



Public Works Department

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April 19, 2004

Mr. Gerard Thibeault
Executive Officer
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3339

Subject: Executive Officer Determination on Natural Treatment System

Dear Mr. Thibeault:

We are writing you to request that you make a consistency determination that the Irvine Ranch Water District's Natural Treatment System ("NTS") be used by the City of Irvine as a "regional program" for storm water and urban runoff pollution prevention within the San Diego Creek Watershed. We know that the Regional Board has previously been supportive of the NTS as a comprehensive method of improving water quality in the San Diego Creek Watershed.

The Irvine Ranch Water District is acting as the lead agency with respect to the implementation and operation of the NTS within the San Diego Creek Watershed. As proposed, the NTS will provide a regional urban runoff treatment system that will incorporate treatment BMPs for runoff from new development, and existing urban and natural areas. The City of Irvine is proposing to use the NTS in its regional program to serve certain development projects under the New Development and Significant Redevelopment program established by the DAMP. As such, the model WQMP requires that the Executive Director make a determination prior to the City's reliance on the NTS within a regional program. We understand this determination is based upon three factors, that water quality treatment BMPs contained with the NTS:

- 1) "exceeds the water quality solution provided by the onsite structural BMPs otherwise required by Section XII.B.3 of the [public storm drain] Permit,"
- 2) is "otherwise consistent with the Third Term Permit," and
- 3) is "otherwise consistent with the Clean Water Act."

The NTS meets each of these three requirements and, thus, merits the aforementioned determination. Each of the three points significant to the determination along with the reasoning why the NTS meets the requirements is discussed in greater detail below.

The NTS exceeds the water quality solution provided by the onsite structural BMPs otherwise required by Section XII.B.3 of the Permit

Attached to this letter is a brief report, prepared by GeoSyntec Consultants, providing calculations demonstrating that the individual components of the NTS collectively exceed the design standard contained in Section XII.B.3 of the Permit for those projects to be contained within the NTS program¹. Section XII.B.3 of the Permit provides design standards based upon volume or flow rate for treatment control BMPs required by new development and significant redevelopment projects. The attached analysis demonstrates that the NTS exceeds the volumetric design standard for those projects included in the NTS program.

Consistency with the Permit

The Regional Board was aware of plans for the NTS as a model for regional systems when it drafted the Permit and encouraged implementation of the NTS both generally and specifically. Through the Permit, the Regional Board generally encourages projects such as the NTS and the Permit directs Permittees to revise their General Plans in light of the following directive: “Encourage the use of water quality wetlands, biofiltration swales, watershed-scale retrofits, etc. where such measures are likely to be effective and technically and economically feasible.” The NTS facilities are precisely the type of watershed-scale project contemplated and promoted by the Permit.

Specifically, the Fact Sheet references the NTS system. In discussing the Newport Bay Drainage Area, page nine of this Fact Sheet references the NTS and its removal of sediment and nutrients from urban runoff within the watershed. Additionally, the Fact Sheet states that the NTS component facilities along with other BMPs “will help to control the discharge of pollutants in urban runoff.” In this way, the Regional Board has already recognized the importance of the NTS and acknowledged that the NTS would have such beneficial effects on the watershed, it should be considered consistent with the Permit.

Furthermore, the NTS facilities promote the goals of the Permit. As described in greater detail in the NTS Environmental Impact Report (“EIR”), the NTS components remove substantial amounts of pollutants from the dry weather and small storm water flows entering the NTS facilities. In this way, the NTS facilities assist greatly in the

¹ There is an exception to the sizing conclusion within Planning Area 39. Sizing of the NTS facilities in the IRWD Master Plan is based on general zoning information that is similarly used in the attached GeoSyntec report for consistency. However, the sizing for the NTS facilities in Planning Area 39 was based on more current and more detailed information obtained from the landowner, The Irvine Company. It is likely that the zoning information overstates the proposed development plans. Also, final project plans must meet the WQMP requirements and must be approved by the City of Irvine. Thus, NTS facilities within Planning Area 39 are expected to be sized consistent with other NTS facilities, and are thus expected to exceed the design standard in Section XII.B.3 of the Permit.

minimization of pollutant loads from the developments included in the NTS program to area water bodies. Therefore, the NTS components are consistent with the Permit and its goals of reducing pollutant loading to local water bodies, from new development and significant redevelopment in improving water quality in the watershed, and in making reasonable further progress toward the attainment of water quality standards.

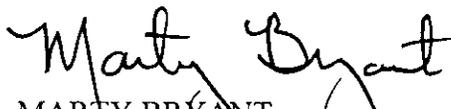
Consistency with the Clean Water Act

As described in the NTS EIR, the NTS component facilities are designed in accordance with the types of restoration and enhancement projects that the Clean Water Act and the U.S. Environmental Protection Agency ("EPA") promote. The NTS is designed to accomplish the main objective of the Clean Water Act of restoring the "chemical, physical and biological integrity of the nation's waters." For example, the in-line NTS facilities will result in portions of existing flood control channels being converted into naturally functioning wetlands and stream corridors.

In implementing the Clean Water Act, EPA's regulations for water quality permits have promoted the retrofitting of flood control facilities to provide additional pollutant removal functions. EPA has concluded that artificial wetlands can be one of the most effective storm water management resources and has encouraged the restoration and enhancement of wetlands and stream corridors. The NTS components will fulfill all of these aspirations through the creation and restoration of wetland habitats. For example, the in-line NTS facilities will create "pool" habitat in certain areas and will benefit fish species and increase wildlife habitat by allowing more natural vegetation to grow within and around the stream corridor. The NTS components will allow the natural filtering process of the area's wetlands to filter harmful pathogens, excess nutrients, sediment, heavy metals, and other toxic contaminants that are currently impairing the San Diego Creek Watershed. The net result of implementation of the NTS will be a healthier and more naturally functioning watershed. Thus, the NTS will fulfill both the Clean Water Act and EPA's fundamental goals and objectives.

Thank you for your consideration in this matter. We appreciate your assistance in our efforts to complete this administrative process so that we may implement the NTS throughout those portions of the San Diego Creek Watershed under our jurisdiction.

Sincerely,


MARTY BRYANT
Acting Director of Public Works

Attachment: "Assessment of Regional Water Quality Treatment by Proposed NTS Facilities Serving Selected Development Planning Areas in the City of Irvine and the El Toro Great Parks Re-Development Areas"

c: Judy Vonada, Deputy City Manager
Eric Tolles, S.E., Chief Building Official / Acting Director of Community
Development
Mark Carroll, P.E., City Engineer
Mike Loving, Water Quality Administrator
Norris Brandt, Irvine Ranch Water District
Sat Tamaribuchi, The Irvine Company