



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**

*National Marine Fisheries Service*

*P.O. Box 21668*

*Juneau, Alaska 99802-1668*

December 6, 2006

Colonel Kevin J. Wilson  
District Engineer  
U.S. Army Corps of Engineers  
P.O. Box 898  
Anchorage, Alaska 99506-0898

Re: POA-2006-1418-2  
Tongass Narrows

Attn: Robin Leighty

Dear Colonel Wilson:

The purpose of this letter is to express the support of the National Marine Fisheries Service (NMFS) for invasive species monitoring as mitigation of the referenced project. Survey Point Holdings has offered to fund the Smithsonian Environmental Research Center first year efforts to establish an invasive invertebrate species monitoring site at the Ketchikan Berth IV cruise ship dock. This would establish Ketchikan as part of a nationwide effort to monitor sessile invasive invertebrates and determine their northward spread. Doing so would directly address an on-site environmental threat of this project to the marine environment. Worldwide, invasive species are considered one of five major threats to marine biodiversity (the others are over fishing, chemical pollution and eutrophication, physical modification of coastal habitat, and global climate change) (Carlton, 2000). Often these threats work in tandem to impair coastal habitats. Invasive species are a form of habitat degradation because habitat quality is determined from plants and animals living in an area as much as the abiotic components of light, substrate and temperature.

Cruise ships are a potential major vector for the spread of invasive species through the discharge of ballast water taken on in other coastal areas, and fouling by live organisms of sea chests and hulls. Such invasive species could include several species of invasive tunicates, also known as sea squirts (in ballast water, sea chest or attached to hulls), the green crab (in ballast water or sea chest or riding fouling growth on hulls) and Atlantic cordgrass (as seeds in ballast water) that have already invaded portions of the west coast of the US and have the potential to dramatically alter marine habitats. In addition, unknown species may be moved from other ports of call that these ships visit throughout the western hemisphere or beyond. Where these invasive species have invaded before they have caused significant impacts by establishing and growing in large numbers and thus out competing native species resulting in both economic and ecological damage to marine resources. Alaska is at risk of marine invasive species invasions because of the increased visitation of vessels from outside the State (McGee et al., 2006) combined with the documented increases in sea water temperature (Grebmeier et al., 2006) that will allow a greater range of species to establish. McGee et al. (2006) suggest the establishment of monitoring sites to evaluate new invasions in response to various ship types and conditions as the most pragmatic management strategy. In this regard cruise ship Berth IV in Ketchikan is an ideal location to monitor for invasive species as it represents a gateway to the State as the southern-most and warmest port in Alaska and a first opportunity for invasion through the cruise ship vessels vector.



NMFS understands that there has been discussion of mitigation by payment of an in-lieu fee to the Southeast Alaska Land Trust. While NMFS supports the land trust and the work they do, our view is that such a payment would result in off-site and out-of-kind mitigation because the land trust is largely based in the Juneau area and thereby logistically constrained from projects in the Ketchikan area. In addition, NMFS considers invasive species to be a greater threat than the quantitative loss of habitat at this site because of its degraded (see our September 5, 2006 letter) and thereby of minimal value as marine habitat. Because of this marginal quality of habitat, the area may be even more at risk for colonization by invasive organisms already adapted to living in the environments of a ship's ballast and hulls.

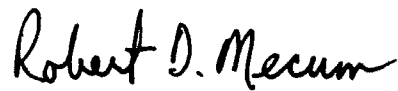
NMFS also understands that there has been discussion of the placement of artificial reef structures in the area of the new cruise ship dock. NMFS is concerned that such placement of structures may pose a navigational threat to cruise ships and the integrity of docking structures and their maintenance. In addition, these structures will provide minimal habitat value because of the already degraded nature of the site, and the necessity of placement in deep water outside the photic zone, which will be unavailable due to the location of the new docking structures.

NMFS believes that monitoring of the site for invasive species addresses a direct potential impact of the dock that could threaten productive marine habitat in the Ketchikan area and beyond. Monitoring will also allow for an early warning of invasive species occurrences that can allow for corrective management actions. The project will serve the community of Ketchikan through the interaction of local students and researchers to educate about the threat of invasive species and the impacts of cruise ships rather than direct funds away from the community.

NMFS believes this project addresses site-specific, in-kind impacts of this project to the marine environment and should be considered as an excellent mitigation opportunity.

If you have any questions regarding our comments, please contact Linda Shaw (907-586-7510).

Sincerely,



Robert D. Mecum  
Acting Administrator, Alaska Region

cc: Fax to Corps of Engineers, Anchorage  
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\*Greg Ruiz, Smithsonian  
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## Literature Cited

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