6.0 RESPONSES TO COMMENTS FROM THE CALIFORNIA DEPARTMENT OF FISH AND GAME

The comment letter from the California Department of Fish and Game (CDFG) includes several comments regarding the Draft Environmental Impact Report and several additional comments regarding the Draft Management Plan. The subsections in this chapter address only the DEIR-related comments. However, the District will consider the Department's comments regarding Plan text in revising the Draft Management Plan for adoption.

6.1 MUTUAL INTERDEPENDENCE AMONG PLAN POLICIES

This comment states the Department's opinion that the Draft EIR Summary should include an explicit statement that all of the Management Plan policies will work in concert in the District's management of Humboldt Bay.

The District does not agree with the comment that there is a need for an additional statement about the mutual interdependence of the Plan's policies. The Draft Management Plan, which is incorporated into the DEIR by reference, already includes the suggested statement in several places, as does the Draft EIR (see Section 1.2.2), and the District has concluded that the mutual interdependence of the policies in the Management Plan is generally well stated and understood.

6.2 SHORELINE MAINTENANCE POLICIES

This CDFG comment expresses support for Plan Policies HSM-2, HSM-6, and HSM-7, which direct a collaborative approach to shoreline maintenance and the development of a coherent bay-wide response to rising sea level.

The District takes note of the comment, which does not raise new substantive issues.

6.3 WETLAND MANAGEMENT POLICIES

This CDFG comment expresses support for Plan Policy CAE-3, which directs the District to work collaboratively with the Department and other concerned parties to develop a coherent restoration and enhancement plan for aquatic ecosystem elements in Humboldt Bay.

The District takes note of the comment, which also does not raise new substantive issues.

6.4 IMPORTANCE OF EELGRASS

This Department comment expresses concurrence with the Draft EIR's recognition of the ecological and regulatory importance of eelgrass (*Zostera marina*), and provides citations to additional studies and reports that support that conclusion.

The District also takes note of this comment.

6.5 DWARF EELGRASS IN HUMBOLDT BAY

This comment adds additional information and several minor corrections to the dwarf eelgrass (*Z. japonica*) summary in footnote 1 on Draft EIR page 10-1.

The District takes note of the comment, and will incorporate the provided information into future descriptions of activities concerning this undesirable exotic species to the extent that it applies. The District finds that the comment does not raise substantial issues regarding the Draft EIR.

6.6 ADDITIONAL SENSITIVE SPECIES

This comment identifies several sensitive wildlife species that are known, or which are believed likely, to occur within the Humboldt Bay region, and which were not identified in Chapter 11.0 of the Draft EIR.

The District takes note of the comment, but observes that the comment merely amplifies conclusions reached in the Draft EIR. In the Draft EIR (page 11-6) the District concluded that it is possible to identify sensitive species, not all of which have a formal legal status, by a variety of criteria.

The listing in DEIR Table 11-1 was based on the occurrence records in the Natural Diversity Data Base (CNDDB). The CNDDB records include reported occurrences, and the District has concluded that it would be inappropriate to amend Table 11-1 to include species that lack actual occurrence records in the Data Base, even though many biologists are aware of specific occurrences in the region or believe that one or more of the species in the comment should be present.

At least one of the species identified in the comment should have been included in Table 11-2; the northern spotted owl (*Strix occidentalis caurina*) is known to occur within the Humboldt Bay watershed (although the occurrence records are not reported by the CNDDB software). The District is uncertain that the other species identified in the comment could be included in Table 11-2, which indicates species that are known to occur in the watershed, even though specific occurrence records are lacking.

As noted in Chapter 11.0 in the DEIR, many of the species have little opportunity to be significantly affected by management activities that would result from the Plan, and the Plan specifies a number of policies that direct the District to obtain and use appropriate information when considering activities that might affect the species that could be affected.

6.7 FISH SAMPLING IN BAY TRIBUTARIES

This comment emphasizes that the fish sampling being conducted by Department Associate Biologist Michael Wallace was/is occurring in tidally influenced Humboldt Bay tributaries and sloughs.

The District takes note of the comment, which affirms statements that were made in the Draft EIR. The relationships among salmonids and their habitats in Humboldt Bay are not fully established (see Chapter 5.0 in this Final EIR for additional discussion). An

extension of the conclusions from a variety of salmonid rearing studies along the Pacific Coast indicates that the tidal (or estuarine) portions of the bay's major tributaries are the locus of rearing habitat for salmonids in the watershed. The District has concluded that the data resulting from Wallace's studies are highly important to developing a full understanding of these interrelationships, and encourages the Department to continue and expand the scope of Wallace's investigations within the estuarine tributaries of Humboldt Bay.

6.8 SALMONID USE OF HUMBOLDT BAY'S WATERS

This Department comment emphasizes the Department's belief that adults and juveniles of several salmonid species, listed under federal and state Endangered Species Acts or not, find important habitat within the waters of Humboldt Bay.

The District concurs in this comment, and in fact the Draft EIR stated the same conclusion; see FEIR Chapter 5.0 for additional considerations of the use of the bay's waters by salmonids.

6.9 LISTED PLANT SPECIES

This Department comment correctly points out that the absence of detections of a number of sensitive plant species from the Humboldt Bay region for several or many decades is not conclusive evidence that those species no longer occur in the region.

The District agrees with this comment, although the District finds that the potential occurrence in the Humboldt Bay region of plant species last detected many decades ago does not raise substantive policy issues for the Management Plan or the Draft EIR. When considering future Plan implementation, the District anticipates consulting with Department staff regarding any element that might be associated with potential impacts for these species (which are, in fact, included in the occurrence records summarized in Table 11-1).

6.10 FENS IN THE HUMBOLDT BAY REGION

This comment notes that an additional environmentally sensitive community type, fens,[1] is known to be present in the Humboldt Bay watershed.

The District concurs, although the District considers it substantially unlikely that any of the activities that may occur in implementing the Management Plan will significantly affect the fens in the watershed.

1 A fen is a wetland in which the wetland's hydrology is dominated more or less completely by subsurface inflow and outflow.

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State of California – The Resources Agency ARNOLD SCHWARZENEGGER, Governor
DEPARTMENT OF FISH AND GAME
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June 5, 2006

Jeff Robinson
Humboldt Bay Harbor, Recreation, and Conservation District
P.O. Box 1030
Eureka, California 95502-1030

Dear Mr. Robinson:

The California Department of Fish and Game (Department) has reviewed the Draft Environmental Impact Report (DEIR) for the Draft Humboldt Bay Management Plan (HBMP, July 2005 version). The Department appreciates the opportunity to provide comments and suggestions on this important planning document for Humboldt Bay. The document is a programmatic DEIR to assess potential effects of implementing the HBMP policies. The purpose of the DEIR is to provide comments and information to the Humboldt Bay Harbor, Recreation, and Conservation District (District) regarding the potential environmental consequences of the policies identified in the HBMP. The HBMP is a policy framework that will guide development of future projects within Humboldt Bay. Future individual projects will likely require additional CEQA review and documentation and will be evaluated in accordance with the contents of the DEIR and policies of the HBMP.

As trustee for the State's fish and wildlife resources, the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. In this capacity, the Department administers the California Endangered Species Act, the Native Plant Protection Act, and other provisions of the California Fish and Game Code that afford protection to the State's fish and wildlife trust resources. Pursuant to our jurisdiction the Department has the following concerns, comments, and recommendations regarding the DEIR and Draft Plan.

Comments regarding the DEIR

6.1

- Summary: The summary section should state that the policies proposed in the HBMP and the DEIR are to function jointly with no portion of the policies acting independent of the whole.
- Page 4-21 4.4.2 Bay Surface Elevations: The Department owns and manages numerous lands within the Humboldt Bay area. In

general, our goal in management of these lands is to preserve, protect, enhance and restore coastal wetlands. The State has expended considerable monies in acquisition and management of these lands. As these lands, to varying degrees, are contained or bordered by levees constructed decades ago, we are concerned about the protection of this significant investment. Given the lack of past maintenance (and un-engineered construction) as well as the need to address sea level rise, this discussion is timely. In some cases we are exploring the possibility of removing levees to restore areas back to tidal action (e.g. McDaniel Slough) and in others, maintaining these levees and enhancing the seasonal freshwater wetlands appears appropriate. As such, we support the inclusion of the policy mitigation measure HSM-7 which would initiate a dialog of affected parties and agencies to deal with increases in sea level rise. We also support measures HSM-2 for development of consistent methodologies and standards for shoreline improvements, and HSM-6 with recommended materials most appropriate for shoreline protection with the least environmental impacts.

6.2

- Page 9-3 *State Wetland Definition*: Pursuant to Fish and Game Code Section 703, the Fish and Game Commission adopted a policy in 1987 regarding the use of a wetland definition and classification system based on the U.S. Fish and Wildlife Service definition (Classification of Wetland and Deepwater Habitats of the United States, FWS/OBS-79/31). Consequently, the Department uses this definition when identification of wetlands is required. Along this same premise, we believe the policy language of CAE-3 is timely and relevant because it strives to cooperatively engage interested and affected parties and agencies to develop and implement a restoration and enhancement plan for Humboldt Bay's aquatic ecosystems.

6.3

- Chapter 10 Eelgrass: The Department concurs with and appreciates the acknowledgement of the ecological significance of the native eelgrass, *Zostera marina*, and its importance to fish and wildlife. In addition to the Pinnix 2005 study cited in the DEIR, Humboldt State University's Center for Integrative Coastal Observation Research and Education (CICORE) program has been monitoring fish species in eelgrass habitat since May 2003 (www.cicore.humboldt.edu). Several other researchers have documented the importance of eelgrass habitat to commercial and non-commercial fish species in Humboldt Bay (Cole 2004, Studebaker 2006, Schlosser & Bloeser 2006).

6.4

- Page 10-1: The information in Footnote 1 is inaccurate and can be corrected as follows: "*Zostera japonica* was discovered on the west side of Indian Island in June 2002 by the Humboldt Bay

6.5

Cooperative Eelgrass Survey team. Staff from the Department, University of California (UC) Sea Grant Program and the District, as well as HSU volunteers physically removed the bulk of the vegetation in April 2003. UC Sea Grant and the Department continue to monitor and remove new growth of this species on Indian Island. No patches of *Z. japonica* have been found anywhere else in Humboldt Bay to date. The species has not yet been fully eradicated from Indian Island, although the number and size of patches and shoot density has decreased substantially. Continued maintenance is expected to result in successful eradication (See Kalson 2004, Kalson 2005, Schlosser et.al. in progress)."

- Page 11-1, 11.1.1 "Heritage" Species and Community Types: The following fully-listed, California Special Concern, or Western Bat Working Group High Priority vertebrate species are not listed in Tables 11-1 or 11-2 but are either known to occur or potentially occur within the Humboldt Bay region: northern spotted owl (*Strix occidentalis caurina*), willow flycatcher (*Empidonax traillii*), purple martin (*Progne subis*), bank swallow (*Riparia riparia*), yellow warbler (*Dendroica petechia brewsteri*), yellow-breasted chat (*Icteria virens*), tricolored blackbird (*Agelaius tricolor*), pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), and fringed myotis (*Myotis thysanodes*). The Department recommends these species be added to the tables. 6.6
- Pages 11-10 & 11-11, Listed Species and Habitat Relationships: The DEIR cites Wallace *in lit.* as capturing young steelhead, coho, and chinook in several Humboldt Bay tributary "basins". To clarify, Wallace's sampling was, specifically, in the tidally influenced portions of the Humboldt Bay tributaries and sloughs. 6.7
- On Page 11-11 the DEIR states that "...extensive sampling within the bay itself has found no evidence of salmonids (Pinnix and others 2005)". To clarify, Pinnix only sampled in North Bay and the study was not designed to target salmonids specifically, rather to describe fish communities in oyster mariculture, eelgrass, and mudflat habitats. In addition, other researchers have captured juvenile salmonids in Humboldt Bay (Waldvogel 1977, Cole 2004, Shaw 2004, Studebaker 2006) and recreational fishermen catch adult salmon inside the bay every year as they migrate to their spawning streams. The Department believes that both adult and juvenile, listed and non-listed, salmonid species utilize Humboldt Bay during portions of the year. 6.8
- Page 11-15, 11.1.3.1 Listed Plant Species: The DEIR states that the sensitive plant species *Spergularia canadensis* var. *occidentalis, Puccinellia pumilla,* and *Lathyrus japonicus* currently do not occur in the Humboldt Bay area. *Spergularia canadensis* 6.9

var. *occidentalis* is presently documented in Humboldt Bay (DFG unpublished data, Humboldt State University Herbarium voucher collections). The absence of *Puccinellia pumilla* and *Lathyrus japonicus* in the Humboldt Bay area has not been verified. These two taxa (along with the sensitive and historically documented *Astragalus pychnostachyus* var. *pychnostachyus and Carex leptalea*), might be considered "presumed extirpated" from the Humboldt Bay area, but they cannot be proven absent.

6.10

- Page 11-15, 11.1.3.2 Community Types: An additional environmentally sensitive community type, fens are an unusual wetland habitat type documented in the Humboldt Bay area. The List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database (September 2003 Edition), designates fen habitat (Code No. 51.100.00) as a natural community considered rare and of high priority for inventory.

Comments regarding the Draft Humboldt Bay Management Plan

- Page 15, Section 6.1 Areas of Primary Interest: The Department owns and manages more than 200 acres of tidelands within Arcata Bay. Specifically, the Bracut Tidelands Wildlife Area comprised of 200 acres west of the Bracut industrial site; and 45 acres of salt marsh just south of Highway 255 on the southwest side of Mad River Slough which are managed with the Mad River Slough Wildlife Area. Please include these Department lands in this section.
- Page 65 The Department of Fish and Game: Please correct "Mad River Wildlife Area" to read "Mad River **Slough** Wildlife Area".
- Page 71, 3.4.1 Water-Dependent Recreational Activities: Paragraph 2. In addition to waterfowl, please include coot and snipe as authorized species during waterfowl season. These species are also readily hunted on the Bay, sloughs, marshes, and adjacent agricultural and other areas. Also, please include the Department's Elk River Wildlife Area where designated waterfowl, coot, and snipe hunting are permitted, and eliminate "walking along levees" as a hunting method for waterfowl.
- Page 195, CAS-5 Fill placement may be used for habitat enhancement purposes: As a land manager within Humboldt Bay, the Department advocates the protection, enhancement, and restoration of coastal wetlands. As such, the Department supports the District's policy of placing fill for the purposes of habitat enhancement because most areas suitable for enhancement are degraded wetlands which function at less than optimum habitat value for wildlife.

- Volume II – Appendices: The presentation of maps and graphics is well organized and informative. The Public Land map should be updated to reflect the current State (Department/Wildlife Conservation Board) and Bureau of Land Management ownership/management changes: South Spit, Table Bluff, Mad River Slough, Fay Slough, and Elk River Wildlife Areas.
- Page 200, CEP-11: The information the District proposes to require may not be sufficient in all cases to adequately evaluate the boundary, buffer, or other environmentally sensitive area. Therefore, the Department recommends that the following be added to the policy: "e. Any additional information requested by the District or other reviewing agencies necessary to complete the evaluation."

The Department appreciates the opportunity to provide comments on the DEIR and HBMP. As always, Department personnel are available to discuss our concerns, comments, and recommendations in greater detail. To arrange for discussion, please contact Ms. Vicki Frey, Environmental Scientist at in the Department's Marine Region located at 619 2nd Street, Eureka, California 95501 or by telephone at (707) 445-7830.

Sincerely,

Gary B. Stacey
Regional Manager
Marine Region

cc: Ms. Vicki Frey
Department of Fish and Game
619 2nd Street
Eureka, CA 95501

Mr. Donald Koch
Department of Fish and Game
601 Locust Street
Redding, CA 96001

ec: Karen Kovacs, Dave Lancaster, Gordon Leppig, Mike Wallace, John Mello
Department of Fish and Game

References Cited

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