



**SMCWPPP C.3 Workshop**  
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## Update on Current and Future Stormwater Permit Requirements

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## Outline of Presentation

- Year in Review: C.3 Requirements for FY 13-14 (Regional Submittals)
- Issue Focus: Special Projects
- C.3 Issues for the Next Permit
  - Potential Changes to Requirements
  - LID White Paper
  - Green Infrastructure Work Group




## Year in Review: FY 13-14

- No new C.3 requirements for development projects or agencies
- BASMAA Regional Submittals
  - Green Streets Pilot Project Summary Report (9/15/13)
  - Status Report on Application of Feasibility/Infeasibility Criteria (12/1/13)




## Green Streets Report

- Per C.3.b, Permittees are required to:
  - Construct 10 pilot green street/parking lot projects within Bay region by 12/1/14
  - Conduct monitoring or modeling to show water quality benefits achieved
  - Report on any projects in their jurisdictions in annual reports
  - Collectively submit a summary of all projects as part of FY 12-13 Annual Report





## Green Streets Report

- Report findings:
  - Ten projects will be substantially completed by 12/1/14 and ten other projects are being funded/designed
- SMCWPPP Projects:
  - Donnelly Ave, Burlingame
  - Bransten Rd, San Carlos





## Feasibility Status Report

- Low impact development (LID) treatment defined as rainwater harvesting/use, infiltration, or evapotranspiration, or if those are infeasible, biotreatment
- BASMAA Feasibility Criteria Report submitted to Water Board on 12/1/2010
- Beginning 12/1/2011 (12/1/2012 for public projects) – 100% LID treatment required




### Feasibility Status Report

- Permittees must submit Status Report to Water Board by 12/1/13 containing:
  - Most common feasibility criteria used
  - Barriers and constraints to rainwater harvesting and use and infiltration, and strategies to address barriers
  - Proposed changes to feasibility criteria
  - Guidance on any changes to criteria



### Feasibility Status Report Key Findings

- From FY 11-12 and 12-13 Annual Reports:
  - Most projects (82%) used bioretention, many of which were designed to infiltrate
  - About 4% of projects reported use of "infiltration" treatment
  - Nearly half of all projects used infiltration-based site design measures (including pervious pavement)
  - No projects used rainwater harvesting for C.3 compliance (some did for other purposes)



### Barriers to Infiltration for C.3 Compliance

- Predominance of clayey soils in the Bay area
  - For most sites, not practical or feasible to infiltrate full C.3.d design volume
  - Infiltration of some runoff is feasible on most projects but amounts are variable


### Barriers to Rainwater Harvesting for C.3 Compliance

- Lack of demand to use entire water quality design volume
- Competition with recycled water use
- Capital and O&M cost
- Lack of plumbing codes for rainwater systems (now available)






### Feasibility Status Report Recommendations

- Recognize bioretention as equal priority to infiltration and rainwater harvesting
- Continue to emphasize site design and runoff reduction where possible
- Continuously improve design and construction standards for bioretention
- Develop protocols for delineation and signage for pervious pavements and other measures
- Revise O&M verification programs to optimize long-term performance of these features





### Issue: Special Projects

- Special Projects are high density and transit oriented development projects that may receive LID treatment reduction credits (i.e., use some "non-LID" measures)
- Potential Special Projects under review must be reported to Water Board twice a year until they are approved
- Water Board staff provided comments on permittees' reports submitted over last two years

### Special Projects Category A

- Creates or replaces ½ acre or less of impervious surface
- No surface parking except for emergency access, ADA or loading requirements
- 85% of lot is covered by buildings; remaining 15% is for safety access, trash/recycling, public uses, etc.
- Up to 100% LID treatment reduction credit

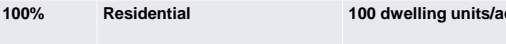
### Special Projects Category B

- Creates or replaces ½ - 2 acres of impervious surface
- No surface parking except for emergency access, ADA or loading requirements
- 85% building lot coverage; remaining 15% is for safety access, trash/recycling, public uses, etc.
- Graduated system of LID treatment reduction credit




### Special Projects Category B Graduated Credit System

LID Treatment Reduction (Maximum)	Land Use	Density
50%	Commercial or Mixed Use	Floor Area Ratio 2:1
50%	Residential	50 dwelling units/acre
75%	Commercial or Mixed Use	Floor Area Ratio 3:1
75%	Residential	75 dwelling units/acre
100%	Commercial or Mixed Use	Floor Area Ratio 4:1
100%	Residential	100 dwelling units/acre




### Special Projects Category C Transit Oriented Development Projects

- Commercial or mixed use project: minimum floor area ratio of 2:1 required
- Residential project: minimum density of 25 dwelling units/acre required
- Graduated system of LID treatment reduction credit:
  - Location credit
  - Density credit
  - Minimize surface parking credit





### Special Projects Category C Location Credit System

LID Treatment Reduction Credit	Location
50%	Within ¼ mile radius of existing or planned transit hub
25%	Within ½ mile of radius of existing or planned transit hub
25%	Within a planned Priority Development Area (designated by ABAG/MTC)




### Special Projects Category C Density Credit System


LID Treatment Reduction	Land Use	Density
10%	Commercial or Mixed Use	Floor Area Ratio 2:1
10%	Residential	30 dwelling units/acre
20%	Commercial or Mixed Use	Floor Area Ratio 4:1
20%	Residential	60 dwelling units/acre
30%	Commercial or Mixed Use	Floor Area Ratio 6:1
30%	Residential	100 dwelling units/acre




### “Special Projects” Category C Minimum Surface Parking Credit System


LID Treatment Reduction	Location
<b>10%</b>	<b>10% or less of the total post-project impervious surface is dedicated to at-grade surface parking</b>
<b>20%</b>	<b>No surface parking except for emergency vehicle access, ADA accessibility, and loading zones</b>




- ### Key Comments on Special Project Submittals
- Projects need to continue to be reported from application submittal through final approval
  - Projects cannot receive final discretionary approval without a stormwater control plan
  - Credits for mixed use projects can only be based on the FAR criteria (even if the project is primarily residential)
  - If project not using 100% LID, must submit narrative discussion of feasibility analysis
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- ### C.3 Issues for MRP 2.0 - Potential New Requirements
- Regulated project threshold – drop to 5,000 sf of impervious surface
  - Road reconstruction projects – remove exemption from C.3 unless commit to “Green Streets Program”
  - Pervious paving -- include design and O&M specs and require inspections
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- ### Potential New Requirements (continued)
- Hydromodification management
    - Make criteria consistent across region
    - Allow variation in low flow criterion based on creek bed material and configuration
  - O&M Inspections
    - Require inspections at time of installation instead of “within 45 days”
    - Require Enforcement Response Plan
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- ### Potential New Requirements (Special Projects)
- Fix Special Projects language to allow small amount of commercial use in residential projects
  - Clarify calculation of FAR
  - Reduce reporting to once per year (in Annual Report)
  - Strictly define requirement for narrative discussion of feasibility of 100% LID
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- ### LID White Paper
- Purpose of White Paper:
    - Describe LID vision and approach for Bay area and how permit should follow that approach
    - Provide technical basis to support recommended approach for key C.3 provisions
  - White Paper tasks:
    - Analyze data on bioretention performance
    - Review other California permits
    - Conduct modeling analyses if needed
    - Prepare draft White Paper by mid-summer, get permittee input, and complete by 11/1/14
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### Green Streets – the Super BMP?

- Green infrastructure planning/implementation will be a central component of MRP 2.0
- Multiple benefits:
  - Flow reduction
  - Pollutant loading reduction (e.g., PCBs, mercury, metals and pesticides)
  - Trash capture (potentially)
  - Urban greening
  - Improved bike/pedestrian environment
  - Climate change abatement (e.g., reduce GHGs)




### Green Infrastructure Work Group

- Members: Stormwater managers; municipal public works, planning, and transportation staffs; researchers; Water Board staff
- Purpose:
  - Discuss approaches to long term planning for green infrastructure (GI)
  - Discuss integration of GI planning/ funding with existing transportation planning/funding
  - Identify short term actions associated with long term planning that are reasonable for inclusion in MRP 2.0




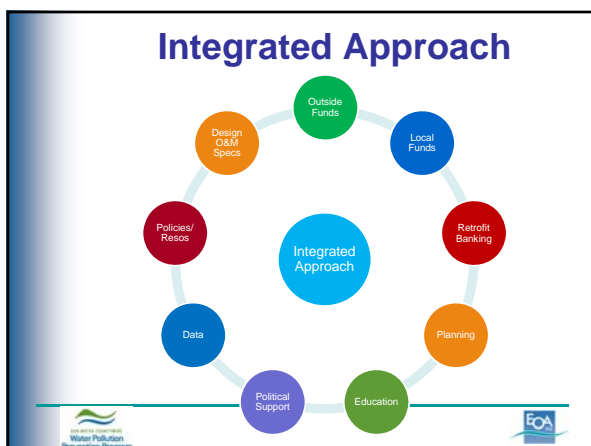
### Current Approach to Making Projects Happen

- Multiple funding sources
- Opportunistic
- Water quality-focused grants
- Lack of coordination with transportation funding cycles
- Semi-integrated, stand-alone projects that are usually not part of a larger “grand plan”



### What’s a Better Approach?

- Integrate sustainability/water quality funding with transportation funding
- Develop long term, coordinated plans for integration and implementation
- Conduct outreach and increase public knowledge to get support
- Emphasize the broader benefits of green infrastructure beyond water quality
- Combine local, regional, state, and federal efforts to make it work

### Potential Short Term Actions

- Retrofit planning efforts – link to Prop 84 “GreenPlan Bay Area” project
- Green Infrastructure Policies, Resolutions, or Sustainable Streets Plans
  - Cities of San Mateo and Emeryville examples
- Alternative compliance/banking programs
- Improved design, construction, and O&M standards
- Coordinated local and outside funding sources
- Outreach and training efforts



## Questions?



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