



SAN MATEO COUNTYWIDE
Water Pollution Prevention Program
Clean Water. Healthy Community.
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New Development Subcommittee
Proposed Agenda
August 4, 2009, 1:30 to 3:30 pm
South San Francisco's Water Quality Control Plant – Administration Building
195 Belle Air Road – South San Francisco

- I. Introductions, Announcements, Minutes & Agree on Agenda - Matt Fabry, All (5 min.)**
Objective: Meet attendees, review and approve previous meeting summary, make announcements, and agree on agenda.

- II. Update on Technical Advisory Committee Meeting and Any Other Issues that Are Not Covered Elsewhere on the Agenda - Matt (5 min.)**
Objective: Obtain information from the TAC meeting.

- III. Municipal Regional Stormwater Permit - Matt, Everyone (15 min.)**
Objective: Receive update on status of the MRP for issues affecting new development.

- IV. Statewide Construction General Permit - Laura Prickett, Everyone (10 min.)**
Objective: Receive update on status of this permit and CASQA response.

- V. Review Training on the Sustainable Green Streets and Parking Lots Design Guidebook, Everyone (10 min.)**
Objective: Share impressions of the May 28 workshop and review evaluation summary.

- VI. Update from the Proposition 84 Stormwater Funds Grant Application Work Group – Work Group members, Everyone (10 min.)**
Objective: Obtain information on the work group's progress developing a project for possible stormwater grant funding of low impact development street and/or parking lot improvements in the San Francisquito Creek Watershed

- VII. Update on Other Funding Opportunities for Green Streets - Matt (10 min.)**
Objective: Receive information about potential funding opportunities for green streets, other than Proposition 84.

VIII. Property Owners' Annual Reports on Operation and Maintenance of Treatment Measures - Laura/All (15 min.)

Objective: Discuss the effectiveness of the standard O&M Agreement's requirement that property owners prepare and submit annual reports of treatment measure O&M to see if there is a need to update the standard O&M Agreement.

IX. Subcommittee Activities that Could Precede Municipal Regional Permit - Laura (10 min.)

Objective: Consider collaborating with other subcommittees to develop Enforcement Response Plan, adapting Alternative Certification Form for consultant reviews of stormwater treatment measure design, and/or updating Guidebook of Site Design Examples.

X. Alameda County's Plans for Database to Track New Development and Construction Projects, and Update of Soil Specifications - Laura (10 min.)

Objective: Hear about projects that could potentially involve regional cooperation.

XI. Roundtable Discussion - All (10 min.)

Objective: Obtain information about how municipalities are proceeding with erosion controls and implementation of Provision C.3.

XII. Schedule a Future Meeting at Portola Valley's New Town Center – Leslie Lambert/All (5 min.)

Objective: Identify date in the near future to hold a regularly-scheduled New Development Subcommittee meeting at the LEED-certified Town Center in Portola Valley.

XIII. Next Meeting - Matt, All (5 min.)

Schedule next meeting for October 6.

DRAFT New Development Subcommittee Report

Meeting Date: April 7, 2009

Subcommittee Actions:

1. Agreed that the morning, classroom session of the Green Streets and Parking Lots Workshop would be videotaped, and the afternoon field session would not be videotaped.
2. Agreed to have the post-workshop evaluation survey conducted online using Survey Monkey.

Requested Technical Advisory Committee Action or Feedback/Guidance (if any): Recommended that the Technical Advisory Committee approve the draft New Development Work Plan for 2009/10.

Other Information/Announcements:

1. **Municipal Regional Stormwater Permit (MRP).** The draft Tentative Order (TO) was released for public comment on February 11. Written comments were due April 3. A public hearing will be held on May 13, at which time the TO may be adopted. The Subcommittee reviewed in detail the requirements of Provisions C.3 (New Development) and C.6 (Construction). Matt Fabry emphasized the importance of having elected officials testify at the hearing.
2. **Draft New Development Work Plan.** Laura Prickett explained the work plan was developed to be efficient in meeting the C.3 (New Development) and C.6 (Construction) requirements of the draft MRP within the existing budget, although the five-year projection showed that, if the permit is adopted as drafted, the budget for first fiscal year would be a little higher.
3. **Workshop on the Sustainable Green Streets and Parking Lots Design Guidebook.** The training workshop is scheduled for Thursday, May 28. Registration is currently open to municipal staff. If space is available, developers, builders and consultants working in San Mateo County will be able to register after May 11. Laura Prickett asked for a volunteer to emcee the workshop, since Matt may need to leave the workshop early if he is needed at the Bay Area Stormwater Management Agencies Association (BASMAA) meeting scheduled that day.
4. **Proposition 84 Work Group.** Sustainable Green Streets and Parking Lots Design Guidebook author Kevin Perry will conduct a site visit to potential green streets and parking lots project sites on April 15 and 16. The purpose of the site visit is to select a site (or sites) to include in a Proposition 84 grant proposal to construct a low impact development project in the San Francisquito Creek Watershed. Menlo Park staff identified some potential sites for the site visit.
5. **Survey of C.3 Stormwater Guidance Users.** The online survey of municipal staff, developers and consultants who use the C.3 Guidance has been posted on www.flowstobay.org. Survey results will help SMCWPPP update the C.3 Guidance, after the MRP is adopted. Jennifer Ng commented that there was a glitch in the final question of the survey.
6. **Roundtable Discussion.** Rob Lecel attended the stormwater treatment training sessions at the California Water Environment Association's P3S conference on March 2-4 and explained that the presenters emphasized the value of using landscape-based stormwater treatment measures. Vortex separators, such as CDS units, may be used with other treatment measures as part of a treatment train.

Subcommittee Work That Affects Other Subcommittees: Training workshop on the Guidebook.

Next Steps:

- Jeannie Naughton will see if she can attend the workshop; if so, she will serve as emcee.
- Laura Prickett will have the glitch in the C.3 guidance survey repaired.

Date of Next Meeting: Next regular meeting on June 1.

Construction General Permit – Background

- Statewide permit that must be obtained to cover construction activities for projects that disturb 1 acre or more of land
- Requires development / implementation of a Storm Water Pollution Prevention Plan (SWPPP) during construction
- Owner must submit notice of intent (NOI), annual reports, monitoring data, notice of termination (NOT)

Construction General Permit – Timeline

- Current permit adopted 1999, expired 2004, still in effect
- Drafts issued March 2007, March 2008
- Revised Draft issued April 23, 2009
- Public hearing June 3, 9:00 am
- Comments due June 24, 5:00 pm
- Adopt September 2009? (will not take effect during 2009-2010 wet season)

Construction General Permit – Key Requirements

- Four phases of construction: Grading, Streets/Utilities, Vertical, Post-Construction
- Includes Linear Underground/ Overhead Projects under same permit
- Requires electronic filing of documents: (NOI, map, SWPPP, fee, certification, etc.)
- Existing projects must file within 100 days of permit adoption

Construction General Permit – Key Requirements

- Numeric Action Levels (NALs): Turbidity 250 NTU, pH 6.5 – 8.5
- Numeric Effluent Limits (NELs): Turbidity 500 NTU, pH 6.0 – 9.0
- Design Storm: 5 year, 24 hr for NEL compliance
- Exceedance of NEL is a violation of the permit

Construction General Permit – Key Requirements

- Non-stormwater discharges must also be monitored for NALs & NELs
- Rain Event Action Plans (REAPs) required to protect exposed areas of site within 48 hours of rain event
- Special training and experience required for:
 - Qualified SWPPP Developer (QSD)
 - Qualified SWPPP Practitioner (QSP)

Simplified Risk Categories

Table 7 - Combined Risk Level Matrix

| Combined Risk Level Matrix | | | |
|----------------------------|------|---------------|---------|
| | | Sediment Risk | |
| | | Low | High |
| Receiving Water Risk | Low | Level 1 | Level 2 |
| | High | Level 2 | Level 3 |

- Level 1: Narrative standards (BAT/BCT)
- Level 2: Narrative plus NALs
- Level 3: Narrative plus NALs and NELs

**Sustainable Green Streets Workshop
Summary of Evaluation Survey Responses
Thursday, May 28, 2009**

Number of attendees (not including speakers, workshop staff): 42
Number of surveys completed: 21

1. Please rate the usefulness of the session "Introduction to the Guidebook."
Speakers: Kevin Robert Perry, Robert Dusenbury

12-Very Useful 9-Useful 0-Not Useful 0-No Answer

2. Please rate the usefulness of the visit to opportunity sites. Site Visit Leaders:
Ben Ngan, Kevin Robert Perry, Ken Kortkamp, Robert Dusenbury, Olena Turula

16-Very Useful 5-Useful 0-Not Useful 0-No Answer

3. Please rate the usefulness of the Application Exercises in Breakout Groups.

15-Very Useful 4-Useful 1-Not Useful 1-No Answer

4. Please rate the usefulness of the Presentations by Breakout Groups.

7-Very Useful 12-Useful 1-Not Useful 1-No Answer

5. Which sessions were most and least beneficial?

Introduction to the Guidebook

13-Most Beneficial 4-Least Beneficial

Visit Opportunity Sites

17-Most Beneficial 2-Least Beneficial

Application Exercises in Breakout Groups

14-Most Beneficial 2-Least Beneficial

Presentations by Breakout Groups

10-Most Beneficial 8-Least Beneficial

1-No Answer

6. Would you be interested in attending another workshop on sustainable stormwater practices for New and Redevelopment?

19-Yes

0-No

2-Maybe

6a. Comments

1. It would have been better to have just used the photos from the guidebook in the powerpoint presentation and then highlighting exactly what in the photo we're supposed to be looking at (sometimes I miss the point of the photos entireley).
2. Please ask participants to bring their guidebooks if you are going to use them for training.
3. Very beneficial to have some "hands on" experience as opposed to just listening. Would probably suggest making work groups even smaller-like 2 or 3 people max. to get more involvement from each participant.
4. I think that municipalities are really needing some "real world" workshops instead of these "theoretical, no constraints" workshops in order to deal with issues surrounding infill.
5. Yes, It would be good to have direct access to a site with a representative that is familiar with the underground utilities and infastructure while doing the site tour.
6. I think it would be more helpful to pull out key points from the Guidebook when presenting to a group, rather than going page by page through it.
7. Great job! This was my first exposure to the Guidebook and it was presented in enough detail to allow me apply the concepts to the afternoon assignment. The guidebook is an impressive resource with the right balance of detail and accessibility that will make it useful for many public agency professionals. I wish we could have spent a little more time on the latter chapters but I thought overall the day's time management was ideal. Thanks!
8. Excellent combination of presentation, field trip, and hands-on exercise. Good formula for future workshops as well.
9. The only problem with the presentations was that it was very difficult to see what they were talking about. My group (Urban Streets) had a larger scale photo with tracing paper. The ones that used the architectural drawings were very hard to see because the scale was too small.

7. Suggestions for future topics?

1. Construction costs, maintenance costs.
2. Like the idea of perhaps having a tour of several sites utilizing various designs and types of sustainable stormwater practices that could be viewed from a what's right-what's wrong perspective. I think seeing actual field examples really increases the awareness and understanding in a more meaningful manner.
3. See above. Fitting in landscape treatment in tight sites with little room for stormwater treatment; merging landscaping and stormwater treatment requirements
4. Would be nice to be a site that had a failed stormwater design to review and investigate why it failed and how it might be remedied.
5. Do a case study (whether it be real or not) and show how various principles from the Guidebook could be applied. Focus the discussion on challenges project proponents will face and how principles in the guidebook can best address possible solutions to those challenges, as well as lessons learned from past projects.
6. I think a "lesson's learned" lecture would be great. It might not need to be all day, or it could be combined with a more thorough overview of Ch 5 and 6.

8. Please enter any additional comments:

1. Go over ch 5 more in depth
2. The guidebook was very well written.
3. The shortcoming of the Introduction to the Guidebook was that the speaker did not seem to know the audience. There was no need to go through the first chapter or two with that group. The session should have focused on the practical applications. We can read the rest. The exercise was excellent. It was very nice to work with the design professionals in a small group.
4. Thanks for organizing this. It was applicable and relevant, just a bit too free-form. I enjoyed using the "only vegetation" plan without consideration of mechanical devices since the mechanical devices are usually the "first pick" for engineers and the workshop was essential in getting them to realize that it doesn't take a lot of space to treat stormwater above the ground with vegetated measures. But for us, we have a 50% landscape based stormwater treatment policy, so this issue is now moot for us--we want to know how to fit in stormwater treatment when there is very little space for vegetation on-site. It is also important that in our City we don't co-mingle private and public water (which this workshop focused on the opposite).
5. Coffee in the afternoon. Organic and hydrogenated free pastries. Who needs transfats?

6. Well done. This was a great workshop.
7. Thanks again!
Luis Montoya, Planner
SFMTA Pedestrian Program
8. The morning presentation got a bit rushed toward the end.
9. There was too much mayonnaise on the sandwiches. I don't like mayonnaise.
Otherwise the food was good.

DRAFT Summary of Proposition 84 Grant Meeting with Water Board Staff

Meeting Date: June 10, 2009

In Attendance: Matt Fabry, SMCWPPP; Carmen Fewless, Regional Water Quality Control Board (RWQCB); Shin Roei Lee, RWQCB; Sue Ma, RWQCB; Laura Prickett, EOA Inc.

Purpose of Meeting: Present the Draft Project Site Descriptions for Potential Green Streets and Parking Lots Projects in the San Francisquito Creek Watershed (attached) and request feedback from the Water Board staff on how to make this a highly competitive project for Proposition 84 LID grant funding.

Meeting Highlights:

Matt and Laura presented progress made since the February 24 meeting with Water Board staff. SMCWPPP has identified 10 potential green street and parking lot locations in Menlo Park and Palo Alto, each of which would treat stormwater from 100,000 square feet of impervious surface. The locations of the proposed projects could ultimately facilitate development of a bicycle tour, to help raise public awareness. At this time, it does not appear possible to include all 10 projects in a Proposition 84 grant proposal. The two project sites shown in the Project Site Descriptions with the greatest potential for implementation are the Alma Street and Parking Plaza 1 and 2 projects. Menlo Park staff has identified public review issues that may cause delays for six of the projects, making them difficult or impossible to implement within Proposition 84 time constraints. There is also concern that simultaneous construction of a large number of projects would put too much strain on city staff. To date, Palo Alto and the Santa Clara Valley Urban Runoff Pollution Prevention Program have not committed to participating in a grant application for the two potential project sites in Palo Alto. Matt and Laura also described a potential green parking lot site in Menlo Park that was not included among the Project Site Descriptions, which serves a senior center and public park, and has known flooding problems.

Water Board staff provided the following input:

- 1) Additional funding may be possible through the Metropolitan Transportation Commission's (MTC) Transportation for Livable Communities program for pedestrian, bicycle and streetscape improvements.
- 2) Congestion management funds may be available if Menlo Park is considered a Project Development Area. Contact Kathleen Van Velsor at the Association for Bay Area Governments for more information.
- 3) The proposal should clearly explain the type of treatment measures to be used, how they will treat stormwater, and how much treatment will be accomplished. It is important to calculate and quantify benefits.
- 4) The multiple benefits of the project should be explained. This could include any potential benefits related to reducing erosion, and/or the implementation of TMDLs.
- 5) The application can give a range of the number of projects, for example, "up to __, and no less than __."
- 6) When asked if constructing a larger number of projects is preferred over offering incentives to property owners to install LID, Water Board staff expressed a preference for whatever has the most benefit, suggesting that public LID projects have more reliable benefits. Sue suggested public construction of LID on private property would have more reliable benefits than offering free or reduced-price products.
- 7) Different types of lot-level LID could be implemented in different areas. For example, rain barrels could be used in one area, and rain gardens in another. Then monitoring data could be compared.
- 8) Water Board staff suggested that green streets projects are preferred over green parking lot projects. If, for example, a proposal included five LID projects, it might be OK if four of the projects are green streets and one is a green parking lot, especially if the parking lot project addresses a known problem, such as flooding.
- 9) Shin Roei suggested that it might put less strain on city staff if only five projects were constructed, but each one treated runoff from 200,000 square feet of impervious surface, instead of 100,000 square feet.
- 10) When asked if a grant application is harmed when a project receives other funding, the response was no. However, funding from other grants does not count toward the local match.
- 11) Carmen will contact grant funding staff in Sacramento with the following questions: (a) Can grant funds be spent on consultants to oversee construction sites? (b) Can projects model results in place of monitoring? Given the short timeframe, Water Board staff has indicated that modeling would be more accurate. (c) When is the call for projects anticipated, and will the finish date be extended to make up for delays?

**Stormwater Treatment Measure Operation and Maintenance
Inspection Report to the [[== Insert Name of Municipality==]], California**

This report and attached Inspection and Maintenance Checklists document the inspection and maintenance conducted for the identified stormwater treatment measure(s) subject to the Maintenance Agreement between the City and the property owner during the annual reporting period indicated below.

I. Property Information:

Property Address or APN: _____

Property Owner: _____

II. Contact Information:

Name of person to contact regarding this report: _____

Phone number of contact person: _____ Email: _____

Address to which correspondence regarding this report should be directed:

III. Reporting Period:

This report, with the attached completed inspection checklists, documents the inspections and maintenance of the identified treatment measures during the time period from _____ to _____.

IV. Stormwater Treatment Measure Information:

The following stormwater treatment measures (identified treatment measures) are located on the property identified above and are subject to the Maintenance Agreement:

| Identifying Number of Treatment Measure | Type of Treatment Measure | Location of Treatment Measure on the Property |
|---|---------------------------|---|
| | | |
| | | |
| | | |

V. Summary of Inspections and Maintenance:

Summarize the following information using the attached Inspection and Maintenance Checklists:

| Identifying Number of Treatment Measure | Date of Inspection | Operation and Maintenance Activities Performed and Date(s) Conducted | Additional Comments |
|---|--------------------|--|---------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

VI. Sediment Removal:

Total amount of accumulated sediment removed from the stormwater treatment measure(s) during the reporting period: _____ cubic yards.

How was sediment disposed?

- landfill
- other location on-site as described in and allowed by the maintenance plan
- other, explain _____

VII. Inspector Information:

The inspections documented in the attached Inspection and Maintenance Checklists were conducted by the following inspector(s):

| Inspector Name and Title | Inspector's Employer and Address |
|--------------------------|----------------------------------|
| | |
| | |

VIII. Certification:

I hereby certify, under penalty of perjury, that the information presented in this report and attachments is true and complete:

Signature of Property Owner or Other Responsible Party

Date

Type or Print Name

Company Name

Address

Phone number: _____ Email: _____

[[== Insert Agency Name ==]]
Alternative Certification Program
Stormwater Treatment Measure Design Criteria

[[== NOTE TO AGENCIES: THE FOLLOWING IS THE TEXT OF PROVISIONS C.3.d and C.3.i OF ACCWP'S NPDES PERMIT. YOUR AGENCY IS NOT REQUIRED TO ACCEPT ALL OF THE SIZING OPTIONS IN PROVISION C.3.d. YOU MAY DELETE ANY OF THE SIZING OPTIONS THAT YOU DO NOT WISH TO ACCEPT, BUT YOU MUST INCLUDE AT LEAST ONE FLOW-BASED AND ONE VOLUME-BASED OPTION FROM PROVISION C.3.d. THE ACCWP'S C.3 STORMWATER HANDBOOK RECOMMENDS USING THE TREATMENT CONTROL SIZING METHODS DESCRIBED IN THE CASQA HANDBOOK— THESE ARE i.2 AND ii.2. YOU MAY ADD ADDITIONAL CRITERIA THAT YOU DEVELOP FOR YOUR AGENCY. ==]]

When conducting alternative certification review, qualified professionals will review project applicant design submittals per the design criteria set forth below, including the requirements of Provisions C.3.d and C.3.i of the ACCWP's municipal stormwater NPDES permit.

1. TREATMENT MEASURE DESIGN CRITERIA FROM PROVISION C.3.D

C.3.d Numeric Sizing Criteria For Pollutant Removal Treatment Systems

All Permittees shall require that treatment measures be constructed for applicable projects, as defined in Provision C.3.c, that incorporate, at a minimum, the following hydraulic sizing design criteria to treat stormwater runoff. As appropriate for each criterion, the Permittees shall use or appropriately analyze local rainfall data to be used for that criterion.

i. Volume Hydraulic Design Basis

Treatment measures whose primary mode of action depends on volume capacity, such as detention/retention units or infiltration structures, shall be designed to treat stormwater runoff equal to:

1. The maximized stormwater quality capture volume for the area, based on historical rainfall records, determined using the formula and volume capture coefficients set forth in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ ASCE Manual of Practice No. 87, (1998), pages 175-178 (e.g., approximately the 85th percentile 24-hour storm runoff event); or
2. The volume of annual runoff required to achieve 80 percent or more capture, determined in accordance with the methodology set forth in Appendix D of the California Stormwater Best Management Practices Handbook (1993), using local rainfall data.

ii. Flow Hydraulic Design Basis

Treatment measures whose primary mode of action depends on flow capacity, such as swales, sand filters, or wetlands, shall be sized to treat:

1. 10% of the 50-year peak flow rate; or
2. The flow of runoff produced by a rain event equal to at least two times the 85th percentile hourly rainfall intensity for the applicable area, based on historical records of hourly rainfall depths; or
3. The flow of runoff resulting from a rain event equal to at least 0.2 inches per hour intensity.

2. TREATMENT MEASURE DESIGN CRITERIA FROM PROVISION C.3.i

C.3.i Limitations on Use of Infiltration Treatment Measures - Infiltration and Groundwater Protection

In order to protect groundwater from pollutants that may be present in urban runoff, treatment measures that function primarily as infiltration devices (such as infiltration basins and infiltration trenches not deeper than their maximum width) shall meet, at a minimum, the following conditions:

- i.** Pollution prevention and source control measures shall be implemented at a level appropriate to protect groundwater quality at sites where infiltration devices are to be used;
- ii.** Use of infiltration devices shall not cause or contribute to degradation of groundwater water quality objectives;
- iii.** Infiltration devices shall be adequately maintained to maximize pollutant removal capabilities;
- iv.** The vertical distance from the base of any infiltration device to the seasonal high groundwater mark shall be at least 10 feet. Note that some locations within the Permittees' jurisdiction are characterized by highly porous soils and/or a high groundwater table; in these areas treatment measure approvals should be subject to a higher level of analysis (e.g., considering the potential for pollutants such as on-site chemical use, the level of pretreatment to be achieved, and similar factors);
- v.** Unless stormwater is first treated by a means other than infiltration, infiltration devices shall not be recommended as treatment measures for areas of industrial or light industrial activity; areas subject to high vehicular traffic (25,000 or greater average daily traffic on main roadway or 15,000 or more average daily traffic on any intersecting roadway); automotive repair shops; car washes; fleet storage areas (bus, truck, etc.); nurseries; and other high threat to water quality land uses and activities as designated by each Permittee; and,
- vi.** Infiltration devices shall be located a minimum of 100 feet horizontally from any water supply wells.