



Stormwater Management in San Mateo County

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Pollution Prevention Program



SAN MATEO COUNTYWIDE
**Water Pollution
Prevention Program**

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C/CAG Water Committee
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Stormwater – What's the Big Deal?

- Urbanization = impervious and polluted
- Impervious = less infiltration
- Stormwater washes pollutants away
- Flows into inlets and underground pipes
- Goes directly to creeks, the Bay, or ocean
- No treatment to remove any pollutants
- Bad for water quality, human health, aquatic life, aesthetics

The Municipal Regional Permit

- Issued by SF Bay Regional Water Board
- 76 municipal permittees
 - San Mateo, Santa Clara, Alameda, Contra Costa Counties, Cities of Fairfield, Suisun City, Vallejo
- Addresses full spectrum of stormwater issues
 - Municipal, commercial, construction
 - Monitoring, outreach
 - New & Redevelopment
 - Pollutants of concern

Municipal Regional Permit

- Mercury/PCB TMDLs
- Trash
- Pesticides
- New & Redevelopment
 - Low Impact Development Treatment
 - Hydromodification Management
- Green Infrastructure Planning

Mercury & PCBs

- Mercury – legacy and ongoing problem
 - Aerial deposition from China
- PCBs – Used extensively, now banned, but still found throughout urban environment
- Significant reductions required for both
- Both adhere strongly to sediment
- Source control and treatment

Trash

- Impacts aquatic life and aesthetics
- Municipalities required to eliminate impacts from trash by 2022
- Will likely require a combination of controls – filtering devices, enforcement, street sweeping, container management, cleanups, etc.
- Visual assessments to verify effectiveness
- Cities implementing long-term control plans, but need resources

Drought, El Niño, and Climate Change

- Need for more sustainable water supplies
- Renewed interest in groundwater
- Potential significant precipitation year
- Potential for increased flood impacts
- Precipitation more intense in future
- Rising seas impact flows from watersheds
- Stormwater aspects to all of these

What's the Solution?

- Challenging, costly problems to address
- Many pollutants, hard to control sources
- Impacts from urbanization, climate
- Need sustainable, resilient urban areas
- Manage stormwater more sustainably
- Green infrastructure emerging as solution

What's Green Infrastructure?

- Using natural systems to capture, treat, and infiltrate stormwater
- Restores “natural” stormwater management
- Distributed, small-scale systems
- Multi-benefit, including for key water issues
 - Adaptation for climate change impacts
 - Flooding
 - Groundwater recharge

Green Infrastructure Planning

- All permittees to develop GI Plans by 2019
- Describe gradual shift from gray to green
- Includes public and private
- Show 3 kg/yr PCBs load reduction by 2040
- Prioritize projects within specific time frames
- Design guidelines, details, and standard specs
- Adopt relevant policies & ordinances
- Public outreach, staff training, educate electeds

Stormwater Resource Planning

- SB 985 (2014) requires SRPs to get bond funds
- Prioritize stormwater capture projects
- Big focus on benefits to water supply
- Metrics-based evaluation of multiple benefits
- Quantify stormwater capture capability
- Allow for public participation
- Required to compete for \$200 million Prop 1 stormwater funds – Round 1 in early 2016
- C/CAG hoping to do one countywide plan

Major Planning Ahead

- Countywide Stormwater Resource Plan
 - Multi-benefit stormwater management
 - Identify opportunities for projects
- Green Infrastructure Plans – all cities
 - Integrate GI with other city plans/priorities
 - Complete Streets & bike/ped improvements
 - Climate change/resiliency
 - Groundwater recharge, flood control
 - Demonstrate water quality benefit for mercury and PCBs



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