

10.0 EDUCATION

10.1 INTRODUCTION

The City of Encinitas' economic health and community character has always been based on its beach-community culture. This culture is one of the keys to an effective education program. The citizens of Encinitas relate to the need for clean beaches and clean water, and it is this message that is the foundation of the City's education program. This message will be disseminated through a combination of printed material; the City's website; personal contact; outreach to trade and merchant associations, the Chamber of Commerce, and schools; promotional educational materials; newspaper coverage; and workshops.

The overall goal of the education element is to provide an education program that will:

- (1) Measurably increase the knowledge of target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and
- (2) Measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment over the five-year cycle of the Permit.

Educational programs and activities will focus on the following target groups:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial and Commercial Owners and Operators
- Residential Community, General Public, and School Children
- Underserved Target Audience, where applicable

10.2 MUNICIPAL STAFF TRAINING

Clean Water Program staff will educate and train City employees and contractors on applicable storm water regulations to assure that proper storm water management practices are applied to all municipal projects and activities. It is important for all City staff and contractors to be aware of storm water regulations so that their knowledge can be shared with citizens throughout the community. Educational opportunities include annual training sessions, on the job training, weekly and monthly staff meetings, and citywide emails and newsletters. Municipal personnel are also made aware of any stormwater-related workshops or additional training seminars that are available.

10.2.1 MUNICIPAL DEVELOPMENT PLANNING

Education will be given to the City's planning and development review staff to ensure that there is thorough and continued understanding of the following, where applicable:

- Laws, Regulations, Permits, & Requirements

EDUCATION

- Federal, state, and local water quality laws and regulations applicable to Development Projects
- Regional Board's General NPDES Permit for Ground Water Dewatering
- Regional Board's 401 Water Quality Certification Program
- Statewide General NPDES Utility Vault Permit
- General Urban Runoff Concepts
 - Short- and long-term water quality impacts associated with urbanization (i.e., land-use decisions, development)
 - Integration of LID BMP requirements into the local regulatory program(s) and requirements
- Best Management Practices
 - Methods of minimizing impacts to receiving water quality resulting from development, including the following:
 - Storm water management plan development and review
 - Methods to control downstream erosion impacts
 - Identification of pollutants of concern
 - LID BMP techniques
 - Source control BMPs
 - Selection of the most effective treatment control BMPs for the pollutants of concern
- Other Topics
 - Water quality awareness for Emergency/First Responders
 - Illicit Discharge Detection and Elimination observations and follow-up during daily work activities
 - Further education will be provided on additional topics, when necessary

10.2.2 MUNICIPAL CONSTRUCTION ACTIVITIES

Clean Water Program staff will train and educate all inspectors and construction, building, code enforcement, and grading review staffs to ensure compliance with, and understanding of, the following, where applicable:

- Laws, Regulations, Permits, & Requirements
 - Federal, state, and local water quality laws and regulations applicable to construction and grading activities
 - Statewide General NPDES Permit for Storm Water Discharges Associated with Construction Activities
 - Regional Board's General NPDES Permit for Ground Water Dewatering
 - Regional Board's 401 Water Quality Certification Program
 - Statewide General NPDES Utility Vault Permit
- General Urban Runoff Concepts
 - BMP types: facility or activity specific, LID, source control, and treatment control

- Short- and long-term water quality impacts associated with urbanization (i.e., land-use decisions, development, construction materials, etc.)
- Best Management Practices
 - Methods of minimizing impacts to receiving water quality resulting from construction activities, including the following:
 - Proper implementation of erosion and sediment control
 - Other activity specific BMPs
 - Current advancements in BMP technologies
- Other Topics
 - Water quality awareness for Emergency/First Responders
 - Illicit Discharge Detection and Elimination observations and follow-up during daily work activities
 - Inspection, plan review, and enforcement policies and procedures to verify consistent application
 - SUSMP requirements including treatment options, LID BMPs, source control, and applicable tracking mechanisms

City staff is aware of all construction activity requirements that must be met during the rainy season, and annual training and education will be provided to all necessary departments. City staff is familiar with the General NPDES Permit for Ground Water Dewatering, and construction inspectors are aware of proper groundwater dewatering procedures. Any sites where dewatering activities may take place will be monitored. City staff will oversee all City projects to ensure that each project meets all storm water requirements.

10.2.3 MUNICIPAL INDUSTRIAL/COMMERCIAL ACTIVITIES

Environmental Specialists involved in the inspections of industrial and commercial facilities will receive annual evaluations to assess their quality of work. In addition, Clean Water staff will be updated on the most recent storm water regulations through relevant regional workshops and annual training sessions. Topics covered in these workshops and training sessions will include the following, where applicable:

- Laws, Regulations, Permits, & Requirements
 - Statewide General NPDES Permit for Storm Water Discharges Associated with Industrial Activities (Except Construction)
- General Urban Runoff Concepts
 - BMP types: facility or activity specific, source control, and treatment control
 - How to conduct storm water inspections
- Best Management Practices
- Other Topics
 - Enforcement procedures
 - BMP implementation
 - Reviewing monitoring data

10.2.4 OTHER MUNICIPAL ACTIVITIES

Clean Water staff will provide annual training to City departments, including Fire and other contracted companies/employees that may perform activities within the City where pollutants might be generated. Training sessions and workshops will be provided as needed and cover the following topics, where applicable:

- Laws, Regulations, Permits, & Requirements
- General Urban Runoff Concepts
- Best Management Practices
 - Activity-specific BMPs
- Other Topics

10.3 EDUCATIONAL OUTREACH

The following topics will be addressed during workshops, training sessions, and public events for all target audiences, including the previously discussed municipal staff, where applicable:

- Laws, Regulations, Permits, & Requirements
 - Federal, state, and local water quality laws and regulations
 - Requirements of local municipal permits and ordinances
- General Urban Runoff Concepts
 - Impacts of urban runoff on receiving waters
 - Distinction between MS4s and sanitary sewers
 - Non-storm water discharge prohibitions
- Best Management Practices
 - Pollution prevention and safe alternatives
 - General BMP concepts
 - Good housekeeping (e.g., sweeping impervious surfaces instead of hosing)
 - Proper waste disposal (e.g., garbage, pet/animal waste, green waste, household hazardous materials, appliances, tires, furniture, vehicles, boat/recreational vehicle waste, catch basin/MS4 cleanout waste)
 - Non-storm water disposal alternatives (e.g., all wash waters)
 - Erosion prevention
 - Preventative Maintenance
 - Equipment/vehicle maintenance and repair
 - Spill response, containment, and recovery
 - Recycling
 - BMP maintenance
- Other Topics
 - Public reporting mechanisms
 - Potable water discharges to the MS4
 - Integrated pest management

- Benefits of native vegetation
- Water conservation
- Traffic reduction, alternative fuel use

10.3.1 CONSTRUCTION SITE OWNERS AND DEVELOPERS

Construction activities typically modify the natural flow of runoff and have the potential to discharge increased amounts of pollutants to local receiving waters. Typical pollutant generating activities may include land clearing, demolition, grading, or material storage. The City will educate this target group and make certain that proper BMPs are implemented before, during, and after construction to reduce the negative impact these activities could have on the environment. Topics included in one-on-one education, training sessions, and distributed information will include the following, where applicable:

- Laws, Regulations, Permits, & Requirements
 - Statewide General NPDES Permit for Storm Water Discharges Associated with Construction Activities
 - Regional Board's General NPDES Permit for Ground Water Dewatering
 - Regional Board's 401 Water Quality Certification Program
 - Statewide General NPDES Utility Vault Permit
- General Urban Runoff Concepts
 - BMP types: facility or activity specific, LID, source control, and treatment control
 - Short- and long-term water quality impacts associated with urbanization (e.g. land-use decisions, development, construction)
- Best Management Practices
 - Proper implementation of erosion and sediment control and other BMPs to minimize the impacts to receiving water quality resulting from construction activities
 - Current advancements in BMP technologies
 - Methods of minimizing impacts to receiving water quality resulting from development and construction, including:
 - Storm water management plan development and review
 - Methods to control downstream erosion impacts
 - Identification of pollutants of concern
 - LID BMP techniques
 - Source control BMPs
 - Selection of the most effective treatment control BMPs for the pollutants of concern
- Other Topics
 - Illicit Discharge Detection and Elimination observations and follow-up during daily work activities
 - Hydrostatic testing

Clean Water staff will annually train and educate the Planning and Building and Engineering Departments, construction inspectors, and all other personnel involved in the construction process. Personnel will also attend outside workshops and trainings pertinent to their job duties when possible. In past years, the City has co-sponsored seminars presented by the Building Industry Association of San Diego County and will pursue future opportunities to be involved with such training.

Education will be distributed to contractors and developers through the following methods:

- Notice/information in planning package
- Notice/information in grading/building permit application
- Information/instructions with grading/building permit
- Announcements at mandatory pre-construction meetings
- Activity-specific brochures given out by inspectors
- Individual communication during inspections
- Fact sheets/BMP manuals available on the City website
- Special mailings of information (rainy season erosion control letter)

10.3.2 INDUSTRIAL OWNERS AND OPERATORS

Though industrial facilities are not prominent in the City, industrial-related activities still have the ability to negatively impact water quality in the City. Education will be distributed to the small number of industrial facilities in the City during annual routine inspections. The following topics will be covered during these routine inspections, where applicable:

- Laws, Regulations, Permits, & Requirements
- Statewide General NPDES Permit for Storm Water Discharges Associated with Industrial Activities (Except Construction)
- Regional Board's General NPDES Permit for Ground Water Dewatering
- General Urban Runoff Concepts
- BMP Types: facility or activity specific, source control, and treatment control
- Illicit Discharge Detection and Elimination observations and follow-up during daily work activities
- Hydrostatic Testing
- Other Topics

10.3.3 COMMERCIAL OWNERS AND OPERATORS

Commercial facilities in the City include, but are not limited to, restaurants, automotive businesses, landscapers, nurseries, and mobile businesses. Notably, as required by the Municipal permit, a regional outreach and education plan targeting mobile businesses is currently being developed by the San Diego region Copermittees and will be discussed further in Section 10.3.5. All types of commercial facilities have the potential to contribute to storm water pollution, and the Clean Water Program will utilize locally and regionally developed materials to educate businesses on the proper use of BMPs and pollution prevention. Methods to distribute education include the following:

- Downtown Encinitas Main Street Association (DEMA)
- Chamber of Commerce (Encinitas and Cardiff)
- Individual Communication during inspections
- Brochures for target activities (Automotive, Restaurants, Nurseries, Landscapers)
- Websites
- Fact sheets
- Special mailings of information and data requests
- Training sessions for individual facilities/groups

Education distributed will include the following topics, where applicable:

- Laws, Regulations, Permits, & Requirements
- General Urban Runoff Concepts
- Best Management Practices
- Other Topics
 - Illicit Discharge Detection and Elimination observations and follow-up during daily work activities

10.3.4 RESIDENTIAL COMMUNITY, GENERAL PUBLIC, AND SCHOOL CHILDREN

Residential activities such as car washing and over-irrigation, though exempt from the current Municipal Permit, still have the potential to negatively impact water quality. The Clean Water Program will educate the community to raise storm water awareness and inform individuals of ways they can minimize their impact on local waterways. Staff will work in conjunction with the San Dieguito Water District to minimize the amount of over-irrigation runoff and encourage water conservation. The following methods will be used to disseminate educational material to residents and the general public:

- Clean Water Program Website
- Brochures and promotional items at events and in public areas, such as the Engineering counter at City Hall
- Community events, workshops, and trainings
- HOA newsletters
- Media coverage
- Clean Water Hotline/Email

The Clean Water Program will continue to be a part of events held throughout the City and our Watershed. Events of interest to the Program may include beach cleanups, lawn and garden festivals, and community environmental days. Education distributed to residents and the general public will include the following information, where applicable:

- Laws, Regulations, Permits, & Requirements
- General Urban Runoff Concepts
- Best Management Practices
- Methods to reduce the impact of residential and charity car-washing

- Methods to reduce over watering of lawns (misdirection of sprinklers onto sidewalks, over use of water)
- Other Topics
- De-chlorination techniques
- Community outreach and activities

School Children

Clean Water Program staff realizes the need to instill smart environmental practices in children throughout the community. Children are generally very excited to learn what they can do to make a positive difference, and what they learn at a young age can be carried with them into adulthood. Also, their knowledge can be used to educate family and friends.

The Clean Water Program will work with the Public Works Department during Public Works Week to provide elementary students with knowledge about the Program and how they can help protect our watershed. The Parks and Recreation Department may also provide storm water education during environmental summer camps put on by various divisions in the Department.

The Solana Center for Environmental Innovation is also an important part of the City's Residential Education Program. City-sponsored community workshops are regularly hosted by Solana Center employees and volunteers to teach residents and students about storm water pollution, composting, recycling, and household hazardous waste. The Solana Center will continue to be a part of the outreach events that are put on throughout the City, our Watershed, and San Diego County and will also be a resource for all areas of environmental education.

Regional Residential Education Plan

The City will collaborate with other Copermittees to develop and implement the Regional Residential Education Program required in Section D.3.c.(5) and Section F.1 of the Municipal Permit. The program will include the following components:

- Pollutant-specific education that focuses educational efforts on bacteria, nutrients, sediment, pesticides, and trash. If a different pollutant is determined to be more critical for the education program, the pollutant can be substituted for one of these pollutants.
- Education efforts focused on the specific residential sources of the pollutants listed in Section F.1.a of the Municipal Permit.
- Assessment of the effectiveness of jurisdictional, watershed, and regional education programs.

10.3.5 TARGETING UNDERSERVED COMMUNITIES

The Clean Water Program will create educational programs to focus on any identified "underserved" target audiences, high-risk behaviors, and "allowable" behaviors and discharges. Efforts will include educational material targeted at various ethnic and socioeconomic groups and mobile sources as well as "allowable" behaviors such as residential car washing and over-irrigation.

Regional Mobile Business Outreach and Education Strategy

The City will collaborate with other Copermittees to develop and implement the Regional Mobile Business Outreach and Education Program, as suggested in Section D.3.b.(4)(b) of the Municipal Permit. The Program will include the following components:

- Inventory development and maintenance. Collaborative development of a shared regional inventory would promote consistency in the regulation of mobile businesses and would promote cost-efficiency by eliminating redundancy between individual inventories and avoiding duplicative notifications.
- Establishment of minimum BMP requirements for each type of mobile business addressed through the regional effort. If an individual Copermittee determines that their specific requirements are not adequately addressed by the Regional Program, they will be responsible for completing additional notifications or other needed measures.
- Outreach and education (including business notifications). The primary method of outreach will be through business notifications sent out to all inventoried mobile businesses within the first three years of implementation of this documentation. Notifications will include the developed minimum standards and BMP requirements and local ordinances of the jurisdictions in which the mobile businesses operate.

Bilingual Education

For those that work in the City and for segments of the community that do not speak English as their first language, the City provides bilingual (English/Spanish) brochures. The Program will continue to utilize the bilingual brochures produced by the City that are targeted at specific trade groups/activities. These brochures will include information about BMPs for Yard and Garden Care, Restaurants, Hiring a Handy Man, Diazinon, Developers, and Automotive. Further, the bi-lingual Clean Water staff is used to provide training as needed to various community sectors.

10.4 OUTREACH COMPONENT EFFECTIVENESS ASSESSMENT

The City will assess the effectiveness of the Education component based on the requirements outlined in the Municipal Permit. Details of this assessment can be found in Section 13 of this document.

10.5 PROGRAM REVIEW AND MODIFICATION

Future modifications to the City's education component to meet the requirements of the Municipal Permit will be documented as necessary. Section 14 includes a list of the major changes that have been made to the education component of the City's JURMP.