



The Otter Project

www.otterproject.org

September 18, 2007

Ms. Diane Noda, Field Supervisor
Mr. Steve Henry, Senior Biologist
Ms. Lilian Carswell, Biologist
United States Fish and Wildlife Service
2493 Portola Road, Suite B
Ventura, CA 93003

Via email

Re: EPA Biological Evaluation for Morro Bay/Cayucos Sewage Treatment Plant

Dear Ms. Noda, Mr. Henry, and Ms. Carswell:

The Otter Project has been very involved in encouraging Morro Bay and Cayucos to upgrade their sewage treatment plant to a tertiary standard. For nearly the past 30 years the Morro Bay / Cayucos Joint Powers Authority (JPA) has been seeking and receiving a waiver from the requirements of the Clean Water Act. The JPA holds one of the very few remaining waivers.

The EPA, RB3, and USFWS should REQUIRE tertiary treatment. The requirement for tertiary was in EPA's earlier draft, and tertiary should remain a requirement to protect sea otter and nearshore ecosystem health.

For years we have known that a disproportionate number of sea otters were washing ashore on Estero Bay beaches. There have been numerous attempts to sidestep the issue of Estero Bay as a sea otter mortality hotspot. The EPA Biological Evaluation repeats the most often used: sea otter carcasses may be drifting in from large distances to be cast ashore in Estero Bay. This is simply not the case; sea otter carcasses are found in reasonably 'fresh' condition in this area, indicating that they have been dead for approximately a day or less. Marine mammal carcasses - including sea otter - decompose and/or are scavenged very quickly after death. Only sea otters found fresh-dead can be necropsied and many Estero Bay carcasses are necropsied.

Estero Bay is a hotspot for sea otter mortality, there is no avoiding this fact. If we look at the Cayucos to Hazard Canyon coastal segment and compare it against rangewide stranding statistics, Estero Bay singularly stands out.

Range wide in 2004, 05, and 06 we found 9.9%, 9.9%, and 9.8% of the spring count dead on the beach.



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In Estero Bay in 2004, 05, and 06 we found approximately 43%, 50% and 33% of the local area spring count dead on the beach.

In Estero Bay (Cayucos to Hazard Canyon) we find approximately four to five times the range wide percentage.

If we look at the Cayucos to Hazard Canyon coastal segment and compare it against a similar area (sand beaches, moderate visitation, embayments, similar urbanization, similar freshwater inputs, and both considered high mortality areas) again, Estero Bay singularly stands out.

In Monterey Bay in 2004, 05, and 06 we found approximately 12%, 23%, and 24% of the local area spring count dead on the beach respectively.

As noted above, in Estero Bay in 2004, 05, and 06 we found approximately 43%, 50% and 33% of the local area spring count dead on the beach.

Estero Bay is approximately double the Monterey Bay percentage.

Every year, Estero Bay has the highest stranding numbers for any coastal segment of the sea otter's range and the strandings are far disproportionate to the local area sea otter population.

The Research Plan recently approved by the USFWS Southern Sea Otter Recovery Implementation Team states: "Necropsies of fresh otter carcasses over the past 15 years have revolutionized the view of death in this species by establishing that a significant proportion of the overall mortality is caused by a diverse array of parasites and pathogens. Many of these agents have land-based origins, and forceful action toward improved water quality is thus urgently needed." And, "Several pathogens have been linked to land-based processes and activities, reinforcing concerns about terrestrial effluents, water quality, and land-sea linkages to the population ecology of sea otters and the overall health of the coastal oceans in which they live. This body of evidence is sufficient to warrant aggressive action toward the reduction of land-based effluents and improved water quality."

Domoic acid is VERY underplayed in the EPA Evaluation. Harmful algal blooms (HABs) producing domoic acid were first reported in California in 1991 and began appearing regularly in 2000. The frequency and toxicity of blooms seems to be increasing and may be related to concentrations of urea (fertilizers and less-treated sanitary sewage) and copper (used as an anti-fouling agent in boat paint). Where two years ago there was no consensus that HABs producing domoic acid were anthropogenic, the pendulum has swung VERY quickly towards human triggers.

Chemical, pathogen, and nutrient pollution are all problems in Estero Bay. It is our understanding that tertiary treatment will solve many of these issues. Tertiary treatment removes many more of the pathogens and much more nitrogen (urea) from

