

# 2026 Fisheries Report Summary

## 1. Executive Summary – Top 6–8 Takeaways

1. **North Basin is generally balanced; South Basin is significantly imbalanced.** North Basin predators show good growth and forage availability, while South Basin Largemouth Bass are **overabundant, stunted, and suppressing Bluegill recruitment**. *“Largemouth Bass were collected at a rate of 110 fish per hour...indicating an overabundant predator population and substantial competition.”*
2. **Bluegill dynamics differ sharply between basins.** North Basin Bluegill are abundant (498/hr) and healthy; South Basin Bluegill show **poor recruitment in the 3–6" forage-critical size class**. *“There are not enough Bluegill present to support quality predator growth.”*
3. **Walleye stocking has succeeded in the North Basin but is struggling in the South Basin.** North Basin produced a **27-inch, 6.63 lb trophy Walleye**; South Basin Walleye of the same length weighed **½ lb less**, indicating food scarcity. *“In the south basin the 18.5 inch Walleye weighed 1.76 pounds...north basin 2.25 pounds.”*
4. **Bass harvest is essential in both basins—but for different reasons.** North Basin: harvest 14–16" Bass to prevent future overcrowding. South Basin: Bass <13" must be harvested to correct severe stunting (requires MDNR regulation change). *“Implementing a slot limit of 14.0–16.0 inches is recommended.”*
5. **Habitat limitations—especially lack of woody structure—are constraining forage survival.** Both basins rely heavily on vegetation; woody habitat is scarce and should be expanded. *“Overall woody complex habitat is scarce.”*
6. **Common Carp are present but not driving water quality issues.** Vegetation levels remain high, indicating Carp are not uprooting habitat at a problematic scale. *“It does not appear Common Carp are a major influencer.”*
7. **Stocking strategy must diverge by basin.** North Basin: continue Walleye and Yellow Perch if the LLPOA wants a dedicated perch fishery. South Basin: prioritize Yellow Perch; limit Walleye to alternating years.
8. **Both basins require a follow-up survey in 2029 to evaluate progress.**

## 2. Fish Population Assessment

### North Basin

#### Abundance & Trends

- **Bluegill:** Very abundant (498/hr), strong forage base. *“81% measured between 3–6 inches.”*
- **Largemouth Bass:** High abundance (106/hr), trending toward overcrowding but still balanced.
- **Walleye:** Low numerical abundance but excellent size distribution (6.5–27").
- **Yellow Perch:** Very low abundance despite stocking.

#### Size Class & Recruitment

- Bluegill recruitment strong across small size classes.
- Bass recruitment strong but trending toward density pressure in larger size classes.

- Walleye recruitment dependent on stocking; natural reproduction absent.

#### **Predator–Prey Balance**

- Currently balanced but **Bass abundance is high enough to warrant preventive harvest.**
- Forage base is strong due to vegetation and Bluegill density.

#### **Signs of Imbalance**

- Early signs of predator overcrowding (Bass >100/hr).
- Yellow Perch failing to establish.

### **South Basin**

#### **Abundance & Trends**

- **Largemouth Bass:** Severely overabundant (110/hr). *“Relative weights averaged 75–79...demonstrating poor body condition.”*
- **Bluegill:** Moderate abundance (116/hr) but **poor recruitment** in forage-critical sizes.
- **Yellow Perch:** Stronger presence than North Basin (25 collected).
- **Walleye:** Present but slow-growing due to competition.

#### **Size Class & Recruitment**

- Bass: Overrepresentation of 8–12" class; very few >14".
- Bluegill: Strong adult population but weak juvenile survival.
- Perch: Good size distribution (3.5–10").

#### **Predator–Prey Balance**

- Severely predator-heavy; forage base suppressed.
- Bass stunting is the dominant ecological issue.

#### **Signs of Imbalance**

- Bass stunting.
- Bluegill recruitment failure.
- Walleye growth suppressed.

### **3. Habitat & Water Quality Indicators**

#### **Vegetation**

- **North Basin:** 78% of sites contain vegetation—excellent for forage survival.
- **South Basin:** 54% vegetation—adequate but insufficient for juvenile refuge.

#### **Woody Habitat**

- Both basins lack woody structure; fallen trees should be retained.

#### **Water Chemistry**

- DO, pH, alkalinity, hardness all within healthy ranges in both basins.
- **North Basin N:P ratio = 79:1** (very stable).
- **South Basin N:P ratio = 35:1** (still stable, but lower).

#### **Habitat–Population Correlations**

- North Basin vegetation supports strong Bluegill recruitment → supports Bass and Walleye growth.
- South Basin limited habitat → poor Bluegill recruitment → Bass stunting.

## **4. Stocking Evaluation**

### **North Basin**

#### **Effectiveness**

- Walleye stocking highly successful (trophy fish present).
- Yellow Perch stocking unsuccessful.

#### **Recommendations**

- Continue **500 Walleye annually (2026–2029)**.
- Only stock Yellow Perch if LLPOA wants a dedicated perch fishery (requires 1,500 annually).

#### **Cost–Benefit**

- Walleye stocking yields high angler satisfaction and strong growth.
- Perch stocking is expensive and low-yield due to predation.

### **South Basin**

#### **Effectiveness**

- Yellow Perch stocking successful; population establishing.
- Walleye stocking limited by Bass competition.

#### **Recommendations**

- Continue **700 Yellow Perch annually (2026–2029)**.
- Walleye only in alternating years (2027 & 2029).

#### **Cost–Benefit**

- Perch stocking provides immediate angler benefit.
- Walleye stocking offers limited return until Bass imbalance corrected.

## **5. Angler Use & Catch Data**

### **North Basin**

- Bass catch rates high and enjoyable for anglers.
- Trophy Walleye present.
- Angler satisfaction likely high.

### **South Basin**

- Anglers report difficulty catching quality Bass.
- Perch and panfish provide better angling experience.
- Angler reports align with survey data.

## **6. Risks, Red Flags & Emerging Issues**

### **North Basin**

- Bass abundance trending upward → risk of future stunting.
- Yellow Perch failing to establish.

### **South Basin**

- Severe Bass overcrowding → urgent need for harvest regulation change.
- Forage suppression → long-term risk to all predator species.

### **Both Basins**

- Woody habitat scarcity.
- Need for long-term vegetation management balance.

## **7. Opportunities for Improvement**

### **Habitat Enhancements**

- Install woody and artificial structures (requires permitting).
- Retain fallen trees.

### **Regulation Adjustments**

- South Basin: pursue MDNR approval for Bass harvest <13".
- North Basin: implement voluntary 14–16" Bass harvest.

### **Stocking Strategy Refinements**

- Basin-specific stocking plans (Walleye north, Perch south).

### **Monitoring Upgrades**

- Continue vegetation surveys.
- Add juvenile forage monitoring.

### **Community Education**

- Promote Bass harvest.
- Educate members on habitat value of fallen trees and native vegetation.