



## ENVIRONMENTAL CHALLENGES STORM WATER UPDATE

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## REGIONAL APPROACH

- **RFQ for Consultant Services for districts in Placer County**
  - Eight participating districts
  - Five-year program
- **Fiscal year 04-05**
  - Conducted site visits of “typical” sites
  - Prepared draft SWMP template
  - Met with Regional Water Quality Control Board representative and presented draft SWMP



## REGIONAL BOARD COMMENTS

- **Minimum Control Measures**
  - **Public Education & Outreach**
    - **Develop Education/Training Program (BMP #1)**
      - Identify existing and/or develop new educational and training materials
        - Material into classroom (posters, signage)
        - District website, school newspaper, storm water displays, brochures
        - Other agencies (city, county, watershed groups)
      - Develop a strategy to effectively educate students and facility users regarding storm water pollution prevention.
        - Students, staff & parents
        - Consultants, vendors & contractors



## PUBLIC EDUCATION & OUTREACH (CONTINUED)

- **Increase student awareness (BMP #2)**
  - Use educational materials developed in BMP #1
  - Where to display/place educational materials to reach students
- **Train employees & educate other facility users (BMP #3)**
  - Target groups include M & O staff, facilities development staff, administration, teachers, clubs, volunteers, etc.
- **Inform consultants & contractors (BMP #4)**
  - Distribute educational materials
  - Conduct workshops for consultants/contractors/vendors



## **PUBLIC INVOLVEMENT & PARTICIPATION**

- **Public Notice (BMP #1)**
  - District board will have to adopt a resolution authorizing and directing the superintendent to implement and enforce the SWMP
- **Storm Drain Marking Program (BMP #2)**
- **Local Watershed input (BMP #3)**
- **Community Activity (BMP #4)**
  - What's happening in your area?
    - Participate in creek clean-up days.



## **ILLICIT DISCHARGE DETECTION & ELIMINATION**

- **Legal Authority (BMP #1)**
  - Develop a district policy to effectively prohibit illicit non-storm water discharges into the district's MS4s (required in the general permit)
- **Outfall map preparation (BMP #2)**
  - Identify outfalls and receiving streams
  - Districts will have to figure out where the water is running off the campus and into what source



## ILLCIT DISCHARGE DETECTION & ELIMINATION (CONTINUED)

- **Illicit Discharge Elimination (BMP #3)**
  - Develop and implement a plan to detect and eliminate illicit non-storm water discharges
    - Custodial wash water disposal
    - Wash down of outdoor eating areas
    - Building wash down (power washing)
    - Vehicle and equipment washing
      - Maintenance trucks, lawn mowers
      - Car washes (fundraisers)
    - IPM program
      - Proper application; no overspray
    - Landscape treatment
      - Fertilizer; again no overspray



## CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

- **Legal Authority (BMP #1)**
  - District policy needs to address legal authority necessary to require & enforce construction site controls
- **Construction Plan Review (BMP #2)**
  - Currently required to have a construction SWPPP for any construction over 1 acre
  - District's SWMP not limited by size
  - Huge training impact on contractors, subs, consultants, architects, IOR's, district staff



## CONSTRUCTION SITE STORM WATER RUNOFF CONTROL (CONTINUED)

- **Construction Site Inspection (BMP #3)**
  - Establish policies/procedures that assure effective BMPs are both in-place & maintained on sites
    - Both district policy and contract language
    - Identify priority sites
  - Develop procedures for site inspection
    - Wet season and dry season inspections
    - Possible tie-in with SFIS requirement for participation in SFP and deferred maintenance programs (checklist)
  - Public inquiries and complaints
    - Develop procedure for tracking and responding to complaints



## POST CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT & REDEVELOPMENT

- **Legal Authority (BMP #1)**
  - Districts must require post construction BMPs for all construction projects that disturb one acre or more
  - Post construction BMPs are required to be adequately maintained (i.e., long-term maintenance agreements)
    - Detention basins, filtration fabrics, pervious pavement, vegetated swales



## POST CONSTRUCTION (CONTINUED)

- **Design Standards (BMP #2)**
  - Review existing design standards and identify suitable post-construction BMPs
  - Adopt mandatory standards
    - Covered vehicle wash facilities that drain into sanitary sewer
    - All outdoor eating areas to drain into sanitary sewer
  - Develop a program to inspect the quality of storm water runoff after a major event in areas where post construction runoff controls are utilized



## POST CONSTRUCTION (CONTINUED)

- **Post Construction BMP inspection (BMP #3)**
  - Conduct inspections to verify that post construction controls are operating properly and adequately maintained



## **POLLUTION PREVENTION/GOOD HOUSEKEEPING**

- **Pollution Prevention/Good Housekeeping (BMP #1)**
  - **General**
    - Clean work areas daily
    - Work areas shall not be hosed down, but vacuumed, swept, or mopped
    - Provide drip trays beneath vehicles
  - **Material storage**
    - Indoors or covered; secondary containment for materials that could leak or spill
  - **Erosion**
    - Prevent slope erosion
    - Determine source & correct the problem



## **POLLUTION PREVENTION/GOOD HOUSEKEEPING (CONTINUED)**

- **O & M**
  - Clean out catch basins
  - Install screens or filtration devices at drainage inlets
  - Keep dumpster lids closed
  - Remove debris and trash around drain inlets before and after storm events
  - Proper disposal of waste materials (paint)
- **Parking Lots**
  - Monitor runoff; potentially divert to swales
- **Pools**
  - Adequately dechlorinate water before discharge
- **Feedback**
  - Develop procedure for employee feedback



## POLLUTION PREVENTION/GOOD HOUSEKEEPING (CONTINUED)

- **Bus Maintenance Facility (BMP #2)**
  - Continue implementing your existing SWPPP
- **Spill Prevention/Response (BMP #3)**
  - Review existing spill/leak prevention, response, clean-up procedures, and equipment. Identify procedures that may need to be revised or augmented



## MONITORING & REPORTING

- **Permit requires**
  - **Monitoring**
    - Construction site inspections
    - Surveillances for illicit non storm water discharges
    - Structural or Treatment Control BMPs
  - **Reporting**
    - Annual
    - Any noncompliance reports
  - **Records**
    - Record retention
    - Record submittal
    - Record availability



## HOT ISSUES

- Identify specific buildings and what happens in them
- Identify potential sources of pollutants within the district
  - Auto shop
  - Pool chemicals
  - Photo lab
  - Science/biology labs
  - Bus storage
- Open space management
  - Concern regarding erosion control and runoff during storm events or over-watering



## HOT ISSUES (CONTINUED)

- Discipline and enforcement
  - District policy
  - Student handbook
  - Ethical clauses for teachers (may not want to go down that road)
  - Anonymous reporting on website
- Enforcement for vendors, consultants, contractors, etc.
  - How?
    - Contract language
    - Purchase order language
    - What if?



## HOT ISSUES (CONTINUED)

- **Training**
  - The regional boards want very specific data on who, how, when, & how often
    - Not only students and staff at the sites
    - Contractors
      - Storm water management needs to be agendized at your pre-construction meetings
    - IOR's
    - Construction Management Firm
    - Vendors
    - Consultants
    - Volunteer groups
    - Youth groups



## HOT ISSUES (CONTINUED)

- **Responsible Individual(s)**
  - Our plan typically listed Director of Facilities, Director of Maintenance, sometimes the Principal
  - Regional board wants “assisting departments/individuals” identified along with the Responsible Individual
    - No names need to be identified but the title(s) do
    - The rationale is that the Principal probably won't be the person telling the custodian to stop dumping gray water down the storm drain



## HINTS/SUGGESTIONS

- **Work with your local city or county**
- **Very important to at least let them know you're aware of the MS4 permit requirements**
- **Let them know your schedule for when you become designated and when you anticipate having a draft SWMP**
- **Lot of opportunity for joint trainings, information sharing, publications, handouts (\$\$)**
- **Analyze whether you have the capability (time, staff, knowledge, or desire) to monitor the program. If not, there are consultants that will do it for you.**



## HOT ISSUES (CONTINUED)

- **Require storm water monitoring from your construction management firm if you use one.**
- **Your IOR may also provide the service**
- **Environmental consultants**
- **Very important to verify training and document it in your SWMP**



## **ANY QUESTIONS?**

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