

Gallatin River Fisheries Update

Keith Wellstone

Fisheries Biologist, Montana FWP, Region 3



Acknowledgements



GALLATIN WATERSHED COUNCIL



TURNER ENDANGERED SPECIES FUND



GALLATIN CONSERVATION DISTRICT

NorthWestern Energy



Overview

Monitoring

- Gallatin River

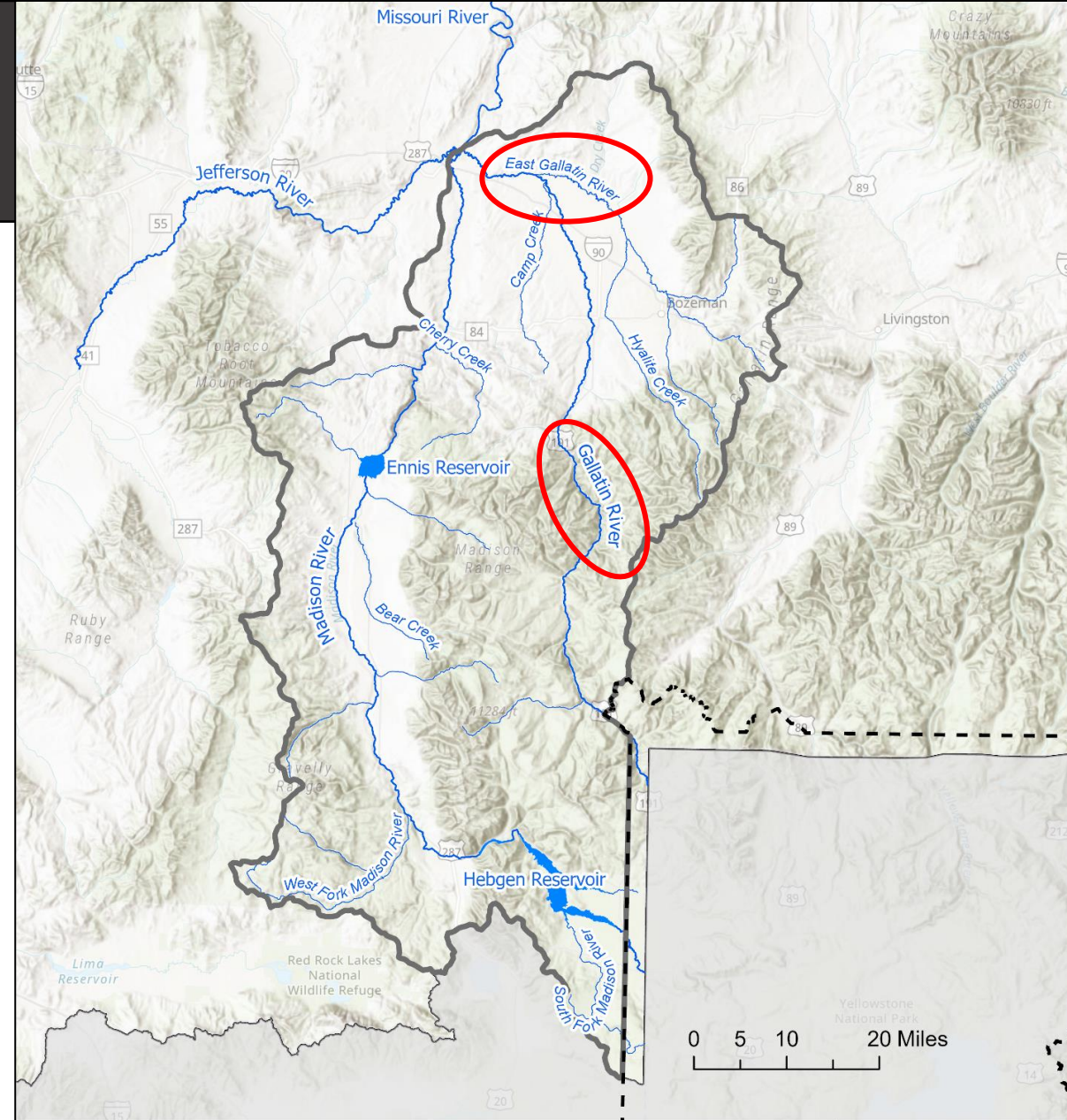
Native fish conservation efforts



Monitoring - Streams

Gallatin River

East Gallatin River



- State Boundary
- Management Area
- Yellowstone National Park Boundary
- Lakes
- Streams



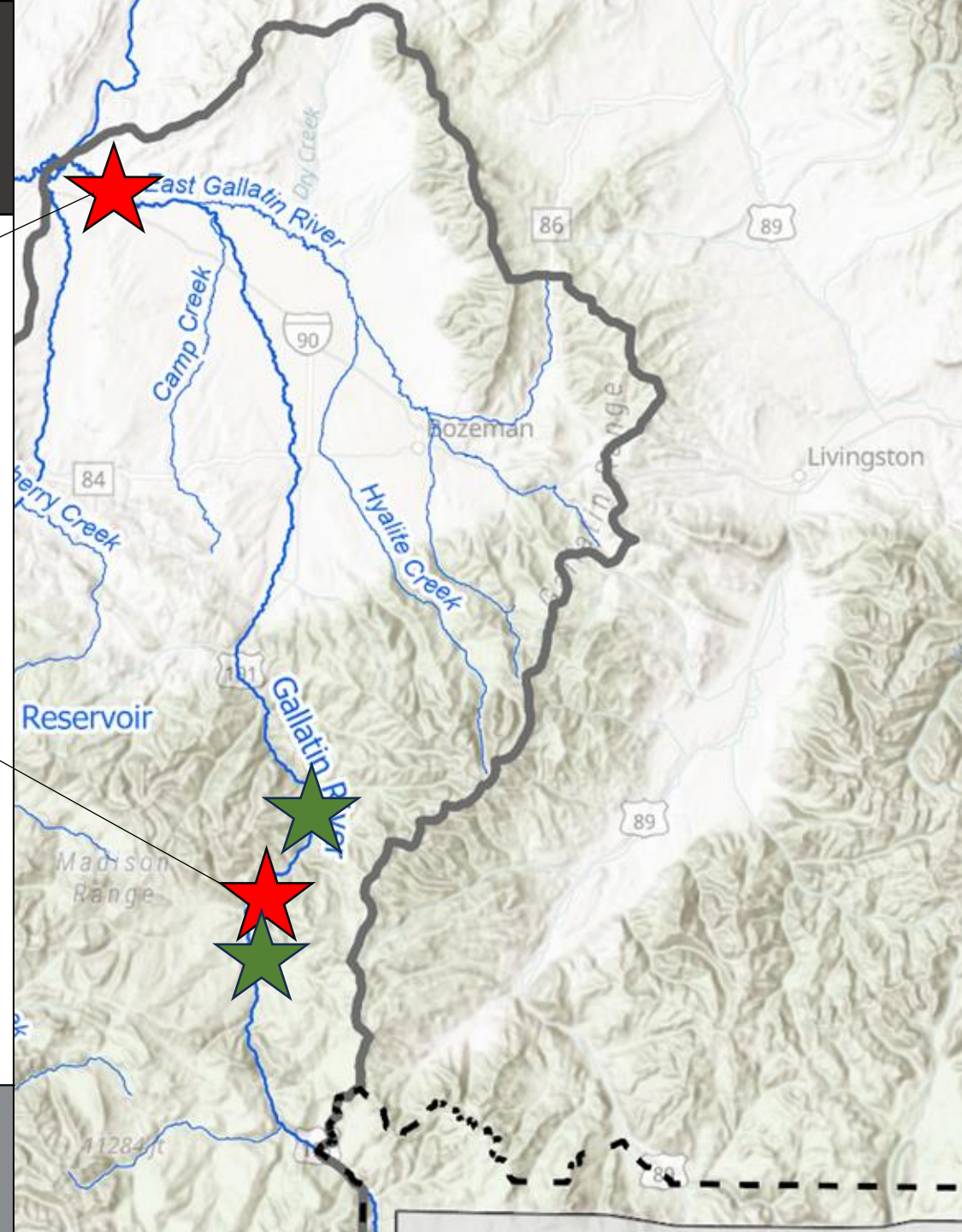
Monitoring - Streams

Gallatin River

- Logan – 4.7 miles
- Big Sky – 2.5 miles
- Porcupine – Historical
- Jack Smith – Historical

East Gallatin River

- Hoffman
- Thompson



How Do We Monitor Streams?



What Do We Monitor?

Trout abundances

- Standardized to fish/mile

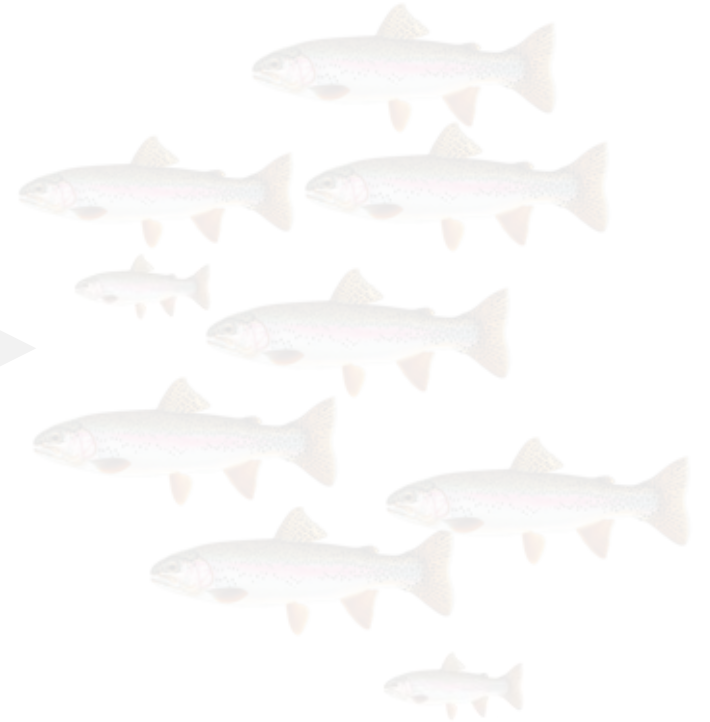
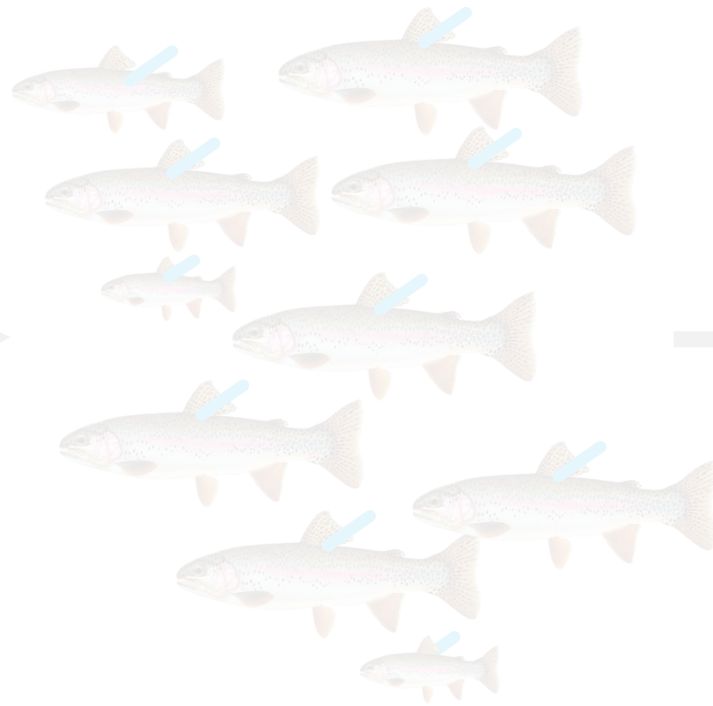
Size structures

Trends

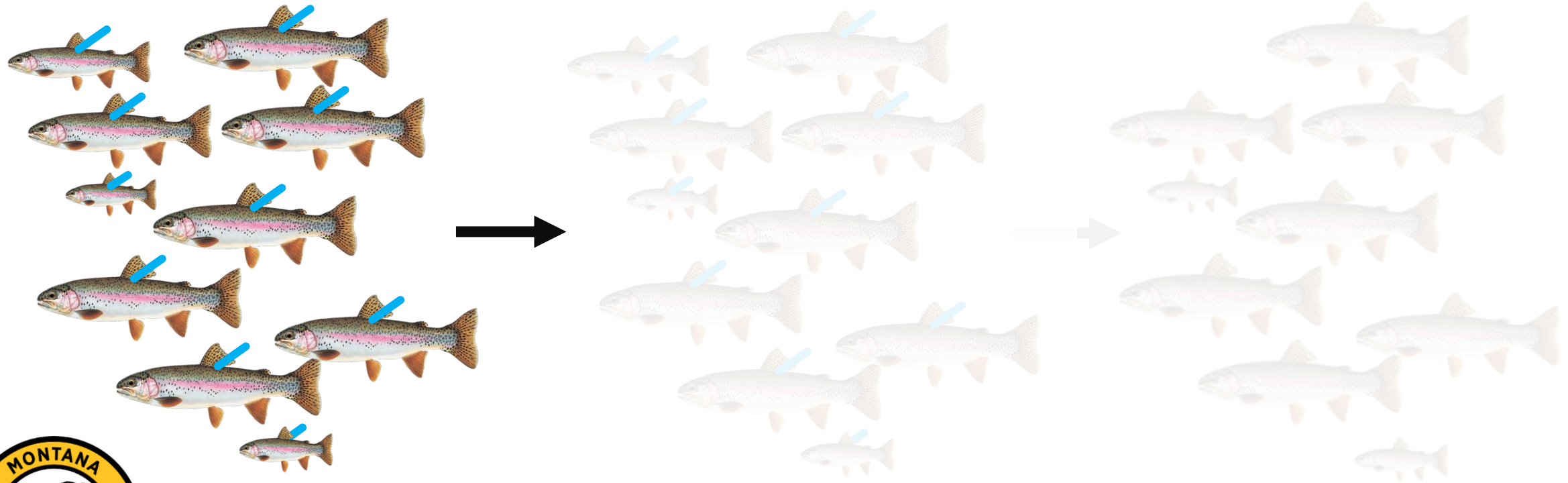


How Do We Estimate Abundance?

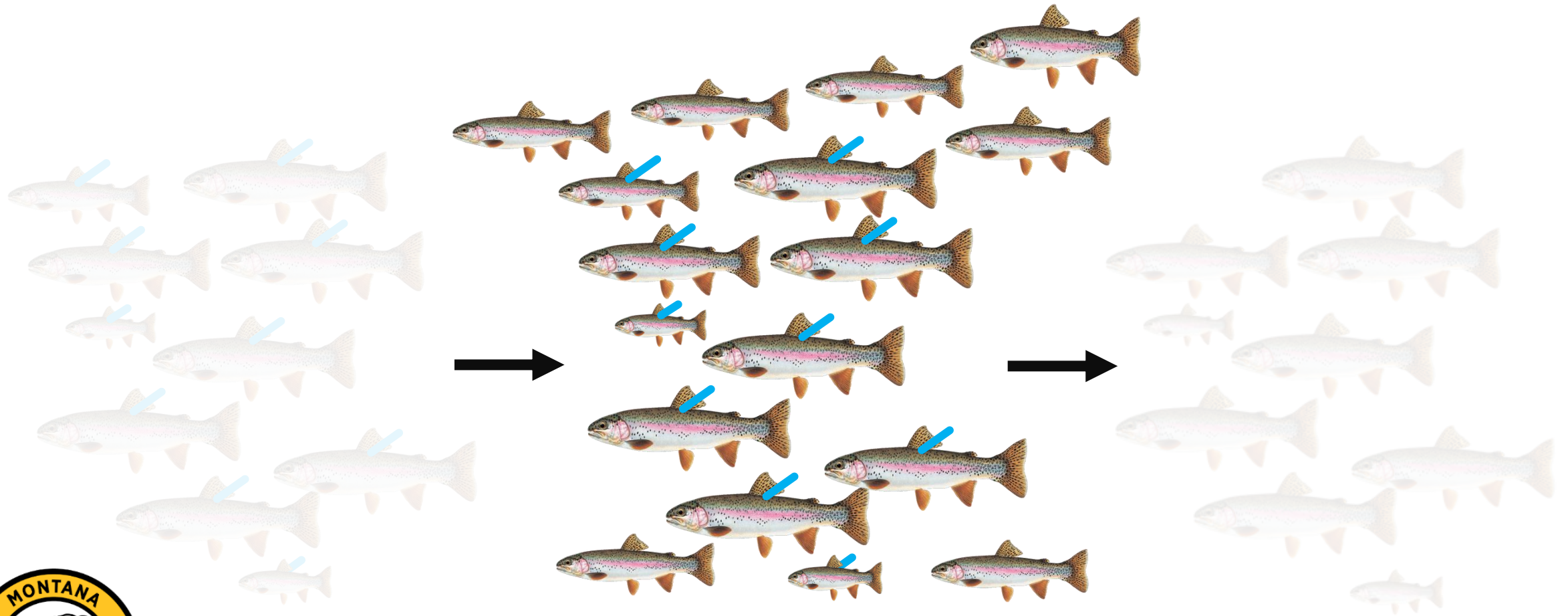
10 fish



How Do We Estimate Abundance?

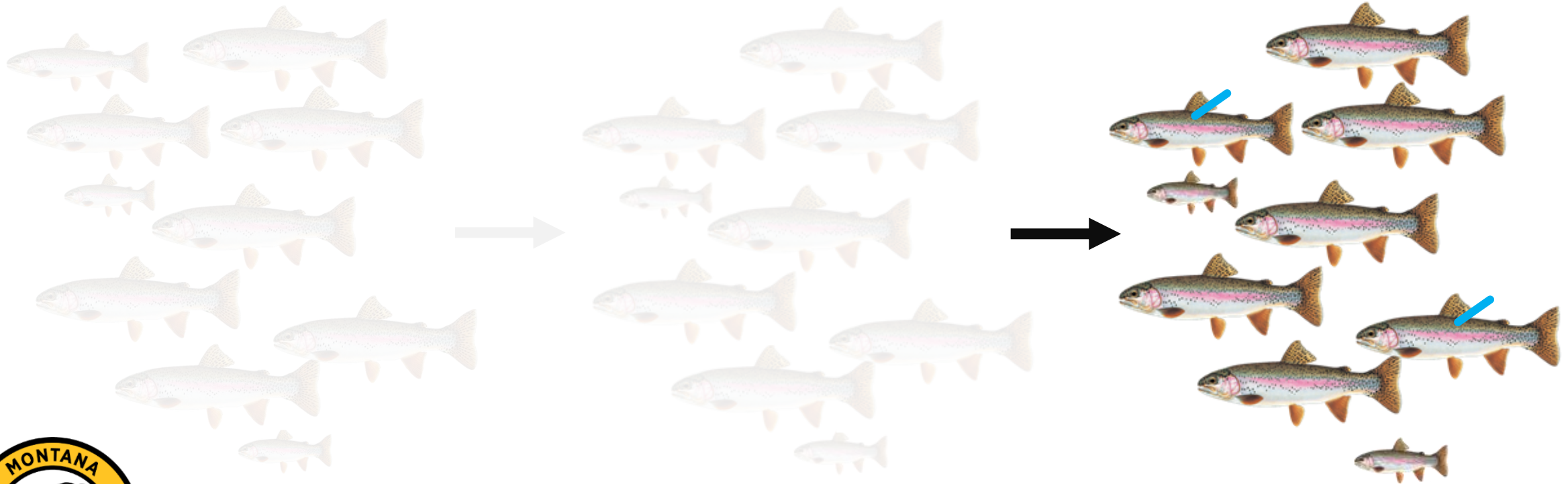


How Do We Estimate Abundance?

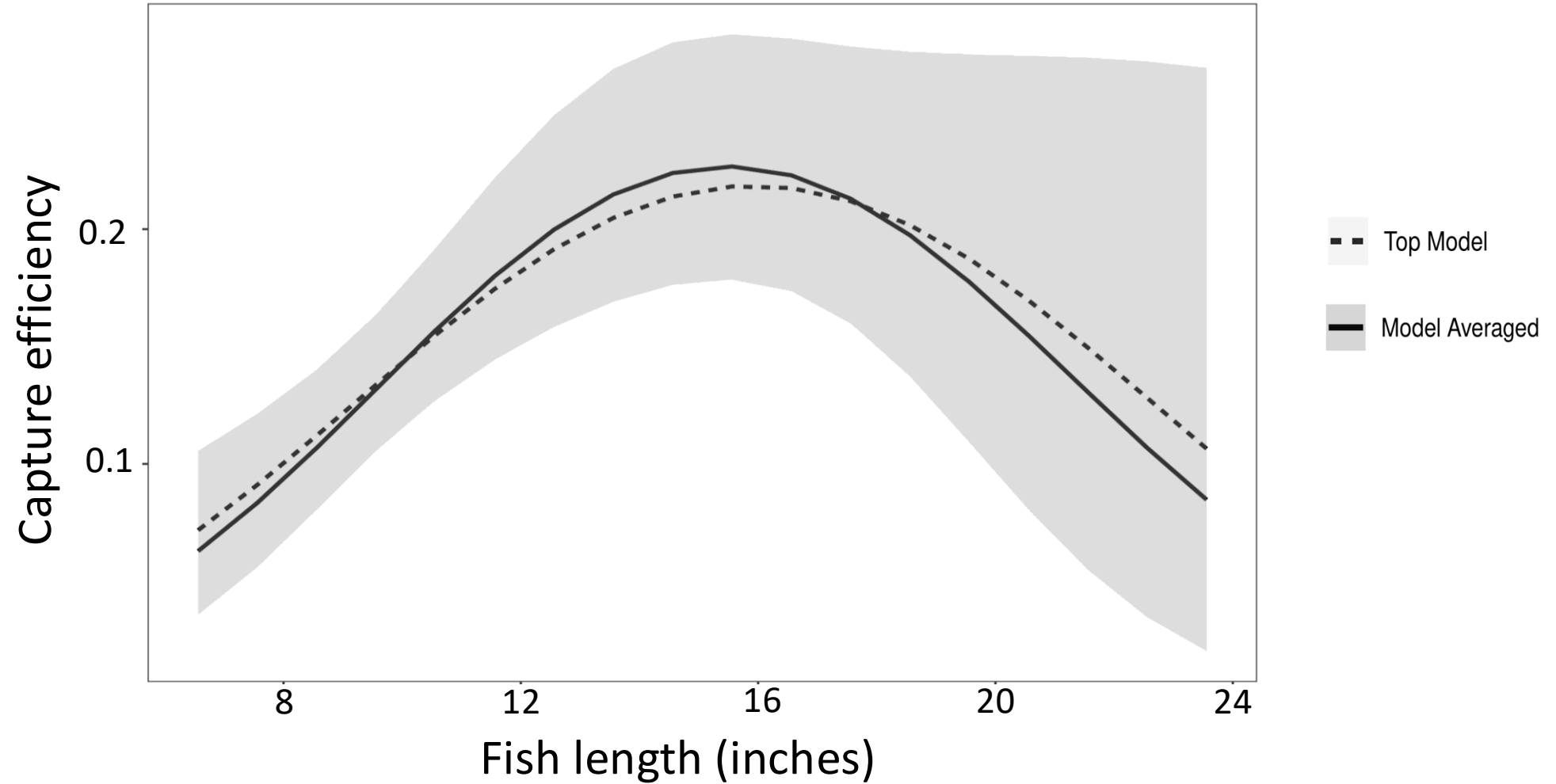


How Do We Estimate Abundance?

$$2/10 \text{ fish} = 20\% \rightarrow 10/0.2 = 50$$



How Do We Estimate Abundance?



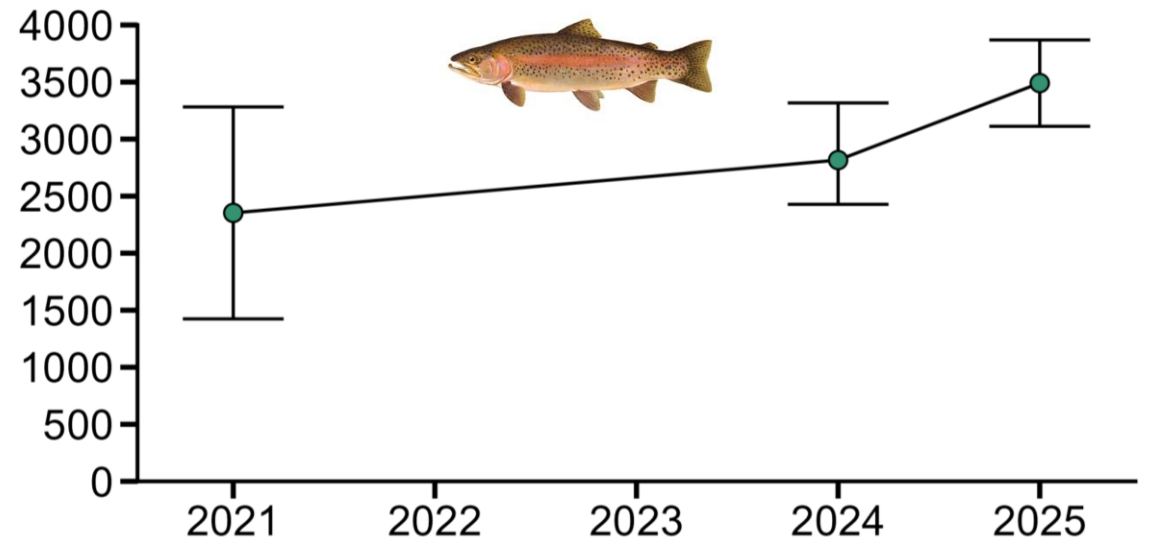
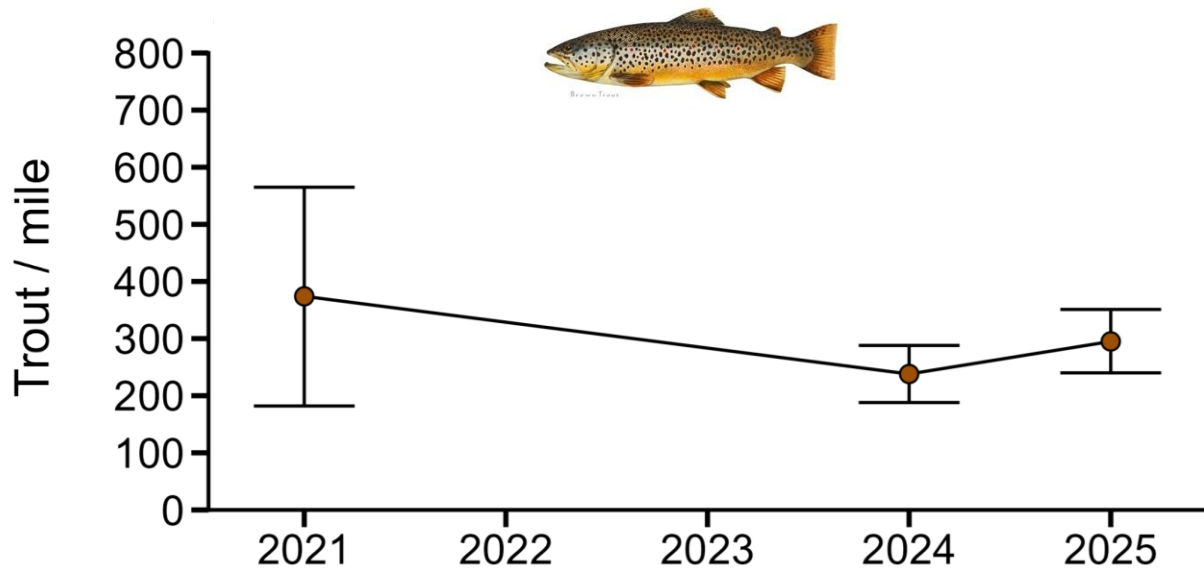
Big Sky – Trout / Mile

Year	Species	Trout / mile	95% LCI	95% UCI
2021	Brown Trout	351	270	431
2024	Brown Trout	238	188	288
2025	Brown Trout	295	240	351
2021	Rainbow Trout	2438	1996	2880
2024	Rainbow Trout	2814	2426	3201
2025	Rainbow Trout	3491	3113	3869

2025 combined = **3,785 trout / mile**



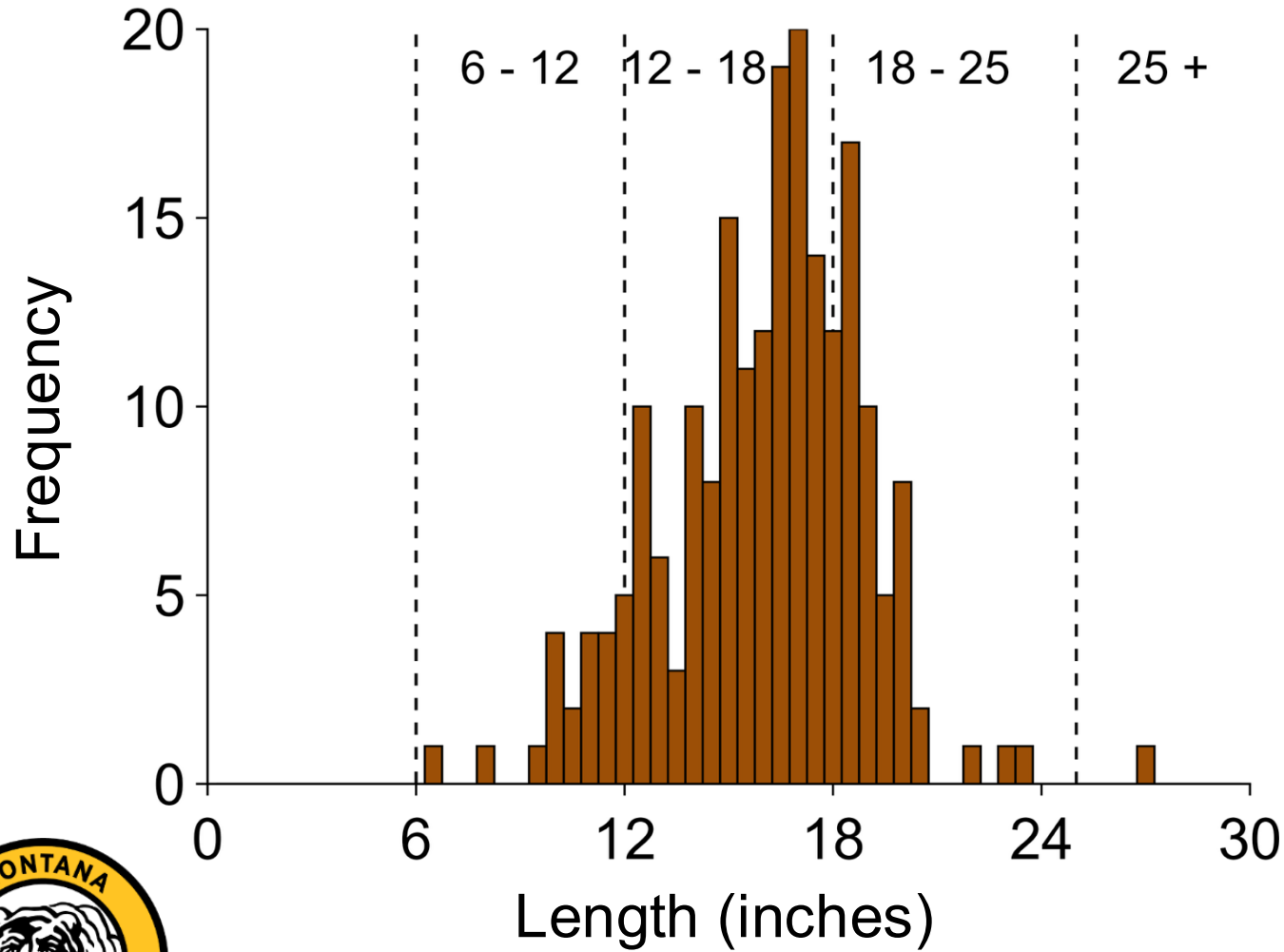
Big Sky – Trout / Mile



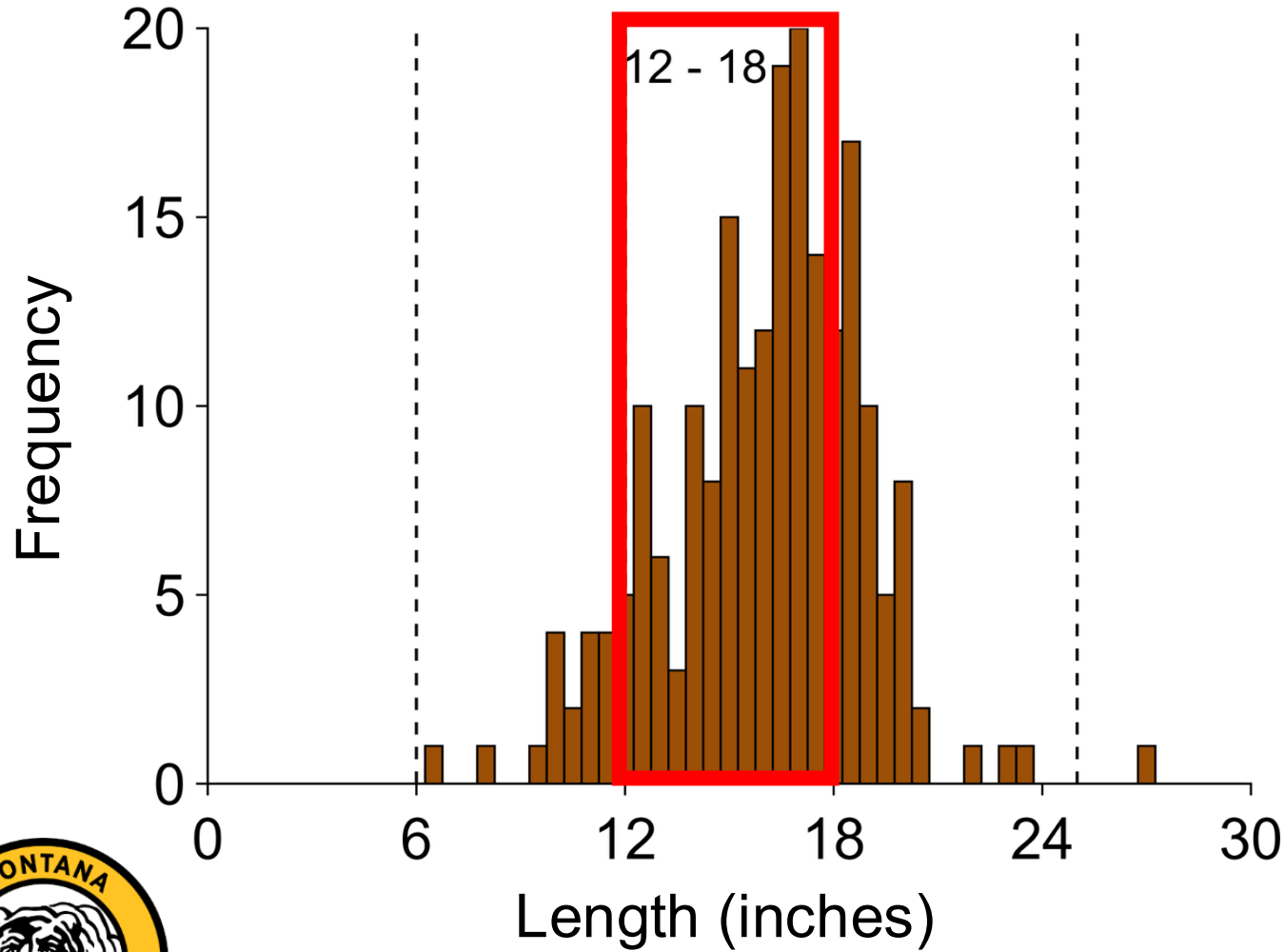
2025 combined = **3,785 trout / mile**



Big Sky – Size Structure



Big Sky – Size Structure

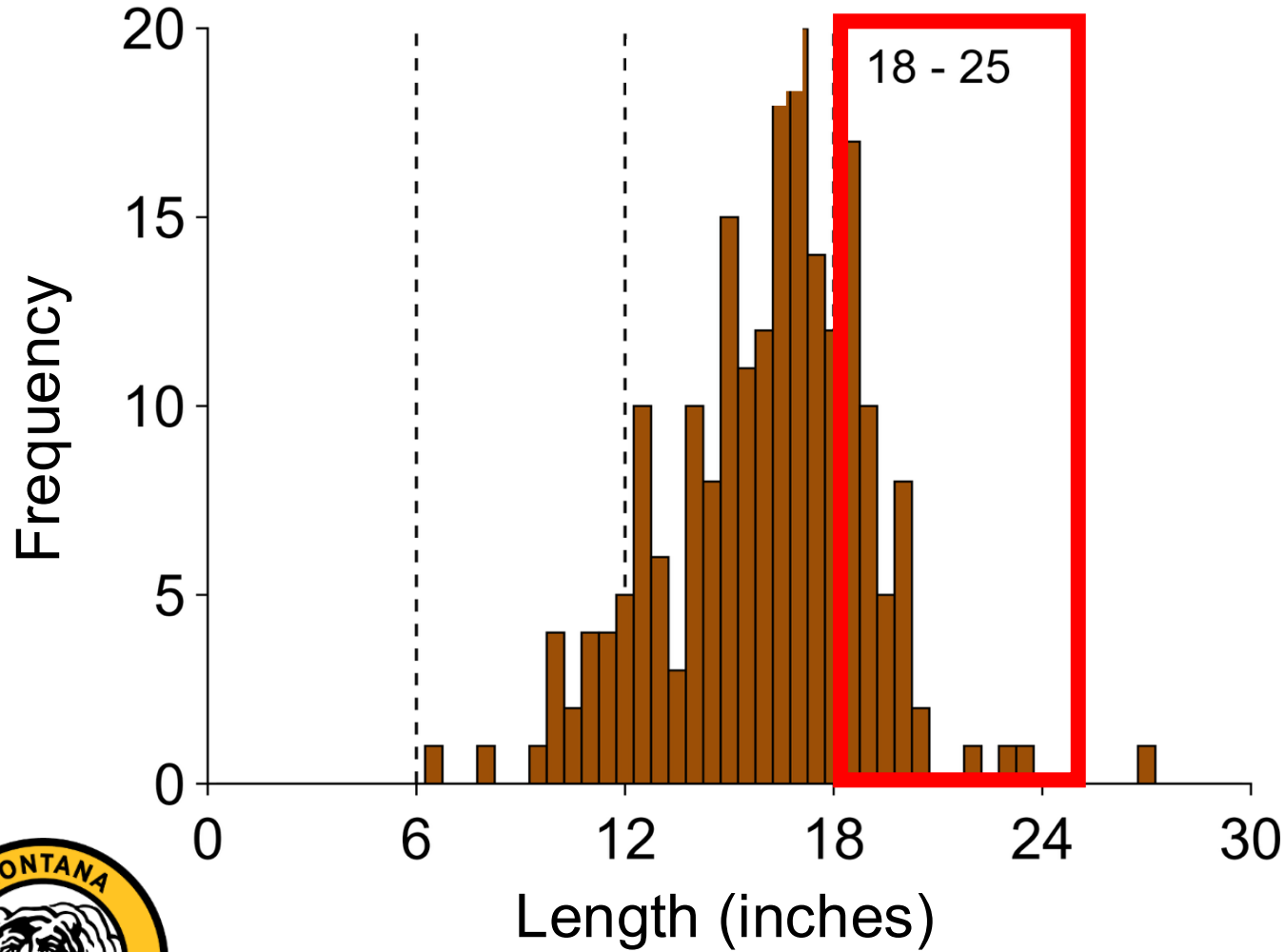


12 – 18 inches

68 %



Big Sky – Size Structure



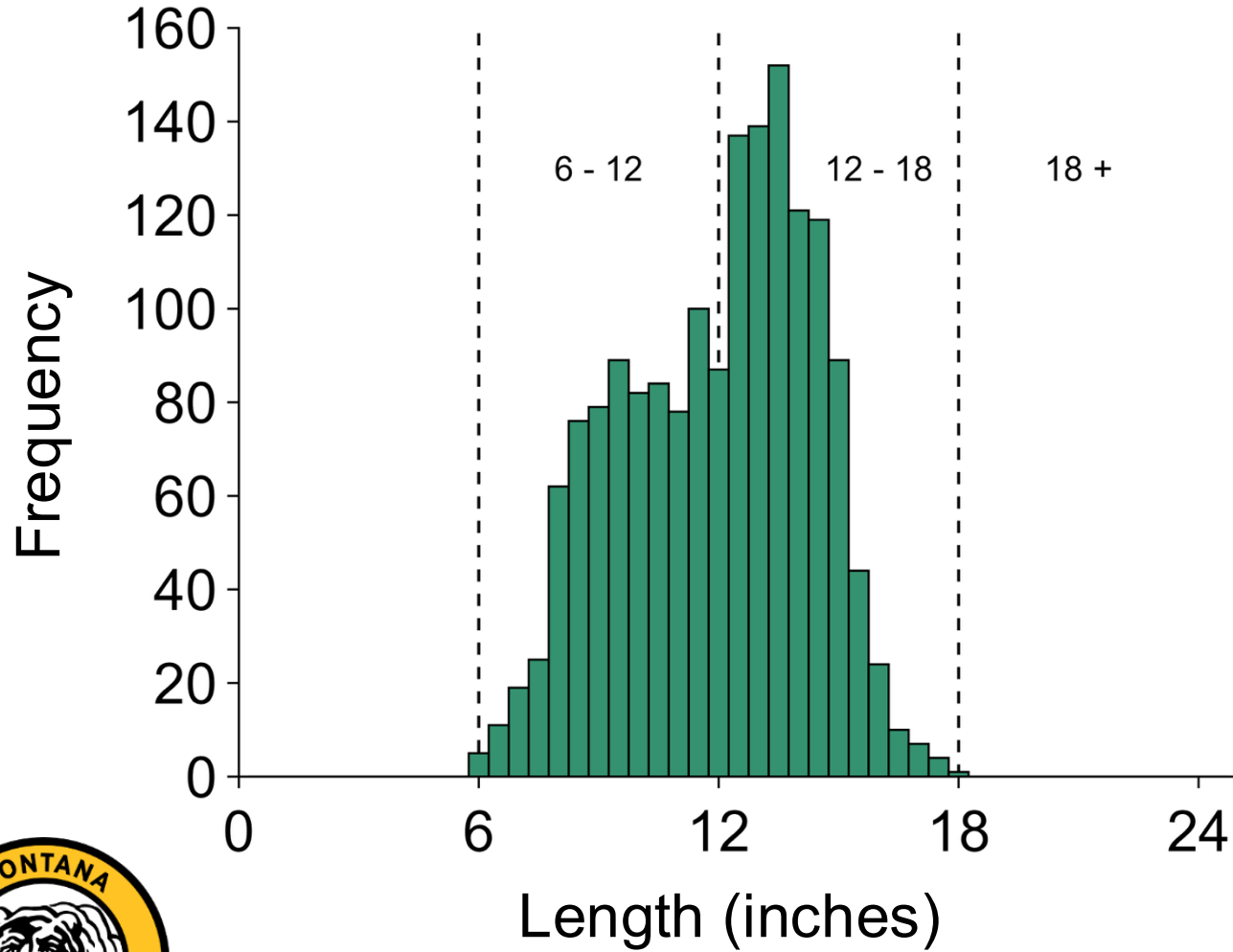
18 – 24 inches

26 %

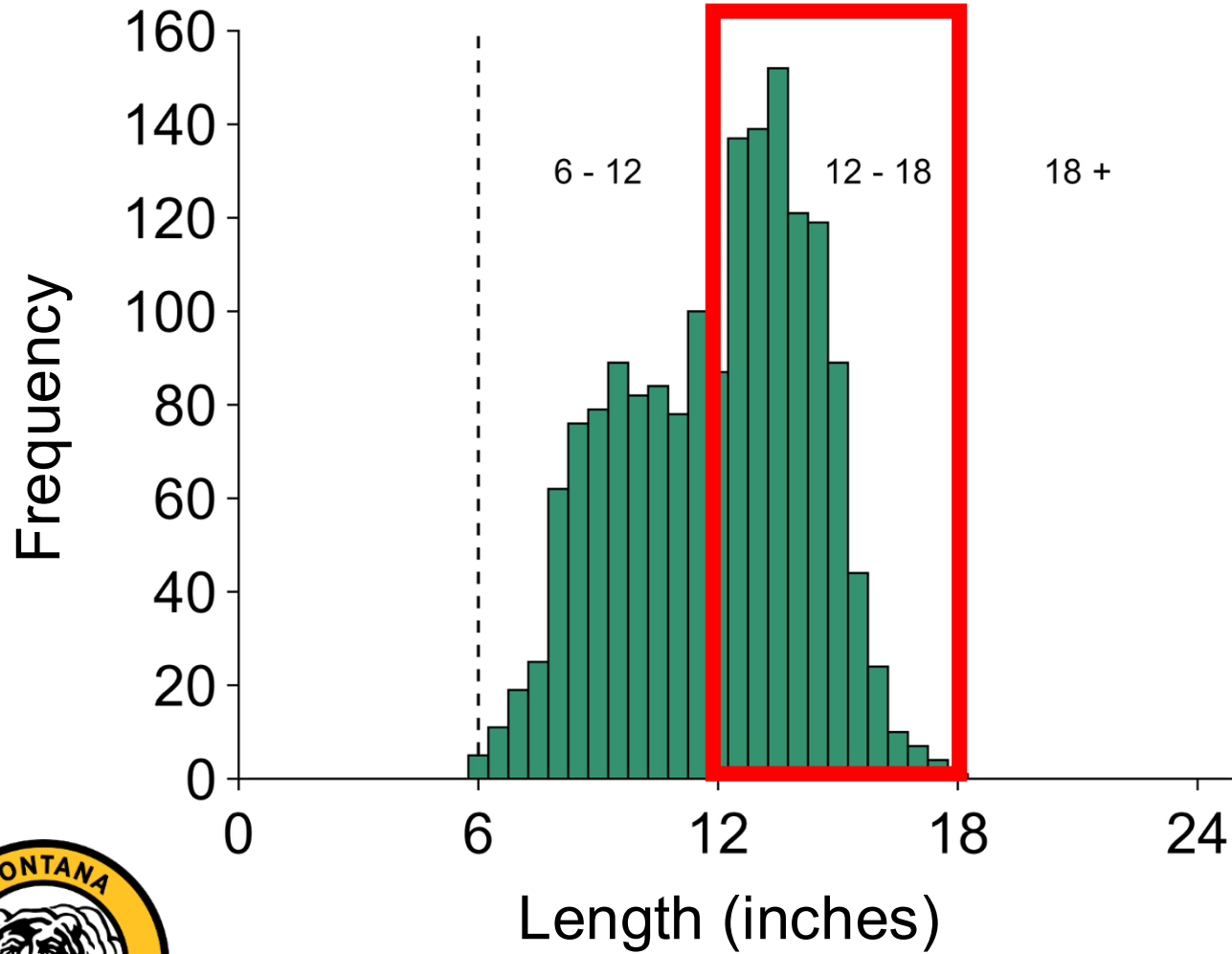
Max = 26.8 inches



Big Sky – Size Structure



Big Sky – Size Structure



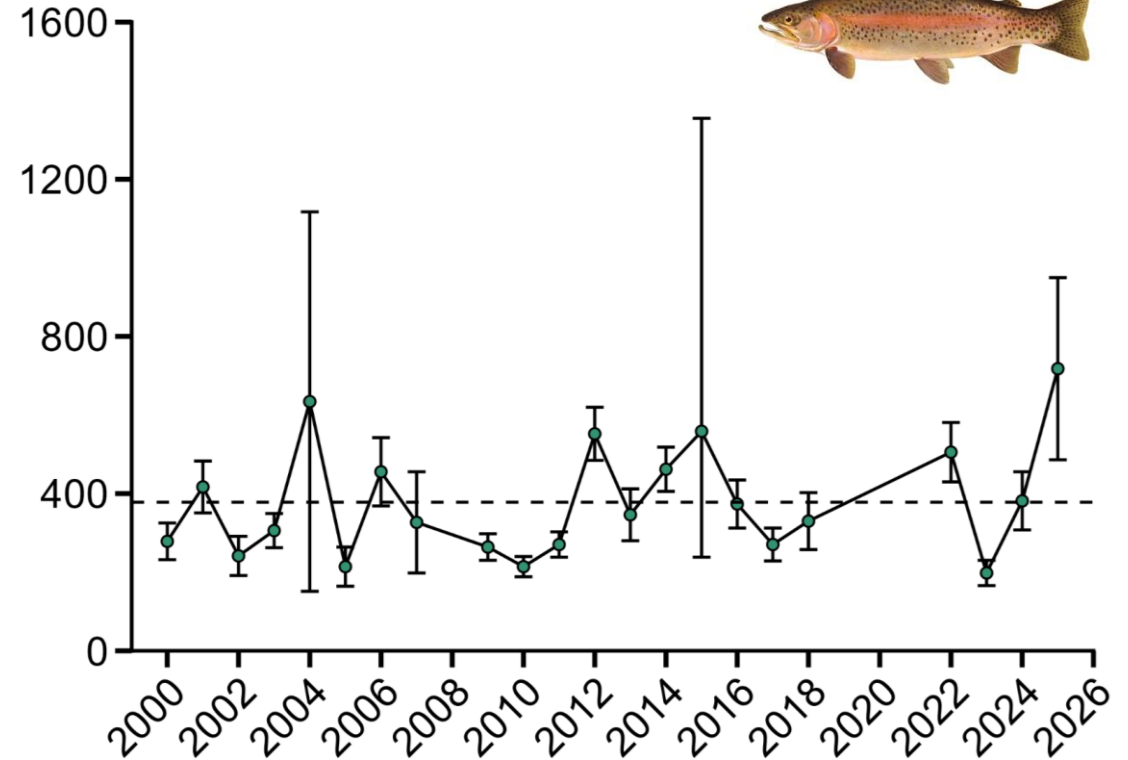
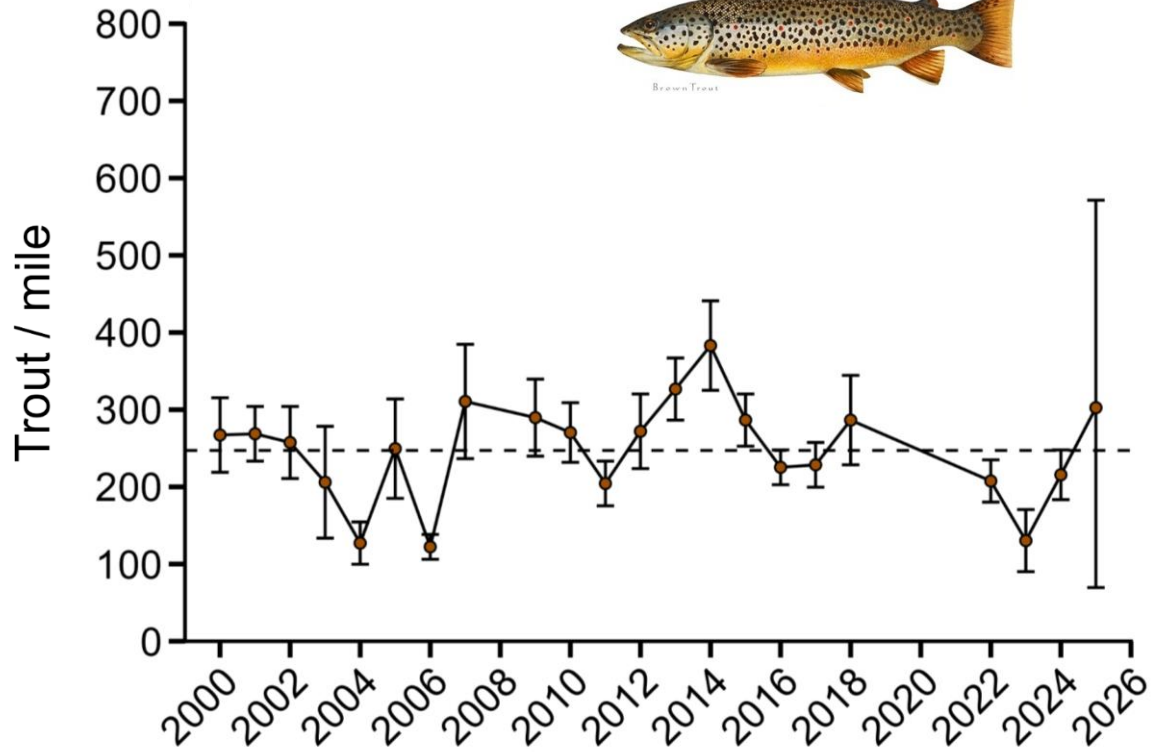
12 – 18 inches

55 %

Max = 18 inches



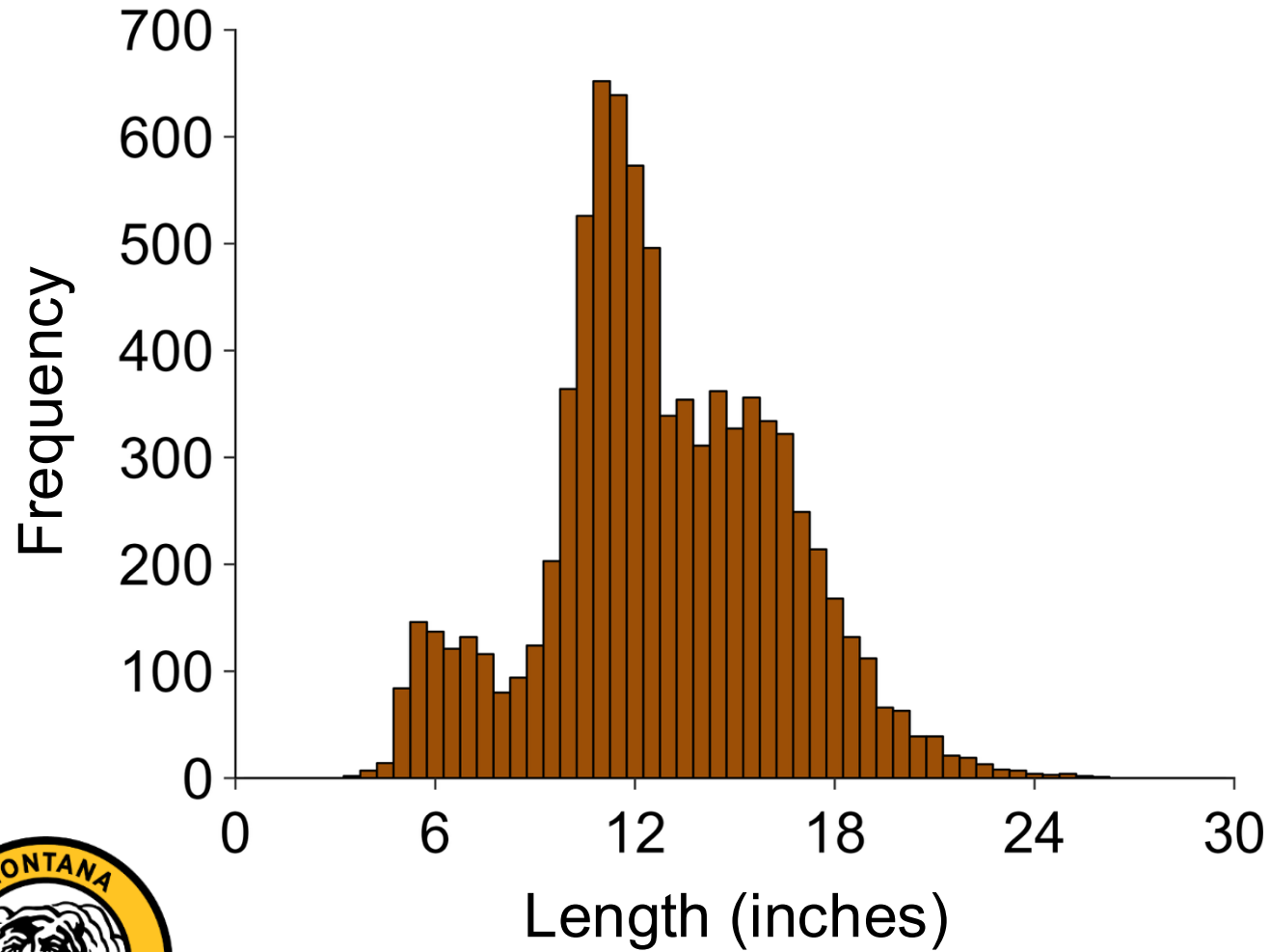
Logan – Trout / mile



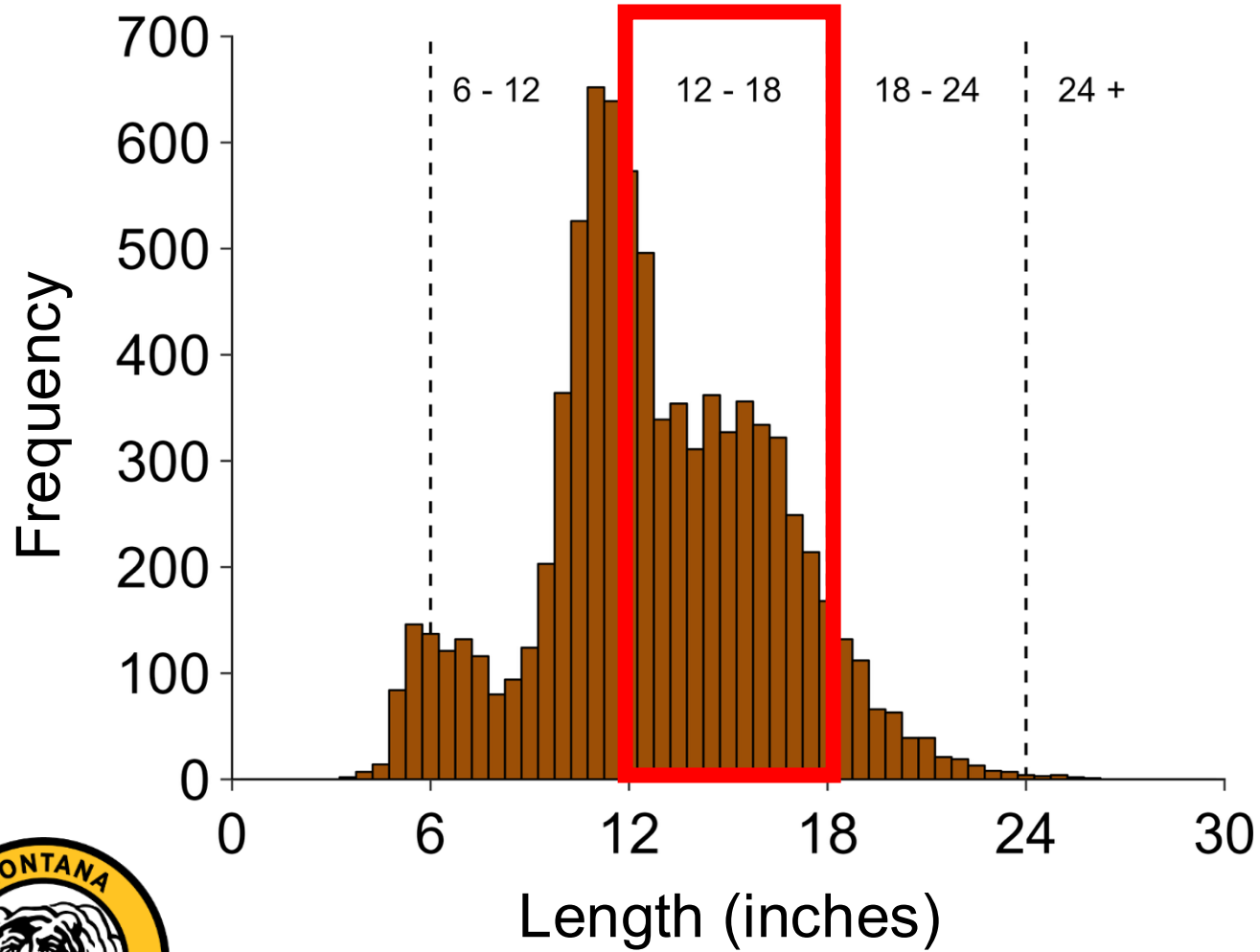
2025 combined = **1020 trout / mile**



Logan – Size Structure



Logan – Size Structure

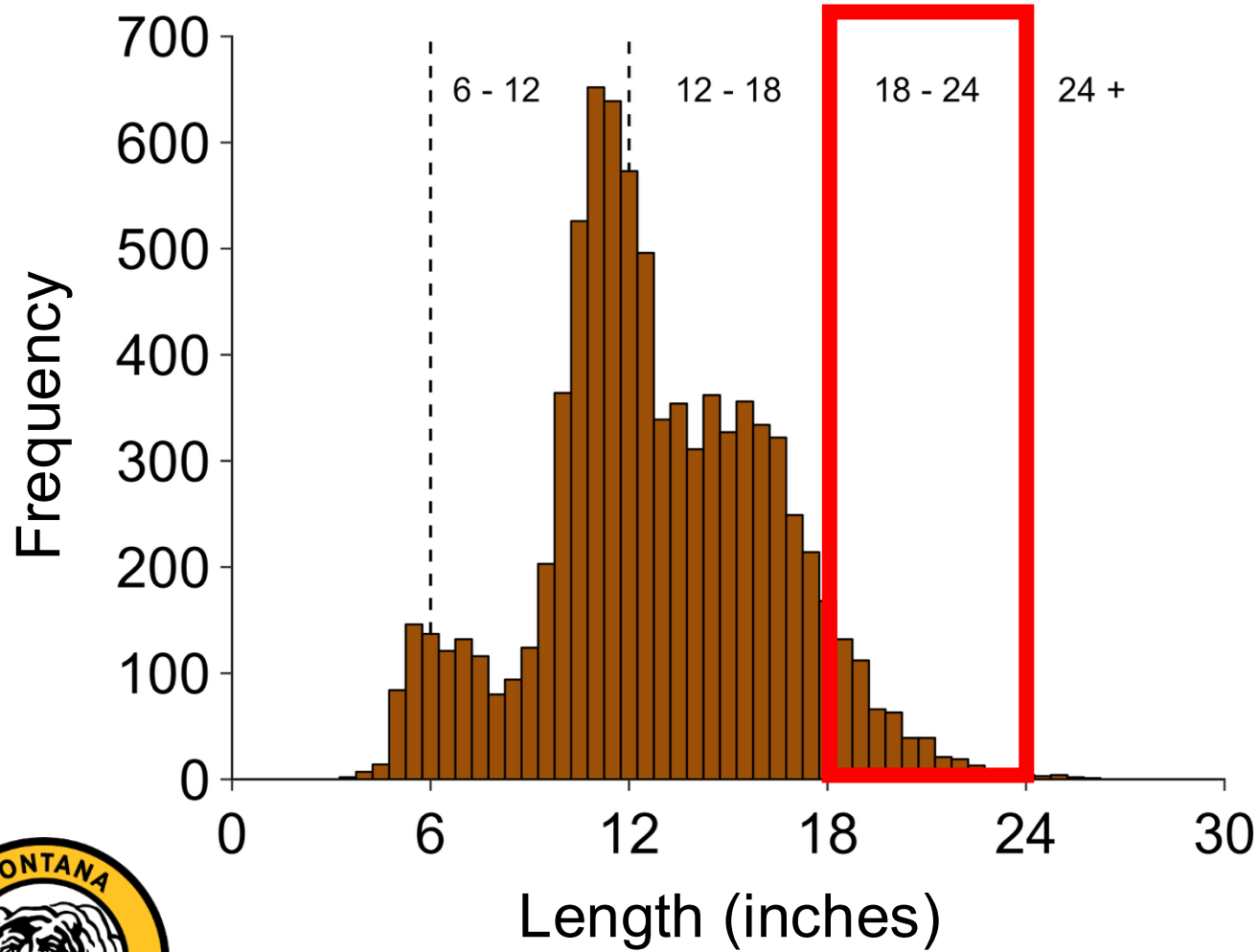


12 – 18 inches

50 %



Logan – Size Structure



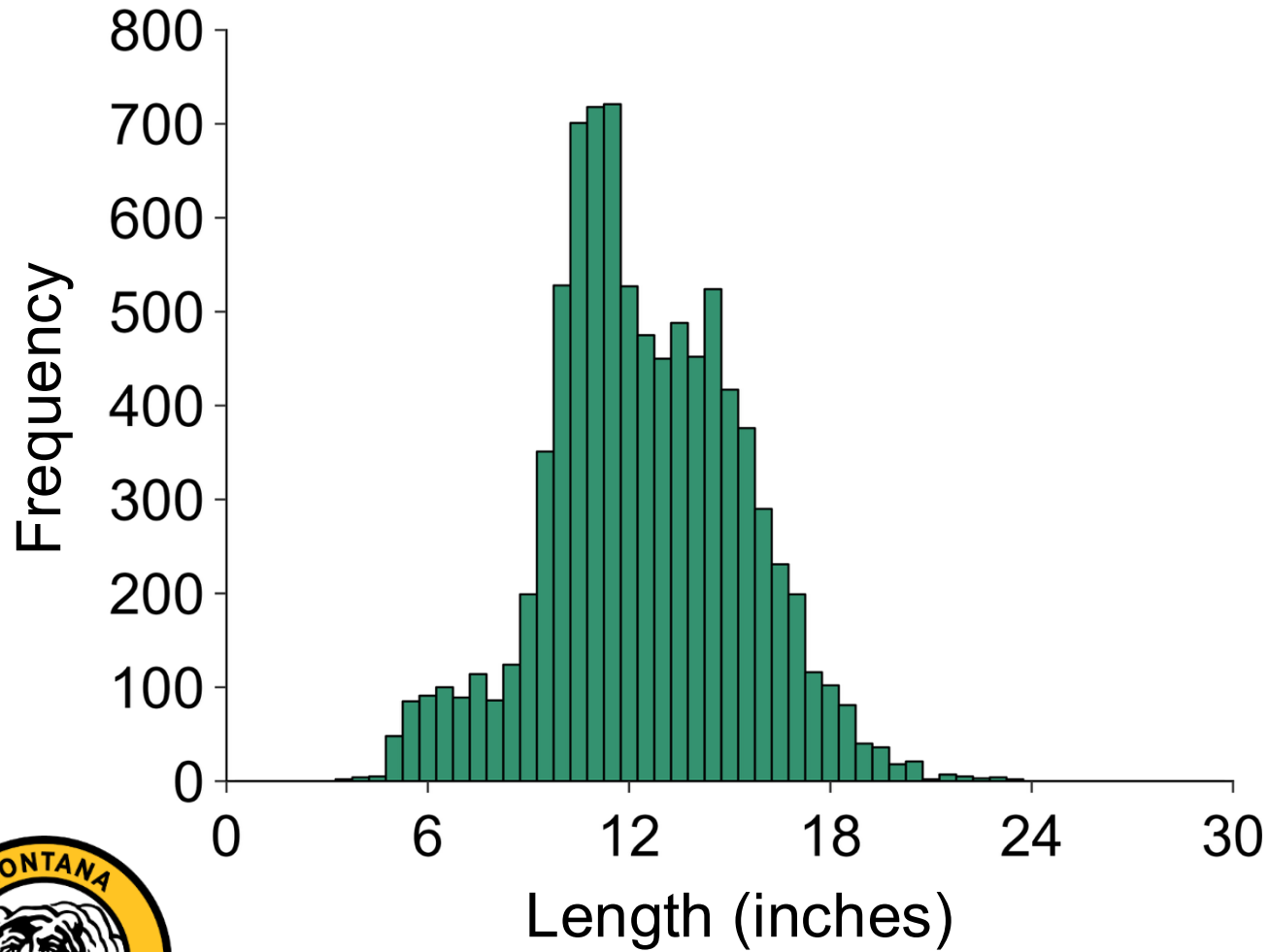
18 – 24 inches

7 %

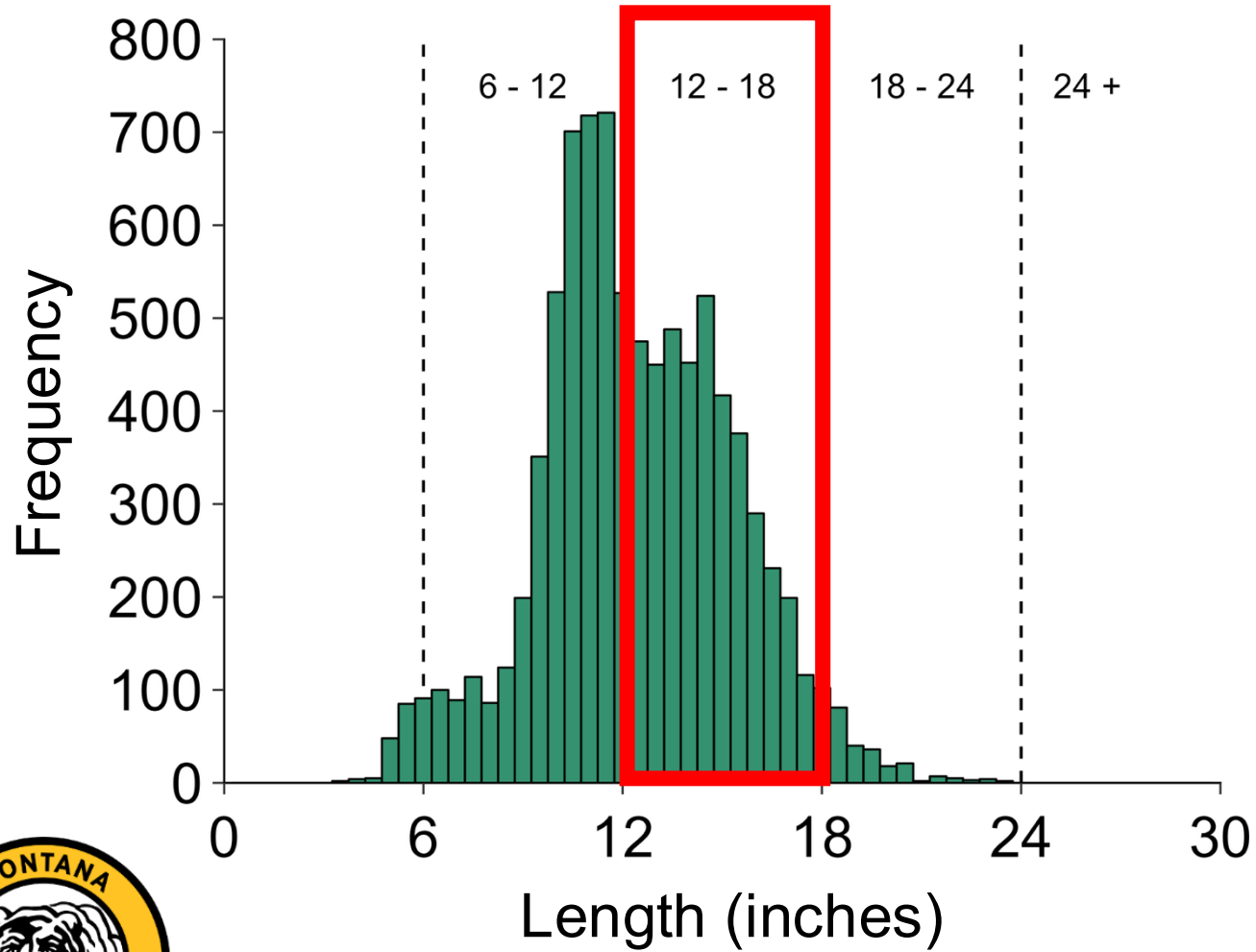
Max = 26.1 inches



Logan – Size Structure



Logan – Size Structure

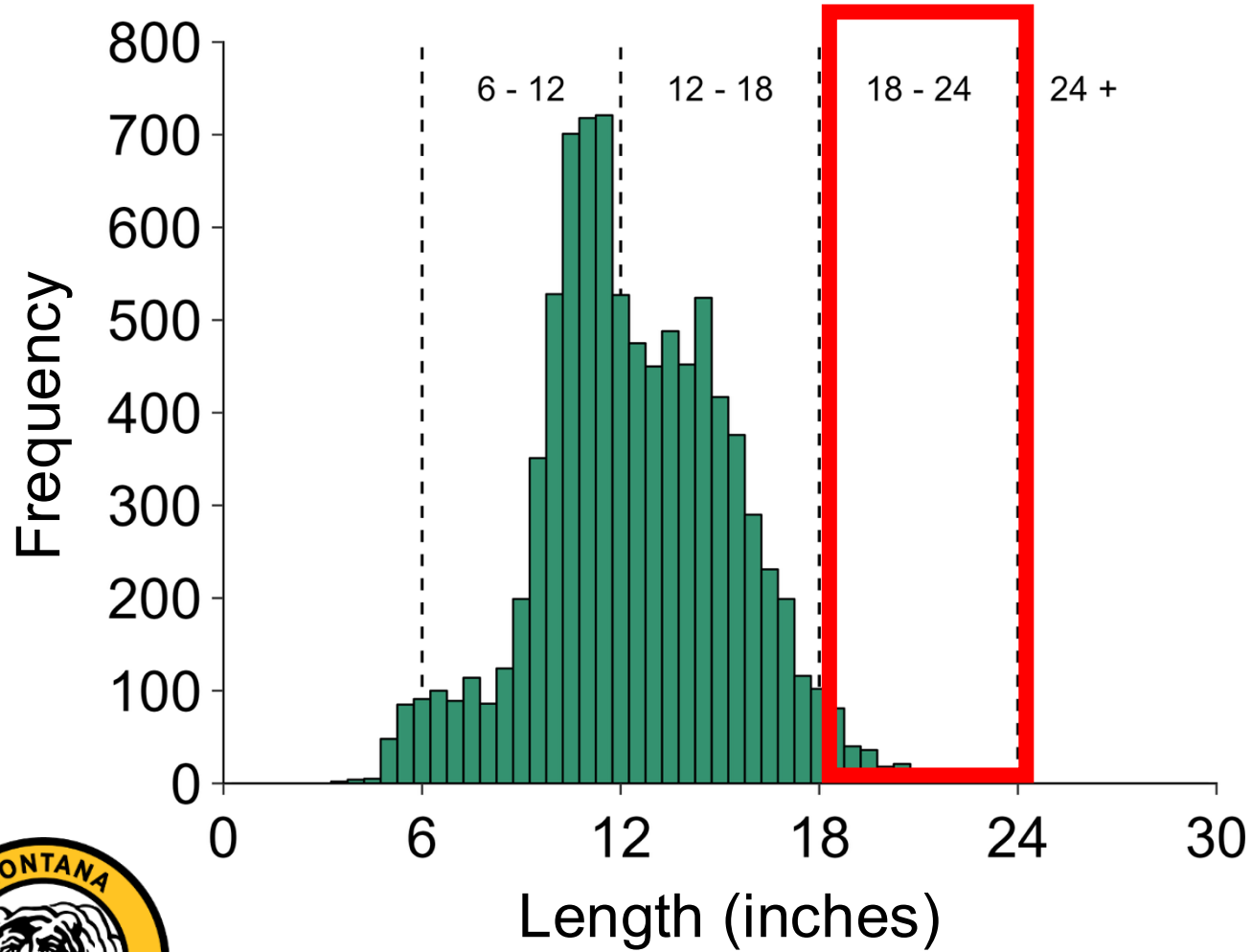


12 – 18 inches

50 %



Logan – Size Structure



18 – 24 inches

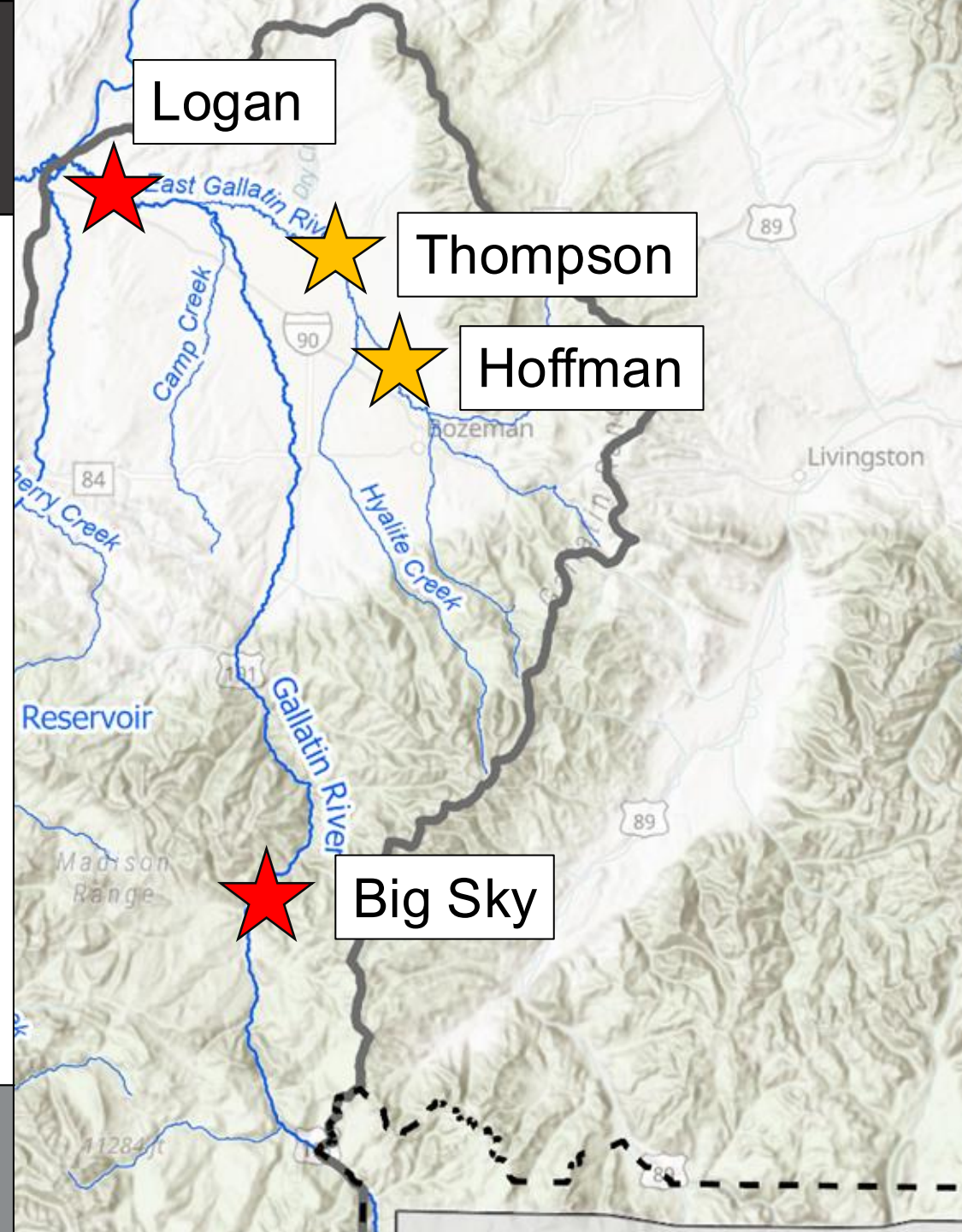
3 %

Max = 23.5 inches



Streams Summary

River	Section	Trout / Mile
Gallatin River	Big Sky	3,785
Gallatin River	Logan	1,020
East Gallatin	Hoffman	1,705
East Gallatin	Thompson	877



Native Fish Conservation



© Joseph R. Tomelleri

Westslope Cutthroat Trout
Oncorhynchus clarkii lewisi



Arctic Grayling
Thymallus arcticus



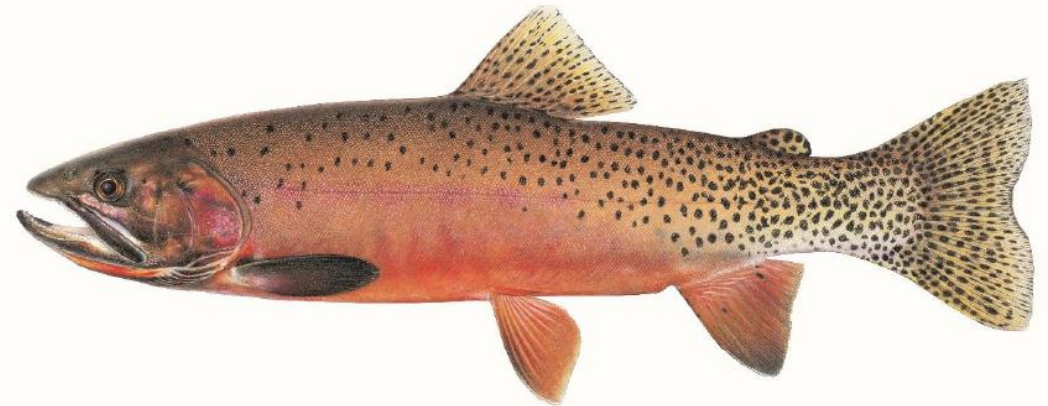
Native Fish Conservation

Goal:

- Ensure the long-term self-sustaining persistence of the subspecies in its historical range.
- Restore Westslope Cutthroat Trout populations to 20% of their historic tributary distribution.

Westslope Cutthroat Trout Conservation Strategy for the Missouri River Headwaters of Southwest Montana

January 29, 2024



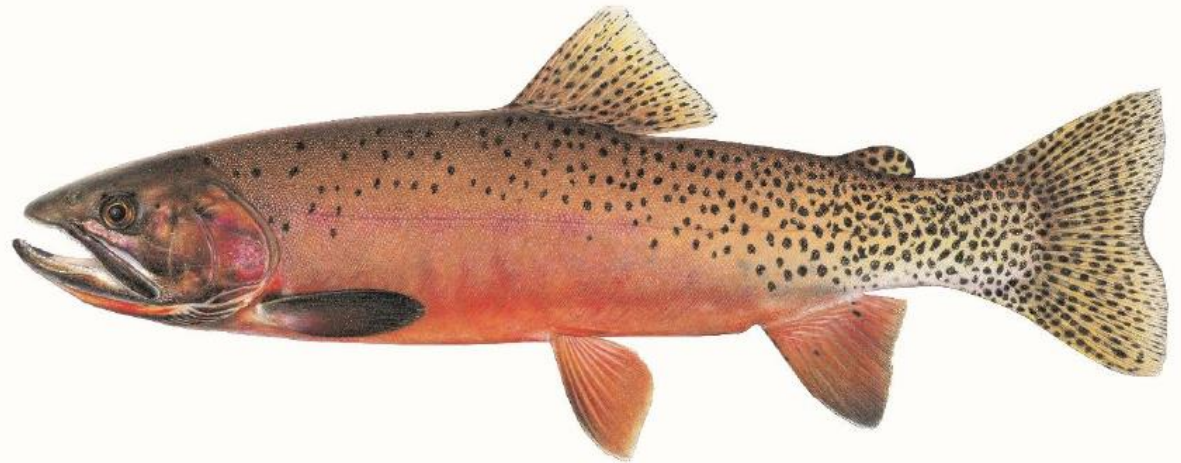
Native Fish Conservation

Gallatin River Watershed

- Estimated number of historic stream habitat occupied:
 - 1,048
- Current:
 - 81.6 (7.8%)

Westslope Cutthroat Trout Conservation Strategy for the Missouri River Headwaters of Southwest Montana

January 29, 2024



Native Fish Conservation

Goal:

- Restore Arctic Grayling to lake and stream systems in tandem with Westslope Cutthroat Trout conservation efforts.
- Hope to expand effort to other streams

UPPER MISSOURI RIVER ARCTIC GRAYLING CONSERVATION STRATEGY



Native Fish Conservation

Gallatin River Watershed

Historically abundant throughout the Gallatin, East Gallatin, and tributaries

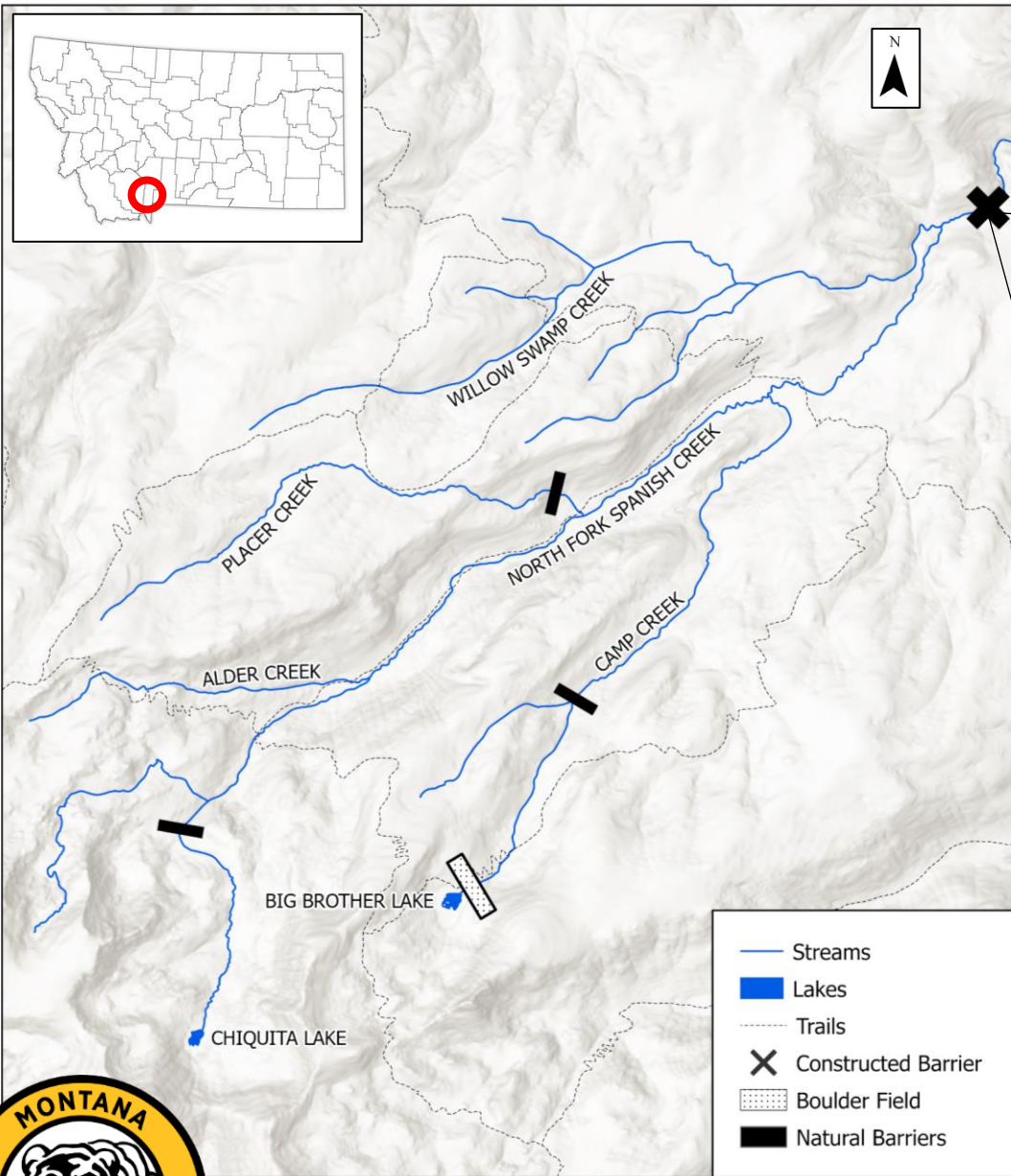
Infrequent angler reports at the mouth of Gallatin River canyon

- Source likely upstream brood stock

UPPER MISSOURI RIVER
ARCTIC GRAYLING
CONSERVATION STRATEGY



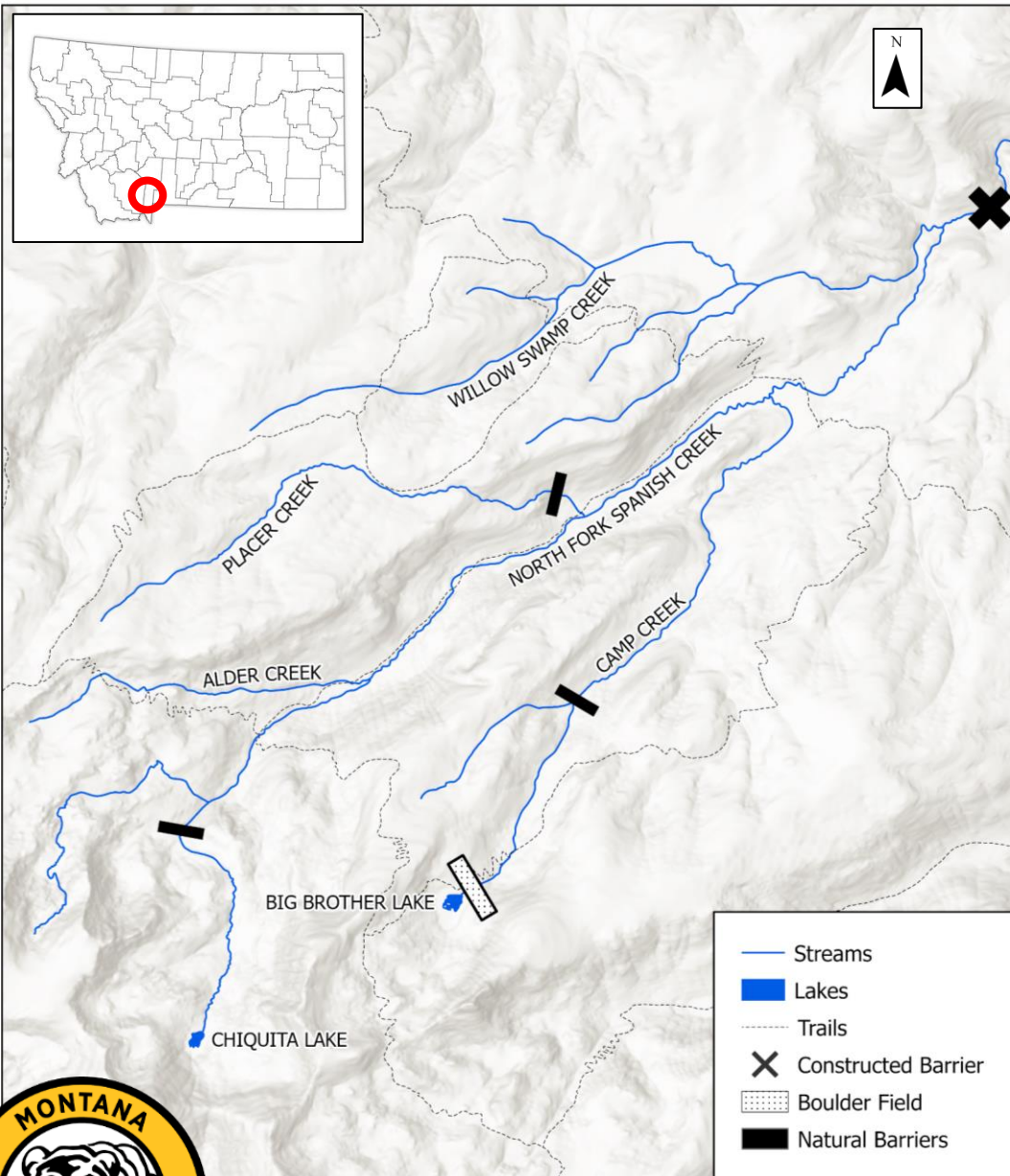
North Fork Spanish Creek



North Fork Spanish Creek

Westslope Cutthroat Trout and Arctic Grayling Reintroductions

- Began in 2023 and currently ongoing
- Translocations
- Monitoring
 - Natural reproduction of arctic grayling documented



Next Steps

Sportfishery Management

- Continue long-term monitoring in the Gallatin and East Gallatin rivers to understand population trends
- Develop specific management goals



Next Steps

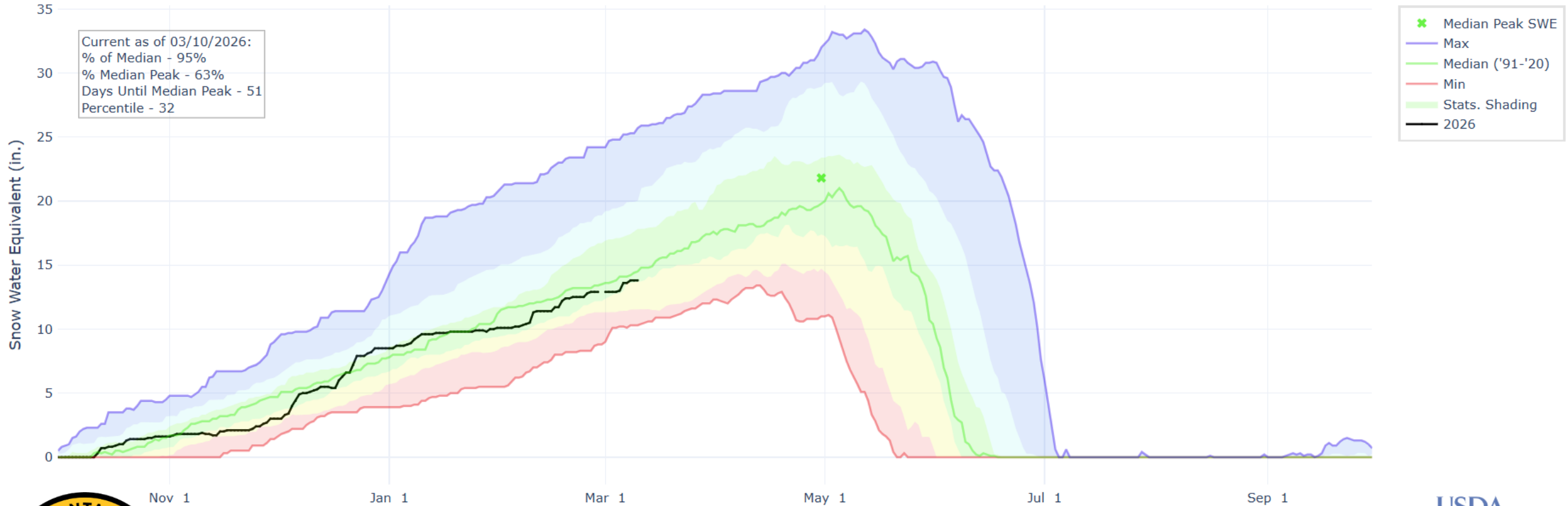
Native Fish Conservation

- Continue monitoring current conservation populations
- Identify options for future range expansion in tributaries



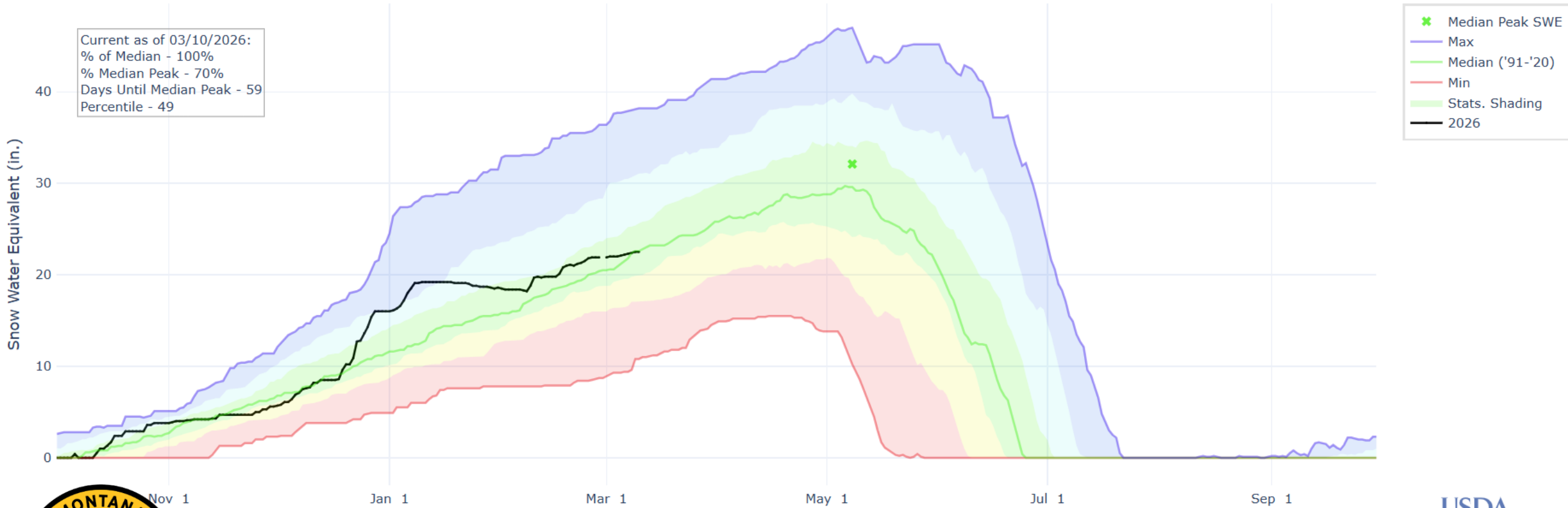
Watershed Outlook

LONE MOUNTAIN, MT (590) SNOW WATER EQUIVALENT



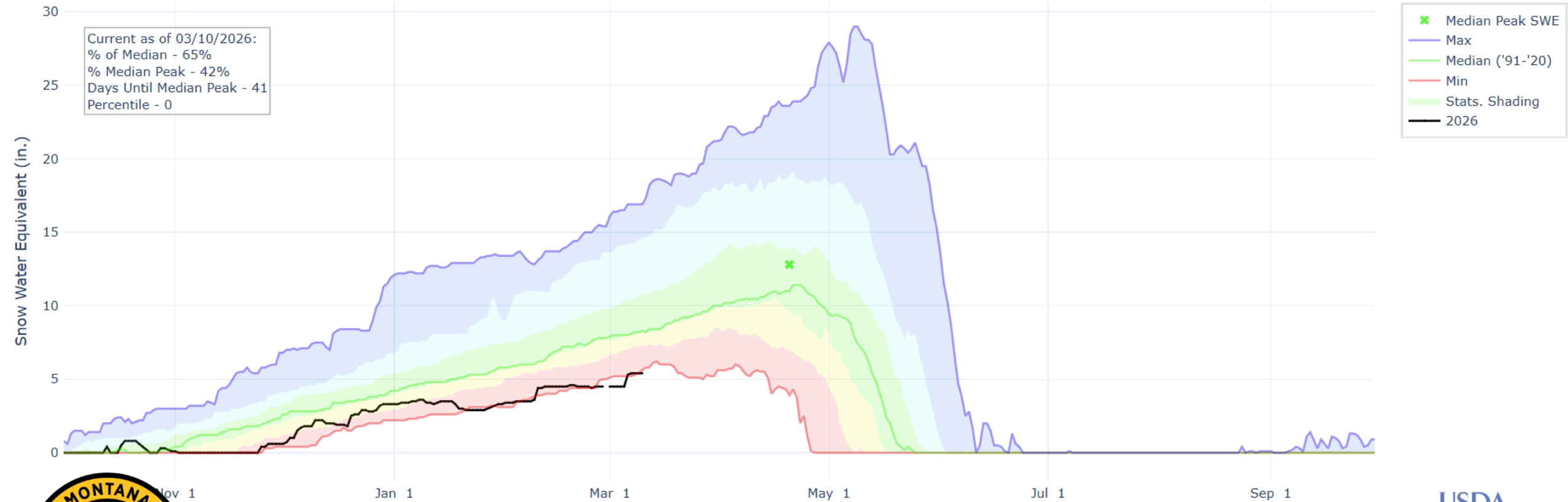
Watershed Outlook

CARROT BASIN, MT (385) SNOW WATER EQUIVALENT



Watershed Outlook

LICK CREEK, MT (578) SNOW WATER EQUIVALENT



Questions?

keith.wellstone@mt.gov



USFWS