

Deep Creek Lake

Watershed Management Plan

Water Quality Subcommittee – Meeting Minutes

Date: Wednesday, 2/20/2014
Time: 9:00 – 11:30 PM
Location: University of Maryland Extension Service Office
1916 Maryland Highway, Suite A
Mountain Lake Park, MD 21550

Members in Attendance:

Steve Green
Steve Wilson
Chuck Hoffeditz
John Forman
Willie Lantz
Ken Fisher
Erin McLaughlin
Sherm Garrison
Bruce Michael
Christine Conn

Agenda Items and Decisions:

1. Minutes from Meeting 2 approved
2. The remainder of the meeting was devoted to the discussion of the draft SAV goal and its objectives and strategies.
3. Lee Karrh and Erin McLaughlin joined the meeting from 10:00 – 11:00 to discuss SAV management with subcommittee members and assist in the refinement of the SAV Goal. Various topics regarding SAV management were discussed. The discussion topics are organized under a general narrative topic as introduction and the three (3) distinct SAV Goal Objectives provided in the attached SAV Goal outline.

General Narrative: A question was asked if all SAV species were detrimental. The discussion that followed recommended that the narrative needs to define how native and non-native species are defined, particularly since there are many instances in which non-native species have been introduced, become naturalized and are now considered an accepted element of a healthy ecosystem. The narrative should also specifically address what defines whether a SAV species is detrimental. Lee indicated that lake SAV species are considered native if they are endemic to Maryland. The definition of invasive also needs to be clearly noted in the narrative.

Objective: Continue the existing Deep Creek Lake Watershed Monitoring Plan (DCLWMP) monitoring plan and develop a long term monitoring plan to track changes in SAV species composition, abundance and distribution to inform native and non-native SAV management plans.

The narrative should discuss **the challenge of balancing statistic validity with available monitoring resources**. This is a broader discussion, relevant to all monitoring activities, not just SAV monitoring.

Targeted levels of SAV: The question was asked if it was possible to identify the amount of SAV needed to support a healthy fishery. Lee indicated that there was no solid research on ecological thresholds, but this could be worked into a research topic. The members agreed that this could be wrapped into one of the strategies that relate to research needs. When asked about SAV management around docks, Lee stated that removing SAV around docks will not be detrimental to lake ecosystem health.

Maintaining water quality conditions was discussed as a strategy for managing SAV and promoting native populations over invasives. was also discussed needs for natives vs invasives? Lee indicated that the literature supports the concept that native species are better able to compete with invasives under more oligotrophic level while invasives are better able to compete with natives under eutrophic levels. The group agreed that working to maintain the mesotrophic state of the lake and prevent eutrophication was an important strategy but other management and control measures were necessary. This was noted as an important consideration, particularly where there is interference with public recreational uses or when the presence of a non-native/invasive species, such as Hydrilla, is detrimental to supporting a healthy ecosystem.

Instituting an on-going Water Quality Workgroup was favored by all members. This workgroup would address SAV monitoring objectives, in addition to all other watershed based water quality monitoring efforts. Membership was discussed and the following suggestions are offered as an initial brainstorm on workgroup composition: Representatives should include DNR (RAS - Lee Karrh, DCL Lake Office, Fisheries), MDE, Garrett County, PRB, business interests, non-profit groups such as FoDCL, Farm Bureau, Forestry Board, boating interests, POA, tourism interests, and real-estate interests such as the Garrett County Board of Realtors.

DCL sponsored research programs – Throughout the meeting, several questions were raised regarding the use of ecological thresholds or targets that can be used to inform management objectives. Examples include a threshold target for SAV levels important for supporting fisheries, or managing for mesotrophic water quality conditions. The group suggested a key study should entail a “holistic integrated study of the lake to determine ecological thresholds for various attributes of the lake to ensure healthy ecosystems and meet recreational/economic uses”. It was suggested that the water quality monitoring workgroup could flesh out this idea and look to partner with research organizations to get the work done.

At this point in time, the group agreed that there was no need for a SAV protection or restoration plan, but this option could be invoked if SAV monitoring identified a decline in healthy SAV communities and distribution. Lee noted that, if coves were dredged for sediment accumulation, there would be no need for a SAV restoration plan since these plants readily re-establish themselves. Sediment management and SAV protection should be addressed by reducing future sediment inputs to the lake. The focus

should remain on prevention of water quality problems, managing for public use and controlling non-native, invasive SAV species.

Objective: Manage the SAV communities in the lake that affect recreational uses such as boating and swimming to minimize interference with public recreation.

SAV interference with public recreational uses were generally agreed to be focused around docks, but there may be other areas in the lake where this exists. DNR has conducted participatory GIS recreational use workshops that allow users to geographically identify where specific concerns might occur. The group was interested in considering a GIS workshop and also suggested other information or know interference areas could be used to achieve the same assessment: ideas included 1) dock areas and areas close to the shore where people are swimming, 2) shallow areas and coves, particularly where docks co-exist in these areas, 3) MGS bathymetric assessments and identification of higher rates of sediment accumulation.

The group discussed **various management options** for SAV control.

- The use of benthic mats is one option widely available to dock owners which requires a permit from the lake office.
- Members raised the question of herbicide treatments and how easy it can be for an individual to acquire and apply herbicide to SAV beds. Lee cautioned that this practice was against the law; herbicides could not be introduced to the lake without a permit and the Natural Resource Police should be alerted to watch for this illegal behavior
- The Lake office does allow cutting of plants, but this option may need to be reconsidered because fragmentation spreads invasives, such as Hydrilla. Mechanical control around docks and piers, if permitted, would need individual review from Park Office based on species composition.
- Large mechanical harvesters are very expensive, but lake rakes can be utilized by the homeowner.
- It is unlikely a general permit for SAV management would be established – individual permits need to be requires.
- Some members hoped for additional control options.
- The co-occurrence of more docks in shallow coves was also recognized as an issue which exacerbates public use interference and calls for an evaluation of permitting policy for new docks.

Members suggested that there be a greater effort towards **educating lake owners and visitors** on the proper control options for SAVs, building an awareness of which SAV species are invasive and how they need to be addressed, highlighting the benefits of SAVs and educating the public on what a healthy lake ecosystem looks like so that users better understand that SAVs are a normal and desirable element of a lake ecosystem. Targeted education outreach includes visitors, homeowners, point-of-sale through chamber of commerce and realtors, recreational services, rentals, etc.

Objective: Control existing populations of established invasive SAV species communities using best management practices and prevent future introductions of harmful non-native species of SAV.

Control of non-native, invasive SAVs - The DNR sponsored Hydrilla task force will identify a range of management options for Hydrilla control that will include an outreach and education element for prevention. The management control strategy will be available for stakeholder review in April 2014. The group discussed a variety of options such as boat washing stations, others, best management practices for cleaning boats crossing different bodies of water , and most wanted "SAV"s – signage at marinas, boat docks and other public use areas. Lee said that these and other options will be identified in the Hydrilla strategy.

4. Members requested a forestry presentation and suggested that local forest managers should be invited to present, such as Ernie Metz. Forestry is a topic that other subcommittees, such as Growth, should also be addressing, particularly from the perspective of loss of workable forest land. Christine confirmed that Forestry is a steering committee topic scheduled for April.
5. Additional speakers were suggested including Dr. Keith Eshleman from UMCES Appalachian Lab and Alan Klotz, DNR Fisheries.
6. Willie suggested that the WQ subcommittee may need to start meeting more frequently to get the work it needed done in time.
7. A general question was posed regarding septic spills and whether we have any proof that this is a concern or a major contributing factor to lake pollution. This question will be forwarded to the Growth subcommittee.