

Review of Chapters 8 Coastal Condition of Alaska and Hawaii; Chapter 9 Coastal Condition of the Island Territories

General Comments:

1. Combining the report for SE Alaska and Hawaii together in one chapter is rather strange since the coastal conditions for these two regions are very different.
 - a. Did the analyses include corrections for average sea surface temperature and dissolved oxygen and salinity?
 - b. Temperature differences have a profound effect on the bacterial counts and presumably beach closures. In Alaska, only two beaches were monitored and both were affected by notification actions whereas 444 beaches in Hawaii were monitored and 7 were affected by notification actions.

Clearly, the conditions for monitoring, etc. are not consistent between the two states and if there is a need to shorten the length of the report, grouping Alaska with West Coast seems more reasonable. Grouping Hawaii with the Island Territories makes more sense.

2. Alaska's shoreline is measured at 45,000 miles. This chapter sites 50% of total US coastline miles is in Alaska. Please note on page ES-14, on the section on the Limitations of Available Data, the first paragraph indicates that "Nearly 75% by area of all the coastal waters, including the bays, sounds and estuaries in the United States, is located in Alaska...." What is the difference, i.e. in the 75% number you are considering square miles vs miles? Please note on page 8-8, Alaska's coast line is now 34,000 miles.
3. The inclusion of Alaska, Hawaii, and the Island Territories is important but the lack of data is troubling. The study does point out the need to provide this data for a more comprehensive analysis of the nation's coastal condition.

Specific Questions :

1. Are the methods used to assess coastal condition supported by sound scientific principles?

The methods used are standard procedures. The one issue that needs to be addressed is the standardization of instrumentation and organizations (Alliance for Coastal Technologies, National Water Quality Monitoring Council) have issued reports that ask for more accuracy and calibration. How was this considered as part of the analyses?

The report does point out the need to consider a different indicator of sediment toxicity using an organism that is found on the West Coast and Pacific to the system. Some investment in assay development would be appropriate.

2. Selection and use of coastal monitoring indicators are described in Chapter 1. Do the coastal monitoring indicators used to assess coastal condition national and regionally and do the criteria for ranking condition as good, fair, or poor reflect the primary environmental concerns of state, regional, and national resource managers?

With respect to the Chapters on Alaska, Hawaii, and the island territories, the data are incomplete. Only water quality and sediment quality indices were considered for Hawaii. For Alaska, the benthic index is missing, and for the Island territories, the coastal habitat index is missing for all. It seems unlikely that any score should be awarded to Hawaii and so the overall condition of 3.0 is most probably inaccurate. The report does point this fact out and it is what it is. However, there are some questions regarding the report:

- a. Page 8-23, the section on Invertebrate fisheries does not indicate that the Pacific lobster fishery has been closed since 2000 and prior to that date, strict regulations governing the crustacean fishery in Hawaii was instituted in 1983. The collapse of the lobster fishery has been a long standing problem in Hawaii. Whether this is due to overfishing or to a decadal shift in ocean conditions has not been determined.
 - b. On Page 8-24, the report states that “Hawaii generated for \$247 in commercial fisheries total ex-vessel revenues,”. Should that number be \$247 million?
 - c. Since the landings of Pacific Highly Migratory Pelagic Fisheries is cited in the report as a reflection of the coastal condition, one has to ask if the biologists know, in fact, that the tuna and billfishes, oceanic sharks, dolphinfish, and wahoo, do, in fact, spend their juvenile years in the Hawaiian Islands. If this is the case, then it makes sense to make this correlation. But if not, then I am not sure how meaningful this data is to the report on coastal condition.
 - d. The coastal condition rating for American Samoa is based on two of the five indices. It doesn’t make sense to give a condition rating based on two ecological indices. Also, water quality data does not appear to be available for Pago Pago harbor, the most impacted site it would seem, for American Samoa. This omission calls into question the data set. I have taken snorkel gear into the Harbor and the corals are not in the greatest of health. I also wonder why there are the “poor” data points off Ofu and Tau. That might be worth a discussion in the text.
 - e. American Samoa beaches were all affected at one time or another with notification actions. Yet, there is a rating of good.
 - f. The summary index for Guam is also a good, yet there were beach advisories for 100% of Guam’s 31 monitored beaches. It is unclear if this was because of sewage spills or some other impact. Thus, it is difficult to consider the rating of good as a valid indicator.
3. Are the report’s conclusions supported by the analyses and results?

Having just asked questions about the conclusions reached, i.e. the rating system based on 5 ecological indices. I think it prudent to omit the data from those regions without all 5 indices for the calculations of national coastal condition.

4. Are the conclusions regarding changes in coastal condition over time supported by the data and analyses presented?

Did not have this data available for examination.

5. Does this report represent an important contribution to the state of the science for assessment of coastal waters?

Despite the questions I have asked, there is no doubt that this report is important. It highlights the need to continue these efforts. I don't think, however, that including Alaska's coastline and showing an improvement is valid. The report does point out these limitations.

6. Do the four approaches to assessing coastal condition (i.e., coastal monitoring data, coastal ocean/offshore monitoring data, offshore fisheries, and assessment and advisory data) clearly represent aspects of coastal condition that informative and non redundant?

Yes. But there might be some effort to develop a weighting system for the data.

7. Are the shortcomings of available data and assessment approaches clearly articulated?

Yes, but a more detailed appendix might be helpful.

8. This report is quite lengthy. Do you have any recommendations for omitting parts of this report to shorten the length?

No. I would not shorten it. The executive summary should take care of the folks that want to scan the report, but the data and the arguments should be lengthy and provide appropriate explanation.

9. Please discuss any controversies that may be raised by the conclusions presented in this report.

I have raised this point in my earlier comments.