

## DEPARTMENT OF FISH AND GAME

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October 30, 1991



Mr. John Sansing, Superintendent  
Point Reyes National Seashore  
Point Reyes, California 94956

Dear John:

I would like to take this opportunity to resolve any misunderstandings that may have arisen as a result of my August 21 response to your request for comments on the impacts of Johnson Oyster Company (JOC) to Drakes Estero. It is my hope that this memorandum will clarify Department of Fish and Game (Department) comments and positions on this subject so that your concerns may be addressed by the appropriate regulatory authority, if necessary.

Three subjects appear to be of principal concern; marine mammal/JOC interactions, marine debris, and possible expanded JOC activity in relation to lease boundaries. I will discuss each topic briefly and suggest future action.

#### Harbor Seal/JOC Interactions

I agree with you that my generalization about an increasing harbor seal population is incorrect. Perhaps, the following material will more accurately describe recent abundance in the Estero. In 1981, the California Department of Fish and Game initiated an annual harbor seal census along the California coast. The census does not produce an estimate of the absolute number of seals; rather, it estimates the total number of seals hauled out on rocks and beaches, which is about 50 to 70 percent of the peak seasonal abundance (Boveng 1988). The techniques and results of the 1982 to 1991 censuses are reported in Miller et al. (1983), Hanan (1990), and Hanan et al. (1985, 1986a, 1987, 1988, 1989, and 1991).

In Drakes Estero two census sites, 224 and 225 are photographed each year. Both sites (Figure 1) are utilized by harbor seals, and the combined estimate is the total for Drakes Estero. As can be seen in Table 1 and Figure 2, abundance in the Estero over 10 surveys from 1982 to 1991 is without a noticeable trend.

Although JOC activities appear unlikely to constitute a threat to the viability of the harbor seal population, the potential for disturbance does exist. Perceived violations of the Marine Mammal Protection Act (MMPA) should be brought to the attention of the Santa Rosa office of the National Marine Fisheries Service (NMFS), which is charged with MMPA enforcement. Ms. Diane Windham of the Protected Species Branch and Special Agent Mr. Ed Eckhoff are the appropriate NMFS contacts. JOC staff have expressed a willingness to reschedule harvesting and planting activities, when possible, to minimize potential impacts to harbor seals throughout the year.

I strongly recommend that a meeting be convened of representatives of the National Park Service, California Department of Fish and Game, the National Marine Fisheries Service, and Johnson Oyster Company to work toward

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resolution of this and other issues. As a first step, Ms. Diane Windham is organizing a meeting of agency representatives in November. If further action is warranted, such as your suggested seasonal closure of the southern half of the Estero, then such proposed additional conditions to the mariculture allotment must be submitted to the permitting authority, the Fish and Game Commission, for consideration, as specified in Title 14 CCR 237 (c) (1).

#### Marine Debris and Litter

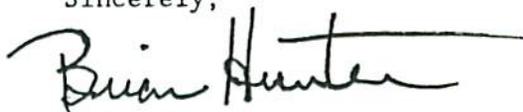
The problem of debris in the marine environment, regardless of source, is of obvious concern to the Department, as evidenced by Fish and Game Code Section 5652. It appears that materials associated with JOC operations are within the upper allotment boundary, which is defined by the Fish and Game Commission as that portion of the shoreline to the high-water mark. However, the Department agrees with you that lost or discarded mariculture materials should be removed from the intertidal and subtidal portions of the allotment as soon as possible, and current bi-weekly shoreline patrols for lost aquaculture materials should continue. Perhaps, at the aforementioned meeting, we can develop a mutually-agreeable plan to minimize litter from all sources along the Estero.

#### JOC Allotment Boundaries

As indicated in our August 21 letter, the Department is actively seeking recent aerial photographs to determine allotment boundaries accurately in relation to historic and present oyster bed locations, as well as channel and sand bar locations. The preliminary bathymetric map included with your September 19 memorandum does provide recent sand bar and channel locations within the Estero, but does not provide sufficient landmarks to determine allotment boundaries. The Army Corps of Engineers, Enforcement Branch, has aerial photographs of the Estero from the present time back to the early 1980s. We have contacted the Corps and, in the near future, hope to examine this material to assess its suitability for the above evaluation.

Ms. Windham of the NMFS is contacting the appropriate agency representatives to arrange a meeting site and date. We look forward to the opportunity to discuss these issues in a spirit of cooperation and mutual concern.

Sincerely,



Brian Hunter  
Regional Manager  
Region 3

#### Attachments

cc: Mr. Al Petrovich, CDFG  
Mr. Bob Hulbrock, Aquaculture Coordinator-CFDG  
Mrs. Diane Windham, NMFS  
Mr. Tom Moore, CDFG

Table 1. Harbor seal counts by site and census year for Drakes Estero.

| YEAR  | 1982 | 83  | 84  | 85  | 86  | 87  | 88  | 89  | 90  | 91  |
|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| SITE  |      |     |     |     |     |     |     |     |     |     |
| 224   | 509  | 86  | 508 | 200 | 300 | 204 | 61  | 484 | 100 | 744 |
| 225   | 516  | 214 | 172 | 453 | 309 | 649 | 276 | 382 | 386 | 71  |
|       | ---  | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TOTAL | 1025 | 300 | 680 | 653 | 609 | 853 | 337 | 866 | 486 | 815 |

Figure 2. Harbor seal census abundance, by site and combined sites, for Drakes Estero.

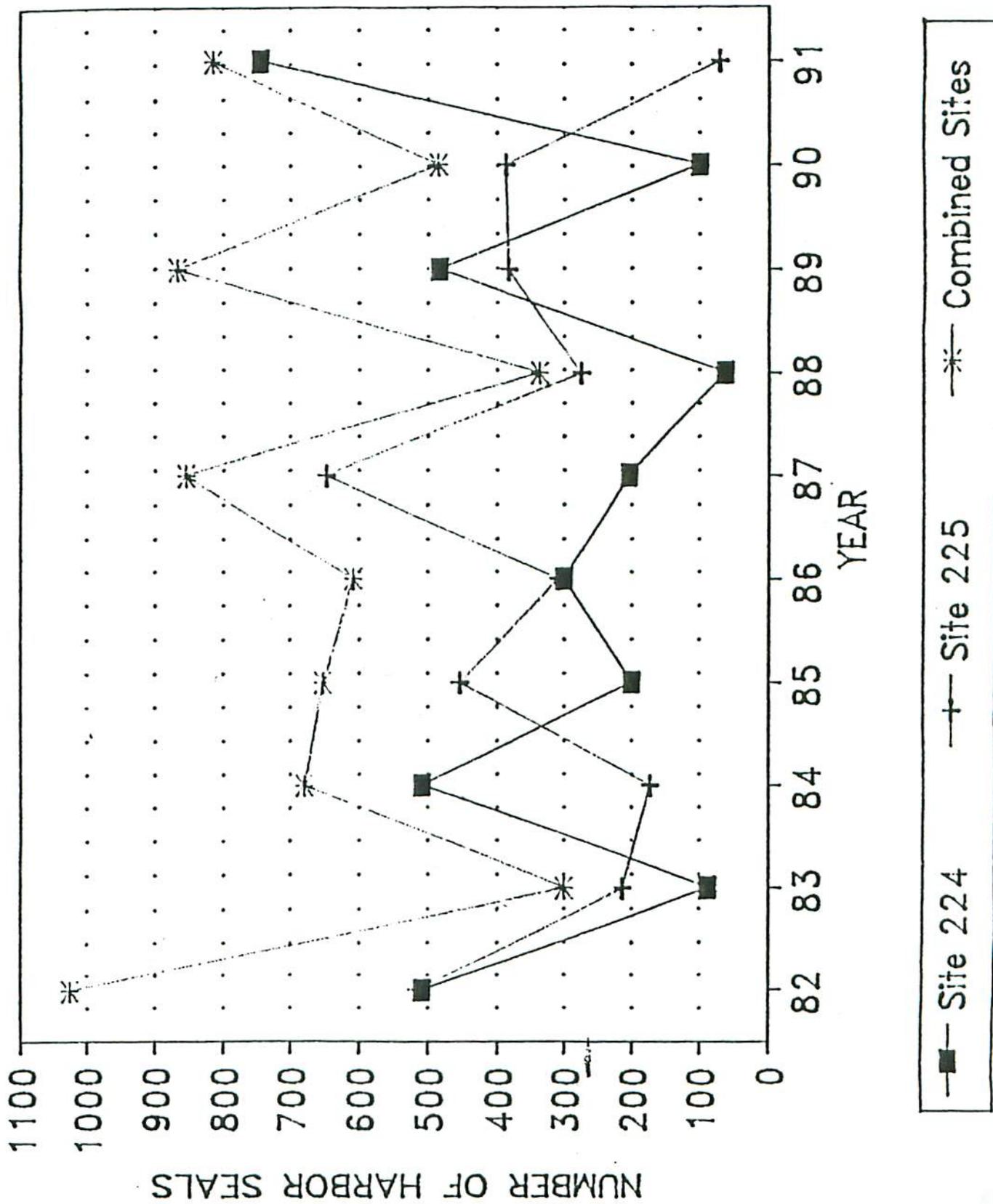




Figure 1. Harbor seal census sites in Drakes Estero.

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