

**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE  
OFFICE OF SPILL PREVENTION AND RESPONSE  
ADDENDUM TO NEGATIVE DECLARATION**

**Montrose Settlements Restoration Program Phase 2 Restoration Plan  
Environmental Assessment/Initial Study**

NOTICE IS HEREBY GIVEN that the California Department of Fish and Wildlife, Office of Spill Prevention and Response (CDFW/OSPR) has prepared this Addendum to an adopted Negative Declaration in the matter of the Montrose Settlements Restoration Program Phase 2 Restoration Plan Environmental Assessment/Initial Study (Phase 2 Restoration Plan). CDFW/OSPR signed a Notice of Intent to Adopt Negative Declaration and Negative Declaration on April 5, 2012 for the Phase 2 Restoration Plan and filed a Notice of Determination on May 21, 2012.

This Addendum to the adopted Negative Declaration has been prepared in accordance with California Public Resources Code (PRC) Section 15164 and documents a change to one of the preferred restoration projects – the Palos Verdes Kelp Forest Restoration Project. The Palos Verdes Kelp Forest Restoration Project has been modified by providing that instead of relocating removed sea urchins they will be crushed on site. This work will be covered under a state scientific collection permit. This Addendum supersedes the June 19, 2012 Addendum to the adopted Negative Declaration for the Phase 2 Restoration Plan and corresponding June 19, 2012 Notice of Determination. The proposed project modification described in the June 19, 2012 Addendum consisted of landing and composting the sea urchins rather than relocating them. Subsequent to completion of that June 19, 2012 Addendum, the MSRP staff determined in consultation with the CDFW regional staff that the preferred methodology for the kelp forest restoration project is to crush the sea urchins on site. Thus, the previous proposal to land and compost the sea urchins was not implemented.

A subsequent EIR pursuant to PRC Section 15162 is not required for this project modification because the modification does not involve any new significant environmental effects or a substantial increase in the severity of any previously identified significant effects. To the contrary, this project modification is expected to result in beneficial impacts as described in the attached memorandum dated 2 May 2013 Re: Methods modification for the Kelp Forest Restoration Project. CDFW/OSPR has considered this Addendum to the Negative Declaration prior to making a decision on the modified Kelp Forest Restoration Project. This Addendum will be attached to the Negative Declaration for the Phase 2 Restoration Plan and made available on the MSRP website <http://www.montrosere restoration.gov>

Date: 2 May 2013

DEPARTMENT OF FISH AND WILDLIFE  
Office of Spill Prevention and Response



Lisa V. Wolfe-Kolb  
Staff Counsel III

## **Memo**

**To:** Montrose Settlements Restoration Program (MSRP) Trustee Council

**From:** David Witting, MSRP Fish Biologist

**Date:** 2 May 2013

**Re:** Methods modification for Kelp Forest Restoration Project

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### **Description of the Kelp Restoration Project**

The Montrose Settlements Restoration Plan (MSRP) Phase 2 Restoration Plan/Environmental Assessment/Initial Study (Restoration Plan) includes a Kelp Restoration Project that is designed to restore approximately 60 acres of impaired fish habitat back to fully functional kelp forest habitat. The fundamental restoration activity is addressing the impacts of high densities of sea urchin on the reef habitat. As described in the Restoration Plan, when sea urchins reach a critical density on the reef habitat, their foraging behavior changes. Urchins in healthy kelp forests tend to remain in crevices and feed on drift algae that break off of adult kelp plants. Urchins that occupy urchin barrens, however, are highly mobile and will actively seek out and consume all available algae, including kelp recruits, which eventually leads to a persistent urchin barren state. In addition, during the restoration planning stage, MSRP staff determined that urchins occupying urchin barrens in the target restoration area were in a starved state and were unlikely to be providing significant ecological functions (e.g., reproductive or food web functions). To illustrate the poor condition of urchin barren urchins, we use an index that measures the weight of the gonad relative to the total weight of the animal (Gonadosomatic Index or GSI). The GSI required for urchins to be marketable in the commercial fishery is 15% or greater. Our data from urchin barren urchins suggest an average GSI of approximately 5%, far below that of a healthy or commercially or biologically viable urchin.

### **Project Methodology**

As stated in the Restoration Plan,

“Kelp forest restoration can be achieved through a variety of methods including urchin control (preferred alternative) and kelp outplanting (see non-preferred alternative). Urchin control can be achieved through two possible mechanisms: 1) urchin relocation, where urchins are collected from the reef by SCUBA divers and relocated over a wide area in the same geographic location, and 2) crushing urchins on site, where urchins are destroyed at the site by SCUBA divers using a hammer or some other similar tool.”

In the Restoration Plan, the Trustees concluded that urchin relocation would be the method employed. At the time the plan was written, released for public comment, finalized, and adopted by the MSRP trustees, urchin removal (i.e., landing and composting) and crushing on site (as discussed in the Restoration Plan) were not considered to be viable options. Although both of these methodologies are environmentally preferable to relocation, prior kelp project permits had been limited to a relocation-based methodology.

In June 2012, the MSRP's project partner, The Santa Monica Bay Restoration Foundation, identified a mechanism through which a large fraction, if not all the urchins could be landed and composted rather than relocated. The trustee council adopted this methodology after careful consideration of potential environmental impacts and benefits, concluding that the change would have no additional environmental impacts but would further decrease the existing, non-significant environmental impacts (e.g., reduced vessel traffic and the potential for relocated urchins to create new urchin barrens).

Recently, MSRP staff learned that the permitting agency would be amenable to a permit that allowed crushing on site, prompting this reconsideration of the project methodology.

## **Impact on Project Goals**

From the perspective of the project's restoration goals, this is a preferred approach for several reasons:

1. The crushing on site method is far more efficient. Composting of the urchins requires divers to locate urchins, pick them up, carry them, and ultimately haul them back to a vessel. When full, the vessel must drop off the collected urchins before returning to the restoration site for another load. In addition, at the end of each day, the restoration teams would be required to count thousands of collected urchins. Under the new methodology, a diver would crush the urchins in place, eliminating all of the other steps. This also means that divers would be able to dedicate their very limited "bottom time" to urchin removal. This streamlined process would achieve restoration goals considerably faster than the more logistically taxing composting method.
2. In addition to achieving restoration goals more quickly the new methodology would allow the Trustees to accomplish these goals at a far lower cost. Each of the steps described above has an associated cost (particularly vessel and dive time), and increasing logistical efficiency also decreases those costs.
3. Urchin biomass is recycled back to the local ecosystem via consumption by local fish, unlike the composting method, which removes that biomass from the system.

## **Environmental Impacts**

This methodological change is unlikely to significantly alter the environmental impacts outlined in the Restoration Plan's impacts analysis.

1. Physical – Neither the Restoration Plan nor the MSRP's subsequent analysis of the composting method anticipated any substantial adverse physical impacts associated with this project, and the change in methodology would not alter this conclusion. Indeed, physical impacts of the project would be further reduced. As described above, there would be a reduced need for vessel traffic, resulting in decreased vessel emissions. Similarly, there would be no need to truck removed urchins to a composting facility, reducing both emissions and vehicle traffic on the roads. Furthermore, the on-land impacts would be reduced beyond those for composting because there would be no need to create a composting facility.
2. Biological – Neither the Restoration Plan nor the MSRP's subsequent analysis of the composting method anticipated any substantial adverse biological impacts associated with this project, and the change in methodology would not alter this conclusion. Indeed, crushing in place provides ecological benefits greater than those for relocating or composting the urchins. Relocation entailed some risk of further destructive foraging by urchins, and, as described above, composting completely removes urchin biomass from the ecosystem. Crushing has neither of these effects and creates the added benefit of recycling the urchin biomass back into the ecosystem.
3. Human Use – Neither the Restoration Plan nor the MSRP's subsequent analysis of the composting method anticipated any substantial adverse human use impacts associated with this project, and the change in methodology would not alter this analysis. Both the composting method and the crushing on site method have the effect of completely removing live urchins from the environment and, therefore, would have the same effects on any human uses of those urchins. As noted in the MSRP's analysis of the composting method, the removal of the targeted urchins from the environment would have no impact on any recreational or commercial fishery. Sea urchins are commercially harvested in California with annual California landings totaling 4,600 to 5,500 metric tons of healthy sea urchins (i.e., GSI exceeding 15%) over the past 5 years (National Marine Fisheries Service Commercial Landings Database). This fishery is considered to be sustainable and resulting in minimal impacts to urchin populations and the habitats that they occupy. The Kelp Restoration project outlined in the Restoration Plan would remove approximately 110 metric tons of poor condition urchins (average GSI of 5%) over a 3 year period, representing approximately 0.7% of the average 3-year commercial harvest.

## **Recommendations to the Trustee Council**

This methodological change has minimal or no impacts on the Restoration Plan's analysis of (1) feasibility of achieving restoration goals or (2) environmental impacts of the Kelp Restoration project. Therefore, the MSRP

staff recommends adopting this change, and the analysis contained in this memorandum, without the need to reopen/revise the Restoration Plan.