Decision and Reasons for the Decision

Background: The purpose for this action (periodic winter drawdowns and tree drops) is to meet the goals of the 2004 Chequamegon-Nicolet National Forests Land and Resource Management Plan (Forest Plan). The need for this initiative is to improve the aquatic habitat and ecological health of Day Lake. Recent monitoring surveys have indicated that Day Lake has poor fish growth and population size structure. To meet the purpose and need, periodic drawdowns will be used to reduce the relatively large amounts of aquatic vegetation in Day Lake. This will reduce the amount of dead and dying vegetation over winter (improving dissolved oxygen levels), reduce hiding cover for the over-abundant panfish (reducing numbers but ultimately improving growth), and improve feeding and spawning conditions for predator fish (improving growth and size structure). Tree drops will be used to add woody structure in appropriate areas of Day Lake, which will improve spawning and foraging habitat for panfish and bass. The environmental assessment (EA) documents the analysis of two alternatives to meet this need.

Decision: Based upon my review of the alternatives, I have decided to implement Alternative 1 which includes the use of periodic winter drawdowns ranging from five to eight feet below normal pool elevation, and installation of tree drops. The need for drawdowns will be determined annually based on summer vegetation surveys, the previous winters DO (dissolved oxygen) level, current year weather conditions, and current fish population structure. Drawdowns will commence about mid-September by opening the gate valve and/or removing stop logs at the dam. The water will be drawn down so that weed beds will be exposed to freezing, snowfree conditions in late fall. The water level will be restored beginning around early March, in order to reach full pool conditions by opening fishing weekend in early May. This decision will permit drawdowns as needed, for up to ten years, subject to yearly review for changed conditions. In addition, woody structure will be added to certain shoreline areas of Day Lake by the felling of live trees, and cabling them in place to prevent movement by ice or wave action. Locations for tree drops will be selected based on water depth, substrate, availability of preferred tree species, and existing woody structure. Approximately 30-40 individual trees or clumps of trees will be used.

When compared to the no action alternative this alternative will more fully meet the purpose and need of improving the aquatic habitat and overall ecological health of Day Lake. Alternative 2 (No Action) would not meet the purpose and need, nor the goals of the Forest Plan. Alternative 2 would likely result in periodic winters of very low DO, continued overpopulation of panfish, and poor population growth of musky. Day Lake is known to be a popular fishery, especially for largemouth bass and musky. I feel that these actions will improve the overall quality of the fishery, and therefore maintain or improve the recreational use of Day Lake.

I realize that there are some uncertainties in predicting effects when implementing a drawdown for the first time in a water body such as Day Lake. To compensate for these uncertainties, the first drawdown will be to a minimum level necessary to meet the objectives (Day Lake Drawdown Project Environmental Assessment [EA], p. 2-3). Environmental conditions will be monitored regularly during and after the drawdown and subsequent drawdowns. For example, overwinter DO will be measured during the drawdown, and monitoring will be continued yearly afterwards. Wildlife use of Day Lake will be monitored during and after drawdowns, including loon use and nesting, eagle occupancy, and any future use by trumpeter swan and black tern. Periodic monitoring of the fishery will continue and the results will be used in the recommendation for any future drawdowns. Should the abundance of any fish species drop too far below the desired objective as to jeopardize its status in the lake, supplemental stocking may be used to enhance the populations.
Other Alternatives Considered: In addition to the selected alternative, I considered one other alternative. A comparison of these alternatives can be found in the EA on page 6.

Alternative 1 (Proposed Action)

Alternative 2 (No Action)

Under the No Action alternative, current management plans would continue to guide management of the project area.

Public Involvement

The need for this action arose several years ago during discussions between National Forest and Wisconsin Department of Natural Resources staff, although as early as 1968 the concept of management by drawdowns was included in the Day Lake Wildlife Management Plan. The proposal for this action was listed in the Schedule of Proposed Actions on April 1, 2009. Tribal and public contacts were made through initial scoping on February 17, 2009. On March 24, 2009 an open house was held at the Community Center in Clam Lake. As a result, the Forest Service received 21 responses from individuals and organizations providing comments and concerns.

Using the comments from initial scoping, the interdisciplinary team identified several issues regarding the effects of the proposed action. Main issues of concern included impacts of drawdowns on fish populations and productivity; and impacts of drawdowns to sensitive species (see EA pages 4 and 5). To address these concerns, the Forest Service created the alternatives described above.

The proposal, alternatives, issues and important effects were developed and summarized. This summary was sent out to interested parties (those responding to initial scoping) in the form of a draft Environmental Assessment for 30-day notice and comment. A legal notice regarding the comment period was published in the Ashland Daily Press, Ashland, WI. Four responses were received. A summary of individual comments and how they are addressed is included here:

A five to eight foot drawdown seems excessive; two and a half feet would be better.

- Early in the project design phase, the idea of a smaller drawdown was discussed; it was not brought forward as an alternative however because it would not meet the purpose and need of the project.
- Much of the weed growth occurs in water deeper than 2.5 feet, therefore a drawdown of that amount would not have the desired effects.

Responder would support removal of 25% of musky.

- Actual removal of musky is outside of the purpose and need of the project. The project is focusing on improvement of habitat conditions in the lake, with resulting improvements expected in fish population growth and size structure. The EA discussed the possible reduction of the musky population due to being concentrated in smaller pools during drawdown (with potential for cannibalism) – EA, p. 12.

Leave the lake alone; let nature take its course.

- This comment was addressed by the inclusion of Alternative 2, No Action.

The drawdown won’t change the weed situation; they will come back.

- The EA recognized that the effects of a drawdown on weeds will be temporary, lasting up to several years; therefore periodic drawdowns will be necessary for continued benefits – EA, p. 10-11.

Promote Day Lake as a fishery, not a destination for jet skiers and water skiers.

- Nothing in the proposed action is meant to encourage additional motorized use; rather, the primary purpose of the project is to improve habitat and ecological health – EA, p. 2-3.

Bass will be trapped in the back bays during drawdown and die.

- This concern was brought forward during initial scoping and was subsequently addressed in the EA effects analysis, through consultation with Thomas Sommerfeldt, WDNR fisheries biologist – EA, p. 13.
In a dry spring the lake might not fill adequately by fishing season; would the lake have to be closed for the year?

A detailed analysis of refill rates was completed by the Forest hydrologist, based on average flows (available in Project Record). It is possible that in a very dry spring the lake wouldn’t be completely filled by opening fishing weekend. However, there would not be any plans to close the lake or fishing season based on lower than expected levels.

Loon nests could be flooded by rising water in the spring.

This was analyzed but not determined to be a concern due to timing and location of loon nesting – EA, p. 18.

There could be effects downstream in Clam Lake by higher flows during drawdown, and no flow during refill.

As stated above, a flow analysis was completed as part of the project record. Flows during a drawdown would not be much different than natural periods of high flow. During refill, water would never be completely cut off at the dam; the flow analysis assumed the passing of 25% of flow even during refill. As a mitigation, any period of drawdown would be coordinated with the Wisconsin Department of Transportation to avoid any conflict with their proposed reconstruction of the Highway 77 bridge and dam downstream of Day Lake – EA, p. 18.

Finding of No Significant Impact

After considering the environmental effects described in the EA, I have determined that these actions will not have a significant effect on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared. I base my finding on the following:

**Context:** the context of this action is limited. The effects are confined to only a portion of a ranger district, and confined to small sites. They will not have widespread impacts at regional, state or national levels.

**Intensity:** The intensity of effects is minor. I have considered the following factors in evaluating the intensity of effects:

1. My finding of no significant environmental effects is not biased by the beneficial effects of the action. I have considered and disclosed adverse impacts individually to determine significance and did not use beneficial impacts to “balance” out the significance of adverse impacts (EA, p. 8-15, 18-19).

2. There will be no significant effects on public health and safety. The only potential impact concerning health and safety is if the project would impact the reconstruction of the Highway 77 bridge and dam downstream of Day Lake. However impacts will be avoided by the timing of drawdowns and by coordination with Wisconsin DOT and their actions (EA, p. 18).

3. There will be no significant effects on unique characteristics of the area such as heritage resources, wetlands, wild and scenic rivers, roadless areas, or ecologically critical areas. There are some heritage resource sites within the project area but impacts will be avoided based on recommendations by the Forest Archeologist (EA, p. 18-19). This action will result in a temporary reduction of wetland plants, based on project design, but will not result in loss of wetlands or permanent changes to wetland vegetation (EA, p. 10-11). There are no designated or candidate Wild and Scenic Rivers within the project area (Forest Plan, page 3-49). There is no Wilderness or designated Roadless Areas within the project area.

4. The effects on the quality of the human environment are not likely to be highly controversial. Internal and public scoping identified no scientific controversy over the impacts of the project, although there was some debate over the perceived need for the actions. The primary concern seemed to be the potential for changes to the recreational fishing experience (EA, p. 5, 18-19).
5. We have considerable experience with the types of activities to be implemented. Overwinter drawdowns have been used in the past in similar flowages in northwest Wisconsin, including Mondeaux flowage on the Park Falls/Medford district. Effects from drawdowns on that waterbody and others in the area have been well documented. Tree drops have also been used many times on this district and elsewhere on the Forest, with beneficial results. The effects of these activities are well known and not significant and do not involve unique or unknown risk.

6. These actions are not likely to establish a precedent for future actions with significant effects, because these actions have occurred frequently in the past. They are not new or unique actions. The scope of my decision is limited to local actions to be undertaken over a specified time period, and these actions do not establish a decision for future actions.

7. The cumulative impacts are not significant. For the issue of potential impacts to the fishery, no cumulative effects were identified, based on a lack of other similar projects within the analysis area in the recent past, present, or foreseeable future that would have additive effects to the direct and indirect effects. For the sensitive species analyzed, there were no adverse direct or indirect effects from project activities, and therefore by definition no cumulative effects were present either.

8. The action will have no significant adverse effect on districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places. Heritage resource sites have been identified adjacent to Day Lake, but they will not be affected by drawdowns. Impacts from tree drops will be avoided based on recommendations by the Forest Archeologist (project record; EA, p. 18-19). The action will not cause loss or destruction of significant scientific, cultural, or historical resources.

9. The action will not adversely affect any endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species act of 1973. No federally listed species are present in the project area or have habitat that would be affected, with the possible exception of the gray wolf. The wolf was not evaluated in detail because its actions and/or habitat needs would be completely unaffected by water level changes in Day Lake and/or tree drops (Project Record, Biological Evaluations for plants and animals).

10. The action will not violate Federal, State, and local laws or requirements for the protection of the environment. See next section of this Decision Notice.

Findings Required by Other Laws and Regulations

NATIONAL FOREST MANAGEMENT ACT (Forest Plan Consistency)

My decision implements the 2004 Chequamegon-Nicolet National Forests Land and Resource Management Plan (Forest Plan). As required by NFMA Section 1604(i), I find this project to be consistent with the Plan.

BEST AVAILABLE SCIENCE

My decision is based on a review of the record that shows consideration of relevant scientific information including responsible opposing views, and as appropriate, the acknowledgement of incomplete or unavailable information, scientific uncertainty, and risk.

ENDANGERED SPECIES ACT OF 1973, AS AMENDED

Potential impacts to federally threatened, endangered, and candidate species were considered in the Biological Evaluations conducted for this project. Potential impacts to gray wolf were considered but not evaluated in detail due to the lack of impacts to wolf habitat or needs from project actions. No other federally listed species or their habitat are found in the project area. A determination of no effect was
made by the biologist and botanist conducting the analyses and formal consultation with the US Fish and Wildlife Service was not required (Project Record, Biological Evaluations for plants and animals).

NATIONAL HISTORIC PRESERVATION ACT

In compliance with this act, potential impacts to sites eligible for the National Register of Historic Places were considered in this analysis. All heritage resource sites are considered potentially significant and eligible for inclusion in the National Register of Historic Places until they are formally evaluated. There are ten documented heritage resource sites within the project area; none of them have been formally evaluated as yet. These sites will be protected from any disturbance in order to maintain their integrity and eligibility. The threshold for protection is to have no effect (EA, p. 18-19).

Administrative Review or Appeal Opportunities

This decision is subject to appeal in accordance with 36 CFR 215. To appeal this decision, a notice meeting content requirements of 36 CFR 215.14 must be submitted within 45 days following publication of the legal notice of decision in the Ashland Daily Press to:

CNNF Forest Supervisor, Appeal Deciding Officer
ATTN: Appeals and Litigation
USDA Forest Service, Eastern Region
626 E. Wisconsin Avenue
Milwaukee, WI 53202
email: appeals-eastern-regional-office@fs.fed.us

Pursuant to 36 CFR 215.15(a), this legal notice is the exclusive means for calculating time to file an appeal. Only individuals or organizations that submitted comments during the comment period (§ 215.6) may appeal. Electronically submitted appeals shall be in one of the following formats: text (.txt), MSWord 6.0 or higher (.doc), portable document format (.pdf), or rich text format (.rtf). For submission by email, appeals greater than 10 lines (no more than 80 characters per line) shall be electronically attached. If electronic appeals are 10 lines or less they may be submitted as an email message using standard messaging software. Business hours for hand-delivered appeals are M-F, 8:00 am – 4:30 pm local time.

Implementation Date

If no appeals are received, implementation may occur on, but not before, the 5th business day following the close of the appeal-filing period (§ 215.15). If an appeal is filed, implementation may occur on, but not before, the 15th business day following the date of appeal disposition (§215.2).

Contact

For additional information concerning this decision or the Forest Service appeal process, contact Tom Matthiae, District Biologist, or Debra Proctor, NEPA Coordinator, Great Divide Ranger District, P.O. Box 896, Hayward, WI, 54843, or 715-634-4821.

/s/ Constance Chaney

CONSTANCE CHANEY
District Ranger

06/25/2010
Date