



PROMOTING STEWARDSHIP OF WHALES AND THE SALISH SEA ECOSYSTEM THROUGH EDUCATION AND RESEARCH

15 December 2010

P. Michael Payne  
Chief, Permits, Conservation and Education Division  
Office of Protected Resources, NMFS  
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<http://edocket.access.gpo.gov/2010/2010-28271.htm>

re: Public Comment on Amendment to Permit No. 781- 1824-01

Dear Mr. Payne:

The Whale Museum is a non-profit education and research organization established in 1976 on San Juan Island, Washington to advance the understanding and conservation of the marine life of the Salish Sea with special emphasis on the Southern Resident killer whales (SRKW).

We are writing in response to the November 9, 2010 Federal Register notice (Volume 75, Number 216) in which the National Marine Fisheries Service Northwest Fisheries Science Center (NMFS NWFSC) is requesting to amend their research permit on the endangered population of Southern Resident killer whales. The modifications include increasing the number of suction cup tags from 10 to 20 annually and to add satellite tagging of six SRKW with dart tags annually.

This request is being made in addition to the existing authorization NMFS has to take 25 biopsy darts, 5 breath samples, 300 incidental harassment takes and 215 surveys of this population of less than 87 individuals.

We thank you for extending the public comment period for this permit amendment. However, we are disappointed that you decided not to provide for a public meeting on this permit for satellite tagging prior to the end of the public comment period. More than a year ago, some of the impacts of satellite tagging became apparent when photos showing lesions from satellite tags placed on transient killer whales circulated in the whale community. (See Appendix Figures 2 and 3) Based on conversations we have had over the past month, we firmly believe that the public has an interest to know more than is provided by the technical listing in the Federal Register recently published during the holiday season with no other official public notice. The Whale Museum appreciated the opportunity to meet with Lynne Barre and Dr. Hanson who shared data and information we did not have. We firmly believe there is more than enough interest in these whales to justify a public hearing to review the scientific and public policy questions.

(1) Specifically, it is important to explain the scientific and public policy rationale that supports invasive tagging of the endangered Southern Resident Killer Whales (SRKW) (see Appendix Figure 1 for image of the tags that are proposed). In our December 6 meeting at The Whale Museum in Friday Harbor, Dr. Bradley Hanson explained that the primary goal of the tagging study was to better understand where the orcas go in the winter. While we share an interest in this information, the questions are how to best determine this and how the data will be utilized. We have long championed the use of passive techniques, specifically acoustics and observations, to non-invasively track the whales. The limited application of these techniques have already yielded important insights that have yet to be shared with the public (Appendix Figures 4 and 5). There need to be specific conservation objectives identified that compellingly justify utilizing short-term invasive techniques where long-term acoustic and observational monitoring could provide more information with no impacts.

Much is known about where the Southern Resident orcas go, but this knowledge has played no apparent role in the recent permitting by NOAA of Naval warfare training in exactly the near-shore areas of Washington, Oregon and California that the orcas are known to frequent. Hundreds of thousands of dollars have been spent by NOAA on coastal surveys and ship surveys and these found SRKWs at the mouths of salmon rivers in Washington, Oregon and California. More thousands of dollars were spent using passive acoustic surveys at the heads Juan de Fuca, Nitnat and Quinault undersea canyons which also detected orca vocalizations. However, these direct observations of orcas in the shallow waters of the west coast apparently played no role in NOAA's granting a permit to the Navy for their desired activities. Therefore we cannot see a compelling need to use an invasive technique to show similar data trends when the existing data observations were not used, or were not adequate, to take conservation measures that would have prevented potential impact to whales in areas and times of the year when they have been demonstrated to use the area.

(2) We recommend that all other non-invasive options be fully explored (i.e., passive acoustics, visual observations) before employing such invasive technology on this fragile population. NOAA's observations document that K and L pods appear at near shore locations along the west coast of the United States. Passive acoustics at a larger number of locations along the continental shelf would be able to monitor for orca locations for entire winter seasons (see Appendix figures 4 and 5). The satellite tags give very detailed information but only for an average of the month or so that they remain operational. Passive acoustics are non-invasive while tags create the wounds shown in the appendix to this letter. Many different agencies, universities and contractors are either preparing or planning deployment of oceanographic buoys in northwest coastal waters. All such plans and programs, perhaps through ESA section 7 consultations, should be charged with detecting SRKWs and coordinating with the NMFS recovery team.

Less is known about the winter trajectories of J pod, the pod that is most frequently seen in the Salish Sea. Since they have not been observed south of Cape Flattery, it is assumed that they go north on the west side of Vancouver Island and perhaps up to or beyond the Queen Charlotte Islands (Haida Gwaii). If tagged J pod whales did go south, it would not be information uniquely helpful to the critical habitat controversy as it is virtually certain that K and L pod whales will go south. Therefore, since NOAA/NMFS cannot declare critical habitat in Canadian waters, what policy objective is being proposed that requires the deployment of satellite tags on J pod whales?

Our recommendation regarding the winter range of J pod outside of the Salish Sea is for the U.S. government and NOAA. to work closely with Canada's Department of Fisheries and Oceans (DFO). In our meeting with Dr. Hanson we learned that NMFS has no information from DFO about winter habitat. But, we have heard that DFO has had passive hydrophones on the north and west side of Vancouver Island in previous winters, and we know that their NEPTUNE program now has a permanent and real-time hydrophone streaming from the head of the Barkley undersea canyon just west of Bamfield. (<http://www.neptunecanada.ca/infrastructure/cabled-ocean-observatory/>) That site is perfectly placed to detect vocalizations of orcas as they are transiting on the west side of Vancouver Island or are foraging at this likely nexus of salmon. In particular, all information on winter ranges developed by DFO in Canada should be integrated with all such information developed here in the USA before invasive procedures are permitted.

(3) We recommend that the permit process for any invasive research on this endangered population be revised to include public notification, an extended comment period and public hearings in King County and San Juan County. There should be time for this because as of the date of this letter, December 2010, there is nearly a year before any winter habitat studies can commence. As mentioned earlier, we know from many conversations in our community on San Juan Island that people do not understand the rationale and the cumulative impacts of the proposed research on these endangered icons of Puget Sound and the Salish Sea. With public hearings on San Juan Island and in Seattle, the public may better understand what has been learned from previous tagging studies, what considerations go into selecting whales for tagging (Note that six of the SRKWs that NMFS proposed for tagging in this application have disappeared since NMFS prepared their list which certainly underscores the fragility of this endangered population) and how the findings from the proposed research would contribute to the conservation and recovery of this population

The Whale Museum is committed to supporting research that advances the understanding and conservation of this population, but we also have a commitment to our members and the broader public to keep them apprised of activities that have the potential to affect our endangered orcas both positively and negatively.

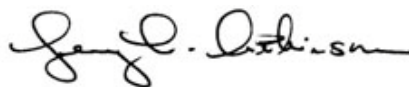
On behalf of The Whale Museum, we respectfully submit these comments.

Thank you for your consideration.

Sincerely,



Dr. Val Veirs  
Board President



Jenny L. Atkinson  
Executive Director

Cc: Brad Hanson  
Lynne Barre  
Mike Ford  
Usha Veranasi  
John Calambokidis  
Ken Balcomb  
Senator Cantwell

Appendix: Figure 1: Photograph of the tag proposed for use on the Southern Resident Killer Whales:



[https://apps.nmfs.noaa.gov/attach/download\\_attachment.cfm?FileName=M3295T6781%2D1824%2D02%5Famendment%5Frequest%5Ffinal%2Epdf](https://apps.nmfs.noaa.gov/attach/download_attachment.cfm?FileName=M3295T6781%2D1824%2D02%5Famendment%5Frequest%5Ffinal%2Epdf) page 9



Figure 2: Photo of a tag that missed implanting both of its darts and one dart completely penetrated the orca's dorsal fin. Photo courtesy of the North Island Marine Mammal Stewardship Association, Vancouver Island, BC.

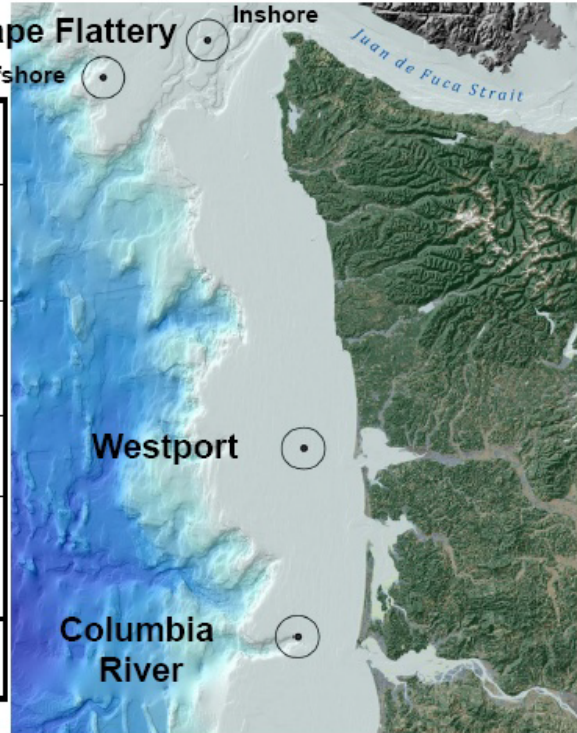


Figure 3: Wound from satellite tag after it has worked its way out of the dorsal fin of an orca. (Photo courtesy of the North Island Marine Mammal Stewardship Association, Vancouver Island, BC)

## Acoustic Recorder deployment schedule on the Washington coast

Mid-January – July

Location	2005 Days	2006 Days	2007 Days	2008 Days
Cape Flattery Inshore	84	201	182	0
Cape Flattery Offshore	85	201	182	197
Westport	ND	201	201	152
Columbia River	ND	ND	ND	102
<b>Total</b>	<b>169</b>	<b>603</b>	<b>565</b>	<b>451</b>



ND – No Deployment    1788 days total

Figure 4: Continental Shelf west of Washington and Oregon: Passive listeners were deployed at the locations shown. (Figure courtesy of Dr. Brad Hanson)

# Killer whale detections on the Washington coast 2005 - 2008

**176 Total Detections**

**90 Total Detections identified to ecotype**

**47 SRKW Detections**

**Additional 33 SRKW detections in 2009**

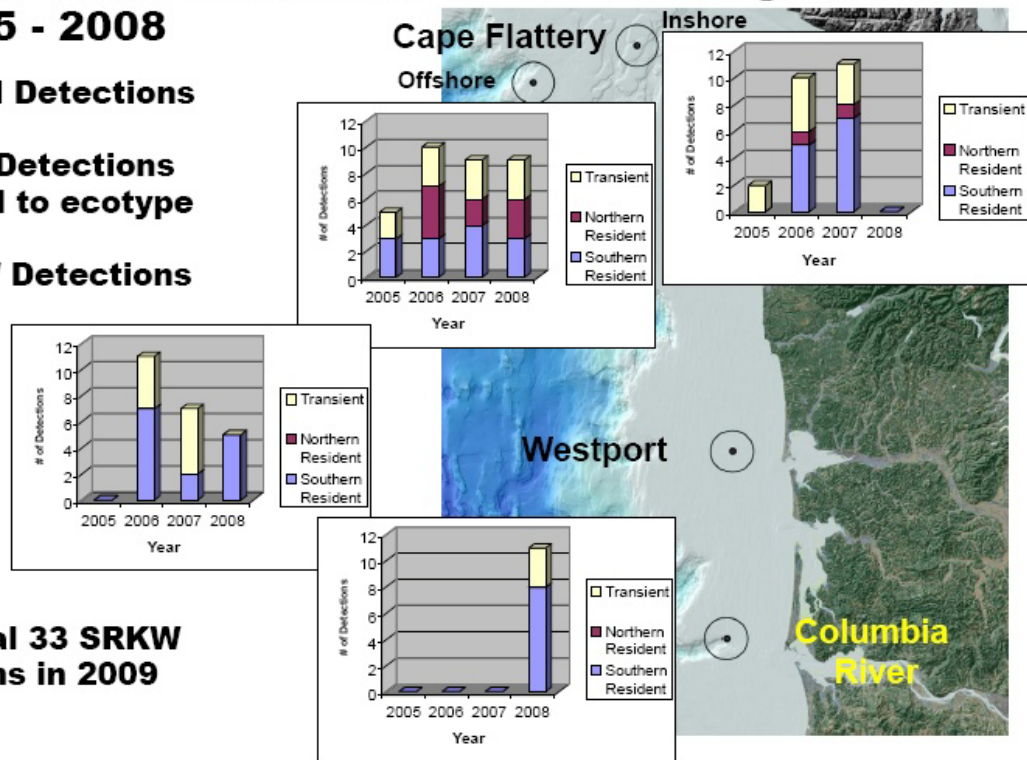


Figure 5: Passive listeners detected killer whales of all three groups, Transients, Northern Residents and Southern Residents. (Figure courtesy of Dr. Brad Hanson)