

The Eastern Brook Trout Joint Venture: Hub for Conservation of an Iconic Species

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Canaan Valley Institute



Eastern Brook Trout

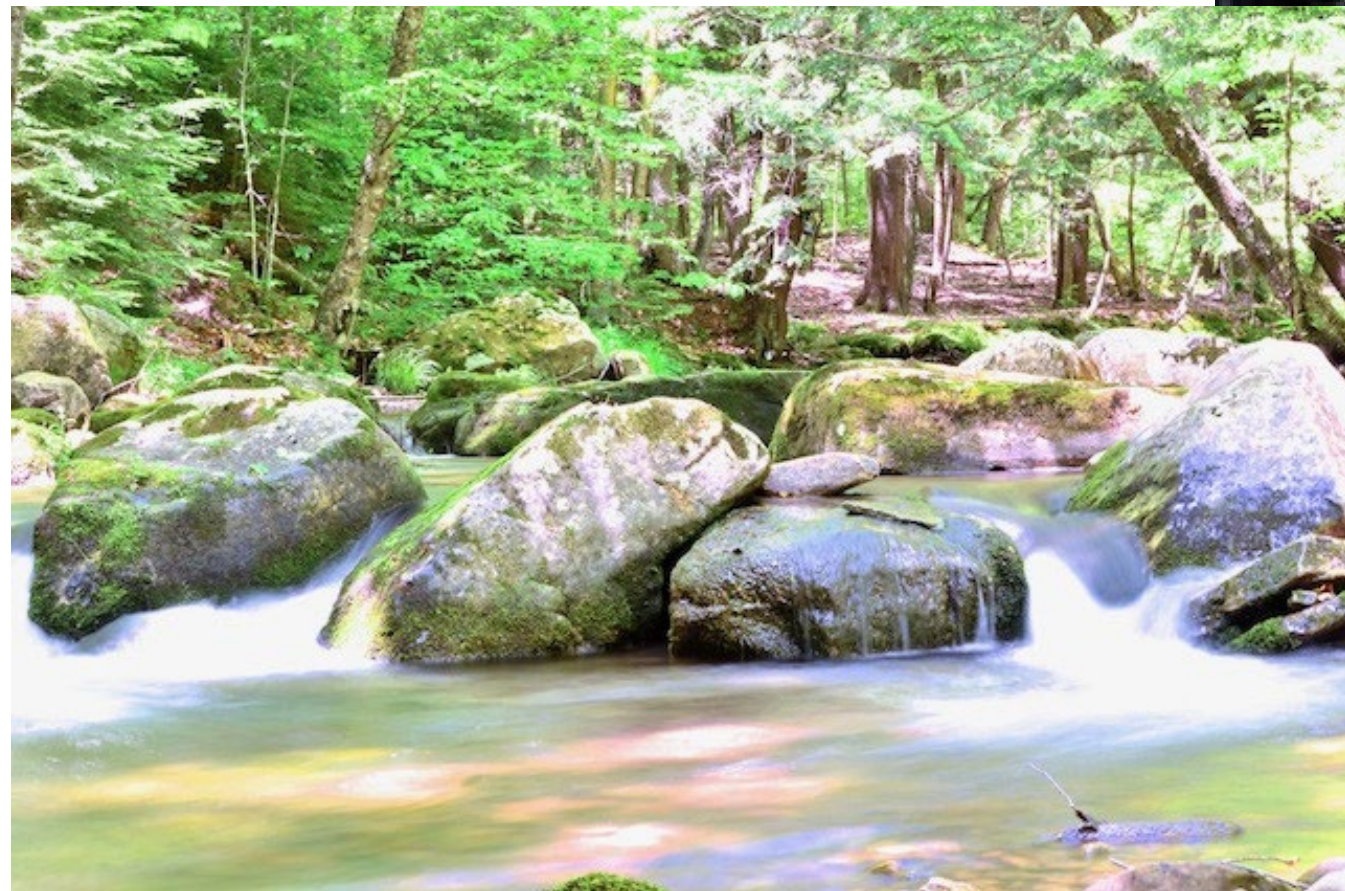
JOINT VENTURE

About the EBTJV

- Formed in early 2000s as one of the first National Fish Habitat Partnerships
- Mission: Conserve fishable, self-sustaining Brook Trout populations across the eastern U.S.
- Volunteer-led, science-based, multi-state partnership



Why brook trout?



Our approach to advancing conservation

1. Comprehensive salmonid distribution dataset across Eastern US
2. Habitat projects & restoration funding
3. Strategic partnerships to advance science-based management

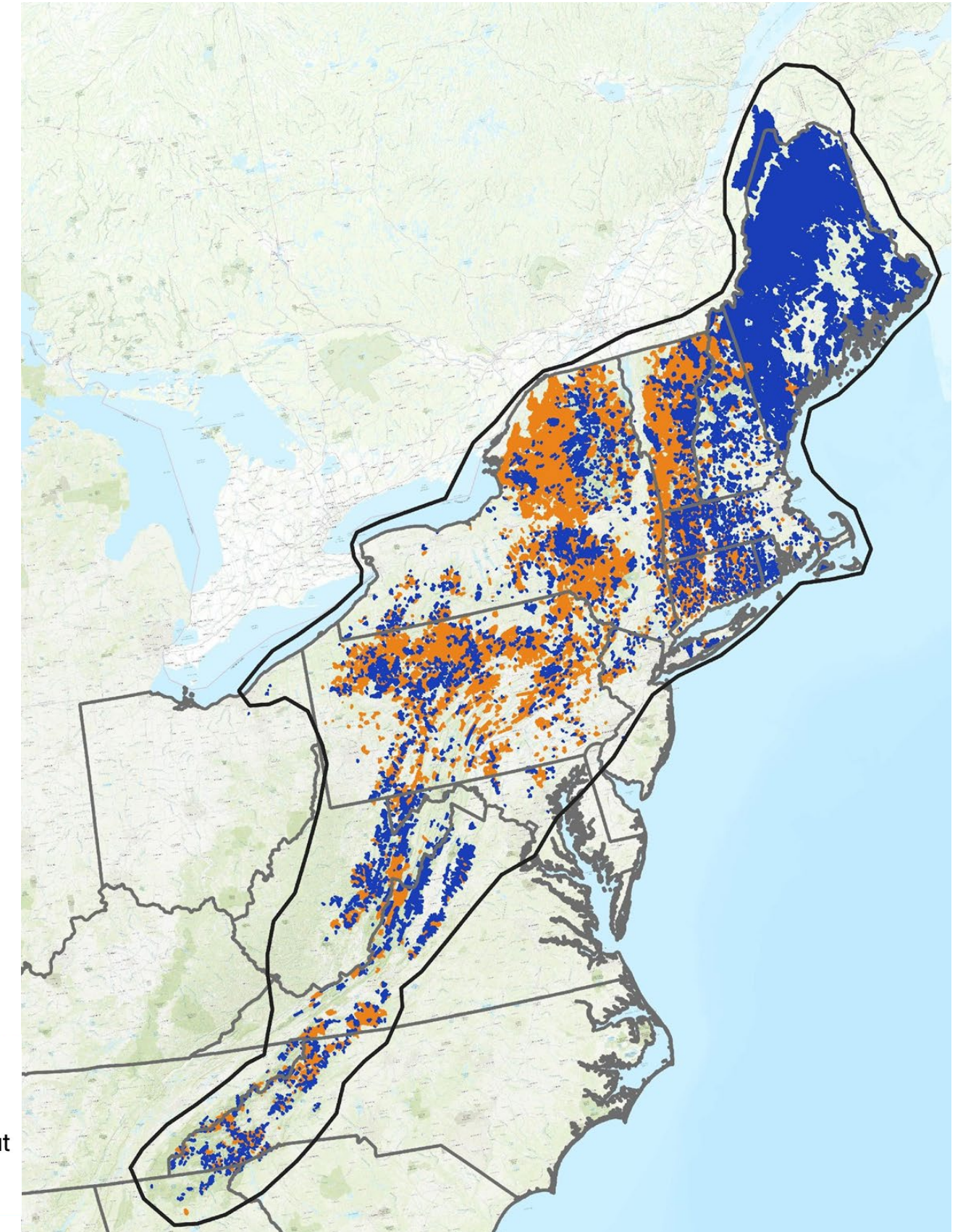
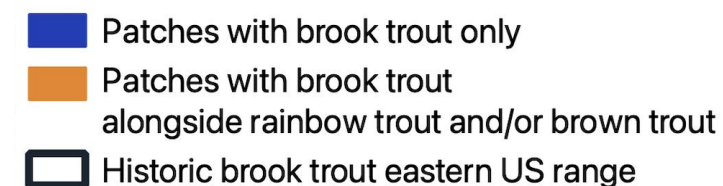


Habitat enhancement on the Narraguagus River, Maine. Project SHARE

Photo by Bill Bennett

Range - wide occupancy assessment

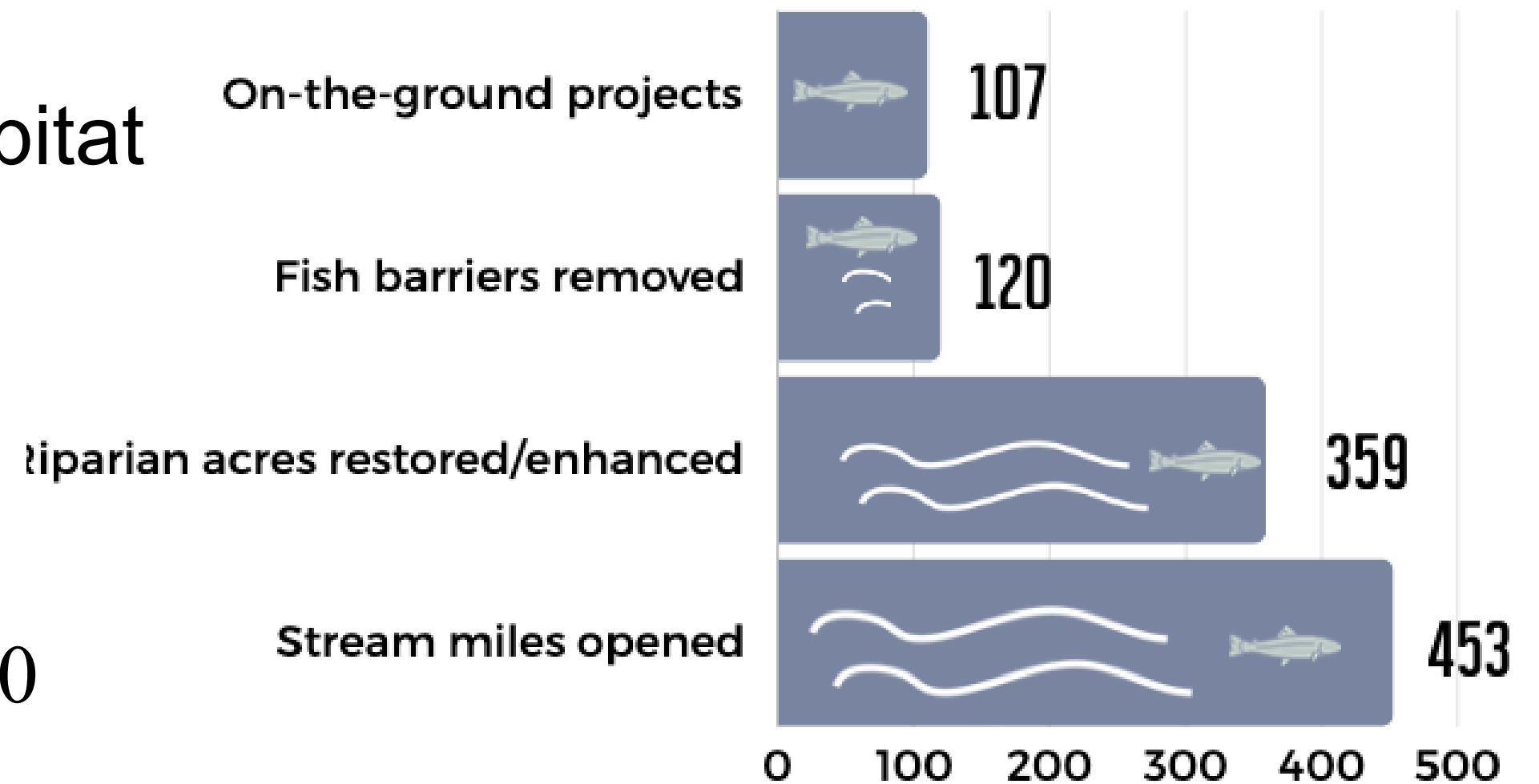
- Third iteration (2006, 2015, 2024)
- Comprehensive data from 17 state agencies, tribal, and federal partners
- Over 270,000 catchments classified
- Data used by other NGOs, funders
- Future: change analysis; occupancy with abundance data



On - the - Ground Habitat Restoration

- Since 2006: National Fish Habitat Partnership funding of **\$5+ million**
- **107 projects**
- In FY27 RFP, received over 30 pre-applications

On-the-ground work 2006- 2024



Small grants program (2023)

- One-time initiative supporting education training, and outreach for Brook Trout conservation
- 8 applications received; 4 selected and executed in < 3 months
- \$29,893 in grants leveraged \$40,537 in nonfederal match
- 185 people trained in-person; ~24,000 reached via digital outreach



Photo 1. Thermal Infrared Workshop organizers and presenters. From the left: Steve Dugdale (University of Nottingham), Kory Whittum (Maine Inland Fisheries and Wildlife), Danielle Frechette (Maine Department of Marine Resources), Christian Torgersen (United States Geological Survey), Baptiste Marteau; virtual (University of Rennes), Valerie Ouellet (Atlantic Salmon Federation), Merry Gallagher (Maine Inland Fisheries and Wildlife), Chris Federico (Project SHARE)

Maine IFW, Maine Audubon, Massachusetts Woodlands Institute, Franklin Land Trust, and Trout Unlimited, Chatooga Conservancy.

Projects included riparian outreach, thermal IR habitat training, ecological road-stream crossing design, and landowner engagement materials



Strategic Partnerships

- 17 State fish & wildlife agencies
- Steering Committee: 16 states, 4 Federal partners, 4 NGOs
- Collaborations with National Forests, National Parks, USGS, FWS, NFWF, Chesapeake Bay Program
- 39 MOU signatories
- >380 organizations supporting projects
- EBTJV outreach to share messaging and successes



EBTJV and Future Priorities

[About EBTJV](#)[The Story of Wild Brook Trout](#)[News & Events](#)[Projects](#)[Science and Data](#)[Search](#)[DONATE](#)

protect. restore. enhance.

NEWS and EVENTS



Forests for Fish Workshop

Franklin Land Trust and MA Woodlands Institute are partnering with Trout Unlimited to host a...

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presence of brook trout indicates clean, cold water.
credit: NPS / Tim Lambert

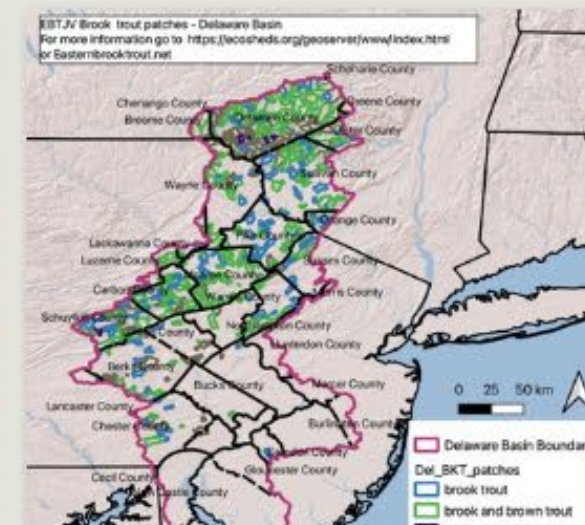
Sharing from NPS: Researchers see startling brook trout declines in Shenandoah streams

Land use and pollution used to be brook trout's biggest problems. But our latest research shows...

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Sharing from CBF: How restoring West Virginia's native brook trout also restores water quality, and the critical partnerships making this important work happen

Brook Trout work in West Virginia helps the Chesapeake...

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EBTJV, PA, NY, NJ, TU, and WMI partner to increase capacity for brook trout conservation

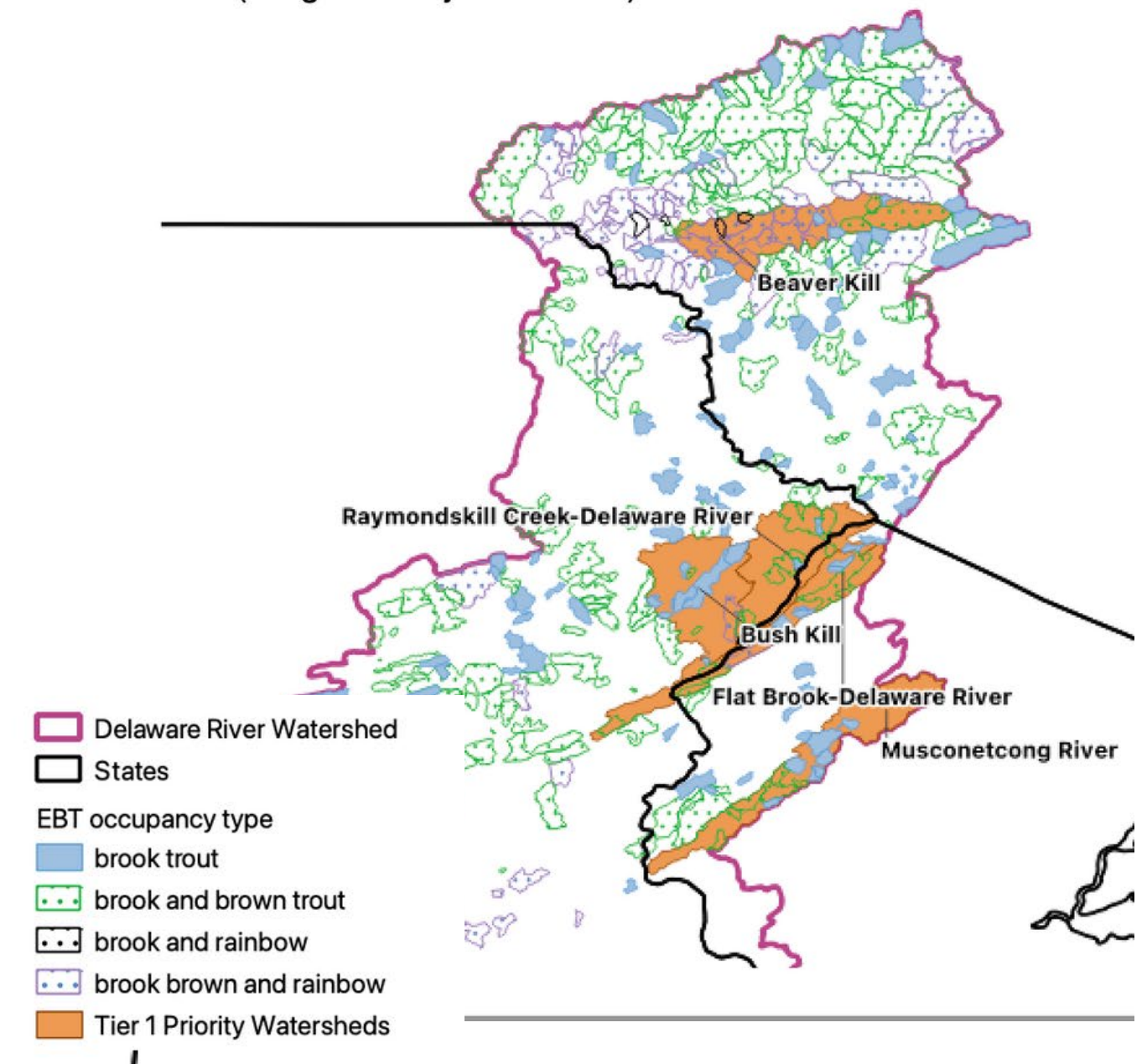
A NFWF grant was awarded to WMI for brook trout work in NY, NJ,...

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Strategic partnerships – landscape conservation

Conserve and restore habitat for Eastern Brook Trout across PA, NJ, NY in the Delaware Watershed

- Bring together people/organizations to tackle project management, monitoring, and project administration;
- Deliver funding, and create administrative efficiency/flexibility across boundaries;
- **Create a model that may be transferred to other regions for broad-scale conservation.**

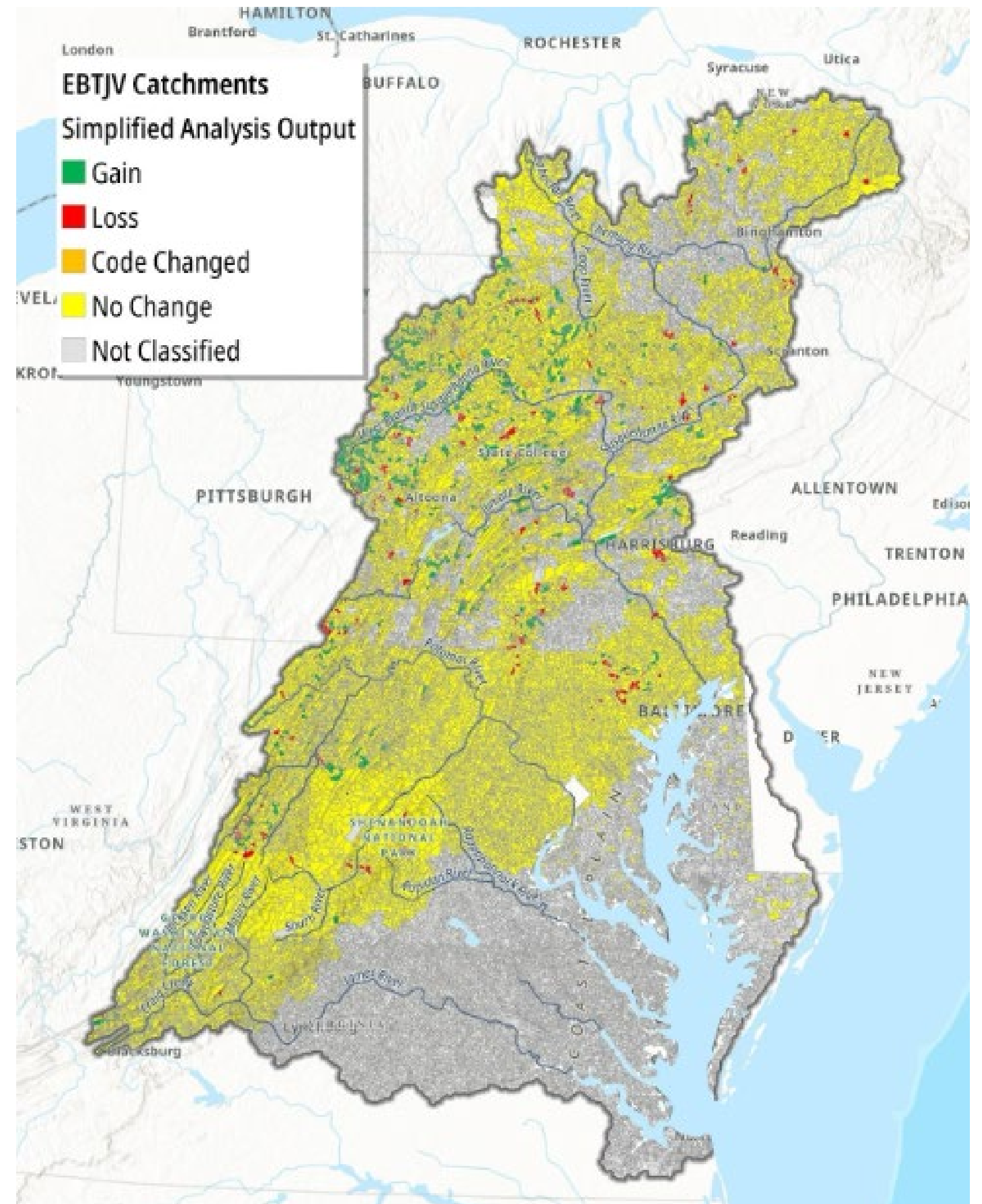


Kristen Meistrell, Kristen Meistrell, Assistant Director, Wildlife
Management & Freshwater Fisheries
TODAY 3:30 PM – 3:50 PM
Reagan Room

Defining success at a landscape scale

- TU - EBTJV collaboration to understand the changes to brook trout occupancy 2016-2023
- Apparent net gain (total gain minus total loss) is **2,955 km² (8.9% increase)**
- Removing unassessed waters sampling and removing modeled brook trout presence = **0.5% gain in occupied brook trout habitat since 2016.**

Rummel et al., 2024 Final report to the Chesapeake Bay Trust.



Defining success at a landscape scale

Brook Trout Workgroup is proposing an update to the Chesapeake Bay Brook Trout Outcome to 2035

- Occupancy – no net loss in strongholds
- Increase abundance trend in strongholds
- Improve resiliency
- Consider local benefits



Contact

Lori Maloney

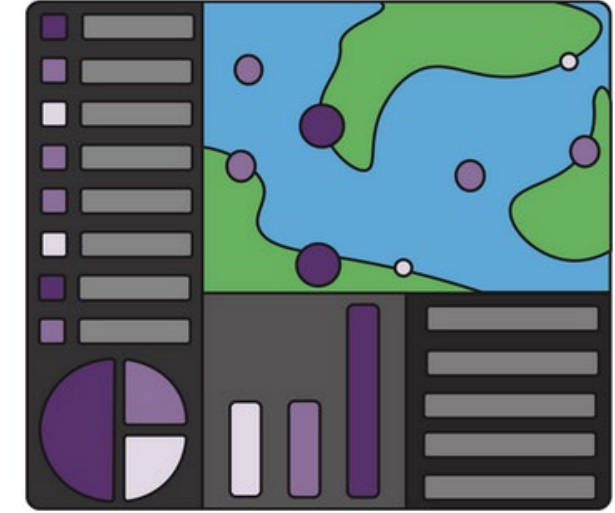
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Data sources - Strategy/"Roadmap" development



Brook Trout data

State specific resources (quantitative)

EBTJV patches and catchments (occupancy and co-occurring salmonids)

TU priority waters and Eastern Conservation Portfolio

TU Flatbrook Portfolio and Conservation Planning

Ecosheds occupancy model - Letcher

Public and protected lands

Municipal boundaries and roads

State water quality designations

Stocking practices

PEJA communities

Barriers, barrier severity, data gaps

NAACC assessment, inventory

TU Middle Delaware barrier inventory: 533 field sites surveyed by TU: significant AOP reduction at 25%, 63% in a BKT patch; most would fail to pass a 100-year storm event.

Prior projects (data sets?)

AMD

Suitability for Beaver Dam Analogs and/or LWM - reference conditions, downstream infrastructure

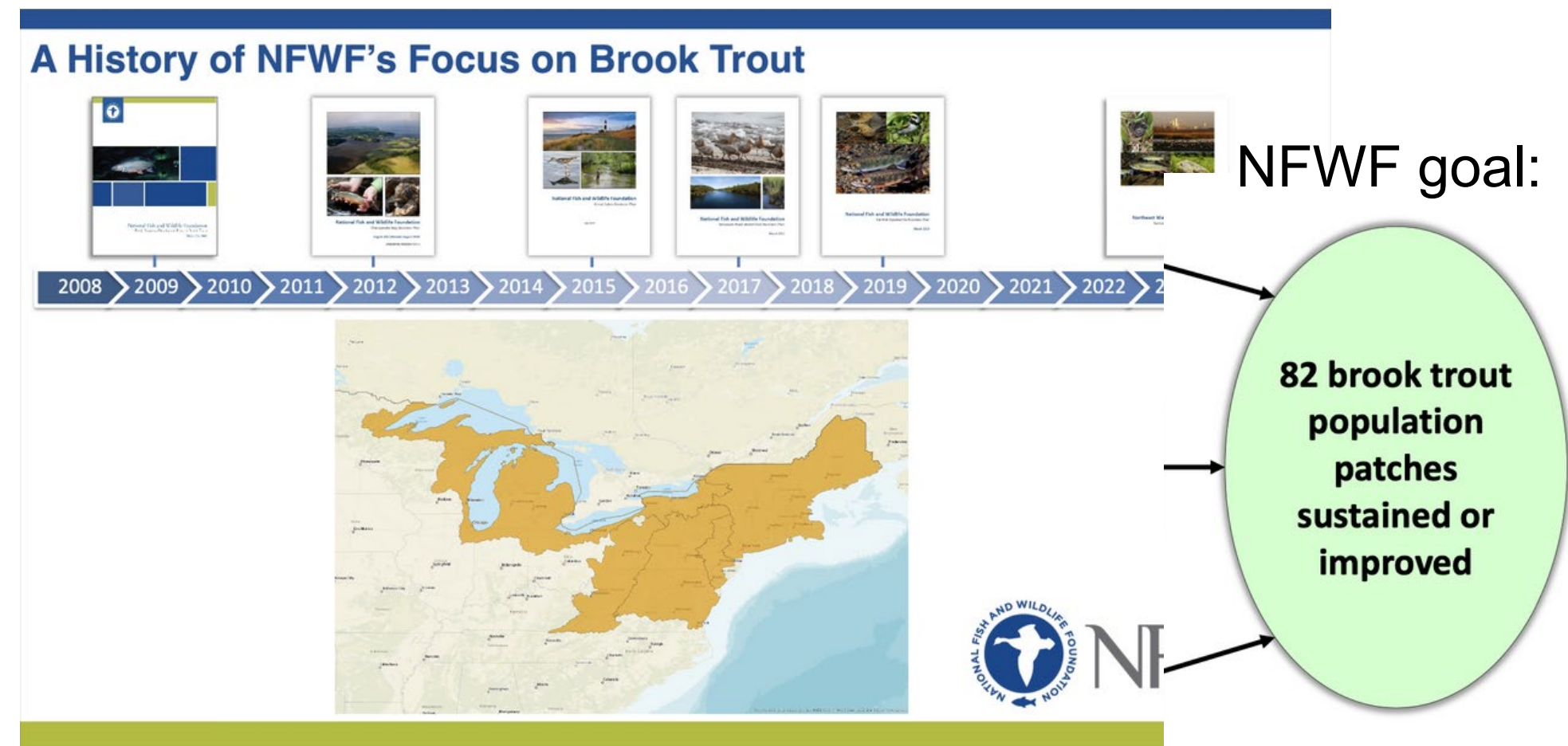
Temperature and flow

State data

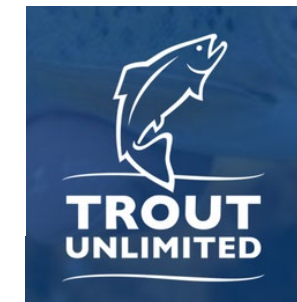
Regional models (USGS, Colorado State)

Brook Trout as a priority species

- States
- National Fish & Wildlife Foundation (NFWF) business plans.
- Trout Unlimited (component of Eastern Brook Trout Conservation Portfolio).
- Chesapeake Bay Program Brook Trout Outcome – based on EBTJV patch size.
- US Fish and Wildlife Service
 - Occupancy of Brook Trout is one component in decision making for priority watersheds.



TU analysis of 5,419 projects in Chesapeake Bay completed 2016-2022



- 2.5% of projects reported costs
- Total: ?? \$25M - 1B ??
- Few had brook trout data
- 0.5% gain in occupied habitat (EBTJV data)

Table 6: Costs reported in database by project type.

Project Type	Total Number of Projects	Number of Projects Reporting Costs	Sum of Total Project Cost	Average of Total Project Cost
Abandoned Mine Drainage Restoration	5	0	NA	NA
AOP	233	11	\$1,895,376.65	\$172,306.97
Brook Trout Reintroduction	3	1	\$184,969.23	\$184,969.23
Dirt and Gravel Road Improvement	1566	1	\$333,187.11	\$333,187.11
Instream Habitat	678	38	\$6,400,383.47	\$168,431.14
Land Protection	157	25	\$741,099.26	\$29,643.97
Other	222	28	\$6,715,291.25	\$239,831.83
Riparian Restoration	2555	34	\$8,798,489.50	\$258,779.10
Grand Total	5419	138	\$25,068,796.47	\$181,657.95

