

# FHWA/NMFS Consultation Process Guide For Transportation Actions in the NMFS Greater Atlantic Region

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## Acronyms

<b>ACM</b>	Alternative Contracting Method
<b>BA</b>	Biological Assessment
<b>BE</b>	Biological Evaluation
<b>BMP</b>	Best Management Practice
<b>BO</b>	Biological Opinion
<b>CEQ</b>	Council on Environmental Quality
<b>CFR</b>	Code of Federal Regulations
<b>DB</b>	Design-Build
<b>DOT</b>	Department of Transportation
<b>EA</b>	Environmental Assessment
<b>EFH</b>	Essential Fish Habitat
<b>EIS</b>	Environmental Impact Statement
<b>ESA</b>	Endangered Species Act
<b>FAHP</b>	Federal Aid Highway Program
<b>FEIS</b>	Final Environmental Impact Statement
<b>FHWA</b>	Federal Highway Administration
<b>FONSI</b>	Finding of No Significant Impact
<b>FWCA</b>	Fish and Wildlife Coordination Act
<b>GARFO</b>	Greater Atlantic Regional Fisheries Office
<b>HAPC</b>	Habitat Area of Particular Concern
<b>HCD</b>	Habitat Conservation Division
<b>ITS</b>	Incidental Take Statement
<b>LAA</b>	Likely to Adversely Affect
<b>MPO</b>	Metropolitan Planning Organization
<b>MSA</b>	Magnuson-Stevens Fishery Conservation and Management Act
<b>NEPA</b>	National Environmental Policy Act
<b>NLAA</b>	Not Likely to Adversely Affect
<b>NOAA</b>	National Oceanic and Atmospheric Administration
<b>PRD</b>	Protected Resources Division
<b>RFP</b>	Request for Proposals
<b>ROD</b>	Record of Decision
<b>RPA</b>	Reasonable and Prudent Alternative
<b>RPM</b>	Reasonable and Prudent Measure
<b>RPO</b>	Regional Planning Organization
<b>SAS</b>	Special Aquatic Site
<b>SAV</b>	Submerged Aquatic Vegetation
<b>STIP</b>	Statewide Transportation Improvement Plan
<b>USC</b>	United States Code

## **I. Introduction and Purpose**

This guide provides information to staff within state Departments of Transportation (state DOT), Federal Highway Administration (FHWA) Division Offices, and NOAA's National Marine Fisheries Service (NMFS) Greater Atlantic Regional Fisheries Office (GARFO) for conducting consultations on FHWA-funded projects. The purpose of this document is to develop a mutually agreeable consultation process for transportation projects in NMFS' Greater Atlantic Region, which includes coastal areas from Maine to Virginia. This document is not prescriptive and does not establish new policy or modify existing agency policies. This guide discusses the requirements of many statutes and regulations to facilitate the reader's understanding of how compliance with those requirements can be fulfilled while conducting consultation under section 7 of the ESA, the MSA, and the FWCA. The statutes and regulations discussed are subject to change and the requirements should be independently verified and their application to a given circumstance evaluated. Nothing in this guide alters the requirements under these laws and regulations. Establishing an efficient consultation process for projects will help expedite FHWA transportation projects, reduce staff workloads, and lead to better environmental outcomes by improving understanding and collaboration among FHWA Divisions, state DOTs, and NMFS.

FHWA and NMFS provide this guide to improve the consultation process for projects through collaboration and alignment of the project development and consultation processes and to provide predictability and consistency. The goal is to develop sufficient detail in the project development process to enable FHWA and NMFS to complete the consultation processes efficiently and consistent with statutory and regulatory requirements. In addition to a Coordinated Consultation Process including a step-by-step process (Section V), this document also provides an extensive description and checklist of information needs (Appendix I). This guide, used at the appropriate stages during the step-by-step process, will ensure the needed information is efficiently exchanged at appropriate stages in the consultation and project development process. A coordinated timeline is provided to identify key points in the project development and consultation processes where the agencies can best collaborate to hone the level of detail needed to meet agency requirements based on the information available and consultation needs.

## II. Applicable Federal Laws, Regulations, and Agency Policies

FHWA's and NMFS' activities are governed by federal laws, regulations, and agency policies. Both agencies are seeking to better align FHWA's NEPA review process with consultation processes pursuant to section 7 of the Endangered Species Act (ESA), the Magnuson-Stevens Act (MSA)/Essential Fish Habitat (EFH), and the Fish and Wildlife Coordination Act (FWCA).

The purpose of this section is to provide the necessary background on both agencies' authorities and responsibilities to clearly document and understand each other's existing requirements, identify opportunities and constraints, and identify areas of timing where alignment of the different processes can most efficiently meet agency requirements and needs. The following subparts include descriptions of the laws and policies that drive the applicable agency processes.

### *Federal Aid Highway Program (Title 23 USC)*

The Federal Aid Highway Program (FAHP) is an umbrella term for the separate highway programs administered by FHWA. These programs are focused on highway construction. Operations and routine maintenance, such as mowing roadway rights-of-way or filling potholes, are responsibilities of the state transportation agencies.

Most funds are apportioned to the states by formula and the planning, prioritizing, selection, and construction of projects is left primarily to state DOTs. Each state is required to have a State Transportation Improvement Plan (STIP), which sets priorities for the state's use of FAHP funds. Metropolitan planning organizations (MPOs) play a role in project decision-making in urban areas, but federal project funding continues to flow through state DOTs. The FAHP does not provide money in advance; rather, funds are obligated to a project and expenditures are reimbursed provided activities are in compliance with federal laws and regulations.

### *National Environmental Policy Act (NEPA) of 1969 (42 USC 4321-4347; 23 USC 771)*

NEPA declares a national policy that encourages harmony between humans and their environment and promotes efforts that prevent damage to the environment. NEPA requires federal agencies to: 1) include a detailed statement of the environmental impact in every recommendation or report on proposals for major federal actions significantly affecting the quality of the human environment; 2) study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources; and 3) initiate and use ecological information in the planning and development of resource-oriented projects.

While NEPA establishes the basic framework for integrating environmental considerations into federal decision making, it does not provide the process details. Agency administration of NEPA is augmented by the Council on Environmental Quality's (CEQ) Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (40 CFR Parts 1500-1508),

FHWA's own NEPA regulations (23 CFR Part 771, Environmental Impact and Related Procedures), and agency policy.

Congress' recent surface transportation legislation (amending Title 23 USC) brought a focus on improving efficiency in the delivery of surface transportation. Provisions in Fixing America's Surface Transportation Act (FAST Act) build on those in past legislation (i.e., Safe, Accountable, Flexible, Efficient Transportation Equity Act: a Legacy for Users [SAFETEA-LU] and the Moving Ahead for Progress in the 21<sup>st</sup> Century Act [MAP-21]) and are aimed at improving highway program and project delivery through enhanced agency coordination and transparency. Specifically, Section 1304 of the FAST Act (Efficient Environmental Reviews for Project Decisionmaking) amends Title 23 USC Section 139 by establishing new coordination and scheduling procedures and changing NEPA process requirements.

The FAST Act amended the coordination plan requirements in 23 USC whereby the lead agency must develop a coordination plan no later than 90 days after the publication of an NOI to prepare an EIS or the initiation of an environmental assessment. The coordination plan must include a schedule for completing the Section 139 environmental review process. The schedule requires participating agency concurrence and must be posted on the [Permitting Dashboard](#) to make publicly available the status and progress for EIS and EA documents.

After providing an opportunity for public and agency involvement, FHWA, or the state DOT as lead federal agency, will define a project's purpose and need and establish a plan to coordinate public and agency participation. As early as practicable in the process, and with involvement by participating agencies and the public, FHWA/state DOT is to provide a range of alternatives to be considered for a project. The FAST Act directs agencies to use the range of alternatives for a project for all federal environmental reviews and permit processes required for the project, when consistent with federal law.

The FAST Act also mandates that, to the maximum extent practicable, all federal permits and reviews for a project rely on a single environmental document prepared under NEPA. Additionally, per 23 USC 139, the final Environmental Impact Statement (FEIS) and record of decision (ROD) can be combined in one document, skipping the 30-day waiting period of the NEPA process, unless the FEIS makes substantial changes to the proposed action that are relevant to environment or safety concerns, or significant new circumstances or information relevant to environmental concerns are presented.

If any issue that could delay the process cannot be resolved within 30 days, U.S. DOT must notify the CEQ, per 23 USC 139(h)(6)(c). A 150-day statute of limitations for lawsuits challenging federal agency approvals is provided, but it requires publishing environmental decisions in the Federal Register, per 23 USC 139(l).

While the FAST Act directs federal agencies to expedite the environmental review process for transportation projects, in terms of the ESA, EFH, and FWCA processes, FHWA may need to reinitiate consultation when new information becomes available or plans change. Issues that

delay completion of the review process are subject to elevation for dispute resolution and may be referred to the President by CEQ. Agencies that fail to meet the deadlines could face financial penalties.

### *Agency Roles*

The NEPA process includes requirements for interagency coordination and cooperation and public participation in planning and project development decision making. The CEQ's regulations establish a "lead agency" and "cooperating agency" to help streamline the environmental process; eliminate duplication in federal, state, and local procedures; and integrate NEPA requirements with other federal environmental review and consultation requirements. Lead agency is defined as the agency preparing or taken primary responsibility for preparing the EIS and supervising the NEPA process (40 CFR § 1508.16). The FAST Act also requires lead agencies to establish a coordination plan within 90 days after the date of publication of an NOI to prepare an EIS or the initiation of an environmental assessment for coordinating public and agency participation and comment during the environmental review process. FHWA is the federal lead agency in the NEPA process for highway projects requiring FHWA approval.

The direct recipient of federal funds for a project must serve as a joint lead agency. For FHWA, the state DOT is typically the direct recipient of project funds and, therefore, must serve as a joint lead agency along with FHWA. Other federal, state, or local governmental entities, may act as joint lead agencies, at the discretion of the required lead agencies, in accordance with CEQ regulations. The lead federal agency works cooperatively with other federal and state agencies during the environmental review process. Lead agency responsibilities in the NEPA process include inviting cooperating agencies, scoping, providing project information, conducting field reviews, developing consensus among stakeholders with diverse interests, resolving conflict, and ensuring that issues are addressed and decisions are fully explained in the environmental document.

Cooperating agency means any federal agency other than a lead agency which has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or a reasonable alternative) for legislation or other major federal action significantly affecting the quality of the human environment (40 CFR § 1508.5). Upon request of the lead agency, any other federal agency which has jurisdiction by law or special expertise with respect to any environmental issue which should be addressed in the EIS, shall be a cooperating agency (40 CFR § 1501.6). An agency may also request the lead agency to designate it a cooperating agency. The concept of cooperating agencies is a mechanism designed to address concerns early in the NEPA process and avert late disagreements. Cooperating agency responsibilities include participating in scoping, attending joint field reviews, and providing meaningful and early input to issues of concern.

The FAST Act further defines the role of "participating agencies" – a category of engagement that allows more agencies a formal role and rights in the environmental review process. Federal, state, tribal, regional, and local government agencies with an interest in the project should be

invited to serve as participating agencies. All cooperating agencies are participating agencies, but not all participating agencies are cooperating agencies. The lead agencies consider the distinctions in deciding whether to invite an agency to serve as a cooperating/participating agency or only as a participating agency. Cooperating agencies have a higher degree of authority, responsibility, and involvement in the environmental review process. The CEQ regulations (40 CFR § 1501.6) permit a cooperating agency to “assume on request of the lead agency responsibility for developing information and preparing environmental analyses including portions of the EIS concerning which the cooperating agency has special expertise.” An additional distinction is that, pursuant to 40 CFR §1506.3, “a cooperating agency may adopt without recirculation of the EIS of a lead agency when, after an independent review of the statement, the cooperating agency concludes that its comments and suggestions have been satisfied.” NMFS is generally a cooperating agency for a FHWA EIS when marine resources are involved.

#### *Title 23 CFR Part 636 Design-Build Contracting*

Title 23 USC § 112(b)(3) provides FHWA’s statutory requirements for the DB project delivery method and Title 23 CFR Part 636 provides FHWA’s regulatory policy for DB. Specifically, CFR § 636.109 describes how the NEPA process relates to the DB procurement process. The intent is to ensure there is an objective NEPA process, that public officials and citizens have the necessary environmental impact information before actions are taken, and that DB proposers do not assume an unnecessary amount of risk in the event the NEPA process results in significant change in the proposal. The regulations also allow release of a Request for Proposals (RFP)<sup>1</sup> or award a DB contract prior to completion of NEPA.

#### *Title 23 CFR Part 771, Environmental Impact and Related Procedures*

FHWA issued these regulations to address NEPA responsibilities, which require FHWA to examine and avoid potential impacts to the environment when delivering proposed transportation projects. The FHWA NEPA project development process is an approach to balanced transportation decision making that takes into account the potential impacts on the human and natural environment and the public’s need for safe and efficient transportation. Title 23 CFR § 771.113(a) states that the lead agency will perform the work necessary to complete a finding of no significant impact (FONSI) or a ROD and comply with other related environmental laws and regulations to the maximum extent possible during the NEPA process. This work includes environmental studies, related engineering studies, agency coordination, and public involvement.

Title 23 CFR § 771.105 states that it is FHWA’s policy that: 1) to the fullest extent possible, all environmental investigations, reviews, and consultations be coordinated as a single process, and compliance with all applicable environmental requirements be reflected in the environmental document required by this regulation (but this is not required); 2) alternative courses of action be

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<sup>1</sup> Request for Proposal (RFP) means the document that describes the procurement process, forms the basis for the final proposals and may potentially become an element in the contract (Title 23 CFR § 636.103).

evaluated and decisions be made in the best overall public interest based upon a balanced consideration of the need for safe and efficient transportation; of the social, economic, and environmental impacts of the proposed transportation improvement; and of national, state, and local environmental protection goals; and 3) measures necessary to mitigate adverse impacts be incorporated into the action. This policy is reiterated in the regulations for Environmental Assessments (EAs) (23 CFR § 771.119), EISs (23 CFR § 771.125), and compliance with other requirements (23 CFR § 771.133).

The policy is reinforced in, or consistent with, legislation (FAST Act), regulation (23 CFR Part 771; 50 CFR § 402.06; 40 CFR § 1502.25), and current and past Presidential actions (EO 13766; EO 13604; Presidential Memorandum- Modernizing Federal Infrastructure Review and Permitting Regulations, Policies, and Procedures). The acceleration of delivery of transportation infrastructure projects however, nevertheless requires consideration of risk related to the project scope, timing, and cost consistent with applicable environmental law. A core principle of FHWA's risk-based approach to stewardship and oversight is ensuring decisions are grounded in objective information. A well-informed NEPA decision includes completing the appropriate environmental investigations, reviews, and consultations prior to making the NEPA decision; this includes ESA section 7 and EFH consultation. However, an appropriate amount of planning must be done so that an effects analysis may be performed to satisfy consultation.

#### *EO 13766, Expediting Environmental Reviews and Approvals for High Priority Infrastructure Projects*

On January 24, 2017, EO 13766 was issued to streamline the review of and expedite the construction of infrastructure projects. Through a nomination process, overseen by the CEQ Chairman, qualifying projects will be determined as "high priority" infrastructure projects. These qualifying high-priority projects will be subject to expedited procedures and deadlines for the completion of environmental reviews and approvals. This EO does not supersede existing laws or impair existing functions of any federal agencies.

#### *EO 13604, Improving Performance of Federal Permitting and Review of Infrastructure Projects*

On March 22, 2012, EO 13604 was issued to reduce time required to make decisions in the permitting and review of infrastructure projects, while improving environmental outcomes. The EO establishes a steering committee on Federal Infrastructure Permitting and Review Process Improvement, focused on executing permitting and review processes efficiently and effectively, ensuring the health, safety, and security of communities and the environment while supporting vital economic growth. To obtain efficiencies and effectiveness, federal permitting and review processes must be more predictable and transparent, promoting early collaboration among agencies to address interests and minimize delays.

*Presidential Memorandum on Modernizing Federal Infrastructure Review and Permitting Regulations, Policies, and Procedures*

On May 17, 2013, a Presidential Memorandum was sent to executive heads of federal departments and agencies. This memorandum builds upon and incorporates reforms identified by agencies pursuant to EO 13604 to reduce the project review and permitting time, while improving environmental and community outcomes. It outlines the methods to be used and expected outcomes of the modernization plan.

*FHWA Policy on Permissible Project Related Activities during the NEPA Process (Oct. 1, 2010)*

This Directive clarifies FHWA's policy regarding permissible project-related activities that may be advanced prior to the conclusion of the NEPA process. Specifically, state DOTs may perform preliminary design activities prior to a NEPA decision regardless of the project delivery mechanism that is used, but final design activities may not be advanced until a NEPA decision has been issued. Preliminary design includes activities that are needed to adequately analyze alternatives and establish the parameters for final design. These activities include, but are not limited to: EAs, topographic surveys, geotechnical investigations, hydrologic and hydraulic analysis, estimates of the types and quantity of materials, design and engineering activities used to define project alternatives, completing the NEPA alternatives analysis and review process, complying with other environmental laws and regulations, environmental mitigation plans, bridge type/size/location studies, temporary structure requirements, and identification of removal items. Division administrators may allow other activities that are not part of final design to be advanced as preliminary design if it is determined that the activities do not affect the objective consideration of alternatives in the NEPA process and/or cause adverse environmental impacts.

*Endangered Species Act (ESA) (USC 136; 16 USC Part 460 et seq.)*

The purpose of the ESA is to conserve the ecosystems upon which endangered and threatened species depend, and to provide a program for the conservation of endangered and threatened species. Congress' policy is that all federal agencies shall seek to conserve endangered and threatened species and use their authorities to further the purposes of the ESA (16 USC § 1531(b and c)). "Conserve" is defined in the ESA to mean the use of all methods and procedures necessary to bring any endangered or threatened species to the point the measures provided pursuant to the ESA are no longer necessary (16 USC § 1532(3)).

Section 7(a)(1) of the ESA of 1973, as amended, requires federal agencies, in consultation with NMFS and/or U.S. Fish and Wildlife Service, to use their authorities in furtherance of the purposes of the ESA "by carrying out programs for the conservation of endangered species and threatened species." Section 7(a)(2) of the ESA of 1973, as amended (16 USC Part 1531 *et seq.*), requires federal agencies to consult with NMFS to insure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitat. Any discretionary federal action, such as the approval or funding of a project by a federal agency, that

may affect ESA-listed species or designated critical habitat, directly and/or indirectly, must undergo section 7 consultation. Consultation procedures are described in regulation (50 CFR Part 402) and in the Endangered Species Consultation Handbook (FWS & NMFS 1998). FHWA policies provide additional direction specifically to activities under the FAHP (FHWA 2002. *Information: Management of the Endangered Species Act (ESA) Environmental Analysis and Consultation Process*).

Section 7(a)(4) requires federal agencies to confer with NMFS on actions likely to jeopardize the continued existence of any species proposed for listing or result in the destruction or adverse modification of any proposed critical habitat. While consultations are required when the proposed action may affect ESA-listed species, a conference is required only when the proposed action is likely to jeopardize the continued existence of a proposed species or destroy or adversely modify proposed critical habitat. However, federal agencies may request a conference on any proposed action that may affect a proposed species or proposed critical habitat. FHWA's policy is for state DOTs to consider conferencing on candidate species based upon a risk-based assessment (FHWA. 2012. *ESA- Consideration of Candidate Species & Change Management, Memorandum No. ESA-3. Environmental Process Manual- Sec 1050.02 ESA Procedures*). NMFS can also request a conference after reviewing available information suggesting a proposed action is likely to jeopardize proposed species or destroy or adversely modify proposed critical habitat.

Section 9 of the ESA prohibits take<sup>2</sup> of endangered fish and wildlife. Through regulations issued pursuant to section 4(d), NMFS has extended the take prohibition to many threatened species under its jurisdiction (50 CFR Part 223). Federal agencies can obtain an exemption from the prohibitions of section 9 through section 7 consultation. For non-federal actions, section 10 of the ESA allows an exemption to the ESA's prohibition of take through the authorization of an incidental take permit under certain circumstances, with the development of a habitat conservation plan.

*Magnuson-Stevens Fishery Conservation and Management Act (MSA) (16 USC 1801 et seq.)*

The MSA requires federal agencies to consult with NMFS on actions authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken that may adversely affect Essential Fish Habitat (EFH), regardless of whether the action is land-based or directly within waters designated as EFH. The consultation process is guided by the EFH regulations at 50 CFR § 600.920, which mandate the preparation of EFH assessments and outline each agency's obligations in the consultation procedure.

The 1996 amendment to the MSA strengthened the link between habitat rebuilding and fisheries sustainability. Until the MSA, no regulations existed that required other agencies to consider

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<sup>2</sup> Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct with respect to federally listed endangered species of wildlife. Federal regulations provide the same taking prohibitions for threatened wildlife species (50 CFR 17.31(a)).

adverse effects on EFH, to identify EFH for managed species, or to measure the effectiveness of conservation efforts to enhance the habitat fish species need.

*Fish and Wildlife Coordination Act (16 USC 661-667e; the Act of March 10, 1934; Ch. 55; 48 Stat.401)*

The FWCA, as amended in 1964, requires federal agencies to consult with NMFS when proposed actions might result in the control or modification of a natural stream or body of water. Federal agencies must consider effects that these projects would have on fish and wildlife and provide for improvement of these resources. Many fish and invertebrates provide forage for managed species and threatened and endangered species, and are considered a component of EFH, as well as NOAA trust resources covered under the FWCA. NMFS provides comments under the FWCA intended to reduce environmental impacts to migratory, estuarine, and marine fish and their habitats. Such comments are typically provided during EFH consultations.

### III. Processes

This section describes the existing consultation processes for both agencies and highlights opportunities for streamlining these procedures and overlapping consultations timelines.

#### *Transportation Planning and Project Development*

FHWA provides stewardship and oversight of the FAHP. However, planning activities occur at MPOs, regional planning organizations (RPOs), and state planning offices. These organizations provide the basis for transportation projects that are ultimately constructed by state DOTs, who plan future transportation projects through the STIP. As a result, FHWA has limited involvement in planning individual projects but certifies planning processes and provides planning assistance to the state DOTs and MPOs. Divisions are responsible for implementing the FAHP and coordinating with states to obligate and reimburse qualifying state DOT expenditures.

State DOTs develop NEPA documents for federal transportation projects. FHWA Division staff coordinate with state DOTs to identify the NEPA class of action and the scope and contents of the NEPA reviews. The NEPA framework is used to integrate all environmental reviews into the evaluation process when making a decision such as a FONSI/ROD. According to 23 CFR § 771.130, projects receiving federal funding must not violate any applicable environmental laws.

To receive federal funding, transportation projects must be included in a STIP. Because these plans are fiscally constrained, state DOTs depend upon reliable cost estimates, including environmental costs, to create an accurate estimate of what they will be able to build. State DOTs then are incentivized to develop accurate estimates of project costs. FHWA encourages state DOTs to consider environmental impacts early in the transportation planning process. One of FHWA's strategies for starting the NEPA process sooner is to encourage state DOTs to meet with resource agencies such as NMFS early in the transportation planning process, incentivizing them to work with resource agencies to assess environmental impacts and the costs of mitigation measures. Thus, providing clear information on resource agencies' expectations offers an obvious benefit to state DOTs. To support this stage of the process, NMFS, in collaboration with FHWA, developed a Best Management Practices (BMP) Manual that provides recommended voluntary measures for transportation agencies to incorporate into their projects to avoid, minimize, and offset adverse effects to ESA-listed species and their critical habitat, EFH, and NOAA trust resources. The BMPs provide more transparency and predictability to transportation agencies, including FHWA and state DOTs, regarding species conservation, habitat needs, and GARFO's recommendations. This conservation strategy facilitates project approvals by enabling transportation agencies to incorporate impact avoidance and other minimization strategies during project planning.

After the planning process is complete, state DOTs commence project development. Historically, most environmental review has occurred during the project development process. After project development and during project delivery, resource agencies such as NMFS may provide data and expertise through collaborative information exchange with state DOTs so that FHWA/state DOT

may perform an analysis of the project's effects that is as robust as possible. The effects analysis and consultation processes are essential parts of project development planning and delivery.

The majority of FHWA consultations with NMFS are triggered by FHWA's authorization or funding of state DOT projects; the consultations are typically between NMFS and the state DOT as FHWA's designated non-federal representative. In a letter to NMFS dated August 7, 1986, FHWA delegated informal section 7 consultation to state DOTs, unless a FHWA Division prefers to make all contacts, as permitted under 50 CFR § 402.08. In general, state DOTs take the lead in conducting informal consultation<sup>3</sup> with NMFS and drafting biological assessments (BAs) and EFH assessments. If a BA is prepared, 50 CFR § 402.08 requires that FHWA furnish guidance and supervision and independently review and evaluate the scope and content of the BA.<sup>4</sup> The ultimate responsibility for compliance with section 7 remains with FHWA.

Typical projects are Design-Bid-Build, where final design is completed by one party (in-house staff or under a negotiated contract) and subsequent construction is awarded to a separate low-bid contractor. Projects that use Design-Build (DB) and other Alternative Contracting Methods (ACM) combine design and construction stages under one contract to promote innovation and expedite project delivery. Under DB regulations, state DOTs can request a waiver from FHWA to proceed with NEPA before letting a project to bid. While state DOTs make this request at their own risk, it is generally in the state DOT's best interest to be aware of the environmental requirements of a specific project before it is let to bid. State DOTs may perform preliminary design activities prior to a NEPA decision regardless of the project delivery mechanism used; however, final design activities may not be advanced until a NEPA decision is issued.

In the ACM/DB process, FHWA completes the NEPA process and issues a decision, such as a FONSI/ROD, before the RFP is issued. For RFPs, state DOTs develop, at minimum, the footprint of the project, the vertical and horizontal alignment and typical cross-section, adequate right of way, identify utilities, limit of disturbance, and enough engineering for a preliminary estimate of stormwater quantity and quality. The state DOT determines where potential impacts may be and develops concept plans including line and grade, overall corridor, vertical clearance, impacts needing to be addressed by the owner, and FHWA/state DOT performance criteria. Conducting investigations to obtain information to comply with environmental regulations is authorized pre-RFP (see the FHWA Order on Permissible Activities). Early communication

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<sup>3</sup> Informal consultation- an optional process that includes all discussions and correspondence between NMFS and a federal agency or designated non-federal representative, prior to formal consultation, if required (50 CFR § 402.02). This process allows the federal agency to use NMFS' expertise to evaluate the agency's assessment of potential effects or to suggest possible modifications to the proposed action, which could avoid or minimize potential adverse effects. If a proposed federal action may affect an ESA-listed species or designated critical habitat, formal consultation is required, unless the federal agency determines and NMFS concurs the proposed action is not likely to adversely affect any listed species or designated critical habitats (50 CFR § 402.13).

<sup>4</sup> This process would change if a GARFO-region state DOT were to become a NEPA-assigned state DOT. At the time of the finalization of this document, no state DOTs in the GARFO region are or are in the process of becoming NEPA-assigned.

between state DOTs and resource agencies is encouraged, so that information needs and expectations can be addressed and environmental requirements and performance criteria can be included in the RFPs. RFPs are released to the contractors from a state DOT with the concept design. The contractor then puts together preliminary plans to meet the needs of the state DOT. If fewer specifics are provided to the contractor with the RFP, the contractor may potentially be able to develop innovative and cost-effective ideas, but with information from this guide and FHWA/NMFS' BMP Manual, the contractor can anticipate NMFS' environmental standards and ensure the design is protective of EFH and ESA-listed species and their critical habitat. The state DOT then reviews the plans developed by the contractor and has an understanding of potential impacts. The state DOT ensures that the contractor demonstrates they will meet any environmental commitments and performance criteria (e.g. pile driving noise threshold).

### *NMFS' ESA Process – Timelines, Requirements*

State DOTs typically take the lead for informal consultation with NMFS. State DOTs evaluate their proposed actions and, if they determine the action may affect a listed species or critical habitat, they conduct a biological evaluation (BE). State DOTs submit a determination of effects along with justification with a request for concurrence to GARFO Protected Resources Division (PRD). If FHWA/state DOT determines that the action is “not likely to adversely affect” (NLAA)<sup>5</sup> any ESA-listed species or critical habitat, and GARFO PRD concurs with this determination, then GARFO PRD will reply in a letter of concurrence, completing section 7 consultation. If FHWA/state DOT determines, after preparing a BE, that the action is “likely to adversely affect” (LAA)<sup>6</sup> any ESA-listed species or GARFO PRD does not concur with the action agency's NLAA determination, then formal section 7 consultation may be required.

As described in 50 CFR § 402.12, a BA is required for major construction activities that may affect ESA protected species and habitat under NMFS' jurisdiction. A BA is used to evaluate the potential effects of the action on listed and proposed species and designated and proposed critical habitat; to determine whether any such species or habitat are likely to be adversely affected by the action; and to determine whether formal consultation or a conference is necessary. The necessary components of a request to initiate formal consultation are described in 50 CFR § 402.14 (c) (1-6). State DOTs may prepare the BA, but FHWA is ultimately responsible for the content and its submission. Upon receipt of sufficient information from FHWA/state DOT, GARFO PRD will issue a Biological Opinion (BO) with an Incidental Take Statement (ITS), if appropriate. Any effects that amount to the take of an ESA-listed species are not discountable, insignificant, or entirely beneficial. If any adverse effect to an ESA-listed species, including an effect that rises to the level of take, or any adverse effect to critical habitat, is

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<sup>5</sup> NLAA- the appropriate conclusion when effects on ESA-listed species are expected to be discountable, insignificant, or completely beneficial (ESA Consultation Handbook).

<sup>6</sup> LAA- the appropriate finding in a biological assessment (or conclusion during informal consultation) if any adverse effect to ESA-listed species may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effect is not: discountable, insignificant, or beneficial (ESA Consultation Handbook).

anticipated, formal consultation is required to be carried out by the FHWA Division Office (50 CFR Part 402).

If formal section 7 consultation is necessary, GARFO PRD has 135 days from the date of initiation of formal consultation (i.e., the date that GARFO PRD has all information necessary to conduct consultation) to deliver a BO and ITS to FHWA. Take of listed endangered fish or wildlife that occurs without special exemption (e.g., an ITS) is illegal pursuant to section 9 of the ESA and take of threatened fish or wildlife is illegal if there is a section 4(d) rule prohibiting the take that occurs. GARFO PRD will develop an ITS with non-discretionary reasonable and prudent measures (RPMs)<sup>7</sup> for minimizing the impact of any incidental take of ESA-listed species caused by the proposed action, as well as terms and conditions implementing the RPMs. If an action is likely to jeopardize ESA-listed species and/or destroy or adversely modify critical habitat, GARFO PRD will issue a BO explaining its determination(s) and include any reasonable and prudent alternatives (RPAs)<sup>8</sup> to the action, which, if implemented, would not be likely to jeopardize the ESA-listed species or destroy or adversely modify its designated critical habitat. If incidental take<sup>9</sup> is anticipated, the BO and any RPAs will be accompanied by an ITS. Incidental take described in an ITS is exempt from the section 9 take prohibitions as long as the RPMs and their terms and conditions are implemented.

In addition to the consultation processes mentioned above, FHWA and GARFO developed a new mechanism to provide more efficient streamlined consultation procedures, while also reducing adverse effects to ESA-listed species and critical habitat for a subset of routine transportation actions. FHWA and GARFO collaborated to develop a programmatic consultation pursuant to section 7 of the ESA that consists of defined categories of activities, specific project design criteria (PDC), and consultation procedures to minimize adverse effects to ESA-listed species and their habitats from individual projects, singly or combined, to insignificant or discountable levels. This informal, programmatic consultation pursuant to section 7 of the ESA applies to four types of routine, low-impact projects that pose minimal risks to ESA-listed species and are authorized or funded by FHWA. Actions that are eligible for the programmatic consultation undergo streamlined consultation through use of a Verification Form to report to and obtain concurrence from NMFS (“NLAA determination”). Concerns about the lack of detail available for ACM/DB projects would largely be addressed by using the programmatic consultation for ACM projects, including incorporating necessary PDC into the proposed action.

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<sup>7</sup> RPMs refer to those actions the Director believes necessary or appropriate to minimize the impacts, i.e., amount or extent, of incidental take on the species (ESA §7(b)(4)(C); 50 CFR § 402.02).

<sup>8</sup> RPAs refer to alternative actions identified during formal consultation that can be implemented in a manner consistent with the intended purpose of the action, that can be implemented consistent with the scope of the federal agency’s legal authority and jurisdiction, that is economically and technologically feasible, and that the Director believes would avoid the likelihood of jeopardizing the continued existence of ESA-listed species or resulting in the destruction or adverse modification of critical habitat (50 CFR § 402.02).

<sup>9</sup> Incidental take refers to takings that result from, but are not the purpose of, carrying out another lawful activity (50 CFR § 402.02).

No Effect Determination made by the Action Agency (Action Agency does not consult or seek concurrence with GARFO PRD)

A “no effect” determination means the proposed action will have no direct or indirect effects to ESA-listed species and/or critical habitat. This determination applies to any individual of any life stage of the listed species.

If FHWA/DOT makes a “no effect” determination for an action, then FHWA/DOT should document the determination (including its rationale) in the project file. The determination that an action will have “no effect” is wholly the responsibility of the federal action agency. NMFS GARFO does not concur with determinations that actions will have “no effect.”

Technical Assistance

Technical assistance is an optional, but recommended, process designed to identify potential conflicts between proposed actions and ESA-listed species. A request for technical assistance can be submitted by the FHWA, a state DOT, an applicant, or the applicant’s representative. It should include a description of the proposed project, project location, and a description of the habitat that will be impacted. GARFO PRD will respond by email or letter providing information on any ESA-listed species and/or critical habitat that may be affected by the proposed action and recommended measures that could avoid or minimize those impacts. This helps the applicant determine if section 7 consultation will be necessary and is particularly helpful for large-scale projects.

Figure 3-1. Informal consultation process

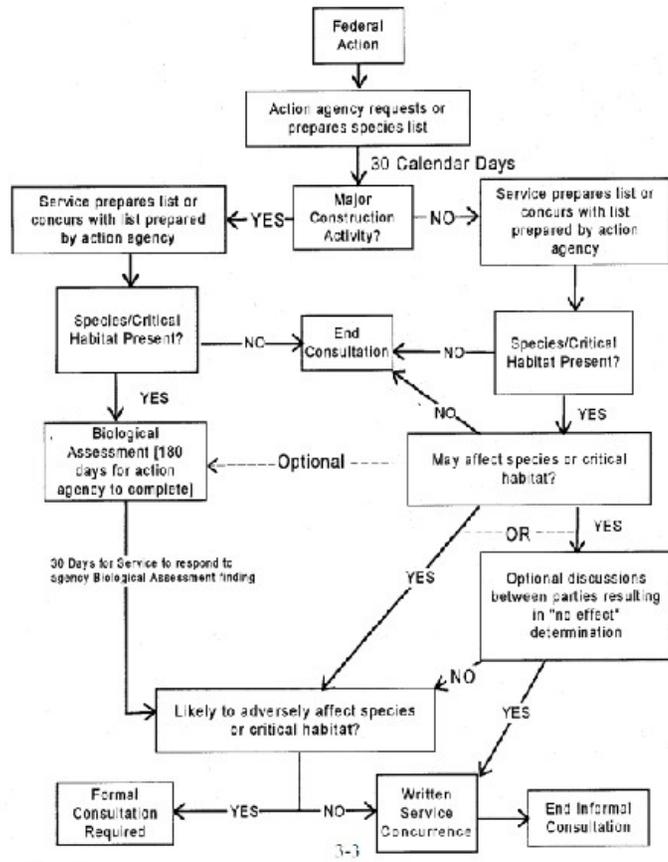
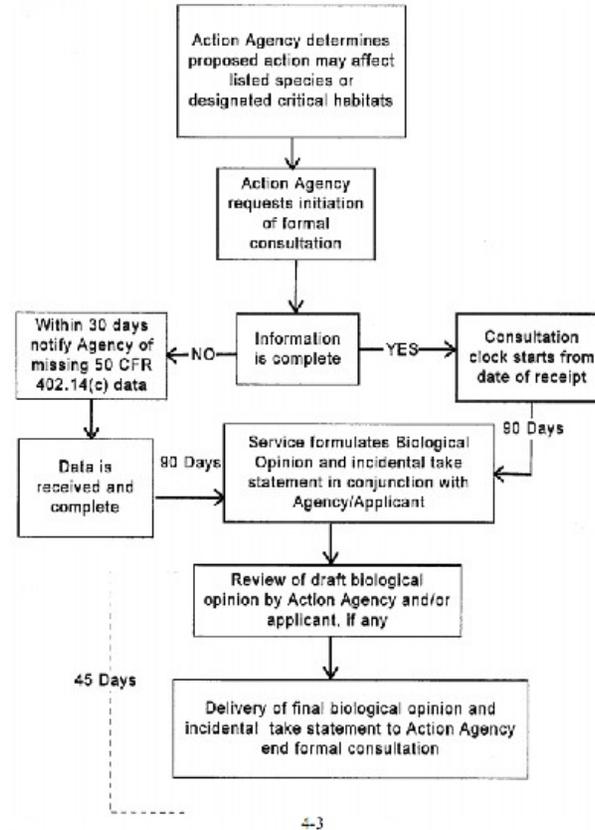


Figure 4-1. Formal consultation process.



Source: Endangered Species Act Consultation Handbook

Figure 1. Flow chart of ESA section 7 informal and formal consultation

## *NMFS' EFH Process – Timelines, Requirements*

NMFS' Habitat Conservation Division (HCD) works with FHWA to conserve and enhance EFH<sup>10</sup> through EFH consultations pursuant to section 305(b) of the MSA (16 USC § 1855(b)). The regulations for implementing the EFH coordination and consultation provisions of the MSA are at 50 CFR § 600.905-930. These regulations provide definitions, procedures for using existing consultation processes, procedures for conducting individual EFH consultation when an existing process is not available, and alternatives to individual consultation. Consultation is required when FHWA authorizes, funds, or undertakes an action that may adversely affect EFH. An adverse effect is defined as any impact that reduces quality and/or quantity of EFH (50 CFR § 600.810). Adverse effects may result from actions occurring within EFH or outside of EFH. FHWA/state DOT must provide HCD with an assessment of the action's impacts to EFH, and within 30 or 60 days of receipt of complete information, depending on whether it is an abbreviated or expanded EFH assessment, HCD provides EFH conservation recommendations to avoid, minimize, mitigate, or otherwise offset those adverse effects. FHWA/state DOT must provide a detailed written response to HCD within 30 days of receiving EFH conservation recommendations and include a description of which recommendations have been adopted, as well as a scientific justification for any EFH conservation recommendations not adopted.

The FWCA requires FHWA to coordinate and consider impacts to fish and wildlife resources from a water resources development action. NMFS provides comments under the FWCA intended to reduce environmental impacts to migratory, estuarine, and marine fisheries and their habitats. NMFS typically provides such comments during the EFH consultation process.

Consultation under the MSA should be consolidated with interagency coordination procedures required by other statutes, such as NEPA, FWCA, and ESA, to reduce duplication and improve efficiency. An EFH consultation is generally initiated when an EFH assessment is provided to GARFO HCD for a federal action that may adversely affect EFH, although agencies may (and are encouraged to) discuss EFH concerns in pre-application planning and other early phases of project development. The use of existing environmental coordination and/or review procedures to meet the EFH consultation requirements is the preferred approach for EFH consultations. For GARFO HCD and a federal action agency to use an existing process for EFH consultation, HCD must make a finding that the existing process fulfills the requirements of the MSA and EFH regulations. Supplemental consultation is required for renewals, reviews, or substantial revisions of actions if through the renewal, review, or revision adverse effects on EFH resulting from the action are changed, or if new information becomes available that affects the basis for HCD's EFH conservation recommendations (50 CFR § 600.920(1)).

FHWA and GARFO HCD developed a programmatic EFH consultation under the MSA Section 305(b)(2). The programmatic EFH consultation will issue programmatic EFH conservation

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<sup>10</sup> EFH- those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. "Waters" include 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" includes sediment, hard bottom, structures underlying the waters, and associated biological communities; "necessary" means 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" covers a species' full life cycle (50 CFR § 600.10).

recommendations for a subset of transportation actions that may adversely affect EFH or NOAA trust resources, without detailed information on a specific project or site. In some cases, activities may have had more than minimal adverse impacts on EFH, either individually or cumulatively; however, by modifying an activity according to the EFH conservation recommendations provided, those impacts may be avoided or minimized and EFH consultation requirements will be satisfied. The programmatic EFH consultation satisfies MSA requirements for a covered transportation project and conclude consultation, as confirmed through a completed Verification Form. The programmatic EFH consultation also enables FHWA/state DOTs to determine when an action is not applicable for the programmatic consultation and will require individual EFH consultation through normal channels with GARFO HCD.

## IV. Constraints and Limitations

FHWA and state DOTs complete their NEPA decision before final design of infrastructure projects. The expanding use of ACMs, such as DB, has incentivized transportation agencies to limit project design information in RFPs to maximize the potential for innovation and cost savings; however, ACMs present challenges in completing consultation because often there is not enough information when FHWA/state DOT requests consultation and there is still the need to ensure ESA-listed species, critical habitat, and EFH are protected and impacts are minimized. NMFS and FHWA are challenged to consult due to the inability to estimate effects without complete information on important project elements, resulting in the delay of consultation initiation or the need to reinitiate consultation after a contract has been awarded before construction begins, and adds to agency workloads due to the sequential process of obtaining new information and submission for review. Section 7 consultation may need to be reinitiated if a project changes and affects species and/or critical habitat in ways that were not considered during initial consultation. EFH consultation may need to be reinitiated if new information becomes available or a project is revised in such a manner that affects the basis of EFH conservation recommendations provided. In certain situations, the lack of project information may be such that consultation cannot be initiated. The absence of project details deemed critical will likely delay the initiation of consultation and ultimately slow the process. Additionally, without specific information, NMFS may not be able to provide the most appropriate conservation recommendations or determine that FHWA has adequately ensured protection of ESA-listed species and critical habitat.

With ACMs, FHWA seeks to complete ESA section 7 and EFH consultation before full project information is available and before a contract is awarded. FHWA/state DOTs must complete section 7 and EFH consultation and reflect findings in the final NEPA documents before an RFP or an award is granted. NMFS may have more influence on project design if involved earlier in the planning process; however, NMFS needs sufficient information to understand the effects of the action on trust resources, and to provide the most appropriate recommendations and complete the consultation. FHWA/state DOTs also need sufficient information to write a thorough and accurate assessment for ESA, MSA, and NEPA that considers the environmental impacts of the project and determines the required type of consultation. It is harder for state DOTs to address NMFS comments and make plan changes later in the design process; therefore, it is beneficial for state DOTs and NMFS to communicate and share project information early in the process—a key focus of the Coordinated Consultation Process section. State DOTs want more flexibility prior to the NEPA decision, and it may be possible to ensure environmental protection by issuing explicit environmental standards in the RFP. State DOTs can provide more details to a greater level of design for consultation, but this could limit innovation and potentially increase state DOT costs.

There are common required components needed to initiate section 7 and EFH consultation, regardless of the contracting methodology used; these components are further described in Appendix I. ACMs can create additional complexities for the ESA/EFH consultation process, as

some of the typical information needs may not be available until later design phases, after consultation is completed.

## V. Coordinated Consultation Process

This guide focuses on key points in the project development process where collaboration between the agencies can hone project design, improve conservation, and foster agreement on the appropriate level of detail needed to complete consultation.

FHWA/state DOT can consider the items identified in the checklist provided in Appendix I and ensure that appropriate information is included in the analysis/assessment for a given project. After initial planning and scoping of a project, FHWA/state DOT should schedule an early coordination meeting between NMFS, FHWA/state DOT, and other applicable resource agencies. This coordination checkpoint should be used to discuss the BMPs and minimization measures available in the BMP Manual that are appropriate for the project. With the use of the checklist, NMFS can provide technical assistance at this early stage, flag potential issues, and possibly identify activities that may allow for the use of adaptive management, such as allowing certain work to proceed after appropriate monitoring.

FHWA/state DOT should determine what effects the activity will have by analyzing potential impacts and seeking technical assistance from NMFS. If FHWA determines that there is no effect on ESA-listed species or their critical habitat, ESA consultation is not required. If a project may affect, but is not likely to adversely affect ESA-listed species or their critical habitat, then FHWA/state DOT should initiate ESA consultation with GARFO PRD. To initiate informal ESA consultation, FHWA/state DOT can use information in the checklist to prepare the appropriate documents and plans and submit to GARFO PRD. If the BA/BE is complete and GARFO PRD agrees with the determination, GARFO PRD will accept it and respond with a letter concurring with the not likely to adversely affect determination. If a project is likely to adversely affect ESA-listed species and/or their designated critical habitat, then a state DOT should coordinate with FHWA, who is responsible for conducting formal consultation with NMFS (see ESA Section 7 Initiation Checklist in Appendix I. for more information).

If FHWA determines that there is no adverse effect on EFH or NOAA trust resources, EFH consultation is not required. If a project may adversely affect EFH or NOAA trust resources, then FHWA/state DOT should initiate consultation with GARFO HCD. For an EFH/FWCA consultation, FHWA/state DOT should prepare the appropriate documents and plans with information in the checklist, along with an EFH assessment and submit them to GARFO HCD. If the EFH assessment is sufficient under the EFH regulations, GARFO HCD will provide EFH conservation recommendations. FHWA/state DOT must respond to the EFH conservation recommendations in writing within 30 days (see EFH Assessment for more information).

Any recommendations, thresholds, or other environmental considerations provided by NMFS during ESA or EFH consultation should be included in the RFP to ensure they are incorporated into the project. In addition, PRD, HCD, and FHWA/state DOT may need to coordinate after FHWA/state DOT receives GARFO's letter(s). HCD needs to know which recommendations are

accepted. PRD and HCD may need to be contacted if there are later changes in the action that would trigger reinitiation of consultation.

Other recommendations for improving FHWA/state DOT and GARFO coordination include designating one GARFO PRD and HCD point of contact for ACM/DB projects for synthesis of reviews and comments. Due to the fast-moving nature of ACM/DB projects, having one contact can save valuable time. Each draft EIS or EA should include a preferred alternative. This will allow GARFO to consult on one option, allowing consultations to proceed faster, as long as the ultimate action is the same as the preferred alternative. If there are significant resource concerns during early coordination, FHWA/state DOT may determine that DB or other ACM is not a practical procurement option. The project delivery matrix prepared by FHWA/state DOT when determining the procurement method, must take these risks into account to decide which method best meets the overall needs, as there are situations where ACMs/DB is not the right mechanism.

*Abbreviated ESA and EFH Coordination Steps\**

- 1) FHWA/state DOT scopes project (project purpose and need, project location, project type).
- 2) FHWA/state DOT identifies presence of EFH and ESA-listed species, using the following websites:  
[www.habitat.noaa.gov/protection/efh/habitatmapper.html](http://www.habitat.noaa.gov/protection/efh/habitatmapper.html)  
[www.greateratlantic.fisheries.noaa.gov/protected/section7/guidance/maps/index.html](http://www.greateratlantic.fisheries.noaa.gov/protected/section7/guidance/maps/index.html)
- 3) FHWA/state DOT coordinates with NMFS on potential resource effects. NMFS provides technical assistance.
- 4) FHWA/state DOT develops initial design work based on GARFO's and other resource agencies technical assistance.
- 5) FHWA/state DOT drafts preliminary BA/BE and EFH assessment, using information checklist.
- 6) FHWA/state DOT hold discussions with GARFO on draft BA/BE and EFH assessment (clarify potential effects, additional project detail necessary to assess effects, assumptions made to address information gaps, and design approaches/BMPs to avoid and minimize the effects of the action).
- 7) FHWA/state DOT revises the preliminary BA/BE and EFH assessment based upon early coordination.
- 8) FHWA/state DOT submits complete BA/BE and EFH assessment to GARFO (submitted within draft EIS or separately with ESA/EFH consultation request letter).
- 9) GARFO PRD reviews BA/BE and provides ESA concurrence or coordinates draft BO/ITS, as applicable; GARFO HCD reviews EFH assessment and provides EFH conservation recommendations/FWCA recommendations.
- 10) FHWA/state DOT provides response to GARFO's letter(s) and determines need for follow up.

*\* **Please Note:** Qualifying projects may alternatively undergo the streamlined processes identified in the FHWA GARFO 2018 NLAA Program and programmatic EFH consultation (for Steps 5-10).*

### *Information Needs for Consultation*

The project elements needed to initiate and complete section 7 and EFH consultations are contained in Appendix I. FHWA/state DOT may benefit from developing information on possible design alternatives, and should fully describe and quantify the impacts to ESA-listed species and critical habitat, and NOAA trust resources including the riverine, intertidal, and subtidal habitats such as salt marsh, un-vegetated bottoms, submerged aquatic vegetation (SAV), and areas containing shellfish. The information needs describe the habitat and resource information as well as the detailed construction methodology information that would allow FHWA/state DOT to adequately describe and analyze the impacts to EFH and ESA-listed species and their critical habitat. This information will help FHWA complete the BA/EFH assessment and NEPA analysis, and any required consultations under the ESA, MSA, and FWCA. Submission of this information will expedite the consultation process by reducing requests for more information.

## ESA/EFH Consultations with FHWA/DOT

	Scoping Process	Analysis and EFH/Informal ESA Consultation	EFH Follow-Up/Formal ESA Consultation	Decision/Determination
		Use of the Information Needs Checklist falls in this segment.		
<b>FHWA/ NEPA EIS Process</b>	<ul style="list-style-type: none"> <li>• Send Cooperating Agency invite</li> <li>• Publish Notice of Intent</li> <li>• Conduct NEPA scoping</li> </ul>	<ul style="list-style-type: none"> <li>• Circulate Draft EIS &amp; file with EPA</li> <li>• Concurrent public, technical, policy, and legal review</li> </ul>	<ul style="list-style-type: none"> <li>• Respond to comments</li> <li>• Circulate FEIS and file with EPA</li> <li>• State &amp; Agency review</li> </ul>	<ul style="list-style-type: none"> <li>• Prepare Draft ROD</li> <li>• Signed ROD</li> </ul>
<b>Design Build</b>	<ul style="list-style-type: none"> <li>• DOT prepares preliminary plans</li> </ul>	<ul style="list-style-type: none"> <li>• Preliminary Design—hold interagency meeting (ESA and EFH)—or checkpoint</li> <li>• Early ESA Assessment/EFH Assessment and determination</li> </ul>	<ul style="list-style-type: none"> <li>• DB contractor prepares final plans</li> <li>• DOT/FHWA confirms plans meet ESA/EFH requirements</li> </ul>	
<b>Section 7</b>	<ul style="list-style-type: none"> <li>• Prepare/request species list</li> <li>• Confirm species list/provide tech assist</li> </ul>	<ul style="list-style-type: none"> <li>• Prepare Biological Assessment</li> <li>• Respond to BA Finding or to early assessment</li> <li>• Conclude informal Consultation</li> </ul>	<ul style="list-style-type: none"> <li>• Initiate Formal Consultation, if required</li> <li>• Formulate BO and ITS, if required</li> <li>• Review BO</li> <li>• Final BO and ITS (includes RPAs/RPMs)</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure ROD reflects S7 consult</li> </ul>
<b>EFH</b>	<ul style="list-style-type: none"> <li>• "Finding" to use existing NEPA process</li> <li>• May impact EFH Determination</li> <li>• Confirm EFH species, early scoping comments</li> </ul>	<ul style="list-style-type: none"> <li>• EFH Assessment (included in draft report /EIS/EA)</li> <li>• Provide EFH Conservation Recommendation letter</li> </ul>	<ul style="list-style-type: none"> <li>• Preliminary Response to Recommendations</li> <li>• Final Response to Recommendations (in FEIS)</li> <li>• Confirm EFH CRs are met</li> </ul>	<ul style="list-style-type: none"> <li>• ROD should reflect results of EFH consult</li> </ul>

Note: Text in **BLUE** refers to DOT/FHWA responsibility and text in **GREEN** refers to NMFS responsibility. The above columns are not necessarily intended to be of equal duration.

Figure 2. General timeline of ESA section 7 and essential fish habitat consultations

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## **I. Introduction**

This guide identifies information needs for successful Endangered Species Act (ESA) section 7, Magnuson-Stevens Fishery Conservation and Management Act (MSA) Essential Fish Habitat (EFH), and Fish and Wildlife Coordination Act (FWCA) consultations between NOAA's National Marine Fisheries Service (NMFS) Greater Atlantic Regional Fisheries Office and Federal Highway Administration (FHWA) or their designated non-federal representative/state DOT. A majority of this information was adapted from the *Biological Assessment Outline and Checklist for Caltrans and NMFS ESA Section 7 Consultations*, dated February 2014. This document includes a checklist to assist FHWA/state DOT in identifying information needs and analyses to initiate section 7 and EFH consultations. Please also review the ESA and EFH programmatic consultation documents for specific information requirements needed to comply with those streamlined consultation processes.

Some information items in the checklist may not be applicable to certain projects and/or additional information items may be identified during the course of a consultation. Items should be incorporated into project plans or narratives, as appropriate. This checklist identifies information needs, understanding that additional information may be needed at a later point and could be addressed through adaptive management strategies, which may vary based on the project scope.

## II. Information Needs with Checklist

The checklist below is for general project use. FHWA/state DOT should include the relevant information in the project plans, the BA/BE and/or EFH assessment, or the Verification Forms, as appropriate. FHWA/state DOT should provide information on the proposed design, project footprint, structure type, staging area, and construction methodologies; this includes a discussion of construction materials, methods, and equipment to the extent the information is relevant to analyzing the effects to species and their habitats. As projects differ in nature, type, and methodologies, some items may not be applicable and/or additional site-specific items may be required. While it may not be possible to provide all of the items listed below, FHWA/state DOT should provide as much information as is available and relevant. Much of the information can be provided through plans, photographs, maps, and other representations.

### Background/General Information

- State the purpose and need of the proposed action.
- Summarize discussions and meetings and provide copies of written correspondence with regulatory or other partners that are relevant to the proposed action and the EFH and/or ESA consultation(s).
- Provide any other pertinent consultation history.

### *Description of the Action Area*

- Describe the action area, i.e., all areas directly or indirectly affected by the proposed action regardless of whether those areas are found on land or in the water (50 CFR § 402.02). This may be determined by the acoustic isopleth or sediment plume, whichever carries the farthest afield.
- Provide a map of the action area, including any staging areas, with topographic representation, photographs, physical and biological characteristics and dimensions.
- Provide waterbody name and location, including coordinates, along with any other geographic information that may describe the physical location of the project.
- Note the river mile of the waterway and the total area affected by all parts of the action, upstream and downstream of the project.
- Include approximate navigable distance from river, bay, or ocean if action is in a tributary.
- Note the presence and location of any navigation channels.
- Describe any biological or habitat studies conducted in the action area or specific to the project, and reference any study reports (provide copies, if requested).

- Describe the specific area under existing conditions that may be affected by the action. This includes information on existing baseline conditions and environmentally sensitive areas within the project area including but not limited to:
  - Substrate/sediment texture: grain size analysis, geotechnical studies, borings, sediment toxicity.
  - Special aquatic site (SAS) mapping- mudflats, submerged aquatic vegetation (SAV), wetland type, oyster reefs, etc., as well as other habitat features identified through surveys, such as boulder, cobble, gravel, or sandflats.
  - Benthic survey results, including information on areas containing shellfish.
  - Salinity and seasonal temperature regimes.
  - Water depth/tidal range and bathymetry, including mean low water and mean high water lines.
  - Velocity/current.
  - Tidal datum used for elevations.
  - Location of Aids to Navigation (ATONS) and/or submerged hazards.
  - Description of existing fish passage conditions.
- Describe any existing structures at the project site, including but not limited to: type, size, capacity, and condition.

#### *Description of the Proposed Action*

- Provide a description and drawings of the site under proposed conditions.
- Identify all federal authorizations or permits associated with the proposed action, inclusive of any federal funding.
- Identify any viable alternatives, including footprint, structure, methodology, that may be considered.
- Summarize the alternatives considered and why they were not selected, including information on construction methods, equipment, and materials.

#### Construction Methodology and Demolition

Provide details for the items below, and if there is a range of potential options, provide details for each of those options, as well as an expected upper limit of potential impacts. The categories below should apply to most project types. The proposed action should be deconstructed by describing specific project components that may affect ESA-listed species and their critical habitat, as well as EFH and other NOAA trust resources.

- Describe proposed construction methods (further described in applicable sections below).
- Describe the types of equipment and materials that will be used for construction.
- Describe how existing structures will be removed (if applicable).
- Provide a detailed description of in-water construction footprint and quantify total area.

- Provide a description and location of any work pads, staging, turn outs, access, borrow/disposal/ stockpile sites and utility relocation areas that are located in or may impact aquatic areas.
- Develop a blasting plan, if any blasting is proposed. Note that blasting will require additional coordination with NMFS/GARFO.
- Indicate the location of disposal of construction/demolition materials, containment methods, and methods of rubble recovery.
- Provide information on any temporary structures and details on their installation and removal, including scaffolding, fill, water diversions, etc.
- Indicate whether a portion of the bridge/previous structure will remain in place for fishing access, or whether a new fishing pier will be built in association with a proposed project.

Deconstructed project aspects to be addressed, as applicable

The categories below address specific aspects of the deconstructed project actions and may not apply to all projects. For the items below, the range of possibilities should be provided. If the exact information or methodology is not known, then provide analysis of alternatives. In addition, briefly describe minimization/mitigation strategies for each stressor (e.g. noise, turbidity, migratory barrier).

*Pile Driving and Removal*

- Provide the number of permanent and temporary piles (maximum number and range).
- Describe the type and composition of pile (e.g., auger, steel, concrete, sheet pile, “H” pile), whether they are straight and open-ended or tapered and closed, and whether drilled shafts or water jetting will be used.
- Provide the diameter or dimensions and length of piles (or range of pile sizes).
- Describe the duration of pile driving per pile (daily and for the entire project).
- Describe the time of year that pile driving is expected to occur.
- Describe the pile driving source or location (from barge, land, or other).
- For temporary falsework (framework or support trestle), determine whether:
  - The piles will be left in place during consecutive seasons.
  - The piles will be cut-off below the mud-line or completely removed.
- Describe the size and type of hammer to drive piles: identify whether an impact, vibratory, or other type of hammer to be used and if pre-drilling or water jetting is proposed. If unknown, provide analysis of all possible hammer types.
- Estimate the number of anticipated pile strikes per pile.

- Estimate the number of piles to be driven per day.
- Provide the location of piles:
  - Provide drawings including water depth in profile view and channel width in plan view.
  - Illustrate the approximate locations of temporary and permanent piles.
  - Indicate the location and distance to the wetted channel of piles not driven in the water.
- Indicate the depth of the water in which the piles will be located.
- Describe the proposed sound attenuation devices to be used (e.g., bubble curtain, isolation casing, dewatered cofferdam), if any, and indicate which piles the attenuation would be used for. Estimate the anticipated decrease in transmitted pressure (dB) due to attenuation devices.
- Estimate the underwater sound generated from each pile type/size (with attenuation methods if proposed), to include the metric referenced to the pressure (i.e., peak dB re: 1μPa, and RMS re: 1μPa and single-strike and cumulative SEL dB re: 1μPa<sup>2</sup>-sec). Alternatively describe noise impacts and analysis through a preliminary noise model. There are numerous templates, models, and standards when determining acoustic effects. For example, an effects analysis using GARFO's [Acoustics Tool](#) (current version dated 11/30/2016) should be completed in non-confined areas such as open basins. The Practical Spreading Loss Model is often used to calculate underwater noise impacts; however, this model may not be appropriate for narrow riverine areas. In the absence of a sound propagation model specific to narrow channel environments, it may be more appropriate to estimate the acoustic footprint using empirical sound data from studies installing similar piles in similar locations.

*Cofferdams/Dewatering*

- Provide a description of diversion controls and dewatering actions: location, timing, duration.
- If cofferdams are proposed, include the dates they will be in place (e.g., years, months, or days) and the area they will occupy. Provide information on the use of pumps/screening and any potential for impingement or entrainment of small fish or early life stages in the pumps.
- Indicate measures to keep fish out of de-watering devices (i.e. prevent fish entrapment). For published standards see the NMFS [Anadromous Salmonid Passage Facility Design](#).
- Provide the methods and procedure of sound attenuation devices used for cofferdam installation or removal (bubble curtains, vibratory hammer, etc.).
- Describe the methodology and construction procedure for installation and removal of cofferdams and water diversions.

- For concrete cooling systems or other water withdrawals, indicate the volume of water to be withdrawn, the duration of withdrawal, screen size, and water intake velocity.
- Develop a contingency fish evacuation plan that includes a description of any fish evacuation activities in case of fish entrapment or entrainment, including the number, frequency, and environmental or construction conditions that may trigger the need for fish relocation actions.

#### *Culverts/Bridges*

- Indicate the size and locations of existing culverts and other crossings.
- Provide engineered drawings of stream crossings.
- Provide plans with cross-sections of culverts, bridges, and grade control structures.
- Prepare a culvert maintenance plan.
- Conduct a fish passage analysis:
  - For projects that may affect fish passage, describe how the proposed project will meet the criteria of a stream simulation or hydraulic design.
  - The included analysis should evaluate the existing and proposed ultimate channel conditions within the action area and vicinity. Types of analysis used to assess fish passage conditions include hydraulic, geomorphic, and sediment and debris transport.
  - Conduct early coordination with NMFS biologists and engineering staff to review fish passage projects.
  - The analysis should indicate the proportion of the tide cycle when there is sufficient depth and velocity in the pipe to allow fish to pass through.

#### *Fill/Stabilization*

- Provide the volume and area of temporary and permanent rock slope protection or other fill to be placed below mean high water (MHW)/ordinary high water mark (OHWM):
  - Total volume of fill for the project, including both above and below the OHWM (or mean low water or mean high water in tidal/marsh areas).
  - Describe the amount and extent of fill along and adjacent to banks and shorelines.
  - Size and type of fill material.
- Describe the habitat being filled and the type of habitats adjacent to the fill.
- Describe the toe stone anchoring technique (e.g., trenching or drill and pin).

#### *Dredging/Excavation/Disposal*

- Describe depth of cut, dredge type used, how many cubic yards, acreage affected.

- Describe the type of dredge to be used: mechanical vs. hydraulic, use of environmental bucket (mechanical).
- Describe area hydrodynamics, i.e., average current speed and direction.
- Complete sediment testing and provide results of contaminant tests.
- Describe the disposal methodology, including the location of disposal of dredged material.
- Prepare a disposal plan considering area hydrodynamics and contaminated sediments.

#### *Vessel Traffic*

- Describe whether vessel traffic is expected to increase during construction (i.e. barges, support vessels, etc.) or as a result of the completed project (i.e. new or improved access).
- Describe the anticipated number of barges or other work vessels and trips used for the proposed project (for dredging and disposal, transporting construction materials, etc.).
- Describe the anticipated vessel speeds, draft depths, and routes used during construction.
- Indicate whether observers will be on board vessels during any part of construction.

#### Construction Sequencing and Schedule

- Describe the intended construction schedule (how many days, weeks, or months for in-water work), including start and end dates and project sequencing.
- Indicate the number of construction seasons to complete the project.
- Specify in- versus out-of-water windows/activities when describing work windows.
- Describe whether construction will take place during the day, night, or both.
- Describe the timing and duration of proposed minimization and avoidance measures.

#### Project Operations and Maintenance

- Describe the completed project's operation.
- Describe how the facility will be maintained, including monitoring and maintenance of restored areas or fish passage structures.
- Describe the operation and maintenance of proposed avoidance, minimization, mitigation and conservation actions. Operations and maintenance activities range from day to day maintenance to long-term or less frequent work.

### Conservation and Mitigation Plan and Applicable Best Management Practices (BMPs)

The items below may be information needs or recommendations/standards that are generally requested by NMFS to minimize project effects. More in-depth BMPs are provided through the BMP Manual developed by FHWA and GARFO.

- Describe the proposed avoidance, minimization, and compensatory measures, including time of year restrictions.
- Describe and analyze conservation and mitigation practices as thoroughly as any other component of a proposed action. Describe proposed avoidance, minimization, mitigation and conservation actions including:
  - In-stream or in-channel work windows;
  - On-site and off-site mitigation (including re-vegetation plans and mitigation bank credits purchase locations, ratios, or amounts);
  - Fish passage monitoring plan;
  - Habitat mitigation and monitoring plan;
  - BMPs to minimize impacts to EFH and critical habitat; and
  - Monitoring (acoustic, turbidity, other).
- Ensure compliance with applicable storm water pollution prevention plan, water pollution quality control plan, and spill prevention control and countermeasure plan.
- Describe specific species, life stages, habitat types and physical and biological features that will be addressed with proposed conservation measures.
- For all water pumping or withdrawal from a waterway supporting listed and/or anadromous fish species, provide details on fish screens to avoid impingement and entrainment of fish. If water pumping is expected, the amount and timing of such withdrawals should be described.
- Provide the location of the intake within the waterway, screen size, and intake velocity.
- Describe the methodology for any marine mammal, sea turtle, or other ESA-listed species monitoring zones, if applicable.

#### *Sedimentation/Erosion Control/Turbidity*

- Describe project's use of sediment/turbidity reduction BMPs, such as turbidity curtains and cofferdams, and monitoring and reporting. If applicable, describe how turbidity measurements will be taken, including location, timing, depth, etc.
- Turbidity models should be included, if they are available.
- Describe the type of turbidity controls to be used, for what action(s) and duration. If turbidity curtains will be used, describe the location(s) and how they will be secured.

- If water will be pumped to a settling pond/tank, describe how water will be tested prior to returning it to the source water, or describe whether temporary sediment basins will be used to allow for settling of sediments and possible ground infiltration.
- If sediment or structure removal is proposed, quantify the volume of material to be removed below the OHWM/MHW. Provide methodology of structure removal.

#### *Habitat Impacts*

- Describe habitat avoidance, minimization, mitigation and conservation measures.
- With the information on existing conditions at the site, describe the habitat and kind of impacts that are expected, including potential impacts to SAS.
- Indicate whether there will be permanent and/or temporary impact to resources (such as habitats or forage) used by federally-managed or ESA-listed species and whether the project will adversely affect the habitats of particular life stages of managed species.
- Describe the size/area of impacts and the BMPs implemented to minimize those impacts.

#### *Acoustic Attenuation*

- Noise models should be included. To determine the action area by acoustics, estimate the distances from the piles to reach the onset of physical injury thresholds for impact hammer pile driving (206 dB peak, and 183 and/or 187 dB cSEL depending on fish size); see [interim agreement](#). Include distance to reach the sub-injurious threshold (currently 150 dB RMS) from the piles during impact pile driving.
- Describe whether initial hammer blows be progressively “ramped up” to scare away fish, protected species from the work area.
- Perform sound monitoring and reporting to NMFS during project construction, if requested. The [Fisheries Hydroacoustic Working Group \(FHWG\) Guidance for Hydroacoustic Monitoring](#) can be used.

#### Interrelated and Interdependent Actions

- Describe interrelated and interdependent actions that may affect EFH, ESA-listed species, their designated critical habitat, or NOAA trust resources. Such actions need not be authorized, funded, or carried out by a federal or state agency, but may be actions by private entities.
  - Interrelated actions are those that are part of a larger action and depend upon the larger action for their justification.
  - Interdependent actions have no independent utility apart from the action under consideration.

### III. ESA Section 7 Initiation Checklist

#### *ESA Consultation Components*

The regulations at 50 CFR 402.12(f) and 50 CFR 402.14 (c) (1-6) list the required BA contents and provide the requirements for initiating formal ESA section 7 consultation, respectively. The BA contents depend on the nature of the action. Section 7(a)(2) requires both FHWA and NMFS to use the “best available” scientific and commercial information during consultation. The information described above in Section II of this Appendix must be included in the request for consultation letter/BA or biological evaluation (BE), as applicable. The potential direct and indirect effects to each ESA-listed species and designated critical habitat located in the action area must be adequately described.

#### **Required Contents of an ESA BA**

- 1) A description of the action;
- 2) A description of the specific area that may be affected by the action (the action area is defined in 50 CFR § 402.02 as “all areas to be affected directly or indirectly by the federal action, and not merely the immediate area involved in the action”);
- 3) A description of any ESA-listed species or critical habitat, or proposed species or critical habitat, which may be affected by the action;
- 4) A description of the manner in which the action may affect any ESA-listed species or critical habitat and an analysis of any cumulative effects;
- 5) Relevant reports, including any environmental impact statement, EA, BA, or section 7 consultations done for similar actions in similar areas; and
- 6) Any other relevant available information on the action, the affected ESA-listed species, or critical habitat.

The BA and other information submitted by the action agency must contain sufficient detail to accurately and fully evaluate the direct, indirect, and, for formal consultation only, the cumulative effects<sup>11</sup> of the proposed action. Avoidance, minimization, and mitigation techniques and strategies are integral parts of the BA/BE. These items can appear along with the project description, or as a separate topic. The BA must also identify any interrelated<sup>12</sup> and interdependent<sup>13</sup> actions and consider their direct and indirect effects in the effects analysis. If sufficient project information is not provided, NMFS may not be able to initiate formal consultation. If consultation is requested, yet there is not sufficient information, then the agencies should work together to identify and develop the information to support the consultation. If project details change or new information becomes available after the BA and consultation are completed, section 7 consultation may have to be reinitiated. It is important that the agencies agree on the information needed to evaluate accurately the potential effects of proposed actions.

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<sup>11</sup> Cumulative effects are those effects of future state or private activities, not involving federal activities, that are reasonably certain to occur within the action area of the federal action subject to consultation (50 CFR § 402.02).

<sup>12</sup> Interrelated actions- actions part of a larger action and dependent on the larger action for their justification. Interrelated actions are typically “associated with” the proposed action (50 CFR § 402.02).

<sup>13</sup> Interdependent actions- actions having no independent utility apart from the proposed action. Interdependent actions are typically “because of” the proposed action (50 CFR § 402.02).

The information contained on [GARFO's PRD section 7 website](#) will help complete this checklist. The PRD website contains information regarding the section 7 consultation process, biological status information regarding ESA-listed species, maps of estimated species range, and a library of active and archived BOs.

The above information in Part II of this Appendix along with the information from this section can be used to complete the BE/BA.

## **Status of the Species and Critical Habitat in Action Area**

### Status of the Species

- Describe any studies that were carried out in relation to the proposed action.
- Identify ESA-listed species that may occur in the action area.
- Provide details on the presence, timing, abundance and site-specific biological requirements of the various life stages of ESA-listed species that may be present in the action area.
- Describe the hydrologic, geomorphic, or geological conditions that are relevant to ESA-listed species and their habitat in the action area.
- Summarize factors affecting the species in the action area.
- Describe how the best available scientific and commercial information regarding the status and trends of the species were used to prepare the BA/BE. Include recent publications, journal articles, agency data, and technical reports that were used and cited; local information relative to the project vicinity, views of recognized experts, and results from recent studies on life history, population dynamics, trends and distribution; reference field notes, unpublished data, research in progress, and other applicable material; and population information for the ESA-listed species within the action area.

### Status of Critical Habitat

- Identify and describe the physical and biological features of critical habitat within the action area.
- Check species-specific physical and biological features found in Federal Register notices in support of critical habitat determinations.
- Describe how the best available scientific and commercial information regarding the status and trends of critical habitat physical and biological features present in the action area was used in developing the BA/BE. Include publications, journal articles, agency data, and technical reports that were used and cited; local information relative to the project vicinity, views of recognized experts, and results from recent studies, life history, population dynamics, trends and distribution; and reference field notes, unpublished data, research in progress and other applicable material.

- Identify the area and linear feet of affected critical habitat (by applicable physical and biological feature).

### ***Effects of the Action***

#### *Approach to the Assessment*

- Describe direct and indirect effects, including any adverse or beneficial effects.
- Describe how effects analysis for individuals of a species and critical habitat will be conducted separately.

#### *Information Available for the Assessment*

- Summarize the best scientific and commercial information that will be applied to the assessment.
- Supply NMFS with an electronic copy of the reference material, if requested.

#### *Assumptions Underlying This Assessment*

- Provide a description of any assumptions that will be applied to the analysis.

#### *Effects: Exposure Assessment to Individuals*

- Describe the spatial and temporal exposure of species and specific life history stages to deconstructed elements of the proposed action in the action area.
- Consider both direct and indirect effects.
- Describe the potential stressors associated with deconstructed action elements within the action area. Possible assessment guidelines and stressors to consider include:
  - Sound assessment regarding peak and cumulative levels without sound attenuation devices, using the most recent interagency hydroacoustic assessment protocols.
  - Assessment of sound levels after attenuation, using the most recent hydroacoustic protocols.
  - Changes in water quality or turbidity and sediment delivery to stream channels.
  - Channel dewatering and changes in flow or fish passage conditions.
  - Changes in channel substrate.
  - Streambed alteration or disturbance.
  - Loss of riparian habitat.

#### *Effects: Response and Risk Assessment to Individuals*

- Describe the direct and indirect biological response to species and individuals that are exposed to project related stressors associated with deconstructed action elements within the action area.

- Describe the conditions that cause adverse effects to fish and quantify the amount and extent of adverse effects expected from the action (e.g., injury, death, harm, harassment, capture).
- Consider the following:
  - Quantification of analyzed hydroacoustic effects to fish using the most recent interagency standards and guidelines.
  - Response and risk from changes in water quality or changes in turbidity and sediment delivery to stream channels.
  - Response and risk from channel dewatering and changes in flow or fish passage conditions.
  - Response and risk from changes in channel substrate.
  - Response and risk from loss of riparian habitat.
  - Response and risk from streambed alteration and disturbance.

*Effects: Exposure Assessment to Critical Habitat*

- Describe the spatial and temporal exposure of critical habitat physical and biological features to potential stressors.

*Effects: Risk Assessment to Critical Habitat*

- Describe the direct and indirect response of critical habitat physical and biological features to potential stressors associated with deconstructed action elements within the action area.

*Summary of Effects to Species and Critical Habitat*

- Summarize the direct and indirect effects to species and the physical response of critical habitat physical and biological features to potential stressors associated with deconstructed action elements within the action area.

***Cumulative Effects***

- Describe cumulative effects that are reasonably certain to occur within the action area:
  - Cumulative effects include the effects of future state, tribal, local or private projects.
  - Future federal actions are not considered in this section because they will be subject to separate consultation pursuant to section 7 of the ESA.

***Effects of Interrelated and Interdependent Actions***

- Describe the effects of interrelated and interdependent actions associated with the proposed action.

***Determination***

- Determine whether effects to ESA-listed species or designated critical habitat will be insignificant or discountable, for each stressor and/or activity.

- Summarize key points that link the analysis to the determination: logic of the analysis should support the determination.
- Make one of the following determinations for each ESA-listed or proposed species:
  - No effect (no effect determinations do not require consultation and GARFO PRD is not obligated to concur with no effect determinations).
  - May affect, but is NLAA.
  - May affect, LAA.
- Make one of the following determinations for each listed or proposed species' critical habitat:
  - No effect.
  - May affect, but is NLAA.
  - May affect, and is LAA.

***Literature Cited***

- Submit the references used to prepare the BA.
- Submit electronic copies of references compiled and supplied to GARFO PRD, if requested.

## IV. EFH Assessment

The MSA mandates that federal agencies conduct an EFH consultation with NMFS regarding any of their actions authorized, funded, or undertaken that may adversely affect EFH. An adverse effect means 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. Adverse effects 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. If a project may result in any adverse effects to EFH, an EFH assessment should be prepared. Consultation with GARFO HCD may be necessary if a proposed action results in adverse impacts to other NOAA trust resources.

### *EFH Consultation Components*

The regulations at 50 CFR § 600.920 describe the required components of EFH assessments and procedures for conducting EFH consultations. The information described above in Part II of this Appendix can be included in the request for individual consultation/EFH assessment submitted by FHWA/state DOT to GARFO HCD, as applicable.

Your analysis of adverse effects to EFH under the MSA should focus on impacts to the habitat for all life stages of species with designated EFH, rather than individual responses of fish species. Fish habitat includes the substrate and benthic resources (e.g., submerged aquatic vegetation, shellfish beds, salt marsh wetlands), as well as the water column and prey species.

### **Required Contents of an EFH Assessment**

- 1) A description of the action;
- 2) An analysis of the potential adverse effects of the action on EFH and the managed species;
- 3) FHWA's conclusions regarding the effects of the action on EFH; and
- 4) Proposed mitigation, if applicable.

Information that should be contained in the EFH assessment, if appropriate, includes:

- 1) The results of on-site inspections to evaluate the habitat and site-specific effects;
- 2) The views of recognized experts on the habitat or the species that may be affected;
- 3) A review of pertinent literature and related information; and
- 4) An analysis of alternatives to the action that could avoid or minimize the adverse effects on EFH.

The level of detail within the EFH assessment should be commensurate with the degree of adverse impact to EFH. The EFH assessment submitted by FHWA/state DOT must contain sufficient detail to accurately and fully evaluate the direct, indirect, and cumulative effects of the proposed actions on EFH and managed species. The assessment should include how the project would impact the habitat: temporary, permanent, individual, and cumulative effects. The above information in Part II of the Appendix along with the information from this section can be used to complete the EFH assessment.

The information contained in the EFH tab on [GARFO HCD's website](#) will help complete the EFH assessment. The GARFO HCD website contains information regarding the EFH consultation process, Guide to EFH Designations which provides a geographic species list, Guide to EFH Species which provides the legal description of EFH as well as important ecological information for each species and life stage, and other EFH reference documents including examples of EFH assessments and EFH consultations. Assessment of EFH impacts should be based upon the Site Characteristics and the Description of Impacts.

## **EFH Assessment Preparation**

### Initial Considerations

- List the project name, date, location, and preparer.
- Generate a species list from the EFH website for the geographic area of interest. Use this species list in the initial screening process to determine if EFH occurs in the vicinity of the proposed action.
- Make a preliminary determination on the need to conduct an EFH consultation. Determine whether:
  - The action is located in or adjacent to EFH.
  - EFH is designated for eggs, larvae, juveniles, and/or adults.
  - Habitat Areas of Particular Concern (HAPCs) are at or near the project site.
- Indicate whether the proposed action has the potential to adversely affect EFH for any of the above life stages. If so, EFH consultation is required.

### Site Characteristics

- Provide information on the existing conditions of the action area using new or existing information.
- Indicate whether the site/action is in intertidal, sub-tidal, or water column areas.
- Describe the sediment characteristics.
- Indicate whether HAPCs are present, and if so indicate for which species, type, size, and characteristics.
- Indicate whether SAV, wetlands, shellfish, mudflats, and/or rocky or cobble habitat is present at or adjacent to the site. If so, describe the areal extent.
- Describe the typical salinity, depth, and water temperature regime/range.
- Describe the normal frequency of site disturbance, both natural and man-made.
- Describe the area of proposed work impact (work footprint and far afield).

### Description of Impacts

- Describe the anticipated impacts from the proposed action on the physical/chemical/biological environment at the project site and areas adjacent to the site that may be affected.
- Describe the nature and duration of the activity.
- Indicate whether the benthic community will be disturbed.
- Indicate whether SAV, salt marsh, mudflat, shellfish, and/or hard bottom habitat will be impacted. If so, provide details on the aerial extent of impacts, survey results, and details on temporary and permanent impacts.
- Indicate whether sediments will be altered or if sedimentation rates will change.
- Indicate whether turbidity will increase or whether contaminants will be released into sediments or the water column.
- Indicate whether water depth or water quality will change.
- Indicate whether tidal flow, currents, or wave patterns will be altered.
- Indicate whether ambient salinity or temperature regime will change.
- Indicated whether ambient noise levels will change.
- Indicate whether the action may impact prey species of federally-managed fish with EFH designations.

### EFH Assessment

- Evaluate the consequences of the proposed action on the functions and values of EFH as well as the vulnerability of the EFH species and their life stages, and identify which species from the EFH species list will be adversely impacted from the action.
- Indicate whether the functions and values will be impacted for spawning, nursery, forage, and/or shelter.
- For impacts to EFH, describe the habitat type, species, and life stages to be adversely impacted.
- Determine whether the impacts will be temporary or permanent.
- Indicate whether compensatory mitigation will be provided. If so, describe mitigation plans and how this will offset impacts to EFH.

### Determination of Impact

- Indicate FHWA's determination on the degree of impact to EFH from the proposed action. The EFH determination dictates the type of EFH consultation that will be required with NMFS. The level of detail contained within the EFH assessment should be commensurate with the degree of adverse impact to EFH.
  - No adverse effect on EFH (EFH consultation is not required).
  - The adverse effect on EFH is not substantial (abbreviated EFH consultation).
  - The adverse effect on EFH is substantial (expanded EFH consultation including a detailed written EFH assessment will be submitted to GARFO HCD expanding on the impacts).

### Other NOAA Trust Resources Impact Assessment

Consultation with NMFS may also be required if the proposed action results in adverse impacts to other NOAA trust resources, such as anadromous fish and shellfish, or their habitats. Adverse impacts to trust resources are assessed via the FWCA and the MSA, as many of these resources provide forage for the managed species. Inquiries regarding potential impacts to marine mammals or threatened/endangered species should be directed to GARFO PRD.

- Indicate which NOAA trust resources are known to occur at the site. Potential species include, but are not limited to:
  - American eel
  - American shad
  - Atlantic menhaden
  - Blue crab
  - Blue mussel
  - Eastern oyster
  - Horseshoe crab
  - Quahog
  - River herring (alewife and blueback herring)
  - Soft-shell clam
  - Striped bass
  
- For any of the above species or other NOAA trust resources, list the habitat impact type (i.e. physical, chemical, or biological disruption of spawning and/or egg development habitat, juvenile nursery, and/or adult feeding or migration habitat).