Item 4a

CALIFORNIA OCEAN PROTECTION COUNCIL

Staff Recommendation
June 29, 2016

Tolowa Dee-ni' Nation Low Impact Development and Stormwater Outfall Improvement Project

Jenn Phillips, Program Manager

RECOMMENDED ACTION: Authorization to disburse up to $974,000 to the Tolowa Dee-ni' Nation to implement a low impact development and stormwater outfall improvement project, and adoption of findings under the California Environmental Quality Act.

LOCATION: Tolowa Dee-ni' Nation, Smith River, Del Norte County

STRATEGIC PLAN OBJECTIVE(S): Climate Change, Coastal and Ocean Water Quality Impacts, and Sustainable Fisheries and Marine Ecosystems

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EXHIBITS

Exhibit A: Project Location and Site Map

Exhibit B: Site images

Exhibit C: Support Letters

Exhibit D: Del Norte County Notice of Exemption under the California Environmental Quality Act

Exhibit E: Draft Notice of Exemption for Ocean Protection Council potential action

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FINDINGS AND RESOLUTION:

Staff recommends that the Ocean Protection Council (OPC) adopt the following findings:
"Based on the accompanying staff report and attached exhibits, the Ocean Protection Council hereby finds that:

1) The proposed project is consistent with the purposes of Division 26.5 of the Public Resources Code, the Ocean Protection Act.
2) The proposed project is consistent with the Ocean Protection Council's Proposition 1 grant guidelines (adopted September 2015).

3) The Ocean Protection Council has reviewed Notice of Exemption filed by Del Norte County on February 11, 2016 pursuant to the California Environmental Quality Act and attached to the accompanying staff recommendation as Exhibit D, and finds that sections §15302 and §15303 of CEQA Guidelines ('Replacement or Reconstruction' and 'New Construction or Conversion of Small Structures') are appropriate. The Council authorizes staff to file a Notice of Exemption on the Council's behalf citing the same sections as rationale."

Staff further recommends that the OPC adopt the following resolution pursuant to Sections 35500 *et seq.* of the Public Resources Code:

"The California Ocean Protection Council hereby approves the disbursement of up to $974,000 to the Tolowa Dee-ni' Nation to implement a low impact development and stormwater outfall improvement project.

Prior to the disbursement of any funds, the Tolowa Dee-ni' shall submit for the review and written approval of the OPC's Executive Director the following:

1) A detailed work program, including budget and schedule;
2) Evidence that all necessary permits and approvals have been obtained;
3) A signage plan to acknowledge OPC and Proposition 1 funding;
4) A Storm Water Resource Plan consistent with California Water Code § 10560 - 10565 or a letter from the Tolowa Dee-ni' Nation explaining how it believes it is exempt."

PROJECT SUMMARY:

The Tolowa Dee-ni' Nation (TDN) is undertaking a stormwater improvement project to upgrade existing stormwater infrastructure and reduce polluted runoff into the Pyramid Point State Marine Conservation Area (SMCA). This multi-benefit project includes the installation of multiple Low Impact Development Best Management Practices (LID BMPs) to treat and infiltrate stormwater at the TDN's facilities to reduce stormwater flows into the Pacific Ocean and the Pyramid Point SMCA. The stormwater system will be developed and upgraded to treat and infiltrate stormwater runoff, and to stabilize the existing outfall to the Pacific Ocean.

Specific objectives include:

- Treat the 85th percentile storm (or amount practical) and reduce pollutant loads in runoff;
- Reduce off-site runoff from paved areas and attenuate peak flows to downstream waterbodies; and
- Stabilize bluff and reduce bluff erosion.

The overarching goal of the project is to improve the quality of stormwater runoff from the project area to prevent pollutants from reaching Lopez Creek, the Pacific Ocean and the Pyramid Point SMCA. The project also aims to reduce the quantity and intensity of stormwater runoff discharging over the ocean bluff and will stabilize the bluff to protect it from further erosion. These desired outcomes will be achieved by implementing a host of Low Impact

Development techniques, such as rain gardens, vegetated bioswales, infiltration and treatment chambers, and permeable pavement, which mimic natural processes that result in filtration, infiltration, evapotranspiration and other biological processes.

Site Description:
The TDN is located approximately 20 miles north of Crescent City and 375 miles north of San Francisco. The project area is bounded by Lopez Creek to the north, Ocean View Drive to the east, coastal bluffs and the Pacific Ocean to the west, and the mouth of the Smith River to the south.

The project area is comprised of two main watershed subbasins:
Subbasin 1 (discharges directly to the ocean): The watershed area includes the casino/hotel, community center (and associated parking lots), and portions of US 101 and North Indian Road. Existing conveyance systems include a network of open ditches, inlets, and underground storm drains which ultimately outfall to the Pacific Ocean through an existing storm drain pipe at western end of North Indian Road. The existing outfall is perched over the coastal bluff and as a result of a failed culvert, is continuously eroding the bluff toe and face.
Subbasin 2 (discharges to the ocean via Lopez Creek): The watershed area includes the gas station/fuel mart, and portions of US 101 located north of the intersection with North Indian Road. Existing conveyance systems include drainage inlets and underground storm drains which outfall in a shallow ditch on the east side of US 101. The ditch then conveys the runoff north and outfalls directly into Lopez Creek, which drains to the Pacific Ocean approximately 700 feet to the west.

PROJECT FINANCING

Ocean Protection Council	$974,000
TOTAL	**$974,000**

The expected source of Ocean Protection Council funds for this project is the fiscal year 2015-16 appropriation to the Natural Resources Agency pursuant to the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1, Water Code §79700 et. seq.). Funds appropriated to the Natural Resources Agency derive from Chapter 6 (commencing with §79730) and may be used "for multibenefit water quality, water supply, and watershed protection and restoration efforts for the watersheds of the state" (Water code §79731). The proposed project is an appropriate use of Proposition 1 funds because it has multiple benefits which are described further below.

The proposed project was selected through a competitive grant process under the Ocean Protection Council's *Proposition 1 Grant Guidelines* adopted in September 2015 ("Prop 1 Guidelines") (see §79706(a)). The proposed project meets each of the evaluation criteria in the Prop 1 Guidelines as described in further detail below.

CONSISTENCY WITH CALIFORNIA OCEAN PROTECTION ACT:
The proposed project is consistent with the Ocean Protection Act, Division 26.5 of the Public Resources Code, because it is consistent with trust-fund allowable projects, defined in Public Resources Code Section 35650(b)(2) as projects which:

- Eliminate or reduce threats to coastal and ocean ecosystems, habitats, and species
- Improve coastal water quality
- Allow for increased public access to, and enjoyment of, ocean and coastal resources, consistent with sustainable, long-term protection and conservation of those resources
- Improve management, conservation, and protection of coastal waters and ocean ecosystems
- Provide monitoring and scientific data to improve state efforts to protect and conserve ocean resources
- Protect, conserve, and restore coastal waters and ocean ecosystems

CONSISTENCY WITH THE OPC'S STRATEGIC PLAN:
OPC's Key Issue Area of Climate Change: The existing stormwater outfall within the project site is perched above an eroding bluff. Increased storm surge and sea level rise associated with climate change is likely to increase the bluff erosion. Bluff erosion not only reduces coastal habitat, it also presents a public safety risk. The proposed project will replace the storm drain and install bluff stabilization measures.
OPC's Key Issue Areas of Marine Managed Areas and Coastal and Ocean Water Quality Impacts: The proposed project will result in the reduction of pollutants discharged to the Pyramid Point SMCA.

CONSISTENCY WITH THE OPC'S PROPOSITION 1 GUIDELINES:
The following are the criteria that were applied to the applications in either the Letter of Intent or full proposal stage of the evaluation.

Chapter 6 of Proposition 1 purposes:
(1) Protect and increase the economic benefits arising from healthy watersheds, fishery resources, and instream flow;
(2) Implement watershed adaptation projects in order to reduce the impacts of climate change on California's communities and ecosystems;
(4) Protect and restore aquatic, wetland, and migratory bird ecosystems, including fish and wildlife corridors and the acquisition of water rights for instream flow;
(9) Protect and restore rural and urban watershed health to improve watershed storage capacity, forest health, protection of life and property, stormwater resource management, and greenhouse gas reduction;
(10)Protect and restore coastal watersheds, including, but not limited to, bays, marine estuaries, and nearshore ecosystems; and
(11) Reduce pollution or contamination of rivers, lakes, streams, or coastal waters, prevent and remediate mercury contamination from legacy mines, and protect or restore natural system

functions that contribute to water supply, water quality, or flood management.

OPC's Key Issue Areas for Prop 1 Funding:
Coastal and Ocean Water Quality Impacts; Marine Managed Areas; Climate Change

Multi-benefits:
Urban water runoff is a major source of ocean pollution. It can cause erosion and result in flooding. The project includes the establishment of LID components such as bioswales, rain gardens, stormwater retention biofilters, infiltration galleries and permeable pavements. These features will contribute to the reduction in pollutants from urban stormwater runoff entering the ocean at Pyramid Point SMCA. LID features will treat the stormwater and improve the water quality of flows reaching the ocean. This will reduce the impact on the marine ecosystem and nearby fisheries, such as smelt upon which TDN relies for traditional gathering and subsistence practices. While limited data has been collected on the pollutant removal efficiencies of stormwater treatment systems, field and laboratory testing have shown that the components selected for this project are effective at removing the following: trash/debris, sediment, phosphorus, nitrate, nitrogen, heavy metals, organics, bacteria, oil/grease, and hydrocarbons.

Ability to adapt to impacts of climate change:
The existing stormwater outfall within the project site is perched above an eroding bluff. Increased storm surge and sea level rise associated with climate change is likely to increase the bluff erosion. Bluff erosion not only reduces coastal habitat, it also presents a public safety risk. The proposed project will replace the storm drain and stabilize the outfall to prevent erosion.

In addition, the effects of changes in precipitation and runoff as a result of increasing global temperatures will affect the project site. According to climate modeling data, climate change is anticipated to result in more intense storms, which may increase flood runoff and flood depths. Climate change projections, and the recent extended drought, highlight the need for shifting land management practices towards conservation. The LID components proposed for this project mimic pre-development watershed runoff and infiltration rates.

California Water Action Plan Goals:
The proposed project provides opportunities for stormwater collection and management that will reduce peak run-off and increase groundwater recharge. The project will contribute towards the following actions of the CWA:

- Make Conservation a California Way of life: The rain gardens proposed in the project set an example for the community of using stormwater to address the water needs of plants. The more that small projects like the ones TDN is proposing are installed the more residents and visitors to the area will become aware of options to reuse stormwater on their own properties.
- Increase Regional Self-Reliance and Integrated Water Management Across All Levels of Government: The proposed project highlights the integration of stormwater planning across multiple jurisdictions, including TDN, the county, Caltrans, and the California

Coastal Commission. The project is included in the North Coast Regional Water Management Plan and benefits a disadvantaged community as well.

- Protect and Restore Important Ecosystems: The proposed project seeks to help protect the Pyramid Point SMCA by reducing coastal erosion.
- Expand water storage capacity and improve groundwater management: The proposed project will increase groundwater recharge through stormwater infiltration.
- Increase Flood Protection: The project will increase flood protection by slowing down stormwater where it enters the system through rain gardens and travels through bioswales. This will decrease the potential for overflows and flooding in the stormwater system.

Removes or reduces multiple stressors to the environment:
The project will result in the reduction of non-point source discharge and reduction of habitat degradation along the coastal bluff. The project will also improve the resiliency of the coastal bluff as sea levels continue to rise near the existing stormwater outfall. Similarly the project will enhance resilience to storms and resulting erosion through infiltration of stormwater and reduction in peak flows.

Utilizes green infrastructure, natural systems, or systems that mimic natural systems:
Rain gardens and bioswales mimic natural systems for stormwater treatment. Rain gardens are constructed as depressions in the ground, which fill with rainwater during a storm event and allow the water to percolate into the ground. Common stormwater contaminants become trapped in the soil and are eventually taken up by the plant root systems. Bioswales, similar to rain gardens, are engineered, vegetated channels which collect, convey, treat, store, and infiltrate stormwater. The proposed project includes the addition of multiple types of green infrastructure, including bioswales and rain gardens, to existing facilities.

New, innovative, or proven technologies or practices:
The LID components represent both proven technologies and an innovative approach to management of stormwater by allowing for reduction of runoff, in contrast to conventional systems which simply move stormwater offsite.

Sustainable outcomes:
The proposed project will deliver sustained improvements to water quality over the project lifespan of 20 years, and TDN has committed to funding the maintenance of the system for the project's lifespan.

Ability to begin implementing the project in timely fashion:
The project is ready to start upon grant award. The TDN owns the land within the project footprint or it is within existing public right of way/easement areas. TDN has a good working relationship with the California Coastal Commission, Del Norte County, and Caltrans, from whom permits will need to be obtained. The County of Del Norte has issued a Notice of Exemption (NOE) for the project. The next steps will be to complete final project design and permitting (Coastal Development Grading Permit, Del Norte County Encroachment Permit, and,

if necessary, Caltrans Encroachment Permit), and then the construction can begin. Construction of the project is anticipated to occur summer of 2017, assuming grant award in summer of 2016.

Provide mapping/data that can enhance current understanding:
Pre- and post-project water quality testing will occur which will enhance the current understanding of the watershed and stormwater runoff contaminants as well as the performance of selected treatment components.

Demonstrates solutions that can be implemented regionally and/or statewide:
The LID components proposed as part of this project could be implemented within similar watersheds across California and the U.S. There are many coastal Tribal and non-Tribal communities in California with extensive impervious areas for parking and access. The proposed project provides a model for other communities on modifications that can be made within existing developed areas to reduce impacts from stormwater both in terms of flows and water quality. The project is located on Tribal land, within the Del Norte County, and in Caltrans right-of-way and therefore highlights how a cooperative approach can result in regional benefits.

Demonstrates experience successfully implementing similar projects or demonstrates appropriate and necessary partnerships to complete the project.
TDN has experience managing similar improvement projects such as maintaining the existing stormwater system at the TDN facilities. The TDN will be supported by GHD Inc., an engineering and environmental consulting firm with extensive experience in designing and implementing stormwater projects in coastal regions. Each GHD project team member has over ten years of experience, and the technical and scientific merit to fulfill the goals of the project.

Consistent with best available science:
The LID components proposed for this project are proven technologies that are effective at removal of nutrients, metals, sediment, and other common stormwater contaminants.

Demonstrates a clear and reasonable method for measuring and reporting effectiveness of project:
Pre- and post-project water quality sampling will be conducted for temperature, pH, conductivity, oxygen reduction potential, turbidity, metals, hydrocarbons, total suspended solids, and bacteria. Flow estimates will also be developed pre- and post-project. This data will be used to develop load reductions from the project and show how the project addressed current issues.

Likelihood of project to fulfill its stated objectives:
As part of the project, TDN will acquire monitoring equipment which will allow for accurate pre-project measurements of stormwater constituents as well as post project monitoring. Field hand-held monitoring equipment will record temperature, pH, conductivity, oxygen reduction potential, and turbidity. It is anticipated that additional samples for metals (Cu, Zn, Pb), total suspended solids, and bacteria will be collected and sent to a lab for analysis. A sampling plan

will be developed at the start of the project which will specify sample locations, sampling frequency, and sampling protocols. For field equipment, it is anticipated that water quality monitoring will be conducted monthly for the duration of the project to capture both pre-project, during project, and post project water quality data. The project will be maintained by staff at TDN, who maintains the existing stormwater system at the TDN facilities. TDN has committed to funding the maintenance of the system for the project's lifespan.

Community support as well as support from outside local area:
The TDN Tribal Council is supportive of the proposed project which advances TDN's environmental stewardship of their lands. This environmental stewardship also translates to the wider community, who has relied on the land for many generations to support the Tribe and its activities. Specifically, Del Norte County is supportive of the project and worked closely with the Tribe to complete CEQA for the project. The project site is located in rural far-Northern California and the presence of regional environmental groups is limited. However, the project provides multiple benefits through innovative LID practices, which are generally supported by state agencies including the State Water Resources Control Board, California Stormwater Quality Association, and California Department of Fish and Wildlife. State support is illustrated through the funding of similar LID projects in other areas of California.

Bonus points:

Advances the management individual marine managed areas (MMAs) or the statewide MMA network:
The project will benefit the Pyramid Point SMCA. This SMCA was designed to maintain a moderate-high level of protection and includes beach, rocky shore, and offshore habitats. Large offshore rocks support Aleutian Canada geese, breeding seabirds including fork-tailed storm petrels and tufted puffin, a large rookery of great blue heron, snowy egret, and black-crowned night-heron. The SMCA provides habitat for nearshore rockfish, smelt, and habitat for cetaceans. The TDN's developed lands represent one of the largest developments adjacent to the Pyramid Point SMCA, therefore addressing stormwater pollution and erosion from this area is critical to reducing a significant percentage of the polluted runoff entering the SMCA.
Advances the resiliency of marine, estuarine, and diadromous fish populations and the human communities that depend upon them in the face of a changing climate:
The TDN relies on the marine environment off of Pyramid Point for recreational and commercial fishing. During the summer months, Tolowa families set up camps to fish for smelt on local beaches. Reducing the stormwater pollutants entering the ocean will protect the fishery, and support this traditional and cultural practice.

Benefits disadvantaged communities:
The TDN has over 1600 tribal members with 203 living within the Rancheria, and over 700 living within 30 miles. This project will provide benefit to an economically disadvantaged community according to the DWR online map viewer (census Block Group #060150002021, MHI $46,106).

COMPLIANCE WITH CEQA:

Del Norte County, on behalf of the TDN, approved a Notice of Exemption under a Class 2 and Class 3 Categorical Exemption on February 11, 2016. Staff concur with the county's determination and the appropriate application of categorical exemptions because the project includes construction of new, small structures and the replacement of existing structures. If the Ocean Protection Council approves disbursement of funds for this project, staff will file a Notice of Exemption with the State Clearinghouse (in draft form as attachment E).