Maine Programmatic Consultation on Atlantic Salmon - Expediting Project Delivery and Improving Partnerships

Presenters

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Learn more about Eco-Logical at the FHWA website
What is Eco-Logical?

• An ecosystem methodology for planning and developing infrastructure projects

• Developed by eight Federal agency partners and four State DOTs

• Collaboration between transportation, resource, and regulatory agencies to integrate their plans and identify environmental priorities across an ecosystem
<table>
<thead>
<tr>
<th>The Integrated Eco-Logical Framework</th>
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<tbody>
<tr>
<td>1. Build and strengthen collaborative partnerships</td>
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<tr>
<td>2. Integrate natural environment plans</td>
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<tr>
<td>3. Create a Regional Ecosystem Framework (REF)</td>
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<td>4. Assess effects on conservation objectives</td>
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<td>5. Establish and prioritize ecological actions</td>
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<td>6. Develop crediting strategy</td>
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<td>7. Develop programmatic consultation, biological opinion, or permit</td>
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<td>8. Implement agreements, adaptive management, and deliver projects</td>
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<td>9. Update REF</td>
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<thead>
<tr>
<th>Partner</th>
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<tr>
<td>Share Data</td>
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<td>Analyze Effects</td>
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<tr>
<th>Identify key sites and actions</th>
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<tbody>
<tr>
<td>Document</td>
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<tr>
<td>Implement</td>
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<td>Evaluate</td>
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Maine’s Work

• Prioritized Atlantic salmon habitat recovery watersheds throughout the State
• Completed the Atlantic Salmon Programmatic Consultation
• Is creating the Atlantic salmon-specific ILF program
• Developed and implemented monitoring protocols,
Overview

• Endangered Species Act Interagency Consultation
• Atlantic Salmon in Maine
• What is a Programmatic Consultation?
• Why a Programmatic Consultation?
• Who was involved?
• BA Development
• Consultation Period
• BO Development
• Implementation
• Benefits
• Challenges
• Lessons Learned
The Endangered Species Act of 1973 (ESA) requires all federal agencies to aid in the recovery of listed species.

Interagency consultation is completed under Section 7 of the ESA.
Informal consultation = NLAA species or CH
- USFWS has a processing goal of 30 days

Formal consultation = LAA species or CH
- USFWS has a statutory deadline of 135 days
Terms and Acronyms

- BA= Biological Assessment
- BO= Biological Opinion
- CH= Critical Habitat
- GOM DPS= Gulf of Maine Distinct Population Segment
- ATS= Atlantic salmon
- LAA= Likely to Adversely Affect
- NLAA= Not Likely to Adversely Affect
Atlantic Salmon in Maine

- **2000** – GOM DPS of ATS listed under the ESA
- **2009** – GOM DPS of ATS was expanded and ATS CH was designated
- Population continues to decline.

### Atlantic Salmon Life Cycle Monthly Gantt Chart

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<thead>
<tr>
<th></th>
<th>January</th>
<th>February</th>
<th>March</th>
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<th>June</th>
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<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
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<td>MIGRATION (river to ocean)</td>
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Smith Harbor Head Lighthouse
Atlantic Salmon in Maine

Figure 2-4. Adult Atlantic salmon returns to GOM DPS Rivers 2001-2014.

Data source: MDMR, unpublished data.
Atlantic Salmon in Maine

- ATS and its CH range covers approx. 2/3 of the state of Maine.
- From 2009-2016, MaineDOT had 30 - 40 projects per year that required ESA consultation (approx. 90% were federally-funded)
What is a Programmatic Consultation?

• Addresses repetitive and predictable project activities and effects
• Can cover informal and formal consultation
• Issues incidental take for a defined program of actions annually, instead of on an individual, project-level basis.
Why a Programmatic Consultation?

- Streamlining and predictability
  - 92% of projects had missed consultation approval timeline targets
  - Formal consultations averaged **220 days**
- Supports delivery of a large volume of critical MaineDOT projects (particularly, bridge and culvert)
- Incorporates conservation benefit at a program scale
Who was involved?

- Maine Department of Transportation
- Federal Highway Administration
  - Maine Division Office
  - Resource Center
  - Headquarters
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
  - Maine Field Office
  - Regional Office (Region 5)
- Maine Turnpike Authority
2012 – Education and outreach
2013 – FHWA SHRP2 Eco-Logical Implementation Grant & workshop
2013 – MaineDOT internal Section 7 process review
2013-2016 – Interagency meetings, schedule development, multiple BA drafts, USFWS turnover
Meanwhile, the backlog of transportation projects GREW
In June 2016, the programmatic BA was submitted and consultation was initiated with USFWS.
This is when we began to see the light at the end of the tunnel!
The programmatic BA proposed a range of transportation activities required for the construction, preservation and maintenance of the State transportation system in Maine.

The proposal of AMMs avoided adverse effects on a large portion of those actions but others resulted in unavoidable adverse effects to ATS and/or its designated CH.
• **Issues to work out during consultation**
  
  – Stream crossing design for fish passage was still undecided
  
  – Monitoring protocols for multiple aspects of the programmatic had to be jointly developed
  
  – In-lieu fee program for ATS was underway, but separate from the programmatic development
• FHWA WA DIV/Resource Center stepped into a leadership role to facilitate the draft BO development.
  – FHWA and MaineDOT authored* the draft BO and managed the BO schedule, including close coordination with USFWS and USACE.

*Likely unprecedented in the transportation sector.

• Began BO development in September 2016. BO was issued FOUR MONTHS later! Record timing.
Table 1: Annual General Construction Activity Project Numbers

<table>
<thead>
<tr>
<th>General Construction Activity</th>
<th>No. Projects per year</th>
<th>SHRU: Penobscot Bay Tier 1</th>
<th>SHRU: Penobscot Bay Tier 2</th>
<th>SHRU: Downeast Tier 1</th>
<th>SHRU: Downeast Tier 2</th>
<th>SHRU: Merrymeeting Bay Tier 1</th>
<th>SHRU: Merrymeeting Bay Tier 2</th>
<th>Within CH and no ATS Presence</th>
<th>Within CH and Potential for ATS Presence</th>
<th>Not Within CH and Unlikely ATS Presence</th>
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<tbody>
<tr>
<td>Stream Crossing</td>
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<td>Temporary Access*</td>
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<tr>
<td>Geotechnical Drilling*</td>
<td>15*</td>
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<td>3*</td>
<td>2*</td>
<td>8*</td>
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<td>TOTAL</td>
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*Temporary Access and Geotechnical Drilling have been broken out into their own separate general construction activities, however, these two activities are always a component of another general construction activity and therefore, do not contribute to the total estimated projects to be processed under this Programmatic.
5. EFFECTS OF THE ACTION

5.1 Effects of the Action on Atlantic salmon

5.1.1 Elevated Turbidity/Sediment Transport

5.1.2 Underwater Noise

5.1.3 Temporary Migration/Movement Barrier

5.1.4 Fish Handling, Relocation, and Entrapment

5.1.5 Impingement/Entrainment

5.1.6 Water Quality Impact (pollutants)

5.1.7 Habitat Alteration

5.1.8 Permanent Migration/Movement Barrier

5.1.9 Summary of Effects to Atlantic salmon

5.2 Effects of the Action on Atlantic salmon Critical Habitat

5.2.1 Insignificant and Discountable Effects

5.2.2 Effects to the Physical and Biological Features of Spawning and Rearing (SR)

5.2.3 Effects to the Physical and Biological Features of Migration (M)
BO Development

- BO Components
  - Adaptive Management
  - Incidental Take Statement
  - Hydroacoustic Monitoring, Turbidity Monitoring and Post-Project Monitoring
  - Avoidance and Minimization Measures
  - Mitigation
BO Development

- Programmatic BO signed on January 23, 2017!!!
February 2017 – MaineDOT website developed to house current documents for viewing
March 2017 – User’s Guide Version 1.0 developed
April 2017 – User’s Guide Training held
Summer/Fall 2017 – In-lieu fee mitigation instrument implemented
Benefits for USFWS
- Produces visible conservation benefits to the species
- Builds trust between agencies
- Informal reviews - 2 weeks (was 1 month)
- Formal reviews - 1 month (was 135 days)
- Can spend more time on highly sensitive projects
Benefits for MaineDOT

– Improved consultation processing times = expedited project delivery
  • 4 projects have been submitted under the programmatic for consistency review to date. <1 week to complete review vs. up to 220 days!

– Increased predictability
  • MaineDOT, FHWA, USACE can complete designs knowing there will be predictable results.

– Improved relationships!
Challenges

• Stream crossing design
  – Applying new design standards to projects far along in the process is complicated
  – MaineDOT is training designers to complete habitat connectivity design
  – New internal training and processes must be created to ensure design is occurring efficiently and properly
Lessons Learned

- Need to prioritize and focus multiple resources
- Important to capitalize on the strengths of your team
- Critical to have support from management
- Communication between agencies is essential
- Flexibility is important for all involved
• MaineDOT ATS Programmatic Website: http://www.maine.gov/mdot/maspc/

• Ecological Case Study: https://www.environment.fhwa.dot.gov/ecological/ImplementingEcoLogicalApproach/Library.asp (Coming soon)

• SIS Newsletter: https://www.environment.fhwa.dot.gov/strmlng/newsletters/apr17nl.asp (May)
<table>
<thead>
<tr>
<th>Name</th>
<th>Contact Information</th>
</tr>
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<tbody>
<tr>
<td>Cassie Chase</td>
<td>FHWA Maine Division&lt;br&gt;207-512-4921&lt;br&gt;<a href="Cassandra.chase@dot.gov">email</a></td>
</tr>
<tr>
<td>Cindy Callahan</td>
<td>FHWA WA Division/Resource Center&lt;br&gt;360-753-9078&lt;br&gt;<a href="Cindy.callahan@dot.gov">email</a></td>
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<tr>
<td>Eric Ham</td>
<td>MaineDOT&lt;br&gt;207-215-7356&lt;br&gt;<a href="Eric.ham@maine.gov">email</a></td>
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<td>Jay Clement</td>
<td>USACE Maine Field Office&lt;br&gt;207-623-8367&lt;br&gt;<a href="Jay.l.clement@usace.army.mil">email</a></td>
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Any Questions?