UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

August 20, 2012

MEMORANDUM FOR: Brian Pawlak
Acting Director, Office of Habitat Conservation

FROM: James W. Balsiger, Ph.D. for Robert D. Mecum
Administrator, Alaska Region

SUBJECT: Essential Fish Habitat Programmatic Consultation for Restoration Center Program Activities in Alaska

The Alaska Regional Office (AKR) of the National Marine Fisheries Service (NMFS) has received the National Oceanic and Atmospheric Administration (NOAA) Restoration Center's (RC) request, pursuant to Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) and its implementing regulations at 50 CFR Part 600.920(a)(2), to initiate Essential Fish Habitat (EFH) Programmatic Consultation for projects undertaken by the RC including the Community-Based Restoration Program (CRP), the Damage Assessment, Remediation and Restoration Program (DARRP) and other similar restoration activities in Alaska.

The request for programmatic consultation results from a determination by the RC that restoration may adversely affect EFH for managed species in coastal, estuarine, and riverine locations within Alaska. The AKR concurs with this determination. A description of activities, an analysis of their effects, the RC's views on those effects, and proposed conservation measures were provided by the RC in their Environmental Assessment and EFH Assessment for RC program activities in Alaska.

The AKR has determined, in accordance with 50 CFR 600.920(j), that programmatic consultation is appropriate for restoration activities in Alaska because sufficient information is available to develop EFH conservation recommendations to reasonably address foreseeable adverse impacts to EFH. The attached EFH Programmatic Consultation document is the result of a cooperative effort by AKR and RC staff to assess the potential adverse effects of the CRP, DARRP and similar restoration activities to EFH in Alaska. Pursuant to §305(b)(4)(A) if the MSA, the best management practices (BMPs) in this document constitute EFH conservation recommendations. These conservation measures will be incorporated into each project in order to avoid and minimize adverse impacts to EFH. If the project plans cannot fully incorporate all the conservation measures, or if additional information becomes available that changes the basis for conservation measures, then supplemental consultation will occur prior to project implementation.

Essential Fish Habitat Programmatic Consultation
between the National Marine Fisheries Service, Alaska Region,
and the NOAA Restoration Center,
for the Community-based Restoration Program,
the Damage Assessment, Remediation and Restoration Program
and Similar Habitat Restoration Activities in the Alaska Region

1.0 Background

In 1996 Congress added new habitat provisions to the MSA. Section 303(a)(7) of the amended MSA required that every fishery management plan (FMP) describe and identify EFH for federally managed species, minimize to the extent practicable the adverse effects of fishing on EFH, and identify other actions to encourage the conservation and enhancement of EFH. The 1996 amendments to the MSA also directed the Secretary of Commerce to develop by regulation, guidelines to assist the Fishery Management Councils in developing the EFH components of FMPs. The EFH provisions of the MSA support one of the nation's overall marine resource management goals - maintaining sustainable fisheries and their habitats. Essential to achieving this goal is the maintenance of suitable marine fishery habitat quality and quantity.

EFH is defined as "...those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." EFH may be a subset of all areas occupied by a species. The Fishery Management Councils, with assistance from the NMFS, have identified and described EFH for federally managed species. EFH for newly managed species will be added as new FMPs are developed and updated through the Fishery Management Councils' public process. Existing EFH descriptions will be refined as new information becomes available.

The EFH regulatory guidance further defines the following terms—"waters," "necessary," and "adverse effect"—for purposes of describing and analyzing impacts on EFH:

- waters - aquatic areas and their associated physical, chemical, and biological properties that are used by fish and may include aquatic areas historically used by fish where appropriate; substrate - sediment, hard bottom, structures underlying the waters, and associated biological communities;
- necessary - the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem; and spawning, breeding, feeding, or growth to maturity - stages representing a species' full life cycle;
- adverse effect - any impact that reduces the quality and/or quantity of EFH. Adverse effects may include direct or indirect physical, chemical, or biological alterations of the waters or substrate and loss of, or injury to, benthic organisms, prey species and their habitat, and other ecosystem components, if such modifications reduce the quality and/or quantity of EFH. Adverse effects to EFH may result from actions occurring within EFH or outside of EFH and may include site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

Under Section 305(b)(2) of the MSA, federal agencies are required to consult with the Secretary of Commerce on any action that may adversely affect EFH, even if the effects of the action are intended to be wholly beneficial. NMFS fully supports habitat restoration to protect and enhance EFH designated under the MSA. However, the MSA does not exempt restoration actions from these requirements; therefore, NMFS must apply the same standards of legal, biological, and technical review to these federal actions as to any other type of action. Section 305(b) also requires NMFS to recommend measures that may be taken by the action agency to conserve EFH.

The EFH regulations establish the procedures for coordination, consultations, and recommendations regarding proposed actions that may adversely affect EFH (50 CFR Part 600, Subpart K). NMFS has defined five approaches to meet the EFH consultation requirements: use of existing procedures, general concurrences, programmatic consultations, abbreviated consultations and expanded consultations. Use of programmatic consultations promotes more consistent use of conservation measures, more efficient workload management, and better customer service.

Designing projects to fit under programmatic consultations can also reduce internal NOAA Fisheries regulatory procedural requirements and timelines that may delay project approval. Programmatic consultations, and the categories of restoration projects they cover, have already been through NOAA's internal technical, legal and quality control reviews and approvals. Therefore, when a proposed restoration action falls within the limits of an existing programmatic consultation, the internal review and approval process is significantly streamlined. For example, a review of consultations for restoration actions completed in the Fisheries Northwest Region in 2009 showed that the average time for restoration projects covered by a programmatic consultation was 14 days or less -- in some cases a single day -- compared to 160 days or longer for restoration projects that required individual consultation.

2.0 Program Description

Alaska is home to a wide range of ecosystems that include coastal habitats, riparian systems along streams, rivers and lakes, wetland and uplands, and marine and estuarine habitats containing submerged aquatic vegetation (SAV) beds, marshes, shorelines, coral, and kelp habitats. These habitats face threats from development, pollution, fish passage barriers, and erosion. Created in 1991, the RC located in NMFS Office of Habitat Conservation. The RC has two programs that fund and implement habitat restoration in Alaska: the Community-based Restoration Program (CRP), and the Damage Assessment Remediation and Restoration Program (DARRP). Nationwide, these programs have funded or implemented over 2000 Projects. Since 1996, the RC has been working in the region to restore habitat and has supported approximately 80 community restoration projects, benefiting more than 560 acres of marine fishery habitat and opening almost 80 stream miles for fish passage.

Projects implemented within the Alaska Region vary and total about 15 projects annually. Projects range in scale from re-vegetating a few feet of stream bank to thinning tens of acres, congested with new growth, to promote old growth tree species. Many projects replace failing or older culverts, which no longer provide adequate fish passage, with bridges or larger culverts. The immediate area impacted by these projects is often localized, occurs in

areas already altered from its natural state, and are considered temporary, while benefits to fish include increased access or creation of new fish habitat. This programmatic consultation is not meant to cover every restoration or protection activity and is limited only to CRP or DARRP activities.

3.0 Essential Fish Habitat Affected by the Program Activities

EFH is described for over 50 species of federally managed fish in Alaska; see Table 1 (below). (See Appendix I for textual descriptions by FMP).

Table 1. Fishery Management Plans and Managed Species List

Fishery Management Plans within the Alaska Region.	Species managed within each Fishery Management Plan. Refer to current (http://www.fakr.noaa.gov/npfmc/fmp/fmp.htm).	Scientific Name
Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands	Walleye pollock Pacific cod Sablefish Yellowfin sole Greenland turbot Arrowtooth flounder Northern rock sole Alaska plaice Rex sole Dover sole Flathead sole Pacific Ocean perch Northern rockfish Shortraker rockfish Blackspotted\Rougheye rockfish Yelloweye rockfish Dusky rockfish Thornyhead rockfish Atka mackerel Squid Sculpins Skates Sharks Octopus Forage fish complex	*Theragra chalcogramma* *Gadus macrocephalus* *Anoplopoma fimbria* *Limanda aspera* *Reinhardtius hippoglossoides* *Atheresthes stomias* *Lepidopsetta polyxystra* *Pleuronectes quadrituberculatus* *Errex zachirus* *Microstomus pacificus* *Hippoglossoides elassodon* *Sebastes alutus* *Sebastes polyspinus* *Sebastes borealis* *Sebastes aleutianus* *Sebastes ruberrimus* *Sebastes ciliatus* *Sebastolobus* *Pleurogrammus monopterygius* *Cephlapoda, Teuthida* *Cottidae* *Rajidae* *Lamnidae; Squalidae* *Octopoda;* *Vampyromorpha* *Osmeridae*
Fishery Management Plan for Groundfish of the Gulf of Alaska	Walleye pollock Pacific cod Sablefish Yellowfin sole Northern rock sole Southern rock sole	*Theragra chalcogramma* *Gadus macrocephalus* *Anoplopoma fimbria* *Limanda aspera* *Lepidopsetta*

Table 1. Fishery Management Plans and Managed Species List		
Fishery Management Plans within the Alaska Region.	Species managed within each Fishery Management Plan. Refer to current (http://www.fakr.noaa.gov/npfmc/fmp/fmp.htm).	Scientific Name
Fishery Management Plan for Groundfish of the Gulf of Alaska (continued)	Alaska plaice Rex sole Dover sole Flathead sole Arrowtooth flounder Pacific Ocean perch Northern rockfish Shortraker rockfish Blackspotted\Rougheye rockfish Dusky rockfish Yelloweye rockfish Thornyhead rockfish Atka mackerel Squid Sculpins Skates Sharks Octopus Forage fish complex	*polyxystra* *Lepidopsetta bilineatus* *Pleuronectes quadrituberculatus* *Errex zachirus* *Microstomus pacificus* *Hippoglossoides elassodon* *Atheresthes stomias* *Sebastes alutus* *Sebastes polyspinus* *Sebastes borealis* *Sebastes aleutianus* *Sebastes ciliatus* *Sebastes ruberrimus* *Sebastolobus* *Pleurogrammus monopterygius* *Cephlapoda, Teuthida* *Cottidae* *Rajidae* *Lamnidae; Squalidae* *Octopoda; Vampyromorpha* *Osmeridae*
Fishery Management Plan for the Salmon Fisheries in the EEZ off the Coast of Alaska	Chinook salmon Chum salmon Coho salmon Sockeye salmon Pink salmon	*Oncorhynchus tshawytscha* *Oncorhynchus keta* *Oncorhynchus kisutch* *Oncorhynchus nerka* *Oncorhynchus gorbuscha*
Fishery Management Plan for Bering Sea/Aleutian Islands King and Tanner Crabs	Red king crab Blue king crab Golden king crab Snow crab Tanner crab	*Paralithodes camtschaticus* *Paralithodes platypus* *Lithodes aequispina* *Chionoecetes opilio* *Chionoecetes bairdi*
Fishery Management Plan for the Scallop Fishery off Alaska	Weathervane Scallop	*Patinopectin caurinus*
Fishery Management Plan for Fish Resources of the Arctic	Arctic cod Saffron cod Snow crab	*Boreogadus saida* *Eligenus gracilis* *Chionoecetes opilio*

The EFH regulations provide for a second, more limited habitat designation for each species in addition to EFH: Habitat Areas of Particular Concern (HAPC). These are subsets of EFH that are rare, particularly susceptible to human-induced degradation, especially ecologically important, or located in an environmentally stressed area. Table 2 presents areas identified as HAPCs by NMFS and the North Pacific Fishery Management Council (NPFMC).

TABLE 2. Habitat Areas of Particular Concern			
HAPC	Area Size (Approx.)	Fishery Management Application	Specific Regulation
Alaska Seamount Habitat Protection Areas	5,300 nm^2	No federally permitted vessel may fish with bottom contact gear*	Federal Register 50 CFR Part 679 Volume 71, No.124 Wednesday, June 28,2006 http://alaskafisheries.noaa.gov/regs/679a2.pdf
Bowers Ridge Habitat Conservation Zone	5,300 nm^2	No federally permitted vessel may fish with mobile bottom contact gear**	Same as above
Gulf of Alaska Coral Habitat Protection Areas	2,100 nm^2	No federally permitted vessel may fish with bottom contact gear*	Same as above
*Bottom contact gear means nonpelagic trawl, dredge, dinglebar, pot, or hook-and-line gear. **Mobile contact gear means nonpelagic trawl, dredge, or dinglebar gear.			

4.0 Restoration Activities Covered Under Programmatic Consultation

Table 3 identifies the restoration activities currently being conducted by the RC covered by this consultation.

Table 3: Restoration Activities
Fish Passage improvements (culvert removal/replacement, dam removal)
Marine Debris Removal (including derelict fishing gear and vessels)
Invasive Species control
Planting or Restoring Submerged Aquatic Vegetation
Erosion reduction/prevention (shoreline)
Pre and Post Restoration Assessment and Monitoring
Land and easement acquisition
Public Outreach/Education

5.0 Assessment of Effects of Restoration Activities on Essential Fish Habitat

CRP and DARRP restoration projects occur in a wide range of coastal habitats, including many that are identified as EFH. Restoration activities have the potential to adversely affect marine and estuarine habitats identified as EFH; however, the restoration activities covered by this consultation are intended to be beneficial to fish and their habitats. NMFS Fisheries biologists have carefully developed design criteria and BMPs over years of working with many restoration partners, other NOAA scientists, and engineers to ensure they reduce the short-term adverse effects of project construction, while also providing long-term conservation benefits.

Table 4 provides an overview of restoration activities and the habitat types in which they occur.

Table 4

	Habitat Type												
	Instream	Riparian	Upland	Estuarine	Submerged Aquatic Vegetation	Intertidal	Mud, sand, shell, & rock substrates	Estuarine water column	Coral and coral reefs	Non-vegetated bottoms	Artificial reefs	Marine water column	Live/Hard Bottom
Restoration Activity													
Fish Passage	x	x	x	x									
Marine Debris					x	x	x	x		x		x	x
Invasive Species Control	x	x	x	x	x	x	x	x		x		x	x
Planting or Restoring Submerged Aquatic Vegetation					x		x			x	x	x	x
Erosion Reduction/Prevention	x	x	x	x		x						x	
Pre and Post Restoration Assessment and Monitoring	x	x	x	x	x	x	x	x	x	x	x	x	X
Land and Easement Acquisition	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Public Outreach/ Education	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

5.1 Potential Effects and Conservation Measures

This section identifies the types of restoration activities currently employed by the RC. To facilitate EFH consultation for each of the approximately 15 restoration projects funded each year in Alaska, the RC initiated a programmatic consultation with NMFS to assess the effects of most restoration activities on EFH.

A full description of each restoration activity, discussion of its potential negative effects, and the RC's conclusion regarding potential negative impacts to EFH are presented below. Accompanying the description of each restoration activity is a discussion of BMPs, by which the RC can reduce potential impacts to EFH. A full review of this document will be conducted every five years by RC and the Alaska Region EFH coordinator.

5.1 A. Fish Passage improvements (culvert removal/replacement, dam removal)

Activity

The RC funds projects to improve fish passage all over Alaska. Funded projects typically benefit anadromous salmon (*Oncorhynchus sp.*) or the riverine habitat that supports salmon. In some cases fish passage projects can also benefit estuarine habitat and species. Techniques for fish passage improvement can be classified as culvert or obstruction removal with either no replacement as in the case of a decommissioned road or replacement with an appropriate sized culvert or bridge. In addition to culvert removal, dam removal or retrofit may be conducted to improve fish passage.

Fish passage projects do not conclude with the removal of the obstruction to passage but also must ensure that the changes will not lead to erosion, insufficient flows, high velocity flows, head-cutting or any condition which causes other problems for passage or permanently disturbs the upstream or downstream habitat. Appropriate design and hydrology, as well as use of reference reaches in pristine sections of the system, are necessary components for improving fish passage. Fish passage projects normally take place in riverine habitat, although occasionally they can occur downstream in areas where tidal inundation and brackish water exist.

Disturbance to the area typically only lasts during the removal of the barrier and installation (if necessary) of the new structure. This work is either conducted in stream, or the stream section is diverted during construction. In all cases the work is conducted outside of migrational fish use.

Effects

In urban and developed areas in Alaska, the loss of riparian habitat can be locally significant. Potential impacts from this project type are dependent on the techniques used; however they hold in common the potential to convert one habitat type into another. In general, projects funded under this program allow unhindered migration and access to riparian habitat for rearing, overwintering or spawning. Therefore, the RC often provides technical and financial support to restoration projects for the purpose of creating or reestablishing fish habitat and opening access to riparian habitat where complete or life stage dependent passage does not currently exist.

Summary of potential effects from Fish Passage Improvement			
Effect	*Occurrence*	*Duration*	*Level of Impact*
Water column turbidity	Frequent	Temporary	Medium
Disturbance of movement of resident fish and juvenile anadromous fish	Occasional	Temporary	Medium
Removal of riparian vegetation	Frequent	Temporary	Low
Compaction of sediment by large equipment	Occasional	Short-term	Low
Trampling of vegetation by people and equipment	Frequent	Temporary	Low
Damage to stands of vegetation from harvest of planting stock	Infrequent	Short-term	Low
Increased risk of Invasive species	Occasional	Long-Term	Medium
Occurrence: Infrequent= Less than 25% of all projects; Occasional= between 25% and 75% of all projects; Frequent= Greater than 75% of all projects. Duration: Temporary= days-weeks; Short-term= under 3 years; Long-term 3-20 years. Level of Impact: Combines frequency and duration. For example, an infrequent impact with a temporary duration will have a low level of impact. A moderate level of impact would occur if the frequency of occurrence or the duration was more significant. A high level of impact would result from frequently occurring impacts with long-term durations.			

Best Management Practices

The following BMPs have been developed to minimize the impact of these types of restoration projects.

- Use turbidity curtains, hay bales, and erosion mats.
- Plan staging areas in advance, and keep them to a minimum size, avoiding particularly sensitive areas.
- Establish buffer areas around sensitive resources.
- Remove invasive plant and animal species from the proposed action area before starting work. Plant only native plant species.
- Identify and implement measures to ensure native vegetation or re-vegetation success.
- Establish temporary access pathways before restoration activities to minimize adverse impacts from project implementation.
- Adhere to regulations and use best management practices outlined in the State of Alaska Aquatic Nuisance Species Management Plan (Fay 2002).
- Avoid restoration work during critical life stages for fish such as spawning, nursery, and migration. Determine these periods before project implementation to reduce or avoid any potential impacts.

- Provide adequate training and education for volunteers and project contractors to ensure minimal impact to the restoration site. Train volunteers in the use of low-impact techniques for planting, equipment handling, and any other activities associated with the restoration.
- Conduct monitoring before, during, and after project implementation to ensure compliance with project design and restoration criteria.
- Remove and, if necessary, restore any temporary access pathways and staging areas used in the restoration effort.

5.1. B. Marine Debris Removal

Activity

The RC funds many marine debris removal projects all over Alaska in partnership with NOAA's Marine Debris program. Typically, these projects benefit marine subtidal, intertidal and upland habitat. Removal also ensures marine debris will not re-enter the ocean and entangle or be ingested by many ocean species. Techniques for marine debris removal are straightforward; workers remove debris either from the water or more commonly from beaches. The size and quantity of debris and the remoteness of the location play a role in what tools are used for removal. Removal can be generally classified as falling into four categories: volunteer/small-scale removals, professional large-scale removals, remote or limited access removals; and large-scale engineered removals.

Volunteer/small-scale removals are often conducted close to communities by local groups or volunteers; who remove debris that can be moved by hand or commonly available equipment such as trucks and ATV's. Access to the sites can be by vehicle or boat.

Large scale professional cleanups are often conducted over a larger geographic area by professionals and often use large, less commonly available vessels for access and removal.

Remote/limited access cleanups are conducted in areas difficult to reach due to the lack of roads, or because access requires larger vessels to ensure safety. Removal from these locations is sometimes only possible by using aircraft; including small planes or helicopters to bring workers in, or to carry debris out, or both.

Large-scale engineered removals are removals of debris that are either so large or so difficult to contain that a plan must be written prior to removal. The most common is a large vessel removal or creosote piling removal.

All types of removal listed above can take place from uplands where debris may be deposited by large storms all the way down to the low tide line. At sea removal can also be conducted and would initially require an independent EFH review.

Disturbance to the area typically only lasts during the removal of the debris. Disturbance can occur in the mechanical removal. A common example of this is the removal of nets that become entwined in rocks and vegetative material. Temporary disturbance can also occur with the presence of people and vessels in remote areas through anchoring, increases in

noise, and possible compaction by ATVs or other equipment. However, these effects can be mitigated through BMPs or will cease when the work is done.

Effects

Potential impacts from this project type are dependent on the techniques used. In general, projects funded under this program, aim to return the habitat to conditions previous to debris fouling. Therefore, the RC often provides technical and financial support to restoration projects for the purpose of removing marine debris from shorelines.

Summary of potential effects from Marine Debris Removal			
Effect	*Occurrence*	*Duration*	*Level of Impact*
Water column turbidity	Occasional	Temporary	Low
Removal of riparian vegetation	na	na	na
Compaction of sediment by large equipment	Occasional	Short-term	Low
Trampling of vegetation by people and equipment	Frequent	Temporary	Low
Increased risk of Invasive species	Occasional	Long-Term	Medium
Occurrence: Infrequent= Less than 25% of all projects; Occasional= between 25% and 75% of all projects; Frequent= Greater than 75% of all projects. Duration: Temporary= days-weeks; Short-term= under 3 years; Long-term 3-20 years. Level of Impact: Combines frequency and duration. For example, an infrequent impact with a temporary duration will have a low level of impact. A moderate level of impact would occur if the frequency of occurrence or the duration was more significant. A high level of impact would result from frequently occurring impacts with long-term durations.			

Best Management Practices

The following BMPs have been developed to minimize the impact of these types of restoration projects.

- Avoid anchoring support vessels in areas of SAV. Plan staging areas in advance, and keep them to a minimum size, avoiding particularly sensitive areas.
- Avoid releasing petroleum or other hazardous materials from found containers; report the presence of any hazardous materials to Coast Guard for removal by HAZMAT professionals.
- Cut nets entangled in vegetation and leave behind net pieces which have become part of the shoreline support/vegetation.
- Follow applicable guidelines in Alaska Aquatic Nuisance Species Management Plan (Fay 2002).

5.2. C. Invasive Species Control

Activity

The RC funds some invasive species control projects in Alaska. Funded projects typically benefit riparian and upland habitat. Future projects may also benefit intertidal and marine habitats. Invasive species control projects benefit the native vegetation and species and aim either to eradicate or to control invasive species in such a way that native vegetation can get a foothold. Techniques for Invasive Species control are varied depending on the species. Currently, Alaska faces invasive threats from the following aquatic species: Atlantic salmon *(Salmo salar)*, green crab *(Carcinus maenas)*, Chinese mitten crab *(Eriocheir sinensis)*, signal crayfish (*Pacifastacus leniuaculus*), zebra mussels *(Dreissena polymorpha)*, New Zealand mudsnail (*Potamopyrgus antipodarum)*, saltmarsh cordgrass *(Spartina alterniflora)*, purple loosestrife *(Lythrum salicaria)* and tunicates *(Botrylloides violaceus* and *Didemnum vexillum)*.

Techniques used for the removal of invasive riparian vegetation include mechanical removal, herbicides, controlled burning, and vegetative covering to block sun and rain needed by invasive species. Techniques for removing invasive freshwater animal species include trapping and mechanical removal. Rotenone, a chemical which can kill all life in a discrete system may also be used for complete removal of an aquatic species. Techniques used for invasive intertidal and marine species include the mechanical removal of the species or the species' habitat.

Volunteer /small scale removals often are conducted close to the applicant's community and entail local groups or volunteers removing invasive species by human power or regularly used equipment such as trucks and ATVs. Access to the sites can be by vehicle or boat.

Large scale professional removals can use chemicals, traps, divers and heavy equipment. A removal plan must be written prior to these activities occurring.

Disturbance to the area is most severe during the removal but can also last until the native vegetation can re-colonize the area. In most invasive species projects direct plantings of the native vegetation speeds up this recovery time.

Effects

Potential impacts from this project type are dependent on the techniques used; therefore, the RC often provides technical and financial support to restoration projects for the purpose of creating or reestablishing native habitat and species where such habitat does not currently exist. Generally, projects funded under this program aim to return the habitat to the condition prior to infestation from invasive species. Therefore, the RC often provides technical and financial support to restoration projects for the purpose of removing invasive species and encouraging native species return.

Summary of potential adverse effects from Marine Debris Removal			
Adverse effect	*Occurrence*	*Duration*	*Level of Impact*
Water column turbidity	Infrequent	Temporary	Low
Removal of riparian vegetation	Frequent	Short-term	moderate
Compaction of sediment by large equipment	Occasional	Short-term	Low
Trampling of vegetation by people and equipment	Frequent	Temporary	Low
Increased risk of Invasive species	na	na	na
Occurrence: Infrequent= Less than 25% of all projects; Occasional= between 25% and 75% of all projects; Frequent= Greater than 75% of all projects. Duration: Temporary= days-weeks; Short-term= under 3 years; Long-term 3-20 years. Level of Impact: Combines frequency and duration. For example, an infrequent impact with a temporary duration will have a low level of impact. A moderate level of impact would occur if the frequency of occurrence or the duration was more significant. A high level of impact would result from frequently occurring impacts with long-term durations.			

Best Management Practices

The following BMPs have been developed to minimize the impact of these types of restoration projects.

- Avoid herbicide leaching into waterways.
- Ensure that vegetation removal will not negatively affect bank stability, unless countered with native planting.
- Minimize effects of trapping on native species by coordinating the trapping with the particular habits of the intended species. This can be done by careful selection of trapping sites, trapping timing, and bait use.
- Identify and minimize pathways for reintroduction as identified in State of Alaska Aquatic Nuisance Species Management Plan (Fay 2002 and invasive plant BMPs listed in Invasive Plants of Alaska (AKEPIC 2005). (http://www.fs.fed.us/r10/spf/fhp/invasive/bookparts/6%20Management.pdf)
- Determine that the benefits outweigh the costs in the use of rotenone, which should only be used in a discrete system.

5.2. D. Planting or Restoring Submerged Aquatic Vegetation

Activity

The RC works in the marine environment all over the coastline of Alaska. Submerged aquatic vegetation (SAV), one of the most productive areas of marine habitat identified, includes sea and eelgrasses, rockweed, laminaria kelps, and larger kelp forests. In areas where this habitat is degraded, restoration may be a viable option for returning to a functional habitat. SAV restoration is common in areas south of Alaska but relatively new in the north. Such restoration projects typically benefit marine habitat from intertidal to approximately 30ft in depth (eelgrass). Volunteer /small scale plantings often are conducted close to the applicant's community and entail local groups or planting SAV at low tide. Large scale professional restoration can use seed dispersal methods, transfer of large rocks with SAV, and planting by divers. Disturbance to the area is most severe during the restoration but can also last until the vegetation colonizes the area.

Effects

Potential impacts from this activity depend on the techniques used; however, they hold in common the potential to convert one habitat type into another. Generally, projects funded by this program convert bare habitat to vegetated habitat. Therefore, the RC often provides technical and financial support to restoration projects for the purpose of creating or reestablishing SAV where it does not currently exist.

Summary of potential adverse effects from Planting or Restoring Submerged Aquatic Vegetation			
Adverse effect	*Occurrence*	*Duration*	*Level of Impact*
Water column turbidity	Occasional	Temporary	Low
Removal of riparian vegetation	na	na	na
Compaction of sediment by large equipment	Occasional	Short-term	Low
Trampling of vegetation by people and equipment	Frequent	Temporary	Low
Increased risk of Invasive species	Occasional	Long-Term	Medium
Occurrence: Infrequent= Less than 25% of all projects; Occasional= between 25% and 75% of all projects; Frequent= Greater than 75% of all projects. Duration: Temporary= days-weeks; Short-term= under 3 years; Long-term 3-20 years. Level of Impact: Combines frequency and duration. For example, an infrequent impact with a temporary duration will have a low level of impact. A moderate level of impact would occur if the frequency of occurrence or the duration was more significant. A high level of impact would result from frequently occurring impacts with long-term durations.			

Best Management Practices

The following BMPs have been developed to minimize the impact of these types of restoration projects.

- If it is necessary to bring the substrate into the photic zone, a survey of the existing habitat must be performed. Identify what SAV neighboring areas to ensure correct species planting.
- Ensure that plantings are not monocultures; eelgrass diversity can be important for new areas.
- If seeding is to be performed by bringing in substrate with already established plants, ensure that this will not also transfer invasive species.

5.2. E. Erosion Reduction/Prevention

Activity

The RC has previously funded some Erosion Reduction/Prevention projects and may in the future see a need to fund more such projects all over Alaska's coast. Funded projects typically benefit coastal habitat and coastal communities. Techniques for Erosion Reduction/Prevention projects include shoreline stabilization followed by shoreline protection.

Volunteer /small scale projects are often conducted close to the applicant's community and entail local groups or volunteers installing natural vegetation which will absorb ocean energy.

Large scale professional projects can redirect orientation of shoreline and use large scale armoring, or placement of breakwaters.

Disturbance to the area is most severe during the implementation but can also last until the native vegetation re-colonizes the area.

Effects

Potential impacts from this activity depend on the techniques used. In general, projects funded by this program aim to protect the coastal habitat and allow for the shoreline to function in a manner that reduces erosion. Therefore, the RC often provides technical and financial support to restoration projects for the purpose of reducing current erosion and preventing further erosion.

Summary of potential adverse effects from Erosion Reduction/Prevention			
Adverse effect	*Occurrence*	*Duration*	*Level of Impact*
Water column turbidity	Occasional	Temporary	Low
Removal of riparian vegetation	Occasional	Short-term	Low
Compaction of sediment by large equipment	Occasional	Short-term	Low
Trampling of vegetation by people and equipment	Occasional	Temporary	Low
Increased risk of Invasive species	Occasional	Short-Term	Low
Occurrence: Infrequent= Less than 25% of all projects; Occasional= between 25% and 75% of all projects; Frequent= Greater than 75% of all projects. Duration: Temporary= days-weeks; Short-term= under 3 years; Long-term 3-20 years. Level of Impact: Combines frequency and duration. For example, an infrequent impact with a temporary duration will have a low level of impact. A moderate level of impact would occur if the frequency of occurrence or the duration was more significant. A high level of impact would result from frequently occurring impacts with long-term durations.			

Best Management Practices

The following BMPs have been developed to minimize the impact of these types of restoration projects.

- Preference is given to using native vegetation for wave attenuation vs. large scale rip rap. If riprap is deemed necessary, vegetation should also be incorporated.
- For larger scale projects where wave energy may be redirected, modeling should be performed to ensure the changes will not cause harm.

5.2. F Pre- and Post-Restoration Assessment and Monitoring

Activity

The RC requires monitoring for all restoration projects it funds. Monitoring typically occurs both pre and post implementation of a restoration project. Monitoring of projects varies depending on the project type but can include fish trapping, sediment monitoring, macroinverebrate sampling, redd counts, spawning surveys, vegetation sampling, photo points, modeling, and others. Most activity would not have an EFH concern; however, care must be taken to follow any fish windows for sensitive life stages. Disturbance can be severe during the monitoring stages, due to prolonged or routine human activity in the area.

Effects

Potential impacts from this activity depend on the techniques used but all should be benign.

Summary of potential adverse effects from Pre and Post Restoration Assessment Monitoring			
Adverse effect	*Occurrence*	*Duration*	*Level of Impact*
Water column turbidity	Occasional	Temporary	Low
Removal of riparian vegetation	na	na	na
Compaction of sediment by large equipment	Occasional	Short-term	Low
Trampling of vegetation by people and equipment	Frequent	Temporary	Low
Increased risk of Invasive species	Occasional	Long-Term	Medium
Occurrence: Infrequent= Less than 25% of all projects; Occasional= between 25% and 75% of all projects; Frequent= Greater than 75% of all projects. Duration: Temporary= days-weeks; Short-term= under 3 years; Long-term 3-20 years. Level of Impact: Combines frequency and duration. For example, an infrequent impact with a temporary duration will have a low level of impact. A moderate level of impact would occur if the frequency of occurrence or the duration was more significant. A high level of impact would result from frequently occurring impacts with long-term durations.			

Best Management Practices

The following BMPs have been developed to minimize the impact of these types of restoration projects.

- Avoid unnecessary disturbance of fish and other species when conducting in stream assessment work by temporal or special means.
- Identify sensitive habitats and try to avoid trampling or excessive travel in these areas.
- Travel along stable shoreline (not overhanging banks) between survey sections of stream.

5.2. G Land and Easement Acquisition

Activity

The RC can provide funds for the purchase of land or easements most commonly in association with a restoration project to ensure the restoration project's longevity. It is assumed that this purchase would only positively affect EFH.

Effects

Potential impacts from this project type would be preservation of the habitat. In some cases easements allow for human use in the area and some effects can occur from increased human traffic.

Summary of potential adverse effects from Land Easement Acquistion			
Adverse effect	*Occurrence*	*Duration*	*Level of Impact*
Water column turbidity	na	na	na
Removal of riparian vegetation	na	na	na
Compaction of sediment by large equipment	na	na	na
Trampling of vegetation by people and equipment	na	na	na
Increased risk of Invasive species	na	na	na
Occurrence: Infrequent= Less than 25% of all projects; Occasional= between 25% and 75% of all projects; Frequent= Greater than 75% of all projects. Duration: Temporary= days-weeks; Short-term= under 3 years; Long-term 3-20 years. Level of Impact: Combines frequency and duration. For example, an infrequent impact with a temporary duration will have a low level of impact. A moderate level of impact would occur if the frequency of occurrence or the duration was more significant. A high level of impact would result from frequently occurring impacts with long-term durations.			

Best Management Practices

The following BMPs have been developed to minimize the impact of these types of restoration projects.

- Plan for future use of the land must be provided. Level of use of the area must enable the land to still yield ecological benefit.

5.2. H Public Outreach /Education

Activity

The RC funds many Public Outreach and Education opportunities mostly in concert with a local restoration project. These activities often serve to educate groups about the benefits of restoration, as well as showing restoration efforts in their own communities. However, many education or public events increase human traffic at restoration locations that may be sensitive habitats.

Effects

Potential impacts from this project type are dependent on the type of event but often the effects would not be negative to EFH and very temporary in nature.

Summary of potential adverse effects from Public Outreach and Education			
Adverse effect	*Occurrence*	*Duration*	*Level of Impact*
Water column turbidity	Infrequent	Infrequent	Low
Removal of riparian vegetation	na	na	na
Compaction of sediment by large equipment	Infrequent	Infrequent	Low
Trampling of vegetation by people and equipment	Infrequent	Infrequent	Low
Increased risk of Invasive species	Occasional	Infrequent	Low

Occurrence: Infrequent= Less than 25% of all projects; Occasional= between 25% and 75% of all projects; Frequent= Greater than 75% of all projects.

Duration: Temporary= days-weeks; Short-term= under 3 years; Long-term 3-20 years.

Level of Impact: Combines frequency and duration. For example, an infrequent impact with a temporary duration will have a low level of impact. A moderate level of impact would occur if the frequency of occurrence or the duration was more significant. A high level of impact would result from frequently occurring impacts with long-term durations

Best Management Practices

The following BMPs have been developed to minimize the impact of these types of restoration projects.

- Ensure that people are kept clear of sensitive habitats.
- Take precautions to avoid introduction of invasive species especially when the project has exposed areas that have not been colonized by native vegetation.

6.0 Conclusion

Implementation of restoration activities under the CRP and DARRP may have impacts to EFH . Should the RC determine BMPs not address adverse effects or the activity is not covered under this programmatic consultation, then an individual EFH Assessment will be provided to NMFS.

For those projects where an individual EFH consultation is necessary, in order to provide streamlined review, the RC will assist NMFS in expediting review procedures to the extent practicable by utilizing the EFH Questionnaire created for each project (see Appendix IV).

7.0 Timing, Tracking and Review

This consultation remains in effect for a period of five years. If any changes are made to the CRP or DARRP during that time the RC should contact the AKR so that the conservation recommendations can be revised if necessary. At the end of the five-year period, the RC will create a spreadsheet of the projects conducted during the five years under this programmatic which have submitted final reports. The information in this spreadsheet will contain project name, project type, year of implementation and acreage or stream miles restored.

APPENDIX I
EFH Designations for Species Managed by the Fishery Management Council.[1]

EFH Descriptions

Text and map descriptions for federally managed fishery resources are found within a Fishery Management Plan (FMP). In Alaska, there are approximately 60 fish species listed within six FMPs, each with several life history stages. Where information exists, Essential Fish Habitat (EFH) has been described. The most current descriptions are found in Appendix D-Alternative 3 of the National Marine Fisheries Service (NMFS) Alaska Region's 2005 EFH Final Environmental Impact Statement. All EFH description information is available online at www.alaskafisheries.noaa.gov.

EFH Mapper

NMFS hosts the EFH Mapper v2.0 and EFH data inventory to provide EFH maps. The EFH Mapper provides the most current information available for EFH descriptions and EFH Conservation Areas, including Habitat Areas of Particular Concern. Data represents EFH geographically and should be used in conjunction with regional EFH Text Descriptions. http://www.habitat.noaa.gov/protection/efh/habitatmapper.html

FMP Summaries

Bering Sea and Aleutian Islands Groundfish FMP - This FMP governs groundfish fisheries of the Bering Sea and Aleutian Islands (BSAI) Management Area. The geographical extent of the FMP management unit is the United States (U.S.) Exclusive Economic Zone (EEZ) of the Bering Sea, including Bristol Bay and Norton Sound, and that portion of the North Pacific Ocean adjacent to the Aleutian Islands which is between 170° W. longitude and the U.S.-Russian Convention Line of 1867. The FMP covers fisheries for all stocks of finfish and marine invertebrates except salmonids, shrimps, scallops, snails, king crab, Tanner crab, Dungeness crab, corals, surf clams, horsehair crab, lyre crab, Pacific halibut, and Pacific herring. In terms of both the fishery and the groundfish resource, the BSAI groundfish fishery forms a distinct management area. The history of fishery development, target species and species composition of the commercial catch, bathymetry, and oceanography are all much different in the BSAI than in the adjacent Gulf of Alaska. Although many species occur over a broader range than the BSAI management area, with only a few exceptions (e.g., sablefish), stocks of common species in this region are believed to be different from those in the adjacent Gulf of Alaska.

Gulf of Alaska Groundfish FMP - This FMP governs groundfish fisheries of the Gulf of Alaska (GOA). The FMP management area is the United States (U.S.) exclusive economic zone (EEZ) of the North Pacific Ocean, exclusive of the Bering Sea, between the eastern Aleutian Islands at 170E W. longitude and Dixon Entrance at 132E40' W. longitude. The FMP covers fisheries for all stocks of finfish except salmon, steelhead, Pacific halibut, Pacific herring, and tuna. This FMP was implemented on December 1, 1978. Since that time, it has been amended over sixty times, and its focus has changed from the regulation of

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[1] Reader should refer to the 2004 final environmental impact statement for more detailed EFH information

mainly foreign fisheries to the management of fully domestic groundfish fisheries. This new version of the FMP has been revised to remove or update obsolete references to foreign fishery management measures, as well as outdated catch data and other scientific information. The FMP has also been reorganized to provide readers with a clear understanding of the GOA groundfish fishery and conservation and management measures promulgated by the FMP.

Bering Sea and Aleutian Islands King and Tanner Crab FMP - The FMP for the Commercial King and Tanner Crab Fisheries in the Bering Sea/Aleutian Islands (BSAI) was approved by the Secretary of Commerce on June 2, 1989. The FMP establishes a State/Federal cooperative management regime that defers crab management to the State of Alaska with Federal oversight. State regulations are subject to the provisions of the FMP, including its goals and objectives, the Magnuson-Stevens Act national standards, and other applicable federal laws. The FMP has been amended several times since its implementation. The management goal in the FMP is to maximize the overall long-term benefit to the nation of BSAI king and Tanner crab stocks by coordinated federal and state management, consistent with responsible stewardship for conservation of the crab resources and their habitats.

Scallop Fisheries off Alaska - This FMP governs scallop fisheries in federal waters off the State of Alaska. The FMP management unit is the U.S. exclusive economic zone (EEZ) of the Bering Sea, Aleutian Islands, and the Gulf of Alaska, and includes weathervane scallops and other scallop species not currently exploited. The GOA is defined as the U.S. EEZ of the North Pacific Ocean, exclusive of the Bering Sea, between the eastern Aleutian Islands at 170EW longitude and Dixon Entrance at 132E40'W longitude. The BSAI is defined as the U.S. EEZ south of the Bering Strait to the Alaska Peninsula and Aleutian Islands and extending south of the Aleutian Islands west of 170E W long.

Salmon FMP - The original Salmon FMP (1979) established Federal and Council authority over salmon fisheries in the EEZ, but excluded that portion west of 175° E. Amendment 3 to the FMP (1990) extended jurisdiction of the FMP to the entire West Area and deferred regulation of the sport and commercial troll salmon fisheries in the EEZ to the State. It generally prohibits commercial salmon fishing in the West Area, but indirectly addresses management authority in the three historical net areas open to commercial salmon fishing in the West Area—Copper River flats, Cook Inlet, and Area M—but acknowledges that the FMP does not prohibit fishing in those areas and that management is left to the state under other federal law. The current vague status of the FMP raises issues of how to be consistent with the FMP, the MSA, and other applicable Federal laws. Though the Council and NMFS are removed from routine management of salmon fisheries in the EEZ, the FMP asserts general NMFS and Council participation in and oversight of salmon management in the EEZ, and express and specific authority in the State in the Southeast commercial troll fishery and the EEZ sport fishery.

Arctic FMP - This FMP governs commercial fishing for most species of fish within the Arctic Management Area.1 The FMP management area, the Arctic Management Area, is all marine waters in the U.S. Exclusive Economic Zone of the Chukchi and Beaufort Seas from three nautical miles offshore the coast of Alaska or its baseline to 200 nautical miles

offshore, north of Bering Strait (from Cape Prince of Wales to Cape Dezhneva) and westward to the 1990 United States/Russia maritime boundary line and eastward to the United States/Canada maritime boundary. The FMP governs commercial fishing for all stocks of fish, including all finfish, shellfish, or other marine living resources, except commercial fishing for Pacific salmon and Pacific halibut, which is managed under other authorities.

APPENDIX II

National Marine Fisheries Service Habitat Conservation Division Contacts in Alaska

Habitat Conservation Division – Alaska Region	
Jeanne Hanson, Assistant Regional Administrator PH: (907)271-3029 or (907) 586-7824 Email: Jeanne.Hanson@noaa.gov	
Regional Office Staff - Juneau P.O. Box 21668 709 West 9th Street Juneau, AK 99802 PH: (907) 586-7636 Fax: (907) 586-7358	Field Office Staff-Anchorage PO Box 43 222 West 7th Ave., Rm. 552 Anchorage, AK 99513-7577 PH: (907) 271-5006 Fax: (907) 271-3030
Chiska Derr PH: (907) 586-7345 Email: Chiska.Derr@noaa.gov	Matthew Eagleton EFH Coordinator PH: (907) 271-6354 Email: Matthew.Eagleton@noaa.gov
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Linda Shaw PH: (907) 586-7510 Email: Linda.Shaw@noaa.gov	Doug Limpinsel PH: (907) 271-6379 Email: Doug.Limpinsel@noaa.gov
Sue Walker PH: (907) 586-7646 Email: Susan.Walker@noaa.gov	John Olson PH: (907) 271-1508 Email: John.Olson@noaa.gov
	Eric Rothwell PH: (907) 271-1937 Email: Eric.Rothwell@noaa.gov

APPENDIX III

Sources of EFH and Related Resource Information

AKEPIC—Alaska Exotic Plant Information Clearinghouse. 2005. Invasive Plants of Alaska. Alaska Association of Conservation Districts Publication. Anchorage, Alaska.

Barras, J., Beville, S., Britsch, D., Hartley, S., Hawes, S., Johnston, J., Kemp, P., Kinler, Q., Martucci, A., Porthouse, J., Reed, D., Roy, K., Sapkota, S., and Suhayda, J., 2003, Historical and projected coastal Louisiana land changes: 1978-2050: USGS Open File Report 03-334, 39 p. (Revised January 2004).

Fay, Virginia. 2001. Alaska Aquatic Nuisance Species Management Plan. Alaska Department of Fish and Game. http://www.anstaskforce.gov/State%20Plans/ak_ansmp.pdf

Hefner, J.M. and J.D. Brown. 1985. Wetland Trends in the Southeastern United States. Wetlands Vol. 4 (pages?)

Stedman, S. and T.E. Dahl. 2008. Status and trends of wetlands in the coastal watersheds of the Eastern United States 1998 to 2004. National Oceanic and Atmospheric Administration, National Marine Fisheries Service and U.S. Department of the Interior, Fish and Wildlife Service. (32 pages)

EFH Frequently Asked Questions. http://www.fakr.noaa.gov/habitat/efh/faq.htm

NPFMC Public Review Draft EFH Omnibus amendment, February 2011 Impacts to Essential Fish Habitat From Non-Fishing Activities in Alaska. http://www.fakr.noaa.gov/habitat/efh/review/omnibusamd/app5.pdf

NPFMC 2010. Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands. October 2010. http://www.fakr.noaa.gov/npfmc/fmp/bsai/BSAI.pdf

NPFMC 2011. Fishery Management Plan for Groundfish of the Gulf of Alaska. April 2011. http://www.fakr.noaa.gov/npfmc/fmp/goa/GOA.pdf

NPFMC 1990. Fishery Management Plan for the Salmon Fisheries in the EEZ off the Coast of Alaska. April 1990. http://www.fakr.noaa.gov/npfmc/fmp/salmon/SalmonFMP.pdf

NPFMC 2009. Fishery Management Plan for Bering Sea/Aleutian Islands King and Tanner Crabs. September 2009. http://www.fakr.noaa.gov/npfmc/fmp/crab/CRAFMP2009.pdf

NPFMC 2006. Fishery Management Plan for the Scallop Fishery off Alaska. May 2006. http://www.fakr.noaa.gov/npfmc/fmp/scallop/ScallopFMP2006.pdf

NPFMC 2009. Fishery Management Plan for Fish Resources of the Arctic. August 2009. http://www.fakr.noaa.gov/npfmc/fmp/arctic/ArcticFMP.pdf

NMFS. 2011. Impacts to Essential Fish Habitat from Non-fishing Activities in Alaska - update to Appendix G of the 2005 Environmental Impact Statement for Essential Fish Habitat Identification and Conservation in Alaska. 123 pages. http://www.fakr.noaa.gov/habitat/efh/nonfishing/impactstoefh112011.pdf

NMFS 2010. Essential Fish Habitat Review for 2010. National Marine Fisheries Service and North Pacific Fishery Management Council. 117 pages. http://www.fakr.noaa.gov/habitat/efh/review.htm

NMFS 2005. National Marine Fisheries Service. 2005. Final Environmental Impact Statement for Essential Fish Habitat Identification and Conservation in Alaska. March 2005. NMFS, P.O. Box 21668, Juneau, AK 99801.

National Marine Fisheries Service (NMFS). 1999. Essential Fish Habitat Consultation Guidance. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Office of Habitat Conservation, Silver Spring, Maryland. NOV 1999.

NOAA Restoration Center (RC). 2001. DRAFT Environmental Assessment and FONSI for Implementation of NOAA Fisheries' Community-Based Restoration Program. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Office of Habitat Conservation, Silver Spring, MD. May 2001.

National Ocean Service. "Coastal Zone Management Program." National Oceanic and Atmospheric Administration, National Ocean Service, Office of Ocean and Coastal Resource Management. 2001. http://www.ocrm.nos.noaa.gov/czm/national.html (11 Jul 2001).

National Research Council. 1995. Wetlands: Characteristics and Boundaries. Committee on Characterization of Wetlands, Water Science and Technology Board, Board on Environmental Studies and Toxicology. Commission on Geosciences, Environment, and Resources. National Academy Press, Washington, D.C.

APPENDIX IV

EFH Affect Determination Questionnaire

This questionnaire is designed to help assess whether or not any action or activity may have an adverse effect on EFH.	
Action Agency	
Agency	
Line Office	
Staff Contact	
Date	
EFH Information	
FMP(s)	
EFH Species (list)	
Habitat Classification	
Action Information	
Action Description	
Waterbody	
Specific Location	
Nearest Community	
Acreage (acres)	
Anadromous Stream Miles (if known)	

Conclusions	Question	YES (√)	NO(√)
Adverse Effect Determination	Will the action or activity adversely affect EFH ?		
Programmatic Conservation Determination	Does the action or activity incorporate Best Management Practices (BMPs) from the Programmatic Consultation (see note b)?		

Notes:

a. If the action or activity may adversely affect EFH AND falls outside of the Programmatic then an EFH Assessment is required and submitted to NMFS AKR/HCD.

b. If BMPs within the Programmatic are not applicable to conserve and protect EFH, then an EFH Assessment is required and submitted to NMFS AKR/HCD.

EFH Assessment Mandatory Contents[1] [50 CFR Part 600.920(e)(3)]:

i. A description of the action;
ii. An analysis of the potential adverse effects of the action on EFH and the managed species;
iii. The Federal agencies conclusions regarding the effects of the action;
iv. Proposed mitigation, if applicable.

Additional Information:

Submitted by: _____ **Date:** ____/____/____

The RC believes this project fits within this Programmatic Consultation Agreement both in terms of project type and project impact.

RC Representative: _____ **Date:** ____/____/____

[1]An EFH Assessment can be a stand-alone document or incorporated by reference; as long as references are made clear as to the exact location of each mandatory content in any supporting document.