

2025 LAKE HOPATCONG COOLWATER FISHERIES SAMPLING RESULTS

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Coolwater Stocking Program



Fish Stocking Programs at Lake Hopatcong

- **Muskellunge/Tiger Muskellunge**
 - Odd years: 9" Fall Fingerlings, 1/acre = 2,385 + 300 Tiger Muskellunge
 - Even years: 12" Spring Yearlings, 1/acre = 2,685 annually



Walleye

- 1-2" Fingerlings,
16/acre = 42,960 annually
- 2-4" Advanced Fingerlings,
4/acre = 10,740 annually
- 53,700 Walleye annually,
total of 20/acre



Hybrid Striped Bass

- 4-6" Fingerlings
- 10/acre =
26,850 annually



Channel Catfish

- 6” Production Fingerlings 2,880 annually
- 0.5-5” Surplus Fry/Fingerlings
Amount varies based on excess fish available



Rainbow Trout

- 11" Spring Stocking
9,120 annually

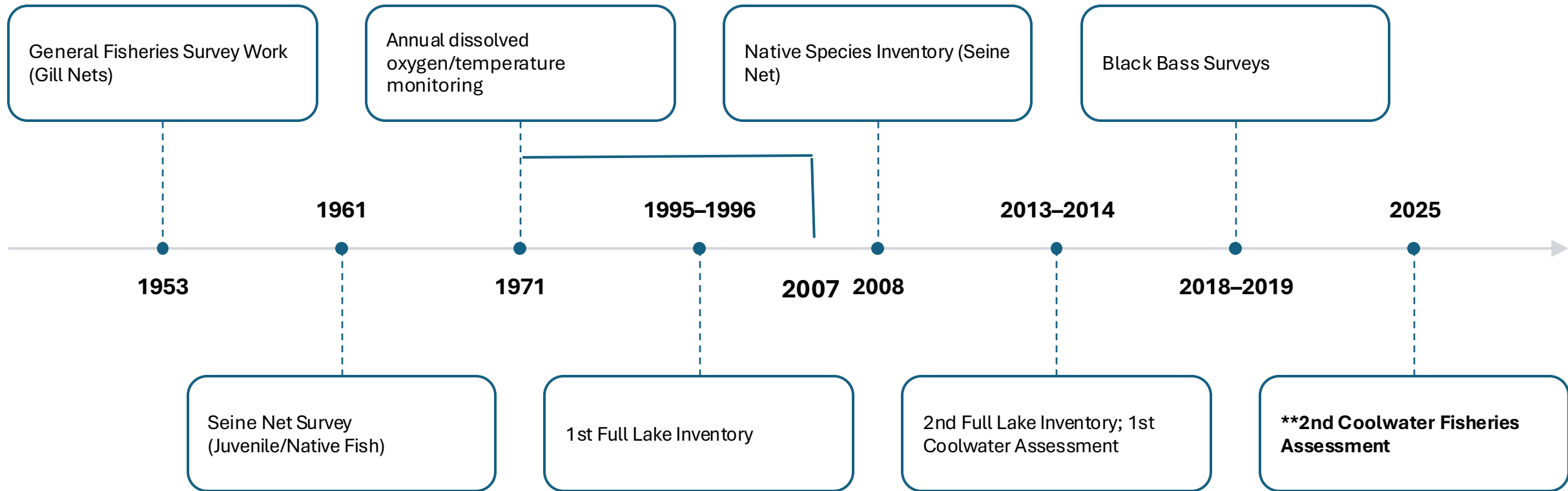


Other Important Gamefish in Lake Hopatcong (Wild)

- Largemouth Bass (Supplementally stocked 2014-2023)
- Smallmouth Bass
- Chain Pickerel
- Bluegill
- Yellow Perch
- White Perch
- Black Crappie



Lake Hopatcong Fisheries Sampling History



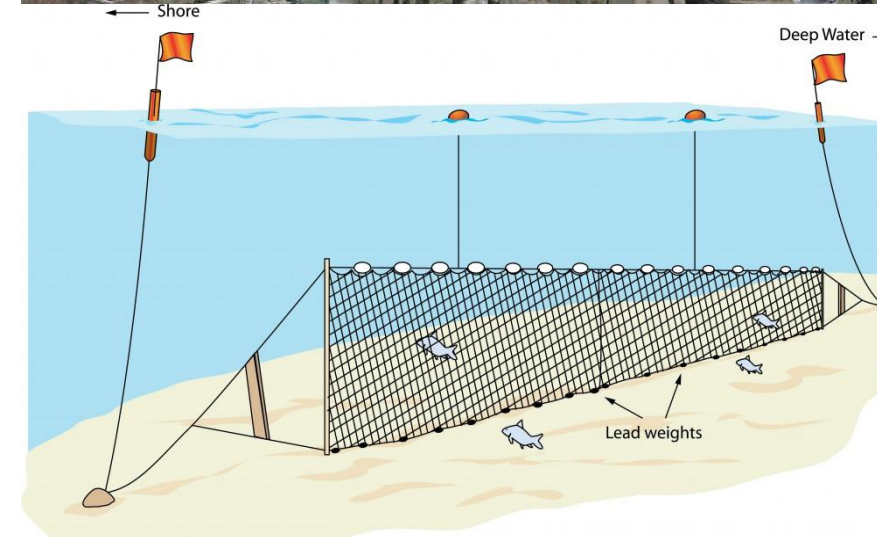
Coolwater Fisheries Monitoring

- All waters stocked are sampled 1x/6 years as part of a revolving monitoring schedule started in 2023.
- **Spring Surveys**
 - Northern Pike: 1x/year, 40°F
 - Walleye: 1x/year, 44-50°F
 - Muskellunge: 2x/year, 50°F
- **Fall Surveys**
 - Hybrid Striped Bass: 1x/2 years, 57-64°F

Trap Net

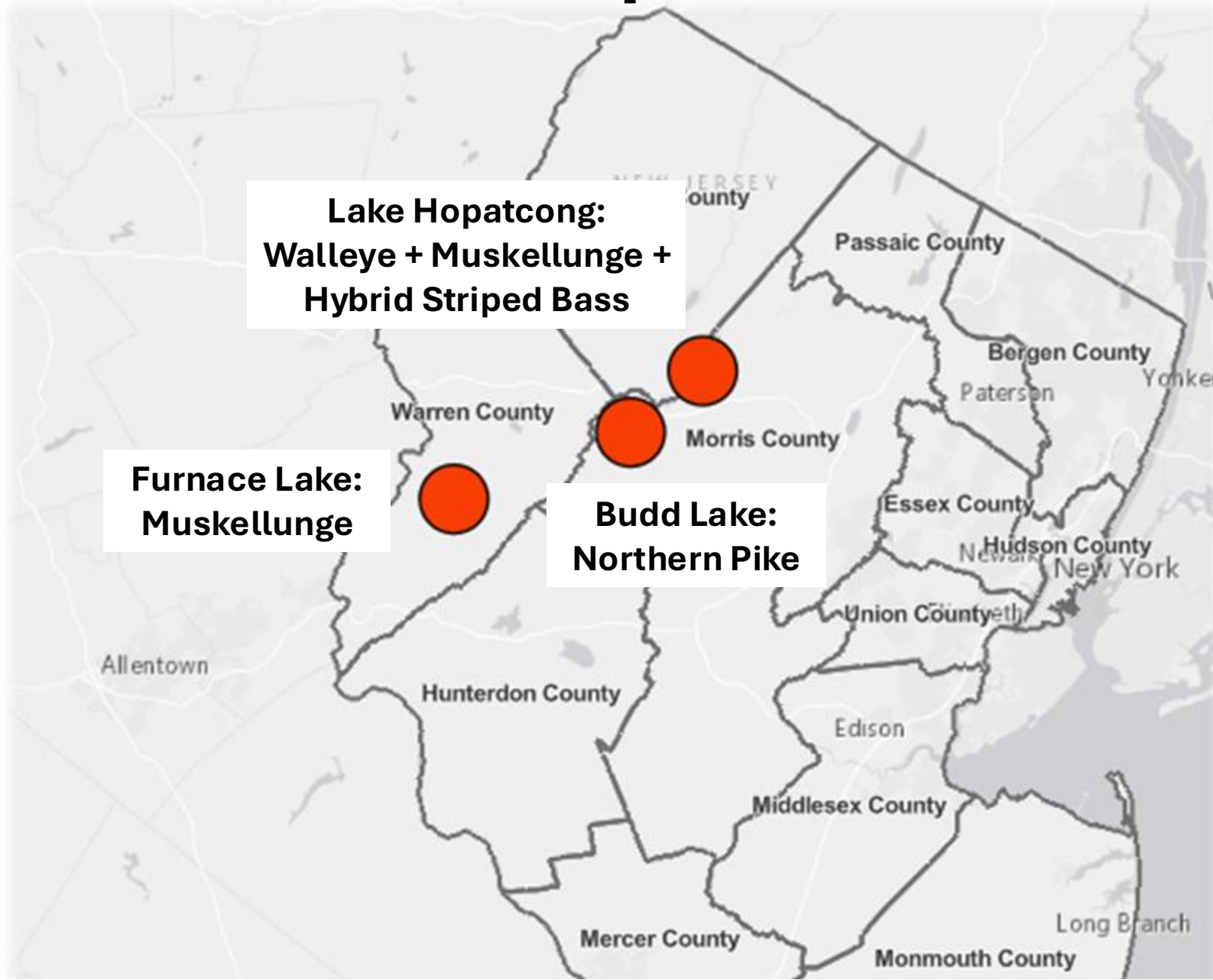


Boat
Electrofishing



Gill Net

Lakes Sampled in 2025



Indices Used to Assess Fisheries

Catch per Unit Effort (CPUE)

Number of fish caught per sample effort

- Overnight net set
- Hour of electrofishing

Relative Weight (Wr)

Actual fish weight versus what it should weigh, expressed as percent

>100% = Fish is heavier than expected

<100% = Fish is lighter than expected

<80% = Problematically lighter

Proportional Size Distribution (PSD)

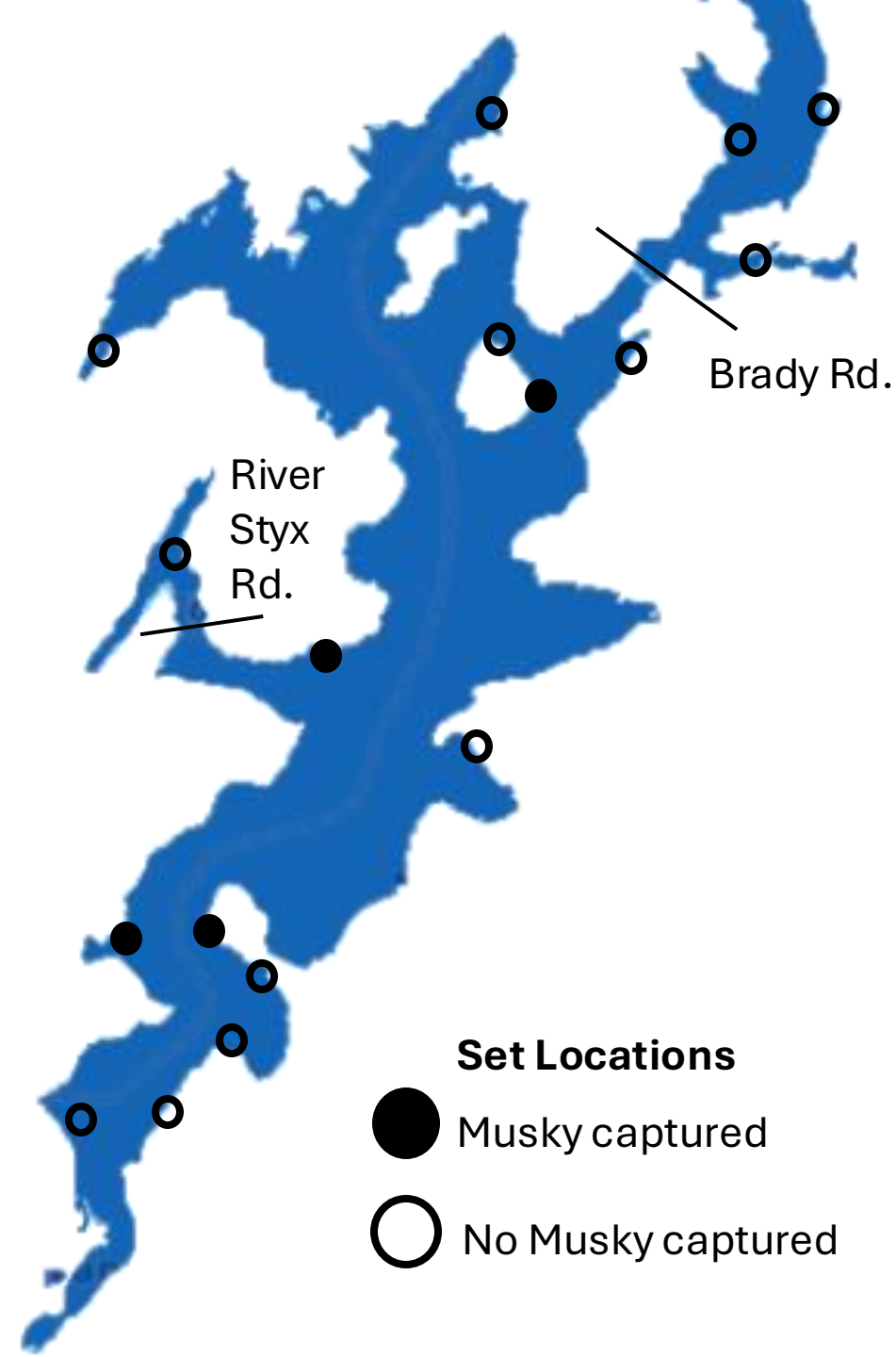
Percent of fish captured of a certain (defined) size

- Quality, Preferred, Memorable
PSD PSD-P PSD-M

Muskellunge Trap Netting

- First stocked with Muskellunge and Tigers in 1997

| | Species | Muskellunge 30", 38" | Black Crappie 8", 10" | White Perch 8", 10" |
|------|-----------------|-------------------------|-----------------------------|---------------------------|
| 2014 | CPUE | 0.34 | 48 | 12 |
| | Relative Weight | 102 | 95 | 94 |
| | PSD | 100 | 79 | - |
| | PSDp | 100 | 18 | - |
| 2025 | CPUE | 0.3 | 34 | 77 |
| | Relative Weight | 95 | 96 | 100 |
| | PSD | 100 | 98 | 99 |
| | PSDp | 33 | 67 | 19 |

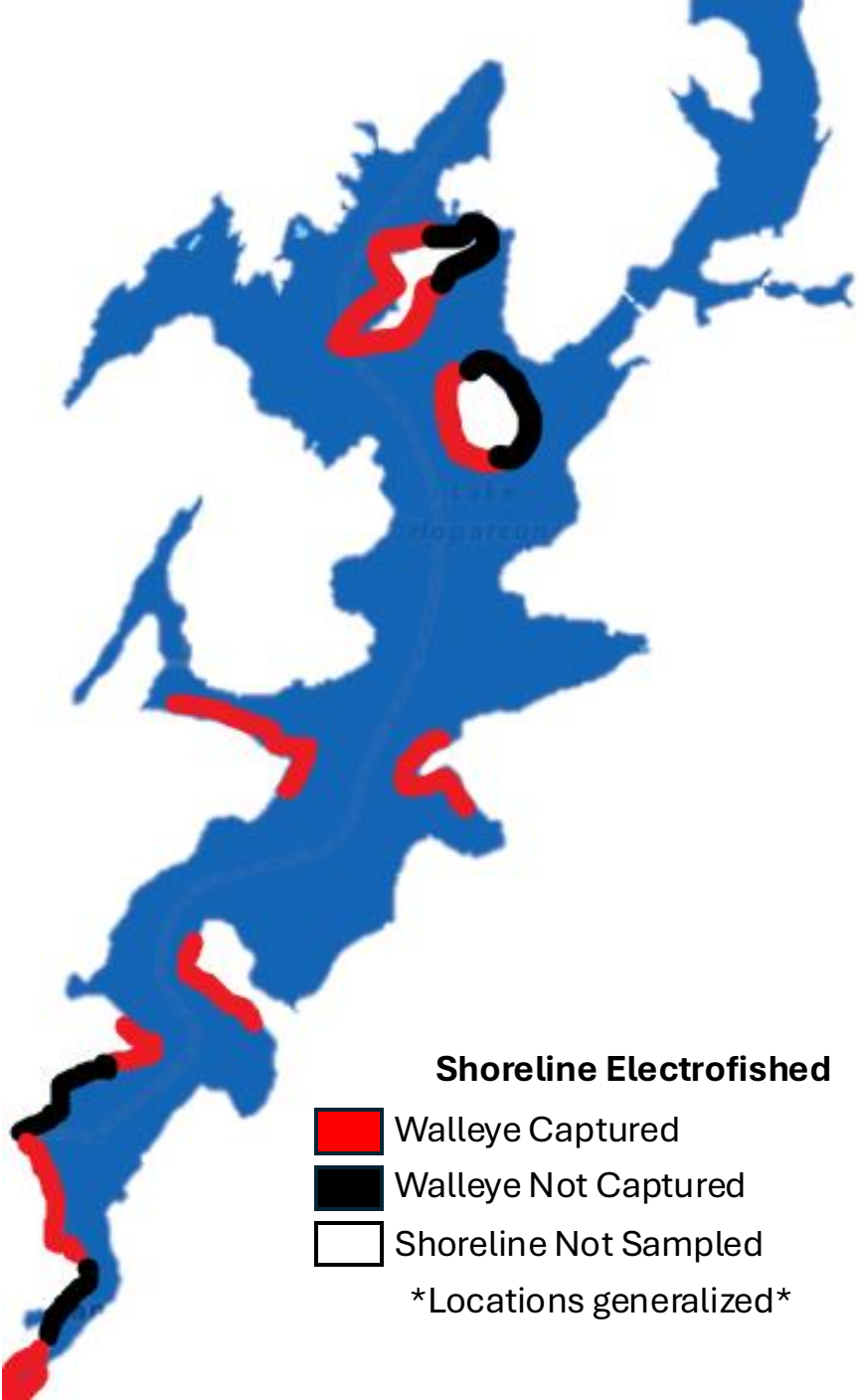


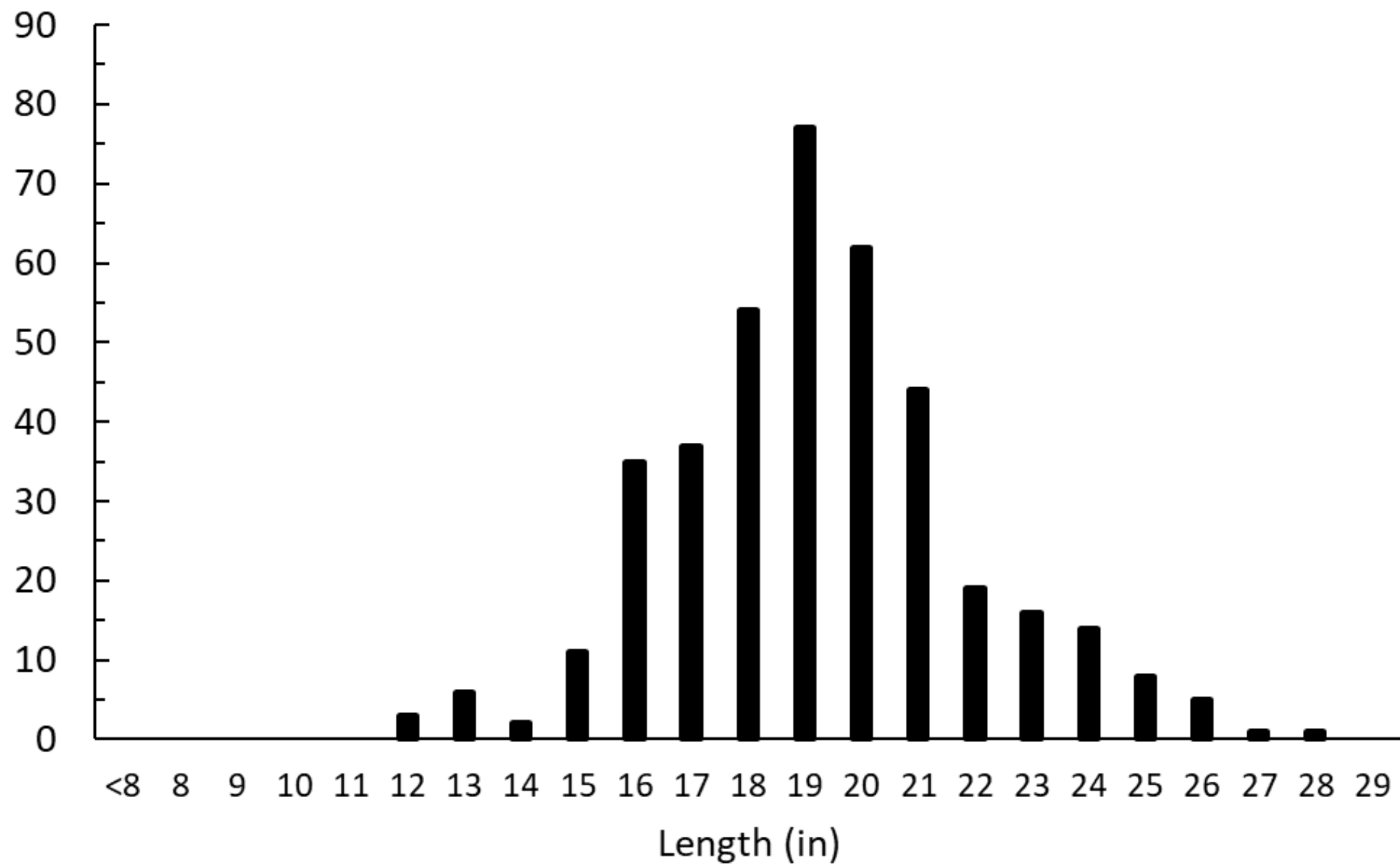
Trophy Fishery



Walleye Night Electrofishing

| | Species | Walleye 15", 20" | Largemouth 12", 15" | Smallmouth 11", 14" |
|-------------|-----------------|---------------------|------------------------|------------------------|
| 2014 | CPUE | - | 13 | 2 |
| | Relative Weight | 95 | 95 | 85 |
| | PSD | 90 | 77 | - |
| | PSDp | 35 | 39 | - |
| 2025 | CPUE | - | 12 | 3 |
| | Relative Weight | 88 | 100 | 88 |
| | PSD | 97 | 85 | - |
| | PSDp | 41 | 42 | - |





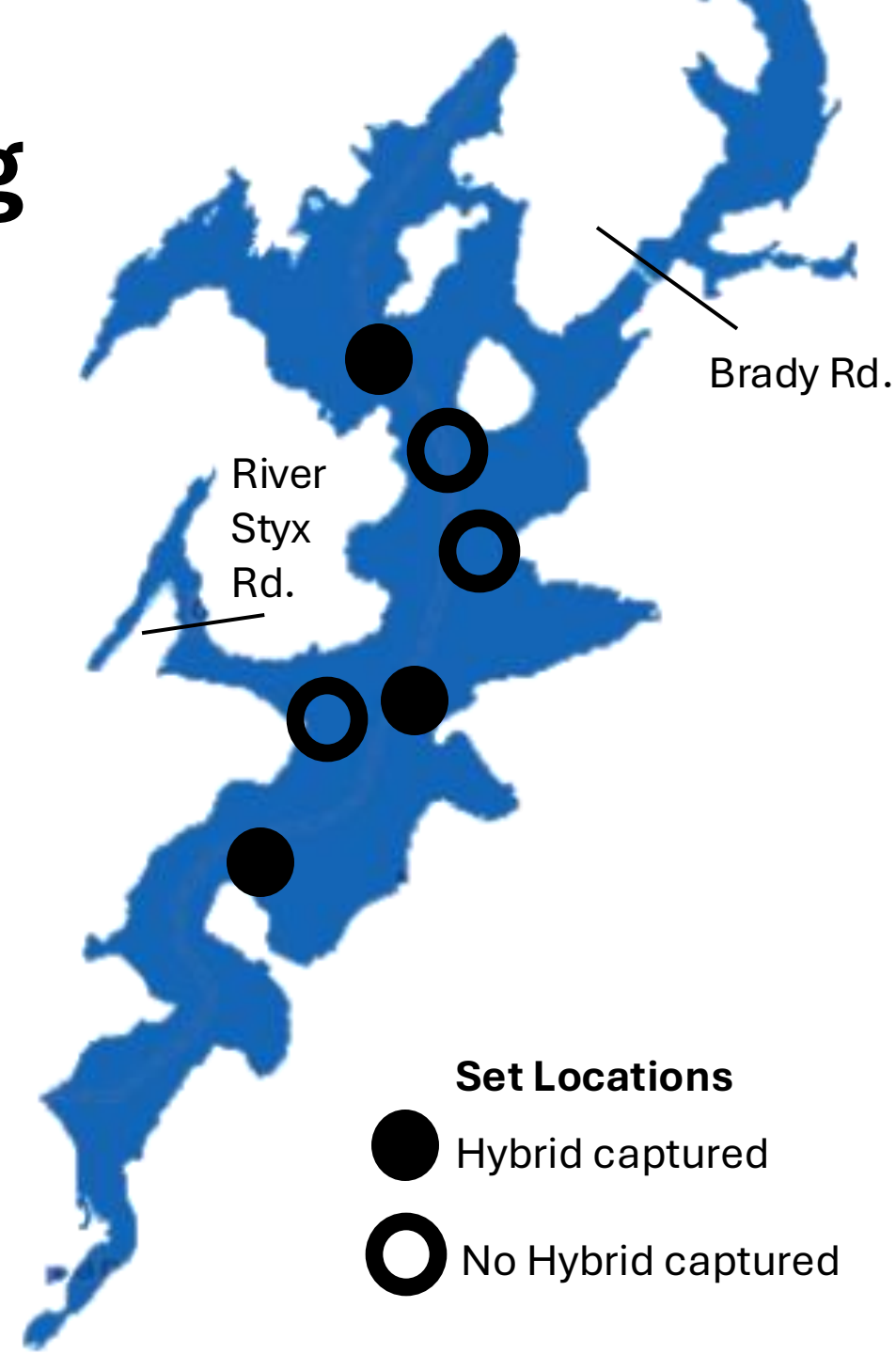


Abundant and Quality Fishery

Hybrid Striped Bass Gill Netting

- Hybrids first stocked in 1993
- Last assessment in 2014 had similar trouble catching Hybrids

| | Species | Hybrid Striped Bass 12", 15" | Walleye 15", 20" |
|------|-----------------|---------------------------------|---------------------|
| 2013 | CPUE | 22 TOTAL | 9.75 |
| | Relative Weight | - | - |
| | PSD | 93 | 87 |
| | PSDp | 87 | 21 |
| 2025 | CPUE | 8 TOTAL | 10.4 |
| | Relative Weight | - | 84 |
| | PSD | - | 75 |
| | PSDp | - | 12 |



More Sampling Required

- Angler reports remain strongly positive and have expressed little concern over the quality of the fishery





Questions?

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