

C-13.0 WORKPLAN

C-13.1 Introduction

Established in 1990, the Program is a cooperative regulatory partnership of the Permittees who operate an interconnected municipal storm drain system which discharges stormwater and urban runoff and at the same time provides flood protection to the residents of the United States' sixth most populous county. In Orange County, the impact of urbanization on hydrologic systems and the adverse consequences of both changed hydrology and pollutant source creation are evident today. However, at the same time, there are very significant water quality successes, such as coastal water quality, that can unequivocally be attributed to the impact of the Program and the Permittees.

C-13.2 Program Development and Implementation

During 2012-13, there has continued to be a significant allocation of resources applied to the integration of LID and hydromodification control practices into local land development regulation. Going forward, this element of the Program will continue to be a major focus of activity as the Permittees look to create off-site and in-lieu fee options for alternative compliance pathways for land development and re-development. This focus also aligns with broader State Board integrated water resource management goals centered on better use of stormwater for local water supply augmentation and increasing interest in "green infrastructure" solutions.

Development of a watershed-based planning approach is viewed as the most important next step to take in the development of the Program. Such an approach offers the opportunity for more comprehensively identifying the meaningful environmental and recreational amenities that can be realized in each watershed and the management strategies that will most effectively ensure their realization. These plans will also provide an opportunity, through linkage and integration, for cogency to be brought to a number of related restoration projects and sub-regional water management efforts such as the Integrated Regional Water Management Plans.

The Fourth Term Permits, with their emphasis on runoff retention, have ensured that the Program now includes elements of the wet weather management paradigm shift encouraged by the NRC. Nonetheless, the Program is obligated to specifically address exceedances of water quality standards where urban runoff is determined to be causing or contributing to the exceedance. With respect to the specific water quality constituents of concern to the Program, there will be additional effort directed toward pollutant control and research related to pesticides, bacteria, and nutrients.

Pesticides

Synthetic pyrethroids have been identified as a significant urban runoff water quality issue on a statewide basis. Directly as a consequence of the efforts of CASQA, the Department of Pesticide Regulation enacted regulations that became effective in July,

2012, specifically intended to limit where structural pest control businesses can apply pesticides in an effort to protect water quality in urban areas. The rules restrict the use of 17 pyrethroid insecticides applied by businesses and significantly limit the amount of pesticides that can be applied outdoors, especially to concrete and other hard surfaces more susceptible to runoff. The regulations also prohibit outdoor pest control applicators and maintenance gardeners from spraying when it rains or to standing water due to rainfall or watering. An evaluation of the regulations by UC Davis suggested that they could affect an 80% reduction in pyrethroid concentrations in runoff. Nonetheless, the Program will continue to seek to make additional progress with municipal IPM policy implementation and general public education and outreach to encourage broad judicious use of these chemicals.

Bacteria

The very significant progress with respect to coastal shoreline water quality underscores the impetus for action that comes from broad societal recognition of a problem, an unequivocally favorable cost-benefit analysis and the ability to implement pragmatic cost effective solutions. In inland surface waters the issue of systemic elevated concentrations of bacteria persists. However, intensive monitoring of the Aliso Creek watershed appears to show that reductions in dry weather flow have produced significant reductions in bacterial concentrations. This finding points to the value of efforts to curtail outdoor water usage. Consequently, collaboration with water districts on water conservation themed education and outreach will continue to be the focus of efforts to engage the general public and sustain the ongoing reductions in bacteria concentrations being observed in inland surface waters.

Nutrients

Across Orange County's watersheds, nutrients continue to present a regulatory concern although the environmental significance of nutrients and the specific contribution of urban sources is less understood in these other areas. Nutrient thresholds are frequently exceeded in the County's streams and channels. However, there are many less frequent occurrences of impacts, such as macroalgal overgrowth, due to these exceedances. Moreover, nutrient problems are not limited to the urban portion of the County; regional monitoring data show nutrient enrichment and impacts such as increased macroalgal cover and/or lower dissolved oxygen in streams and estuaries in undeveloped regions. Pending further research, the Program will continue to effect reductions in municipal fertilizer use through implementation of the Program's municipal IPM policy and encourage water quality-sensitive landscape maintenance practices in the general population through education and outreach.

C-13.2 Future Program Development

Based upon the prior discussion and in response to the findings of the environmental quality monitoring program, the following program enhancements will be undertaken in 2013-14:

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PLAN DEVELOPMENT

- Roll out a training program for all core competencies (see **Section C-3.3.1**);
- Annual update and implementation of the Watershed Workplans in south Orange County (see **Section C-3.3.1**);
- Complete additional WIHMPs for North Orange County Watersheds (see **Section C-3.3.1**);
- Continue implementation of *Santa Ana Region Monitoring Program* and TMDL monitoring programs within Orange County (see **Section C-3.3.2**);
- The Permittees will continue to coordinate with Orange County Water District to identify additional potential runoff infiltration evaluation projects for development and implementation (see **Section C-3.3.4**); and
- The Permittees will continue to coordinate with OCTA regarding the future competitive disbursement of Measure M funding for BMP retrofit projects (see **Section C-3.3.5**).

MUNICIPAL ACTIVITIES

- Continue to coordinate with UCCE to support municipal Model IPM Policy implementation throughout the County (see **Section 5.3.2**);
- Implement pilot soil/leaf analysis in a small number of cities to assess nitrogen needs for high-use landscaped areas(see **Section 5.3.2**);
- Continue to coordinate with Orange County Transportation Authority (OCTA) on implementation of Tier One and Tier Two Measure M funding to assist Permittees in controlling transportation-generated pollution (see **Section 5.3.2**); and
- Develop guidance for municipal trash collection and haulage contracts that addresses water quality protection issues (see **Section 5.3.3**).

PUBLIC EDUCATION & OUTREACH

- Achieve at least 50% of impressions through earned media to meet impression benchmarks and record public exposure to messaging in support of Program goals (see **Section C-6.3.1.1**);
- Provide a workshop to manufacturing facilities prioritized based upon inspection results; workshop would focus on proper stormwater BMPs and requirements in the State Industrial General Permit expected for adoption in

- early 2014 (see Section C-6.3.1.2);
- Supplement speakers' bureau presentations and materials with action campaign materials and encourage residents and business representatives to participate in recommended BMPs and sign-up for *H₂OC* correspondence (see Section C-6.3.1.2);
 - Encourage residents to sign-up for *action campaign* communication at events and seek to obtain at least 20% of *action campaign* sign-ups at events (see Section C-6.3.1.2);
 - Conduct follow-up outreach to Corporate Environmental Managers during the 2013-14 reporting period (see Section C-6.3.1.2);
 - Reformat H2OC.org website to be more user friendly and increase page views on website pages by a minimum of 10% per year (see Section C-6.3.1.3);
 - Expand support of Pacific Marine Mammal Center Pinniped Pollution Project watershed education program (see Section C-6.3.1.4);
 - Expand support of MWDOC water education programs and Discovery Science Center through workbook modifications and updates (see Section C-6.3.1.4);
 - Coordinate with school outreach organizations to incorporate metrics in existing outreach programs to gauge gains in student knowledge as a results of watershed/pollution prevention program messaging and materials (see Section C-6.3.1.4);
 - Institute a form of metrics for each type of school outreach (e.g. pre-/post-tests for presentation-based outreach (see Section C-6.3.1.4);
 - Encourage residents to "opt-in" to the *Overwatering action campaign* and provide baseline information about watering efficiency; track sign-ups throughout the campaign (see Section C-6.3.2.4);
 - Recruit a minimum of 300 campaign followers through obtaining email addresses; (see Section C-6.3.2.4); and
 - Demonstrate that 100 people have practiced a BMP through the *Overwatering action campaign*; (see Section C-6.3.2.4).

LAND DEVELOPMENT

- Provide refresher training on the revised New Development/Significant Redevelopment Program (see Section C-7.3.1);

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- Provide additional training for the implementation of the revised New Development/Significant Redevelopment Program upon approval of the Model WQMP and HMP for the San Diego Region (see **Section C-7.3.1**);
- Create web portal access to geotechnical information necessary for Project WQMP completion (see **Section C-7.3.1**);
- Coordinate with the Santa Ana Watershed Project Authority and Orange County Water District to identify potential regional infiltration BMP sites and create a model runoff retention credit trading framework (see **Section C-7.3.1**);
- Develop a library of BMP performance reports (see **Section C-7.3.3**);
- Develop standard design checklist/plans/details for selected LID BMPs (see **Section C-7.3.1**);
- Coordinate with Riverside and San Bernardino Counties to work toward greater tri-county consistency regarding local regulation of development for water quality protection (see **Section C-7.3.1**); and
- Coordinate with Riverside and San Bernardino Counties to develop Project WQMP preparation and verification training materials (see **Section C-7.3.1**).

CONSTRUCTION

- Review the Enforcement Consistency Guide and provide further guidance to the Permittees on the use and reporting of the different types of enforcement actions (see **Section C-8.3.1**); and
- Prepare training modules supportive of the specified expertise and technical competencies established for individuals in the *Construction Inspector* position (see **Section C-8.3.1**).

EXISTING DEVELOPMENT

- Provide refresher training to HCA staff on NPDES issues specific to food facilities in the 2012-13 reporting period (see **Section C-9.3.1**);
- Contact surface cleaner / power washing mobile businesses and provide information on source control and BMPs in conjunction with an outreach workshop (see **Section C-9.3.1**);
- Include the self-certification quiz form on the Orange County Stormwater Program public education website (see **Section C-9.3.1**);
- Develop new training modules supportive of the specified expertise and

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technical competencies established for individuals in the *Authorized Inspector* and *Commercial/Industrial/Municipal Inspector* positions (see **Section C-9.3.1**); and

- Continue implementation of the Santa Ana Region CIA/HOA Pilot Program in 2012-13 (see **Section C-9.3.2**).

ID/IC

- Continue implementation of the seasonal Dry Weather Reconnaissance Program in the Santa Ana Region, and implementation of the year-round Dry Weather Non-stormwater Discharge Monitoring Program in the San Diego Region (see **Section C-10.3.1**);
- Develop new training modules supportive of the specified expertise and technical competencies established for individuals in the *Authorized Inspector* position (see **Section C-10.3.1**); and
- Further implementation of the CASC on a countywide basis (see **Section C-10.3.2**).

WATERSHED PLANNING

- Complete additional WIHMPs (see **Section C-12.0**).

