

# **Early Community Outreach for New and Redevelopment Activities**

## **MEETING EVALUATION AND FINAL RECOMMENDATIONS**

**August 2004**

### ***Introduction***

In May 2004, Tucker Environmental Consulting (TEC), under contract to the Contra Costa Clean Water Program (hereinafter “the Program.”), conducted an “early” community outreach project targeting community and business leaders and other private-sector decision-makers in Contra Costa County who have a stake in real estate development, housing development, and the community development review process. The project was designed to identify their concerns, communicate the Program’s C.3 strategy, and develop ideas for ongoing outreach for new and redevelopment activities.

The first phase of the project involved a telephone survey to assess the knowledge of community and business leaders related to the new regulations, identifying primary concerns, and developing recommendations to communicate the Program’s implementation strategy. The final phase of the project addressed these issues in a fact sheet and in presentations and discussion at a meeting held on July 14, 2004. Based upon the survey results, observations at the meeting, and meeting evaluation forms, this report summarizes the evaluation results and presents recommendations for outreach to the broader development community during C.3. implementation (beginning in late 2004).

### ***Survey Findings***

Nineteen community and business leaders were surveyed by telephone between May and June 2004. Interviewees included selected developers, engineers, architects, landscape architects, law firms, public policy and home builder association advocates. The survey indicated:

- ▶ Community and business leaders understand new state regulations will require many new development and redevelopment projects to treat stormwater runoff. Their knowledge of the specific requirements is less universal.
- ▶ Only a small number of respondents are confident in their level of knowledge regarding approaches and methods to reduce the quantity or quality of runoff pollutants from new or redevelopment projects.
- ▶ Respondents want the Program to address “what works,” including sample site designs showing the integration of site design features, and treatment BMP options.
- ▶ Impacts to the project approval process, increased project costs, and the Program’s implementation approach and compliance standards were highly rated topics and/or concerns to be addressed by the Program.
- ▶ Overall, the respondents value the objectives that Contra Costa cities, towns and the County used when they developed their approach to the new regulations. Moreover, the findings suggest community and business leaders share values and have similar expectations regardless of their interests. The Program should feel confident about proceeding with the

implementation of the regulations knowing there is limited debate about the values guiding the Program's approach.

- ▶ Not surprisingly, community and business leaders were not familiar with the Program's implementation strategy. This finding should not be overly troubling since the Program is in the early stage of its community outreach efforts.
- ▶ Respondents expressed strong support for education, training municipal staff, and uniformity among compliance standards from city to city. Those surveyed were also highly concerned with limitations on infill and redevelopment sites.
- ▶ Numerous individuals, occupations, organizations and associations were suggested for invitation to the workshop. Each of the entities, in some form, has a stake in development or the development review process.

Based on the survey results, the overall findings and recommendations were used to develop a fact sheet on the new regulations and the Program's approach to implementation. The findings were also used to shape the content of the agenda, presentations and speakers for the Program's first workshop meeting held on July 14, 2004 for community and business leaders. The workshop was co-sponsored by the Program, the Contra Costa Council and the Home Builders Association of Northern California. The complete survey report and fact sheet can be found in Appendices A and B, respectively.

### ***Workshop Evaluation***

Overall the workshop held on July 14, 2004 was well attended and well received. One hundred and sixteen people were present at the workshop with sixty-three attendees completing a workshop evaluation. The evaluations indicated the workshop met or exceeded the expectations of 98% of those surveyed and 83% rated the overall workshop above average or excellent—an exceptional sign the workshop created a positive profile for the CCCWP with key community business leaders. Eight in ten workshop participants thought the information presented and the speakers were above average or excellent.

Overall, the reactions to the topics covered were also positive. Virtually all those surveyed gave the CCCWP high marks for knowledge and understandability of the topics presented. The highest rated presentation was urbanization, development and water quality degradation with seventy-three of those surveyed rating the topic above average or excellent. Six in ten rated site design & stormwater BMPs and NPDES provision C.3. regulations above average or excellent followed closely by Contra Costa's approach to meeting the new regulations with one half of workshop participant rating the topic above average or excellent for knowledge and understandability.

The evaluation results also indicated that nearly all the topics tested for future workshops would be constructive. Over eighty percent of workshop attendees rated every topic tested "useful" or "most useful"- a good indication community and business leaders are eager for more information about implementing new and redevelopment requirements in Contra Costa County. Among the highest rated topics for future workshops were "preparing a stormwater control plan" and "effects on project cost and feasibility." Approximately one half of workshop attendees rated these topics as the most useful. "Site design to minimize impervious surface" and "locating, selecting, and sizing treatment BMPs" followed closely with approximately 40% of workshop attendees rating these topics as most useful. Three in ten believed the remaining topics tested would be most useful: "controlling peak flows and runoff volumes," long-term operation and maintenance of BMPs," and "acceptance of BMPs by home buyers and owners." Other topics suggested included "vector control," "acceptance

and education and outreach for city planning and public works departments, and city council members.”

The final open-ended question of the survey, allowing for general comments, drew a broad range of responses. For the most part the comments were positive indicating the workshop was excellent, that the CCCWP was headed in the right direction, and the new standards represented needed designs for a sustainable future. Concerns were expressed with the potential for deficit in on-going communication, lack of agreement on MEP standards, and the need for more practical examples. Furthermore, several respondents were very eager to see the compliance guidebook. The top line results for the complete evaluation survey can be found in Appendix C.

### ***Recommendations***

The project was designed to identify the concerns of key community and business leaders in Contra Costa County about new stormwater regulations for new and redevelopment activities, communicate the Program’s C.3 strategy, and develop ideas for early and ongoing outreach for new development and redevelopment activities. The feedback received formed the basis for the Program’s early outreach activities and may be used to guide the Program’s approach to future outreach activities. Based on the survey results, observations at the meeting, and meeting evaluation forms, the recommendations for outreach to the broader development community during C.3. implementation are as follows:

1. Increasing the understanding of basic facts about C.3. is a critical preparation for success in the outreach strategy to the broader development community. Communication should begin immediately through a wide-variety of potential communication vehicles such as direct mail and/or e-mail, distribution of the new C.3. fact sheet at planning counters, and/or stand-alone display at planning departments calling attention to the new regulations and providing information across a broad range topics regarding the new regulations.
2. A majority of survey respondents believe an overview of water quality issues and the impact of new development and redevelopment projects on downstream channels and aquatic ecosystems is warranted. Moreover, the “urbanization, development and water quality degradation” presentation was rated most highly. A common understanding of the impacts of development on water quality is likely necessary for the regulated community to comprehend, positively receive, and be motivated to comply with the new regulations. As the Program expands its outreach to the broader development community it should reinforce this basic understanding.
3. Community and business leaders had considerable interest regarding information and/or presentations on what works; sample site designs showing an integration of site design features and treatment BMP options. The Program should continue its search for sites that demonstrate how design features have been integrated in real world examples or conduct case studies to develop their own examples. The Program should utilize several modes of communication including developing site-specific fact sheets or conducting case study presentations at future workshops.
4. Cost impacts remain a major concern to be addressed in future outreach. Opportunities for integrating information on cost impacts should be explored. Adding a cost component/analysis to case study presentations at a future workshop or a more general presentation on the cost of various landscape, source control and treatment BMP options are two possibilities.
5. Both survey respondents and workshop attendees were significantly concerned with applying the requirements to infill and redevelopment sites. Future workshop presentations, case studies (existing or planned) should include infill redevelopment sites.

6. The most highly rated topic for future workshop was “how to prepare a stormwater control plan.” This shows that community and business leaders have considerable concern about the impacts of the new regulations to the project approval process. To temper these concerns it is highly recommended that the Program’s approach and Stormwater C.3. Guidebook is evaluated in several communities. Planning staff should work with local developers to prepare a stormwater plan, track and report cost information, and examine the implementation process e.g., what works, what doesn’t, where is the information gaps, how can we improve the process?
7. Although the overall understandability of the workshop presentations was high among community and business leaders, Contra Costa’s approach to implementation was the least understood topic. Moreover, workshop participants were also very eager to see the Stormwater C.3. Guidebook. Future workshops should continue to explain and reinforce the Program’s approach. The Stormwater C.3. Guidebook should also be released for public comment as soon as possible.
8. Preferred topics varied by profession, (e.g., the majority of developers are highly concerned with cost, lawyers are predominately interested in liability, and design criteria interested most engineers). A long-term communication strategy of conducting workshops involving break out sessions that target profession specific topics by occupation and interests is desirable.
9. Community and business leaders seek timely, inclusive, and consistent information in the implementation of the new requirements.
10. Community and business leaders are concerned about the administrative support systems that must be put into place within each city to provide the groundwork for the broad-scale introduction and integration of the new requirements. Consideration should be given to such issues as consistency, flexibility, and trained, qualified staff.
11. Since those that have a stake in the community development process often conduct business across jurisdictional boundaries, consistency among standards from city to city was also a highly desired outcome. Although flexibility in implementation is important, standards should remain as consistent as possible to foster a clear, common understanding of the requirements and establish an even playing field for development standards across jurisdictions.
12. The Program would benefit by establishing a reward and recognition program to credit the accomplishments of exemplar projects. One idea expressed at the meeting was to hold a contest for the most innovative design. This could help build momentum and peer acceptance for changes in design practice.
13. The initial workshop involved major community and business leaders including: Contra Costa Council Land Use Task Force, Water Task Force and Environment Task Force members major developers (residential and commercial), engineers, architects, landscape architects, RWQCB representatives, and a limited number of planning staff. Future workshops and on-going outreach should involve the broader development community during implementation, including but not limited to an expanded list of the occupations described above as well as general contractors, consulting engineer firms, EIR professionals, home builders associations, community facility districts, and restaurant owners. Some suggested umbrella organizations include American Society of Civil Engineers (San Francisco), Association of General Contractors, Association of Environmental Professionals (EIRs), Civil Engineering Association Consulting Engineers and Land Surveyors of California, American Public Works Association, Restaurant/Grease Disposal Association, and the Grocery Council.
14. Given that the Program represents a large number of public agencies and the regulations affect a broad range of professions, local information/ training sessions should also be considered. The Program could develop a series of model presentations and have copermittees conduct local information and/or training sessions. This could serve several

functions: ensure consistent training of planning staff across jurisdictions, consistent information dissemination to the broader development, and allow a broader net to be cast among the diverse professions.



**APPENDIX A**

**EARLY COMMUNITY OUTREACH SURVEY FINAL REPORT  
JULY 2004**



# **CONTRA COSTA CLEAN WATER PROGRAM**

## **EARLY COMMUNITY OUTREACH SURVEY**

### **FINAL REPORT**

**JULY 2004**

#### ***Executive Summary***

Tucker Environmental Consulting (TEC), under contract to the Contra Costa Clean Water Program (hereafter “the Program.”), conducted a survey of community and business leaders and other private-sector decision-makers in Contra Costa County who have a stake in real estate development, housing development, and the community development review process. The California Regional Water Quality Control Boards for the San Francisco Bay Region and Central Valley Region (RWQCBs) have recently mandated that Contra Costa municipalities impose new, more stringent requirements to control runoff from development projects. The purpose of the survey was to 1) assess the knowledge of community and business leaders related to the new regulations, 2) identify primary concerns, and 3) develop recommendations to communicate the Program’s implementation strategy in a new fact sheet and a presentation at an upcoming workshop.

The survey indicated community and business leaders understand new state regulations exist that will require many new development and redevelopment projects to treat their stormwater runoff. Their knowledge of the specific requirements is less universal. Increasing knowledge of these basic facts is a critical preparation for success in the early outreach effort.

Only a small number of respondents are confident in their level of knowledge of various types of approaches and methods to reduce the quantity or quality of runoff pollutants from new or redevelopment projects. Moreover the most useful topic identified by respondents to be addressed in the Program’s fact sheet and workshop is: what works, sample site designs showing the integration of site design features and treatment BMP options.

The impacts to the project approval process, cost impacts, and the Program’s implementation approach and compliance standards were among the most highly rated topics and/or concerns to be addressed in the Program’s fact sheet and/or workshop. Over half of the respondents believe an overview of water quality issues and the impact of new and redevelopment on downstream channels and aquatic ecosystems would also be a very useful. A common understanding of the impacts of development on the environment is likely necessary for the regulated community to comprehend, positively receive, and be motivated to comply with the new regulations.

While some improvements were suggested, overall the objectives that Contra Costa cities, towns and the County have identified that are important to developing their approach to the new regulations are highly valued. Moreover, the findings suggest community and business leaders share values and have similar expectations regardless of their interests. The Program should feel confident about proceeding with the implementation of the regulations knowing there is limited debate about the values guiding the Program’s approach.

Not surprisingly the Program's implementation strategy did not have strong recognition among community and business leaders. This finding should not be overly troubling since the Program is in the early stage of its community outreach efforts. The information may be used as a benchmark for measuring recall further along in the implementation process.

The Program would be well served by recognizing the strong concern and support for education, training municipal staff, and uniformity among compliance standards from city to city. Those surveyed were also highly concerned with limitations on infill and redevelopment sites.

Numerous individuals, occupations, organizations and associations were suggested to invite to the workshop. Each of the entities, in some form, has a stake in development or the development review process. However, the Program and attendees would be better served by focusing the distribution list for the first workshop to a smaller subset of community and business leaders. Future workshops and on-going outreach should involve the broader development community during implementation.

### ***Fact Sheet***

The survey findings indicate the fact sheet should:

- ▶ Communicate a clear understanding of the specific requirements, including the types, sizes, and impacts to projects that will be subject to the new regulations, and the schedule for implementation.
- ▶ Convey the implications to the planning process, the Program's approach to implementation, and how it will work locally.
- ▶ Discuss ways to reduce water quality impacts through site design with an emphasis on increasing the understanding of what source control measures are.

### ***Workshop***

The survey findings indicate the workshop should:

- ▶ Begin with a brief overview of water quality issues and the impact of new and redevelopment on downstream channels and aquatic ecosystems, including an overview of the geographical representation of the watershed i.e., where streams flow, complexities involved, etc.
- ▶ Include a presentation on the specific requirements, including the types, sizes, and impacts to projects that will be subject to the new regulations. The implementation schedule for requirements should be made clear but the focus should remain on what they need to know in the early stages of implementation.
- ▶ Incorporate information on the impacts to the project approval process and the Program's approach to implementation. An emphasis should be placed on understandability, cost, time, and a streamlined process.
- ▶ Include a presentation on various types of approaches and methods to reduce the quantity and quality of runoff pollutants from development. Case study presentations that demonstrate how site design features have been integrated in real world examples are highly recommended.
- ▶ Integrate cost information where feasible. Adding a cost component/analysis to case study presentations or a more general presentation on the cost of various landscape, source control and treatment BMP options are two possibilities. Information on cost impacts to the fee structure of the planning process would also be positively received.

### ***Methodology***

Nineteen community and business leaders were surveyed by telephone between May and June 2004. The survey consisted of twelve questions and took the average respondent approximately 10

minutes to complete. The sample included selected developers, engineers, architects, landscape architects, law firms, public policy and home builder association advocates. Due to privacy concerns the specific individuals surveyed will remain confidential. Given the sample was deliberately selected (as opposed to a random sample), the survey should not be viewed as a statistically representative analysis. The structure of these one-on-one interviews can be regarded, on the whole, as a focus group which provided the Program with useful qualitative information. The data were analyzed to determine any differences in knowledge, concerns, and values among the various occupations in the sample set.

### ***Detailed Findings***

- ▶ An overwhelming majority (90%) of respondents are aware that new state regulations will require many new development and redevelopment projects to treat their storm water runoff.
- ▶ Ninety-five percent of the respondents are knowledgeable about the new regulations, however, only one in ten are very confident in their degree of knowledge.
- ▶ Over two-thirds of those surveyed understand the regulations will require new developments to: 1) be designed to minimize impervious surfaces, 2) incorporate measures to control on-site pollutants, 3) capture and treat/or infiltrate a specific quantity of stormwater runoff on-site prior to discharge, and 4) detain or retain runoff on-site to reduce the potential for downstream erosion.
- ▶ The awareness of when the regulations go into effect is low. Just 32% of respondents had some recognition of the schedule for implementation. When these respondents were asked to identify a specific implementation date a majority answered inaccurately.
- ▶ The group as a whole has some knowledge (90%) of the types and sizes of projects that will be subject to the new regulations and their effect on them. Yet only 16% percent are very confident in that knowledge.
- ▶ A significant majority of respondents (68%) had very little or no understanding of what Contra Costa cities, towns, and the county are doing to prepare for the new regulations.
- ▶ Seventy-five percent of those surveyed had some level of knowledge of the various types of approaches and methods to reduce the quantity or quality of runoff pollutants from new or redevelopment projects. Twenty-one percent are very confident in that knowledge. Engineers are by far the most knowledgeable in this category.
- ▶ Proportions were slightly lower when respondents were asked about knowledge of specific types of approaches and methods to reduce the quantity and quality of runoff. Two out of every three surveyed are somewhat or very knowledgeable about ways of designing and landscaping sites that reduce the quantity of runoff, and methods or devices that detain or treat stormwater before discharging from the site. While only one half of those surveyed are knowledgeable about built features of sites that control specific sources of runoff pollutants.
- ▶ The top five most useful topics identified by the respondents to be addressed in the Program's fact sheet and workshop include: 1) sample site designs (90%), 2) project approval process (74%), 3) cost impacts (74%), 4) developer liability (69%), and 5) overview of regulatory requirements (68%).
- ▶ Interest in topics varied by profession. A majority of the developers are highly concerned with cost, lawyers are predominately interested in liability, and design criteria interested most engineers.

- ▶ Over one half of the respondents believed an overview of water quality issues and the impact of new and redevelopment on downstream channels and aquatic ecosystems would be very useful.
- ▶ Three out of every four respondents rated the complete list of objectives that Contra Costa cities, towns and the County have identified that are important to developing their approach to the new regulations as important or very important.
- ▶ The highest held values were: complying with the new regulations (100%), participation and consensus (100%), flexibility (100%), achieving reasonable protection of streams and the Bay (95%), and minimizing time required for project review (95%).
- ▶ The value of the Program's objectives did not substantially vary among occupations with the exception of minimizing cost to developers. Not surprisingly, one hundred percent of the developers surveyed rated minimizing cost to developers very important.
- ▶ Overall, the top three concerns about implementation of the new regulations are cost impacts, implementation is not an undue burden (financial and time), and having a clear understanding of what's required. Education, clearly defined process and compliance standards, limitations on infill and redevelopment, and qualified municipal staff were also predominant concerns.
- ▶ Many individuals and organizations were suggested to include in our survey and/or invite to the workshop. The most frequent occupations mentioned include: developers, contractors, engineers, architects, landscape architects, consulting engineering firms, home owners associations, land surveyors, EIR consultants, and planning staff.

### ***Conclusions and Recommendations***

The survey showed respondents understand new state regulations exist that will require many new development and redevelopment projects to treat their stormwater runoff. Their knowledge of the specific requirements, including the types, sizes, and impacts to projects that will be subject to the new regulations, and the schedule for implementation is less universal. Having a clear understanding of what's required was also rated as one of the top three concerns about implementation of the new regulations. The fact sheet and workshop presentations should clearly communicate this information. Increasing the knowledge of these basic facts is a critical preparation for success in the early outreach effort.

Only a small number of those surveyed are confident in their level of knowledge of the various types of approaches and methods to reduce the quantity or quality of runoff pollutants from new or redevelopment. Moreover the most useful topic identified by respondents to be addressed in the Program's fact sheet and workshop was: what works; sample site designs showing an integration of site design features and treatment BMP options. Therefore, communication should be directed to increase knowledge about the specific types of approaches and methods to reduce the quantity and quality of runoff (particularly to those outside the engineering community who were found to be the most unknowledgeable).

The Program could utilize several modes of communication including the fact sheet, supplemental case study handouts at the workshop, or actual case study presentations that demonstrate how site design features have been integrated in real world examples. A presentation could also be given at the workshop on various types of approaches and methods followed by break out sessions where participants would work in groups to integrate site design features and BMP options on different types of sites (residential, commercial, infill/redevelopment, etc).

Given a majority of respondents believe an overview of water quality issues and the impact of new and redevelopment projects on downstream channels and aquatic ecosystems would be very useful, communication activities should be directed to this effort. A universal understanding of the impacts of development on the environment is likely necessary for the regulated community to comprehend, positively receive, and be motivated to comply with the new regulations. An overview of water quality issues would most appropriately be addressed at the onset of the workshop. A notable comment was to include an overview of the geographical representation of the watershed i.e., where streams flow, complexities involved, etc.

Impacts to the project approval process, cost impacts, and implementation (Program's approach, clearly defined process and compliance standards) were among the most highly rated topics and/or concerns to be addressed in the Program's fact sheet and/or workshop. Communication directed at the impacts to the project approval process and the Program's approach to implementation should be incorporated into the outreach piece and a workshop presentation.

While the Program's approach to implementation rated high among community and business leaders, decision makers perceive water quality problems through the filter of their background, experience and needs. They are experts on what they are worried about which are understandability, cost, time, and a streamlined process. These concerns must be integrated or the information won't be accepted or valued. They will also be much more motivated if the Program helps them to solve their problems and answer important pressing questions as opposed to helping them to solely understand the Program's activities and approach.

Opportunities for integrating information on cost impacts should also be explored. Adding a cost component/analysis to case study presentations (if feasible), or a more general presentation on the cost of various landscape, source control and treatment BMP options are two possibilities.

Overall the objectives that Contra Costa cities, towns and the County have identified that are important to developing their approach to the new regulations are highly valued. However, a few notable comments are worth mentioning. First, minimizing costs to "taxpayers" was unclear to many respondents. Respondents were uncertain whether "taxpayers" was referring to property owners (building or improving personal property) or the general tax base as a whole (through redevelopment and public improvements).

In addition, the term "minimize" in three of the objectives (cost to taxpayers, developers and time required for project review) was disconcerting to several respondents. It was not believed that "minimizing" cost and time should drive the Program's approach to implementing the regulations but rather the objectives should focus on cost effectiveness and time efficiencies in relationship to quality. Several remarked, "you can minimize cost and time and not get the same quality of service." Another notable comment was that three objectives: encouraging smart growth and maintaining economic competitiveness, having a flexible approach to implementation, and participation and consensus are at times mutually exclusive. Several respondents believed that these objectives should be separated.

An encouraging observation is the value of the Program's objectives did not substantially vary among professions. Given the objectives are somewhat oriented towards specific interests there is a reasonable expectation that the values would align with occupations. The findings suggest community and business leaders share values and have similar expectations regardless of their interests. The Program should feel confident about proceeding with the implementation of the regulations knowing there is limited concern or debate about the values guiding their approach.

Not surprisingly the Program's implementation strategy did not have strong recognition among those surveyed. This finding should not be overly troubling since the Program is in the early stage of its community outreach efforts. The information may be used as a benchmark for measuring recognition further along in the implementation process.

The Program would be well served by recognizing the strong concern and support for education, training municipal staff, and uniformity among compliance standards from city to city. Respondents were also highly concerned with limitations on infill and redevelopment sites. While the redevelopment/infill topic may be too specific for this early outreach effort, the topic could be integrated into a case study presentation. None-the-less future communications should undoubtedly be directed at this topic.

Numerous individuals, occupations, organizations and associations were suggested to invite to this workshop. Each of the entities, in some form, has a stake in development or the development review process. However, the Program would be well served by focusing the distribution list for the early community outreach effort to a smaller subset of those recommended. The initial workshop should involve major community and business leaders including: Contra Costa Council Task Force members (land, water, and environment), major developers (residential and commercial), engineers, architects, landscape architects, RWQCB representatives, and a limited number of planning staff. Future workshops and on-going outreach should involve the broader development community during implementation.

**Attachment A.**  
**Contra Costa Clean Water Program Survey – Top line**

Final N = 19

Respondent \_\_\_\_\_ Telephone \_\_\_\_\_

Organization \_\_\_\_\_ E-mail \_\_\_\_\_

Address \_\_\_\_\_

Occupation: \_\_\_\_\_

Hello, my name is Sheila Tucker and I am calling on behalf of the Contra Costa Clean Water Program. Are you familiar with this Program? If no, go to CCCWP description. I am conducting a short 10-15 minute survey today to community and business leaders about new development regulations in the region. The CCCWP will be co-sponsoring an upcoming workshop on July 14<sup>th</sup> with the Contra Costa Council and HBA(?) to discuss these new regulations and the purpose of this survey is to determine: 1) what our key community and business leaders know about the new requirements, 2) what some of their questions and concerns are about implementation, and perhaps most importantly 3) what the CCCWP can do to address these questions and concerns. Before we begin I do want you to know your responses will remain confidential.

1. Are you aware that new state regulations will require many new development and redevelopment projects to treat their storm water runoff? Please answer yes or no.

1. Yes----- 90%

2. No ----- 10%

2. How would you describe your level of knowledge of these new regulations?

1. Very Knowledgeable ----- 11%

2. Somewhat knowledgeable ----- 84%

3. Very Unknowledgeable -----5%

**If answer “very unknowledgeable” skip to Question 7.**

3. Do you know when these new regulations go into effect? If yes, when?

1. Yes----- 32%

2. No ----- 68%

4. How would you describe your understanding of the types and sizes of projects that will be subject to the new regulations and their effect on them? Please tell me if you have a good understanding, some understanding or no understanding at all.

- 1. Good Understanding -----16%
- 2. Some Understanding-----74%
- 3. No Understanding-----10%

5. On a scale of 1 to 5, with 5 being the most knowledgeable and 1 being the least knowledgeable, how would you characterize your understanding of what Contra Costa cities, towns and the County are doing to prepare for these new regulations?

<b>Least Knowledgeable</b>					<b>Most Knowledgeable</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	
37%	31%	11%	16%	5%	

6. Next I am going to read a list of some of the requirements in the new regulations. For each statement I read please tell me if you are aware of the requirement by answering yes or no. If you have heard something about it, please tell me that too.

	<u>Aware</u>	<u>Not Aware</u>	<u>Heard Something</u>
[ ] 6a. The regulations require new developments to be designed to minimize the amount of roofs and pavement that are directly connected to storm drains. ....	84%	5%	11%
[ ] 6b. The regulations require new developments to incorporate measures to control on-site pollutant sources.....	79%	11%	10%
[ ] 6c. The regulations require new and redevelopment projects to capture and treat/or infiltrate a specific quantity of stormwater runoff on-site prior to discharge.....	68%	21%	11%
[ ] 6d. The regulations require new and redevelopment projects to detain or retain runoff on-site to reduce the potential for downstream erosion. ....	84%	16%	0%

7. The new regulations are different from previous regulations in that they require municipalities to enhance their site design and source control standards to further reduce pollutant discharges and runoff volume. How would you describe your level of knowledge of various types of approaches and methods to reduce the quantity or quality of runoff pollutants from new or redevelopment (e.g., site design, landscape measures, methods and devices to treat stormwater, etc.).

- 1. Very Knowledgeable ----- 21%
- 2. Somewhat knowledgeable----- 53%
- 3. Very Unknowledgeable ----- 26%

**If answer “very unknowledgeable” skip to Question 9.**

8. Next I am going to describe some types of approaches and methods that may be used to reduce the quantity of runoff and quality of runoff from new or redevelopment. On a scale from 1 to 5, with 5 being the most knowledgeable and 1 being the least knowledgeable, how would you rate your knowledge of:

<u>Approaches and Methods</u>	Least Knowledgeable			Most Knowledgeable		
	1	2	3	4	5	N/A
8a. Ways of designing and landscaping sites that reduce the quantity of runoff.	5%	11%	26%	21%	16%	21%
8b. Any built features of sites that control specific sources of runoff pollutants.	5%	21%	21%	21%	11%	21%
8c. Methods or devices that detain or treat stormwater before discharging from the site.	5%	5%	32%	26%	11%	21%

9. Next I am going to list some potential topics for CCCWP’s workshop on July 14 and a fact sheet that the Program will be developing. Again on a scale from 1 to 5 with 5 being the most useful and 1 being the least useful please tell me how helpful this information would be.

<u>Potential Topics</u>	Least Useful				Most Useful
	1	2	3	4	5
9a. Overview of water quality issues and the impact of new and redevelopment on downstream channels and aquatic ecosystems.	5%	21%	21%	16%	37%
9b. Overview of regulatory requirements, legal mandate and authority to regulate.	0%	5%	26%	5%	63%
9c. Project approval process, environmental review and CEQA process.	0%	5%	21%	21%	53%
9d. Cost impacts, affordability.	0%	0%	26%	32%	42%
9e. Developer liability (adequacy of design, design failures).	0%	16%	16%	16%	52%
9f. Long-term operation and maintenance of stormwater treatment measures.	5%	11%	21%	37%	26%

<u>Approaches and Methods</u>	Least Useful				Most Useful
	1	2	3	4	5
9g. Hydraulic design criteria. How to calculate and size BMPs to treat required flow?	16%	21%	21%	10%	32%
9h. Stormwater treatment measures and mosquito control.	5%	16%	16%	37%	26%
9i. What works. Sample site designs showing an integration of site design features, treatment BMP options, BMP sizing, and documentation of compliance.	0%	0%	10%	31%	59%

10. Next I am going to read a list of objectives that Contra Costa cities, towns and the County have identified that are important to developing their approach to the new regulations. On a scale from 1-5, with 5 being the most important and 1 being the least important, please tell me how important these objectives are to you or your constituents.

<u>Objectives</u>	Least Important				Most Important
	1	2	3	4	5
10a. Complying with the new stormwater regulations.	0%	0%	5%	21%	74%
10b. Achieving reasonable protection of streams and the Bay.	5%	0%	16%	42%	37%
10c. Minimizing costs to taxpayers.	11%	10%	21%	37%	21%
10d. Minimizing cost to developers.	10%	5%	32%	16%	37%
10e. Minimizing time required for project review.	5%	0%	5%	26%	63%
10f. Encouraging "smart growth" and maintaining economic competitiveness.	11%	16%	16%	21%	37%
10g. Having a flexible approach to implementation.	0%	0%	5%	26%	68%
10h. Participation and consensus.	0%	0%	21%	32%	47%

11. Based on the topics that we've discussed today and anything else you have to add, what would say your top three concerns are about implementation of the new regulations?

### Concerns About Implementation

1. Cost impacts. Impact to fee structures. (7)

2. Implementation is not an undue burden (financial and time). Streamline the process to avoid unnecessary project delays. (7)
  3. Clear understanding of what's required in the conceptual design stage, obligation of developers, application to projects, types, sizes, and triggers. (6)
  4. Education. Educating development community, engineers, and municipal staff to design projects to meet the regulations. (4)
  5. Clearly defined and realistic process to get engineering approved, rules, and compliance standards. (4)
  6. How objectives can be achieved on small infill sites. Regulations conflict with smart growth and infill goals. Doesn't leave much flexibility. Limitations, space constraints, and cost efficiencies on infill and redevelopment sites. (4)
  7. Qualified municipal staff. Uninformed personnel trying to enforce regulations in a misguided fashion. (4)
  8. Uneven enforcement from one city to the next. Need for uniformity among compliance standards from city to city. (4)
  9. Impact to development project footprints. Limits and restrictions. (3)
  10. Flexibility of implementation. Need for innovative approaches to deal with requirements. (3)
  11. Level of regulation must be proportionate to impact created. Must have a shared burden on a sliding scale depending on size of the development. (2)
  12. Negative impact on ability to develop and remain economically competitive. (2)
  13. What can we best do to prepare for the new regulations. Prioritize what we need to know. (2)
  14. Regulations are an over kill. Question the practicality of the regulations and whether this is a good use of public funds. (2)
  15. Understanding the Program's approach to implementation. How will they be regulated? (1)
  16. Feasibility. Can you do it? (1)
  17. Consequences for not adhering to the standards. (1)
  18. Design methods. How to design to meet the regulations. (1)
  19. Updating municipal codes in a cooperative manner. (1)
  20. How could the regulations be used to litigate and stop a project? (1)
  21. No need for hydromodification when your at the lower reaches of the watershed discharging to an improved channel. (1)
  22. Impact on homeowners associations. (1)
  23. Ensure regulations are not used to control growth. (1)
- 
12. Would you suggest any specific individuals or organizations that we should be sure to include in our survey and/or workshop?
    1. Engineers (civil)
    2. American Society of Civil Engineers (San Francisco)

3. Architects
4. Landscape Architects
5. Association of Environmental Professionals (EIRs).
6. Regional Water Quality Control Board Representatives
7. Civil Engineering Association
8. Commercial developers.
9. Consulting Engineer Firms. Bellecci and Associates, David Evans and Associates, Brown and Caldwell.
10. Consulting Engineers and Land Surveyors of California
11. Contra Costa Council's Land Use, Water, and Environment Task Force Chairs.
12. Dahlin Group (architectural firm out of San Ramon).
13. Diablo Engineers
14. Home Builders Associations
15. Planning personnel (municipal staff)
16. Restaurant/Grease Disposal Associations
17. Sycamore Associates in Walnut Creek
18. APWA
19. Association of General Contractors
20. Community Facility Districts
21. Developers
22. Grocery Council
23. Sasaki Associates (Landscape Architect)

<b>THANK YOU FOR PARTICIPATING IN OUR SURVEY</b>
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***Survey Sample***

***Occupations***

	<b>Frequency</b>	<b>Percent</b>
Lawyer	4	21.1
Developer	3	15.8
Engineer	4	21.1
Architect	3	15.8
Landscape Architect	1	5.3
Public Policy Advocate	2	10.5
HBA Advocate	1	5.3
Food Handling Facility	1	5.3
<b>Total</b>	<b>19</b>	<b>100.0</b>

## **APPENDIX B**

### **C.3. FACT SHEET “STORMWATER QUALITY CONTROL FOR DEVELOPMENT PROJECTS”**



# Stormwater Quality Control for Development Projects

Fact Sheet  
July 2004

On Reverse Side

Guidebook will assist compliance

Best Management Practices

## New Water Board regulations require major changes to site, drainage, and landscape designs

New regulations require many Contra Costa development projects to treat stormwater runoff before it may be discharged to creeks or municipal storm drains.

Projects may also be required to detain or infiltrate runoff so that peak flows and durations match pre-project conditions.

Project plans must incorporate measures to prevent pollutants from entering runoff. For example, most outdoor equipment and work areas must be bermed and roofed.

In February 2003, the California Regional Water Quality Control Boards for the San Francisco Bay Region and the Central Valley

Region revised Provision "C.3" in the NPDES permit governing discharges from the municipal storm drain systems of Contra Costa County, its cities and towns. The new permit provision is being phased in from 2004 through 2006.

The new requirements are separate from, and in addition to, requirements for erosion and sediment control and for pollution prevention measures during construction.

Project site designs must minimize the area of new roofs and paving. Where feasible, pervious surfaces should be used



instead of paving so that runoff can percolate to the underlying soil.

Runoff from impervious areas must be captured and treated. The permit specifies ways to calculate the required size of treatment devices.

Local governments are creating a *Stormwater C.3 Guidebook* to help developers comply with the new requirements. See the article on page 2.

## How Runoff from New Developments Affects Streams and the Bay

As urban areas expand and are built up, more land is covered by roofs, pavement, and other impervious surfaces.

Rainfall that would previously have percolated into the ground now

flows directly to storm drains. This untreated runoff carries automotive fluids, cleaning solvents, detergents, pesticides, oil and grease, trash, food waste, and urban grime to creeks

and eventually to the San Francisco Bay/Delta.

In addition, increased runoff can erode creek beds and banks, damag-

### Do the New Regulations Apply to My Project?

- **YES**, if your application for planning and zoning approval is "deemed complete" after *Feb. 15, 2005*, and your project creates or replaces more than one acre of impervious area.
- The threshold drops from one acre to **10,000 square feet** effective *Oct. 15, 2006*.
- If more than **50%** of existing impervious surface is replaced, the entire project is subject to the new regulations.
- **Exemptions:** Routine replacement or resurfacing of roofs and pavement.
- Requirements to match pre-project hydrology take effect sometime after *May 15, 2005*.

(Continued on page 2)



Contra Costa  
Clean Water Program  
www.cccleanwater.org

- City of Antioch
- City of Brentwood
- City of Clayton
- City of Concord
- Town of Danville
- City of El Cerrito
- City of Hercules
- City of Lafayette
- City of Martinez
- Town of Moraga
- City of Oakley
- City of Orinda
- City of Pinole
- City of Pittsburg
- City of Pleasant Hill
- City of Richmond
- City of San Pablo
- City of San Ramon
- City of Walnut Creek
- Contra Costa County
- Contra Costa County  
Flood Control and  
Water Conservation District

**Stormwater Best  
Management Practices (BMPs)**

A stormwater “BMP” can be any kind of procedure or device designed to minimize the amount of pollutants that enter the storm drain system. Examples include:

- Narrower streets (less paving), pervious pavements, and directing downspouts to disperse runoff to lawns and landscaping.
- Basins or swales that capture and treat runoff or allow it to infiltrate to groundwater.
- Building roofs and berms over work or storage areas or providing connections to dispose used washwater to sanitary sewers rather than storm drains.
- Housekeeping practices such as litter control, frequent sweeping, and properly storing materials and wastes.

## Effects of runoff on streams and the Bay

(Continued from page 1)

ing habitat and increasing sedimentation downstream.

To control pollutant runoff from areas that are already built, Contra Costa municipalities enforce prohibitions on dumping, require busi-

nesses to practice “good housekeeping,” and ask residents to avoid letting pollutants enter storm drains. This includes limiting the use of pesticides.

However, to reduce the long-term effects of runoff, the Water Board is

requiring runoff control measures to be built-in to development projects. This may help preserve environmental quality in newly developed areas and, over time, protect water quality in already-urbanized areas as more sites are redeveloped.

## Guidebook will assist developers to comply

Contra Costa municipalities are working together to plan compliance with the Water Board’s new regulations for development.

Although each municipality has its own specific development review procedures, planning and engineering staff are striving to make review as consistent as possible throughout the County.

Municipalities will require applicants to submit a “Stormwater Control Plan” with their application for planning and zoning approval. The Stormwater Control Plan must show how the proposed development will comply with each aspect of the new regulations.

The Stormwater Control Plan will show how drainage from each impervious area on the site is captured and directed to a treatment device. Recommended devices include planter boxes, swales, and bio-retention areas that

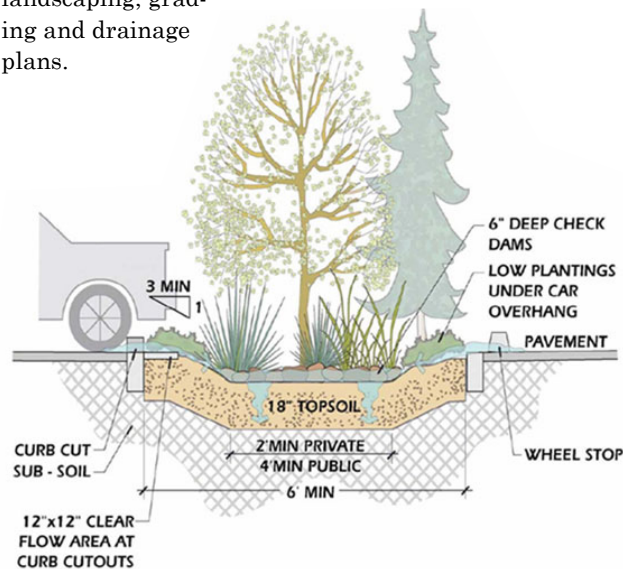
filter runoff through imported soil. In areas with clay soils, underdrains may direct filtered runoff to the storm drain system.

Applicants must also describe how these devices will be operated and maintained in perpetuity.

The required measures will be most effective and least expensive if they are integrated into the site layout and the landscaping, grading and drainage plans.

Planning for compliance should begin at the very start of project planning and design.

The Clean Water Program’s *Stormwater C.3 Guidebook* will include checklists, step-by-step instructions, a sample outline, and technical resources to guide preparation of a Stormwater Control Plan. A draft *Guidebook* will be available on the Program’s website in November 2004.



**A vegetated swale is one option for treating runoff from parking lots.**

Source: Portland, Oregon, Stormwater Manual

## **APPENDIX C**

# **“IMPLEMENTING NEW AND REDEVELOPMENT STORMWATER REGULATIONS” JULY 14, 2004 WORKSHOP EVALUATIONS TOPLINE RESULTS**





Contra Costa Clean Water Program  
Contra Costa Council

## WORKSHOP EVALUATION SURVEY RESULTS

### “Implementing New and Redevelopment Stormwater Regulations”

**N=63**

#### General Workshop/Presenters

	Excellent					Poor				
	Circle your response									
1. <i>The workshop met your expectations.</i>	5	4	3	2	1	21%	64%	13%	2%	0%
2. <i>Information was relevant and well organized.</i>	5	4	3	2	1	33%	54%	10%	2%	0%
3. <i>Presenters were informative and interesting.</i>	5	4	3	2	1	35%	49%	11%	3%	0%
4. <i>There was appropriate time for discussion and questions.</i>	5	4	3	2	1	37%	41%	14%	3%	2%
5. <i>Overall the workshop was:</i>	5	4	3	2	1	27%	56%	13%	2%	0%

#### Knowledge/Understandability of Topics

	Excellent					Poor				
	Circle your response									
1. <i>Urbanization, development and water quality degradation.</i>	5	4	3	2	1	21%	52%	21%	0%	0%
2. <i>NPDES Provision C.3 regulations.</i>	5	4	3	2	1	21%	40%	27%	6%	0%
3. <i>Contra Costa’s approach to meeting the new regulations.</i>	5	4	3	2	1	11%	38%	38%	6%	2%
4. <i>Site design and stormwater treatment BMPs.</i>	5	4	3	2	1	10%	52%	30%	2%	0%

#### Topics for Future Workshops

	Most Useful					Least Useful				
	Circle your response									
1. <i>Preparing a Stormwater Control Plan.</i>	5	4	3	2	1	56%	27%	11%	2%	0%
2. <i>Site design to minimize imperviousness.</i>	5	4	3	2	1	40%	37%	11%	3%	0%
3. <i>Locating, selecting, and sizing treatment BMPs.</i>	5	4	3	2	1	37%	33%	18%	2%	0%
4. <i>Source Control BMPs.</i>	5	4	3	2	1	27%	39%	16%	3%	0%

<b>5. Controlling peak flows and runoff volumes.</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
	<b>25%</b>	<b>38%</b>	<b>21%</b>	<b>3%</b>	<b>0%</b>
<b>6. Long-term operation and maintenance of BMPs.</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
	<b>30%</b>	<b>30%</b>	<b>21%</b>	<b>3%</b>	<b>0%</b>
<b>7. Acceptance of BMPs by home buyers and owners.</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
	<b>30%</b>	<b>30%</b>	<b>14%</b>	<b>11%</b>	<b>0%</b>
<b>8. Effects on project cost and feasibility.</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
	<b>49%</b>	<b>27%</b>	<b>8%</b>	<b>8%</b>	<b>2%</b>

***Your recommendations for other topics and/or speakers at future workshops:***

- Acceptance of BMPs by local agencies.
- How to sell your proposed BMPs to public works departments and where do you go if they don't accept them.
- Let's hear from more capitalists and fewer socialists.
- Mosquito abatement.
- Vector control features for stormwater control plans.
- Education and outreach for city planning departments and city council members.

***Other comments:***

- Concern about BIA and CCC acting as a wall instead of a bridge for communication with Contra Costa Clean Water Program. How to keep up communication?
- Excellent workshop, long time coming, imperative designs for our future.
- I think we are headed in the right direction.
- It would be helpful to see the compliance guidebook that was sent to municipalities. Site designers could then get a jump on incorporating the BMPs now.
- Let us know when the Stormwater C.3. Guidebook is available.
- MEP standards are not standards. How can you plan for standards that are not even agreed upon by professionals after 10 years? Need real standards, and we are still working on them.
- Not enough practical examples. Just a bit too much pontification. Great way to squeeze 2 hours of useful information into a four-hour session.
- Tom Richman's presentation was excellent.