

STATUS OF RECOMMENDATIONS

Progress Report and Status of Previous Recommendations

Submitted by IUCN

BACKGROUND

This document provides a summary of the status of recommendations made by the Panel at its last meeting. To assist all participants attending WGWAP meetings in the future and allow them to gain an appreciation of the progress made towards addressing and implementing recommendations made by the WGWAP, this will remain a standing item for Panel meetings.

Annex 1 includes a summary table of recommendations made at the second meeting of the WGWAP, SEIC responses and the status of each recommendation. The majority of issues highlighted in Annex 1 will be the subject of further discussion at the second meeting of the WGWAP, and will therefore not be elaborated on further in this paper.

Annex 2 provides a summary of WGWAP recommendations that remain unresolved from the 1st WGWAP meeting and the informal briefing provided to Panel members by SEIC in Vladivostok in February 2007.

ANNEX 1

Status of Recommendations made at the 2nd Meeting of the GWAP

Last Updated 18 October 2007

Reference	GWAP Recommendation & Requests	Responsible Party	SEIC Response	Status
ITEM 4: BENTHIC MONITORING				
GWAP 2/001	The Panel recommends that Sakhalin Energy's scientists take into account the Panel's recommendations from the GWAP 1 (November 2006) in the planning and execution of 2007 benthic. The Panel attaches particularly high priority to the recommended incorporation of benthic ecosystem data into a GIS-type database in order to facilitate two types of investigation: (1) a more thorough understanding and appreciation of spatial and temporal patterns in the benthos, and (2) evaluation of quantitative relationships among benthic data and data from other aspects of the study of western gray whales in the area. For example, benthic ecosystem data should be included among the variables incorporated in analyses of noise effects.	SEIC	During the Vladivostok meeting in January 2007 between GIS experts and scientists involved in GWAP monitoring it was decided to include the benthos data in to GIS database together with the other parameters, such as distribution, acoustic, etc. It is being implemented jointly with ENL and will be ready by end 2007 as was committed in response to GWAP 1 recommendation	In-progress Benthic monitoring is not included on the agenda of the 3 rd GWAP meeting but will be considered at its 4 th meeting in spring 2008.
GWAP 2/002	Recognizing the practical difficulties that occurred last year, the Panel recommends that timing of sampling of benthos be standardized within month among years, to the maximum extent practicable.	SEIC	SEIC is aware of the importance to standardize the benthic sampling period and has and will continue to undertake all effort to ensure this happens in 2007 field research and beyond.	In progress Implemented in 2007 field season and will be taken into account in the future
GWAP 2/003	The Panel recommends that Sakhalin Energy's scientists attempt field collections of fecal matter from foraging whales, to the extent practical and with minimal disturbance of foraging whales, to search for hard-part remains of sand lance and to assess the frequency and significance of sand lance in the whales' diet.	SEIC	A fecal sampling program requires a boat to maneuver in extremely close proximity to animals, with the potential for disturbance. SEIC will try to collect fecal matter in 2007 if it appears possible with only minimal disturbance to the whales.	Open Benthic monitoring is not included on the agenda of the 3 rd GWAP meeting but will be considered at its 4 th meeting in spring 2008.

Reference	WGWAP Recommendation & Requests	Responsible Party	SEIC Response	Status
			SEIC will discuss the practicalities of such a programme in future years and will report to the next WGWAP.	
ITEM 5: BEACH SURVEYS				
WGWAP 2/004	<p>The Panel recommends that surveys for stranded gray whale carcasses be conducted according to the following specifications:</p> <ul style="list-style-type: none"> ● Flight (ground) speed: 80-100 knots (148-185 km/hr). ● Flight altitude: 1500 ft (450m). Although this is above the optimal height, it should preclude serious disturbance to near-shore living whales as well as nesting birds and hauled-out pinnipeds. The smallest gray whales expected during summer and autumn in this region would be 6-7m long and they should be at least moderately detectable from 450m. ● Flight path: Where the terrain permits, a flight path along the land-side (ca. ¼ mi [0.4km] from the beach) is preferred. However, it is essential that the beach be kept in sight and therefore in areas such as the Piltun feeding ground, where dunes, hills and cliffs might obscure a high-and-dry carcass, it may be necessary to fly directly along, or just offshore from, the waterline. In this circumstance, it will be especially important to avoid sharp turns and rapid changes in power that cause more sound to enter the water. ● Flight coverage and regularity: This should follow the guidance given in the reports of the IISG and WGWAP-I (e.g. expand coverage to include areas north of Piltun Lagoon, entire east coast to be covered at least twice per season, Piltun feeding area to be covered biweekly from July-October). 	SEIC	<p>Currently, SEIC has planned the following beach carcass surveys for the period May-November 2007:</p> <ul style="list-style-type: none"> - Continuation of the daily surveys using existing crew change flights - Monthly dedicated beach carcass helicopter surveys with two MMOs, covering the northeast side of Sakhalin from Nogliki to Okha (frequency as in recommendation WGWAP 1/10, WGWAP-1 meeting Prangins, November 2006). <p>The flight speed, altitude and path of the dedicated monthly surveys will be followed according to this recommendation.</p> <p>SEIC will investigate possibility of carrying out the Island length surveys but are currently limited by availability of aircraft.</p>	<p>In progress</p> <p>A report back is expected at WGWAP 3 (WGWAP 3/INF.2)</p>

Reference	WGAP Recommendation & Requests	Responsible Party	SEIC Response	Status
WGAP 2/005	The Panel recommends that Sakhalin Energy develops, in consultation with appropriate experts, a list of data and samples to be collected from gray whale carcasses, and an associated protocol for such collection. The protocol will need to incorporate, <i>inter alia</i> , consideration for the state of the carcass and the level of experience of available personnel.	SEIC	In case a stranded gray whale is observed, SEIC is legally obliged to cooperate with the relevant Russian authorities and their specialists that include veterinarians to conduct or consult on the necropsy. A gray whale necropsy form was implemented in SEICs Marine Mammal Protection Plan in 2006. This form lists the necessary information and was provided by an expert proposed by the panel. SEIC will review this form in the light of the Panel's comments.	Outstanding. The outcome of this review needs to be reported back to WGAP.
ITEM 6: MARINE MAMMAL OBSERVER (MMO) PROGRAMME)				
WGAP 2/006	The Panel recommends that as a matter of routine, IUCN and Sakhalin Energy ensure that the Panel is provided with relevant updated MMPP documents for review well in advance of each field season.	SEIC	MMPP will be provided.	Closed. The 2007 MMPP was provided to IUCN and the Panel in July 2007.
WGAP 2/007	The Panel recommends that MMOs are also placed on the crew change vessel operating between Nogliki and LUN-A at all times.	SEIC	The most extensive SEIC activities in Lunskeye were carried out in 2005-2006. The level of activities in 2007 is going to be much lower than in the previous years. Based on the Collision Risk Assessment the probability to encounter the whale in this area is very low. This was confirmed in 2005 when no sightings were recorded from 11 vessels in the area and in 2006 when 1 whale was sighted in 2000 hours of observations. Therefore, we consider not placing the MMO on these trips, and propose to give the MMO briefing to the crew of the boats.	In progress The MMO programme will be considered under agenda item 3. (WGAP 3/INF.3)
WGAP 2/008	The Panel recommends that no crew change vessel trips are conducted during the night (any instances where this policy is not followed should be documented with an explanation of the circumstances in the 2007 close-out report).	SEIC	The main crew change platform will be helicopter, with the crew change boats being the back up option. Crew change trips will be conducted during daylight, unless night trips are absolutely necessary	In progress The MMO programme will be considered under agenda item 3.

Reference	WGWAP Recommendation & Requests	Responsible Party	SEIC Response	Status
			for safety or other operational reasons. These occasions will be documented and included in the MMO closeout report.	The information on night trips is included in the document WGWAP 3/INF.3 (Marine Mammal Observation Program – 2007. Preliminary report)
WGWAP 2/009	The Panel recommends that the MMO dataset, in conjunction with the company’s other records of vessel operations, be analysed by Sakhalin Energy, with a view to evaluating each of the factors (specified in the report text) that contributes to overall effective coverage.	SEIC	In the 2006 MMO closeout report SEIC already conducted some analysis regarding effective coverage. However, SEIC will look into more detail to the factors specified in the current WGWAP report and may seek the panel’s advice on a detailed protocol of such analysis.	In progress The MMO programme will be considered under agenda item 3.
ITEM 7: SAKHALIN ENERGY WORK/CONSTRUCTION PROGRAMME				
WGWAP 2/010	While the Panel was pleased to learn at the meeting that Sakhalin Energy considers the present situation (with regard to provision of advance information on decisions and plans) unacceptable, this acknowledgement must be translated into action as soon as possible.	SEIC	SEIC will generate a document further developing the general outline of the construction, operation and research plans that was provided to the panel earlier.	In progress Document WGWAP 3/INF.15 provides information on the future construction works
ITEM 8: BEHAVIOUR MONITORING AND MULTIVARIATE ANALYSIS (MVA)				
WGWAP 2/011	Unless whale behaviour is monitored over the long term, it will be impossible to characterize and assess cumulative effects on the whale population, including those arising from the activities of other oil and gas companies operating in the region. Continuity in data series often proves essential for interpreting observations in a single season or year. For these reasons, the Panel recommends continued, annual monitoring of gray whale behaviour off Sakhalin.	SEIC	SEIC will consider to continue annual behavioral monitoring but will review this from time to time.	In progress Document WGWAP 3/INF.14 describes future WGW monitoring plans

ITEM 10: EFFORT-CORRECTED DENSITY DISTRIBUTION AND NOISE FOOTPRINT				
WGWAP 2/012	There was general agreement that a more efficient means of conveying Panel requests and Sakhalin Energy's questions about those requests needs to be implemented.	SEIC	SEIC agrees that a more efficient, two way communication process must be established. This will be developed in conjunction with the IUCN.	The process used for the drafting and completion of the report of the 2 nd meeting of the WGWAP proved a useful model for clarification of requests and information to be provided. In future it is proposed that this process will be adopted for all reports prepared by the WGWAP.
WGWAP 2/013	The Panel recommends that, for the period of 14-28 July 2006, the densities of whales and noise levels for a small area (blocks 7-9 from WGWAP 2/INF 11) be calculated and plotted together. Whale density should be calculated for grid cells of 10 km ² (5 km parallel to shore x 2 km perpendicular) with a 1-day average and reported in whales/km ² . The noise should be calculated with hourly averages, and the two datasets overlain on plots of standard line type with time/date on the x-axis and two y-axes, one for whale density and one for noise amplitude.	SEIC	SEIC will conduct this recommended analysis.	In progress This information is expected to be presented at the 3 rd meeting of the WGWAP. Document WGWAP 3/INF. 7
ITEM 11: ACOUSTIC FOOTPRINT AND 2006 NOISE MONITORING				
WGWAP 2/014	The Panel requests that, in the future, information regarding the conduct of transmission loss (TL) experiments be included in the detailed work plan.	SEIC	The scope of TL experiments is part of WGW scope of work that is being provided to the Russian authorities for approval. This information has been provided to the panel on May 15.	Needs clarification The scope of work, which includes description of TL experiments will be supplied to the Panel
WGWAP 2/015	The Panel recommends that transmission loss experiments be conducted only in good-weather periods (and in daytime) to ensure that MMOs and the shore-based behaviour teams are able to monitor efficiently for the presence of gray whales.	SEIC	All TL or propagation measurements that require the operation of a transducer inside the 20 m contour of the Piltun feeding area are conducted according the following protocol: <ul style="list-style-type: none">- Operations can only be conducted in daylight and in good visibility.- MMOs on the vessel should monitor a radius of at least 1 km and if gray whales are present measurements are postponed.- Source levels of any transducer monitored by the source hydrophone should not be greater than 150 dBrms	Ongoing.

			<p>re 1 μPa-m.</p> <ul style="list-style-type: none"> - These protocols should ensure that no gray whale receives a sound level greater than 120 dBrms re 1 μPa. <p>This protocol was provided to the panel during the meeting in the form of a 1 page briefing note.</p>	
ITEM 12: EXPOSURE CRITERIA AND PROPOSED 2008 SEISMIC SURVEY				
WGWAP 2/016	The Panel recommends that Sakhalin Energy adopts the criteria as presented in WGWAP 2/INF 15.	SEIC	<p>SEIC will provide the panel with their response in a more detailed note prior to the 2007 construction season.</p> <p>SEIC notes that no time was allocated to further discuss the proposed criteria at the WGWAP.</p> <p>SEIC have planned all 2007 work based on the criteria successfully used in 2006. SEIC considers that it is not technically feasible to implement the proposed criteria.</p>	<p>In progress</p> <p>SEIC's response to this recommendation was provided in August 2007.</p> <p>Refer to documents: WGWAP 3/INF.5 WGWAP 3/INF.6</p>
WGWAP 2/017	The possibility of conducting on-ice seismic surveys when the whales are absent was discussed. The Panel recommends that the feasibility of this comparative approach be evaluated.	SEIC	Seismic operations in broken, moving ice are beyond the limits of current seismic technology.	<p>In progress</p> <p>This issue was addressed as part of the 4D seismic Task Force and some discussion is included in the report of the Task Force (WGWAP3/INF.9).</p>
WGWAP 2/018	Any and all agencies (e.g., Sakhalin State Government) that might have information on seismic surveys planned for 2008 on the Sakhalin shelf should be approached by both Sakhalin Energy and IUCN to ensure that management decisions to protect western gray whales are fully informed.	IUCN	SEIC will approach Sakhalin oblast authorities on the provision of the information about seismic surveys planned for 2008.	<p>In progress</p> <p>IUCN approached Rosneft over this issue and received a general response only. Additional consideration needs to be given, by IUCN, to how best to address this issue following the 3rd WGWAP meeting.</p> <p>SEIC also approached Sakhalin oblast Rosprirodnadzor, who had no information on seismic surveys planned</p>

ITEM 14: OIL SPILL PREVENTION AND RESPONSE				
WGWAP 2/019	<p>The Panel recommends that IUCN:</p> <ul style="list-style-type: none"> determine whether oil on dead birds in 2005 and the winter of 2006/07 can be fingerprinted to establish if it came from the same source; consider whether archived satellite photographs are likely to provide additional evidence of the source and movement of spilled oil; and consider preparing a summary report on the Hokkaido spill, after consultation with authorities at the UNESCO World Heritage Site on the Shiretoko Peninsula. 	IUCN		<p>Outstanding.</p> <p>Satellite images have been provided by IFAW but to date these have proved problematic to review due to the size of the images and the format of the files.</p> <p>IUCN will be undertaking a mission to Shiretoko as part of the World Heritage site designation in 2008. This may provide an opportunity to deal with this issue but to date no action has been taken.</p>
WGWAP 2/020	The Panel adopts and recommends implementation of the Terms of Reference for a Task Force as prescribed in its report.	SEIC	SEIC agrees to participate in the task force process	<p>In progress</p> <p>The task force will meet immediately prior to the WGWAP meeting (6-8 November) and will report its finding to the Panel meeting.</p>
ITEM 15: WHALE MONITORING BY NON-SAKHALIN ENERGY GROUPS				
WGWAP 2/021	The Panel encourages the continued development of any proposal that may contribute to improved conservation of the western gray whale population. The Panel supports efforts that include protection of Piltun Lagoon from industrial development and other types of anthropogenic disturbance.			
WGWAP 2/022	In cases of planned studies of western gray whales by non-Sakhalin Energy groups that wish to have comments from the Panel, the Panel requires written documentation well in advance of meetings to ensure adequate time for review.			
WGWAP 2/023	The Panel emphasises the need for all research groups to minimise disturbance of whales while conducting fieldwork, and to provide information about field activities that may be relevant to the interpretation of acoustic data collected in the study area.			

ITEM 16: LONG-TERM ARCHIVING OF SCIENTIFIC DATA

WGWAP 2/024	The Panel encourages Sakhalin Energy and all other groups involved in work on western gray whales to develop and pursue plans for centralized, long-term archiving of data and samples.	SEIC	See response to recommendation # 2/001. SEIC will work with the IUCN and the panel to see how this can be further developed.	In progress SEIC and LGL is making improvements in the database to ensure the protection of data
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ANNEX 2 Status of Recommendations made Prior to the 2nd Meeting of the WGWAP

Last Updated 18 October 2007

WGWAP Recommendations & Requests	Reference	Status as of WGWAP III
<p>The Panel requests that Sakhalin Energy prepare a schedule of its work for at least the next five years – this should include the construction and operations schedule, the research and monitoring plans and the times when decisions will be taken. As well as confirmed activities, it should indicate all anticipated or likely events, such as seismic testing.</p> <p>In addition, the Panel requests that Sakhalin Energy establish a standard practice of keeping the Panel informed of its plans, through IUCN, without the Panel's having to request such information repeatedly.</p>	WGWAP 1/001 (and WGWAP/Vlad-01)	Outstanding. Re-addressed in section 7 of WGWAP II report. To date this has not been delivered.
<p>In view of the endangered status of the western gray whale population, the observed offshore displacement, change in diving pattern, and other potential effects on the whales in 2005 warrant additional scrutiny and follow-up analyses.</p>	WGWAP 1/004	Re-addressed in section 8 of WGWAP II report.
<p>The Panel recommends that:</p> <p>In the final report of the multivariate analysis of 2005 data, and in any other outlet citing its findings (e.g. on Sakhalin Energy's website), the study's limits, as outlined in the WGWAP II report, e.g. in relation to the lack of baseline (pre-disturbance) behavioural data and the failure to collect behavioural data during the two loudest phases of the construction activity, be clearly acknowledged. It should not be claimed that the extent of the whales' response to noise, such as movement offshore, has been quantified.</p>	WGWAP 1/005	Still applies.
<p>The Panel recommends that it be provided with a full analysis using effort-corrected data on density distribution for each year that such data are available, overlaid onto the appropriate acoustic 'footprint' information. The results should be integrated to produce an appropriate multi-year comparison of distribution, particularly for years with and without significant anthropogenic noise</p>	WGWAP 1/006	Still applies. Re-addressed in section 10 of WGWAP II report.
<p>The Panel recommends that noise exposure criteria developed in the IISG report and intended for application in the 2006 construction season be followed during the 2007 season and thereafter unless, during the interim, sound exposures below the recommended thresholds are found to result in unexpected adverse effects.</p>	WGWAP 1/007	As discussed in section 12.1 of WGWAP II report, the Panel has produced its final recommended criteria for exposure to continuous noise.
<p>The Panel emphasises its concern about one major drawback of having multiple research and monitoring teams in the field, which is that it can add to the disturbance from vessel noise or vessel presence on and near the feeding grounds. Therefore, any encouragement of independent initiatives must carry a caveat – that due consideration be given to this concern and that every effort is made to avoid or</p>	WGWAP 1/008	Still applies.

WGWAP Recommendations & Requests	Reference	Status as of WGWAP III
minimise additional disturbance to the whales.		
In terms of DNA and other biological sampling, the Panel refers Sakhalin Energy to the IISG report where detailed advice was provided. Here, it recommends that a tissue sample (preferably skin or bone) be collected as soon as possible if any carcass of a baleen whale is found and there is any possibility that it could be a gray whale.	WGWAP 1/012	Still applies. Also re-addressed in section 5 of WGWAP II report.
The Panel agreed that in principle, telemetry work on western gray whales should be carried out but only once certain conditions have been met.	WGWAP 1/014	Still applies but re-addressed in section 13 of WGWAP II report.
The Panel recognizes the spatial separation of Piltun Lagoon from Sakhalin II activities, but nevertheless continues to recommend studies of the linkage of Lagoon biota and detrital output with WGW feeding areas.	WGWAP 1/016	Still applies.
Concerning the issue of reducing collision risks associated with crew change vessels, the Panel notes some positive changes in the Sakhalin Energy approach. However, it believes that further work in this area is important and should be pursued. Therefore, it is recommended that:	WGWAP 1/023	Still applies. Also re-addressed (but not in detail) in section 6.2 of WGWAP II report.
(a) <i>Both</i> crew change vessels have 2 MMOs onboard on a <i>permanent</i> basis, as recommended by the IISG, instead of 'whenever possible', as reported by Sakhalin Energy at the WGWAP-I meeting;		
(b) Further measures be taken to avoid deviations of crew change vessels from the prescribed route;		
(c) Serious consideration continue to be given by Sakhalin Energy to the issue of collision risk associated with number and frequency of crew change vessel trips; a solution to this problem must be found.		
It was agreed that there was a need for access to an authoritative, up-to-date and more detailed map showing the spatial boundaries (including latitudes/longitudes) of the existing (and proposed) oil and gas lease areas on the Sakhalin Shelf. The Panel recommends that IUCN consult with industry (Sakhalin Energy as well as other companies), Russian governmental agencies, NGOs and other sources, as appropriate, to obtain better information on oil and gas activities in the Sakhalin region. Such information needs to be provided to the Panel on a routine basis.	WGWAP 1/030	Good progress but still applies.
The Panel further noted that it would be useful to obtain access to expertise in spatial data management and modelling (e.g. GIS, 3-dimensional modelling) for assistance in analysing existing and future data and for helping to ensure that such data are archived for future use. The Panel recommends that IUCN investigate and pursue this matter with Sakhalin Energy and relevant panel members on an ongoing basis and that a report on progress be provided at the next WGWAP meeting (WGWAP II).	WGWAP 1/031	Some progress but still applies.

WGWAP Recommendations & Requests	Reference	Status as of WGWAP III
<p>Follow-up on WGWAP 1/007 regarding 2006 acoustic data The Panel recommends that for every recorder available, Sakhalin Energy provides the following:</p>	WGWAP/Vlad-03	Some of the requested data were provided in St. Petersburg but not in time for consideration at the meeting.
<p>(1) Spectrograms and amplitude levels for all recordings from all recorders, both real-time data from T-AUARs and sonobuoys <u>and</u> the post-season analysis of the recorders. These plots should take the form of those from a previous MNR report, for example, figure 1.8 from the following document prepared for the second Vancouver meeting (i.e., IISG) – 'WGWAP_13E_MNR_Report_Acoustics_Volume_1_2005.pdf'. This is a traditional presentation of acoustic data, and some completed analyses were shared at the Vladivostok briefing. Frequency analysis should be in 1 Hz steps, and time steps should be ≤ 1 min. We would make two recommendations regarding changes in the display of these data:</p> <p>i) the frequency axis should be linear, not logarithmic, and need only cover the range from 1-1000 Hz; and</p> <p>ii) the plots for the levels should be expanded so that the axis for the levels is larger and more readable.</p>		
<p>(2) 90th, 50th and 10th percentile amplitude levels calculated for 1/3 octave bands up to 5 kHz every half-hour based on ≤ 30 sec time window analysis, i.e., for every recorder, again both the real-time recordings <u>and</u> the post-season analysis, we should see plots of at least the 90th, 50th, and 10th percentile levels for 1/3 octave bands, with the levels calculated every half-hour based on ≤ 30 sec windows. So, the levels are taken for every 30 sec time window, averaged over one half-hour, then the 10th, 50th, and 90th percentile levels for 1/3 octave bands are calculated.</p>		
<p>(3) correlations between different hydrophones, e.g., how do the recordings of a particular event compare between a hydrophone at the edge of the feeding area and one inside the area?</p>		
<p>Follow-up on WGWAP 1/007 regarding 2006 Daily Construction Activities, by Vessel The Panel recommends that information on day-by-day construction activities <u>and</u> <u>locations</u> for each vessel be provided as a document for the St. Petersburg WGWAP meeting (per the SEIC response to WGWAP 1/007). There should be at least three sources of such information – satellite-linked tracking data for each vessel, vessel logbooks, and MMO data (recorded at half-hourly intervals).</p>	WGWAP/Vlad-04	Some of these data were provided in St. Petersburg but not in time for consideration at the meeting.