Jun 20th, 1:00 PM - 1:15 PM

Penobscot I: Looking After the Leap: Reflections on the Penobscot River Restoration Project

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Penobscot Trust


Looking After the Leap:
Reflections on the
Penobscot River Restoration Project

Penobscot River Restoration Project

“When the fish came in the spring they found an impassable barrier across their way; they gathered in multitudes below the dam and strove in vain to surmount it… A great many shad and alewives lingered about the dam and died there, until the air was loaded with the stench”

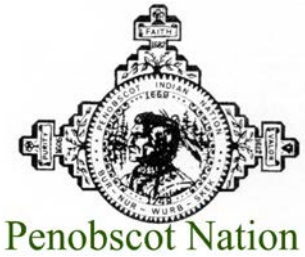
Maine Commissioner of Fisheries, Charles Atkins, 1869

Before the Penobscot Project…

Dams, water pollution and over fishing had virtually eliminated sea-run fish above Bangor in the Penobscot River

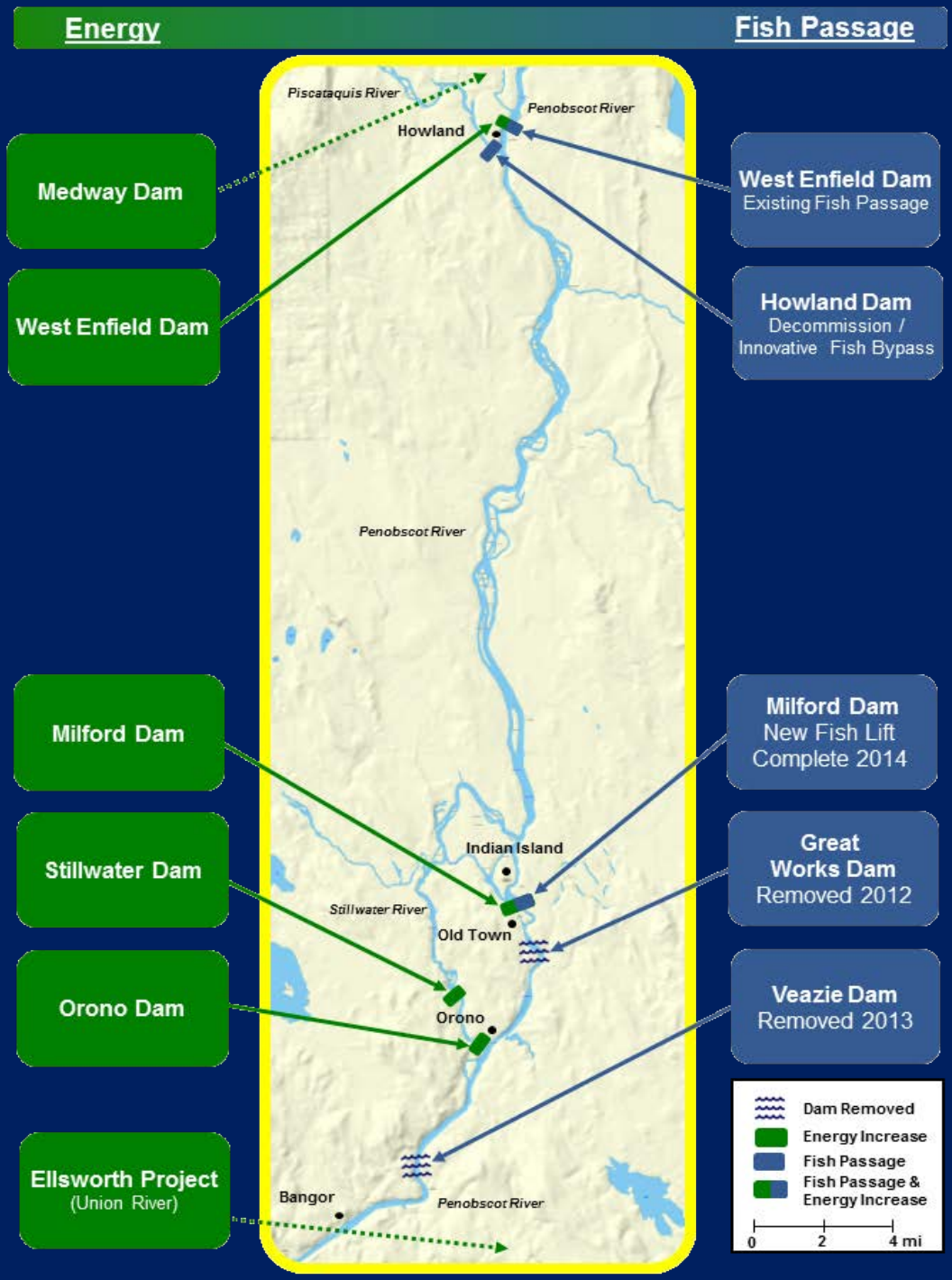
Species	Historic	Pre-2004	Potential
River herring	14-20 million	Below 1,000	~ 15 million
Atlantic salmon	75–100,000	1,300 (10 yr. avg.)	10,000-12,000
American shad	3-5 million	Near 1000	1.5 million

Partners in the Penobscot River Restoration Project



Penobscot River Restoration Trust

11 Species of Native Sea-Run Fish



THE DEAL

→ Increased Energy
to maintain power generation

→ Purchase Three Dams
Decommission

→ Removed Two Dams
closest to the sea

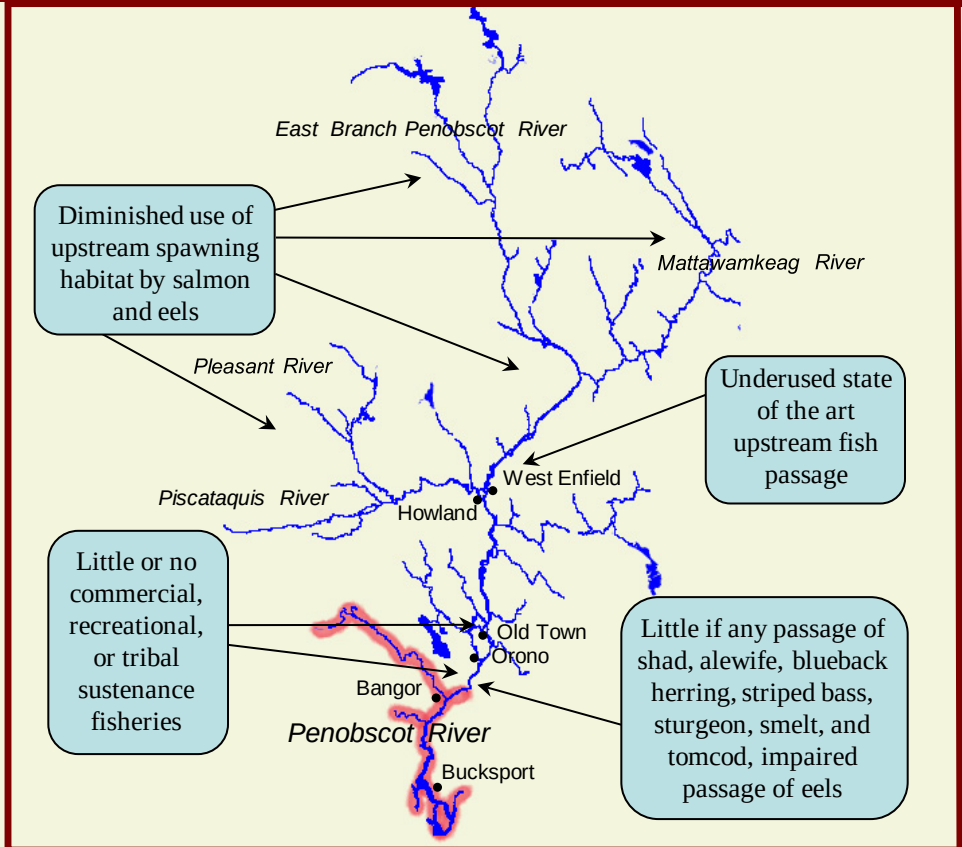
→ Bypassed Howland Dam
for inland habitat access

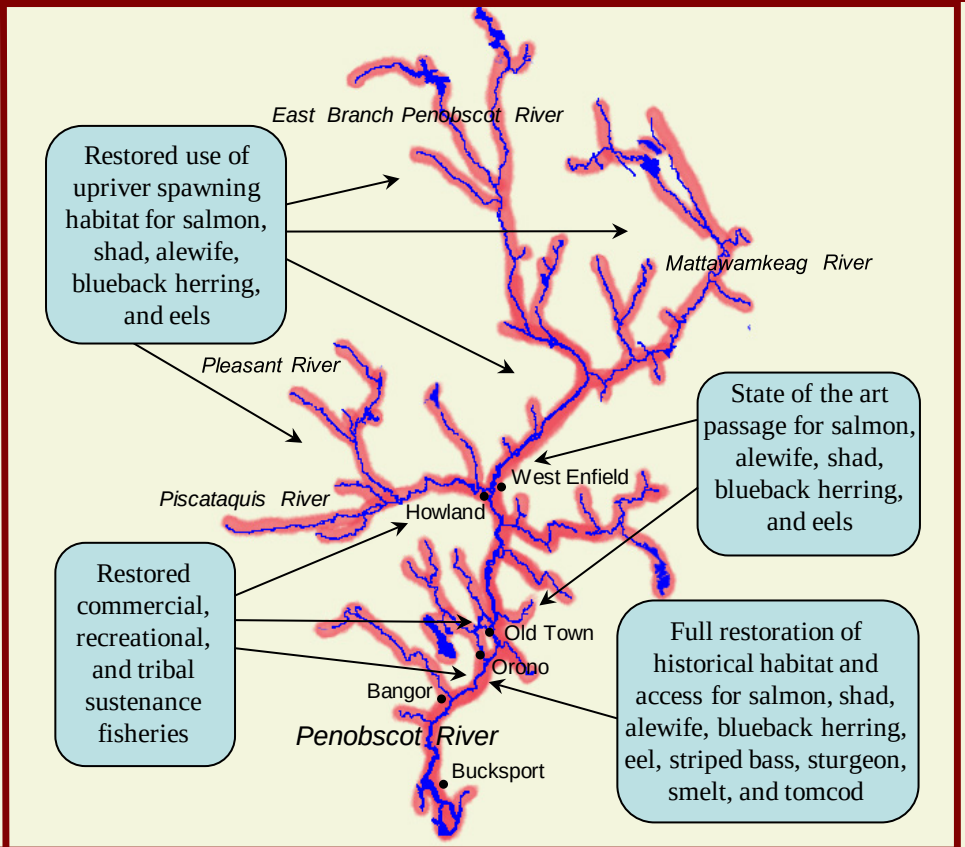
→ Improved Fish passage
at four other dams

→ Enhanced Habitat Access
1,000 miles of historic habitat

Penobscot River Restoration Project

Before and After Habitat Access

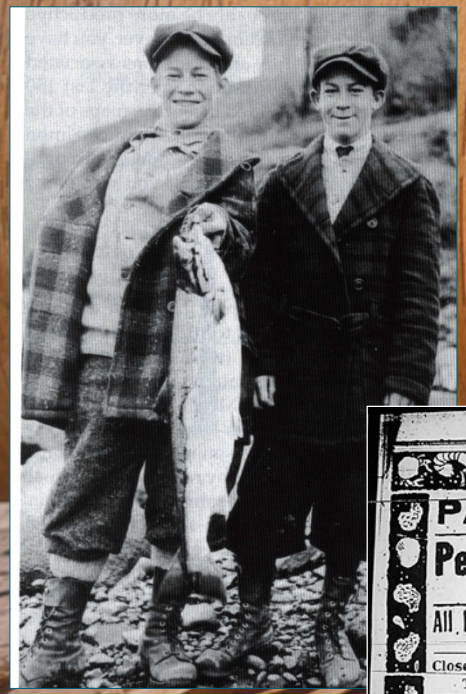


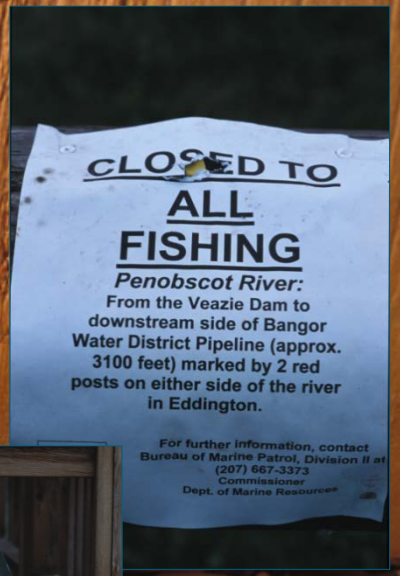


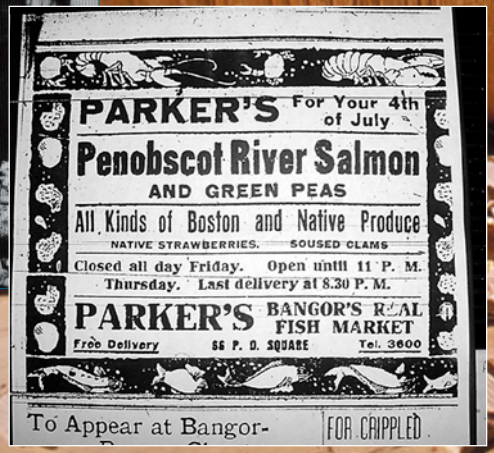
Existing Access for Sea-Run Fish

Significantly Improved Access for Sea-Run Fish to Nearly 1,000 Miles


HOME OF THE
PENOBSCOTS




CLOSED TO
ALL
FISHING
Penobscot River:
From the Veazie Dam to downstream side of Bangor Water District Pipeline (approx. 3100 feet) marked by 2 red posts on either side of the river in Eddington.
For further information, contact Bureau of Marine Patrol, Division II at (207) 667-3373
Commissioner
Dept. of Marine Resources


PARKER'S For Your 4th of July
Penobscot River Salmon
AND GREEN PEAS
All Kinds of Boston and Native Produce
NATIVE STRAWBERRIES. SOUSED CLAMS
Closed all day Friday. Open until 11 P. M.
Thursday. Last delivery at 8.30 P. M.
PARKER'S BANGOR'S REAL FISH MARKET
Free Delivery 56 P. O. SQUARE Tel. 3600
To Appear at Bangor- FOR CRIPPLED


VEAZIE
SALMON CLUB

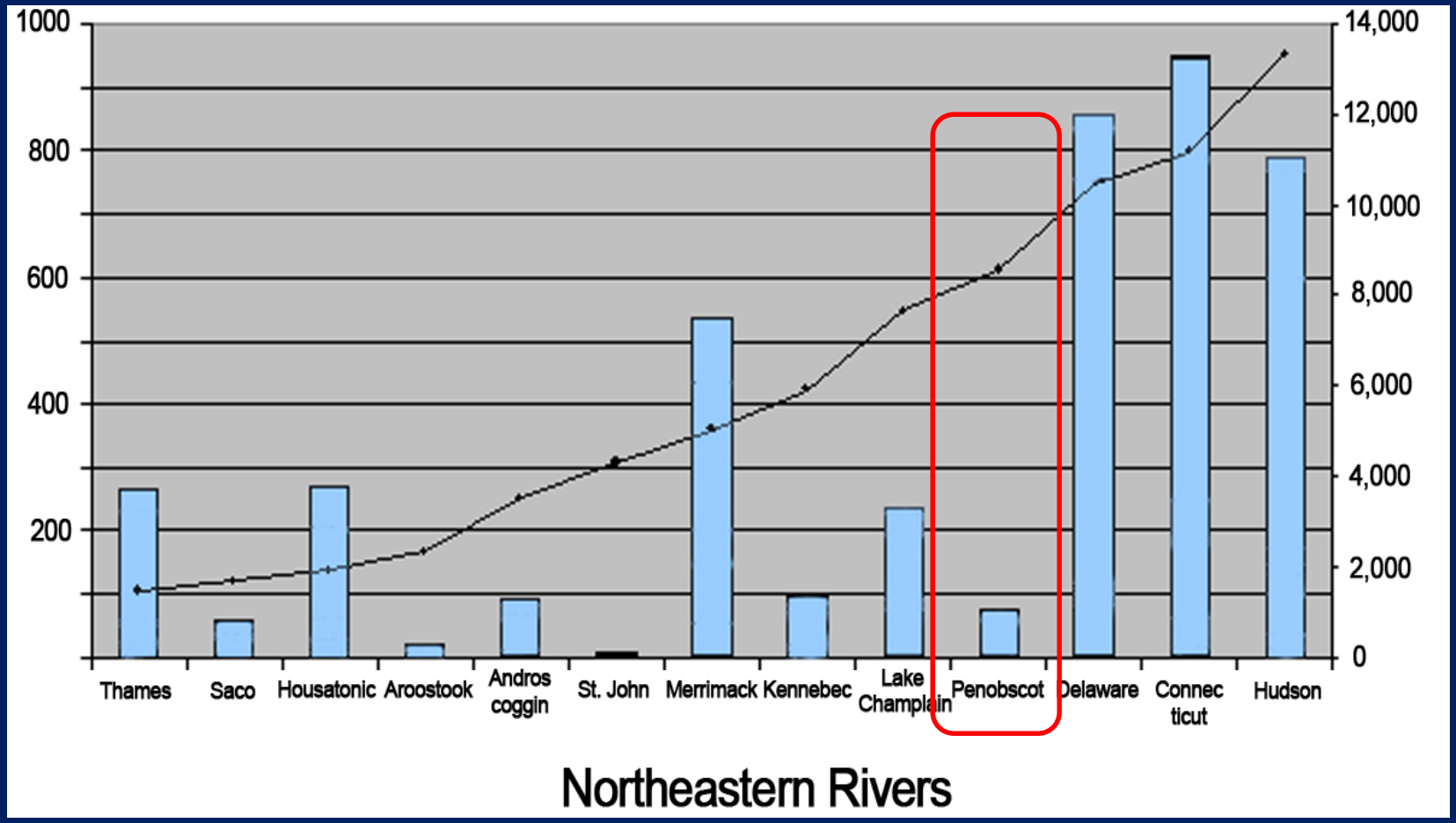

Dagger


SPONSORS

Why the Penobscot River?

Watershed Size:
8,570 mi^2
22,196 km^2

- **Penobscot is the second largest river system in New England**
- **One of the largest freshwater sources to the Gulf of Maine**



Comparison of rivers in the Northeast U.S.

(slide courtesy of TNC)

FISH

- Historically low numbers of migratory species but widely distributed in the river.
- Supports the largest run of Atlantic salmon in the U.S.

Opportunity to Strategically Reconfigure Dams

Recognizing factors contributing to the reduction in fish numbers include the cumulative impact of multiple dams

(Laser ‘09 and NRC ’04)

Great Works Dam - Removed 2012

Veazie Dam - Removed 2013


Photo by R.W. Estella

Milford Dam and Fish Lift


(c) 2014 Penobscot River Restoration Trust
Aerial support provided by LightHawk

Howland Dam

Photo by Bridget Besaw, courtesy of Penobscot River Restoration Trust

Nature-like Fish Bypass


REFLECTIONS

Motivated Partners

Regulations:

FPA, ESA, FERC

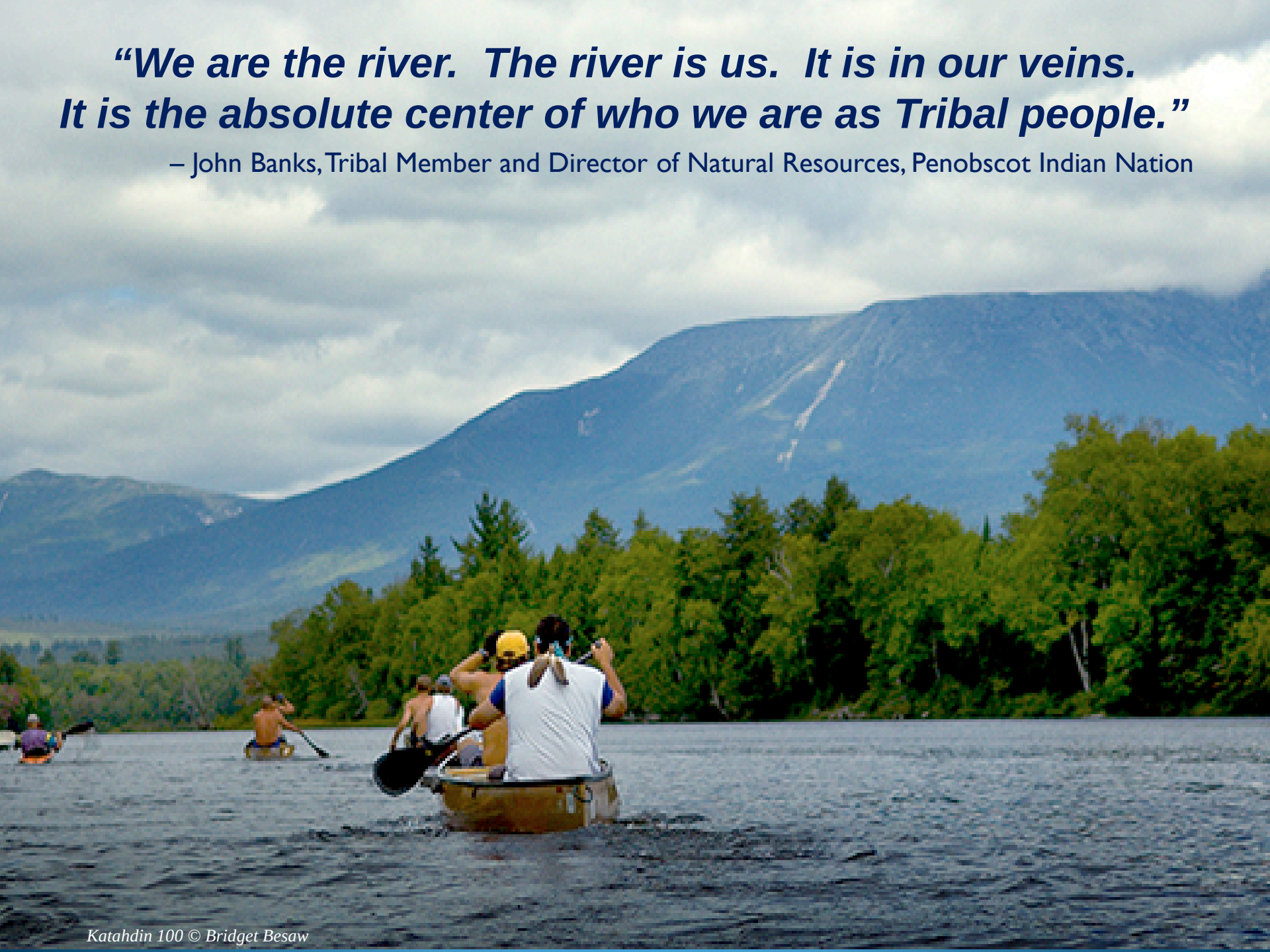
Fishery on the Brink

Hydropower Interests

- ✓ Partnership is key
- ✓ Stayed engaged
- ✓ Seized opportunities
- ✓ Took “Big picture” approach

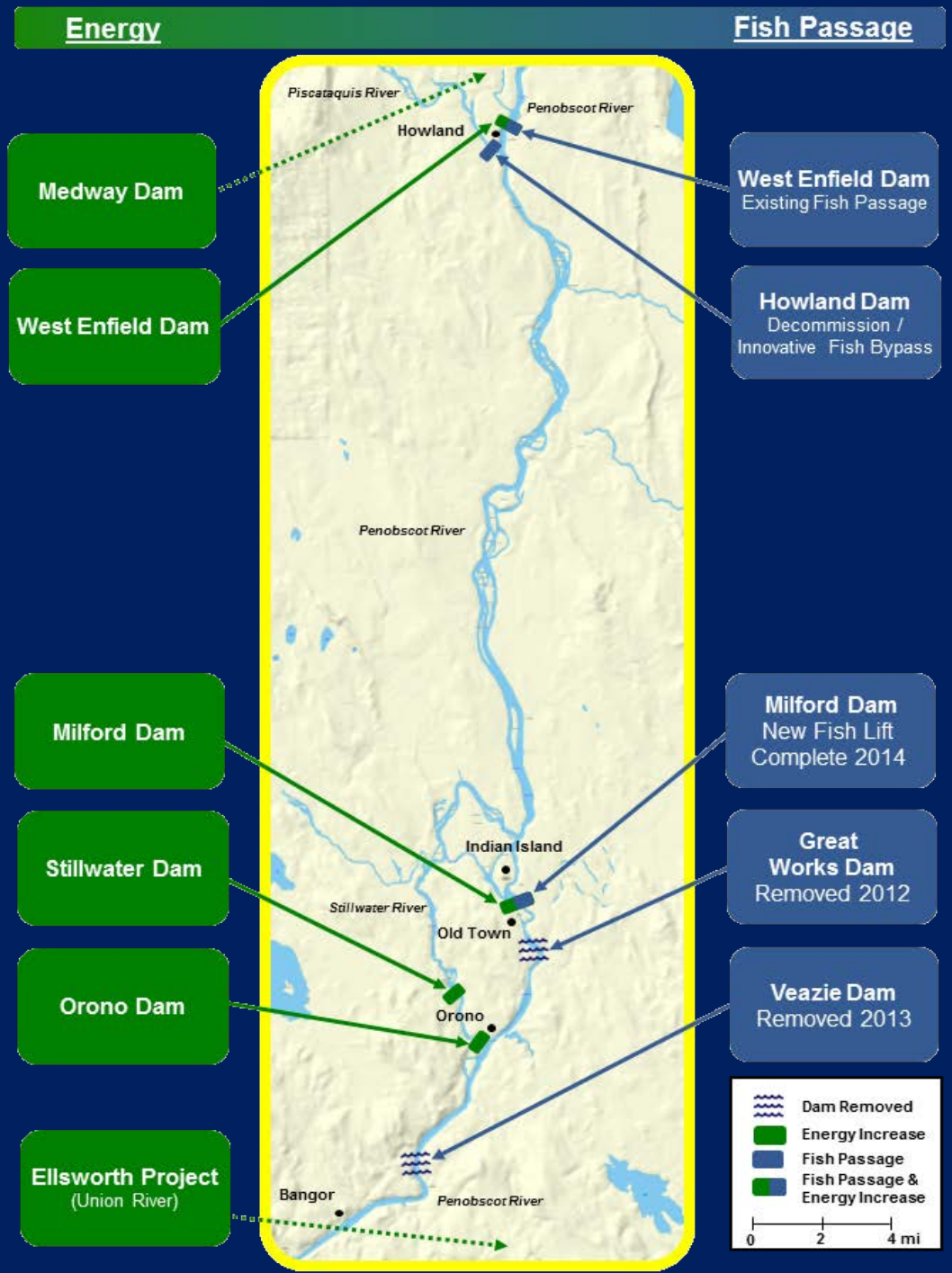
"We are the river. The river is us. It is in our veins. It is the absolute center of who we are as Tribal people."

– John Banks, Tribal Member and Director of Natural Resources, Penobscot Indian Nation



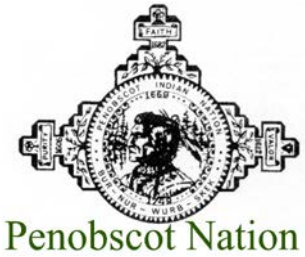
Katahdin 100 © Bridget Besaw

✓ Ecosystem Approach



- ✓ **Know your geography**
- ✓ **Seek out unique opportunities**
- ✓ **Think outside the box**

✓ Diverse Mix of Funding



Penobscot River Restoration Trust

✓ Diverse Technical Team

Aquatic Science Associates • Boyle Associates • Biodrawversity • CES • Cianbro Corporation • Kleinschmidt Associates • Milone & MacBroom • R.F. Jordan & Sons • Sargent Corporation • Sewall • Stantec • Sullivan & Merritt Constructors • S.W. Cole • Inter-Fluv • UMaine • USM • Wright-Pierce • SumCo Eco-Contracting • Haley Aldrich

✓ Adaptability, Creativity, & Expectation Management

✓ Design with Nature

✓ Constituency-building, Community work, & Outreach


Win-Win-Win
Restoration Can Happen


2015/16 Fish Counts:
Atlantic Salmon 721
River Herring 889,503 / 1.7 million
American Shad 1,806 / 3,250
Sturgeon YES!


www.penobscotriver.org
www.facebook.com/PenobscotRiver