Big Fish Lake Regulation Review Meeting

September 26, 2018

Collegeville Township Hall, Cold Spring, MN 6-8 pm

The DNR is proposing to either extend, modify, or drop the existing experimental Northern Pike regulations on Big Fish Lake. The current regulation is a 24-36 inch protected slot limit (PSL) for Northern Pike with a possession limit of three. All Northern Pike within the 24”-36” slot must be immediately released, with one over 36” allowed in possession.

Anglers!!! Please help us by indicating your preference.

\_\_\_\_\_\_ Convert existing Experimental regulation into a Special regulation.

\_\_\_\_\_\_ Revert current Experimental Northern Pike regulation, back to the current statewide regulation.

\_\_\_\_\_\_ Other (write in comments): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Optional Survey Questions**:

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Address \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Telephone \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Lakeshore resident? \_\_\_\_\_\_

Please leave this survey form at the meeting or mail to: DNR Fisheries, 1035 South Benton Drive, Sauk Rapids, MN 56379 **by October 12, 2018.** Telephone 320-223-7867

e-mail: joe.stewig@state.mn.us.

Current status of the Northern Pike population

The Northern Pike population in Big Fish Lake has always been high (Figure 1) and the average length has been small (< 19 inches). Research has indicated that the use of protected size limits (PSL) have had success in improving the size structure of Northern Pike in systems that have high numbers of “hammer handle” pike. Since Big Fish Lake fit the criteria for a PSL an experimental 24 – 36 inch protected slot was implemented March 1, 2005. Ice out sampling was conducted in 2005, 2010 and 2015 while gill net surveys were conducted in 2005, 2010, and 2015. Based on spring Ice-out sampling it appears as though the regulation has had little effect on the Northern Pike population (Figure 2). Ice-out survey results show that all size structure indicators (TL, % > 21”, % > 24”, and % > 30”) have decreased. Whereas, the results from the summer gill net and trap net surveys shows minimal improvement in the % > 21”, % > 24”, and % > 30” while the average length has decreased slightly (Figure 3). It appears as though we could probably achieve similar results by reverting to the “new” statewide Northern Pike zone regulations

Figure 1. Historic Northern Pike gill net catches for Big Fish Lake (1980 – 2015)

Figure 2. Length frequency of Northern Pike collected during Ice-Out netting on Big Fish Lake pre- (2005) and post-regulation (2015).

Figure 3. Length frequency of Northern Pike collected during summer gill net and trap net surveys on Big Fish Lake pre- (2005) and post-regulation (2015).