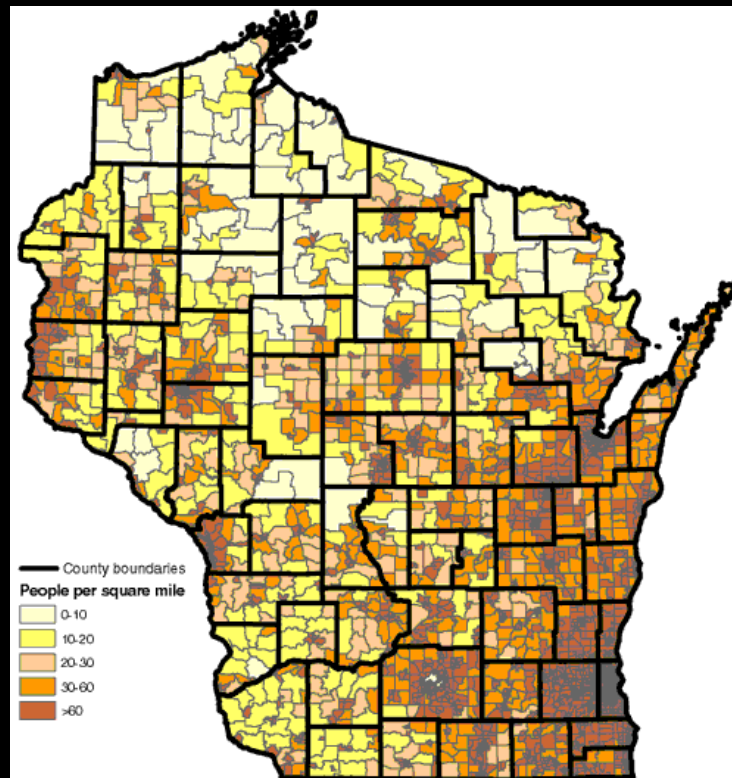


Wisconsin Department of Natural Resources Fish Stocking Program

WI Lakes Partnership Convention
April 19th, 2018



Presented
by
Benjamin
Heussner



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Walleye Production



Photo by: Bob Fahey



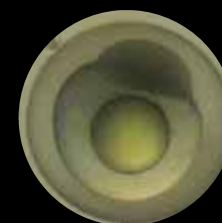
Photo by: Bob Fahey



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- WDNR Stocking Program Overview
- Species Management
- Stocking Evaluations
- Management Strategies
- Critical Habitat
- Regulations

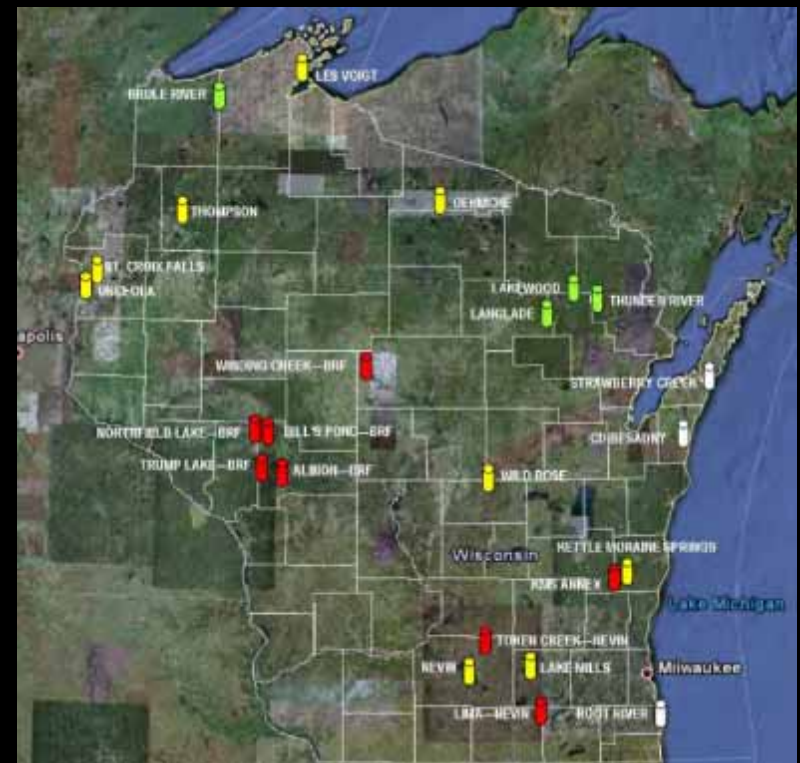
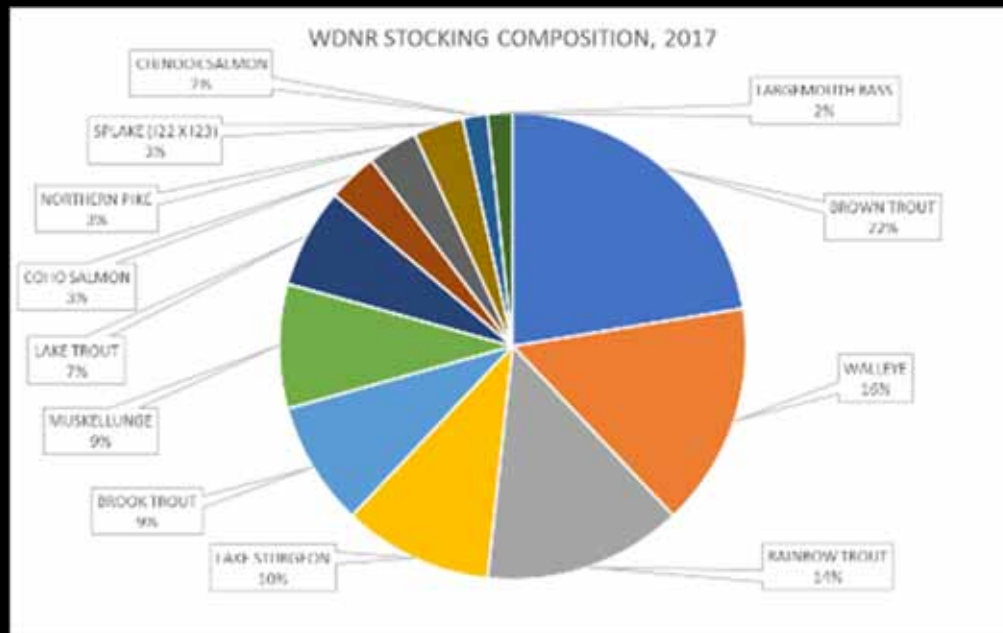


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WDNR Stocking Program Overview

- 36.5 million fish stocked in 2017
- 6.8 million stocked (not counting walleye fry)
- 58 different products



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WDNR Stocking Guidance

- Species Specific Guidance
- Management Goal (Rehabilitation, Research, Recreation, Remediation, Introduction, Put & Take, etc.)
- Stocking Rates
- Genetic Conservation
- Stocking Database
- Natural Reproduction



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brown trout

- Most frequently stocked fish in Wisconsin
- Non-indigenous species
- State record is 41lbs. 8 oz. (18/6 inland)
- Stocking not allowed in brook trout streams



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brook trout

- Not typically stocked in lakes
- Native species found in streams
- Usually outcompeted by brown trout
- Feral strain management is imperative



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rainbow trout

- Three strains of anadromous steelhead, (ganaraska, skamainia, chambers creek, arlee)
- Erwin domestic trout stocked annually in urban ponds



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lake sturgeon

Wild Brood Sources:

- Flambeau River
- Menominee River
- Lake Michigan tributaries
- Wisconsin River
- Wolf River
- Yellow River



*Female sturgeon reach maturity at age 24-26 and about 55 inches, world record is 170 lbs. 10 oz.



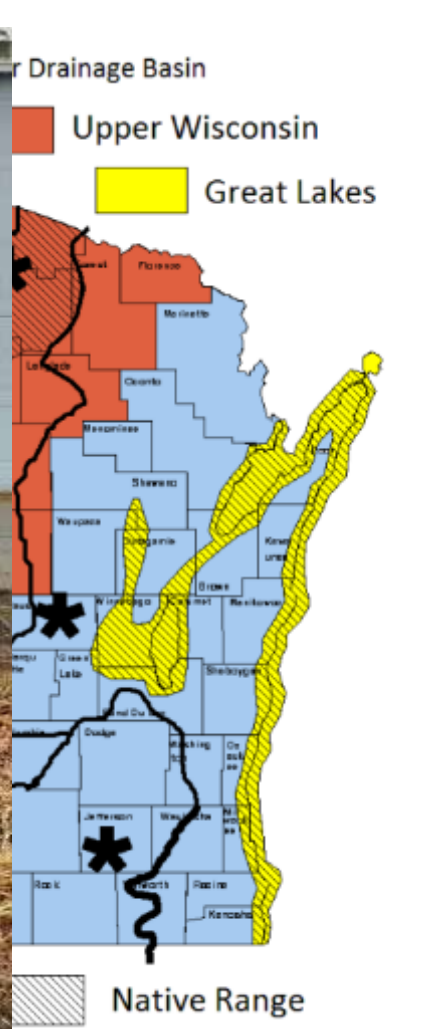
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muskellunge

- Four main genetic management units
- State record is 69 lbs., 11 ounces caught in 1952 on Chippewa Flowage

Muskellunge Genetic Management Zones - Current



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northern pike

- Primarily stocked in southern part of state
- Five genetic management units
- State record 38 lbs.

Northern Pike Genetic Management Units



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Fisheries Surveys

- Spring Netting
- Spring Electrofishing
- Creel Surveys



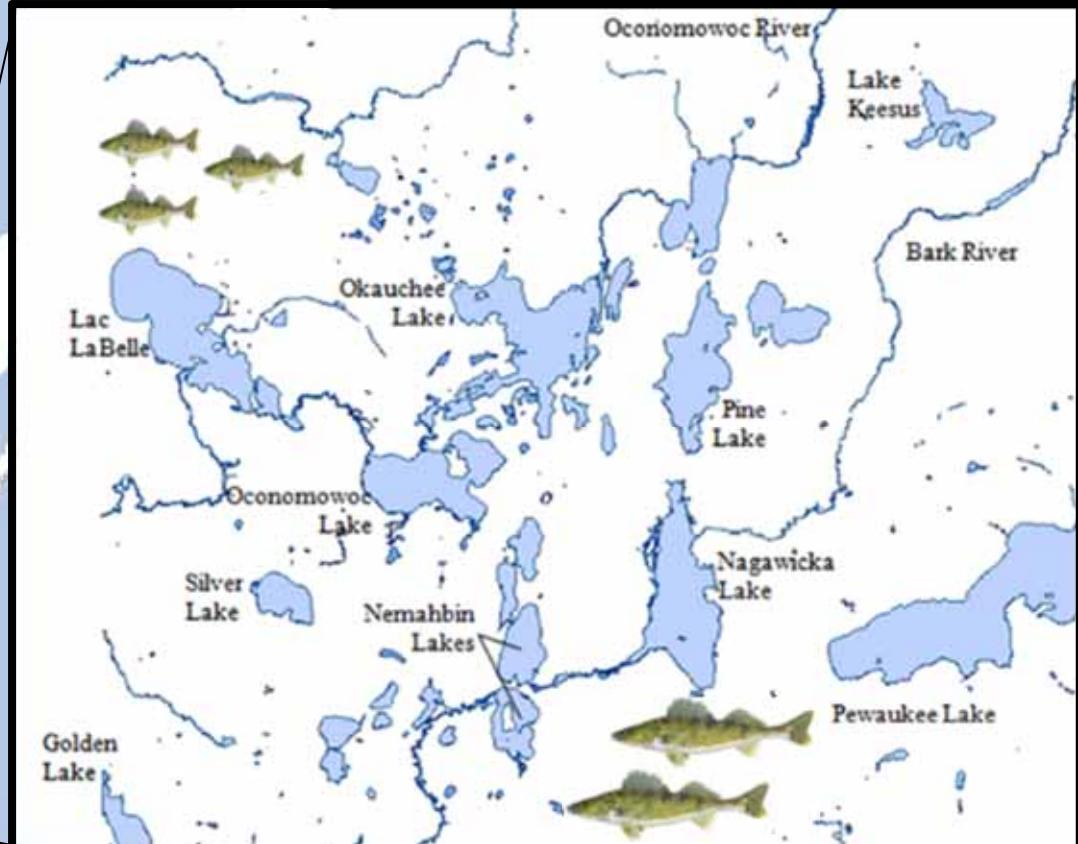
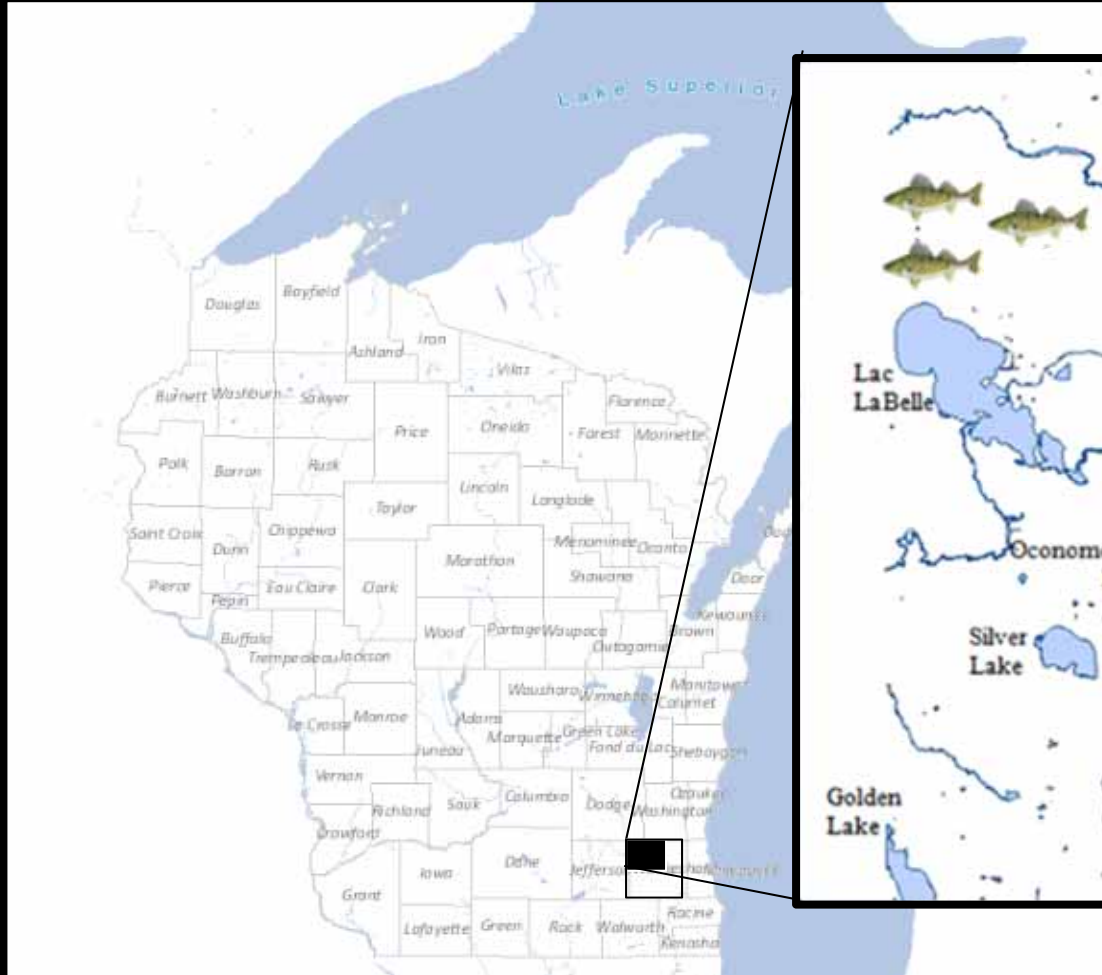
* Estimate abundance, size structure, age, growth and mortality.



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Waukesha County - Lake Country



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Size does matter...



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Squeeze, Egg, Fry; Fingerling, Stock, Die?



Photo by: Bob Fahey, WDNR

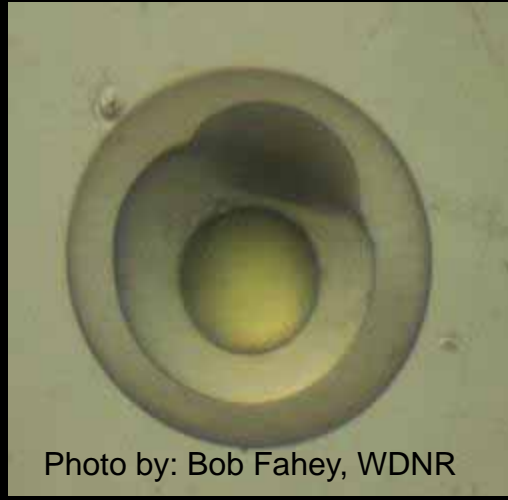


Photo by: Bob Fahey, WDNR



Photo by: Bob Fahey, WDNR



Photo by: Bob Fahey, WDNR



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Wisconsin and Walleye



a great combination just got better

The Wisconsin Walleye Initiative

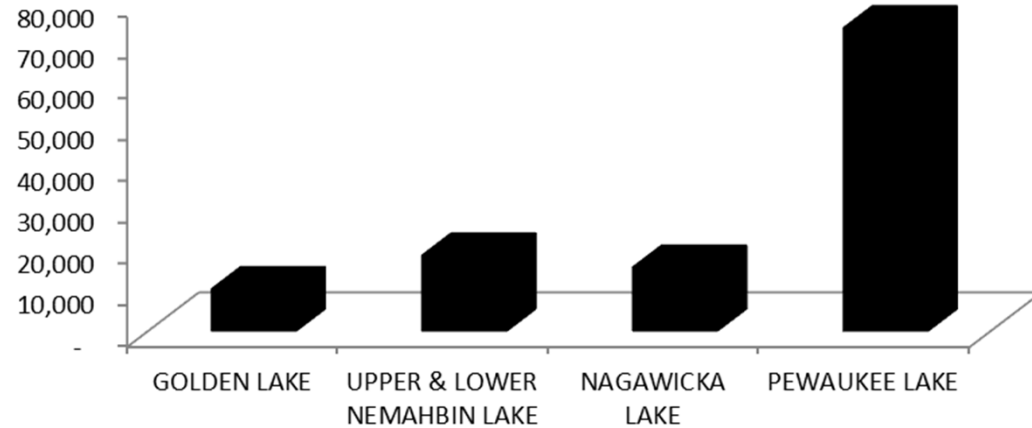
- \$8.2 million in existing unencumbered bonding authority to expand hatchery capacities.
- \$1.8 million for operating costs over the biennium.
- \$2 million over the biennium for a competitive grant program for private organizations to expand walleye production and to cover operational costs.
- \$160,000 in one-time funds for the UW Extension to continue their work with private aquaculture through the end of Fiscal Year 2014.
- \$500,000 annually beginning in Fiscal Year 2015 to contract with organizations to acquire additional walleye fingerlings.
- \$250,000 annually to expand the summer Tribal Youth Program. The program is a state-tribal partnership giving high school-aged tribal youth the opportunity to work on natural resource-related projects.



For more details, go to dnr.wi.gov and search "walleye"



Wisconsin Walleye Initiative Large Fingerling Stocking 2013 - 2017 Waukesha County Sentinel Lakes



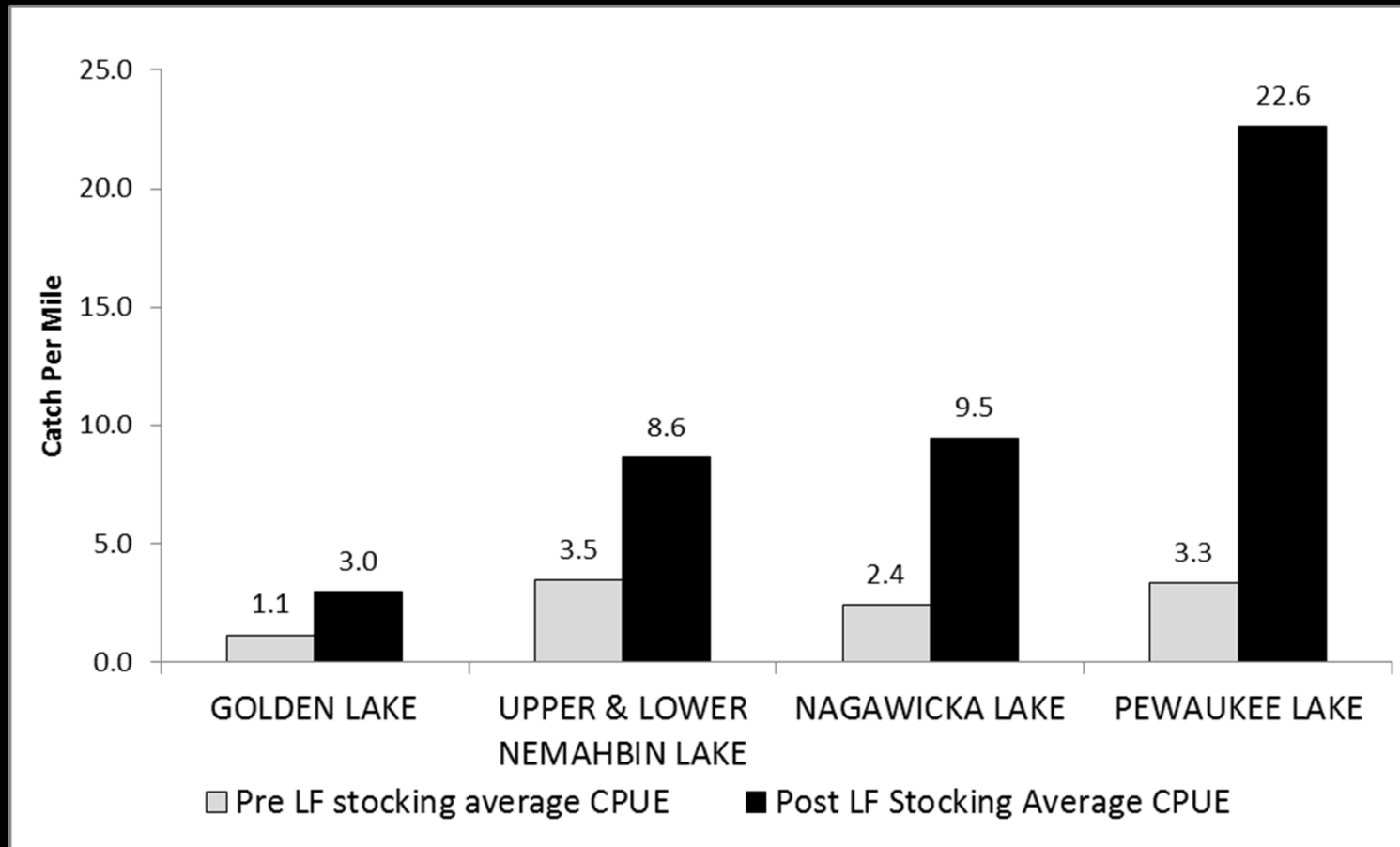
	Stocking Rate	2013	2014	2015	2016	2017
GOLDEN	20 per acre			5,072		5,000
NEMAUBIN	15 per acre		9,116		9,116	
NAGAWICKA	5 per acre	5,513		4,905		4,913
PEWAUKEE	15 per acre		36,984		36,557	



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Pre & Post Large Fingerling Stocking - CPUE (2009-2017)



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Oconomowoc Lake



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Pewaukee Lake



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Upper & Lower Nemahbin Lakes



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Nagawicka Lake



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Big Muskego Lake



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Biomanipulation Definition; “ In lakes, trophic cascades are used to **improve water quality through biomanipulation**, a management practice in which humans intentionally remove whole species from ecosystems. The goal of biomanipulation is to reduce the concentration of harmful phytoplankton, such as toxic blue-green algae. The most direct method to control harmful phytoplankton blooms is to reduce inputs of nutrients such as phosphorus that drive their growth. In cases where the arrival of nutrients to the ecosystem is delayed or slow to develop, biomanipulation can be used to hasten the decline of harmful phytoplankton. **The stocking of game fish** (or their protection from harvest using special regulations) triggers a trophic cascade with **decreases in the biomass of smaller-bodied fish**, increases in the biomass of herbivorous zooplankton, and decreases in the biomass of harmful phytoplankton. In some cases plankton-eating fish have been removed directly by lake managers. In addition, the removal of bottom-feeding fish from shallow lakes leads to **increases in rooted vegetation and increased water clarity** as the rooted plants stabilize the sediments. This transition involves a trophic cascade, as herbivorous **zooplankton increase in biomass and consume phytoplankton**, but also involves the direct effects of rooted vegetation on sediment stability and nutrient cycling.”

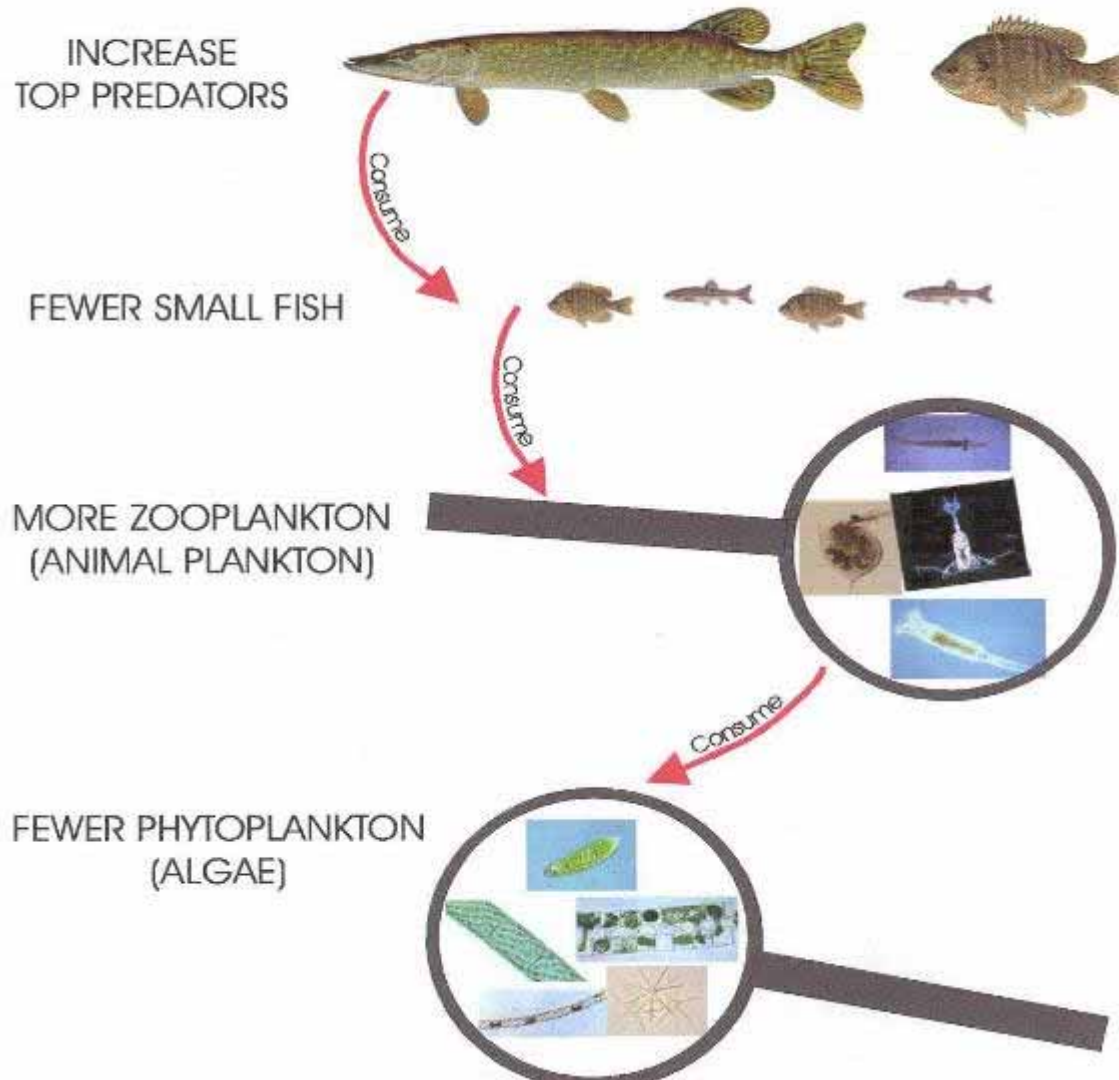
Stephen Carpenter, Director of the Center for Limnology, University of Wisconsin, Madison.



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BIOMANIPULATION TO MAINTAIN PLANT-DOMINATED STATE



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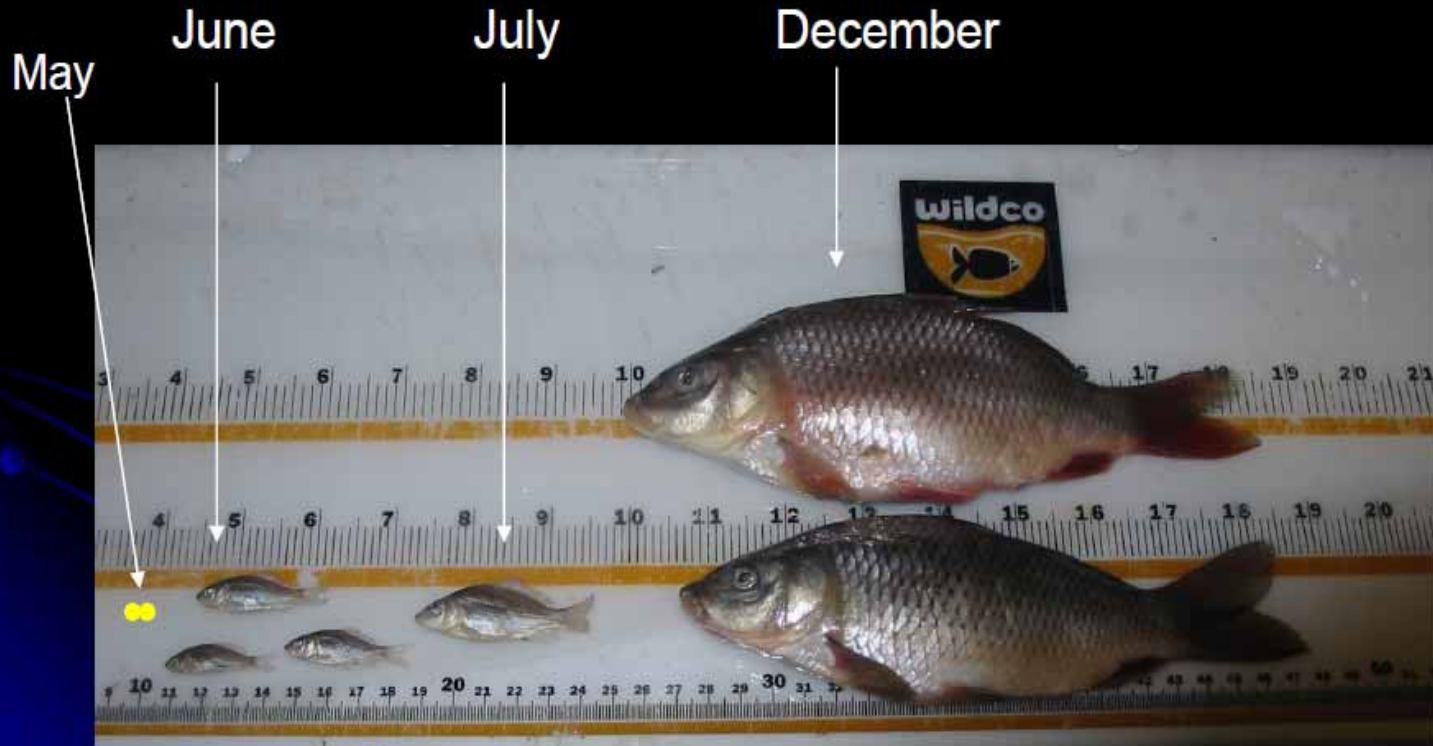
Common Carp – Aquatic Invasive Species



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Carp Grow Very Fast!

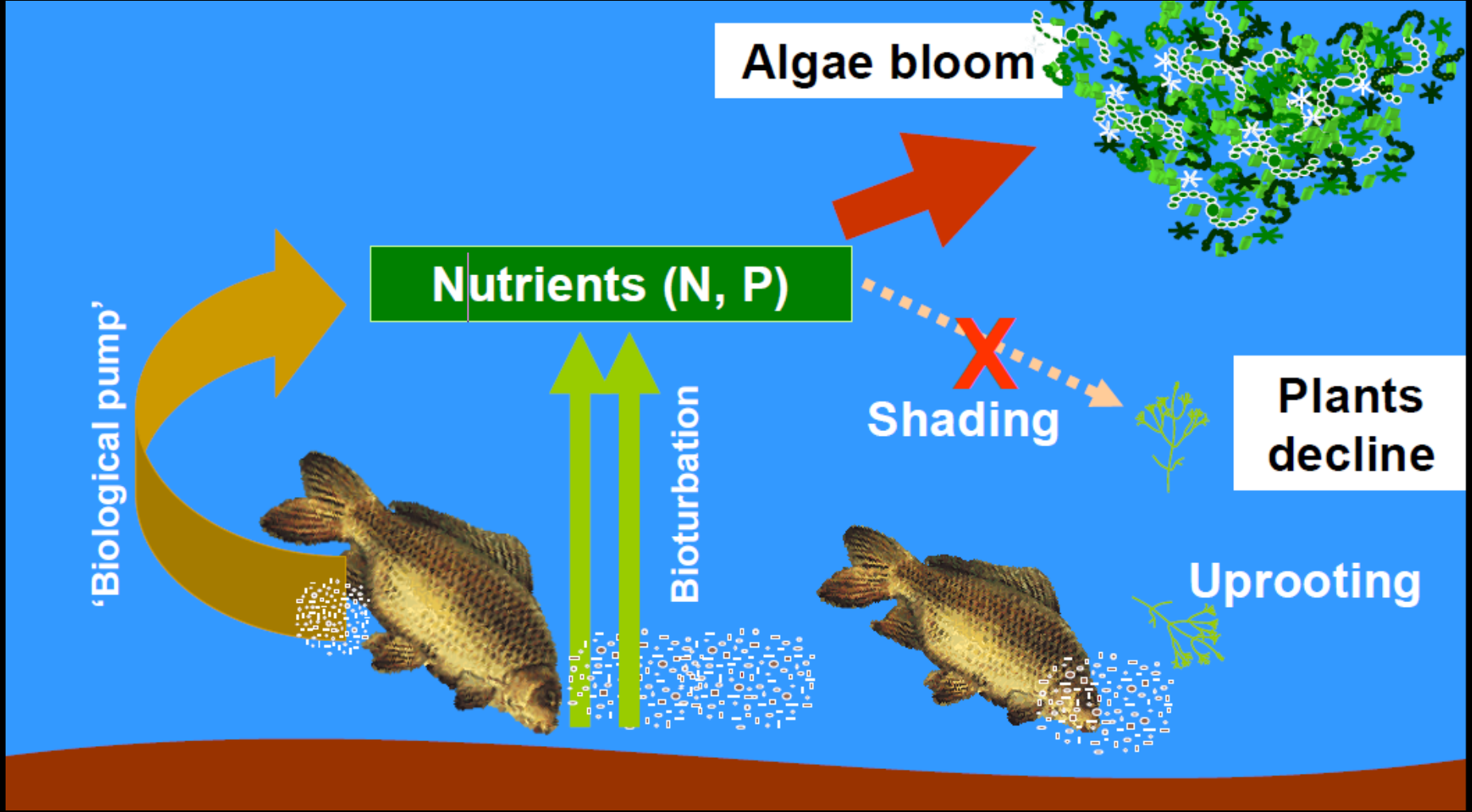


6 inches



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Lac LaBelle



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Habitat is Critical!



[ABOUT](#) ▾ [BEST PRACTICES](#) ▾ [GRANTS](#) ▾ [RESULTS](#) ▾ [RESOURCES](#) ▾ [Q](#)

350 FT² NATIVE PLANTINGS

Improve wildlife habitat, natural beauty, and privacy, and decrease runoff.

Native Plantings include grasses and wildflowers with shrubs and trees. Choose an option based on your property and interests – from bird/butterfly habitat to a low-growing garden showcasing your lake view.

[LEARN MORE](#)



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Fisheries Habitat Improvement and Protection

- Dam & Culvert Removal
- Fish cribs, tree drops.
- Proper aquatic plant management.
- Erosion and sedimentation control.
- Watershed management, nutrient loading.
- Sensitive area designations & habitat protection.



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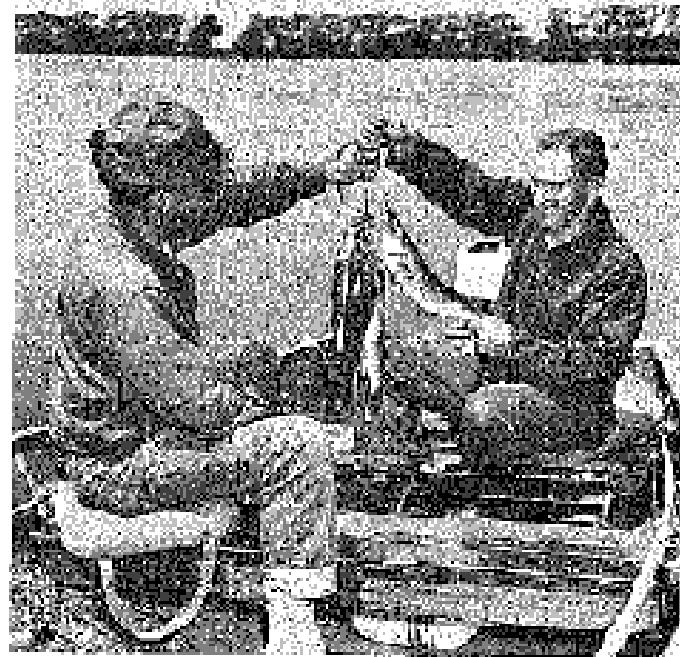


Wisconsin Walleye Waters

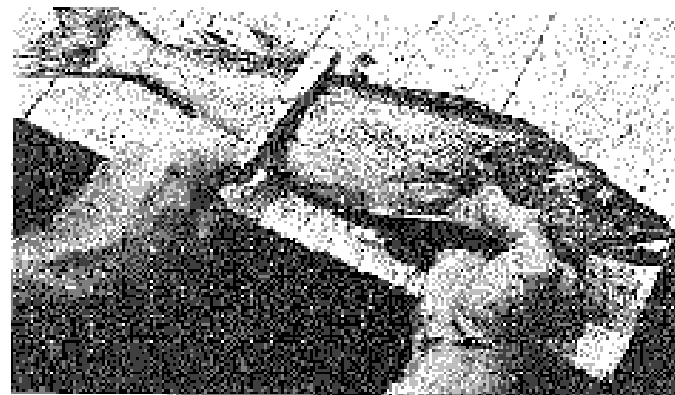


DEPARTMENT OF NATURAL RESOURCES
BOX 450
MADISON, WISCONSIN 53701

Pub. 241-71



CATCH




SCALING




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Southern Wisconsin 

WALLEYE



Bigger fish and more of 'em

See brochure for details

Special Regulations

- 18" minimum length limit, daily bag limit of 3
- Waukesha, Washington, Walworth, Kenosha, Sheboygan & Racine Counties



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Eagle Spring Lake



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- We need to utilize the best available science to support management decisions.
- We need to identify limiting factors in fisheries management to improve fishing opportunity.
- Habitat Protection and Enhancement are critical to healthy fisheries and better water quality.



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Thank you!



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Increased anthropogenic changes have had a profound influence on fisheries habitat, water quality and fish populations. Most notably, significant changes to some southern Wisconsin waters include increased nutrient loading, increased eutrophication and aquatic invasive species introductions. Changes to fisheries habitat and water quality have resulted in the increased need for supplemental stocking of desirable gamefish populations to maintain species diversity and abundance. The WDNR Bureau of Fisheries Management takes into consideration a broad array of factors when making stocking decisions including genetic conservation, natural reproductive success, interspecies competition, forage availability and cost effectiveness. The purpose of this presentation is to inform the audience of the WDNR's current practices, procedures and policies and how they help guide sound fisheries management decisions.