Eco-Logical Webinar Series

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

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Presenters

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Learn more about Eco-Logical at the FHWA website

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W hat 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

The Integrated Eco-Logical Framework

1. **Build and strengthen collaborative partnerships**
2. **Integrate natural environment plans**
3. **Create a Regional Ecosystem Framework (REF)**
4. **Assess effects on conservation objectives**

Partner
Share Data
Analyze Effects

5. **Establish and prioritize ecological actions**
6. **Develop crediting strategy**

Identify key sites and actions

7. **Develop programmatic consultation, biological opinion, or permit**
8. **Implement agreements, adaptive management, and deliver projects**
9. **Update REF**

Document
Implement
Evaluate

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,

Maine Atlantic Salmon Programmatic Consultation

Bass Harbor Head Lighthouse

Maine Division Office

U.S. Department of Transportation
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Maine Atlantic Salmon Programmatic Consultation

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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

Endangered Species Act Interagency Consultation

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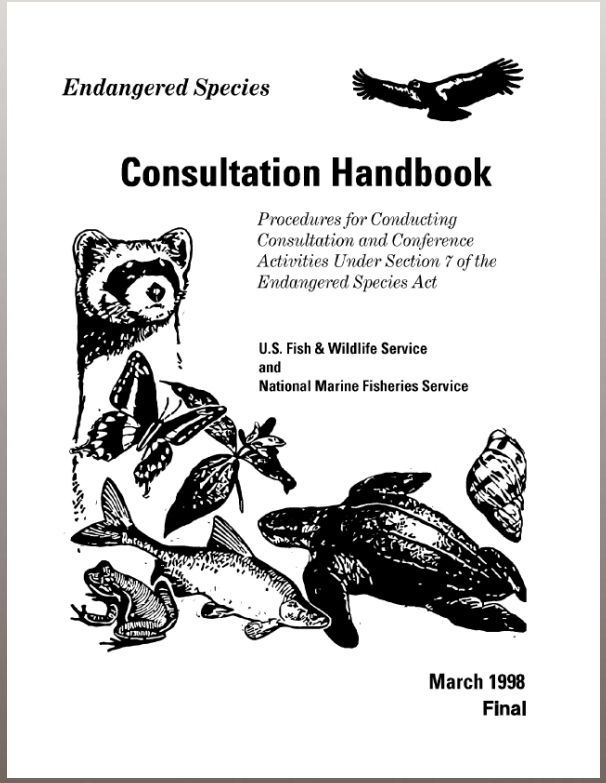
- The Endangered Species Act of 1973 (ESA) requires all federal agencies to aid in the recovery of listed species.
- Interagency consultation is completed under Section 7 of the ESA



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Endangered Species Act Interagency Consultation

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- **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

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- 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

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- **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

	January	February	March	April	May	June	July	August	September	October	November	December
Adults	OVERWINTER				MIGRATION (ocean to rivers)		HOLDING			SPAWNING		OVERWINTER
										MIGRATION (river to ocean)		
Smolts				MIGRATION (river to ocean)								
Parr/Fry	REARING											
Alevins			HATCH									
Eggs	DEVELOPMENT IN REDDS									DEVELOPMENT IN REDDS		

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Atlantic Salmon in Maine

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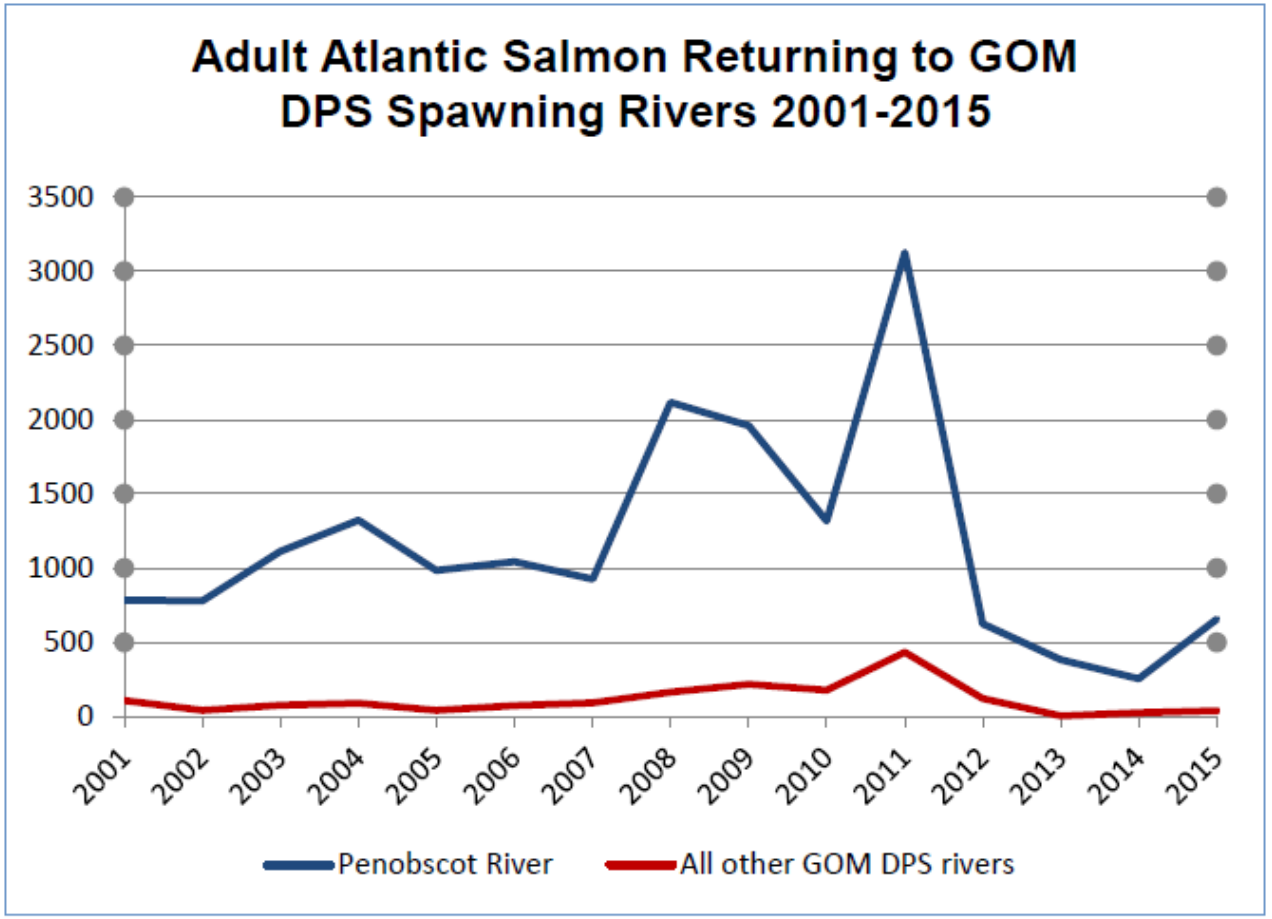

Figure 2-4. Adult Atlantic salmon returns to GOM DPS Rivers 2001-2014.

Data source: MDMR, unpublished data.

Atlantic Salmon in Maine

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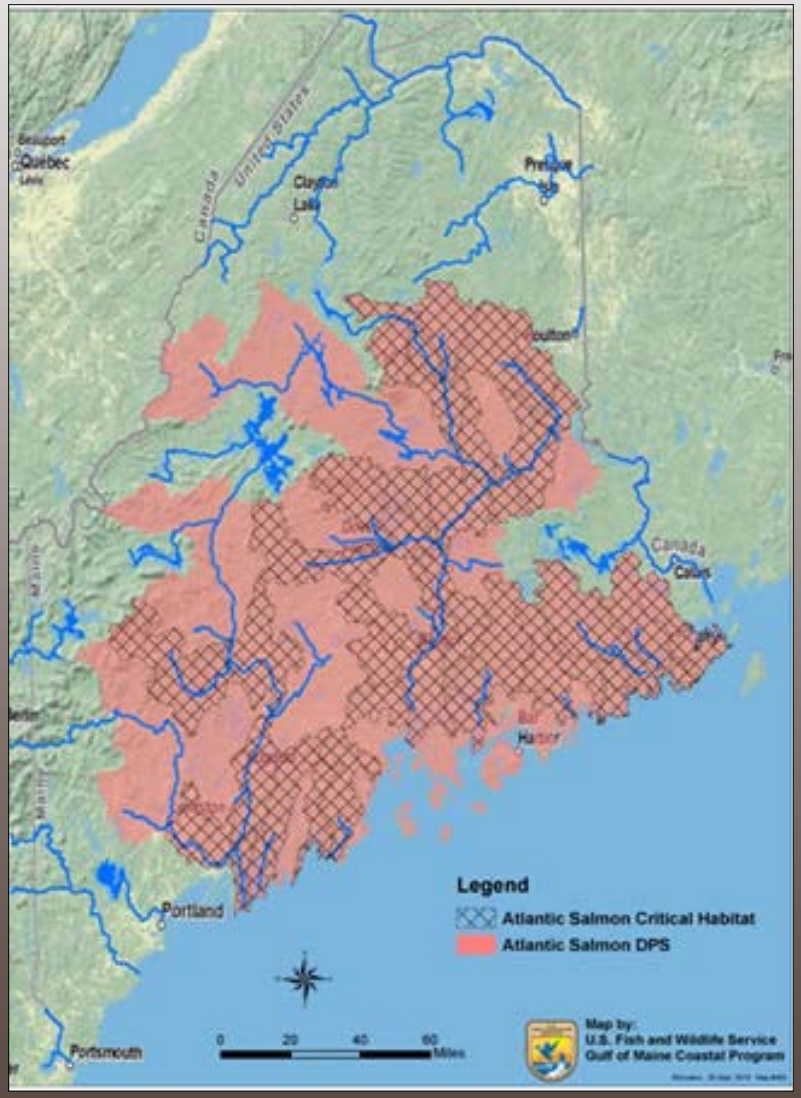
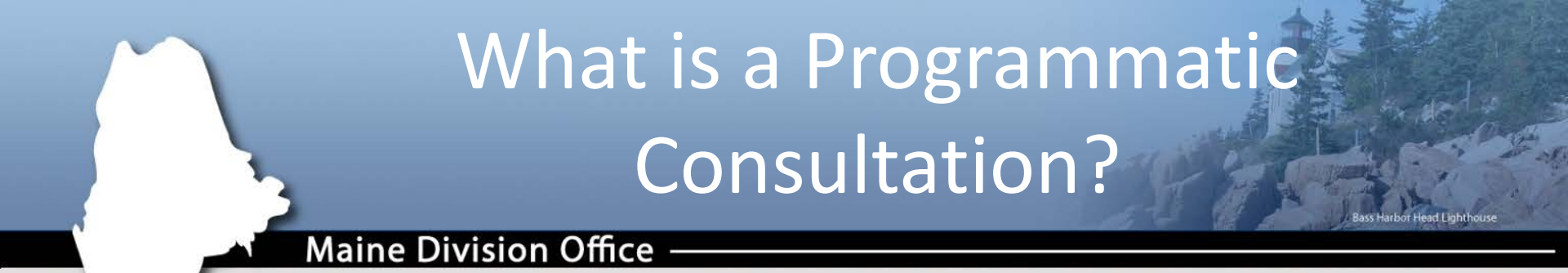
- ATS and its CH range covers approx. 2/3 of the state of Maine.
- From 2009-2016, MaineDOT had 30 - 40 projects per year that required ESA consultation (approx. 90% were federally-funded)



What is a Programmatic Consultation?



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- 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?

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- 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?

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- 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

U.S. Department of Transportation
Federal Highway Administration

U.S. Department of Transportation
Federal Highway Administration

US Army Corps of Engineers ®
New England District

U.S. FISH & WILDLIFE SERVICE
DEPARTMENT OF THE INTERIOR

MaineDOT

MAINE TURNPIKE

Maine Turnpike Authority

BA Development

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- 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**

BA Development

- 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!

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BA Development

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- 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.

Consultation Period

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- 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

BO Development

Maine Division Office

- 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.

BO Development

Table 1: Annual General Construction Activity Project Numbers

General Construction Activity	No. Projects per year	*SHRU: Penobscot Bay*		*SHRU: Downeast*		*SHRU: Merrymeeting Bay*		Within CH and no ATS Presence[1]	Within CH and Potential for ATS Presence	Not Within CH and Unlikely ATS Presence
		Tier 1	Tier 2	Tier 1	Tier 2	Tier 1	Tier 2			
Stream Crossing Structure Replacement:										
-Culvert Replacement	20	4	3	3	3	4	3	9[2]	7	4
-Bridge Replacement	15	3	2	3	2	3	2	8	5	2
Bridge Removal	1	0	0	0	0	0	0	0	1[3]	0
Culvert End:										
-Extension	5	2	1	1	0	1	0	3	2	0
-Reset	10	3	1	2	1	2	1	5	3	2
Bridge Scour Countermeasure	3	1[4]		1		1		0	3	0
Bridge Maintenance										
-Grout Bag	3	1		1		1		1	2	0
-Concrete Repair	1	1		0		0		0	1	0
Temporary Access*	15*	5*		5*		5*		8*	5*	2*
Slipline/Invert Line	3	1	0	1	0	1	0	0	3	0
Geotechnical Drilling*	15*	3*	2*	3*	2*	3*	2*	8*	5*	2*
TOTAL	**61**							**26 (43%)**	**27 (44%)**	**8 (13%)**

*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.

BO Development

BO Development

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

BO Development

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- Programmatic BO signed on January 23, 2017!!!

Implementation

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- 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

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- 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

Maine Division Office

- 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!

Improved Relationships!

Challenges

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- 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

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- 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

Resources

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- 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)

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Any Questions?