Responses to suggested panel discussion topics

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Disclaimer: The responses reflect a statewide perspective based on the experiences and opinions of the author and do not necessarily represent official positions of the Department of Natural Resources.

 Describe the scope of your organization's work on wild rice protection, restoration, and best management practices. Include where geographically your organization works, pertinent mandates, and partners you collaborate with, and current sources of funding for your work.

The wild rice work of the Minnesota DNR falls into the broad categories of protection, restoration, enhancement, and ongoing management. Responsibilities are clearly statewide although the bulk of the efforts are focused within the current primary range of wild rice. Mandates are based on statutory responsibilities and departmental mission statements (see statute examples below). Partners include other agencies (BWSR, USFWS, NPS, and USFS), nongovernmental organizations, and tribal governments.

84.091 AQUATIC VEGETATION IN PUBLIC WATERS.

Subdivision 1.Ownership. The state is the owner of wild rice and other aquatic vegetation growing in public waters. A person may not acquire a property interest in wild rice or other aquatic vegetation or destroy wild rice or aquatic vegetation, except as authorized under this chapter or section 103G.615.

84.028 COMMISSIONER OF NATURAL RESOURCES, SPECIFIC ASSIGNMENTS.

Subdivision 1.Commissioner to control department responsibilities. The powers, duties and responsibilities of the Department of Natural Resources relating to boat safety, firearm safety, wild rice harvest program, ginseng harvest program, and such other programs as are now or hereafter vested by statute in the Department of Natural Resources, shall be under the control and supervision of the commissioner of natural resources.

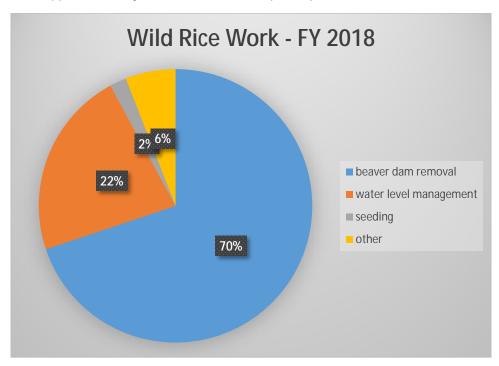
Protection activities include regulations such as aquatic plant management permitting and public water regulations, fee acquisition of shorelines and outlets, and support of shoreline easement acquisition efforts. Funds for acquisition often depend on special grants such as the Outdoor Heritage Fund. These are often collaborative efforts with other agencies and nongovernmental conservation organizations. Management authority for some of these parcels are transferred to local units of government.

Restoration work typically focuses on sites known to have had robust wild rice production in the past but is now absent or has declined to a negligible occurrence. Restoration usually involves

construction to improve outlet capacity and historical water levels through the modification or removal of outlet constrictions. Strategies may include planting if proper water levels are restored and the wild rice fails to recover.

Enhancement activities are similar to restoration but focus on sites where wild rice production is suffering but is still viable to recover on its own. Modification of outlet structures and altered channels is typical but also may include management of invasive or competing vegetation such as hybrid cattail. Restoration and enhancement activities are usually funded by harvest license fees supplemented by state waterfowl stamp receipts and grants.

Ongoing management (Best Management Practices) includes monitoring, providing information for harvesters, and keeping outlets free of debris. Although the vast majority of this work focuses on keeping the outlets free flowing, it also includes special activities such as legislative reports and user surveys. Ongoing management are usually funded by wild rice harvest license fees supplemented by state waterfowl stamp receipts, and the DNR Game and Fish Fund.



What are the key sources of information that guide your work with wild rice—how do you know where to focus and prioritize efforts?

The 2008 Wild Rice Inventory based on observations and records of DNR area wildlife field staff, observations and records of tribal staff, lake surveys conducted by the DNR, and the 2007 Wild Rice Harvest Survey was an important step in providing a systematic approach to prioritization of work. Current decisions are informed by the updated version that is supported by lake surveys conducted by the Shallow Lakes Program, 2010 Shallow Lake Management Plan, lake surveys conducted by the DNR Section of Fisheries and DNR Division of Ecological and Water Resources, aquatic plant management permit requests, continued observations and records of DNR area wildlife field staff, continued observations and records of tribal staff, aerial and ground based estimates of wild rice abundance, and lake level recordings.

 What are the barriers to doing your work? (Consider gaps in information, funding, jurisdictional/institutional barriers)

The primary barrier is funding. Prior to this year, DNR paid \$60,000 annually for our contract with Ducks Unlimited to undertake ongoing outlet management on approximately 100 wild rice lakes. This work focused almost entirely on the removal of beaver and beaver dams to maintain free flowing outlets. Ducks Unlimited contributed in-kind support. The \$60,000 came from wild rice permit revenue (\$40,000) and waterfowl stamp revenue (\$20,000). In addition to this annual activity, we provided approximately \$10,000 to the DNR Tower area wildlife office for management of their local wild rice lakes. Other offices also did wild rice lake management, but it was money that was not specifically allotted for that work.

Going forward, our funding for wild rice lake management has increased significantly. Beginning in FY19, we will now budget \$120,000 for this work, with \$20,000 coming for waterfowl stamp revenue, \$40,000 coming from wild rice permit revenue, and \$60,000 from Game and Fish funds. Additionally, Ducks Unlimited is providing \$15,000 annually to use towards wild rice lake management. It is unclear whether this level of financial support can be maintained over the long term.

Funding is also a key ingredient for protecting shoreline through fee acquisition and easements. There is growing opposition from some to fee acquisition by state and federal agencies although easements are more often accepted since the land remains in private ownership.

Gathering Information concerning wild rice abundance across individual lakes and rivers, statewide and local harvest, and timely water level readings is also a significant challenge to targeting work for ongoing management.

In addition, sustaining long-term management efforts will ultimately depend on an informed and active group of wild rice harvesters and others concerned about the future of wild rice. Wild rice harvesting is physically demanding and location dependent. Knowing where and when harvesting opportunities occur is a major challenge for new harvesters. Even finding someone to process the raw rice is intimidating. Although the DNR and tribal governments publish some information, there much more that can be done to bring interested people to the point where they are comfortable attempting harvest of wild rice. Funding a commitment to recruitment of new harvesters is critical to providing long-term support for wild rice.

- What has been your biggest learning related to the protection and restoration of wild rice?
 - Understanding the many variables that may, or may not, affect wild rice is challenging. Old and new threats abound. Having said that, often the most critical factor for existing stands of wild rice is water levels, particularly abrupt changes due to constricted outlets and long-term increases due to dams, altered watershed hydrology, and climate.
- What are the greatest areas of opportunity or lowest hanging fruit in relation to wild rice protection and restoration?

Active management of outlets to maintain free flowing conditions is the greatest overall opportunity to improve conditions for wild rice. Establishing wild rice in new areas on public land may be the easiest to accomplish when funding is available.

For Minnesota to accelerate the pace of progress on wild rice protection and restoration, what are the top three priority actions we need to take?

It is personally very difficult to limit the list to only three since more has to occur to provide the synergy required to really move forward. Here are three In addition to the general need to combat climate change:

- 1) Actively recruit wild rice harvesters to encourage the societal value of connectedness to nature and for their financial and political support. Efforts should include multimedia messaging and instructions including but not limited to electronic media and workshops.
- 2) Use refined inventory lists to guide much needed expansion of work to maintain free flowing outlet conditions.
- 3) Manage against aquatic invading species including hybrid cattail, invasive phragmites, common carp and others.

Additional needs include:

- 4) Establish agreed upon protocols for both standard and rapid assessment monitoring of wild rice sites recognizing that technological advances will require the periodic updating of methodologies.
- 5) Accept the challenge of restoring wild rice sites within its broader historical range where watershed hydrology and land use has been significantly altered.
- 6) Establish wild rice on new sites within its broader historical range that have been subjected to changes that now allow wild rice to prosper.
- 7) Clean up the language and organization in statute and rules to address redundancy and contradictions.

• What level of funding would be required to take those actions?

\$500,000 annually would be a great start to pursue the first three actions. \$1,000,000 annually in new funding would allow serious pursuit of wild rice restoration within its former range. An additional \$2,000,000 annually would be needed to accelerate shoreline and outlet protection through perpetual easements. Given the broad ecological, cultural, and economic values of wild rice this funding should not rely on just user fees or the DNR Game and Fish Fund.