

From Pam Daoust <daoust@hawaii.rr.com>
Sent Tuesday, October 12, 2010 11:19 am
To hihwmanagementplan@noaa.gov
Subject Comments on Management Plan Review

Aloha,

I would like to offer the following comments on the above:

Protected species within the Hawaiian Islands Humpback Whale Sanctuary should be expanded to include the Hawaiian monk seal, sea turtles, other cetaceans, rare and endangered corals and fish vital to reef health, such as herbivores and algae eating urchins. In view of the number of critically endangered species such as Hawaiian monk seals and hawksbill turtles that are known to frequent Ma'alaea Bay, for example, the bay itself should be designated as a marine preserve existing within the confines of the whale sanctuary and the above mentioned endangered species should receive increased protections.

Hawaiian monk seals are frequently spotted in front of Ma'alaea condos (where I live). I and many others have observed Hawaiian monk seal individuals on numerous occasions playing with eels and puffer fish, and/or hunting and feeding. This critically endangered species needs protected habitat with abundant food sources. Considering how critical the situation is, it only makes sense to extend protections for this species and its food sources within the sanctuary boundaries.

Critically endangered hawksbill turtles nest along the Ma'alaea Bay shoreline bordering the sanctuary. This species requires a constant supply of sponges in order to survive. Green sea turtles have no lack of algae but as water quality in the sanctuary continues to decline due to human impacts, hawksbill food sources will be adversely affected. Making the sanctuary or designated portions of it into additional marine preserves would help to solve this problem as well.

The reefs at Ma'alaea were once described as "striking in their diversity and in the presence of rare corals." A 2007 Coral Reef Study documented the decline of those reefs, as excerpted here: **"The end result of reef degradation is evident at Maalaea Bay. In 1972, Maalaea coral reefs were described as being 'striking in their diversity and in the presence of rare corals species'. As late as 1993, estimated coral cover was 50- 75% close to the site where cover is now 8%. Therefore, in just a few decades, the Maalaea reef has transformed from a healthy and diverse ecosystem into a badly degraded habitat overgrown by algae and with little surviving coral. One consequence of severe loss of living coral is that degrading reefs change from being actively-growing and structurally-complex habitats, into eroding and relatively flat areas which do not support abundant marine life. That process is well advanced at Maalaea, where fish stocks are now in very poor condition, being dominated by small wrasse, triggerfish and puffers. Given that the Maalaea reef is now a poor habitat for most grazing fishes, and that existing blooms of algae will continue to inhibit new coral growth, even in the best of circumstances (without water quality or fishing impacts), recovery of Maalaea would likely take many years."**

Designating Ma'alaea Bay as a marine preserve within the Hawaiian Islands Humpback Whale Sanctuary would focus more attention on addressing and mitigating contributing factors to reef decline from shoreline activities and human impacts. Numerous injection wells, both public and private, are located within close proximity to Ma'alaea Bay. Encouraging, if not mandating, alternative technologies such as reclamation, enhanced nutrient removal and constructed wetlands would have the effect of controlling harmful nutrient levels of nitrogen and phosphorous within the Bay itself and help to protect and produce more food sources for critically endangered species.

Non point sources of pollution, e.g. agricultural runoff, siltation from construction activities, etc. also would need to be addressed. The creation of a marine preserve at Ma'alaea Bay would ensure that priority is given to these issues. Federal and state funding resources hopefully would become more readily available to mitigate human impacts once these issues receive more priority and recognition.

The County of Maui is seeking to increase its wastewater reclamation efforts. Funding is needed for infrastructure to expand the existing program of wastewater recycling at the Kihei plant and elsewhere. If the sanctuary expands its oversight to include preserving water quality within its boundaries or portions of its boundaries, most particularly within Ma'alaea Bay where so many critically endangered species are known to frequent, this would assist the County as well as private entities in addressing the elimination of injection wells and other practices known to affect water quality.

The fact that humpback whales do not feed here should not prevent water quality issues from being addressed. Do we really know how water quality issues affect newborn humpback calves? The presence of excessive nutrients, pharmaceuticals, hormones, etc. in injected wastewater that eventually reaches the ocean may have many impacts we have not yet determined. As Maui's population increases, so also will the types and amounts of harmful substances in its injected wastewater. We do know that other critically endangered species, including Hawaiian monk seals, hawksbill turtles and corals are adversely affected by poor water quality, as are dolphins and reef fish. Poor water quality means less food overall or more highly contaminated food sources for these marine inhabitants.

New injection wells near the coastline should not be permitted and old ones should be phased out as new technology is adopted and priority is given to funding injection well alternatives. The sanctuary could promote this as a means of improving water quality in targeted areas.

Obviously, close cooperation between the residents, the DLNR, local government entities and sanctuary officials will be necessary to bring about changes such as I have mentioned. We all need to pull together to address these issues because we are at a critical turning point for preservation of so many marine species.

Maui has only four marine preserves and could benefit from many more. If the sanctuary expands its guidelines to include other species and backs it up with strong recommendations and mandates for improving water quality within sanctuary waters (or at least assists in designating portions of them such as Ma'alaea Bay as marine preserves) all of our marine life will benefit, ensuring an adequate supply of fish for fishing as well. Failure to act now likely will mean vastly diminished marine resources for everyone in the future and will seriously impact tourism, as well. Many visitors come here expressly to enjoy the ocean and its many varied inhabitants. At the same time, sustenance fishing provides food for local families. However, there will be no fish for anyone to enjoy if we don't act soon to protect and preserve what we still have left!

Thank you for the opportunity to comment,

Pam Daoust

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