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Steve Stone,
NMFS Northwest Region,
MakahDEIS.nwr@noaa.gov.

Steve,

MAKAH DEIS COMMENTS

Australians for Animals Int. submits its formal comments in relation to the Makah DEIS.

Please place on record our dismay at the refusal of the Agency to allow a further extension. The sheer volume of the material makes it impossible to adequately or properly respond to the massive amount of documentation in the time frame. Indeed, AFA Int. believes NMFS should issue a Supplementary DEIS based on the inadequacy of this DEIS. Major issues impacting on Gray whale survival have ignored in the document. Questions which AFA Int. has asked have not been properly responded to.

Given the judgment of the 9th Circuit in Anderson v Evans, AFA Int. believes the DEIS can be characterized as disingenuous. Issues which should have been explored in the context of NEPA have been glossed over or ignored.

In support of our concern about the sheer size of the DEIS, we cite from the 9th Circuit judgment, Anderson v Evans :- ' *girth is not a measure of analytical soundness of an environmental assessment* '.

The DVD containing all the relevant information included in the DEIS did not arrive until ten days after publication of the notice in the Federal Register.

International groups have not been able to access public hearings in the US. In spite of the 9th Circuit judgement which does not equivocate about the international and domestic ramifications of any waiver, substantive legal matters which are on the record have been quarantined from the DEIS.

It is the contention of this organization that the DEIS represents a number of violations of NEPA and we request that the 9th Circuit judgment attached to this letter be included in our comments.

Of major concern is the lack of any adequate budget funding for the Gray Whale at least since 1999.

It is also regrettable that in spite of my request to you to consider accepting comments sent by post from Australia as long as they were postmarked no later than August l5, that you refused to accept the documents.

Should you have any queries in relation to the comments, please contact the writer.

Yours sincerely,

Sue Arnold

Sue Arnold
Chief Executive Officer.

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2008 MAKAH DEIS.

Australians for Animals Int. (AFA Int) makes the following formal objection to the 2008 Makah DEIS.

In summary, AFA Int. believes there is no plausible evidence to suggest that any proper comprehensive review of the gray whale has been undertaken since the delisting in 1994. The five-year monitoring program as required under the ESA was never funded and many, if not most of the recommendations following delisting did not eventuate.

'*The draft plan, dated October 1993 was not finalized by the NMFS Office of Protected Resources; however it has provided the framework and guidelines for research, monitoring and management over the past five years*.'[1]

A recommendation for a second five-year research plan was never implemented. NMFS SWFSC has advised AFA Int. that no budget funding has been received for the gray whale since 2000.

Without doubt the most critical factor facing gray whale survival is climate change. As the Artic ice melts at a rate faster than any modeling or predictions, the fate of all marine mammals dependent on a functioning Artic ecosystem hangs in the balance. The rate of change is happening so rapidly that no agency can predict the outcome. At this time, the only possible management criterion must be adoption of the precautionary principle and immediate relisting of the gray whale under the provisions of the ESA.

Scientific research demonstrates a damning case of massive ecosystem changes in the Arctic and sub Arctic. Oil and gas leases in the Gray whale feeding grounds will impact all marine mammals which rely on these marine ecosystems.

As well, resident whale habitats such as the niches in Washington, Oregon, California and Canada need to be protected to ensure the survival of the species.

The PBR value from 2000-2005 was based on a minimum population estimate of 24,717, a figure that was completely inaccurate. The severe population crash of l999/2000 of one third and more was never reflected in the PBR.

[1] Status Review 1999

Given that the Recovery Factor for all large whales is set at 0.1, AFA Int contends there is no justification for any waiver as the PBR from 2000-2005 was grossly over-inflated and the population has had no time to recover from the major population collapse in 1999-2000.

The ramifications of a PBR, which was 15 times higher than the more conservative estimate for large gray whales is unknown. But given the evidence of calf numbers; emaciated whales; toxic contamination; lowest gray whale numbers ever recorded in San Ignacio; totally inadequate surveys and studies, no funding; the population cannot be described as " *healthy* " and there is no justification for a PBR of 1.0 or 0.5. On those grounds alone, the waiver must be rejected and steps taken by NOAA to urgently relist the Gray Whale.

The Makah DEIS has highlighted an appalling situation. It is clear that the Gray whale has not had the benefit of proper funding, current science and research and at the same time, the bias exhibited by NMFS and its Gray whale scientists is a violation of the agency's mandate.

AFA Int. believes the status of the Gray whale is now critical and that a comprehensive scientific review of all factors impacting on the whales' survival needs to be undertaken.

The Eastern North Pacific Gray Whale needs to be relisted under the ESA as a matter of urgency.

SPIRITUAL OBJECTION.

As an organization representing conscious and aware human beings, AFA Int. objects to the slaughter of all Whales. The notion that the Makah tribe has some kind of divine right to kill Gray Whales in the 21st Century is a giant step back to the Dark Ages.

A dead whale is a dead whale. A sacrificial object at an altar that no longer has relevance in a world where protecting biodiversity and the web of life must take priority if we are to honor future generations.

Gray whales are part of the natural heritage of humanity. **Of all humanity**. As the most ancient Baleen whale alive today, given the history of extinction of the Atlantic populations and the looming extinction of the Western Pacific Gray Whale, the only option for the Makah waiver proposal is a firm denial.

GRAY WHALE – MIGRATION ROUTE

AFA commissioned a GIS of the known threats to the Gray Whale along its migration route. The GIS was undertaken by the GIS Laboratory of Southern Cross University, Lismore, NSW, Australia.

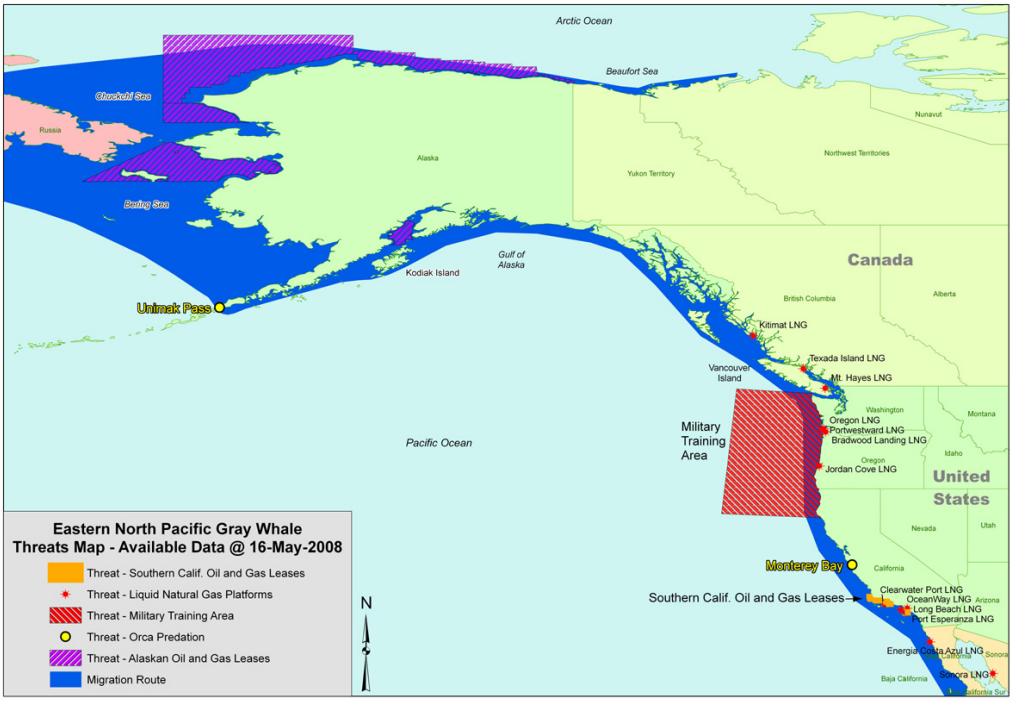

Table 1. Threats to Gray Whales © Australians for Animals Int.

HISTORIC CONCERNS.

A Review of the Status of Gray Whales (Eschrichtius robustus), Final Report to the US Marine Mammal Commission edited by Steven L Swartz, June l986, sums up the plight of this majestic whale.

*“ *As a coastal species gray whales are continuously exposed to human activities throughout their range from the northern feeding grounds, to the coastal migration routes and within the protected waters of the breeding lagoons. Because gray whales cannot avoid exposure to marine pollution, vessel traffic, industrial noise, and activities associated with the development of outer continental shelf resources, it has been acknowledged that these activities pose very real threats.”*

“ It is very clear that the responsible management of the coastal habitats of the gray whale are paramount to the survival of the species. The continued recovery of the California stock of the gray whales can only be assured by coordinated efforts between the governments of Canada, Mexico, the Soviet Union and the United States.

‘ *…human activities throughout their range are increasing, and habitat degradation and disturbance probably pose the greatest potential threat to the survival and continued recovery of the species today.* ‘ Swartz MMC l986)

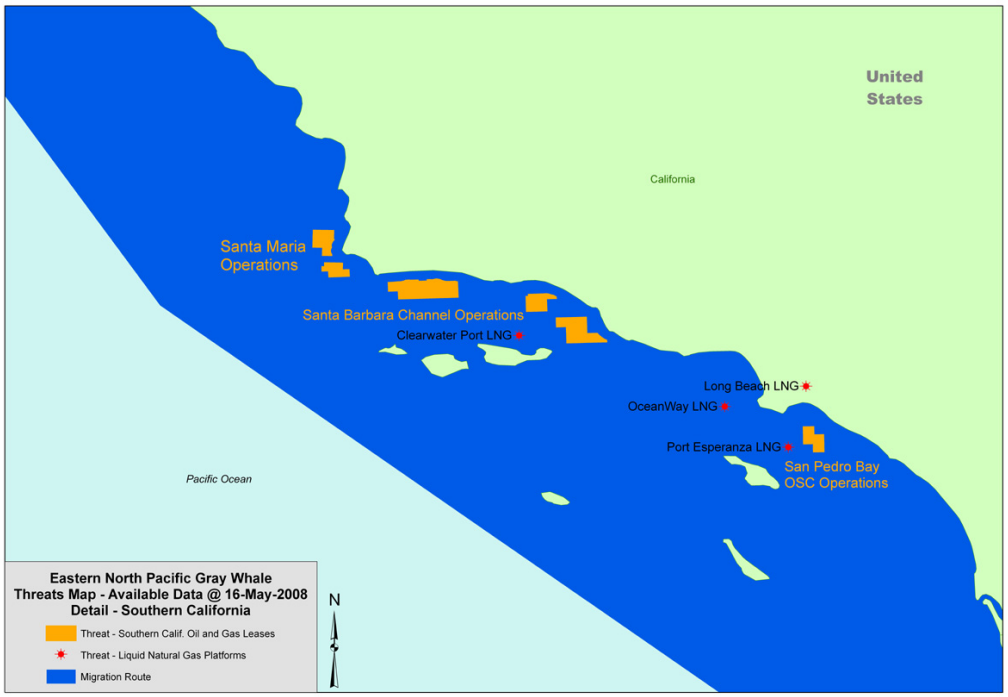

Table 2. Threats to Gray Whale Southern California © Australians for Animals Int.

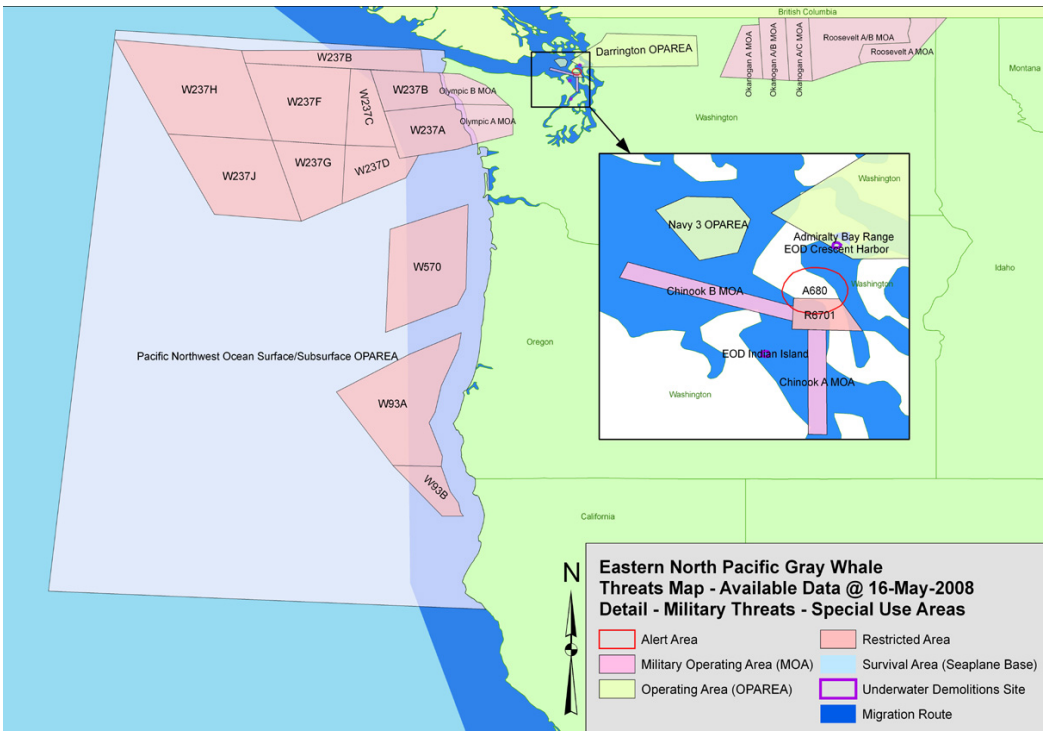

Table 3. Military Threats to Gray Whale. © Australians for Animals Int.

BACKGROUND

There is a great deal of uncertainty in terms of knowledge of the Gray Whale. Lack of information on the true survivorship of any classes; the approximate age of reproduction or mortality inhibit proper management of the species.

The basic ecology of the gray whale is unknown. (Chaloupka, 2003 Gray Whale lawsuit)[2].

The ENP Gray Whale is the last viable population of four to remain. The Makah DEIS fails to recognize the importance of ensuring the survival of this population.

NMFS scientists acknowledge that the Gray whale is an indicator species for the Arctic marine ecosystem and that massive ecological changes in the whales' feeding grounds is putting the future survival of the species at risk.

Dr Sue Moore has described gray whales, as "*sentinels of the sea because the creatures are sampling and responding to the marine environment from Mexico to Alaska, and like walruses and polar bears, are early indicators of ecological crisis*."

Yet climate change, with the attendant looming ecological crisis, and virtually every major threat including growing industrialization of the feeding grounds have been excluded from the DEIS. A supplementary DEIS is urgently needed to cover the serious omissions in the current DEIS.

The cumulative impacts of the plethora of threats facing the Gray Whale have been ignored. With evidence of the Arctic melting at a much faster rate than predicted presented to the public on a daily basis, a waiver to kill Gray whales makes no sense.

The DEIS is a biased document. A consulting firm which already works for the Makah Tribe was hired by NMFS to do the DEIS, an action which in any other arena would be seen as a conflict of interest. Under its mandate, NMFS has an obligation to present objective and current scientific information. NEPA also demands objective information. Instead, critical facts relevant to Gray Whale survival have been ignored, censored, distorted or presented in a biased manner.

Although the DEIS has taken apparently two or three years to compile, the public, conservation groups, scientists and citizens have been granted an extremely short time in which to make substantive comments.

Three hearings set down in the US have been organized in a highly undemocratic manner. Written questions only, inadequate responses and far too many rules for what are supposed to be public hearings. International organizations such as AFA Int. who cannot attend hearings in the US are deprived of the opportunity to put important questions to NMFS.

Further, questions sent by email to NMFS North West office have not be properly addressed or answered. The failure to respond to these questions seriously inhibits the extent of comment as we cannot obtain the relevant information.

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[2] Hawaii Green Party v. Evans Sec. Dept of Commerce

For example, AFA Int. requested sources of legal opinions expressed in the DEIS. The list of references do not demonstrate names of law firms or lawyers and as the claims made in Chapter 4 are refuted by non-government lawyers, the source of the opinions expressed in the DEIS is relevant.

Given the controversy and extent of objections to any Makah hunt; ramifications to US domestic whale conservation policy and the flow on effects of US actions in allowing a waiver, NMFS has an obligation to carefully weigh up all sides of the issue. International ramifications as a result of the US setting up two more classes of whaling (cultural, ceremonial) at the IWC and beyond, are not dealt with in any substantive way. Sweeping generalizations which are not supported by any legal advice or research cannot be acceptable in an objective properly researched DEIS.

In the opinion of AFA Int., the extent of omissions and misleading information contained in the DEIS are deserving of a Congressional enquiry

Climate change is wreaking havoc in the Arctic. Documented evidence of increased seawater temperatures, catastrophic disappearance of ice and the extent of oil and gas leases in the Gray Whale feeding grounds have been omitted from the DEIS.

Threats to Gray whale survival have significantly increased in the last 8 years. At the same time, Gray whale numbers are visibly decreasing, calf counts are down, significant numbers of emaciated whales are being sighted and the primary prey (benthic amphipods) is disappearing because of climate change. The indicators of major problems for the species survival are plain to see and supported by impeccable research by academics, government agencies and specialist groups such as the UNEP.

KEY FACTORS AFFECTING LONG TERM VIABILITY OF THE EASTERN NORTH PACIFIC GRAY WHALE STOCK.

1. Health and availability of food (prey switching, benthic amphipod production.)
2. whaling.
3. habitat conservation.
4. ocean health (contaminants, drift nets etc.)
5 climate change
6. human activities around whales and habitat.
7. mortality factors (disease, pollutants, viruses)
8. carrying capacity, trophic competition.
9. human induced mortality (incidental capture, habitat modification – competing risks, migratory route.)
l0. Long term changes in food resource (food quality).
11. natural toxins (dinoflagellate blooms)
12. food and long term oceanographic changes and influence on food- secondary site feeding behavior.
13. density-dependent behavior (feeding, dispersal)
14. anthropogenic stressors and intrinsic adaptive capacity.
15. loss of genetic diversity.
16. changes in abundance and composition of apex predators (e.g. orcas)
17. direct disturbance of breeding activities.

18. availability and access to breeding grounds.
19 climate change affects on demersal fish stock.
20 adaptability of dispersion and behavior.
21 adaptability of amphipod stock to ocean regime shifts
22. ability to monitor population and the appropriateness of legislation – need for more relevant status criteria.
23. assessments of benthic communities along Russian coast.
24. stock structure assessment (spatially distributed substocks)
25 cetacean inter-specific competition (e.g. humpbacks)
26 coastal distribution in comparison with other cetaceans.
27 impacts on toxicant concentrations in sediments in feeding areas-resuspension of toxicant by feeding activity.
28. intermingling of stocks in under-utilized feeding grounds.
29 synergistic impacts of all factors identified
30 willing and ability to prevent and reduce human factors that induce mortality
31 benthic community structure shifts.

AFA Int. submits that with one of two exceptions, the entire list of key factors has been ignored in the Makah DEIS.

Arguments which support the suggestion that taking five (seven) whales per year will have a negligible impact on the population cannot be substantiated. Without a comprehensive scientific review of all the factors impacting on Gray Whale survival and the guestimates which pass for population estimates, any quota for the Makah tribe is an act of gross irresponsibility.

The evidence below of rubbery figures, outdated population estimates and the setting of highly inflated PBR values at a time when one third or more of the population had collapsed is of great concern.

In pursuing a waiver at this time, the Makah tribe demonstrates its unwillingness to consider the serious nature of the threats facing the gray whales.

The illegal slaughter of a gray whale by five members of the Makah Tribe last year and the subsequent criminal charges do not augur well for any responsible management.

The suggestion that somehow killing whales will assist in resolving problems of teenage pregnancy; drug and alcohol use etc etc is not supported by any research. AFA Int. knows of no studies that have demonstrated that killing whales restores social cohesion in any community.

There are a number of public records which indicate that the Makah Tribe has sought to begin commercial whaling and/or scientific whaling. As well, it is entirely unclear from the DEIS interpretation of Treaty language whether in the future more non-listed cetaceans will be targeted. The Makah Tribe also killed Humpbacks and ate the meat, which is, apparently, infinitely preferably to the bottom feeding Gray whale.

Any waiver for the Gray whale will create precedents for future waivers if this current attempt is granted on the basis of out-dated science and research that has not been adequately funded at least since 2000. The 9th Circuit is certainly of the opinion that other tribes could

seek the same rights. (See Legal section below). Questions remain as to whether adequate funding has been provided since delisting. A delisting which was the result of the Makah Tribe formal request.

Recommendations by the Marine Mammal Commission and the IWC for further important research on Gray Whale population have been resisted or ignored by NMFS.

".. *The Commission wrote to the Service on 7 August, 2001 and again on 15 January, 2002 recommending that the Service develop a second five year research plan, complete a stranding response plan to better coordinate gray whale stranding investigations, assess effects of the 1999-2000 die-off on the population's status, and review planned research to ensure that information is adequate to assess the population's status and conservation needs*." (MMC report 2002).

NMFS conducted a review of the status of the EN Pacific stock at a workshop held by the National Marine Mammal Laboratory (NMML) in Seattle, Washington in 1999. It was determined that monitoring should continue for an additional 5-year period (1999-2004) and that research should continue on human impacts to critical habitats. (64 FR 54275 10/6/99). The research recommended was never adequately funded.

Let's be clear about this fact. During the time a second 5 year monitoring program had been recommended, a third to almost one half of the population perished and the PBR was set at a highly inflated value. So not only did NMFS ignore the recommendations of the Status Review Workshop but it upped the threats and lack of protection by setting a highly inflated PBR value.

S.117 of the Marine Mammal Protection Act requires comprehensive information in any Stock Assessment Review; the requirements of S. 117 as they relate to Gray Whale SAR have not been met for many years. An email from Jeremy Rusin, Deputy Director Protected Resources SWFSC, NOAA to Sue Arnold, Australians for Animals Int. dated 30 July 2008 reveals the serious lack of funding.

' *Regarding the funding question, it is our understanding that the last dedicated NOAA funding for gray whale monitoring was in 2000 ($17.2K). In 1999, $11K in funding was provided for gray whale monitoring. This information came from our national budget contacts.'*

These are completely inadequate amounts which would prohibit any realistic monitoring or research. $11K would not cover a portion of a salary, nor would $17.2 K. AFA Int. believes NMFS should provide details of all funding allocated to the Gray whale by NMFS since delisting. But what we have is a situation where there is no financial support for the critically important monitoring and no recognition by the Agency of the even more critical factors facing Gray whale survival. Instead of recognisng the serious nature of the population collapse, NMFS merely ignored the bad figures and instead, relied on out of date population estimates.

Stock Assessments 16 U.S.C. 1386 Sec.117 states (a) … *Each draft stock assessment, based on the best scientific information available, shall ….*

Given that there has been no budget funding since 2000, and taking into account that the SARs for 2005 and 2007 relied on outdated information based on previous questionable data, NMFS cannot claim to have based any SARs since 2000 on the " *best scientific information available*".

Evidence from genetic research by Prof Stephen Palumbi et al and Clapham et demonstrate the original population was Eastern North Pacific whales was at least 60,000. This is new evidence that has been virtually ignored by NMFS although at least one of the research papers presented by a NMFS scientist at the Status Review acknowledges one set of modeling shows the original population may have been as high as 70,000.

Information about the status of sea ice; increased seawater temperatures; contamination; emaciation and other issues have not been acknowledged in SARs.

Sec, 117 (1) states: _ " *describe the geographic range of the affected stock, including any seasonal or temporal variation in such range;*

Massive changes in the Bering and Chukchi Seas and the entire Arctic region have not been acknowledged or described in any Gray Whale SAR. Climate change is having a drastic impact on the Arctic environment as demonstrated by satellite images and a wealth of research. On Gray whales, other marine mammals and invertebrates.

The extent of the population crash can be seen from the mapping carried out by Dr Sue Moore, NMFS scientist at:- http://www.beringclimate.noaa.gov/essays_moore_maps.html

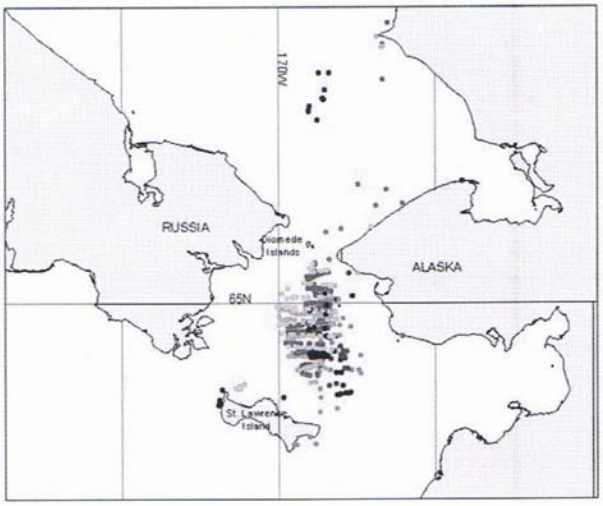
Bering Climate

Bering Sea Status Quick View Data Science Essays Info > Home

Return to essay: What is happening to whales in the Bering Sea?

Maps depicting the Chirikov Basin and southern Chukchi Sea showing a composite of gray whale distribution during 16-31 July in the 1980's (historical), compared to sampling effort and whale distribution in 2002. Colors indicate the specific days (16 total) when surveys were conducted and gray whales seen in years 1981-1985 (historical), and five survey days coded to sightings for 29 July - 3 August 2002 (maps prepared by Janet Clarke).

Historical distribution



Flight tracks in 2002

Table 4. Bering Sea Maps. NOAA Composite of gray whale distribution in l980's

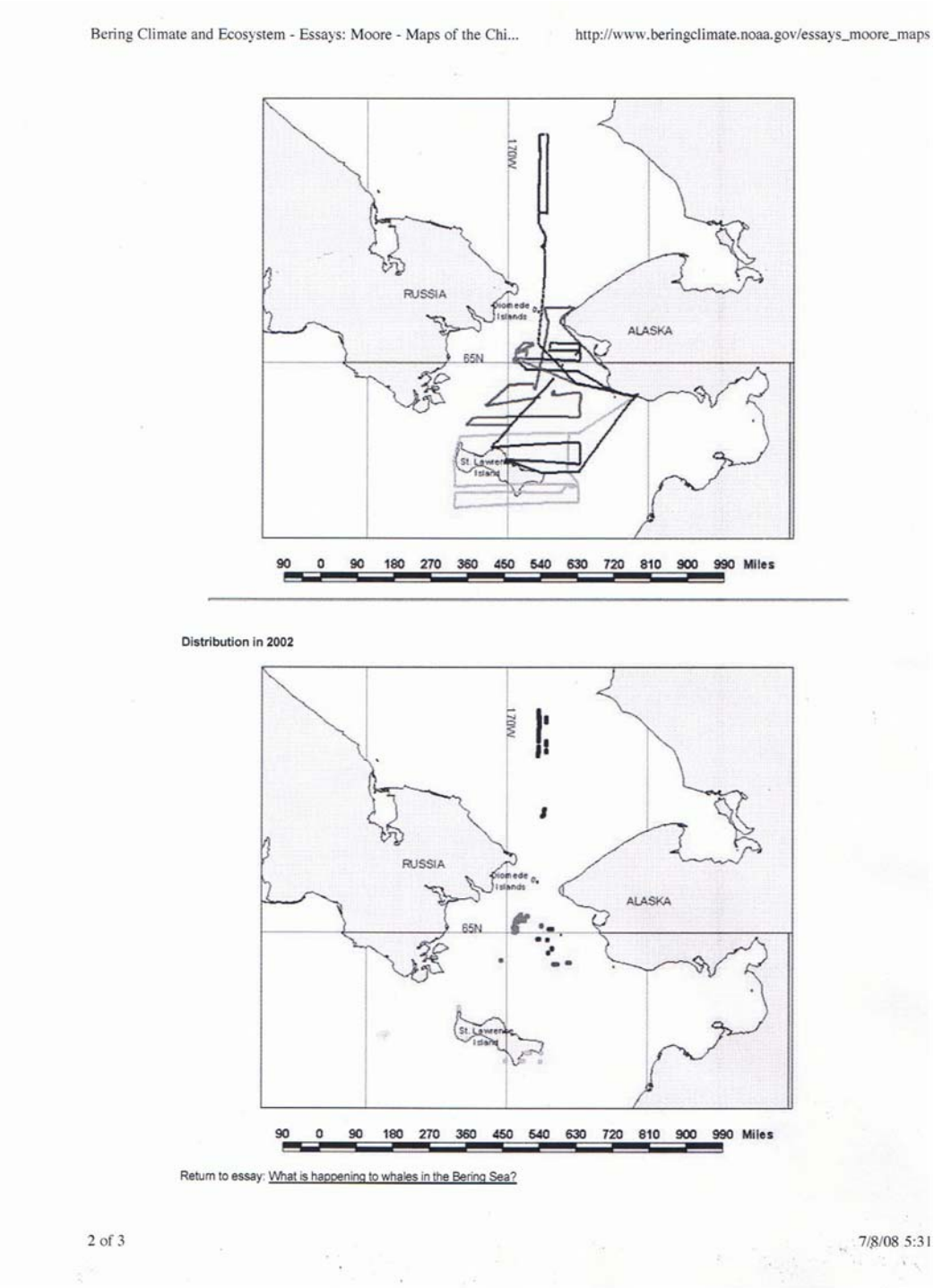


Table 5. Bering Sea Maps. NOAA. Gray whale distribution 2002

Research which demonstrates changes in the gray whale migration route is given little focus, likewise delays in migration and anecdotal evidence that a greater number of whales are giving birth outside the Mexican Lagoons, thus putting calves at increasing risk of orca predation.

Nor is there any adequate information relating to the high percentage of emaciated whales and increasing numbers of " stinky whales"; increased seawater temperatures; differences in migration timing; changes in behavior in Mexican lagoons; seriously low mother and calf counts in San Ignacio.

In a conference call between the Ocean Protection Council, California Assemblyman Pedro Nava, NMFS personnel from SWFC Wayne Perryman, scientist with NMFS SWFC, and AFA representative, Sue Arnold on behalf of the California Gray Whale Coalition, Perryman said: -

Wayne – it is hard to get parameters right – individual pieces of the puzzle – we don't have all the pieces and the picture keeps changing. The rate of change is changing. What is happening to the ice is happening fast and it's scary.

We need to monitor population condition – it is the highest priority – but no funding.

Don't know how change in food source is effecting population.
Counts bounce around a lot – assumptions in their technique don't hold true.

Absolute numbers could be off.

1997-98 27K whales not a good estimate.

Sec. 117 (2) *provide for such stock the minimum population estimate, current and maximum net productivity rates, and current population trend, including a description of the information upon which these were based;"*

Charts and information below will demonstrate that no SAR since 97/98 has complied with (1) or (2).

(3) *estimate the annual human-caused mortality and serious injury of the stock by source and, for a strategic stock, other factors that may be causing a decline or impeding recovery of the stock, including effects on marine mammal habitat and prey:"*

In the 2007 SAR (which was based on the 2001 population estimate) the following statement highlights the complete lack of scientific rigor which typifies the DEIS.

" In fact, it is expected that a population close to or at carrying capacity of the environment will be more susceptible to fluctuations in the environment. (Moore et al 2001). The recent correlation between gray whale calf production and environmental conditions in the Bering Sea (Perryman et al 2002) may be an example of this. For this reason, it can be predicted that the population will undergo fluctuations in the future that may be similar to the 2 year event that occurred in 1999-2000 (Norman et al, Perez-Coretes et al),

Gray Whales suffered a major crash with an estimated loss of between one third and almost one half of the population. To describe this major collapse as a " *fluctuation*" is absurd and unscientific. In other scientific literature, the crash is described as an Unusual Mortality Event (UME).

An unusual mortality event (UME) is defined under the Marine Mammal Protection Act as:

"*a stranding that is unexpected; involves a significant die-off of any marine mammal population; and demands immediate response*."

Down playing the language by not indicating in the SARs that the population had sustained a UME, and failing to recognize the seriousness of the UME is a violation of Sec. 117(3). There was no *" immediate response*" . NMFS continued to set PBR values against the l997/98 population estimate as though nothing had changed. According to Wayne Perryman, the l997/98 estimate *" was not a good estimate*."

Baleen whales take at least 10 years to recover from a crash of this size. Another " *fluctuation* " of a similar size would take the population out according to the heuristic model developed for Australians for Animals. Further, there is no evidence in the records kept since 1967 of any population crash of this size.

NMFS needs to explain why the official recognition of the UME has been ignored in the DEIS. And provide research which would support the contention above that " *it can be predicted that the population will undergo fluctuations in the future that may be similar to the 2 year event that occurred in 1999-2000 (Norman et al, Perez-Coretes et al),* At the same time NMFS scientist should model the impact of another UME on a population which is demonstrably under stress and in decline.

Climate change alone is a sufficient reason to ensure the Gray Whales have all the legal protection available. Clearly, the effects of increased seawater temperature are having a major impact on the benthic community on which the Gray Whales rely. Research by Moore and Grebmeier indicate the Gray Whales are seeking new feeding grounds. There is no research to demonstrate any adequate prey base along the migration route or research to support the NMFS contention that Gray Whales are surviving principally on other sources. What we do know is that in 2007, according to reports, up to 13% of gray whales sighted were emaciated.

As sightings appear to indicate adult whales are emaciated, the question arises as to the impact of starvation on reproduction. The DEIS fails to cover this matter which has profound ramifications. If the population is at 20,000 plus, and 13 % of the adult population are emaciated and incapable of reproduction, (and there currently is no evidence which supports the hypothesis that starving whales can have a normal pregnancy and feed a calf) effectively removing a major percentage of the reproduction capability of the population. Another factor which should be taken into account when assessing the PBR but is not because of the deficiencies of this model.

Without current figures for stranding; unknown ship strike mortalities and/or injuries; extent of orca predation which appears to have increased; it is not possible to assert that the take will not impact on OSP. Indeed, the impact of the massive number of oil and gas leases in the Bering, Chukchi Seas and Southern California combined with 13 proposed LNG works, wave energy projects, military training areas, increased industrialization along the migration route is unknown.

The sheer extent of industrialization and activity along the migration route are grounds alone to decline the Makah waiver. Climate change provides a compelling injunction to immediately relist the Gray whales under the ESA.

POPULATION ESTIMATES.

1874	30,000 – 40,0	Scammon
93/94	23,109 (20,80 24,638	Lake et al., 1994 – Status Review of the ENP Stock of Gr August 1999 NMFS (Rugh, Muto, Moore, DeMaster) Lake et al 1994
97/98	26,300 (21,90 26,635 (21,87 29,758 min. est. 24,47 25,130 to 30,1	IWC Hobbs and Rugh (1999) Status Review of the ENP Stock Whales – August 1999 NMFS (Rugh, Muto, Moore, DeMa Rugh et al (NMFS Gray Whale Stock Asses. 2/6/05) http://www.nmfs.noaa.gov/pr/pdfs/sars/ak2005whgr-en.pd Federal register notice April 6,1998 Vol.63, No. 65 " Based on a revised Bayesian analysis of gray whale po dynamics, carrying capacity ranged from **25,130 to 30,14** upon the starting year of the trajectory."
1999	24,640 to 31,8	Status Review of Eastern North Pacific Stock. "Using a Bayesian statistical method to assess the stock to l995/96 data, point estimates of carrying capacity rang **24,640 to 31,840**."
00/01	18,761 19,448 18,246	NMML Gray Whale Census (Rugh) Rugh et al (NMFS Gray Whale Stock Asses. 2/6/05) http://www.nmfs.noaa.gov/pr/pdfs/sars/ak2005whgr-en.pd Rugh et al 2004 (From Marine Mammal Research: Conse Beyond Crisis (John Elliot Reynolds, Timothy J. Ragen)
01/02	17,500 16,840 18,178 Min. est: 17,7	NOAA 2002 Press Release (5/10/02) and NNML Quarter Report (Rugh) IWC Rugh et al 2004 (From Marine Mammal Research: Conse Beyond Crisis (John Elliot Reynolds, Timothy J. Ragen) Rugh et al (NMFS Gray Whale Stock Asses. 2/6/05) http://www.nmfs.noaa.gov/pr/pdfs/sars/ak2005whgr-en.pd
02/03		
03/04		
04/05	18,813	NMFS Gray Whale Stock Assessment 2/6/05 (based on t

	Min. 17,752	the 2000/2001 and 2001/2002 abundance estimates) http://www.nmfs.noaa.gov/pr/pdfs/sars/ak2005whgr-en.p
05/06	19,000 – 23,0	NOAA 2006-R114 Press Release – NOAA Reports Signi Increase in 2006 Whale Calf Numbers http://www.nmfs.noaa.gov/docs/GraywhalesMilbury.pdf
06/07	18,813 Min. 17,752 20,110	NMFS Gray Whale Stock Assessment 3/31/07 (based on the 2000/2001 and 2001/2002 abundance estimates) http://www.nmfs.noaa.gov/pr/pdfs/sars/ak2007whgr-en.p Rugh et al NMFS Report of the 2006-2007 Census of the Gray Whales (AFSC Processed Report 2008-03) http://www.afsc.noaa.gov/Publications/ProcRpt/PR2008-
07/08	18,178	Federal Register Notice - Vol. 73, No. 82/Monday, April 2 NOAA Incidental Takes of Marine Mammals during Spec Shallow Hazard and Site Clearance Surveys in the Chuk 2008. The population has "increased to a level that equ pre-exploitation numbers". Angliss and Outlaw (2007) re population to be 18,178

Table 6. Chart of some of the conflicting population estimates since 1874-2008 various sources

BAND WIDTHS OF POPULATION ESTIMATES.

Year	Bandwidth	Range	Pop. estimate	Who
93/94	20,800-25,700	4,900	23,109	Lake et al.
97/98	21,900-32,400	10,500	26,300	IWC
97/98	21,878-32,427	10,549	26,635	Hobbs Rug
97/98	29,758-24,477	5,281	29,758	Rugh et al
97/98	24,241-36,531	12,290	29,758	Rugh Cet.R
97/98	25,130-30,140	5,010		Fed Reg.98
1999	26,640-31,840	7,200		Status Rev
00/01	26,635-24,477	2,158	26,635	NMF
00/01			18,761	NMML Cen
00/01			19,448	SAR 2005
00/01	16,096-23,498	7,402	19,448	Rugl
00/01			18,246	Rugh et al
01/02			17,500	NOAA P/R
01/02			16,848	Rugh et al
01/02	18,178-17,752	424	18,178	SAR
01/02	15,010-22,015	7,005	18,178	Rugl
04/05	18,813-17,752	1061	18,813	SAR

05/06	19,000-23,000	4000		NOAA 2006
06/07	18,813-17,752	426	18,813	SAR
06/07	16,936-23,878	6942	20,110	Rugl
07/08			18,178	Fed Reg. 2

Table 7. Chart of Bandwidths of Population Estimates

RETROSPECTIVE MANAGEMENT?

In the 2001/2 SAR, NMFS states: -

"*The l997/98 abundance estimate is the most recent and is considered the most reliable estimate of abundance for this stock. The most recent survey to determine abundance was carried out during the winter of 2000/01. An abundance estimate based on these data will be available in the 2003 SARs*."

- **NOTE**: There was no 2003 SAR, the next SAR did not appear until 2005 with an abundance estimate based on the mean of the 2000/01 and 2001/02 abundance estimates. The minimum population estimate is 17,752.

* **NOTE**. In the conference call on 25th July, 2008 with Ocean Protection Council, NMFS, Assemblyman Pedro Nava staffers, Wayne Perryman, SWCFS NMFS said: - *1997-98 27K whales not a good estimate.*

PBR.

PBR Equations for NMFS Stock Assessment Reports

PBR = N_{min} x 0.5R_{max} x F_R
N_{min}=min pop. Est.
R_{max}=maximum theoretical net productivity rate
F_R = recovery factor

1997 PBR = 432 animals (21,597 x 0.02 x 1.0)

2000 PBR = 575 animals (24,477 x 0.0235 x 1.0)

2002 PBR = 575 animals (24,477 × 0.0235 × 1.0)

2005 PBR = 417 animals (17,752 x 0.0235 x 1.0)

2007 PBR = 417 animals (17,752 x 0.0235 x 1.0).

Table 8. PBR 1997-2007

This table illustrates the inconsistency and confusion created by NMFS data.

In l997, the PBR was set at 432 animals with the minimum population cited at 21,597.
In 2007, the PBR was set at 417 animals, 15 animals less than the l997 figure, with the minimum population estimate cited at 17,752. A difference of 3,845 animals. In l997/98, gray whale numbers were high with NMFS estimating the population between 25,130 and 30,140.

Setting the recovery factor (f) at 1.0 is highly questionable.

Professor Stephen Palumbi, Stanford University in a letter dated March 28 to California Assemblyman Pedro Nava in support of Resolution AJR 49 writes: -

"*The U.S. Marine Mammal Protection Act puts a limit on the number of human-caused deaths that are allowed for marine mammal populations in order to be confident of their continued population growth. This value, termed the Potential Biological Removal, is based on the current population growth rate and on a management term called the Recovery Factor. For all the large whales, except gray whales, the Recovery Factor is set at a very conservative 0.1. But the National Oceanographic and Atmospheric Agency set the factor at 1.0, allowing a ten-fold higher rate of human caused mortality than for any other whale in U.S. waters. This regulatory decision allows 417 gray whales to be killed by human causes each year without triggering agency concern. A shift in regulatory status for the gray whale could reduce this number to 42 whales.*

These calculations are supposed to be based on the current population growth rate, but without a new population census, the current population growth rate is not known, and the Potential Biological Removal levels now used are based on data from 2002. A new stock assessment would count the current gray whale population, and establish the growth rate of the population, if any, from 2002 to 2008. These new data are critical to our understanding of the gray whale population because the official population counts dropped by about 1/3 from 1999 to 2002. If this decline has continued, then the gray whale may be entitled to endangered status under International Union for the Conservation of Nature Red List criteria. Periodic review every 5 years of the population status of marine mammals is mandated under the Endangered Species Act, and an assessment of the gray whale would be due now if it were still listed as endangered by the U.S."

Dr Elizabeth Alter, Marine Mammal Fellow, National Resources Defense Council, in a letter of support for Resolution AJR 49, California Assembly, March 31,2008 writes: -

" *The assumption of full demographic recovery has been built into the recovery factor used in marine mammal management, a number used to calculate the acceptable level of anthropogenic mortality. Whereas all other baleen whales in the US waters are assigned a recovery factor of 0.1, gray whales are assigned a recovery factor of 1.0 (Read and Wade 2000). This increase in the recovery factor effectively raises the annual acceptable mortality for gray whales and thus can slow population growth."*

And further: - *"" Alter et al (2007) show that gray whales have likely not achieved full demographic recovery. Rather, this population may be at most at 28-56% of historical abundance, estimated to be between 76,000 and 118,000 whales. This analysis was based on genetic information gathered from 10 genetic markers from across the genome analyzed*

and incorporated the effects of migration from other populations (such as the western Pacific and extinct Atlantic population.) These data suggest that the recovery factor used to calculate potential biological removal should be changed from 1.0 to 0.5. This change would reduce allowable take from roughly 417 animals to 208 animals, a more appropriate number from a precautionary standpoint."

In a paper published by Science Direct [3] the following cite in relation to the PBR is revealing.

'2.3 Selecting f

The value selected for f can be used to implement alternative management strategies. For example, a value of 0.1 can be used to provide a minimal increase in recovery time for a depleted population, to maintain a population close to its carrying capacity, or to minimize the extinction risk for a population with a limited range, while a value of 1 could be used to maintain a healthy, growing population at or above its maximum net productivity level (Wade, 1998: Taylor et al, 2000). Wade (1998) suggests a value of 0.5 for most healthy populations, as this provides protection against bias in population estimates, maximum growth rates, and mortality estimates. While this approach was designed to maintain a population at or above MNPL, a value of 1<f<2 could be used to control a population at a lower level, while f>2Nmin/N^ would be expected to reduce the population size no matter where it was in relation to its carrying capacity.'

If the three f values are put in a chart, the outcomes are significantly different.

Year	N	Rmax/2	f1	f2	f3	PBR1	PBR2	PBR3
1997	21597	0.02	1	0.5	0.1	432	216	43
2000	24477	0.0235	1	0.5	0.1	575	288	58
2002	24477	0.0235	1	0.5	0.1	575	288	58
2005	17752	0.0235	1	0.5	0.1	417	209	42
2007	17752	0.0235	1	0.5	0.1	417	209	42

Table 9. Comparison of Fr values.

The paper cites Wade 1998 ' 0.5 *for most healthy populations, as this provides protection against bias in population estimates, maximum growth rates and mortality estimates'*.

NMFS simply cannot claim the population is ' *healthy* '. No explanation for setting the recovery factor at 1 has been forthcoming from NMFS in spite of requests by AFA Int.

[3] Estimating the ability of birds to sustain additional human-caused mortalities using a simple decision rule and allometric relationships P.W.Dillingham, David Fletcher

Lance Barrett-Lennard in an email to Sue Arnold, AFA Int. CEO, dated February 27 2007 writes: -

‘ *You are right that natural mortality (including predation mortality) is not an explicit parameter the PBR formula. In theory, it’s encompassed in Rmax (=reproductive-mortality rates). Furthermore whenever there is reason to believe that the population is vulnerable for either extrinsic or intrinsic reasons, the recovery factory should be reduced. I just looked at the last gray whale SAR (2005) and was surprised to see that a recovery factor of 1 (the highest possible) is used…. I do agree with your main point, which is that the high level of killer whale predation that the eastern gray whale population experiences reduces its recovery potential, meaning that the calculated PBR is likely to high.’*
And further.

“ ***we are in agreement that setting rf to 1 is wildly imprudent***.”

Dr Milani Chaloupka, a research scientist who developed an heuristic model of the Gray whale for AFA Int. writes in relation to the PBR: -

“’*the unfortunate thing about PBR is that Rmax is a constant value and doesn’t vary over time. Hence, if orca predation is increasing (due to the whale cascade view) then the Rmax needs to change over time as well (i.e. Decrease as orca predation increases). Unless of course reproductive output increases as the population decreases due to increased predation by orcas.*

So PBR is a static concept and not a time-varying concept that is needed to reflect environmental and or demographic variability. ‘[4]

The ramifications of setting a ***‘ wildly imprudent***’ rf need to be assessed urgently. The model below illustrates the fine line between survival and extinction for the Gray whales. AFA Int. notes that in 2003 when the model was commissioned, the facts that have now emerged in relation to the PBR, and the population estimates were not available. Given the new data, including the research by Professor Stephen Palumbi et al, it is highly likely that the so-called “ management” of Gray whales in the last 8 years has led to a significant decline in the population.

One can only hope that the decline does not lead to extinction.

[4] email from Dr Milani Chaloupka to Sue Arnold, Feb. 27, 2007

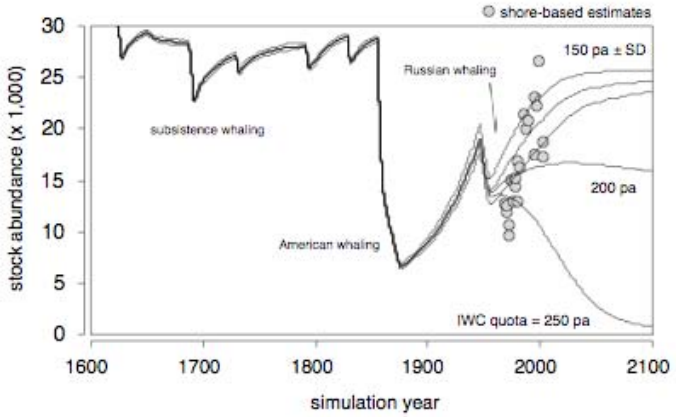


Figure 1 Expected California gray whale stock abundance derived from a stochastic sex- and ageclass structured simulation model that includes both environmental and demographic stochasticity as well as density-dependent compensatory and depensatory processes. Model based on best available scientific information reagrding gray whale ecology and demographic processes. Simulated gray whale stock was subject to a low level of indigenous whaling from 1600–1800 followed by the American whaling period from 1846–1874, the Russian whaling period from 1933-1946 and then by the IWC subsistence quota period from 1947- present. The fluctuations in the expected abundance evident during the subsistence whaling period (prior to the 1800s) result from the stock response to major ENSO events and the affect of such events on the major gray whale food stock (amphipod) abundance in the Bering Sea. ENSO = El Nino-Southern Oscillation, which relates to a major recurrent climate-ocean anomaly in the Pacific that can have a profound effect on marine ecological processes. The model suggests that both the American and Russian takes were grossly under-reported. Filled circles = shore-based stock abundance estimates. Three IWC quota scenarios shown with either a 150, 200 or 250 post-yearling take per annum (predominately larger females). The curves show the expected stock abundance from 1000 Monte Carlo trials. The 150 pa scenario also includes the expected ± 1 standard deviation curves — not shown for the 2 other scenarios to avoid visual clutter. Given model assumptions, it is apparent that the current IWC quota of 150 whales pa would slow recovery. On the other hand, a take of 200 pa (i.,e 50 more than the current quota of 150) would stop the recovery and probably result in a slowly declining stock while a take of 250 pa (or 100 more than the current quota) would most likely result in a stock well on the way to extinction.

Prepared January 10, 2003 for Australians for Animals by:

Dr Milani Chaloupka
Ecologica, PO Box 6150,University of Queensland, St Lucia, Queensland, 4067, Australia
Email: m.chaloupka@mailbox.uq.edu.au.

Table 10. -

Email correspondence obtained through a FOIA in 2004 recommends using the PBR to avoid setting estimates of OSP boundaries.

Tom Eagle wrote:

…'*I'd recommend relying most heavily on the dynamic response to say it looks as if the stocks is within OSP. Then you could use the PBR approach to estimate the maximum number you could remove from the stock without pushing it below OSP. In fact if you calculate a PBR like number and use 0.1 in the place of the recovery factor, you'd have a*

number that would be the upper limit of harvest that would allow the stock to equilibrate within 95% of K (which we could say is a "negligible impact").'

It is noteworthy that the PBR recovery factor was set at 1.0.

Further emails demonstrate grounds for an investigation.

Roger Eckert wrote:

"*All I know is that in order to consider an MMPA waiver, the MMPA requires, among other things, " a statement of the expected impact of the proposed regulations on the optimum sustainable population of such species or population stock". MMPA s.103 (d) (2). We need a way to satisfy that requirement."*

And the response from Tom Eagle:

" *In that case, I would recommend not using the term PBR in the analysis because some parties could claim that PBR has explicit application only in section 118. (Mike Gosliner from the Marine Mammal Commission has made this point to me more than once and I'd use his statements as a warning that other parties may pick up on it as well.) Unless there is better (more recent) info available, Paul Wade's paper in the 1998 Marine Mammal Science on calculating allowable mortality limits is a good source for a starting point. (see p.18). Using a formula of Nmin * .5 Rmax *0.1 you'd get an upper limit of mortality that would allow the stock to equilibrate (95% of simulations) within 95% of K: and for a stock below OSP, such a mortality limit would delay recovery to OS by less than 10%.*

" *The astute reader would quickly catch the similarity to PBR; but avoiding the term … avoid some conflict down the road – unless you want to assert the idea that P1 (unclear) has some application outside section 118 (I think this would be okay but avoiding PBR could be easier."*

AFA notes again that the recommendation for any recovery factor is 0.1 not 1.0.

Further, the question of whether the PBR has explicit application other than under s. 118 needs to be clarified in the DEIS.

KEY PBR ISSUES.

* PBR does not acknowledge zero harvesting which is a plausible option.

* PBR is no substitute for comprehensive assessments.

* MSY is not a target but a limit.

* Nm- highly dubious value

* No adequate explanation for setting *f* at 1.0

* Harvest data isn't good. No one can fit underlying historical population to data.

* PBR why is it constant when NMFS claims population is increasing

* No papers that explicitly review methodology.

* Methodology has changed at least twice with little explanation.

* Changes in location of study. Changes are not well documented in literature or journals.

* Calving figures do not show exploding population.

In an article published in Misterios, April 2008, Steven Swartz writes:-

" *The census of the population conducted in 2000 indicated that the population had declined from its 1996 peak size by 35% to 16,000-18,000 whales."*

Yet in spite of the acknowledgement of the status of the population by a senior NMFS scientist and others with many years of research and expertise on the Gray Whale, NMFS set the Nmin value in 2000 at 24,477. If Swartz is correct, then Nmin should have been set at 16,000. Nmin value of 24,477 remained until 2005.

Nmin 16,000 x 0.0235 x 1.0 PBR =376.
Nmin l6,000 x 0.0235 x 0.5 (as recommended by Wade)[5], PBR = 188.
Nmin 16,000 x 0.0235 x 0.1 PBR =37.6

These figures need to be compared with the values set with a recovery factor of 1.0, 0.5 and 0.1 against a Nmin which had no validity and failed to take into account the major population crash in 199/2000.

year	Nmin	Rmax	Fr-1.0	0.5	0.1
1997	21,597	0.02	432	215	43
2000	24,477	0.0235	575	287	57
2002	24,477	0.0235	575	287	57
2005	17,752	0.0235	417	208	41
2007	17,752	0.0235	417	208	41

Table 11. Comparison of Fr values

[5] Estimating the ability of birds to sustain additional human-caused mortalities using a simple decision rule and allometric relationships. Dillingham P, Fletcher D. Science Direct in press 208

At a time when the population had collapsed by 35% according to NMFS own estimate, the PBR values were unsustainable, grossly irresponsible and a violation of the agency's mandate.

The PBR was 575 up until 2005.

In 2001/2 the minimum population was estimated at 15,010. (Rugh et al)

Nmin 15,010 shows much the same picture.

2001/2	15,010	0.0235	352	176	35

Table 12. Fr Values at 15,010

As this minimum population estimate was ignored in the 2001/2 SAR and the next SAR was published in 2005, AFA Int. assumes that the Nmin for the years from 2001-2005-6 were set at 24,477.

In 2006/7, a field study census was undertaken. A Field report of the 2006/7 census was submitted to the IWC (SC/59/BRG1). No population estimate was given. Counts of gray whale pods were compared with pods counted in 2000/01 and 2001/2.

The Field Report states : - *after two censuses (2000/1 and 2001/2) in which abundance estimates were well below the expected trajectory. (Rugh et al).*

In spite of the obvious similarities of pod counts noted in the 2007 SAR and Field Report, the Gray Whale population has suddenly increased to 20,110 (over 2,000 animals) yet the Nmin remains at 17,752. The Nmin was obtained using the mean of 2000/01 and 200l/2 abundance estimates – in other words, using the Nmin of 24,477.

An obvious conclusion is that, in the absence of an abundance estimate in the Field Report, based on the number of pods sighted, the population remains well below the expected trajectory.

DEPLETION MODEL

We estimated the underlying time-specific trend in the NMFS gray whale abundance series over the 40 years (1968-2007) using a generalised smoothing spline regression approach implemented in the gss library for R (Gu 2002). This nonparametric approach uses the data to determine the underlying linear or nonlinear trend without having to assume any specific functional form. It is apparent from Figure 1 that gray whale abundance on the southbound migration at Granite Canyon (California) was generally increasing from the late 1960s until the mid-1990s and then has been decreasing steadily ever since.

Gu C (2002) *Smoothing spline ANOVA models*. Springer-Verlag, New York.

Table 13. Depletion Model

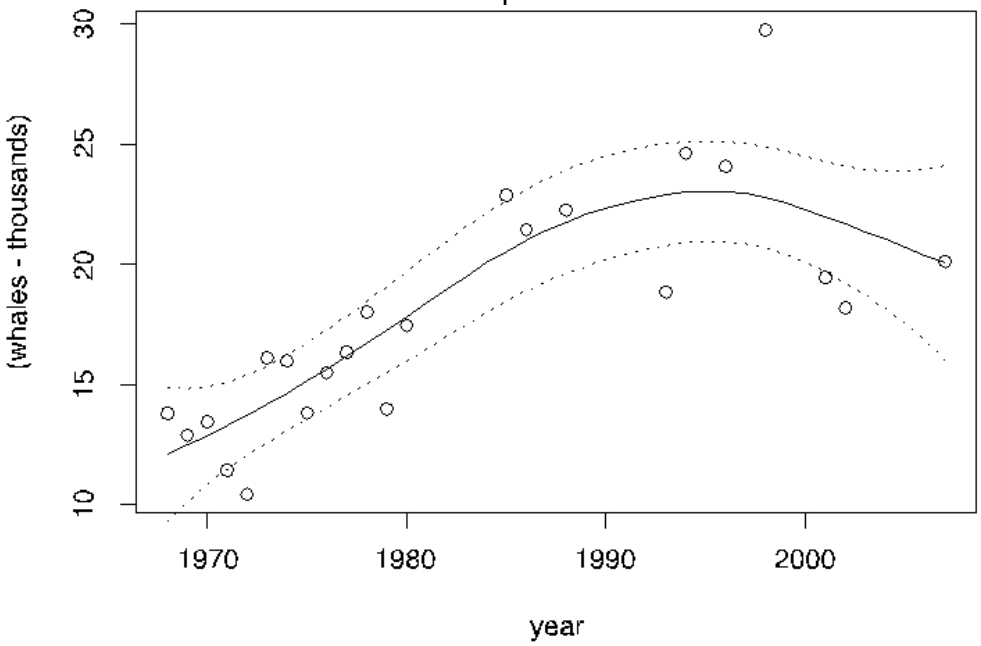


Figure 1 Time series plot of the estimated number of gray whales migrating each year since 1968 southward past the NMFS study site at Granite Canyon (California). Open circles show NMFS-estimated gray whale abundance, solid curve shows smoothing spline regression fit to the time-specific abundance series, dashed curves show 95% Bayesian confidence interval for estimated underlying smoothing spline trend. Note that there were no NMFS surveys in the following years: 1981-1984, 1987, 1989-1992, 1995, 1997, 1999, 2000, 2003-2006. © Australians for Animals Int.

Model by Ecological Modelling Services Pty Ltd. Brisbane Australia.

RUBBERY FIGURES .

In correspondence with Dave Rugh, AFA has attempted to clarify the questions relating to the PBR and abundance estimates for the last 10 years.

His response via email does nothing to clarify the 2000 + increase in animals. Rugh's claim that the " *difference of 2000 is a function of change across five years rather than a change in analytical procedures for any one year*" provides zero clarity.

Rugh email dated 18/7/08: - '*The abundance estimate of 18,178 was from counts made in 2001/02, as published in the Journal of Cetacean Research and Management. The abundance estimate of 20,110 was from data collected in 2006-2007 as presented in the AFSC Processed Report.*

Therefore the difference of 2000 is a function of change across 5 years rather than a change in analytical procedures for any one year. In fact, there is considerable effort to keep the

counts and analysis standardized in order to allow for these inter-year comparisons. Then again the CVs (15,010 to 22,015 in 2001/02 and 16,936 to 23,878 in 2006/07) do mean there is some range around each of the point estimates."

The following graphs show the CVs show more than " *some range around each of the point estimates*.

BACKGROUND.

An analysis of the status of the population estimates since from 1967/68 until 87/88 when they were consistently undertaken by Buckland et al.[6] follows:-

The annual percentage increase over that period was estimated at 3.2% each year except for a 3.3% increase in 77/78. These figures are in line with projected increases for baleen whales.

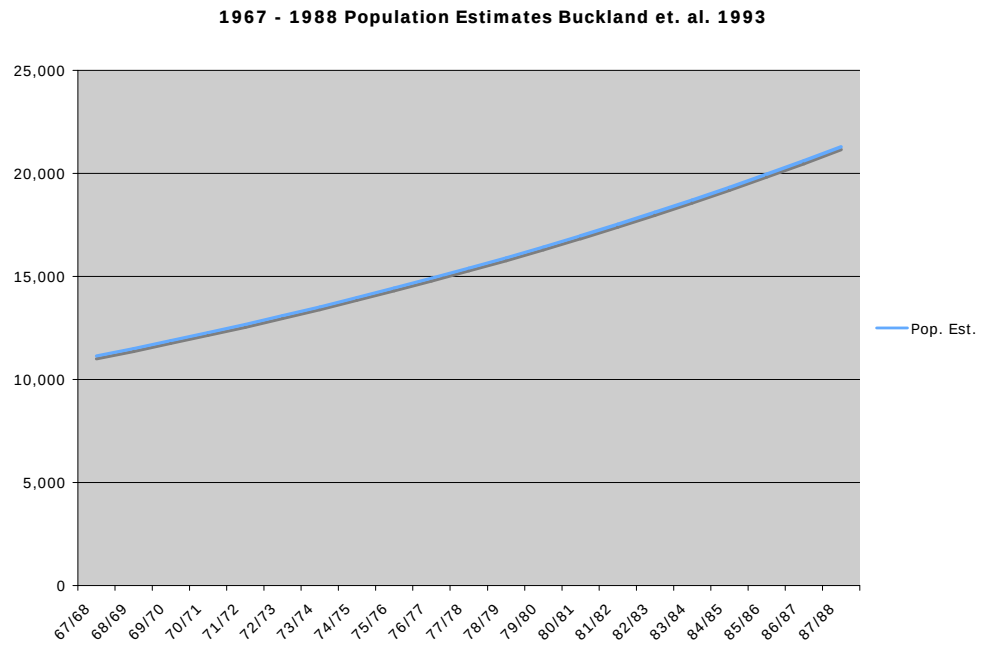


Table 14. Buckland estimates 1967-1988

However, once the delisting took place in 1994, the methodology changed and NMFS reported the following increases and decreases.

92/93 - 93/94 - 30.75% increase
94/95 - 95/96 - 3.66% decrease
95/96 - 97/98 - 18.13% increase
97/98 - 00/01 - 22.68% decrease

[6] Buckland et al Marine Mammal Science Volume 9. No 3 1993

00/01- 02 - 6.72% decrease

(Illustrated in the chart below)

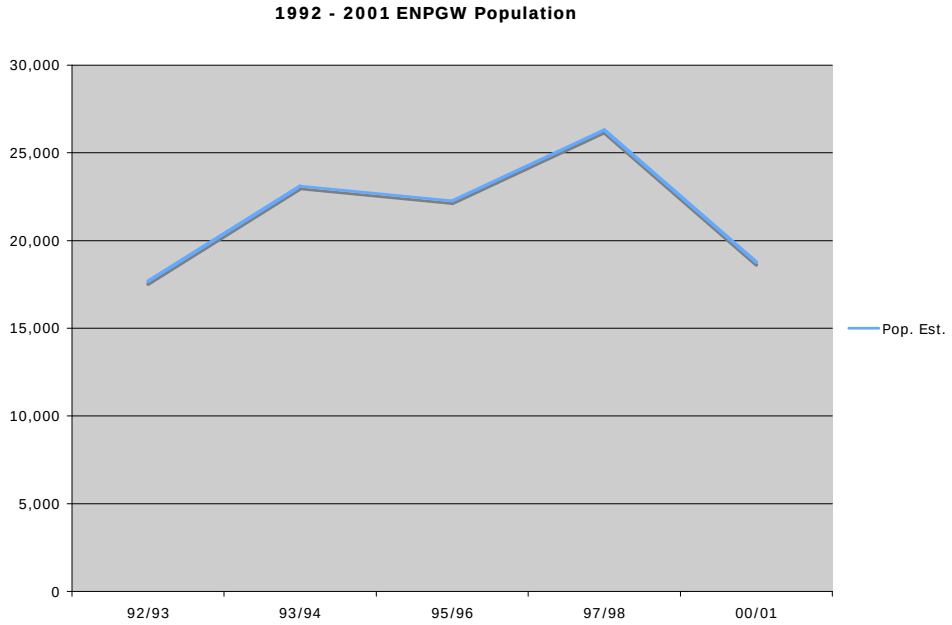


Table 15. 1992-2001 ENPGW Population Estimates.

These increases are biologically impossible and highlight the growing concern over the methodologies used by NMFS and the substantial uncertainties in these NMFS estimates.

The uncertainties of NMFS calculations can be further illustrated by the following graphs:

Co-efficient variation (CV) is a measure of the uncertainty of the estimate.

CV change from mid-1990's onward as analytical approach changed

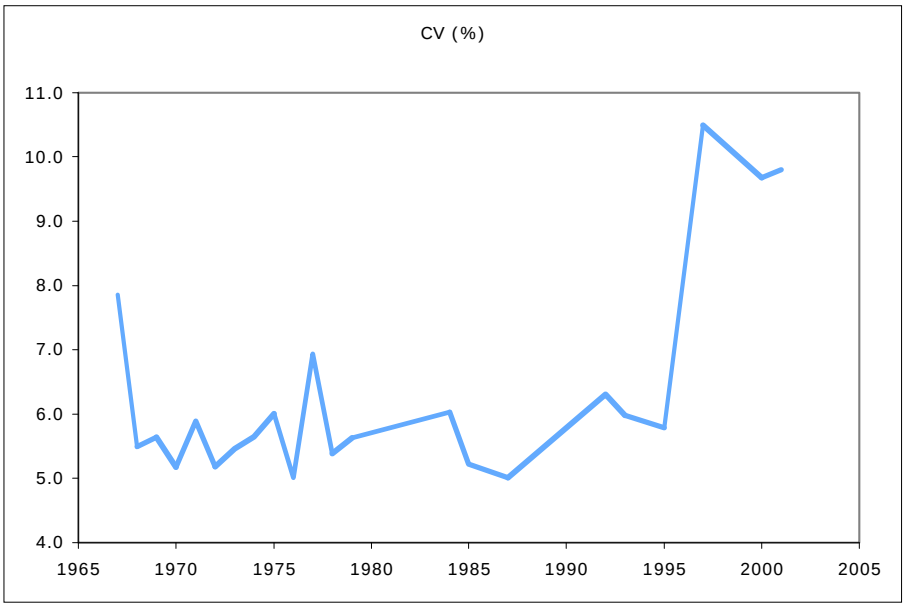


Table 16. CV change from mid 1990-s onward.

Annual % change from mid-1990's onward as analytical approach changed

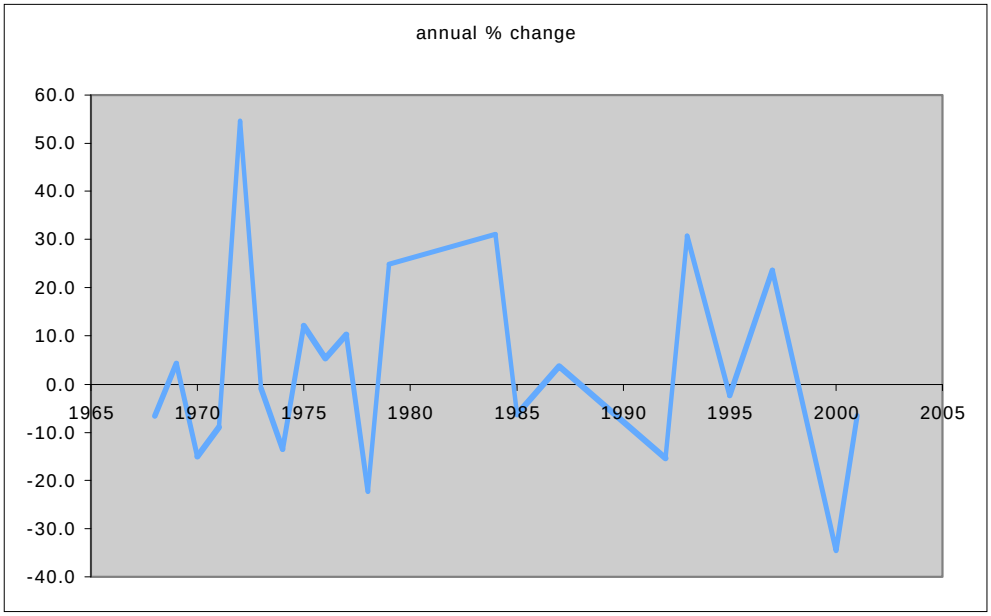


Table 17. Annual % of change.

As a further example of the confusion created by NMFS changes in methodology, we chart the " corrected abundances" as outlined in the 2006/7 field report presented to the IWC Scientific Committee at the Anchorage meeting as compared with the abundances charted by Buckland et al from

l967/1988.

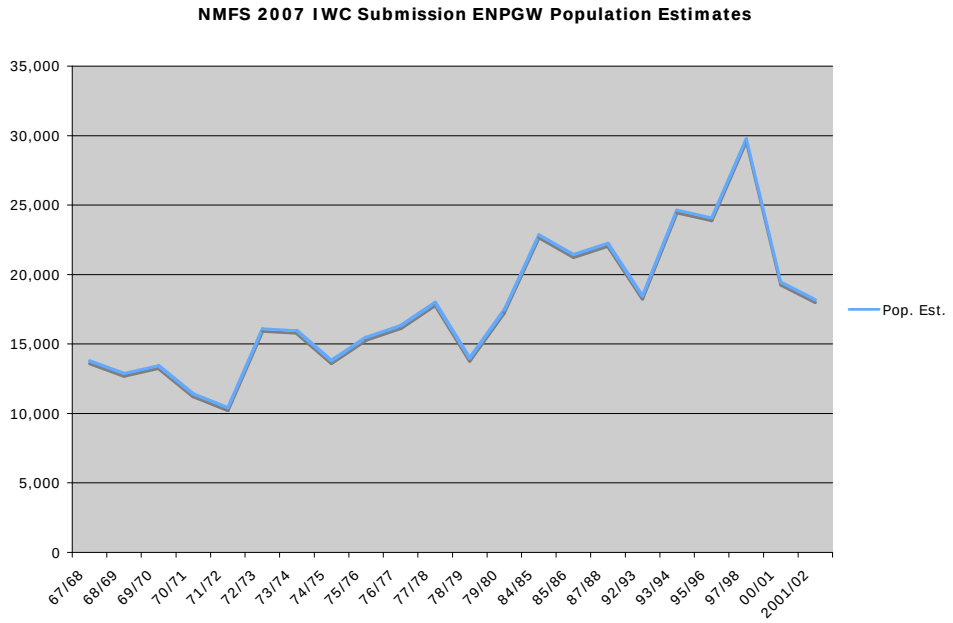


Table 18. NMFS 2007 IWC Submission ENPGW Population Estimates.

An IWC report states " Abundance and trend estimates from shore based censuses led to an estimated annual increase of 2.5% (S.E.=0.4%) "[7]

The true status of the population is unclear. Canadian researchers suggest the population may be as low as 15,000 [8]

Another email from Dave Rugh in relation to the increase of 2000+ animals now attributed to the field survey and 2007 AFSC Report further illustrates the confusion.

From Sue Arnold, AFA Int.

I still cannot get my head around where the increase of 2000 plus whales comes from. There was an estimate done in 2006/7 but where or how does the increase come from in the AFSC report ? There wasn't another count, so have you changed the CV or what ?

I would be very grateful for your patient explanation. I ve also emailed Paul and Jeff, thanks for their emails. With regards Sue

On 16/7/08 8:51 AM, "Dave Rugh" <Dave.Rugh@noaa.gov> wrote:

[7] IWC Chairman's Report of 46th Annual Meeting, 1994
[8] pers.comm.Dr William Megill

Hi Sue-

***1) At the time of the publication of the attached file ("Gray Whale Abundance") in 2005, the most recent abundance estimate was 18,178 based on counts made in 2001/02 (CV=9.79%; 95% log-normal confidence interval=15,010 to 22,015). Perhaps the 18,313 that you noted came from an earlier draft of that report. However, since then we have a more recent abundance estimate of 20,110 from data collected in 2006-2007 (CV = 8.78%; 95% log-normal confidence interval=16,936 to 23,878). The latter estimate is from the AFSC Processed Report as you noted. Therefore, the Makah DEIS has the latest estimate correctly indicated (20,110 whales from counts made in 2006-2007), which - as you mentioned is about 2000 more than the estimate (18,178) from counts made 5 years earlier in 2001-2002*.**"**

If the minimum population in 2001/02 was 15,010 to 22,015 as indicated by Rugh in his email and 16,936 to 23,878 in 2006/7, the PBR Nmin for the years 2000l to 2005 was not a reflection of minimum population. (See PBR section).

Similarly, the PBR Nmin for 2006/7 is l7,752 although Rugh's minimum estimate is 16,936.

Rugh fails to point out is that the US submitted a field report to the IWC at the meeting in Alaska in 2007 which contained no population estimate only the number of pods which the report compared to 2000/2001.

It is worth repeating the cite from the Field Report :- The Field Report states : - *and after two censuses (2000/1 and 2001/2) in which abundance estimates were well below the expected trajectory. (Rugh et al).*

There is no explanation as to how these censuses in 2000/1 and 2001/2 in which abundance estimates were well below the expected trajectory are now somehow transformed into an increase of 2000+ animals without a shred of evidence to support this alleged increase.

In any event, according to an email from Roger Eckert, NOAA dated l9 April 2004 to Jeff Lake et al, Jeff Lake wrote – *the difference of 1000+ whales is not statistically significant.*

<u>Given that the new population estimate of 20, 110 represents and increase of 1297 animals since the 2005 SAR which is based on 2000/1 and 2001/2 SARs, AFA regards the increase as neither statistically significant NOR an indication that the population is recovering. On the contrary, these statistics give a clear indication of a population in decline.</u>

Other agencies claim the population in 2007 is 18,178. Federal Register Notice - Vol. 73, No. 82/Monday, April 28, 2008 – NOAA Incidental Takes of Marine Mammals during Specified Activities; Shallow Hazard and Site Clearance Surveys in the Chukchi Sea in 2008. The population has "increased to a level that equals or exceeds pre-exploitation numbers". Angliss and Outlaw (2007) reported the population to be 18,178.

In the DEIS, the following statement is made:-

" **.. NMFS CAN ONLY BE RELATIVELY CERTAIN THAT THE TRUE ABUNDANCE IN 2006/7 WAS PROBABLY SOMEWHERE BETWEEN 17,000 AND 24,000 WHALES**."

AFA Int. doubts that NMFS can be even vaguely certain of any population data given the lack of funding for any substantive research.

CARRYING CAPACITY.

In 1990, the Scientific Committee of the IWC noted that " *either feeding or breeding limitations could determine the carrying capacity for this stock."*

AFA Int. believes that both factors are at play with the Gray whale population. The feeding limitations caused by climate change in their primary feeding grounds are impacting on breeding as evidenced by the lowest count ever recorded in San Ignacio Laguna and by the SAR's since 2000.

As well, the impact of contamination of Gray whales on reproduction has not been researched.

With the rapidly diminishing ice in the Arctic feeding grounds and no research to indicate the location and sustainability of alternative prey, the carrying capacity of the Gray whale is unknown.

This fact is supported by comments made by Wayne Perryman in a conference call between NMFS SWFC, Ocean Protection Council, Assemblyman Pedro Nava's office and Sue Arnold from AFA Int. on behalf of the California Gray Whale Coalition.

Wayne Perryman acknowledged that :- " *the large picture keeps changing, the carrying capacity almost impossible to estimate because doesn't stay in the same place. Rate of change is changing. It is a rapidly changing environment.* "

Cites from 1874 below indicate the instability of any measure of the carrying capacity.

1. **1874** Scammon, **30,000 to 40,000.**

2 * October 1993 Gray Whale Monitoring Task Force, NMFS, NOAA, A 5 Year plan for Research and monitoring the eastern north pacific population of gray whales. NMFS estimates population is approximately **21,000 animals** " *close to pre-commercial population size and will soon begin to decline because they are approaching their ecosystem's carrying capacity*."

3**. 1998** " *Based on a revised Bayesian analysis of gray whale population dynamics, carrying capacity ranged from **25,130 to 30,140** depending upon the starting year of the trajectory, with the upper 95th percentile of 43,950 and 59,160* " [9]

[9] Federal register notice April 6,1998 Vol.63, No. 65

4. **1999**. " *Using a Bayesian statistical method to assess the stock with 1996/67 to l995/96 data, point estimates of carrying capacity ranged from **24,640 to 31,840**."* [10]

5. **2000/01 19.448** Journal of Cetacean Research . David Rugh et al.
(CV=9.67%; 95% log-normal confidence interval=16,096 to 23,498)

6. 2001/02 18,178 Journal of Cetacean research David Rugh et al (CV=9.79%; 95% log-normal confidence interval=15,010 to 22,015). The abundance in 1997/98 was the highest estimate made since this project began in 1967/68. It was followed by two much lower estimates – probably related to the high mortality rates observed in 1999 and 2000. This whale population appears to be approaching the carrying capacity.
.

7. 12 January, 2004 Declaration of Roger Gentry (head of Acoustics Program in the Office of Protected Resources NMFS) in Australians for Animals et al v. Donald L. Evans.
" *The gray whale population is not in decline. Mr Rugh's declaration concludes that the population underwent a brief reduction but is now stable. Professionals in population dynamics agree that the population has reached carrying capacity of its environment and should no longer be expected to grow at pre 1997 rates but it is not declining*.

* Note: AFA Int. has serious concerns over this evidence given that the population crash had been identified as a UME and no action had been taken as required under the MMPA. We believe Roger Gentry mislead the Court.

18. *Retrospective analyses of abundance estimates suggest that the ENP gray whale population was approaching carrying capacity by the late 1980's (P.Wade pers.comm..). If so, and if the population remained near carrying capacity through the late 1990s, a sudden decline in marine ecosystem productivity caused by the 1997-1998 El Nino could have contributed to whale mortality. A drop in ENP gray whale abundance estimates from a high of 27,958 (CV=0.1) for 1997-1998 migration to **18,246** (CV=0.9) for the 2000-2001 season and to **16,848** (CV=0.9) for the 2001-2002 season (Rugh et al 2004) supports this view.*[11]

CURRENT ABUNDANCE

" Gray whales have been taken as part of aboriginal hunts since before European arrival and have been exploited commercially on both sides of the North Pacific for the last two centuries. ….. However, the basic density-dependent model and its variants cannot reconcile the current abundance and continued increase of this population with the historical catch records; the population seems to have overshot its historical K by 200-300%. A consistent trajectory can be achieved only be assuming large historical " adjustments", such as under-reporting historical catches by a half to a third or by assuming density dependent selection on life-history parameters resulting in long-period oscillations in abundance.

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[10] Status Review of Eastern North Pacific Stock.
[11] *Marine Mammal Research: Conservation Beyond Crisis. John Elliott Reynolds, John E. Reynolds III, William F. Perrin, Randall R. Reeves 2005*

As an alternative to backward extrapolation using uncertain historical records, Wade considered only the " known" catch data available since the start of shore-based surveys during 1966-67 (ignoring all catches before this time), and the trend in the 21 years of abundance surveys. Using several modifications of the basic model and incorporating Bayesian statistical estimators, Wade concluded that the variance of the time series of abundance estimates was greater than was estimated previously. As a consequence, previous models have derived estimates for K and other population parameters (e.g. rates of increase) that were overly precise. Taking this additional variance into account, the 95% confidence intervals of predicted current carrying capacity (K) were much wider than calculated in previous models, extending from ***19.980 to 66,720****. Consequently, there was a moderately large probability (>0.20) that the current population is still below 50% of K." Trends in Ecology and Evolution Vol.19.No.7 July 2004* [12]

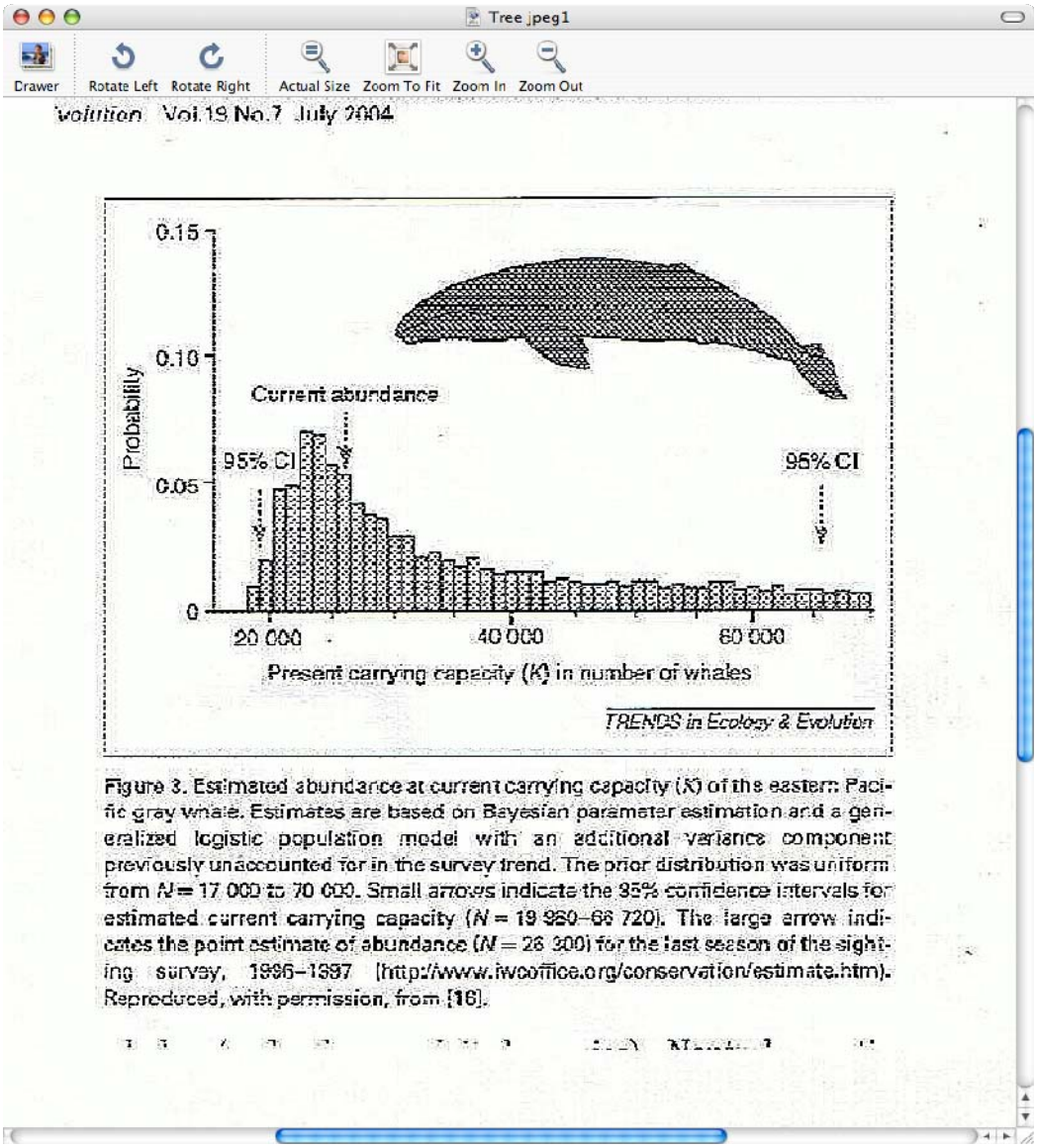

Table 19. Modelling the past and future of whales and whaling. Scott Baker, Clapham

[12] Modelling the past and future of whales and whaling. Scott Baker & Clapham.

" *Alter et al (2007) show that gray whales have likely not achieved full demographic recovery. Rather, this population may be at most at 28-56% of historical abundance, estimated to be between 76,000 and 118,000 whales. This analysis was based on genetic information gathered from 10 genetic markers from across the genome analzyed and incorporated the effects of migration from other populations (such as the western Pacific and extinct Atlantic population.)* " [13]

At the l999 Status Review, a paper by Wade & DeMaster [14], *supports the possibility of an historical abundance as high as 70,000.'*

" *Point estimates of the equilibrium population size ranged from 24,000 to 32,000 depending upon which model was used, but values as high as 70,000 still had some probability."*

REPRODUCTION.

" *Given the relatively low estimates of Rmx that exist for cetaceans, it is obvious that cetacean populations can decline much more rapidly than they can increase, and this should be reflected in the kind of environmental variance term that is incorporated into a population dynamic model*." [15]

Unquestionably, the rate of reproduction has changed. Female reproduction rate was about 2 years (Lankester & Beddington SC/37/PS21).

'Report of the Special Meeting of the Scientific Committee on the Assessment of Gray Whales, 23-27th April, 1990 – Biological Parameters for Gray Whales' identifies the pregnancy rate as 0.46 per year.

Swartz, Urban et al, 2008, Jones (1990) estimated the calving interval for female gray whales at 2.11 + SD 0.403 years during the period l977 to l982. The estimated calving interval of 2.48 + SD 0.607 from this study suggests that fewer females are reproducing every other year which has been typical in the previous decade, and suggests that the reproductive rate of the ENP population may be slowing. Low calf counts could be indicators that some gray whale females are unable to obtain sufficient energy resources to conceive, or if pregnant to bring calves successfully to term. Brown and Weller (2002) suggest that resource limitations may result in a three year rather than the normal two year reproductive cycle in western pacific gray whales.

Steve Swartz pers.comm. Sue A. Feb. 2008 Mexico. *Calving cycle has increased to 2.4 years suggesting that some females are reproducing every three to four years on average.*

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[13] Letter from Dr E. Alter in support of AJR 49.
[14] A Bayesian Analysis of Eastern Pacific Gray Whale Population Dynamics. (unpubl)
[15] P. Wade. " Estimates of population parameters for the eastern Pacific gray whale, (Eschrichtius Robustus) using a Bayesian method. 1994 SC/46/AS16

Calving Interval increasing.

According to the report of the IWC Scientific Committee in Shimonoseki, Japan, the mean length of the calving interval was estimated at 2.50± 0.29 years. This interval is, according to the report, significantly higher than 2.11 years estimated for the period 1977-l982.[16]

In an article in the Seattle Post Intelligencer, 18 May, 2007 Swartz is quoted saying:-

"*We know that the primary feeding ground is in the Bering Sea, north of the Gulf of Alaska. We know that has been going through some severe changes associated with climate change, warming of the water and changing of the oceanography. Where the whales used to congregate in large numbers to feed, they don't any more. They may be suffering from not enough food, or they may have become vulnerable to parasites or diseases from having to switch to different food sources. They can survive this for a period of time, but not forever.*

" The biggest concern is if they are nutrition-stressed, the females may not be able to bring their calves to term or give birth to those that are hardy enough to survive."

Wayne Perryman is quoted in an article " *Lactating and fasting at the same time is very challenging* " Perryman said. (As if he would know.) " *If a female is not putting on weight rapidly, she kicks into miscarriage." Perryman has noted the pattern for five years*. [17]

In the DEIS, Urban and Swartz are quoted saying that 11-13% of animals in San Ignacio were emaciated.

The Report of the IWC Scientific Committee IWC/54/4 Annxes F-G. 2002 in relation to the Western North Pacific Stock Gray Whales stated:-

" *The three year calving interval observed in western gray whales is hypothesised to be due to nutritional stress and compounded by ongoing anthropogenic disturbance while on the feeding ground. If western gray whales have increased their calving interval from two years, as typically reported for eastern gray whales, to three years, the change will decrease overall calf production by at least 20%. This change, if persistent, will have a major impact on the potential of the population to recover from its depleted state*."

In 2002, the IWC Scientific Committee reported that calving intervals were estimated to range from 2-4 years.[18]

STRESS IMPACTS

Dr Albert C. Myrick Jr. in his declaration in the lawsuit Hawaii Green Party versus Donald Evans January, 2003 San Francisco District Court asserts that a steep decline in population size, accompanied by a steep decline in yearly calf production is indicative of a population subjected to unusually strong chronic stressors.

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16 IWC SC repne doc. Page 37. IWC Japan, 2002)

17 A Whale of a Food Shortage. Usha Lee McFarlane, Kenneth R. Weiss LA Times 25 June, 2002

18 Report of Scientific Committee, IWC Japan. IWC54/4/Annexes F-G. 5/14/02

Dr Myrick adds that ' *although various natural and human-caused chronic stressors that could potentially affect the gray whale population can easily be identified, none has been studied from a physiological standpoint*.'

In his declaration Dr Myrick explained that (5a) ' *stress increases the levels of glucocorticosteroids (cortisols) in the blood. Chronically elevated levels of cortisols, i.e., persistently elevated levels over time, suppress luteinizing hormone. This hormone is essential to female ovulation and maturation of the ovum (unfertilised egg). Elevated blood cortisols result in fewer eggs and in fewer eggs reaching maturity. Thus, low calf production would be resultant from a population under strong chronic stress.*

b. *Elevated levels of cortisols in the blood also suppress growth hormone. This would result in slower growth in growing animals and thus would delay sexual maturation. The protaction of time between birth reproductive readiness could mean a lower reproductive rate for the population and a reduction in the annual production of calves.*

c. *Chronically elevated blood cortisols tend to destroy nuclear DNA of lymphocytes, cells that play a major role in the immune response. The result of large scale destruction of lymphocytes would be the increase of susceptibility to disease and infection.*

d. *Each source of stress (stressor) is a potentiator. Multiple stressors may act synergistically to impact an animal's physiology at a level that would be greater than the sum of the individual stressors.*

e. *The introduction of additional stressors in the population, presumably already under (unstudied) multiple chronic stressors, could compound the putatively pathological responses, such that further, more rapid deterioration of the population may occur.*

f. *Considering the very serious decline both in the population size and calf production of the Eastern Pacific gray whale and the likely possibility that the population is under strong chronic stress, the reasonable governing principle should be one of non-interference, ie; we should avoid the introduction of additional (especially human generated) factors that may further promote the further deterioration of the remaining numbers of this once great whale population.*

These factors have been completely ignored in the Makah DEIS.

MALE BIAS IN POPULATION.

Another factor which could have serious implications for the Gray whale population is the growing evidence of a male bias. No research has been undertaken in spite of considerable evidence including the historical female bias in the Russian kill.

Harvest data obtained from the IWC for gray whales for years 1966-1993 shows a much higher ratio of female kills. 1626 males and 2989 females were [19]killed in that period.

[19] Table 2. SC/46/AS p.12 Wade, 1994

Research on Western gray whales in 2002 demonstrates an overall male biased sex ratio of 59.1% males and 40.9% females. The sex ratio for calves was 68.0% male and 32.0% female.

With the evident collapse of the population in 1999/2000 and evidence of the female bias in the Russian kill, it is critical that NMFS undertake studies to determine the sex ratio of the Eastern Gray Whale. Similar male bias percentages in the Eastern Gray whale population would have serious implications for reproduction.

MEXICO.

The DEIS has conveniently ignored the data from Mexico and the results of a recent paper by Swartz, Urban et al. [20]*San Ignacio Laguna represents one of the best series of baseline data which cannot be ignored.*

" *Overall counts in 2008 were the lowest ever recorded in LSI during winter. The 2008 arrival and occupation of LSI was the latest and shortest ever recorded for gray whales in the lagoon. Comparison of these trends with other breeding lagoons is needed to determine if these decreasing counts, shortening and shift in timing of the winter lagoon occupation by gray whales reflect actual population declines or changes in gray whale distribution to other areas within their winter range*."

Mother calf pairs were the lowest recorded during the post die-off period from 2003-2008. The following graph of cow calf pairs and single whales is insightful.

[20] Preliminary comparison of winter counts of gray whale in Laguna San Ignacio, B.C.S, Mexico from 1978 to 2008.

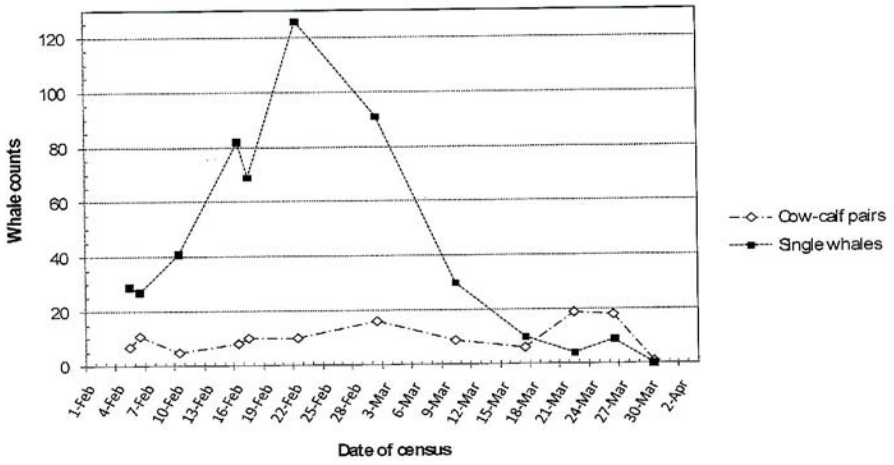

Figure 9. Number of cow-calf pairs (black mark with single line) and single gray whales (white mark with dotted line) counted in census surveys of Laguna San Ignacio in the LOWER ZONE during the 2007 winter season.

Photographic Identification - Residency

A total of 815 usable photographs of gray whales were obtained from 2428 digital exposures. From these, 615 different individual whales were identified from 1156 right-side photographs and 735 left-side photographs. Only 121 whales were photographed from both sides. The analysis of left-side photographs yielded 181 single whales, 58 females with calves, and 11 unknown whales (individuals that for some reason could not be assigned to one of the previous group classes), or 250 individuals (Table III). The analysis of right-side photographs yielded 272 single whales, 79 females with calves, and 14 unknown whales, for 365 individuals. The minimum number of individual whales (single and females with calves) identified from the photographs is equal to the larger number of individuals identified from the left or right side, or 365 whales identified from the right side photos (this includes the 121 individuals identified from both left and right side photographs). If we assume that the whales identified from only their left side photos are distinct from those identified from right-side photos (none are of the same individual), the maximum number

Report of the 2007 Gray Whale Studies at Laguna San Ignacio B.C.S. Mexico 12

Table 20 – Review of 2007 Gray Whale Studies at Laguna San Ignacio.

" *Low gray whale calf counts in Laguna San Ignacio and during their northward spring migration are especially troublesome as they could indicate a reduction in the reproductive potential of the population. Perryman et al (200) observed that gray whale calf production appears linked to summer ice conditions in the Arctic which may limit pregnant female whales' access to prey resources in some years and subsequently lower calf survivorship. Their observation suggest that short-term annual changes in oceanic sea ice conditions*

along with longer-term basin scale changes may ultimately affect gray whale productivity. Our observations of " skinny" gray whales in Laguna San Ignacio also suggest that prey resource limitation is a factor in the health and status of the population. Vulnerability to parasites and disease associated with prey switching and overall stress could affect gray whale productivity and survivorship. (F. Gulland, S.E. Moore and T. Rowles, pers.Comm.) :"

In February, 2008, Australians for Animals CEO, Sue Arnold, had a meeting with Steve Swartz at San Ignacio Laguna. He reported that :-

'the reproduction rate of the whales has extended from one calf every 2.4 years to one every 3- 4 years.'

** 2007 - 12% skinny whales*

** 2007 - lowest calf count in 30 years*

** water temperature 2 degrees cooler in lagoon*

** experts postulate that the cooler temperature might be keeping whales out*

of lagoons. Whales are being seen coming up the Sea of Cortes,

Acupulco, Loreto, Cabo, and other places where not usually seen

** big drop in lagoon numbers. Usually 2000 in Guerrero Negro, so far*

around 600. usually 300 in San Ignacio -so far, around 120.

** whales spending more time underwater*

** calves smaller*

** not much sexual activity*

** few juveniles*

** fishermen see whales trying to feed on lagoon bottom, may be sucking up some slugs and shrimp.*

** everyone spoke of food shortages causing problems for whales.*

In the light of the information presented by Swartz, Urban et al, 2008, NMFS assertions that the population is healthy and recovering can be taken with a grain of salt.

The importance of conditions in the San Ignacio Lagoon cannot be ignored.

Swartz is quoted in a web article, Journey North Gray Whales saying:-
" *The San Ignacio Lagoon, one of four gray whale breeding grounds off the Pacific Coast of Mexico, can be used as a litmus test for the reproductive rate of the species*.." 2007 AFP

AFA Int. notes that according to Swartz and Urban [21] 17.50% of cow calf pairs in 2007 were 'skinny.'

If San Ignacio Lagoon is an indicator of the status of the population, this figure is a cause of major concern.

In an article written by Swartz in Misterios de Laguna Baja Enero – Abril de 2008, the following insightful comments are made:-

" *In the past, large numbers of gray whales gathered in the northern Bering Sea's Chirikov Basin which was known as a primary Arctic feeding ground for gray whales. Spring time and summer plankton blooms resulted in rich colonies of amphipods, a nutricious gray whale food source, on the sea floor. However, dramatic changes in the oceanography of the Arctic associated with global climate change have occurred in recent decades and specifically in the Bering Sea. During the 1990's the Arctic air and water temperature warmed, polar sea ice began to melt faster than any other time in history, and the ocean currents that supported the rich communities of amphipods changed. One result was that the former productivity of the Chirikov Basin declined severely and there is now less food available for gray whales and other species to feed on.*

" Some scientists believed that the gray whale population grew too large and overgrazed the amphipod communities, while other scientists point to climate change effects on the oceanography of the Bering Sea that resulted as the cause of a less productive system or perhaps some combination of factors. With the loss of this important feeding area, scientists reported in 2003 that aggregations of feeding gray whales were further north in the southern Chukchi Sea and whales are now travelling to new areas and spending more time looking for their primary food sources. Recent sightings of " skinny " gray whales at Laguna San Ignacio suggest that food limitation is a factor in the health and status of individual whales and of the population. Stress resulting from having to find new food resources and to work harder to get them could make the whales more vulnerable to parasites and disease.

Disruption of the gray whales' food chain can also have implications for gray whale calf production and their survival. Counts of newborn clves in Laguna San Ignacio in 2007 were the lowest ever recorded, as were counts of female gray whales with calves passing Punta Pedras Blancas in California Norte during the northward spring migration. ***Low gray whale calf counts are especially troublesome because they could indicate a reduction in the reproductive capacity of the population.*** *(our emphasis). Gray whale females can birth birth to a calf every two years -12-13 months for gestation, followed by the birth of a calf and then 6-9 months nursing before the calves can feed on their own. Scientist Mary Lou Jones used photographic identification data to estimate the calving interval for female gray whales that were seen during a 5-year period in Laguna San Ignacio. Her estimate based on re-sightings of these female whales was 2.11 years during the period 1977 to 1982. Biologist Sergio Gonzales of the UABCS whale research team developed a new estimate for calving interval of 2.48 years for the period 1996-2000 suggesting that fewer females are reproducing every other year and that the reproductive rate of the gray whale population is*

[21] Preliminary comparison of winter counts of gray whale in Laguna San Ignacio, B.C.S, Mexico from 1978 to 2008.

slowing down. These lower calf counts could indicate that some gray whale females are unable to obtain sufficient energy resources to conceive, or if pregnant to bring calves successfully to term, or their claves do not survive after birth.

CALVING STATISTICS.

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

Table 21. Calf Abundance

The calf count in 2007 was the lowest mid point count in 30 years in the San Ignacio Lagoon according to Mexican and US scientists.

The annual count of northbound whales by the American Cetacean Society demonstrates the current situation.[22]

A joint research and education project of UCSB's coal oil point reserve, Goleta + American Cetacean Society – Channel Islands + Cascadia Research Collective, WA + Marine Physical Laboratory, Scripps Institution of Oceanography, UCSD, La Jolla cites:-

" In 2007 we observed a troubling, estimated drop-off of 46.8% in calves from the previous year, 2006. A similar percentage was reported from other primary, survey stations along the migration route. The confirmation has alerted scientists who are investigating climate changes and access to prey in the primary feeding regions off Alaska. Observed

22

http://www.learner.org/jnorth/images/graphics/gwhale/ACSLA_020408.gif

stress on the population points up the importance of consistent monitoring and close collaboration between survey sites. [23]"

AFA Int. does not intend to debate the calf statistics as there is no research done by NMFS on the extent of orca predation and no way of ascertaining the status of calves once they reach Russian waters.

The pod sizes have changed and require in depth investigation as estimates appear to have been pushed upwards by fiddling with correction factors and size of pods.

ORCA PREDATION.

The extent of orca predation has been ignored in the DEIS. Yet scientists from Monterey and Alaska are documenting mortality rates of up to 30% in the Gray Whale population in some years. Orcas are predating on juveniles as well as calves. Russian scientists details attacks on two and three year olds. California whale watching captains have seen fatal attacks on adult whales.

Killer whales from Puget Sound have turned up in Monterey Bay for the sixth season in a row. Many observers believe this is an ominous sign that killer whale behaviour is changing.

Matkin and Barrett-Lennard have identified three distinct lineages of killer whales. Marine mammal eating transient killer whales predate on gray whales. Heavy predation occurs in Monterey Bay and Unimak Pass.

In their paper, [24] they document 18 observed kills observed at False Pass in 2003 and 2004 (May to early June). The paper documents a total of 165 mammal-eating transient killer whales were identified and the majority (70%) were encountered during spring (May and June). The diet of transient killer whales in spring was primarily gray whales.

At the 2005 Puget Sound/Georgia Basin Region Conference, Priority Conservation Areas (PCA) were identified on the border between British Columbia – Washington. The Strait of Juan de Fuca was identified as a key habitat for killer whales. Although no hunting will be permitted if the waiver is granted in the Strait of Juan de Fuca, nevertheless the number of transient orcas likely to be present in the area and their impact on the resident gray whale population has been ignored in the DEIS

The DEIS is particularly deficient in any estimation of the extent of orca predation on gray whales. A project entitled:- *Determining the role of killer whales as apex predators is central to understanding the function and dynamics of marine ecosystems of the Aleutian Islands (AI), Bering Sea (BS), and Gulf of Alaska (GOA).* Wade et al. focused on Steller sea lions, not gray whales.

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[23] *http://www.acschannelislands.org/2008ProjectDescrp.pdf*

[24] Fish.Bulletin 105:74-87 (2007) Ecotypic variation and predatory behavior among killer whales (Orcinus orca) off the eastern Aleutian Islands Alaska

Collaborative studies with the North Gulf Oceanic Society (NGOS) have identified a hot spot in distribution and abundance of transients around the western end of the Alaska Peninsula and in the eastern Aleutians, coinciding with the northbound migration of gray whales into the Bering Sea in late spring. Migrating gray whales have increased in abundance over the past three decades, providing a predictable seasonal food source which may have indirectly increased predation pressure on pinnipeds and other marine mammal species later in the summer.

" *In the coastal waters of the Chukotski Peninsula, during the ice-free seasons of the years 1990 to 2000, Inuit hunters reported all of their observations of killer whale predation on marine mammals.(Melnikov & Zagrebin, 2005) Of 92 attacks on marine mammals, 66% were on gray whales, of these 23 resulted in successful; kills, 6 were unsuccessful and the outcome was unknown of the other 32.* [25]

" Killer whales may kill multiple gray whales. For example, when a pod of 12 killer whales were hunting in the area off Inchoun village on 5-10 August 1999, hunters noted six carcasses of gray whales killed by killer whales and beached after a storm.

Of the killer whale attacks on gray whales reported by hunters when the result was known, nearly 80% of the gray whales were killed and 20% escaped."[26]

There is a reported loss of about 30% of the calves between the breeding lagoons and central California (Swartz, 1986). This needs to be investigated.[27]

STINKY WHALES.

The historic record demonstrates that contamination of gray whales has been recognised as a major problem at least since 1990.

At the 1990 meeting – Report of the Special meeting of the Scientific Committee on the Assessment of Gray Whales, the following statement was made:-

" The Committee recommends that all strandings of gray whales throughout their range should if possible be investigated and samples collected to determine contaminant levels, including particularly animals from the Kodiak Island area. Schweder and Fleischer believed that such studies should investigate the effect on reproductive capacity where possible.'

IWC Ulsan, 2005 Plenary Agenda Item 4.3 and 15.2 [28] Table 5 documents the number of sightings, harassments and observed kills of known marine mammal prey species. In May-June 18 there were 18 observed kills of gray whales. Ac

[25] Mizroch 2006 MarEcoProgServ.
[26] Killer Whale Predation in coastal waters of the Chukotka Pensinsula. Marine Mammal Science 21(3) 550-556 July 2005 Melnikov & Zagrebin.
[27] Urban et al Review of Gray Whales in Mexican waters. J. Cetacean Res. 5(3) 281-295, 2003

[28] IWC/57/17

Proposal. A more comprehensive investigation should be taken for a number of reasons: The following is relevant to the Makah DEIS.

- There is a compelling need to determine the cause of this phenomenon, as it could threaten both cetacean and human health, and could be an indicator of habitat degradation.

Russian veterinarian Gennady Zelensky, head of the Chukotka Science Support Group says the phenol is the toxin which makes the whales stink.

Phenol is carbolic acid, a highly toxic industrial solvent that smells distinctly like disinfectant. It is used and dumped in vast quantities throughout Siberia by oil refineries and diamond mines, in natural gas exploration and extraction and a host of other heavy industries that operate in the former Soviet Union's far eastern hinterlands with little oversight and nowhere to safely dispose of toxic industrial waste.

" Last summer, Zelensky participated in a study of phenol contamination in the salmon, sturgeon and whitefish of the great Amur River in eastern Siberia. For several years, the fishermen who ply the Amur have complained that their catches are dwindling and that many of the fish in their nets disgorge a chemical smell when cut opn. Every fall, when the brown water of the Amur begins to freeze, an eye-watering medicinal reeks sets in along the ice. The fishermen describe the smell as like the inside of a drugstore or health clinic.

" Tests showed the fish of the Amur are heavily contaminated with phenol. That was no surprise, as the Amur is loaded with phenol, same as most major rivers that flow through the Russian Far east.

" Zelensky says in August he tested for phenol in the blubber and livers of five freshly killed gray whales in Chukotka. Though none of them were stinky whales, all five tested positive for the solvent."[29]

RUSSIA –CONTAMINANTS – MEXICO – CONTAMINANTS ?

" The Chukotka Science Support Group sampling is in the first phase of a study of contaminants in the Eastern North Pacific Stock of gray whales. The study was funded by the National Marine Fisheries Service to investigate the causes and potential human health effects of stinky whales.

" The situation is quite severe," says Dr. Vladimir Orlov, the Russian Federation's Minister of Natural Resources. " This is the region (Siberia and the Far East) where our industrial development is the heaviest. Sixty-nine per cent of Russian oil exploration is being conducted in this region, along with 78% of natural gas exploration, and 90 per cent of our natural gas extraction efforts. There is also heavy mining, timber and other chemical waste producing activities. Unfortunately, there are no special sites for hazardous chemical storage in this region that are well equipped."[30]

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[29] Survival, David Holthouse. New Times Inc. 2005
[30] Ibid.

" *You look at the level of chemicals in most of our rivers in Siberia and it can be seen there are more toxins in the river than water*, " says Mikhail Krykhitin of the Amur Inland Basin Laboratory, an affiliate of the Russian Federation's Pacific Fishery and Oceanography Institute."[31]

NMFS has not revealed, published or provided any information on the study funded by the agency.

Phenol and other forms of industrial toxic waste, including PCBs, act as endocrine disrupters creating havoc with hormones resulting in greatly decreased rates of reproduction.

NMFS has failed to carry out any studies which would identify whether the consistently low calf count is related to toxic contamination of the Russian waters.

RUSSIAN NEEDS STATEMENT IWC 2007 ABORIGINAL SUBSISTENCE WHALING ANNEX D.

QuickTime™ and a
TIFF (LZW) decompressor
are needed to see this picture.

IWC Aboriginal Subsistence Whaling report 2006 indicates '*in relation to the ' stinky whale'* issue, there is a related gray whale study started in Mexico in March 2006 to obtain breath samples for chemical analyses from free swimming whales. Samples will also be obtained from free swimming gray whales in the fall, offshore the State of Washington (feeding grounds). The results of these studies will be made available to the Scientific Committee next year. '

No such information is available in the DEIS. Given that samples were to be obtained in Washington state, this research is particularly relevant and should be included in the DEIS.

The same report states:-

" *Mexico said that in the 2005 IWC Annual Report on page 102, the Russian Federation indicated that there is information that the winter habitat areas of gray whales in Mexico are chemically polluted."*

[31] Ibid

None of this information has been provided in the DEIS. If, in fact, there is chemical pollution along the entire migration route then not only should the cumulative impacts of the toxic load be investigated but any consumption of the Gray whale should be viewed as a potential health risk pending proper published studies.

CHUKOTKA/MAKAH RELATIONSHIP.

In September 2005, Makah tribe biologist, Nathan Pamplin, visited Chukotka on a *" scientific exchange"* to evaluate the type of data they collected on landed whales and to evaluate the logistics of studying the *" stinky whale*" phenomenon that was raised during both the Aboriginal Whaling sub-committee and the Conservation sub-committee at IWC 57 in Ulsan, Korea.

During the visit, a member of the Makah tribe took part in whaling which was claimed to have occurred in Russian territorial waters.

Pamplin writes in an email to John Arum, lawyer, dated September 13, 2005 that " *the information that I learned will be shared with other US delegates to the International Whaling Commission. At IWC 58 I plan to discuss ways that the Russian Federation can increase the amount of data collected from landed whales, both in terms of understanding more about gray whales, in general, and to address specific concerns about " stinky whales*."

No such data is evident in the DEIS. Although several studies by Pamplin are cited, none of the papers refer to *" stinky whales*" or any data collected by the Russian Federataion. The failure to provide information gained by the Tribe's biologist in the DEIS is a gaping hole in the document. As the Makah propose to consume any slaughtered whale, the concern surrounding Gray whale contamination must be discussed comprehensively in any DEIS. That the Tribe's own biologist, after visiting Chukotka on a " *scientific exchange*" has no research or information to contribute to the " *stinky whale* " issue is of major concern.

Samples which were supposed to have come back from Russia to the US are not mentioned. Acivist groups who attempted to find out if NOAA had actually issued a permit to bring back samples have not been able to obtain relevant information.

These samples are important research which should be documented in the DEIS.

Pesticides, toxic contamination.

The gray whale feeds primarily on benthic prey using suction to engulf sediments and prey from the bottom, then filtering out water and sediment through their baleen plates and ingesting the remaining prey. This feeding strategy often results in exposure to sediment associated contaminants.

Tilbury et al (1999) studied contaminants in gray whales. During migrations, prolonged fasting may alter the disposition of toxic chemicals within the whales' bodies. Gray whales feeding in coastal waters may be at risk from exposure to toxic chemicals in some regions. The higher concentrations of PCBs found in stranded animals compared to harvested animals may be due to the retention of organochlorines in blubber during fasting rather than increased exposure to these contaminants.

The elevated concentrations of certain trace elements (e.g., cadmium) found in some tissues, such as kidneys, of stranded animals and the high levels of aluminium found in the stomach contents and tissues of harvested whales, compared to other marine mammal species is consistent with the ingestion of sediment by gray whales. [32]

Organochlorine (OC) pollutants are among the most widespread and persistent chemical contaminants present in the marine environment. (Tilburny et al/Chemosphere 47) 2002 555-564). These pollutants bioaccumulate in lipid rich tissues of marine mammals. Males cannot eliminate OC's as females do through gestation and lactation. (Wagemanna and Muier, l984. . Tilbury paper)

Toxic and essential elements found in gray whales are of concern because of their toxilogical significance and possible accumulation in certain organs (eg. Kidney, brain) of marine mammals. Mercury is pephrotoxic in mammals, it has been suggested that aluminium may alter brain function. (Goyer, l986). (Tilbury paper).

In the Tilbury et al study, tissue samples were collected from juvenile gray whales in their Arctic feeding grounds in the western Bering Sea, a relatively pristine area according to the authors.

Concentrations of Ocs (PCBs, DDTs, hexachlorobenzene) selected non essential, potentially toxic elements (eg . mercury, cadmium) and essential elements (selenium) along with per cent lip were determined in tissue samples and stomach contents of these animals.

Wolman and Wilson (l970) reported the presence of DDT's in 6 of 23 gray whales that stranded off San Francisco, California during both their northern and southern migrations. Schaffer et al (l984) reported concentrations of DDTs in blubber of a gray whale stranded in southern Claifornia in l976. Varanasi et all (l993, l994) reported chemical contaminant data for 22 gray whales that stranded along the west coast of the US from l988 to l991.

The Tilbury paper compared OC levels in the juvenile subsistence whales with juvenile whales that stranded from l988 to l991 and found that the juvenile stranded animals had significantly higher mean concentrations of PCBs and DDTs than the juvenile subsistence animals.

Researchers conclude that they would expect to find higher concentrations of OCs in gray whales that feed near urban areas than OC levels in animals that feed in more pristine waters.

In l985, nine gray whales died within Puget Sound, Washington. Although the cause of death was not determined conclusively, there was speculation that the deaths were due to toxic chemical contamination. (Swartz l986 MMC)

Washington Department of Fish & Wildlife in their Status Report for the Killer Whale, March 2004 cites studies which establish the transient and southern resident populations of the northeastern Pacific as among the most chemically contaminated marine mammals in the world (Ross et al 2000, Ylatalo et al 2001).

[32] Status Review 1999

" *This conclusion is further emphasized by the recent discovery of extremely high levels of SPCBs in a reproductively active adult female transient that stranded and died on Hugeness Spit in January, 2002. While alive, this whale was recorded most frequently off California thus its high contaminant load may largely reflect pollutant levels in prey from that region*. "

According to the report, a primary factor in the decline of killer whales in the northeastern Pacific may be exposure to elevated levels of toxic chemical contaminants, especially organochlorine compounds.

'.. many organochlorines are highly fat soluble and have poor water solubility, which allows them to accumulate in the fatty tissues of animals, where the vast majority of storage occurs. (0'Shea 1999, Reijnders and Aguilar 2002). Some are highly persistent in the environment and resistant to metabolic degradation. Vast amounts have been producted and released into the environment since the l920s and l930s. The persistent qualities of organochlorines mean that many are ultimately transported to the oceans, where they enter marine food chains. Bioaccumulation through trophic transfer allows relatively high concentrations of these compounds to build up in top level marine predators such as marine mammals (O'Shea, 1999). … Organochlorines enter the marine environment through several sources, such as atmospheric transport, ocean current transport,. And terrestial runoff (Iwata et al.1993. Grant and Ross 2002)… Much of the organochlorine load in the northern Pacific Ocean originates through atmospheric transport from Asia (Barrie et al. 1992, Iwata et al. 1993, Tanabe et al 1994)."

The report recognizes the vulnerability of marine mammals to biotoxins.

" Killer whales are candidates for accumulating high concentrations of organochlorines because of their position atop the food chain and long life expectancy. Their exposure to contaminants occurs only through diet. "

Since Resident gray whales feed in Washington state on mysids and benthic organisms, the lack of any tests to establish levels of contaminants in these whales should not be considered grounds for asserting that eating the meat of gray whales is " *safe*" for the Makah tribe.

As bottom feeders, gray whales are particularly susceptible and vulnerable to the exponentially growing contamination of the North Pacific, Bering, Chukchi, Beaufort Seas.

RESIDENT WHALES.

The importance of protecting resident whales and their habitat/prey is highlighted by Earthwatch Institute in an article by Dr William Megill who has studied the gray whales for many years.

He says " *the observed shift in the Bering Sea benthos, which may be due to long-term global warming induced effects, may now have begun to push whales further into secondary habitat in the Arctic and possibly into tertiary or even quaternary habitat in Baja California. If this is the case, then it is more important than ever to determine the significance of these new feeding niches if the grey (sic) whale is to remain off the Endangered Species List*."

" *The degree to which seasonal resident gray whales should be managed as a unit separate from the overall gray whale population is unclear. The animals that feed in Pacific Northwest waters appear to make the southern migration to Mexico each year and therefore are part of the larger breeding population of gray whales. Depending on the stability of this group and how animals are recruited to this strategy, they may represent a unit that should be managed separately.*

" The management implications of seasonal resident whales has become controversial recently due to the resumption of whaling by the Makah tribe in northern Washington (Quan 2000). The management plan for the Makah hunt calls for targeting migrating whales but it is unclear how effectively current strategies would be in avoiding takes of seasonal resident whales. (Quan 2000). This study shows that many gray whales identified as early as March during the gray whale migration were animals that had been seen in previous years and stayed through the summer and fall. This would make it more difficult to effectively target whales that were not part of this small season resident group." [33]

At the 2005 Puget Sound Georgia Basin Research Conference, biologist John Calambokidis of Cascadia Research said gray whales that ventured inland were more likely more vulnerable to shore-based hunters than those that swam farther offshore.

He said the ones that stop in the Northwest tend to not have as many young as the larger population. This comment is important as there is no easy way that Makah hunters can determine whether a whale is a resident or a non-resident.

Of primary importance in commenting on the resident whales is the following cite from the 9th Circuit [34] :-

'*The crucial question, therefore, is whether the hunting, striking, and taking of whales from this smaller group could significantly affect the environment in the local area. The answer to this question is, we are convinced, both uncertain and controversial within the meaning of NEPA. No one, including the government's retained scientists, has a firm idea what will happen to the local whale population if the Tribe is allowed to hunt and kill whales pursuant to an approved quota and Makah Management Plan. There is at least a substantial question whether killing five whales from this group either annually or every two years, which the quota would allow, could have a significant impact on the environment.'*

STRANDING DATA.

" Reports from a portion of the stock's range indicate that only 5 and 6 strandings were reported in 2002 and 2003, respectively. (C. Allen, NMFS-National Stranding Database pers.comm) " CITE SAR 2007

Stranding data is not current and therefore comment cannot be made without current data.

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[33] Final report – Range and movements of seasonal resident gray whales from California to Southeast Alaska. Calambokidos et al, December 2000.
[34] Anderson v Evans, 9th Circuit.

The PBR value should not be set without this information and is a violation of s. 118 f the MMPA.

PREY.

Although NMFS is strident in its efforts to persuade the public that the Gray whale is now a " *generalist feeder*" There is no current research to support the contention. 80% of their primary prey comes from the benthic biomass in the Bering and Chukchi Seas. The amphipods on which Gray Whales predate are severely affected by increased seawater temperatures and resulting loss of ice.

Carl Safina, president of the Blue Ocean Institute explains the system with exquisite simplicity.

Noting research that shows how diminished sea ice may be forcing gray whales to swim hundreds of miles farther north to find food Safina is reported in the Orange County Register saying: - ' *Sea ice in the northern Bering Sea formerly melted in April, releasing nutrients that fed single-cell plankton that bloomed, died and fell to the ocean bottom because it was too cold for animal plankton to graze on it. That created a rich biomass on the ocean bottom, feeding creatures eventually exploited by gray whales, walruses and diving ducks.*

'With sea ice melting sooner there is not enough sunlight to fuel the initial plankton bloom so early in the season. A lesser bloom of single-cell plankton comes later and the water is warm enough for zooplankton to come and graze off that plankton. Those zooplankton are eaten by fish that can thrive in the warmer water- and there's less to eat by the animals eaten by gray whales.

" The food chain has shifted from one that created dense bottom fauna foraged by certain marine mammals and diving ducks to one foraged by fish.

" And the warming water also allows other fish to move in like Pollock to eat those smaller fish. So it goes from that top down, bottom-dominated system to a pelagic or ocean-water column, fish-dominated system."[35]

Dr. Liz Alter adds her concerns to the status of benthic prey and the changes in the marine ecosystem.

" *Nearly all marine mammal species that depend on Arctic resources for prey will face impacts from climate change in the near future, and gray whales will be no exception. Gray whales feed on benthic amphipods and other small prey along shallow continental shelves in the Arctic by scooping up mouthful of benthic matter. Significant ecosystem-level changes in gray whale feeding grounds in the Bering Sea have already been documented (e.g. Grebmeier et al 2006). The feeding range of gray whales has also changed significantly since the l980's (Moore et al 2003) moving from feeding grounds in the Bering Sea to more northward areas above the Bering Strait. Unfortunately, there is currently no way to predict how the prey base that gray whales depend upon will change as the climate in the Arctic*

[35] The Orange County Register September 1, 2007 Dan Joling Associated Press

warms due to complex interactions between projected changes such as reduced ice cover, increased freshwater input, and changing ecological dominance. However, this uncertainty serves to emphasize the importance of continued and vigilant monitoring of the gray whale population as well as the Pacific ecosystems upon which they depend."[36]

Although the recent paper by Coyle et al [37] suggests that the decline in amphipod biomass is coincident "*increasing gray whale populations and were probably the result of top down by gray whales on the amphipod populations*", an alternative hypothesis is also possible given that Gray whale population is not increasing but in decline. The study focuses on a comparison of the mid 80's and 2002-2003. 2002-3 was the post die-off period following a major population crash that removed at least 30% of the population. There was no SAR in 2003 or 2004. The 2005 SAR put the 2002-3 population at around l8, 000. So the hypothesis that " *increasing gray whale populations*" had caused the decline is questionable.

According to Highsmith Coyle (1992) " *a similar if not greater decrease in amphipod biomass was documented from 1986 to l98*8." Both scientists claim that the amphipod biomass can take five to 100 years to recover.

'*Specifically Highsmith and Coyle 1992 showed that the abundance and biomass of the amphipod community decreased during the 3 year period from l986-l988, resulting in a 30% decline in production. They noted that high-latitude amphipod populations are characterized by low fecundity and long generation times, and that large, long-lived individuals are responsible for the majority of amphipod secondary production. Therefore, a substantial reduction in the density of large individuals in the population will result in significant long term decrease in production*'[38]

Bottom trawling has also been implicated in major changes in the benthic community.

Gray whale population estimates in 1986 –l988 were 21,444 and 22,250 respectively.

In 2004, the US Geological survey's Dr Hans Nelson reported that certain environmental stresses in the Chirikov Basin would negatively impact gray whales.

" *Knowledge of the feeding habits of gray whales and the geological framework of which the habitat of amphipods depends suggest that any disturbance to the ecosystem could significantly reduce the gray whale population within a few years. Calculations suggest that the Chirikov Basin provides a minimum of 6 per cent of the food supply for the California Gray Whale. Gray whales feed here for about 5 months before migrating south as Arctic sea ice advances; loss of the amphipod ecosystem would substantially reduce the whales' food supply. Such a loss of amphipod habitat could occur, for example, if sand is removed to support construction in Alaska or if the sand sheet is contaminated by petroleum spills.* '

Ken Weiss, LA Times journalist, writes in an article July 6, 2007: -

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[36] Dr S. E. Alter, Marine Mammal Fellow, NRDC, letter of support for Resolution AJR 49 to Assemblyman Pedro Nava, California Assembly, March 31, 2008

[37] Amphipod prey of gray whales in the northern Bering Sea: Comparison of biomass and distribution between the 1980s and 2002-2003. Coyle et al. Science Direct, Deep-sea Research Part II, March 7,2007.

[38] Status Review, 1999

‘ *Scientists first thought that the gray whale population, which had been hunted nearly to extinction in the 1930s, had simply grown too large for its primary food source and eaten more than nature could provide. Such overgrazing was thought to have been responsible for the mass die-off in 1999 and 2000 that saw the population drop from 26,600 to about 17,400.*

‘ *Now scientists suspect that the climatic changes in the Bering Sea played a role in the population plunge by reducing the whale’s primary food; amphipods that appear to be affected by warming temperatures and vanishing sea ice.*

‘ *These amphipods grow in tubes on sandy or muddy seafloors and cannot move around like many sea creatures. They count on bits of algae to come to them, or at least close enough so they can use their antennae to pull the food into their mouths.*

‘ *One source is a confetti that rains down from shaggy mats of algae that grow on the underside of ice sheets at the ocean’s surface. Another is brought by ocean currents, carrying a soupy mix of algae or plankton.*

‘ *Both sources have diminished or been cut off as the northern Bering Sea has undergone a shift from a seasonally ice-dominated region to more of an open ocean dotted with thin ice that is quickly broken up by storms. And the basin’s waters have warmed enough to allow new types of fish to migrate north, gobbling up the amphipods or competing with them for food.*

“ Whales are not the only animals struggling to adapt to these rapid changes. Researchers have also noticed dramatic declines in other species that feed on the bottom such as walruses and sea ducks.’

In their paper detailing genetic research on the Gray whale,[39] Alter, Rynes and Palumbi say the Gray whales play a key ecological role in their Arctic feeding grounds, stirring up sediment that increases nutrient cycling in the ecosystem.

‘ *At previous levels, gray whales may have seasonally re-suspended 700 million cubic meters of sediment, as much as 12 Yukon Rivers, and provided food to a million seabirds,’* the authors write.

‘ *Decreased sediment reworking could dramatically change nutrient recycling, and create shifts in benthic species dominance.’*

NMFS scientists acknowledge that a reduction in primary food supply was the cause of the population crash in 1999/2000.

‘ *We agree that the symptoms observed in this population in 1999 and 2000 are likely related to an overall reduction in nutritive condition of individuals within the population. We suspect that the dramatic nature of these events are the result of a synergistic interaction of lower*

[39] DNA evidence for historic population size and past ecoystem impacts of gray whale. S. Elizabeth Alter, Eric Rynes and Stephen R. Palumbi (2007)

overall food availability and reduced access to this already depleted resource caused by extensive seasonal ice."[40]

OIL AND GAS EXPLORATION

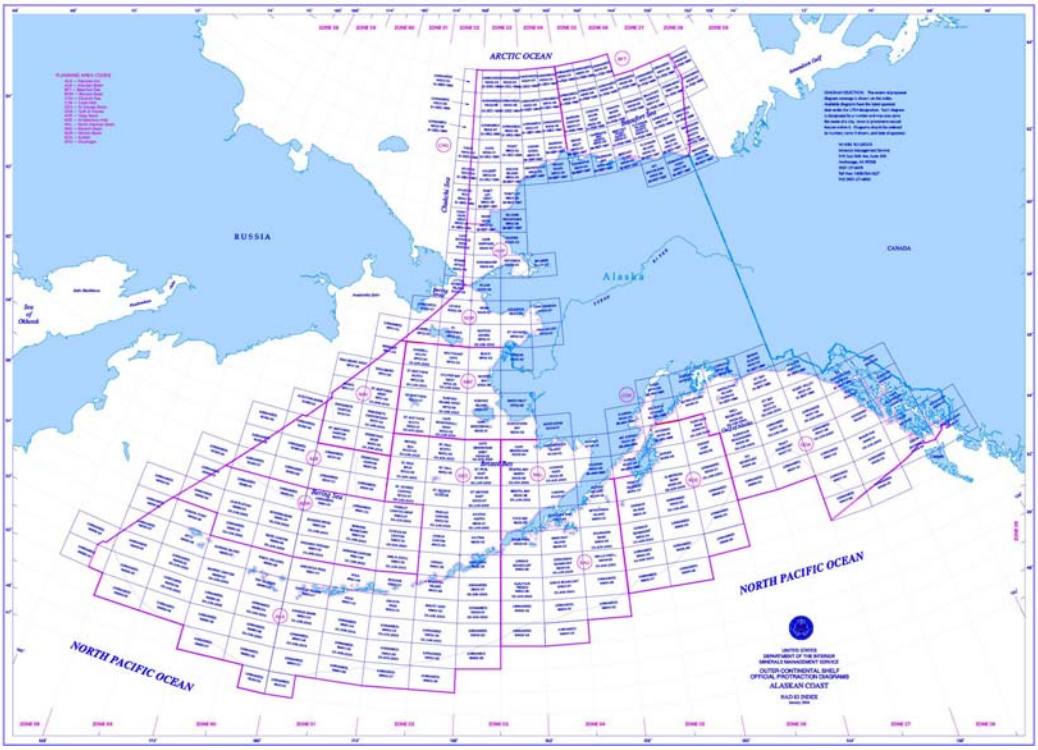

Table 22. Minerals Management Service Map

" *Because of the potential for human-related impacts along migratory corridors and calving grounds off the south- eastern coast of Asia, as well as on the feeding grounds, project scientists expressed serious concern for the future survival of the population. They noted that the proximity of whales to seismic surveys, drilling, ship traffic, and other activities associated with offshore development could displace gray whales from essential feeding areas, and that oil spills, dredging, and other forms of pollution and construction could impact gray whale prey resources.* "[41]

There is no difference in the risks that threaten the Eastern Pacific Gray Whale with similar consequences.

The US Geological Survey estimates the Arctic has as much as 25 per cent of the world's undiscovered oil and gas. Russia reportedly sees the potential of minerals in its slice of the Arctic sector approaching $2 trillion.

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[40] Marine Mammal Science Vol. 18, No. 1 2002 Gray whale calf production 1994-2000; are observed fluctuations related to changes in seasonal ice cover. Perryman et al.

[41] Marin Mammal Commission – Annual Report for 2002.

The US Government has recently sold 29.4 million acres in the Chukchi Sea for oil lease sales.[42] Within this lease sale is critical feeding habitat for the Gray Whale.

According to the US Minerals Management Service Environmental Impact Statement there is a 33 to 50 per cent chance of a 1000-barrel spill in the area.

MMS Alaska OCS Developed Leases

According to MMS are 173 operating leases in the Alaska OCS Region. See attached maps showing the locations of existing leases.

Chukchi Lease Sale 193

The Federal Government has recently sold 29.4 million acres in the Chukchi Sea for oil lease sales. Within this lease sale is critical feeding habitat for the ENPGW.

There are two other lease sales scheduled for the Chukchi Sea in the MMS Artic Region 5 year plan for 2007-2012.

The Chukchi Sea is the most productive high latitude ocean system in the Arctic. Its shallow and highly productive sea floor (benthic system) allows bottom-dwelling prey (crustacea, mollusks, etc) to flourish, creating a buffet for wildlife specialized to feed off the ocean floor, such as the gray whale.

Gray whales are particularly at risk with the proposed development, yet the National Marine Fisheries Service (NMFS) has failed to accurately document those impacts in their DEIS. They fail to acknowledge the critical feeding habitat of the gray whale and the significant impact of seismic, drilling and other operations.

Major changes in recent decades from arctic to subarctic conditions in the northern Bering Sea ecosystem has resulted in the loss of tight benthic pelagic coupling that previously supported high benthic standing stocks is resulting in the decline in prey of gray whales and other benthic feeders. Gray whales have responded by relocating their primary feeding area northward. Their calls have been recorded throughout the winter near Barrow, and local hunters report that gray whales are more numerous along the Alaskan North Slope than in the past. Gray whales moving north through the Bering Strait in June, following leads in the pack ice northward. Gray whales have been observed feeding off Barrow until well into October. (Annex K- Report of the Environmental Concerns SWG and Chairman's Report of the SC, 2005).

One of the highly used feeding areas for the gray whale is the Hannah Shoal in the northeast corner of the leasing area, just off of the Barrow Point. (Moore S.E., DeMaster D.P., 1999) This is also the central location to be developed by industry. This critical feeding area was not discussed in the DEIS, or was an analysis done regarding the impact to gray whales of the loss of this primary feeding area. Disastrous impacts to Gray whales are bound to occur, particularly given the extensive pipeline infrastructure planned for the area. Look no further than the WP Gray whale and the consequences of similar infrastructure.

[42] http://www.mms.gov/ld/Offshore_Cadastre/Alaska/pdf/akindex.pdf

Both gray whales and walrus are at great risk from pipeline development in the Hannah Shoal area (COMIDA Meetings, Nov. 2006). Both marine mammals are bottom feeders that rely on benthic species populations. The impact from pipeline infrastructure displacement is greatly minimized by the government. The impact to gray whales from infrastructure disturbance to feeding area may result in movement away from the area. If the whales continue to feed in the area, a greater risk is assumed with the impacts of bioaccumulation. For example, "drilling muds probably would not kill benthic organisms, but any heavy metals in them might be accumulated by benthic organisms, adding to the body burden in vertebrate consumers." 5-year plan DEIS at IV-65.

The Hannah Shoal area is known to have annual ice keels (deep gouges into the sea floor). The impact of these on pipelines are not discussed in the DEIS. There is a risk for chronic, undetected oil leaks. Undetected leaks from underwater pipelines could impact gray whales by contaminating the benthic communities they feed on and subsequently accumulating in the whale. Additionally, if the whales continue to choose to feed in this area, then traffic and other impacts would be realistic.

Chukchi Lease Sales 212 and 221
Beaufort Lease Sales 209 and 217

The MMS is also in the process of preparing an EIS for two Beaufort Sea and two additional Chukchi Sea oil and gas leases. The area to be evaluated for Beaufort Sea Sales 209 and 217, slated for 2009 and 2011 respectively, encompasses approximately 33 million acres, 3 to 205 statute miles off the northern coast of Alaska. The area stretches east from Barrow to the Canadian border.

The area for sales proposed for the Chukchi Sea, Sales 212 and Sale 221 slated for 2010 and 2012 respectively encompasses approximately 40 million acres located 25 to 275 miles off the coast of Alaska. The proposed sale area stretches from north of Point Barrow to northwest of Cape Lisburne

Seismic Testing Chukchi and Beufort Seas

Given concerns about esonification affecting important life history functions for a large portion of a population in areas of special concern[43], the IWC Scientific Committee recommends that further research be undertaken to quantify the exposure and potential impact of noise from seismic surveys within these areas and their effect on important life functions. (Annex K-Report of the Environmental Concerns SWG and Chairman's Report of the SC, 2005).

The Working Group recommended that impacts of seismic testing to bowhead, gray and Beluga whales must be determined. The group noted that the eastern North Pacific gray whales have a significant presence in the Beaufort and Chukchi Seas and should be considered when assessing seismic activities. (Annex K- Report of the Environmental Concerns SWG and Chairman's Report of the SC, 2005).

[43] Include restricted migratory routes, feeding grounds, breeding/nursery areas, resting ares, designated protected areas.

MMS-permitted seismic surveys have been conducted in the Federal waters of the Beaufort and Chukchi seas since the 1960's with a peak in the 1980's. The seismic exploration program now under way in the Arctic Ocean originally incorporated standards requiring companies to shut down their seismic shoots when whales are exposed to dangerous sound levels, which can extend 50 miles from the vessel. After first agreeing to this, Conoco Phillips went to court in 2007 and had this requirement suspended – an ominous sign of things to come. They continued their testing without monitoring the 120db exclusion zone for cow/calf pairs that was required to mitigate impacts to the bowhead whale. Conoco argued, in part, that aerial monitoring of the Chukchi was too difficult.

Conoco Phillips Alaska will be conducting shallow hazard and site clearance using acoustic equipment and airguns from August to October this year. The Arctic Slope Regional Corporation (ARSC) Energy Services (AES) – will be conducting shallow hazard site surveys between July and November 2008. Shell Offshore Inc. will also be conducting seismic testing from July to November 2008.

MMS OCS Oil and Gas Leasing Proposed Program for 2007-2012

The DEIS does not address the effects of the MMS OCS 2007-2012 five year plan on gray whale habitat. This is a shortsighted plan sacrificing America's Arctic.

The 5-year plan proposes 21 sales nationwide, nine of which are off Alaska: two in the Beaufort Sea, three in the Chukchi, two in the North Aleutian Basin (Bristol Bay), and two in Cook Inlet. The Alaska OCS, with its infamous stormy seas, sea ice and remoteness, is one of the most difficult working environments in the world. Clearly, the risks of offshore oil are greater in Alaska than anywhere else in the nation.

Marine ecosystems and marine mammals are at risk from oil spills, noise and other disturbance and habitat impacts, which would inevitably occur during exploration and development. Devastating spills that cannot be cleaned up in broken ice risk endangered bowhead, gray and other whales. Because of adverse conditions present in the Chukchi and Beaufort Seas most of the year, there is no oil spill response technology available to remediate an oil spill.

Oil pollution causes direct mortality, increases susceptibility to diseases in fishes, inhibits phytoplankton productivity, and interferes with reproduction, development, growth, and behavior of many species. In addition to the dangers of oil pollution, a number of other potential pollutants are common in offshore oil operations, including the dumping of toxic drilling muds and other chemicals involved in drilling.

An oil spill, regardless of its cause or the probability of such an accident, could adversely impact ENPGW and ENPGW habitat. While the impacts of such a spill are undoubtedly higher on the feeding and calving/breeding grounds, migrating whales may also be subject to the adverse effects of an oil spill.

Such effects may:

1) Kill or debilitate marine mammals by matting and reducing the insulating quality of fur, by acute or chronic poisoning due to inhalation or ingestion of toxic compounds or ingestion of contaminated food, by irritation of skin, eyes, or mucous membranes, or by fouling of the

feeding apparatus of baleen whales;

2) Kill, debilitate, or otherwise reduce the abundance or productivity (Availability) of important marine mammal prey species and/or species lower in the marine food web, and cause acute or chronic nutritional deficiencies including starvation;

3) Stress animals making them more vulnerable to disease, parasitism, and/or predation;

4) Interfere with formation of mother/young bonds and cause mothers to abandon their young;

5) Cause animals to abandon or avoid contaminated breeding areas, feeding areas, etc. and/or to concentrate in unaffected areas;

6) Attract animals to debilitated prey making them more vulnerable to contact with harmful compounds and oil and ingestion of contaminated prey (Swartz and Hofman 1991; Albert 1981; Geraci and St. Aubin 1990).

Oil spills result in high mortality in benthic amphipods on which the ENPGW relies for its primary prey.

According to the Minerals Management Service Environmental Impact Statement there is a 33 to 50 per cent chance of a 1000-barrel spill in the area. The estimated probability of an oil spill of greater than 10,000 barrels within the range of the ENPGW, for example, is 14% in southern California, 21-27% in the Bering Sea, 18-34% in the Gulf of Alaska, and 96% in the Chukchi Sea assuming commercially productive amounts of hydrocarbon are found in those areas (NMFS 1993).

Similarly, the probability of one or more pipeline or platform spills of 1000 bbl and greater, and 10,000 bbl and greater in the Chukchi Sea as 92 and 57 percent, respectively (NMFS 1993). Furthermore, because Chukchi Sea oil will be transported by tanker, MMS (1992) predicts a 93 and 81 percent probability of one or more tanker spills of 1,000 bbl or greater and one or more tanker spills of 10,000 bbls or greater, respectively occurring outside of the Chukchi Sea. MMS (1992) also predicts additional tanker and oil spills along the western coast of North America.

GRAY WHALES AND NOISE.

SC/A90/G5 (IWC Scientific Committee document) summarized the potential impact of offshore activities on gray whales.

“ Considerable research on the possible effects of noise associated with offshore oil and gas development on gray whales has been conducted since the mid-1980’s. Noise from oil and

gas sources occurs at frequencies that overlap gray whale calling (and assumed) hearing frequencies, and therefore can probably influence whale behavior.

In general, gray whales exhibited a 0.5 probability of avoidance to continuous noise levels that exceeded 120dB, and to intermittent noise levels that exceeded 170 dB re 1 u Pa. The distance at which whales responded to noise, and the type of response elicited, varied with the noise source, the locale and ongoing whale behavior.[44]

Gray whales are particularly sensitive to noise. Noise associated with industrial development, including oil and gas exploration, and other activities may adversely impact whales by:

* interfering with or disrupting communications, feeding, breeding, or other vital functions;
* causing animals to avoid or abandon important feeding area, breeding areas, resting areas, or migratory routes;
* causing animals to use marginal habitat or to concentrate in undisturbed areas which in turn may result in crowding, over-exploited food resources, increased mortality, and decreased reproduction;
* stress animals and make them more vulnerable to parasites, disease, and/or predation; and
* attract animals making them more vulnerable to oil spills, hunting, or harassment

In 1994, the US Marine Mammal Commission said: -
"*noise associated with coastal development and related activities could cause whales to avoid and, if exposure to the noise is prolonged, to abandon areas that may be essential to calving, nursing, and breeding.*

Noise impacts can also interfere with mother/ calf communication and may cause whales to abandon their feeding grounds moving to less productive areas where the prey does not provide sufficient food for their energy needs.

In the California Coastal Commission staff report and recommendation in relation to the BHP Billiton proposed LNG Terminal, [45] and the issue of noise cites a NAA Fisheries (2007) Reports that: -

> ' *Bryant et al (1984:in Polefka 2004) recorded the abandonment by gray whales of a calving lagoon in Baja California, Mexico following the initiation of dredging and increase in small vessel traffic. Following the termination of the noise-producing operations, the cow-calf pairs returned to the lagoon. Underwater noise associated with extensive vessel traffic has been documented to have caused gray whales to abandon some of their habitat in California for several years (Gard 1974; Increasing levels of anthropogenic noise have been identified as a habitat concern for whales and other marine mammals because of its potential effect on their ability to communicate (Carretta et al 2001; Jasney et al 2005).*

[44] Report of the special meeting of the Scientific Committee on the Assessment of Gray Whales. 1990
[45] CC-079-06 BHP Billiton Staff Report and Recommendation

The IWC Scientific Committee has stated that " *noise producing activities (such as seismic surveys or sonar operations) should not be conducted in critical habitats at certain times of the year, which could greatly reduce exposing mothers and calves or breeding animals to high sound levels*."

IWC Scientific Committee meeting in Japan received evidence of behavioral disturbance from seismic surveys on the Piltun Feeding Ground – Western Pacific Gray Whale habitat. This evidence noted that whales appeared to have moved away from the region where seismic surveys were conducted, reoccupying the region from which they had been displaced when the surveys ceased.

In 2001, the Scientific Committee strongly recommended that no seismic work be conducted while whales were present on their feeding ground. SC/54/BRGl4 provides strong empirical evidence in support of the Committee's concerns last year that seismic activities can have a major impact on gray whales. (IWC, 2002j, p.l82).

The Committee also recommended that acoustic monitoring and behavioral observations be conducted to examine noise-related disturbance of these whales; it reiterated that this recommendation should be implemented.

Further, the Committee was concerned to hear that additional seismic work is planned for 2002, 2003 and the future. It again **strongly recommended** (their emphasis) that no seismic work be conducted on or near the Piltun Feeding Ground while whales are present because: -

1. Gray whales in this area have shown strong avoidance responses to seismic survey activities during which they were displaced from important feeding habitat;

2. this region is the only known feeding ground for the population and is therefore critical to the continued survival of the population.

3. ' skinny ' whales including many reproductive females with calves have been observed in the area between l999 and 2001 and require maximum food intake during the summer feeding season;

4. the cumulative impacts of seismic operations on the health and survival of these whales, especially ' skinny ' animals, are unknown and of great concern.

All of the above recommendations should apply to the Eastern Pacific Gray Whale which has shown demonstrable avoidance to sonar pollution.

The IWC Scientific Committee in Japan also recommended that the following additional research items be pursued in terms of the Western Pacific Gray Whale.

1. Benthic sampling and prey resource assessment in known foraging locations and in areas outside of the feeding ground.
2. simultaneous theodolite based behavioral observations and acoustic monitoring of industry related noise to examine possible disturbance.

3. satellite and radio telemetry work to determine movements on the feeding ground, migration pathway(s) and location of the wintering grounds (tag design and attachment protocols, however should first be assessed on eastern gray whales to evaluate safety and effectiveness *** Note . once again Eastern Pacific Gray Whales to be used for experimental purposes.
4. obtain DNA and photos to match to existing catalogues of such materials of any stranded or living animals.

These same provisions should apply to the Eastern Pacific Gray whale.

Swartz l986 MMC. page l3. G. Reetz *'discussed the Minerals Management Service (MMS) concern for the possible cumulative effects of human industrial activities on gray whales during their migration along the California coast. At this time MMS is considering funding a program to estimate the abundance of migrating whales in the Los Angeles area over time and methods to correlate population trends with human activities in the area.'*

Swartz l986 MMC. Page l4. G Reetz summarized studies by Bolt, Beranek and Newman Inc. (Malme et al. l984) to investigate the potential effects of underwater noise from petroleum industry activities on migrating gray whales off central California. The researchers employed underwater playback of biological and non-biological (industrial) noise during the l983 migration to determine the reaction of migrating whales.

'*Shore based observers, unaware of the playback schedule, tracked the movements of the whales past the playback site. The results indicate a correlation between the playback of industrial and some biological sounds (e.g. killer whale calls) and changes in the behavior of whales. Additional experiments included the use of a single seismic air-gun as a source of industrial noise. The whales responded to this disturbance as well*.'

CLIMATE

According to a Survey on Ice Dependent Marine Mammals in Alaska [46] ' *Warming of the earth's climate is forecast to be greatest at the poles and the arctic region. In the Arctic, the challenge for species to accommodate such change is increased because of its large scale, the rapid rate at which the warming is predicted to occur, large inter-annual variation in climate, and the accelerated pace of human development. As a result, Arctic climate change is expected to have large effects. Higher ocean temperatures and lower salinities, contraction of seasonal ice extent, rising sea levels, and a host of other effects are certain to have significant impacts on marine species. For marine mammals adapted to life with sea ice, the effects of reduction in ice are likely to be reflected initially by shifts in range and abundance. Demographic changes associated with shifts in geographic range will likely e observed as decreased recruitment in areas of reduced sea ice.*

' Climate change will have substantial and possibly irreversible consequences on sea ice and ice-dependent marine mammals. The most serious threats to Arctic marine mammals are

[46] Alaska Oceans Program, November 2004

the loss of sea ice habitat and the unique ecosystem with which it is associated, and the related increasing human activities that result from easier access to the region.

' The ecosystem will likely be profoundly affected by the loss of sea ice because the presence of ice probably boosts the productivity in the Bering, Chukchi and Beaufort seas.

***' Because ice habitat is so integral to the existence of the marine mammal species discussed in this paper (note not gray whales but the paper is obviously relevant to the population) the rapid loss of sea ice and the cumulative effects of other factors appear to set the stage for drastic reductions in population and ultimate extinction of marine mammal species**."*

Gray whales are entirely dependent on climatic factors. Their prey, (amphipod *macrocephela)* needs very cold water to grow and survive. In 1999/2000, a third to almost half the Gray whale population died. Starvation appeared to be the major cause.

'Changes in the extent and concentration of sea ice in the Arctic Ocean over the past 20-30 years, coincident with warming trends, may alter the seasonal distributions, geographic ranges, patterns of migration, nutritional status, reproductive success, and ultimately the abundance and stock structure of some species (Tynan and DeMaster 1997a). Effects of climate warming on Eastern North Pacific Gray Whales are unknown, but studies of benthic-pelagic coupling in the Arctic and sub arctic (e.g. Grebmeier and Barry 1991) suggest depression of production in surface waters that may lead to reduced availability of gray whale prey in primary feeding areas of Alaska.'[47]

Research by Dr Elizabeth Alter et al (2007) identifies climatic shifts in the Bering Sea as a possible cause. Her paper indicates an historical abundance of gray whales between 76,000 and 118,000 whales. According to Dr Alter -

" *the results of this study also strongly imply that the population crash observed in 1999-2001 was not a result of the population reaching a natural demographic plateau, but may have been caused by other forces such as climatic shifts in the Bering Sea*."[48]

The status of the benthic community on which the Gray whales depend is in decline. According to a recent study [49] a decline of nearly 50% from maximum values in the 1980s was measured.

Amphipods feed on algae dropping from sea ice or carried by ocean currents. When the sea ice is diminished, the food web is disrupted. Whales are forced to feed on smaller amphipods which do not provide enough energy to complete the massive migration.

Gray whales have one of the longest migrations of any whale. Females need enough food to sustain the 12,000-mile migration; to give birth and to feed their young.

---

[47] Status Review 1999
[48] letter in support of AJR 49
[49] Amphipod prey of gray whales in the northern Bering Sea: Comparison of biomass and distribution between the 1980s and 2002-2003. Coyle et al Science Direct Deep-Sea Research Part II 7 March, 2007

In their feeding grounds, the Bering and Chukchi Seas, El Nino events combined with global warming have increased the seawater temperature and ensured that sea ice is disappearing fast.

QuickTime™ and a
TIFF (LZW) decompressor
are needed to see this picture.

Table 23. Annual Sea Ice Minimum

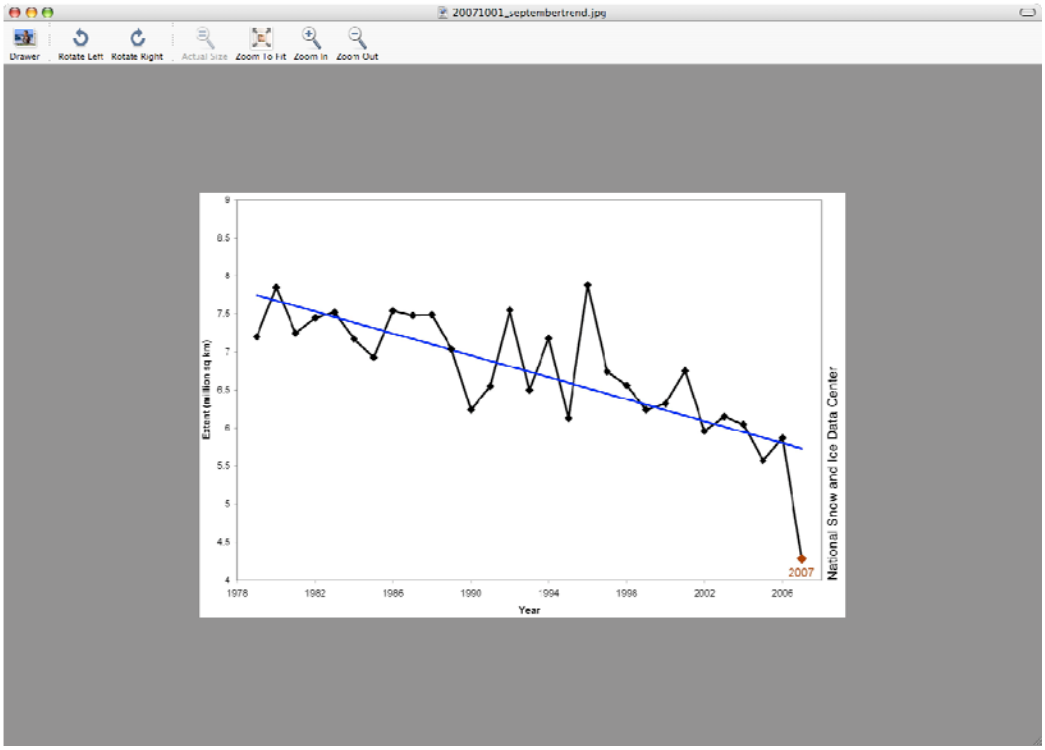


Table 24. National Snow and Ice Data Center Graph.

The extent of ice melt is so dramatic that the current decline exceeds the past records for the lowest ice periods in the 1930s and 40s. In 2005, scientists estimated the decline in ice amounted to approximately 1.3 million square kilometres – an area roughly twice the size of

Texas. In 2007, an additional 180,000 square kilometres, an area roughly the size of Florida, had disappeared.

A secondary warming effect is caused by the oceans absorption of a great deal of the sun's energy. As the sun begins to set in autumn, the heat stored in the ocean is released back into the atmosphere which increases air temperatures, thus decreasing sea ice.

2007 is the sixth consecutive year of melting sea ice in the Arctic with scientists predicting a new and steeper rate of decline.

Gray whales are specialist feeders. With no adequate substitute prey, their future survival is grim.

COMPARISONS BETWEEN DEMISE OF WESTERN PACIFIC AND EASTERN PACIFIC WHALES.

Tow NMFS gray whale scientists, Robert Brownell and David Weller (Southwest Fisheries Science Center in La Jolla) submitted a paper to IWC 2002 arguing against the carrying capacity theory. Both men have worked extensively with the Western Pacific Gray Whale.

They claim that overgrazing of feeding grounds is not the reason for the drop in numbers as with less than l00 whales, there is unlikely to be any lack of prey.

They suggest that more global or ocean wide changes may be influencing the availability of, or access to primary prey for numerous large whale populations. At a meeting of l0 other whale experts of the Society of Marine Mammology in Hawaii in l999, photographs of skinny whales from both Eastern and Western populations were shown. These photos demonstrated protruding shoulder blades, depressions behind the head, and a pronounced ridge or visible bulge along the lateral flank.

The scientists concluded these whales were starving. The two scientists hypothesized that changing weather patterns may be affecting sea ice, which would mean that feeding grounds are not as accessible to the whales. They suggested that some sort of " large scale ocean basin" climatic event affected both sides of the North Pacific Ocean in the late 90's and changed the availability of food for both Eastern and Western Pacific gray whales in the same way.

++++++++++++++++++++

One of the first casualties of climate change in the Arctic is likely to be the Gray whale. It is vitally important that the habitat of resident whales in Canada, Oregon, Washington and California be protected to ensure survival of the species.

On 25th July, a telephone conference call between NMFS scientists from SWFC, members of the Ocean Protection Council, California Assemblyman Pedro Nava and two representatives of the California Gray Whale Coalition, revealed key facts in relation to climate change.

Wayne Perryman, a scientist with NMFS made the following comments which are contained in an email from Ben Turner, staffer to Assemblyman Pedro Nava: -

Email from Ben Turner, 26/7

‘ It was a really interesting discussion and it raised a number of issues. One of the important things that I think came out of it was the emphasis on climate change, changing food sources and associated differences in habitat.
Aside from the economic impact that you mentioned, I'm not sure if we were all still on the phone or not, but Wayne emphasized that the gray whale is a keystone species in terms of reflecting the health of sub arctic ecosystems especially in regard to the benthos. Additionally, the gray whales feeding on benthic amphipods has important beneficial side effects in terms of bringing smaller invertebrates to the surface for feeding by marine birds, and adding nutrients to the system by defecating at various levels in the water column. The gray whale's behaviors and obviously their survival, has serious implications throughout the food web.’

Professor Stephen Palumbi, Stanford University, in a letter to California Assemblyman Pedro Nava, in support of Resolution AJR 49 states: -

“*A return to endangered status is reasonable for gray whales for another reason - the future of this population is thrown into doubt by the impact of global warming. Gray whales feed almost exclusively on cold-water bottom-dwelling crustaceans in the Bering Sea and northward. In the last 15 years, substantial changes in Arctic ecosystems have changed the feeding grounds of the gray whale, driving them further north than in past decades. These shifts have been correlated with observations of emaciated, starving whales and high calf mortality in some years, and have been linked to the wash of warm water from the Pacific into former gray whale feeding areas. Gray whales have been moving north as a result, having to migrate further from Mexican calving grounds each year. As they seek to feed in more northern waters where sea ice is retreating, gray whales may find themselves intersecting large oil and gas leases proposed in the shallow water Chuckchi and Barents Seas. The combination of climate change and petroleum industrialization may pose strong limits on gray whale feeding in the future. The lack of protection as an endangered marine mammal may limit efforts to ensure access of the gray whale to adequate feeding grounds as the Arctic climate changes*. “

Dr Elizabeth Alter, Marine Mammal Fellow, Natural Resources Defense Council in a letter to California Assemblyman Pedro Nava, in support of Resolution AJR 49 writes: -

“ *In addition to threats along the migratory route, gray whales also face an uncertain future with regard to their prey base or food supply. Nearly all marine mammal species that depend on Arctic resources for prey will face impacts from climate change in the near future and gray whales will be no exception. Gray whales feed on benthic amphipods and other small prey along shallow continental shelves in the Arctic by scooping up mouthfuls of benthic matter. Significant ecosystem-level changes in gray whale feeding grounds in the Bering Sea have already been documented (e.g. Grebmeier et al 2006). The feeding range of the gray whales has changed significantly since the l980s (Moore et al. 2003) moving from feeding grounds*

in the Bering Sea to more northward areas above the Bering Strait. Unfortunately, there is currently no way to predict how the prey base that gray whales depend upon will change as the climate in the Arctic warms due to complex interactions between projected changes such as reduced ice cover, increased freshwater input, and changing ecological dominance. However, this uncertainty serves to emphasize the importance of continued and vigilant monitoring of the gray whale population as well as the Pacific ecosystems upon which they depend."

LEGAL

AFA Int. is an IWC NGO. Since 1996 when the US delegation first brought the request for a quota on gray whales to the IWC, this organization has lobbied and taken legal action to stop any slaughter by the Makah Tribe.

AFA Int. believes that if a waiver is granted under the MMPA, at the domestic level other tribes could seek the same rights (see Judge Franklin Burgess opinion below) and a precedent will be set internationally which will see the opening up of new categories of whaling.

Excerpt from judgment of United States District Court Western District of Washington at Tacoma. No: C98-5289FDB Order Granting Defendant's Motion for Summary Judgment. Metcalf et al v. Daley et al.

" ***Precedent.***

The plaintiffs make a good point. The EA concedes that approval of the Makah hunt could encourage other Tribes to seek to exercise aboriginal rights to hunt whales. While the EA notes (and relies heavily upon) the fact that the Makahs are the only tribe in the United States with a treaty expressly guaranteeing the right to whale, it glosses over the fact that whale hunting may be deemed protected under less specific treaty language. "

Email sent to Chief, General Counsel Fisheries on May 30, l996

Mhayes.hq.noaa.gov. Cc Kevin Chu@hq.noaa.gov, Elizabeth.R. Mitchell@hq.noaa.gov Scott_Keep@-interior-cmm@ios.doi.gov from Sandra Ashton sashton@ios.do.gov headed subject: Makah.
Message reads: " Well the real question here is whether we can reassure the opponents of Makah whaling that their treaty prohibits them from ever engaging in international commerce. THIS IS PROBABLY NOT SOMETHING WE CAN SAY (their emphasis). From what you say, members of the tribe could (if the moratorium were lifted and the CITES list revised THESE ARE BIG IFS) export whale meat and products to a foreign country. LIKELY SO. Or the tribe could sell meat to an intermediary in the US for export. IF THEY COULD SELL DIRECTLY, THEY COULD SELL THROUGH AN INTERMEDIARY.

Internationally, It is highly probable that Japan will declare its coastal people " *indigenous*", seeking the same rights as the Makah Tribe to kill whales for cultural and ceremonial purposes under domestic legislation. AFA Int. notes there is no legal advice in the DEIS which indicates any likely scenario internationally as a result of any waiver. Given that the implications of a waiver for the Makah have been a topic at IWC for some years, the omission

of any in-depth legal advice in the DEIS which supports the Government's claim there will be no impacts can be taken with a grain of salt.

The DEIS fails to detail the fact that IWC Scientific Committee is constructing an Aboriginal Subsistence RMS which is focused on the Gray whale as the target species. The Scientific Committee relies on the evidence provided by member governments in making assessments and setting quotas.

It is abundantly obvious from the research undertaken in this comment document that the Gray whale cannot sustain any Aboriginal RMS or the current quotas which are unsustainable. The US government has an obligation to inform the IWC Scientific Committee that the NMFS agency has received no funding for Gray whale research since 2000 and that the PBR is highly inflated and population estimates are not worth the paper they're written on.

It is of grave concern to AFA Int. that the IWC Scientific Committee has not been informed of the true state of the population.

The lack of any serious attempt to address the impact internationally is a major flaw in the DEIS.

AFA Int. notes the judgment in the Ninth Circuit[50] in relation to the precedent which a waiver may create.

" *The 1997 IWC gray whale quota, as implemented domestically by the United States, could be used as a precedent for other countries to declare the subsistence need of their own aboriginal groups, thereby making it easier for such groups to gain approval for whaling. If such an increase in whaling occurs, there will obviously be a significant impact on the environment.*

" The EA does not specifically address the impact of the quota on any IWC country besides the United States.

" … we cannot agree with the agencies' assessment that because the Makah Tribe is the only tribe that has an explicit treaty-based whaling right, the approval of their whaling is unlikely to lead to an increase in whaling by other domestic groups. And the agencies' failure to consider the precedential impact of our government's support for the Makah Tribe's whaling in future IWC deliberations remains a troubling vacuum. "

The '*troubling vacuum* ' continues with the current Makah DEIS.

Page 5 of the Tribe's Feb. 11, 2005 application notes the Makah hunted grays "*as well as other species*." Several other sources mention the tribe's traditional interest in humpbacks and one notes its preference (see PBS interview available at http://www.pbs.org/newshour/bb/environment/july-dec98/whaling_10-21.html).

It is discomfiting that the DEIS reviews the status of ESA listed animals, including humpbacks, in section 3.5.3.2.1. There are no clear undertakings

[50] No. 02-35761 D.C. No. CV-02-00081-FDB Anderson v. Evans

in the DEIS that any Makah waiver or the precedent created will not lead to waivers for other whale species.

The same judgment states: - ' *An EIS weighs any significant negative impacts of the proposed action against the positive objectives of the project.* '

AFA int. contends there has been minimal attempt in the DEIS to portray the significant negative impacts of any waiver.

Circuit Judge Gould with whom Judge Hill and Berzon concurred writes in his judgment: -

' *The Defendants (government) argue that, because the IWC was given the power to adopt quotas in 1946, the Tribe's quota approved in 1997 should be considered a right under the 1946 Convention that pre-dates the MMPA.*

' *We disagree. The 1997 Schedule was adopted more than twenty-four years after the MMPA became effective. Section 137(a) (2) exempts only international treaties that pre-date the MMPA, without also exempting amendments to those treaties. If Congress wanted to exempt subsequent amendments, then Congress could have done so explicitly. But Congress did not do so. That Congress did not intend to exempt subsequent amendments is clear when s.1372 (a) (2) is considered alongside the mandates of s. 1378 (a) (4). Section 1378 (a) (4) requires " the amendment of any existing international treaty for the protection and conservation of any species of marine mammal to which the United States is a party in order to make such treaty consistent with the purposes and policies of this (Act)." 16 U.S.C. s.1378 (a) (4). Far from intending amendments of international treaties to escape the restrictions of the MMPA moratorium by relating back to the treaties' pre-MMPA inception, Congress mandated that existing treaties be amended to incorporate the conservation principles of the MMPA. It would be incongruous to interpret s. 1372 (a) (2) to exempt the amendments that were mandated by s. 1378 (a) (4). And, if we accepted the defendants' view, then we would read the MMPA to disregard its conservation principles whenever in the future the IWC made unknown decisions for unknown reasons about the killing of unknown numbers of whales. We do not believe that Congress subordinated its goal of conservation in United States waters to the decisions of unknown future foreign delegates to an international commission.* '

And on the critical question: - ' If the MMPA's conservation purpose were forced to yield to the Makah Tribe's treaty rights, other tribes could also claim the right to hunt marine mammals without complying with the MMPA. While defendants argue that the Makah Tribe is the only tribe in the United States with a treaty right expressly guaranteeing the right to whale, that argument ignores the fact that whale hunting could be protected under less specific treaty language. The EA prepared by the federal defendants notes that other Pacific Coast tribes that once hunted whales have reserved traditional " hunting and fishing" rights in their treaties. These less specific " hunting and fishing " rights might be urged to cover a hunt for marine mammals Although such mammals might not be the subject of " fishing", there is little doubt they are " hunted." AFA Int. emphasis.

And further in the judgment: - '*.. the Tribe asserts a treaty right that would give the Tribe the exclusive ability to hunt whales free from the regulatory scheme of the MMPA. Just as treaty*

fisherman are not permitted to " totally frustrate… the rights of the non-Indian citizens of Washington " to fish, Puyallup Tribe v Dept. of Game of Wash., 433 U.S. 165, 175 (1977) (Puyallup III) the Makah cannot, consistent with the plain terms of the treaty, hunt whales without regard to processes in place and designed to advance conservation values by preserving marine mammals or to engage in whalewatching, scientific study and other non-consumptive uses. See Wash.v.Wash. Commercial Passenger Fishing Vessel Ass'n, 433 U.S. at 658. The Supreme Court has recognized that regulation for the purpose of conservation is permissible despite the existence of treaty rights.

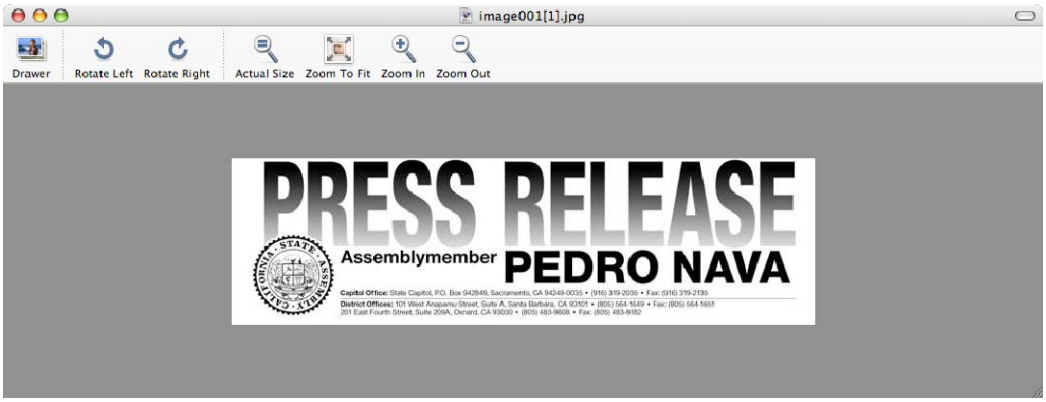
" The MMPA will properly allow the taking of marine mammals only when it will not diminish the sustainability and optimum level of the resource for all citizens. The procedural safeguards and conservation principles of the MMPA ensure that marine mammals like the gray whale can be sustained as a resource for the benefit of the Tribe and others.'

A recent Resolution in the California Assembly and Senate (AJR 49) underlines the value of the gray whale to all Americans, not just the Makah Tribe.

According to the 9th Circuit judgment, it is a NEPA requirement that the wishes of the people of California and all Americans must be taken into account by NMFS in this DEIS.

CALIFORNIA ASSEMBLY AND SENATE PASS RESOLUTION

From: Mann, John
Sent: Tuesday, July 15, 2008 3:21 PM
To: Mann, John
Subject: California Legislature Sends Strong Message to President Bush & Congress Calling for Increased Protection for California Gray Whale-Resolution by California State Assemblymember Pedro Nava



For Immediate Release

Contact: John Mann

July 15, 2008

(805) 483-9808

California Resolution Calling for Increased Protection for California Gray Whale

Submitted to President Bush and the United States Congress

SACRAMENTO – Assemblymember Pedro Nava, Chair of the Joint Committee on Emergency Services and Homeland Security and the legislature's representative on the California Ocean Protection Council announced today that his Assembly Joint Resolution 49 calling on the United States Congress, the President, and the National Marine Fisheries Service to take action to protect the California Gray Whale cleared its final hurdle by passing the California State Assembly yesterday on a bi-partisan 56 to19 vote. The resolution has been sent to President Bush, the Congress of the United States and the National Marine Fisheries Service.

"I am pleased that my colleagues in the Assembly and Senate have joined me in asking Congress, President Bush, and the National Marine Fisheries Service to take immediate action to protect the California Gray Whale," said Nava. "This magnificent marine mammal is again facing a number of threats to its existence and it is imperative that we act to provide it with as much protection as possible so that it will be here for future generations."

AJR 49 requests the United States Congress and the President of the United States to call upon the National Marine Fisheries Service to undertake an immediate and comprehensive assessment of the California Gray Whale, and requests that they change its status to endangered. This revised listing will provide comprehensive protections for the Gray Whale as it travels from its breeding grounds

in Mexico to its feeding grounds in the Arctic.

The California Gray Whale was placed on the endangered species list in 1970, but was removed in 1994 after it was believed that the population had recovered. However new scientific evidence indicates that historic populations were up to five times their current numbers. The Gray Whale experienced a population collapse in 2000 in which up to 1/3 of the population died off and recent observations indicated that they may be in the midst of another die off. Current threats to the Gray Whale's survival include climate change, oil and gas exploration and leases in the Bering and Chukchi Sea feeding grounds, noise from seismic operations, military and non-military sonar, liquefied natural gas terminals planned along the whale's migration route, bottom trawling, pollution, and other changes in ocean conditions that have drastically reduced their food supply.

“California’s coastline and the marine environment are precious and need to be protected for our children and grandchildren. This resolution will send a strong message to Congress and the President that we need to take action now to save the Gray Whale,” said Nava.

####

RESOLUTION TEXT.

WHEREAS, Each year, the California gray whale (Eschrichtius robustus of the Eastern North Pacific stock) migrates along the California coast to feeding grounds in the Arctic, a journey of 8,500 to 11,000 miles; and
WHEREAS, The California gray whale is important for public education, recreational value, aesthetic appeal, economic significance, and scientific interest to the people of California; and
WHEREAS, Whale watching contributes to local

economies in direct revenues and in the overall economic well-being of coastal communities, including the creation of jobs; and

WHEREAS, Whale watching generates tens of millions of dollars in California annually; and

WHEREAS, The California gray whale migrates past one of the most heavily industrialized coastlines in the world, exposing the California gray whale to marine pollution, marine vessel traffic, industrial noise, activities associated with the development of the outer continental shelf resources, fishing entanglements, bottom trawling, industrial development, and military and nonmilitary sonar activity; and

WHEREAS, Marine mammals, including the California gray whale, are vulnerable to underwater sound, including high-intensity mid-frequency sonar systems used off the California coast; and

WHEREAS, These sonar systems blast across large areas with levels of underwater noise loud enough to have resulted in deaths of marine mammals in incidents around the world; and

WHEREAS, The significant threats posed by global warming, melting sea ice, and the impact of increased sea water temperature in the Arctic feeding grounds of the California gray whale have very serious implications for the species; and

WHEREAS, The federal government placed the gray whale on the endangered and threatened species list in 1970 when its estimated population was approximately 12,000 and removed it in 1994 when the population rose to 23,000; and

WHEREAS, Prewhaling population estimates used as a factor in determining species recovered status of the gray whale are now known to be erroneous and account only for a fraction of actual historical populations; and

WHEREAS, A major collapse in 1999 and 2000 is estimated to have wiped out one-third to almost one-half of the population; and

WHEREAS, There has been no proper population estimate published by the National Marine Fisheries Service since 2001; and

WHEREAS, There is no habitat protection for the Pacific Coast Feeding Aggregation in California, Oregon, or Washington State; and

WHEREAS, There are inconsistencies in the protection states give to gray whales; and

WHEREAS, Oregon lists the gray whale as endangered; and

WHEREAS, Washington lists the gray whale as sensitive; and

WHEREAS, California *, by law, defers to the federal government and* lists the gray whale as recovered; now, therefore, be it

Resolved by the Assembly and the Senate of the State of California, jointly, That the Legislature respectfully requests the United States Congress and the President of the United States to call upon the National Marine Fisheries Service to undertake an immediate and comprehensive assessment of the California gray whale. This assessment should include all current research covering the migration routes, population dynamics, and mortality of the California gray whale, and the impacts of threats to the California gray whale, including the impact of global warming on critical feeding grounds;

and be it further

Resolved, That the National Marine Fisheries Service publish, and make available to the public, the results of the comprehensive assessment of the California gray whale; and be it further

Resolved, That, if the results of the comprehensive assessment or the body of scientific evidence warrants it, the *National Marine Fisheries Service* is requested to change the status of the gray whale to endangered; and be it further

Resolved, That the Chief Clerk of the Assembly transmit copies of this resolution to the *National Marine Fisheries Service* , the President and Vice President of the United States, the Speaker of the House of Representatives, the Majority Leader of the Senate, and to each Senator and Representative from California in the Congress of the United States.

****

Anderson v Evans notes the NEPA standards for determining the "intensity" of the action under review (pages 487-488). The 6th enumerated criteria are "*The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration*."

Clearly, the 6th criteria of NEPA is highly relevant in this matter and has not been adequately dealt with in the DEIS.

NEPA "Intensity" criteria number 9 which is "*The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the ESA'* must be taken into account. Although Gray whales are no longer listed under the ESA, the northern portion of the Gray whales' migratory route is under constant and increasing serious threat due to climate change. These factors introduce enough uncertainty to invoke the precautionary principle in a US court.

In relation to the Treaty of Neah Bay, Article 4 raises questions which NMFS has not answered in spite of written questions from AFA Int.

ARTICLE 4

The right of taking fish and of whaling or sealing at usual and accustomed grounds and stations is further secured to said Indians in common with all citizens of the United States.

Article 4 does not specify gray whales and therefore, the question arises. Will a waiver for gray whales set a precedent for other whale species, as the Treaty language is not specific?

These questions were asked by AFA Int. of NMFS and we received a response which did not attempt to address the question.

SEADUCKS AND GRAY WHALES.

When commercial whalers in the 19th century radically reduced the number of gray whales migrating up and down the California coast, other species suffered from their loss, sometimes in surprising ways.

One such species was the California condor, which historically fed upon the occasional dead beached whale. It was a feast no less welcome than whale falls are to abyssal sea life. With most grays falling to harpoons rather than nature, the birds lost a key source of food. It was just one more factor that helped push the condor to the brink of extinction.

' Feeding by gray whales provides nutrient subsidies from benthic marine communities to terrestrial ones, including food subsidies for at least four species of seabirds that feed on benthic crustaceans brought to the surface by gray whale feeding'; say Alter, Rynes and Palumbi. ' We calculate that a population of 96,000 whales could provide food subsidies to 1.03 million birds. In addition, gray whales may have provided an important food source for predators and scavengers such as orcas and California condors. '[51]

AFA Int. believes the ecological link between Gray whales and diving sea birds must be explored. With catastrophic declines in benthos feeding sea birds documented, it is highly probable that there is a relationship between the declining population of Gray whales and major declines in the bottom feeding bird populations.

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[51] DNA evidence for historic population size and past ecosystem impacts of gray whales. S. Elizabeth Alter, Eric Rynes, Stephen R. Palumbi (2007)

In their paper,[52] Anderson and Lovvorn suggest that gray whale feeding may have increasing influence on the foraging patterns and trophic relations of a range of bottom-feeding vertebrates. The paper is the first report of a feeding association between a cetacean and bottom-feeding birds, namely a migrating gray whale and diving sea ducks.

Gray whales have been observed returning annually in Washington State to feed mainly on ghost shrimp.

" *Suction sieving by gray whales creates elliptical pits in bottom sediments that are typically 10cm deep and up to 5 m2 in area. Such excavations likely enhance short-term foraging profitability for avian benthivores by exposing or dislodging infauna, and by attracting invertebrate scavengers that are also eaten by birds. …. Although gray whales remove much of the prey biomass within feeding its, the fraction of infauna that is dislodged and not consumed by gray whales is typically valuable to marine birds. (Obst & Hunt 1990).*

"Foraging profitability for avian benthivores may be altered for prolonged periods after feeding by gray whales. In the Bering Sea and coastal British Columbia, invertebrate colonists settled in organic debris trapped in whale feeding pits and remained at elevated densities for weeks to months. (Liver & Slattery 1985). Populations of some infaunal invertebrates may also increase over longer periods because sediment suspension by gray whales exports finder particles and releases nutrients (Johnson & Nelson l984). Longer-term changes in benthic communities may explain why, after the typical arrival in March of gray whales in Puget Sound, we observed scoter numbers increase in a habitual feeding area for whales. The period for which feeding pits are valuable to avian benthivores will depend on various factors affecting foraging profitability, such as colonization rates and thus localized biomass of prey (Oliver & Slattery 1985) use pits as visual cues, and feeding rates of other predators.

" Recent episodes of high mortality for gray whales during migration and winter may have resulted from observed declines of their main prey in the Bering Sea (Le Boeuf et all 2000)… Gray whales that feed throughout the summer south of the Bering Sea are known as the Pacific Coast Feeding Aggregation, and likely account for just 1 or 2% of the -18,000 gray whales in the eastern Pacific Ocean (Calambokidis et al 2002a, Anglliss & Outlaw 2007). However, foraging during migration occurs along the entire Pacific coast……. At the scale of decades, gray whales may feed along all suitable sections of coast, shifting foraging locations as profitability changes among diverse foods. (Darling et al. 1998). These impacts can alter prey availability for several months and thus we suggest that longer term effects on many bottom feeding animals may be important, even if direct feeding associations with gray whales are rare.

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[52] Gray whales may increase feeding opportunites for avian benthivores. Anderson, Lovvorn, MEPS pre press abstract. 2008

" Moreover, feeding by gray whales during their northward migration coincides with increasing energy needs of marine birds as they prepare for migration and reproduction, at the same time that typical winter foods may have declined. (Lewis et al.2007)."[53]

The impact of a hunt of gray whales on bottom feeding birds has not been assessed in the DEIS. The impact caused by the loss of whales on birds has not been assessed. Given that sea ducks and bottom feeding birds have experienced major declines in the last decade; the synergistic and cumulative effects of any whale slaughter have not been adequately examined. If resident gray whales desert their Northwest feeding grounds, sea diving birds will have diminished prey.

Professor James Lovvorn says that the contamination levels in seabirds are " *through the roof*" (pers.comm) but that the birds seem to be able to deal with these levels.

Unquestionably gray whales do not. The evidence of toxic contaminants in sea ducks and diving birds which share the same habitat as gray whales is an injunction to urgently investigate the contamination levels in whales.

TOURISM

The DEIS contains some extraordinary statements in relation to the Makah hunt and its impact on whale watching.

'Current revenues of whale-watch operators are unknown, *and there is no information available or that could be obtained that would allow an estimation of how much revenues might decrease if ENP gray whale behavior were altered by a Makah hunt. DEIS 4-109'*

Professor Linwood Pendleton, UCLA, in his paper " Understanding the Potential Economic Impact of Marine Wildlife Viewing and Whale Watching in California provides details of the value of whale watching and wildlife viewing along the California coast. He estimates the value in the order of tens to hundreds of millions of dollars annually.

" *Clearly, the economic value of protecting and enhancing near shore marine wildlife populations in California is non-trivial."*

It is extremely doubtful that Washington State would be any different from California. Professor Pendleton cites in 1999 and 2000, more than 43% of all Americans participated in some form of marine recreation.

[53] Anderson & Lovvorn: Gray Whales and bottom feeding birds. MEPS prepress abstract.

‘ *Americans flock to beaches and shores to swim, fish, boat, and view the natural scenery. Overall, the total number of people participating in all forms of marine recreation is expected to increase. (Leeworthy et al 2005).*

‘ *Wildlife viewing represents an important part of marine recreation. Bird watching and other wildlife viewing constitute the fifth and seventh most popular marine recreation activities in the United States, with more than 15 million people spending nearly 650 million person days watching birds at the shore alone. (Leeworthy, Wiley, 2001). Leeworthy et al (2005) predict that by 2005, the number of people participating in coastal bird watching activities was expected to have grown by 6% to more than 16 million participants; by 2010 the figure is predicted to be just under 17 million. Other forms of wildlife viewing, including whale watching, are also expected to grow in overall numbers of participants. Using the same models, Leeworthy et al predict that by 2005, almost 14.5 million people can be expected to participate in some other form of wildlife viewing nationally with this number growing to 15 million by 2010.*

‘ *Whale watching has grown to become an industry with gross receipts of over $%150 million (in US$1999) in the United States alone. By the early twenty first century, whale watching business operated in 87 countries and served more than 9 million whale watchers. (Hoyt, 2001). At the end of the twentieth century, nearly 270 whale watch tour companies were in operation in the United States generation over <u>$158 million (the writer’s emphasis) in direct revenues.</u>*

‘ *Within the United States, whale watching is concentrated most heavily in New England, Alaska, California and the Pacific Northwest. ‘*

NMFS has no excuse for not including this information in the DEIS. Millions of Americans and tourists who go to the Pacific Northwest to watch birds, whales and recreate in the marine environment will take their recreation somewhere else. No one in his or her right mind wants to watch a whale being hunted, harpooned and butchered in the midst of the Olympic Sanctuary.

Professor Pendleton’s paper continues: -

‘ *wildlife viewing, including whale watching, contributes to local, regional and national economies in two important ways. First, wildlife viewing and whale watching generate gross revenues that create jobs, support salaries, and generate tax revenues for local and state governments. While these gross revenues do not reflect economic value, they do indicate a measure of the economic impact of these activities, economic impact includes the support of jobs, wages, and multiplier effects. Further gross revenues form the base of taxes that are generated by whale and wildlife viewing. Second wildlife viewing and whale watching generate values beyond what people spend in the market. These non market values represent a larger part of the total value that people place on the opportunity to see marine and coastal life.”*

There has been NO attempt in the DEIS to assess the value of whale and wildlife watching in Washington state; to assess the impact of a Makah slaughter of five to seven whales on the tourist industry; to assess the economic impact of Washington becoming a whale killing state; to assess the loss of gross revenues which rely on whale and wildlife watching. No attempt to assess the multiplier effect. Instead, the DEIS seeks to mislead again by failing to investigate the true cost of a Makah slaughter. Questions of discrimination arise given that taxpayers would have to bear the cost of the " cultural and ceremonial" slaughters of Gray whales and the resulting impact on tourism to Washington State. Yet another violation of NEPA.

NMFS is unable to demonstrate any support by tourists, tourist operators, wildlife or whale watching companies who believe that allowing the Makah to kill Gray whales will encourage tourism to the Pacific Northwest.

WAVE ENERGY PROJECTS

AFA Int. has identified at least 26 wave energy projects along the West Coast. The cumulative effects of this new source of energy are unknown. AFA cites some of a summary of a Scientific Workshop on Ecological Effects of Wave Energy Development in the Pacific Northwest.

A steering committee at the Hatfield Marine Science Center in Newport, Oregon, organized the workshop. According to the report, the proceedings were to be published in a NOAA Technical Memorandum available early 2008.

There is no reference to any such Memorandum in the DEIS. Some of the key issues are worth dealing with in these comments.

" Marine Mammals.

-
- Significant concern about mooring cables (slack v taut; horizontal v vertical; diameter) and entanglement issues.
- Very basic baseline data is needed (mammal biology, presence/absence/species diversity; information on prey species) to understand the projects' impacts
- It is critical to monitor cetaceans (e.g. videography, beachings, tagging, vessel surveys) to understand how they interact with wave energy facilities.

- Benthic Habitat.

- Wave energy development can have a large effect on water circulation and currents.

- Current changes would effect larval distribution and sediment transport (both on benthos and on beaches).

- Fouling community growth on buoys, anchors and lines may adversely affect benthic environment if deposited and accumulate on seafloor.

“ Acoustics.

- Understanding noise coming from buoys/cables and how fish and marine Mammals will/could react is critical.
- It is possible to model noise from buoy/cables and use that information to Assess impacts from various scales of wave energy facility build out.
- The synchrony of noise from buoys could exacerbate/create noise not previously considered (this could be modeled.)
- Wave energy facilities, depending on their size and layout, could create a sound barrier that mammals would avoid.

“ System View/Cumulative Effects.

- It is important to understand/evaluate what we don’t know. As projects scale up, risks become a function of the extent, density and duration of the project operation.
- In order to understand effects, impact thresholds need to be established.
- As projects scale up in location or implementation, new risk end points
  Come into play that were not initially part of the assessment. Therefore,
  Adaptive management is critical to address long-term impacts.
- **As projects scale up, other activities can be displaced (e.g. fishing ….May force whales to alter migration paths etc.)**
- **It is important to think broadly about cumulative effects when Assessing impacts. (Our emphasis)**

LIQUIFIED NATURAL GAS TERMINALS (LNG)

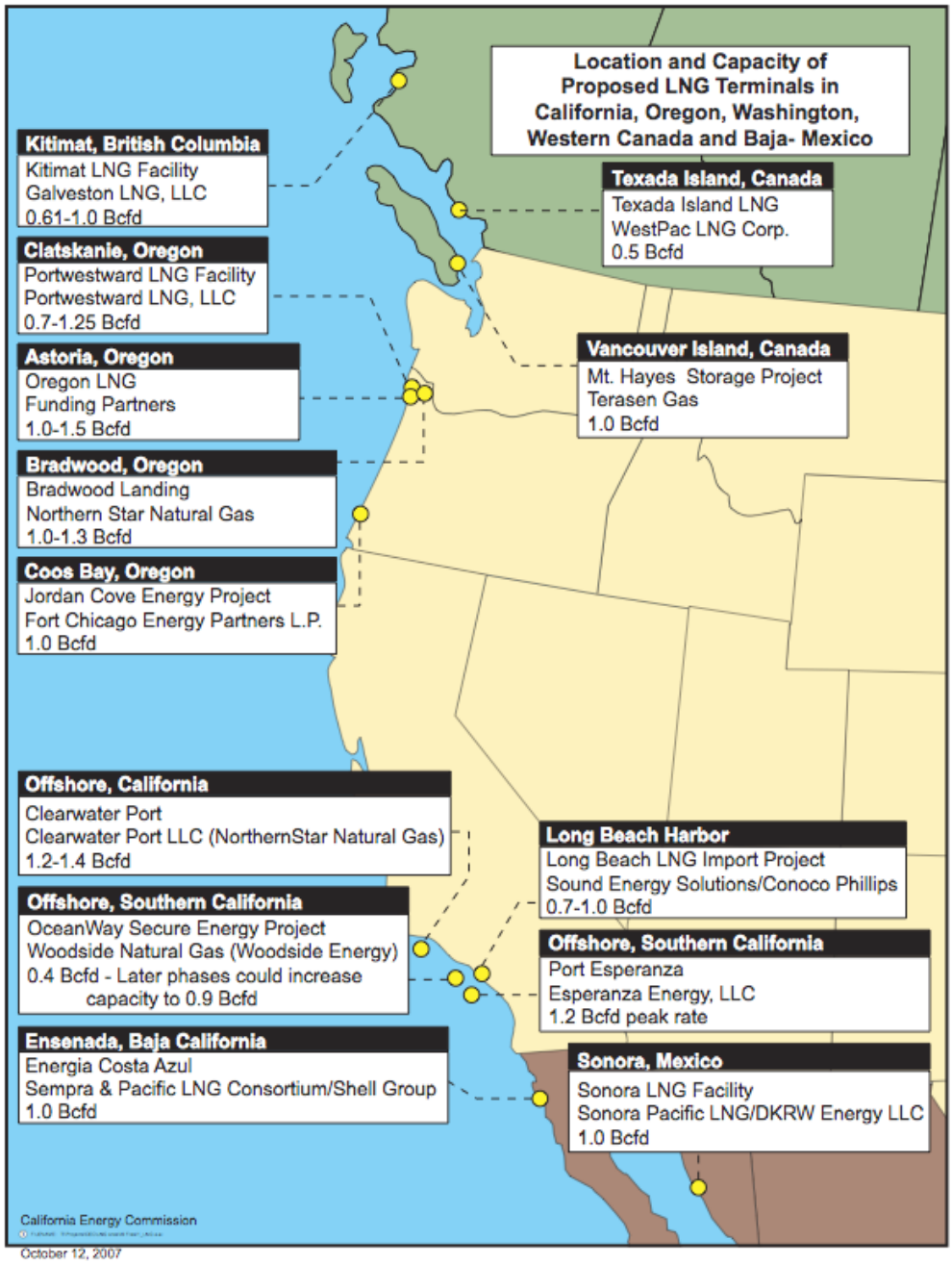

Table 25. LNG Terminals. FERC

With at least 13 proposed LNG Terminals along the migration route, the DEIS is deficient in taking into account the impact on the population.

According to a Staff Report, California Coastal Commission [54] potential marine resource impacts of LNG Terminals include the following: -

* Entrainment of planktonic and larval organisms due to the use of seawater.
* impingement of marine life on intake screens on LNG carrier vessels;
* disturbance to nocturnal seabirds due to safety, operational and construction lighting requirements
* disturbance and injury of marine mammals due to underwater noise associated with construction and operational activities
* disturbance and loss of benthic organisms and habitat due to placement and installation of mooring systems, the excavation of exit pits in the seafloor and installation of pipelines and protective devices
* risk of tankers and support vessels colliding with marine mammals
* disturbance and entanglement of migratory whales during pipeline installation
* destruction of marine habitat and mortality to marine life associated with accidental interactions with unexploded ordnance during pipeline construction and installation.

WATER POLLUTION AND MARINE WILDLIFE

- Discharges will degrade ocean water quality. LNG Terminals intake millions of gallons of seawater per day to cool their generators and discharge water more than 28. Degrees Fahrenheit hotter than ambient ocean temperatures. Billions of gallons per year of intake and thermal waste would cause serious harm to the surrounding ecosystems, killing zooplankton and small fish critical to the survival of marine mammals and fisheries.

- LNG terminals will discharge sewage and ballast water, and heated wastewater from LNG regasification operations.

[54] CC-079-06 BHP Billiton Staff Report and Recommendation

- Construction of gas pipelines could cause harmful spills of drilling fluids and even contaminated sediments into near shore marine environments.

- Increased vessel traffic resulting from LNG Terminals also increases the likelihood of hazardous diesel, oil or sewage spills.

- According to marine mammal experts, endangered blue and humpback whales and federally protected gray whales migrating north from the calving lagoons of Baja, commonly feed and travel along the route where the proposed LNG Terminals will be sited.

- Consequently, these endangered marine mammals will be threatened with asphyxiation and burns from surface fires in the event of significant LNG releases, increased chance of injury or death from collisions with ship traffic, and habitat degradation from water pollution.

- Noise from the tankers, the terminals and pipeline construction will be audible above and underwater for miles around these activities. The underwater noise could harm these marine mammal species and many others, reduce their ability to communicate and find food, or cause them to abandon these traditional habitats and migration routes.

The cumulative impacts of the proposed LNG Terminals along the gray whale migration route have not been assessed in the DEIS.

MEXICAN DEVELOPMENT IMPACTING ON GRAY WHALES.

Five different energy consortiums have announced plans to build Liquified Natural Gas (LNG) Terminals at different locations along the northern Baja coast. [55]

SHIP STRIKES

The cumulative impact of increasing numbers of cruise ships and industrial shipping traffic have not been taken into account by the DEIS.

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GLARING DEFICIENCIES IN THE MAKAH DEIS.

The term **UNCERTAIN** has been used over and over again in describing the potential impact of a Makah slaughter. AFA Int. provides a list of some of the items which are **UNCERTAIN** or **UNKNOWN**.

[55] Urban et al Review of Gray Whales in Mexican waters. J. Cetacean Res. 5(3) 281-295, 2003

Without **CERTAINTY**, the Precautionary Principle should be applied. AFA Int. draws the attention of NMFS to NEPA in relation to the above.

" *(5) the degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks*."

Uncertain -Long term effects of number of visitors – Alternative 2 and 3

* '*It is **uncertain**, but possible, that a decision not to authorize a Makah whale hunt could discourage future requests for a waiver of the MMPA.*

* *The Coast Guard specifically found that "the **uncertain** reactions of a pursued or wounded whale and the inherent dangers in firing a [.50 caliber] hunting rifle from a pitching and rolling small boat are likely to be present in all future hunts, and present a significant danger to life and property if persons or vessels are not excluded from the immediate vicinity of a hunt" (64 FR 61212, November 10, 1999). 3-10 DEIS*

* *Sound exposure may also induce physical trauma to non-auditory structures (Jepson et al. 2004; Fernandez et al. 2005), although much remains **uncertain** regarding the exact mechanisms. Because marine mammals in the project area rely on underwater sounds for various purposes, any strong anthropogenic sounds at relevant frequencies might have an effect. 3-174 DEIS*

* *It is **uncertain** whether penthrite grenades would be readily available for a Makah Tribe gray whale hunt. 3-296 DEIS*

* *The future of the moratorium on commercial whaling remains **uncertain.** 3-327 DEIS*

* *While slight majorities within the IWC have thus succeeded in adopting contradictory resolutions regarding the commercial whaling moratorium, (resolutions are nonbinding) definitive action on the commercial moratorium (or the revised management scheme) is **uncertain** because neither the pro-commercial-whaling or anti-commercial-whaling sides of the debate have the three-fourths majority necessary for action (Henderson 2005; Hogarth 2006). DEIS 3-327*

* *It is possible that fewer rifle shots or grenade explosions would be necessary to kill whales under Alternative 3 because of the opportunity to hunt during the summer, when better weather and sea conditions might improve hunter accuracy. Due to **the uncertainty** associated with such a prediction, however, the analysis makes the conservative assumption that there would be the same number of weapons discharges regardless of the hunting season. DEIS 4-10*

* *It is reasonable to expect that whales approached by Makah whale-hunting vessels would react in a similar, temporary manner. It is **uncertain** what the longer-term effects would be on whales exposed to repeated approaches. DEIS 4-39*

* *It is **uncertain** how whales would react to unsuccessful harpoon attempts, but the reaction may be similar to that observed in whales that are tagged or biopsied. Such reactions are likely to be dramatic but temporary changes in behavior (Section 3.4.3.6.6, Vessel Interactions). Whales may be less likely to habituate to unsuccessful harpoon attempts than to approaches of vessels. It is unknown whether whales in the vicinity of successful harpoon attempts will develop an association between vessel approaches and harpoon strikes and over time begin to avoid vessels. DEIS 4-39*

* *During migration, it is **uncertain** what factors affect gray whale distribution and habitat use. While there is evidence that gray whales will alter course or swimming speed in response to disturbances, there is no evidence that the disturbance is more than temporary (Section 3.4.3.6, Known and Potential Anthropogenic Impacts). Clarke and Moore (2002) found there was little evidence that gray whales disturbed by human activities travel far in response or remain disturbed for long. DEIS 4-39* (* Note – this is yet another example of selective quotes from NMFS scientists without also citing the research which clearly indicates whales ARE disturbed by human activities and change their migration route in response to disturbance. As well, the whales have abandoned lagoons in Mexico because of disturbance by human activity.)

* *It is **uncertain** whether the use of an explosive projectile could reduce time to death. DEIS 4-42* (Outrageous stuff)

* *It is **uncertain** what the average time to death would be for gray whales killed in a Makah gray whale hunt using explosive projectiles as the striking and killing weapon, though it is possible that average time to death would be lower than with the alternative method (toggle-point harpoon and rifle), because the striking weapon has the potential to quickly kill the whale or render it insensible. DEIS 4-43*

* *It is **uncertain** whether other whales would take the place of killed Makah U&A whales or ORSVI whales during the year in which they were killed. DEIS 4-46*

* *It is **uncertain** whether the intensity of unsuccessful harpoon attempts would result in more than a temporary disturbance of Makah U&A whales and cause them to avoid portions of the Makah U&A either for a short period (days to weeks), or a longer period (for example, over a period of years). Makah DEIS 4-49*

* *If seven whales were killed under Alternative 3, it is **uncertain** whether other whales would take their place during the year in which they were killed.*

Seven whales are more than the observed annual recruitment to the Makah U&A. So it is possible that there would be a decrease in abundance under this alternative compared to the No-action Alternative. DEIS 4-52

** Note: This issue was raised in the 9th Circuit, Anderson v. Evans. The Court found that this question could not be answered adequately and ruled against the Government.*

* *It is also **uncertain** how quickly whales removed under Alternative 3 would be replaced in subsequent years. As described in Section 3.4.3.3.1, Summer Range Distribution and Habitat Use, Calambokidis et al. (2004a) propose that whales likely recruit to the Makah U&A or other parts of the PCFA survey area from the migratory population randomly, as feeding habitat becomes available along the migration route. Thus it appears likely that at least some of the removed whales could be replaced in subsequent years. DEIS 4-52*

* Although the precise number of Makah U&A and ORSVI whales removed cannot *be predicted, as many as seven could be killed each year. Given the numbers of whales available to replace them, it is unlikely all seven would be replaced during the year in which they were removed. It is **uncertain** whether seven would be replaced in the subsequent year. Compared to Alternative 2, Alternative 3 represents a potential seven-fold increase in the risk to abundance of whales in the Makah U&A and ORSVI survey areas, because of the potential for seven of these whales to be killed per year compared to about one whale per year under Alternative 2. DEIS 4-52*

* *It is **uncertain** whether the intensity of unsuccessful harpoon attempts would result in more than a temporary disturbance of Makah U&A whales and cause them to avoid portions of the Makah U&A either for a short period (days to weeks), or a longer period (for example, over a period of years). It is also uncertain whether such disturbance in the Makah U&A would cause PCFA whales to change their distribution or habitat use in the larger PCFA survey area. As described in Section 4.4.2.3, Change in Distribution or Habitat Use, availability of prey may be the factor most strongly affecting gray whale distribution during feeding. If prey is available in the Makah U&A or PCFA, hunting by the Makah Tribe might not result in either a short- or long-term response from summer-feeding whales. Many new whales are seen in the Makah U&A every year (Section 3.4.3.3.1, Summer Range Distribution and Habitat Use). Thus even if some whales do abandon the area as a result of hunting disturbance, new whales that had not previously been exposed to hunting might come into the area, suggesting that gray whale distribution and habitat use will not change compared to the No-action Alternative. DEIS 4 – 54*

* *If three Makah U&A and ORSVI whales were killed under Alternative 5, it is **uncertain** whether other whales would take their place during the year in which they were killed. Whales identified in the PCFA survey area could take the place of whales removed from the ORSVI, and whales identified in the*

ORSVI survey area could take the place of whales removed from the Makah U&A. DEIS 4-57

* *It is also **uncertain** how quickly Makah U&A and ORSVI whales removed under Alternative 5 would be replaced in subsequent years. All three whales killed under this scenario could be Makah U&A whales, which is higher than the average annual recruitment of 4.66 whales described under Alternative 2. DEIS 4-57*

* *It is **uncertain** whether the intensity of unsuccessful harpoon attempts would result in more than a temporary disturbance of Makah U&A whales and cause them to avoid portions of the Makah U&A either for a short period (days to weeks), or a longer period (for example, over a period of years). It is also **uncertain** whether such disturbance in the Makah U&A would cause PCFA whales to change their distribution or habitat use in the larger PCFA survey area. As described in Section 4.4.2.3, Change in Distribution or Habitat Use, availability of prey may be the factor most strongly affecting gray whale distribution during feeding. If prey is available in the Makah U&A or PCFA, hunting by the Makah Tribe might not result in either a short- or long-term response from summer-feeding whales. Many new whales are seen in the Makah U&A every year (Section 3.4.3.3.1, Summer Range Distribution and Habitat Use). Thus even if some whales do abandon the area as a result of hunting disturbance, new whales that had not previously been exposed to hunting might come into the area, indicating that gray whale distribution and habitat use will not change compared to the No-action Alternative. DEIS 4-59*

* *Under current conditions, NMFS' annual budget for marine mammal management in the Northwest Region ranges from zero to $500,000 per year. The overall budget for monitoring the ENP gray whale population is approximately $65,000. Within the ENP gray whale budget, funding has been provided for photo-identification studies of gray whales in local survey areas with one purpose, among others, being management of a potential Makah gray whale hunt. It is **uncertain** whether NMFS would continue to fund the photo-identification program if a hunt was not authorized. Because no gray whale hunting currently occurs, there are no NMFS observers associated with a hunt. DEIS 4-105*

* It is ***uncertain*** whether a hunt would result in a long-term increase in tourism. Publicity about the whale hunt could generate interest in the Makah Reservation as a cultural tourism destination, while some individuals might not visit the project area due to negative publicity about the whale hunt. DEIS 4 – 108

* It is ***un*certain** whether four whales annually would meet contemporary Makah needs. DEIS 4-145

* *Based on the information available for this analysis, all of the alternatives would have a reasonably foreseeable potential to affect human health both positively and negatively. **There are too many uncertainties**,*

however, to quantify either type of effect or to predict whether any of the alternatives would result in a net positive or negative effect on human health. DEIS 4-193

** The outcomes of any future processes would depend on facts not presently known, but it is possible that implementation of Alternatives 2 through 6 could lead to increased federally authorized take by other Indian tribes. With respect to the No-action Alternative**, it is uncertain** whether a decision by NMFS to deny the Makah Tribe's request would result in less harvest of marine mammals by Indian tribes in the future. DEIS 4-198*

** NMFS considers it unlikely that publishing a WCA gray whale quota for the*
*Makah's use under Alternatives 2 through 6 would influence other Indian tribes to seek WCA quotas, eventually leading to the harvest of other whale species in other aboriginal subsistence whaling operations. In any event, any WCA quota issued would be subject to the IWC catch limit. And before NMFS could publish a WCA quota, it would also be required to present a needs statement to the IWC. The outcome of that process would depend on facts not currently known and **the outcome is therefore uncertain.** DEIS 4-199*

** **It is uncertain** whether NMFS' action to authorize a gray whale hunt would increase whaling worldwide by emboldening pro-whaling countries. While such an outcome is possible, it is speculative given the variety of issues and dynamics that drive the decisions of the IWC or of countries party to the IWC. DEIS 4 – 206*

** In addition to future actions in the project area, future actions along the entire coast have the potential to affect gray whales because of their migration patterns. Projections for the future of shipping coast wide are **uncertain** due to concerns about fuel prices and the capacity of west coast ports to accommodate increased volumes (White 2008). There are several proposals by various entities to develop ocean energy projects all along the Pacific coast (Section 3.4.3.6.10, Marine 14 Energy Projects). At this time these projects are in the preliminary stages of study and design, and it is difficult to predict how many will ultimately be deployed and in what configuration. Consequently, an analysis of the impact of the action alternatives on gray whales or other wildlife, when added to the effects of future ocean energy projects, would be speculative, or not possible without project details available to analyze. DEIS 5-2*

** At this time it is **uncertain** how overall gray whale abundance and viability will be affected by global climate change (Weiss 2007). As described above, the Scientific Committee of the IWC annually monitors the status of the ENP gray whale stock, and the IWC has a process to adjust catch limits. DEIS 5-6*

Unknown

* The cause of such large-scale starvation remains ***unknown*** (Gulland et al. 2005). Some scientists think that the starvation was related to a climatically based decline in prey availability, especially related to the 1997 and 1998 El Nino events in the winter range and the Pacific Decadal Oscillation and Arctic Oscillation in the summer range (LeBouef et al. 2000; Moore et al. 2001;
Moore et al. 2003). DEIS 3-103 **(Note: Nevertheless, the UME was not acted upon as required under the MMPA and no hypothesis which makes any sense other than starvation as a result of El Nino and regime shift makes sense)**

* Most of the 2002 to 2005 dead whales that biologists examined died of ***unknown causes***. In a few cases, biologists found evidence of ship strikes (propeller cuts) or entanglement in fishing gear (Gulland et al. 2005). DEIS 3-104

* During the unauthorized hunt in 2007, at least 16 shots struck the whale, but it is **unknown** what caliber rifle was used. DEIS 3-116

* The long-term effects of repeated ingestion of sub-lethal quantities of petroleum hydrocarbons on marine mammals are also ***unknown***. DEIS 3-128

* Generally, the concept for most of these proposed projects is to take wind turbines and place them under water to use the energy from tidal currents to generate electricity (WDFW 2006b). The actual impacts of these types of projects **are unknown** because very few exist in the world, but WDFW (2006b) has identified preliminary potential impacts to birds, fish, and marine mammals. They include, but are not limited to, direct mortality or injury from turbine blade strikes, interference with migratory patterns, measures to protect equipment from marine growth, direct habitat loss from equipment and infrastructure placement, impacts on currents, changes in water surface elevations, effects on commercial and recreational fishing areas and equipment, changes in sediment transport, and other issues not yet identified. The WDFW will design studies to assess effects on fish, birds, marine mammals, and their habitats (WDFW 2006b). DEIS 3-135

* Number of PFCA, ORSVI and Makah U & A Whales that may be killed under each alternative:

* Likely number ORSVI – Alternatives 3, 5 and 6 - –**Unknown**

* Likely number Makah U & A – Alternatives 3, 5 and 6 – **Unknown**
DEIS 4-35

* It **is unknown** whether whales in the vicinity of successful harpoon attempts will develop an association between vessel approaches and harpoon strikes and over time begin to avoid vessels. DEIS 4-39 (Note: the Russian data documents Gray whales fleeing the catcher vessels.)

* With the potential for 140 approaches and 28 unsuccessful harpoon attempts over 40 days, it is mathematically possible that every Makah U&A whale could be approached by tribal hunting vessels on multiple occasions, and that every Makah U&A whale could be subject to harpoon attempts. For PCFA whales, the number of whales present in any year is also likely larger than the number observed, although the actual number **is unknown**. DEIS 4-53, 54

* It is **unknown** how far away a hunt could occur without interfering with pelicans' foraging activities. DEIS 4-71

* It is **unknown** how murrelets react to gunfire, helicopters, and other loud disturbances to which these birds are unaccustomed, although helicopters and gunfire would probably cause them to either dive or fly away from the area completely (Nelson 1997). DEIS 4-71

* Some marine mammals, specifically those in the coastal environment (e.g., harbor seals, California sea lions, Steller sea lions, and sea otter), and most birds and turtles would continue to encounter noise and vessel traffic from sport and commercial fisheries vessels, sight-seeing boats, and other sources such as military vessels. ***Effects on these species at current levels are unknown***. DEIS 4-80

* If a Makah gray whale hunt were to alter gray whale behavior, it is not possible to estimate the amount of decrease that might occur in revenues of whale-watch operators. **Current revenues of whale-watch operators are unknown,** and there is no information available or that could reasonably be obtained that would allow an estimation of how much whale-watching revenues might decrease if gray whale behavior were altered by a Makah hunt. The extent to which a Makah hunt had an effect on gray whale behavior, and a subsequent indirect effect on whale- watching revenues, would depend primarily on factors that could cause whales to avoid boats, including the number of whales that could be struck and the estimated number of whales with harpoon attempts and approaches. DEIS 4-103

* **Current revenues of whale-watch operators are unknown,** and there is no information available or that could be obtained that would allow an estimation of how much revenues might decrease if ENP gray whale behavior were altered by a Makah hunt. DEIS 4-109 (**Note: Professor Linwood Pendleton has done a published study which estimates the whale watching industry is worth hundreds of millions of dollars.)**

* Some level of hunting currently exists but **the number of injuries associated with weapons accidents in hunting is unknown**. Under any of the action alternatives, hunters and other participants would be at the greatest risk of injury from weapons because they would be handling weapons; protesters and bystanders would experience a lesser risk. DEIS 4-186

DEFICIENCES OF PARAMETRIX CONTRACT

#30. No consultations will be required with other countries, including Canada or Russia.

(This instruction is extraordinary, given that the Gray whale is a migratory species and the information, which Canada, Mexico and Russia can provide, is critical to the management of the Gray Whales. AFA Int. doubts that the Mexican government or Mexican and Canadian tourist operators would be supportive of any Makah kill).

Resource Scope of Work

Items NOT to Include:

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Water Quality

- Quantitative analyses on oceanic water quality, either generally or locally
- General water quality and quantity conditions in the upland area surrounding the immediate hunt, such as watershed or stream conditions
- Lengthy background information on shellfish beds in general
- Construction impacts to water quality and quantity
- Identification and listing of valid water rights
- Water conservation
- Reclamation and reuse facilities
- Potable water supplies
- Field surveys

Fish Species and Habitat

- Lengthy background information on ocean habitats
- Aspects of fish life histories unless they are pertinent to the effects analysis (e.g., time spent at sea feeding). Summarize relevant information in table format.
- No population modeling
- No field surveys
- Lengthy information on salmonid consumption, including dietary benefits

Wildlife – ESA species

- No field surveys
- Do not describe aspects of life histories unless they are pertinent to the effects analysis. For example, do not include information on feeding or other behavior in portions of the range other than off the Washington coast.
- No population modeling

Non-Listed Birds

- No field surveys
- Do not describe aspects of life history unless they are pertinent to the effects analysis. Summarize relevant information in a table format.

- No population modeling.

Marine Mammals

- Do not describe aspects of life histories unless they are pertinent to the effects analysis.
- Information on population stocks of marine mammals not likely to be in the hunt area during the hunting period.
- No population modeling
- No field studies.

General Vegetation

- Economic values of kelp beds
- Quantification of kelp bed destruction or impairment
- Land based vegetation
- ESA or State listed vegetation in the vicinity

Socioeconomics/Tourism

- **State-wide economic or tourism data, and state-wide impacts**
- **Commercial shipping**
- **Background data or impacts on other natural resources such as the timber industry.**

The instruction to refrain from identifying any statewide impacts to tourism or the economy is a significant omission.

Cultural Resources

- **Information on structures or artifacts not related to whaling**
- **Historic information on tribes, Euro-settlements, or Northwest history prior to 1920**
- **Importance of whales to other populations besides the U.S. population (e.g. Russians, Canadians, Japanese, etc.)**
- **Detail regarding the International Whaling Convention Act beyond information necessary to characterize tribal whaling history.**

The instruction to refrain from recognizing the importance of whales to other populations besides the US population is outrageous. The whales are a migratory species and have major economic and spiritual value to Mexico, to the Mexican economy. As well, the thousands of tourists who have gone to Mexico to see gray whales have a major interest in their survival.

Noise

- Noise modeling
- Quantification of helicopter or gunfire noise levels

Aesthetics

- Land-based aesthetic information
- **Graphics of any kind depicting the carcass or kill**

Why should graphics of dead whales be censored?

Transportation

- County-wide traffic data

Public Services

- County-wide traffic and incident response data (unless localized information is unavailable or cannot be estimated via personal communications with reliable sources)
- Regional Coast Guard incident response data (unless localized information is unavailable and cannot be estimated via personal communications with reliable sources)
- State-wide data or effects

Human Health/Safety

- Exposure to health risks from activities other than those directly involved in the hunt or butchering the carcass or from consuming the resulting whale products.
- County-wide data on arrests and traffic incidents
- County-wide or localized data on firearm injuries

CONCLUSION.

The Makah DEIS is an appalling document. It is lacking in any objectivity, fails to encompass the vast array of threats facing the Gray whale and the cumulative impact of those threats.

The ramifications of a waiver will impact internationally. It is difficult to believe that any Native American Indian Tribe would attempt to assert Treaty rights to kill vulnerable whales at a time when the population urgently needs the full protection of the law.

On ecological grounds alone the Eastern North Pacific Gray Whale population merits relisting.

The Eastern North Pacific Gray Whale is the last viable population of the species.

It is time the US government took its responsibility towards this whale seriously.

14th August, 2008 Author : Sue Arnold, CEO AFA Int.

FOR PUBLICATION

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

WILL ANDERSON; FUND FOR ANIMALS; HUMANE SOCIETY OF THE UNITED STATES; AUSTRALIANS FOR ANIMALS; CETACEAN SOCIETY INTERNATIONAL; WEST COAST ANTI-WHALING SOCIETY; SANDRA ABELS; CINDY HANSEN; PATRICIA NESS; ROBERT NESS; LISA LAMB; MARGARET OWENS; CHARLES OWENS; PENINSULA CITIZENS FOR THE PROTECTION OF WHALES; DAN SPOMER; SUE MILLER; STEPH DUTTON,
Plaintiffs-Appellants,

v.

DONALD EVANS, Secretary, U.S. Department of Commerce; CONRAD LAUTENBACHER, Administrator, National Oceanic and Atmospheric Administration; WILLIAM HOGARTH, Assistant Administrator for Fisheries, National Marine Fisheries Service,
Defendants-Appellees,

MAKAH INDIAN TRIBE,
Defendant-intervenor-Appellee.

No. 02-35761

D.C. No. CV-02-00081-FDB

ORDER AND AMENDED OPINION

Appeal from the United States District Court
for the Western District of Washington
Franklin D. Burgess, District Judge, Presiding

Argued and Submitted
October 28, 2002—Seattle, Washington

Filed December 20, 2002
Amended November 26, 2003
Second Amendment June 7, 2004

Before: James C. Hill,* Ronald M. Gould and
Marsha S. Berzon, Circuit Judges.

Opinion by Judge Berzon for sections I and II;
Opinion by Judge Gould for sections III and IV.

*The Honorable James C. Hill, Senior United States Circuit Judge, United States Court of Appeals for the Eleventh Circuit, sitting by designation.

COUNSEL

Eric R. Giltzenstein and Kimberly D. Ockene, Meyer & Glitzenstein, Washington, D.C., for the plaintiffs-appellants.

Robert H. Oakley, Environment & Natural Resources Division, United States Department of Justice, Washington, D.C., for the defendants-appellees.

John B. Arum, Ziontz, Chestnut, Varnell, Berley & Slonim, Seattle, Washington, for the defendant-intervenor-appellee.

ORDER

The panel majority opinion, as amended, appearing at 350 F.3d 815 (9th Cir. 2003), is AMENDED as follows:

On Page 844, in Part IV, after the sentence that ends "they must do so before any taking of a marine mammal", insert the following footnote:

> In connection with petitions for rehearing en banc, the Appellees urged that this case is moot because the whaling quota expired before we filed our opinion. We disagree. First, Appellants' complaint sought relief broader than invalidation of the then-existing whaling quota, including invalidation of the procedures used to obtain the IWC permit and of the Cooperative Agreement as violative of NEPA and the MMPA. The government activity challenged is not an ordinary, time-limited regulatory permit, but rather the way the government has gone about contracting with the Makah, obtaining "aboriginal subsistence" quotas from the IWC, and allocating them to the Tribe. The quotas are not assigned pursuant to a statutory or regulatory regime. The system by which the Department of Commerce has allocated a whale quota to the Makah Tribe is *ad hoc*; there is no requirement that quotas coincide with the five-year quotas assigned by the IWC. *See* 16 U.S.C. § 916d; 50 C.F.R. §§ 230.4-230.6. This remains an active controversy over the question of the procedures to be followed before permitting whaling by the Tribe, *GATX/Airlog Co. v. U.S. District Court*, 192 F.3d 1304, 1306 (9th Cir. 1999), so our decision still governs the relations between the parties. *See Friends of the Earth v. Laidlaw*, 528 U.S. 167, 174 (2000); *Firefighters Local Union No. 1784 v. Stotts*, 467 U.S. 561, 569-70 (1984).
>
> Second, vacating our opinion would make the precedential harms from the 2001-02 permit irredressable. *See Alaska Center for the Environment v. U.S. Forest Service*, 189 F.3d 851, 855 n.3, 856-57 (9th Cir. 1999). The precedential effects of past agency

decisions must be considered when an agency determines whether an environmental impact statement (EIS) is required. *See* 40 C.F.R. § 1508.27(b)(6). Precedential harms continue to flow from the government's action. As there remains a continuing impact for NEPA purposes of the 2001-02 permit, the case is not moot.

Third, the expiration of the one-year quota, whose length is determined by the agency alone in the *ad hoc* manner described above, was nothing more than the government's voluntary cessation of challenged conduct. The party asserting mootness bears the burden of proving that " 'there is no reasonable expectation that the wrong will be repeated,' " *City of Erie v. Pap's A.M.*, 529 U.S. 277, 287 (2000) (citation omitted), *i.e.*, that it is " 'absolutely clear that the allegedly wrongful behavior could not reasonably be expected to recur.' " *Friends of the Earth*, 528 U.S. at 189 (citation omitted). Here, there is no assurance that the challenged action will not again take place. On the contrary, the government has declared that it *will* recur, and that the government expects to grant the Tribe further permission to whale without complying with the NEPA or MMPA, should this court's edict that the government comply with the law be vacated. At oral argument, the government said that a "quota will probably be given to the Makah whalers again next year," with a "similar" environmental assessment and "pretty much the same management plan" as that used in the 2001-2002 allocation. *See also* Department of Commerce/National Oceanic and Atmospheric Administration, *Marine Mammals; Notice of Intent to Prepare an Environmental Impact Statement for Issuing Annual Gray Whale Subsistence Quotas to the Makah Indian Tribe for the years 2003 through 2007*, 68 Fed. Reg. 10,703, 10,703 (March 6, 2003).

> Fourth, even if the claims were otherwise moot, the "capable of repetition, yet evading review" doctrine applies. In *Biodiversity Legal Foundation v. Badgley*, 309 F.3d 1166, 1174 (9th Cir. 2002), we applied the evading-review doctrine where the "duration of the controversy is solely within the control of the defendant." The exception applies even more aptly here in light of the history of protracted challenges to the 1997 and 2001 allocations. One cannot assume that the government will tailor any new permit to be long enough for effective review. Instead, there is every reason to believe that further administrative delays and piecemeal litigation will continue to make even a five-year whaling quota unreviewable. *See Honig v. Doe*, 484 U.S. 305, 322 (1988). We retain jurisdiction under *Weinstein v. Bradford*, 423 U.S. 147 (1975), and its progeny.
>
> Fifth, even if the only basis for ongoing controversy were the Cooperative Agreement, which expired *after* we filed our opinion, we have concluded that we should not exercise our discretion to vacate the opinion. *See U.S. Bancorp Mortgage Co. v. Bonner Mall P'ship*, 513 U.S. 18, 29 (1994).
>
> Our opinion is not moot and we decline to vacate it.

Judge Gould and Judge Berzon have voted to deny the renewed petitions for rehearing en banc and Judge Hill took no position on whether the case should be heard en banc. The full court was advised of the petition for rehearing en banc. A judge of the court requested a vote on whether to rehear the matter en banc. The call failed to receive a majority vote of the active, non-recused judges. The petitions for rehearing en banc are DENIED.

No further petition for rehearing or rehearing en banc will be accepted in this case.

IT IS SO ORDERED.

OPINION

BERZON, Circuit Judge:

"[W]hile in life the great whale's body may have been a real terror to his foes, in his death his ghost [became] a powerless panic to [the] world." Herman Melville, Moby Dick 262 (W.W. Norton & Co. 1967) (1851). This modern day struggle over whale hunting began when the United States granted support and approval to the Makah Tribe's ("the Tribe's") plan to resume whaling.

The Tribe, a traditional Northwest Indian whale hunting tribe, had given up the hunt in the 1920s. In recent years, the Tribe's leaders came to regret the cultural impact on the Tribe of the lapse of its whale hunting tradition. As part of a general effort at cultural revival, the Tribe developed plans to resume pursuing gray whales off the coast of Washington State and in the Strait of Juan de Fuca. The worldwide hunt for whales in the years the real-life Captain Ahabs roamed the high seas, however, seriously depleted the worldwide stock of the cetaceans. As a result of the near extinction of some species of whales, what had been a free realm for ancient and not-so-ancient mariners became an activity closely regulated under both federal and international law. This case is the second in which we have considered whether the federal government's approval of the Tribe's plans to pursue once again the Leviathan of the deep runs afoul of that regulation. *See Metcalf v. Daley*, 214 F.3d 1135 (9th Cir. 2000).

The plaintiffs, citizens and animal conservation groups,[1]

[1]Will Anderson, Fund for Animals, Humane Society of the United States, Australians for Animals, Cetacean Society International, West Coast Anti-Whaling Society, Sandra Abels, Cindy Hansen, Patricia Ness, Robert Ness, Lisa Lamb, Margaret Owens, Charles Owens, Peninsula Citizens for the Protection of Whales, Dan Spomer, Sue Miller, and Steph Dutton.

challenge, as did the plaintiffs in *Metcalf*, the government's failure to prepare an environmental impact statement ("EIS") pursuant to the National Environmental Policy Act of 1969 ("NEPA"), 42 U.S.C. § 4321 et seq. They also contend that the Tribe's whaling plan cannot be implemented because the Tribe has not complied with the Marine Mammal Protection Act of 1972 ("MMPA"), 16 U.S.C. § 1361 et seq. Having reviewed the environmental assessment ("EA") prepared by the government agencies and the administrative record, we conclude that there are substantial questions remaining as to whether the Tribe's whaling plans will have a significant effect on the environment. The government therefore violated NEPA by failing to prepare an EIS before approving a whaling quota for the Tribe. We also conclude that the MMPA applies to the Tribe's proposed whale hunt.

I. Background

A. *The Whales*

The record discloses that there are two genetically distinct North Pacific gray whale populations — an eastern stock, also known as the California gray whale, and a western stock, confined to East Asian waters. *See* Steven L. Swartz et al., *Review of Studies on Stock Identity in the Gray Whale (Eschrichtius robustus)* (hereinafter "*Review of Studies*") (written by scientists employed by National Marine and Fisheries Service ("NMFS") and National Oceanic and Atmospheric Administration ("NOAA"), at 1 (2000)). The California gray whales migrate annually between the North Pacific and the West Coast of Mexico. These whales were at one time nearing extinction and were therefore listed on the Endangered Species Act list. *See* Endangered Species Act of 1973, 16 U.S.C. § 1531 et seq.; *Metcalf*, 214 F.3d at 1138. Protected by the endangered species designation and by other conservation measures, the California gray whale stock revived, so that by 1994 the whale was removed from the endangered species list. *See* 59 Fed. Reg. 31,094 (Jun. 16,

1994). The NMFS has determined that the eastern North Pacific gray whale stock has now recovered to between 17,000 and 26,000 whales, a number near its carrying capacity.[2] *See* 63 Fed. Reg. 16,701, 16,704 (Apr. 6, 1998); 58 Fed. Reg. 3121, 3122 (Jan. 7, 1993); John Calambokidis et al., Final Report, *Range and Movements of Seasonal Resident Gray Whales from California to Southeast Alaska*, at 11 (Dec. 2000); *Review of Studies* at 11, 14.[3] Most of the migrating whales pass through the Olympic Coast National Marine Sanctuary ["Marine Sanctuary"],[4] adjacent to the Makah Tribe's home territory on the coast of Washington State, on their way to the Bering and Chukchi Seas, and again when heading south for the winter.

Not all of the gray whales, however, make the entire journey to the Far North each summer. On this much the parties agree, although they disagree about the habits of the nonmigrating whales as they pertain to this case.

The plaintiffs contend that a separate group of gray whales remains in and around the Marine Sanctuary waters and within the Strait of Juan de Fuca (south of Vancouver Island and east of the Pacific Ocean) during the summer and early fall, rather than migrating to the Bering and Chukchi Seas with the other eastern stock North Pacific gray whales. *See* Appendix (map depicting area). This resident group, plaintiffs maintain, arrives in the late spring with the northward migration and remains in the area for the summer, leaving only

[2]Carrying capacity is the largest number of a species that a given ecosystem can sustain.

[3]The studies and other documents cited are in the Administrative Record for the 2001 EA.

[4]The Marine Sanctuary was designated in 1994 under the National Marine Sanctuaries Act. The Act provides for the identification and protection of marine environment areas of special national significance. *See* 16 U.S.C. § 1431 et seq. The Marine Sanctuary covers more than 3300 square miles of ocean off the Olympic Peninsula of Washington State.

when the larger contingent of behemoths migrate south for the winter.

The government, in contrast, posits that the whales in the Marine Sanctuary area and the Strait of Juan de Fuca are not a distinct group but rather a rotating one changing from year to year, albeit with some repeat visitors. *See* Environmental Assessment on Issuing a Quota to the Makah Indian Tribe for a Subsistence Hunt on Gray Whales for the Years 2001 and 2002, at 22-29 (July 12, 2001) ["Final EA"]. The government points to several studies that suggest that if there is any identifiable whale subgroup, it is a much larger one than the plaintiffs suppose. This larger subgroup is denominated by the government the Pacific Coast Feeding Aggregation ("PCFA"). The PCFA, the government maintains, does not migrate all the way north for the summer but ranges over a long stretch of the Pacific Coast from California to Southern Alaska. *See id.* According to this analysis, although some whales in the PCFA show a tendency to return to the same area along the Pacific Coast, most of them move around among different areas along the West Coast rather than staying in a particular area. Some frequent different locations throughout the summer, and others visit different places each year.

Despite this disagreement among the parties about the habits of the nonmigrating whales, there are some concepts that are not disputed. Scientists, including those relied upon by the government agencies, generally support the assessment that there is a fairly small number of whales who spend some or all of the summer in the general area of the planned Tribe hunt, and that some of these whales return to the area for more than one summer, albeit not necessarily in successive years. *See, e.g.*, John Calambokidis et al., Final Report, *Gray Whale Photographic Identification in 1999: Collaborative Research by Cascadia Research, the National Marine Mammal Laboratory, and Humboldt State University*, at 8-10 (Dec. 2000) (prepared for the National Marine Mammal Laboratory

["NMML"]); Calambokidis et al., *Range and Movements*, *supra*, at 3-4, 6-9, 11 (funded by NMML with participation of Dr. James Darling, the plaintiffs' main expert); Darling Decl. ¶¶ 2-3;[5] *Review of Studies* at 10, 14-15 (NMFS and NMML study); Jennifer Leigh Quan, Univ. of Wash. Sch. of Marine Affairs, Thesis, *Summer Resident Gray Whales of Washington State: Policy, Biological and Management Implications of Makah Whaling*, at 1, 7-11 (2000).

Further, while the parties disagree in their assessment of the scientific literature as it pertains to many details regarding the behavior of these returning whales, they agree — and our review of the administrative record confirms — that overall, the best current scientific evidence indicates that each summer about sixty percent of the whales in the area around Neah Bay and the Strait of Juan de Fuca are returning whales. *See* Final EA at 24, 27; *Review of Studies* at 1,13-15, 20-21 (finding that there are "identifiable gray whales, termed 'summer residents' [that] have been observed to return each summer to the same areas at various locations along the Pacific Northwest Coast" for at least part of the season) (citing studies done within the Tribe's hunting grounds off the Washington Coast and near Vancouver Island); Quan, *supra*, at 4, 9-10 (supporting the finding that approximately 61% of the whales found in the Tribe's whaling area were repeat visitors). *See also*, Darling Decl. ¶¶ 2-3, 7 (approximately sixty percent of the whales identified in a separate area, off central Vancouver Island in any one summer, are seen repeatedly over multiple years, with some whales having returned to the region each summer for more than twenty years).

The total number of whales frequenting the area of the planned Makah Tribe hunt each summer is not known. It is common ground, however, that the whales in the Tribe's proposed whaling area are a relatively small subgroup of the

[5]This Declaration was submitted to the NOAA and is part of the administrative record.

larger number of nonmigrating whales that forego the complete trip to the North. *See* Final EA at 26 (seventy whales sighted in the area in 2000); Calambokidis et al., *Range and Movements*, *supra*, at 6 (between forty and forty-five whales were spotted south of Vancouver Island in two summer months during 1998); Darling Decl. ¶¶ 2-3 (the number of whales south of Vancouver Island in the Strait of Juan de Fuca is likely to be similar to the thirty-five to fifty whales observed as residents off the central coast of Vancouver Island); Quan, *supra*, at 10 (from 1993-1998 ten to thirty-five individual whales were identified in the outer coast near Neah Bay and the Strait of Juan de Fuca).

B. *The Makah Tribe and Its Efforts to Resume Whaling*

The Tribe is composed of Native Americans whose traditional territory is in Washington State, on the northwestern Olympic Peninsula. In 1855, the United States entered into a treaty with the Tribe, the Treaty of Neah Bay, providing that the Tribe would give up most of its land on the Olympic Peninsula. *See* 12 Stat. 939, 940 (1855). In exchange, the Tribe was given, *inter alia*, the "right of taking fish and of whaling or sealing at usual and accustomed grounds and stations . . . ." *Id.* That the Treaty of Neah Bay is the only treaty between the United States and a Native American tribe that specifically protects the right to hunt whales suggests the historic importance of whaling to the Makah Tribe.

Despite the central place of whaling in their lives, the Tribe ended their whaling expeditions in the late 1920s. Explanations regarding the reasons for the abandonment of this custom include: the federal government's discouragement and lack of assistance; a decline in demand for whale oil; social and economic dislocation within the Tribe; and the drastic decline of the gray whale population.

Then came, in the early 1990s, both a renewed interest within the Tribe in reviving its traditional whaling customs

and the removal of the California gray whale from the Endangered Species Act list. The Tribe therefore determined to resume its traditional whale hunting. In the seventy years since the last hunt, however, whaling had become an activity tightly regulated internationally, through the International Whaling Commission, and domestically, through the Whaling Convention Act,[6] and the MMPA, as well as through more general federal environmental legislation. Pursuant to the ICRW, aboriginal subsistence whaling is permitted,[7] but such whaling must conform to quotas issued by the IWC for various whale stocks.

In 1996 the NOAA entered into a written agreement with the Tribe committing the NOAA to seek an aboriginal subsistence quota from the IWC. The United States presented a proposal for such a quota at the annual IWC meeting in June 1996. The proposal proved controversial, however, and some

[6]The International Convention for the Regulation of Whaling ("ICRW") was established in 1946 to restrict and regulate whaling. 62 Stat. 1716, 161 U.N.T.S. 72 (Dec. 2, 1946). The ICRW created the International Whaling Commission ("IWC"), comprised of one member from each of the ratifying countries. The IWC is empowered to set international whaling regulations and annual whaling quotas. *Id.* at arts. III, V § 1. The United States signed the Convention, 62 Stat. 1716 (1946), and implemented it domestically in the Whaling Convention Act of 1949 ("WCA"), 16 U.S.C. § 916 et seq. *See also* 50 C.F.R. § 230.1 (WCA implementing regulations).

[7]This exception originated in the first quota (termed a "Schedule") approved under the ICRW, which stated that "[it] is forbidden to take or kill gray whales . . . *except when the meat and products of such whales are to be used exclusively for local consumption by the aborigines*." 62 Stat. at 1723 (emphasis added). The articulation of the aboriginal subsistence exception has varied in ICRW Schedules over time. The precise reach of the exception has remained unclear. *See, e.g.*, Brian Trevor Hodges, *The Cracking Facade of the International Whaling Commission as an Institution of International Law: Norwegian Small-Type Whaling and the Aboriginal Subsistence Exemption*, 15 J. Envtl. L. & Litig. 295, 304-05 (2000); Nancy C. Doubleday, *Aboriginal Subsistence Whaling: The Right of Inuit to Hunt Whales and Implications for International Environmental Law*, 17 Denv. J. Int'l L. & Pol'y 373, 384-94 (1989).

members of the IWC blocked its passage. The House of Representatives Committee on Resources also passed a unanimous bipartisan resolution opposing the Tribe's hunting proposal. In the face of this opposition the United States withdrew its request.

Before the United States began its next attempt to gain IWC approval, some animal conservation organizations, whale watching groups, and individual citizens wrote a letter to the NOAA expressing concern about the prospect of a renewed whale hunt in the waters off the continental United States. The letter charged that the government had violated NEPA by agreeing to help the Tribe obtain hunting rights without conducting an EA. The NOAA quickly produced for public comment a Draft EA, concluding that the Tribe's hunt would have no significant environmental impact.

A few months later, the NOAA and the Tribe entered into a new agreement similar to the prior one except that the new version required that the Tribe's management plan provide time and area restrictions "including . . . confining hunting activities to the open waters of the Pacific Ocean outside the Tatoosh-Bonilla Line." Agreement Between the NOAA and the Makah Tribal Council, at 5 (1997). This provision sought to reduce the likelihood that the Tribe would take nonmigrating whales. Four days after this agreement was reached, the NMFS issued a final EA and a finding of no significant impact ("FONSI") concerning the proposed hunt.

The United States thereupon presented a joint proposal with the Russian Federation to the IWC's 1997 annual meeting. The joint proposal combined the desired Makah Tribe quota with the Russian request for a whaling quota for its Siberian aboriginal people, the Chukotka, into a single request for permission to take 620 whales over a five-year period. *See* IWC Chairman's Report of the 49th Annual Meeting, at 19 (Oct. 1997).

Delegates at the IWC meeting again disagreed about whether the Tribe qualified under the aboriginal subsistence exception. Rather than resolving the disagreement, the delegates papered it over with ambiguous language: The new Schedule approved by a majority of IWC members limited use of the California gray whale quota to aboriginal groups "whose traditional aboriginal subsistence needs have been recognised," but did not say who was to recognize those needs, or how. *See id.* at 20. So it remained unclear whether a majority of the members considered the Tribe entitled to the aboriginal subsistence exception, or whether instead such recognition was to be conferred by the country issuing the quota. In March 1998, the NMFS announced a quota permitting the Tribe to take[8] five gray whales in a one-year period and allowing no more than thirty-three strikes[9] over a five year period. *See* 63 Fed. Reg. 16,701 (Apr. 6, 1998).

Meanwhile, on the day the 1997 FONSI was released and before the IWC and NMFS quotas were issued, a group of concerned citizens and animal conservation organizations filed a complaint in federal court against the federal defendants for violations of NEPA, the WCA, and the Administrative Procedure Act. The primary allegation was that the EA was a deficient effort, put together simply to justify the prior agreement allowing the Tribe to hunt whales. After the district

[8]To "take" a whale under the Makah Management Plan means "to flag, buoy or make fast to a whale catcher, including a canoe, chase boat or support boat." *See* Makah Management Plan for Makah Treaty Gray Whale Hunting for the Years 1998-2002, as amended by Council Resolution No. 57-01 on May 30, 2001 ["Makah Management Plan"], at 2.

[9]A "strike" is defined in the Makah Management Plan as "any blow or blows delivered to a whale by a harpoon, lance, rifle, explosive device or other weapon. When used as a verb, "strike" means the act of delivering such a blow or blows to a whale. A harpoon blow is a strike *only if the harpoon is embedded in the whale.* Any rifle shot which hits a whale is a strike." Makah Management Plan at 2 (emphasis added). For purposes of the quota, multiple blows to one whale are counted as a single strike. *Id.*

court granted summary judgment for the defendants, the Tribe began whaling and in 1999 killed one whale.

The whale's demise did not bring this prolonged dispute to an end, for this court reversed the district court in *Metcalf*. We held that the EA was invalid because it was not produced until after the agreement with the Tribe had been consummated. *Id.* at 1143-46. A new EA must be drafted, we ordered, "under circumstances that ensure an objective evaluation free of the previous taint." *Id.* at 1146. Because we viewed the government defendants' actions as having been undertaken improperly, we stated that when the new EA was completed and returned to the courts for evaluation, it should be subject to "additional scrutiny [and] the burden shall be on the Federal Defendants to demonstrate . . . that they have complied with [the] requirement" to evaluate the environmental impact of the proposal objectively and in good faith. *Id.*

After the decision in *Metcalf*, the federal defendants dissolved the agreement with the Makah Tribe (over the Tribe's protest) and began the EA process anew. The NMFS and the NOAA published a new Draft EA in January 2001. The Draft EA, like the 1997 EA, presented as the most desirable option a whale quota targeted at migrating whales. The restriction was to be accomplished by limiting the hunt to the area west of the Tatoosh-Bonilla line and to months when northward or southward migration was underway. Draft EA at 7. Similarly, the proposed Makah Management Plan only allowed whaling in the "open waters of the Pacific Ocean which are outside the Tatoosh-Bonilla Line." Management Plan for Makah Treaty Gray Whale Hunting for the Years 1998-2002 (pre-amendment), at 6.

Before the Final EA issued but after the comments period on the Draft EA had closed, the Tribe amended the Management Plan. The amended plan, in contrast to the earlier ones, does not contain any general geographic limitations on the whale hunt. Instead, the new plan allows for the taking of five

whales in any one calendar year, with the aggregate number taken from 1998 to 2002 not to exceed twenty whales. *See* Makah Management Plan at 3. No more than thirty-three whales can be struck between 1998 and 2002, and the number of gray whales struck between 2001 and 2002 cannot exceed fourteen. *Id.* The amended plan does limit the number of strikes — but not the number of takes — likely to affect non-migrating whales: For 2001 and 2002, the plan limits to five the number of strikes (1) during the months of the migration, between June 1 and November 30; and (2) at all times in the Strait of Juan de Fuca. *Id.*

On July 12, 2001, the NOAA and NMFS published a Final EA, based on the amended Management Plan and once again found no significant environmental impact. The Draft EA did not evaluate the amended Management Plan, so there has been no opportunity for public comment on the important amendments. Nor did any of the scientific studies relied on in the EA specifically evaluate the impact of the revised Management Plan. Rather, to the extent those studies and comments discuss the proposed hunt at all, they assume a hunt limited to areas west of the Tatoosh-Bonilla line.

The final step in the administrative saga took place when the NOAA and the NMFS issued a Federal Register notice on December 13, 2001 announcing a quota for the "land[ing]" of five gray whales in 2001 and 2002 and approving the latest Makah Management Plan. 66 Fed. Reg. 64,378 (Dec. 13, 2001).

C. *The Current Litigation*

The plaintiffs filed this action in January 2002, alleging violations of both NEPA and the MMPA. The Tribe intervened. In April, the plaintiffs moved for a preliminary injunction to prevent an anticipated whale hunt, but the district court denied the motion. Concluding that the federal agencies had taken the requisite "hard look" at the risks associated with the

whale hunt and that the court was required to defer to their decision, the district court determined that the plaintiffs did not have a probability of success on the merits. The district court also held that the Treaty of Neah Bay's preservation of the Tribe's whaling rights takes precedence over the MMPA's requirements; the plaintiffs therefore were unlikely to prevail on their MMPA claim as well. The plaintiffs appealed these rulings.

While the preliminary injunction decision was on appeal, the district court granted summary judgment to the defendants. The plaintiffs now appeal the summary judgment order. We consolidated the two appeals and dismissed the preliminary injunction appeal as moot. Now before us is the appeal from the summary judgment order.[10]

II. NEPA Analysis

A. *Standard of Review*

The Administrative Procedure Act governs judicial review of agency decisions under NEPA. If an agency decides not to prepare an EIS, the decision not to do so may be overturned only if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." *Native Ecosystems Council v. Dombeck*, 304 F.3d 886, 891 (9th Cir. 2002) (quoting 5 U.S.C. § 706(2)(A)); *Tillamook County v. U.S. Army Corps of Eng'rs*, 288 F.3d 1140, 1143 (9th Cir. 2002).

[10]The parties dispute whether the 1997 administrative record should have been considered part of the administrative record in this case. They agree, however, that we may use the material contained in the Excerpts of Record prepared for the preliminary injunction appeal, and we have done so. Further, we have relied only on studies cited in the 2001 EA and material in the 2001 administrative record. We therefore have no need to resolve the dispute regarding the scope of the administrative record in the summary judgment appeal and do not do so.

More specifically, this court must determine whether the agencies that prepared the EA took a " 'hard look' at the environmental consequences" of the proposed action. *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1211 (9th Cir. 1998) (citing *Oregon Natural Res. Council v. Lowe*, 109 F.3d 521, 526 (9th Cir. 1997)). The court must defer to an agency conclusion that is "fully informed and well-considered," but need not rubber stamp a "clear error of judgment." *Blue Mountains*, 161 F.3d at 1211 (quoting *Save the Yaak Comm. v. Block*, 840 F.2d 714, 717 (9th Cir. 1988) and *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 378 (1989)).[11]

B. *NEPA Standards*

NEPA is a statute that aims to promote environmentally sensitive governmental decision-making, without prescribing any substantive standards. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 353 (1989); *Tillamook County*, 288 F.3d at 1143. Toward that end, the statute requires, with some exceptions, that all federal agencies consider the environmental impact of their actions. If a federal action "significantly [affects] the quality of the human environment," then the implementing agency or agencies must prepare an EIS providing a detailed and comprehensive analysis of the potential environmental impacts of the proposed action. *See* 42 U.S.C. § 4332(C); 40 C.F.R. § 1502 et seq. The EIS must also suggest and analyze the environmental impact of alternatives to the proposed action. 42 U.S.C. §§ 4332(C) & (E).

[11]It might be argued that our review may be less deferential than usual, given the specific directive in *Metcalf* that we give any later EA "additional scrutiny" and place the burden of demonstrating objective evaluation on the government. *See Metcalf*, 214 F.3d at 1146. We find it unnecessary to apply this directive from *Metcalf*, because we conclude in this section that NEPA was violated based on the traditional standard of review set forth above.

Regulations promulgated by the Council on Environmental Quality provide factors that agencies must consider in deciding whether to prepare an EIS and emphasize the importance of involving the public in NEPA evaluations. 40 C.F.R. §§ 1500.2, 1502.4(b). The public must be given an opportunity to comment on draft EAs and EISs, and public hearings are encouraged to facilitate input on the evaluation of proposed actions. *See* 40 C.F.R §§ 1503.1, 1506.6.

The CEQ regulations define the term "significantly" for purposes of NEPA as requiring analysis of both the "context" and the "intensity" of the action. Of great importance for purposes of this case, the context of the action includes "society as a whole (human, national), the affected region, the affected interests, and *the locality*." 40 C.F.R. § 1508.27(a) (emphasis added).

"Intensity" refers to the severity of the impact, and includes the following considerations:

> (1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.
>
> (2) The degree to which the proposed action affects public health or safety.
>
> (3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
>
> (4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

> (5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
>
> (6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
>
> (7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts . . . .
>
> (8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.
>
> (9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.
>
> (10) Whether the action threatens a violation of Federal, State, or local law . . . .

40 C.F.R. § 1508.27.

Before deciding whether to complete an EIS, government agencies may prepare a less formal EA which "briefly provides sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact." *Tillamook County*, 288 F.3d at 1144 (citation omitted). *See also Nat'l Parks & Conservation Ass'n v. Babbitt*, 241 F.3d 722, 728, 730 (9th Cir. 2001); 40 C.F.R. §§ 1501.3, 1501.4, 1508.9, 1508.27. If the EA

results in a finding of no significant impact — a FONSI, in NEPA lingo — then no EIS need be completed. *See* 40 C.F.R. §§ 1500.3, 1500.4(q), 1500.5(l), 1508.13.

[1] Critically for this case, to prevail on the claim that the federal agencies were required to prepare an EIS, the plaintiffs need not demonstrate that significant effects *will* occur. A showing that there are " '*substantial questions* whether a project may have a significant effect' on the environment" is sufficient. *Blue Mountains*, 161 F.3d at 1212 (quoting *Idaho Sporting Cong. v. Thomas*, 137 F.3d 1146, 1150 (9th Cir. 1998)) (emphasis added). The plaintiffs in this case point to a number of CEQ significance factors as pertinent to raising substantial questions concerning a possible significant effect on the environment but concentrate on three, to which we now turn.

C. *Impact on Public Safety*

The plaintiffs first focus on the possible impact of the Tribe's whaling proposal on public safety. The proposal provides that whales will be hunted by a combination of traditional and contemporary methods: Whales must first be struck with harpoons but, once struck, are to be killed, in an effort to make the killing as humane as possible, with high-powered rifles. The plaintiffs maintain that the long range of the rifles and the possibility that injured whales will lash out at nearby people and boats present serious human safety issues.

The government EA analyzes these risks in some detail and finds them insignificant. *See* Final EA at 63-65. In so concluding, the EA relies in large part on a study by Kirk H. Beattie, the safety expert hired by the Tribe. Beattie made specific safety recommendations, largely adopted in the Makah Management Plan, including: shooting only if the Tribe's boat is thirty feet or closer to the targeted whale; pointing the rifle away from the shoreline if within 500 yards of it; and having a safety officer on the chaser boat to ensure

a clear line of fire for the rifleman. *See* Kirk H. Beattie, Report, *Minimizing the Potential Injury or Death from Rifle Fire to Non-Participants in Makah Gray Whale Hunts*; Final EA at 64; Makah Management Plan at 6. Beattie went on to conclude that the proposed whale hunt will be far less dangerous than deer hunting, in which there is a risk of injury from ricocheted bullets of approximately one in four million. *See* Beattie, *supra*, at 5.

The plaintiffs argue that the government cannot rely on Beattie because he is not an independent expert. Their contention is wrong. The government may rely on experts hired by other parties so long as the agency objectively evaluates the qualifications and analysis of the expert. *See Friends of Earth v. Hintz*, 800 F.2d 822, 834-35 (9th Cir. 1986). The government has done just that: Beattie is an undisputed expert, and the EA evaluates his findings.

Furthermore, the EA specifically discounts the opinion of the plaintiffs' expert, Roy Kline, that firing away from the shoreline is not a solution because the bullets could ricochet 1,700 meters off the line of fire. Because Kline did not consider the specifics of the Tribe's hunt, including the exact kind of weapons to be used and the mitigating safety measures, the agencies concluded that his concerns were not warranted. *See* Final EA at 63-65.

The EA points, in addition, to several more factors that reduce the risk to the public: There will be only a few whale hunts and such hunts will not take place near populated areas. Final EA at 64, 69. The Coast Guard also has established a 500 yard exclusionary zone to keep the public from danger during a Tribe whale hunt. Final EA at 64, 69; *see also* Regulated Navigation Area, 63 Fed. Reg. 52,603 (Oct. 1, 1998). The Coast Guard regulations further require the Tribe to broadcast warnings over the radio and display a warning flag marking the hunting vessel. *See id.*

We must defer to the expertise of the agency in evaluating scientific evidence. "[W]hen the record reveals that an agency based a finding of no significant impact upon relevant and substantial data, the fact that the record also contains evidence supporting a different scientific opinion does not render the agency's decision arbitrary and capricious." *See Wetlands Action Network v. U.S. Army Corps of Eng'rs*, 222 F.3d 1105, 1120-21 (9th Cir. 2000) (citations omitted). The government does not need to show that there is *no* risk of injury, but only that the risk is not significant.

The agencies' finding that public safety is not endangered is neither arbitrary nor capricious. Were there no substantial questions raised as to other aspects of the environmental impact of the Tribe's hunt, no EIS would be required with respect to the public safety concerns alone.

D. *Controversy and Uncertainty*

[2] Under the CEQ regulations, we must consider whether the effects of the Tribe's whaling on the human environment are "likely to be highly controversial," 40 C.F.R. § 1508.27(b)(4), and also whether the "possible effects . . . are highly uncertain or involve unique or unknown risks." 40 C.F.R. § 1508.27(b)(5). A proposal is highly controversial when there is "a substantial dispute [about] the size, nature, or effect of the major Federal action rather than the existence of opposition to a use." *Blue Mountains*, 161 F.3d at 1212 (quoting *Greenpeace Action v. Franklin*, 14 F.3d 1324, 1335 (9th Cir. 1993)). Put another way, a proposal can be considered controversial if "substantial questions are raised as to whether a project . . . may cause significant degradation of some human environmental factor." *Nat'l Parks*, 241 F.3d at 736 (quoting *Northwest Envtl. Def. Ctr. v. Bonneville Power Admin.*, 117 F.3d 1520, 1539 (9th Cir. 1997) (Reinhardt, J., concurring in part and dissenting in part)).

[3] There is no disagreement in this case concerning the EA's conclusion that the impact of the Makah Tribe's hunt on

the overall California gray whale population will not be significant. What is in hot dispute is the possible impact on the whale population in the local area where the Tribe wants to hunt. In our view, the answer to this question — of greatly increased importance with the revision of the Makah Management Plan so as expressly to allow hunting of local nonmigrating animals — is sufficiently uncertain and controversial to require the full EIS protocol.

[4] Our reasoning in this regard is as follows: The government agrees that a relatively small group of whales comes into the area of the Tribe's hunt each summer, and that about sixty percent of them are returning whales (although, again, not necessarily whales returning annually). Even if the eastern Pacific gray whales overall or the smaller PCFA group of whales are not significantly impacted by the Makah Tribe's whaling, the summer whale population in the *local* Washington area may be significantly affected. Such local effects are a basis for a finding that there will be a significant impact from the Tribe's hunts. *See* 40 C.F.R. § 1508.27(a). Thus, if there are substantial questions about the impact on the number of whales who frequent the Strait of Juan de Fuca and the northern Washington Coast, an EIS must be prepared.

[5] The crucial question, therefore, is whether the hunting, striking, and taking of whales from this smaller group could significantly affect the environment in the local area. The answer to this question is, we are convinced, both uncertain and controversial within the meaning of NEPA. No one, including the government's retained scientists, has a firm idea what will happen to the local whale population if the Tribe is allowed to hunt and kill whales pursuant to the approved quota and Makah Management Plan. There is at least a substantial question whether killing five whales from this group either annually or every two years, which the quota would allow, could have a significant impact on the environment.

The government estimates that a conservative allowable take from a group of 222 to 269 whales is 2.5 whales per year,[12] while a less conservative approach would allow killing up to six whales per year from the PCFA. Final EA at 57. Thus, with a smaller group, it would appear that a take of less than 2.5 whales per year could exceed the allowable Potential Biological Removal level or "PBR" established under the MMPA's standards.

Some of the scientists relied upon by the government worry that takes from the local resident whale population may deplete the number of local whales in the area off the coast of Washington State and in and around the Strait of Juan de Fuca. *See Review of Studies* at 15 ("[The whales'] fidelity to specific locations could subject them to differential harvests and potential depletions if there are unregulated *local takes*.") (emphasis added); Quan, *supra*, at 13 (finding that there could be an adverse impact on the local whale population in the area of the Tribe's hunt if the whales' site fidelity is based on social or familial recruitment); *see also* Darling Decl. ¶ 7 ("[I]t remains a reasonable possibility that removals of resident whales would deplete their presence in specific areas from which they would require an extended time period to recover."). These concerns, it should be noted, were expressed

[12]The government's calculation of the acceptable Potential Biological Removal level ("PBR") number for the PCFA is not without controversy. The PBR is calculated based on an MMPA formula which strives to prevent any marine mammal from being reduced below its optimum sustainable population level. The EA relies on an estimate that there are 222 to 269 whales in the PCFA. Final EA at 28, 57. Studies, however, suggest that these figures are not representative and overestimate the actual number of whales in the group. *See* Calambokidis et al., *Range and Movements*, *supra*, at 9; Calambokidis et al., *Gray Whale Photographic Identification in 1999*, *supra*, at 4, 12. Based on the higher range of 222 to 269, the EA finds that a conservative estimate allows for the taking of 2.5 whales per year without jeopardizing the PCFA population. *See* Final EA at 57. The Makah Management Plan, however, is set at five per year — the higher end of the range of acceptable removal levels (2.5 to 6) for this possibly exaggerated number of whales.

at a time when it was expected that the Tribe's hunt would be structured so as to avoid targeting the nonmigrating whales in the area, a restriction that has in large part been lifted.

The government tries in two ways to minimize the importance of the possible local impact. First, the government maintains that the PCFA — or summer resident whale group, if one exists — is not genetically distinct from the other California gray whales.[13] For purposes of applying the CEQ regulations, this consideration is irrelevant. If California gray whales disappear from the area of the Strait of Juan de Fuca, the Marine Sanctuary, or both, that would be a significant environmental impact even if the PCFA whales populating the rest of the Pacific Coast in the summer are genetically identical to the local whales, and even if the PCFA whales are genetically identical to the migrating whales.

Second, the government implies that any whales taken from the local resident group will be replaced in the local area by other whales from the PCFA, so the number of whales locally will not decline. The EA describes the PCFA as composed of whales that move from one feeding area to another rather than staying in one locale for all the summer months. That some of the whales who return, whether annually or intermittently, to the area of the proposed hunt also visit other areas of the coast cannot, however, eliminate concern about the local impact. The fact remains that a majority of the fairly small number of whales identified in the Makah Tribe's hunting area have been there in previous years, wherever else they have also journeyed. Whether there will be fewer or no whales in the pertinent local area if the hunt is permitted depends not on whether the whales who frequent that area

[13]The studies upon which the government relies are not definitive on this issue. *See* Final EA at 28; *Review of Studies* at 14 (stating that it is not known whether the "summer residents are genetically distinct"); Quan, *supra*, at 4 ("The biological significance of the seasonal residents is unclear.").

also travel elsewhere, but upon the opposite inquiry: whether whales who heretofore have *not* visited the area will do so, thereby replenishing the summer whale population in the area, if some of the returning whales are killed.

It is on this latter question that the scientific uncertainty is at its apogee. Almost all of the scientific experts relied upon in the EA state that the effect of taking whales who demonstrate some site fidelity within the Tribe's hunting area is uncertain. Quan, for example, suggests that much depends on how whales are recruited to the area, an open question requiring further study. *See* Quan, *supra*, at 11-13. If the local whales are recruited randomly, removing four whales annually from the Tribe's hunt area should not have any long-term impact. If the whales are recruited familially, however, "the annual removal of four gray whales could directly [affect the number of whales] observed and utilizing the area." Quan, *supra*, at 13.

Similarly, Darling states that "the recruitment mechanism that influences or maintains the resident group of gray whales found in Washington is not known. As a result, it is difficult to predict at this time how the harvesting of resident whales could affect the resident population." Darling Decl. ¶ 10. *See also* Calambokidis et al., *Range and Movements*, *supra*, at 4 ("It is unclear how loyal these [seasonal resident] animals are to the feeding grounds, how they adopt this alternate feeding strategy, and their range of movements."); *Review of Studies*, at 20 ("Relatively little is known about how individuals choose feeding grounds throughout their lives . . . . It is plausible that females may learn their migration route and preferred feeding areas from their mothers . . . . A summer hunt that is localized and very coastal has the potential to adversely affect such localized feeding groups and could lead to distributional changes and local extirpation.").[14]

[14]Swartz and his colleagues go on to recommend that "[s]mall-localized feeding groups should be closely monitored and management adapted to detect and avoid adverse population changes resulting from harvests." *Id.* at 21.

[6] The EA's *only* substantive attempt to address the impact of the Tribe's whaling on the number of whales in the area of the Marine Sanctuary and the Strait of Juan de Fuca is as follows: "With the extreme movements of whales in the [PCFA] both within and between seasons . . . a limit of five strikes over two years should also alleviate any potential local depletion issues." Final EA at 58.[15] The EA's conclusion simply does not follow from its premise: That PCFA whales do not spend all summer or every summer in the area of the Tribe's hunt does not eliminate the possibility that the killing of returning whales present in any given year may lead to a depletion of whales in the local area. Obviously, with the demise of some returning whales, fewer whales with the habit of returning to that area in the summer will survive. As the underlying studies establish, the local impact of the Tribe's whaling therefore turns on whether different PCFA whales will fill in for the killed, struck, or frightened whales no longer in the area. This critical question is never analyzed, numerically or otherwise, in the EA.

[7] In short, the record establishes that there are "substantial questions" as to the significance of the effect on the *local* area. Despite the commendable care with which the EA addresses other questions, the EA simply does not adequately address the highly uncertain impact of the Tribe's whaling on the *local* whale population and the local ecosystem. This major analytical lapse is, we conclude, a sufficient basis for holding that the agencies' finding of no significant impact cannot survive the level of scrutiny applicable in this case.[16]

[15]The EA also quotes from the IWC's Scientific Committee: "[T]he Committee agreed that there is a need for better understanding of site fidelity and potential stock substructure in eastern gray whales to improve advice on management." Final EA at 29. Far from negating scientific uncertainty, this conclusion by an international group of experts supports the conclusion that there are unresolved issues critical to assessing the possible local environmental impact of the Tribe's hunt.

[16]Although we reach our result under ordinary NEPA analysis, we note in addition that the amendments to the Makah Management Plan between

And because the EA simply does not adequately address the local impact of the Tribe's hunt, an EIS is required. *See Blue Mountains*, 161 F.3d at 1213 (ordering the Forest Service to prepare an EIS where the EA's treatment of one important environmental factor was "cursory and inconsistent"); *Nat'l Parks*, 241 F.3d at 735-36 (requiring preparation of an EIS when the EA admitted that it was not known how serious the dangers of the proposed action were and the EA failed adequately to address opposing expert studies).

E. *Precedential Effect*

There is a second consideration that buttresses the conclusion that an EIS must be prepared. If approval of a single action will establish a precedent for other actions which may cumulatively have a negative impact on the environment, an EIS may be required. *See* 40 C.F.R. § 1508.27(b)(6). The plaintiffs argue that the approval of the Tribe's hunting quota could have such a significant precedential impact on future IWC quotas. Approval of a whaling quota for one group for a limited time period is not binding, however, on future IWC or WCA decisions regarding other groups, or even regarding the same group in the future. This factor is therefore insufficient on its own to demonstrate a significant environmental impact.

There is nonetheless sufficient merit to plaintiffs' concerns to lend support to the conclusion that there are substantial questions concerning whether the Makah Tribe's hunt will adversely affect the environment. As noted, it appears that the IWC quota language concerning the aboriginal subsistence exception was left purposely vague. The quota issued jointly to Russia and the United States was limited to whaling by

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the Draft and Final EAs, followed by an apparent change in the agencies' position regarding the importance of targeting only nonmigrating whales, provides some basis for doubting that the government has met the special burden, imposed by *Metcalf*, of establishing its objectivity.

aboriginal groups "whose traditional aboriginal subsistence needs have been recognised." Conspicuously absent from this phrase is any delineation of who must do the recognizing or how.

Prior to adoption of this language, the understanding among IWC members was that only the IWC could decide which groups met the subsistence exception. The 1997 IWC gray whale quota, as implemented domestically by the United States, could be used as a precedent for other countries to declare the subsistence need of their own aboriginal groups, thereby making it easier for such groups to gain approval for whaling.[17] If such an increase in whaling occurs, there will obviously be a significant impact on the environment.

The EA does not specifically address the impact of the quota on any IWC country besides the United States. Instead, the EA only analyzes the possible precedent with regard to other Native American tribes in this country and Canada.

We agree that because Canada is not a member of the IWC, it will not be heavily swayed one way or the other by approval of the Makah Tribe's whaling quota. But we cannot agree with the agencies' assessment that because the Makah Tribe is the only tribe that has an explicit treaty-based whaling right, the approval of their whaling is unlikely to lead to an increase in whaling by other domestic groups. And the agencies' failure to consider the precedential impact of our gov-

[17]There have been disputes in the IWC in recent years over efforts by other countries to gain approval for quotas for whaling communities viewed domestically, but not internationally, as meeting the aboriginal exception. *See, e.g.*, Leesteffy Jenkins & Cara Romanzo, *Makah Whaling: Aboriginal Subsistence or a Stepping Stone to Undermining the Commercial Whaling Moratorium*, 9 Colo. J. Int'l Envtl. L. & Pol'y 71, 88-99 (1998); *see also* James Brooke, *Japan Cuts Whaling Rights for Native Peoples of Arctic*, N.Y. Times, May 25, 2002, at A4 (describing Japan's efforts to block whaling quotas for Alaskan and Siberian aboriginal people until quota was approved for its own whaling communities).

ernment's support for the Makah Tribe's whaling in future IWC deliberations remains a troubling vacuum. We conclude that the possible impact on the heretofore narrow aboriginal subsistence exception supports our conclusion that an EIS is necessary.

* * * *

In sum, given the substantial uncertainty and controversy over the local impact of the Makah Tribe's whaling and its possible precedential effect, an EIS should have been prepared. Of course scientific inquiry rarely yields certainty. But here the agencies' inquiry itself was deficient. Thus, an EIS is required.

There is no doubt that the government put much effort into preparing the lengthy environmental assessment now before us. While a notable attribute of the creatures we discuss in this opinion, girth is not a measure of the analytical soundness of an environmental assessment. No matter how thorough, an EA can never substitute for preparation of an EIS, if the proposed action could significantly affect the environment. *See Sierra Club v. Marsh*, 769 F.2d 868, 874-76 (1st Cir. 1985).

We stress in this regard that an EIS serves different purposes from an EA. An EA simply assesses whether there will be a significant impact on the environment. An EIS weighs any significant negative impacts of the proposed action against the positive objectives of the project. Preparation of an EIS thus ensures that decision-makers know that there *is* a risk of significant environmental impact and take that impact into consideration. As such, an EIS is more likely to attract the time and attention of both policymakers and the public.

In addition, there is generally a longer time period for the public to comment on an EIS as opposed to an EA, and public hearings are often held. *See id.* at 875-76. Furthermore, preparation of an EIS could allow additional study of a key scien-

tific issue, the local recruitment scheme of the whales in the Makah Tribe's hunting area. *See, e.g.*, *Review of Studies* at 21 ("A better understanding of site fidelity and potential stock structure will be gained through continuation and expansion of photographic identification and satellite tagging research on the feeding grounds . . . .").

Because the agencies have not complied with NEPA, we set aside the FONSI, suspend implementation of the Agreement with the Makah Tribe, and vacate the approved whaling quota for the Tribe.

III. MMPA Analysis

GOULD, Circuit Judge, with whom HILL and BERZON, Circuit Judges, concur:

In addition to arguing their NEPA claim, plaintiffs maintain that the federal defendants issued a gray whale quota to the Tribe in violation of the Marine Mammal Protection Act (MMPA), 16 U.S.C. § 1361 et. seq., which prohibits the taking of marine mammals absent a permit or waiver. The Tribe has not applied for a permit or waiver under the MMPA. Defendants maintain that the MMPA does not apply because the Tribe's whaling quota has been expressly provided for by an international treaty, or, in the alternative, because the Tribe has an Indian treaty whaling right that is not affected by the MMPA.

A. *Exemption*

The federal defendants, including NOAA, and the Makah Tribe as defendant-intervenor first assert that § 1372(a)(2) of the MMPA exempts the Tribe's whaling from the MMPA moratorium. Section 1372(a)(2) provides an exception to the MMPA's blanket moratorium on the taking of marine mammals when takes have been "expressly provided for by an international treaty, convention, or agreement to which the

United States is a party and which was entered into before [1972] or by any statute implementing any such treaty, convention, or agreement." 16 U.S.C. § 1372(a)(2). Defendants argue that § 1372(a)(2) applies here because the International Whaling Commission (IWC) approved a gray whale quota for the Tribe in 1997. We reject this argument for several reasons.

First, there is the problem of timing. Defendants recognize that a 1997 approval does not pre-date the MMPA as required by § 1372(a)(2), but argue that the 1997 approval relates back to the International Convention for the Regulation of Whaling (ICRW), which the United States signed in 1946. The ICRW enacted a schedule of whaling regulations (Schedule) and granted the IWC the power to amend the Schedule by adopting subsequent regulations, including quotas. International Convention for the Regulation of Whaling, 62 Stat. 1716, 1717-19 (1946). Defendants argue that, because the IWC was given the power to adopt quotas in 1946, the Tribe's quota approved in 1997 should be considered a right under the 1946 Convention that pre-dates the MMPA.

We disagree. The 1997 Schedule was adopted more than twenty-four years after the MMPA became effective. Section 1372(a)(2) exempts only international treaties that pre-date the MMPA, without also exempting amendments to those treaties. If Congress wanted to exempt subsequent amendments, then Congress could have done so explicitly. But Congress did not do so. That Congress did not intend to exempt subsequent amendments is clear when § 1372(a)(2) is considered alongside the mandates of § 1378(a)(4). Section 1378(a)(4) requires "the amendment of any existing international treaty for the protection and conservation of any species of marine mammal to which the United States is a party in order to make such treaty consistent with the purposes and policies of this [Act]." 16 U.S.C. § 1378(a)(4). Far from intending amendments of international treaties to escape the restrictions of the MMPA moratorium by relating back to the treaties' pre-MMPA inception, Congress mandated that exist-

ing treaties be amended to incorporate the conservation principles of MMPA. It would be incongruous to interpret § 1372(a)(2) to exempt the amendments that were mandated by § 1378(a)(4). And, if we accepted the defendants' view, then we would read the MMPA to disregard its conservation principles whenever in the future the IWC made unknown decisions for unknown reasons about the killing of unknown numbers of whales. We do not believe that Congress subordinated its goal of conservation in United States waters to the decisions of unknown future foreign delegates to an international commission.

Second, there is a problem of specificity. Even if we were to read the 1997 Schedule to relate back to the 1946 Convention and thus to pre-date the MMPA, § 1372(a)(2) still would not apply here because the Schedule fails expressly to provide any whaling quota for the Tribe.[18] Defendants do not dispute that the Schedule fails to mention the Tribe on its face. But defendants argue that IWC Schedules in practice never mention particular aboriginal tribes, but rather provide general quotas based on specific needs of particular tribes.[19] Whatever may be the IWC's practice, the MMPA unambiguously

[18]The Schedule provides for:

> The taking of gray whales from the Eastern stock in the North Pacific is permitted, but only by aborigines or a Contracting Government on behalf of aborigines, and then only when the meat and products of such whales are to be used exclusively for local consumption by the aborigines whose traditional aboriginal subsistence and cultural needs have been recognised . . . . For the years 1998, 1999, 2000, 2001, and 2002, the number of gray whales taken in accordance with this sub-paragraph shall not exceed 620, provided that the number of gray whales taken in any one of the years 1998, 1999, 2000, 2001, or 2002 shall not exceed 140.

[19]The 1997 Schedule, for example, approves the taking of 620 gray whales over five years from the Eastern stock in the North Pacific. Defendants contend that this quota is meant to accommodate the subsistence needs of the Tribe as well as Russian Chukotka aborigines over the five-year period.

requires express approval for § 1372(a)(2) to apply and to excuse the takings of marine mammals without a permit.

Third, there is a problem of uncertainty. We cannot tell whether the IWC intended a quota specifically to benefit the Tribe. Even if timing and specificity were no problem, the surrounding circumstances of the adoption of the Schedule cast doubt on the intent of the IWC to approve a quota for the Tribe. The Schedule extends the quota only to those aborigines whose "subsistence and cultural needs have been recognised." This language was inserted into the Schedule after some IWC delegates questioned whether the Tribe qualified for the aboriginal subsistence quota. *See Metcalf v. Daley*, 214 F.3d 1135, 1140 (9th Cir. 2000). Whether recognition must formally come from the IWC or from the United States is not clear.

In light of the circumstances giving rise to this language, the IWC presumably intended that such recognition, whether it came from the IWC or the United States, would depend on the Tribe's ability to satisfy the definition of aboriginal subsistence whaling. When the United States presented its request for a quota for the Makah Tribe to the IWC, the United States, in response to issues raised by the IWC during subcommittee, represented that the IWC had adopted the following definition of aboriginal subsistence whaling:

> whaling, for purposes of local aboriginal consumption carried out by or on behalf of aboriginal, indigenous, or native peoples who share strong community, familial, social, and cultural ties related to a *continuing traditional dependence* on whaling and on the use of whales.

(emphasis added).[20] While NOAA issued a Federal Register

[20]It is unclear whether the IWC has in fact definitively adopted a definition of aboriginal subsistence whaling. *See supra* footnote 7.

Notice in April 1998 recognizing the Tribe's subsistence and cultural needs, Notice of Aboriginal Subsistence Whaling Quotas, 63 Fed. Reg. 16,701 (1998), it is not clear that the IWC anticipated such recognition, given that the United States relied on a definition of subsistence whaling that requires a "continuing traditional dependence" on whaling and given that the Tribe had not engaged in whaling since 1927.

Because the IWC adopted the "has been recognised" language in response to opposition to the Tribe's whaling, and because it was not a foregone conclusion that the Tribe would satisfy the definition of aboriginal subsistence whaling, the IWC's intent to approve a whaling quota for the Tribe has not been demonstrated. The "expressly provided for" requirement of § 1372(a)(2) is not satisfied.

Fourth, § 1372(a)(2) does not apply in this case by way of a statute implementing an international treaty because there is no domestic statute implementing the ICRW that expressly permits the Tribe's whaling. The Whaling Convention Act (WCA), 16 U.S.C. § 916, implements the ICRW domestically, making it unlawful to take whales without first obtaining a quota from the IWC. 16 U.S.C. § 916c. The WCA does not mention quotas or aboriginal subsistence whaling, much less the Tribe's whaling, and therefore is of no assistance to defendants.

In sum, the defendants' reliance on § 1372(a)(2) to exempt the Tribe's whaling from the MMPA's general moratorium is misplaced. The federal defendants' view so clearly offends the express, unambiguous language of the statute that the statutory interpretation offered by NOAA and the federal defendants cannot properly be afforded deference under *Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837 (1984).

B. *Conservation Necessity*

[8] We consider whether the MMPA must apply to the Tribe to effectuate the conservation purpose of the statute.[21] In *Fryberg*, we set out a three-part test for determining when reasonable conservation statutes affect Indian treaty rights: (1) the sovereign has jurisdiction in the area where the activity occurs; (2) the statute is non-discriminatory; and (3) the application of the statute to treaty rights is necessary to achieve its conservation purpose. 622 F.2d at 1015.[22] Applying this rule,

[21]The conservation necessity principle finds its roots in the state context, allowing state regulation of Indian treaty rights even though states do not otherwise possess Congress's authority to qualify treaty rights. *Minnesota v. Mille Lacs Band of Chippewa Indians*, 526 U.S. 172, 205 (1999). *See also Antoine v. Washington*, 420 U.S. 194, (1975) (tribal hunting and fishing rights may be restricted by a regulation that is a "reasonable and necessary conservation measure") (citations omitted); *Puyallup Tribe v. Dept. of Game (Puyallup I)*, 391 U.S. 392, 398 (1968) (states may regulate tribal hunting and fishing rights if the regulation meets "appropriate standards" and is non-discriminatory). The invocation of the conservation necessity principle, however, is not limited to state regulation. *See United States v. Fryberg*, 622 F.2d 1010, 1014-1015 (9th Cir. 1980). *See also United States v. Eberhardt*, 789 F.2d 1354, 1360 (9th Cir. 1986) (making it clear that the Department of Interior has the authority to enact regulations to manage and conserve Indian resources). Indeed, because the states do not have the power held by Congress to regulate affairs with Indian nations, state regulation of treaty hunting or fishing rights may be more limited in scope than federal regulation. *See Eberhardt*, 789 F.2d at 1362. We express no opinion as to whether and, if so, the extent to which our decision has relevance to assessment of state conservation regulation that touches on treaty rights.

[22]*Fryberg* addressed whether the Eagle Protection Act, 16 U.S.C. § 668 et seq., abrogated treaty hunting rights by prohibiting the taking and killing of bald eagles. 622 F.2d at 1011. Though the ultimate issue in *Fryberg* was abrogation, *Fryberg* also articulated a test for identifying conservation statutes that affect treaty rights. *Id.* at 1015. That test was based on Supreme Court authority that allows conservation statutes to affect treaty rights to the extent necessary to achieve their conservation purpose. *Id.* at 1014-15. The Supreme Court authority relied on by *Fryberg* remains good law. *See Antoine v. Washington*, 420 U.S. 194 (1974); *Wash. Dep't of Game v. Puyallup Tribe*, 414 U.S. 44 (1973) (*Puyallup II*); *Wash. Dep't*

the MMPA may regulate any pre-existing Makah Tribe whaling rights under treaty if (1) the United States has jurisdiction where the whaling occurs; (2) the MMPA applies in a non-discriminatory manner to treaty and non-treaty persons alike; and (3) the application of the statute to regulate treaty rights is necessary to achieve its conservation purpose. *See id.*

[9] As to the first prong of the test, the MMPA extends to "any person subject to the jurisdiction of the United States," 16 U.S.C. § 1372(a)(1), and reaches 200 nautical miles outward from the seaward boundary of each coastal state, 16 U.S.C. §1362(15). Thus, the MMPA would clearly apply to the Tribe's whaling off the coast of Washington State in the Strait of Juan de Fuca. As to the second prong, the MMPA places a general moratorium on all persons except certain Native Alaskans with subsistence needs. The MMPA cannot be said to discriminate between treaty and non-treaty persons because members of the Tribe are not being singled out any more than non-treaty people in the lower forty-eight states.

[10] The third prong of the *Fryberg* test requires that the application of the MMPA to the Tribe be necessary to achieve its conservation purpose. This prong frames for us the critical issue under this test: whether restraint on the Tribe's whaling pursuant to treaty rights is necessary to effectuate the conservation purpose of the MMPA. In assessing this issue, we are

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of Game v. Puyallup Tribe, 391 U.S. 392 (1968) (*Puyallup I*); *Kennedy v. Becker*, 241 U.S. 556 (1916). Moreover, *Fryberg* did not purport to substitute the conservation necessity test for an abrogation analysis. Rather, *Fryberg* used the conservation purpose of the statute to bolster its conclusion that Congress clearly intended to abrogate treaty rights by enacting the Eagle Protection Act. Later, the same conclusion was reached by the Supreme Court in *United States v. Dion*, 476 U.S. 734 (1986), though the Supreme Court did not discuss the conservation necessity principle. Still, regardless of *Fryberg*'s posture as an abrogation case, we conclude that the conservation necessity test articulated by *Fryberg* has not been undermined by later cases and is supported by the Supreme Court authorities above cited.

mindful that the major objective of the MMPA is to ensure that marine mammals continue to be "significant functioning element[s] in the ecosystem." 16 U.S.C. § 1361(2). In fact, "[marine mammals] should not be permitted to diminish below their optimum sustainable population." *Id.* To carry out these conservation objectives, the MMPA implements a sweeping moratorium in combination with a permitting process to ensure that the taking of marine mammals is specifically authorized and systematically reviewed. For example, the MMPA requires that the administering agency consider "distribution, abundance, breeding habits, and times and lines of migratory movements of such marine mammals" when deciding the appropriateness of waiving requirements under the MMPA, 16 U.S.C. § 1371(a)(3)(A). And, when certain permits are issued, the permit may be suspended if the taking results in "more than a negligible impact on the species or stock concerned." 16 U.S.C. § 1371(a)(5)(B)(ii). One need only review Congress's carefully selected language to realize that Congress's concern was not merely with survival of marine mammals, though that is of inestimable importance, but more broadly with ensuring that these mammals maintain an "optimum sustainable population" and remain "significant functioning elements in the ecosystem." The MMPA's requirements for taking are specifically designed to promote such objectives. Without subjecting the Tribe's whaling to review under the MMPA, there is no assurance that the takes by the Tribe of gray whales, including both those killed and those harassed without success, will not threaten the role of the gray whales as functioning elements of the marine ecosystem, and thus no assurance that the purpose of the MMPA will be effectuated.[23]

[23]While we conclude here that the Tribe must undergo the MMPA permitting process to ensure the conservation goals of the Act are effectuated, we do not purport to address what limitations on the scope of a permit, if any is issued, would be appropriate to achieve the conservation purpose of the Act. Any disputes arising under the MMPA's terms regarding whether, and the means by which, any whaling may be carried out will emerge clearly and concretely in the permitting process, and can be resolved at that juncture by the responsible agencies or on judicial review thereafter.

If the Tribe's plans for whaling could proceed without regulation, we cannot be certain that future whaling by the Tribe will not jeopardize the gray whale population either through its current plan or through future expanded quotas. While the Tribe's current Gray Whale Management Plan allows the Tribe to hunt whales with rifles and motorized boats, the Tribe is not limited to a particular method of hunting by the terms of the Treaty of Neah Bay. *See United States v. Washington*, 384 F. Supp. 312, 407 (W.D.Wash. 1974) (commonly referred to as the "Boldt" decision), aff'd, 520 F.2d 676 (9th Cir. 1975), cert. denied, 423 U.S. 1086 (1976) ("Just as non-Indians may continue to take advantage of improvements in fishing techniques, the Treaty Tribes may, in exercising their rights to take anadromous fish, utilize improvements in traditional fishing methods, such for example as nylon nets and steel hooks."). The Tribe, therefore, could use evolving technology to facilitate more efficient hunting of the gray whales. The tribal council of the Makah Tribe has shown admirable restraint in limiting its aim to a small number of whales, and seeking the umbrella approval of the United States for a share of a quota approved by the IWC. But it is not clear the extent to which the Tribe's treaty right is limited to the approvals of the IWC or the Tribe's Gray Whale Management Plan. The intent of Congress cannot be hostage to the goodwill or good judgment or good sense of the particular leaders empowered by the Tribe at present; it must be assumed that Congress intended to effectuate policies for the United States and its residents, including the Makah Tribe, that transcend the decisions of any subordinate group.

If the MMPA's conservation purpose were forced to yield to the Makah Tribe's treaty rights, other tribes could also claim the right to hunt marine mammals without complying with the MMPA. While defendants argue that the Makah Tribe is the only tribe in the United States with a treaty right expressly guaranteeing the right to whale, that argument ignores the fact that whale hunting could be protected under less specific treaty language. The EA prepared by the federal

defendants notes that other Pacific Coast tribes that once hunted whales have reserved traditional "hunting and fishing" rights in their treaties. These less specific "hunting and fishing" rights might be urged to cover a hunt for marine mammals. Although such mammals might not be the subject of "fishing," there is little doubt they are "hunted."

[11] Defendants argue that the conservation necessity test under *Fryberg* is not triggered until species preservation emerges as an issue. We have rejected the idea that species preservation must be an issue for the conservation necessity principle to apply. *Eberhardt*, 789 F.2d at 1362, *citing United States v. Oregon*, 718 F.2d 299, 305 (9th Cir. 1983). Satisfaction of the *Fryberg* test depends on the conservation purpose of the statute. Here the purpose of the MMPA is not limited to species preservation. Whether the Tribe's whaling will damage the delicate balance of the gray whales in the marine ecosystem is a question that must be asked long before we reach the desperate point where we face a reactive scramble for species preservation. To effectuate the purpose of the MMPA, which is to make informed, proactive decisions regarding the effect of marine mammal takes, we conclude that the MMPA must apply to the Tribe, even if its treaty rights must be considered and given weight by NMFS in implementing the MMPA, an issue we do not decide.[24]

[12] The application of the MMPA to the Tribe to uphold the conservation purpose of the MMPA goes hand in hand with the principles embedded in the Treaty of Neah Bay itself. The treaty language, when considered on its face, supports our conclusion that the conservation purpose of the MMPA requires it be applied to the Tribe. The Treaty of Neah Bay

[24]This conclusion is reinforced by our holding in *Midwater Trawlers Co-Operative v. Dep't of Commerce*, 282 F.3d 710 (9th Cir. 2002), wherein we held that the Magnuson-Stevens Act, which has as its purpose the protection of U.S. fisheries, applies to the Makah's fishing rights despite the Treaty of Neah Bay.

provides the Tribe with a right to fish and hunt whales "in common with all citizens of the United States." 12 Stat. 939, 940 (1855). We have recognized that the "in common with" language creates a relationship between Indians and non-Indians similar to a cotenancy, in which neither party may "permit the subject matter of [the treaty] to be destroyed." *United States v. Washington*, 520 F.2d 676, 685 (9th Cir. 1975). *See also United States v. Washington*, 761 F.2d 1404, 1408 (9th Cir. 1985) (recognizing that "in common with" has been interpreted to give rise to cotenancy type relationship). While this "in common with" clause does not strip Indians of the substance of their treaty rights, *see Washington v. Washington Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658, 677 n. 22 (1979), it does prevent Indians from relying on treaty rights to deprive other citizens of a fair apportionment of a resource. *See id.* at 683-84. In *Washington Commercial Passenger Fishing Vessel Ass'n*, the Supreme Court concluded that: "Nontreaty fishermen may not rely on property law concepts, devices such as the fish wheel, license fees, or general regulations to deprive the Indians of a fair share of the relevant runs of anadromous fish in the case area. Nor may the treaty fishermen rely on their exclusive right of access to the reservations to destroy the rights of other 'citizens of the

Territory.' Both sides have a right, secured by the treaty, to take a fair share of the available fish. That, we think, is what the parties to the treaty intended when they secured to the Indians a right of taking fish in common with other citizens." *Id.* at 684-85. This holding might be read to suggest that the Tribe's treaty right gives the Tribe a right to a "fair share" of whales that are to be taken. The "fair share" formula, however, does not provide a ready answer in this case, which involves now-protected marine mammals rather than salmon and other fish available, within limits, for fishing. The question presented to us is not how whaling rights can be fairly apportioned between Indians and non-Indians. Rather, the Tribe asserts a treaty right that would give the Tribe the exclusive ability to hunt whales free from the regulatory scheme of the MMPA. Just as treaty fisherman are not permitted to "totally frustrate . . . the rights of the non-Indian citizens of Washington" to fish, *Puyallup Tribe v. Dept. of Game of Wash.*, 433 U.S. 165, 175 (1977) (Puyallup III), the Makah cannot, consistent with the plain terms of the treaty, hunt whales without regard to processes in place and designed to advance conservation values by preserving marine mammals or to engage in whalewatching, scientific study, and other non-consumptive uses. *See Wash. v. Wash. Commercial Passenger Fishing Vessel*, 433 U.S. at 658. The Supreme Court has recognized that regulation for the purpose of conservation is permissible despite the existence of treaty rights. *Washington Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. at 682 ("Although nontreaty fishermen might be subjected to any reasonable state fishing regulation serving any legitimate purpose, treaty fishermen are immune from all regulation *save that required for conservation*.") (emphasis added). Mindful of that recognition, we conclude that to the extent there is a "fair share" of marine mammal takes by the Tribe, the proper scope of such a share must be considered in light of the MMPA through its permit or waiver process. The MMPA will properly allow the taking of marine mammals only when it will not diminish the sustainability and optimum level of the resource for all citizens. The procedural safeguards and con-

servation principles of the MMPA ensure that marine mammals like the gray whale can be sustained as a resource for the benefit of the Tribe and others.

[13] Having concluded that the MMPA is applicable to regulate any whaling proposed by the Tribe because the MMPA's application is necessary to effectuate the conservation purpose of the statute, and because such application is consistent with the language of the Neah Bay Treaty, we conclude that the issuance by NOAA of a gray whale quota to the Tribe, absent compliance with the MMPA, violates federal law. Whether or not the Tribe may have sufficient justification to gain a permit or waiver allowing whaling under the MMPA, we must now set aside NOAA's approval of the Tribe's whaling quota absent MMPA compliance as "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A).[25]

Of course, in holding that the MMPA applies to the Tribe, we need not and do not decide whether the Tribe's whaling rights have been abrogated by the MMPA.[26] We simply hold that the Tribe, to pursue any treaty rights for whaling, must

[25]In *Metcalf*, we concluded that NOAA violated NEPA because agencies must engage the NEPA process "before any irreversible and irretrievable commitment of resources." 214 F.3d at 1143 (citations omitted). Therefore, before NOAA can issue the Tribe a permit or waiver under the MMPA, which would be an "irretrievable commitment of resources," NOAA must complete the NEPA process. Otherwise, NOAA may have granted permits for takings of marine mammals without first fully considering the effects of that federal action through NEPA.

[26]Having determined that the procedures of the MMPA apply to the Tribe, in light of the conservation principle and the 'in common with' language of the treaty, we need not resolve the abrogation issue presented by the plaintiffs: The NMFS might authorize prescribed whaling to proceed under the MMPA, albeit with conditions designed to ensure the perpetuation of the resident whale population. Unlike other persons applying for a permit or waiver under the MMPA, the Tribe may urge a treaty right to be considered in the NMFS's review of an application submitted by the Tribe under the MMPA.

comply with the process prescribed in the MMPA for authorizing a "take" because it is the procedure that ensures the Tribe's whaling will not frustrate the conservation goals of the MMPA.

IV. Conclusion

We hold that the federal defendants did not satisfy NEPA when they issued a finding of no significant impact as a result of an environmental assessment: For the reasons set forth above in section II, it is necessary that the federal actions be reviewed in an environmental impact statement. Also, we hold that both the federal defendants and the Tribe did not satisfy the permit or waiver requirements of the MMPA, and, for the reasons set forth above in section III, they must do so before any taking of a marine mammal.[27]

(Text continued on page 7252)

[27]In connection with petitions for rehearing en banc, the Appellees urged that this case is moot because the whaling quota expired before we filed our opinion. We disagree. First, Appellants' complaint sought relief broader than invalidation of the then-existing whaling quota, including invalidation of the procedures used to obtain the IWC permit and of the Cooperative Agreement as violative of NEPA and the MMPA. The government activity challenged is not an ordinary, time-limited regulatory permit, but rather the way the government has gone about contracting with the Makah, obtaining "aboriginal subsistence" quotas from the IWC, and allocating them to the Tribe. The quotas are not assigned pursuant to a statutory or regulatory regime. The system by which the Department of Commerce has allocated a whale quota to the Makah Tribe is *ad hoc*; there is no requirement that quotas coincide with the five-year quotas assigned by the IWC. *See* 16 U.S.C. § 916d; 50 C.F.R. §§ 230.4-230.6. This remains an active controversy over the question of the procedures to be followed before permitting whaling by the Tribe, *GATX/Airlog Co. v. U.S. District Court*, 192 F.3d 1304, 1306 (9th Cir. 1999), so our decision still governs the relations between the parties. *See Friends of the Earth v. Laidlaw*, 528 U.S. 167, 174 (2000); *Firefighters Local Union No. 1784 v. Stotts*, 467 U.S. 561, 569-70 (1984).

Second, vacating our opinion would make the precedential harms from the 2001-02 permit irredressable. *See Alaska Center for the Environment v. U.S. Forest Service*, 189 F.3d 851, 855 n.3, 856-57 (9th Cir. 1999). The

precedential effects of past agency decisions must be considered when an agency determines whether an environmental impact statement (EIS) is required. *See* 40 C.F.R. § 1508.27(b)(6). Precedential harms continue to flow from the government's action. As there remains a continuing impact for NEPA purposes of the 2001-02 permit, the case is not moot.

Third, the expiration of the one-year quota, whose length is determined by the agency alone in the *ad hoc* manner described above, was nothing more than the government's voluntary cessation of challenged conduct. The party asserting mootness bears the burden of proving that " 'there is no reasonable expectation that the wrong will be repeated,' " *City of Erie v. Pap's A.M.*, 529 U.S. 277, 287 (2000) (citation omitted), *i.e.*, that it is " 'absolutely clear that the allegedly wrongful behavior could not reasonably be expected to recur.' " *Friends of the Earth*, 528 U.S. at 189 (citation omitted). Here, there is no assurance that the challenged action will not again take place. On the contrary, the government has declared that it *will* recur, and that the government expects to grant the Tribe further permission to whale without complying with the NEPA or MMPA, should this court's edict that the government comply with the law be vacated. At oral argument, the government said that a "quota will probably be given to the Makah whalers again next year," with a "similar" environmental assessment and "pretty much the same management plan" as that used in the 2001-2002 allocation. *See also* Department of Commerce/National Oceanic and Atmospheric Administration, *Marine Mammals; Notice of Intent to Prepare an Environmental Impact Statement for Issuing Annual Gray Whale Subsistence Quotas to the Makah Indian Tribe for the years 2003 through 2007*, 68 Fed. Reg. 10,703, 10,703 (March 6, 2003).

Fourth, even if the claims were otherwise moot, the "capable of repetition, yet evading review" doctrine applies. In *Biodiversity Legal Foundation v. Badgley*, 309 F.3d 1166, 1174 (9th Cir. 2002), we applied the evading-review doctrine where the "duration of the controversy is solely within the control of the defendant." The exception applies even more aptly here in light of the history of protracted challenges to the 1997 and 2001 allocations. One cannot assume that the government will tailor any new permit to be long enough for effective review. Instead, there is every reason to believe that further administrative delays and piecemeal litigation will continue to make even a five-year whaling quota unreviewable. *See Honig v. Doe*, 484 U.S. 305, 322 (1988). We retain jurisdiction under *Weinstein v. Bradford*, 423 U.S. 147 (1975), and its progeny.

Fifth, even if the only basis for ongoing controversy were the Cooperative Agreement, which expired *after* we filed our opinion, we have concluded that we should not exercise our discretion to vacate the opinion.

REVERSED.

See U.S. Bancorp Mortgage Co. v. Bonner Mall P'ship, 513 U.S. 18, 29 (1994).

Our opinion is not moot and we decline to vacate it.

APPENDIX

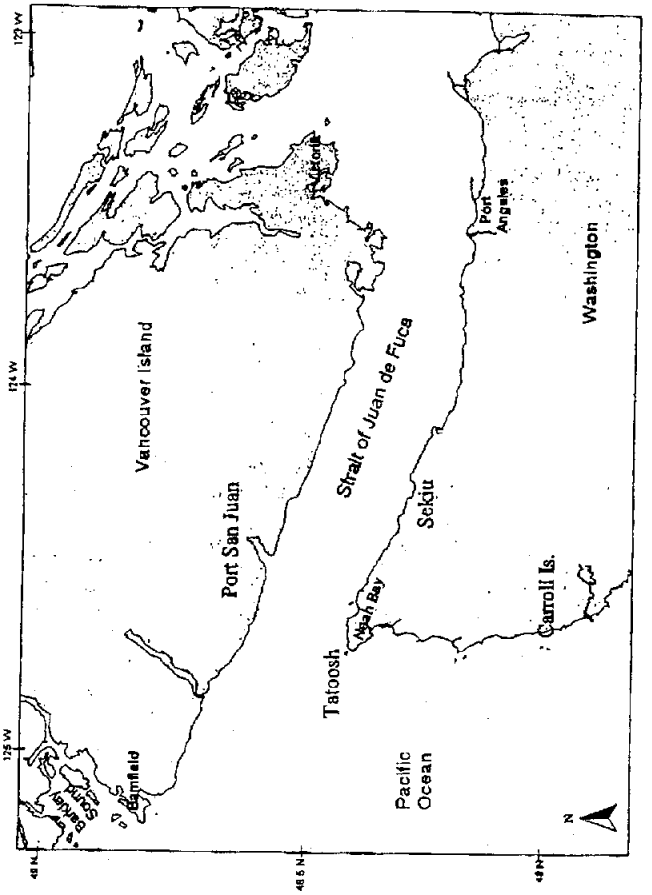

Figure 1. Gray whale survey area.

ANIMAL WELFARE INSTITUTE ▪
AUSTRALIANS FOR ANIMALS ▪
THE HUMANE SOCIETY OF THE UNITED STATES ▪
PENINSULA CITIZENS FOR THE PROTECTION OF WHALES

DEPARTMENT OF COMMERCE
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NATIONAL MARINE FISHERIES SERVICE

July 22, 2008

BY ELECTRONIC AND REGULAR MAIL

Dr. James W. Balsiger
Acting Assistant Administrator for Fisheries
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD

Dear Dr. Balsiger:

On behalf of the Animal Welfare Institute (AWI), Australians for Animals (AFA), The Humane Society of the United States (HSUS), and Peninsula Citizens for the Protection of Whales (PCP) which collectively represent more than ten million members and supporters, I am writing to respectfully request an additional thirty (30) day extension in the deadline for public comments on the Draft Environmental Impact Statement for Proposed Authorization of the Makah Whale Hunt (Draft EIS). If this request is granted, the new deadline for public comment would be September 15, 2008. While AWI, AFA, HSUS, and PCP sincerely appreciate the initial five-week extension in the comment deadline announced on June 13, 2008, additional time is necessary in order to fully evaluate the Draft EIS, to obtain and review documents referenced in the Draft EIS, to examine evidence not contained in the Draft EIS that is applicable to the analysis, and to synthesize that information into substantive public comment.

Specifically, AWI, AFA, HSUS, and PCP believe an additional thirty day extension in the comment deadline is warranted for the following reasons:

1. To obtain and review documents cited in the Draft EIS. The Draft EIS includes reference to several legal decisions and over 70 pages of studies, reports, and other supporting documents. While NMFS, through the efforts of Mr. Steve Stone, has made many of these documents available to one or more organizations, including PCP, some of the referenced documents have not yet been made available either electronically or in hard copy. Obtaining and creating electronic files of the multitude of documents referenced in the Draft EIS is, admittedly, a time consuming process and AWI, HSUS, and PCP appreciate the efforts made by NMFS to date to provide access to the requested records. However, in order to ensure that all such records can be used in developing

substantive comments, additional time is necessary to ensure that all documents of interest can be both obtained and reviewed.

2. To obtain and review relevant documents not cited in the Draft EIS. Despite its length the Draft EIS does not fully evaluate all issues of relevance to an assessment of the environmental impacts of the proposed hunt nor does it cite to all of the applicable scientific studies. Since the principal intent of the public review process is for the public to critique the government's analysis and to identify potential deficiencies or weaknesses in its review, interested stakeholders must seek out and evaluate other relevant studies, documents, and reports when preparing substantive comments. In this case, deficiencies include, but are not limited to, a lack of analysis of the impacts of global climate change on gray whales and their habitat, a lack of information on the status and viability of amphipod populations in the arctic, a lack of disclosure of oil and gas exploration activities and their potential impacts on the gray whale and its habitat, and a limited review of the cumulative impacts of relevance in this case. Locating and reviewing the documents necessary to include such information in substantive comments requires additional time since, in some cases, such information is published in obscure journals or due to the length of such analyses (i.e., oil and gas development environmental documents and/or biological opinions). To ensure that NMFS decision-makers have the most relevant and up-to-date information available to them when rendering a decision on this proposal, additional time is necessary to ensure that the public has sufficient opportunity to locate, review, and synthesize such information into its comment letters.

3. Obtaining additional records of relevance to the analysis and for the preparation of substantive public comment. In addition to published studies, reports, or other documents, there are additional records possessed by NMFS that are likely of relevance to the analysis of the Draft EIS. These records may include internal reports, correspondence, contracts, and financial records that may be only accessible through a request submitted pursuant to the Freedom of Information Act (FOIA). Given the length of the Draft EIS, the breadth of issues raised in the Draft EIS, and due to other related commitments that have prevented some of the representatives of AWI, AFA, HSUS, and PCP from being able to focus on the Draft EIS since its initial publication (i.e., the International Whaling Commission meeting), the preparation of a FOIA request has been delayed but will be submitted soon. In order to provide time to facilitate the processing of the request and to ensure that at least some of the requested records can be released, the deadline for public comment must be extended as requested. One such record that will be sought via FOIA and is concurrently being sought through the U.S. Attorney's office in Washington is a copy of the NMFS investigatory report on the illegal gray whale hunt that occurred on September 7, 2007. To date, however, the U.S. Attorney's office has been unresponsive to telephone calls made to inquire about the availability of the report.

4. Additional time is necessary to investigate new information related to the possible involvement of the Makah tribal council in the September 2007 illegal killing of a gray whale. As you may be aware, in legal briefs filed with the U.S. District Court in Tacoma, Washington, at least two of the Makah tribal members convicted for illegally killing a gray whale in September of 2007 revealed that the Makah tribal council may have been complicit in the illegal hunt.

Defendant Parker, for example, states that due to the delay in regaining federal approval to whale, tribal council members privately and individually told some of the defendants that if they were to engage in whaling in the fall the council would "back them up and ensure that, if they were arrested, they would be protected by the tribe." See Defendant Parker's Sentencing Memorandum, U.S. District Court, Western District of Washington at Tacoma (Attachment 1). There were so many discussions about the planned hunt, according to Mr. Parker, that it was "common knowledge" within the tribe that a hunt was to take place in the fall. Parker also stated that on the day of the hunt a lookout had been posted and other individuals were designated to provide the tribal council with reports on the progress of the hunt and some 200 tribal members were on their way to the beach in order to assist in landing and butchering the whale. Mr. Parker included with his memorandum statements from witnesses supporting his claims and providing explicit details of statements made by Makah tribal council members endorsing and promoting the illegal hunt.

Similarly, Defendant Noel also provides evidence of the potential complicity of the Makah tribal council in the hunt. He asserts that most of the Makah community were aware of a planned whale hunt well before September 7th and that, on the day of the hunt, Makah marksman Donnie Swann, who was sent to the scene to "put down" the wounded whale, publicly asked why the men had elected to hunt the whale that day as he was scheduled to engage in a whale hunt with some or all of the defendants the very next day. Defendant Noel's Sentencing Memorandum, U.S. District Court Western District of Washington at Tacoma (Attachment 2). Mr. Noel goes on to state that he and his uncle, Defendant Johnson, "obtained both the tacit and expressed approval of their leaders" in the tribe to engage in the hunt and that, without such approval and knowledge of the hunt he could not have as easily obtained access to the tribally owned weapons, buoy, and boat used in the hunt.

While the court elected not to consider such evidence when sentencing the five defendants, these assertions, if true, would dramatically impact the Makah's efforts to seek a waiver of the Marine Mammal Protection Act's prohibitions on the killing of marine mammals which is a critical element to their proposed resumption of whaling. In addition, if the tribal council approved and/or facilitated the September hunt, it would directly impact the environmental impact analysis of the proposed hunt by raising credible concerns over the council's respect for federal law, its willingness to comply with the law and to ensure that those under its authority comply with the law, and its

ability to comply with any rules that may be imposed by the government on the tribe's hunt if it does elect to allow the Makah to resume whaling. Consequently, additional time is necessary to provide the public, including AWI, AFA, HSUS, and PCP, with an opportunity to fully investigate these assertions of tribal council complicity in the September 2007 illegal hunt.

5. Public comment is an integral part of the National Environmental Policy Act (NEPA) process. The Council on Environmental Quality's regulations implementing NEPA explicitly state that "public scrutiny" is "essential to implementing NEPA." 40 C.F.R. § 1500.1 (b). Thus, federal agencies are required to "encourage and facilitate public involvement in decisions which affect the quality of the human environment." Id. § 1500.2(d). The intent of the public review provision of NEPA is to ensure that the public is both aware of the environmental impacts of the government's proposed actions and to provide the public an opportunity to participate in the decision making process by submitting substantive and informed public comment in response to an Environmental Assessment or Environmental Impact Statement. The public's comments then become part of the record relied on by the agency to assess the quality of the agency's analysis of the environmental impacts relevant to a proposed project, to determine if additional analysis is necessary to ensure consistency with the law, and to make a final decision as to whether a proposed project will be approved or not. To provide the necessary critique and evaluation necessary to aid the government's review of its analysis, the public must be provided sufficient time to study the document, to access cited and other relevant records, to evaluate the agency's analysis of the impacts of the action and its alternatives, and to prepare substantive comments. While the NEPA implementing provide guidance as to the minimum time periods appropriate for public review, agencies have significant discretion to extend comment deadlines to facilitate public review depending on any number of variable including the length, content, or complexity of the issues involved in the analysis. Given the length of this Draft EIS, its content, and the complexity of the issues involved there is sufficient justification for providing the public with an additional 30-days to review and comment on the Draft EIS.

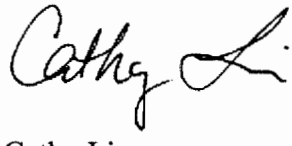
6. There is no compelling reason to not extend the comment deadline for an additional thirty days. If this request is granted everyone involved in this issue will benefit. The public, regardless of their position on the proposal, will benefit by having thirty more days to analyze and prepare comments on the Draft EIS. NMFS will also benefit by ensuring that it will have access to fully informed and substantive comments on the Draft EIS for its review of the strengths and weaknesses of the document and for its decision-makers to consider prior to rendering a final judgment on the proposed project. While AWI, AFA, HSUS, and PCP recognize the government's interest in making sure the NEPA and MMPA processes inherent to this review continue and do not become bogged down, providing the public with an additional thirty-days to review, analyze, and prepare substantive comments on the Draft EIS will surely not prevent the process from moving forward. Considering both the need to complete the NEPA process

and the extended timetable necessary to comply with the MMPA's waiver application procedures, an additional thirty days of public comment on the Draft EIS will not interfere with the process. Indeed, Mr. Brian Gorman of NMFS recently was quoted in a July 13, 2008 San Francisco Chronicle article on this subject that it "could be decades before the feds grant an exemption to the Marine Mammal Protection Act" (San Francisco Chronicle, "Makah Indians embrace whaling, defend culture," July 13, 2008). While AWI, AFA, HSUS, and PCP believe this was an exaggeration, it nonetheless demonstrates that the planning and review process for the proposed hunt is far from over suggesting again that providing an additional thirty days to facilitate the public's preparation of substantive comments on the Draft EIS is both warranted and will not slow down the planning process.

For the foregoing reasons AWI, AFA, HSUS, and PCP respectfully request that NMFS agree to an additional thirty-day extension in the comment deadline on the Draft EIS.

Thank you for considering this request. Please notify D.J. Schubert of the Animal Welfare Institute of your decision on this request as soon as possible. Mr. Schubert can be reached by telephone (609-601-2875), telefax (1-888-260-2271), or e-mail (dj@awionline.org). Upon receipt of your response, Mr. Schubert will immediately notify representatives of AFA, HSUS and PCP of your decision.

Sincerely,



Cathy Liss
President

cc: Ms. Donna Darm, NMFS, Seattle, WA.
Mr. Steve Stone, NMFS, Portland, OR.

To: PRD

ANIMAL WELFARE INSTITUTE

PO Box 3650 Washington, DC 20027-0150 www.awionline.org
telephone: (703) 836-4300 facsimile: (703) 836-0400

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AUG - 8 2008
NOAA/NMFS
NORTHWEST REGIONAL OFFICE

August 8, 2008

BY TELEFAX AND CERTIFIED MAIL

The Honorable Carlos M. Gutierrez, Secretary
U.S. Department of Commerce
1401 Constitution Avenue, NW
Washington, DC 20230

Vice-Admiral Conrad Lautenbacher
Undersecretary of Commerce for Oceans and Atmosphere
Administrator, National Oceanic and Atmospheric Administration
1401 Constitution Avenue, NW
Room 6217
Washington, DC 20230

Dear Secretary Gutierrez and Vice-Admiral Lautenbacher:

On behalf of the undersigned organizations, the Animal Welfare Institute respectfully and urgently seeks your assistance to obtain a thirty-day extension in the deadline for public comments on the Draft Environmental Impact Statement for the Proposed Authorization of the Makah Whale Hunt (DEIS). Though the National Marine Fisheries Service (NMFS) has previously granted a five-week extension in the deadline, this additional time, as explained below, is not sufficient to ensure an adequate opportunity for the public to participate in this decision-making process. If granted, this request would extend the comment deadline to September 15, 2008 providing all interested parties, regardless of their perspective on this controversial issue, sufficient time to review, analyze and prepare substantive comments on the DEIS.

For your benefit, I have attached the two previous letters sent to NMFS seeking extensions in the comment deadline. The first, dated May 30, 2008, resulted in a five-week extension in the deadline. The second request, dated July 22, 2008, was denied though the reasons for this denial are not, in our opinion, sufficient to reject the need for additional time to review the DEIS. The undersigned organizations believe this denial was unwarranted and that the request for an additional extension of the deadline for thirty-days is both reasonable, appropriate, and justified for the following reasons:

1. The DEIS is over 900 pages in length and includes over 70 pages of references containing over 700 individual reports, documents, or studies. It also cites a number of legal opinions and contains reference to issues as wide ranging as whaling impacts to tourism in Clallam County, WA to an assessment of the proposed project on various groups of resident gray whales. In other words, the length of this DEIS is far in excess of the majority of environmental document and its content is so wide-ranging that even with the previously approved extension of the comment deadline by five weeks there is simply not sufficient time for the public to review, evaluate, and prepare substantive comments on the document.

In its response to the July 22, 2008 request for a second extension in the comment deadline, NMFS suggests that its decision to host four public meetings to "encourage public input" on the DEIS and a 98-day comment period provides sufficient opportunity for public input into this decision-making process. As NMFS concedes, however, the public meetings were held "soon after" the release of the DEIS meaning that few, if any, interested stakeholders had a sufficient opportunity to review and analyze the 900+ page document. Moreover, while NMFS may believe a 98-day comment period is commensurate with other NEPA analyses of similar size and scope, it neglects to mention that the comment period for this DEIS overlapped with the annual meeting of the International Whaling Commission and that, unlike many NMFS planning processes, there is no deadline by which this process has to be completed (see below). For some of those interested stakeholders preparing comments on this DEIS, the overlap with the IWC meeting cost us several weeks of time to review the DEIS.

2. Despite the length and content of the DEIS, it remains incomplete. While NMFS staff have made efforts to accommodate requests for copies of studies/reports cited in the DEIS, additional time is necessary to allow interested stakeholders to access studies/reports relevant to issues not disclosed/discussed or inadequately reviewed in the DEIS. For example, there is considerable information available on the potential adverse impacts of ocean wave energy project, oil and gas development activities, and ocean noise on cetaceans that is not included in the DEIS but which is directly relevant to the cumulative impacts analysis. In addition, despite repeated requests to the U.S. Attorney's office in Seattle, WA it has not yet released a copy of the NMFS investigatory report of the September 2007 illegal gray whale hunt conducted by five members of the Makah tribe. Considering the significant controversy that has followed this issue which has led to multiple lawsuits, it is of particular importance both to the public and to NMFS that it provide interested stakeholders with sufficient time to identify, review, and incorporate information on potential cumulative impacts of the proposed action into their comment letters to assist NMFS in complying with the National Environmental Policy Act (NEPA).

3. The NEPA implementing regulations promulgated by the Council on Environmental Quality which are applicable to all federal agencies explicitly declare that "public scrutiny" is "essential to implementing NEPA." 40 C.F.R. §1500.1(b). To achieve this mandate, federal agencies are required to "encourage and facilitate public involvement in decisions which affect the quality of the human environment." Id. §1500.2(d). NMFS policies implement NEPA

mimic the CEQ's regulations and provided additional explanation for the purpose and value of public review processes. Specifically, this policy states that:

> Public involvement is essential to implementing NEPA. Public involvement helps the agency understand the concerns of the public regarding the proposed action and its environmental impacts, identify controversies, and obtain the necessary information for conducting the environmental analysis. RPMs must make every effort to encourage the participation of affected Federal, state, and local agencies, affected Indian tribes, and other interested persons throughout the development of a proposed action and to ensure that public concerns are adequately considered in NOAA's environmental analyses of a proposed action and in its decisionmaking process regarding that action. See Environmental Review Procedures for Implementing the National Environmental Protection Act, Section 5.02(b).

The undersigned organizations concede that the existing comment period is in excess of the standard 45 day period specified in NMFS policy. However, it is indisputable that the standard NMFS DEIS is not in excess of 900 pages, does not contain over 700 citations, and does not involve issues as complex, sensitive, and controversial as treaty rights, cultural needs, and whaling. Thus, considering the subject matter and given the value in providing an expanded opportunity for all interested stakeholders – including the Makah, other tribes and tribal organizations, scientists, non-governmental organizations, and industry groups to participate in this process, an additional thirty-day extension is fully warranted.

4. Unlike many NMFS planning processes which include a rather firm deadline by which a NEPA process must be completed to allow for the initiation of a fishing season or issuance of a permit, there is no urgency in regard to this proposed project. With the exception of a single gray whale killed in 1999, the Makah tribe has not hunted gray whales for approximately 80 years. In addition, NEPA is only one of two regulatory mandates that NMFS must complete before making a final decision on this proposed project. It must also engage in the waiver process contained within the Marine Mammal Protection Act as required by the 9th Circuit Court of Appeals in *Anderson v. Evans*. There is, consequently, no compelling justification for not providing an additional thirty-days at this juncture in the decision-making process to ensure that all interested stakeholders, regardless of their perspective on this issue, have a sufficient opportunity to review, analyze, and prepare substantive comments in response to the DEIS. If this request is granted not only will the public benefit but NMFS will as well since it will then have a more complete and thorough record on which to base its final decision.

For these and other reasons as articulated in the attached letters, the undersigned organizations respectfully seek your assistance in securing an additional thirty-day extension in the comment deadline on the DEIS.

Thank you in advance for considering this request. Please notify me of your decision on this matter as soon as possible so that I may communicate your answer to representatives of each of the undersigned organizations.

Sincerely,

Cathy Liss

Cathy Liss, President
Animal Welfare Institute

Attachments

cc: Mr. Jim Connaughton, Chairman, Council on Environmental Quality
Mr. Bob Lohn, Regional Director, NMFS, Northwest Region

On behalf of:

Cetacean Society International
Friends of the Gray Whale
The Humane Society of the United States
Humane Society International
Peninsula Citizens for the Protection of Whales
Whale and Dolphin Conservation Society

ANIMAL WELFARE INSTITUTE ▪
AUSTRALIANS FOR ANIMALS ▪
THE HUMANE SOCIETY OF THE UNITED STATES ▪
PENINSULA CITIZENS FOR THE PROTECTION OF WHALES

July 22, 2008

BY ELECTRONIC AND REGULAR MAIL

Dr. James W. Balsiger
Acting Assistant Administrator for Fisheries
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD

Dear Dr. Balsiger:

On behalf of the Animal Welfare Institute (AWI), Australians for Animals (AFA), The Humane Society of the United States (HSUS), and Peninsula Citizens for the Protection of Whales (PCP) which collectively represent more than ten million members and supporters, I am writing to respectfully request an additional thirty (30) day extension in the deadline for public comments on the Draft Environmental Impact Statement for Proposed Authorization of the Makah Whale Hunt (Draft EIS). If this request is granted, the new deadline for public comment would be September 15, 2008. While AWI, AFA, HSUS, and PCP sincerely appreciate the initial five-week extension in the comment deadline announced on June 13, 2008, additional time is necessary in order to fully evaluate the Draft EIS, to obtain and review documents referenced in the Draft EIS, to examine evidence not contained in the Draft EIS that is applicable to the analysis, and to synthesize that information into substantive public comment.

Specifically, AWI, AFA, HSUS, and PCP believe an additional thirty day extension in the comment deadline is warranted for the following reasons:

1. To obtain and review documents cited in the Draft EIS. The Draft EIS includes reference to several legal decisions and over 70 pages of studies, reports, and other supporting documents. While NMFS, through the efforts of Mr. Steve Stone, has made many of these documents available to one or more organizations, including PCP, some of the referenced documents have not yet been made available either electronically or in hard copy. Obtaining and creating electronic files of the multitude of documents referenced in the Draft EIS is, admittedly, a time consuming process and AWI, HSUS, and PCP appreciate the efforts made by NMFS to date to provide access to the requested records. However, in order to ensure that all such records can be used in developing

substantive comments, additional time is necessary to ensure that all documents of interest can be both obtained and reviewed.

2. To obtain and review relevant documents not cited in the Draft EIS. Despite its length the Draft EIS does not fully evaluate all issues of relevance to an assessment of the environmental impacts of the proposed hunt nor does it cite to all of the applicable scientific studies. Since the principal intent of the public review process is for the public to critique the government's analysis and to identify potential deficiencies or weaknesses in its review, interested stakeholders must seek out and evaluate other relevant studies, documents, and reports when preparing substantive comments. In this case, deficiencies include, but are not limited to, a lack of analysis of the impacts of global climate change on gray whales and their habitat, a lack of information on the status and viability of amphipod populations in the arctic, a lack of disclosure of oil and gas exploration activities and their potential impacts on the gray whale and its habitat, and a limited review of the cumulative impacts of relevance in this case. Locating and reviewing the documents necessary to include such information in substantive comments requires additional time since, in some cases, such information is published in obscure journals or due to the length of such analyses (i.e., oil and gas development environmental documents and/or biological opinions). To ensure that NMFS decision-makers have the most relevant and up-to-date information available to them when rendering a decision on this proposal, additional time is necessary to ensure that the public has sufficient opportunity to locate, review, and synthesize such information into its comment letters.

3. Obtaining additional records of relevance to the analysis and for the preparation of substantive public comment. In addition to published studies, reports, or other documents, there are additional records possessed by NMFS that are likely of relevance to the analysis of the Draft EIS. These records may include internal reports, correspondence, contracts, and financial records that may be only accessible through a request submitted pursuant to the Freedom of Information Act (FOIA). Given the length of the Draft EIS, the breadth of issues raised in the Draft EIS, and due to other related commitments that have prevented some of the representatives of AWI, AFA, HSUS, and PCP from being able to focus on the Draft EIS since its initial publication (i.e., the International Whaling Commission meeting), the preparation of a FOIA request has been delayed but will be submitted soon. In order to provide time to facilitate the processing of the request and to ensure that at least some of the requested records can be released, the deadline for public comment must be extended as requested. One such record that will be sought via FOIA and is concurrently being sought through the U.S. Attorney's office in Washington is a copy of the NMFS investigatory report on the illegal gray whale hunt that occurred on September 7, 2007. To date, however, the U.S. Attorney's office has been unresponsive to telephone calls made to inquire about the availability of the report.

4. Additional time is necessary to investigate new information related to the possible involvement of the Makah tribal council in the September 2007 illegal killing of a gray whale. As you may be aware, in legal briefs filed with the U.S. District Court in Tacoma, Washington, at least two of the Makah tribal members convicted for illegally killing a gray whale in September of 2007 revealed that the Makah tribal council may have been complicit in the illegal hunt.

Defendant Parker, for example, states that due to the delay in regaining federal approval to whale, tribal council members privately and individually told some of the defendants that if they were to engage in whaling in the fall the council would "back them up and ensure that, if they were arrested, they would be protected by the tribe." See Defendant Parker's Sentencing Memorandum, U.S. District Court, Western District of Washington at Tacoma (Attachment 1). There were so many discussions about the planned hunt, according to Mr. Parker, that it was "common knowledge" within the tribe that a hunt was to take place in the fall. Parker also stated that on the day of the hunt a lookout had been posted and other individuals were designated to provide the tribal council with reports on the progress of the hunt and some 200 tribal members were on their way to the beach in order to assist in landing and butchering the whale. Mr. Parker included with his memorandum statements from witnesses supporting his claims and providing explicit details of statements made by Makah tribal council members endorsing and promoting the illegal hunt.

Similarly, Defendant Noel also provides evidence of the potential complicity of the Makah tribal council in the hunt. He asserts that most of the Makah community were aware of a planned whale hunt well before September 7th and that, on the day of the hunt, Makah marksman Donnie Swann, who was sent to the scene to "put down" the wounded whale, publicly asked why the men had elected to hunt the whale that day as he was scheduled to engage in a whale hunt with some or all of the defendants the very next day. Defendant Noel's Sentencing Memorandum, U.S. District Court Western District of Washington at Tacoma (Attachment 2). Mr. Noel goes on to state that he and his uncle, Defendant Johnson, "obtained both the tacit and expressed approval of their leaders" in the tribe to engage in the hunt and that, without such approval and knowledge of the hunt he could not have as easily obtained access to the tribally owned weapons, buoy, and boat used in the hunt.

While the court elected not to consider such evidence when sentencing the five defendants, these assertions, if true, would dramatically impact the Makah's efforts to seek a waiver of the Marine Mammal Protection Act's prohibitions on the killing of marine mammals which is a critical element to their proposed resumption of whaling. In addition, if the tribal council approved and/or facilitated the September hunt, it would directly impact the environmental impact analysis of the proposed hunt by raising credible concerns over the council's respect for federal law, its willingness to comply with the law and to ensure that those under its authority comply with the law, and its

ability to comply with any rules that may be imposed by the government on the tribe's hunt if it does elect to allow the Makah to resume whaling. Consequently, additional time is necessary to provide the public, including AWI, AFA, HSUS, and PCP, with an opportunity to fully investigate these assertions of tribal council complicity in the September 2007 illegal hunt.

5. Public comment is an integral part of the National Environmental Policy Act (NEPA) process. The Council on Environmental Quality's regulations implementing NEPA explicitly state that "public scrutiny" is "essential to implementing NEPA." 40 C.F.R. § 1500.1 (b). Thus, federal agencies are required to "encourage and facilitate public involvement in decisions which affect the quality of the human environment." Id. § 1500.2(d). The intent of the public review provision of NEPA is to ensure that the public is both aware of the environmental impacts of the government's proposed actions and to provide the public an opportunity to participate in the decision making process by submitting substantive and informed public comment in response to an Environmental Assessment or Environmental Impact Statement. The public's comments then become part of the record relied on by the agency to assess the quality of the agency's analysis of the environmental impacts relevant to a proposed project, to determine if additional analysis is necessary to ensure consistency with the law, and to make a final decision as to whether a proposed project will be approved or not. To provide the necessary critique and evaluation necessary to aid the government's review of its analysis, the public must be provided sufficient time to study the document, to access cited and other relevant records, to evaluate the agency's analysis of the impacts of the action and its alternatives, and to prepare substantive comments. While the NEPA implementing provide guidance as to the minimum time periods appropriate for public review, agencies have significant discretion to extend comment deadlines to facilitate public review depending on any number of variable including the length, content, or complexity of the issues involved in the analysis. Given the length of this Draft EIS, its content, and the complexity of the issues involved there is sufficient justification for providing the public with an additional 30-days to review and comment on the Draft EIS.

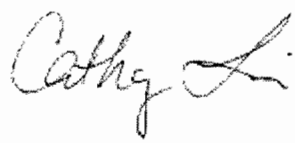
6. There is no compelling reason to not extend the comment deadline for an additional thirty days. If this request is granted everyone involved in this issue will benefit. The public, regardless of their position on the proposal, will benefit by having thirty more days to analyze and prepare comments on the Draft EIS. NMFS will also benefit by ensuring that it will have access to fully informed and substantive comments on the Draft EIS for its review of the strengths and weaknesses of the document and for its decision-makers to consider prior to rendering a final judgment on the proposed project. While AWI, AFA, HSUS, and PCP recognize the government's interest in making sure the NEPA and MMPA processes inherent to this review continue and do not become bogged down, providing the public with an additional thirty-days to review, analyze, and prepare substantive comments on the Draft EIS will surely not prevent the process from moving forward. Considering both the need to complete the NEPA process

and the extended timetable necessary to comply with the MMPA's waiver application procedures, an additional thirty days of public comment on the Draft EIS will not interfere with the process. Indeed, Mr. Brian Gorman of NMFS recently was quoted in a July 13, 2008 San Francisco Chronicle article on this subject that it "could be decades before the feds grant an exemption to the Marine Mammal Protection Act" (San Francisco Chronicle, "Makah Indians embrace whaling, defend culture," July 13, 2008). While AWI, AFA, HSUS, and PCP believe this was an exaggeration, it nonetheless demonstrates that the planning and review process for the proposed hunt is far from over suggesting again that providing an additional thirty days to facilitate the public's preparation of substantive comments on the Draft EIS is both warranted and will not slow down the planning process.

For the foregoing reasons AWI, AFA, HSUS, and PCP respectfully request that NMFS agree to an additional thirty-day extension in the comment deadline on the Draft EIS.

Thank you for considering this request. Please notify D.J. Schubert of the Animal Welfare Institute of your decision on this request as soon as possible. Mr. Schubert can be reached by telephone (609-601-2875), telefax (1-888-260-2271), or e-mail (dj@awionline.org). Upon receipt of your response, Mr. Schubert will immediately notify representatives of AFA, HSUS and PCP of your decision.

Sincerely,



Cathy Liss
President

cc: Ms. Donna Darm, NMFS, Seattle, WA.
Mr. Steve Stone, NMFS, Portland, OR.

ANIMAL WELFARE INSTITUTE

PO Box 3650 Washington, DC 20027-0150 www.awionline.org
telephone: (703) 836-4300 facsimile: (703) 836-0400

May 30, 2008

BY ELECTRONIC AND REGULAR MAIL

Ms. Donna Darm, Assistant Regional Administrator
Protected Resources Division
National Marine Fisheries Service
7600 Sand Point Way, NE
Seattle, WA 98115

Dear Ms. Darm:

On behalf of the combined nationwide membership of the undersigned organizations, the Animal Welfare Institute respectfully requests a 90 day extension in the deadline for receipt of public comments on the Draft Environmental Impact Statement for Proposed Authorization of the Makah Whale Hunt (hereafter "DEIS"). This extension, as discussed in more detail below, is necessary to facilitate public review of the DEIS and participation in the associated decision-making process. If agreed to by the National Marine Fisheries Service, a 90-day extension would result in a new public comment deadline of Wednesday, October 8, 2008.

The undersigned organizations believe a 90 day extension must be granted for the following reasons:

1. The length of the DEIS (909 pages) requires additional time to ensure that it can be carefully reviewed, its evidence analyzed, and its strengths and/or weaknesses identified. Extending the comment deadline by 90-days will both facilitate the public's preparation of accurate and substantive comments and, in turn, improve the decision-making process by ensuring that agency decision-makers have the highest quality information, including public comments, available to them on which to base their decision.

2. The DEIS contains a 74-page literature cited section including references to over 700 studies or other documents. While some of these references are from easily accessible journals and/or are available through listed URLs, many others are contained in obscure journals and/or are agency documents for which no URLs are listed and/or that may not be as easily accessible from the identified agencies. The requested 90-day extension is, therefore, necessary to provide the public, including the undersigned organizations, an opportunity to obtain and review the various studies/documents necessary to facilitate the preparation of substantive and informed public comment.

3. Public review of the DEIS is complicated by the subject matter and, specifically, the legal issues involved including the 1855 treaty, treaty abrogation issues, the Marine Mammal Protection Act, the Whaling Convention Act, the International Convention for the Regulation of Whaling, and the relevant statutes, regulations, and policies pertinent to the overlapping federal/state/tribal authorities involved in this case (i.e., National Park Service, U.S. Fish and Wildlife Service, U.S. Coast Guard, State of Washington, National Marine Fisheries Service). In order to ensure that the public has sufficient time to access and review the many cited legal opinions, the relevant statutes, regulations, and policies, and, if necessary, the legislative history of any statutes that are of importance in this analysis and to enable the public to organize such information into informed and substantive comments, the request for a 90-day extension in the comment deadline must be granted.

4. The current comment period which began on May 9 and runs through July 8 encompasses the entirety of the upcoming 60th International Whaling Commission meeting in Santiago, Chile which begins on June 1 and ends on June 27. While not all of the undersigned organizations will send representatives to IWC/60, many will. Moreover, in many cases those individuals who will be attending all or a portion of IWC/60 are the very individuals tasked with reviewing the DEIS and preparing substantive comments on behalf of their organizations. Considering that little time will be available to these individuals to review the DEIS, analyze its contents, engage in requisite research, and/or prepare substantive comments during the IWC meeting, the ability of these individuals and their respective organizations to participate in this important decision-making process will be compromised. This same scenario may also affect the ability of other interested stakeholders, like the Makah tribe and other aboriginal groups who will be represented at IWC/60 to prepare and submit substantive comments on the DEIS. To ensure that all interested stakeholders have an equal opportunity to review the DEIS and participate in the decision-making process, NMFS must extend the comment deadline by, preferably, 90-days.

5. The ability of the public to comment on a document prepared pursuant to the National Environmental Policy Act (NEPA) is a cornerstone of the decision-making process required under that statute. Regulations implementing NEPA promulgated by the Council on Environmental Quality which each federal agency must follow specify that

"public scrutiny" is "essential to implementing NEPA." 40 CFR §1500.1(b). Moreover, the regulations explicitly mandate that federal agencies "encourage and facilitate public involvement in decisions which affect the quality of the human environment." Id. at §1500.2(d). In order to meet these requirements and to ensure that the public, including those who support or oppose the proposed action in the DEIS, have a sufficient opportunity to participate in this NEPA process, NMFS must extend the comment deadline by, preferably, 90-days.

6. There is no compelling reason not to extend the comment deadline by 90-days as requested. Considering that the Makah tribe has "legally" killed a single whale over a time span of approximately 80 years, there is no urgency to expedite the completion of the NEPA and MMPA waiver processes. While some members of the Makah tribe may desire for NMFS to make a decision on its request for an MMPA waiver as rapidly as possible, there is no scientific, cultural, nutritional, or other reason to expedite this decision-making process. Furthermore, as the NEPA process is only one step in a multi-step process needed to satisfy the requirements imposed in *Anderson v. Evans*, there is no urgency to complete the NEPA process. Similarly, though some of the undersigned organizations strongly opposed the efforts by the United States to secure a gray whale quota (in conjunction with the Russian Federation) at IWC/59 in 2007 as premature, a quota was granted and is valid until 2012, removing any claim that NMFS must complete the pending processes urgently in order to secure IWC approval for a quota. For these reasons and considering the controversial nature of the proposed action, NMFS must proceed cautiously and deliberately through this multi-step decision-making process to ensure that all interested stakeholders have sufficient opportunity to fully participate in the process and to facilitate the submission of informed and substantive public comment. A decision to extend the comment deadline by 90-days will reflect a cautious approach that may ultimately benefit NMFS by providing its decision-makers with as much high-quality information and analysis upon which a decision can be based.

For the foregoing reasons, the undersigned organizations respectfully request that NMFS agree to a 90-day extension in the deadline for receipt of public comment on the DEIS. While the undersigned organizations believe that 90-days is the minimum extension that should be considered given the specific facts and circumstances relevant to this DEIS, they would reluctantly accept a 60-day extension if NMFS is unwilling to agree to the requested 90-day extension in the comment deadline.

Thank you in advance for considering this request. Should you have any questions about this matter, please contact D.J. Schubert at (609-601-2875) or by e-mail at dj@awionline.org. Any correspondence sent in response to this request should be sent to D.J. Schubert, Animal Welfare Institute, 3121-D Fire Road, PMB #327, Egg Harbor Township, NJ, 08234. AWI will ensure that any correspondence or other communications relevant to this request is expeditiously forwarded to all of the undersigned organizations.

Sincerely,

D.J. Schubert
Wildlife Biologist

On behalf of:

Australians for Animals
California Gray Whale Coalition
Cetacean Society International
Friends of the Gray Whale
The Humane Society of the United States
International Marine Mammal Project of Earth Island Institute
Peninsula Citizens for the Protection of Whales
Whale and Dolphin Conservation Society
Whaleman Foundation

Dear Steve Stove,

I am compleatly against the Makah Tribes hunting of grey whales.

I have a four year old grandson who I am teaching to Love Nature — the Earth and the peoples who live on the earth. How am I to explain that because some people hunted a certain animal a thousand years ago — they can do it now ~~and~~ with this treaty that was agreed upon under compleatly different circumstances of Nature.

Its time for this group of humans to take a stand on whats important now for our Natural World before its gone.

Sharon Benson Kent Wa.

Sharon Bersaas
436 Jasonover
Kent, Wa. 98030

USA FIRST-CLASS FOREVER

SEATTLE WA 981
JUN 2008 PM 6 L

Steve Stone
NMFS Northwest
Region
1201 NE Lloyd Blvd.
Suite 1100
Portland, OR 97232

DEPARTMENT OF COMMERCE
RECEIVED
JUL 02 2008
F/NW03
NATIONAL MARINE FISHERIES SERVICE

DEPARTMENT OF COMMERCE
RECEIVED
JUL 07 2008
F/NW03
NATIONAL MARINE FISHERIES SERVICE

July 2, 2008

Steve Stone
NMFS Northwest Region
1201 NE Lloyd Blvd., Suite 1100
Portland OR 97232

Re: Draft Environmental Impact Statement (DEIS)

Dear Mr. Stone,

I write you this letter today with deep sadness and concern of the pending Makah Tribe's whale hunt. I do not have a lot of rhetoric; I am no big time celebrity. I live in Pasadena California and pay my taxes, abide by the law. To be honest, I am just an ordinary person, deeply concerned that the US government is considering of allowing the Makah tribe to take and kill whales. I find no purpose or significance to allow this tribe, or any tribe for that matter to kill a whale. Whales at one point were near extinction, and thank goodness the government put a stop to it. I know that many foreign countries, particularly Norway, Japan and China kill whales by the thousands. I wish there was more to be done to stop those countries. I read up on the Whaling Commission yet they do not enforce tough bans on killing whales. To have no regard for wildlife is unconscionable.

The Makah tribe claims this was a cultural practice that is a tradition. I do not at all want to take away from the history of any nationality, especially the American Indians. Yes, they suffered greatly, (as did Jewish people and African Americans). However I cannot sit still and agree with them in 2008, that they need and should kill whales due to "tribal rituals". They do not live as tribesmen, in other words, most Indians tribes of today live and function like all the rest of us. They have homes, they drive cars, they work, eat beef, fish, have internet, and own casinos. If this were the time period of the 1800's maybe I would see their point. With the technology and the resources available today, why in the world do they think they have the right to kill whales and some of the whales they could potentially kill could be a young calf or a mother which would cause the young calf to be an orphan? The earth is in shambles and Mankind is responsible for it all. We have so many issues going on with Global warming, terrorist, inflation, recession, unemployment, foreclosures; all of this is so disheartening and now to read that the Makah tribe wants to take whales! It is absurd and I will continue to fight to protect the whales. I am not wealthy; do not know a lot of politicians but one thing is for certain, no one has the right to kill whales because it dates back

to their ancestral days. There is no reason to kill other than it was something that the tribe did some 140 years ago. It was essential for survival back *then*, as they used the whales' meats, oils, skin in many ways. I doubt that is the reason now, as the Food and Agricultural Dept provides an abundance of food in this country. So please, help me understand why this is necessary. Whales have a right to live freely in our ocean waters.

I urge you please; please stop the Makah tribe of killing the whales. Most of our wildlife is pretty much gone and what will our children have to look forward to when mankind is killing everything, absolutely everything off. Please understand that I am a strong believer in preserving culture and tradition. But I do not believe the tradition needs to be practiced if animals are being senselessly killed. I will continue to write to any and all parties that can make a difference.

Sincerely,

Cheryl Branum

Cc: Senator Feinstein
Senator Schiff
Senator Boxer

June 23, 2008

Mr. Steve Stone
National Marine Fisheries Service
1201 NE Lloyd Blvd
#1100
Portland, OR 97232

DEPARTMENT OF COMMERCE
RECEIVED
JUL 02 2008
F/NWO3
NATIONAL MARINE FISHERIES SERVICE

RE: Comments on the Draft Environmental Impact Statement for Proposed Authorization of the Makah Whale Hunt

Dear Mr. Stone:

Thank you for the opportunity to comment on the proposed Makah whale hunt. I fully support the Tribe's request for Alternative 2 in the Draft EIS. I strongly support native treaty rights and especially the Makah right to harvest whales.

I hope that you will proceed with all due haste to approve this request and grant the Tribe their authorization.

Sincerely,

Ron Broschart + Nancy Broschart

Ron Broschart Nancy Broschart

Ronald & Nancy Broschart
1179 Cornwall Ln
Ventura CA 93001-4030

OXNARD CA 930

25 JUN 2005 PM 2 L

USA FIRST-CLASS

Mr. Steve Stone
National Marine Fisheries Service
1201 NE Lloyd Blvd. #1100
Portland, OR 97232

June 7, 2008

DEPARTMENT OF COMMERCE
RECEIVED
JUN 11 2008
F/NW03
NATIONAL MARINE FISHERIES SERVICE

7928 Ridge Avenue
Philadelphia, PA 19128
610 609 6987

Ms. Donna Darm
Asst. Regional Administrator, Protected Resources Div.
7600 Sand Point Way NE
Seattle, Washington 98115

RE: 2008 Makah DEIS

Dear Ms. Darm:

I appreciate the opportunity to review and comment on the application process of the Makah Tribe to hunt more gray whales.

After careful thought and review of all the materials, to me, it comes down to 'justification' for killing the whale(s). As far as the main reason given for wanting to hunt the gray whale, described as "pride, self-esteem, and for a reason to abstain from alcohol and drug abuse", I find these to be misguided, and grossly immature reasons to justify the suffering and killing of a gray whale. I recall clearly the aerial views of the killing of the whale in the late 1990s by the Makah. This haunting aerial documentation was highly disturbing and did not bring favorable view of the tormentors of this whale, the committees, or the administration who allowed it to take place.

Since the 70 year moratorium on gray whales was initiated, whale-watching excursions, scientists, and animal behaviorists have taught the American public and the world about the intelligence and unique sociability of these great animals, actually dubbing them "our human counterparts of the sea." Also, being of American Indian heritage myself, I have always understood the reverence Indian tribes have always had for all the creatures they shared the Earth with, and life was only taken out of absolute necessity. This was a gentle and wise culture and therefore this application to take life unnecessarily is surprising and to some in the Indian culture, even shameful. To be a tribal member a Makah can boast as little as ten percent Makah biological identification, and this may explain some of the detraction from Indian culture.

As far as killing a gray whale for sustenance, there seems to be no justification there either. All products that the killing of whales once supplied have been replaced by science and technology. I have read the material sent to me explaining the Makah detractors of the hunt incidentally finding wasted whale meat and blubber in fishing nets. The portion of the Makah Tribe who do not want the hunt as they do not consume or like whale products, and those protesting on moral grounds, should also be heard. There was much protest.

We, as Americans, should be homogenizing and not allowing every subculture within our culture to renew "traditions", as then we would have to legalize other un-American rituals, such as cock fighting, dog fighting, Voodoo with its animal sacrifices, etc; exceptions cannot be made just for one group or one subculture.

Certainly, traditions are not always a good thing; we had a few American traditions like slavery and witch-burning, and thankfully we have realized our shameful mistakes as a people. Time moves on, progress happens, and there comes a point where the old traditions can no longer be justified, as in the case of barbaric hunting of the gray whale.

Again, thank you for allowing me to review the material sent to me and be assured I took this responsibility seriously and have made the above conclusions.

Very truly yours,

L. Camac

L. Camac

Box 455
Carlsborg, WA 98324
June 18, 2008

Ms Donna Darm
Protected Resources Division
National Marine Fisheries Service
7600 Sand Point Way NE
Seattle, WA 98115

DEPARTMENT OF COMMERCE
RECEIVED
JUN 20 2008
F/NW03
NATIONAL MARINE FISHERIES SERVICE

Ref: 2008 Makah DEIS

Dear Ms Darm:

After careful and thorough review of the draft EIS, I recommend the adoption of--
Alternative 1, the No-action Alternative

As you can see, I reside in proximity to the Makah reservation. I have attended the several information sessions, and I often meet and discuss the subject with both Tribal and community members. I attended many of the events prior to and following the 1999 Makah take. Further many years ago, I was active in the Sierra Club's national "Save the Whales" program of the 1950s. My understanding of the issues, background, actions, and consequences lends unusual substance to this recommendation.

You should be aware of "where I come from": the NEPA always is the underlying statement of principle The MMPS, a comprehensive, hard-won statement, demands preservation in its entirety, no waivers or exceptions. The pending Makah request cannot be considered favorably within these guides. The 1855 Treaty of Neah Bay is irrelevant. Six generations later it is another scrap of paper in the dustbin of history, along with dozens of other treaties and agreements published in a earlier and evolving World.

Today's Makah tribe can no longer attach valid "cultural and subsistence" claims to the proposed hunt. The latter were refuted in earlier litigation and, in any event, contradict the status quo. The cultural claim is less easily dismissed. It may have limited significance to the larger fraction of the tribe now living in Port Angeles (now well integrated into the local economy). For those living on the reservation, I contend that a very small group is employing this action to reinvent a troubled Indian community. Note that several of the tribal elders have come forth to disassociate themselves, a sentiment that prevails among the Makah students in the local college.

Very truly yours,

Roland K. Griffith

July 1, 2008

229 E. Benedict Avenue
Havertown, PA 19083

DEPARTMENT OF COMMERCE
RECEIVED
JUL 07 2008
F/NW03
NATIONAL MARINE FISHERIES SERVICE

Dear Mr. Stone:

Concerning the request of the Makah Indian Tribe to kill gray whales in the North Pacific, let my voice be heard for a definite and resounding NO!

Today many of the Makah Tribe members are less Makah than I am, and I happen to be 1/16th! This is a barbaric and embarrassing so-called tradition, which should be laid to rest with all the other bad traditions humans have had throughout history.

We know now that the whale is a magnificent animal in every sense of the word, and all of the products from the whale have long been replaced by technology and science. The portion of Makah tribe members who believe that the killing of a whale will miraculously restore "pride and self-esteem, and help them to refrain from drinking and taking drugs" – are having "magical" thinking. To rekindle the manhood they seek through destruction of an innocent animal will not do it; and in fact in the minds of most Americans killing whales is shameful, not prideful. Rekindling manhood comes with ideas for improving the Makah economy for a better life for all. This may involve an ironic turn of following the whales with ships and tourists. This would be a continuous cash flow and a prideful business. The Makah know the migratory patterns of the whales and should profit from their great knowledge.

I plan on writing to my local editor to rally the troops to send you letters about this request being just plain 'wrong'; it is wrong and we all know it is wrong.

Sincerely,

L. Hasbrouck

L. Hasbrouck

Steve Stone
NMFS Northwest Region
1201 NE Lloyd Blvd., Suite 1100
Portland, OR 97232

DEPARTMENT OF COMMERCE
RECEIVED
JUL 07 2008
F/NW03
NATIONAL MARINE FISHERIES SERVICE

June 26, 2008

Dear Mr. Stone:

My name is Rachel Haugland, and I am an incoming senior at Sequim High School in Sequim, Washington. This past year I have been participating fervently in a nation-wide competition called National History Day (NHD). In this competition, middle school and high school students from across the country make projects based on a theme in history. Students can participate in the categories of: historical papers, performances, documentaries, exhibits (display boards), and websites. This year's theme was conflict and compromise in history. Living only a couple hours from Neah Bay, my partner Olivia Boots and I decided to pursue the subject of Makah Whaling for our group documentary. We weren't entirely sure what to expect when we started the project. To tell the truth, I hadn't had a clue that the 2007 hunt had even occurred at the time. This being our fifth year competing in NHD, we were somewhat arrogant (as little as I'd like to admit it) about the whole thing. We knew the routine, and we knew what it took to make a good documentary. Most importantly was access to interviews, and the closeness of both the Makah and the environmental groups was more than convenient. However, neither of us ever anticipated that we could actually become *passionate* about the topic. As we progressed in our research, it became painfully obvious that the Makah have been taken advantage of time and time again by the colonialist views of not only the government, but also environmental groups. I'd like to take this time to share a little bit with you about what I've learned. I believe that I may have a unique point of view, coming from a third party, and being a mere high school student.

No one told the Makah to stop whaling in 1926; they voluntarily stopped. Makah Paddler Darrel Markishtum explained to us, "when you have to go farther and farther out to find a whale, it becomes obvious that it's time to stop." The Makah have proven themselves to be able stewards of their resources, and as the DEIS proves, the Makah's proposed plan of action will have very minimal impact on the environment, and virtually no impact on the whale populations. The Makah have even agreed to not hunt a whale from the Pacific Coast Feeding Aggregation, where the loss of a whale could have an impact.

We took the time to contact Margaret Owens, the wife of one of the most outspoken anti-whaling protesters in our area. Listening to her arguments, it was quite easy to blow holes through them. Her first complaint was that Japan will call the United States hypocritical for supporting the Makah's hunt, but voting against their whaling. First of all, the United States government would really rather not have to grant the Makah whaling rights, but the fact of the matter is, they're held to the treaty Isaac Stevens signed in 1855, specifically stating the Makah's right to whale. Furthermore, Article VI of the constitution seals the deal, stating that Indian treaties are to be read as "the supreme law of the land." If Japan had treaties stating those very same words, then they would have a valid argument. Her second complaint was that by allowing the Makah to whale, other aboriginal groups would see this as an excuse for them to do the same.

Again, this could not happen because *no other* aboriginal group specifically states the word "whaling" in their treaty. Margaret's last concern was that this hunt would weaken efforts to end commercial whaling in other countries. I *very* strongly disagree with this point. Because this hunt is of cultural value, as much as it is sustenance, the strong emotions tied to it would strengthen efforts to end commercial whaling. Although I believe the Makah should have the right to sell their whale meat and oil for economic reasons, it's obvious that this is an unlikely goal, whereas the nation-wide resistance to any form of commercial whaling is phenomenal.

One of the most important things we have learned through this experience, however, is about the Makah people themselves. Researching the social values of their ancestors, it became clear that not only their economy and culture, but also their social structure, depended directly on the whale. When the lack of whales forced the Makah to stop whaling, their entire community saw a decline. The youth became disengaged in anything culturally related, leading to increased drug use, alcoholism, violence, crime, and overall care for the world. If you've taken a trip out to Neah Bay lately, the people are in pretty bad shape. The housing is mostly run-down. The people don't have a whole lot to live for anymore. As we talked to the families who were involved in the 1999 hunt, however, the positive changes it had incurred remained obvious. Whalers have to have the mindset of being completely one with nature, free of hate and all negative thoughts. They value their family and their culture, and it shows in the way they live their lives. Talking to Janine Bowechop at the Makah Cultural and Research Center (the museum from the Ozette dig), it was fascinating to see how both the Ozette findings and 1999 hunt sparked a revival of culture among the Makah people. However, those Makah not directly involved in keeping whaling alive have begun to fall into the same pattern of decline that affected their nation in the 1940's. When their rights were again taken away, many began to grow restless, such as the men who shot the whale in September. While these men should be persecuted to the full extent of the law, this is a painfully clear example of this social and cultural depression. Who is it that has the right to decide whether it is more important to save the lives of 4 whales a year, or an entire people?

While I am aware that you may have heard many of these arguments countless times before, I'd really like you, and anyone else whose hands this letter falls into, to realize that I am not just blowing hot air here. I have done the research, and have a 23-page bibliography to show for it. You have done the biological research, and have a 909-page document to show for it. The U.S. Government has a constitutional responsibility to honor their word to these people. As a U.S. Citizen, the refusal of this right makes me fear what will become of my own rights. The fact that this is so *painfully* clear really makes me wonder how much integrity is left in our government. I pray that my words will not fall on deaf ears, and that this letter will get to the people who need to hear it. Because honestly, if I, a 16 year-old, can see this and worry about my liberties being compromised, why is it our elected officials cannot?

Thank you for your time, and I have included the 10-minute documentary that was the result of our research, along with our process essay and annotated bibliography. I hope you have time to look at both, and to consider what I have said. Thanks again.

Sincerely,

Rachel Haugland

rachel.haugland@gmail.com

Makah Whaling:

The Enduring Battle for Tribal Sovereignty

Olivia Boots

Rachel Haugland

Senior Division

Group Documentary

Process Essay

The idea of "The Trail of Broken Treaties" has always fascinated us, and the topic of Makah whaling was both accessible and appealing. What began as a search for knowledge quickly escalated into a network of relationships unlike any other History Day project we've encountered, sparking our passion, and becoming the epicenter of our lives.

The very foundation of our project stems from personal interviews we've had the privilege of conducting throughout the year. From visiting Special Collections at the University of Washington and attending the public comment session of the Environmental Impact Statement, our research has taken us to places we'd never dreamed of encountering. Our first contact, Janine Bowechop, executive director of the Makah Cultural and Research Center, helped us gain a better understanding of the role the Ozette excavation played in the revival of Makah Whaling. Darrel Markishtum, paddler on the 1999 hunt, Wayne Johnson, captain of the crew and participant in the 2007 hunt, and the oldest Makah elder "Ab," revealed the cultural aspects of the whale hunt. We learned the legal conflicts the tribe faces, and various aspects comprising a whale hunt through Keith Johnson, current president of the Makah Whaling Commission, and Ben Johnson, former chairman of the Makah Tribal Council and president of the Makah Whaling Commission. John Haupt, Special Agent from the Department of Commerce and NOAA Fisheries, gave us a comprehensive look at the events surrounding the illegal 2007 whale hunt. Former Clallam County Sherriff Joe Hawe explained the importance of upholding not only the Makah's right to whale, but also of the opposition's right to protest. Sylvia Moss, PAWS representative, and Margaret Owens, anti-whaling activist, explained their viewpoints, stating that allowing the Makah to resume whaling would set the precedent

for commercial whaling enterprises and other aboriginal groups to revive this practice. To complete the balance of our research, NOAA Sanctuaries marine biologist Ed Bowlby, confirmed that the Makah's harvest of 5 whales a year would not have any significant impact on the population as a whole.

For thousands of years, the Makah have made their home on the Pacific Northwest coast. They relied upon the whale as a source of spiritual strength essential to the survival of their culture. With the arrival of Europeans and the expansion of the commercial whaling industry, the Makah would encounter many conflicts, forcing them to compromise 600,000 acres of ancestral land and voluntarily concede their whaling rights. As time wore on, they would face more conflicts with the introduction of the Endangered Species and Marine Mammal Protection Acts and anti-whaling activists as they sought to renew their whaling tradition. Repeatedly, the Makah relinquished their rights and compromised with tangled legalistic moratoriums and government standards. The enduring battle of the Makah has become indicative of the struggles of all Indian Nations to uphold their treaty rights. The convoluted conflict surrounding the 1999 whale hunt has left the Makah continually battling for consistency in reestablishing their treaty-given right to whale, apart from a one-time compromise.

Annotated Bibliography

Primary Sources:

Interviews:

Bowechop, Janine. Personal Interview. 28 January 2008.

Janine is the director of the Makah Cultural and Research Center (MCRC) and vice Chairperson of the National Association of Tribal Historic Preservation Officers. She was our first contact in our project, and proved to be vital in our research. She discussed with vivid detail the Ozette dig, which she had the opportunity to take part in, and shared with us the passion that all Makah people have to preserve their culture. We also had a chance to view the exhibits at MCRC, and the skeleton of the whale the Makah harvested in 1999. Not only did she provide us with an excellent interview, but she gave us resources and names of more people who could be helpful in our research process.

Bowlby, Ed. Personal Interview. 28 May 2008.

Ed Bowlby is a Marine Biologist at NOAA Sanctuaries, or National Oceanic and Atmospheric Administration. Bowlby explained that in accordance with the National Environmental Policy Act (NEPA), the Makah had to draft an Environmental Impact Statement (EIS), which would then be displayed for public comment, before a final decision was made. At this point the EIS has been exhibited in Neah Bay and Port Angeles in public comment sessions, one of which we had the opportunity to attend. In the latter part of June the EIS will be shown in Washington, DC for further comment. Mr. Bowlby further assisted us in our research, by explaining that based on his knowledge of the controversy and concurrently of the gray whale populations; the Makah's desire to harvest five whales over the course of five years would present no substantial problem. He explained that the gray whale is one of the greatest success stories in the history of endangered species, with their numbers fully rebounding to figures before the practice of commercial whaling. He also relayed the fact that, in a sense, the five whales the Makah intend to hunt are already dead, because those whales are "borrowed" off of the Russian quota, and if the Makah do not harvest them, then they will be taken at some point on their migration route.

Johnson, Ben. Personal Interview. 26 May 2008.

Ben Johnson was the Chairman of the Makah Tribal Council and former President of the Makah Whaling Commission. It was an honor to meet him, as he is one of the most respected members in the tribe. His interview was extremely helpful and instrumental in our research. Johnson described the experience of being involved with the whale hunt of 1999; it was shocking to hear of the abuse and threats he endured. He said he received hate mail constantly and the death threats were never-ending, along with the persistence of the press, which pestered him to no end. As he spoke, Johnson was very direct and concise with his words; therefore, the contribution of approximately a dozen videos to our research was priceless. The movies ranged from raw footage of the actual hunt to the news broadcasts from the time and were vital to our project.

Johnson, Keith. Personal Interview. 28 January 2008.

Keith Johnson is the president of the Makah Whaling Commission. Our interview with him turned out to be an act of fate. His brother was working at the Makah Cultural and Research Center while we were at an interview with Janine Bowechop. We had wanted to get a hold of him, but did not have a way to find his number. His brother, however, called him up for us and we met for an interview on the spot. He gave us a massive amount of insight as to the depth whaling holds in Makah society. Coming from a lineage of whalers, Keith was able to share with us the spiritual preparation, along with the responsibility, that goes into preparing for a whale hunt. He worked us through the entire legal jumble, so we could gain a clear understanding of exactly what the Tribe is facing in their whaling battle.

Johnson, Wayne. Personal Interview. 22 April 2008.

Wayne Johnson was the captain of the whaling crew in the 1999 hunt, as well as being one of the five men that participated in the September 2007 hunt. Johnson has constantly been in the news these past few months, and when we had the chance to actually sit down and talk with him we heard of the intense conflict he has encountered due to the September 2007 hunt. From death threats, to facing potential jail-time, he is on a tumultuous journey to convince the government and the public of the sanctity of treaty rights. Through his interview we learned a whole new aspect to the debate, apart from what we've read in the newspapers and seen on nightly news reports. Wayne recounted the fact that when the Coast Guard intervened, the men were not allowed to shoot the whale, and end its misery. Instead, the whale would suffer for twelve hours as it headed out to sea, Johnson, said he would never forget the sound of that whale. Hearing his staunch opinion on treaty rights and his explanation for the 2007 hunt, gave us a better understanding and appreciation for his and some others views. This was an incredibly moving interview, that showed a surprisingly different facet of the Makah story, and provided us with an abundance of new and interesting information.

Haupt, John. Personal Interview. 2 June 2008.

John Haupt is a Special Agent for the United States Department of Commerce, linked to NOAA. He was the case agent in charge during the highly contested and protested, 2007 illegal whale hunt. Haupt gave us an in-depth account of the proceedings of the day the whale was killed. Hearing him relay the story, we learned that everything that the five men could have done wrong in the process, they did. Not only did they neglect to wait for approval of the government and the tribe, but they also forgot the 50 caliber rifle in their car when they went on their hunt. This type of gun is the only one approved by the commission for being the most humane and effective. Furthermore, Haupt explained that the group ignored the spiritual component of the hunt, which was perceived as the biggest failure in the eyes of their people. Much of what we had read on the 2007 hunt varied greatly depending on the observer, yet when we talked with John, he was very methodical in recounting everything as it was and is, as far as the trial today.

Hawe, Joe. Personal Interview. 11 April 2008.

Joe Hawe was the Sheriff of Clallam Bay at the time of the 1999 Makah whale hunt. We approached him to obtain the legalistic view point of the hunt, and discover an objective opinion of the hunt. His interview was incredibly helpful and informative for us. One of the points that he repeatedly stressed was the importance of his duty to uphold the rights of both parties in the conflict. Hawe described the necessity of protecting the right of the Makah to hold their whale hunt, as allowed by the government, as well as the right of the environmentalists to protest. We also learned one very interesting fact that we had not known before; the Makah whale hunt of 1999 was the first event in history where the National Guard was called out prior to an actual confrontation. Talking to Hawe opened up a whole new dimension of information for us that has proved to be a valuable resource.

Markishtum, Darrel. Personal Interview. 16 April 2008.

Darrel Markishtum was one of the paddlers on the 1999 Makah whale hunt. When we traveled out to Neah Bay to interview him, we had the unique opportunity and honor to be invited into the eldest Makah's home for dinner. "Ab," which means Grandma in Makah, told us stories of Neah Bay, describing the rise, fall, and eventual, slow renewal of Makah language due to the hunt. Furthermore, she sung a family whaling song for us that greatly added to our appreciation of Makah ritual. When we sat down and talked to Darrel, we received an amazing interview, he shared his songs, his stories, explaining the sense of family the crew developed throughout the years they spent preparing for the hunt. Markishtum was one of the few men who actually stayed with the crew for the duration of the hunt and therefore was able to provide an in-depth account of the 1999 hunt. Moreover, he told the story of the Makah, maintaining his conviction that this is, "not a trophy hunt…It's a way of life."

Moss, Sylvia. E-mail Interview. 1 February 2008.

Sylvia Moss is the Public Affairs Coordinator for the Washington Progressive Animal Welfare Society (PAWS) chapter. Although unable to provide us with a first-hand account of the happenings, she provided us with many helpful resources. She also gave us a PAWS article with some key former representatives on the topic, including the Japan and Norway topics regarding whaling. She also was instrumental in providing us with information regarding Japan's claim to take 100 whales for scientific reasons. Throughout the process of our project, she kept us up to date with PAWS publications regarding Makah Whaling. As we progressed, we realized our project lacked sufficient Gray Whale footage, but Moss provided us with an educational video documenting the Gray Whale, *Meet the Gray Whales.*

Owens, Margaret. Personal Interview. 28 May 2008.

Margaret Owens is a well-known anti-whaling activist all across the North Olympic Peninsula. We had the opportunity to meet her when we attended the Environmental Impact Statement public comment session, and finally convinced her to sit down and talk with us. She presented a much different opinion on Makah Whaling than that of tribal members. Owens expressed outrage at the "slaughter" of the whale based on sustenance or justified by cultural necessity, saying that a type of fish oil could provide the same nutritional value. Talking with her greatly helped to balance our research and expand our understanding of the argument that anti-whaling activists present. As we discussed the issue, she explained that her and others greatest protest against the hunt was on the basis that it could be the catalyst for many more. She said it wasn't so much about the killing of five whales, although they did care deeply about them, but the possibility that Makah whaling could set the precedent for other aboriginal groups to renew the practice, along with sparking the revival of commercial whaling on a larger scale.

Books:

Colson, Elizabeth. *The Makah Indians: A Study of an Indian Tribe in Modern American Society.* Minnesota: University of Minnesota Press, 1953.
Elizabeth Colson lived on the Makah Reservation from 1941 to 1942, her purpose being to obtain material on the history of the Makah. While she was there, she observed the fact that the Makah integration into modern day, white society, was still progressing and encountering many conflicts along the way. With the dawning of the twentieth century, elders described to Colson how the pressure of government edicts and the disappearance of whales had led to the loss of the complex knowledge involved with whaling and related rituals. Through reading of these discussions, we were able to further grasp the intense conflict the Makah faced in order to keep there culture and tradition alive.

Conly, Arlyn. *Never Trust A White Man.* Tacoma: Red Apple Publishing, 1998.

This book tells the story of the proud whaling nation through the eyes of a white schoolteacher, who lived on the Makah Reservation from 1954-1959. At the end of her stay in Neah Bay, she had the privilege of being accepted as an honorary Makah. Through reading her accounts of her observed views on the role of the whale in Makah society, we were better able to understand the public perception of whaling during this time period. Furthermore, we had the ability to further appreciate the importance of talking with and listening to tribal members in order to grasp the necessity of the whale in sustaining Makah Culture.

Curtis, Edward S. *Indian Days of the Long Ago.* New York: World Book Company, 1915.

This was a story and account by the great photographer Edward S. Curtis. It was written to give a more intimate view into the lives of Native Americans. It highlighted not only striking differences in the various tribes, but their important similarities in spiritual beliefs. Moreover, describing how these beliefs influenced the character building of the youth. It focused mainly on the Clayoquot Indians, but made necessary points for our understanding of the tribal ways and values.

Daugherty, Richard D. and Ruth Kirk. *Hunters of the Whale: An Adventure in Northwest Coast Archeology.* New York: William Morrow and Company, 1974.

This book tells the exciting, landmark story of the excavation of the Makah Indian village Ozette. Describing the reason for its final abandonment in 1930, we learned that the final people were forced from the site because it lacked a school. Therefore, due to the conflict with the US Government, they were mandated to conform with the outsider guidelines. When artifacts were exposed by the sea in 1970, Richard Daugherty was contacted by the Makah Tribal Council to save this record of the past. Detailed text and stunning photos document the painstaking process of piecing together the archeological puzzle. Throughout this report we found yet another component of the proud Makah people and their complex culture.

Frost, Sydney. *The Whaling Question.* California: Friends of the Earth, 1979.

This is a summary report written by Sir Sydney Frost of Australia, addressing Australia's whaling policy prior to 1979. In it, Frost provides data on the whaling industry that caused Australia to renounce commercial whaling, ban it in nearby waters, and strive to protect whales forever. Through reading the basis for this request and action, we were able to better understand the motive of anti-whaling activists who struggle to ensure the survival of whales. Simultaneously, it helped us to further realize the necessity for a worldwide ban on commercial whaling.

Goodman, Linda J. and Helma Swan. *Singing the Songs of My Ancestors: The Life and Music of Helma Swan, Makah Elder.* Oklahoma: University of Oklahoma Press, 2003.

This is the story of rights and relationships of the Makah people, but also the story of their everyday life, in a time of great prejudice and suppression of Native ways, by both the church and government. Swan and Goodman recount the tragic loss of traditions, combined with the economic hardship and cultural disintegration they endured. The two also highlight the impressive fact that the Makah culture survived this well due to the persistence and strength of resilient traditionalists like Helma Swan, who persevered to see a day when it was no longer disgraceful to be an Indian.

Marine Mammal Protection Act. Congress, 21 October 1972.

The Marine Mammal Protection Act prohibits, with certain exceptions, the "take" of all marine mammals in US waters and by US citizens on the high seas. It also goes further to prohibit the importation of marine mammals and marine mammal products into the nation. It was created to halt the rapidly approaching extinction of many species. The only exemptions from this statute, as of now, are in cases of subsistence harvesting and permits and authorization for scientific research. This document was crucial to our research, providing information on the standards and conditions on what requirements the Makah need to meet in order to whale. The MMPA has played a huge role in the conflict surrounding our topic, through halting the progress of Makah "cultural" whaling.

Marr, Carolyn. *Portrait in Time: Photographs of the Makah by Samuel G. Morse, 1896-1903.* Washington: Makah Cultural and Research Center, 1987.

This book is a compilation of many photographs taken when the Makah first were encountered by European settlers. It shows their complex history, acknowledging the various components that have been adapted to the existing Makah culture. Although there have been a great number of changes over time, this book maintains the fact that, above all, these are still the "people of the Cape." Through pictures and related narration, Morse and Marr tell the story of the conflict and compromise surrounding the Makah, as they have dealt with a new imposing society and way of life, in order to persevere and preserve their tribal traditions.

McCurd, James G. *Indian Days at Neah Bay.* Washington: The Working Press, 1981.

This is the autobiography of a young pioneer boy who lived with his family among the Makah Indians in Neah Bay in the last decades of the 1800s. It is a priceless account that gives an accurate and rare picture of Makah life and culture. He had the tremendous privilege of watching the construction of their fabled canoes, attending school and a Potlatch with the children of the reservation, and, above all, going on a whale hunt with the men. Jimmy McCurd describes the sensation of speeding along attached to the tow line of the harpoon and feeling the awakened compassion from the sad sounds of the harpooned whale. When it came time to leave the reservation for his mother's health, we were able to read and feel how the mystic place and people had touched him, the value of this firsthand story is unfathomable and contributed greatly to our understanding of the Makah.

Scammon, Charles M. *The Marine Mammals of the Northwestern Coast of North America.* New York: Dover Publications, Inc., 1968.

This book first written in 1874, by famed whaler Charles Scammon illustrates a historical segment out of American history, a time when whales were plenty and they were harvested without any regard to future numbers. Scammon gives a detailed account of methods for whaling, highlighting his first attempt to hunt a gray whale. Through reading this book we were able to see the astonishing depletion of the gray whale population due to the overfishing by commercial whalers, although this later addition does emphasize the fact that they are starting to recover, even in 1968.

Sullivan, Robert. *A Whale Hunt.* New York: Scribner, 2000.

In this book Robert Sullivan chronicles the two years he spent in Neah Bay from 1997-1999. He tells the story of the Makah people's opinion that a whale hunt would inject their community with a new sense of pride and purpose. Sullivan's story was the first we read when we began our research because it offered widespread, unbiased information on the conflict surrounding the Makah. From historical days of old, the modern Makah village, to the vehement protests of the anti-whaling community, he displayed every influential aspect of the heated debate. Concluding with his personal coverage of the three-day, 1999 whale hunt, his commentary helped us to form a basis for further research and center in on the important fact that whaling is what defined the tribe for thousands of years previous and what would continue to represent and sustain their culture.

Swan, James G. *The Indians of Cape Flattery.* Washington: Fascimile Reproduction, 1868.

This is a memoir on the Makah Indians, prepared by Swan at the request of the Smithsonian Institution. For several years he lived among them as a teacher and dispenser of medicines under the US Government. Incredibly, he was also present at the signing of the Treaty of 1855, with Governor Isaac Stevens. It documents all aspects of Makah life, in the section on food and the methods used to procure it Swan describes the whaling tradition. He describes in minute detail with intricate diagrams the manner in which the Makah went about whaling, offering an inside look into a rare custom during a tumultuous time period. Swan makes a big point of stating that there was no portion of the whale that was useless to the tribe. Through reading portions of this priceless report we were able to imagine and get a better idea of Makah life and the whaling tradition as they embarked into the future of conflict with the US Government.

Swanton, John Reed. *Indian Tribes of Washington, Oregon, and Idaho.* Washington: Ye Galleon Press, 1952.

This was an eye-opening source for us; it contained the ethnology of many Indian Tribes throughout the Pacific Northwest. Through reading the section on the Makah Nation we learned that in 1780 their population was estimated to be approximately 2,000 people, based on figures given by Lewis and Clark in 1805. However, in 1905, reports recorded 435 persons, dropping to 360 in 1910. These astounding numbers showed the devastating impact of smallpox and disease, transferred by the Europeans, on the Makah population. This conflict placed yet another restriction on the preservation of Makah culture.

Taylor, Herbert C. *Anthropological Investigation of the Makah Indians Relative to Tribal Identity and Aboriginal Possession of Lands.* Washington: Western Washington State College Press, 1958.

This was written by the Professor of Anthropology at Western Washington State College, in an effort to establish if the Makah were an identifiable tribal entity, what waters they had occupied in aboriginal times, and if at this point in the twentieth century they were a specific group. His research was utilized in a suit pending between the Makah and the US Government, therefore it was reported objectively. In reading the section on their waters and ecology we read a citation of Edward S. Curtis that said of Makah whaling, they "carried it to the highest pinnacle of refinement." By studying this portion of the report we obtained a further outsider view on Makah adeptness at whaling and their ancestral waters, which assisted in creating maps.

Woodcock, George. *Peoples of the Coast: The Indians of the Pacific Northwest.* London: Indiana University Press, 1977.

In this book, Woodcock explains the differences between coastal and inland tribes, accentuating the incredible characteristics and fortitude of the people of the Pacific Northwest. Through his narrations and photographs, he exemplifies the achievements of the various tribes, illustrating their lifestyles and customs through a wide range of pictures. Their reliance upon the sea distinguishes them from all other peoples, and this compilation details the stories of conflict and controversy that have plagued them throughout history.

Documentaries and Movies:

Hunt. Videocassette. Ben Johnson, 1999. 6 hours.

This video was a contribution from one of our interview subjects, Ben Johnson. It consisted of raw footage of the hunt, taken by Makah tribal members throughout the course of the three days of the 1999 hunt. The background narrations and comments were at times amusing and helpful in understanding what exactly was occurring in various situations. Seeing the raw footage of such a historical and monumental event for the Makah people was absolutely amazing. Seeing the men persevere through the difficult seas, watching the attempts of the Coast Guard to control the situation, and observing the harassing antics of protestors, really helped us to get a better understanding and view in our mind of how exactly the whale hunt of 1999 played out.

Indian America: A Gift From the Past. Videocassette. Media Resources Associates, Inc., 1994. 60 minutes.

This video illustrating the uniqueness of the Makah Tribe proved to be one of our most valuable sources for footage. The documentary mainly focused on the Ozette dig, but also gave valuable background information on what defines the Makah. It also included an interview with Dr. Richard Daugherty, who was the head of the excavation project at Ozette. Being one of the most abundant archeological digs in the Pacific Northwest, the Ozette dig uncovered more than artifacts. It showed the world what it meant to be a Makah, and how important it is to preserve tribal traditions. The extent of whaling objects found at the site astounded all associated with the excavations, opening new doorways to cultural revival worldwide.

In the Land of War Canoes. Videocassette. Milestone Film and Video, 1914. 60 minutes.

This video was a drama of Kwakiutl life in the Northwest. Best known as one of the premiere photographers of the 20th century, Edward S. Curtis devoted his life to documenting the disappearing world of the American Indian. In this film, originally titled "In the Land of the Headhunters," Curtis retold a tribal story of love and revenge among the Kwakiutl Indians of Vancouver Island. Curtis spent three years with the Kwakiutl to meticulously recreate their way of life before the white man came. Furthermore, the film features wonderful native costumes, dancing and rituals, including a powerful scene of a vision quest.

Makah Gray Whale Hunt. Videocassette. Ben Johnson, 1999. 30 minutes.

We borrowed this video as well from Ben Johnson for use in our research. It was of fairly good quality and showed the actual day that the Makah killed their first whale in over seventy years. Although, it was quite difficult to observe the whale being harpooned and seeing as the hunt progressed it was balanced by the apparent triumph it presented. The crew's feeling of excitement, joy, and pride, was obvious even through the camera lens. It was so rewarding to see the people raise their hands thanking the heavens for the great gift, and rejoicing that the whale saw them as worthy to come home with them.

Makah Indian History. Videocassette. Encore Productions, 1998. 50 minutes.

This is a part of the *Exploration Northwest* series of documentaries that were broadcast by KOMO TV for 21 years, with Don McCune narrating and writing this incredible collection. It contained footage of the region and reservation that we utilized throughout our documentary. However, the most helpful component of this video was the coverage of the Ozette Excavation Site. McCune carefully recorded the artifacts and captured the work of Daugherty and other researchers onsite that were instrumental in crafting our video. Not only that, but it showed a portion on Makah Days that was helpful for further use on our timeline.

Makah Whale Hunt. Videocassette. Ben Johnson, 1999. 2 hours.

This video was part of the large collection that Ben Johnson lent out to us. It was a compilation of fascinating footage from the three days of the 1999 whale hunt. Not only that it was unedited and completely raw, so we had the opportunity to see exactly how the event progressed during that tumultuous time on the reservation. It was impressive and shocking to see the paddlers powering through the surf, and the frightening nearness of the protest boats, to not only the canoe, but also the whale itself. Watching this video was extremely beneficial as we continued to delve into our research, attempting to understand and empathize with every possible angle.

Meet the Gray Whales. Videocassette. The Progressive Animal Welfare Society, 1998. 15 minutes.

Even though this was an extremely short video, it provided much needed and sought after footage. We had been searching for gray whale clips since our Regional competition, discovering in quite difficult to obtain anything other than humpback recordings. Through contacting PAWS, we were able to borrow from their archives and acquire these sensational scenes of gray whales, that greatly enhanced the effectiveness and quality of our documentary. Moreover, our interaction with PAWS would not end there, after hearing interest we were able to obtain an interview with an employee of the organization.

Northwest Indian News 12. DVD. Tulalip Communications Dept., 2005. 24 minutes.

NorthWest Indian News is a program that tells stories and shares information about topics important to tribal communities throughout northwest America. Launched in 2003, NWIN gives Native Americans an opportunity to report their stories, celebrate their successes and initiate conversations among their tribes, friends and neighbors. This particular program was a review of the legal obstacles surrounding the Makah Whaling Issue. It included footage of the 1999 whale hunt and open tribal meeting to discuss the position of the Makah people on whaling issues.

Northwest Indian News 1 & 2. DVD. Tulalip Communications Dept., 2003. 28 minutes.

This program focused on the history of the Makah and the influence Ozette held on their cultural sovereignty. It holds interviews with Makah leaders, conservationists, and marine biologists to address all the different viewpoints. It also provided us with footage of Tribal dances, the 1999 whale hunt, and Ozette artifacts.

Whaling Hunt. Videocassette. Ben Johnson, 1999. 1 hour 20 minutes.

This was another video Ben Johnson kindly allowed us to use in our research. It contains footage from the whale hunt of 1999. The camera focuses specifically on the Coast Guard boat that remained close nearby the canoe throughout the course of the hunt. We found it interesting to watch as the officers dealt with the antics of the protestors. At one point, a protest boat seemed to try and rush the crew with the intent being to disable canoe and halt the hunt entirely. Throughout the course of the whole affair, the Coast Guard claimed many vessels from organizations such as Sea Shepherd, as they violated the laws restraining the distance from the canoe they could enter into.

Whaling News. Videocassette. Ben Johnson, 1999. 60 minutes.

We received this video from Ben Johnson. It captured news reports from the 1999 whale hunt, focusing on the responses of television viewers to the great conflict. Some people appeared quite indifferent to the whole affair, ignorant even. While others were slightly less, the majority hated the fact that a whale was being killed, however, they concurrently understood the necessity of upholding treaty rights, and said, "Well, we did take their land..." Yet others were outraged at the entire endeavor, and criticized the aims of the Makah, citing not only the awfulness of killing the gentle whale, but also expressing outrage at what appeared to be special privileges for Native American people in general. Even another portion of the population still, thought that what the Makah were doing was great; essentially they saw it not only as a revival of Makah culture, but also putting the outspoken animal rights activists in their place.

Whaling News-Hunt. Videocassette. Ben Johnson, 1999. 1 hour 45 minutes.

This is another video that we obtained when we had the opportunity to talk with and interview Ben Johnson. It was a fairly complete compilation of newscasts from the 1999 whale hunt, produced by Komo 4 and King 5, popular news agencies in Western Washington. Watching the footage was extremely eye opening for us, we had the chance, to not only see the protests of animal activists fighting the hunt out near the reservation, and hear the response of the Makah people. But also, to see the manner in which the issue was presented to the public and displayed for people to form an opinion. Although, there was a proportionate amount of airtime for both sides of the conflict, it was revealing to see how the majority of the people shown speaking were the radicals of the time. This slightly detracted from the validity of the actual statements, though did not alter the quality of footage we were able to view.

Newspapers and Magazines:

"Appeals Courts Prohibits Whaling by Indians in Washington." *New York Times.* 22 December 2002: 1.27.

This specific article was an incredibly helpful article for our documentary when it came time for laying visuals. It detailed the Ninth Circuit Court's rejection of the Makah's federal environmental assessment, on the grounds that the tribe had not adequately considered the affect of whaling on the local gray whale populations and the precedent whaling could set in other areas. This ruling overturned an earlier lower court's decision when Judge Berzon ruled that the NOAA and the NMFS would have to create an environmental impact statement more extensive than environmental assessment. Reading this article we were able to get a sense of the incredibly convoluted legal process that the Makah endured, and understand the legalistic component of the issue more fully.

Makah Nation. "Formal Request for a Waiver Under the Marine Mammal Protection Act." 14 February 2005.

This is the actual letter written by Makah representatives requesting a waiver and exemption from the MMPA. It described the necessity of "cultural" whaling in order to preserve tradition and a sacred and ancient culture. The letter referred to the Treaty of Neah Bay in 1855, which granted the, "right of taking fish, and of whaling or sealing at usual and accustomed grounds or stations," in order to try and convince them of their right to whale. It was extremely helpful as a visual in our video, when we discussed this event.

Mapes, Lynda V, and Chris Solomon. "Paying Spoils Shared Among Tribe." *Seattle Times.* 18 May 1999: A1+.

This article, written by two Seattle Times Staff Reporters, describes the event of the 1999 Makah whale hunt. It goes into detail, explaining the devoted prayer and song that preceded the kill, effectively highlighting the reverent role that the gray whale plays in Makah society. Furthermore, it goes on to illustrate the kinship that the tribe has with the whale, contrasting this with the opposition's candlelit vigil that was held the day of the hunt. All the while, this source praises the Makah and their unique relationship with the whale, voicing the tribe's plea that to lose their right to whale would mean the loss of a great portion of their heritage, a remarkable culture people should strive to protect.

Moss, John. "Clash of Cultures." *Coast Guard Magazine.* Jan. 1999.

This article was compiled from research and observations from a member of the Coast Guard, who was required to help maintain the five hundred foot radius around the Makah whaling canoe in 1999. It helped to explain the opinions and fears of the protesters, particularly accentuating their grave concern that if the Makah were to resume whaling, it could trigger the same desire in other aboriginal groups, or worse: cause a return to commercial whaling. Through reading this one could better understand the adverse effects that could occur as a result of a return to Makah whaling, and therefore further sympathize with the protesting component of this battle.

Murphy, Kim. "Makah Indians Finally Get Their Whale; Tradition: Crew harpoons 34-ton gray but finishes it off with a rifle. Protesters sound mournful siren." *Los Angeles Times.* 18 May 1999: 1.

This article focused more on the response of the protestors to the Makah whale hunt of 1999. It detailed various groups reactions to the sight of the dead whale, and the blood spreading across the water. Many people expressed outrage, exclaiming that the Makah had not employed traditional methods in the harvesting of the whale, when they finally killed it with .50 caliber rifle. Furthermore, in this article Murphy observed that aboriginal whaling goes on in other locations, virtually unnoticed. Anti-whaling activists have focused on the Makah because of concerns that the exemption for "cultural" whaling could open up loopholes, allowing countries like Norway and Japan to resume large-scale commercial whaling. Massive anger was expressed towards the government for condoning such practices.

Satchell, Michael. "A Whale of a Protest." *U.S. News and World Report.* 5 October 1998: 38.

This article was written in the months leading up to the hunt, as the reservation at Neah Bay became the focal point of the nation's attention. The protesting groups described their various preparations and plans to sabotage the hunt. Paul Watson, the director of Sea Shepherd, told of his plans to scare the gray whales away from the hunt site with an acoustical barrage. Some vessels were to have underwater speakers that played the sounds of killer whales attacking grays, while a small submarine, painted to resemble an orca would cruise around emitting killer whale war cries. Not only that, but there was to be a boat further out at sea that played gray whale mating calls, the thought being that this would draw the creatures away from the hunting canoes. This article was very informative of different tactics that the protestors would attempt to use. Wayne Johnson, one of our interview subjects would sum up the conflict by observing in this article, that this was a situation with, "big whales, big waves, big guns, and a lot of crazy people."

Verhovek, Sam Howe. "After the Hunt, Bitter Protest and Salty Blubber. *New York Times.* 19 May 1999: A.14.

This article from the *New York Times* reported on the opposing responses of the Makah and whaling protestors, following the 1999 whale hunt. Verhovek recounted the tales of the various parties in an objective manner that allowed us to see the different viewpoints without bias. " The different groups also expressed their greatest fear that this hunt could set the precedent for the return to commercial whaling, as other countries relaxed their bans and restrictions on the harvesting of whales. However, the Makah displayed their joy and pride for capturing the first whale in 75 years, responding to the activists, that the hunt was not about the money, but a great tradition, and a calling from their ancestors, that defines who they are as a people.

Internet:

Makah. 2006. Makah Nation. 11 January 2008. <http://www.makah.com>

This was the official website of the Makah Nation. It provided us with vital information on the specific whaling methods of the tribe, and gave us important insight as to their relationship with the whale. The site also was a source of information surrounding the 1999 whale hunt. It also provided us with the significance of spiritual preparation before a whale hunt. Whalers had to be ready in body, mind, and soul. Even the whaler's wives had strict guidelines they had to follow. If any of these rituals were compromised, the hunt would not succeed.

Progressive Animal Welfare Society. 2008. Progressive Animal Welfare Society. 11 January 2008. <www.paws.org>

As development encroaches on wildlife habitat, PAWS' nationally recognized wildlife program rehabilitates sick, injured and orphaned animals, returns them to the wild, and educates people about peaceful coexistence with wildlife. PAWS operates one of the largest rehabilitation centers and hospitals for wildlife in the Pacific Northwest. Although mainly focused as a rehabilitation center, PAWS was one of the central environmental groups who would oppose the Makah whale hunt. This site provided us with a fairly unbiased timeline of the Makah's efforts to whale. It also offered over 20 articles relating to whaling events, including information on rebounding whaling populations.

Sea Shepherd Conservation Society. 2008. Sea Shepherd Conservation Society. 11 January 2008. <www.seashepherd.org>

Sea Shepherd is an environmental organization dedicated to the conservation of animal species, particularly the whales. This site stressed the fact that three nations – Iceland, Norway, and Japan – have brutally slaughtered over 25,000 whales under the guise of scientific research and for commercial purposes. Sea Shepherd, guided by the United Nations World Charter for Nature, is the only organization whose mission is to enforce international conservation regulations on the high seas . Sea Shepherd achieves most of its goals through militant action, and is known as one of the most radical environmental groups. This site also provided us with a biased, but lengthy take on the Makah Whaling, most importantly presenting newspaper articles from the time of the hunt.

Treaty of Neah Bay, 1855. 2007. History Link. 29 May 2008.
<http://www.historylink.org/essays/output.cfm?file_id=2632>

This document was the entire foundation for the conflict the Makah face today. On this website is the entire text of the Treaty of Neah Bay, which was essential to our research and understanding the roots of the Makah's right to whale.

United States Constitution, The. 1995. Steve Mount. 13 January 2008.
<http://www.usconstitution.net/const.html>

This website presented us with the full text of the Constitution of the United States. We focused on Article VI of the Constitution for our research, because it states that treaties should reign as "the supreme law of the land." Through reading this statement in the Constitution we were able to further our analysis of the Makah's right to whale and better understand the implications of the Treaty of Neah Bay.

Photographs:

Special Collections. University of Washington. 2 February 2008.

We had the opportunity to visit the University of Washington and comb through their special collections, which contain various photographs of the Makah people from past years. Many of the older photographs of the Makah seen in our video were gathered from the UW, from their original copies and prints.

Internet Photographs:

Associated Press. "Whale Harpooned." 2007. KOMOTV, Seattle. 9 September 2007.
<http://media.komotv.com/images/070908_whale_harpooned_3.jpg>

This photo is of a California gray whale seen Saturday, Sept. 8, 2007 in Neah Bay, Washington, after being shot with a machine gun off the western tip of Washington State. It was included in an article detailing the shootings and prosecution of the guilty tribal members.

Burke, Barney. "Gray Whale in Net." 2007. *Seattle P.I.*, Seattle. 9 September 2007.
<http://seattlepi.nwsource.com/dayart/20070908/450whaleonline2.jpg>

This photo documents an injured gray whale that is unable to escape from a fishing net hours after Makah Tribal members harpooned, then shot the trapped animal. The Coast Guard intervened, cutting the whale loose and causing it to die after 12 hours, slowly sinking while heading out to see. This photo was a component of a *Seattle PI* article detailing the "illegal hunt."

Burke, Barney. "Whale Harpooned." 2007. *Seattle P.I.*, Seattle. 9 September 2007. <http://seattlepi.nwsource.com/dayart/20070908/226whaleonline1.jpg>

This picture depicts a California gray whale floating injured after being harpooned Saturday in the Strait of Juan de Fuca about one mile off the shore of Neah Bay, harpooned and shot by five members of the Makah tribe, according to a U.S. Coast Guard spokesperson. This photo was also a component of a *Seattle PI* article detailing the "illegal hunt."

Greenpeace. "Stop Killing Whales." 2004. Greenpeace. 12 February 2004. <http://www.greenpeace.org/raw/image_full/international/photosvideos/photos/greenpeace-makah-anti-whaling.jpg>

This photo shows a group of anti-whaling activists campaigning against the Makah whale hunt. It is included in an article of outrage against the Makah's actions.

Makah Nation. "Bringing Whale In." 1999. Makah Nation. 17 May 1999. <http://www.makah.com/images/bringing_whale_in.jpg>

This is a photo of four Makah canoes helping to haul in the gray whale that was killed on May 17, 1999. It also shows the large crowd gathered on the beach to welcome the whalers home.

Secondary:

Books:

Allen, K. Radway. *Conservation and Management of Whales.* Washington: Washington Sea Grant Publication, 1980.

This book addresses the matter of great public concern during that decade: the commercial exploitation of whales. It discusses the ethical problem related to the issue along with the more practical question of whether whale populations are sufficiently abundant to sustain this practice and ensure the mammals' survival. Allen is a biostatistician that served to advise the International Whaling Commission on the state of the whale stocks. Using this book, we were able to learn the various techniques that are implemented to manage whale resources, and gain a brief history of the whaling industry and the history of regulation. Through reading this history we could see the immense conflict that resulted in the Makah relinquishing their whaling habit in the 1920s.

Boxberger, Daniel L. *To Fish in Common: The Ethnohistory of Lummi Indian Salmon Fishing*. Seattle: University of Washington Press, 2000.

This book with its title, derived from the infamous phrase in the Treaty of 1855, described the impact of over-fishing as a result of the commercial harvesting, showing the related effect on whaling. The author displayed the consequences of the confining legal agreement, from underdevelopment on the reservation, and a debilitating dependency on the United States government. He also explained that if the Makah could not have the whale as an economic base, then they still desired it as a cultural foundation.

Currie, David P. *The Constitution of the United States: A Primer for the People.* Chicago: University of Chicago Press, 2000.

This book, by David P. Currie, shows a concise overview over the Constitution's various articles and amendments, which is easy to understand. Throughout this book he explains the impact of the provisions on the relationship between federal and state governments. By reading the section focused on Article VI of the Constitution, we were able to better understand the fine balance between federal and state government and grasp the ramifications of the "supreme law of the land" clause, which helped greatly in our understanding of the status of Indian Treaties in decisions by the federal government.

Ellis, Richard. *Men and Whales.* New York: Alfred A. Knopf, Inc., 1991.

This book gives a comprehensive history of the whaling industry. It includes detailed photographs that assist in telling the story of this enterprise. From the first encounters of men with whales to in-depth writings on whaling in Japan and Russia, this book allowed for a different angle and entirely new range in our research. We could see the true endangerment of these giants of the deep came from the decades of unrestricted commercial slaughter, which is unfortunately continuing through pirates today. Also by reading the section on the Inuit harvest of the bowhead in Alaska, we were able to compare the Makah with them and understand other aboriginal traditions of whaling.

Erikson, Patricia Pierce. *Voices of a Thousand People.* Nebraska: University of Nebraska Press, 2002.

This book tells the story of the Makah community's struggle to regain control of their past and preserve their heritage through the revival of whaling and cultural custom. It traces Makah efforts beginning with the Ozette excavation and the following establishment of the Makah Cultural and Research Center. While reading the section on the various battles the Makah have faced, we became evermore aware of their great compromises throughout history while facing the judgment of the identity they were assigned by others. This served to reinforce the obvious fact that whaling remains significant to contemporary Makah identity.

Halliday, Jan and Gail Chehak. *Native Peoples of the Northwest.* Washington: Sasquatch Books, 2000.

This book addresses all aspects of the Makah tribe, along with many other natives of the Pacific Northwest, describing these exceptional seafarers, and their sacred harvest of the whale. The majority of the Makah section describes the incredible cultural heritage that was uncovered with the reveal of the Ozette Village site. The two authors recount how it is considered by many anthropologists to be the most significant archeological record in North America. Using this book, we were able to further reinforce the significance of the Ozette findings.

Hess, Bill. *Gift of the Whale: The Iñupiat Bowhead Hunt, A Sacred Tradition.* Washington: Sasquatch Books, 1999.

We read the section of this book on the Bowhead's gift to these people and the tradition that feeds it, in order to gain a better understanding of other aboriginal whaling groups and the foundations of their continued hunts. Their culture subsists in one of the most inhospitable regions of the world, and for them the central subsistence for this lifestyle was the bowhead whale. Not only was it a primary source of food, building materials, and barter goods, but also of art, stories, and above all…cultural unity. Like the Makah, we discovered that the Iñupiat hunt feeds them not only physically, but also spiritually; it is their whole identity.

Jones, Nard. *Puget Sound Profiles: Stories About the People, the Places, and the Past of Puget Country.* Washington: Puget Sound Power and Light Company, 1962-3.

This is a compilation of various stories from Nard Jones' radio broadcast titled Puget Sound Profiles. In one area, it displays the opinions of viewers on the number of different Indian Tribes in the region. The broadcasts voice the view that the US government, at this point in history, was trying to encourage the Indians to assume the role as equal members in society through education. However, as this report fails to show its viewers, by providing this education they were simultaneously eradicating pieces of traditional tribal culture.

Kirk, Ruth. *Tradition and Change on the Northwest Coast.* Washington: University of Washington Press, 1986.

In many ways, this book is a native chronicle about being native due to its great utilization of elder accounts. This received the Roderick Haig-Brown Award and the Washington State Governor's Writing Award in 1987. Through reading the first-person accounts of vivid memories from the elders of the Makah we were able to envision the transition from the traditional ways to the new, including the adaptation of whaling traditions to the twentieth century. This gave us a wealth of visual information through amazing photographs combined with a great amount of text on all aspects of the old ways.

Linton, Darrell. *Dances with Leviathan: The Tragedy and Shame of Makah Cultural Whaling.* Washington: Peninsula Environmental Center, 1999.

This is a critical examination of the Makah whaling issue, addressing the fears of the ramifications of the tribe's return to whaling. Linton describes how the Makah quest for their cultural identity presents a huge conflict with present major federal laws and international agreement concerning marine wildlife. Using the argument of the phrase, "in common with," the author concludes that the Makah are entitled to no less, yet no more, than the citizens of the United States with regard to whaling. He says that whaling is a practice of the past whether it is traditional or not, bringing up many supporting opinions and points to prove his conclusion. Reading this critique we were able to better understand the standpoint and argument of anti-whaling activists.

Liptak, Karen. *Indians of the Pacific Northwest.* New York: International Book Marketing Ltd., 1991.

This book helped as a good basis for beginning research. It contained information on the traditions and differences between the tribes of the Northwest including the Bella Coola, the Chinook, the Coast Salish, the Kwakiutl, the Nootka, the Tlingit, the Tsimshian, and the Makah. Included in the description of the Makah people was a focus on their reputation as whalers, through reading the excerpt from that section we were able to understand the approach the Makah took towards harvesting a whale. Learning of the spiritual and necessary tools, we gained a framework for whaling methods.

May, Allan. *The Sea People of Ozette.* United States: B&E Enterprises, 1975.

This book is a compilation of the separate stories that each one of the various artifacts found at Ozette tells many stories. May describes how the multitude of relics paint a big picture of Makah life, and goes further to explain that each intricate piece recounts thousands of untold stories. Through reading the analysis of the site in this book we were able to further appreciate the lessons and strands of culture that were gained through this dig. Moreover, we saw the importance of these discoveries to the people of today, in order to preserve the sacred Makah culture.

McFeat, Tom, ed. *Indian of the North Pacific Coast.* Washington: University of Washington Press, 1966.

This is a book that compares the tribes of the Northwest Coast of the United States to others around the world. It describes how individual attitudes, behavior, and traditions, are related to conditions specific to the area, for example: reliance upon the sea. Through reading several of the various analysis's it further reinforced the uniqueness of the Coastal tribes and helped us to better understand their ways of life and isolation from the outside world.

Peterson, Brenda and Linda Hogan. *Sightings: The Gray Whales' Mysterious Journey.* Washington D.C.: National Geographic Society, 2002.

Award-winning Native American author Linda Hogan and acclaimed novelist, essayist, and naturalist team together to produce a collaboration of legend, symbolism, and controversy sparked by the gray whale. The authors address the three-way collision between the whales, the curtailed yet still destructive whaling industry, and the rights of Native Americans in the Pacific Northwest. This book addresses the tedious balance between preservation and culture.

Seaman, N. G. *Indian Relics of the Pacific Northwest.* Oregon: Binforts and Mort Publishers, 1974.

This book contained an interesting little section on the Indian Tribes of the Northwest, discussing traditional hunting grounds and habits of various peoples, including the Makah. It went further to summarize the ways of old, including descriptions of the daily life in a village and the potlatch that usually occurred with the hunting of a whale. In reading this excerpt we were able to further understand the important position the whale held in Makah society.

Smyth, Willie and Esme Ryan ed. *Spirit of the First People: Native American Music Traditions of Washington State.* Seattle: Jack Straw Productions, 1999.

This book offers a glimpse into Native American sacred traditions of song and dance. It covers rituals from tribe to tribe and reservation to reservation, explaining the significance of tribal music to both the past and present. Furthermore, it notes how spiritual traditions were nurtured by dance and song under conditions of government suppression. By reading the portion of this book on Makah Music we were better able to understand the importance of music in order to sustain their whaling culture, and to preserve essential information and customs for future generations.

Swanton, John R. *Indian Tribes of the Pacific Northwest.* Washington D.C.: Bureau of American Ethnology, 1966.

This describes the conflict between the pioneers, following in the footsteps of Lewis and Clark, and the aborigines. Recounting how the missionaries and various government affiliates attempted, successfully, to bring the Makah and other peoples to conformity, effectively eradicating great portions of their culture. Not only did the white persons' presence erase priceless tradition, but the introduced diseases decimated their numbers, shown by the steady decreasing census reports of the era.

Tweedie, Ann M. *Drawing Back Culture: The Makah Struggle for Repatriation.* Washington: University of Washington Press, 2002.

This book documents the Makah effort to implement the 1990 Congressional Native American Graves Protection and Repatriation Act, which was passed to give Native people a mechanism through which they could reclaim specific objects of importance to the tribe. Through this book we are able to see the early stages of NAGPRA functioning, and discover the benefits and jewels of knowledge that have been gained through rare photographs and generations old cultural objects returning to them from around the world. We found that museums on the east coast contain objects, such as an old whaling harpoon point, and through this act Makah are retrieving a piece of their past that helps to strengthen the argument for whaling and tradition.

Waterman, T.T. *The Whaling Equipment of the Makah Indians.* Washington: University of Washington Press, 1955.

As its title suggests this book has an in-depth coverage of the Makah whaling equipment. From the actual construction of the canoe, to the paddles, bailer, and the harpoon with its accessories, this covers every essential for a hunt. However, the most helpful and informative section pertaining to our interest was the one with the descriptions of the religious observances connected to harvesting the whale. The author made the intriguing observation that from a white person's or non-Makah point of view, the matter of greatest concern in a hunt would be the tackle and methods of approaching or striking a whale. However, with the Makah the most important aspect is the proper observance of various ceremonial rituals. Through reading this section, we gained increased appreciation for the respect and customs related to whaling.

Wray, Jacilee,ed. *Native Peoples of the Olympic Peninsula: Who We Are.* University of Oklahoma Press: Oklahoma, 2002.

This book is an invaluable contribution to the entire field of Native American studies. Written by Native Americans, it offers an inside look into the cultures of the Northwest Coastline. The section on the Makah people was very insightful, discussing the cultural history of the tribe, along with their traditional lifestyle, then transitioning into the contemporary Makah life, and discussing modern heritage programs. Through reading this portion of the book we were able to further comprehend the long story of conflict and compromise that brought the tribe to where it is today; a sovereign nation in its traditional homeland. We better understand that the Makah have successfully carried their culture into the twenty-first century through valuing the lesson, worth, and symbolism of the whale.

Documentaries and Movies:

Ancient America: The Northwest. Videocassette. Wood Knapp Video, 1994. 60 minutes.

This video provided outstanding footage and history on America's first peoples. By listening to the narrations of this production, we were able to hear various legends that provide the foundation for some of the oldest histories of mankind. The interesting dialogue was not the only component that helped us to gain a better understanding of the Indians of the Pacific Northwest, including the Makah, but the photography and video was fantastic as well. It showed some of the earliest photographs of these groups, documenting the period of original contact that forever altered the course of customs for the Makah and numbers of others.

Gift of the Whales. Videocassette. Miramar Images Inc. 30 minutes.

A Miramar production, this video told the story of a young Makah learning about whales. The 11-year-old boy relates stories told to him by his ancestors. In this manner, the film presents traditional Native American philosophies along with recent scientific findings to encourage a greater appreciation for marine mammals. It includes never-before-seen footage of whales and spectacular views of the area's unspoiled scenery. It also brought attention to the environmental conflicts that are threatening the whale. Although an obvious anti-whaling video, it did provide an abundance of marine life footage.

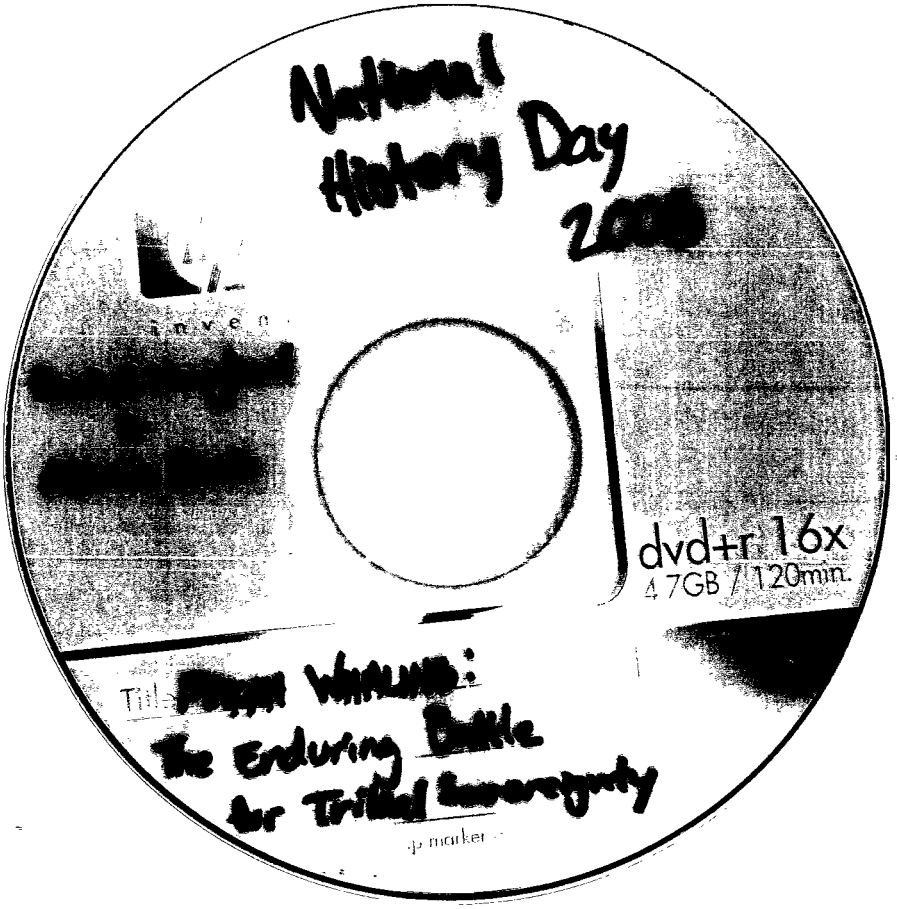
The Great Ships: The Whalers. Videocassette. The History Channel, 1996. 50 minutes.

This movie documents the dangerous and romance that comprise a part of American legend. Watching this and capturing it, we saw the heart of this enterprise-the whaling ship. This program tells the complete story of whalers, from their deadly first voyages and the aboriginal roots, while exploring the enormous cultural and economic influences of the revolutionary vessels and their crews on a young, growing nation. We used this video to gain further insight into the world of commercial whaling and its tumultuous history. It provided a small collection of footage of whales and commercial whaling clips that assisted our narration.

In the Land of Totem Poles. Videocassette. 1999. 51 minutes.

This is a video on the Haida Indians. It shows a great amount of footage that, although we didn't utilize it in our video, helped to convey the lifestyle of tribes of the Northwest. Watching this movie simply helped us to gain a better understanding of the elements that affect the Makah and their culture.

treaty rights. Through reading the information on this webpage we were able to better understand the finer points and intricacies relating to treaty rights. It detailed the processes and stipulations relating to land purchases and reservations along with reserved rights. This was the perfect source in order to start our research and firmly establish the background information related to the Treaty of Neah Bay.


National
History Day
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The Enduring Battle
for Tribal Sovereignty

1704 Melrose Avenue
Havertown, Pennsylvania 19083
484-453-8087
June 8, 2008

DEPARTMENT OF COMMERCE
RECEIVED
JUN 11 2008
F/NW03
NATIONAL MARINE FISHERIES SERVICE

Ms. Donna Darm
Asst Reg. Administrator
7600 Sand Point Way NE
Seattle, Washington 98115

RE: MAKAH TRIBE REQUEST TO RESUME HUNT OF WHALE 2008

Dear Ms. Darm:

Thank you for sending me the CD to view the request from the Makah Tribe for permission to resume the hunt of gray whales.

After reading all very carefully I **cannot**, in good consciousness, agree with allowing the hunt to proceed. I do not believe any more whales should be taken. There seems to be no good reason or justification for killing the gray whale in any of the material I read.

Although the Makah ancestors may have had to kill whales for survival, I find it offensive that a group of people want to kill a whale for reasons of "self esteem or pride" and particularly "to abstain from alcohol and taking drugs." I find the link between killing a magnificent animal unnecessarily and 'pride' hard to connect. In fact, I would think the opposite to be true in that the word "shame" comes more to mind.

With this attitude we stand to lose more than a great whale, but our "humanness" is also on the line. I think it would callous and a detriment to our civil society to allow this hunt to take place.

Thank you.
Sincerely,

Russell V. Kennedy

DEAR MS DARM

I AM STRONGLY OPPOSED TO THE MAKAI WHALING HUNT. THEY DO NOT HUNT FOR SUBSISTANCE OR CULTURAL TRADITION. THEY HUNT COMMERCIALLY.

ALL HUNTING OF ALL WHALE SHOUD BE STOPPED PERMANNTLY.

THANK YOU

Jerol Kennedy

DEPARTMENT OF COMMERCE
RECEIVED
JUN 20 2008
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NATIONAL MARINE FISHERIES SERVICE

MAKAI DEIS
NWR@
NOAA.GOV

Ms. Jerol Kennedy
17186 Wood Acre Trail
Chagrin Falls, OH 44023

July 1, 2008
Russell Kennedy
1704 Melrose Avenue
Havertown, PA 19083

DEPARTMENT OF COMMERCE
RECEIVED
JUL 07 2008
F/NW03
NATIONAL MARINE FISHERIES SERVICE

Steve Stone, NMFS Northwest Region,
1201 N E Lloyd Blvd, Suite 1100
Portland, Oregon 97232

RE: Makah Whale Hunt 2008

Dear Mr. Stone:

Thank you for hearing my public comment about the proposed gray whale hunt.

Research shows that the Northwest Gray Whale has low numbers, according to the scientists at the World Wildlife Fund. The numbers range from 100-200 whales. In addition to that, it seems whales and all marine animals are facing new challenges with the rudimentary beginnings of global warming already in place and as all the climatologists predict, things are only going to get a lot worse and within only 20 years a mass extinction (over half of all known species) of our animal and plant life.

The new unrelenting digging for oil and gas in feeding grounds of whales will be devastating. Also with the continuing frequent oil spills and pollution from pesticides and other chemicals, the whale populations are shown to have an increasing rate of cancers upon necropsy of beached whales; even very young whales. I have to also mention the 'bycatch' problem which kills many whales every year, collisions with large ships, fishing apparatus, and, of course, the international hunting of whales from Norway, Japan and Russia, who flew in the face of world opinion even after a moratorium was declared for seventy years to bring our whales back from over hunting and the brink of extinction.

Personally, I find that the intelligence of the whale combined with the social bonds of the whale demonstrate this iconic animal as one to be revered and not sacrificed for the Makah's reasons of "self-esteem, pride and a distraction against alcohol and/or drugs". I actually find this reasoning to be surprisingly immature and even offensive.

I can speak of this as I have Iroquois lineage myself. The Indian Culture always revered life and nature, with animals at the top of the list, and only killed animals out of complete necessity, which no longer exists. The American Indians, as you probably know, found the American settlers somewhat amusing, I'm sure, at the concept of a man owning a tree! One also has to consider the sector of the Makah Tribe who are very against this hunt and do not want it to take place in the name of their tribe. They have offered that the whale meat and blubber had been wasted and later found floating and caught by fishing nets. They have protested that they do not use whale products and do not like whale products.

With all that is going on in our climate in combination with all the old existing threats to whales, and the complete lack of justification for the Makah to take a whale, it is my public comment that the hunt should not now or ever take place again.

The last aerial footage of the whale being taken by the Makah was horrifically brutal; the Northwest Pacific waters turning red with the blood of this terrified, innocent animal who suffered an agonizing death for 27 minutes according to the anchor person. I believe the people of this country who have compassion for other living things should also have a "say" in what happens to our treasured wildlife - not just those who would kill and exploit. And as a last point, if we allow one subculture to resume old traditions, we must allow all subcultures within our culture to restore their traditions and whatever mayhem that would create.

Thanks for listening.

Yours,

Russell Kennedy

MAKAH TRIBAL COUNCIL
P.O. BOX 115 • NEAH BAY, WA 98357 • 360-645-2201

By Facsimile (503) 230-5441 & First-Class Mail

August 14, 2008

Steve Stone
NOAA Fisheries Northwest Region
1201 NE Lloyd Blvd.
Suite 1100
Portland, OR 97232

Re: Makah Indian Tribe's Comments on Draft EIS (May 2008)

Dear Mr. Stone,

Attached are the comments of the Makah Indian Tribe on the Draft Environmental Impact Statement for Proposed Authorization of the Makah Whale Hunt (May 2008). Thank you for this opportunity to comment. The Tribe sincerely appreciates the substantial time and effort you and your colleagues at NOAA have dedicated to producing this document. If you have any questions please contact Jonathan Scordino, Makah Marine Mammal Biologist, at (360) 645-3176 or by email at mtcmmbiologist@centurytel.net.

Sincerely yours,

Micah McCarty
Chairman, Makah Tribal Council

GENERAL COMMENTS

Overall, as measured by the breadth and depth of the resources and impacts evaluated, the analysis presented in this Draft EIS is extremely thorough. More than just a long document, the substance of the agency's analysis represents a hard look at all resources likely to be impacted by the Tribe's proposal to resume ceremonial and subsistence whaling under the rights guaranteed by the Treaty of Neah Bay. In particular, the Draft EIS responds to the concerns of the Ninth Circuit in *Anderson v Evans* by carefully examining the local impacts of the hunt on gray whales that are present in the Makah U&A and other southern areas of the ENP stock's summer range.

The Tribe appreciates the extensive analysis of the Makah people and culture and their relationship to whaling, which includes the substantial information gathered from visits to Neah Bay and discussion with the tribal community. In the often polarized public debate over whaling in the twenty-first century, the focus is too frequently limited to the impacts on the gray whale rather than on the substantial impacts that a decision to approve or reject the Tribe's waiver request will have on Makah subsistence, ceremonial, cultural and spiritual needs and values. It is, after all, the "human environment" that NEPA requires the agency to analyze, and just as the impacts to the gray whale are a central topic for the EIS, so too must be the impacts of the agency decision on the Tribe. This Draft EIS goes a long way toward educating the agency decision makers and the public about the potential impacts on both sides of the Tribe's waiver request.

The five action alternatives and the no-action alternative represent a reasonable range of alternatives to the Tribe's proposed action. The alternatives represent both more and less restrictive approaches than the proposed action and clearly demonstrate the impacts that the Tribe's proposed time, area, and PCFA whale limits will have on affected resources. In doing so, the Draft EIS analyzes the principal conservation measures proposed by the Tribe in the waiver request. Moreover, the range of alternatives highlights that the proposed action is modest in scope and was carefully crafted so as to reflect both the Tribe's needs and the objective of minimizing the impacts to gray whales present in the southern portion of the summer range. The conservative nature of the Tribe's proposal is made clear when comparing Alternative 2 (the Tribe's proposal) with Alternatives 3 and 6, which are less restrictive in time, area, and/or limits on PCFA whales.

WHALE WATCHING

Whale watching may have greater impacts on gray whales than is suggested in this document. Gray whale calf counts in the lagoons of Baja California have declined persistently over the past decade while gray whale population numbers in general have increased. The decreased use of the lagoons also coincides with increased ecotourism and whale watching efforts. This observation may show that disturbance from whale

watching is either reducing survival of individuals using lagoons or it is displacing the whales to breeding areas that were not seen as favorable areas in the past.

HOT HARPOONS/PENTHRITE GRENADES

The Tribe has concerns about the analysis of penthrite grenades under Chapter 3 and Chapter 4. First, there needs to be some analysis on the expense of buying the grenades. The EIS should also analyze how the whale will be killed using a penthrite grenade, *i.e.* a "hot harpoon." Because (unlike bowhead whales) gray whales sink when killed, an exploding harpoon with a penthrite grenade cannot be used as the weapon to dispatch the whale and at the same time be the initial harpoon delivered on the whale. A single harpoon is not likely to be sufficient to retrieve a dead and sinking whale because the harpoon is likely to tear out under the strain of retrieval. A more accurate representation of this method of hunting would be the use of one or two cold harpoons, followed by the use of penthrite grenade harpoon to dispatch the animal. Based on this method, it is likely that use of a large caliber rifle aimed at the whale's central nervous system, as proposed by the Tribe, would result in a shorter time-to-death compared with the realistic use of a penthrite grenade. In addition, the effective range of the rifle is much longer than the effective range of a penthrite grenade harpoon.

USE OF DRIFT WHALES FOR CONSUMPTION

The legal basis for the subsistence use of drift whales by Makah tribal members needs to be clarified. *See* Sections 2.4.2 and 4.10.3.1. The Tribe believes that the Treaty of Neah Bay authorizes the use of drift and stranded marine mammals without prior approval from NMFS. However, there is no agreement between the Tribe and NMFS governing the subsistence use of drift whales, and NMFS' policy on this issue has never been formalized in writing. There is an agreement, which was referenced in the EIS, which allows subsistence use of marine mammals taken incidentally to fishing. The beachcombers' clause within the MMPA does not allow the consumption of edible tissues, only the collection of tissues for scientific or educational purposes. Therefore, neither of these resolves the legal uncertainty described above. Absent formal written guidance expressly authorizing Tribal members to utilize stranded marine mammals the use of this resource may be significantly less than assumed the analysis of Alternative 1.

USE OF WHALE PRODUCTS FOR MANUFACTURE AND SALE OF TRADITIONAL HANDICRAFTS

The legal basis for the Tribe's use of non-edible whale products for manufacture and sale of artwork and traditional handicrafts needs to be clarified. On page 4-123, lines 23-25, the Draft EIS states "With the possible exception of products from drift whales or whales caught in fisheries, there would be no potential for households to consume whale meat and blubber or use non-edible whale products for the manufacture and sale of traditional handicrafts." The clause "with the exception of" implies that products from

drift whales can be used for such purposes under Alternative 1. In Section 4.7.3.2.1 on page 4-124 the document states "Compared to the no action alternative, the potential for whale products for ... making and selling handicrafts would increase..." This language again implies that Makah tribal members can currently utilize whale products for art sold commercially and that agency authorization of a hunt would only increase the opportunities for utilization of such products in the manufacture and sale of handicrafts. Yet Section 2.3.3.2.6 at page 2-14 states that the use of whale products is strictly part of analysis for action alternatives, thus implying that use of whale products is not included under the no-action alternative (Compare Section 2.3.1 at page 2-4 to 2-5).

NORTHWARD MIGRATION CHARACTERISTICS AND ASSUMPTIONS REGARDING MOST LIKELY HUNTING TIMES

At Pages 3-65 and 3-66, the Draft EIS discusses the characteristics of the northward migration, particularly that mother and calf pairs constituted the second migratory phase and are the last to leave the wintering areas. Page 3-67 notes that 90% of this phase is made of cow-calf pairs. In Chapter 4, the Draft EIS makes some logical assumptions (with the exception noted below), including that the timing of a hunt under Alternatives 2 and 4 (*see, e.g.*, Page 4-5) would most likely be in the late Spring. The Draft EIS should make the connection between the characteristics of the second phase of the northward migration and the assumption as to likely hunting in April and May, which may affect hunting opportunities given the prohibition on striking calves and females accompanied by a calf.

ASSUMPTIONS UNDER ALTERNATIVE 5

Alternative 5 includes more restrictive limits than the proposed action. The Tribe would be limited to 3 strikes, 2 whales harvested, and 1 struck and lost. However, the agency's assumption, without spelling out the details as it does for Alternative 2 at page 4-7 (bottom), concludes that "all three whales potentially killed could be PCFA whales." (4th line from bottom. Note that the sentence starts off incorrectly as "Alternative 3" instead of Alternative 5). In alternatives 2, 3, 4 and 6, it is assumed that the combination of struck and lost (3), maximum harvest (5) and strike limit (7) results in the potential for up to 7 whales to be killed in any given year for the reasons stated at the bottom of Page 4-7. Applying the same reasoning to Alternative 5 yields a potential of *two* (not three) whales killed in any given year. This is because whaling for the year will have to cease once (1) 2 whales are harvested; (2) one whale is harvested and one is struck and lost; or (3) one is struck and lost. The maximum potential killed whales is therefore two, and the strike limit provides no actual restriction. This error should be corrected, or addressed as suggested below. If corrected to two potential kills, it would affect the assumptions in the rest of Section 4.1.5 and the analysis in other parts of the Draft EIS, such as in the comparison of alternatives (Page 4-57, bottom).

An alternative approach to making the change suggested above would be to alter the parameters of Alternative 5 to a limit of two (2) whales struck and lost annually. Under this scenario, the assumption of 3 potential whale kills per year would be valid. In addition, it would be a more realistic limit, since it would be very restrictive if the first hunt of the year led to a struck and lost whale and this single struck and lost event resulted in a closure of the hunt for the entire year.

BEST AVAILABLE SCIENCE

Throughout this document there is a need to note that the data on gray whale abundance is the best science available. These estimates have been collected by experienced researchers for NMFS and have been validated by the leading international authority on large whales, the International Whaling Commission. Noting that this analysis of populations is based on the best science available will help decisionmakers and the public review the EIS and understand that the best science was used.

SPECIFIC EDITS OR COMMENTS

Page 1-13: states "Congress specified that the primary objective of the marine resource management under the MMPA is to maintain the health and stability of the marine ecosystem." It needs to be recognized that historically and currently Native Americans have been part of the ecosystem. The Makah Tribe and other tribes of the Pacific Northwest have hunted marine mammals since time immemorial.

Page 1-33, line 19. "s" should probably be "Chukotka Natives".

Page 2-7, Table 2-1. There is a random "2" after U&A in Alternative 6. Also for Alternative six, the row for maximum harvest, struck and struck and lost should read "Same as Alternatives 2, 3, and 4".

Page 2-10, line 28. Appendix A contains the Tribe's waiver request, but it is not "discussed in detail" there.

Table 2-2. Page 2-34 (Tourism). Alternative 6 should be "Similar to Alternative 2". Same with "Public Safety" on Page 2-38. page 2-37, Ceremonial and Subsistence Resources, Alternative 5 should conclude with "compared to Alternative 2." Page 2-44 (Media Observers, Alternative 6) was probably intended to refer to Alternative 3. Page 2-49 (Indigenous People Worldwide, Alternatives 2-6) should probably read "Similar to Alternative 1" for consistency throughout the table and ease of reference by the reader.

Page 3-11, line 9. "sunset" should probably be "sunrise".

Page 3-27, Figure 3-2. Cape Johnson appears to be mislabeled. It is north of La Push.

Page 3- 79, line 28 states that identified whales reappeared "at least 93.3 miles away" from where they were seen in previous year. Instead of "at least," the sentence should read "up to 93.3 miles away" to be consistent with the example from the preceding sentence.

Page 3-87. In the analysis of PCFA whales it is noted that survey results are analyzed for population numbers under the assumption that all whales observable are seen. This document needs to discuss how close this assumption is to reality. While it is not unheard of in wildlife sciences to make the assumption that all individuals are observed, normally this is only done for animals that are highly visible, like African elephants, or have abnormally high effort, like Southern Resident killer whales. PCFA whales have neither traits of high visibility nor abnormally high observation effort. Therefore, any estimates under these assumptions are very conservative as the assumption is unlikely to be satisfied.

Page 3-112, lines 19-22, portrays the hunt as a single harpoon being thrust into the animal before the whale is shot in the central nervous system with a large caliber rifle. This description is not accurate. As noted above, gray whales sink after they have died (unlike bowhead whales). A single harpoon may not be sufficient to retrieve a whale that has sunk to the ocean floor. Therefore, two or even more harpoons should be in the whale before the whale dies to prevent losing a struck whale. The additional harpoons can be applied before or immediately after the whale is dispatched with the rifle, as occurred in the 1999 hunt (see Page 1-38).

Page 3-116, lines 22-23. The caliber of bullet used for the majority of the 16 shots in the unauthorized 2007 hunt was known to be .460 caliber. One of the shots may have come from the .577 caliber rifle, but likely not more.

Page 3-121, line 13. Should insert "gray" in the sentence "Although Alaska natives hunted *gray* whales . . . ." Note also that this appears to be contradicted by Table 3-9 (Page 3-122), showing 2 gray whales harvested in 1995.

Page 3-122, Table 3-9 is missing information regarding IWC allocations.

Section 3.4.3.6.9 at Page 3-134 should note that in the past gray whales have been entangled in Makah fishing nets. During the late 1970s and early 1980s a few whales were accidentally captured in nets. This appears to be referenced in Page 2-21, lines 11-13 (citing Angliss and Outlaw 2008). Failing to note that gray whales have been incidentally captured in tribal fishing gear in the past may lead a reader to conclude that under the no-action alternative, if a whale is caught in a net, the fishermen caught the whale intentionally. Documentation that gray whales are occasionally caught in tribal fishing gear will promote greater public understanding of this issue.

Chapter 4 should include line numbers for consistency and ease of reference.

Page 4-9, line 12 should be corrected. It is not whales "after June 1"; rather it is whales between June 1 and November 31st. Similar changes to page 4-7 as appropriate.

In Chapter 4 there is analysis on social benefits of the Makah hunt on Page 4-126, Section 4.7.3.3.3. Under the analysis it is stated that, "There is insufficient information to determine whether the potential social benefits to Makah Tribe would offset potential adverse social effects." This analysis did not reference or neglected to consider Dr. Ann Renker's 2007 report. There, it was found that 88.8% of Makah households surveyed in a randomized sample want to return to whaling. Clearly, the vast majority of Makah Tribal members would benefit if whale hunting were renewed.

Section 4.8.3.1 at Page 4-133 needs to have the words "might" and "perceived" stricken from the last sentence. The lack of respect for treaty rights would be present, and not just "perceived," if Alternative 1 is chosen. Also, Makah tribal members, and those of other tribes, *will* feel increased tension and frustration if the no-action alternative is chosen, not "might".

Section 4.10.3.2.2 at Pages 4-145 to 1-146 substantially overestimates the number of whales available under the no-action alternative for subsistence use. There may be 1 whale that dies in tribal fishing gear (see comment above) or drifts in to tribal beaches every 5 years, but it is unlikely that any drift whale that is caught or comes ashore would be in edible condition. Whales have a thick blubber layer that traps the heat of their body. As a result, after they die the process of autolysis is quicker in whales than other animals due to the ability of a whale's body to retain heat given their immense size and thick blubber layer. An edible whale is unlikely to come to shore more often than once every 20-30 years. Eating a whale that has decomposed through autolysis may make tribal members sick and for this and other reasons does not fulfill the Tribe's treaty right.

MARINE MAMMAL COMMISSION
4340 EAST-WEST HWY., RM. 700
BETHESDA, MD 20814

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FACSIMILE TRANSMISSION

Date: 14 Aug. 2008

Total pages including cover: 3

To: 2008 Makah DEIS

Fax #: 503-230-5441

Phone #:

From: Tim Regen

Subject:

Comments:

MARINE MAMMAL COMMISSION
4340 EAST-WEST HIGHWAY, ROOM 700
BETHESDA, MD 20814-4447

14 August 2008

Mr. Steve Stone
National Marine Fisheries Service
Northwest Region
1201 NE Lloyd Boulevard, Suite 1100
Portland, OR 97232

Dear Mr. Stone:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the Draft Environmental Impact Statement (DEIS) for Proposed Authorization of the Makah Whale Hunt. The National Marine Fisheries Service has previously prepared two environmental assessments related to the hunting of gray whales by the Makah Tribe. The Service prepared the present document to address the ruling of the Ninth Circuit Court of Appeals in *Anderson* v. *Evans* that an environmental impact statement was needed to meet the agency's responsibilities under the National Environmental Policy Act. In particular, the court was concerned about the need for additional analyses on three different issues: the impact of the proposed hunting on the whales that remain in the waters of the Pacific Northwest throughout the summer (referred to as the Pacific coast feeding aggregation), public safety concerns, and the proposed hunt's precedential effect on possible hunting by other tribes in the United States or within other countries that are parties to the International Whaling Commission.

The Commission believes that the DEIS meets the requirements of the National Environmental Policy Act. The Service has been particularly thorough in soliciting public input on the scope of the DEIS and in the breadth of issues addressed in that document. Also, the range of alternatives considered in the DEIS is appropriate, given the purpose and nature of the tribe's request for a waiver under the Marine Mammal Protection Act and the constraints established by the International Whaling Commission in authorizing subsistence whaling of gray whales. In summary, the Commission believes that the DEIS does a good job of analyzing the environmental consequences of the various issues that participants and decision-makers will need to consider in the course of a rulemaking under the Marine Mammal Protection Act to authorize a proposed hunt.

If the Service decides to proceed with a rulemaking to waive the Marine Mammal Protection Act's moratorium and authorize the Makah Tribe to take gray whales, the Commission and others will have sufficient opportunity to make substantive recommendations about the selection of a preferred alternative from among those considered in the DEIS. As such, the Commission sees no need to make recommendations concerning the selection of alternatives at this stage. In any future reviews, we will consider not only the impact of the proposed hunting on the gray whale stock and on the Pacific coast feeding aggregation but also ways to improve hunting efficiency (e.g., to minimize the number of struck and lost whales) and to ensure that any taking is humane.

Because of the length of the DEIS, we are not now providing specific drafting suggestions or identifying areas where clarification would be useful but not substantively important. There is, however, one threshold issue that we believe the Service should address more directly than it has. This issue concerns the requirement under section 103(a) of the Marine Mammal Protection Act

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that regulations issued to waive the moratorium on taking or importing marine mammals ensure that the taking will not be to the disadvantage of the affected stock and will be consistent with the purposes and policies of the Act. Discussion in the DEIS suggests that this "disadvantage test" will be met as long as the stock would not be reduced below its optimum sustainable population (OSP) level by the authorized taking. Although this is one possible interpretation of the requirement, support can be found in the recommended decisions from previous rulemakings under section 103 for an alternative view, which is that allowing a healthy stock to decline to the point where it has been reduced to its maximum net productivity level (the lower bound of the OSP range) would be inconsistent with the statutory requirement that taking not disadvantage the stock. It does not appear that the levels of taking being considered in this instance are likely to disadvantage the stock under either interpretation. However, because this is fundamental issue of statutory interpretation that may have implications beyond the current proceeding, a more complete discussion would be useful.

The Commission looks forward to working with the Service as it continues to evaluate the Makah Tribe's rulemaking request.

Sincerely,

Timothy J. Ragen

Timothy J. Ragen, Ph.D.
Executive Director

Molly Nicoletta
1928 6th Ave W
Seattle WA 98119

DEPARTMENT OF COMMERCE
RECEIVED
JUL 02 2008
F/NW03
NATIONAL MARINE FISHERIES SERVICE

June 24, 2008

Steve Stone
NMFS Northwest Region
1201 N.E. Lloyd Blvd., Suite 1100
Portland OR 97232

To Whom it May Concern,

The Makah should NOT be allowed to hunt gray whales. Whales should not be hunted and killed anytime or anywhere by any people. These are socially complex, intelligent mammals whose numbers worldwide have been diminished severely.

Sincerely,

Molly Nicoletta

Molly Nicoletta

7-1-2008

Mr. Steve Stone
National Marine Fisheries Service
1201 NE Lloyd Blvd
#1100
Portland, OR 97232

RE: Comments on the Draft Environmental Impact Statement for Proposed Authorization of the Makah Whale Hunt

Dear Mr. Stone:

Thank you for the opportunity to comment on the proposed Makah whale hunt. I fully support the Tribe's request for Alternative 2 in the Draft EIS. I strongly support native treaty rights and especially the Makah right to harvest whales.

I hope that you will proceed with all due haste to approve this request and grant the Tribe their authorization.

Sincerely,

Jeanne K. Oliver

DEPARTMENT OF COMMERCE
RECEIVED
JUL 07 2008
F/NW03
NATIONAL MARINE FISHERIES SERVICE

Ms. Jeanne K. Oliver
11988 Sentinel Point Ct
Reston, VA 20191-4806

NO VA 220

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USA FIRST-CLASS FOREVER

Mr. Steve Stone
National Marine Fisheries Service
1201 NE Lloyd Blvd. #1100
Portland OR 97232

97232+2182

Peninsula Citizens for the Protection of Whales

Aug. 10, 2008
Steve Stone
NOAA Fisheries Northwest Region
1201 NE Lloyd Blvd
Suite 1100, Portland, OR 97232

RE: Comments on DEIS – Makah Whaling

Ever since NOAA's first Environmental Assessment rubber-stamped the Makah whale hunt, we have naively believed that a thorough and honest EIS would find way too many potentially negative impacts to people and whales to justify a return to whale "harvesting" in Washington State. The release of this DEIS has shattered the expectation that the highest quality scientific data and social analysis would be collected in an unbiased way, allowing decision-makers an honest and untainted look at this controversial issue. This Draft has obviously been prepared with the sole intent by NOAA to arrive at the same politicized decision that they have always arrived at: "There will be no significant impact on people or whales."

It is impossible to read through this Draft without being struck by the conflicts of interest inherent in the preparers, the many issues left under analyzed and unanalyzed, and the low drumbeat of uncertainty that nervously throbs through every page. The word "uncertain" itself is used at least 49 times. The phrase "not possible to predict," 16 times. The phrases "too speculative to consider," "too speculative to conclude," "insufficient information" and "difficult to predict" are used over 30 times. And the word "might" takes the prize at 258 times used.

The conflicts of interest embedded in this document are less easily spotted, but quite appallingly apparently to "locals" who are paying attention. A prime example involves the firm hired to prepare the Draft, Parametrix Inc.

NOAA knew before hiring Parametrix that this company had a history of lucrative employment with the Makah Tribe.

Parametrix began work for the Tribe in 2003 on a Corridor Management Plan for their Cape Flattery Tribal Scenic Byway. Parametrix was a natural choice for this job, as they had facilitated a Corridor Management Plan for the adjoining

Juan de Fuca Scenic Byway. Additionally, in 2002 Parametrix had supported the Makah Tribe's effort to simply annex the reservation road onto the Juan de Fuca Byway. This plan was halted by local objections to linking the Juan de Fuca Byway to the potential "whaling road," so the Tribe designated its own Tribal Scenic Byway and Parametrix Inc. felt the frustration of dealing with the overwhelming objections of the outer community to whaling.
One of Parametrix's Scenic Byway goals will be to help the tribe "interpret" whaling to tourists. This process has slowed to a halt, which must reflect the Tribe's need for a conclusion to the waiver process. If a waiver is granted, Parametrix will be back to work, helping the Tribe to finalize the whaling related tourism mentioned repeatedly in the Draft.

Subsequent to the hiring of Parametrix to consult on tourism issues, TranTech, a major sub-consultant to Parametrix, was selected by the Makah Tribe in 2006 to provide construction administration services in a $10 million paving project on the Tribal Byway through Neah Bay. This consulting job continued into 2007.

It is not known by us how many other projects link the Makah Tribe to Parametrix Inc. We do know there is a connection to the wave energy project.

NOAA should have avoided the impropriety implied in the hiring of a consultant with such deep ties to the Tribe and the “project area”.

NOAA should have disclosed these relationships publicly, not kept them under wraps. All references and opinions expressed in this DEIS related to tourism are now suspect and need to be reviewed. The optimistic statement at: 4-106: “Overall, it is reasonable to expect more visitors would be drawn to the area than avoid the area as a result of a whale hunt,” and from Table 2-2, “ability to hunt creates opportunity for the Tribe to promote hunt-related tourism,” sound like the wishful thinking of consultants who have been hired to promote whaling related tourism, and it is!

The comments that follow are not the sole opinions of one person or one family. They represent the thoughts and input of the many members of the Peninsula Citizens for the Protection of Whales as well as the great majority of the general public of Clallam County many of whom have signed our petitions (submitted to NMFS in the past). There have been many meetings, discussions and conversations during the short comment period for the DEIS. We wish there had been more time, as this Draft is so deficient, so filled with errors, intentional omissions and bias that, without considerable revisions and reassessments, it utterly fails as a prepatory document for the FEIS.

It has been impossible to comment adequately in the time period allowed. In part because documents and questions were slow in being provided. It was quite frustrating for Steve Stone, NMFS, to take a week off during the time he was in charge of responding to requests. It is now too late to receive answers to numerous questions put to NMFS regarding references in the DEIS. This DEIS is an insult and affront to all who have spent over 10 years submitting comments to NMFS in good faith and participating in numerous lawsuits. The cart has remained firmly in front of the horse and there seems no way out of Wonderland.

Comments on the Draft

RE: 1.1.3 Line 8 and 9 "In 1994, ENP gray whales were delisted.
Comment: For the record, the gray whales were delisted in 1994 after NOAA was relentlessly petitioned to do so by The Northwest Indian Fisheries Commission. Other proponents of delisting were oil companies and mid-water trawlers associations. Many conservation groups, as well as the Marine Mammal Commission, opposed the delisting. Most objections then cited habitat threats that have now only worsened. Global warming impacts should mandate the re-listing of the gray whales.

RE: 1.1.4 Makah Tribe's Historic Whaling Tradition.
Comment: This section contains the first of many references to Renker and Sepez. Renker will be cited (77) times as an authority on the Makah's "need" to whale. Sepez will be cited (37) times as an authority on Makah culture and subsistence use of foods. Nowhere is it mentioned that Ann Renker PhD is the wife of a whaler, and that Jennifer Sepez had a long term romantic relationship with a whaler in Neah Bay (A Whale Hunt, Sullivan 2000). The bias inherent in the work of these two women is inextricably woven into the fabric of this DEIS, and will be commented on in depth. NMFS never should have relied so heavily on biased sources, or kept that bias covered up.

RE: 1-23 footnote: "The annual quota from this feeding aggregation (Greenland bowhead) shall only become operative when the Commission has received advice from The Scientific Committee (IWC) that the strikes are unlikely to endanger the stock."
Comment: This IWC concern for strikes on a feeding aggregation should also hold true for strikes on the Makah U&A whales. Allowing (7) strikes per year (Alt. 2) presents an extremely high risk for such a small group of whales. "Struck and lost" should go against the quota for resident whales.

RE: 1.4.1.2.2 Overview of Requests…
Comment: NMFS reports here that "on May 5, 1995, … the Makah Tribal Council notified NMFS of its interest in reestablishing ceremonial and subsistence hunts…" NMFS does not report that on April of 1995, they were notified by Tribal representatives that… "the Makah are planning to operate a processing plant so as to sell (marine mammals) to markets outside the U.S."

RE: 2.3.3.2.7 Public Safety Measures. "All whalers would participate in … drug and alcohol testing."

Comment: There is no explanation of whether tests and standards for passing will be promulgated and conducted by the Tribe or by NMFS. Where will accountability to the public enter into this extremely important monitoring process? Many members of the past crews have had well known drug and alcohol problems (A Whale Hunt, Sullivan 2000).

RE: 2.3.3.2.7 Enforcement "Tribal enforcement"

Comment: The Tribal Council has lost all credibility, enforcement wise. In spite of all management plans, rules, laws and promises, the Tribe was unwilling and unable to bring any charge whatsoever against the Sept. 8, 2007 whalers. In particular, the Tribe had promised to prosecute the State's animal cruelty and reckless endangerment laws. Consequently, these important violations went unprosecuted. Additionally, the accusations by the convicted whalers of Tribal Council participation in the decision to have that hunt, casts an even darker shadow on the willingness of a Tribal Council to abide by rules.

In fact, a day before legal whaling was to begin in 1998, (Sept. 30, 1998) the whaling crew approached a whale. According to the Coast Guard, a kill attempt was imminent before it was called off at the last moment. The Coast Guard noted their lack of confidence that the Tribe would play by the rules. From Coast Guard log, Oct. 1998, attached. "The Makah issued a whaling permit late on the 28th or 29th and commenced a hunt on the 30th. The Makah informed the Coast Guard and NMFS, but they did not inform NMFS is the agreed upon manner and NMFS did not have an observer onboard as is required per prior agreements. During the hunt, AP called the Coast Guard to ask if a hunt was taking place. We said yes, in keeping with D13 policy of not announcing hunts, but not giving false information to the press. Prior to dispatching the whale, NMFS found out and asked that the hunt be discontinued. Steadfast was on scene and confirmed that a whale was about to be taken when the Makah ceased the hunt. Upon returning to port, the Makah addressed the press stating that the permit was only a practice permit. Capt __(redacted)__ wanted to let you know that any confusion and/or animosity that may be expressed in the press regarding this incident is pretty much a result of the Makah issuing a whaling permit, telling us they issued a whaling permit, then switching and saying it was just a practice permit." Then, from Coast Guard Log, Oct. 11, 1998: "Discussion with tribal chairman confirmed that the Tribe is awar of their responsibilities to make securite broadcast prior to initiating whaling operations and to fly the five pennant from whaling vsl in order for the MEZ to be in effect. CG reps at the meeting were left with the impression that the Tribe would not necessarily comply with these

requirements viewing them as compromising their element of surprise." So from the very first attempted hunt to the most recent, a cavalier attitude towards "rules" seems to be in play. How will NMFS ensure compliance in the future from their "co-managers?"

RE: 2.3.3.2.2 E.N.P Gray Whale Hunt Details. 2-10, lines 25 - 28

Comment: It is mentioned here and elsewhere that the allowable bycatch level of whales in the NMML's photo catalog would be calculated by a certain formula, and a number arrived at using current numbers, NMFS seems to be estimating that two resident whales per year can be harvested by the Makah. As photo IDs are added to the NMML's catalogue every year, will that allowable "bycatch" number go up to 3, 4, or 5? At that point will all considerations for resident whales be moot?

If NOAA believes it is possibly for the allowable "bycatch" of identified whales to rise over 2, this must be analyzed and discussed openly. The number of catalogued whales will surely rise with increased efforts by NMFS and the Tribe to make photo ID's. But the few faithful Makah U&A whale numbers have not been shown to have permanently risen. A disproportionate number of strikes and struck & lost will undoubtedly affect this small faithful group of 20 or so.

RE: Strikes (5 year and Annual) 2-11

Comment: The issues of "strikes" and "struck and lost" is dealt with in a very confusing way throughout the DEIS. However, the bottom line seems to be that it will be acceptable to NMFS if up to 35 whales are killed every five years. At this rate, 70 w hales could have been killed between 1998 and 2008. This is a completely unacceptable rate of slaughter which will have a devastating effect on our small resident whale population.

What is the meaning of line 23: "If the struck and lost quota is met or exceeded…" How does NMFS envision quotas being "exceeded"?

RE: 2.3.3.2.3 Location of Hunt and 2.3.3.2.4 Timing of Hunt

Comment: To proclaim that hunting among the near shore feeding sites during April and May is "designed to avoid any intentional harvest of gray whales that have been identified within the PCFA Survey area" simply defies common sense and the evidence. April and May represent the middle and end of the arrival to Washington State's near shore coast of the resident whales and the mothers and calves, two categories which NMFS claims to want to protect from death and harassment. The Tribe must go offshore to target migrating whales.

RE: Securing and Towing the whale 2-14 … "The Makah Whaling Commission be able to amend tribal regulations periodically…"

Comment: This Makah request is unanalyzed as to the potential to affect changes to policies that the public has been allowed to comment on, and is unacceptable. Could these "changes" include location of hunt? Timing of hunt? Method of hunt? Weapons? Vessels used? NMFS must reject this request or analyze it. What "changes" are potentially contemplated?

RE: 2.3.3.2.6 Whale Product Use and Non-Commercial Use and Distribution.

Comment: NMFS must clearly list what "inedible parts" can be used, and what handicrafts will constitute "authentic articles." Along with the new declaration that the meat itself can be freely passed off the reservation, the floodgates will be opened on our Peninsula for a whale product free-for-all, with no control or enforcement possible. It will be impossible to define any illegal possession or use of whale products, as anyone can fit themselves into one of the categories allowed to "share" the meat: "familial, social, cultural, or economically tied." While this may make some sense among the isolated villages of the high north, the Makah Reservation is connected by roads and waterways to the rest of the world.
The Treaty of Neah Bay, 1855, specifically bans The Makah from trading with "Vancouver's Island." Although the tribes across the Straits fit all the above criteria, will the Treaty preclude the sending of whale meat to Canada?

RE: 2.4 Alternatives considered but eliminated from detailed analysis.
2.4.4.2 Hunt outside areas frequented by identified whales.

Comment: This very important and often suggested alternative seems deliberately mis-titled to facilitate its dismissal. This alternative has always been proposed by commenters as: "Hunt offshore in the actual migratory corridor." This is an extremely reasonable and problem-solving alternative, as it addresses the gun-safety issue by getting the .50 cal at least 3 miles off the shore, and can quite reasonably be expected to avoid the great majority of whales who are feeding and resting inshore, particularly the mothers and calves, and most resident whales. Whaler's safety is assured by the presence of multiple chase boats and support boats. NMFS did not properly phrase or address this suggested alternative, which NMFS well knows would sooth many concerns about shooting resident whales at their feeding sites inshore and harassing mothers and calves. We request a reconsideration of this alternative, properly framed as a hunt in the offshore migratory corridor. Olympic National Park should be consulted for their input on this. Park visitor safety would be ensured by an off-shore hunt.

RE: 3.4.3.1.4 Seasonal Migrations 3-66
"There are no direct observations that establish the timing of either phrase of the northward gray whale migration through the project area… it is reasonable to estimate that… migrants in the second phase would be in the project area from roughly early May until June."

Comment: This "rough estimate" conveniently estimates that mothers and calves don't arrive along Washington until May. This is not "reasonable," and there have been many "direct observations," considering that the Quileute tribe, just south of the Makah U&A, has a brisk and enthusiastic season from early April until May based on the arrival of the mothers and calves. Hundreds of people flock to La Push to see the calves playing in the breakers while the mothers feed close by.

April must be considered the arrival of phase two, 90 percent of which (3 – 67 line 8) is "cow-calf pairs." Lines 18 – 30 page 3-67 documents the offshore migratory corridor as most north-bound migrants cut from near-shore Oregon to mid Vancouver Island. Average offshore distances for Phase I whales reported as 7.3 miles by Green et al (1995). Southbound migrants averaged 15.7 miles offshore (3-68).

This information reinforces the argument that whaling should occur off shore, and that hunting in April and May will target many mothers and calves with harassment as they hug the coast. The only other whales who would logically be in the "project area" would be resident whales and desperately hungry north-bound migrants, taking a chance on locating a patchy feeding site.

RE: 3.4.3.3.1 Summer Range Distribution and Habitat Use.

Comment: This important section is very confusing, with Tables 3-2, 3-3 and 3-4 being almost impossible to decipher.

What does come across, though, is one inescapable reality: There are a very small number of whales who return most years to the same feeding sites on the outer coast in the Makah U&A. That important number is hard to extricate from the mish-mosh of irrelevant data and charts, but seems to be between 20 and 30.

RE: 3-95 "The number of these identified whales is a small fraction (less than 1 percent) of the total ENP gray whale population, almost all of which migrates through their survey areas on the northward migration. If these whales are randomly mixed… Dec. 1 through May 30 less than 1% of encounters between whales and Makah hunters… would be one of these identified whales."

Comment: This misleading calculation minimizes possible impacts of hunts on Makah U&A whales, disregards many facts cited elsewhere in the DEIS:

- The favorable weather conditions for a hunt will occur in April and May at a time when most of Phase I has already passed Washington.
- Most whales in Phase I and many in Phase II are about 5 miles offshore, not in the near shore waters of all previous hunts and hunt attempts.
- This leaves a much smaller pool of whales for the hunters to "encounter", which will include unknown percentages of resident whales, mothers and calves, and hungry migrating whales who are stopping to eat on the way north. The "hunters" have never targeted the migratory corridor off shore, only the feeding areas very close to shore.

It is logical that there will be a much higher than 1% chance that these vulnerable whales will be targeted. NMFS needs to provide a more realistic estimate of the number and make up of whales encountered in the Point of Arches/Cape Alava area in April and May.

This section confirms the 9th Circuit Court's interest in the well-being of the Makah U&A whales, as well as their extremely low numbers, less than two dozen.

If NMFS is claiming that the numbers are rising slowly in all the survey areas, that must mean that none of the areas have reached its OSP. If the Makah U&A has still not reached its OSP, it must be hard for a randomly recruited whale to succeed at finding enough productive feeding sites to be satisfied with the area. This would explain why many whales are "newly seen" but few are "seen again." The calves that learn the feeding areas from their mothers have a great advantage in The Makah U&A. For example: Cascadia's whale #107 was identified as a calf in 1994 with his mother whale #43 who was identified in 1984 and seen many times over the years as has her calf #107.

All this begs the question: What is the OSP of the Makah U&A? Why has NMFS not analyzed this important f actor?

Before the Makah begin killing and harassing whales away from these feeding grounds every spring, it is vital to know how many whales should or could be utilizing this area.

RE: 3.6.3.3 Summary of Economic Effects

Comment: "No quantitative information is available concerning the economic effects of the Makah Tribe's practice whale hunt exercises in late 1998…" (line 3-4 3-196)

"Practice whale hunt execises?" The Tribe should have told the Coast Guard, The National Guard, The FBI, The Clallam Country Sheriffs, The Whale Task Force, and all those who spent untold resources "protecting" their right to go hunt a whale that fall that this

was just a "practice exercise." They should have told the hordes of media workers who left their families to live in Neah Bay to be on scene for "the hunt." They should have told all the protestors who the Tribe found so annoying and "threatening." They should have told Paul Watson he didn't need to park two ships in the bay.
Or is this new labeling of the many false starts, tribal infightings, violence against protestors of 1998 a way of minimizing the many fiascos of the Fall of 1998 hunt season?

RE: 3.8.3 Existing Conditions "According to a 2001/2002 household whaling survey… 93 percent responded that the Makah Tribe should continue to hunt whales…"

Comment: Statements such as above, throughout the DEIS, must be stricken or reevaluated by an unbiased panel of anthropologists and statisticians. Renker's results are simply not trustworthy, tainted throughout all the Needs Statement with the inherent bias of her personal pro-whaling position.
The world and the general public have been swayed by her results, showing an almost 100% unified tribe behind whaling.
In a Lynda Mapes Seattle PI story of 2002, these questionable statistics are passed on without question to a wide local audience: "… 163 randomly selected respondents… were surveyed… The survey found 94 percent of respondents believed resuming whale hunts had affected the tribe positively…"
And to quote the biased viewpoints of Keith Hunter, non-Makah pro-whaling activist who lived on the reservation for a short time is completely insupportable. (More comments on Renker results at 3.10.3.51)

RE: 3-214 lines 27-32

Comment: This section points out a couple things. Whalers were paid to practice (and attend meetings), which seems to add a commercial incentive at odds with "spirituality." And the changing nature of the Makah Tribal Council is highlighted. The makeup of the Council can change every year. The judges of the 9th Circuit Court pointed out the problematic nature of making agreements with any particular council. How will NMFS ensure the continuity of commitments made by a particular council?

RE: 3.10.3.1 Makah Archaeological Resources Connected with Whaling

Comment: Much of this section comes from Ann Renker and her sources.
In both her 2002 and 2007 Need Statements, written to support a gray whale quota request by U.S. at IWC, Ann Renker does her best to maintain the Makah story line that the Tribe has occupied the North Olympic Peninsula for thousands of years. Never does

she mention that this version of the “mists of time” scenario is seriously questioned by numerous scholars. Specifically, there is ample evidence that the Makah usurped Quileute domination of the Peninsula possibly as little as several hundred years ago.
Yet Renker pummels the reader with dates, painting a misleading picture of history. She mixes what is known about the pre-contact whaling culture of the Vancouver Island Nootka (relatives of the Makah) with references to the whale bones and artifacts found in midden layers on the Peninsula.
These bones and artifacts cover a wide range of dates, and it has not been established that the older layers (pre-400 years ago) represent Makah occupation.
Excerpts from Needs Statement 2007:

Pg. 4: “whale hunting… for at least 1,500 years before present day.”

“750 years before (1,500 b.p.) Makah used drift whales.”

Pg. 5: “for 1,500 years, whale hunting…”

Pg. 6: “… 2,000 year old subsistence culture.”

Pg. 11: “Archaeological data from…Makah village of Wa-atch indicates whale bone present some 3,850 +/- 75 years before present.”

“…data from Ozette site… 1,500 years of continuous whale use.”

Pg. 26: “…Makahs and their nu-ca-nu relatives hunted whales… at least 1,200 years”

Pg. 55: “For approximately 2,000 years the Makah people relied on… the whale.”

Pg. 61: “The food products of the gray whale… have sustained the Makah people for over 2,000 years.”

The controversy over who occupied the Olympic Peninsula when, surfaces in the works of scholars referenced in Olympic National Park anthropologist Jacilee Wray’s 1997 book – Olympic National Park Ethnographic Overview and Assessment:

According to information provided for the Indian Claims Commission, the Makah came to Cape Flattery "from Vancouver Island about 500 years ago." (ICC 1970:172) A story related to Ruth Kirk by a Nuu-Chah-Nulth elder (Kirk 1986:23-24).

Powell states that the Quileute formerly occupied the entire northern area of the Olympic Peninsula, but were dislodged by the Makah and Klallam

J.V. Powell, linguist and Vickie Jensen
Quileute: An Introduction to the Indians of La Push, 1976.

Reagan mentions an ancient midden heap 16 miles up the Hoh… Reagan believes that the Quileute once "owned" the entire Peninsula.

Albert B. Reagan
Archaeological Notes on Western Washington and Adjacent British Columbia, 1917.

Reagan notes that the fishing grounds of the Quileute are at Cape Flattery and states that at one time the Quileute/Chimakum had complete control over the greater part of the Peninsula… The Makahs captured the Quileute settlement of Warmhouse, between Cape Flattery and Neah Bay; then captured villages at Tsooez, Waatch and headed toward Ozette…

Albert B. Reagan
Some Traditions of the West Coast Indians, 1934.

References to the "Makah/Nootka" invasion of the Peninsula are numerous and describe a bloody village by village take over that was still being vividly retold by Tribal elders in the 1800's.

Helen Clark, who worked for the Women's National Indian Association in Neah Bay during the first decade of the 20th century, recorded many oral histories. Following is an excerpt from her rare manuscript entitled, "Chips From An Old Block."

"Many years ago… the little village of what is now known to Indians as West Coast, was swept away by… a tidal wave. The natives determined to seek another home. All the families but one sailed southward until they reached an Island at the mouth of the Straits (of Juan de Fuca).
These homeless Indians, afterward called Makahs, besieged this island (Tatooche)… starved the natives

into submission and took possession. Part of them went south and settled at what is now called Osette. The rest crept up to a little village on the bay. Although it was already occupied by a peaceful people, they determined to possess it. Stratagem, bloodshed, and active warfare soon gave them homes they had not built, and fish they had not dried. As was customary at the time they killed the old people and kept the younger ones as slaves."

In summary, it is far from accurate for anyone to state as unequivocal fact, that the Makah have occupied the Peninsula beyond 400-500 years.

RE: 3.10.3.5.1 Makah Whaling. Lines 24 – 26: "… some of those individuals taking a leading role in revitalizing (whaling) are from whaling families of high status who trace their ancestry to men who formerly hunted whales."

Comment: One thing that is repeatedly mentioned in Renker's Needs Statement 2007, is the "complex pattern of social stratification" that is, unarguably, one of the hallmarks of the Nootka/Makah whaling culture. Some examples from the document (pages referenced are from Needs Statement 2007):

pg. 10: "Emphasis on achieved wealth as measured in property and hereditary rights."

"Complex pattern of social stratification."

"Integration of rank and kinship as the basis for social interaction."

pg. 11: "A highly regulated system of ceremonial and economic privilege including ownership of, and control over, … whaling grounds, fishing grounds and other sections of ocean and river property."

pg. 15: "A whaling crew consisted of a chief, or the whaler… The whaler owned the canoe and the equipment… he also owned important ceremonial privileges through his hereditary status…"

"Whaling was restricted to the men who… possessed the hereditary access to the position…"

pg. 18: "strict protocol governed the butchering process… the distribution of the whale reinforced the Infrastructure of Makah society each time the process occurred."

pg. 19: "The highly stratified nature of the Makah social system was a mirror of the status structure involved in the entire process of the whale hunt… whaling actualized the social organization of Makah society."

"Whalers, or 'headmen,' were ranked at the top of the pyramid of social standing."

"The anthropological literature tends to concentrate on the role of high-status men in the whale hunt… The women who married whalers dominated the top of the female analog to the male status pyramid."

"Marriages between (two whaling families)… united two powerful, wealth families and ensured that consolidated social, ceremonial, and political power would be transmitted to another privileged generation; this procedure is common to… royal families."

pg. 20: "anthropologists were most interested in the ceremonial, social, and work activities of the privileged classes…"

The United States did not make a treaty with another government. The United States made a treaty with whalers. The whalers *were* the "headmen." Whaling is what made them and their families the wealthy, powerful, privileged class, in control of strategic locations on and off shore. Of course they demanded the right to continue whaling. Their very lifestyle as chiefs depended on it.

But everyone couldn't be a whaler. The "complex pattern of social stratification" was really a caste system, with sealers and fishermen ranked below whalers, and commoners and slaves at the bottom of the heap.

The U.S. government signed a treaty with primarily, the "royal families." And in the family memories of some contemporary Makah, these old claims to status are not forgotten. "Makah people had never stopped educating their children about their respective

familial whaling traditions" (pg. 34). It should be no surprise that the prime movers of the "back to whaling" crusade are descendants of the whalers.

Keith Johnson, a whaling family member and former Tribal Councilman, said in a Peninsula Daily News interview on Sept. 27, 1998:

"(Whaling)… brings in all of the cultural aspects of our heads of family… and lifts that family up in its identity as a whaling family."

That same fall in 1998, John McCarty, grandson of the last Makah Whaling Chief, and Makah Whaling Commissioner, interviewed on KIRO-7 TV said,

"There could be with the lesser families that, uh, like I don't like to call them slave families, but the slave families and the less prominent ones, that there might be a feeling of what's going to happen now?"

Renker bemoans "the introduction of American values" in the 1800's such as "the American philosophy of social equality" and how that social equality "made it difficult for Makahs to continue to staff and organize whaling canoes, and therefore households, according to the ancient patterns" (pg. 30).

Social equality is considered by most Americans today to be the hallmark of a free and just society. Are the whaling families actually hoping for a return to a traditional status and power structure that is above the shifting winds of the democratic process?

RE: 3.10.3.5.1 Makah Whaling

Comment: This section describes Ann Renker's Household Whaling Surveys, HWSI and HWSII, her methods, results, and excerpts from her Needs Statements.

These topics raise so many questions it is hard to know where to start. We'll start with Ann Renker PhD., herself. While she is no doubt a fine person and an asset to her adopted home of Neah Bay, she is in no way an objective or neutral scientist. She is, in fact, married into a very prominent and activist whaling family, and her Needs Statements unabashedly reflect their support of whaling. Did NMFS critique the Needs Statement or have them reviewed by impartial anthropologists?

RE: HWSI, 2002

Comment: It's a compelling premise for a community survey, to frame it in terms of defending one's Tribe from "outside attacks." "The expressed purpose of the survey was to address concerns of some non-tribal citizens who believed that the Makah Tribe did not support whaling and wasted the whale products received from the 1999 hunt." 3-241

One would think Tribal members would put differences aside and really pull together to show unity in the face of these comments from "non-tribal citizens." Jennifer Sepez (Sepez 2001) informs us that, "Typically, face to face interview surveys in the U.S. have a refusal rate of 5% - 20%." Her own survey in Neah Bay had a 10.9% refusal.

Renker had a 31% refusal rate for her survey. Did NMFS ask Renker why that might be?

The whaling proponents have done their best over the years to stifle dissent. Those who spoke out against whaling were threatened and intimidated. Renker even uses this Needs Statement as a platform to falsely accuse four dissenting tribal members of being responsible for all protests against whaling! (pg. 36)

Considering the conflict within the Tribe over whaling, it is not surprising that in Household Survey (I) 2002, 58 out of 217 contacted households (31%) refused to participate in the survey. There is no effort to explain this large number. Four additional households were determined by the surveyors to be anti-whaling, so to "minimize external influences" they were not interviewed, and their surveys were filled out for them "to answer negatively." When 31% of the survey contactees removed themselves from the sample pool, "random sampling" was no longer random. It had at that point self-selected for cooperation with the Makah Cultural Resource Center, whose oft-stated desire is the return to whaling. Add the 31% to the 5.5% who were scored as "anti whaling" and this is a total of 36.5% who are at the least, unwilling to help with the survey, and at the most anti-whaling. So to imply a 93.3% approval rate for whaling in 2002, is not honest, is not science, and disregards the implications of the election results of 2000.

After the whale hunt in 1999, voter frustration with whaling swung tribal policy in a different direction in 2000 and 2002. New leaders slashed funding for whaling, arguing other needs were more pressing. With no budget, the Makah Whaling Commission was shuttered in 2002, and angry whaling families were told to go ahead at their own expense. No more tribal subsidies for family hunts.

Keith Johnson said he was voted off the council after the first hunt amid criticism that the Council had spent too much time

and money on whaling. "It was really clear that whaling was a dead horse," he said.

Lynda Mapes
Seattle Times
April 15, 2002

Nowhere does Renker, or the DEIS, analyze, discuss or even mention the "dead horse" period, but Keith Johnson's startling statement throws open a small window to the large divisions in Neah Bay over whaling.

It is quite clear that the following Letter to the Editor that ran in the Peninsula Daily News on April 11, 1999 must speak for a large percentage of the Tribe:

"I am a Makah and I am against whaling. I respect the whale's right to swim free. Killing whales will not wipe out all the ills of the reservation. It is not a cure for addictions; drugs or alcohol.

… Hundreds of us do not want to see these wonderful creatures killed. Many of us believe there is more to be gained by saving the whales.

In my humble opinion, this whaling issue was never brought to a ballot vote by the Tribal Council. If it was put to a ballot vote, I believe that we would not be facing this heart breaking issue."

A Makah Tribal Member, Neah Bay

So where does this leave Renker's "93.3% approval," touted in Table 3.32 and throughout the DEIS? NMFS must reevaluate the misleading results and methodology of the Household Whaling Surveys, and explain to the public why this biased work was supported uncritically and submitted to the IWC shamelessly.

How did Renker achieve such a response from a “random sampling”? With all the “refusals” out of the picture, who were her “respondents”?

One cannot get a clear picture without all the data from the surveys. Renker has carefully cherry-picked the answers and percentages that support her conclusions and that she wants the readers of the Needs Statements to see, and the DEIS is happy to do the same. Renker’s handpicked data is strewn liberally throughout the Draft reinforcing over and over the message that the Tribe overwhelming wants whaling, wants whale meat. Her “random sampling” says so.

We found in our files a draft version of the 2002 Needs Statement. This old version happens to have a Household Survey filled out with Renker’s data results for each question. A handwritten note at the top advises: “Will not be included as a part of Needs Statement. Will be available separately upon request. FYI for now.” A cover letter addresses the Draft and survey data to Rolland Schmitten, March 8, 2002, CC: Michael Tillman, Chris Yeats and Roger Eckert.

When the data results from questions 37 and 38 of the first Household Whaling Survey are compared to the numbers in Table 3-34 in the DEIS, interesting facts emerge.

Sixteen (16) respondents to the HWSI identified themselves as members of the 23-member Makah Whaling Commission. Seven (7) members of respondents’ households also were counted as MWC members. 16 + 7 = 23. So, somehow, all Makah Whaling Commissioners’ households were surveyed.

Table 3-34 lists thirteen (13) members of the whale hunt crew. The HWS lists ten (10) respondents and eleven (11) household members on the hunt crew. With twenty-one (21) crew members in the survey, that certainly must include all thirteen (13) claimed by Table 3-34.

Twenty-two (22) respondents identified themselves as support crew, as did nine (9) household members. That total of thirty-one (31) must certainly include members of the tow crew on the one fishing boat that pulled in the whale, as well as twenty or so others who worked in a “support crew” capacity.

So, we have a “random sampling” that happens to include the opinions of:

- The entire Whaling Commission
- The entire hunt crew and almost enough for a second crew
- All tow-crew members plus an additional 20 or so “support crew.”

It strains credulity beyond the breaking point to believe that these respondents were “randomly chosen.”

The survey needed to achieve a pre-determined outcome: An overwhelming Tribal desire for whaling and evidence that the meat and blubber were utilized.

This seems to be ample motivation to bias the sampling, and the magnitude of the bias does falsify the conclusions. The survey results were not left to chance, and the fact that the complete results were not included in the Needs Statement is a big red flag. NMFS did see the results. What were Schmitten et al's comments to Renker upon receiving the Draft?

There needs to be a complete and thorough review of Ann Renker's Household Surveys and the way her results were used to mislead the IWC in the Needs Statements, and the American public in the DEIS.

The fact that Renker's survey results "were supported in an independent survey by anthropologist Jennifer Sepez" (3-242) is not reassuring, only more troubling, given the romantic relationship Ms. Sepez carried on with the captain of the 1998-99 hunt seasons as he helped her with her research for her doctoral thesis. (A Whale Hunt, Sullivan 2000)

Did Ann Renker and Jennifer Sepez keep these relationships with whaling families in Neah Bay away from NMFS, or were they truthful and NMFS used their work without question anyway? If that is the case, the public should have been informed of the possible conflicts of interest inherent in their work. It is an important component in analyzing the reliability of the data in this DEIS, and information that is only available to commentors living very close to the reservation.

NMFS has relied quite heavily on Ann Renker's Needs Statements to make the case for the Makah's "nutritional and cultural need" to the world, and continues to do so. Dissent within the Tribe has been stifled, blame on "outsiders," and purged from or minimized by survey results in a methodical and dishonest way.

It seems that NMFS has chosen to look the other way and not to ask questions or challenge findings in Renker's work. This does a disservice to a large faction of the Tribe, to the neighboring communities, and to the ones who NMFS is most charged with protecting: The gray whales.

There is no great need for whaling or whale meat in Neah Bay. As on Makah elder has repeatedly stated: "We are not hungry. We don't need dead whales to know we are Makah."

Whaling will be a novelty pastime for the rich. Divorced from its original cultural and nutritional importance, it will be an ego-driven exercise, marking time until the hoped for commercial harvesting materializes.

NMFS can deny that this is likely, but has never put forward any binding assertion from the Tribe that they will not resume

commercial whaling. In fact, it is the reverse: the Tribe has always stated that their treaty reserves for them the commercial use of marine mammals, and NMFS has remained silent on this topic, in spite being asked to clarify this issue.
This current plan for an "open door" whale-meat policy will no doubt lead to money changing hands for this "nutritious and healthful" food. Smuggling of whale meat to anywhere in the world is quite feasible and maybe an irresistible temptation, given the monetary value of whale meat in Japan.

RE: 3.10.3.5.1 Makah whaling, 3-24 "Makah whalers reported enduring intense physical and spiritual training."
Comment: Author Robert Sullivan spent a great deal of time with the whaling crew in 1998-1999. His book A Whale Hunt (2000), had no preconceived agenda but by documenting his observations of crew preparations, inadvertently de-bunks the above statement from Braund. Braund is a Parametrix sub-contractor who paid a visit to Neah Bay in 2007. He spoke to whaling family members and found, no surprise, a support and need for whaling.

RE: 3.10.3.5.3 Symbolic Expression of Whaling.
Comment: This section serves to remind us that most of the world has adopted images of whales in art of every media to symbolize a renewedl effort to care for and protect nature and the environment. Sculpture, T-shirts, photos, paintings, "doodles" by children and even tattoos have been produced by the millions to reinforce the huge global cultural/spiritual connection to living whales. It is the feelings, sensibilities, and hopes and dreams of these – the great majority of people here and everywhere – that will be harmed and diminished by this unnecessary scheme to benefit from the slaughter of whales.

RE: 3.10.3.4 Makah Historic Whaling 3-228 lines 11-13 "Chiefs had two methods of obtaining whales: either hunting them from a canoe on the open water and harpooning them, or using ritual to entice them to die and float ashore… thereby permitting the chief to avoid the dangers of hunting at sea."
Comment: We would propose this as an alternative. Cultural, safe, lots of rituals and the end result is a dead whale on the beach ready to be butchered. No shooting, no struck and lost: Sounds like an alternative we could live with.

RE: 3.10.3.4.1 Cessation of the Hunt "Swan (1870) noted that even in the 1850's, the Makah Tribe was whaling less than in the past, but he could provide no clear explanation for the decline."

Comment: In Winter Brothers, by Ivan Doig, Swan writes in his diary in 1887, "Captain Sampson informed me that whales have been quite plenty around the vicinity of the Cape this spring but the Indians have not been after them as they devote themselves exclusively to sealing."

RE: 3.10.3.4.2 Factors Responsible for Discontinuation of the Hunt

Comment: This section quotes Charles Scammon's 1874 Marine Mammals of the Northwestern Coast at length. As a whaler, his knowledge of whales, and gray whales in particular, is still considered valuable and accurate.

On page 3-234, lines 12-14, the DEIS notes that "when the Makah Tribe… attempted to hunt whales in the early 1900's, few whales remained in the local waters."

Scammon sheds light on a possible reason, with his description of kelp whaling: "The first year or two that this was practiced, many of the animals passed through or along the edges of the kelp, where the gunners chose their own distance for a shot. This method, however, soon excited the suspicions of those sagacious creatures. At first, the ordinary whale-boat was used, but the keen-eyed "Devilfish" soon found what would be the consequences of getting too near the long, dark-looking object as it lay nearly motionless, only rising and falling with the rolling swell. A very small boat, with one man to scull and another to shoot, was then used… This proved successful for a time, but, after a few successive seasons, the animals passed farther seaward…"

Green et al. (1995), Offshore Distance of Gray Whales... references studies that concur with Scammon's observations: "… Hubbs (1959) and Rice and Wolman (1971) suggested that the few whales observed along traditional migration routes off California in the late 1800's and early 1900's (Townsend 1887, Andrews 1914, Howell and Huey 1930) was due to animals traveling farther offshore to avoid shore-based whaling pressure rather than an overall population decline."

These suggestions that gray whales will learn to avoid hunt areas, serves warning to this Makah process: Do not ignore the possibility, indeed the likelihood, that the harassments and killings of gray whales at their feeding grounds will drive them offshore. Maybe not the first season, or the second, but according to Scammon, it will happen.

RE: 3.16.3.1 "Early archaeological studies indicated that as much as 84 percent of the Makah diet was whale meat, oil, and other food products (Renker 2002)

Comment: Considering that 80% of bones found at Ozette were Northern Fur Seal, how does that jibe with a calculation of whale providing 84% of the diet?

With the Makah diet currently so high in healthful sea foods, and supplements such as cod liver oil readily available, where is the great need for contaminated whale meat in the diet?

RE: 4.1.1 Alternative 1

Comment: There is no relevance to the gray whales utilizing the Makah U&A, in this speculation about Chukotka harvest levels with or without a Makah harvest.

Analysis of Alternative 1 should have focused on the fact that without Makah hunting, the small numbers of gray whales utilizing the Makah U&A would be left in peace to thrive as functioning elements in this unique environment, and to gradually increase to the currently undetermined OSP of the Makah U&A

Additionally, there would be no harassment of the mothers and calves in April and May in the "project area." Hungry migrating whales would also be able to feed and rest on their way north. With the continuing problem of "skinny" whales, utilization of the "project area" during north bound migration may be the difference between life and death for undernourished whales.

The fact that this "analysis" of the effects of Alt. 1 – no hunting – contains no pertinent mention of positive effects to whales in the Makah U&A is a blatant smoking gun to the bias inherent in this DEIS.

The paucity of balance by NMFS/Parametrix is nowhere more visible than in this little section.

NMFS must answer why they could find no beneficial consequences to Alt. 1.

RE: 4.1.2 Alternative 2

Comment: This section devotes (44) lines to explanations and predictions as to why a Makah hunt should and would occur in the months of April and May.

Considering that whales in the Makah U&A during April and May will include large proportions of Phase II whales (90% mothers and calves) and resident whales, it is not surprising that there is such an over-kill of justification for allowing this timing for a hunt, and raises the big red flag of a biased assessment bent on justifying a preconceived NMFS decision, not allowing the possibility of science to direct a reasonable outcome.

NMFS seems preoccupied with finding the perfect weather conditions for whalers. Is this really NMFS's mandate? Or should NMFS be at least equally concerned with the safety and wellbeing of the gray whales under its care?

RE: Allowable by-catch of identified whales (4-6)

Comment: While this PBR methodology claims to be protective of whales faithful to the Makah U&A, there is an unexplained implication. If the abundance levels of whales returning to the ORSVI area will be "annually updated," then the allowable by-catch at this point in time (DEIS May 2008) may be different when/if a hunt is allowed. In fact, the numbers of ID'd whales only has to rise by a small number to tip the ABL level of 2.35% (rounded down to (2) in the DEIS) to over 2.5 which would be rounded up to (3) or (4) or (5). At which point any protection of resident whales would be moot. And if the Tribe is allowed to "apply the ABL only to whales landed, then all 35 whales killed every 5 years could be from the Makah U&A. Sooner or later, that would extirpate our faithful whales.

While NMFS assumes that "other" whales will "fill in," there will be over 20 years of science flushed down the drain if these specific whales are "harvested."

These whales include many who have been adopted through Cascadia Research's adoption program. These whales include many who are seen by and known to residents along the Straits. These whales provide profound enjoyment to tourists and fishermen. The whales who return to bays and rocky points farther in the Straits must first pass through the "project area." Eventually they too will feel the harpoon and the .50 cal.

NMFS is participating in an experiment with unknown consequences to our Washington State resident whales.

RE: 4.1.2 Alt2 (4-8)

Comment: The amount of harassments predicted by the Tribe on this page are bad enough: 140 attempts on whales and 700 whales approached every five years. But these numbers are based on the untruth that whales in the "project area" during May and April are "migrating" in "average pod size of two."

It is much closer to the truth to admit that these whales are where they are because they are feeding. The mothers and calves are also resting, nursing and hiding from orcas in the kelp beds near shore.

The whales in these areas at this time are also milling, circling, feeding, resting, moving around in groups and numbers that change as they look for food between the various and variable patchy areas on the coast.

Helicopter coverage of the unsuccessful hunts in 2000 clearly showed mud plumes in the same frame as the whaling canoe. The approaches and harpoon attempts could be plainly seen from above, frightening the feeding whales and causing them to flee the immediate area.

The truth of the matter is that the approaches and the harpoon attempts will come down over and over again, year in and year out

on many of the same whales. The faithful ones who specialize in feeding in the Makah U&A. If we are to believe the observations of Charles Scammon (cited earlier), gray whales are not stupid or oblivious to their surroundings and experiences. They will learn. They will feed elsewhere. The consequences of that are unanalyzed. They may crowd feeding areas to the north or south. Mothers and claves may move off shore where conditions are much more dangerous for the vulnerable calves.
NMFS is encouraging an experiment with grim consequences.
All other Alternatives but (1) risk the same predictably bad consequences to the near shore U&A whales of the outer coast and the Straits.

RE: 4.3.3.2.1 Pelagic Environment (4-26)
Comment: The second paragraph on this page states that the number of whales "allowed to be removed" will be "less than 1 percent of the some 20,000 whales, and less than 5 percent of the 464 whales observed in the Makah U&A…"
This sentence raises a problem of definition: In most cases, this DEIS uses the term "Makah U&A whales" to define the smallest number of identified whales in the PCFA. These are all whales who have been identified in the very n ear shore areas where the whale hunts of '98, '99, and 2000 have all occurred.
It is confusing and self-serving to mix the whales near shore ("to be removed"), with the "20,000" and the "464" (PCFA) 'observed in the Makah U&A. In this last case, NMFS is using the entire "the Makah U&A" to mean the fishing grounds out to 40-50 miles off shore. This is the same misleading terminology that the DEIS used to state that the resident whales (Makah U&A whales) will only have a 1% chance of encountering a Makah hunter. The Makah hunters will not be out in the migratory corridor used by the great majority of migrating whales. This mixing of word usage seems intended to minimize fears about the well being of local whales and their habitat in a very dishonest way.
NMFS must reword these statements to differentiate between off-shore migration corridor portion of the Makah U&A and the near shore whales and hunt areas of the Makah U&A.

RE: 4.4 ENP Gray Whale & 4.4.2.1 "NMFS currently considers the ENP gray whale stock to be within it's OSP… and viable"
Comment: This section should have discussed the potential for any of the many threats to the gray whales' habitat to greatly and suddenly change that viability. The die off of 1999-2000 is still not fully understood, but may relate to the worsening conditions in the Arctic. As the sea ice melts away, so do the hopes for a healthy future for gray whales. The ever-present threats of oil spills, dead

zones, algae blooms, Navy sonar, projects off shore such as wave energy buoys, oil exploration and drilling, threaten all whales, including the whales in the Makah U&A.
NMFS should be taking the most protective measures when it comes to the gray whales. The gray whales are in much more peril than the elite Makah whaling families, and NMFS priorities should be to protect them. The EIS must acknowledge the nature and extent of the threats to their viability.

RE: 4.4.2.2 (4 – 36) "There is no evidence of familial recruitment in the local survey areas"

Comment: This is just not so. The Peninsula Citizens for the Protection of Whales have adopted whale #107. He was identified as a calf with his mother, #43. They are both seen most years, with #107 feeding at the near shore places in the Makah U&A that his mother took him to as a calf.
Additionally, in the Dec. 2000 Final Report "Range and Movement of Seasonal Resident Gray Whales," pg. 12: "there is some evidence for maternally directed site fidelity."
The statement quoted above, "there is no evidence," should be stricken from the DEIS and replaced with the known facts.

RE: PBR of whales in ORSVI Survey Area

Comment: The Makah must not be allowed to dictate the ABL for PCFA whales. Struck and lost must go against the PCFA quota, and the total PBR must never rise above two. How can NMFS consider it reasonable to allow a possible 15 ORSVI whales to be killed every five years? By NMFS' own admission, that "would exceed by 2.5 whales the PBR level resulting form the Tribe's proposed method." It is not sufficient for NMFS to next state a lower "likely" number. Does NMFS not put stock in the precautionary principal? Why bend over backwards to satisfy the whaling families at the expense of our very small number of resident whales?

RE: 4-38 "Estimates of the proportion of PCFA whales in the Makah U&A during April and May… are based on a small number of observations."

Comment: NMFS has had ample time – years – to do the research needed to know what whales are present where and when. This DEIS should never have been prepared without this vital information. How can decisions about hunts in April and May be made without the facts that are needed to protect the Makah U&A whales? It is bad enough that NMFS well knows mothers and calves are using this area at that time. NMFS must obtain and provide longer term data on the composition of whales in the near shore Makah U&A in April and May.

RE: 4.4.2.3 Change in Distribution or Habitat Use 'It is reasonable to expect that whales approached by Makah whale-hunting vessels would react in a similar, temporary manner… (as to whale watching)"

Comment: Comparison of whale watching and whale hunting:

Vessels involved in hunt: (3-275)

- Coast Guard Helicopters
- Coast Guard Cutter
- Coast Guard Utility boats (several)
- Coast Guard Zodiacs (several)
- Tribal Canoes – one or two
- Tribal Chase Boats – one or more (24' long, 200hp engines)
- Tribal Fishing Vessel (tow boat)
- Protest Vessels – five to fifteen – various sizes (3-273)
- Protest Aircraft (3-274)
- Media Helicopters – three (3-274)
- NMFS Research Vessel(s)

Vessels involved in whale-watching in Makah U&A:

- One to five vessels out of Neah Bay and Sekiu
- One to five whale watching vessels in Straits
- Small number of kayakers

Behavior of vessels involved in locating and pursuing a kills:

- Many very loud engines
- All vessels searching for and pursuing whales moving at high speeds. Canoe being towed by support boat. Coast Guard vessels, protest boats, media boat, and NMFS boats keeping pace.
- Helicopters circling above

Behavior of whale watch boats searching for and observing whales:

Guidelines:

1. Be cautious and courteous. Approach areas of suspected marine mammal activity with extreme caution.
2. Slow down: Reduce speed to less than 7 knots when within 400 yards of whale. Avoid abrupt course changes.
3. Avoid approaching closer than 100 yards to any whale.
4. If vessel is unexpectedly with 100 yards of a whale, stop immediately and allow the whales to pass.
5. Avoid approaching whales from the front or from behind.
6. Keep clear of the whale's path.
7. Limit viewing time to maximum of 30 minutes.

Source: NMFS and Fisheries & Oceans Canada

<u>Vessels involved in hunt: attempted approach, harpoon, kill shots.</u>

- All vessels close in on whales.
- Canoe(s), chase boats, Coast Guard vessels, media boat, protest boats, NMFS boat all in vicinity of whales being approached. Harpoon attempts made from within feet of whale. Shots fired within yards of whale. (Composite description of failed hunts and successful hunt – Observers Report).

<u>Vessels involved in watching whales in Makah U&A:</u>

- One or two vessels floating quietly no closer than 100 yards.

Comment: The behaviors and numbers of vessels involved in the whale hunts of 1998, 1999, and 2000 are in no way comparable to the behaviors of the very few whale watching boats the Makah U&A whales are likely to encounter on their northbound migration in March and April, on the coast, or even on their entry into the Straits. Whale watching has not yet blossomed on the outer coast of Washington or on the U.S. side of the Straits. But we can learn from other areas. Farther north, on the outer coast of Vancouver Island, in Clayoquot Sound, more significant whale watching does occur. During a three year period (1991 – 94) D.A. Duffs, University of Victoria, Victoria B.C., studied the foraging tactics and movement patterns of the gray whales of the area:

"Over the 3 year period, the whales gradually moved further from the main commercial whale-watching port of Tofino, necessitating a significant increase in travel distances for the whale-watching fleet, from only 10km in 1991 to as much as 30 km in 1994. The implications of this for the management and sustainability of whale-watching are discussed." From: "The recreational use of gray whales in Southern Clayoquot Sound, Canada. Applied Geography 16(3): 179-190 1996.

Additionally, from Randall's "The Problem of Gray Whale Harassment: at lagoons and during migration" 1977: Harassment involves evasive action, taxing the "energy budget." "This energy may be important to the animal's reproductive fitness or survival." He describes behaviors of gray whales that signal harassment by boats, including:

1. Speed up
2. Slow down
3. Breathing changes
4. No blow
5. No roll
6. No flukes
7. Dodge reverse
8. Bottom dodge
9. Disappear

10. Sun slick “trickiest and most intelligent”

He also makes this important statement about whale response: “Some whales are skittish and react with panic when approached by even the most careful observer. Others are unafraid and even attracted to boats.”

From Heckel, et al 2001 “Influence of Whale Watching on Gray Whales”: “The intentional approach of vessels might elicit escape reaction in whales, and the vessel’s speed, direction, distance and sound seem to be important factors.” (Bird 1983)

“… vessel’s proximity and speed probably resemble a chase as experienced by gray whales when pursued by killer whales (Goley and Straley, 1994) or by aboriginal subsistence hunters off Chukotka (IWC. 1993).”

Comment: These are just a few references to the effects of whale watching on gray whales. It is eye opening to realize the potential effects of an activity that means the whales no harm, an activity that only seeks to observe them from a distance as they pass by or mill and feed. Most people participating in whale watching would be heart broken to ponder the power of their cumulative presence to drive whales off shore away from their feeding areas, to cause evasive behavior that saps their energy reserves, to disrupt resting, sheltering, and nursing of young, and to cause actual panic in some sensitive whales.

It is no wonder that Heckel, when contemplating the potential long-term effects of whale watching on gray whales concludes: “The precautionary principal adopted by the U.N. Conference on the Environment and Development (UNCED) urges caution when making decisions about systems that are not fully understood.” (Meffe and Carroll, 1947)

How much more frightening and severe harassment will the gray whales face from Makah whaling? The hundreds upon hundreds of “approaches” that are in actuality aggressive attack moves. The dozens and dozens of harpoons flung at close range with numerous motorized boats and ships clustered around. The glancing blows, the strikes, the struck and lost, the dead and dying whales. The gun shots hitting and wounding and killing over and over and over, year after year after year. Scammon says the whales will leave. Observers of the whale watching effects in Tofino say the whales will leave. Those faithful few whales whose presence around us here on the Peninsula, make every glimpse of the Straits and the ocean a potential “joyful happening.” Those faithful few will surely be among the dead and vanished. And then it will be too late for “adaptive management” to mitigate the loss. A few less strikes? A lesser number of approaches? Bigger weapons? Just quit caring about “resident’ whales?

The 9th Circuit Court's decision requires NMFS to care. Require NMFS to protect the faithful few. NMFS' current Alternatives Two through Six mock the Court. All will lead to the elimination of local whales by either fear or death. Does NMFS have evidence to support its theory that whale hunting and whale watching will have a "similar and temporary" effect?
None of the references provided by NMFS "suggested the whales might become habituated and have less of a reaction the more frequently they are approached" (4-39). The references cited above conclude the opposite is much more likely.

RE: "It is uncertain how whales would react to unsuccessful harpoon attempts, but the reaction may be similar to that observed in whales that are tagged or biopsied. Whales may be less likely to habituate to unsuccessful harpoon attempts than to approaches... It is unknown whether whales near successful harpoon attempts will… over time avoid vessels."

Comment: All this uncertainty defies common sense, and available studies by NMFS. Herb Sanborn writes in Gray Whale 5 Year Monitoring Plan about biopsy samples of blubber collected from north bound whales in 1995: "The effective range of current equipment is 20 meters, however many animals could only be approached to within 40 meters. Additional testing will be necessary to determine whether biopsying from a greater distance is possible, with modification of the present equipment…"
This indicates that the comparison between harpoon attempts and biopsy collection may not bode well, as harpoon attempts must be made from a few feet away, not 40 meters.

RE: 4.4.3 Evaluation of Alternatives

Comment: NMFS refuses to consider an Alternative that takes the hunt offshore to the migratory corridor. Every alternative other than Alt. 1 makes it mathematically likely that every Makah U&A whale will be approached by Makah hunting vessels on multiple occasions and could repeatedly be subjected to harpoon attempts. Mothers and calves that will be in the hunt area in April and May will feel the "collateral harassment" as well.
Therefore, the only Alternative that satisfies the 9th Circuit Court and the MMPA' mandates is Alternative I.
How can we take this DEIS seriously, when it ends section 4.4.3.2.3 with this statement: "Thus available information indicates that gray whale distribution and habitat use will not change compared to the no-action alternative."
NMFS' own studies cannot possibly lead to this conclusion. And NMFS' own uncertainties cannot logically lead to this declarative statement.

RE: 4.4.3.2.3 Migrating Whales "Migrating whales travel one to two miles offshore on their northward migration…"

Comment: At 3-67, lines 29-30, the DEIS states: "These sightings farther offshore are consistent with Green et al (1995), who documented phase one north bound migrants off the coast of Washington… averaging a distance of 7.3 miles."

This is another example of conflicting "facts" that seem to be deliberate attempts to confuse. In this case it suits the desired outcome to continue to place all "20,000" migrating whales into the "project area," thereby "diluting the chances of a resident whale being harassed or killed."

RE: 4.4.3.5.3 (4-59) "Thus even if some whales do abandon the area as a result of hunting disturbance, new whales... ***might*** come into the area, indicating that gray whale distribution and habitat use ***will not*** change compared to the no-action Alternative."

Comment: For a paragraph that includes the following: "***is likely to be***," "***is less certain***," "***is uncertain***," "***is also uncertain***," "***may be***," "***if***," "***might not***," "***if***" and "***might***" to end in a statement of fact is absolutely astounding. Does NMFS stand behind this conclusion with enough certainty to base decisions on it?

Even if a population of gray whales on the coast were thought to be relatively constant, harvest regimes that remove maximum sustained yields annually would change whale behavior, reduce densities and observability and alter established relationships between whales and their environment.

RE: 1.2.2 Treaty of Neah Bay… "Courts liberally construe treaties, resolve ambiguities in the tribe's favor, and "interpret Indian treaties to give effect to the terms as the Indians themselves would have understood them."

"The Treaty of Neah Bay is the only treaty, between the U.S. and an Indian tribe that expressly provides for the right to hunt whales."

Comment: The words "and seals" has been left out of the above statement. Olympic National Park anthropologist Jacilee Wray wrote in her 1997 book <u>Olympic National Park Ethnographic Overview and Assessment</u>:

The Treaty of Neah Bay is the only Stevens treaty with language that specifies the right of whaling and sealing. However, the privilege to hunt included in the other western Washington treaties have also been construed as including whaling and sealing (Mitchell 1992). Currently the Makah, Quileute, Quinault, Skokomish, Port Gamble S'Klallam, Jamestown, S'Klallam, Lower Elwha Klallam, as well as the Muckleshoot, Tulalip, Lummi, and Nooksack have tribal

regulations regarding the harvest of the harbor seal and the sea lion (Northwest Indian Fisheries Commission: Personal Conversation 1996).

It is becoming clear that many western Washington tribes are closely monitoring the Makah legal battle. When and if a legal precedent is established, any or all may claim "discrimination" if they are not also allowed to whale.
In 2004 the National Congress of American Indians passed Resolution #MOH-04-025 supporting Makah whaling rights, which concludes with these words:
Now therefore be it resolved, that the NCAI does hereby go on record in full support of the right of the Makah Tribe to freely exercise their treaty right to hunt whales ***while supporting the rights of fishing Tribes to marine mammal management without threats, intimidation, harassment or interference.***
Be it further resolved, that NCAI supports the Makah Tribe ***and other effected tribes*** *to take all necessary steps, judicial, legislative and administrative, to reverse the court's ruling in Anderson v. Evens.*
Be it finally resolved, that NCAI calls upon the United States government and all of its agencies to support the efforts of the Makah Tribe ***and effected tribes*** *to restore its full treaty whaling rights.*

The Quileute Tribe has often claimed to have the identical whaling rights to the Makah, although they have renounced any desire to return to it. (Whales – Touching the Mystery, 2006, Doug Thompson).

RE: 1-12 "The federal government has a trust responsibility to protect the treaty hunting, fishing, and gathering rights of Indian tribes."
1-4.1 "Preparation of the EIS is the first step…: it will aid NMFS in future decisions related to the MMPA (and WCA).
Table 2-2 "may prompt other tribes…"
4.17.2.1 Marine Mammals Nationally "NMFS' waiver of the moratorium… for the Makah hunt… has the potential to lead to additional requests for MMPA waivers from… Indian Tribes and to additional requests for a quota under the WCA by those claiming aboriginal subsistence whaling rights."
4.17.2.1.2 "A successful completion … in response to the Makah in this waiver request may influence these other tribes in the Northwest and nationally to seek waivers…"

Comment: It seems pretty clear where all this is heading. NMFS is prepared to take precedent-setting actions without even estimating how

many other tribes could likely pursue waivers for take of marine mammals.

NMFS concludes that because it has been nine years since the Makah received an allocation and no other tribe has requested or inquired about an allocation, this "suggests" there is little interest by other native groups to seek take of gray whales. This is extremely flawed reasoning.

There have been 9 years of see-sawing court battles. Nothing is settled. Why would there be inquiries during this delicate phase of court ordered NEPA compliance?

It is much more reasonable to conclude that any interested parties, on the west or east coasts of the U.S., are waiting for the precedent to be set by the Makah. Granting the Makah a waiver could have a domino effect with unknown consequences. The flood gates could be opened on a marine mammal slaughter that will be impossible to monitor or control.

Alternative I is the only way to hold onto the protections guaranteed by the MMPA. All marine habitats are degrading and imperiled. This is not the time to unnecessarily reduce population numbers.

It does not make sense to conclude that the no-action Alternative is "unlikely" to result in fewer requests from Indian tribes in the future. It is more logical to conclude that considering the 10 year legal battle, the denial of a waiver would be quite discouraging to others. The granting of the waiver will have the opposite effect.

RE: 4.15 Public Safety – Bystanders

Comment: A scant (9) lines are devoted to the safety of "bystanders." This in spite of the real dangers of using a .50 cal rifle close to shore.

There is no argument among ballistic experts that the range of a .50 cal weapon greatly exceeds the "hundreds to thousands of yards from shore" that the DEIS reasons makes it "extremely unlikely that bystanders on land would be exposed to injury," from a Makah whale hunt.

The most recent Makah safety protocols call for 500 yards visibility and "pointing the rifle downwards." Ballistics expert Roy Kline recommends no firing within 6,670 yards from shore.

NMFS' comment at 3-262 unfairly minimized the potential danger to campers and hikers on the narrow coastal beaches of Olympic National Park (ONP), when the statement is made that "May is not a peak month," and that "hunts were well-advertised."

According to ONP data, April and May are actually quite popular months on the coast; and there never was definitive advance warning of hunts.

Coastal Strip overnight wilderness permits (each permit represents 1 – 14 people camping overnight on the outer coast)

- April 2002: 231 permits

- May 2002: 396 permits
- April 2003: 426 permits
- May 2003: 355 permits
- April 2004: 355 permits
- May 2004: 408 permits

Considering these high numbers of park visitors within range of the .50 cal, NMFS must consult with ONP about enhancing safety for these innocent bystanders. The Tribe estimates 140 rifle shots every 5 years. NMFS must also confer with ONP on the following:

- What will policy be in the event that a near-shore hunt results in a dead, dying, or simply frightened whale beaching on the wilderness strip?
- What will policy be regarding the pursing, killing (with .50 cal), and butchering of whales in ONP?
- How close to ONP beaches are motorized vessels allowed to approach?

Many of these issues would be resolved if the hunt was taken off-shore in the migratory corridor, an alternative that for safety issues alone, should have been considered.
See attached chart/map showing identified whale sightings, camper numbers, hunt sites, .50 cal danger zone, and migratory corridor.

RE: 4.6 Economics "… potential effects on Clallam County as a whole will not be addressed in this analysis."

Comment: This statement encapsulates the biased nature of Parametrix's treatment of tourism issues throughout this DEIS.
In the Scoping Report 2005, prepared by Parametrix for NMFS, there is the admission at 3.1.1.7 socioeconomics and tourism, that "there were 47 comments regarding a need to analyze the effects of whale hunting on socioeconomics and tourism."
There is no possibility that these comments could have been construed to represent a concern for tourism in Neah Bay rather than the off-reservation communities of Clallam County.
While the potential for a "tourism boycott" is given token mention here and there in the DEIS, it is discussed only in reference to the effect on the reservation, not on Clallam County or Washington State, where tourism is increasingly important as the fishing and timber industries provide fewer and fewer jobs.
There is a huge likelihood that if whaling begins again and is no longer stoppable through legal actions, the cumulative consequences of the slaughter of gray whales, identified or not, will be negative.
The Olympic Peninsula has long marketed itself to tourists as a natural wonderland. The presence of the Olympic National Park is

the heart and soul of the eco-tourism advertising directed at families.

For Parametrix to put a favorable spin on whaling-related tourism, reveals the Parametrix strategy in its other job description to work with the Makah Tribe on promoting whaling-related tourism! The conflict of interest involved in Parametrix overseeing an analysis of the effects on tourism of whaling, is certainly mind boggling, and needs to be reassessed by NMFS. NMFS' judgment in hiring Parametrix is called into question and deserves an explanation, as nowhere is the relationship between Parametrix and the Makah Tribe revealed to the DEIS reader.

The unanalyzed likely fate of tourism on the Peninsula is grim. It is likely that a tourism boycott will worsen with every whale killed, year after year after year.

The great majority of people everywhere believe that whales should be watched, not killed, especially where there is no survival need for the meat. It will also be very hard to erase the horrendous Sept 8, 2007 "hunt" from the minds of the public.

Bill Sperry was the president of the Forks Chamber of Commerce in 2001 (Forks is the larger of the communities close to Neah Bay). Mr. Sperry was quoted in the Peninsula Business column by business consultant Jim Walker, in the Peninsula Daily News, July 3, 2002, in a column entitled "A Vision for West End Tourism:" "Sperry hopes that the Makah tribe will become part of the Peninsula tourism plan, but first Makah whaling, which he views as a put-off to many visitors, must end."

Parametrix only referenced one website in regard to boycott "research": a website called "Boycott these companies." This site is irrelevant to tourism or whaling. But there are dozens and dozens of websites providing details and updates on whaling-related boycotts around the world. To studiously avoid this information serves the Makah whaling agenda, but disregards the potentially devastating effects a decrease in tourism would have on local businesses and the low-wage employees in tourism service jobs on the Peninsula.

A few headlines from boycott information on-line:

- "The resumption of whaling hurts Iceland tourism" Nov. 12, 2006 InTransit
- "More than 65,000 say no to Caribbean commercial whaling" Dec. 21, 2006 Caribbean Net News
- "Whaling foes say support for hunting could backfire on the Caribbean nations that helped Japan end a 20-year moratorium - are told tourism may suffer" June 20, 2006 L.A. Times
- "The resumption of whaling by Iceland and the potential negative impact in the Icelandic whale-watching market" 2003 Current Issues in Tourism

- "Pro-whaling St.Lucia suffers tourism decline" April 20, 2007 Cyber Diver News Network
- "French Polynesia could profit from international vote (against) whaling" June 22, 2007 Pacific Magazine
- "Tourism: Whale threat looms again could threaten visitor business" article from Tonga
- "Bauger chief (head of Icelandic bank) blubbers about whaling." From article: "This whaling could hurt us because many pressure groups have been saying they will encourage others not to buy things from Icelandic companies." Jan. 12, 2007 Times Online
- "Tourism boycott hurts St. Lucia" May 28, 2007 Eco

The statement by Parametrix at 4.6.2.1 Tourism that there is "no evidence that calls for boycotts of Olympic Peninsula tourism had any negative economic impact on tourism in the area" is incorrect and irrelevant.
Incorrect: The Peninsula Daily News in July 1999 quoted Al Seda, the then owner of Big Salmon Resort in Neah Bay: Commenting on his fishing business being down quite a bit from the past (75 boats compared to 200), Seda "attributed the decline to several factors, among them the Makah killing of a gray whale off the coast May 17…"
Irrelevant: Only one whale was killed in the years since 1998, outside of the Sept 8, 2007 debacle. Most people feel that whaling has been stopped, not to return again. There has been nothing overt to boycott in the quiet behind-the-scenes actions by NMFS the past many years.
If whaling does return, with that return will come the boycotts that will hurt many more off the reservation than on. The DEIS does get it right at 4.6.2.1 Tourism: "Persons opposed to whaling under any conditions would be likely to participate in a boycott under any of the action alternatives." As that describes most Americans, NMFS must reevaluate the Parametrix decision not to analyze the probable impacts of whaling on economics off the reservation.
If NMFS approves a waiver, they will be setting in motion an experiment unknown in the lower 48 states of the U.S.: resumption of the killing of whales in the midst of 21st century America. To refuse to analyze the potential for devastating economic effects to the Olympic Peninsula is unconscionable.

RE: 4.10.3.1 Cultural Identity – Alt. 1 "Without whale hunting activity… young tribal members would lack any active whaler role models… living a culturally proper life…"

Comments: With most of the previously active whalers in prison, on probation, accused of various crimes including domestic violence and many with drug and alcohol problems, any references in this DEIS to

whalers as role models must be stricken or labeled as speculative. For NMFS to fail to honestly characterize the current whalers is to endorse the concept that whalers can break federal, state, and Tribal law and still be considered "role models."
And to complain that Alt. 1 could "reinforce their feeling of disillusionment with the federal government," one comment: Join the club!

RE: Cumulative Effects 5.1 Context for Analysis

Comments: It is commendable that the DEIS devotes pages to the Wave Energy Pilot Project, but while it may be the only "projected development in the area of which NMFS is aware," there are other developments afoot which should have been considered in this section.
The Peninsula Daily News, 3-19-06 ran an article titled "Navy Plans Pacific Marine Mammals Study – Another proposal may intrude on Olympic Coast Marine Sanctuary."
To quote the article: "U.S. Navy officials say they will study the movements of marine mammals in the Pacific Ocean as they develop procedures for avoiding conflicts with sensitive species such as killer whales. The Navy is also preparing an E.I.S. on its plan to expand a testing range off the coast of Washington
One proposal would increase the size of the existing range by some 50 times and intrude on protected habitat inside Olympic Coast National Marine Sanctuary, according to Michael Jasney of the Natural Resource Defense Council."
This must fit the criteria of "reasonably foreseeable future action," but there is no mention of it in the DEIS.
NMFS should also acknowledge the potential for off-shore drilling, as it is being discussed daily by the President and both presumptive nominees for the Presidency.

RE: 5.4 ENP Gray Whale "Ocean energy projects would have a greater impact on summer-feeding whales in the PCFA… (and could) negatively affect the abundance of gray whales identified in the ORSVI. Under Alternatives 3, 5 and 6… it is possible that the abundance of identified whales in the ORSVI would decline as a result of cumulative effects."

Comment: This finding begs three questions:

1. Did NMFS submit comments to the wave energy project expressing concern for the ORSVI whales?
2. Will NMFS now remove Alternatives 3, 5 and 6 from consideration as unreasonable?
3. If answer to above is no, will NMFS admit the obvious: NMFS has no stake or interest in the well being or survival of our specific local gray whales?

RE: "For gray whales in local survey areas, there are no other cumulative effects from those that affect the gray whale stock as a whole."

Comment: This statement comes without any discussion of the specific habitat threats off Washington's coast that seem to be tied to climate changes.

The following headlines and stories appeared in the Peninsula Daily News:

- "Effects of 'dead zone' unclear. Scientists remain puzzled by low-oxygen levels (off the central Olympic Peninsula coast) "Sept 6, 2006.
- "Coastal ocean suffers from famine" Aug. 14, 2005
- "Research in Pacific reveals its troubles" Acidity rises, oxygen drops. April 7, 2006

These headlines hint at the recurring problems of the "highly productive and nearly pristine" habitat described at 5.3 Marine Habitat and Species.

It seems reasonable to predict that the cumulative impacts of these erratic and poorly understood new problems will have an impact on the prey availability on the coast, a topic unanalyzed by NMFS.

RE: Cumulative effects on individual whales

Comment: Along with stress mortality, another cumulative effect on individual whales would be the instilling in these calm and trusting whales a fear and distrust of boats. The problem will go beyond "personality change" and will no doubt result in many faithful whales leaving the Makah U&A and the feeding sites they know so well and pushing further north. The effect of the loss of these whales, experienced at finding food here or the fate of these whales themselves, is not explored in this DEIS.

RE: 5.6 Economics "Given the current economic climate… in Clallam Country… no cumulative effects anticipated on the local economy."

Comment: To avoid analysis of the potential for a snowballing boycott of the Peninsula is no surprise on these last few pages of the DEIS. But the rosy "current economic climate" described in 2006 is no longer "current" or rosy. The Peninsula Daily News Aug. 12, 2008, has coverage of a Clallam County Commissioner candidates' forum. The incumbent, Mike Chapment references to the "current economic down turn": "While paring county employment and reducing workers' hours, the current county commissioners have denied $4 million in proposed new spending." And from his opponent Terry Roth: "The economic structure of the Peninsula is not good." Additionally, the PDN, Aug 13, 2008, reports that the

unemployment rate in Clallam County is now 7.4%, not the 5.6% the DEIS found in 2006.
There must be an updated analysis of the Clallam County economy.

RE: 5.7 Environmental Justice
Nowhere in the DEIS have any potentially positive effects of the no-action Alternative on the Tribe been envisioned.

Comment: Envision this: Without whaling sapping the energy, attention and funds of the Makah Tribe, it is possible that the Tribe could come together and bond over other needs. In fact Ann Renker could write a whole new Needs Statement, elucidating the needs of youth, parents, elders. Needs like jobs, education, after school programs, drug rehabilitation programs, nutritional supplements, improved housing, secure water supply, assisted living houses for elders who currently have to be sent away from home for care to Forks, Port Angeles and Sequim.
Neah Bay is a small community with so much going for it: spectacular surroundings, lots of sea food, lots of activities, strong families, medical and dental coverage for all, churches, a decent median household income, and lots of good people who just want a good life for their families and their community.
Of course there is poverty and some people need help. This must be within the power of a caring community to do something about, given the resources and will of the Tribal government.
In the Needs Statement 2007, Ann Renker reveals that the Makah Tribe has spent "675,000 of its own funds" during the 2003-2007 period on the pursuit of whaling. This has not surprisingly "placed a substantial financial burden on the Tribe," (pg. 39) and has no doubt caused many other pressing projects to go without.
Several articles that appeared in the Peninsula Daily News during this time period shed light on a few of those projects:

June 16, 2004: "Tribal members look to help Neah Bay kids"
A group of Makah tribal members is hoping to raise enough money to give elementary school children a place to play. "We need to raise about $70,000 for the new playground… All children should have a playground."
The group has raised about $18,500… and the children completed a readathon to raise money.

In a tepid show of support for the Tribe's children, "the Makah Tribal Council gave $5,000" towards the project.

July 18, 2005: "Tribal housing efforts face cuts"

The threatened cuts in federal funds for low-cost tribal housing would affect the Makah: Projected $300,000 loss. Housing needs for 50 families would probably not be built. Maintenance on existing units would be cut to "bare bones." Tribal members employed in maintenance would be laid off. Many families would continue to overcrowd current housing, and some would remain homeless.

Keeping a decent roof over the heads of all Tribal members should certainly be a top priority, even for the current "whaling" council.

Sept. 3, 2006: "Makah, Navy may resolve water crisis"
The Makah are working with representatives of the Navy to get a temporary back-up system (desalination) for drinking water, says Ben Johnson, Tribal chairman. … the Tribal Council declared a state of emergency last Tuesday.

The impending water crisis has been looming for years, why was it ignored until water ran out?

These three important issues: A safe playground for the children, housing for low-income and homeless Makah, and drinking water for the Tribe all came before the Tribal Council during the same time period that they authorized the expenditure of $675,000 on whaling related activities, including multiple group trips to Russia and Alaska.
Here's a question for the next Household Survey: Do you approve or disapprove of the way these precious Tribal resources were allocated?

RE: 5.8 Social Environment
Comments: For NMFS to conclude that "it is too speculative to consider whether the issue of Makah gray whale hunting would result in substantial cumulative effects within this larger social context" is to ignore all evidence documenting the "social effect" from 1998 – 2000. PCPW has submitted stacks of news clippings over the years.
There is nothing speculative about the hurt, sadness, anger, frustration, protests, threats (to both sides) and physical confrontations that are all bound to recur as a cumulating effect of whaling.
To call this "too speculative" shines a light on either the bias or the laziness in effect throughout this DEIS.

RE: 5.11 Aesthetics "… there may be some temporary aesthetic effects to those viewing hunts."

Comments: Federal and State regulations refer to whales as "aesthetic resources." The WCA states that "whales are unique resources of great aesthetic and scientific interest to mankind." The MMPA calls whales "resources of great international significance, aesthetic and recreational, as well as economic."

For NMFS to dismiss aesthetics with 6 cold lines about "viewing" the hunt, and to claim "no cumulative effects" is to reduce the meaning of aesthetics to a distaste for viewing the gore of a particular kill. Thus a "temporary" effect would be expected. What does NMFS believe the declarations of the WCA and the MMPA refer to, when they extol the "aesthetic resource?"

The word "aesthetics" comes from a Greek word meaning "to perceive – to feel." Why is this word used by our codes of law to describe whales?

In the same way that we value the preservation of the wilderness and the mountains so that humans can feel the awe and mystery of creation, many people feel a spiritual awe in the presence of the largest living beings on earth. The human psyche seems to crave this wonderment. It's not just about seeing a foot-square patch of gray skin. It's about how it makes you feel to see it.

The aesthetic enjoyment of watching, photographing, and simply knowing that we live in a place where a whale might pop up at any time, is a heart-filling happiness to many. To raise children to be thrilled to the core to merely catch sight of a whale exhaling is to have hope for the future.

For NMFS to reduce the aesthetic issues involved with whaling to simply the witnessing or not of the actual death of a whale is to not comprehend the words of the MMPA.

Simply knowing that any whale seen in our home area could be a future target of harassment and death immensely reduces the enjoyment of seeing them. It actually creates a feeling of anxiety along with awe. To see kayaks glide gently past gray whales feeding in the neighborhood bays, revives the sad feelings at the thought of whaling canoes gliding up to harpoon a whale who has known only kayaks.

The aesthetic enjoyment of whales is as big and mysterious as the whales themselves. And whaling will take that magic away from so many men, women and children here and everywhere.

Will there be a cumulative effect to the sadness generated with every whale death? That seems reasonably predictable.

The cumulative effects of sadness will likely include frustration and anger. Aesthetic enjoyment turned upside down.

We believe this would constitute a "taking" of our right to the aesthetic enjoyment of our resident whales. A right the MMPA was

passed by Congress to protect, along with the whales themselves. Our resident whales must be left in peace so the non-lethal enjoyment of them can be pursued by the great majority who live on and visit the Olympic Peninsula.

RE: 5.16 National and International Regulatory Environment

Comment: It is fitting that the last paragraph in this uncertainly-laden and deficient DEIS is a mere 6 lines, two sentences. Each sentence containing the phrase "it is too speculative to conclude."
And this on a topic of immense importance: Whether or not the authorizing of a Makah whale hunt will influence other domestic tribes or other countries to follow suit.
If NMFS cannot or will not come to reasonable and informed conclusions on these important questions, then NMFS has no business authorizing a Makah hunt and thereby creating a precedent for future requests.

In summary, the following points are reiterated as being some of the main conflicts of interest and deficiencies in the DEIS.

Conflicts of interest:

- Parametrix Inc.: The company itself, its preparers and sub contractors. Tourism issues are particularly suspect, as dealt with by Parametrix.
- Ann Renker Ph.D.: Her Needs Statements, her Household Surveys I and II, all references to her work in the DEIS must be peer-reviewed and reevaluated.
- Jennifer Sepez: References to her work in the DEIS represent the opinions and results of an expert with a personal bias.

Taken together these three conflicts of interest completely taint the entire process and results. A new DEIS needs to be prepared by unbiased entities. The actions contemplated are too important, precedent-setting and far reaching to be entrusted to vested interests.

No Analysis of:

- Which whales and how many whales are actually in the Makah U&A (near shore) in April and May.
- What is the OSP of the near shore Makah U&A? How can NMFS know how many to risk removing from the small resident group without knowing how many the environment can support?
- Prey health and abundance on the outer coast of Washington in times of healthy conditions as well as during low oxygen/dead zone events?
- Alternative: whaling in migratory corridor only.

- The cumulative effect of whaling-related harassment on whales in the Makah U&A. For NMFS to conclude at 4.4.3 that the "increased risk" to the abundance of Makah U&A and ORSVI whales of Alt 2 - 6 over Alt. 1 "would be small," is not supported by fact or reason. The "1% of 20,000" argument does not hold water.

No analysis of Makah proposals to:

- Not count strikes and struck and lost against quota for ORSVI whales.
- Share meat outside community. Where is analysis of the needs of those "outside community?" What percentage of harvest will leave reservation? Will there be monitoring, or will "don't ask, don't tell" be good enough for NMFS. What about meat to Vancouver Island?
- No analysis of: "Change their management plan periodically" – What does this mean?
- Likelihood of other domestic Tribe following Makah's lead; extremely important but not estimated.
- No analysis of importance of Makah U&A feeding sites during the 1999-2000 die offs, considering that no identified whales were found stranded.
- No analysis of whether the Treaty of Neah Bay enshrines commercial whaling or not. Many more groups and individuals would be alarmed at this waiver request if they understood the will within the Tribe to continue pursuing commercial whaling.
- No mention or analysis of the high level of uncertainty in this DEIS. How much uncertainty is acceptable to NMFS in this precedent-setting action?
- What do the Treaty words "in common with" mean, as used by the 9th Circuit Court in Anderson v. Evans? How is "aesthetic use" preserved by this DEIS?

No analysis in the DEIS of the numerous implications of the Sept. 8, 2007 "hunt":

- Tribal enforcement/Tribal court: all references need to be reassessed in light of complete failure of either to bring charges.
- "Spirituality" – whalers put a whale to death based on "frustration" – how do we forget that and go back to the story line of "spiritual hunts" when it is the same cast of characters?
- "Role models" – hard to continue justifying "need" for whaling that includes "role models."
- NMFS enforcement/investigation called into question by the utilization of John Haupt, a Makah Tribal member, to conduct the investigation.

Makah MMMP:
- Jon Scordino – Makah marine mammal biologist – in spite of being tied off to the dying whale for at least 5 hours, could not or would not:
- Take effective ID photos
- Take tissue samples

The fact that Jon Scordino is Joe Scordino's son raises many questions about conflicts of interest and vested interests between NMFS and the Makah Tribe.

Implication of the Tribal Council by all five Sept. 8, 2007 whalers in the decision to go whaling that weekend:
- Someone is lying: the "role models" or the Tribal leaders.

No analysis of impacts to Olympic National Park (ONP):
- Why did NMFS not consult with ONP on plans to allow whaling within the external boundaries of the Park?
- How can ONP visitor safety be ensured during hunts?
- What protocols are in place incase of a beaching of a wounded or dead whale on ONP beach?
- What will protocols be if Makah whalers pursue a whale onto the beach at ONP?
-

There were factors, controllable by NMFS, which made this process difficult for commentors.

Years in preparation, the 900 plus page bulk of the DEIS is so unwieldy, that NMFS had to schedule special meetings, part way through the initial comment period, to help people understand how to use it. This postponed most commentors from beginning an analysis until after the meetings occurred.

Extensions were requested in the 60 day comment period. There was a "likely" extension announced but no verification for some time.

As the hugeness of the document and the numbers of problems to address became apparent, another extension was requested by a great many organizations. The request seemed reasonable and there were hopes it would be granted. NMFS took a great deal of time to "consider" the requests. When the refusal to extend came from Donna Darm, many were taken by surprise by her decision.

Many commentors work full time in jobs other than reading through and commenting on documents such as this. It has been quite difficult to do justice to the task of adequately commenting on an issue of such long-term concern to so many. Especially for those of us who are not scientists or writers.

Requests for DEIS references from the Portland office were responded to fairly quickly, but it was unfortunate that Steve Stone took a week off during this time. Some documents that we feel should have been provided were not. Some questions we asked were answered in evasive ways or not at all.

Thirty more days of comment period would have been quite useful in acquiring information on our own, once we were told that is what we would have to do. More depth could have been added to topics touched on but not fully analyzed by us. Some topics had to be passed over completely due to lack of time.

Hopefully the comments of others will fill the gaps in our own.

Margaret Owens

Submitted for: Peninsula Citizens for the Protection of Whales
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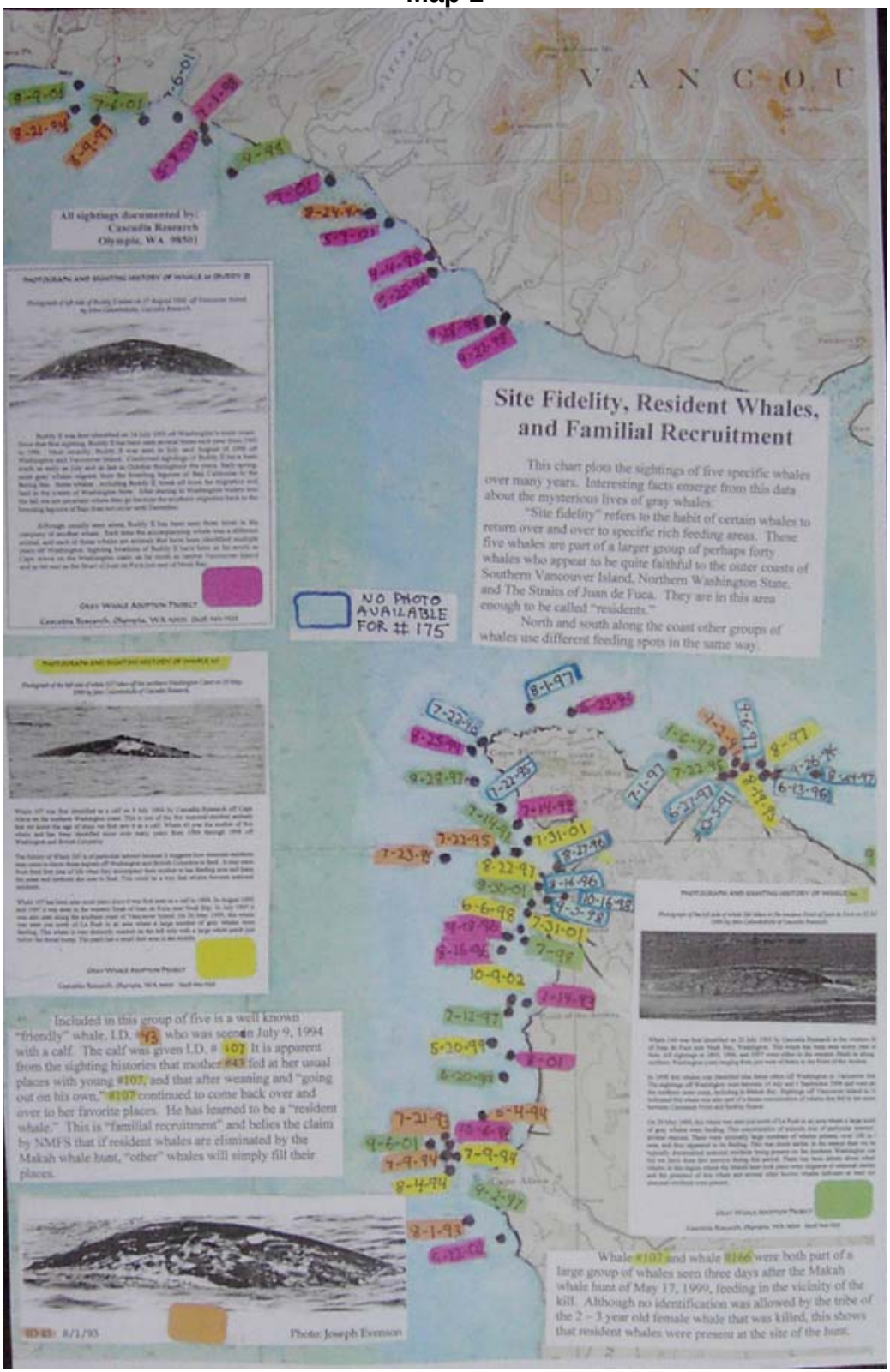
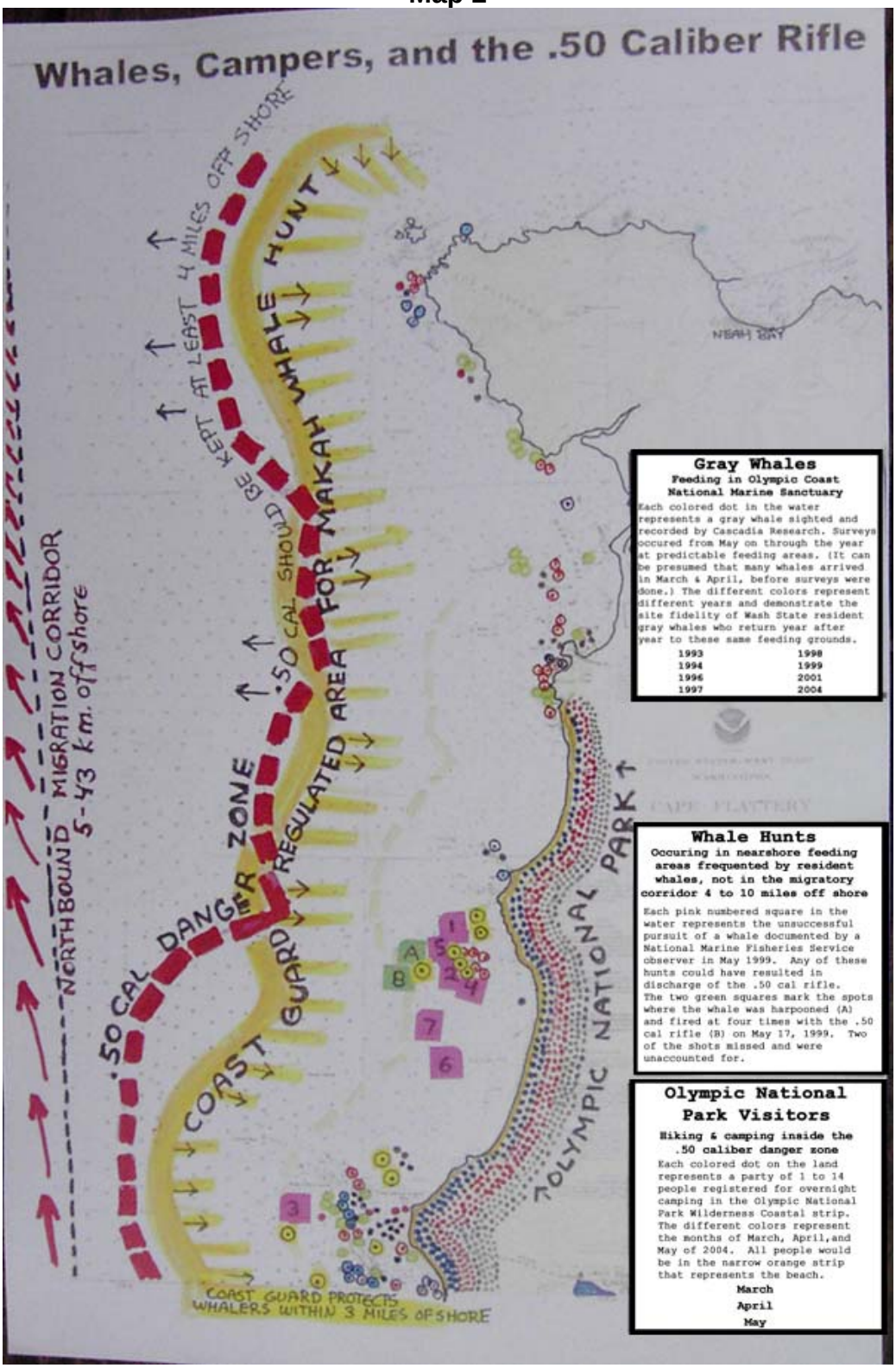
Maps and information referenced in comments

Map 1



Map 2


Whales, Campers, and the .50 Caliber Rifle
.50 CAL DANGER ZONE
COAST GUARD REGULATED AREA FOR MAKAH WHALE HUNT
.50 CAL SHOULD BE KEPT AT LEAST 4 MILES OFF SHORE
NORTHBOUND MIGRATION CORRIDOR
5-43 km. offshore
OLYMPIC NATIONAL PARK
COAST GUARD PROTECTS WHALERS WITHIN 3 MILES OFSHORE
NEAH BAY
CAPE FLATTERY
Gray Whales
Feeding in Olympic Coast National Marine Sanctuary
Each colored dot in the water represents a gray whale sighted and recorded by Cascadia Research. Surveys occured from May on through the year at predictable feeding areas. (It can be presumed that many whales arrived in March & April, before surveys were done.) The different colors represent different years and demonstrate the site fidelity of Wash State resident gray whales who return year after year to these same feeding grounds.
1993 1998
1994 1999
1996 2001
1997 2004
Whale Hunts
Occuring in nearshore feeding areas frequented by resident whales, not in the migratory corridor 4 to 10 miles off shore
Each pink numbered square in the water represents the unsuccessful pursuit of a whale documented by a National Marine Fisheries Service observer in May 1999. Any of these hunts could have resulted in discharge of the .50 cal rifle. The two green squares mark the spots where the whale was harpooned (A) and fired at four times with the .50 cal rifle (B) on May 17, 1999. Two of the shots missed and were unaccounted for.
Olympic National Park Visitors
Hiking & camping inside the .50 caliber danger zone
Each colored dot on the land represents a party of 1 to 14 people registered for overnight camping in the Olympic National Park Wilderness Coastal strip. The different colors represent the months of March, April, and May of 2004. All people would be in the narrow orange strip that represents the beach.
March
April
May

1707 E. Lambert Lane
Port Angeles, Wa.
98362
June 20, 2008

Dear Sir:

We are against the Makah whale hunts. It is not necessary for their diets. I think that they do it for the sport. I hope that they are not allowed to hunt whales ever again.

Sincerely,
Mrs. Carroll Reid
Mr. Carroll Reid

DEPARTMENT OF COMMERCE
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F/NW03
NATIONAL MARINE FISHERIES SERVICE

2008 Makah DEIS **July 3, 2008**

Please do not let the Makah tribes kill any more whales. The fact that it took hours for the whale to die is enough reason. If they are such good hunters, how could they let that poor whale suffer?

I remember that last time they all went hunting, many of the Makah people said they didn't even like the taste of whale meat. What are they going to do with 5 whales?

My vote is NO, NO,NO!!!

Thank you for listening,

Dede Renne
Kirkland, Wa.

DEPARTMENT OF COMMERCE
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NATIONAL MARINE FISHERIES SERVICE

NJARA

July 2, 2008

Re: 2008 Makah DEIS

NOAA's Fisheries Service:

Thank you for allowing us to speak up on behalf of the Pacific Gray whales. This plea is in reference to curtailing the Makah tribe from slaughtering any more whales.

Their past has shown your agency how irresponsible they have been in abiding by the moratoriums set and their use of powered technology and overseas sales to Japan contradicts their usual line of "Nation territory, traditions and customs". How has the temporary restriction on hunting affected their rights and culture? Maybe their profits went down but during the temporary ban surely there had been positive outcomes as well.

For example: whales had a respite and mated more, ecotourism was increased and therefore those businesses and local economies prospered. Perhaps during this ban the Makah tribe found newer, positive ways to be enterprising. Our opinion serves to support the majesty of whales in our oceans for all cultures to enjoy and not just for a single one to exploit. Please make this ban permanent.

Respectfully,
Andria Schanzer

New Jersey Animal Rights Alliance, PO Box 174, Englishtown, NJ 07726
Phone: 732-446-6808 / Fax: 732-446-0227 / E-mail: njara@nj-ara.org

DEPARTMENT OF COMMERCE
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JUL 03 2008
F/NW03
NATIONAL MARINE FISHERIES SERVICE

7928 Ridge Avenue
Philadelphia, Pennsylvania 19128
215-508-1784/610-609-6987
Nivilica@comcast.net

Mr. Steve Stone
NMFS Northwest Region
1201 NE Lloyd Blvd
Suite 1100
Portland, Oregon 97232

RE: 2008 Makah DEIS

Dear Mr. Stone:

I appreciate the opportunity to comment on the proposed gray whale hunt by the Makah Tribe.

I have reviewed the online sites of the International Whaling Commission, the Marine Mammal Commission, the National Oceanic and Atmospheric Administration, the Bureau of Indian Affairs, The World Wildlife Fund, and carefully reviewed the materials sent to me.

My conclusion and comment is two-fold: The first consideration in this decision is ***the new,*** and some of the old, threats to whale populations. For the first time in *recorded history* we stand at an ecological crossroads with global warming, including all of the ramifications of warming seas and the impact increased temperatures will have on our marine life. Whale populations are extremely vulnerable to increasing ocean temperatures and degradation of habitat.

Just this week the top NASA scientist and climatologist, Dr. Jim Hansen, declared that global warming is already here and stated the consequences will be felt in many ways including mass extinction, collapse of the ecosystem, and warming, rising seas. Already there is evidence of disruption of whale migratory patterns in search of food. Also, for very important consideration, is the *new urgent* quest in finding offshore oil and gas in feeding grounds. In addition, scientists have stated that industrial chemicals and run-off pesticides are making our oceans a literal 'chemical cocktail', accumulative in whale blubber and evidenced by cancers in even very young beached whales. In general, for all species of whales, the international hunting of whales (increasing every year) and whales being caught as a "by-catch" product is devastating as well.

In particular, and specifically, I have come to learn that the target whale here, the Western North Pacific gray whale's numbers are estimated to be very low. The gray whale has the longest migration of all whales at 12,000 miles per year, always in peril of

killer whales who hunt the calf and the mother, in addition to all the above threats which plague all species of marine mammals. In summary, whales are facing extreme challenges for future survival.

The second part of my comment and conclusion is the "justification" that the Makah Tribe is offering for the hunting of gray whales in the North Pacific. In their application the Makah have expressed their reasoning for hunting the gray whale primarily would be for "pride, self-esteem, and ***a reason to abstain from alcohol and drug use***." The latter reason given to kill a whale may be considered by people as offensive. This serious taking of a marine mammal and all of the carnage involved with doing that, should not be a temporary distraction from substance abuse. I do understand pride in culture but certainly, in the name of fairness, if America were to change her laws to allow and protect all of the subculture traditions and rituals in this diverse country, we would have to make legal and allow populations of people to resume cock fighting, dog fighting, and animal sacrifice, just to mention a few.

It is no longer 1855, the year the Neah Bay Treaty was signed to allow the hunt of the gray whale. Since this time, aside from the real threat of driving these animals to extinction thus declaring a moratorium, we have learned much of the behavior, intelligence, family orientation, and even the nobility these animals demonstrate.

I do realize the unemployment problem causing economic hardship in some of the Indian Tribes, which nods to the subtle, but somewhat obvious idea, that the Makah Indian Tribe could turn their economy around; to instead honor the whale that helped them to survive in 1855, and perhaps embark in a business venture of whale watching tours. The Makah are certainly in the right region of the world for the popular and profitable business of ecotourism, with the advantage of their great knowledge of the gray whale and the migratory patterns. I am also aware of the Makah Tribe members who are totally *against* the resuming of whale hunts and have protested. They do not use or like whale products and have claimed that much of the whale meat is wasted, as in the past they have retrieved whale meat and blubber in fishing nets.

As you realize my comment is NOT to allow the gray whale hunt to take place for all the above reasons. I would like to add that I have a great respect for American Indian culture, but I think most would agree that we all come from a subculture, however, needs and times change, we move on, and while still having pride in our heritage, realize what once may have been necessary no longer applies or works to better our lives in this brave new world.

Thank you.

Sincerely,

Dr. & Mrs. N. Vittorio

Linda Jeanelli-Vittorio

Steve Stone
Nat'l. Marine Fisheries Svc.

6/29/08

Now retired, I worked as a lineman for some 25 years, from Fairbanks to San Diego, Detroit to Portland.

During this period I lived like a hobo, in a camper with a dog as a hiking partner.

Of all the wonderful wildlife experiences, none approaches the time (in the late 90's) my dog and I had ~~an~~ close (50') encounter with a gray whale near Greenbank on Whidbey Island.

Without going into detail here the whale sat offshore in a shallow inlet and made eye contact with us and subsequently charged us playfully as we stood on shore.

A man couldn't ask for a more spiritual encounter with another living creature. I will cherish those minutes

forever.

Although having previously considered the issue of whaling, I felt obligated to uphold the treaty rights of U.S. tribes. Having lived in areas and around those (native and white) who live a subsistence life, I have also accomodated legitimate harvest of wildlife.

I have also unfailingly supported the legitimate rights of native people.

Nonetheless, the pro-whaling faction of the Makah tribe revulses me. They remind me of a bunch of Alabama rednecks, Idaho NRA members. Men lacking self-confidence needing the prove their masculinity with others' blood.

I still understand their anger, bitterness, spite and being a thoughtful, deliberative man am able to overlook their (native) weaknesses, as their culture is shattered.

③ But combined with the sacred life of whales and the unnecessary harvest for subsistence, I advocate rescinding this treaty right.

This said, I believe I understand this is not likely or even the issue at hand.

Science though does demand that the population be sufficient to certainly withstand any harvest.

This bunch of Japanese Norwegian Russian? whaling. Any whaling by these countries (non-tribal) should trigger serious sanctions by the U.S. people. How disgusting, vicious for such wealthy, supposed civilized people to do such things.

Sincerely
Eugene J Wright
PO Box 2464
Port Angeles, Wa.
98362

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AUG 13 2008
F/NW03
NATIONAL MARINE FISHERIES SERVICE

August 6,2008

To: NMFS Northwest Region
1201 N.E. Lloyd Blvd.,
Suite 1100
Portland, Or 97232

From: D.M. Mattoni-West
17422 Crystal Drive
Enumclaw, Wa. 98022

Dear Dear Makahs,

Treaty or no treaty-----Cultural heritage or no cultural heritage-----Is there not some creative way to celebrate the survival of the Makahs as a tribe without killing whales? Come on now-----The Makahs have made it to the 21st century, Why can't the Makahs help the whales and other endangered species make it thru the 21st also? Why not make December thru May a celebration of living, not killing?

Thank you for letting me put in my two cents.

Darlene Mattoni-West

Darlene Mattoni-West

13 August 2008

Attention: Steve Stone
NOAA Fisheries Northwest Region
1201 NE Lloyd Blvd., Suite 1100
Portland, OR 97232.

Re: 2008 Makah DEIS (Makah Tribe's Request for Permission to Hunt Whales)

To the National Marine Fisheries Service:

Harvard geneticist Richard Lewontin has said: "That is the one point which I think all evolutionists are agreed upon, that it is virtually impossible to do a better job than an organism is doing in its own environment."[1] We strongly agree. Friends of Animals (FoA), a nonprofit animal-advocacy organization, opposes hunting.

Thus, as the National Marine Fisheries Service (NMFS) addresses the proposed authorization of the Makah Whale Hunt, FoA supports only Alternative 1 of the Draft Environmental Impact Statement. Alternative 1 is "the No-action Alternative, wherein NMFS would not authorize a Makah gray whale hunt."[2]

Friends of Animals urges the NMFS to choose the No-action Alternative to the draft environmental impact statement (DEIS) concerning the Makah Indian tribe's February 2005 request to resume whale hunting, and this can be done on the basis of several factors:

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[1] Quoted by Richard Dawkins in *The God Delusion* (Boston: Houghton Mifflin, 2006), at 191.

[2] *Makah Whale Hunt EIS (May 2008).*

- Populations of eastern North Pacific gray whales (*Eschrichtius robustus*), which migrate from Arctic waters to the Gulf of California in Mexico, have grown substantially, and they have been removed from the Endangered Species List. Because the whales have been delisted, the reasoning goes, the species' health would not be harmed by the hunt. Yet a report in the *Proceedings of the National Academy of Sciences* asserts that "large numbers of gray whales have recently been discovered suffering from starvation."[3] The article goes on to say that "starving whales may be suffering reduced food supply from changing climate conditions in their Arctic feeding grounds." This possibility parallels 2006 reports last year of major climate shifts in the Arctic ecosystems in which gray whales feed.[4] Given how little scientists yet know about the climate shift phenomenon, the impact of killing these whales is unpredictable.

- The Makah request to resume whale killing did not take such climate shift factors into account; it pre-dated them.

- The Makah request to resume whale hunting would ostensibly be for "ceremonial and subsistence purposes" only. The Makah tradition of killing whales was suspended in the 1920s, when hunting drove gray whales to near-extinction. The Makah Nation itself agreed to halt the killing.

- Over the intervening decades (before the Makah were again permitted to kill a whale in 1999), the tribe has subsisted without killing whales. New traditions, therefore, have taken the place of former ones.

- If the Makah tribe wishes to maintain a cultural connection with gray whales, it could do so through rituals, ceremonies, crafts, and drama, rather than by killing. Promotion of carefully planned ecotourism in the form of whale watching could also provide the Makah with a viable source of income and an opportunity for the tribe members to maintain their cultural connection with whales. It would also spare the lives of the whales.

- Whale kills are a source of international controversy. Permitting the Makah to hunt eastern North Pacific gray whales would only encourage other aboriginal peoples and countries to hunt whales, legally or not. The Makah request must be seen in the context of the international effort to protect whales internationally.

For the above-described reasons, and based on the above factors, Friends of Animals respectfully requests that the National Marine Fisheries Service choose Alternative 1.

Friends of Animals, headquartered in Darien, Connecticut, is a nonprofit organization founded in 1957. Our work to protect animal communities includes the Marine Animal

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[3] *Proceedings of the National Academy of Sciences* (10 Sep. 2007).

[4] Release titled "Gray whales a fraction of historic levels, genetic research says "(10 Sep. 2007), issued be Steve Palumbi, Harold A. Miller Professor at Stanford; contact address supplied: spalumbi@stanford.edu.

Rescue project based in Los Angeles County, California; as well as ongoing efforts to protect North American wolves, North African antelopes, chimpanzees in Senegal, and to stop the import of tropical birds for the caged-bird trade. FoA has a long-standing interest in working for the integrity of communities of marine mammals within the ecosystems to which they have naturally adapted.

Very truly yours,

Priscilla Feral
President
Friends of Animals

National Headquarters

777 Post Road
Suite 205
Darien, CT 06820
Phone: 203-656-1522
Fax: 203-656-0267
E-mail: contact@friendsofanimals.org

503-230-5441
Attn: 2008 Makah DEIS

I wish to express my outrage with the proposed NMFS allowance of Makah whale hunting and harassing. It is as reasonable to me as a statement of how many slaves I might have as my ancestral right. As whales, porpoises, and the great apes are recognized as intelligent, communicating animals, and as our American culture deems killing them as wrong, I think it biased to exempt any group from these recognized norms. We disagree with these actions on the part of Iceland and Japan; why would we be so hypocritical as to grant such a "right" to a group in our own country? And it is certain that those who take part in this "right" with modern weapons and disregard for the safety and laws of others, reap a sad harvest of disdain, dislike, and division.

Donna L Whichello
Port Angeles