

**ALASKA STATE LEGISLATURE
HOUSE SPECIAL COMMITTEE ON FISHERIES**

February 8, 2018

10:03 a.m.

MEMBERS PRESENT

Representative Louise Stutes, Chair
Representative Jonathan Kreiss-Tomkins
Representative Mike Chenault
Representative Geran Tarr
Representative David Eastman

MEMBERS ABSENT

Representative Mark Neuman
Representative Zach Fansler

COMMITTEE CALENDAR

PRESENTATION: PERMITTING PROCESS BY ADF&G, DEC, AND DOTPF.

- HEARD

PREVIOUS COMMITTEE ACTION

No previous action to record

WITNESS REGISTER

JOSEPH KLEIN, Aquatic Resources Unit Supervisor
Division of Sport Fish
Alaska Department of Fish & Game (ADF&G)
Anchorage, Alaska

POSITION STATEMENT: Provided a PowerPoint presentation during on the permitting process by the ADF&G.

WADE STRICKLAND, Environ. Program Manager III
Water Quality Programs
Division of Water (DOW)
Department of Environmental Conservation (DEC)
Anchorage, Alaska

POSITION STATEMENT: Provided a PowerPoint presentation on the Permitting Process by DEC.

RON BENKERT, Habitat Biologist

Division of Habitat
Alaska Department of Fish & Game (ADF&G)
Anchorage, Alaska

POSITION STATEMENT: Answered questions during the presentation.

JOHN BARNETT, Environmental Manager
Southcoast Region
Department of Transportation & Public Facilities (DOT&PF)
Juneau, Alaska

POSITION STATEMENT: Provided a PowerPoint presentation of the DOT &PF permitting process.

ACTION NARRATIVE

[10:03:18 AM](#)

CHAIR LOUISE STUTES called the House Special Committee on Fisheries meeting to order at 10:03 a.m. Representatives Stutes, Kreiss-Tomkins, Chenault, and Eastman were present at the call to order. Representative Tarr arrived as the meeting was in progress.

Presentation: Permitting Process by ADF&G, DEC, and DOT&PF.

[10:04:17 AM](#)

CHAIR STUTES announced that the only order of business would be a Presentation: Permitting Process by ADF&G, DEC, and DOT&PF.

[10:06:16 AM](#)

JOSEPH KLEIN, Aquatic Resources Unit Supervisor, Division of Sport Fish, Alaska Department of Fish & Game (ADF&G), introduced himself. He directed attention to slide 2, titled "Federal Energy Regulatory Commission (FERC, Commission)," which read as follows [original punctuation provided]:

FERC is an independent agency that regulates non-federal hydroelectric projects by authorizing their construction and operation.

The Commission is composed of up to five commissioners who are appointed by the President of the United States and confirmed by the Senate.

The Federal Power Act (FPA) was enacted in 1935 and grants the Commission jurisdiction over non-federal hydropower projects throughout the United States.

10:08:14 AM

MR. KLEIN turned to slide 3, titled "FERC Hydropower Jurisdiction," which read as follows [original punctuation provided]:

FERC authorization is required for non-federal hydropower projects:

Located on navigable waters; or
Located on federal lands; or
Using surplus water from a federal dam; or
Located on a body of water over which Congress has Commerce Clause jurisdiction, project construction occurred on or after August 26, 1935, and the project affects the interests of interstate or foreign commerce.

MR. KLEIN said the most common hydroelectric projects in Alaska are impoundment or reservoir storage projects; for example, the hydroelectric projects at Blue Lake near Sitka and Bradley River near Homer [slide 4]. Two other types of power projects were run-of-the-river and hydrokinetic, he said [slide 5].

CHAIR STUTES asked whether any hydrokinetic projects were in Alaska.

MR. KLEIN answered that currently no licensed projects exist; however, a few were in the pilot project phase. The Kvichak River has the only active hydrokinetic project, but it has not yet generated any electricity.

10:11:00 AM

MR. KLEIN turned to a diagram on slide 6, titled "Federal Power Act" and noted three license processes:

1. Integrated Licensing Process (default)
2. Alternative Licensing Process
3. Traditional Licensing Process

MR. KLEIN said the licensing process has been designed to document the environmental, engineering, and economic characteristics of an applicant's process. The process involves studies in consultation with resource agencies, which provide the basis for the FERC decision making. All three processes consist of two main phases. Pre-filing which consists of

scoping, conducting environmental studies, consultation with resource agencies and members of the public and results in a license application. Once the application has been submitted to FERC, the second or post-filing phase begins and an environmental NEPA [National Environmental Policy Act of 1969] process would be produced, which ultimately results in an agency decision, he said.

[10:12:51 AM](#)

MR. KLEIN turned to slide 7, titled "Major Sections of the FPA," which read as follows [original punctuation provided]:

- **Preliminary permit**
Allow permittee to study a project for a 3-year period with an option to extend to 5 years. Gives the permittee priority over other potential applicants.
- **Section 4(e)**
Equal consideration to developmental and environmental values. Any license issued within a federal reservation is also subject to mandatory terms and conditions issued by the federal land management agency
- **Section 10(j)**
Any license issued must include conditions to protect, mitigate damages to, and enhance, fish and wildlife habitat. Conditions are based on recommendations from federal and state fish and wildlife agencies.
- **Section 18**
Fishway prescriptions by the Secretaries of Interior or Commerce are mandatory and must be included in the license.
- **License Order**
Order approves the license applications with specific terms and conditions for 30-50 years. Licensee may file for amendments during license period.

[10:14:53 AM](#)

CHAIR STUTES asked the length of time it takes from the initial application to issuance of the permit.

MR. KLEIN answered that it varies. One of the largest factors was the ability to access and conduct studies, he said. He elaborated that the FERC website states that the agency strives to issue a license within five years; however, in Alaska it often takes longer due to the extra time necessary to complete studies, engineering and geotechnical evaluations.

[10:15:45 AM](#)

REPRESENTATIVE TARR referred to page 7 to the major sections of the FPA and asked whether these sections were listed in sequential order or if the sections were considered concurrently.

MR. KLEIN responded that they were sequential, but the three sections have significant detail within them.

[10:16:31 AM](#)

REPRESENTATIVE TARR further asked for clarification, noting that the general process [listed on slide 6] divided the pre-filing and post-filing phases. She wondered how the major sections of the FPA [slide 7] meshed with the pre-filing and post-filing phases of the review.

MR. KLEIN responded that the major sections of the FPA on slide 7 related to the end of the process in the post-filing. Specifically, prior to the NEPA document. They represented the period when the FERC will ask agencies to submit recommended and mandatory terms and conditions. That information would be evaluated within the NEPA document and the agency would decide whether to accept the terms and which it would be considered mandatory conditions. He recapped that generally the process is sequential; however, this presentation provides a brief overview of the process; for example, Section 4(e) consists of other topics that relate to the overall licensing process.

[10:17:59 AM](#)

MR. KLEIN, in further response to Representative Tarr, agreed that the process builds toward a NEPA document, which includes a recommendation by the FERC staff to the commissioners. The commissioners may decide to deviate from FERC staff recommendations; however, that would rarely happen, he said. He

reiterated that FERC commissioners make the final decision on whether to issue the license and any terms and conditions to be included.

[10:19:07 AM](#)

MR. KLEIN turned to slide 8, titled "National Environmental Policy Act (NEPA)," which read, in part, as follows [original punctuation provided]:

The Federal Power Act requires preparation of a NEPA document (EA or EIS) that analyzes developmental issues (energy, flood control, water supply, irrigation, etc.)

MR. KLEIN explained it would also provide FERC staff with recommendations on each aspect of the application in the NEPA document.

[10:19:47 AM](#)

MR. KLEIN turned to slide 9, titled "Exemptions & Hydrokinetic Projects," which read as follows [original punctuation provided]:

2 Types of Exemptions

1. Small hydropower projects (\leq 10 megawatts) that will be built at an existing dam or that utilize a natural water feature for head or an existing small project that proposes to increase capacity.

2. Conduit exemption for projects on an existing conduit (e.g. water supply, irrigation canal) that was constructed primarily for purposes other than power production.

Exempted projects are subject to mandatory terms and conditions set by state and federal fish and wildlife agencies.

Hydrokinetic Projects (marine, wave & in-river)

- Special licensing process due to experimental technology.

- Pilot projects are small, short-term, & removable to allow developers to test technologies and environmental effects.

MR. KLEIN noted that these exemptions have not been used much in Alaska. He recalled one small hydropower exemption at Tazlina [Copper River] and perhaps a few other conduit exemption projects; for example, a conduit exemption was issued for the Hidden Falls hatchery, which has an existing pipeline for the hatchery. The hatchery wanted to put a power turbine within the pipeline, he said.

MR. KLEIN explained that the hydrokinetic projects use a special licensing process to help initiate the experimental technology. Nationwide a few hydrokinetic projects exist, but the process has proven more difficult than envisioned. He offered his belief that these hydrokinetic projects have lots of potential but getting the projects to work in real-time environments has proven difficult and challenging.

[10:22:25 AM](#)

MR. KLEIN turned to slide 10, titled "Summary," which contained a triangle whose sides were labeled "License Administration & Compliance," "Dam Safety," and "Licensing." Within the triangle was a list consisting of licensees, resource agencies, tribes, NGOs, and local stakeholders.

[10:22:50 AM](#)

REPRESENTATIVE TARR asked whether he could give a sense of whether there are enough projects under consideration.

MR. KLEIN replied that currently 32 projects have been licensed under FERC, with a handful still in the licensing process. He stated that his division has a staff member who tracks, monitors, and participates in this process. He explained that once a project has obtained a license, sometime amendments are requested within the 30 to 50-year license span. The licensee might request adding another turbine, wish to divert a stream into the reservoir, or request engaging in other activities that would require an amendment, which may also require associated studies. The licensing itself can be quite time-consuming; for example, the Susitna-Watana Hydroelectric Project, a project that members may be most familiar with. In addition, his office monitors compliance, he said. Sometimes his office must work with an applicant on various terms and conditions to ensure

these will be implemented in an efficient and cost-effective manner. It may take time to obtain the best design for a fish exclusion from a tailrace, for example.

[10:26:19 AM](#)

The committee took an at-ease from 10:26 a.m. to 10:27 a.m.

[10:27:56 AM](#)

WADE STRICKLAND, Environ. Program Manager III, Water Quality Programs, Division of Water (DOW), Department of Environmental Conservation (DEC), stated that he would begin his PowerPoint presentation on the Alaska Pollutant Discharge Elimination System (APDES) and Anadromous Waters.

[10:28:36 AM](#)

MR. STRICKLAND directed attention to slide 2, titled "Division of Water Mission," which read as follows [original punctuation provided]:

Improve and Protect Water Quality:

How?

- Establishes standards for water cleanliness
- **Regulates discharges to waters, wetlands and subsurface**
 - Provides financial assistance for water and wastewater facility construction and waterbody assessment and remediation
 - Trains, certifies, and assists water and wastewater system operators
 - Monitors and reports on water quality

MR. STRICKLAND stated that his focus would be on regulations for discharges to waters, wetlands and subsurface, particularly to waters.

[10:28:57 AM](#)

MR. STRICKLAND turned to slide 3, titled "National Pollutant Discharge Elimination System (NPDES) Framework," which read as follows [original punctuation provided]:

- Clean Water Act & Amendments

- Established the NPDES Program (Section 402)
- Point sources of wastewater discharging pollutants into waters of the United States require a NPDES permit
- Authorization of State Programs

MR. STRICKLAND explained that the NPDES legal framework comes from the Clean Water Act and its amendments. The Clean Water Act has an authorization process. Section 402 of the Clean Water Act provides that any discharge into waters of the United States, which is most surface waters, requires an NPDES permit. The Clean Water Act envisioned that states would administer the program upon application to the federal Environmental Protection Agency (EPA). He related that Alaska is one of 46 states delegated to administer the program. He offered his belief that in July Idaho would be the 47th state to do so, with Massachusetts, New Hampshire, and New Mexico the only states remaining without authorizations.

[10:30:06 AM](#)

MR STRICKLAND directed attention to slide 4 titled, "Primacy Transfer and APDES Framework," which read as follows [original punctuation provided]:

- The State's program is called the APDES Program, which started on October 2008
- Statutory authority is provided in Alaska Statute 46.03
- Implementing regulations are provided in 18 AAC 83

MR. STRICKLAND stated that any industry may have a point source discharge to waters in the United States. In Alaska, that usually includes oil and gas, mining, seafood processors, municipal wastewater treatment plants, and other miscellaneous industrial discharges.

[10:31:36 AM](#)

MR. STRICKLAND turned to slide 5, titled "APDES Permit Development Process," which read as follows [original punctuation provided]:

- Receive complete application for permit

- Evaluate proposed wastewater discharge and receiving waterbody characteristics
 - Is the wastewater potentially toxic and will it require advanced treatment?
 - Are there sensitive species in the waterbody that require protection?
 - For freshwater discharges, review Fish and Game's (ADF&G) Anadromous Waters Catalog to determine if the waterbody is listed
 - Consult with ADF&G and applicant on spawning determination if discharge is to an anadromous waterbody

MR. STRICKLAND explained that the department issues two types of permits: a general permit that covers a category of similar discharges, such as seafood processing or vessels; and for larger or unique facilities, the department issues individual permits that follow the process described on slide 5. If a waterbody has been identified as an anadromous waterbody the division will consult with ADF&G to determine if the waterway has any spawning activity occurring.

[10:33:12 AM](#)

CHAIR STUTES asked whether mixing zones would be allowed in anadromous waters if a determination was made that it was not a spawning segment.

MR. STRICKLAND answered that was correct.

[10:35:08 AM](#)

MR. STRICKLAND turned to slide 6, titled "Fish Spawning Determination - Impacts," which read, in part, as follows [original punctuation provided]:

- Discharge is not eligible for a mixing zone per Alaska water quality standards
 - Mixing zone is a limited area in the waterbody where wastewater is allowed to mix with the ambient water before meeting water quality criteria
- State water quality criteria must be met at end of pipe

MR. STRICKLAND explained that if ADF&G determined that a waterbody listed as anadromous does have spawning, the

division's water quality standards do not allow for mixing zones; therefore, the discharger would not be eligible for mixing zones per the department's standards. He paraphrased the mixing zone definition as "a limited area in the waterbody where wastewater is allowed to mix with the ambient water before meeting water quality criteria." He directed attention to the graphic on the slide that shows wastewater discharge going into a lake, which shows a gray area where state water quality criteria could be exceeded; however, at the boundary where it mixes with the waterbody, all state water quality standards must be met. In instances in which mixing zones are not allowed, the state water quality criteria must be met at the end of the pipe, he said. This generally means that numeric permit limits are much lower than if a mixing zone was permitted.

[10:35:23 AM](#)

REPRESENTATIVE TARR asked whether he could further discuss it since this has been a controversial issue. She recalled that the water quality standard had been weakened in 2013 when a cruise ship initiative had increased water quality standards.

MR. STRICKLAND answered that he does not manage the cruise ship program; however, he was aware of the issue. He explained that the division's water quality standards did not change due to the initiative, but that cruise ships would not be allowed mixing zone permits. Instead, cruise ships would be required to install advanced wastewater treatment systems (AWTSS). He related that at the time, a science panel was formed to evaluate the installation of the systems and evaluate performance. Based on the review of the performance data, it was determined that many of the systems met state water quality criteria, but not for some ships. He related his understanding that this had resulted in the legislation that allowed mixing zones for smaller cruise ships with 50-249 lower berths; however, water quality criteria had not changed as a result of [the initiative and the legislation].

[10:37:31 AM](#)

REPRESENTATIVE TARR requested the division provide an update on that and offered that there may have been some changes to mixing zone permits from stationary sources.

MR. STRICKLAND offered to do so but elaborated that a general permit was administered through the Division of Water [ADEC], that authorized the mixing zones for vessels underway as well as

for stationary vessels. He offered his belief that the permitting process authorized mixing zones. He offered to provide information to the committee.

[10:38:43 AM](#)

MR. STRICKLAND directed attention to slide 7, titled "Permit Document Reviews," which read as follows [original punctuation provided]:

- Preliminary draft permit documents are shared with the permittee and state and federal agencies for a 10- day review period.
- Draft permit documents are public noticed for a minimum of 30-days. Major permits are public noticed in a newspaper of local circulation.
- Public meetings and hearings by request.
- Proposed final permit documents are shared with the permittee and state and federal agencies for a 5-day review period prior to issuance.

MR. STRICKLAND briefly described the preliminary draft permit document called the applicant review. Links to the document would be sent to all state resource agencies, and to the Environmental Protection Agency [EPA], National Marine Fisheries Service [NMFS], and the U.S. Fish and Wildlife Service [USF&WS]. After making changes, the draft permit documents are public noticed for a minimum of 30 days. The comment period could be extended in instances with significant public interest. After the public comment period, the division prepares a response to comments document for all substantial comments that documents the rationale for making changes to the permit or not making any changes. The final permit documents are shared with the permittee and state and federal agencies for a five-day review period, followed by issuance. Throughout the process, special notifications are sent to potentially affected tribes and local governments in the area.

[10:41:57 AM](#)

MR. STRICKLAND turned to slide 8, titled, "Summary of Permitting Process," which consisted of a flowchart. He explained that the flowchart summarizes the permitting process and how individuals could get involved in the process. He reviewed the process, such that the division annually develops a permit issuance plan (PIP). Recently the division completed the 2018-2019 calendar year PIP, which identifies the priorities for the department.

The department sends the PIP to all local governments and tribes and posts it to its website. The division then assigns a permit writer and identifies any potentially affected communities. The department prepares a preliminary draft, the draft, and the proposed final draft, and goes through the public comment period. The division issues the permit online.

[10:43:36 AM](#)

MR. STRICKLAND turned to slide 9, titled, "Permit Issuance and Administrative Appeal," which read as follows [original punctuation provided]:

- Permit issued for a term not to exceed five years.
- Upon issuance, there is a 20-day informal administrative appeal period and a 30-day administrative appeal period.
- After 30 days, any appeal must be lodged in Superior Court.

[10:44:18 AM](#)

REPRESENTATIVE TARR asked for further clarification on who is considered to have standing to appeal the decision. For example, could an Alaska resident have standing and challenge something based on potential impacts to anadromous fish habitat, she asked.

MR. STRICKLAND suggested that was probably a question for the Department of Law. He offered that the division's regulations explain how to establish standing through a permitting process. He recalled that one way to do so was to be meaningfully involved throughout the permitting process. In other words, he said a person who did not make public comments but later appealed the decision would not be considered to have "standing" since he/she was not actively involved in the permit-development process. In further response to Representative Tarr, he offered to provide regulations to the committee.

[10:46:06 AM](#)

MR. STRICKLAND turned to slide 10, titled, "Compliance with Permits," which read as follows [original punctuation provided]:

- During the permit term, DEC inspectors will visit the sites to complete inspections

- Permittees are also required to notify DEC within 24- hours of a non-compliance event that potentially threatens public health or the environment

[10:47:00 AM](#)

REPRESENTATIVE CHENAULT asked for a synopsis of what would be required for a permittee to continue holding a permit five years after initial permit was issued.

MR STRICKLAND answered that the requirement depends on the type of discharge. He explained that at the four and one-half year mark, individual permittees must apply for a permit reissuance. For example, a municipal wastewater treatment plant or a large mine would have different federal and state requirements. The division would review the application for administrative completeness. The division would issue an administrative extension letter to confirm it was working on reissuing the permit. The old permit continues to be in effect if the division has not completed the reissuance process prior to the end date of the permit. He further added that for general permits, the applicant must apply for reissuance within 90 days of the permit expiration date, and again, the agency process would be the same; that it would send an administrative extension letter and the general permit would be in effect until the agency completed the general permit reissue.

[10:48:54 AM](#)

REPRESENTATIVE CHENAULT asked whether the process would be as extensive as the original permit process.

MR STRICKLAND answered that during the reissuance process the division would take into consideration all activities and occurrences during the previous five years.

[10:49:38 AM](#)

CHAIR STUTES said she thought the question related to whether there would be additional cost.

REPRESENTATIVE CHENAULT disagreed. He clarified that his question related to if nothing had changed in the permitting process, he wondered how intensive the reissuance process would be compared to the original permitting process.

MR STRICKLAND answered that there is some routine monitoring that occurs throughout the life of the facility to ensure that the quality of the wastewater does not change over time. He elaborated that if there were some initial requirements that had been satisfied, that the division would not need to carry those requirements forward. He reiterated that some ongoing evaluation occurs to evaluate the effects of the wastewater discharge.

[10:51:15 AM](#)

REPRESENTATIVE TARR acknowledged that the statutory and regulatory references were found on slide 4 so she would not need follow-up from the department on the framework.

[10:51:40 AM](#)

CHAIR STUTES asked whether a public process was part of the FERC permitting process.

MR KLEIN answered yes. He stated that the FERC process was an open and public process, noting that documents are available on the FERC website; that all meetings are open to the public through the post-filing phase. He said the NEPA document was a public document.

CHAIR STUTES asked whether any public notices are given.

MR KLEIN answered yes; that FERC also maintains a distribution list.

CHAIR STUTES asked whether there a charge for fish habitat permits.

MR KLEIN said he did not know but he offered to research it and report to the committee.

[10:53:42 AM](#)

RON BENKERT, Habitat Biologist, Division of Habitat, Alaska Department of Fish & Game (ADF&G), responded that there is no charge for a fish habitat permit; however, the division would be compensated for the work through a reimbursable services agreement (RSA).

[10:54:51 AM](#)

REPRESENTATIVE CHENAULT asked Mr. Klein if there were any federal hydroelectric projects in the state.

MR KLEIN answered that one would be the Eklutna power plant, but he was not aware of others.

REPRESENTATIVE CHENAULT asked who has authorization over federal hydroelectric projects if Federal Energy Regulatory Commission (FERC) is not the agency.

MR KLEIN answered that the federal hydroelectric projects typically are ones built in the western United States by the United States Bureau of Reclamation or the United States Army Corps of Engineers, such as the Glen Canyon or Grand Coulee dams.

REPRESENTATIVE CHENAULT responded that he was just curious.

[10:56:32 AM](#)

MR. KLEIN, in response to Representative Tarr, said that he did not have any dealings with gas pipelines, but the main divisions for hydropower are whether the projects are federal or not.

REPRESENTATIVE TARR remarked on the paradigm difference between pipelines and hydropower projects.

[10:57:25 AM](#)

CHAIR STUTES asked for an estimate of the cost to the ADF&G per application to apply to the Department of Natural Resources (DNR) for a water reservation to protect salmon.

MR BENKERT answered that the department did not have a fish habitat permit associated with a water reservation, but it would be something negotiated.

[10:58:20 AM](#)

CHAIR STUTES restated her question, for an estimate of the cost to the ADF&G per application to apply to the Department of Natural Resources (DNR) for a water reservation to protect salmon.

MR KLEIN responded that he had not calculated the cost. He offered his belief that it would vary. One of the limitations for obtaining water reservations or reservations of water would

be that the DNR requires five years of hydrologic data to adjudicate the application. He stated that sometimes the data is available through the United States geological survey. In that instance it would be the staff time needed to prepare the application. Once it was eligible for adjudication, it would be the time spent working with DNR to adjudicate it, including costs for public notice.

[11:01:04 AM](#)

The committee took a brief at-ease.

[11:02:05 AM](#)

JOHN BARNETT, Environmental Manager, Southcoast Region, Department of Transportation & Public Facilities (DOT&PF), stated that his presentation would focus on activities in fish streams. He directed attention to slide 2, titled "DOT&PF Activities in Fish Streams," which read as follows [original punctuation provided]:

- Culverts (New)
- Culverts (Improvements)
- Culverts (Maintenance)
- Bridges (New)
- Bridges (Replacements)
- Bridges (Maintenance)
- Roadway Embankment Protection (Riprap Armoring)
- Stream Realignment (Airports, Roadways)
- Mitigation, Restoration, Enhancement

MR. BARNETT elaborated that some culverts were installed a number years ago and some may need to be "upsized" to allow adequate passage for fish fry or routine maintenance may be necessary due to corrosion or pipe length. The Department of Transportation & Public Facilities (DOT&PF) currently has been going through its entire bridge inventory to identify and replace bridges that need replacement. Routine maintenance might mean replacement of riprap armoring around abutments below the ordinary high water of a fish stream or piling replacement. He noted a common activity within fish streams would be roadway embankment protection, consisting of adding large rocks along a roadway to protect the infrastructure from erosion due to flood events or normal storm activity. Stream realignment might occur if a runway needed to be extended and a stream might have to be shifted around the runway extension. He related that the DOT&PF has performed considerable mitigation and enhancement to

streams. For example, the department has performed watershed-based permittee-responsible mitigation for impacts to wetlands by improving fish habitat in drainages in major watersheds, he said.

[11:05:12 AM](#)

REPRESENTATIVE TARR asked for further clarification on watershed-based permittee-responsible mitigation.

MR. BARNETT responded that watershed-based permittee-responsible mitigation was an allowable form of mitigation for impacts to wetlands and other waters of the United States through the {Section] 404 [Permit Program] process administered by the U.S. Army Corps of Engineers (USACE). He described a scenario in which a road may need to be widened, encroaching the wetlands; however, there would not be any process to restore the fill area in the wetlands. One option would be to buy credits into a mitigation bank. A second option would be to pay in lieu fees, or funds used to acquire high value wetlands that can be protected over time. Third, the department could use the funds to improve habitat. The department has repaired riparian habitat in areas decimated by logging thirty or forty years ago. He pointed out a project in Hyder, where impacts to the Salmon River occurred when placing the roadway embankment in the river. In that instance, the department's watershed-based mitigation response was to fund a joint effort with the United States Fish & Wildlife Service (USF&WS), the U.S. Forest Service, and Alaska Department of Fish & Game (ADF&G) to construct rearing ponds and spawning channels on the Marks Creek tributary to Fish Creek, a large tributary to Salmon River, he said.

[11:07:05 AM](#)

REPRESENTATIVE TARR asked whether the state currently sponsors a mitigation bank or if the department has a relationship with the federal government to pay funds into a mitigation bank.

MR. BARNETT answered no. He said the department did not have a mitigation bank; however, the Sealaska Corporation and the Southeast Alaska Conservation Fund are mitigation banks, and the Southeast Alaska Land Trust was also in-lieu fee land trust for preservation funds. Mitigation banks must be not-for-profit entities; thus, the state does not qualify as a mitigation bank, he said. He stated that he researched the process to become a mitigation bank and it would be challenging for the state to become its own mitigation bank.

[11:07:56 AM](#)

CHAIR STUTES asked how often mitigation occurs onsite versus offsite.

MR. BARNETT said the department was not capable of doing onsite mitigation on most of its projects. Typically, the department would have to go upstream or downstream from the site; for example, when placing a culvert in a roadway that destroyed riparian habitat. The DOT&PF would move as close to as possible to the site but not directly on the site. He related a scenario during the runway extension project at the Hoonah Airport, in which the runway sat on the area impacted. Thus DOT&PF realigned about a quarter mile of Coho Creek by adding sinuosity and large, woody debris to create riparian habitat and a new stream reach as its mitigation for the project.

[11:09:11 AM](#)

CHAIR STUTES asked how often maintenance occurs on culverts. She said she often hears that replacing culverts would allow for greater fish passage since many culverts are too small. She further asked whether the DOT&PF has a replacement program.

MR BARNETT answered yes, the department does have a program to replace culverts that impede fish passage. In addition, the DOT&PF has a Memorandum of Agreement (MOA) with ADF&G on all its road projects to improve fish passage that has become blocked or was not adequately performing. Numerous roads were constructed decades ago creating such issues, although many of the main corridors have been upgraded, he said.

CHAIR STUTES responded that she was glad to hear of the program.

[11:10:56 AM](#)

REPRESENTATIVE KREISS-TOMKINS asked whether the DOT&PF had any research or data that spoke to the biological productivity of created habitat versus natural-occurring habitat.

MR BARNETT answered that considerable volumes of published data exists. In addition, the DOT&PF has a monitoring program that measures the success of artificial habitat for five to ten years after a project has been completed to identify any deficiencies. Further, the monitoring program has an adaptive management plan to ensure if the habitat was not working effectively, that the

DOT&PF could go back and fix it. He indicated that the adaptive management plans typically would be part of the USACE permitting process along with installing site protection instruments and conducting monitoring.

[11:12:30 AM](#)

REPRESENTATIVE KREISS-TOMKINS expressed interest on whether the department had any baseline data prior to the project that could be compared with post-project data. He further asked whether Mr. Barnett could summarize the vast volumes of data to determine the scientific consensus when comparing artificial habitat with naturally-occurring habitat.

MR BARNETT responded that highway departments throughout the country have impacted habitat over many years and various agencies have established some basic parameters of how to restore habitat. He described some ways the DOT&PF creates artificial habitat, including anchoring large, woody debris, replanting banks, and avoiding hydraulic jumps that might impede migration of fry. He asked for clarification on the original question.

REPRESENTATIVE KREISS-TOMKINS restated his question, which was whether there was scientific consensus that compares artificial habitat with original, natural habitat to ensure the artificial habitat was equally as productive.

MR BARNETT answered yes; that often new habitat was found to be better since impediments were removed. With respect to the DOT&PF Hoonah Airport project, he stated that monitoring has shown habitat has improved, that the biomass increased, and the volume of fish has also increased. He summarized that often the artificial habitat improved fish habitat or it stayed the same.

[11:15:48 AM](#)

REPRESENTATIVE TARR asked whether list of culvert sites that identify those that need the most attention. She imagined that the upgrades would occur as funding became available. She reiterated her interest in a list of culverts the department felt needed the most attention.

MR BARNETT responded that the department maintains a list of specific structures, which is prioritized by ADF&G and other agencies. He described it as a collaborative effort between the DOT&PF, ADF&G, and federal agencies. He acknowledged that

Representative Tarr had "hit the nail on the head" with her suggestion that it depended on funding as the DOT&PF has a limited amount of funds; however, culvert replacement was one of the things the region considers first when a project moves forward in the Statewide Transportation Improvement Program (STIP).

[11:17:17 AM](#)

MR. BARNETT reviewed slide 3, titled "Agency Involvement," which read as follows [original punctuation provided]:

- Alaska Department of Fish and Game
- Alaska Department of Natural Resources
- Alaska Department of Environmental Conservation (Impaired Waters)
- Alaska Department of Environmental Conservation (APDES)
- Environmental Protection Agency (Large Projects)
- U.S. Fish and Wildlife Service
- NOAA Fisheries (NMFS) - Protected Resources Division
- NOAA Fisheries (NMFS) - Habitat Conservation Division
- U.S Army Corps of Engineers
- FEMA Flood Map Service
- State Land Managers (DNR, OHA)
- Federal Land Managers (USFS, USFWS, BLM, NPS)

[11:18:57 AM](#)

MR. BARNETT referred to slide 4, titled "Existing Laws, Regulations, Agreements," which read as follows [original punctuation provided]:

- Clean Water Act, Section 401
- Clean Water Act, Section 404
- Clean Water Act, NPDES/APDES (Stormwater)
- Coastal Zone Management Act (Federal)
- Endangered Species Act (Terrestrial and Freshwater Species)
- Fish & Wildlife Coordination Act
- Magnuson-Stevens Fishery Conservation & Management Act (Essential Fish Habitat)
- Executive Order 11988, Floodplain Management
- Executive Order 11990, Protection of Wetlands
- Executive Order 13112, Invasive Species

[11:19:16 AM](#)

MR. BARNETT referred to slide 5, titled "Existing Laws, Regulations, Agreements page...Agreements," which read as follows [original punctuation provided]:

Agreements Specific to Fish Streams:

- DOT&PF/ADF&G MOA for Design, Permitting, and Construction of Culverts for Fish Passage
- DOT&PF/ADF&G MOA for Implementing Safe Passage of Anadromous and Resident Fish While Maintaining and Improving State Transportation Infrastructure
- MOU between DNR, ADF&G Regarding Reviews of Land and Water Use Activities

Projects that impact fish streams in marine, intertidal, and estuaries must also comply with:

- Endangered Species Act (Marine)
- Marine Mammal Protection Act (MMPA)
- Marine Protection, Research, and Sanctuaries Act, Section 102/103
- Alaska National Interest Lands Conservation Act (ANILCA) - *Alaska Maritime Refuge*

MR. BARNETT briefly reviewed the three Memorandums of Agreement the department has with ADF&G. He specifically noted the detail in the MOA for implementing safe passage of anadromous and resident fish while maintaining and improving state transportation infrastructure since this agreement sets the standards for the fish pipes that the DOT&PF installs. He reported that the Alaska Maritime Refuge basically surrounds all communities on projects in the Aleutians. He stated that if a bridge crosses a stream and under the jurisdiction of the ADF&G and the NMFS, the DOT&PF may also need to obtain an incidental harassment authorization from the NMFS. That authorization could take from six to eighteen months to obtain and it also required public noticing in the Federal Register.

[11:20:59 AM](#)

REPRESENTATIVE KREISS-TOMKINS said he was curious about that last point - the DEC working with NMFS on incidental harassment. He asked Mr. Barnett to specifically identify projects that required incidental harassment authorization from the NMFS. He wondered if those projects were ones like ferry terminals, ports, and harbor projects.

MR. BARNETT responded yes, the DOT&PF administers the Southcoast Region, which maintains and constructs all the ferry facilities in Alaska. He further related that permits for these projects all had to pass through NMFS, MMPA, and the Endangered Species Act. He reported that the last permit he recalled was for Sand Point on the Alaska Peninsula, which took 18 months to secure. The DOT&PF currently has nine of those permits in process, he said.

CHAIR STUTES recalled one of those permits had been overlooked in Kodiak, which delayed the project for over a year.

MR. BARNETT acknowledged that was correct. He said in that instance, the department had had an informal consultation with NMFS but due to the discovery of additional marine mammals in the area, the department had to re-initiate consultation with the NMFS and request a formal consultation.

[11:22:33 AM](#)

REPRESENTATIVE KREISS-TOMKINS asked whether he could identify the nine projects currently in the permit process. He further asked whether the DOT&PF was working with NMFS in Alaska on the permits or if the division was working with the Washington D.C. office. He wondered whether it mattered if the marine mammals were on the Endangered Species Act.

MR. BARNETT responded that there are six projects in the permitting process in the Tongass Narrows in Ketchikan, four of which were spinoffs from the Gravina Access Environmental Impact Study [EIS]. Other projects included the Gustavus ferry terminal and the Haines ferry terminal project, which had just been completed. He did not recall the other two projects. He related that the DOT&PF has worked with the Alaska NMFS Habitat Conservation office on endangered species and the Silver Springs, Maryland NMFS Protected Resources Division. At times the two NMFS offices do not agree; however, the DOT&PF must develop its biological assessments and the agencies subsequently develop their opinions. He reported that one of the endangered species in question was the "Mexican distinct population

segment" of humpback whales that migrates into Alaska waters, noting the Marine Mammals Protection Act covered all marine mammals.

11:24:46 AM

CHAIR STUTES observed that DOT&PF had memorandums of understanding (MOUs), and she asked whether the MOUs have any "teeth."

MR. BARNETT answered yes; that if the DOT&PF does not comply with the MOAs or MOUs in effect, the department will not obtain or retain any permits.

CHAIR STUTES commented that she was glad to hear that the MOUs are effective.

11:25:50 AM

REPRESENTATIVE EASTMAN related his understanding that the DOT&PF maintains the MOAs. He asked for any recent projects that may have destroyed of salmon habitat.

MR. BARNETT acknowledged that the department has had projects that are less successful; for example, two years ago the DOT&PF added a multi-use path just past Auke Lake. The DOT&PF constructed a habitat bench that did not perform as expected with about 30 percent considered as not functioning. The DOT&PF hired a team of consultants to develop a new program to restore the bench, which should happen this summer. The DOT&PF has a mitigation requirement in any USACE permits, which means the department must undertake certain levels of mitigation. In the event the DOT&PF did not remedy the problem, the DOT&PF would be out of compliance with its permit and risk the USACE revoking the permit.

11:28:35 AM

MR. BARNETT reviewed slide 6, titled "RSA's" which read as follows [original punctuation provided]:

DOT&PF / ADF&G Reimbursable Services Agreements (RSA)

- RSA 2583602 Juneau Area Fish Habitat Permit Review & Services

- RSA 2583603 Kodiak, Bristol Bay, Aleutian Area Fish Habitat Permit Review & Services
- RSA2583601 Craig Area Fish Habitat Permit Review & Services
- RSA 2533061 Hoonah Airport Monitoring PJ 683003
- RSA 2582040 Fairbanks DOT&PF Project Review
- RSA2582041 Anchorage DOT&PF Project Review
- RSA 2581605 Soldotna (Kenai Peninsula) Area Fish Habitat Review Services
- RSA 2581604 Palmer (Mat-Su) Area Fish Habitat Review Services
- RSA 2581603 Anchorage Area Fish Habitat Review Services

[11:29:42 AM](#)

MR. BARNETT referred to slide 7, titled "Permits in Fish Streams," which read as follows [original punctuation provided]:

Title 16 Permit - Required for activities below Ordinary High Water of an anadromous or resident fish stream. DOT&PF is required to obtain a Title 16 Fish Habitat Permit to construct a hydraulic project, use, divert, obstruct, pollute, or change the natural flow or bed of a specified river, lake, or stream, or use wheeled, tracked, or excavating equipment in the bed of a specified river, lake, or stream.

Clean Water Act 404 Permit - DOT&PF is required to obtain a permit from the USACE for any structure in any waters of the U.S. (such as embankment armoring, culverts, bridge piers or abutments).

Essential Fish Habitat Assessment Concurrence - DOT&PF must obtain concurrence from NOAA Fisheries (NMFS) per the Magnuson-Stevens Act for activities or structures in anadromous waters.

MR. BARNETT explained that under the Clean Water Act 404 Permit, the DOT&PF must maintain its facilities.

[11:30:47 AM](#)

CHAIR STUTES asked whether there is a public process for the permits [listed on slide 7].

MR. BARNETT answered yes. He referenced slide 8 titled, "NEPA and Fish Streams," which read as follows [original punctuation provided]:

National Environmental Policy Act (NEPA) requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions, including:

- making decisions on permit applications,
- adopting federal land management actions, and
- constructing highways and other publicly-owned facilities.

Using the NEPA process, agencies evaluate the environmental and related social and economic effects of their proposed actions. Agencies must also provide opportunities for public review and comment on those evaluations.

Public Involvement is an integral component of the NEPA Process

MR. BARNETT stated that the National Environmental Policy Act of 1969 governs almost all the DOT&PF projects. The DOT&PF, in its federal highway capacity acts on behalf of the Federal Aviation Administration (FAA). Most of the DOT&PF's projects are federal projects and must comply with NEPA, which has a major public process requirement.

[11:31:33 AM](#)

MR. BARNETT turned to the slide 9, titled "NEPA" which read as follows [original punctuation provided]:

- NEPA is not a permit
- NEPA is an "Umbrella" Law
- NEPA is a Procedural Law
- NEPA applies to all Federal Projects, including FHWA, FAA, & FTA PROJECTS

- NEPA applies to all State Projects if a Federal Permit, Concurrence, or other Federal Action is Required

MR. BARNETT stated that the DOT&PF must comply with all laws or be subject to lose funding. Typically, the DOT&PF provides information to the USACE on state projects if a federal action or permit is required so that agency can complete its NEPA process, he said.

[11:32:14 AM](#)

MR. BARNETT turned to slide 10, titled "DOT&PF Current Process for Fish Streams," which read as follows [original punctuation provided]:

- Design Engineering staff provide general project concept to DOT&PF Environmental
- Environmental staff conduct desktop analysis of project site using in-house and published resources
- Environmental staff determine NEPA Class of Action (CE, EA, EIS)
- DOT&PF conducts site visit and develops Project Management Plan (design parameters, ROW concerns, environmental issues, etc.)
- Engineering staff develop preliminary design drawings
- Environmental staff begin public and agency scoping process and issue public notices
- Environmental staff initiate consultation with ADF&G, USFWS, NMFS
- Engineering and Environmental staff conduct additional site visits to refine design and conduct field studies
- Environmental staff and hydraulic engineering staff collaborate with ADF&G and other agencies to insure fish passage in design

- Environmental staff complete Essential Fish Habitat Assessment for agency review (ADF&G, NMFS, USFWS) and NMFS concurrence
- Design finalized, Permit applications submitted

[11:33:13 AM](#)

MR. BARNETT turned to slide 11, titled "Environmental/Engineering Process," which read as follows [original punctuation provided]:

- DOT&PF Environmental identifies locations of catalogued fish streams in project footprint
- DOT&PF Environmental and Engineering staff conduct a field visit / site investigation
- DOT&PF Environmental may identify additional streams with suitable habitat that may require further study
- DOT&PF requests ADF&G staff determine which stream crossings will need to accommodate fish passage
- DOT&PF conducts additional studies (such as fish trapping) if ADF&G staff are unavailable
- DOT&PF (or its contractors) conduct a hydrologic and hydraulic study of the proposed crossings in order to develop a preliminary design.
- DOT&PF Environmental prepares Essential Fish Habitat Assessment (EFHA) with *adverse* or *no adverse* determination
- ADF&G, USFWS and NMFS provide comments and input to allow DOT&PF to receive concurrence on EFHA
- ADF&G, USFWS, NMFS are consulted regarding design. Agency field reviews may be conducted when appropriate
- If ADF&G and other agencies have no further issues or concerns, the design is finalized and a Title 16 permit application is developed by DOT&PF Environmental in collaboration with Regional Hydraulic Engineer

MR. BARNETT explained that during the design process the regional hydraulic engineers, the ADF&G, USFWS, and NMFS develop a design that in most cases improves fish passage. Once the permits have been issued the division's hydraulic engineering and environmental staff monitor the project during construction to ensure compliance and to make sure the pipes perform adequately. If the ADF&G is not available to perform the field work, the DOT&PF would use its specialized staff to do so and report the data to ADF&G.

MR. BARNETT added that the RSAs are not only used to identify fish streams but also are used for monitoring during construction. The ADF&G can visit projects at any time, he said.

[11:35:14 AM](#)

MR. BARNETT referred to slide 13, titled "Public Involvement." which read as follows [original punctuation provided]:

DOT&PF Process

- Public Notice & Request for Comments at start of environmental scoping process
- Public Workshops for larger projects (dependent upon impacts)
- Public Informational Meetings for larger projects (dependent upon impacts)
- Public Notice Comment Period typically 30 days
- Public Notice Comment Period can range from 14 days for routine (maintenance) projects to 45-60 days for large projects (EA's & EIS's)

USACE Process

- Public Notice and Request for Comments following Corps determination that permit application is complete
- Public Notice Comment Period typically 14 to 30 days

MR. BARNETT reviewed the DOT&PF public process on slide 13. He noted that for the Gravina Access Project in Ketchikan, the

department held nine separate public meetings. Interested parties can request a public hearing through the USACE, he said. Projects that fall in an intertidal area that would require piledriving must also have an incidental harassment authorization from NMFS or a biological opinion and concurrence from the Habitat Conservation Division for endangered species. Those types of projects would also be published in the Federal Register for 45 days. He characterized the DOT&PF public noticing process as being "fairly robust."

[11:37:49 AM](#)

MR. BARNETT referred to slide 14, titled "Mitigation," which read as follows [original punctuation provided]:

- Impacts to anadromous waters routinely require mitigation to offset temporary or permanent loss of essential fish habitat (riparian cover, large woody debris, loss of sinuosity, etc.)
- Mitigation typically includes riparian habitat restoration or enhancement at project site
- Mitigation efforts are also routinely conducted away from actual project site:
 - Wrangell Airport Mitigation - Falls Creek and Anan Creek Fish Ladders
 - Hyder Salmon River Road Mitigation - Marx Creek Rearing Pond & Spawning Channels
 - Dyea Road Mitigation - West Creek Tributary Fish Pipe Improvements

MR. BARNETT explained the mitigation efforts for the Wrangell Airport Runway Extension, noting that the DOT&PF purchased mitigation credits. He said that with the Dyea Road Mitigation the department completed a project in the national park on a tributary and replaced a culvert.

[11:40:29 AM](#)

REPRESENTATIVE KREISS-TOMKINS commented that it was good to hear about the DOT&PF's productive engagement on preserving this habitat.

REPRESENTATIVE TARR asked whether the public in an affected area were notified by mail for upcoming projects.

MR. BARNETT responded that all the DOT&PF projects have an online public notice in the state's online system. The DOT&PF publishes in communities with media, such as Juneau, Sitka, Anchorage, Ketchikan, and Fairbanks. The DOT&PF sometimes publishes a map of the area and conducts public service announcements (PSAs), he said. For example, locally, with the Brotherhood Bridge replacement [2015], the DOT&PF went door-to-door advising the neighborhood about noise that would occur when piledriving 45-inch pilings. He acknowledged that the department also sends out localized mailouts to people who would be directly impacted by a project, as well as taking a broader approach by using the media.

[11:42:45 AM](#)

REPRESENTATIVE TARR offered her belief that the best method to reach the public in her area seemed to be by mail since many people no longer subscribe to newspapers.

MR. BARNETT agreed; but noted that the department also creates a website for its larger projects; for example, it just posted the entire state environmental document online. He offered his belief that the DOT&PF has tried to make information available and to be as transparent as possible.

REPRESENTATIVE TARR acknowledged that in the past few years she has been able to get a color-coded map in Anchorage of state and local projects.

[11:44:07 AM](#)

REPRESENTATIVE TARR wondered if other staff in DOT&PF was as experienced as he was since job retention has been a problem for the state and she would hate to lose his expertise.

MR. BARNETT responded that the department has a comprehensive training process within DOT&PF for its environmental analysts, which includes an environmental procedures manual that describes how to monitor the DOT&PF projects. The environmental procedures manual was developed by the statewide environmental office, which is modified and updated annually. The DOT&PF updated its training manual and provides extensive training, he said. He expressed confidence in his staff.

REPRESENTATIVE TARR commented that the legislature has been hearing about recruitment and retention issues and she worried about losing the institutional knowledge.

[11:46:51 AM](#)

REPRESENTATIVE TARR related her understanding that eliminating dams and upgrading culverts has been recognized as "best practices." She wondered if he could identify other things that the department has been doing differently.

MR. BARNETT responded that the department uses hydraulic engineers who pay close attention to the gradients, the type of pipe, and the depth of burial. In addition, the DOT&PF has tried to create natural environments; for example, it uses fish rock to recreate a stream bed within the culvert pipes. In some instances, the department has used bottomless arches or structural plate arches to maintain the natural stream bed and substrate below the pipe. He noted that in Angoon, the DOT&PF constructed the entire runway and safety area above an arch. He acknowledged that the DOT&PF has strived to make things better whenever possible.

[11:49:55 AM](#)

ADJOURNMENT

There being no further business before the committee, the House Special Committee on Fisheries meeting was adjourned at 11:50 a.m.