all roads within the City is contained within a separate stormwater inventory document.

Figure 3-1 Streets and Freeways Within 300 Feet of Open Drainage

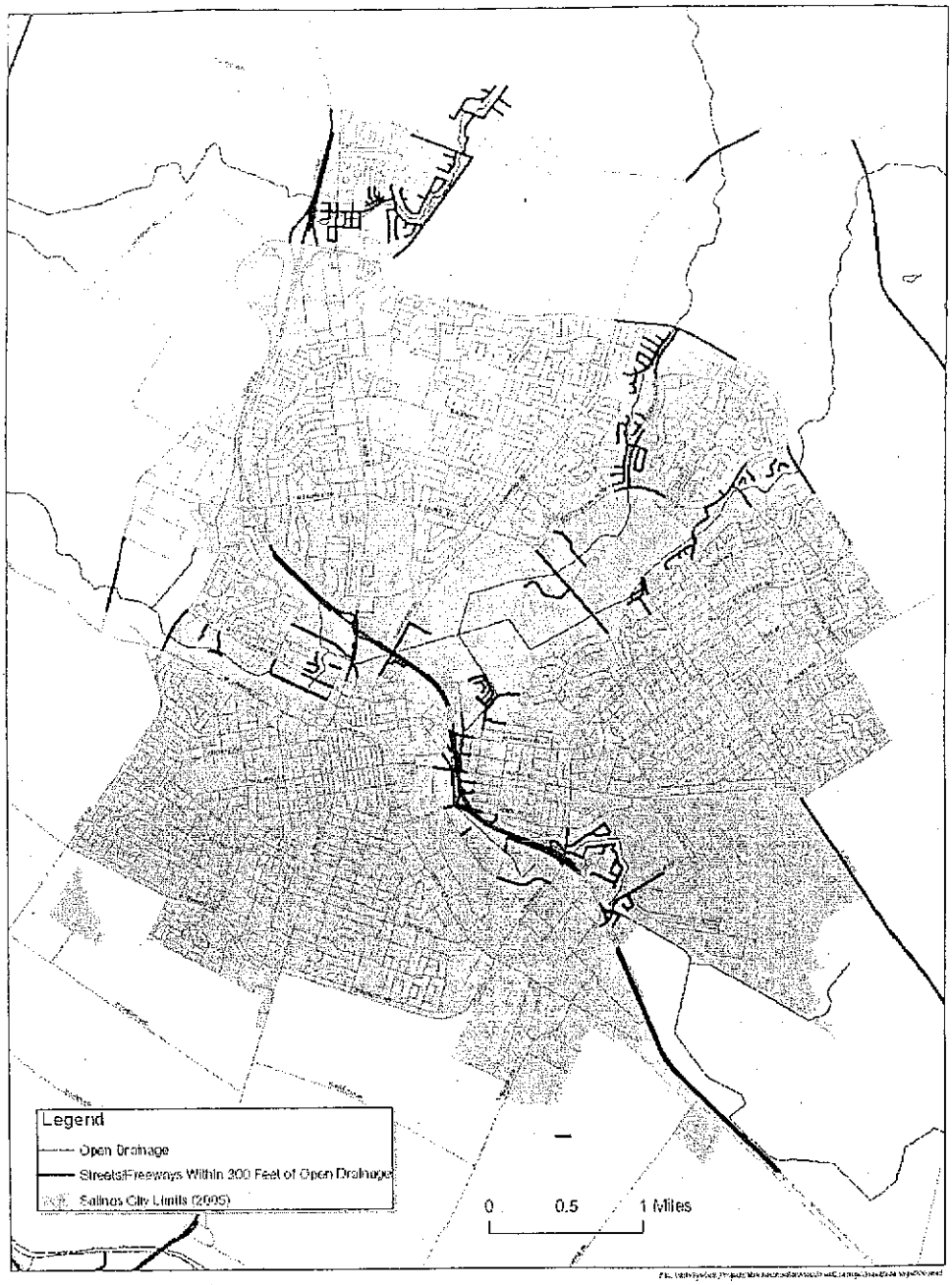
Legend
Open Drainage
Streets&Freeways Within 300 Feet of Open Drainage
Salinas City Limits (2005)
0
0.5
1 Miles

Table 3.1b Streets Within 300 Feet of Open Drainage

AIRPORT BLVD

ALISAL RD
ALP CIR
APACHE ST
ARMSTRONG RD
ASCONA WAY
BARBARA PL
BELLINZONA AVE
BEVERLY DR
BORONDA RD
BRIDGE ST
BRUTUS ST
CAPE COD WAY
CAROL DR
CASENTINI ST
CASTLETON ST
CASTRO ST
CLEVELAND AVE
CONSTITUTION BLVD
COOPER RD
CORNWALL ST
CORNWALL ST
COVENTRY ST
CRAZY HORSE RD
CREEKBRIDGE CIR
CREEKSIDE TER
DANBURY ST
DE LA TORRE
DENNER RD
E ALISAL ST
E BOLIVAR ST
E BORONDA RD
E LAMAR ST
E LAUREL DR
E MARKET ST
EBANO PL
EISENHOWER CIR
ELVEE DR
ENGLAND AVE
ESPINOZA RD
FAIRVIEW AVE
FIELDGATE DR
FLORENCE PL
FOOTHILL DR
FREEDOM PKY
FRESA PL
GARNER AVE
GREENBRIAR WAY
GRIFFIN ST
HARRYETTE DR
HARTFORD ST
HARTNELL RD
HEBERT RD
HIDDEN CREEK CIR
HIGHWAY 183
HILLTOWN DR
HOLLY ST
HOOVER ST
HYANNIS CIR
INDEPENDENCE BLVD
INGLEWOOD ST
JACKSON ST
JEAN AVE
JOHN ST
KERN ST
LAS CASITAS DR
LENNY ST
LEXINGTON DR
LITTLE RIVER DR
LOHMAN ST
LONDONDERRY WAY
LOUISE CT
MASSA ST
MASSACHUSETTS CIR
MAYFAIR DR
MCFADDEN RD
MERCED ST
MILL WAY
MOFFETT ST
N DAVIS RD
N FREEWAY ON RAMP
N HIGHWAY 68
N HIGHWAY OFF RAMP
N MADEIRA AVE
N MADEIRA AVE
N MAIN ST
N MONTEREY SALINAS
HIGHWAY 68
N U.S. HIGHWAY 101
NATIVIDAD RD
NEW HAMPSHIRE CT
NEWPORT CT
NORTHRIDGE DR
OLD STAGE RD
PAUL AVE
PEACEFUL COVE WAY
PEREZ ST
PORTOLA DR
PORTSMOUTH WAY
PRESTON ST
PROVINCETOWN DR
QUAIL RUN CIR
RANCH VIEW LN
RANCHERO DR
RESERVATION RD
RHODE ISLAND CIR
RHODE ISLAND ST
RICO ST
RIVERTON WAY
RODGERS RD
ROGGE RD
ROOSEVELT ST
ROUNDTREE DR
S DAVIS RD
S FREEWAY OFF RAMP
S MONTEREY SALINAS
HIGHWAY 68
S SANBORN RD
S U.S. HIGHWAY 101
SAN BENITO ST
SAN JON RD
SAN JUAN GRADE RD
SANTA RITA ST
SEMINOLE DR
SHERWOOD DR
SOTO PL
SOUZA WAY
STARLIGHT LN
STONY BROOK DR
SUCRE CT
SUNVIEW DR
SWANER AVE
TAFT CIR
TERRACE ST
TICINO CIR
VAN BUREN AVE
VERMONT CIR
VICTOR ST
VICTOR WAY
W BOLIVAR ST
W LAKE ST
W LAMAR ST
W ROSSI ST
WENTWORTH CIR
WORK CIR
WORK ST
ZABALA RD

Table 3.2
Roadways within 200 Feet of a 303(d) listed waterway

Street Name (by water body)	Daily Traffic Volume (Trips per day)	Orientation (To Creek)
GABILAN CREEK		
LAUREL DR	24,662	Perpendicular
INDEPENDENCE DR	9,721	Parallel
BORONDA RD	18,080	Perpendicular
CONSTITUION	22,101	Perpendicular
NATIVIDAD CREEK		
RIDER AVE	7522	Parallel
FREEDOM PARKWAY	9,012	Perpendicular
BORONDA RD	18,080	Perpendicular
REC DITCH		
W. MARKET	24,984	Parallel
SHERWOOD DR	24,977	Perpendicular
N. MAIN	33,346	Perpendicular
ROSSI ST	23,881	PAR/PER
SANTA RITA CREEK		
RUSSEL RD	8,492	Perpendicular
SAN JUAN GD	10,072	Parallel
N. MAIN	7,547	Perpendicular
BORONDA	45,096	Parallel

The following roadways (Table 3.3) have also been designated as a possible risk to waterways due to their location in the City's industrial section and high truck traffic volumes.

Table 3.3
Streets Carrying High Truck Traffic

Street Name	Daily Traffic Volume
Abbott Street (Between John St. and City Limit)	27,129
Sanborn Road (Between John Street and Abbott Street)	28,850
John Street (Between Work Street and Sanborn Road)	26,755
Work Street (Between John and Sanborn Road)	11,427
Airport Blvd. (Between Hansen Road and Del La Torre	19,534

While all roads have been designated as a high priority, roads that carry heavy truck traffic, or roads that drain into open waterways or sensitive areas as shown in Tables 3.1 to 3.3 above will receive the City's focus specifically, what does this mean? This is another BMP that should have a measurable goal (MG) associated with it over the 5-year permit term.

In addition to roads, other paved areas also contribute to downstream water contaminates. The 20 public parking facilities (some as adjunct to other facilities) located throughout the City pose a concern if not managed adequately. Potential pollutants of concern include: heavy metals, petroleum products, battery acid and anti-freeze, and herbicides and/or pesticides. To reduce these potential impacts to the MEP, the City employs the following BMPs at its parking lots: (1) seasonal visual inspections, (2) weekly sweeping, (3) annual storm drain cleaning, and (4) routine maintenance during dry weather. Additional steps are performed based upon need, such as spill clean-ups. When performing repairs to parking lots, the City employs BMP SC-43. Table 3.4 lists City owned and maintained parking facilities. Highlighted sections are BMPs. Are these not included in the measurable goals section? Would they be included on a summary table, along with timelines?

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Table 3.4
Municipal Parking Lots

LOT NO	LOT SIZE (Sq. Ft.)	LOCATION
1	18,760	219 Salinas St
2	26,520	345 Salinas St
3	38,240	222 Monterey St
5	54,000	300 Monterey St
6	40,470	101 W. Alisal St
8	26,892	204 Salinas St
10	6,574	128 Salinas St
11	5,400	106 Salinas St
12	26,532	112 Lincoln Ave
13	16,900	111 Salinas St
14	28,210	138 Monterey St
15	3,162	321 Church St
16	6,630	30 Lincoln Ave
17	12,411	101 W. Alisal St
Salinas St. Garage	104,145	320 Salinas St
Monterey St. Garage	143,884	20 E Monterey St 1/
Airport	27,405	30 Mortenson Ave
Steinbeck Library	14,325	350 Lincoln Ave
C. Chavez Library	25,612	615 Williams Rd
Gabilan Library	7,800	1400 N. Main St
City Corporation Yard	115,722	426 Work St 1/
City Animal Shelter	6,708	144 Hitchcock Rd
Train Station	53,417	26 Station Pl

1/ Parking garages with an oil grease separator built into the storm drain system.

D. Park Maintenance

The City of Salinas has 47 sites designated as park facilities. This element includes an inventory of park facilities and the management practices employed at each site (Table 3.5). A full description of each individual site and the BMPs employed are these cross-ref'd in the MG section? are summarized in Appendix F. All parks share certain characteristics that generate or have the potential to generate pollutants that affect environmentally sensitive bodies of water. Rainfall runoff, irrigation surface drainage, or debris and sediment flow from activities at City park sites discharge into storm water systems that flow into one of five waterways:

1. Alisal Creek (becomes Reclamation Ditch 1665)
2. Gabilan Creek
3. Natividad Creek
4. Salinas Reclamation Ditch
5. Santa Rita Creek (also known as Little Bear Creek)

These five waterways flow on through several sloughs including the Tembladero, Alisal, and Espinosa, before they enter the Monterey Bay at the Salinas Lagoon, Moss Landing Harbor, and Elkhorn Slough.

Potential pollutants to these watersheds include trash and pesticides and fertilizers. Trash including garbage, litter, plastics and trash from general park misuse, offsite activities, and picnics and barbeques is also a potential source of pollutants. Pesticides are used to control landscape pests, including gophers, ground squirrels, weeds, and insects and prevent risks to public health and safety associated with such pests. Fertilizers are used to ensure the health and viability of turf and landscape materials, many of which provide buffers and filters to reduce runoff pollutants and to control erosion. Budget shortfalls over the past several years have resulted in substantial reductions to Parks Division budgets. These cutbacks have diminished the number of staff and the availability of supplies needed to maintain parks. One such affect is a reduction in chemical usage. Less use of fertilizers and herbicides has reduced the potential for downstream pollution. What are the deliberate BMPs to be employed regardless of budget shortfalls? See Oct 17 letter, pg. 2, last paragraph.

Park maintenance staff members remove litter and empty garbage cans daily, including weekends and holidays. The City provides garbage cans at all picnic and barbeque sites, playgrounds, parking areas, and various other accessible areas to prevent littering. However, park litter remains a prime concern. Peak use days can generate vast quantities of litter not always deposited into trash receptacles.

Deleted: While budget reductions have affected operations, they are not the overriding factor. Management decisions govern operations. Management of City parks and grounds has moved towards elimination of the use of pesticides through Integrated Pest Management practices (IPM). IPM is now the preferred City approach to landscape management. More about the City's pesticide management approach is discussed in Section I below.

I. Pesticide Management:

Integrated Pest Management (IPM) is an approach to pest control that seeks to limit use of harmful chemicals. IPM has been proven as a means to protect water resource ecosystems through integrated practices. Reduced use of potentially harmful chemicals is now common practice at municipal parks, as the City has moved away from extensive use of chemicals to manage pests. In fact, IPM is now the City's approach to landscape management; the City has moved toward elimination of the use of pesticides through IPM practices. Use of pre-emergent herbicides to control weeds is now replaced by use of more environmentally friendly practices such as increased hand-weeding; use of rodenticides have been replaced by the use of traps whenever possible. Pesticides are applied when there are no viable alternatives see Oct 17 letter, pg. 2, last Paragraph. What are the specifics, the goals?. When chemicals are applied,

the City follows labels and manufacturer safety data sheet (MSDS) requirements to ensure safety. In addition, pesticides are kept from entering and negatively impacting stormwater drainage systems.

The City of Salinas will not discharge pollutants from the MS4 in a manner causing, or threatening to cause, a condtion of pollution, contamination, or nuisance (as defined in § 13050 of the California Water Code) in waters of the State of California. Assume this is the general goal. How will this be achieved and measured? All pesticide applications are made in accordance with federal, state and local laws Assume this is the BMP? . This includes the application, storage and disposal of pesticide materials. Salinas' pesticide applications are monitored and audited by the Monterey County Agricultural Commissioner's Office.

Staff members who receive annual pesticide training are the only staff authorized to apply chemicals. Training topics include safe application methods, worker safety, BMPs, spill mitigation and clean-up techniques, medical facilities, storm water protection, and a review of integrated pesticide management practices and alternatives. At the conclusion of annual pesticide training, each trainee will verify, they have received, understood, and will abide by the training they have received for the application of all pesticides. Throughout the year, the Qualified Applicators and Pest Control Advisors all receive an additional minimum of ten- to twenty-hours of pest control training at seminars, primarily sponsored by the Pesticide Applicators Professional Association, the California Association of Pest Control Advisors, or the International Society of Arboriculture. These include training in IPM techniques.

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All applications are made at the direction of a Qualified Applicator or advisor at the Crew Supervision level or higher. This staff member is also responsible for checking the effectiveness of the application, training, and keeping of records of the applications.

Pesticides applied are primarily herbicides to control weed growth in areas of public use. Pesticides are applied only in areas where actual need exists and not simply to apply the materials on a regular preventative schedule. Copper based pesticides and most toxic forms of restricted pesticides (Class 1) have effectively been eliminated from the application process. These materials would only be utilized if a serious public health and safety condition exists that cannot be reasonably mitigated through other less toxic means.

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City has confined its use of pesticides in 2006 to: Round-up (Monsanto), Aqua Master (Monsanto), and Surflan (Dow-Agra Sciences). Injection products for trees include Marathon, and Merit. In 2005, other pesticides used include Karmex and Wilco Gopher Getter. None of these products appear on the State Water Resources Control Board 303(d) list for the lower Salinas River. Products are never listed on the 303 (d) list.

This is a BMP. Should be listed with the MG section. No pesticides will be applied when winds exceed 7-miles-per-hour, or when it is raining, or rain is projected within 24-hours. The Pesticide Application Record required of all applicators documents weather condition and wind speed at the time of application. Irrigation will be limited to areas that have not recently had applications of any pesticide or fertilizer that has pollution run-off potential. Irrigation systems will be operated in accordance with planning between the applicator and person responsible for maintenance of the site.

Weed abatement practices will not rely exclusively on pesticide application. Viable mechanical methods also include flail-mowing, weed-eating and hand-hoeing. No potential for runoff will be created by the removal of vegetation on slopes when rains are expected before erosion control

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methods are put in place. Salinas has developed a significant reliance on mulch products (chips) to smother weeds. Chips produced with the removal of woody materials in the Urban Forestry Division are commonly employed.

Staff has been trained to schedule weed abatement before seeds set, whenever possible, to avoid the need for a more intense abatement method that may include both mechanical and pesticide application methods. Training for Pesticide Applicators and Advisors include selecting plant materials that require less maintenance, such as use of chemicals. This includes choosing more plant groundcovers and aggressively growing herbaceous shrubs for faster soil coverage and less exposure time of bare soil, a condition that often results in weed establishment. How will this be tracked and reported on in AR? Include something in MG section to cover this BMP

For public health and safety reasons, vertebrate pest control is done only on an as-needed basis. Application methods to control rodents are made in accordance with applicable laws. Grains and bait blocks are positioned in the ground or in covered bait stations away from storm drains.

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Routine overhead aerial applications of dormant oils, and summer oils have been reduced 25% over the past five-years. Staff is committed to a decrease of an additional 25% over the term BMP of this Permit. To accomplish this reduction, staff will plant trees that are less prone to mass infestations of insects that might otherwise be required of other species. Applications will be made only to tree varieties that are actually experiencing mass infestations and these infestations cannot be controlled by means other than the application of oils. All storm drains in areas of the applications will be covered to protect the quality of the storm water. Foliar applications of all other insecticides to street trees have been eliminated in preference of injector products that produce no runoff potential.

All mixing and loading of materials in preparation for pesticide applications will be done in areas that have no potential for run-off to a nearby storm drain. City staff will not apply pesticides in the Gabilan Creek Wilderness or other wetland and creek area, unless a serious public health and safety concern exists for which no other remedy is feasible. Should this occur, only pesticides that are approved by the EPA for use in water bodies will be used to mitigate the immediate problem. BMPs. Track and report

BMPs. Track and report Tanks will be emptied of all pesticides through the application process. Rinse water will also be used for the application process and will not be allowed to flow to any storm drain facility or water body. All application equipment is calibrated for effective spraying and to eliminate overspray to areas outside of the application target. Pesticide containers are rinsed in accordance with applicable laws and are disposed monthly at a certified facility (the Marina Landfill), or as volumes of containers require. These containers are then registered with the Monterey County Agricultural Commissioner's Office, counted and chipped for use as recycled products.

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BMPs. Track and report Fertilizers are applied on an ad-hoc and as needed basis to ensure plant health and are immediately watered in order to prevent burning of the target plants and the possibilty of movement off the target. Fertilizers that remain on hardscape areas are swept up or blown onto target areas to prevent runoff carrying them to storm drains.

The following additional measures will be implemented to prevent potential fertilizer or pesticide contamination of storm drain systems. When applying broadcast fertilizers to turf or landscape areas that contain storm drains, staff will cover the drains to prevent materials from entering the system directly, and when applying pesticides those drains will be clearly marked to prevent

spray from entering into drains. Further, the City will expand its IPM program with principals identified within the Pesticide Hazard and Exposure Reduction (PHAER) Zone concept. PHAER is a management concept that seeks to eliminitate application of pesticides from zones that are not environmentally sentivive. One of its goals is to ensure the pubilc's safety. Resource limitations will limit the Ciy's ability to implement all of the concepts contained within PHAER. Nonetheless, landscape pest management using a zone principle is another tool that the City will employ to reduce environmental risk. In the second year of the permit term, City staff will be trained on PHAER principles, and 20-percent of maintenance crews will attend an all-day IMP training session. Crew supervisors will be responsible for training and ensuring that IPM /PHAER and other management practices are implemented in day-to-day maintenance activities. Annually, crew supervisors will conduct training sessions in conjunction with the Water Resources staff.

II. Oil /Grease/Metals and Sediment Management:

Oil, grease, metals, and sediments are usually generated from two areas within the City's parks: parking lots and hardscape areas. Both receive windblown or water-carried materials from buildings, vehicles, landscapes, sports fields, or offsite areas. These can include sediments, dust, landscape soils, playground sand, and baseball field materials (clay/cinder), as well as, oils, greases, metals, and other fluids from vehicles.

The majority of the park hardscape surfaces drain to landscape beds, turf, or playgrounds, where the runoff percolates through the plant material, mulch, and soil to filter pollutants before reaching groundwater. Some parks have storm drains in turf or landscape areas. Runoff to these drains is from clean irrigation or rainwater that the turf filters, preventing pollutants from entering the storm water system.

Park staff clean hardscape surfaces including paths and sidewalks, barbeque and picnic pads, and building foundation pads with brooms, blowers, rakes, and shovels, to remove the materials and provide clean, safe surfaces. Staff also picks up garbage and landscape debris, and cleans obvious spills or vehicle parts in parking lots and drives. When runoff from cleaning operations cannot be directed to permeable surfaces and flows into storm drains, those drains will be covered or surrounded with filtration media. This cleaning combined with the drainage of most areas to permeable surfaces minimizes or eliminates the potential pollutants to the storm water system in most facilities; however, budget and manpower reductions, and lack of large sweeping equipment restrict the City's ability to thoroughly and frequently clean parking lots.

Parking lots will be swept monthly to ensure that trash and pollutants are minimized and controlled. Three options for meeting this commitment are scheduling under current municipal street division operations with their equipment and manpower, training of park personnel in sweeper use and scheduling of sweeping when equipment is available or contracting sweeping services.

Staff will also provide filtration barriers or covers for any drains that receive runoff from surface cleaning in City facilities such as the Sherwood Tennis Center. This practice will also be employed for picnic and barbeque areas that generate cooking oils, grease, and ashes that stain tables and concrete pads. Park personnel wash these areas with water pressure and/or baking soda or citrus degreasers to remove heavy deposits. The runoff is directed to turf areas for filtration. Ashes are cooled and disposed of with other garbage.

III. Biological and oxygen demanding substances:

These substances result from landscape maintenance and normal plant activity including leaf drop, as well as animal or human waste products.

Landscape materials include lawn clippings from mowing, leaves, bark, and fruit from normal plant lifecycles, and plant material from maintenance activities such as pruning, edging, trimming, or removal. Lawn clippings are left on the turf to recycle and provide soil nutrients. Landscape debris from maintenance activities is recycled as mulch when possible, disposed of through recycle waste disposal programs when available, or collected and removed of through normal waste disposal operations. These methods prevent landscape materials from having a negative affect on runoff from park facilities.

Animal waste present in park areas is minimal due to enforcement of City policies prohibiting the presence of animals in the park. The only exceptions to this policy are the two dog walk areas at Rossi-Rico Park and Natividad Creek Park. Both facilities have dog-waste disposal systems that have been effective Annual report – how know this is true? in controlling the problem. Animal feces in other parks are removed when observed. Remaining waste materials are usually in turf or landscape areas and remain on the site to decompose and filter through the soil. The only other area of concern for animal wastes is the Sherwood parking lot used annually by the Rodeo Association as a living area for rodeo participants and their animals for the duration of the event. Horse and pet waste products are present on the asphalt surfaces until the post event cleanup and could enter storm drains in the parking lot. Additional precautions will be taken during future events to prevent this, for example by placing filtration media at all parking lot storm drains during the event.

In summary, the majority of rain or irrigation water that enters park facilities remains on the site to percolate into the ground, or, is filtered by turf and landscape material before leaving the site. Most of the remaining runoff flows on regularly cleaned surfaces and presents no threat of pollution to off site systems.

Park division staff are trained regularly in facility and landscape maintenance to ensure best efforts are implemented with available resources and manpower to provide safe, clean, and well maintained park facilities for public use. While training on landscape management has been sufficient, expanded educational efforts discussed elsewhere in this section are needed. Park's division staff will be educated regarding the Clean Water Act, NPDES program goals, and linkages between park maintenance and BMPs necessary for success. Training and performance will be incorporated into personnel performance evaluations.

E. Inventory of City Facilities and Associated BMPs

Non-park municipal facilities are inventoried in Table 3.6. Table 3.6 also lists BMPs that are being employed at each facility. Summary discussions of each site (SWPPPs) are included in Appendix F, while detailed summaries of each BMP are included in Appendix B. SWPPPs include an inventory of facilities, including streets and a description of facility location, size and amenities. Activities that could affect downstream water quality are summarized, as are pollutants of concern. Management practices (BMPs) to mitigate these potential concerns are also discussed.

F. Program Effectiveness –It appears that the meaning of this is not the same as what EPA guidelines intend. Effectiveness evaluation refers to an evolution of a program so as to make a more useful program. This is done by taking lessons learned from the

information that is gleaned as BMPs are implemented and analyzed, and applying the lessons to improving the BMP (or program). That action will cause the program (or the BMP) to develop into a more effective tool for Stormwater protection.

This doesn't make sense. MGs and Meas. of effect. should be specific to the BMPs. Measurable goals and measures of effectiveness include meeting the intent and requirements of the City's Municipal Permit. Facility inventories, stormwater pollution prevention plans, best management practices for operations and training have all been prepared and completed consistent with the Municipal Permit. Further, the City substantially remodeled the one facility with the greatest potential to threaten runoff quality (corporation yard) and installed BMPs that improved runoff protection.This belongs in the Annual Report, not here All of these actions are dynamic. Inventories, pollution prevention plans and Plan implementation are all designed to evolve as information and resources becomes available. What process will ensure that the info is analyzed and the feedback loop is completed to make sure the program evolves? The main problem that tetratech found was that the data was not analyzed and the loop was not complete.

For example, the City's inventory of storm drain inlets and outfalls has been completed using conventional technology. This is an example of a completed BMP, not of Effectiveness. . Over the permit term, the City will revisit the feasibility of incorporating GIS as a management tool. Further, continual training of staff members is a key measure training is not a measure of performance for this element. Staff will attend training sessions and incorporate lessons learnedthis is getting closer to the meaning of "effectiveness" into daily practices. Division managers will meet to discuss = BMP, not effectiveness operations and best management practices. Park's Division staff will continue to train = BMP, not effectiveness their staff on and implement IPM practices.

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Table 3.5 Municipal Facilities Best Management Practices

ID No.	Name	BMP SC-10	BMP SC-11	BMP SC-34	BMP SC-41	BMP SC-43	BMP SC-60	BMP SC-70	BMP SC-71	BMP SC-73	BMP SC-74	BMP SC-75	BMP SC-76
M001	Acacia Corners	X		X	X				X	X			
M002	Bataan Memorial Park	X		X	X				X	X		X	
M003	Breadbox Recreation Center	X	X	X	X	X			X	X			
M004	Carmel Corner	X		X	X				X	X			
M005	Central Park	X		X	X		X		X	X		X	
M006	Cesar Chavez Community Park	X		X	X				X	X		X	
M007	Claremont Manor Park	X		X	X	X			X	X		X	
M008	Clay Street Park	X		X	X				X	X			
M009	Closter Community Park	X		X	X	X			X	X		X	
M010	Constitution Soccer Complex	X	X	X	X	X	X	X	X	X	X	X	X
M011	Cornell Corner	X		X						X			
M012	Creekbridge Neighborhood Park	X	X	X	X				X	X		X	
M013	East Laurel Pocket Park	X		X	X				X	X		X	
M014	El Dorado Community Park	X		X	X				X	X		X	
M015	El Gabilan Library	X	X	X	X	X	X		X	X		X	
M016A	Exposition Park / PGE Site												
M016B	Exposition Park / PGE Site	X	X	X	X	X	X	X	X	X	X	X	X
M017	Frank Paul Park	X		X	X	X			X	X		X	
M018	Fremont School Softball Field	X		X	X	X			X	X		X	
M019	Gabilan Play Lot	X		X	X				X	X		X	
M020	Greenbriar Open Space	X		X	X				X	X		X	
M021	Harden Ranch Neighborhood Park	X		X	X				X	X		X	
M022	Hebbron Heights Community Center	X		X	X	X			X	X		X	
M023	Jaycee Tot Lot	X	X	X	X				X	X		X	
M024	La Paz Neighborhood Park	X		X	X				X	X		X	

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Table 3.5 Municipal Facilities Best Management Practices (Continued)

ID No.	Name	BMP SC-10	BMP SC-11	BMP SC-34	BMP SC-41	BMP SC-43	BMP SC-60	BMP SC-70	BMP SC-71	BMP SC-73	BMP SC-74	BMP SC-75	BMP SC-76
M025	Laurel Neighborhood Park	X		X	X		X		X	X		X	
M026	Laurel Heights Neighborhood Park	X		X	X				X	X		X	
M027	Laurelwood Neighborhood Park	X		X	X				X	X		X	
M028	Los Padres Neighborhood Park	X		X	X				X	X		X	
M029	Maple Play Tot Park	X		X	X				X	X		X	
M030	McKinnon Neighborhood Park	X	X	X	X	X		X	X	X	X	X	X
M031	Mission Neighborhood Park	X		X	X				X	X		X	
M032	Myrtle Court Play Tot	X		X	X				X	X		X	
M033A	Natividad Creek Park (North)	X	X	X	X	X	X		X	X		X	
M033B	Natividad Creek (South)	X	X	X	X	X	X		X	X		X	
M034	Natividad Neighborhood Park	X		X	X	X			X	X		X	
M035	Northgate Tot Lot	X		X	X				X	X		X	
M036	Northgate Neighborhood Park	X		X	X	X			X	X		X	
M037	Rossi Rico Linear Parkway	X		X	X	X			X	X		X	
M038	Municipal Stadium Sports Complex	X	X	X	X	X	X		X	X		X	
M039	Santa Lucia Tot Lot	X		X	X				X	X		X	
M040	Santa Rita Neighborhood Park	X	X	X	X	X			X	X		X	
M041	Sherwood Community Park	X		X	X	X	X		X	X		X	
M042	Soberanes Neighborhood Park	X		X	X				X	X	X	X	
M043	Soto Square Tot Lot	X		X	X				X	X		X	
M044	Steinbeck Neighborhood Park	X		X	X				X	X		X	
M045	Veteran's Memorial Park	X		X	X		X		X	X		X	
M046	Williams Ranch Neighborhood Park	X		X	X	X			X	X		X	
M047	Woodside Neighborhood Park	X		X	X				X	X		X	
M048	Salinas Fairways Golf Course	X	X	X	X	X	X		X	X		X	

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Table 3.6 Municipal Facilities Best Management Practices

ID No.	Name	BMP SC-10	BMP SC-11	BMP SC-21	BMP SC-22	BMP SC-31	BMP SC-34	BMP SC-41	BMP SC-60	BMP SC-74	BMP SC-76	BMP SE-3	BMP SE-7	BMP SE-10
M049	City Hall and Employee Parking Lot							X						
M050	Salinas Maintenace Services Yard	X	X	X	X	X	X	X	X	X		X	X	
M051	Steinbeck Library							X		X				
M052	El Gabilan Library							X		X				
M053	Cesar Chavez Library							X		X				
M054	Salinas Recreation Center							X	X	X				
M055	Salinas Street Parking Garage	X	X											
M056	Women's Club Building													
M057	Salinas Sunrise House							X		X				
M058	Salinas Train Station	X						X						
M059	Salinas Old Fire Station (non-operational)						X		X	X				
M060	Salinas Fire Station #1		X		X		X		X					X
M061	Salinas Fire Station #2		X				X		X					X
M062	Salinas "Firehouse" Recreation Center							X						
M063	Fire Station #4		X				X		X					X
M064	Fire Station #5		X				X		X					X
M065	Fire Station #6		X				X		X					X
M066	Permit Center	X						X						
M067	Industrial Wastewater Treatment Facility	X	X			X			X					
M068	Sanitary Sewer Collection System	X	X							X	X			
M069	Salinas Animal Shelter	X					X	X	X					

Element 4

Development Standards

"Form follows function."

--Louis Henry Sullivan

4.1 Introduction

How Salinas develops directly affects the quality of life it affords its citizens. Development practices affect water quality, for better or worse. Increased urban water runoff generated by development can begin a chain of events that includes erosion, flooding, stream channel alteration and the introduction of man made pollutants leading to ecological degradation. The goal of this element is to provide a framework to establish regulatory standards and to provide guidance for sustainable development to protect environmental resources while meeting economic development interests. The bases for this process are the City's land use policies and its Municipal Permit.

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The City's General Plan recognizes the dynamic interrelationship between development and resource management. The General Plan contains goals and policies to promote economic development and to protect natural resources.

Conversion of open space and farmland to urban uses changes the water cycle. When development occurs, the resultant alteration to the land can lead to dramatic changes to the hydrology, or the way water is transported and stored. Designing with nature is a fundamental part of the planning process, however, impervious surfaces and compacted soils associated with development have the potential to increase water runoff and the potential to decrease ground- water infiltration.

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Historically, the process of urbanization as well as agricultural cultivation has modified natural watershed and stream ecology by altering the terrain, modifying soil and vegetative characteristics, replacing some pervious surfaces with pavement and buildings and converting natural drainage ecosystems with anthropogenic systems to meet the requirements of the activity or development characteristics. Natural stream channels were often replaced with flood control and/or drainage systems that altered stream channels through straightening, deepening, and paving (Figure 4-1).

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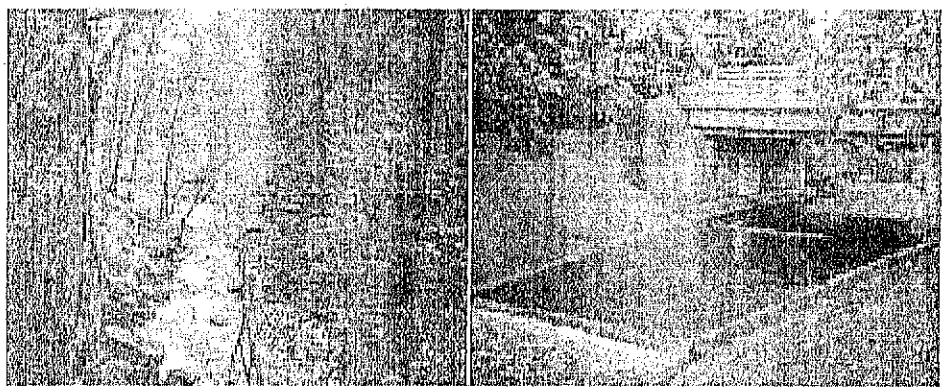
Figure 4-1 Changes in Stream Form



Storms that previously, under non-urbanized conditions did not produce runoff can produce significant erosive flows. Increased flow volume and velocity, along with the increased duration of flows exacerbate sediment transport. Agricultural practices associated with irrigated row crop production often mimic urbanized conditions and produce similar spikes in runoff and sediment transport.

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These spikes in hydrology and associated urban and agricultural impacts have the potential to modify the stream ecology for Gabilan, Natividad and Alisal Creeks as well other unnamed creeks flowing through Salinas; negatively impacting habitat.

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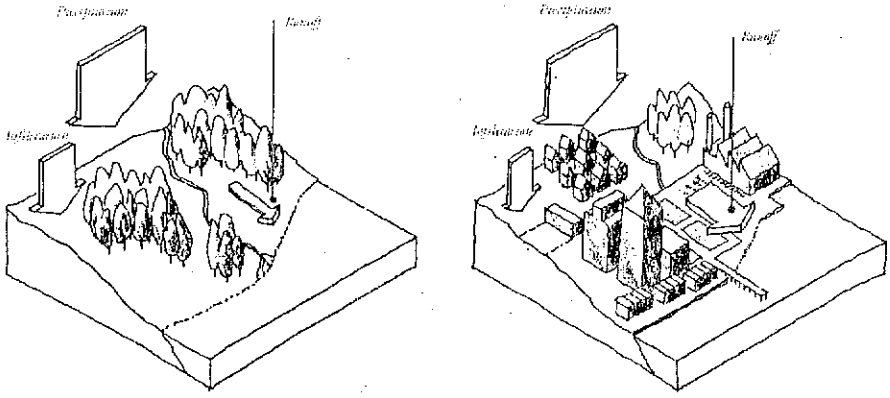
Conversely, urbanization can also lower stream flows. With development, water that could otherwise percolate and/or run off from unaltered lands and recharge stream flows are commonly redirected to man-made storm systems thereby altering habitat areas within the natural watershed

Runoff from urban uses carries with it pollutants from rooftops, roadways, parking areas and other impervious surfaces. Prior to development these either did not exist, or in some cases infiltrated into the soil. As runoff moves over large impervious surfaces, it collects and concentrates nonpoint source pollutants, such as petroleum distillates, heavy metals, and rubber from cars, and roadways. Pollutants carried from these sources enter the waterway further degrading it. Basic urbanization's effects upon the hydrologic cycle from urbanization are further illustrated in Figure 4-2. Similarly, agricultural activities have also introduced pollutants into the drainage environments through the introduction of pesticides, herbicides and fertilizers.

Once altered, natural waterways and associated ecosystems cannot be fully restored. However, the past practice towards declining habitat can be stopped, and partially reversed to preserve ecosystems for the benefit for future generations. This requires a significant and long-term effort dedicated to the preservation and enhancement of existing riparian ecosystems.

Protection of water resources has become more complex. The multitude of stakeholder interests and the variety of regulatory agencies involved make watershed management and land use planning highly challenging. Recognizing this challenge, establishing a consistent, easily comprehensible approach to watershed management is paramount.

Figure 4-2 Urbanization's Effects Upon the Hydrologic Cycle



The hydrologic cycle

In **pre-development** landforms, a large percentage of precipitation infiltrates into the soil. A small percentage remains on the surface as runoff.

In **Post-development,** opportunities for infiltration are typically reduced, and a larger proportion of total precipitation becomes surface runoff.

The City's Storm Water Management Plan must meet the requirements of the City's NPDES Municipal Storm Water Permit, as summarized by Table 4.1 below.

Table 4.1 Municipal Permit Requirements – Development Standards

Plan Section	Requirement Summary	Municipal Permit Section
Entire	Minimize short and long-term impacts on receiving water quality from development	III a
4.6 D	Incorporate watershed protection principles into planning procedures and policies, e.g. General Plan and Specific Plans	III a 1
4.6 A	Minimize amount of impervious surfaces and directly connected impervious surfaces; use on-site infiltration in areas with appropriate soils.	III a 1
4.3	Implement pollution prevention methods supplemented by source controls; use strategies that control sources to minimize their transportation offsite.	III a 2
4.6 A	Preserve, and where possible, create/restore areas important to water quality, such as riparian corridors, wetlands, etc.	III a 3
4.6 A	Limit disturbances to natural drainage systems caused by	III a 4

	development	
4.6 C	Require submittal of pre- and post project pollutant load and flow analyses. Require BMPs to mitigate projected increases in pollutant load runoff	III a 5
4.6 E	Identify, minimize and regulate development in areas particularly susceptible to erosion and sediment loss; or establish development guidance to protect areas	III a 6
4.6 E	Implement source/treatment controls to protect receiving waters from increased pollutant loads from runoff.	III a 7
4.6 I	Control post-development peak storm runoff rates and velocities to protect stream habitat and prevent/reduce erosion.	III a 8
4.6 I	Review and require that all proposed development is in compliance with City codes, regulations, and policies prior to issuing a permit.	III a ii
4.6 D	Prepare and submit for public review a Development Standards Plan (DSP) within 1 year of permit adoption. DSP must be consistent with WQ 2000-11[1]	III b
4.6 D	Adopt DSP within 1 year of approval	III b
4.6 L	Ensure that all development meeting Municipal Permit criterion are reviewed and conditioned to comply with the DSP.	III c
4.6 O	DSP shall include a list of recommended source and/or structural treatment control BMPs.	III c ii
4.6 D	Ensure that municipal sizing criteria are comparable to Volume- or Flow-based criteria (24-hr, 85th percentile storm event); flow by 85th percentile hourly rainfall intensity.	III c iii
4.6 O	May develop or use equivalent numeric sizing criteria to above	III c iv
4.6 D	DSP shall identify roles and responsibilities of municipal departments.	
4.6 N	Restrict structural BMPs to protect groundwater quality	III c vii
4.6 D	DSP process shall consider measures to control peak storm volumes and rates to protect downstream habitat.	III c ix
4.6 F	DSP shall include a description of necessary modifications to existing codes, etc.	III c x
4.7	May consider a waiver program	III c e
4.6 L	Require all development subject to DSP provide verification of maintenance provisions.	III f
4.6 I	Incorporate stormwater quality impacts into CEQA processing	III g
4.6 A	Evaluate and amend as necessary General Plan to include watershed quality and quantity management considerations when relevant elements are amended.	III h I
4.6 A	Provide Regional Water Quality Control Board with draft General Plan amendments	III h ii
4.6 P	Annually train City employees engaged in planning and development.	III h I
4.6 D	Make DSP standards available as they are adopted.	III j
4.6 D	Within 1 year of adopting DSP make hardcopy available to development community.	III j ii
4.6 O	Development Standards shall include: a) source and treatment control design criteria BMPs; b) peak flow control criteria; c) expected pollutant removal performance ranges from BMPs;	III j ii 2, 3, 4

[1] Order WQ 2000-11 is a State Water Resources Control Board precedential action regarding Los Angeles' Standard Urban Storm Water Mitigation Plan (SUSMP). SUSMPs are plans designating BMPs for development projects.

	and d) maintenance factors.	

4.2 Goals and Objectives

Salinas' goal is to reduce, to the maximum extent practicable, the impacts of new development and redevelopment on storm water and urban runoff through the integration of watershed management principles into the City's land use planning and development activities. To achieve this goal the City has initiated the following actions:

1. Incorporate watershed management and water quality protection principles into its planning processes and development review functions by minimizing impacts from stormwater and urban runoff on the biological integrity of natural drainage systems and water bodies. The City of Salinas will accomplish this by adopting low impact development design guidelines and techniques by March 2007 and by providing low impact development training to its design and development review staff a minimum of twice each year.
2. Work with the development community to maximize, to the extent practicable, the development's percentage of pervious surfaces to allow percolation of stormwater and runoff into the ground. City staff will accomplish this by ensuring site plans for development projects incorporate LID strategies(as appropriate) and the minimum amount of impervious surface possible to retain the viability of the development project.
3. Work with the development community to minimize the quantity of untreated stormwater directed to impervious surfaces and the City's storm sewer system. All projects meeting the minimum thresholds of the City's Municipal Permit shall incorporate low impact development features.;
4. Work with the development community to implement pollution prevention methods as a first approach supplemented by pollutant source controls. If source controls are not practicable then treatment controls will be employed. City staff will require all qualifying development projects to implement pollution prevention features.conforming to the City Design Standards and LID guidelines.
5. Preserve and, where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones. This will be accomplished by the adoption and implementation of regulations to protect the open space features identified in the City's General Plan.
6. Limit disturbances of natural water bodies and natural drainage systems caused by development, including development of roads, highways and bridges. The City's General Plan has designates these natural features as Open Space and their protection and/or restoration will be assured through the adoption of regulations and implementation of Specific Plans in new development areas.
7. Except where noted, the City will conduct the following within the first year of its Municipal Permit: these should be reported in the Annual Report
    a. Prepare a phased implementation schedule and associated costs needed to implement the Municipal Permit and Land Use Development / Element through the five-year Permit period for all planning and development review related functions. BMP should be done now
    b. Revise land use planning and development review processes and fees, including its CEQA review--Initial Study Procedure to protect water resources and implement the Municipal Permit (completed).

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c. Annually train all staff involved with planning and development review operations with provisions and goals contained within the City's Municipal Permit, such as watershed management principles, as well as new municipal procedures required to implement them (ongoing).
d. Ensure that the City's Zoning Code is consistent with the NPDES permit and if not, then when will it be updated?(completed).
e. Conduct how many? outreach/education sessions/workshops for decision-makers (Planning Commissioners, Design Review Board Members, and City Council, et al) and the development community regarding Municipal Permit requirements, municipal procedures and associated development fees. Prepare and distribute to whom, how often, how many? educational materials explaining the City's NPDES permit requirements (ongoing).
f. Adopt Development Design Standards in compliance with Municipal Permit's requirements (anticipated release for public review in January 2007 with City of Salinas adoption in March 2007).

8. Annually document this doesn't fit in this section of the SWMP. This discusses the reporting requirement (required by permit) stormwater, urban runoff pollution prevention activities conducted by the City for inclusion in the City's annual activities report (2005 and 2006 reports submitted).
9. Collaborate with vague - # times?, who invited? Outreach to stakeholders? Etc. watershed stakeholders in preparing and implementing land use plans (ongoing).
10. Monitor the effectiveness of implemented runoff controls and stormwater management strategies to provide for the most effective and efficient storm water management program (ongoing). Also vague. How will this be done for each BMP?

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4.3 Planning and Design Perspectives

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Over the past several decades, conventional engineering practice viewed urban runoff and stormwater as a flood control issue. Accordingly, drainage design has focused on concentrating runoff at the site, collecting it, and removing it as quickly as possible. Runoff was typically routed into a pipe and sent to an outfall downstream. This single purpose "end of pipe" approach often did not adequately consider other effects. Broad ecosystem management concerns such as water quality, water supply, habitat protection, sustainability, and/or community character and aesthetics were often overlooked.

End of pipe drainage solutions tend to transfer what is essentially a private responsibility to a public one. Runoff generated by an individual property owner or developer becomes a public responsibility once it enters the public storm drain system. This "end of pipe" design transfers both the risk and the cost of storm water management to the public. Another consideration not adequately addressed by the end of pipe approach is water supply. In the Salinas Valley where water supply has been an issue for over half a century, and where limited water supplies have the potential to constrain municipal goals, discarding water that falls freely from the sky is a practice that bears reconsideration.

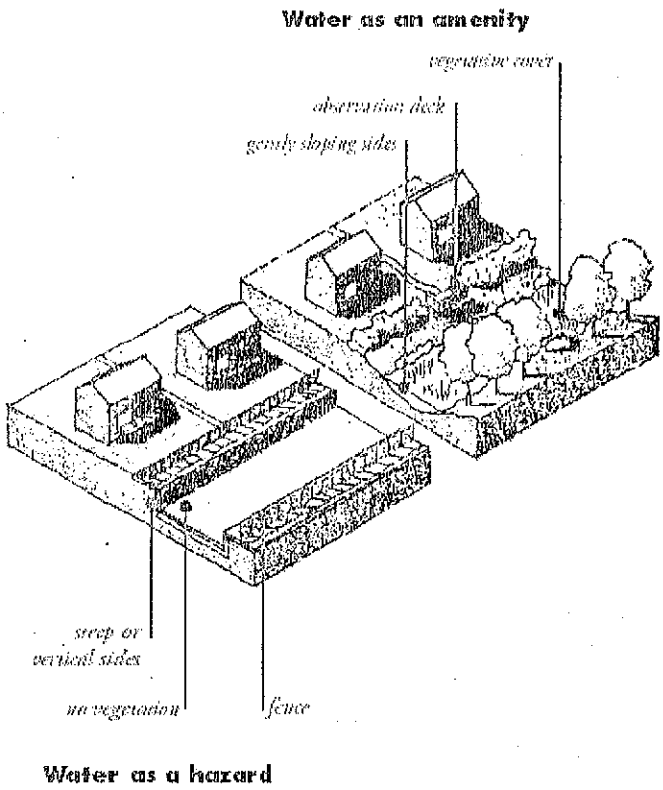
Growing awareness in professional fields, along with changes to state and Federal regulations offer new solutions and new management practices. Rather than view rainwater and runoff as a hazard, planners and engineers now see rainwater as a resource. Management solutions now avoid end of pipe solutions for source control and

low impact development (LID) designs. Source control and LID designs attempt to mimic pre-development hydrologic conditions by managing water runoff on-site, and percolating it into the soil when possible. This results in several benefits: volume and velocity issues are addressed as before and now other beneficial uses: water supply, water quality, habitat preservation, resource management, and community aesthetic and cost concerns are all factored-in.

There is a closer relationship between benefit and responsibility--those that benefit bear the responsibility rather than transferring the responsibility directly to the public. The result is a very different development pattern. Figure 4-3 presents a very generalized representation of development under the old and new paradigms.

Municipal Permit provisions (see Table 4.1) require Salinas to apply watershed protection principles (an integrated, sustainable solution that considers ecosystems and resource protection) and reduce the amount of impervious surfaces. The provisions in this element are consistent with Municipal Permit requirements.

Figure 4-3 Design Outcomes from Different Development Values



Source: BASMAA, Start at the Source (1999)

4.4 Maximum Extent Practicable

In 1987, when it amended the Clean Water Act, Congress recognized that it was not technically feasible to establish similar limits on stormwater pollutants discharged from municipal storm drains. Rather, Clean Water Act Section 402(p)(3)(iii) says that each state *"...shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants."*

"Maximum extent practicable" has been defined by the RWQCB. The Central Coast RWQCB has defined MEP for the City as follows:

"MEP is generally a result of emphasizing pollution prevention and source control BMPs as the first lines of defense in combination with structural and treatment methods where appropriate serving as additional lines of defense. The MEP approach is an ever evolving, flexible, and advancing concept, which considers technical and economic feasibility. For purposes of this Permit, the Regional Board will determine compliance with MEP standards based on the terms of the Permit, including Attachment 4; and State Board decisions or guidance, EPA regulations and guidance and applicable case law defining MEP." (Salinas Order, Finding 16, emphasis added by Regional Board 12/23/05 letter to City.

Salinas' Stormwater Management Plan incorporates the above understanding of MEP and progressive professional practices (Best Management Practices) to ensure that land use development occurs consistent with NPDES Municipal Permit requirements. Further, this Plan includes the value of continuous improvement to ensure that pollution-prevention efforts achieve maximum extent practicable standard over time.

4.5 Best Management Practices

Best management practice (BMP) refers to any procedure or device designed to minimize the quantity of pollutants that enter the storm drain system, including receiving water bodies. Clean Water Act Section 402(p) and USEPA regulations (40 CFR 122.6) specify a municipal program of "management practices" to control stormwater pollutants. Throughout this Plan, BMPs are included to address the pollutants commonly generated by land use development. Primarily, these BMPs can be viewed three ways: 1) Type (structural or operational), 2) Longevity (permanent or temporary), and 3) Mode (source control versus treatment controls).

In most development, one classification of BMP will not be sufficient to meet Municipal Permit requirements or protect water quality. Rather, an integrated approach employing more than one class, and a variety of BMPs developed in response to the potential pollutants of concern, site characteristics, project design and regulations will be necessary. Selection of BMPs is therefore flexible based upon several factors. Selection is first up to the project design team's professional judgment. Second, staff members also have a role to ensure that requirements are met. At minimum, the suite of BMPs selected must meet the criteria established in the City's NPDES Municipal Permit, this element and other municipal, state and Federal regulations. How the collection of factors are integrated into a project's design will be described within the development project's Stormwater Control Plan (see section 4.6).

4.6 Activities

The activities section directs the City to develop, adopt, amend, and/or enforce City policies and practices, regulations and programs to decrease pollution from water and urban runoff. The activities that follow address this objective. I am expecting to see the actions described below. The section below is all background info, except for the last paragraph which is Annual Report material. What actions are planned for the remainder of the permit term?

A. General Plan

Salinas' General Plan is the City's fundamental policy for land use development. The City's General Plan is not self-implementing. For the City to realize its goals, implementing strategies must also be enacted. Foremost among these strategies are: 1) zoning regulations, 2) specific plans, 3) subdivision map regulations, and 4) the design standards incorporated into these regulations.

Various elements of Salinas' General Plan guide development to protect natural resources. The land use plan incorporates a number of site and street design policies that relate to water quality and watershed management principles. Indeed, the City's fundamental tenet that shapes the General Plan supports protection of natural resources. This philosophical foundation upon which the City's General Plan is based are the principles of traditional neighborhood development, or "Smart Growth". At its root, Smart Growth principles call for the efficient use of land, and the creation of livable communities. The United States Environmental Protection Agency's Office of Wastewater Management has cited one Smart Growth principle, infill development, as a strategy for mitigating stormwater runoff impacts. Other smart growth principles also serve to protect natural resources, and minimize the amount of public infrastructure (i.e., streets) and sprawl that create impacts.

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Smart Growth principles value pedestrians while accommodating automobiles and alternative transportation modes to establish the sense of community that one might have found in pre-World War II America. Neighborhoods are organized so many of the residents' daily needs can be accomplished within walking distance from one's home. The goal is to make the community livable through urban design. Streets are lined with stores, rather than the sea of parking that envelope strip malls. Development uses the land efficiently; infill of vacant land is valued, and development is compact. Open space is provided in the form of squares and parks as well as protected watershed resources. To calm traffic speeds, streets are narrower. Residents have multiple choices to navigate the community, including walking, bicycling, public transit, as well as driving. Indeed, development is designed upon multiple transit opportunities.

Many Smart Growth values can be realized through techniques that are directed at protecting water quality and watersheds. Efficient use of land, compact development, emphasis on pedestrian over vehicular travel, proximity of housing to jobs and transit and the integration of open space in land use plans are all designs that integrate well with watershed management, including LID principles.

Salinas reviewed its General Plan for its effectiveness in fostering or impeding the Municipal Permit. Based upon that analysis, the City concludes that its General Plan supports the intent and criteria of its Municipal Permit. A summary of General Plan goals and policies that support the City's NPDES permit is located in Appendix D-1.Goes into the Annual REport

B. Specific Plans

Specific plans implement a community's general plan and provide more detailed project information. Prior to approval of development within the Future Growth Area, a Specific Plan, to include an annexation plan, will be completed. These Specific Plans are being prepared by multi-disciplined development teams including certified planners, engineers, landscape architects having a state of the art knowledge of effective storm water

management techniques. The Annual Report should reflect these claims. City staff directly involved in the City's NPDES permit and related documents will review and comment on these plans. This is a BMP. As part of this process, plans for providing and financing public services and public facilities will be prepared to demonstrate how adequate levels of public services and facilities will be provided to serve the new development without impacting service levels for the existing community. The City's General Plan, its NPDES Municipal Permit, and provisions of state law guide the preparation of specific plans. The Specific Plans will also be reviewed for compliance under the California Environmental Quality Act which will provide a method of validating that the Specific Plans have incorporated appropriate feature and techniques to assure that the MEP standard is achieved. The City's Future Growth Areas and existing creeks and waterways are shown in Figure 4-4.

In addition to implementing General Plan policies, specific plans will also address the City's NPDES Municipal Permit requirements to include watershed protection principles and eliminating pollutant discharges to the maximum extent practicable. Necessary but vague. How will this be done? = BMPs which should be specific. Drainage conditions in the proposed development area make plan preparation challenging. These conditions also offer opportunities for innovation. To meet these challenges, Salinas is preparing LID Development Standards.

In accord with Salinas' NPDES Municipal Permit, the new LID Development Standards will provide guidance weak wording. What will be required? How often, by/of whom? Etc. to enable the Specific Plans to meet the requirements of the City's storm water management program requirements. These LID Development Standards are being prepared by the Regional Water Quality Control Board consultant, Kennedy/Jenks, and are expected to be released for public review in January 2007. Following public review and revisions as a result of this process, it is anticipated that the City Council will approve the LID Development Standards. And what is the follow-up implementation plan? Will staff be trained? Will info be available for developers, etc.? If the DSP is as critical as believed, then what is the groundwork being laid to 1. get approval, 2 implement these fully and timely?

It bears noting that the City of Salinas has informally implemented LID requirements for new development in compliance with the NPDES permit and in advance of the receipt of the development standards documents of the RWQCB consultant Kennedy/Jenks. It is known that the implemented standards are consistent with those being prepared by Kennedy/Jenks.

As envisioned, each Specific Plan will feature a variety of LID stormwater management techniques applicable to the proposed development and the environmental conditions present.

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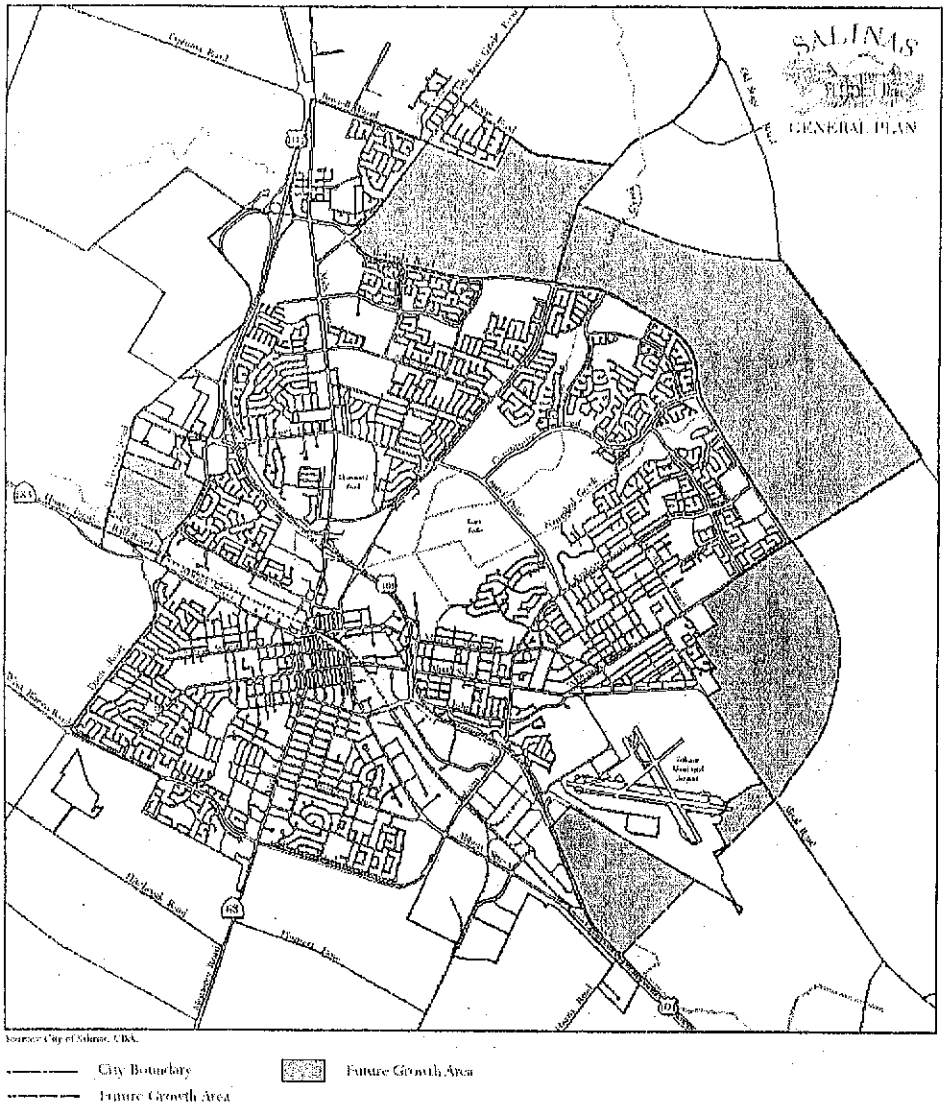
Figure 4-4 Future Growth Areas



C. Zoning Code

The Zoning Code will include language to complement the implementation of the City's Municipal Permit requirements. The update to the City's Zoning Code provides for increased floor area ratios (FAR) in all of the commercial and industrial districts, created new mixed-use districts and established a New Urbanism district to implement the tenets of Smart Growth in the City's new growth areas. In addition to these new zoning

districts. the zoning code requires specific performance standards regarding development in near proximity to riparian corridors and natural drainage features and increases the required number of trees and landscape area to be included within parking areas. The update to the Zoning Code was approved on October 17, 2006, will be formally adopted on November 7, 2006 and become effective on December 7, 2006 was/to be included in Annual Report?

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D. Development Design Standards

Low Impact Development (LID) Design Standards are in the process of being prepared. The preparation of the LID design standards began in the first year of the permit term. The Regional Water Quality Control Board has hired the environmental consulting firm Kennedy/Jenks Consultants, to prepare the LID Design standards document. It is currently planned for development design standards to be presented to the community through a public participation process in January 2007. = BMP In advance of the receipt of the development standards document from Kennedy/Jenks, the City has implemented LID requirements on all new developments in the City. These requirements are known to be consistent with the standards document being prepared by Kennedy/Jenks and follow the NPDES permit and the RWQCB interpretation of the MEP.

In the City's LID development approach, it is recognized that the use of site bioremediation is a preferred means for treatment of stormwater runoff. Bioremediation is a proven means for treatment of most all constituents of concern for urban runoff is incorporated in site design using engineered grassy swales, elevated planters, bioretention areas, and other landscaping features which are engineered to absorb and filter site runoff. Developers are required to demonstrate hardship regarding problems with implementation of bioremediation BMPs prior to approval of other types of treatment means, such as remove this – too specific and not considered LID, in its development plans.

The City's LID approach also calls for disconnection between impermeable surfaces and the city stormwater system. Runoff from parking surfaces, roofs, and other impermeable surfaces must drain in and through LID BMPs (such as grassy swales or elevated planters) prior to entering into the stormwater system. Reword as a measurable goal

Given urban runoff pollution concerns occur primarily with the more frequent low rainfall events, the City requires flow based BMPs to be sized to handle twice 85th percentile of hourly rainfall intensity (0.11 inches) in Salinas and the volume based BMPs to accommodate the 85th percentile storm event (0.60 inches) in Salinas. This sizing requirement is consistent with the NPDES permit. The RWQCB consultant, Kennedy/Jenks, completed the rainfall precipitation calculations for Salinas. Developers/Engineers are required to show their BMP calculations to demonstrate compliance with these sizing requirements. Reword as a measurable goal

The City has utilized BMP designs of the Contra Costa Clean Water Program for its LID program. The Contra Costa standards were selected based on their approach to solving issues with impermeable soil types prevalent within its jurisdiction, and similar to the

Deleted: Development design standards are another common tool used by communities to implement land use and development policies.

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characteristics of Salinas's area soils. It is understood by the City that the Kennedy/Jenks BMPs in the development document will be very similar.

As LID is a dramatic new approach to stormwater handling design, outreach and education are essential steps. Kennedy/Jenks has presented two workshops in 2006 regarding Low Impact Development to the Salinas area developers and general community. The City staff has ongoing working sessions with area developers and engineers on the fine points regarding design and implementation and has retained Kennedy/Jenks for technical support of these issues. Annual Report

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The City recognizes that stormwater management designs as well as LID techniques are most successful if they are incorporated at the first planning opportunity. Salinas' General Plan seeks to implement sustainable "smart growth" solutions to address its persistent housing shortage and establish neighborhoods having the characteristics of traditional neighborhood development. These neighborhood characteristics have been called "neo-traditional designs" or "Smart Growth". Among others, neo-traditional design values include reducing the dominance of the automobile. The City will achieve multiple goals sounds like BMPs that need to be listed as it implements the General Plan. For example, building neighborhoods with narrower streets will result in: slower traffic, foster a more pedestrian community, and result in less impervious surfacing which positively influence water quality (Figure 4-5). The City recently contracted with Fehr & Peers Transportation Consultants to determine the extent to which the standard for street widths may be reduced. Annual Report info A series of field tests were conducted involving the City's Fire Department and Solid Waste franchisee to establish minimum street widths necessary to enable these critical functions to safely operate.

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Narrower streets and street trees reduce runoff volumes and lower storm water runoff temperature. In one study, planners found that neo-traditional design resulted in less than 1/3 of the amount of paved street surface per dwelling unit when compared with conventional street designs.[2] Salinas will apply sustainable Smart Growth features in its future planned growth area. Reword as specific measurable goal.

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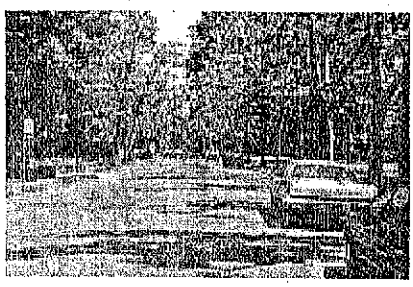
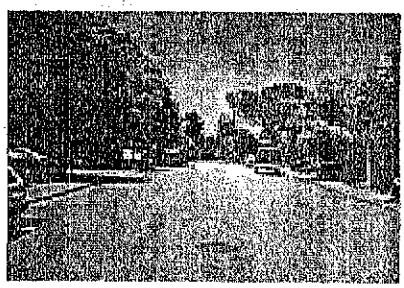
Figure 4-5 Neo-traditional (Smart Growth) Street Design as a BMP



A typical pre-war residential street



A typical post-war residential street

[2] North Carolina Department of Transportation, Street Design Guidelines for Traditional Neighborhood Design

Techniques to be considered include slowing flow rate and volume to foster percolation; and reducing the amount of impervious surfacing through creative site design. Figures 4-6 through 4-8 provide examples of LID design techniques. Other techniques include: 1) innovative site design that provides multiple functions (mixed use); 2) clustering of buildings to protect sensitive areas; 3) use of concave lawn areas to decrease runoff; and, 5) use of landscaping to disperse roof runoff.

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Figure 4-6 Typical Vegetated Swale Design to Convey Water

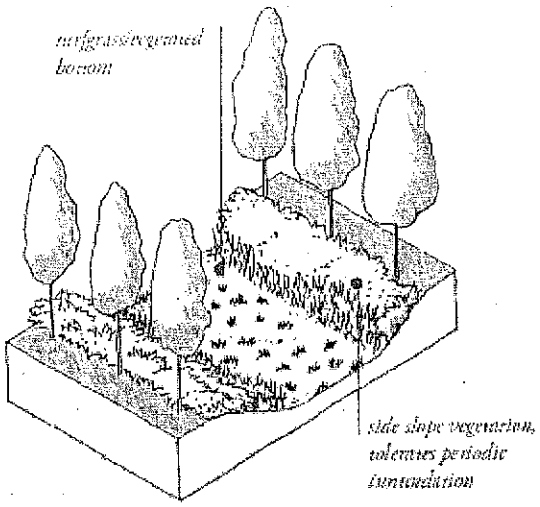


Figure 4-7 Typical Low Impact Design Techniques for Residential Development

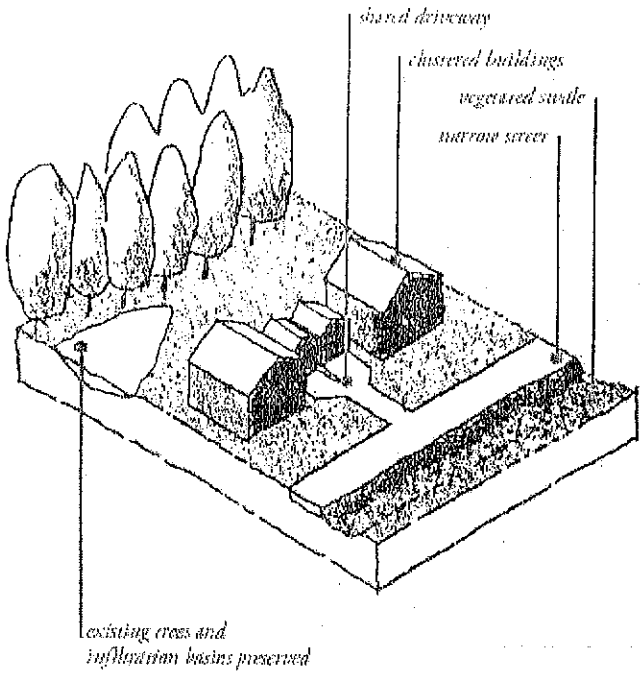


Figure 4-8 LID Site Design Ideas for Multi-Family Housing

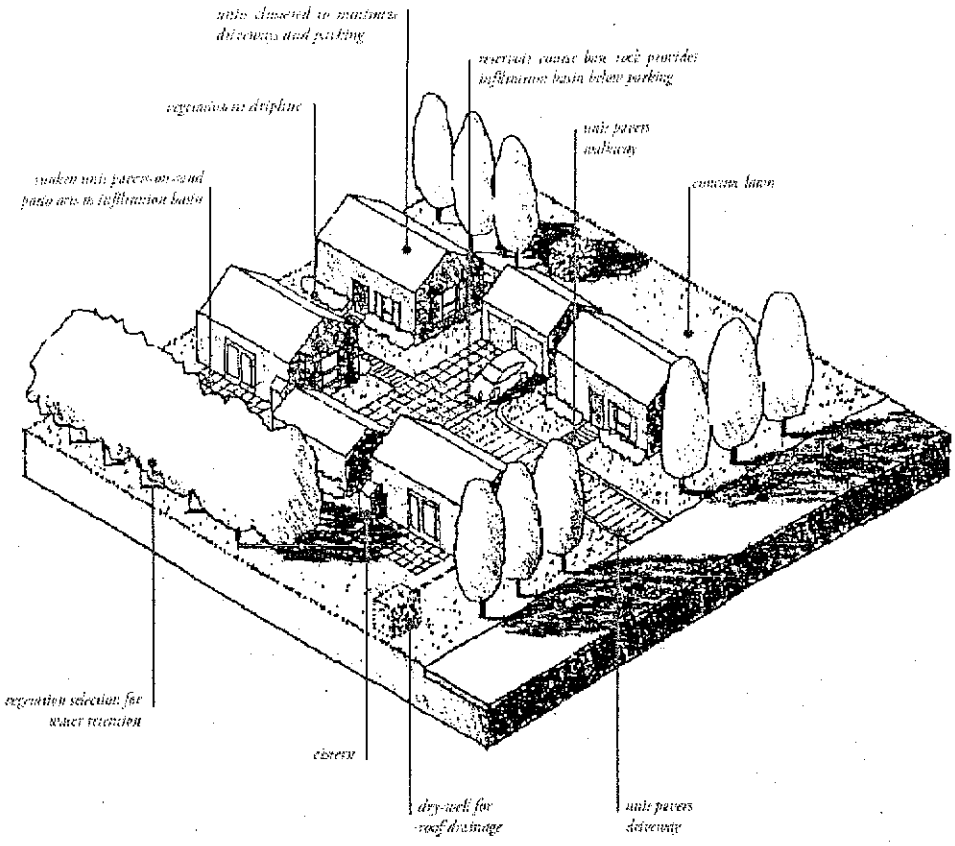
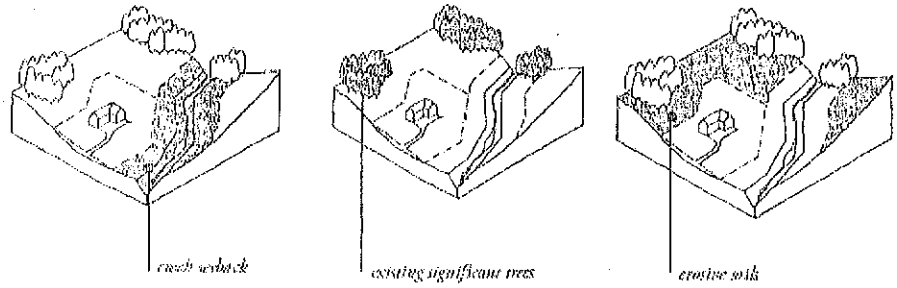


Figure 4-9 Site Design Concepts that Reduce Water Pollution and Erosion

Set back development from creeks, wetlands, and riparian habitats.

Preserve significant trees. Trees protect soil structure, aid in soil permeability, and provide aesthetics.

Avoid erosive soils and slopes. These include steep or long continuous slopes, soils high in silt or fine sand, or soils lacking vegetative cover.



Source: Start at the Source: BASMAA, 1999

F. Grading Ordinance

By the end of second year of the permit term, January 2007, the City will complete the update to its Grading Ordinance and incorporate Municipal Permit requirements.

G. Storm Water Ordinance

Salinas' *Storm Water Ordinance* regulates the City's stormwater infrastructure and management approach to new development. It is also the basis for other related documents such as the City's *Storm Water Master Plan*. Salinas is updating its Storm Water Ordinance to reflect its NPDES Municipal Permit requirements. Adoption of an updated Storm Water Ordinance will occur BMP in the same period as the revised Grading Ordinance, in January 2007.

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H. Storm Water Master Plan

The City's *Storm Water Master Plan* is a comprehensive engineering plan based upon the City's *Storm Water Ordinance*. It includes an assessment of infrastructure and surface storm drainage and provides recommendations. This plan is separate and distinct from the City's *Stormwater Management Plan*. The *Master Plan* was last updated in May 2004--before adoption of the City's Municipal Permit. As part of the process to review the *Storm Water Ordinance* and other municipal documents, the Regional Board's consultant (Kennedy/Jenks) is also tasked to review the *Master Plan*. The consultant will submit their review and recommendations/comments for staff's

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consideration, at which time staff will initiate appropriate revisions deemed necessary to assure consistency with the City's Municipal Permit BMP

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I. California Environmental Quality Act (CEQA)

Under California law, applications for proposed land use projects must be reviewed and a determination established if the proposal is subject to the California Environmental Quality Act (CEQA). If a project requires review under CEQA City staff will typically prepare an environmental assessment called an "Initial Study". Staff completes a checklist that identifies the project's potential for affecting environmental resources. Through the Initial Study process, issues having the potential to degrade the environment, including water quality are identified as are potential mitigation measures. Mitigation measures to address water quality may include: minimizing impervious surfaces, controlling pollutant sources and incorporating BMPs that retain, detain and or treat runoff. Staff has completed revisions to annual report to the City's Initial Study process to incorporate NPDES Municipal Permit requirements. Specifically, the revised *Initial Study Check* list considers the following potential impacts:

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1. Project construction on stormwater runoff;
2. Project post-construction activity on stormwater runoff;
3. Discharge of stormwater from material storage areas, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas or loading docks, or other outdoor work areas;
4. Discharge of stormwater that impairs the beneficial uses of the receiving waters or areas that provide water quality benefit;
5. Discharge of stormwater that might cause significant harm on the biological integrity of waterways and water bodies;
6. Significant changes in the flow velocity and/or flow volume of stormwater runoff that might cause environmental harm; and
7. Significant increases in erosion of the project site or surrounding areas.

The City's NPDES permit, city ordinaces, and applicable water quality standards are the implied standards for CEQA review.

J. Engineering Standard Specifications, Design Standards and Standard Plans

The City's *Standard Specifications, Design Standards and Standard Plans* document provides specific design requirements for development. TheRWQCB consultant Kennedy/Jenks has reviewed and will be making recommendations regarding this document's consistency with the Municipal Permit. The RWQCB has also provided the City with clarifying letters regarding Maximum Extent Practicable and Low Impact Development Requirements. Drainage design best management practices, project planning guidance, design specifications and technical requirements for construction and post-construction standards will be added as appropriate. Within the second year of the permit term, revisions will be completed and adopted as necessary. BMP

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K. Information Brochures

The pending Development Standards Document will provide technical guidance regarding Low Impact Development. The City will also prepare a series of urban runoff pollution prevention information brochures. BMP Brochures will summarize relevant

RWQCB and City stormwater requirements and reference web sites for additional information. These will be generally directed toward construction and smaller construction projects. Further, the City will produce and provide an urban water runoff BMP checklist that will guide applicants in selecting BMPs. Lastly, brochures will guide applicants by describing the various steps in the development process. Information contained in the brochures will be made available at the City's Permit Center, City Hall and through the City's web site.

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L. Development Review Process

The City's NPDES Municipal Permit requires new development and significant redevelopment[3] to meet specific standards. These include incorporation of stormwater BMPs to protect receiving water bodies. Practices relate to project design, environmental review, permit conditions, and construction management. The first three steps are addressed within this element. Construction BMPs are addressed in element 5 of this Plan. While all development will be required to incorporate BMPs to protect receiving water bodies, certain priority development types (as identified within the NPDES Municipal Permit) will be required to meet design standards as described in Attachment 4 of the City's Municipal Permit. These projects will meet specific design standards and include best management practices to control flow volume, velocity and water quality prior to issuance of any applicable discretionary or ministerial permits.

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As defined within the Municipal Permit priority project categories include:

1. All residential developments of 10 units or more;
2. Commercial developments;
3. Redevelopment projects creating 5,000 square feet or more of impervious surfaces;
4. Automotive repair businesses;
5. Restaurants;
6. Hillside development of 5,000 square- feet or more of impervious surface[4] ;
7. Certain Parking lots[5];
8. Streets, roads, highways, and freeways—any paved surface equal to or greater than 5-acres; and,
9. Retail Gasoline Outlets[6]

Project BMPs are site and project specific. Therefore, they will vary based upon the project's design and potential impact to urban runoff and receiving water quality. Stormwater BMPs will be required through the development review and approval process. BMP

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[3] The RWQCB Municipal Permit defines the term "redevelopment" to mean additions or expansions of 5,000 square-feet or more of impervious surface, rather than the more common municipal use of the term "redevelopment."

[4] Hillside is defined as an area with known erosive soil located in areas with a natural grade of 25 percent or greater slope. At present, there are no areas within the City that meet that criterion.

[5] Any impervious area exposed to rainfall with 25 or more parking spaces, or with 5,000 square-feet or more of area.

[6] Any facility engaged in selling gasoline with 5,000 square-feet or more of impervious surface area.

To determine the most applicable BMPs, applicants proposing "priority projects" shall prepare and submit studies analyzing pre- and post- project pollutant loads BMPs(including sediment) and flows resulting from the projected future development. These stormwater studies shall include the implementation of measures to control stormwater runoff to reduce pollutants and hydromodification effects to the maximum extent practicable standard. Incorporating LID measures conforming to those standards will be adopted BMP by the City and relieve the applicant of this analysis.

The stormwater studies and development plans BMPs shall specify and document permanent site features and proposed BMPs designed to meet minimum sizing criteria to minimize impervious surfaces, retain or detain stormwater, slow runoff rates, and control pollutants for the life of the project. If structural treatment controls are proposed, sizing calculations shall be included. The analysis shall also address the responsibility for the maintenance of treatment controls and other BMPs in perpetuity. For large projects a maintenance district may be required to insure supervised oversight of these maintenance responsibilities and obligations.

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The following steps list the generalized process for the stormwater analysis and plan preparation:

1. Define site characteristics, features, topography, etc.;
2. Identify opportunities and constraints;
3. Design to minimize impervious surfaces;
4. Select treatment BMPs;
5. Design BMPs;
6. Specify source control BMPs;
7. Integrate BMPs into other site designs for landscape and drainage plans;
8. Check/resolve permitting code and compliance issues;
9. Plan for BMP maintenance; and,
10. Prepare stormwater control analysis.

A more thorough discussion regarding numeric sizing is being prepared as part of the City's Low Impact Development Design Standards, which will be released for public review in January 2007. BMP

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Development processing begins with development review. Submittal of an application for planning and zoning approval begins the first step. Figure 4-10 displays a conceptual process for discretionary projects—those that require discretionary action. For most (ministerial) projects, that is, projects that conform to the City's land use and development regulations, the process is much simplified. These projects are exempt from CEQA processing.

Step I—Staff conduct optional pre-application meeting. This step is advisable for those new to the City's NPDES requirements, or for those with large, complex projects. Staff will review necessary BMPs and discuss design options with applicants, including LID.

Step II—Applicant submits Development Review Application including plans and stormwater analysis.

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Step III—Staff determines whether application is complete, including verifying submittal of a stormwater control analysis.

Step IV— Staff reviews proposed development for conformity with applicable regulations. Staff will review the applicant's stormwater analysis as part of the project review.

Step V— Staff are responsible for reviewing proposed development for conformity with local, state and Federal regulations. Staff review of the applicant's stormwater control analysis/plan is conducted at this step. . Engineering staff provides comments/conditions related to NPDES requirements.

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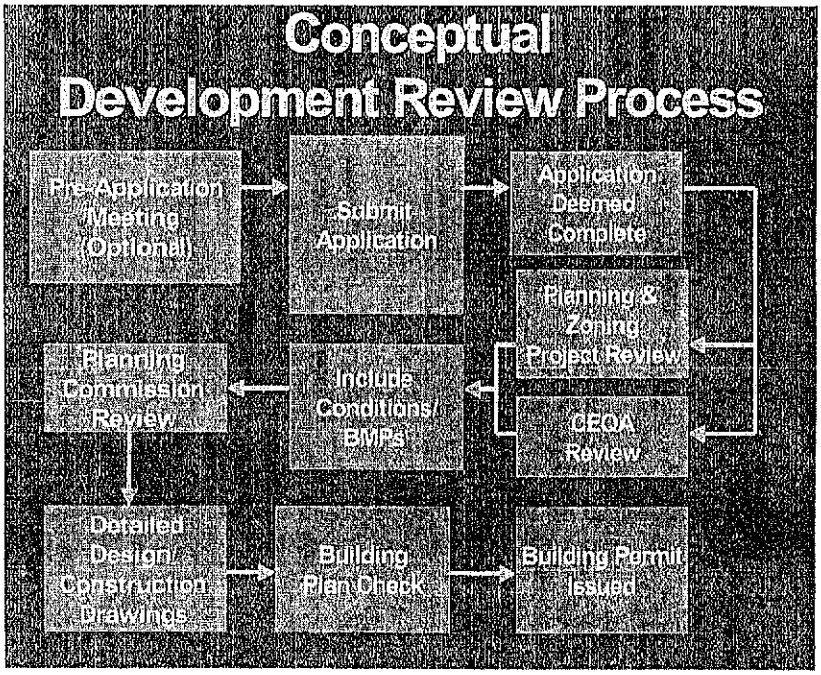
Figure 4-10 Conceptual Development Review Process



During the review process, staff will solicit comments from other City divisions and departments. Comments from these various municipal disciplines will be considered at a City Development Review Committee (DRC) meeting. BMPs may be incorporated into the project as specifications, project design modifications, conditions of approval or other requirements as appropriate to reduce stormwater impacts to the MEP.

Project applicants will assure the adequacy of the maintenance of stormwater BMPs during construction and throughout the life of the project. Maintenance of treatment and other urban runoff controls will be the responsibility of the applicant, unless included in a

maintenance district. Maintenance methods must be identified in writing and approved as part of the permit prior to permit issuance.

Step VI –During the building plan and construction permit review process staff will ensure that BMPs are carried forth and incorporated into construction drawings and plan specifications.

Step VII – Where substantive revisions to a project have been proposed; staff will re-initiate Step II to ensure revisions meet stormwater requirements. If proposed changes are determined to potentially materially affect surface runoff, further changes to the project design, or amendments to the previously approved permit such as different or additional BMPs may be necessary.

M. BMP Selection

Land development design and review must consider many factors: environmental, economic, temporal and other factors in context of the individual project. There is no universal solution to stormwater pollution prevention. Consequently, stipulated conditions, project designs and required BMPs will be established on a project-by-project basis. However, there are categories of BMPs that should be considered given certain shared project traits, or environmental circumstances. This "menu" of BMPs will be incorporated into the City's Standard Specifications, Design Standards and Standard Plans. The new Development Standards document will provide the default standard BMPs for which the project engineers will use as a benchmark. As part of the development review process consideration shall be given to watershed protection. While each project will be reviewed individually, project processing will be standardized and uniform water protection principles employed.

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Plan review will be conducted consistent with watershed protection values contained with the NPDES Municipal Permit, *Salinas Stormwater Management Plan, and the new Development Standards document*. Further, plan processing will be performed using the development design standards prepared under the NPDES Municipal Permit as the required benchmark. Until the development design standard requirements are adopted (second year of permit term), requirements contained within the NPDES Municipal Permit shall be employed. For example, at minimum, retail gasoline projects shall be required to use BMPs listed in the *California Storm Water Quality Task Force, March 1977 BMP Guide for Retail Gasoline Outlets*. In addition, projects will meet numeric sizing criteria contained within the NPDES Municipal Permit. Upon adoption of the City's LID development design standards, these will replace the interim standards referenced within the Municipal Permit.

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City staff will employ the following methodology when advising developers and during plan review. The following discussion includes a list of BMPs that may be employed to meet Municipal Permit requirements and minimize the introduction of pollutants of concern.

The City's focus for protecting water quality will be pollution prevention and site/ architectural designs will incorporate pollution prevention BMPs as their cornerstone. Project review will also include the provision of source control BMPs, such as Low Impact Development techniques. Where site design and source control management

practices fail to bring the project into conformity with Municipal Permit pollution prevention (quality, volume and velocity) MEP requirements, structural treatment control techniques will be employed. For example, a new supermarket sized shopping center will be reviewed for how runoff from the building roof and parking areas are treated in low impact development BMPs on site. Calculations will be reviewed to insure proper sizing with all BMPs for each drainage area. If unique conditions exist on a portion of the property, which will not allow for low impact BMP implementation, other types of stormwater treatment will be considered for this application in this portion of the property.

N. Site Planning and Development BMPs

The section that follows lists BMPs by type—site design, rainfall infiltration, etc. Depending upon the project and site location to meet the City's Municipal Permit requirements.

Deleted: , these BMPs may provide utility in meeting

1. Pollution Prevention / Site Design:

   The City's Municipal Permit requires specific development categories to reduce pollutant runoff to the maximum extent practicable. Site design BMPs include any project design feature that prevents the creation of pollution sources, or reduces the severity of impacts to downstream receiving water bodies to the maximum extent practicable.

Deleted: In many cases, this requires inclusion of site design techniques that result in post-development runoff mimicking the pre-development site hydrologic response. That is, development should not result in an increase in flow volume, velocity, or pollutant load over pre-development peak amounts

   The BMPs listed below should be selected, and/or considered in new development. Selection of site design BMPs will be project, site and performance driven; and consistent with the Development Standards document. Proponents may select whichever BMPs they determine best meets municipal and state standards, as well as project needs. In cases where certain prescriptive BMPs prove impracticable, other BMPs that similarly meet the Municipal Permit standard of removing project pollutants to the MEP must be substituted.

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   In addition to the BMPs that follow, goals, objectives and polices from the City's General Plan that protect water resources will also be considered BMPs.

2. The following Smart Growth principles will be considered BMPs:

   a. For projects identified within the City's NPDES Municipal Permit as *priority development projects*, developers will prepare and submit a stormwater control plan that analyzes pre-and post-development project pollutant loads, including sediment, and flows (volume and velocity) resulting from proposed development, and explain how the design will reduce urban runoff to MEP. A licensed engineer or other trained and licensed professional capable of conducting this study shall prepare this analysis. For all other projects, a simpler Stormwater Control Plan will be required. For some projects, one page identifying pollutants of concern, summarizing the proposed BMPs and their maintenance schedules, and including them on the plans and specifications may suffice. These less rigorous documents may not require preparation by a licensed professional, however, City staff trained by a licensed engineer or other trained and licensed professional shall determine the adequacy of the submitted Stormwater Control Plan.

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   b. The following planning principles will be considered during the preparation of the Development Design Standards:

i. Reducing street width areas as authorized by the City's Traffic Engineer and Fire Chief.
ii. Include sunken landscaped islands in street designs.
iii. Reduce future parking lot sizes/requirements by encouraging shared parking as appropriate and as provided for in the Zoning Code Update.
iv. Providing incentives for opportunities for structured parking (multi-level) rather than surface parking.
v. Include porous pavers and/or porous pavement in parking overflow areas.

O. Required Development or Post-construction BMPs

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Site Design BMPs: all of the following are lacking specific wording to answer questions like "How much?"

Minimize Impervious Areas

- Incorporate Smart Growth (traditional neighborhood development) principles and design concepts that implement Salinas' General Plan;
- Develop streetscapes that minimize impervious surfaces and maximize tree canopy to the greatest extent feasible by requiring landscaped setbacks in accord with zoning standards;
- Incorporate landscape buffer areas between sidewalks and streets;
- Avoid residential cul-de-sacs and incorporate landscape areas into street sections wherever possible;
- Increase building density while decreasing building footprints; specifics
- Use cluster development that incorporates smaller lot sizes and maximizes open space; and,
- Reduce overall lot imperviousness to what % or amount? by promoting alternative driveway and parking lots surfaces and designs.

Increase Rainfall Infiltration

- Encourage weak wording sustainable needs a definition building design;
- Direct runoff from rooftops and hardscape to landscape areas; avoid routing runoff to the roadway or the urban runoff conveyance system;
- Use permeable materials for private sidewalks, driveways, parking lots, and interior roadway surfaces, while ensuring compliance with ADA/Title 24 access requirements; and,
- Where soils percolate freely, consider infiltration designs.

Deleted: dry wells or other

Maximize Rainfall Interception

- Maximize canopy interception and water conservation by preserving native and existing vegetation, especially trees, and by planting low water using street trees, and large shrubs;
- Encourage the use of cisterns/rain barrels to retain rainfall for later landscape irrigation; and,
- Design landscape areas to receive roof and surface drainage.

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Minimize Directly Connected Impervious Areas

- Drain rooftops into adjacent/nearby landscape areas prior to discharge into storm drain;
- Drain parking lots into landscape areas that serve also as bio-filtration areas; and

- Drain roads, sidewalks and paths into adjacent landscaped areas rather than directly into the street.

Slope and Channel Protection

- Use natural drainage systems to maximum extent practicable;
- Stabilize permanent channel crossings;
- Select native, indigenous or water-thrifty plants appropriate for the local ecosystem with deep root structures for slopes; and
- Use energy dissipaters, such as river stones or riprap, at drain outfalls of new storm drains, culverts, conduits, or channels that enter other unlined channels.

Source Control BMPs

- Use/encourage sustainable building design, including low impact development (LID)
- Use water-thrifty landscape designs with efficient irrigation systems, such as drip systems, rather than spray, to eliminate runoff.

Treatment Controls BMPs

Bio-filters

- Grass swales;
- Grass strips;
- Vegetated swale; and
- Bio-retention.

Table 4-2 displays a comparison of the effectiveness of various treatments at removing common pollutants of concern. More detailed information is available from these resources:

1) Caltrans *Treatment BMP Technology Report, April 2006* (http://www.mastep.net/documents/caltrans%20treatment%20bmp%20technology%20report.pdf).
2) National Pollutant Removal Performance Database for Stormwater Treatment Practices, June 2000, Center for Watershed Protection (http://www.cwp.org).
3) BMP National Stormwater Database, American Society of Civil Engineers (http://www.bmpdatabse.org/), 4) CSUS Office of Water Programs: Storm Water Monitoring (http://www.stormwater.water-programs.com)

Table 4.2 Treatment Control Performance

BMP Performance												
Constituent Performance												
BMP Type	BMP	Coarse Sed.	Fine Sed.	NO3	TN	TP	Pb (T)	Zn (T)	Cu (T)	Pathogens	Oil and Grease	Trash and Debris
Detention Basins	Wetponds	X	X	#	O	O	X	X	O	O	NR	X
	Extended Wetponds	X	X	O	O	X	X	X	X	O	NR	X
	Extended Drypond	X	O	#	O	#	O	O	O	#	NR	X
Water Quality Wetlands	Shallow Wetland	X	X	O	#	O	O	X	O	X	NR	X
	Extended Detention Wetpond	X	X	O	#	O	O	X	O	X	NR	X
Good X Fair O Poor #												
NR: Not recommended for treating this parameter without pretreatment due to high probability of system impairment												

Source: GeoSyntec Consultants, 2002; Santa Clara Valley Urban Runoff Pollution PreventionProgram

Table 4.2 Treatment Control Performance (Continued)

BMP Performance												
		Constituent Performance										
BMP Type	BMP	Coarse Sed.	Fine Sed.	NO3	TN	TP	Pb (T)	Zn (T)	Cu (T)	Pathogens	Oil and Grease	Trash and Debris
Biofilters (horizontal)	Bioswale	X	O	#	O	O	X	O	O	#	O	O
	Filter Strip	X	O	#	O	O	X	O	O	#	O	O
Filters (vertical)	Sand Filter	X	X	#	O	O	X	X	O	O	X	X
	Media Filter	X	X	#	O	O	X	X	X	O	O	NR
	Bioretention	X	X	#	X	X	X	X	X	#	X	NR
Solids Separator	Rotational Flow *	X	O	#	O	O	O	O	O	#	X*	X
	Multi-Chamber	O	#	#	O	#	O	O	#	#	O	X
Inserts	Catch Basin Insert **	X	O	#	O	O	O	O	O	#	X**	X

Good X Fair O Poor #

NR: Not recommended for treating this parameter without pretreatment due to high probability of system impairment.

* Assumes that sorbent is placed in sedimentatin chamber

** The San Francisco Regional Board staff does not recommend the use of this BMP as it feels that it is ineffective.

Source: GeoSyntec Consultants, 2002; Santa Clara Valley Urban Runoff Pollution PreventionProgram

Detention / Retention Basins

- Extended/dry detention basins with drought tolerant grass linings as part of larger system that infiltrates water, such as source control and green site design;
- Retention basin; and
- Catch basin screens.

Infiltration Basins

- Infiltration basin;
- Infiltration trench;
- Porous concrete;
- Porous modulate concrete block; and
- Wet ponds.

Drainage Inserts (lower priority)

- Oil/Water separators;
- Catch basin inserts; and,
- Storm drain inserts.

Filtration Systems

- Media filtration; and,
- Sand Filtration.

Continuous Flow Deflection/Separation Systems

- Swirl Concentrator;
- Vortex-type inlet use at final site discharge point.

P. Outreach, Education and Training

Consistent with its Municipal Permit, Salinas will annually conduct a multi-faceted education program. The program will include staff training, targeted education and community outreach. Training will include broad-based topics, such as Municipal Permit requirements and the Clean Water Act, as well as specific information about procedures and BMPs. For the first two years of the Municipal Permit the City will focus on training staff and educating the development community. During the third year of the permit term, City staff will continue to conduct broad outreach to the general public.

Outreach, training, and educational efforts will be conducted and managed by an interdisciplinary team. Topics will include basic watershed management theory, potential environmental/water quality impacts regarding development, and an overview of the City's Municipal Permit.

All staff involved with aspects of project management, project and/or environmental review, or development policy formulation/implementation will be provided annual training on existing and emerging designs and techniques to protect water quality and limit impacts. Among other practices, smart growth principles, sustainable development, low impact development techniques, and proven BMPs will be presented. Training will range from formal workshop presentations and guest speakers, to informal "brown-bag" sessions, web-based presentations and individual research. As knowledge of BMPs evolve, municipal divisions and individual staff will keep current by holding brief division meetings and assimilate information into a reference library. Annual training will ensure that City staff are kept current and knowledgeable of Municipal Permit, *Stormwater Management Plan* and other requirements, and are effectively implementing them.

In the first year of the permit term, staff will conduct an educational program for the development community. This session will include a summary of the Municipal Permit and its effects upon development processing. This session may be conducted in conjunction with staff training and key issues and new requirements will be presented. In conjunction with LID standards preparation, the City will conduct a series of outreach sessions with the broad community. Additional public meetings (public hearings) will be held with the Planning Commission and City Council when these standards are considered for adoption. Once standards are adopted, City staff will produce an information brochure that summarizes new regulations.

As the City's Stormwater Management Plan changes in response to the City's NPDES Municipal Permit requirements and other factors, staff will prepare updates to the City's information brochures outlining new BMPs. Upon adoption of the LID Development Standards, an informational brochure will be printed that summarizes new requirements. The City will also post relevant information on its web site.

4.7 Program Effectiveness

Salinas will employ direct means to assess the City's stormwater management program's effectiveness in implementing LID. City of Salinas staff will measure its success on how much of the new drainage area impacted by new development and redevelopment will have its runoff treated via low impact bioremediation versus that treated via commercial devices such as vortex separators. It is the City's goal that the drainage area from new development treated with LID BMPs exceed 75% of the new development area built.

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Deleted: The implementation of BMPs will be confirmed prior to the final approval of building permits and/or Certificates of Occupancy for new development.

Deleted: Salinas has established a water-monitoring program that will compare baseline information with changes over the permit term. ¶
¶
For this permit term, water quality sampling will be conducted as outlined within the City's Quality Assurance Pollution Plan and the Monitoring requirements contained it the City's NPDES Municipal Permit. ¶