

This document is a response to the topics most commonly expressed in public comments received by MN DNR between June 1 and November 2, 2015, regarding the northern pike (pike) zone proposal.

Comments were collected from the following sources:

- Online comments submitted between June 1 November 2, 2015
- Emails and letters received between June 1 November 2, 2015
- Public meetings (11) held between August 24 September 23, 2015

DNR staff completed a review of all comments received (approximately 675 total). These comments, along with data from statistically representative surveys of northern pike anglers and spearers and feedback from citizens on DNR's Esocid (Pike and Muskellunge) workgroup, were used to refine a proposal for northern pike management in Minnesota.

We are unable to provide individual responses to each comment, but will provide a brief summary of, and response to, the topics most commonly expressed in the comments we received. Common themes are summarized under headings, followed by a brief response from DNR for each topic.

## **NORTHEAST ZONE**

## **Comment:**

A majority of the comments submitted in reference to this zone support the DNR's objective of maintaining harvest opportunity while protecting large pike where they currently exist. Many comments also expressed a desire to have an opportunity to harvest trophy pike in this zone. Suggestions for trophy harvest included implementing a protected slot limit (PSL) of 30-40" or 30-44", implementing "earn a trophy" regulations, providing trophy tags or punch-holes on licenses.

*DNR response:* Based on public comment and information from the University of Minnesota survey of angers and spearers, the proposal for the Northeast Management Zone has been changed to a 30-40 PSL, two fish bag limit with one fish allowed over 40 inches in possession. Although the DNR's initial proposal of a 2 fish limit and maximum size of 30" is the best option for protecting quality large pike in this zone, the 30-40 PSL provides similar amounts of protection while being more favorable to anglers.

Current pike populations in the northeast zone are relatively healthy. These lakes generally have low pike densities and relatively low harvest rates, resulting in balanced populations that include good

numbers of large pike. The DNR's objectives for the northeastern zone regulation are to maintain harvest opportunities while protecting large pike and the quality northern pike fishing that currently exists. Regulations to protect large pike are only effective where large pike are still present. Once quality pike fisheries are gone, they are much more difficult to restore.

## **NORTH-CENTRAL ZONE**

### *Comment:*

The North-Central zone received more comments than either the Northeast or Southern zones. A majority of comments referencing this zone supported the DNR's objective of increasing the number of medium and large pike, reducing the number of small pike, and maintaining or improving harvest opportunities. Some commenters questioned how the proposed regulations will meet the stated objectives. Many commenters asked for the research and rationale behind the proposed regulation of a PSL from 22-26" with a daily bag limit of 10 fish, including two fish over 26". Numerous alternative PSLs were suggested. Many commenters expressed skepticism that anglers will be willing to harvest more small pike, but suggested ways to encourage such harvest.

### **DNR response:**

How proposed regulations meet objectives: The proposed 22-26 inch PSL will increase the number of medium to large pike in a lake by targeting protection where there are significant numbers of fish to protect and where the protection can be most effective. Creel survey data indicates that without protection, pike longer than 22 inches have a high probability of being harvested when caught. Protecting those pike will increase the number and pounds of medium size pike in the lake, which should increase predation on smaller pike by the increased numbers of pike larger than 22". Allowing additional harvest of small pike is included in the regulation to provide increased harvest opportunity. The expanded bag alone is not expected to result in a reduction of small pike in a lake. Maintaining more medium to large pike is intended to eventually reduce the number of small pike by additional predation. Eventually, harvest opportunity will also improve for preferred size pike over 26 inches as fish grow out of the protected slot. In some lakes, high abundance of northern pike may be having a negative impact on yellow perch and walleye populations, so reducing the abundance of small pike could benefit the fish community.

**Research behind proposed regulations**: Since the 1950's, DNR fish surveys have shown that pike populations in many lakes have increased in number while average size has declined, particularly in the north central part of the state. The North Central zone regulation was developed using population assessment and creel survey data to model pike populations under various regulations. Regulations similar to the proposed regulation were implemented on a couple of northern Minnesota lakes in the late 1980's and early 1990's. For example, Medicine Lake in Beltrami County has seen significant

increases in medium and large size pike, and decreases in small pike with a slot limit that initially began at 22 to 30 inches and is now at 24 to 36 inches.

Alternative protected slot limits (PSLs): The proposed regulation for the North-central zone has the bottom of the slot limit placed at 22 inches because there are still fish to protect at that length. In many lakes, there are few fish longer than 22 inches remaining. The top of the slot limit was selected for several reasons. In previous statewide surveys, pike anglers stated that their preferred length to harvest was 27 inches. The 22 to 26 inch protected slot limit is designed to increase the average size of pike in a lake while creating a more balanced pike population, and allowing anglers to still harvest preferred sizes. This slot limit is not designed to create trophy pike fisheries. Lakes that are biologically and socially compatible with trophy pike management would need special regulations applied to achieve that goal.

**Harvesting small pike**: Many pike anglers may choose to release small pike even though they can legally harvest them. This is unlikely to have any effect on the success of the proposed North Central pike regulation. The main driver of the North Central regulation is the protected slot limit. The increased bag limit for small pike is being introduced because there is a surplus of these small pike in many waters and if people want to harvest them there will be no impact to the population. An expanded bag limit of these small fish may be an incentive for those that wish to pickle the fish or prepare them in other ways.

### **SOUTHERN ZONE**

### Comment:

A majority of the comments submitted in reference to this zone support the DNR's objective of increasing pike abundance and improving the size of harvested fish. Some commenters expressed concern about the proposed regulation (minimum size limit of 24", with a daily bag limit of two fish over 24"), suggesting alternate regulations that would protect medium or large size fish while allowing some harvest of fish under 24". Several commenters identified specific lakes that they believe would be a better fit in the North-Central zone, or should receive special regulations.

### **DNR response:**

The objectives of the proposed regulation in the southern zone (a minimum size limit of 24 inches and a daily bag limit of 2 pike) are to increase pike abundance and improve the size of harvested pike. Northern pike populations in the southern zone are characterized as low density populations that have poor natural reproduction and very fast growth. Fishing pressure typically is high on these southern populations which results in a high harvest rate relative to northern pike density. MNDNR researchers simulated the effect of various regulations on northern pike abundance and size and concluded that the proposed regulation (minimum of 24 inches, limit of 2) was the most effective at increasing northern pike abundance and size of harvested pike and would likely be socially acceptable.

Alternate regulations in the southern zone, such as a protected slot to protect medium or large sized pike, would be counterproductive to southern zone objectives. The transition area around the boundary between the north-central zone and the southern zone includes a number of lakes that may fit better in one zone or the other depending on northern pike population characteristics. The original boundary description was "from the North Dakota Border-Highway 55 east, south on MN Highway 4 to Cosmos, east on MN Highway 7 past Hutchinson, south on Highway 22 to Glencoe, east on Highway 212 to Shakopee, Minnesota/Mississippi Rivers to the Wisconsin border". After several public input meetings and careful analysis of fish population data for lakes along this boundary, the boundary between the north-central and southern zone was adjusted. The new boundary is now "From the South Dakota Border—State Highway 7 at Ortonville east past Hutchinson, south on State Highway 22 to Glencoe, east on US Highway 212 to Chaska, south on State Highway 41 to the Minnesota River to the Mississippi River to the Wisconsin border."

## **SPEARING**

## Comment:

Many comments indicated that the proposed regulations pose challenges to darkhouse spearers, who may have difficulty judging the size of fish before harvest. The comments received demonstrated broad support for providing alternative regulations for spearers; no one particular alternative was favored. Some comments indicated a perception that spearing is a major factor in the decline of large pike in Minnesota.

### **DNR response:**

Broad public support was received during the comment period to provide spearers with alternative regulations that would make it easier to comply with regulations. The proposal for the North Central Zone is to allow harvest by spearers of one northern pike within the 22-26 inch slot and one fish over 26 inches, or two fish over 26 inches in a 10 fish limit. Spearers in the North East Zone would be allowed to take 1 fish over 26 inches as part of a 2 fish bag. While these regulations for spearers would differ from angling regulations, analysis indicates the objectives of the proposed regulations would still be achieved through increased protection of medium to large size pike. These alternatives were created because DNR acknowledges that length-based regulations make it more difficult for spearers to practice their sport due to the difficulty of determining the size of fish under water. Under the statewide regulations but with special length-based regulations on some individual lakes, spearers still had other opportunities in nearby lakes without length restrictions. Under the zone concept as proposed here, this opportunity would not be available, and therefore alternative regulations for spearers are justified.

Several comments were also received expressing concern for the impacts of spearing on large pike. Over the decades angling and spearing have both been factors in the decline in abundance of large pike. While creel information may indicate that spearing can be more effective at harvesting large pike,

currently there are approximately twenty (20) times more anglers than spearers in Minnesota. The regulations for each zone are designed to maintain or improve the size structure of pike populations but are not for the purpose of producing "trophy" pike. With the newly proposed regulations we hope to get the desired results of improved pike fishing while continuing to provide recreational and harvest opportunities for anglers and spearers. Management for "trophy" northern pike is not an objective with this zone proposal, and instead will be accomplished on select individual waters utilizing specialized regulations where appropriate.

## **INDIVIDUAL LAKE MANAGEMENT AND SPECIAL REGULATIONS**

## *Comment summary:*

Some comments indicated a preference for individual lake management, rather than zone regulations. Some commenters identified specific lakes as a poor fit for the zone regulations, suggesting these lakes receive special regulations or maintain the current statewide regulation. Many commenters asked which lakes will retain special regulations, and how DNR will make decisions regarding implementation or removal of special regulations.

**DNR response:** The DNR recognizes that some lakes will not fit the proposed zone regulations; however, the majority of lakes will benefit from the proposed regulation for their respective zone, and creating different regulations or even adopting the proposed regulations for individual lakes would result in greater regulation complexity.

Adjustments to the boundary between the North-Central and South zones have addressed most of the major concerns. There will probably still be a few lakes within each zone that might benefit from an alternative regulation. These "outliers" would need to be addressed in the future through the Special Regulation process.

There are currently 100 lakes managed with special regulations for Northern Pike. Some of those lakes could potentially be dropped and rolled into their respective Zone regulation.

### **OTHER**

There were a variety of other questions brought forward in the comments (e.g. evaluation plan, when will results be realized, hooking mortality, winterkill lakes, lakes with no public access, and special regulations.

## DNR response:

**Evaluation**: Evaluation of the regulation will be through standard lake surveys, creel surveys and perhaps angler attitude surveys. If we find that the regulations are not meeting the objectives it may be necessary to revisit the regulations in the future.

**Results**: The timeline to see results will vary across Zones. Changes in the southern zone may be realized very quickly -- perhaps in 2 years -- because pike in this area tend to grow fast. In the north-central zone we expect it may take 5-10 years to see changes in the abundance of medium sized fish. Reductions in the abundance of small northern pike may take longer. The objective in the Northeast zone is to maintain the quality that is already present.

**Hooking mortality**: Hooking mortality on northern pike is expected to be minimal. Recent research from Shingobee Lake in Cass County has documented that northern pike are capable of surviving multiple catch and release events; on average each pike was caught three times since being tagged and some individuals were reported to have been caught more than 10 times!

**Winterkill**: Frequency and severity of winterkill is difficult to predict, since it is influenced by a number of different factors, including: ice-up and ice-out dates, timing and depth of snow cover, depth of water, amount of submergent vegetation and algae available for decomposition, and the number and size of refuge areas. Northern Pike are well adapted to survive many winterkill situations and populations usually recover within a few years of winterkill events. In cases where lakes may have sustained significant winterkill, stocking Northern Pike is sometimes used to develop the managed game fishery. Therefore, lakes that periodically experience winterkill will be managed with the same regulation as those that do not experience winterkill.

**Lakes without public access**: The proposed Northern Pike zone regulation will apply to all lakes, including those without public access, similar to all other fishing regulations. Rare exemptions for things like private aquaculture operations will be permitted on a case by case basis.

**Special regulations**: State-wide regulations (limits and seasons) for all other game-fish will not change because of the proposed Northern Pike regulations. Lakes with existing special or experimental regulations, for various species, will continue until final evaluations can be completed as described in individual lake management plans. Those special and experimental regulations help improve fishing quality, protect unique fisheries, provide additional fishing opportunities, or protect threatened species.