

The Environmental Action Committee of West Marin
THE BOLINAS LAGOON ECOSYSTEM RESTORATION PROJECT

OVERVIEW:

Though the goals of this project are tidal prism enlargement and habitat restoration, only tidal prism enlargement is studied and measured. Habitat restoration, a difficult field in which the Corps has little experience, is assumed to be a result of tidal prism enlargement, and is considered as an engineering problem not a ecological one. We have serious doubts about the reliability of the EIS' engineering statements and its ecological assumptions.

THE EIS DOES NOT DEMONSTRATE THAT THERE IS A PROBLEM

1. What is the predictive accuracy and statistical strength of the models that the EIS uses to predict closure of Bolinas Lagoon.?
2. The Corps' Guidance for Conducting Civil Works Planning Studies states that "potential relative sea level change should be considered in every coastal and estuarine feasibility study that the Corps undertakes." What range of values for relative sea level rise did the Corps use in its recent studies in Montezuma wetlands, Sonoma Baylands, and SF Bay? What is the justification for not considering the impact of sea level rise in this study, given the Corps' acknowledgement in its Coasta1 Geology manual that "as sea level rises, tidal prism of the lagoon increases"?
3. What is the justification for defining habitat according to elevation instead by habitat survey?
4. What is the justification for using 2.54 NGVD as the cut-off for intertidal habitat when the EIS' shows that high tide exceeds that level 22 days in the Bolinas Lagoon Mean Tidal Month? The effect of this is to seriously overstate the Lagoon's upland habitat and understate its marsh and other intertidal habitat.
5. What is the justification for basing the need for the project on predicted volume change in intertidal and subtidal habitat, rather than area change? The ecological value of habitat is best measured by area, not by volume. Moreover, measuring by volume overstates the expected loss of intertidal habitat. Under the No Action alternative, the area of intertidal habitat is expected to decrease by less than 3 per cent from 2008 to 2058 (from 844 to 823 acres), whereas by volume it drops by 47%.

THE EIS DOES NOT FAIRLY EVALUATE THE BENEFITS & COSTS OF DREDGING

1. What is the justification for citing the volume of habitat to be created or lost by dredging? The only apparent reason is that doing so produces a higher figure for ecological impact per cubic yard of material dredged. Dredging 1.4 million cubic yards to prevent the loss of 21 acres of subtidal habitat gives a habitat/dredging ratio of 1:66,666, whereas if volumes are used instead, the result is a much more attractive ratio of 1:just under 1.
2. What is the justification for failing to distinguish between marine and fluvial deposition in the areas to be dredged? . The EIS acknowledges that the sediments in Bolinas Lagoon come from both fluvial and marine sources, but it does not inquire more deeply into this important, and potentially very expensive and damaging, fact.
3. What is the justification for failing to consider the impact of dredging on sand transportation in and out of the Lagoon and on and off the Seadrift spit. The EIS suggests that Kent Island and the adjacent area exist as a result of marine, not fluvial, deposition. If so, dredging at this critical location would create a sediment sink. Much of the sediment drawn to this sink would be drawn from the adjacent nearshore, beach and would be very likely to cause significant erosion of the distal end of Stinson Beach.
4. What is the justification for delineating the lagoon system with a boundary at the mouth of the lagoon, rather than including the whole sediment system, which encompasses the entire coastal barrier beach, from Duxbury Point to the Seadrift spit and Stinson Beach.

THE EIS DOES NOT DEMONSTRATE THAT THE BENEFITS OF DREDGING ARE SUSTAINABLE

1. What is the justification for the EIS' assertion that both the two proposed alternatives will meet the goal of "increasing tidal volume...in a manner that prevents the need for regular maintenance dredging during the project period"?
2. Has the Corps ever successfully increased the tidal prism of a shallow embayment? Is it aware of any other agency that has successfully done so?
3. What is the evidence that either of the alternatives can be sustained over the proposed phased-in period. In other words, will the impact on the tidal prism of dredging in Year 1 be adequate to ensure that the dredged area will be sustained until Year 2?
4. What is the evidence that maintenance dredging and beach replenishment will not be necessary if dredging interferes with the marine deposition cycle?

THE EIS DOES NOT CONSIDER A FULL RANGE OF REASONABLE ALTERNATIVES, AS REQUIRED BY NEPA

1. What is the justification for failing to do a detailed study of the No Action alternative? We do not have a clear and thorough picture of what the Lagoon would look like in 50 years if we choose the No-Action Alternative. For example, the Table of Significant Unavoidable Impacts lists an earthquake as a possibility for the two Action Alternatives, but does not consider the impact of an earthquake in the No-Action alternative.

2. Why have only two Action Alternatives (which are essentially the same) been considered? The EIS states (p.ES-4) that among the areas of controversy is the need to repair human-caused damage to the Lagoon, including the Caltrans turnouts, the upland area in the Pine Gulch Creek Delta, and the areas filled for the construction of the Seadrift Project. Yet, it does not consider these alternatives.
3. What is the justification for failing to consider the alternative of improving flushing in Bolinas Lagoon by opening the Seadrift Lagoon to tidal action?
4. The EIS has many other shortcomings, which we will address in our written comments, among them is its failure to address the likelihood that dredging will result in an increase in invasive species in the Lagoon, that it suggests no mitigations for 7 of the 18 significant impacts it identifies, and that it does not take into account the impact on dredging of re-suspended sediments.

THE EIS DOES NOT PRESENT THE TRUE COST OF THE PROJECT

1. Given that the estimated cost of the project has grown from \$20 million in 2000 to \$135 million today and that the cost is estimated in 2001 dollars, what is the real cost likely to be by the time implementation begins?
2. Can the Corps provide a clearer picture of the full range of public disturbance the project will cause, including 33 days of round-the-clock dredging every year for nine years; laying a pipeline under the Lagoon, adding bridges and culverts between the Lagoon and Stinson Beach; and stationing dumpster barges offshore?
3. Why does the EIS not consider the impact on the cost of the project should a major storm event occur during project implementation?

THERE SHOULD BE MORE PUBLIC CONSULTATION

1. The EIS is a huge document that requires detailed study. The Appendix was not easily available and is confusingly organized. The CD, which was all many people received, was a mess. The sections of the printed report were re-named and re-ordered so that it is impossible to follow the table of contents. The version available on the web site has page numbering that is different from the printed version, so that it is impossible to co-ordinate a discussion between people with different versions.
2. The two public hearings promised in the Draft EIS have been reduced to one.
3. Today's meeting was not adequately advertised. The location was not announced except on the Planning Commission's web site, which erroneously gives the date of the meeting as tomorrow, Thursday, July 25th.
4. Many interested parties are unable to attend a brief hearing in the middle of the work day. In addition, individuals and groups who would like to submitted detailed written comments need more time to obtain and distribute the documentation to their members and advisors.
5. A project of this magnitude with this amount of documentation merits at least two public hearings and a 120 day comment period rather than a 45 day comment period. We request that you schedule another hearing and extend the period for written comments to October 1.