

Au Sable River
“Trophy Waters”
Past, Present, and Future

Mershon Chapter of Trout Unlimited

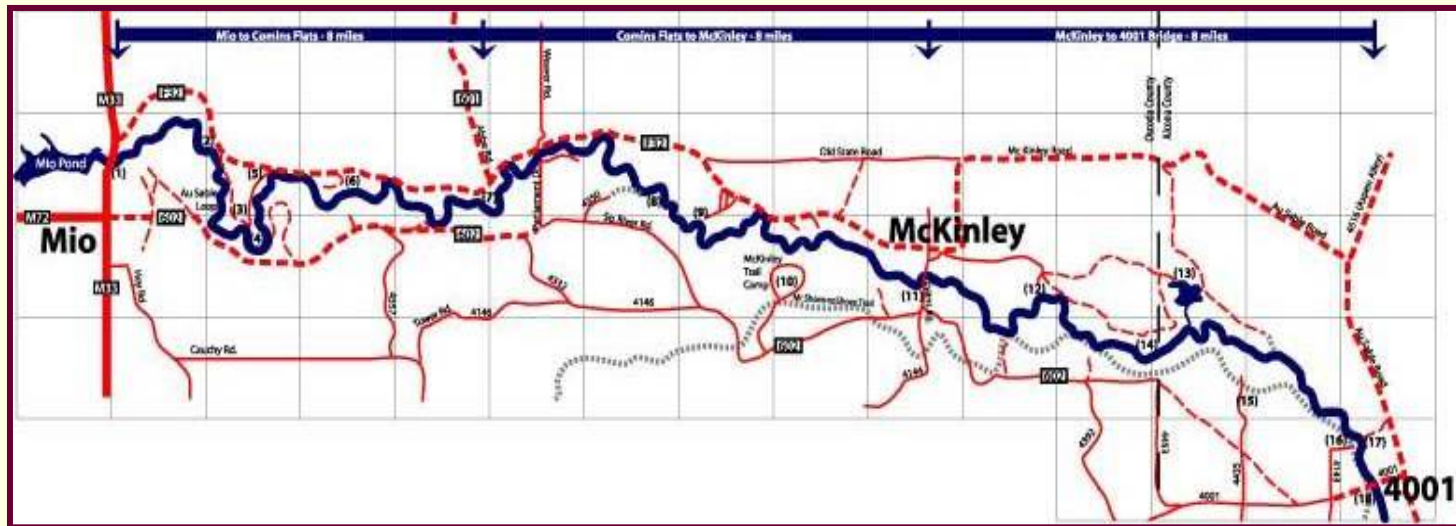
Au Sable River Trophy Waters

The Trophy Waters section of the Au Sable River extends from Mio Dam downstream to McKinley Bridge, a distance of approximately 16 river miles.



Mio M-33 Access

Focus Area



- **“The Au Sable River has the reputation for being an outstanding trout stream as well as being popular with canoeists, homeowners and other recreationists. The many outstanding natural values possessed by this river have resulted in 23 miles of the mainstream being designated by the United States Congress as a Scenic River under the Federal Wild and Scenic Rivers Act. Private ownership comprises less than 1.5 miles of frontage.”**
- (Michigan Department of Natural Resources, 2002)

Trophy Waters Past

- Early fisheries management of the river began in 1938 with the stocking of 27,400 fingerling brown trout. General fishing regulations applied to the stretch until 1965.
- Since that time, seven different sets of regulations have been in existence
- A stated goal of the Michigan DNR is to place the Trophy Waters under one of the existing seven categories of regulations, but the stretch has a long history of separate regulations

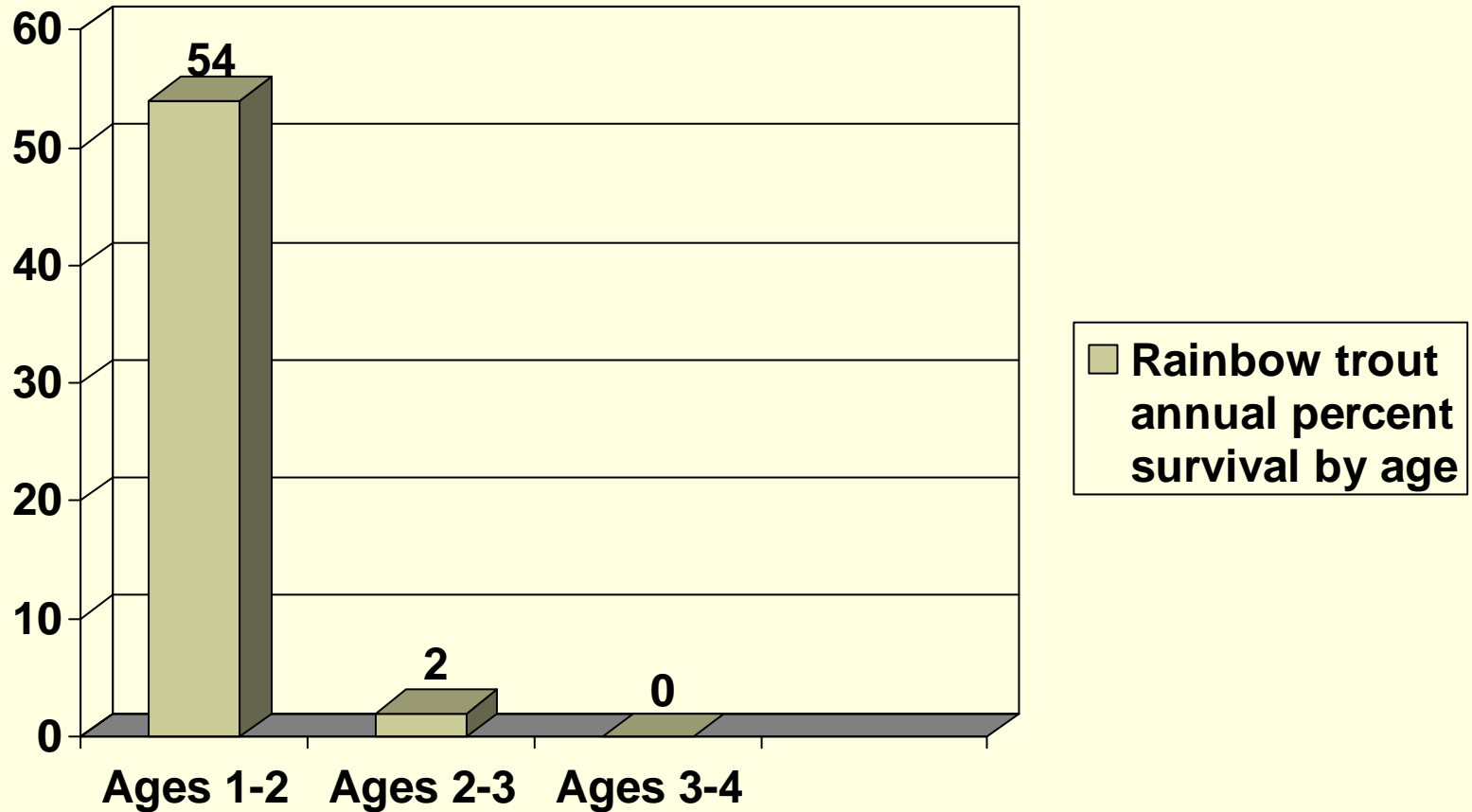
Trophy Waters Regulations 1965-2008

Year	Tackle	Size Limits	Creel Limits	Season
1965-1967	Artificial lures or flies only	12" all trout	2 trout per day	Last Saturday in April to September 30
1968-1970	Artificial lures or flies only	15" all trout	2 trout per day	Last Saturday in April to October 10
1971-1972	Artificial lures or flies only	15" all trout	2 trout per day	Last Saturday in April to October 31
1973	Artificial flies only	18" all trout	2 trout per day	Last Saturday in April to October 31
1974-1975	Artificial flies only	18" brown and rainbow trout; 12" brook trout	2 trout per day	Last Saturday in April to October 31
1976-1978	Artificial lures or flies only	15" brown and rainbow trout; 12" brook trout	2 trout per day	Last Saturday in April to September 30
1979-2008	Artificial lures or flies only	15" brown 12" rainbow and brook trout	2 trout per day	Last Saturday in April to September 30

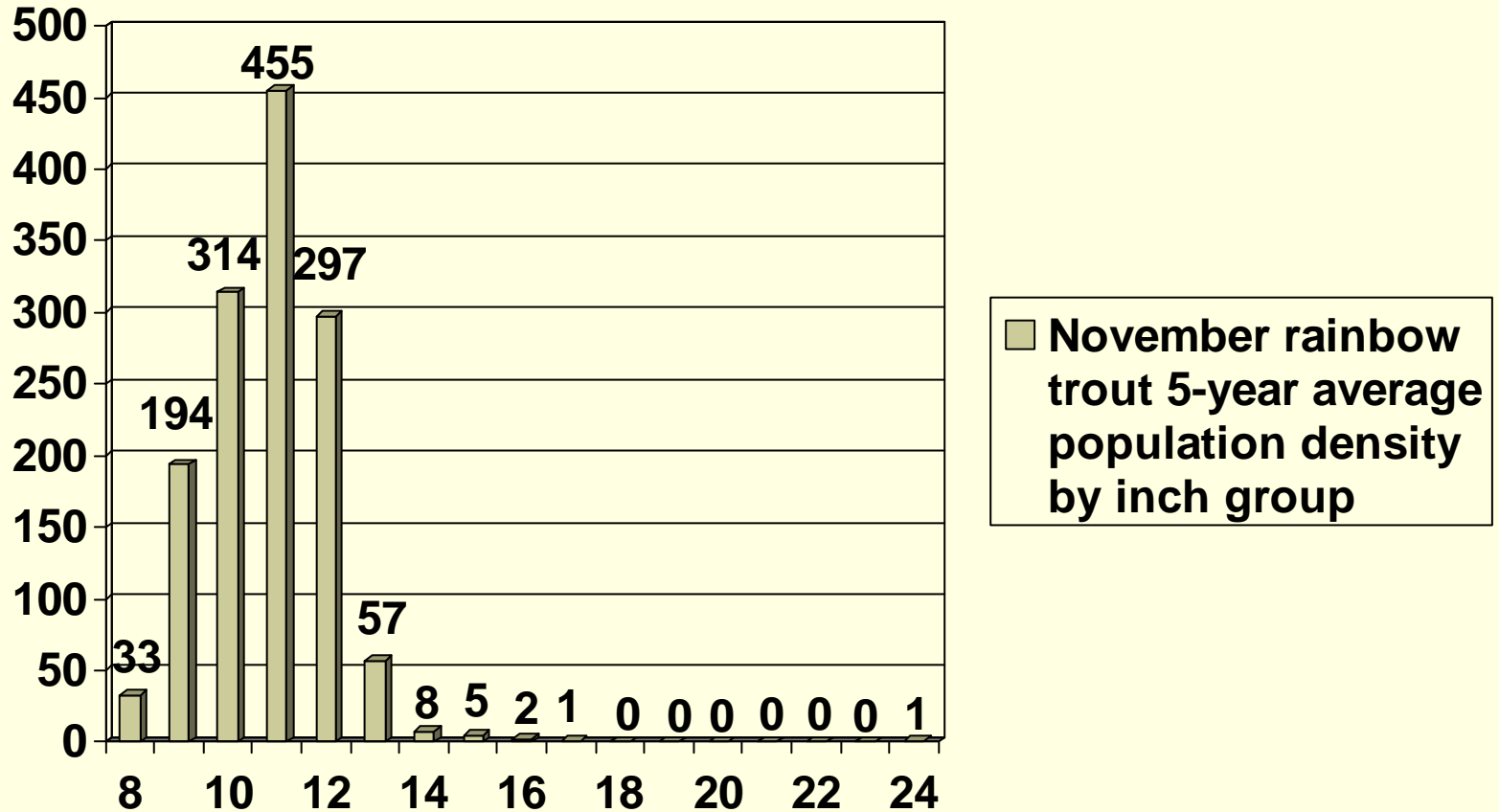
Trophy Waters Present

- The most significant influence on the Trophy Waters is the Mio Dam and impoundment
- Thermal stress caused by warm water discharge reduces natural reproduction and often exceeds the upper range of tolerable water temperatures
- Yearly plants of nearly 100,000 combined brown and rainbow trout are necessary to sustain a viable cold-water fishery
- Rainbow trout survival rates are extremely low with few planted fish surviving beyond 1-2 years and few reaching sizes larger than 12"

Estimated rainbow trout survivorship: 3-year average 1999-2001



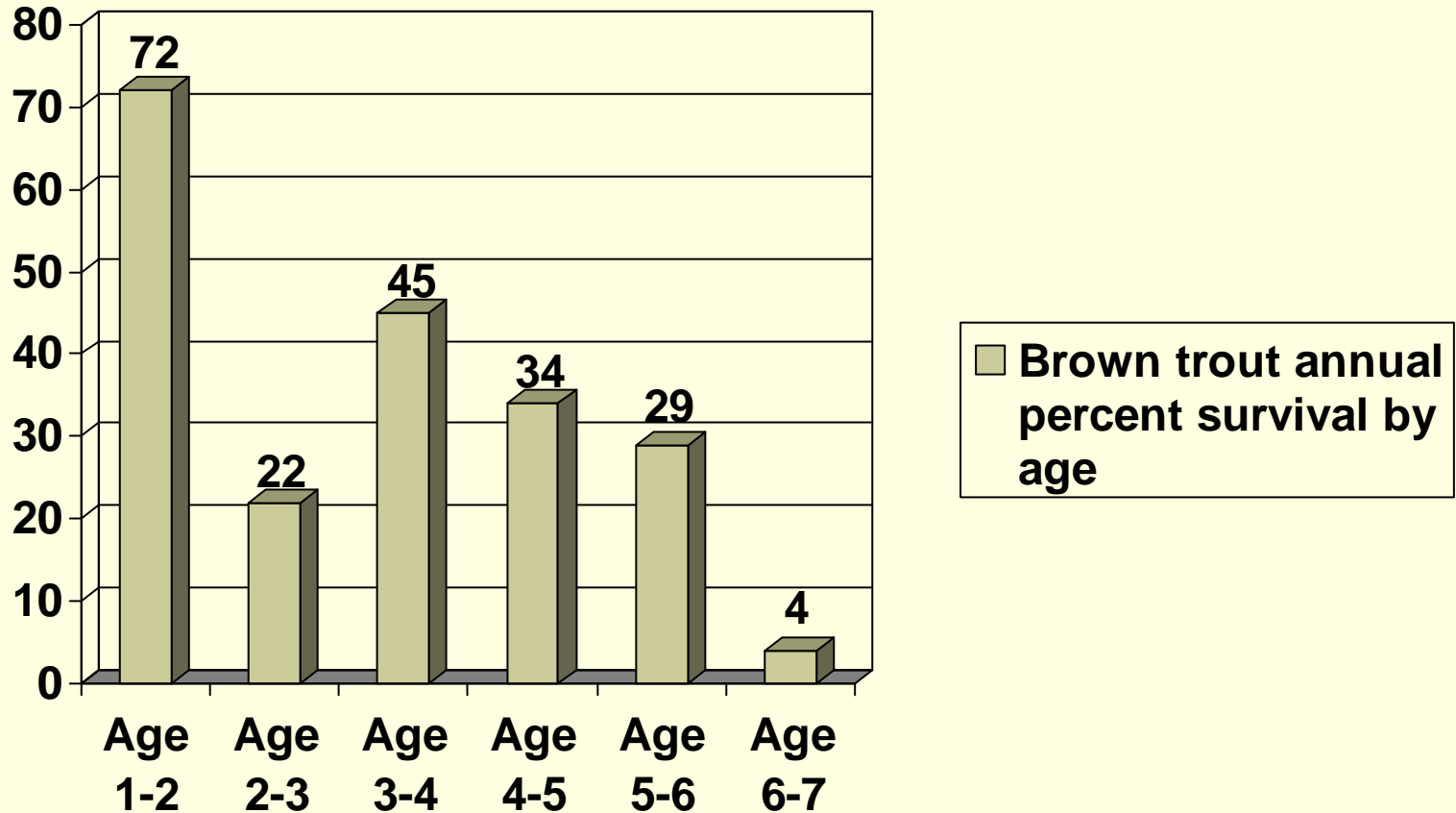
Rainbow Trout Population Density: Mio to Meadow Springs (4.75 miles)



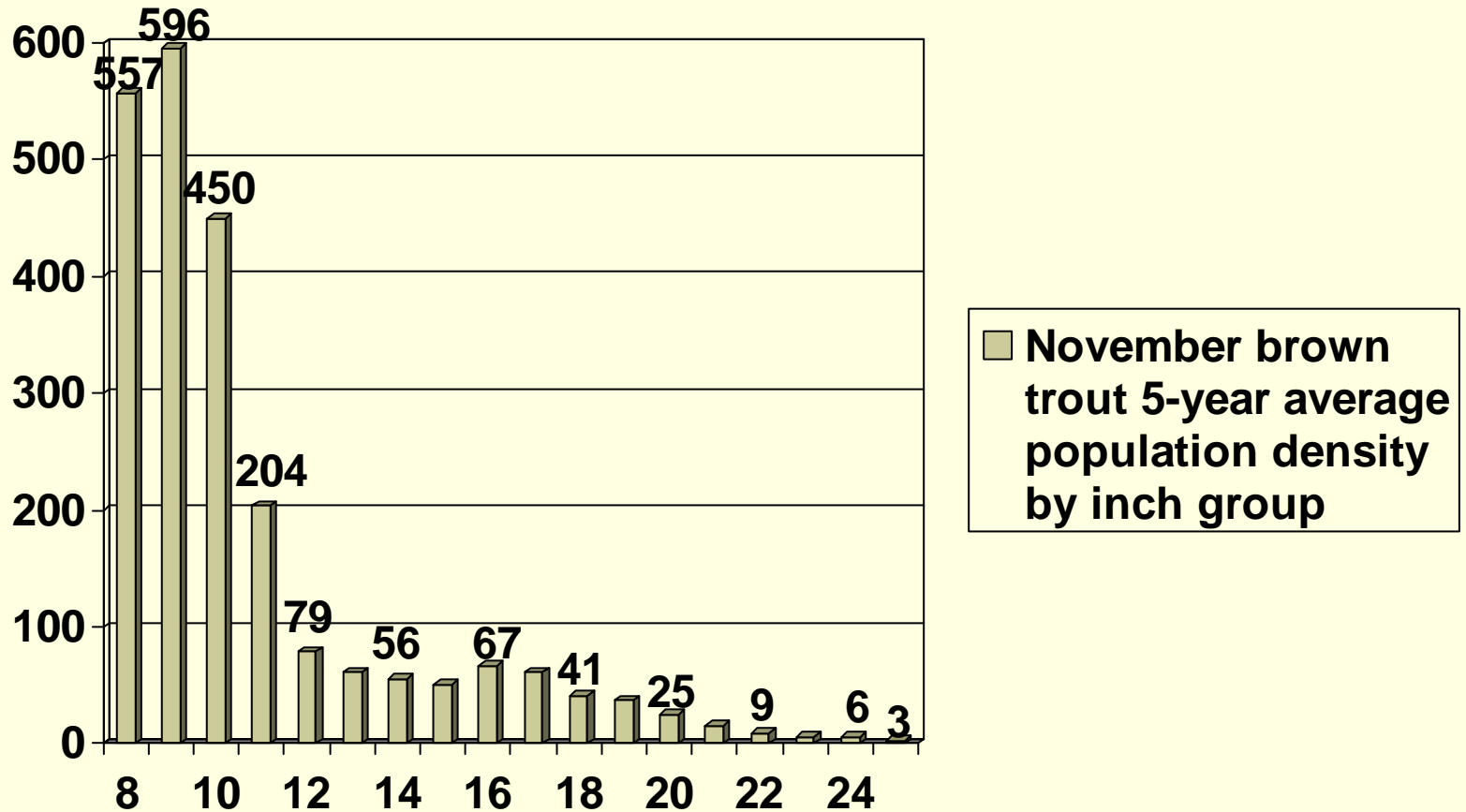
Trophy Water brown trout status

- Brown trout survival rates are significantly higher and 6-7 year age classes are common
- In addition, population densities indicate relatively high numbers of 20+ inch fish surviving
- Due to these higher rates of survival, population densities, and above average growth rates, the Trophy Waters have received “nation-wide acclaim for trophy size brown trout” (Sendek and Nuhfer, 2007)

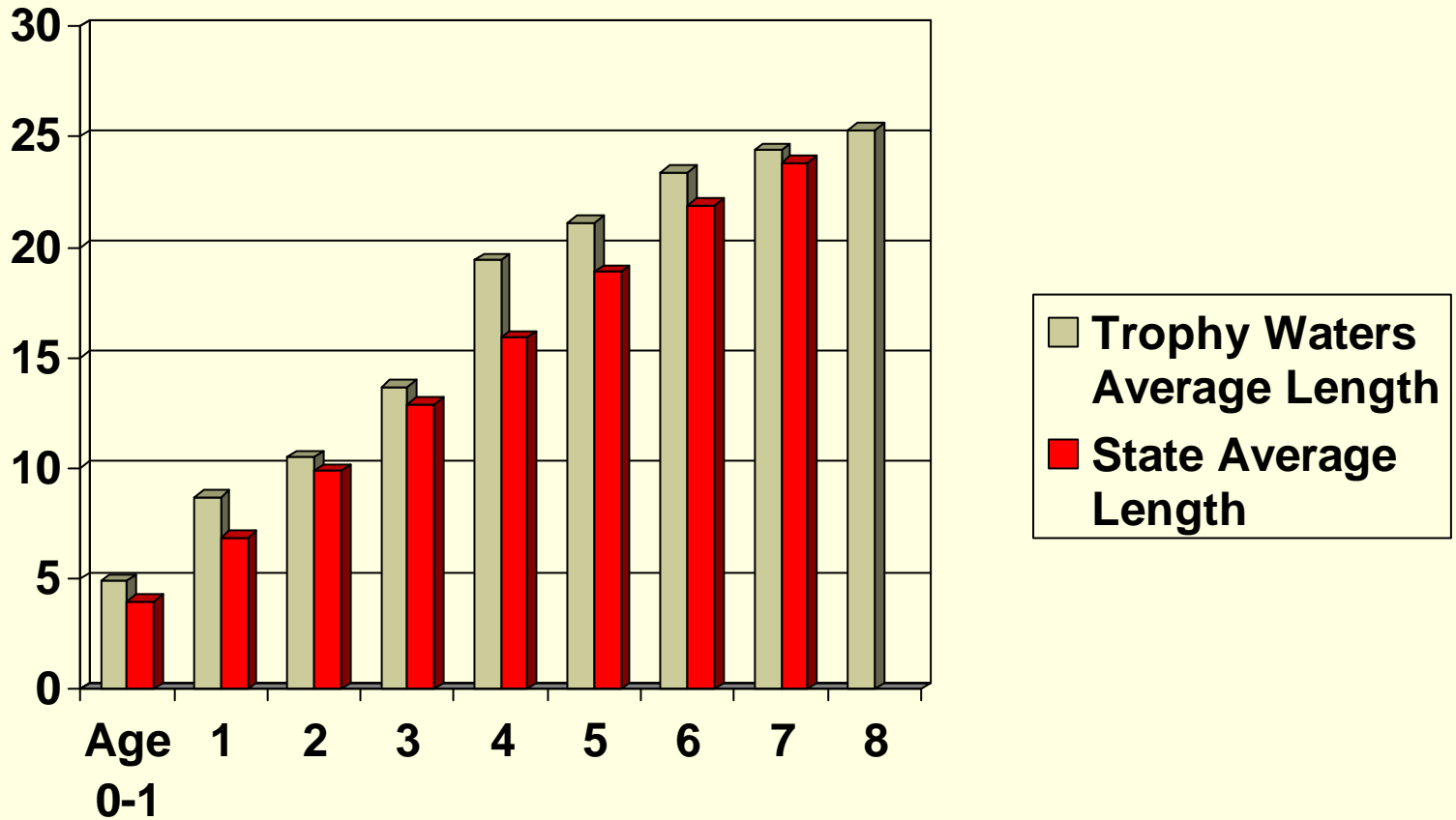
Estimated brown trout survivorship: 3-year average 1999-2001



Brown Trout Population Density: Mio to Meadow Springs (4.75 miles)



Brown trout growth rates: Age group vs. inches of length



Trophy Waters Summary

- Rainbow trout plants provide a high-catch rate fishery that many anglers enjoy but the population is not sustaining and natural mortality is extremely high
- Brown trout have much better long-term survival rates, grow faster than the state average, and population sizes provide the opportunity to fish for trophy-class trout

Trophy Waters Future

- The DNR would like to have a new set of regulations governing the Trophy Waters in place for the 2009-2010 fishing season
- Public meetings have been held with the desire to solicit input concerning future regulations
- The DNR supports the idea of fitting the Trophy Waters into one of the existing regulation categories- preferably category 5, 6, or 7

Regulation Options

Category	Tackle	Size Limits	Possession	Season
5	Artificial flies	15" minimum rainbows and browns	2 trout/day	Last Saturday in April-Sept. 30 browns Rainbows all year
6	Artificial flies and lures	12" minimum rainbows and browns	2 trout/day	Last Saturday in April-Sept. 30 browns Rainbows all year
7	Artificial flies	No kill for rainbow and browns	None	Open all year

Analysis of Type 5,6, & 7 Regulations

■ Type 5

- Opportunity to fish for trophy trout with artificial lures will be lost
- Minimum size limit (15") for rainbow trout would preclude harvest due to low survivorship
- Recreational opportunities for anglers may be lost due to use of artificial flies only and rainbow size limits
- Size limits remain 15" for brown trout; in line with current regulations

Analysis: Type 6

■ Type 6

- Lowering of size limit for brown trout from 15" to 12" may cause a predicted 4-13% lower number of brown trout caught over 12" and a 7-23% drop in brown trout caught over 15" dependent upon release rates
- Greater harvest opportunities for rainbow trout than Type 5 regulations but still limited due to low survivorship of planted rainbows
- Inclusion of artificial lures may increase angling opportunities compared to Type 5

Analysis: Type 7

- Type 7
 - Opportunity to fish with for trophy trout with artificial lures will be lost resulting in fewer recreational opportunities
 - Predicted angler catches of brown trout over 15" would increase about 25% compared to catches under Type 5 regulations and about 14% compared to Type 6 regulations
 - Abundance and size of rainbow trout populations would not change significantly due to high natural mortality rates compared to Type 5 or Type 6 regulations

Mershon Proposal

- The Mershon Chapter believes that none of the three regulation types offered by the DNR provide the best solution for management of the Trophy Waters
- Therefore, we propose the following alternative:
 - 1. No Kill regulations for all brown trout
 - Total protection of brown trout would maximize world-class trophy trout fishery potential
 - 2. Extended season open year
 - Aligned with DNR proposal
 - 3. Regulations apply from Mio Dam to 4001 Bridge
 - Creates one set of consistent regulations

Mershon Proposal

- Proposal continued:
 - 4. Harvest of rainbow trout with a 10” minimum size limit and a possession limit of 2 per day
 - High mortality of rainbows results in a very small percentage of fish surviving past 2-3 years of age or beyond 12” in length; angler harvest has little to no impact on the population and provides for human utilization of the resource
 - 5. Artificial flies and lures only
 - Provides greater recreational opportunity

Trophy Waters Future

- The Mershon chapter position is aligned with a proposal put forth by Dr. Bryan Burroughs during the March 5 public input meeting in Mio, MI and was supported by the vast majority in attendance at two public input meetings
- The brown trout no kill provision is also supported by advocacy groups such as Anglers of the Au Sable and the Au Sable Big Water Protection Association
- It is our hope that the Mershon Chapter's position will be adopted by the State council and become an official MCTU policy position.

Trophy Waters Future

- It is also hoped that with MCTU support, we can enlist the support of all state chapters in an effort to lobby the DNR and the Natural Resource Council to strongly consider adopting the regulation changes we propose.
- We believe our proposal represents a realistic solution that recognizes the biological potential and limitations of the trout populations as well as the social aspects and economic opportunities the fishery provides in this section of the Au Sable River.

- **References:**
 - Sendek, Steven P. and Andrew J. Nuhfer. 2007. AuSable River, Mio Dam to Alcona Pond. MDNR Fisheries Division "Status of Fishery Resource Report 22.

 - Au Sable River Natural River Plan. 1987. Michigan Department of Natural Resources, Fisheries Division.