Aleutians Subarea
Geographic Response Strategy Development Initiative

Draft Work Plan for Phase II

June 14, 2004

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Aleutians Subarea Geographic Response Strategy (GRS) Development Initiative

Draft Work Plan for Phase II

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Introduction

This is a DRAFT Work Plan for Phase II of the Aleutian Geographic Response Strategy (GRS) Development Initiative. This plan builds on the accomplishments of Phase I of this project and is intended to chart the course for completing the project in the coming 18 months.

Project Background

Geographic response strategies are site-specific spill response methods used to protect sensitive coastal environments from the detrimental effects of petroleum or other hazardous substance spills. GRS provide first responders with specific guidance for rapid deployment of pre-identified actions to protect priority sensitive sites.

With its thousands of miles of coastline, Alaska possesses many unique, vital, or highly sensitive areas that merit immediate attention and protection in the event of a spill. GRS are one tool that can help expedite a successful response or mitigate potential spill impacts.

Review of Phase I

Phase I of the Aleutians GRS development initiative commenced in April, 2004. The primary purpose of this initiative is to coordinate the development of GRS for the Aleutians Subarea and, in the process, complete information-gathering and risk assessments for the remaining subareas that lack GRS (Bristol Bay, Western Alaska, Northwest Arctic, and the North Slope).

To address the development of GRS for the Aleutians Subarea of Alaska, a Workgroup (Appendix A) was created under a Draft Memorandum of Agreement that specifies the purpose, composition, funding, process, and guiding principles for preparing GRS in a specific subarea (Appendix B). A steering committee was designated to lead the Workgroup process.

A website for the project was created at http://www.state.ak.us/dec/spar/perp/grs/ai/home.htm. The site explains the purpose of the projects and displays draft work products and information about the Workgroup's meetings.

In order to assess oil spill risks, a series of maps of the Aleutians Subarea were drawn depicting the following information:

- Locations of spill response hubs and equipment;
- Locations of key nearshore fishing grounds and tramper offload activities;
- Locations of non-crude carrier routes;
- Locations of bulk fuel storage facilities;
- Logistical information on airports, docks and cranes;
- Location of major oil spill events and vessel groundings; and
- Routes for cruise ship and ferry traffic.

The maps were posted on the website with a request that the Workgroup verify the accuracy of the information contained in the maps. Similar maps were developed and posted for the Bristol Bay, Western Alaska, Northwest Arctic, and North Slope subareas in anticipation of future GRS projects.

Site selection matrices and accompanying index maps were developed to assist the Workgroup in the selection of high priority sites for the development of GRS in the Aleutians Subarea. The site selection matrices contain information about the resources at risk to oil spill impacts at various potential sites within the subarea. Data for the site selection matrices was taken from Environmental Sensitivity Maps produced for the National Oceanic and Atmospheric Administration (NOAA) National Ocean Services, Office of Response and Restoration. The matrices were also posted on the project website and Workgroup members were asked to verify the accuracy of the information.

A preparatory meeting of the steering committee for the project was held in Anchorage on March 23, 2004. The steering committee reviewed a draft of the MOA and the risk maps. A summary of the meeting is available at the website.

The initial Workgroup meeting was held on May 7, 2004 in Anchorage. The initial selections of high priority sites were based on three primary considerations: the environmental or cultural sensitivity; the risk from an oil spill; and the ability to protect the site. Factors such as amount and type of biological resources needing protection and recreational or local significance were also considered. The federal and state natural resource trustee agencies made preliminary site selections of 24 sites, which were noted on the site selection matrices (Appendix C). A summary of the meeting is available on the project website.

A Tactics Subgroup was designated to design the response strategies using basic spill response tactics. A Places Of Refuge (POR) Subgroup was designated to consider the selection of places to bring stricken or distressed vessels.

Phase II Work Plan

The objective of Phase II of the initiative is to complete the development of GRS and POR documents for the Aleutians Subarea and to establish a process to field-test the GRS over the coming years. The final GRS product is a document that includes a site map, photograph, and table of associated information that describes the resources to protect, operational tactics to carry out the protection, the equipment and personnel needs, site access, and staging considerations. The final POR product document will be modeled on the document produced by the Prince William Sound POR Workgroup process now underway. Once completed, the GRS and POR documents will become an addendum to the Aleutians Subarea Contingency Plan.

The GRS are field-tested when possible to verify operational feasibility and to ensure that proposed response actions do not inadvertently harm sensitive resources. Past field-tests, as well as site visits, have proven quite valuable in discerning the applicability and potential for success of a GRS.

The tasks necessary to complete Phase II are:

1. ***Maintain the project website and continue to facilitate good Workgroup communications.***
2. ***Conduct a public information/input program;***
3. ***Hold a 2nd Workgroup meeting to review public input, update the site selection matrices and risk maps, and make final site selections;***
4. ***Take aerial photographs of selected sites;***
5. ***Conduct on-water/ground surveys of selected sites;***
6. ***Convene Tactics Subgroup meetings as necessary to draft GRS documents;***
7. ***Convene Places of Refuge (POR) Subgroup meetings as necessary to draft POR documents;***
8. ***Post draft documents on the project web site and notify the Work Group to review the products and provide comments and edits; and***
9. ***If necessary, hold a 3rd Work Group meeting to review and approve the final draft documents for transmittal to the Aleutians Subarea Committee.***

Each of these tasks are described in detail below.

1. Maintain the project website and continue to facilitate good Workgroup communications.

This task includes the essential overhead necessary to conduct an effective Workgroup process. The contractor must regularly communicate with the project manager and co-chairs in order to coordinate the activities of the Workgroup. The project website will be periodically updated with work products and meeting information. The Workgroup contact list will be maintained and regular announcements will be emailed to the Workgroup.

2. Conduct a public information/input program.

The Workgroup must undertake a public information, review, and comment process. A contact database of interest groups, local media outlets, and area tribal and local governments will be assembled. A fact sheet and news release will be drafted for approval by the co-chairs. Area residents will be notified of the project and the proposed GRS sites through a news release, public notices in local papers, radio talk shows, public meetings, and an Internet website. Letters will be mailed to representatives of interest groups, local governments, and tribal entities. This public process has the additional benefit of helping stakeholders and the public understand what response actions may be feasible during a spill response. Feedback gained through this process will be summarized and reported to the Workgroup.

During the first Workgroup meeting, Bob Juettner of the Aleutians East Borough mentioned that teleconference capabilities exist between each of the Borough communities. This system could be used to brief the eastern communities in the subarea. The Dutch Harbor newspaper will provide an opportunity for information distribution. The Aleut Corporation may provide an opportunity for addressing its shareholders. Other meeting venues in Anchorage and Fairbanks, such as the Alaska Federation of Natives conference in Fairbanks this fall, that attract residents of the Aleutians Subarea will be explored as opportunities to get information to the public and solicit feedback.

3. Hold a 2nd Workgroup meeting to review public input, update the site selection matrices and risk maps, and make final site selections.

Once the public process is conducted and the Workgroup has had sufficient time to review the work products posted to the project website, they will reconvene to edit their work products, review and discuss any public input, and make the final selection of high priority sites for GRS development. The meeting will be scheduled in Anchorage to accommodate the large number of agencies that must attend, but a teleconference option will be provided to any community members in the Subarea that wish to participate. Presentations and handouts for the meeting will be available on the project website

in advance, so that all attendees may review them and reference them during the meeting. Summaries of the meeting will be prepared and published on the project website.

4. Take aerial photographs of selected sites.

Once the final selection of high priority sites is completed by the Workgroup, oblique aerial photos must be taken for the GRS and POR documents to facilitate the strategy development. Photos will be taken according to the specifications in the Technical Sheet for GRS aerial photography presented in Appendix D. High quality digital photographs will be taken from a fixed-wing or rotary-wing aircraft. The photos will be catalogued and indexed by location, time, and tidal height for use by the Tactics Subgroup.

The U.S. Coast Guard has offered to allow a photographer to fly on one of the regular law enforcement patrol flights from the Kodiak Air Station. Another alternative, which may work in conjunction with site visits, is to take commercial flights into the local communities and charter fix-wing aircraft from local air taxi operators.

5. Conduct on-water/ground surveys of selected sites.

Previous GRS projects have demonstrated the great value of conducting an on-site survey prior to developing a response strategy. One or more of the Tactics Subgroup members will visit each site to collect information relevant to organizing a response strategy. Prior to the visit, USGS topographic maps, NOAA charts, FAA sectional aerial maps, and any available aerial photography will be assembled for the site. The site information will be reviewed to establish the actual location of resources at risk and the physical parameters of the site (such as geomorphology, tides, currents and prevailing winds). Sources of local knowledge will be sought out, and the daily and seasonal variations for key concerns such as wind and weather patterns will be discussed. Notes will be taken on base maps and the form contained in Appendix E. In many cases, the site-surveyor(s) will draft the initial strategy on location.

The USFWS research vessel, the *M/V Tiglax*, has been offered as a platform from which to conduct site surveys, but the day rate for this vessel is expensive (five to six thousand dollars). Another option is to fly in to the closest community and conduct surveys from locally chartered vessels. Other resource management agencies may also be able to assist in logistics for accessing each site.

If cost proves prohibitive, then some strategies may have to be published without the advantage of a site survey. In this case, the GRS should clearly state that the site has not yet been surveyed to verify the applicability of the strategy.

6. Convene Tactics Subgroup meetings as necessary to draft GRS documents.

Once the aerial photography and site survey information is in hand, the Tactics Subgroup will be called together to devise the best initial strategy for protecting the resources at risk at each high priority site. The Workgroup has already appointed the Tactics Subgroup; they will meet as often as necessary to develop a GRS for each site. The most likely place for these meetings is the Alaska Chadux office in Anchorage. Local community members and resource agencies with specific knowledge of the site will be invited to attend, in person or by teleconference.

7. Convene Places of Refuge Subgroup meeting as necessary to draft POR documents.

As soon as the Prince William Sound Places of Refuge (POR) Subgroup has substantially developed their plan format and process, the Aleutians POR Subgroup will be convened to begin a parallel process. They will conduct a site selection process based on the vessel traffic in and around the subarea. Pertinent information for each site selected will be placed into tables and presented along with aerial photos and site-specific maps. This information will be useful at the time of any request to allow a distressed or injured vessel to enter a place of refuge.

8. Post draft documents on the project website and notify the Workgroup to review the products and provide comments and edits.

Draft products of the subgroups will be posted on the project website and once the subgroups have completed their tasks, the entire Workgroup will be notified and given ample opportunity to review and comment on the subgroup's work. Comments will be summarized and given to the co-chairs. Draft documents will be edited under the direction of the co-chairs and a final draft will be produced and posted.

9. If necessary, hold a 3rd Workgroup meeting to review and approve the final draft documents for transmittal to the Aleutians Subarea Committee.

The co-chairs may call a third and final meeting of the Workgroup, if members raise substantial issues during the review process. If the meeting is called, issues will be resolved, and the final draft document may be approved contingent upon making any edits agreed to at the meeting. Otherwise, the draft final document will be deemed approved by the Workgroup and passed along for incorporation into the next change to the Aleutians Subarea Contingency Plan. It should be noted that changes to the Subarea Contingency Plan are posted for public review before being adopted into the plan.

Phase II Timeline

If funding can be acquired in the 3rd quarter of Calendar Year 2004, the project can proceed toward a target completion date by the end of the 4th quarter of Calendar Year 2005. Suggested milestones and completion dates are:

3rd Qtr 2004	Public outreach begins;
3rd Qtr 2004	Public comments due 60 days after start of public comments;
4th Qtr 2004	2nd Workgroup meeting in Anchorage – final GRS site selections;
1st Qtr 2005	POR Subgroup meetings as necessary to select POR sites and draft documents;
2nd Qtr 2005	Aerial photography completed;
2nd & 3rd Qtr 2005	Site surveys completed;
3rd Qtr 2005	Tactics Subgroup meetings as necessary to draft GRS documents;
3rd Qtr 2005	Subgroup draft documents posted for Workgroup review and comment;
4th Qtr 2005	Workgroup comments due; 3rd Workgroup meeting, if necessary; and
4th Qtr 2005	Final documents approved by Workgroup.

Phase II Costs

The estimated cost to contract the planning services necessary to conduct the Workgroup's business and complete the second phase of the project is roughly $40,000.[1] This includes the work specified in tasks 1, 2, 3, 6, 7, 8 and 9 listed above.

In addition to the planning services, there will be costs to conduct the necessary aerial photography and the site surveys listed in tasks 4 and 5 above. These costs can vary dramatically, depending on the amount of support that Workgroup members can provide to the project. A rough estimate for a single contractor to travel to the local communities, conduct aerial photography and site surveys using locally chartered vessels and aircraft is about $25,000.[2] Other Tactic Subgroup members may be able to participate in the site surveys if they can travel on their organization's budget.

[1] Assuming 20 high priority sites and 5 places of refuge.
[2] Total cost, assuming 20 high priority sites and 5 places of refuge.

Appendices

Appendix A – Aleutians Subarea Workgroup

Appendix B – Memorandum of Agreement

Appendix C – Site Selection Key, Index Maps and Matrices

Appendix D – GRS Photograph Technique Sheet

Appendix E – Site Survey Form

Appendix A – Workgroup List

Aleutians Subarea
Workgroup List

Last Name	First Name	Organization	Group	Email Address	Phone	Fax	Street	City	State	Zip	Workgroup Member	Steering committee
Ballesteros	Robert	ADEC	State Agency	Robert_ballesteros@dec.state.ak.us	269-7539	269-8403					x	
Balogh	Greg	US FWS	Fed. Agency	greg_balogh@fws.gov							x	
Bay	Paul	Sand Point-City Mngr.-City of	Local Gov	sptcity@arctic.net	383-2696	383-2698	P.O. Box 249,	Sand Point	AK	99661		
Bearikoff	Harriet	Unalaska-'Tribe of -President	Local Gov		581-2920	581-3644	P.O. Box 334	Unalaska	AK	99685	X	
Bereskin	Joe	Akutan-Mayor City of	Local Gov	akutan@alaska.com, erikat@gci.net	274-7555	276-7569	3380 C Street, Suite 205	Anchorage	AK	99503	X	
Bereskin, Sr	Joseph	Akutan-'Native Village of-President	Local Gov		698-2300	698-2301	P.O.Box 89	Akutan	AK	99553	X	
Berg	Catherine	USFWS-Fish&wildlife Field Office	Fed Agency	Catherine_berg@fws.gov	271-1630	271-2786	605 W. 4th Ave., Suite G-61	Anchorage	AK	99501	X	
Bohl	Christy	US Minerals Management Service	Fed Agency		271-6190 /6010						X	
Breitenberger	Eric	ADEC	State Agency	eric_breitenberger@dec.state.ak.us	907-451-2144	907-451-2155	610 University Avenue	Fairbanks	AK	99709		
Brown	Scott	Port of Dutch Harbor	Local Gov	Scott@ci.unalaska.ak.us	581-1254						X	
Brubaker	Mike	Aleutian Pribilof Islands Assc.	State Agency		276-2700							
Burrill	Derek	USCG	Fed. Agency	dburrill@cgalaska.uscg.mil							x	X
Camlin	Theo	The O'Brians Group	Industry	theo.camlin@theobriensgroup.com								
Crayton	Wayne	US Army COE	Fed. Agency	Wayne.M.Crayton@poa02.usace.army.mil							X	
Dreyer	Bob	ADEC	State Agency	bob_dreyer@dec.state.ak.us							x	
Eagleton	Matthew	NOAA-NMFS	Fed. Agency	Matthew.eagleton@noaa.gov	271-6354	271-3030	222 West 7th Ave # 43	Anchorage	AK	99513	x	
Eley	Dave	Alaska Steamship Association	Industry	capedec@alaska.com	907 723-4299						X	
Ermeloff	Leonte	Native Village of Nikolski-President	Local Gov		576-2225	576-2205	P.O. Box 105	Nikolski	AK	99638	X	
Fink	Mark	ADFG	State Agency	mark_fink@fishgame.state.ak.us	267-2338	267-2464	333 Raspberry Road	Anchorage	AK	99518	X	
Folley	Gary	ADEC	State Agency	Gary_Folley@dec.state.ak.us	271-6712		43335 K-Beach Rd, #11	Soldatna	AK	99669	x	
Foster, Jr.	John	Native Village of Unga-President/Envir. Coord.	Local Gov	ungacorp@arctic.net	383-5215	383-5553	P.O.Box 508	Sand Point	AK	99661	X	
Galvin	Nate	Sand Point Village-'Tribe of -Transportation	Local Gov	nategalvingtt@yahoo.com								
Gardner	Dale	ADEC	State Agency	dale_gardner@dec.state.ak.us		269-7648	555 Cordova St.	Anchorage	AK	99501	x	X
Gardner Jr.	Glen	Sand Point-Mayor-City of	Local Gov	sptcity@arctic.net	383-2696	383-2698	P.O. Box 249,	Sand Point	AK	99661	X	
Goalodoff	Raymond	Atka-Native Village of -Envir. Coord.	Local Gov	rgoalodoff@gci.net	839-2229	839-2269	P.O.Box 47030	Atka	AK	99547		
Godell	Dave	SeaCoast Towing	Industry	dave@sea-coast.com							x	
Goolie	Mary	USEPA	Fed. Agency	goolie.mary@epa.gov	271-3414	271-3424	222 West 7th Avenue #19	Anchorage	AK	99513	x	X
Gould	Joyce	Agdaagux of King Cove-President	Local Gov	jgould_epa_kcv@yahoo.com or hotmail	497-2648	497-2803	P.O.Box 249	King Cove	AK	99612	X	
Gunderson, Jr.	Paul K.	Pauloff Harbor Village-President	Local Gov	Pauloff@arctic.net	383-6075	383-6094	P. O. Box 194	Sand Point	AK	99661	X	
Hallback	Trena	Delta Western	Industry	TrenaH@DeltaWestern.com							X	
Heavilin	Bob	Chadux	Industry	bheavilin@chadux.com	348-23-48	348-2330	2347 Azurite Ct	Anchorage	AK	99507	x	X
Hines	Steve	Adak-City Manager	Local Gov	adakcity@corecom.net	592-4500						X	
Hoblet	Jolene	False Pass-Native Village of -Envir. Coord.	Local Gov			548-2256	P.O.Box 29	False Pass	AK	99583		
Hoffman	Chris	U.S. Army Corps of Engineers, Alaska District	Fed Agency	Christopher.A.Hoffman@poa02.usace.army.mil	753-2634	753-2625	PO Box 6898 EN-CW-ER	Elmendorf	AK	99506		
Hunter	Julie	Alaska Marine Pilots' Association	Industry	amp@arctic.net	907 581-1240						X	
Hutmacher	Bill	ADEC	State Agency	bill_hutmacher@dec.state.ak.us							x	
Iwamoto	Larry	ADEC	State Agency	Larry_iwamoto@dec.state.ak.us	269-7683	269-7648					x	X
Janes	Mark	Nuka Research and Planning	Contractor	mark@nukaresearch.com	235-7555			Seldovia	AK	99663		
John	Whitney	NOAA	Fed Agency	John.Whitney@noaa.gov	271-3593	271-3139	510 L St. #100	Anchorage	AK	99501	x	
Johnson, Sr.	Harold	Nelson Lagoon-Native Village of-President	Local Gov		989-2204	989-2233	P.O.Box 13-NLG	Nelson Lagoon	AK	99571	X	
Juettner	Bob	Aleutians East Borough	Local Gov	RJuett0869@aol.com	274-7555	276-7569	3380 C Street, Suite 205	Anchorage	AK	99503		
K'eit	Kristin	Bureau of Indian Affairs	Fed. Agency								X	
Kochuten	Delores	Belkofski-Native Village of -Envir. Coord.	Local Gov	dkochuten@yahoo.com	497-4137	497-3123	P.O.Box 57	King Cove	AK	99612		
Kolehmainen	Karol	Aleutians West Coastal Resource Service Area	Local Gov								X	
Kuzakin	Simeon	Native Village of 'Belkofski-President	Local Gov		497-3122	497-3123	P.O.Box 57	King Cove	AK	99612	X	
Lance	Ellen	US FWS	Fed. Agency	ellen_lance@fws.gov	271-1467	271-2786	605 W. 4th Ave., Suite G-61	Anchorage	AK	99501	x	
Landt	Constantina	Native Village of Nikolski-Envir. Coord.	Local Gov		576-2225	576-2205	P.O. Box 105	Nikolski	AK	99638		
LeClair	John	Chadux	Industry	jleclair@chadux.com	278-3359	278-3330	2347 Azurite Ct	Anchorage	AK	99507	x	X
Livingston	Sharon	Unalaska-Tribe of-Envir. Coord.	Local Gov	qtep@arctic.net	581-2920	581-3644	P.O. Box 334	Unalaska	AK	99685		
Luck	Chuck	Adak-Mayor City of	Local Gov	adakcity@corecom.net	592-4500	592-4262	P.O. Box 2011	Adak	AK	99546	X	
Mack	Stanley	Aleutians East Borough	Local Gov								X	
Malavansky	Andrew	St. George-Pribilof Is. Aleut Community of -Envir. Coord.	Local Gov	malavansky@hotmail.com								
Malavansky	Maxim	Saint George-Mayor City of	Local Gov	mayormax@yahoo.com	859-2263	859-2212	P.O. Box 929,	St. George Is.	AK	99591	X	

Aleutians Subarea
Workgroup List

Last Name	First Name	Organization	Group	Email Address	Phone	Fax	Street	City	State	Zip	Workgroup Member	Steering committee
Malavansky Jr.	Max	St. George-Pribilof Is. Aleut Community of -Envir.Coord	Local Gov	max_malavansky@hotmail.com	859-2205	859-2242	P.O. Box 940	St. George Is.	AK	99591		
Maxwell	John	Mayor City of Cold Bay	Local Gov		532-2401		PO Box 10	Cold Bay	AK	99571	X	
McCallum	Dorthy	Sand Point Village-'Tribe of-President	Local Gov		383-5616	383-5814	P.O.Box 447	Sand Point	AK	99661	X	
Mcgalasan	Gregory	Pribilof Is. Aleut Community of St. George-Envir. Coord	Local Gov	stgcounsel@starband.com	859-2205	859-2242	P.O. Box 940	St. George Is.	AK	99591		
McGlashan	George	St. George-Pribilof Is. Aleut Community of-Envir. Coord	Local Gov	georgemcglashan@yahoo.com	859-2205	859-2242	P.O. Box 940	St. George Is.	AK	99591		
Means	Sam	ADNR	State Agency	sam_means@dnr.state.ak.us	269-8548	269-8913	550 W 7th	Anchorage	AK	99501	X	
Merculief	Anthony	St. George-Pribilof Is. Aleut Community of -President	Local Gov	amerculief@hotmail.com	859-2205	859-2242	P.O. Box 940	St. George Is.	AK	99591	X	
Merculief	John	City of St. Paul-city manager	Local Gov	stpaulak@hotmail.com	546-3110							
Moreno	Steve	Alaska Marine Pilots' Association	Industry	amp@arctic.net	907 581-1240						X	
Morris	Ann	Pauloff Harbor Village-Envir. Coord.	Local Gov	Pauloff@arctic.net	383-6075	383-6094	P. O. Box 194	Sand Point	AK	99661		
Morris	Ron	USCG	Fed. Agency	rmorris@cgalaska.uscg.mil							x	X
Morrison	Rance	NMFS-NOAA	Fed. Agency	rance.morrison@noaa.gov	581-2062							
Mutter	Doug	USDOI	Fed. Agency	Douglas_mutter@ios.doi.gov	271-5011	271-4102	1689 C Street Room 119	Anchorage	AK	99501	X	X
Newman	Arthur	Agdaagux of King Cove-Envir. Coord.	Local Gov		497-2648	497-2803	P.O.Box 249	King Cove	AK	99612		
Nickles	John	False Pass-Mayor/CityMngr- City of	Local Gov	cityoffalsepass@ak.net	548-2319	548-2214	P.O. Box 50,	False Pass	AK	99583	X	
Nieman	Bev	Yutana Barge Line	Industry	bniemann@yutana.com							x	
O'Shea	Micheal	Crowley Marine Services	Industry	micheal.o'shea@Crowley.com							x	
Oberlitner	Annie	Aleutian-Pribilof Islands Comm Dev. Assn	Local Gov	aoberlitner@apicda.com	235-3929/						x	
Pearson	Leslie	ADEC PERP (Anc)	State Agency	Leslie_pearson@dec.state.ak.us	269-7543	269-7648					x	
Pride	Rayburn	Nelson Lagoon-Native Village of-Envir. Coord.	Local Gov		989-2204	989-2233	P.O.Box 13-NLG	Nelson Lagoon	AK	99571		
Rappoport	Ann	US FWS	Fed. Agency	ann_rappoport@fws.gov							x	
Robertson	Tim	Nuka Research and Planning	Contractor	nuka@alaska.net	234-7821	509-278-4406	PO Box 175	Seldovia	AK	99663		
Roll	Lorraine	Sand Point Village-'Tribe of -Envir. Coord.	Local Gov	nategalvingtt@yahoo.com	383-5616	383-5814	P.O.Box 447	Sand Point	AK	99661		
Rosen	Ira	AMHS	Industry	ira_rosen@dot.state.ak.us	(907) 465-8878						x	
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Shelikoff	Gilda	Native Village of False Pass-President	Local Gov		548-2227	548-2256	P.O.Box 29	False Pass	AK	99583	X	
Shestakov	Michail	AEC	Industry	mshestakov@adakisland.com							x	
Smith	Brad	US National Marine Fisheries Service	Fed Agency								X	
Snigaroff	Mark	Native Village of Atka-President	Local Gov		839-2229	839-2269	P.O.Box 47030	Atka	AK	99547	X	
Sterne	Charla	US FWS	Fed. Agency				605 W. 4th Ave., Suite G-61	Anchorage	AK	99501		
Street	Hayden	US Navy	Fed. Agency	hayden.street@navy.mil	360 369-5089						X	
Sweetsir	Mat	Yutana Barge Line	Industry	msweetsir@yutanabarge.com							x	
Swetzof, Jr	Simeon	City of Saint Paul-Mayor	Local Gov	stpaulak@hotmail.com	546-2331	546-3188	P.O. Box 901	St. Paul Island	AK	99660	X	
Tidwell	Bryson	US Air Force	Fed. Agency	Bryson.Twidwell@ELMENDORF.af.mil	552-0866			Elmendorf			X	
Tritremmel	Erika	Akutan- City of	Local Gov	erikat@gci.net	274-7565	274-1813	3380 C Street, Suite 205	Anchorage	AK	99503		
Ward	Ron	Southwest Alaska Pilots Association	Industry	captron@ak.net	235-8783	235-6119	PO 977	Homer	AK	99603	x	
Webster	Jennie	Akutan-'Native Village of -Envir. Coord.	Local Gov	atcheripanoff@yahoo.com	698-2300	698-2301	P.O.Box 89	Akutan	AK	99553		
Whitney	John	NOAA	Fed Agency	John.Whitney@noaa.gov	271-3593	271-3139	510 L St. #100	Anchorage	AK	99501	X	
Wilson	Stephen	Crowley Marine Services	Industry	Stephen.Wilson@Crowley.com							x	
Woodley	Chris	USCG	Fed. Agency	cwoodley@cgalaska.uscg.mil	271-6723	229-7434					x	X
Zacharof	Richard	St. Paul-Probilof Is. Aleut Community of -President	Local Gov		546-2211	546-2407	P.O. Box 86	St. Paul Island	AK	99660	X	
Zavadil	Phil	St. Paul-Probilof Is. Aleut Community of -Envir. Coord.	Local Gov	pazavadil@tdxak.com	546-2211	546-2407	P.O. Box 86	St. Paul Island	AK	99660		

Memorandum of Agreement

Between:
Alaska Chadux Corporation ..... Robert Heavilin
Alaska Department of Environmental Conservation ..... Larry Dietrick
U.S. Coast Guard ..... Captain Ron Morris
U.S. Environmental Protection Agency ..... Matthew Carr

CC:
State Agencies
- Alaska Department of Fish and Game ..... Mark Fink
- Alaska Department of Natural Resources ..... Sam Means

Federal Agencies
- U.S. Bureau of Indian Affairs ..... Kristin K'eit
- U.S. Corps of Engineers ..... Wayne Crayton
- U.S. Department of the Interior ..... Doug Mutter
- U.S. Fish and Wildlife Service ..... Catherine Berg
- U.S. Mineral Management Services ..... Christy Bohl
- U.S. National Marine Fisheries Service ..... Brad Smith
- U.S. Navy ..... Hayden Street
- U.S. NOAA, Hazardous Materials ..... Dr. John Whitney

Local Governments
- Agdaagux of King Cove ..... Joyce Gould
- Aleut Community of Saint Paul Island ..... Richard Zacharof
- Aleutians East Borough ..... Stanley Mack
- Aleutians West Coastal Resource Service Area ..... Karol Kolehmainen
- Aleutians-Pribilof Island Community Development Association ..... Annie Oberlitner
- City of Adak ..... Steve Hines
- City of Akutan ..... Joseph Bereskin, Sr
- City of Cold Bay ..... John Maxwell
- City of False Pass ..... John Nickles
- City of Saint George ..... Maxim Malavansky
- City of Saint Paul ..... Simeon Swetzof, Jr
- City of Sand Point ..... Paul Bay.
- Traditional Council of Akutan ..... Richard Stepetin
- Native Village of Atka ..... Mark Snigaroff
- Native Village of Belkofski ..... Simeon Kuzakin
- Native Village of False Pass ..... Gilda Shelikoff
- Native Village of Nelson Lagoon ..... Harold Johnson, Sr.
- Native Village of Nikolski ..... Leonte Ermeloff
- Native Village of Unga ..... John Foster, Jr.
- Pauloff Harbor Village ..... Paul K. Gunderson, Jr.
- Port of Dutch Harbor ..... Scott Brown

Qagun Tayagungin Tribe of Sand Point.....Dorthy McCallum
Qawalangin Tribe of Unalaska .....Harriet Bearikoff
St. George Traditional Council.....Anthony Merculief

Contingency Planholders

Aleut Enterprise Corporation..... Michail Shestakov
Bering Sea Fisheries.....
Crowley Marine Services .....Stephen Wilson
Delta Western ..... Trena Hallback
.....
Petro Star .....Bud Sands
.....
Offshore Systems Inc., Dutch Harbor Alaska Facility.....Geirrimo Turnbull
Peterpan Seafoods.....Glen Guffy
Sea Coast Towing, Inc. ..... Dave Godell
Trident Seafoods.....Lurilla Lee
Western Pioneer, Inc. .....Kevin Kivy
.....
Yutana Barge Lines.....Bev Niemann
U.S. Air Force..... Bryson Twidwell

Other Organizations

Alaska Marine Pilots' Association..... Steve Moreno
Alaska Steamship Response .....David Eley
Southwest Alaska Pilots' Association..... Ron Ward
The O'Brien's Group .....Theo Camlin

PURPOSE OF AGREEMENT

This Memorandum of Agreement (MOA) establishes a Workgroup to draft a minimum *{number dependent on funding}* Geographic Response Strategies (GRS). The GRS will be for the Aleutians Subarea, which is one of ten subareas that are defined in the Alaska Federal/State Preparedness Plan for Response to Oil and Hazardous Substance Discharges/Releases (Unified Plan).

The Workgroup will be comprised of members of the Aleutians Subarea Committee and representatives from cities, tribes and village councils, commercial entities, and agencies with interests in the Aleutians Subarea. This MOA defines the purpose and scope of the GRS project and the participation and process the Workgroup will use to produce the GRS Document.

Once the GRS are drafted they will be forwarded to the Aleutians Subarea Committee for inclusion in Section G of the Aleutians Subarea Contingency Plan (Aleutians SCP). If the Subarea Committee adopts the GRS into the Aleutians SCP, planholders and participating Oil Spill Removal Organizations (OSROs) may reference the Aleutians SCP in their Oil Discharge Prevention and Contingency Plan (ODPCP) or respective OSRO technical or response manuals to meet their requirements for planning to protect environmentally sensitive areas in the Aleutians Subarea, where applicable.

PURPOSE OF A GEOGRAPHIC RESPONSE STRATEGY

The purpose of a GRS is to provide site-specific response strategies to protect the priority sensitive areas in a geographic location by presenting unified (public, responders, and agencies) priorities and

strategies for implementation. The GRS identifies the sensitive resources at a site and the response strategies, equipment, personnel and logistical requirements necessary to protect those sensitive areas.

The GRS will be developed with the intention that they be adopted into the Aleutians SCP. GRS may serve as pre-approved strategies of the Unified Command during the emergency phase of an oil spill response.

The parties to this MOA agree that GRS are not "Response Planning Standards" as defined in Alaska Statutes and will not force the acquisition of new equipment stockpiles or pre-deployment of existing stockpiles for ODPCP planholders that otherwise meet their state response planning standards.

The existence of a particular site-specific protection strategy in a GRS will not automatically require the implementation of the strategy during an event. The best professional judgment of the Unified Command will be used to decide whether or not to implement a particular plan or strategy. When either trajectory analyses or oil tracking methods show a sensitive area that has a GRS to be at risk, the priorities and strategies in the GRS may be used to protect the area. Many factors, such as the size of a spill; type of spilled product; season; sea conditions; and prevailing weather, currents, and tides must be considered at the time of a spill before determining which particular response strategy will be implemented.

GRS are a great help in planning for a spill response and can provide excellent guidance during a spill response, but are not a mandate for specific action at the time of a spill.

GRS DEVELOPMENT PROCESS

Zone Definitions

The Aleutians GRS Workgroup may define specific geographic zones within the Aleutians Subarea to facilitate response planning.

Sensitive Area Identification and Site Selection

The Workgroup will conduct a process using previously identified sensitive areas (e.g. Alaska Department of Fish and Game's Most Environmentally Sensitive Areas, National Oceanic and Atmospheric Administration's Environmental Sensitivity Index maps, and sensitive areas identified in the Aleutians SCP) as a beginning for identification of sensitive areas and prioritization for their protection.

Representatives from federal and state natural resource management agencies will be consulted during this process for their recommendations on additions, deletions and priorities for the identified sites.

Site selection will take into account the sensitivity of flora and fauna in the area; the historic, cultural and recreational significance; the likelihood of being subjected to spill impacts; the likelihood of successfully protecting the area from spill impacts; and the degree of public concern. Once the Workgroup develops a draft priority list of identified sites, the list will be offered for public review and comment before being finalized for strategy development.

Framework for Development of GRS

To construct the GRS, the Workgroup will employ a development process that relies on the expertise of experienced spill responders within the Workgroup, local knowledge and information available in the Aleutians SCP. A Tactics Sub-group will be formed to develop the GRS documents.

Response strategies may be broad in their scope to protect a general habitat, such as sheltered tidal flats, or more specific, in order to focus on the protection of a particular feature such as a clam bed or river mouth. A team that includes a resource management agency representative and a response specialist will attempt to survey each GRS site in order to validate that the proposed strategies and response resources shown in the plan are appropriate for the site. Aerial photos of each site will be taken to provide responders with valuable visual data.

GRS Content and Format

GRS recently developed for the Cook Inlet Subarea will be used as a model for the Aleutians Subarea GRS (see attachment). Each GRS will identify the sensitive area and its resources that need protection. The GRS will include a strategy to accomplish the necessary protection, and this strategy will provide a set of response tactics for the site, which will be applied according to the most likely spill-impact scenario and prevailing weather and ocean conditions. The tactics will be prioritized, taking into account factors such as environmental sensitivity, feasibility of protection, public concerns, on-scene wind and tidal action, and time of arrival for response resources (in the case where resources will need to be deployed to the GRS site from a regional response depot.)

Each GRS will identify the amount and type of equipment necessary for implementation of the specific response actions. Unique or pertinent equipment, logistical, or personnel information will be noted. Special considerations, such as historic properties protection, will also be identified.

The response strategies will be diagrammed on base maps that are scaled no larger than one inch to the mile and will be correlated to tables containing or referencing the following information:

- Site location & description
- Response strategy
- Implementation procedures
- Response resources necessary for implementation
- Possible staging areas
- Available site access
- Environmental resources needing protection
- Special considerations

GRS are designed to complement existing strategies, sensitive area information, and response plans currently available in industry and government contingency plans. Unnecessary duplication of information will be avoided.

All GRS will be placed in Section G of the Aleutians SCP. The GRS section will include:

- Part 1 - Introduction, including an explanation of GRS, their development and use
- Part 2 - A description of general protection and recovery tactics
- Part 3 - Individual GRS
- Part 4 - A list of references

Places of Refuge
As part of the GRS development process for the Aleutians Subarea, the Workgroup will form a sub-group to review, discuss, and pre-identify specific locations within the subarea that may be used as places of refuge by disabled, damaged or leaking vessels. The sub-group will focus on potential places of refuge near the high traffic areas. The criteria used for the identification of places of refuge for Cook Inlet and Prince William Sound will be applied during this process. The final product will have the same format as the Prince William Sound Places of Refuge document and be incorporated into the Aleutians SCP.

Public Process
All parties to this MOA agree that it is important for the general public to understand and support the GRS planning process in advance of a spill in order to prevent confusion and conflict over response priorities during a spill event. All documents generated by the Workgroup will be available for inspection at a public location or online. The Workgroup will consult with relevant state and federal natural resource management agencies not represented on the Workgroup and consider comments on GRS from the local communities, coastal districts, tribes and Native villages, and citizens. The Workgroup will offer the draft sensitive area selection list for public comment prior to finalizing site-specific response strategies. The final GRS document developed by the Workgroup will be distributed for public comment before being adopted in the Aleutians SCP.

Timeline
The Workgroup will convene at the call of the co-chairs between thirty and sixty days after execution of this agreement. A contractor will be hired by the time of the first Workgroup meeting. Three meetings of the Workgroup are expected to complete the project. The Tactics and Places of Refuge sub-groups will meet every 60 to 90 days as necessary to complete their draft documents. It is anticipated that the sub-groups will each meet three to five times. The GRS section should be completed and submitted to the Aleutians Subarea committee within two years of the first meeting of the Workgroup.

Exercises and GRS Validation
GRS may be exercised to test their viability as part of the Aleutians SCP and Federal/State contingency planholders exercise schedule. State ODPC planholders who exercise a GRS will be given credit for one of the unannounced discharge exercises that ADEC may call during that year.[1] The GRS will be modified to incorporate lessons learned from the exercises. Agencies and planholders will strive not to duplicate an exercise at any particular site until all of the GRS sites in the subarea are exercised at least once.

WORKGROUP PARTICIPATION
The parties to this MOA agree to participate in regular Workgroup meetings to direct the contractor and review the work product. Signatories and CCs listed in this MOA may participate in the Workgroup. Each Workgroup member agrees to contribute technical knowledge and expertise to the process. Members will be responsible for their own costs of participation. Members agree to provide meeting space for the Workgroup, as they are able.

[1] 18 AAC 75.485(a)

The Alaska Department of Environmental Conservation, U.S. Coast Guard and ??? agree to co-chair the Workgroup. Decisions of the Workgroup will be by consensus.

All the meetings of the Workgroup will be open to the public, and there will be opportunities for public comment at each meeting.

FUNDING/SIGNIFICANT IN-KIND RESOURCES
Funding, as currently arranged, will be provided by the following:

Alaska Department of Environmental Conservation	
Initial Planning and Work Group Organization	$32,000
Follow-on GRS Development	?
Environmental Protection Agency	
Contracting Support	?

Using these funds, the ADEC agrees to hire and manage an independent contractor to assist the Workgroup in drafting the GRS. The contractor will work at the direction of the Workgroup. Additionally, most participants will be called upon to offer in-kind services.

Where possible, the U.S. Coast Guard agrees to provide over flights for photography. Other Work Group members agree to provide in-kind resources to the project, as they are able.

SIGNATURES
We the undersigned, as authorized representatives of our respective organizations, enter into this agreement in good faith to accomplish the development of *{number dependent on funding}* Geographic Response Strategies for the Aleutians Subarea.

Date:

_____ _____
Robert Heavilin, Alaska Chadux Corporation

_____ _____
Larry Dietrick, Alaska Department of Environmental Conservation

_____ _____
Captain Ron Morris, United States Coast Guard

_____ _____
Matthew Carr, Environmental Protection Agency

Appendix C – Site Selection Key, Index Maps and Matrices

Key for the Site Selection Matrices

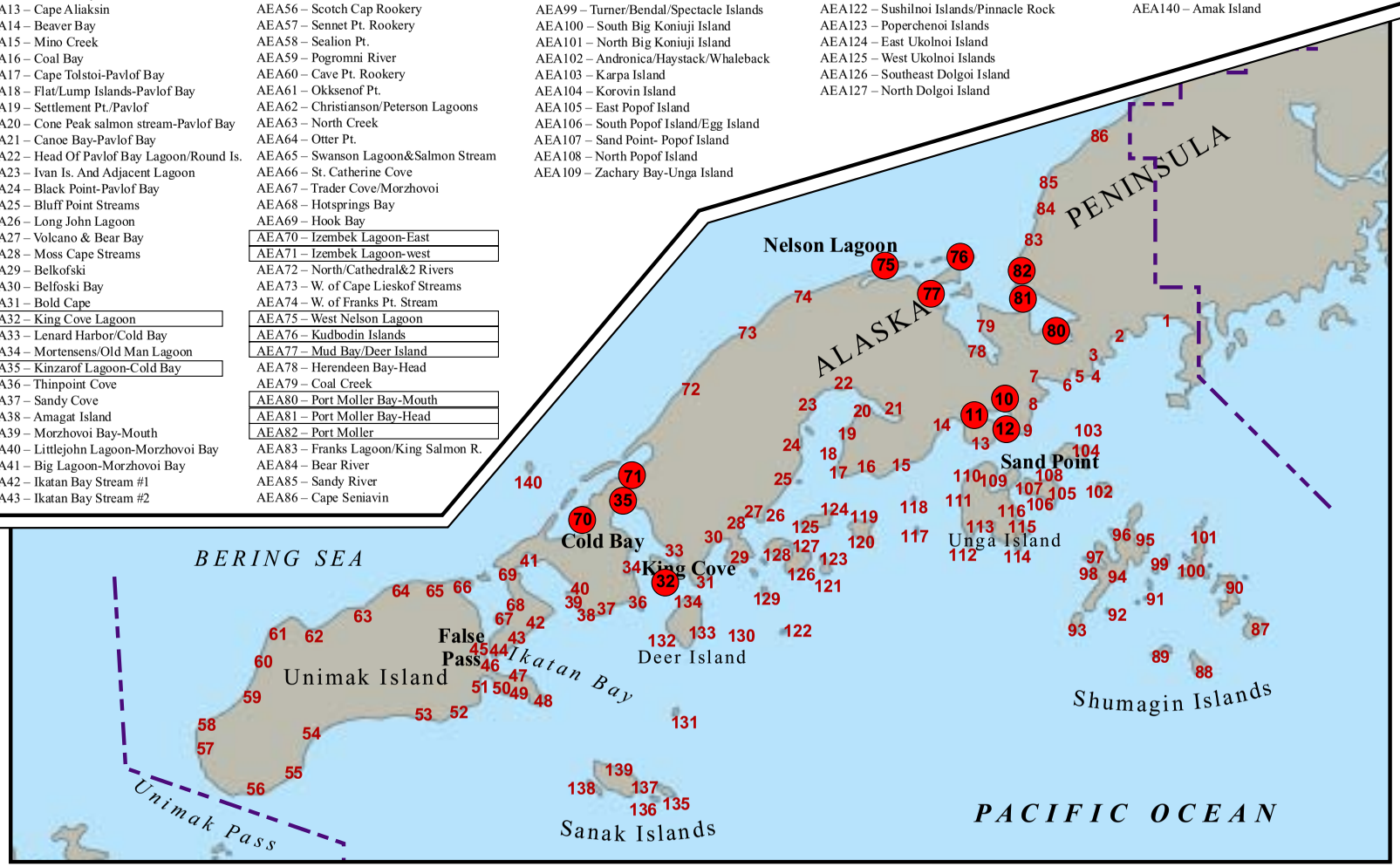
Aleutians Subarea

Site Name	lat.	lon.	Marine Mammals	Fish	Subsistence	Cultural Resources	Birds	High Recreational Use	Commercial Fishing	Land Mgt. Designations	Coastal Habitat
Key to Site Selection Matrix			O = otter	K = King salmon	F = Fish		En = Eagle nest	SF = Sports Fishing	C = Commercial fishing	TL = Tidelands leases, permits, & right-of-ways	M = Marsh
A "+" adjacent to the listed resource indicates an area of major concern			S = Harbor Seal	P = Pink salmon	B = birds		SBf = Seabird feeding area	C = Campsite	A = Aquaculture sites	CT = Conveyed Tidal Lands	SRS = Sheltered Rocky Shoreline
			SL = Sea Lion	Co = Coho Salmon	I = Intertidal		SBn = Seabird nesting area	TH = Trailhead	H = Hatchery	SP = State Park	K = High Density Kelp Bed
			W = Walrus	Ch = Chum Salmon	M = Marine Mammals		WFc = Waterfowl concentration area	K = Kayak beach	HC = High Use Commercial Fishery	NC-Native Lands Conveyed	ETF = Exposed Tidal Flat
				DV = Dolly Varden Char	O = Otters		WFc-E = Endangeredwaterfowl concentration area	A = Anchorage		SCH = Critical Habitat	STF = Sheltered Tidal Flat
				I = Intertidal Spawning			WFs = Waterfowl or Shorebird Spring Onshore	BR=boat ramp		NPW= National Park and Wilderness	ERS= Exposed Rocky Shore
				H = Herring Spawning			SHBc= Shorebird concentration area			MR = Maritime Wildlife Refuge	GB=Gravel Beach
				S = Sockeye Salmon						NS=Native Selected	EG=Eel Grass
				SH = Steelhead/ Rainbow Trout						M= Military	
										NWR= National Wildlife Refuge	
										SGS = State Game Sanctuary	
Responsible Agency			NMFS, ADFG, USFWS	ADFG	ADFG	ADNR	USFWS, ADFG	ADNR	ADFG	ADNR, NPS, ADFG, Municipalities, Tribal Organizations	NOAA

version: May 31, 2004

Aleutians Subarea – East A Zone, SELECTED & CANDIDATE SITES for GEOGRAPHIC RESPONSE STRATEGIES

AEA01 – Grub Gulch-Stepovak Bay
AEA02 – Clark Bay
AEA03 – Orzinski Bay
AEA04 – American Bay
AEA05 – Windbound Bay
AEA06 – Chichagof Bay/West Cove
AEA07 – Dorenoi Bay
AEA08 – San Diego Bay
AEA09 – Guillemont Island
AEA10 – Albatros Anchorage/Balboa Bay
AEA11 – Lefthand Bay/Balboa Bay
AEA12 – Balboa Bay
AEA13 – Cape Aliaksin
AEA14 – Beaver Bay
AEA15 – Mino Creek
AEA16 – Coal Bay
AEA17 – Cape Tolstoi-Pavlof Bay
AEA18 – Flat/Lump Islands-Pavlof Bay
AEA19 – Settlement Pt./Pavlof
AEA20 – Cone Peak salmon stream-Pavlof Bay
AEA21 – Canoe Bay-Pavlof Bay
AEA22 – Head Of Pavlof Bay Lagoon/Round Is.
AEA23 – Ivan Is. And Adjacent Lagoon
AEA24 – Black Point-Pavlof Bay
AEA25 – Bluff Point Streams
AEA26 – Long John Lagoon
AEA27 – Volcano & Bear Bay
AEA28 – Moss Cape Streams
AEA29 – Belkofski
AEA30 – Belfoski Bay
AEA31 – Bold Cape
AEA32 – King Cove Lagoon
AEA33 – Lenard Harbor/Cold Bay
AEA34 – Mortensens/Old Man Lagoon
AEA35 – Kinzarof Lagoon-Cold Bay
AEA36 – Thinpoint Cove
AEA37 – Sandy Cove
AEA38 – Amagat Island
AEA39 – Morzhovoi Bay-Mouth
AEA40 – Littlejohn Lagoon-Morzhovoi Bay
AEA41 – Big Lagoon-Morzhovoi Bay
AEA42 – Ikatan Bay Stream #1
AEA43 – Ikatan Bay Stream #2
AEA44 – Sankin Island/Sankin Bay
AEA45 – False Pass-Unimak Island
AEA46 – Ikatan Bay-Head
AEA47 – Ikatok Peak Stream
AEA48 – Cape Pankof Rookery
AEA49 – West Anchor Cove/Dora Harbor
AEA50 – Bird Island
AEA51 – Otter Cove
AEA52 – Lazaref River/Cape
AEA53 – Brown Pk salmon stream
AEA54 – Unimak Bight salmon stream
AEA55 – Cape Lutke Rookery
AEA56 – Scotch Cap Rookery
AEA57 – Sennet Pt. Rookery
AEA58 – Sealion Pt.
AEA59 – Pogromni River
AEA60 – Cave Pt. Rookery
AEA61 – Okksenof Pt.
AEA62 – Christianson/Peterson Lagoons
AEA63 – North Creek
AEA64 – Otter Pt.
AEA65 – Swanson Lagoon&Salmon Stream
AEA66 – St. Catherine Cove
AEA67 – Trader Cove/Morzhovoi
AEA68 – Hotsprings Bay
AEA69 – Hook Bay
AEA70 – Izembek Lagoon-East
AEA71 – Izembek Lagoon-west
AEA72 – North/Cathedral&2 Rivers
AEA73 – W. of Cape Lieskof Streams
AEA74 – W. of Franks Pt. Stream
AEA75 – West Nelson Lagoon
AEA76 – Kudbodin Islands
AEA77 – Mud Bay/Deer Island
AEA78 – Herendeen Bay-Head
AEA79 – Coal Creek
AEA80 – Port Moller Bay-Mouth
AEA81 – Port Moller Bay-Head
AEA82 – Port Moller
AEA83 – Franks Lagoon/King Salmon R.
AEA84 – Bear River
AEA85 – Sandy River
AEA86 – Cape Seniavin
AEA87 – Simeonof Island
AEA88 – Chernabura Island
AEA89 – Bird Island
AEA90 – Little Koniuji/Heredeen/Atkins Islands
AEA91 – Twins Islands
AEA92 – Near Island
AEA93 – South Nagai Island
AEA94 – Larson/East Bight Bays-Nagai Is.
AEA95 – North Bight-Nagai Is.
AEA96 – Porpoise Harbor-Nagai Is.
AEA97 – Sanborn Harbor
AEA98 – Falmouth Harbor
AEA99 – Turner/Bendal/Spectacle Islands
AEA100 – South Big Koniuji Island
AEA101 – North Big Koniuji Island
AEA102 – Andronica/Haystack/Whaleback
AEA103 – Karpa Island
AEA104 – Korovin Island
AEA105 – East Popof Island
AEA106 – South Popof Island/Egg Island
AEA107 – Sand Point- Popof Island
AEA108 – North Popof Island
AEA109 – Zachary Bay-Unga Island
AEA110 – Unga Spit to Bay Pt.-Unga Island
AEA111 – Pinnacle Pt. Salmon Streams.-Unga Island
AEA112 – Archeredin Pt .-Unga Island
AEA113 – Archeredin Bay.-Unga Island
AEA114 – Unga Cape./Delarof Hbr.-Unga Island
AEA115 – Baralof Bay-.-Unga Island
AEA116 – East Unga Island
AEA117 – Kennoys Islands
AEA118 – Jude/Omega Islands
AEA119 – North Wosnesenski Island
AEA120 – South Wosnesenski Island
AEA121 – East/South/Olga/John Rocks
AEA122 – Sushilnoi Islands/Pinnacle Rock
AEA123 – Poperchenoi Islands
AEA124 – East Ukolnoi Island
AEA125 – West Ukolnoi Islands
AEA126 – Southeast Dolgoi Island
AEA127 – North Dolgoi Island
AEA128 – Dolgoi Harbor
AEA129 – Hunter/Rona/Outer Iliasik Islands
AEA130 – Sandman Reefs
AEA131 – Cherni Island/Hague Rock
AEA132 – SouthwestDeer/Sozavarika/High Islands
AEA133 – East Deer/Bunyan/Patton Islands
AEA134 – Northeast Deer/Fox Islands
AEA135 – Caton/Elma Islands
AEA136 – Sanak Reefs
AEA137 – Southeast Sanak Island
AEA138 – Southwest Sanak/Long Island
AEA139 – North Sanak Island
AEA140 – Amak Island



Aleutians Subarea – East A Zone

Site Selection Matrix

Seletion #	Priority	GRS #	Site Name	Lat. N	Lon. W	Marine Mammals	Fish	Subsistence	Cultural Resources	Birds	High Recreational Use	Commercial Fishing	Land Mgt. Designations	Coastal Habitat	ESI MAP
10	H		Albatros Anchorage/Balboa Bay	55 34.40	160 36.33		CH+,P							ETF,M,GB,ERS,SRS,EG	2
11	H		Lefthand Bay/Balboa Bay	55 32.20	160 41.96		CO,CH+,P							M,EG,ETF,GB	2
12	H		Balboa Bay	55 28.96	160 35.66		CH,P,CO			WFc-E				EG,GB,ERS	2&3
32	H		King Cove-Lagoon	55 02.88	162 19.16	O	H,CH,P	I,TM						M,ETF,SRS,ERS	6
35	H		Kinzarof Lagoon-Cold Bay	55 15.80	162 38.71	S, 0	H,P,CH,CO,S	I,TM		WFC-E				ETF,EG,M	9
71	H		Izembek Lagoon-East	55 23.99	162 38.05	S, 0	P,CH,S+,CO,K	I,TM		WFC, SHBc, SBn, SBf			SGR,NWR	STF,ETF,M,SRS,EG	9
70	H		Izembek Lagoon-west	55 14.49	162 56.61	S, 0	P,CH,S,CO	I,TM		WFC, SHBc, SBn, SBf			SGR,NWR	STF,ETF,M,SRS,EG	9
75	H		West Nelson Lagoon	56 00.37	161 07.08	S, 0	K+,Ch+,S+,CO+,SH	I,TM		WFc-E,SBn			SCH	GB,ETF,STF	5
76	H		Kudbodin Islands	56 01.26	160 55.12	S,O,W		I,TM		WFc-E,SBn			SCH	GB,ETF,STF	1
77	H		Mud Bay/Deer Island	55 44.46	160 56.22	O		I,TM		WFc			SCH	M,STF,ETF,GB	2&5
81	H		Port Moller Bay-Mouth	55 53.40	160 35.51	S	H			WFc			SCH	ETF,STF,EG,GB,	2
80	H		Port Moller Bay-Head	55 50.26	160 23.22	O	CH,CO,H			WFc,SBn			SCH	ETF,STF,EG,GB,SRS,M	2
82	H		Port Moller	55 59.15	160 33.34	W,O	H			WFc,SBn				ETF,STF,EG,GB,	2
1			Grub Gulch-Stepovak Bay	55 47.28	159 56.46	S	H,CH,P+							ETF,ERS,M	2
2			Clark Bay	55 45.60	159 59.88	O	H,CH,P,CO,S							ETF,M,GB,ERS	2
3			Orzinski Bay	55 42.64	160 01.77	S,O	CH,P+,S+							ETF,M,GB,ERS	2
4			American Bay	55 41.93	160 07.40	O								EG,ERS,ETF	2
5			Windbound Bay	55 39.70	160 10.12		P,SH							GB,ERS	2
6			Chichagof Bay/West Cove	55 39.09	160 13.87	S	CH,P,S,SH							M,GB,ERS	2
7			Dorenoi Bay	55 37.98	160 21.83		CH,P							ETF, GB, ERS	2
8			San Diego Bay	55 33.77	160 26.61	O	CH,P							ETF,M,GB,ERS	2
9			Guillemont Island	55 32.81	160 22.97	S,O				SBn				ERS,GB	2
13			Cape Aliaksin	55 27.57	160 43.52		P							M,ETF,ERS	3
14			Beaver Bay	55 27.64	160 53.71		CO,CH+,P							M,ETF,ERS,STF	2&3
15			Mino Creek	55 23.63	161 07.99	S	CH,P+,S							M,ETF,ERS	6
16			Coal Bay	55 22.09	161 21.64		H,CH,P+							M,SRS,GB,	6
17			Cape Tolstoi-Pavlof Bay	55 21.63	161 30.84		H,P			WFc-E				SRS,EG	6
18			Flat/Lump Islands-Pavlof Bay	55 23.62	161 37.26	S	H			WFc-E,SBn				SRS	6
19			Settlement Pt./Pavlof	55 29.75	161 27.99		P+			WFc-E				M,ETF,SRS,STF,GB,EG	6
20			Cone Peak salmon stream-Pavlof Bay	55 32.55	161 24.72		CH,P			WFc-E				M,ETF,GB,EG	6
21			Canoe Bay-Pavlof Bay	55 35.70	161 21.60		CH,P+,S			WFc-E				M,ETF,STF,GB,EG,ERS	5
22			Head Of Pavlof Bay Lagoon/Round Is.	55 33.93	161 36.44	S	CH			WFc-E,SHBc				GB,ERS,M,ETF,STF,EG	5
23			Ivan Is. And Adjacent Lagoon	55 30.98	161 40.90	S	CH			SBn,WFc-E,SHBc				SRS,ERS,GB,ETF,STF,M,EG	5&6
24			Black Point-Pavlof Bay	55 24.96	161 40.84		H			W				GB,EG	6
25			Bluff Point Streams	55 18.95	161 48.04									M,STF	6
26			Long John Lagoon	55 13.63	161 52.70		CH,CO,S,P			WFc				M,STF,GB,ETF,ERS	6
27			Volcano & Bear Bay	55 11.60	161 57.39	S	H,CH,P,CO			WFc,SBn				M,STF,ETF,GB,EG,SRS	6
28			Moss Cape Streams	55 07.71	161 57.72		CH,P							ERS,GB	6
29			Belkofski	55 04.92	162 02.37		CH,P+							M,GB,ERS	6
30			Belfoski Bay	55 06.87	162 10.45		CH,P							M,ETF,GB,ERS,ETF,STF,SRS	6

Aleutians Subarea – East A Zone
Site Selection Matrix

Seletion #	Priority	GRS #	Site Name	Lat. N	Lon. W	Marine Mammals	Fish	Subsistence	Cultural Resources	Birds	High Recreational Use	Commercial Fishing	Land Mgt. Designations	Coastal Habitat	ESI MAP
31			Bold Cape	55 01.89	162 13.09					SBn				ERS,GB	6
33			Lenard Harbor/Cold Bay	55 08.59	162 26.79		H,P,CH,CO			WFC-E,				ETF,EG,SRS,M,GB,EG	6
34			Mortensens/Old Man Lagoon	55 06.87	162 35.25		CO,S,CH			WFC-E,				STF,M,ETF,GB,EG	9
36			Thinpoint Cove	54 57.77	162 38.05		CH,P			WFC				EG,ETF,ERS	10
37			Sandy Cove	54 26.24	162 48.56		Ch,P							GR,M	10
38			Amagat Island	54 53.98	162 53.05					SBn				ERS,GB	10
39			Morzhovoi Bay-Mouth	54 55.90	162 58.01					WFc,SBn				EG,GB,ERS	10
40			Littlejohn Lagoon-Morzhovoi Bay	55 01.31	162 57.36		CH,P			WFc,				STF,M,GB	10
41			Big Lagoon-Morzhovoi Bay	55 04.96	163 09.53	S, O	S			WFc,SBn				ETF,M,GB,EG	10
42			Ikatan Bay Stream #1	54 54.00	163 07.82		CH,P+,S							GB,ERS	10
43			Ikatan Bay Stream #2	54 51.59	163 12.08		P,S							GB,ERS	10
44			Sankin Island/Sankin Bay	54 49.04	163 16.94	S	P			WFc-E, SBn				GB,ERS,EG	10
45			False Pass-Unimak Island	54 51.48	163 24.44		P,CH							EG,GB	10
46			Ikatan Bay-Head	54 47.76	163 17.82	S	P,S			WFc-E, SBn				ETF,GB,EG	10
47			Ikatok Peak Stream	54 45.22	163 0832		P							M,ETF,ERS,GB	10
48			Cape Pankof Rookery	54 39.63	163 03.70					SBn				ERS	10
49			West Anchor Cove/Dora Harbor	54 40.62	163 13.43		P			WFc-E, SBn				ERS,GB	10
50			Bird Island	54 40.04	163 17.40	SL,S				WFc-E, SBn				ERS	10
51			Otter Cove	54 42.77	163 21.96		CH,P			WFc				ERS	10
52			Lazaref River/Cape	54 37.01	163 33.15	SL,S	CH,S							ERS,GB	10
53			Brown Pk salmon stream	54 37.76	163 47.76		CH							GB	10
54			Unimak Bight salmon stream	54 32.50	163 19.02		Ch							GB	11
55			Cape Lutke Rookery	54 28.32	163 20.50	SL				SBn				ERS	12
56			Scotch Cap Rookery	54 24.07	163 47.63	SL								ERS,GB	12
57			Sennet Pt. Rookery	54 28.92	164 54.94	SL				SBn				ERS,GB	12
58			Sealion Pt.	54 34.80	164 57.74	SL				SBn				ERS	11
59			Pogromni River	54 44.30	164 39.12		S							GB	11
60			Cave Pt. Rookery	54 47.17	164 37.53	SL				SBn				GB,ERS	11
61			Okksenof Pt.	54 52.78	164 33.74	SL	CH,P			SBn				ERS	11
62			Christianson/Peterson Lagoons	54 55.59	164 15.06		CH,P,S+			WFc,				EG,GB	11
63			North Creek	54.59.98	163 58.03		CH,CO							GB	10
64			Otter Pt.	55 03.28	163 43.88	O	CH							GB	9
65			Swanson Lagoon&Salmon Stream	55 02.94	163 37.61	O	CH,CO,S							M,GB,STF	9
66			St. Catherine Cove	55 01.10	163 29.15	O	CH,CO,S	I		SBn,WFc				M,ETF,GB,EG	9
67			Trader Cove/Morzhovoi	54 54.68	163 18.88		P,CH			WFc				STF,GB	10
68			Hotsprings Bay	54 57.30	163 17.31		P,CH			WFc				STF,GB	10
69			Hook Bay	55 03.82	163 19.88	S,O	S	I		WFc,SBc				ETF,EG,M	9
72			North/Cathedral&2 Rivers	55 37.40	162 20.75		K,Ch,S,CO			WFc				GB,ETF	5
73			W. of Cape Lieskof Streams	55 44.77	162 07.84		K,Ch,S,CO							ERS,GB	5
74			W. of Franks Pt. Stream	55 49.34	161 58.28		K,Ch,S,P,SH			WFc				GB	5

Aleutians Subarea – East A Zone
Site Selection Matrix

Seletion #	Priority	GRS #	Site Name	Lat. N	Lon. W	Marine Mammals	Fish	Subsistence	Cultural Resources	Birds	High Recreational Use	Commercial Fishing	Land Mgt. Designations	Coastal Habitat	ESI MAP
78			Herendeen Bay-Head	55 46.21	160 46.48		CH,CO,DV,P+,S			WFc				M,EG,ETF,STF,ERS,SRS,GB	2
79			Coal Creek	55 50.56	160 45.78		CH			WFc				EG,ETF,GB,ERS	2
83			Franks Lagoon/King Salmon River	56 04.79	160 29.31	S,W	CH,K,SH							GB,STF,M	1
84			Bear River	56 08.45	160 27.16		K,CH,CO,S+,SH							GB,M	1
85			Sandy River	56 14.96	160 23.91	O	K,CH,CO,S+,SH							GB	1
86			Cape Seniavin	56 24.95	160 05.56	S, O,SL	CH			WFc-E,SBn				ERS,GB	1
87			Simeonof Island	54 55.56	159 16.67	S,O	H,CH,CO,P			WFc-E,SBn				ERS,GB,ETF,STF,EG	4
88			Chernabura Island	54 47.05	159 33.34	SL,O				WFc-E				ERS,GB,EG	4
89			Bird Island	54 49.49	159 45.15	S,O				WFc-E,SBn				ERS,GB,EG	4
90			Little Koniuji/Heredeen/Atkins Islands	55 03.44	159 24.53	SL,O				WFc-E,SBn				ERS,GB,EG	4
91			Twins Islands	54 57.80	159 52.05	SL				SBn				ERS	4
92			Near Island	54 56.66	160 02.81					SBn				ERS	4
93			South Nagai Island	54 54.39	160 15.06	SL,O				WFc-E,SBn				GB,ERS,EG	4
94			Larson/East Bight Bays-Nagai Is.	55 04.23	159 26.54	S, O	CH,P,S			WFc-E				M,GB,ERS,EG	3
95			North Bight-Nagai Is.	55 11.43	159 55.96	S	P			WFc-E,SBN				GB,GB,SRS,EG	3
96			Porpoise Harbor-Nagai Is.	55 13.89	159 58.18	SL,O,S	CH,P,S			WFc-E				GB,GB,SRS,EG	3
97			Sanborn Harbor	55 08.67	160 02.13	O	CO,CH,P			WFc-E				M,GB,ERS,SRS,EG	3
98			Falmouth Harbor	55 04.89	160 08.25	O	CH,P			WFc-E,SBn				STF,GB,ERS	3
99			Turner/Bendal/Spectacle Islands	55 04.63	159 47.60	S,O				WFc-E,SBn				ERS,EG,GB	3
100			South Big Koniuji Island	55 05.86	159 33.26	S,O,SL				WFc-E,SBn				GB,SRS,ERS,ETF,SRS,EG	3
101			North Big Koniuji Island	55 09.77	159 32.16	S,O,SL				WFc-E,SBn				M,GB,SRS,ERS,ETF,SRS,EG	3
102			Andronica/Haystack/Whaleback	55 18.59	160 02.81	SL,O				WFc-E,SBn				GB,ERS,EG	3
103			Karpa Island	55 30.50	160 03.09					SBn				ERS	2
104			Korovin Island	55 25.92	160 14.24	SL,O	H,CO,P,S			WFc-E,SBn				M,GB,ERS,EG,SRS	3
105			East Popof Island	55 20.37	160 19.24	O	P			WFc-E,SBn				SRS,ERS,GB,EG	3
106			South Popof Island/Egg Island	55 16.99	160 25.56	S,O	CO,DV			WFc-E,SBn				EG,ERS,GB	3
107			Sand Point- Popof Island	55 19.92	160 30.32	O	CO,P			WFc-E				SRS,EG,ERS	3
108			North Popof Island	55 20.95	160 25.61	O	P			WFc-E				ERS,EG,GB	3
109			Zachary Bay-Unga Island	55 21.43	160 37.70	S,O	CH,P			WFc-E,SBn				ETF,STF,SRS,GB,M,ERS,EG	3
110			Unga Spit to Bay Pt.-Unga Island	55 22.49	160 48.79	O	CH,P+			WFc-E,SBn				M,ETF,GB,ERS,STF	3
111			Pinnacle Pt. Salmon Streams.-Unga Island	55 15.27	160 15.11	O	CH,P			WFc-E				GB,ERS	3
112			Archeredin Pt .-Unga Island	55 07.40	160 49.07	SL,O				WFc-E				ERS	3
113			Archeredin Bay.-Unga Island	55 10.19	160 43.30		P,S,SH			WFc-E				M,GB,ERS	3
114			Unga Cape./Delarof Hbr.-Unga Island	55 07.87	160 31.38	SL,S,O	P,CH			WFc-E,SBn				ESR,GB,ETF,STF,M	3
115			Baralof Bay-.-Unga Island	55 14.05	160 31.53	O	P+,CH,SH			WFc				M,GB,SRS	3
116			East Unga Island	55 17.63	160 34.44	O	P,SH			WFc				M,GB,ERS	3
			Zone A-Pavlof Islands												
117			Kennoys Islands	55 09.37	161 06.04	S				SBn				ERS	6
118			Jude/Omega Islands	55 15.25	161 09.75	SL				SBn				ERS	6
119			North Wosnesenski Island	55 13.03	161 22.41	S	S			WFc-E,SBn				GB,ERS	6

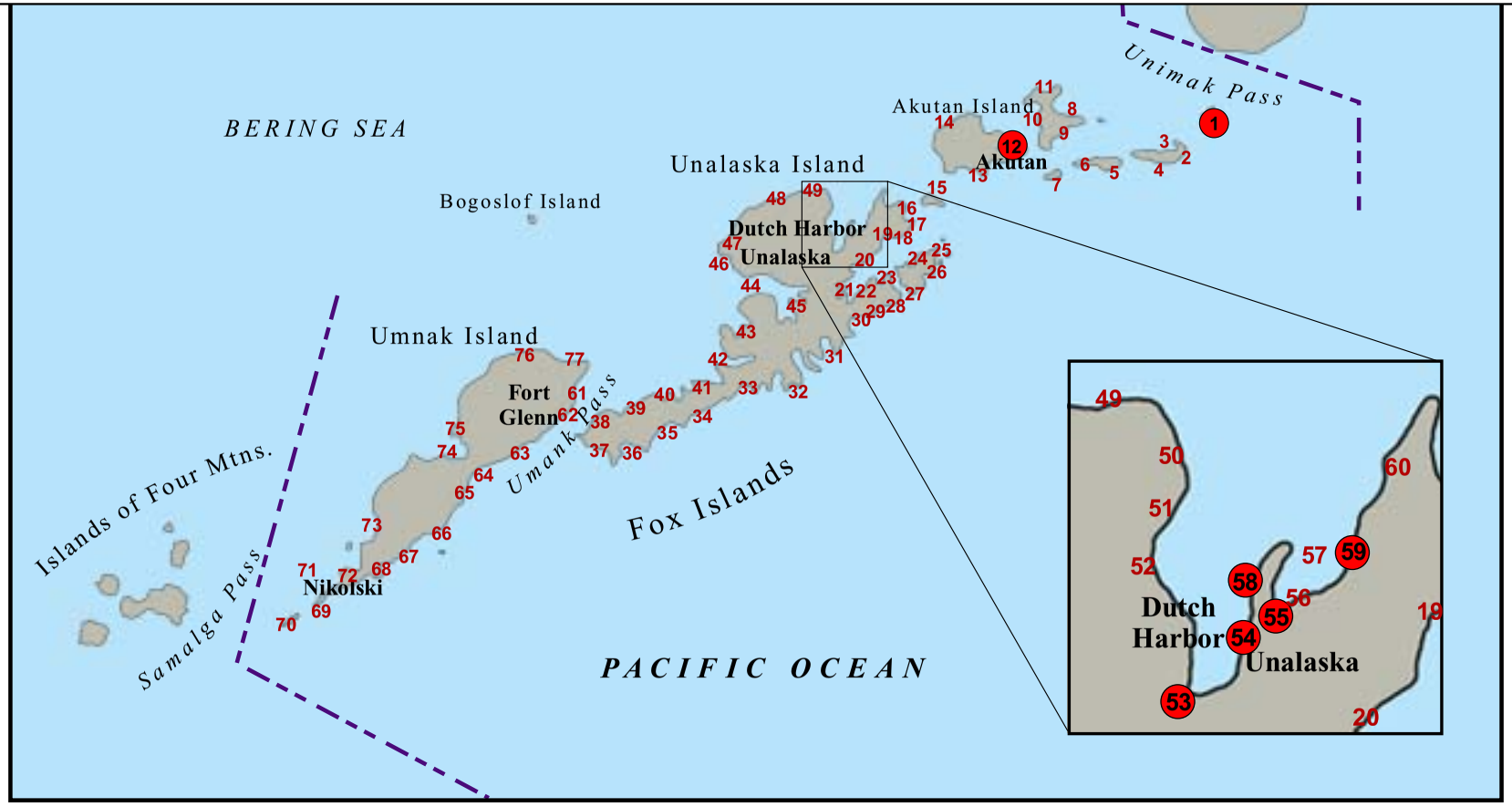
Aleutians Subarea – East A Zone
Site Selection Matrix

Seletion #	Priority	GRS #	Site Name	Lat. N	Lon. W	Marine Mammals	Fish	Subsistence	Cultural Resources	Birds	High Recreational Use	Commercial Fishing	Land Mgt. Designations	Coastal Habitat	ESI MAP
120			South Wosnesenski Island	55 10.13	161 22.83	SL				WFc-E,SBn				GB,ERS	6
121			East/South/Olga/John Rocks	55 00.06	161 31.27	SL								ERS	6
122			Sushilnoi Islands/Pinnacle Rock	54 49.11	161 49.77	S,O,SL				WFc-E,SBn				ERS,EG	6
123			Poperchenoi Islands	55 05.04	161 34.44	O				SBn				GB,ERS	6
124			East Ukolnoi Island	55 14.11	161 32.74	S	CH,P,S			WFc-E,SBn				GB,ERS	6
125			West Ukolnoi Islands	55 13.05	161 41.39		CH,P,S			WFc				GB,ERS	6
126			Southeast Dolgoi Island	55 04.36	161 43.01	O								GB,ERS	6
127			North Dolgoi Island	55 08.94	161 42.89	S								GB,ERS	6
128			Dolgoi Harbor	55 06.18	161 47.75	S,O	H,P			SBn				GB,ERS	6
129			Hunter/Rona/Outer Iliasik Islands	54 59.42	161 50.52	S,O				WFc-E,SBn				ERS,EG	6
130			Sandman Reefs	54 41.82	162 14.43	S,O,SL				WFc-E,SBn				ERS,EG	6
131			Chernl Island/Hague Rock	54 37.95	162 22,29	SL				WFc-E,SBn				ERS,EG	6
132			SouthwestDeer/Sozavarika/High Islands	54 51.90	162 22.51	S,O	P+			WFc-E,SBn				ERS,EG,GB	6
133			East Deer/Bunyan/Patton Islands	54 55.97	162 14.32	S,O	P+			WFc-E,SBn				ERS,EG,GB,M	6
134			Northeast Deer/Fox Islands	54 56.76	162 23.99	O	P			WFc-E,SBn				ERS,EG,GB,SRS,STF	6
135			Caton/Elma Islands	54 21.84	162 25.75	O,SL				WFc-E				ERS,EG,GB,M	6
136			Sanak Reefs	54 19.08	162 43.11	SL,O				WFc-E,SBn				ERS	6
137			Southeast Sanak Island	54 24.13	162 37.01	O	P,S			WFc-E				GB,ERS	6
138			Southwest Sanak/Long Island	54 26.12	162 49.26	O	P,S			WFc-E,SBn				ERS,ETF,STF,EG	6
139			North Sanak Island	54 28.74	162 44.09	S,O	P			WFc				ERS,GB	6
140			Amak Island	55 24.08	163 09.91	SL,S,O				SBn				ERS,GB	9

version: May 31, 2004

Aleutians Subarea – East B Zone, SELECTED & CANDIDATE SITES for GEOGRAPHIC RESPONSE STRATEGIES

AEB01 – Ugamak/Aiktak Islands
AEB02 – Northeast Tigalda/Kaligagin Islands
AEB03 – Northwest Tigalda Island
AEB04 – Southwest Tigalda Island
AEB05 – East Avatanak Island
AEB06 – West Avatanak Island
AEB07 – Rootok Island
AEB08 – Billings to Round Head-Akun Island
AEB09 – Round Head to Jackass Point-Akun Is.
AEB10 – Lost Hbr./Surf Bay-Akun Is.
AEB11 – North Akun Is.
AEB12 – Akutan Harbor
AEB13 – Battery Pt to Cape Morgan-Akutan Is.
AEB14 – Reef Pt. To North Head
AEB15 – Unalga/Baby Island
AEB16 – English Bay-Unalaska Is.
AEB17 – Brundage Head/Deep Bay
AEB18 – Agamgik Bay&Cove to the west
AEB19 – Ugada/Small Bay
AEB20 – Uniktali Bay
AEB21 – Beaver INS&NWRet-Mouth
AEB22 – Amugul Bay
AEB23 – Udagak Straight
AEB24 – North Sedanka Island
AEB25 – East Sedanka Old Man Rks/Egg Is.
AEB26 – South Sedanka Island
AEB27 – Udagak Straight to Hive Bay
AEB28 – Hive Bay to Staraya Bay
AEB29 – Protection Bay
AEB30 – Three Island/Blueberry Bays
AEB31 – Usof Bay
AEB32 – Open/Raven/Eagle Bay
AEB33 – Kuliliak Bay
AEB34 – Riding Cove/Lance Point
AEB35 – Huddle Rocks to Surveyor Bay
AEB36 – Surveyor Bay
AEB37 – Cape Izigan to Konets Head
AEB38 – No Name Cove& Station Bay
AEB39 – West Pt to Cape Aspid-Chernofshi Hbr.
AEB40 – Aspid/Alimuda Bay
AEB41 – Buck/McIver Bights-Kashega Bay
AEB42 – PumiceStone Bay
AEB43 – Spray Cape/Skan Bay
AEB44 – Mouth of Makushin Bay
AEB45 – Head of Makushin Bay
AEB46 – Volcano Bay/Cape Kovrizhka
AEB47 – Koriga Pt to Pt Tebenkof
AEB48 – Driftwood Bay
AEB49 – Cape Winslow/Reese Bay
AEB50 – Eider Pt/Wide Bay
AEB51 – Broad Bay
AEB52 – Nateekin Bay
AEB53 – Head of Captains Bay
AEB54 – Obernoi Pt Stream
AEB55 – Iliuliuk River
AEB56 – Iliuliuk Harbor/South Channel
AEB57 – Dutch Harbor
AEB58 – Hog Island
AEB59 – Summer Bay
AEB60 – Constantine Hbr./Princess Head
AEB61 – Otter Bight-Umnak Island
AEB62 – Umnak Pass/Ship Rock
AEB63 – Kettle Cape Streams
AEB64 – Partoff Cove/Thumb Pt Stream/The Pillars
AEB65 – Russian Bay & adjacent stream
AEB66 – Amos Bay
AEB67 – Vseidof Island
AEB68 – Diftwood Bay
AEB69 – Cape Sagak
AEB70 – Samalga Island
AEB71 – Adugak Island
AEB72 – Nikolski Bay
AEB73 – Okee Bay
AEB74 – Inanudak Bay
AEB75 – Cape Aslik& adjacent stream
AEB76 – Cape Ashishik Pt.
AEB77 – Cape Idak & adjacent stream



Aleutians Subarea – East B Zone

Site Selection Matrix

Seletion #	Priority	GRS #	Site Name	Lat. N	Lon. W	Marine Mammals	Fish	Subsistence	Cultural Resources	Birds	High Recreational Use	Commercial Fishing	Land Mgt. Designations	Coastal Habitat	ESI MAP
1	H		Ugamak/Aiktak Islands	54 11.70	164 50.11	SL,S,O				SBn				ERS	12
12	H		Akutan Harbor	54 08.10	165 43.80	O	P	F		SBn				M,ETF,GB,ERS	13
53	H		Head of Captains Bay	53 50.32	166 36.23		CH,CO,P	F		WFc-E,SBf,SBn,SHBc				GB,M,SRS,STF,EG	1
54	H		Obernoi Pt Stream	53 51.33	166 33.93		CO,P	F		WFc-E,SBf,SBn,SHBc				STF,GB,EG	1
55	H		Iliuliuk River	53 52.69	166 32.54		CO,P,S	F		WFc-E,SBf,SBn,SHBc	SF			GB,STF,M	1
58	H		Hog Island	53 54.24	166 34.27	S,O		F		WFc-E,SBf,SBn,SHBc				GB,ERS	1
59	H		Summer Bay	53 54.65	166 27.16	S,O	CO,P,S	I,F		WFc-E,SBf,SBn,SHBc	SF			GB,ETF,STF,M,ERS	1
2			Northeast Tigalda/Kaligagin Islands	54 08.78	164 56.86	SL,S,O				SBn				ERS,GB	12
3			Northwest Tigalda Island	54 07.97	165 09.61	S,O								GB,ERS	12
4			Southwest Tigalda Island	54 04.57	165 10.60	S,O				SBn				GB,ERS	12
5			East Avatanak Island	54 04.72	165 15.73	S,O								GB,ERS	12
6			West Avatanak Island	54 04.74	165 28.78	SL,S,O								GB,ERS	12
7			Rootok Island	54 02.82	165 31.36	SL,S,O				SBn				GB,ERS	12&13
8			Billings to Round Head-Akun Island	54 15.07	165 27.08	SL,S,O				SBn				GB,ERS,STF	12&13
9			Round Head to Jackass Point-Akun Is.	54 09.13	165 29.33	SL,S,O				SBn				GB,ERS	12&13
10			Lost Hbr./Surf Bay-Akun Is.	54 11.73	165 39.29	S,O				SBn				GB	13
11			North Akun Is.	54 17.93	165 37.68	SL,S,O				SBn				GB,ERS	13
13			Battery Pt to Cape Morgan-Akutan Is.	54 02.57	165 57.67	SL,O				SBn				GB,ERS	13
14			Reef Pt. To North Head	54 11.64	166 02.86	SL,O				SBn				GB,ERS	13
15			Unalga/Baby Island	53 59.65	166 06.19	S,O				SBn				ERS	13
16			English Bay-Unalaska Is.	53 56.97	166 14.26	S,O	P			WFc, SBf				GB,SRS,ETF,M	1
17			Brundage Head/Deep Bay	53 54.15	166 12.41	S,O	P			WFc, SBf				GB,ERS,ETF	1
18			Agamgik Bay&Cove to the west	53 50.97	166 21.97	S,O	P,CO,S							GB,ETF,M,ERS	1
19			Ugada/Small Bay	53 48.13	166 24.97	S,O	P							GB,ETF,M,ERS	1
20			Uniktali Bay	53 47.06	166 29.03	S,O	P			WFc,SBf				GB,ETF,M,ERS	1
21			Beaver INS&NWRet-Mouth	53 52.57	166 11.71	S,O	p			WFc				ETF,GB,ERS,M	1
22			Amugul Bay	53 45.56	166 23.66	S,O				WFc, SBn,SHBc				ETF,GB,ERS,M	1
23			Udagak Straight	53 44.70	166 18.11	S,O	P			WFc, SBn,SHBc				GB,ETF,M,ERS	1
24			North Sedanka Island	53 49.40	166 14.24	S,O	P							GB,ETF,M,ERS	1
25			East Sedanka Old Man Rks/Egg Island	53 50.32	166 03.22	SL,S,O				WFc,SBn				GB,ETF,M,ERS	1
26			South Sedanka Island	53 43.99	166 09.02	S,O	P							GB,ERS	1
27			Udagak Straight to Hive Bay	53 39.88	166 19.37	O				WFc, SBn,SHBc				ERS,GB,STF,M	1
28			Hive Bay to Staraya Bay	53 37.40	166 26.63	S,O	P,S,DV			WFc, SBn,SHBc				ERS,GB,STF,ETF, M	1
29			Protection Bay	53 33.70	166 32.22	S	P							ERS,GB,M,SRS	1
30			Three Island/Blueberry Bays	53 31.07	166 37.02	S,O	P			SBn				ERS,SRS,GB,M	1
31			Usof Bay	53 28.53	166 42.61	SL,S,O	P			SBn				ERS,SRS,GB,M	1&2
32			Open/Raven/Eagle Bay	53 25.48	166 50.30	S,O	P,DV			SBn				ERS,SRS,GB,M	2
33			Kuliliak Bay	53 25.45	167 02.49	S,O	P,S			SBn				ERS,GB,SRS	2
34			Riding Cove/Lance Point	53 21.64	167 15.66	S,O	P			SBn				ERS,GB	2
35			Huddle Rocks to Surveyor Bay	53 19.55	167 24.57	S,O	P,DV			SBn				ERS,GB	2

Aleutians Subarea – East B Zone
Site Selection Matrix

Seletion #	Priority	GRS #	Site Name	Lat. N	Lon. W	Marine Mammals	Fish	Subsistence	Cultural Resources	Birds	High Recreational Use	Commercial Fishing	Land Mgt. Designations	Coastal Habitat	ESI MAP
36			Surveyor Bay	53 15.32	167 34.35	S,O	P,CO,DV			SBn				ERS,GB,ETF	2
37			Cape Izigan to Konets Head	53 16.07	167 46.38	SL,S,O	P,DV			SBn,WFc,SBf				ERS,GB,ETF	2
38			No Name Cove& Station Bay	53 23.71	167 38.49	S,O	P,DV			SBn				ERS,GB,ETF	2
39			West Pt to Cape Aspid-Chernofshi Hbr.	53 25.05	167 33.17	O	P,CO			SBn				ERS,GB,M	2
40			Aspid/Alimuda Bay	53 27.12	167 23.97	S,O	P			SBn				ERS,GB	2
41			Buck/McIver Bights-Kashega Bay	53 29.84	167 13.81	S,O	P,S			WFc-E,SBf,SBn,SHBc				ERS,GB,M,SRS,STF	2
42			PumiceStone Bay	53 32.89	167 09.47	S,O	P,CO			SBn				ERS,GB,SRS,M	1
43			Spray Cape/Skan Bay	53 39.19	167 05.32	SL,S,O	P,S			SBn				ERS,GB,M,SRS,STF	1
44			Mouth of Makushin Bay	53 44.32	167 01.72	SL,S,O	P+			SBn,WFc,SBf				ERS,GB	1
45			Head of Makushin Bay	53 44.10	166 51.45	S,O	P			WFc-E,SBf,SBn,SHBc				GB,ETF,M,ERS,SRS,EG	1
46			Volcano Bay/Cape Kovrizhka	53 49.36	167 08.81	O	P,S							GB,ERS,M,ETF	1
47			Koriga Pt to Pt Tebenkof	53 58.99	166 58.04	SL,S,O				SBn				ERS,GB	1
48			Driftwood Bay	53 59.65	166 50.11	O	P,CO			SBn				ERS,GB	1
49			Cape Winslow/Reese Bay	54 00.62	166 43.51	SL	S	F		SBn				STF,M,GB,ERS	1
50			Eider Pt/Wide Bay	53 57.11	166 35.69	O	P			WFc-E,SBf,SBn,SHBc				GB,ERS,EG	1
51			Broad Bay	53 54.70	166 37.90	S,O	CH,CO,P,DV	F		WFc-E,SBf,SBn,SHBc				GB,M,ERS,EG	1
52			Nateekin Bay	53 53.28	166 36.33		CO,P+	F		WFc-E,SBf,SBn,SHBc				GB,ETF,EG	1
56			Iliuliuk Harbor/South Channel	53 52.53	166 32.82					WFc-E,SBf,SBn,SHBc				STF,GB	1
57			Dutch Harbor	53 53.82	166 31.39	O				WFc-E,SBf,SBn,SHBc				STF,GB	1
60			Constantine Hbr./Princess Head	53 58.29	166 25.76	S,O				WFc-E,SBf,SBn,SHBc				GB,STF,ERS,M	1
61			Otter Bight-Umnak Island	53 25.79	167 49.33	S,O	CO,P,DV			WFc,SBn,SBf				GB	2
62			Umnak Pass/Ship Rock	53 22.21	167 49.65	S,O				WFc,SBn,SBf				GB	2
63			Kettle Cape Streams	53 14.82	168 13.07	O	P,DV							GB,M	3
64			Partoff Cove/Thumb Pt Stream/The Pillars	53 11.58	168 17.30	SL,O	CO,DV,P,S			SBn				ERS,GB	3
65			Russian Bay & adjacent stream	53 07.75	168 21.54	S,O	P,DV							ERS,ETF,GB	3
66			Amos Bay	53 01.61	168 30.55	S,O	P,DV			SBn,WFc				ERS,GB	3
67			Vseidof Island	53 58.96	168 28.13	SL				SBn,WFc				ERS	3
68			Diftwood Bay	52 56.00	168 43.43	S,O	CO,P,DV			SBn				ERS,GB	3
69			Cape Sagak	52 49.92	169 05.51	S,O				SBn				ERS	3
70			Samalga Island	52 46.88	169 12.02	SL,S,O				SBn,WFc				ERS	3
71			Adugak Island	52 54.45	169 09.77	SL				SBn				ERS	3
72			Nikolski Bay	52 57.08	168 54.50	S,O	CO,P,S			SBn,WFc				ERS	3
73			Okee Bay	53 03.64	168 49.19	S,O	CH,CO,P			SBn				ERS,GB,M	3
74			Inanudak Bay	53 18.09	168 28.76	S,O	CO,P,DV							ERS,GB,M	3
75			Cape Aslik& adjacent stream	53 23.53	168 25.23	SL,S,O	P,DV							ERS,GB	3
76			Cape Ashishik Pt.	53 33.39	168 06.27	SL,S,O								ERS,GB	3
77			Cape Idak & adjacent stream	53 31.35	167 53.00	SL,S,O	P							ERS,GB	3

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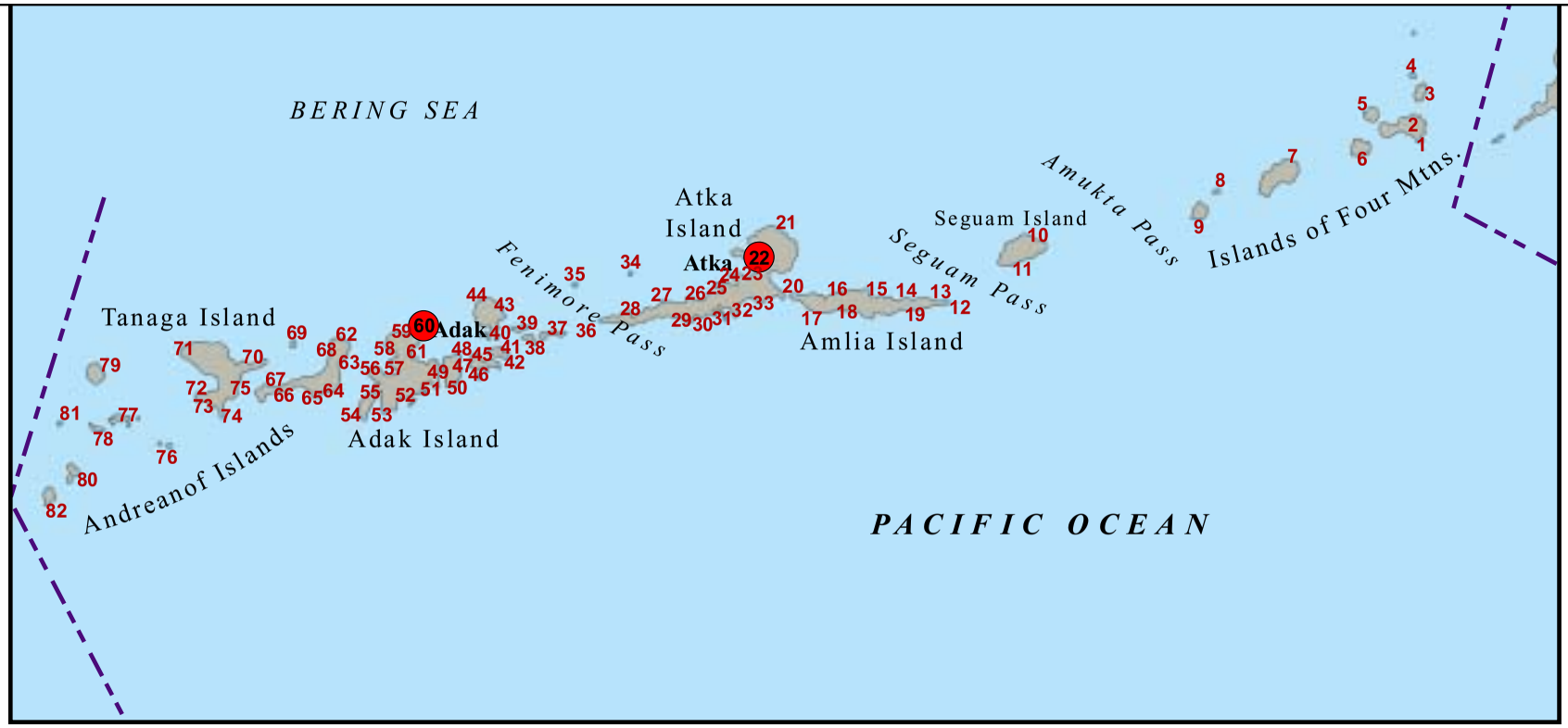
Aleutians Subarea – West A Zone, SELECTED & CANDIDATE SITES for GEOGRAPHIC RESPONSE STRATEGIES

AWA01 – Concord Pt.-Chuginadak Island
AWA02 – Chuginadak Island-North
AWA03 – Kagamil Island
AWA04 – Ulinga Island
AWA05 – Carlisle Island
AWA06 – Herbert Island
AWA07 – Yunaska Island-North
AWA08 – Chagulak Island
AWA09 – Amukta Island
AWA10 – North Seguam Island
AWA11 – South Seguam Island
AWA12 – Agligaduk/Tanadak Islands
AWA13 – Amelia Island-Northeast
AWA14 – Cape Idalug-East
AWA15 – Chalugas Bay-Amelia Island
AWA16 – Amelia Island-Northwest
AWA17 – Amelia Island-Southwest
AWA18 – Amelia Island-Southcentral
AWA19 – Sviechnikof Hbr to Tanadak Is.-Amelia Is.
AWA20 – Nazan Bay-Atka
AWA21 – North Cape to Cape Korovin-Atka Is.
AWA22 – Korovin Bay
AWA23 – Egg Bay
AWA24 – Salt Island/Banner Bay
AWA25 – Deep Bay to Wall Bay-Atka Is.
AWA26 – Kovurof/Podsopochni Bay
AWA27 – Bechevin Bay
AWA28 – Crescent Bay to Cape Kigun
AWA29 – Sergief Bay
AWA30 – Beaver Bay-Atka Is.
AWA31 – Explorer Bay/Sagchudak Island
AWA32 – Kobakof Bay/Amtagis&Sadatanak Is.
AWA33 – Vasilief Bay
AWA34 – Koniuji Island
AWA35 – Kasatochi Island
AWA36 – Ikiginak/Oglodak Isalnd
AWA37 – Tagalak Island-East
AWA38 – Chuguli Island-South
AWA39 – Igitkin Island-West
AWA40 – Tagadak/Kanu/Asuksak/Tanaklak/Aziak Is.
AWA41 – Umak Bight
AWA42 – Anagaksik Island
AWA43 – Great Sitkin Island-East
AWA44 – Great Sitkin Island-West
AWA45 – Little Tanaga Island-North
AWA46 – Little Tanaga Island-South
AWA47 – Cabin Cove/Cemetary Pt.-Kagalaska Is.
AWA48 – Kagalaska Island-North
AWA49 – North Kagalaska Strait-Kagalaska&Adak Is.
AWA50 – South Kagalaska Island
AWA51 – Boot Bay-Adak Island
AWA52 – Camel Cove/Hidden Bay/Crone Is.
AWA53 – Bay of Waterfalls-Adak
AWA54 – Cape Yakak to Hook Pt. Adak Is.
AWA55 – Three Arm Bay
AWA56 – Argonne Pt to Careful Pt
AWA57 – Bay of Islands-Adak Is.
AWA58 – Shagak Bay
AWA59 – Andrew Bay to Cape Moffet
AWA60 – Clam Lagoon/Sweeper Cove
AWA61 – Finger Bay/Scabbard Bay
AWA62 – North Cape-Kanaga Island
AWA63 – Kanaga Island-East
AWA64 – Kanaga Island-Southeast
AWA65 – Point Deceit & bay
AWA66 – Chunu Bay& Cape Chunu
AWA67 – Northwest Kanaga Island
AWA68 – Lakeside Point
AWA69 – Bobrof Island
AWA70 – Gusty Bay-Tanaga Island
AWA71 – Northwest Tanaga Island
AWA72 – Tanga Bay
AWA73 – Lash/South Bays
AWA74 – Twins Bay
AWA75 – East Tanaga Island
AWA76 – Ilak Island/Gramp Rock
AWA77 – Skagul/Ogliuga/Tag/Ugidak Islands
AWA78 – Kavalga Island
AWA79 – Gareloi Island-
AWA80 – Ulak Island
AWA81 – Unalga Island
AWA82 – Amatignak Island-SE



Aleutians Subarea – West A Zone

Site Selection Matrix

Seletion #	Priority	GRS #	Site Name	Lat. N	Lon. W	Marine Mammals	Fish	Subsistence	Cultural Resources	Birds	High Recreational Use	Commercial Fishing	Land Mgt. Designations	Coastal Habitat	ESI MAP
22	H		Korovin Bay-Lagoon	52 15.48	174 24.75	O	CO,P,S	I,F,B		WFc				ERS,GB,M,EG	5
60	H		Clam Lagoon/Sweeper Cove	51 53.19	176 34.30	S,O	CO,P,S			SBn				ERS,M	6
1			Concord Pt.-Chuginadak Island	52 46.13	169 42.67	SL,S,O				WFc,SBn				ERS	3
2			Chuginadak Island-North	52 53.50	169 43.44	S,O				WFc,SBn				ERS,GB	3
3			Kagamil Island	53 02.47	169 40.26	SL,S,O				WFc,SBn				ERS,GB	3
4			Ulinga Island	53 04.65	169 47.89	SL,S,O				WFc,SBn				ERS,GB	3
5			Carlisle Island	52 55.22	170 06.46	SL,S,O				WFc,SBn				ERS,GB	3
6			Herbert Island	52 42.92	170 04.92	SL,S,O				WFc,SBn				ERS,GB	3
7			Yunaska Island-North	52 44.40	170 38.76	SL,S,O				WFc,SBn				ERS	4
8			Chagulak Island	52 34.01	170 10.89	SL,S,O				WFc,SBn				ERS	4
9			Amukta Island	52.27.02	171 18.25	SL,S,O				WFc,SBn				ERS	4
10			North Seguam Island	52 23.64	172 27.25	SL,S,O				WFc,SBn				ERS	4
11			South Seguam Island	52 14.74	172 34.44	SL,S,O				WFc,SBn				ERS	4
12			Agligaduk/Tanadak Islands	52 05.20	172 55.49	S,SL				WFc,SBn				ERS	4
13			Amelia Island-Northeast	52 05.91	173 03.06	S,SL	P,S			WFc,SBn				ERS,GB	4
14			Cape Idalug-East	52 07.97	173 29.58	SL,S,O	P,S			SBn				ERS,GB,M	5
15			Chalugas Bay-Amelia Island	52 09.13	173 34.54	S,O	CH,P			WFc				ERS,M	5
16			Amelia Island-Northwest	52 08.12	173 51.12	S,O	P,CH,S			WFc,SBn				ERS,GB,M	5
17			Amelia Island-Southwest	52 02.71	173 52.39	SL,S,O	P,S			WFc				ERS,GB	5
18			Amelia Island-Southcentral	52 03.33	173 37.84	O	CH,P							ERS,GB	5
19			Sviechnikof Hbr to Tanadak Is.-Amelia Is.	52 01.61	173 23.06	SL,S,O	CH,P,DV			SBn				ERS,GB	4&5
20			Nazan Bay-Atka	52 11.32	174 05.44	O	CO,P,DV	I		WFC				ERS,GB	5
21			North Cape to Cape Korovin-Atka Is.	52 23.00	174 21.24	SL,O	P			WFc				ERS,GB,M	5
23			Egg Bay	52 12.00	174 29.60	S,O	CO,P							ERS	5
24			Salt Island/Banner Bay	52 09.75	174 36.39	SL,S,O	CO,P			SBn				ERS,M	5
25			Deep Bay to Wall Bay-Atka Is.	52 07.40	174 44.69	S,O	P,S,DV							ERS	5
26			Kovurof/Podsopochni Bay	52 05.37	174 58.26	S,O	P,S							ERS	5
27			Bechevin Bay	52 03.45	175 05.29	S	CO,P							ERS,GB,M	5
28			Crescent Bay to Cape Kigun	52 02.98	175 15.83	O	P,CO,DV							ERS,GB	5
29			Sergief Bay	51 59.66	175 01.11	S,O	P							ERS	5
30			Beaver Bay-Atka Is.	52 01.02	174 31.74		P,CO							ERS,GB,M	5
31			Explorer Bay/Sagchudak Island	52 01.08	174 32.38	S	P,S			SBn				ERS,GB	5
32			Kobakof Bay/Amtagis&Sadatanak Islands	52 02.44	174 27.49	S	P			SBn				ERS,GB	5
33			Vasilief Bay	52 05.10	174 19.48	S	P,CH,CO			SBn				ERS	5
34			Koniuji Island	52 13.19	175 07.98	SL,S				SBn					
35			Kasatochi Island	52 11.24	175 31.05	S,SL				SBn					
36			Ikiginak/Oglodak Isalnd	51 59.04	175 28.08	SL,S				SBn				ERS	5
37			Tagalak Island-East	51 51.06	175 39.12	SL,S,O				SBn				ERS	5
38			Chuguli Island-South	51 54.87	175 46.62	S,SL				SBn				ERS	5
39			Igitkin Island-West	51 59.34	175 57.39	S,SL,O				SBn				ERS	5
40			Tagadak/Kanu/Asuksak/Tanaklak/Aziak Is.	51 56.83	176 04.03	S,O				SBn				ERS	5&6
41			Umak Bight	51 53.88	175 59.19	S,O	P							ERS,GB,M	5
42			Anagaksik Island	51 50.86	175 52.86	SL				SBn				ERS	5

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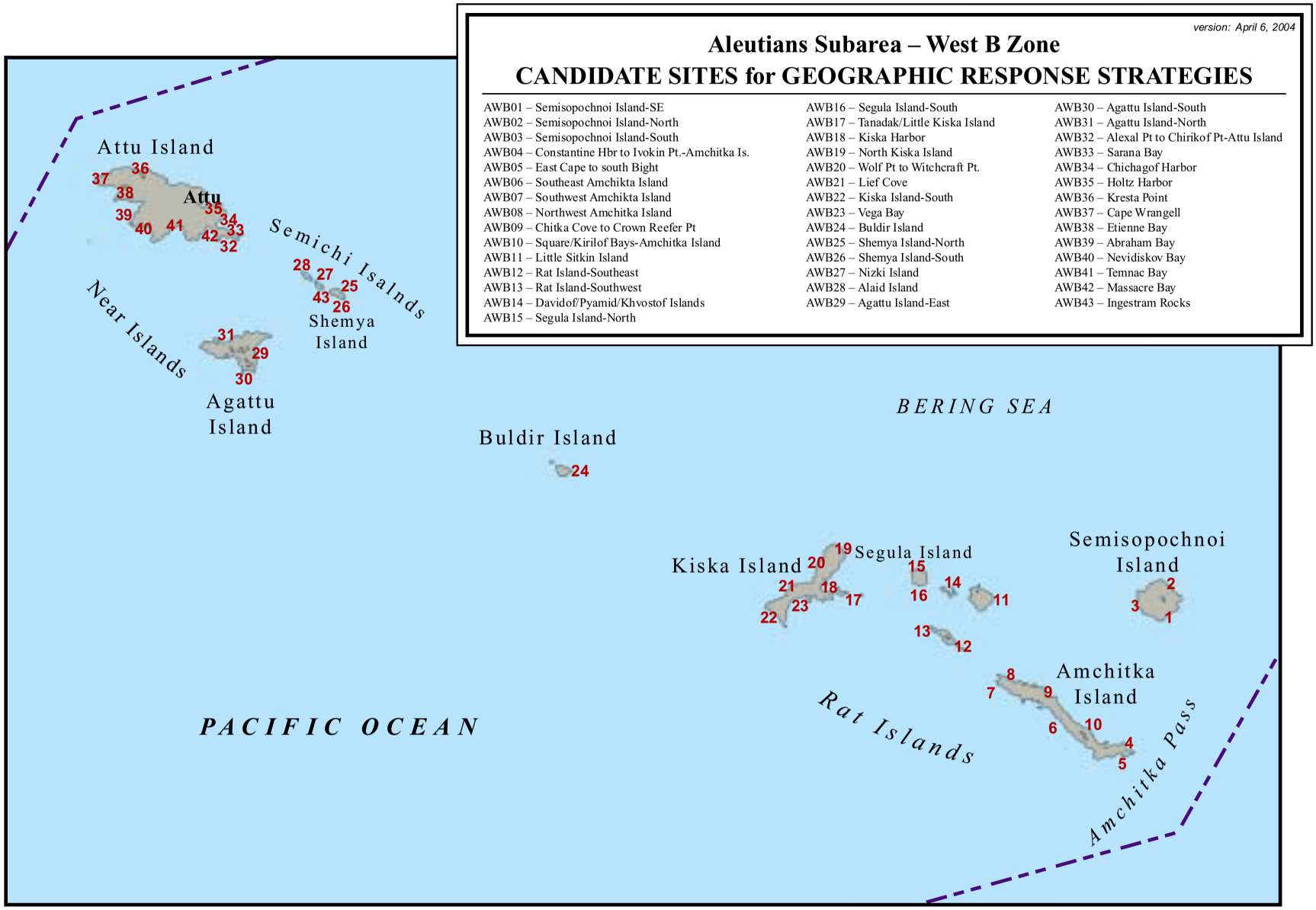
Aleutians Subarea – West A Zone

Site Selection Matrix

Seletion #	Priority	GRS #	Site Name	Lat. N	Lon. W	Marine Mammals	Fish	Subsistence	Cultural Resources	Birds	High Recreational Use	Commercial Fishing	Land Mgt. Designations	Coastal Habitat	ESI MAP
43			Great Sitkin Island-East	52 04.66	176 00.25	SL,S	P			SBn				ERS,GB	5
44			Great Sitkin Island-West	52 02.72	176 12.80	S,SL,O				SBn				ERS	5
45			Little Tanaga Island-North	51 51.70	176 07.19	S,O	CO,P			SBn				ERS,GB	5&6
46			Little Tanaga Island-South	51 46.41	176 08.48	SL,S,O	CO,P			SBn				ERS,GB	5&6
47			Cabin Cove/Cemetary Pt.-Kagalaska Is.	51 49.39	176 16.62	S,SL,O				SBn				ERS,GB,M	6
48			Kagalaska Island-North	51 52.18	176 20.32	SL,O				SBn				ERS	6
49			North Kagalaska Strait-Kagalaska&Adak Is.	51 50.30	176 25.56	S,O	P,DV			SBn				ERS,GB	6
50			South Kagalaska Island	51 43.38	176 21.04	S,O	P,S,DV			SBn				ERS,GB,M	6
51			Boot Bay-Adak Island	51 43.33	176 30.10	S,O	CH,CO,P,S			SBn				ERS	6
52			Camel Cove/Hidden Bay/Crone Island	51 40.81	176 37.38	S,SL,O	CH,CO,P,DV,S			SBn				ERS	6
53			Bay of Waterfalls-Adak	51 38.25	176 51.55	S,O	CO,CH,P			SBn				ERS	6
54			Cape Yakak to Hook Pt. Adak Is.	51 37.33	176 59.65	SL,S,O	P,CO			SBn				ERS	6
55			Three Arm Bay	51 44.39	176 54.55	S,O	Ch,P,CO,S			Sbn				ERS	6
56			Argonne Pt to Careful Pt	51 49.43	176 53.50	SL,S,O								ERS	6
57			Bay of Islands-Adak Is.	51 49.21	176 49.00	S,O	Ch,P,CO,S			SBn				ERS	6
58			Shagak Bay	51 52.28	176 45.87	O	CH,P			SBn				ERS	6
59			Andrew Bay to Cape Moffet	51 58.68	176 42.08	SL,S,O	CH,CO,P,DV,S			SBn				ERS,M	6
61			Finger Bay/Scabbard Bay	51 51.11	176 32.79	O	CH,CO,P,S							ERS	6
62			North Cape-Kanaga Island	51 56.75	177 09.78	SL								ERS	6
63			Kanaga Island-East	51 48.24	177 03.66	S,O	P,DV							ERS,GB	6
64			Kanaga Island-Southeast	51 41.37	177 12.07	S,O	P,DV							ERS,M	6
65			Point Deceit & bay	51 42.61	177 22.96	S,O	P			SBn				ERS,GB	6
66			Chunu Bay& Cape Chunu	51 39.87	177 37.06	SL,S,O				SBn				ERS,GB	6
67			Northwest Kanaga Island	51 45.50	177 30.25	SL,S,O								ERS,GB	6
68			Lakeside Point	51 50.91	177 13.50	O	P,DV							ERS,GB,M	6
69			Bobrof Island	51 53.72	177 27.69	S,SL				SBn				ERS	6
70			Gusty Bay-Tanaga Island	51 51.26	177 49.86	O	P,DV							ERS,GB,M	6
71			Northwest Tanaga Island	51 55.30	178 00.90	SL,S,O								ERS	6
72			Tanga Bay	51 45.18	178 02.66	S,O	P			WFc,SBn				ERS,GB	6
73			Lash/South Bays	51 37.93	178 02.11	SL,S,O	P			WFc,SBn				ERS	6
74			Twins Bay	51 40.21	177 53.02	S,O	CO,P,DV							ERS,GB	6
75			East Tanaga Island	51 45.45	177 45.30	S,O	P,DV			SBn				ERS,GB	6
76			Ilak Island/Gramp Rock	51 21.80	178 19.15	SL,S,O				SBn				ERS	6
77			Skagul/Ogliuga/Tag/Ugidak Islands	51 35.33	178 34.44	SL,S,O				WFc,SBn				ERS,GB	6
78			Kavalga Island	51 34.99	178 51.85	SL,S,O				WFc,SBn				ERS	6
79			Gareloi Island-	51 44.40	178 46.80	SL,O				SBn				ERS	6
80			Ulak Island	51 18.15	178 57.07	SL,S,O				SBn				ERS	6
81			Unalga Island	51 33.92	179 04.02	SL,S,O				SBn				ERS	7
82			Amatignak Island-SE	51 13.10	179 05.39	SL,S				SBn				ERS	7



version: April 6, 2004

Aleutians Subarea – West B Zone

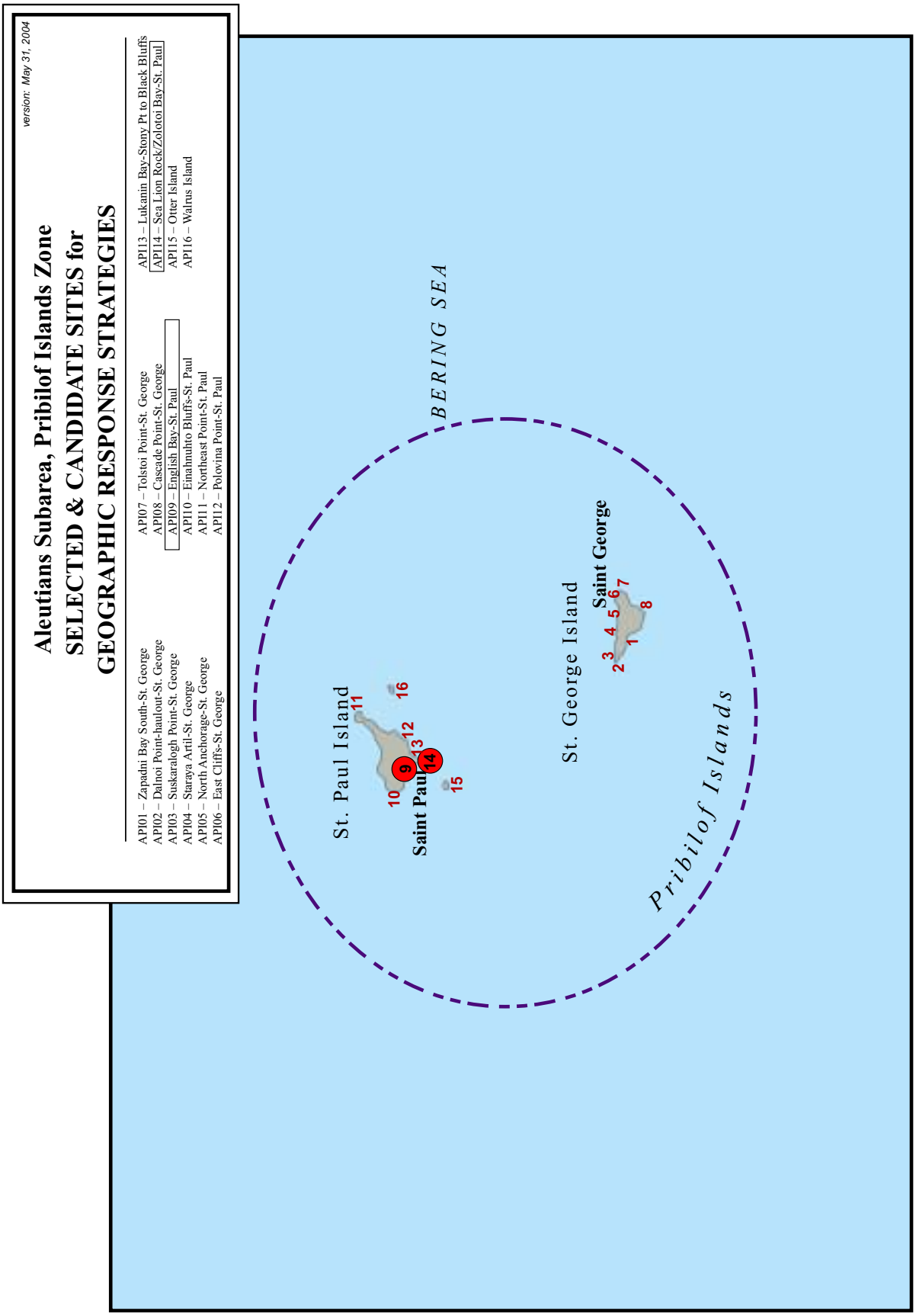
CANDIDATE SITES for GEOGRAPHIC RESPONSE STRATEGIES

AWB01 – Semisopochnoi Island-SE
AWB02 – Semisopochnoi Island-North
AWB03 – Semisopochnoi Island-South
AWB04 – Constantine Hbr to Ivokin Pt.-Amchitka Is.
AWB05 – East Cape to south Bight
AWB06 – Southeast Amchikta Island
AWB07 – Southwest Amchikta Island
AWB08 – Northwest Amchitka Island
AWB09 – Chitka Cove to Crown Reefer Pt
AWB10 – Square/Kirilof Bays-Amchitka Island
AWB11 – Little Sitkin Island
AWB12 – Rat Island-Southeast
AWB13 – Rat Island-Southwest
AWB14 – Davidof/Pyamid/Khvostof Islands
AWB15 – Segula Island-North
AWB16 – Segula Island-South
AWB17 – Tanadak/Little Kiska Island
AWB18 – Kiska Harbor
AWB19 – North Kiska Island
AWB20 – Wolf Pt to Witchcraft Pt.
AWB21 – Lief Cove
AWB22 – Kiska Island-South
AWB23 – Vega Bay
AWB24 – Buldir Island
AWB25 – Shemya Island-North
AWB26 – Shemya Island-South
AWB27 – Nizki Island
AWB28 – Alaid Island
AWB29 – Agattu Island-East
AWB30 – Agattu Island-South
AWB31 – Agattu Island-North
AWB32 – Alexal Pt to Chirikof Pt-Attu Island
AWB33 – Sarana Bay
AWB34 – Chichagof Harbor
AWB35 – Holtz Harbor
AWB36 – Kresta Point
AWB37 – Cape Wrangell
AWB38 – Etienne Bay
AWB39 – Abraham Bay
AWB40 – Nevidiskov Bay
AWB41 – Temnac Bay
AWB42 – Massacre Bay
AWB43 – Ingestram Rocks

Aleutians Subarea – West B Zone

Site Selection Matrix

Seletion #	Priority	GRS #	Site Name	Lat. N	Lon. W	Marine Mammals	Fish	Subsistence	Cultural Resources	Birds	High Recreational Use	Commercial Fishing	Land Mgt. Designations	Coastal Habitat	ESI MAP
1			Semisopochnoi Island-SE	51 54.52	179 44.72	SL,S	P			SBn				ERS,GB	7
2			Semisopochnoi Island-North	52 02.65	179 36.28	SL	DV			SBn				ERS	7
3			Semisopochnoi Island-South	51 52.93	179 31.82	SL,S	DV			SBn				ERS,GB	7
4			Constantine Hbr to Ivokin Pt.-Amch	51 24.69	179 20.42	SL,O	P							ERS	7
5			East Cape to south Bight	51 21.13	179 21.60	SL,S,O				SBn				ERS	7
6			Southeast Amchikta Island	51 23.89	179 09.32	SL,S	P,DV			SBn				ERS	7
7			Southwest Amchikta Island	51 32.62	178 48.30	SL,S,O	P,DV							ERS	7
8			Northwest Amchitka Island	51 39.23	178 42.12	SL,S	P							ERS	7
9			Chitka Cove to Crown Reefer Pt	51 31.82	179 04.18	SL,O								ERS	7
10			Square/Kirilof Bays-Amchitka Islan	51 26.33	179 14.03	S,O	P			SBn				ERS	7
11			Little Sitkin Island	51 59.71	178 29.68	SL,S				SBn				ERS,GB	7
12			Rat Island-Southeast	51 45.46	178 21.93	SL,S,O				SBn				ERS	7
13			Rat Island-Southwest	51 49.10	178 13.02	SL,S,O								ERS	7
14			Davidof/Pyamid/Khvostof Islands	51 58.51	178 18.63	O				SBn				ERS	7
15			Segula Island-North	52 03.34	178 08.34	SL,O								ERS	7&8
16			Segula Island-South	51 59.43	178 06.82	SL,O				SBn				ERS	7&8
17			Tanadak/Little Kiska Island	51 37.51	177 43.07	SL,S,O				WFc,SBn				ERS	8
18			Kiska Harbor	51 58.31	177 35.49	S,O	S,P,DV			WFc,SBn				ERS,M	8
19			North Kiska Island	52 08.13	177 37.88	SL,S,O				SBn				ERS	8
20			Wolf Pt to Witchcraft Pt-	52 04.69	177 31.05	SL								ERS,M	8
21			Lief Cove	51 57.64	177 18.38	SL	P			SBn				ERS	8
22			Kiska Island-South	51 50.41	177 14.80	SL,S,O	DV			SBn				ERS	8
23			Vega Bay	51 52.88	177 25.13	SL,S,O	P,DV			SBn				ERS	8
24			Buldir Island	52 19.90	175 54.97	SL,O				WFc, SBn				ERS	8
25			Shemya Island-North	52 44.43	174 06.56	SL,S,O				WFc, SBn				ERS	9
26			Shemya Island-South	52 42.18	174 06.84	S,O				WFc				ERS	9
27			Nizki Island	52 45.06	173 58.87	SL,S,O				WFc, SBn				ERS	9
28			Alaid Island	52 46.55	173 51.50	SL,S,O				WFc, SBn				ERS	9
29			Agattu Island-East	52 26.38	173 44.99	SL,S,O	CO,P			WFc, SBn				ERS	9
30			Agattu Island-South	52 21.96	173 26.70	SL,S,O	CO,P			WFc, SBn				ERS	9
31			Agattu Island-North	52 29..67	173 32.54	S,O	P			WFc, SBn				ERS	9
32			Alexal Pt to Chirikof Pt-Attu Island	52 49.16	173 21.81	SL,S,O	P			SBn				ERS	9
33			Sarana Bay	52 53.24	173 21.31	S,O	CO,P,S			WFc, SBn				ERS,M	9
34			Chichagof Harbor	52 56.27	173 16.69	SL,S,O	P,DV,CO			WFc, SBn				ERS,GB	9
35			Holtz Harbor	52 57.22	173 11.99	O	CO,P,S			WFc, SBn				ERS,GB	9
36			Kresta Point	53 00.47	172 37.80	SL,O								ERS	9
37			Cape Wrangell	52 54.93	172 26.21	SL,O				SBn				ERS	9
38			Etienne Bay	52 54.77	172 37.33	S,O	S							ERS,GB	9
39			Abraham Bay	52 50.48	172 42.42	S,O	P,DV			SBn				ERS,GB	9
40			Nevidiskov Bay	52 46.03	172 50.49	O	CO,S			SBn				ERS,GB	9
41			Temnac Bay	52 47.50	173 02.30	S,O	P,S			WFc,SBn				ERS,GB	9
42			Massacre Bay	52 48.54	173 14.05	S,O	CH,CO,P,S			WFc,SBn				ERS,GB	9
43			Ingestram Rocks	52 37.46	147 31.16					WFc,SBf					9


Aleutians Subarea, Pribilof Islands Zone
SELECTED & CANDIDATE SITES for
GEOGRAPHIC RESPONSE STRATEGIES
version: May 31, 2004
API01 – Zapadni Bay South-St. George
API02 – Dalnoi Point-haulout-St. George
API03 – Suskaralogh Point-St. George
API04 – Staraya Artil-St. George
API05 – North Anchorage-St. George
API06 – East Cliffs-St. George
API07 – Tolstoi Point-St. George
API08 – Cascade Point-St. George
API09 – English Bay-St. Paul
API10 – Einahnuhto Bluffs-St. Paul
API11 – Northeast Point-St. Paul
API12 – Polovina Point-St. Paul
API13 – Lukanin Bay-Stony Pt to Black Bluffs
API14 – Sea Lion Rock/Zolotoi Bay-St. Paul
API15 – Otter Island
API16 – Walrus Island
BERING SEA
St. Paul Island
Saint Paul
St. George Island
Saint George
Pribilof Islands
1
2
3
4
5
6
7
8
9
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11
12
13
14
15
16

Aleutians Subarea – Pribilof Islands Zone

Site Selection Matrix

Seletion #	Priority	GRS #	Site Name	Lat. N	Lon. W	Marine Mammals	Fish	Subsistence	Cultural Resources	Birds	High Recreational Use	Commercial Fishing	Land Mgt. Designations	Coastal Habitat	ESI MAP
9	H		English Bay Lagoon-St. Paul	57 08.67	170 18.83	S		F,M,I		SBf,SBn				ERS,GB	
14	H		Sea Lion Rock/Zolotoi Bay-St. Paul	57 06.76	170 18.05	S,SL		F,M,I		SBf,SBn	BR			ERS,GB,STF	
1			Zapadni Bay South-St. George	56 33.87	169 40.09	S				WFc,SBn	BR			ERS,GB	
2			Dalnoi Point-haulout-St. George	56 36.57	169 46.48	SL				SBf,SBn				ERS,GB	
3			Suskaralogh Point-St. George	56 36.87	169 44.94	S				SBf,SBn				ERS,GB	
4			Staraya Artil-St. George	56 36.30	169 36.10	S				SBf,SBn				ERS,GB	
5			North Anchorage-St. George	56 36.31	169 33.91	S				SBf,SBn	BR			ERS,GB	
6			East Cliffs-St. George	56 36.25	169 28.48	S				SBf,SBn				ERS,GB	
7			Tolstoi Point-St. George	56 35.66	169 27.80	SL				SBf,SBn				ERS,GB	
8			Cascade Point-St. George	56 31.96	169 34.50	S				SBf,SBn				ERS,GB	
10			Einahnuhto Bluffs-St. Paul	57 11.32	170 25.32					SBf,SBn				ERS,GB	
11			Northeast Point-St. Paul	57 15.07	170 05.83	S,SL				SBf,SBn				ERS,GB	
12			Polovina Point-St. Paul	57 10.11	170 09.00	S				SBf	BR			ERS,GB	
13			Lukanin Bay-Stony Pt to Black Bluffs	57 07.90	170 14.62	S				SBf				ERS,GB	
15			Otter Island	57 02.90	170 23.90	S				SBf,SBn				ERS,GB	
16			Walrus Island	57 10.97	169 56.38	SL				SBf,SBn				ERS,GB	

Appendix D – GRS Photograph Technique Sheet

GRS PHOTOGRAPH TECHNIQUE SHEET

Purpose:
This sheet explains techniques for shooting aerial photos for Geographic Response Strategies (GRS). GRS are map-based oil spill response strategies to protect a specific sensitive area. The aerial photographs are taken to show responders and response planners the actual location to be protected. This saves valuable time during an actual spill response.

Your participation as a photographer is valuable to this planning effort. A good photograph is worth a thousand words.

Checklist
Before you begin, make sure that you have the following items:

- ❑ index map showing the general location of sites
- ❑ site map for each site showing the frames for the photos requested
- ❑ camera
  - ❑ digital, minimum 2 megapixel, set on HQ or SHQ, capable of producing a JPEG of TIFF file or
  - ❑ 35 mm SLR, shooting color slide film, 30 to 60 zoom lens is best
- ❑ GPS, handheld or aircraft equipment
- ❑ note pad on clipboard with pencils and pens
- ❑ watch or clock
- ❑ tide book
- ❑ sun glasses

Specifications:

- ♦ photo angle — 45º to 75º below horizontal provides the best angle to judge the conditions at the site, see Figure 1.
- ♦ altitude — 500' to 3,000' is best altitude range, vary the altitude to frame the field of view show on the site map, it is better to have more in the frame that less.
- ♦ orientation — photograph toward shoreline whenever possible.
- ♦ tide — low to mid tide is best for response planning purpose.
- ♦ lighting — sunlight behind photographer is best to minimize glare.
- ♦ line of sight — clear, do not shoot through Plexiglas windows.
- ♦ time of day — morning is preferred.

Considerations:
Good photographs can be taken from a variety of aircraft. In general the slower the aircraft can operate the better. Helicopters are the best choice because they can almost hold in a stationary position. It is important that the photographer have an unobstructed vantage to shoot down at the site.

Photographs should be taken through an open door or window. Shooting through Plexiglas windows almost always produces poor results.

If someone is available to take notes, ask them to record the GPS location of each photo or mark the aircraft's location on the site map for each photo. It is also desired to note the time and altitude of each shot or at each site.

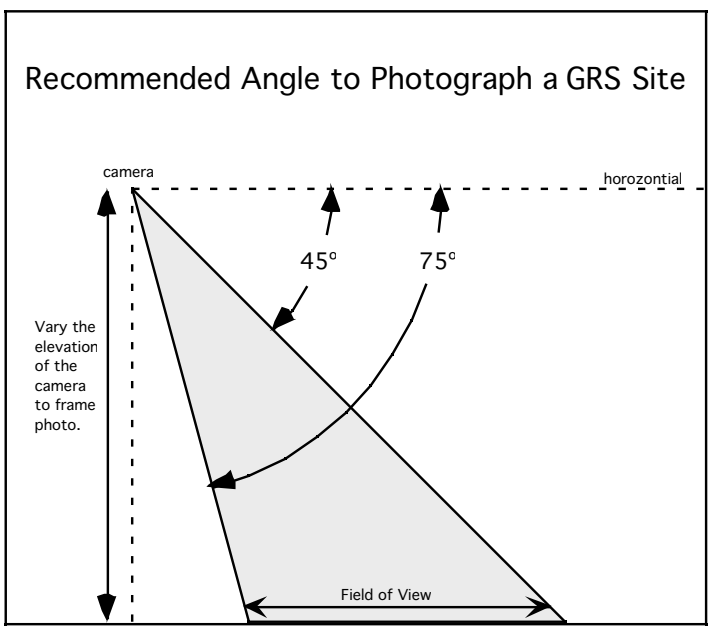
It is a good idea to plan your route so that the aircraft approaches the site such that the photographer is setup to take the shot. This avoids having to maneuver to get into position. For example, if the photographer is on the right side of the aircraft and the aircraft is to follow a shoreline that faces west, then it is best to fly north along the coast from site to site.

As you approach the site vary the aircraft's altitude to achieve the correct camera frame necessary to capture the field of view shown on the site map. Use the following table to estimate the correct altitude for your shot:

Desired Field of View		Altitude
feet	miles	Feet
< 500	-	500
500 to 1,000	1/10	1,000
1,000 to 2,000	1/4	1,500
2,000 to 3,000	1/2	2,000
3,000 to 5,000	1	2,500
> 5,000	> 1	3,000

Photos should be shot at the highest shutter speed and lowest aperture possible. Take numerous photos with various settings to bracket the shot.

Figure 1.



Appendix E – Site Survey Form

Geographic Response Strategy
Site Survey Form

(1) Site: _____ **(2)** Date: _____

(3) Surveyed by: _____

(4) Time: **(5)** Tide Stage: _____

(6) Maximum Tidal Flux: _____ Attach Map or draw on back of form.

(7) Land Ownership (permits or permission) _____

(8) Access (boat, road, helicopter, fixed wing)_____

(9) Staging Areas _____

(10) Support Services (shelter, food, equipment) _____

(11) Sources of Local Knowledge _____

(12) Resources at risk: _____

(13) Tactic #:_____ **(14)** Lat. _____ **(15)** Lon. _____

(16) Notes: (currents, anchors, exposure, implementation, response resources)

_____

_____

_____

(17) Photos:_____

Geographic Response Strategy
Site Survey Form cont.

(1) Site: _____ **(2)** Date: _____

(13) Tactic #:_____ **(14)** Lat. _____ **(15)** Lon. _____

(16) Notes: (currents, anchors, exposure, implementation, response resources)

_____

_____

_____

(17) Photos:_____

----

(13) Tactic #:_____ **(14)** Lat. _____ **(15)** Lon. _____

(16) Notes: (currents, anchors, exposure, implementation, response resources)

_____

_____

_____

(17) Photos:_____

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