

Regulation Proposal Form

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Proposal Title Walleye Regulation for Beaver Dam Lake, Mill Creek, Beaver Creek, and all tributaries to Beaver Dam Lake	
Author Laura Stremick-Thompson	Date 10/21/2011
Location Information:	
Affected water(s) Beaver Dam Lake and its tributaries including Beaver Creek, Mill Creek	
County Dodge	WBIC(s) 835100
Upstream/downstream boundaries, if applicable—Law Enforcement should be consulted Upstream = Fox Lake Dam, downstream = Beaver Dam Dam- Law Enforcement has been consulted and is in agreement.	
Will this regulation affect Ceded Territory water and are there any anticipated impacts to tribal fisheries? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Current Regulation
Fox Lake, Beaver Dam Lake (including Mill Creek from the mouth upstream to the Fox Lake dam, and all portions of Beaver Creek and all other tributaries to Beaver Dam Lake): The minimum length limit on walleye is 18" with a daily bag limit of 3.

Proposed Regulation
Same as current regulation and make it permanent. Current code language =
2. Fox lake, Beaver Dam lake and its tributaries ~~until March 31, 2014~~, and Mill creek ~~until March 31, 2014~~
a. Hook and line.
First Saturday in May to the first Sunday in March
3 in total 18

Management Goal
Summary statement that characterizes the desired fishery (e.g. provide a naturally reproducing harvest-oriented walleye fishery; provide a bass fishery dominated by large adults that maximizes predation on smaller fishes)
Continue to provide larger sized walleye for fishing opportunities and predation on carp and bullhead populations.

Description of the Water(s) and Fishery
Provide a brief description of the water(s), past regulations and other management actions. Summarize all applicable fisheries data, particularly from surveys meeting protocols (Table 1).
A considerable amount of fisheries management time, effort and money has been spent over the years on rehabilitation of Beaver Dam Lake, including two chemical treatments. In order to protect this investment, the Department has conducted a three-tiered approach of mechanical rough fish removal via commercial fishing, stocking of predators and enactment of more restrictive fishing regulations to protect predators. In 2002, the walleye regulation on Beaver Dam Lake changed from a 15-inch minimum length limit and 5-fish daily bag limit to an 18-inch minimum length limit and 3-fish daily bag limit. The regulation went into effect in 2002 with a 2007 sunset clause. A DNR proposal to retain the 18-inch/3-fish regulation and expand it to include all tributaries to Beaver Dam Lake, including Beaver Creek, Mill Creek (from Beaver Dam Lake upstream to the Fox Lake Dam) was submitted to the 2006 Dodge County Conservation Congress Spring Hearings where it was put to public vote and passed by majority vote (64 counties YES, 4 counties NO, 4 counties TIED with Dodge County at 52 YES and 21 NO). The 2006 regulation proposal had a 2014 sunset clause attached to it.

Since the regulation went into effect in 2002, the regulation is maintaining and increasing the density of moderate and large adult walleye, with the majority of walleye shifting closer to 18 inches over time, with multiple year classes contributing to a more stable population and more consistent recruitment of fish into the legal harvestable range. Post regulation change data indicates that the percent of walleye over 18-inches was 7% in 2010 and 4% in 2005 compared to pre regulation change data collected in 1999 where 0.2% were over 18-inches (Figure 1). Proportional Stock Density (PSD) has changed over this time frame from 37 in 1999, 47 in 2005 and 44 in 2010. While suggested PSD for balanced walleye populations range from 30-60 (Anderson and Weithman, 1978), PSDs in the upper end of this range are best suited for meeting the objective of increasing predation on undesirable fish.

Management Objective(s)

a) Goals are general, objectives are specific. Objectives are used to evaluate the effectiveness of your action and determine if you have achieved your goal. Provide a management objective that is specific, measurable, able to be achieved, related to the goal, and has a temporal component (e.g. increase walleye harvest rate to 0.1 fish/hour while maintaining recruitment at or above 10 YOY/mile within 5 years; increase largemouth bass RSD14 to 35 and bluegill RSD8 to 15 within 5 years

The fishery level objective of maintaining and increasing the density of moderate and large adult walleye by shifting the size distribution of the majority of walleye closer to 18 inches over time has been accomplished over the 10-years the 18/3 regulation has been in effect on Beaver Dam Lake (Table 1). Post regulation change data indicates that the percent of walleye over 18-inches was 7% in 2010 and 4% in 2005 compared to pre regulation change data collected in 1999 where 0.2% were over 18-inches (Figure 1). Proportional Stock Density (PSD) has changed over this time frame from 37 in 1999, 47 in 2005 and 44 in 2010. While suggested PSD for balanced walleye populations range from 30-60 (Anderson and Weithman, 1978), PSDs in the upper end of this range are best suited for meeting the objective of increasing predation on undesirable fish.

The ecosystem-level objective of increasing predation on carp and bullhead by fostering a population of larger predators is difficult to prove. However, data suggests that, since the last chemical treatment in 1988, bullhead catch rates have declined while walleye populations have increased (Table 2). Carp population size is also difficult to quantify in this system, however, the lake has become more productive with aquatic vegetation, which is atypical for this system and would not occur if carp abundance was high.

The 18/3 walleye regulation typically has a population level objective of improving reproduction. While this objective was not intended to apply specifically to Beaver Dam Lake, the Beaver Dam Lake Association reports consistently higher numbers of large adult females are available for their egg taking/walleye wagon operation. Thus, the Beaver Dam Lake Association has been/is a proponent of the 18/3 regulation on Beaver Dam Lake.

b) Describe how the management objective and associated target levels for metrics were developed (e.g. lake management plan, stakeholder meeting, comparison to other water(s)).

A management plan for Beaver Dam Lake has been developed through extensive outreach and planning between the Department and the Beaver Dam Lake Citizen Advisory Committee. The management objective for the fisheries management portion of the plan states: Maintain a quality sport fishery by managing for gamefish and predator species while actively controlling rough fish populations. The management actions identified to meet the stated plan objective include: maintaining or increasing predator fish populations, establishing and enforcing appropriate fishing regulations to maintain spawning stock, issuing commercial fishing contracts and investigate methods to encourage the harvest of carp.

Current Problem

Use survey data or provide context for a similar water or group of waters (e.g. lake type, watershed) to demonstrate how the fishery is not meeting the desired management objective. Identify hypothesized problem(s) you hope to address.

As stated, the survey data shows that the desired management objectives are being met on Beaver Dam Lake. Over the past 10-years the public has accepted the regulation as demonstrated by the regulation passing at the 2006 Spring Hearings.

Proposed Regulation Justification

How is the regulation change expected to meet your objective(s)? Demonstrate expected results of the regulation using tools such as modeling, comparisons to other waters, peer-reviewed literature, etc...

The regulation is maintaining and increasing the density of moderate and large adult walleye, with the majority of walleye shifting closer to 18 inches over time, with multiple year classes contributing to a more stable population and more consistent recruitment of fish into the legal harvestable range. Post regulation change data indicates that the percent of walleye over 18-inches was 7% in 2010 and 4% in 2005 compared to pre regulation change data collected in 1999 where 0.2% were over 18-inches (Figure 1). Proportional Stock Density (PSD) has changed over this time frame from 37 in 1999, 47 in 2005 and 44 in 2010. While suggested PSD for balanced walleye populations range from 30-60 (Anderson and Weithman, 1978), PSDs in the upper end of this range are best suited for meeting the objective of increasing predation on undesirable fish. Retaining the regulation will continue the positive progress gained for the fishery of Beaver Dam Lake.

Evaluation Plan

Provide a suggested plan and timeline for evaluating whether the objectives are met in response to the regulation change. Indicate potential courses of action if objectives are not being met. If proposed regulation is not part of the "toolbox" (Table 2) the evaluation plan needs to be additionally detailed with an explanation of how the costs of evaluation will be covered.

Pre and post regulation walleye population data on Beaver Dam Lake has been collected according to the Department's lakes monitoring protocol. The walleye population will continue to be monitored according to the established lakes monitoring schedule and protocol.

Previous Action

Include details on previous regulation proposals that were intended to address the current problem, if applicable.

In 2002, the walleye regulation on Beaver Dam Lake changed from a 15-inch minimum length limit and 5-fish daily bag limit to an 18-inch minimum length limit and 3-fish daily bag limit. The regulation went into effect in 2002 with a 2007 sunset clause. In 2006, a DNR proposal to retain the 18-inch/3-fish regulation and expand it to include all tributaries to Beaver Dam Lake, including Beaver Creek, Mill Creek (from Beaver Dam Lake upstream to the Fox Lake Dam) was submitted to the Dodge County Conservation Congress Spring Hearings where it was put to public vote and passed by majority vote. The 2006 regulation proposal had a 2014 sunset clause attached to it.

Public Participation in Developing Proposed Regulation

Was input solicited from stakeholders when developing the proposed regulation change? Include documented comments from affected user groups (positive and negative), contacts made with local Conservation Congress Representatives, lake associations, angler groups, etc...

The Department provided public forums and meetings with affected lake groups and users to discuss retaining and expanding the regulation prior the Spring Hearing vote in 2006. At that time, public presentations were made by DNR fisheries staff to the Beaver Dam Lake Improvement Association, the Dodge County Conservation Congress Delegates, angling groups and the Conservation Congress District 7 was briefed at this time. The issue also received heavy local media coverage. The idea to expand the regulation to include the tributaries of Beaver Dam Lake was initiated by the Dodge County Conservation Congress Representatives. Department Law Enforcement staff covering Beaver Dam Lake and its tributaries are in support of this regulation and making it permanent. Retaining the 18/3 regulation on Beaver Dam Lake will keep the local regulations consistent, as the main tributary, Mill Creek, connects the lake to upstream Fox Lake which has had an 18/3 walleye regulation since 1996.

A DNR proposal to retain the 18-inch/3-fish regulation and expand it to include all tributaries to Beaver Dam Lake, including Beaver Creek, Mill Creek (from Beaver Dam Lake upstream to the Fox Lake Dam) was submitted to the 2006 Dodge County Conservation Congress Spring Hearings where it was put to public vote and passed by majority vote (64 counties YES, 4 counties NO, 4 counties TIED with Dodge County at 52 YES and 21 NO).

Small Business and Fiscal Effect

Explain who is likely to be economically impacted and in what way. If possible, provide estimates.

This proposal seeks to retain the current regulation which has been in effect on Beaver Dam Lake since 2002 and the tributaries since 2007. As such, no new or additional economic impacts are expected.

Draft Question: for inclusion in Spring Hearing questionnaire

This proposal would (insert proposed regulation): Retain and make permanent the current walleye regulation: Beaver Dam Lake (including Mill Creek from the mouth upstream to the Fox Lake dam, and all portions of Beaver Creek and all other tributaries to Beaver Dam Lake): The minimum length limit on walleye is 18” with a daily bag limit of 3.

This regulation proposal is one tool to help meet the management goal because: It is providing a memorable, harvestable walleye fishery while protecting larger fish that serve as a predator base for rough fish population control.

Do you favor :

Fish Team Supervisor Regulation Proposal Review Checklist

Proposal Title		
Author	Reviewer	Date

Recommended Action by Fish Team Supervisor

Approve Reject

Regional Fish Supervisor Regulation Proposal Review Checklist

Proposal Title		
Author	Reviewer Scot Stewart	Date

Regional Fish Supervisor Reviewer Notes:
Approved: Scot Stewart

Recommended Action by Regional Fish Supervisor

Approve X Reject

Species Team Regulation Proposal Review Checklist

Proposal Title		
Author	Reviewer Walleye Team	Date 12/14/11

Species Team Reviewer Notes:
Beaver Dam Lake- make permanent 18" minimum. Team recommends advancement.

Proposal was deemed complete and well-justified.

Recommended Action by Species Team

Approve x Reject

Table 1

**Walleye Size Distribution
Beaver Dam Lake Spring Fyke Netting
2010, 2005, 1999**

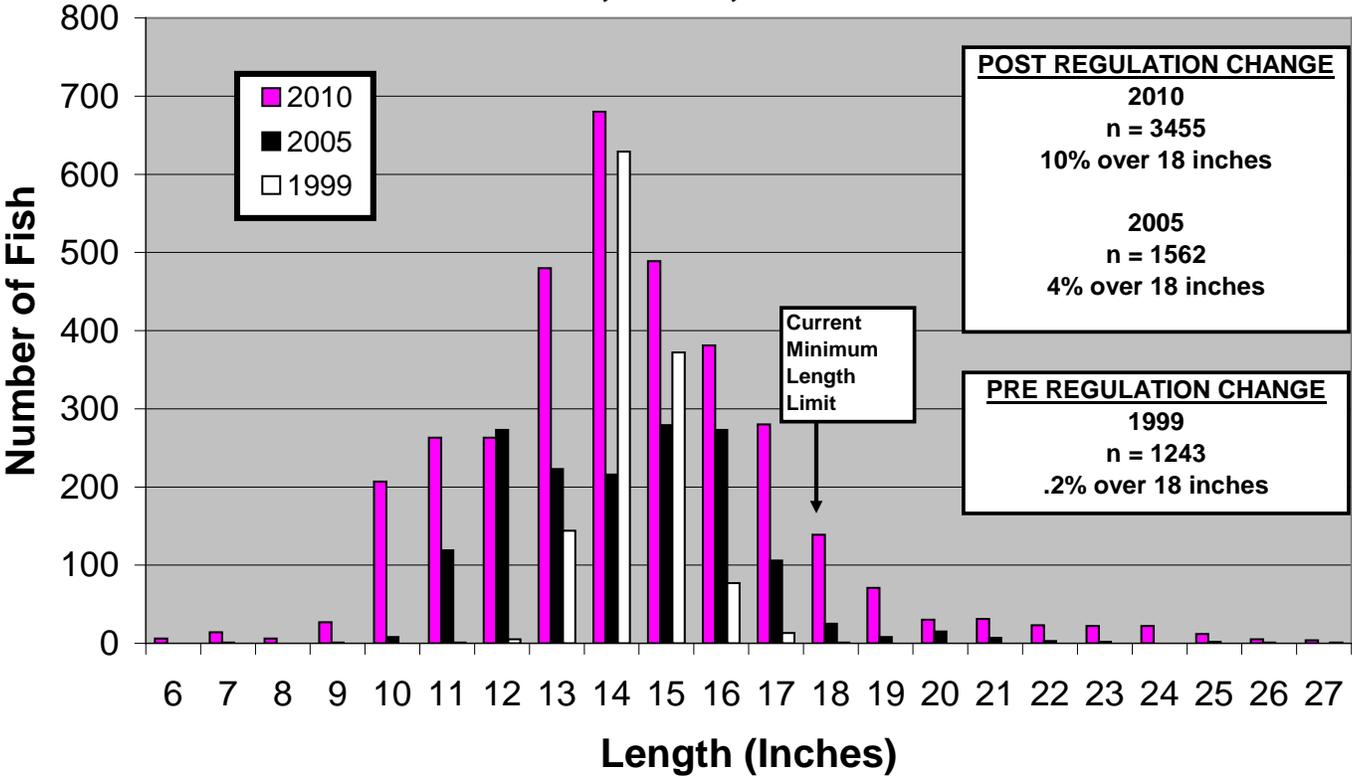


Table 2

**Bullhead and Walleye Catch Rates
Spring Fyke Netting
Beaver Dam Lake**

