Bay Area Storm Water Management Agencies Association
Regional Construction Education Program
Final Phase III Report

1. Background
The purpose of Phase III of the Regional Construction Education Program (RCEP) is to plan a storm water pollution prevention educational program for three categories of subcontractors:

- painters,
- saw cutting companies, and
- concrete, asphalt and stucco contractors.

In order to produce the plan, the following was completed:

- reviewing Phase I and II reports,
- surveying BASMAA agencies for information on ongoing outreach to these categories, and
- contacting contractors, subcontractors and trade associations to learn how they are getting stormwater-related information now, and what they recommend for future outreach.

The results of the survey are discussed in Section 2 below. Section 3 lists and discusses numerous potential outreach mechanisms. Recommendations for phasing in these outreach efforts are made in Attachment 1 for Phase III, in the attached BASMAA form, “Proposed Project for Baseline Budget Funding,” for Phase IV of the RCEP and in section 5, Tasks to Consider beyond Phase IV.

2. Current Educational Efforts
A Survey of the BASMAA member stormwater programs was conducted to learn about current efforts to educate subcontractors. Representatives of Fairfield/Suisun and the SCVURPP program (including Sunnyvale, Santa Clara County and Palo Alto) completed and returned the survey form.

The results of the survey show the following are being used:

   a. Printed Materials
      i. Blueprint for a Clean Bay and construction trifolds are the most universally used documents. Santa Clara Valley Urban Runoff Pollution Prevention Program is revising the trifolds and will translate them into Spanish and Vietnamese. Masters will be provided to cities for photocopying, some have requested PDF files. All but one are 8.5 x11 inches (home repair and remodeling is 11X17).
      ii. Palo Alto and Fairfield-Suisun programs have each developed a brochure on pollution prevention for saw cutters.
      iii. Fairfield-Suisun has developed a new brochure on Home Repair and Remodeling and a brochure on the General Permit.
      iv. Palo Alto has developed “It’s in the Contract! (but not in the Bay)” [pollution prevention specifications for City construction contractors and maintenance crew supervisors] and "Storm Drain Pollution is illegal in Palo Alto!" wallet cards (Spanish and English).
v. The Santa Clara Valley Urban Runoff Pollution Prevention Program has produced twelve 5.5X12 inch cards with graphics on one side and stormwater pollution prevention messages on the other. Each of these cards covers a different activity and has the printed message in English, Spanish and Vietnamese. There are cards for each of the activities covered by this phase of the Construction Education Program.

vi. The Home Builder Association has used the fact sheets from the State Handbook.

b. Distribution mechanisms:
   i. All but one of the agencies that responded are using inspectors to distribute materials (primarily trifold brochures).
   ii. All of the agencies have the trifolds on display at the building department.
   iii. Two agencies are attaching stormwater pollution prevention information to approved building plans.
   iv. Two agencies are putting stormwater pollution prevention conditions in construction contracts

c. Existing Workshops
   i. Joint Regional Water Quality Control Board/Estuary Project workshops were sponsored by both responding stormwater programs. These workshops were expanded through Phase II of the BASMAA Regional Construction Education Program to add non-erosion and sediment control pollution prevention measures (through revisions to the Field Manual and production of a video.)
   
   ii. Last fall, the *Home Builder's Association* worked with Hosain Kazemi to put on a stormwater pollution prevention workshop targeted to subcontractors:
      a. Notice of workshops was distributed primarily to the subcontractors used by the general contractors that make up their membership.
      b. Site supervisors were asked specifically to come.
      c. Over 100 people attended.
      d. Many of the subcontractors doing work such as painting and masonry work were noticeably surprised that their cleaning operations could not be conducted where runoff would drain to the street.
      e. They plan to hold another similar workshop this fall.
   
   iii. The *Associated General Contractors*, Sacramento Office, is working with Caltrans to put on four workshops on stormwater issues. The first phase will cover how to prepare SWPPPs.
3. New or Improved Outreach Mechanisms
Potential new or improved outreach mechanisms are listed below based on type of outreach. The general types of outreach and the categories of businesses they can be expected to reach are outlined below.

a. New or Improved Printed Materials
   i. Improve upon trifolds (including slaw cut slurry brochure) for use in the field, by simplifying, reducing verbiage and adding pictures. Translate into Spanish (SCVURPPP is currently working on this effort)
   ii. Create stickers with graphics and little verbiage (the same or similar to the SCVURPPP do’s and don’ts cards) to attach to equipment and supplies.
   iii. Create boiler plate pollution prevention conditions for contract language.

b. New means of distributing materials
   i. Mass mailing of materials to subcontractors (see How to Find Subcontractors, below).
   ii. Make fliers available in format easily downloaded off the internet. Consider adding video clips that can show real discharges and solutions.
   iii. Ask vendors to place (or allow to be placed) stickers on equipment or materials at the factory or point of distribution.
   iv. Consider teaming with other stormwater agencies statewide (SWQTF?) to produce materials and host website.
   v. Develop links to other sites (e.g., association websites, OSHA website, agency websites, etc.)
   vi. Encourage employers to use these materials in their biweekly, OSHA-required tailgate meetings.
   vii. Encourage contractors to use boiler-plate language in subcontracts.
   viii. Publish articles in trade association journals (include URL for more information.)
   ix. Increase the number of inspectors distributing these materials.
   x. Provide materials to Caltrans to use in their workshops.
   xi. Distribute information through vendors (e.g., Bode Gravel Company)

1. New Workshops
   i. Team with the Home Builder’s Association to put on more workshops tailored for subcontractors (invite inspectors).
   ii. Consider using ABAG’s on-line training capability to reach subcontractors.
   iii. Provide additional in-house training to building inspectors on stormwater pollution prevention and on how to use outreach materials.
   iv. Make presentations to trade association meetings.
2. Other mechanisms:
   i. Assist local agencies that have not done so, to develop ordinances that are specific to construction stormwater pollution prevention.
   ii. Assist local agencies that do not have boiler plate language for construction contracts to develop and use this mechanism.
   iii. Apprentice programs are not likely to be open to additional material at this point. This is because they are putting large amounts of resources into recruiting workers from the scarce supply.

3. How to Find Subcontractors
   A database of subcontractors can be created using the following sources of information:
   i. Trade association mailing lists:
      a. Home Builder Association has 100 builder members and 300-450 associate members. The Estuary Project has their mailing list.
      b. American Subcontractors Association, the Bay area chapter has 360 members.
      c. Associated Builders and Contractors, Inc. mailing list may be available.
      d. Associated General Contractors has a mailing list for 1200 members in N. CA
      e. Contractors State Licensing Board provides labels, or electronic files for a charge.
   ii. Chambers of Commerce membership lists.
   iii. Yellow Pages (update software acquired in Phase II).
   iv. Classified "Services" section of local papers.
   v. Internet yellow pages.

4. Outreach mechanism based on scale of business:
   i. Large subcontractors doing infrastructure improvements, and commercial or residential new development are more likely to contaminate stormwater due to higher volumes of materials, more equipment to clean and operations in urban areas that are mainly hardscape.
      a. Target large subcontractors doing painting, stucco application through mailings, internet links, and workshops cosponsored with Home Builder’s Association and possibly other trade associations.
      b. Target large subcontractors doing road work (asphalt and saw cutting) through the agencies hiring them. This includes, primarily, Caltrans, City and County public works, and municipal transportation authorities. Use Caltrans efforts toward training and developing contract language to recommend similar efforts by other agencies.
   ii. Small subcontractors are less likely to be informed through existing mechanisms, but they are also less likely to pollute. They mainly do small home remodeling projects with smaller amounts of materials and
less equipment to clean. They are also more likely to be operating in residential areas, where there is a higher likelihood that runoff will to surrounding soil rather than directly to the street. They are less established and therefore more difficult to find. However, there are large numbers of these contractors, with a potentially high cumulative impact.

a. Do a mass mailing of simplified fliers to database.
b. Target small subcontractors through outreach to homeowners (distribute wallet-size cards in both languages).
c. Provide more training and hand out materials to building inspectors.

5. Criteria used to Prioritize Implementation of New Outreach
Many criteria were considered in prioritizing tasks in the attached Plan for Phases III. These criteria include:

- Targeting “low hanging fruit.” For example, insuring that efforts already made by some BASMAA agencies are being taken advantage of by other agencies within BASMAA.
- Targeting subcontractors with the most potential to cause stormwater contamination (larger commercial subcontractors working in highly urban areas)
- Targeting subcontractors least likely to already be addressed through existing outreach efforts (the smaller residential subcontractors).
- Potential opportunities to team with others (e.g., RWQCB and Home Builders Association).

4. Recommendations for Phase III and IV
Attachment 1 is a recommended scope for Phase III. This scope includes improving outreach to subcontractors through BASMAA member agencies and through outreach to general contractors and developers. The attached BASMAA form *Proposed Project for Baseline Budget Funding* recommends a scope for Phase IV. Phase IV focuses on providing outreach directly to subcontractors themselves, including through mailings and by applying stickers with a graphic pollution prevention message to tools and materials.

5. Tasks to Consider beyond Phase IV
The following tasks are beyond the scope (and budget) of Phases III and IV, but should be considered for future implementation:

1) Identify other mechanisms to reach homeowners (e.g., home remodeling journals or television shows).
2) Consider teaming with other stormwater agencies statewide (SWQTF?) to produce materials and host website.
3) Encourage other websites to have a link to subcontractor webpage (e.g., association websites, OSHA website, agency websites, etc.)
4) New Workshops
   a. Team with the Home Builder’s Association to put on more workshops tailored for subcontractors (invite inspectors).
   b. Consider using ABAG’s on-line training capability to reach subcontractors.
   c. Provide additional in-house training to building inspectors on stormwater pollution prevention and on how to use outreach materials.
   d. Assist local agencies that have not done so, to develop ordinances that are specific to construction stormwater pollution prevention.

5) Expand database of subcontractors using:
   a. Trade association mailing lists:
      i. Home Builder Association has 100 builder members and 300-450 associate members. The Estuary Project has their mailing list.
      ii. American Subcontractors Association, the Bay area chapter has 360 members.
      iii. Associated Builders and Contractors, Inc. mailing list may be available.
      iv. Associated General Contractors has a mailing list for 1200 members in N. CA
      v. Contractors State Licensing Board provides labels, or electronic files for a charge.
      vi. Chambers of Commerce membership lists.
      vii. Classified “Services” section of local papers.
      viii. Internet yellow pages.
Develop New or Improved Materials

1) Develop generic masters and/or electronic files of the following materials:
   a) Trifolds (for each category plus a home remodeling brochure) using the SCVURPP improved versions and translations into Spanish and Vietnamese by SCVURPP and into Tagalog by Fairfield). Add URL for downloading off web
   b) Do’s and don’ts cards
   c) Boilerplate contract language for capital improvement projects.

Subcontractor Outreach through Agencies

1) Ensure all BASMAA’s member agencies and their copermittees are familiar with existing materials and mechanisms to use these materials:
   a) Distribute these materials (and suggestions for use) to all agencies. by email and/or postal service.
2) Provide boilerplate stormwater pollution prevention contract language to BASMAA agencies and encourage those not already doing so to use this language in their own construction contracts.
3) Identify if support is needed in inspection and enforcement programs. Address these needs as a budget allows.

Subcontractor Outreach through Developers and General Contractors

1) Support the Regional Water Quality Control Board and Estuary Project in conducting their erosion and sediment control workshops.
   a) If amenable to RWQCB and SFEP organizers, develop and make short presentation to compliment pollution prevention video and describe materials being distributed (see b and c).
   b) Provide trifolds and cards for attendees. Include information on how to obtain additional copies for use in training employees (consider putting URL for webpage and keep up-to-date pdf files of materials there).
   c) Provide boilerplate pollution prevention language for use in subcontracts to protect general contractor from liability.
2) Coordinate speakers to attend, make brief presentations and distribute information (trifolds and boilerplate subcontract language) at trade association meetings.

Subcontractor Outreach through Home Owners

1) Ensure all agencies have remodeling brochure.

Produce Final Report

Summarize findings and make recommendations for future efforts.
Products:
• Generic masters and electronic files of
  • Trifolds (for each category plus a home remodeling brochure) using the SCVURPP improved versions and translations into Spanish and Vietnamese). Add URL for downloading off web
  • Do’s and don’ts cards
  • Boilerplate contract language
• Letters to agencies
• Presentation materials
• Final Report

Schedule:
May 2001 through Dec. 2001

Budget** (estimate):
$10,000 Total
Develop Materials $4000
Outreach through Agencies $1,000
Outreach through General Contractors $3,000
Final Report $2000

**Budget assumes printing costs to be incurred by BASMAA member agencies