

## Chapter 6. ALTERNATIVES

The Department recommends that the Commission adopt the proposed project. Specifically, the Department recommends a suite of changes to the existing management regulatory processes that became effective May 9, 1984 and March 26, 1996 (Sections 30 to 30.10 and Sections 165 and 165.5, Title 14, CCR, respectively) (Appendix 1). The recommended changes include: 1) an amendment to that clarifies what weighting methods are acceptable to determine the weight of kelp being landed; 2) an amendment that clarifies what information is required in landing records and what processes are to be followed in submitting reports (§ 165(b)); 3) amendments that further restricts harvest methods and seasons for bull kelp near the southern limit of that species geographical range; 4) amendments that increase the number of kelp beds that are closed to harvest (§165(c)) to prevent focused or repeated harvest and limit risk of resource damage in those beds where there has historically been little kelp resource; 5) an amendment that specifically addresses resource use conflicts in bed 220 near Monterey by closing a portion of the bed; 6) an amendment that provides a mechanism for restricting harvest by explicitly allowing imposition of temporary harvest controls in beds or portions of beds where necessary for resource protection; and 7) an amendment that provides an easy method for interested parties to determine which kelp beds are currently available for leasing (§165.5 (b)). More information on the preferred alternative can be found in Chapter 2 (2.1 Proposed Project).

The amendments identified in the preferred alternative will aid in the effective management and control of the commercial harvest of the giant and bull kelp resources within state waters while ensuring further protection and conservation of these important resources. The proposed project reflects both Department and public recommendations for amendment, change, or additions to existing regulations to meet the State's policy for managing kelp resources.

In developing the preferred alternative to address resource use conflicts in the Monterey bay area (Bed 220) (mentioned above), the Department evaluated several approaches and alternatives. The Monterey Bay National Marine Sanctuary (Sanctuary) submitted recommendations (Figure 6.1) that ultimately formed the basis for the recommended alternative. The Sanctuary recommended two closures near the City of Monterey. One closure was intended to limit resource use conflicts between consumptive and recreational users of the kelp beds. The other was intended to provide an area free of harvest as a control area to facilitate research. The preferred alternative modified the Sanctuary recommendations by creating a single larger area closed to commercial harvest of kelp. No research had been identified for the control area and the expanded closure was located to minimize resource use conflict and to provide the kelp harvesters with a closure boundary that was more readily identified from the water.

In addition to the proposed project, or preferred alternative, the Department is providing the Commission with an additional alternative that would also attain the project objectives. This alternative still provides harvest opportunities as an element of kelp resource management but further restricts the amount of kelp that could be cut from a kelp bed annually. The three alternatives, including the no-action (status-quo)

alternative required under CEQA guidelines, were selected to provide the Commission with a range of alternatives. The no-action alternative would involve continuation of the existing commercial and sport regulations for the harvest of kelp resources within State waters.

### **6.1 Alternative 1 (Statewide Harvest Controls)**

This alternative suggests expanding the suite of amendments in the proposed alternative to include a provision for limiting the amount of kelp that can be removed from each kelp bed (leased, available for lease, and open beds). The amendment would limit the amount of kelp that could be removed from each bed as a precautionary measure to prevent over-harvest. In response to public input, the Department considered several approaches, including limiting harvest to no more than 50 percent of that available in each bed during peak canopy production. Depending upon inter-annual variation and geographical differences in canopy production, this type of broad harvest control would tend to impact harvest patterns in southern California to a greater extent than in central or northern California. Most lease beds in southern California, with higher productivity, are now harvested two or three times each year.

Selection of this alternative would be expected to: 1) allow most beds in southern California to develop and slough naturally to a greater extent than occurs under existing uses; 2) provide more unharvested canopy in many southern California beds, resulting in less displacement of juvenile fish; 3) provide more unharvested canopy in many southern California beds, resulting in less disruption of sea otters in occupied beds; 4) reduce the harvest of giant kelp in southern California to levels appreciably lower than normal; 5) reduce the revenues to local and regional economies derived from the commercial harvest of giant kelp; 6) reduce revenues to the Department of Fish and Game from harvesting of kelp; 7) impact the algin and abalone aquaculture industry; and 8) increase the amount of kelp wrack on some beaches.

As stated above, the alternative would allow more kelp to develop and slough naturally, particularly in southern California. With that recognition and concern over the potential for over harvest prompted the general interest in this alternative. The additional canopy would provide more habitat for those species at various life stages that occupy the kelp canopy. It would also provide more kelp productivity in support of other marine communities such as those that use beach wrack. However, data presented in Chapter 4 of this document suggests that the ecological gains would not be significant for kelp plants or associated biota in most geographical areas.

The Department does see a benefit in developing a precautionary approach that limits or prevents an escalation of harvest to levels that can potentially cause significant impacts. However, establishing a biologically tenable threshold value beyond which one could reasonably expect a significant biological impact is problematic. At this point, establishing a specific harvest control level would be highly subjective. Further, establishing a management process based on a kelp bed by kelp bed quota system would be complex and require a significant staff commitment when existing management processes appear to be efficacious.

A statewide harvest control would impact the California algin industry. The only California producer of algin began production in 1929. One reason the industry survived for seventy years is the ample kelp supply that is generally available in southern California. Adoption of this alternative would take some of that production out of service and result in significant scheduling problems, and cause a significant increase in the cost of manufacturing algin because the raw material (kelp) would necessarily be harvested from more distant beds. This could translate to an increase in harvest pressure in less productive open beds in central California.

In conclusion, this alternative is not the preferred alternative because the benefit gained through implementation of a precautionary approach is not warranted given: 1) potential impacts to the algin industry and local economies; 2) no ecological benefits to populations of giant kelp or the marine biota associated with those beds; and 3) the potential for a shift in harvest pressure from southern California to less productive kelp beds in central California.

In lieu of this approach, the preferred alternative provides a mechanism for establishing harvest controls for specific kelp beds on a case by case basis for specified time periods.

## **6.2 No Action**

If selected by the Commission, the no action alternative essentially means no change would occur to existing regulations. The Commission and the Department have been given broad authority over the management of the state's kelp resources through statute (§6650-6751, §8596-8598.6 and, §7050-7090 Fish and Game Code) as expressed in regulation (§30, §165, and §165.5 Title 14, CCR). All relevant statute and regulation are presented in Appendix 1). These regulations have evolved to provide for the efficient management and harvest of kelp.

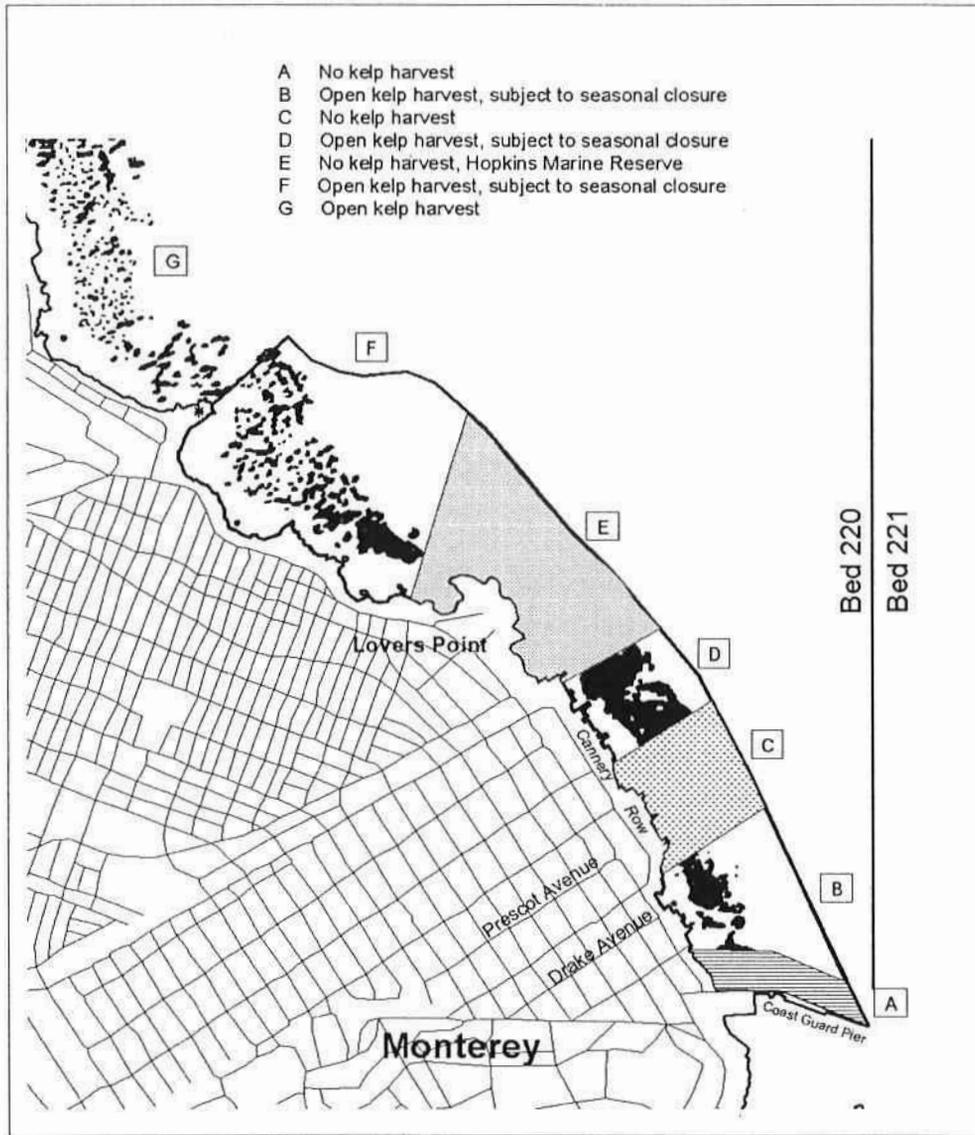


Figure 6-1. Map of Monterey Bay National Marine Sanctuary recommended regulations for bed 220.

