East and West Lake Sylvia Regulation Review Meeting

October 4, 2018

Southside Township Hall, Annandale, MN 6-8 pm

The DNR is proposing to either extend, modify, or drop the existing experimental Northern Pike regulations on East and West Lake Sylvia. 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): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**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 19, 2018.** Telephone 320-223-7867

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

Current status of the Northern Pike population

The Northern Pike population in East and West Sylvia has been near or above the range of expected values for their respective lake class dating back to 1981(Figure 1). Coinciding with these higher catch rates, the average size of Northern Pike has been small (< 20 inches and < 2 lbs. (Table 1). Research has indicated that the use of protected size limits (PSLs) have had success in improving the size structure of Northern Pike in systems that have high numbers of “hammer handle” pike. Since East and West Lake Sylvia fit the criteria for a PSL laid out in the Northern Pike toolbox an experimental 24 – 36 inch protected slot limit was implemented March 1, 2009. Pre-regulation data was conducted in 2002-2008 and post-regulation data was collected from 2015 – 2017. Results from these surveys appear to indicate that the 24 – 36 inch PSL has not performed as well as we would have hoped. Summer gill net and spring ice-out survey results show that most size structure indicators (TL, % > 21”, and % > 24”) have decreased, while the % > 30” has increased slightly (Figures 2 and 3). With the implementation of the new Northern Pike Zone regulations on March 1, 2018, it appears that East and West Lake Sylvia are more suited for this new regulation.

Figure 1. Historic Northern Pike gill net catches for East and West Lake Sylvia Lake (combined; 1981 – 2015). Dashed lines are 25th and 75th percentile values for the lake class.

**Pre-Reg** **Post-Reg**

N = 353 N = 1,131

Avg. TL = 21.9" Avg. TL = 19.0"

% >21" = 59 % >21" = 25

% >24" = 23 % >24" = 15

% >30" = 2 % >30" = 4

Figure 2. Length frequency of Northern Pike collected during Ice-Out Assessments on East and West Lake Sylvia (combined) pre- (2002) and post-regulation (2017).

**Pre-Reg**  **Post-Reg**

N = 238 N = 116

Avg.TL = 20.1" Avg.TL = 19.1"

% >21” = 33 % >21” = 30

% >24” = 17 % >24” = 11

% >30” = <1 % > 30” = <1

Figure 3. Length frequency of Northern Pike collected during summer gill net and trap net surveys on East and West Lake Sylvia (combined; pre- (2002-08) and post-regulation (2015)).