This document is made available electronically by the Minnesota Legislative Reference Library as part of an ongoing digital archiving project. http://www.leg.state.mn.us/lrl/sonar/sonar.asp

# STATE OF MINNESOTA

# DEPARTMENT OF NATURAL RESOURCES

# DIVISIONS OF FISHERIES, ECOLOGICAL SERVICES, AND ENFORCEMENT

# IN THE MATTER OF PROPOSED ADOPTION OF

# FISH AND AQUATIC WILDLIFE

# STATEMENT OF NEED AND REASONABLENESS



#### **GENERAL PROVISIONS**

# I. INTRODUCTION

#### Purpose

The primary purpose of the game and fish rules is to preserve, protect, and propagate desirable species of wild animals and native plant communities while ensuring recreational opportunities for those who enjoy wildlife-related activities and continued use of these resources.

#### Scope

The proposed amendments to existing rules cover a variety of areas pertaining to fish and aquatic wildlife including:

- Designation of various aquatic plants as prohibited or regulated exotic species, including the aquatic plants on the federal noxious weed list;
- Changes in commercial minnow regulations including closing waters to commercial and recreational harvest to protect the endangered Topeka Shiner and clarifying trap use and design specifications;
- Changes in commercial turtle regulations including trap use, numbers, checking, tagging, recording, and design specifications; establishing turtle seasons and size limits; and establishing guidelines for possessing turtle eggs, the protection of turtle nests, and propogation;
- Changes in commercial fishing regulations including net design and notification of lost or stolen nets;
- Addition of Friday to the days listed for Take a Kid Fishing Weekend;
- Clarification that it is illegal to fish for a species during its closed season and to sort fish;
- Clarification of fish possession and transportation language;
- Technical corrections in dates for fishing seasons;
- Establishment of a seasonal fishing closure on Lake Superior, Gull River in Cass County, and add Red Wing and Alma dams (Goodhue and Wabasha counties) on the Mississippi River to the list of dams with 300 ft fishing closures;
- Technical corrections for the existing fishing restrictions for Little Rock Creek in Morrison County and Red Lake in Beltrami County;
- Establishment of a daily and possession limit of 50 cisco on waters within the Leech Lake Reservation in Cass, Itasca, and Beltrami counties;
- Allowing the use of live leeches in designated stream trout lakes;
- Changes to commercial fishing regulations on Minnesota -Wisconsin border waters including the closing of mussel harvest, modifying the turtle language so that it is consistent with other turtle rule changes, and splitting the catfish title in the general fishing regulations into channel and flathead catfish; and
- Changes in the Minnesota Canadian border waters to make the current sturgeon and walleye harvest restrictions permanent, modify fishing equipment that is allowed on the Rainy River.

# Notification to Persons and Classes of Persons Affected by the Proposed Rules

A request for comments was published in the State Register on August 13, 2001. This notice described the specific areas of the proposed rules, the statutory authority for each proposed change, and the parties that could be affected by the proposed rules. The Department of Natural Resources (DNR) also provided additional notice to people who may be affected by the rules by sending the request for comments and additional information to a number of angling groups, other environmental and social organizations, businesses, individuals, licensed pet stores and aquarium outlets, legislators, educational institutions, and representatives from bordering states. The DNR also published a statewide news release that described major parts of the proposed rule and was used to take comments directly related to the proposed changes.

In addition to the request for comments period, public meetings were held along the Canadian border in International Falls and Baudette, in St. Cloud and St. Paul with turtle industry representatives, and in Duluth with the charter boat captains to discuss the various proposed rule changes that affected them. The turtle industry representatives and other interested parties also received an initial draft of the proposed turtle regulations to review and provide comments and changes. Minnow dealers that would be affected by the proposed closures of waters in southwestern Minnesota were contacted and asked to comment on the rule language.

Organizations and individuals contacted included: educational institutions, such as the University of Minnesota and the Natural Resources Research Institute; horticulture organizations such as Minnesota Nursery and Landscape Association and commercial plant harvesters; organizations representing private and commercial riparian owners, such as the Minnesota Lakes Association and Minnesota Resort Association; conservation groups such as the Nature Conservancy, Sierra Club, and Audubon Society; Minnesota Sportfishing Congress; Fisheries Funding Citizen Oversight Committee; Minnesota Tourism; Minnesota Inland Commercial Fishermen's Association; licensed commercial fish and turtle operators; Minnesota Aquaculture Association; licensed aquatic farms; licensed bait dealers/harvesters; North Shore Charter Captains; West Lake Superior Trolling Association; the chamber of commerce in several cities; Lake County Recreation Board; Lake Superior Steelhead Association; Rainy Lake Sportfishing Club; Izaak Walton League; United Northern Sportsmen; businesses, individuals, and local sports groups; Minnesota Council of Trout Unlimited; Trout and Salmon Stamp Citizen Oversight Committee; Minnesota Trout Association; Southeast Asian and Hispanic organizations; several state legislators; and border state staff who are responsible for fishing and public waters rules and regulations.

Despite the extensive outreach done by the DNR, very little input was received regarding the proposed rule changes. The comments received during the comment period are summarized as follows.

<u>Changes in commercial minnow regulations:</u> Six people commented in favor of closing the Topeka shiner waters. Three people commented against the Topeka shiner closure. One person recommended making the possession of Topeka shiners illegal. A bait dealer working in Lincoln and Murray counties was against closing the waters in these two counties. Four people commented that they were in favor of the minnow trap changes.

<u>Changes in commercial turtle regulations:</u> Sixty-four comments were received on these proposed rules. Fourteen people recommended more restrictive requirements for trap design and allowing fewer numbers of traps. Nine people commented that better record keeping and more restrictive shipping requirements and records were necessary, especially for those turtles leaving the state. One person requested that we close the turtle season as other surrounding states are doing. Three people recommend that the license fee be increased. Twenty people commented on needing closed seasons or areas, size limits, and harvest limits for turtles. Two people opposed using the rule making process to make these changes and did not favor any of the proposed rules. Five people approved of all the proposed rules. Five people recommended that softshell turtles not be commercially harvested. Five people commented on turtle farming: four recommend that turtle farming be an option and one was apposed to it.

<u>Changes in commercial fishing regulations</u>: Six people favored the proposed change to report lost or stolen nets.

<u>Clarification of fishing during the closed season and culling</u>: Five people commented in favor of these proposed clarifications.

<u>Reduced cisco limit on Leech Lake Reservation in Cass Co.</u>: Five comments were received on this proposed rule. Four people were in favor of the change. One person requested that the limit be lower.

Adding Friday to Take a Kid Fishing Weekend: Three people commented in favor of this addition.

Technical corrections for fishing seasons: Three people favored these corrections.

<u>Close or restrict fishing areas:</u> Three people commented in favor of the Red Lake technical change.

<u>Lake Superior seasonal fishing closure:</u> Ten comments were received on this proposed closure. Two people commented that they didn't favor closing shore fishing in this area. One person didn't favor the closure. One person felt that both boat and shore fishing necessary to be closed in the area. Six people favored the closure as proposed.

Adding of dams to the 300-foot closure list: Three people commented in favor of adding the proposed dams to this list.

<u>Use of live leeches in designated stream trout lakes:</u> Nine comments were received on these proposed changes. Four people were in favor of the change. Three people didn't favor the change. Two people recommended use only on waters where leeches are already present.

Clarification of fish possession: Three people commented in favor of the proposed clarifications.

-4-

<u>Minnesota-Wisconsin border water changes:</u> Four people commented in favor of splitting the catfish heading into channel and flathead catfish. Six people submitted comments in favor of the mussel harvest closure.

<u>Minnesota – Canada border water changes:</u> Five people commented in favor of the proposed changes.

<u>Revisions to Aquatic Management Areas</u>: Three comments were received regarding the proposed revision: two people were in favor of the revision and one was against it.

Exotic species designations: Five people sent in comments that favored adding the federal noxious weed list to Minnesota's designations.

#### **Additional notice**

Additional notice on the proposed rules will be provided to persons or classes of persons who could be affected. Our notice plan involves sending the notice of intent to adopt rules with or without a public hearing to all of the previously mentioned groups: a number of angling groups, other environmental and social organizations, businesses, individuals, DNR licensed pet stores and aquarium outlets, state legislators who have an interest in these areas, educational institutions that are doing studies with exotic plants, and staff from bordering states that are responsible for rule making. News releases that detail the major parts of the rule would be issued statewide. The DNR web site would be used to inform the public of our intent to adopt rules in the following areas and take requests for hearings. Notice would also be provided to appropriate legislators as required by Minn. Stat., sec. 14.116. The Department of Agriculture would also be notified as required.

#### **Statutory Authority**

Statutory authority for the various provisions of the proposed rules is listed below. The citation of Minn. Stat., secs. 97C.001, subd. 3 and 97C.005, subd. 3 in rule part 6262.0100, 6264.0050, and 6264.0300 applies only to the waters that have been designated as experimental or special management waters:

Rules Part	Minnesota Statutes, sections
6216.0250	84D.12, subd. 1
6216.0260	84D.12, subd. 1
6254.0300	97C.505, subd. 3; 97A.045, subd. 2; 97A.501, subd. 1 & 2
6254.0510	97C.505 subd. 1 & 6
6256.0500	97C.605, subd. 3
6256.0600	97A.045, subd. 2; 97C605, subd. 3
6256.0900	17.4997
6260.0500	97C.811, subd. 3
6260.2000	97C.345, subd. 5; 97C.811, subd. 3
	5

-5-

6262.0100	97A.045, subd. 2; 97A.445, subd. 1; 97C.001, subd. 3; 97C.005, subd. 3;
	97C.395, subd 1 & 2; 97C.415, subd. 1; 97C.401, subd. 1
6262.0300	97A.045, subd. 3
6262.0500	97A.045, subd. 2; 97C.401, subd. 1
6262.0575	97A.045, subd. 2; 97C.401, subd. 1
6262.0800	97C.401, subd. 1
6264.0050	97C.005, subd. 3
6264.0300	97C.001, subd. 3; 97C.005, subd. 3
6266.0100	97A.045, subd. 4
6266.0500	97A.045, subd. 4
6266.0600	97A.045, subd. 2 & 4
6266.0700	97A.045, subd. 4

# **II. REGULATORY ANALYSIS**

#### Description of the Classes of Persons Affected by the Proposed Rules

The groups of people affected by the proposed changes to the rules in parts 6216.0250 and 6216.0260 include nursery, greenhouse, and landscaping businesses; water gardeners and other customers who purchase aquatic plants; pet stores and the aquarium trade who sell aquatic plants; boaters and water users; people who consume exotic aquatic plants as part of their diet; research and educational institutions that conduct research on prohibited exotic species; riparian landowners; and those managing public waters.

The proposed changes in parts 6216.0250 and 6216.0260 restrict the use of certain species of aquatic plants for ornamental use and human consumption. The proposed rules may benefit riparian property owners, angling/boating related business, angling groups, conservation groups, and environmental groups because they would protect native vegetation, which supports the associated aquatic ecosystem and fishery, and limit unwanted introductions of plants that may harm the ecosystem. Those who participate in water recreation, such as sailing, power boating, and swimming may benefit from the proposed rules since they are designed to help prevent the introduction of harmful aquatic plants which may impair water recreation on state waters. Research and educational institutions that conduct research on prohibited exotic species would be affected because they would be required to obtain permits to possess, transport, and propagate the species designated as prohibited. Commercial aquatic plant harvesters, local governments, or other parties who need to transport aquatic prohibited exotic species as part of their harvest or control activities may also be affected by the proposed changes.

The proposed rules to close waters to minnow harvest (6254.0300, 6262.0575) would affect minnow dealers, anglers who harvest minnows, and businesses associated with the bait industry in southwestern Minnesota. The proposed change would close waters in the Missouri river drainage to protect the endangered Topeka shiner as per federal guidelines. Dealers and anglers who harvest in these waters would no longer be able to do so and would need to find other water bodies. This proposed closure would have a negative impact on those people and business that rely on those waters to support their livelihoods.

The proposed changes dealing with minnow trap and commercial net specifications (6254.0510, 6260.200, 6260.0500) would benefit minnow dealers and commercial fishing

-6-

operators since it would legalize the types of equipment that they wish to use and provide a way to report lost or stolen nets.

The proposed changes related to turtles (6256.0500, 6256.0600, and 6256.0900) would have varying degrees of affect to turtle harvesters and associated businesses. The proposed change dealing with trap design specifications is less restrictive. However, the number of traps allowed per turtle license (40 floating and 40 submerged) is more restrictive than a judge's recent interpretation of the law that allows unlimited use of floating traps and 40 submerged. The proposed change for the number of traps is less restrictive than what the DNR had enforced (40 traps total regardless of design) prior to the judge's interpretation. The list of commercial species, size limits, and closed seasons are more restrictive. Tagging of traps and reporting are already required. The proposed language for turtle eggs, nests, and propagation should be beneficial to the industry since they would now be allowed to possess, sell, take, and propagate turtles and eggs as long as other state and federal laws are followed.

The changes proposed in 6262.0100, 6262.0500, 6262.0575, 6264.0300, 6266.0100, and 6266.0500 are technical in nature and would have minimal affect on charter boat captains, anglers and associated angling businesses. The Lake Superior refuge may have an initial reduction in angling effort with minimal effect on angling businesses.

The other proposed changes dealing with "Take a Kid Fishing," fish possession, fish seasons and Red Lake (6262.0100 and 6266.0100) should have minimal impacts on anglers and associated businesses. These changes should be a benefit to enforcement agencies and anglers since they would foster better compliance with regulations.

The proposed changes in 6262.0800 would affect people who sport gill net for cisco. The change includes a more restrictive harvest limit for cisco taken in the Leech Lake Reservation. There may be an initial reduction in angling effort with minimal effect on angling businesses.

Trout anglers should benefit from the change in 6264.0050 since they would now be allowed to use live leeches when fishing designated stream trout lakes.

The proposed changes for border waters (6266.0100, 6266.0500, 6266.0600, 6266.0700) are not expected to have a significant impact on anglers or associated businesses. These changes instead would result in common regulations and less confusion for anglers. The changes being made for commercial turtle harvest (6266.0600) are technical in nature and would have minimal affect on commercial netters, turtle harvesters, and associated industries. The closure of mussel harvest on the Mississippi River would have a minimal affect on commercial mussel operators, since the DNR has issued only a couple of licenses for mussel harvest on this water body in the past few years.

#### **Probable Costs to the Agency or Other Agencies from the Proposed Rules**

Amending parts 6216.0250 and 6216.0260 does not add any new duties or responsibilities to the DNR, although it would expand some responsibilities for permit issuance and enforcement. Review of requests for prohibited exotic species permits for allowed purposes and applications for regulated exotic species introductions would require a slight increase of DNR staff time, but can be accomplished without additional staff or funds. Unlike the noxious weed law, designating harmful exotic species does not require management or control of the species, so there should be no increased management costs for the DNR or other agencies. The purpose of designating species in these categories is to help prevent introduction and spread of

harmful exotic species that could cause long-term harm to the states resources. Such a tactic can help reduce management costs associated with harmful exotic species by limiting the number of unwanted introductions and slowing their spread.

The proposed fish rules (6254.0300, 6254.0510, 6256.0500, 6256.0600, 6260.0500, 6260.2000, 6262.0100, 6262.0300, 6262.0500, 6262.0575, 6262.0800, 6264.0050, 6264.0300, 6266.0100, 6266.0500, 6266.0600 and 6266.0700) would result in no costs to the DNR or other agencies. There is already extensive monitoring of the fish populations that would be affected by the proposed rules and no additional monitoring is planned if the rules are adopted.

There are no significant positive or negative direct impacts anticipated for state revenues as a result of these rules since the DNR already enforces and monitors these laws. DNR revenues would also not be affected since no fees are collected for permits regarding prohibited or regulated exotic species. The proposed fish rules are not anticipated to have any affects on state revenues.

# Determination of Less Costly or Less Intrusive Methods for Achieving the Purpose of the Proposed Rules

The DNR has determined that there is no less costly or intrusive method for achieving the purpose of parts 6216.0250 and 6216.0260. Preventing introductions of harmful exotic species is the least costly method to minimize harm from those species to the states water resources.

Some of the other proposed rules would result in stricter and therefore more intrusive limits and seasons on fish and turtles. However, it has long been recognized by fisheries professionals that harvest restrictions are necessary to provide a sustainable fisheries resource (*Inland Fisheries Management in North America*). The best option for reducing harvest and maintaining fish and other aquatic animal populations is, by definition, more intrusive than alternatives, because "less intrusive" proposals would usually not provide the necessary reductions in harvest. Examples of some of the less intrusive methods that were considered follow.

The proposed change in the number of turtle traps, adding a day to the Take A Kid Fishing Weekend, and allowing the use of live leeches on designated trout streams (6256.0500, 6262.0100, and 6262.0800) are less restrictive than the current language.

The proposed rules for different minnow trap and commercial net design (6254.0510 and 6260.2000) are less intrusive on commercial fishing operations than the current language because they would allow use of equipment and materials that are available and currently owned by the industry.

Less intrusive alternatives were also chosen for some of the proposed fish rules. The proposal to implement a daily and possession limit of eight walleye and sauger combined with only four walleye for Rainy Lake (6264.0300 and 6266.0700) is an example. Based on negotiations with Canadian natural resource staff, a harvest level was established for walleye that would ensure a sustainable population that supported fishing. Walleye harvest on Minnesota waters, however, exceeded our harvest level. To meet the harvest allocation for the walleye fishery, a walleye/sauger daily and possession limit of four fish combined was considered. Based on creel and population data (DNR Lake Management Report) staff determined that the management objective of maintaining the current walleye harvest allocation on Rainy Lake could be met with a less intrusive option. The proposal was changed from four to eight fish combined

-8-

because it would provide the necessary walleye reduction while allowing the less intrusive opportunity to harvest more sauger.

An option considered and rejected for protecting turtle populations was to eliminate harvest. Season restrictions and size limits could achieve the necessary protection of turtle populations and would be less intrusive than closing the harvest (6256.0600). Closing the harvest would have eliminated commercial opportunity and would have had a greater economic impact than the proposed season and size limit reductions.

The proposed rule to prohibit walleye harvest on Red Lake and its tributaries (6262.0500 and 6262.0575) is intrusive, but necessary to help the walleye population recover (DNR Lake Management Report).

The other changes in the proposed rules that have more restrictive limits on fish or equipment specifications are minor and would be relatively unobtrusive to anglers and commercial operations (6260.2000, 6266.0100, 6266.0500.) For example, the proposal to change the commercial netting specifications would have minimal impact on the harvest of targeted commercial species. However, it would help reduce the number of game fish harvested during these operations and thus the amount of time necessary to sort their harvest.

#### **Description of Alternative Methods for Achieving the Purpose of the Proposed Rules**

State statute (Minn. Stat., sec 84D.12, subd. 1) require the DNR to designate prohibited, regulated, and unregulated exotic species. Alternatives available to the DNR to designate prohibited, regulated, and unregulated exotic species are expedited emergency rules and permanent rules. The following factors were considered to determine the best alternative for designating prohibited, regulated, and unregulated exotic species: the permanent rule making process would afford public review of these designations; and the term of expedited emergency rules is limited to 18 months. The DNR believes the best long-term alternative is to designate prohibited, regulated, and unregulated exotic species in permanent rule, and for short-term needs either add or delete prohibited, regulated, and unregulated exotic species through expedited emergency rules.

Regarding part 6216.0250, the DNR considered having the Minnesota Department of Agriculture designate the aquatic plants on the federal noxious weed list during their last rulemaking effort to designate noxious weeds; however, state prohibited noxious weed designation and status does not work well for species that grow in public waters. Also, the DNR has been given the responsibility for curbing the spread of harmful exotic species of aquatic plants in the state (Minn. Stat. sec. 84D.01) and, therefore, the rulemaking responsibility for these species lies with the DNR.

Regarding part 6216.0260, there were two alternatives available for regulating species that may be harmful if they establish in the wild, but are not sufficiently harmful to classify them as prohibited exotic species: 1) leave them as unlisted exotic species; or 2) review information about the species and designate it as a regulated exotic species. For the yellow iris, which is currently unlisted, the "no action" alternative of not classifying and designating the species was considered but not chosen, because yellow iris is commonly sold as an ornamental. While the "no action" alternative would provide the same level of protection as designating it as a regulated exotic species, it was determined that classifying it as a regulated exotic species would make it more apparent to retailers and the public that the species cannot be released into a free living

state without a permit. The alternative of proposing the designation of yellow iris in this rule is necessary and reasonable because it would result in a more comprehensive list of species that are classified and would make it clearer to the public what the regulations are for the listed species.

The major alternatives to size limits and possession limits being applied to fish and turtles are: 1) quotas where a certain level of harvest is allowed after which all harvest activity is curtailed for the remainder of the season; and 2) limited entry where only a certain number of anglers or commercial operators are allowed to engage in harvest activities (*Inland Fisheries Management in North America*). These alternatives could achieve the purpose of the proposed rules. However, quotas and limited entry are not proposed because they are considered to be unnecessarily intrusive and would require more monitoring from the DNR to determine when harvest limits were reached.

#### **Probable Costs of Complying with the Proposed Rules**

Persons possessing, importing, propagating, or selling exotic species that are now proposed to be designated as prohibited exotic species under part 6216.0250 may experience financial losses if they had intended to sell those species. However, all of these species are already illegal to import into the country and ship interstate under federal law. Since Minnesota businesses should not have them, businesses should not have any costs associated with implementing this change. Designation of these aquatic plants on the federal noxious weed list, as a state prohibited exotic species would prohibit their import, possession, transport, sale, and purchase. It does not require the species to be controlled. Control may be undertaken to limit their spread and nuisance, but that decision is separate from designation as a prohibited exotic species. It is hoped that by restricting prohibited exotic species from entering the state, the potential management costs to reduce their negative impacts in state waters and wetland habitats would be minimized. Often the cost of managing these aquatic plant species are very high and their impacts long-term.

There are no additional costs for county and local governments, as a result of the new designation for yellow iris or adding the federally listed aquatic species, because their responsibilities are not being changed. By restricting the import and use of the plants, any potential control and management costs that may be borne by cities, counties, and private citizens to reduce nuisance conditions in lakes should be minimized.

The types of restrictions being proposed for harvest of fish and turtles do not result in increased costs for the public.

#### Assessment of Differences between the Proposed Rules and Existing Federal Regulations

The federal law regulating noxious weeds is in United States Code, Title 7, Chapter 61, sections 2801 to 2814. The federal regulations regarding noxious weeds are in the Code of Federal Regulations, Title 7, Chapter III, Part 360, sections 360.100 to 360.300. Section 360.200 contains the list of federal noxious weeds that we are referencing in these amendments to the rules. The federal listing is generally for species that are not yet in the United States although several species on the list are now in the United States or proposed for import or interstate transport for commercial purposes. Prohibiting them would mean that federal and state officials would inspect imported materials to prevent them from becoming established here.

Designating the federal listed species as state prohibited exotic species would allow

-10-

collaborative prevention and response efforts by state and federal agencies. The state designation would also allow better response when species are in the state, as the USDA has limited authority regarding possession of federal noxious weeds once they are in a state. Joint listing would help ensure that DNR staff can respond to illegal importations or infestations.

The proposed turtle rules (6256.0500 and 6256.0900) were provided for review and comment to those federal and state agencies (United States Department of Food and Drug, MN Pollution Control Agency, MN Department of Agriculture, and MN Department of Health) that implement other regulations that apply to commercial turtle operations and farming. The federal regulations associated with viable turtle eggs and live turtles with a carapace length of less than four inches are found in Title 21, Code of Federal Regulations, Part 1240.62, (21 CFR 1240.62). The proposed turtle rules have been written so that they are additive and comply with these other federal rules.

The proposed rules (6254.0300 and 6262.0575, Sub. 5) for closing minnow harvest where Topeka shiners have been documented would bring state-allowed activities into compliance with Federal Endangered Species regulations.

The rest of the proposed rules cover areas that are not addressed by federal law; therefore, this consideration is not applicable.

#### **Regulatory, Licensure, or Other Charges in the Proposed Rules**

The proposed rules do not involve any new regulatory, permit, or license fees or any other charges to the public. Minnesota Statutes, section 16A.1285, does not apply because the rules do not set or adjust fees or charges.

#### **Proposed Rules Affect on Farming Operations**

The proposed rules in parts 6216.0250 and 6216.0260 are not designed to affect farming operations and should not affect farming operations. Species on the federal noxious weed list are already illegal to import and sell, so designating them as prohibited exotic species in part 6216.0250 should not affect those who import and sell aquatic plants in the state. Designation of yellow iris as a regulated exotic species in part 6216.0260 does not restrict the propagation and sale of that plant.

The rules relating to turtle propagation (6256.0900) should have a positive affect on farming operations in that they would provide another business opportunity for aquatic farm licensees. These rules were designed to clarify that Chapter 17 applies to turtle operations as well as fish and would provide the guidelines for conducting such an operation. The turtle propagation rules dealing with operation of such a facility were designed to have a positive affect on aquatic farming operations. A copy of the proposed draft rules was sent to the Department of Agriculture for their review.

The proposed fish rules (6254.0300, 6254.0510, 6256.0500, 6256.0600, 6260.0500, 6260.2000, 6262.0100, 6262.0300, 6262.0500, 6262.0575, 6262.0800, 6264.0050, 6264.0300, 6266.0100, 6266.0500, 6266.0600 and 6266.0700) would not affect farming operations.

III. Description of How the Agency Considered and Implemented the Policy to Adopt Rules that Emphasize Superior Achievement in Meeting the Agency's Regulatory Objective and Maximum Flexibility for the Regulated Party and the Agency in Meeting these Goals

The agency's objective with regard to recreational fishing, commercial fishing, and exotic species regulations is to provide for resource conservation, public safety, and equitable use, while maintaining flexibility for anglers and businesses to participate in a variety of opportunities for use and enjoyment of the aquatic resources consistent with state and federal law. To the extent possible, the DNR attempts to maintain simplicity and understandability of regulations, balanced against the demand for more specialized regulations to protect resources and provide additional opportunities for use of these resources. The agency also attempts to balance the economic and social impacts against the biological requirements necessary to meet goals that conserve and protect the aquatic resources.

In developing the proposed rules, the agency sought to make the rules less restrictive and more business friendly where resource conservation, safety, and equitable use were not compromised. Good examples include the Rainy Lake regulation change that raised the daily and possession limit to allow additional harvest opportunity of sauger while still meeting the walleye harvest allocation.

In the case of more restrictive provisions, the agency sought to make sure that consistency of regulations and resource protection were addressed. For example, on the border water regulation changes, we worked with the border states to match proposed changes. Using one set of fishing regulations for border waters is simpler for anglers and still meets management goals that seek to protect the aquatic resources. It also adds flexibility for anglers who wish to fish both sides of a border water without having to become familiar with where the state boundaries fall.

The DNR has promoted voluntary catch and release and selective harvest to help promote a conservation ethic among anglers and to counter the effects of increased fishing pressure. However, when over-harvest results in declining trends for a specific fish species or on a specific body of water, voluntary compliance cannot be relied on to achieve the necessary harvest reductions (Gigliotti & Taylor 1990). Typically, when new rules on harvest are established and enforced, acceptance and compliance by the public must evolve over time before the regulation reaches its full effectiveness. There is little doubt that the role of regulations in fisheries management would need to increase as fishing pressure increases and anglers use more advanced technology. Without setting and enforcing more restrictive fishing regulations, over-harvest would occur on more and more waters.

#### **IV. RULE-BY-RULE ANALYSIS**

#### 6216.0250 PROHIBITED EXOTIC SPECIES, SUBP. 2A.

This proposed language would add the aquatic plants on the federal noxious weed list to the state prohibited exotic species list. It is necessary and reasonable to identify and acknowledge the federal listing of aquatic plant species that could be a problem in the state if introduced here. It is also necessary and reasonable for the state to assist the federal government in preventing the introduction and establishment of the plants. The Minnesota Department of Agriculture has

-12-

already added the non-aquatic plants on the federal noxious weed list to the state prohibited noxious weed list through rulemaking. This change would complement that action.

Four of the species on the federal list were previously designated as prohibited exotic species during past rulemaking. They are *Hydrilla verticillata*, *Hygrophila polysperma*, *Lagarosiphon major*, *and Salvinia molesta*. The proposed amendment that designates all the aquatic plants on the federal list is preferred over individually designating each species on the federal list. By adding species as a group it would allow future additions to the federal list to automatically be included in the state list. It is also reasonable because it is a consistent approach by both the Minnesota Department of Agriculture and the DNR.

The current federal noxious weed list includes these aquatic plant species:

Scientific name and authority Azolla pinnata R. Brown Eichhornia azurea (Swartz) Kunth

Hydrilla verticillata (Linnaeus f.) Royle Hygrophila polysperma T. Anderson Ipomoea aquatica Forsskal Lagarosiphon major (Ridley) Moss Limnophila sessiliflora (Vahl) Blume Melaleuca quenquinervia (Cav.) Blake Monochoria hastata (Linnaeus) Solms-Laubach Monochoria vaginalis (Burman f.) C. Presl Ottelia alismoides (L.) Pers. Sagittaria sagittifolia Linnaeus Salvinia auriculata Aublet Salvinia biloba Raddi Salvinia herzogii de la Sota Salvinia molesta D.S. Mitchell Sparganium erectum Linnaeus Solanum tampicense

<u>Common names</u> (mosquito fern, water velvet) (anchored waterhyacinth, rooted waterhyacinth) (hydrilla) (Miramar weed) (water-spinach, swamp morning-glory)

(ambulia) (broadleaf paper bark tree).

(arrowhead) (giant salvinia) (giant salvinia) (giant salvinia) (giant salvinia) (exotic bur-reed) (wetland nightshade)

#### 6216.0260 REGULATED EXOTIC SPECIES, SUBP. 2, ITEM D.

This part proposes one new designation of a regulated exotic species, yellow iris. By designating it, the yellow iris would then be regulated by Minnesota Rules parts 6216.0265, 6216.0280, and 6216.0600 and Minnesota Statutes, Chapter 84D. Species in this classification may not be released into a free-living state. "Free-living state" is defined in rule to be unconfined or outside the control of a person. It is necessary and reasonable to designate yellow iris as a regulated exotic species because it meets the criteria outlined in Minnesota Statutes Chapter 84D: (1) its likelihood of release or escape if allowed in the state; (2) its likelihood of naturalization if released or escaped; (3) the magnitude of adverse impacts on native species, natural resources, or its use; and (4) the ability to control its spread. The information provided below substantiates the need to designate this species as a regulated exotic species.

#### COMMON NAME: Yellow Iris SCIENTIFIC NAME: Iris psuedacorus L. FAMILY: Iridaceae

SPECIES DESCRIPTION, NATIVE AND CURRENT RANGE: Yellow iris is a herbaceous perennial found throughout the United States and Canada (Ramey et al., 2001). It grows in and near water including wetlands, lakeshores, and riverbanks. It produces lemon yellow flowers, which distinguishes this iris from all other native irises in the United States (Ramey et al 2001). When not in flower, Yellow iris is virtually impossible to identify from native irises (Perleberg per. comm. 13 June 2001). Yellow iris leaves are sword-like: flat with a raised midrib that comes to a point and can reach heights of 3 to 4 feet (Ramey et al., 2001). The native distribution of yellow iris is Europe and the British Isles, North Africa and the Mediterranean region (Cody 1961).

PRESENT CLASSIFICATION: PROPOSED CLASSIFICATION:

unlisted exotic species regulated exotic species

# BASIS FOR PROPOSED CLASSIFICATION PER M.S. 84D:

A. Likelihood of release or escape if allowed in the state: high B. Likelihood of naturalization if released or escaped: high C. Magnitude of potential adverse impacts if it naturalized: D. Ability to: a) eradicate low b) manage naturalized populations:

c) control its spread to new locations:

Ranking moderate moderate high

#### A. Likelihood of introduction

The likelihood that yellow iris might be released or escape into a free-living state is high. It already has been introduced in Minnesota. Yellow iris is a common ornamental plant used in gardens (Ramey, 2001) and water gardens, and is often promoted for naturalizing lakeshores.

#### B. Likelihood of naturalization

The likelihood that yellow iris might establish a self sustaining population in the wild in Minnesota is high because it has naturalized in several lakeshore locations around the state (Perleberg, per. comm. 13 June 2001) and in other northern latitude states and Canadian provinces. Known locations in the state include but may not be limited to Douglas, St. Louis, and Ramsey counties.

C. Magnitude of adverse impacts on native species, natural resources, and their use

The magnitude of potential adverse impacts of yellow iris is moderate. Yellow iris can grow much like Typha (cattail) species; a monoculture of densely packed plants with extensive rhizomes (Ramey, 2001). These traits allow the yellow iris to out-compete many native wetland plants. In Minnesota, the yellow iris does not seem to be as invasive as other harmful exotic species, such as purple loosestrife (Perleberg per.com. 2001). It has established some large infestations along lakeshores. In more temperate climates, the yellow iris can reach nuisance levels (Jancono C.C. 2000, Ramey 2001).

-14-

#### D. Ability to control

The ability to reduce populations of yellow iris once naturalized would be moderate because it is susceptible to control by some herbicides. The preferred method of herbicide control would be to treat the stem with glyphosate right after cutting (Jancono C.C. 2000). Control of this plant in wetlands as with other wetland species would be difficult due to accessibility. Control may also be difficult because it would need to occur during the spring when the plant is in bloom and this may not be the time when herbicides would be the most effective. Usually late summer and fall are better times for the use of glyphosate. The ability to limit spread of yellow iris to new locations from existing populations is high because it is not likely to be transported by boats or other recreational equipment from one site to another.

Based on the preceding information, the proposed rule adding yellow iris to the regulated exotic species list in part 6216.0260 is necessary because this plant has the potential to threaten native plants and aquatic ecosystems in the state. This plant is widely sold and promoted as a naturalizing plant. There are numerous Internet sites where yellow iris is sold and recommended for naturalization (Missouri Botanical Garden 2000, Michigan State University Extension Ornamental Plants 1998). This species is already a problem in other states and provinces. This proposed rule is reasonable because we currently have only small infestations of this species in the state and further spread and harm to native plants and ecosystems can still be prevented. It is also reasonable because this designation would aid public understanding that the plant should not be placed into a free-living state (into public waters), while at the same time the classification does not restrict the continued sale of the plant for use in water gardens and terrestrial settings.

# 6254.0300 WATERS CLOSED TO COMMERCIAL TAKING OF MINNOWS SUBP. 2

The proposed language is designed to close commercial bait harvest on streams and off-channel waters that are seasonally connected to those streams within the range of the federally endangered Topeka shiner (*Notropis topeka*). In Minnesota, the Topeka shiner is found within the Missouri River drainage in Lincoln, Pipestone, Murray, Rock, and Nobles counties. Recent research indicates, that in Minnesota, the Topeka shiner has a strong preference for slow and still waters. Because the streams with Topeka shiner have extremely variable flow, the species occupies main stream channels during periods of low flow, but tends to move to the calm waters of "off-channel habitat" (i.e., side channels, oxbows, and backwaters) during periods of high flow. Once high waters recede and connections between the off-channel habitat and the stream disappear, some Topeka shiners remain in the off-channel habitat becoming isolated from the main stream. Surveys have shown that Topeka shiner populations thrive and reproduce well in these habitats.

The Topeka shiner was listed by the U.S. Dept. of Interior as an Endangered Species in 1998. This status protects the species from any taking without a federal permit. The federal Endangered Species Act (Sec. 3(18)) defines "take" as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Consequently, simply setting a bait trap within waters occupied by Topeka shiners could result in federal, criminal prosecution, or the issuance of an injunction against bait trapping. The proposed rule is necessary to make state law consistent with federal law. The proposed rule language is reasonable because instead of completely closing an area to harvest it would allow harvest with a federal permit. However, even without the proposed rule, any deliberate or incidental take of Topeka shiners without a federal permit would still be a violation of federal law.

# 6254.0510 USE OF MINNOW TRAPS, HOOP NETS, AND TRAP NETS.

**Subp 2. Tending minnow traps, hoop nets and trap nets.** The proposed change will allow a licensee to leave nets on the shoreline as long as they have permission from the owner. The change is necessary to update and clarify the language. The proposed deletion of the word "shoreline" is reasonable because it accommodates current operating practices and should help with regulation compliance. The language that requires permission to leave the traps on shore and to allow the escape of non-target species is necessary and reasonable because it will prevent the deaths of other animals and protect landowner rights.

Subp 4. Minnow trap, hoop net, and trap net specifications for licensed minnow dealers. The proposed changes would clarify the existing law by allowing the operation of an industry-preferred trap design of two throats with the inner most one not exceeding 1-½ inches. The current law is vague and is being interpreted by members of the industry and conservation officers in different ways. The DNR's concern in using traps is the harm they might impose on non-target species. Staff from fisheries, enforcement, and ecological services met with the industry and examined the two-throated trap design. The proposed change for trap specifications is necessary to clarify the existing law and ensure that non-target species can escape. It is reasonable to allow the use of these traps because they would result in minimal harm to non-target species if operated according to existing laws (6254.0510) and with this modification.

# 6256.0500 COMMERCIAL TAKING OF TURTLES

The purpose of changes to this part is to increase the likelihood that the commercial harvest of turtles in Minnesota is conducted in a sustainable manner. Three considerations point out the need for the proposed changes that would limit the commercial harvest of turtles in Minnesota:

1) Recent scientific research demonstrates that the commercial harvest of turtles in northern latitudes is not sustainable. Congdon et.al. (1987, 1993, 1994), in several studies of the demographics of Michigan turtle populations, demonstrated that these populations cannot sustain the increased adult mortality that results from commercial harvest. Brooks et al. (1988) and Gibbs and Amato (2000) also concluded that northern turtle populations couldn't sustain even minimal levels of exploitation by humans without undergoing a decline in numbers. Similar conclusions were arrived at in studies by Close and Siegel (1997), Galbraith et.al. (1997), Jenniges (2001), Klemens (2000) and Pappas et.al. (2001).

2) The commercial market for turtles is growing rapidly, especially in Europe and Asia. A recent report from TRAFFIC International, the wildlife trade monitoring program of IUCN- The World Conservation Union, reports that <sup>3</sup>/<sub>4</sub> of Asian turtles are now endangered or threatened due to overharvest. As Asian turtle populations are depleted, the world market is turning to other sources to meet the existing demand for turtles. Lovitch et.al. (2000) reports that over 7 million turtles are exported each year from the U.S. as pets or food products. These turtles are being taken from turtle-rich regions such as the Upper Midwest.

3) Commercial harvest has been closed in many states, with only three midwestern states still permitting this practice. With the closure of commercial harvest in Wisconsin (1999) and Nebraska (2001), only Minnesota, Iowa, and Michigan (snapping turtles only) permit commercial harvest. In turn,

markets in states where commercial harvest has been closed are fueling the harvest in Minnesota. For example, one Wisconsin wholesaler alone imported over 11,400 painted turtles from Minnesota in 2000. (analysis of Wisconsin import forms)

#### Subp. 1. Scope.

The proposed change to this subpart would extend its application to holders of two new types of turtle harvesting licenses: turtle seller's apprentices and recreational turtle harvesters. The proposed change is necessary to make the rules reflect the changes that were made during the 2002 legislative session (Laws of Minnesota for 2002, Chapter 351, Sec. 23, Subd. 2.) It is reasonable to add these licenses to the rules because they provide an apprentice for commercial turtle operations and the ability to use commercial gear to collect turtles for personal use.

The proposed change also limits commercial turtle harvest to Minnesota's three species of turtles that are sufficiently abundant to withstand some type of commercial harvest: western painted turtle (*Chrysemys picta bellii*), snapping turtle (*Chelydra serpentina*), and spiny softshell (*Apalone spinifera*). The western painted turtle and the snapping turtle are species that are widely distributed in the state, and local populations of these species are believed to be large enough to support limited commercial harvest. The spiny softshell, while less widely distributed than the other two species, is well distributed in many of southern and central Minnesota's larger rivers, and is subject to less market pressure than the western painted or snapping turtles.

The proposed change would result in six turtle species not being available for commercial harvest: smooth softshell (*Apalone mutica*), wood turtle (*Clemmys insculpta*), Blanding's turtle (*Emydoidea blandingii*), common map turtle (*Graptemys geographica*), Ouchita map turtle (*Graptemys ouachitensis*), and false map turtle (*Graptemys pseudogeographica*). The smooth softshell is a state "Species of Special Concern" due to its limited range along the Mississippi, Minnesota, and St. Croix rivers in southern and central Minnesota, loss of nesting habitat, and observed population declines. Due to habitat loss and low population sizes, the wood and Blanding's turtles are both state "Threatened" species, a status that prohibits taking without a separate permit. Like the smooth softshell, the three map turtle species are restricted to the Mississippi and Minnesota rivers in southern Minnesota, a distribution that makes these species vulnerable to decline if commercial harvest is permitted.

It is necessary and reasonable to limit commercial turtle harvest to the three named species because, as has been stated, there is considerable evidence that commercial harvest of any turtle species is not sustainable in northern latitudes, and only these three of the state's nine species have potential to withstand commercial harvest.

The proposed change also includes provisions to ensure that other laws that regulate the propagation, possession, and selling of turtles and eggs are also followed. The federal regulations associated with viable turtle eggs and live turtles with a carapace length of less than four inches are found in Title 21, Code of Federal Regulations, Part 1240.62, (21 CFR 1240.62). The MN Pollution Control Agency also has rules relating to the operation of feedlots that must be followed when holding turtles. The MN Department of Health has policies dealing with health concerns that arise when handling turtles. The Department of Agriculture in Chapter 17 has a complete section that deals with the regulation of aquatic farms. The proposed language about following these regulations is necessary to ensure that turtle operations meet all federal and state compliances for operation in Minnesota. It is reasonable to include this language to ensure that turtle operators are aware of these other requirements.

#### Subp. 2. Equipment.

The proposed change to this subpart would allow the use of commercial turtle harvest equipment by holders of any of the three types of turtle harvesting licenses. The proposed change also places both floating and submerged turtle traps into rule as permitted equipment, correcting an error in which floating traps were referenced in statute, but submerged traps were only referenced in rule. It is necessary and reasonable to describe the types and restrictions of permitted commercial equipment in order to eliminate the potential for misinterpretation. The proposed changes are reasonable because they better reflect how the industry is doing business. The language to limit the size of traps to a 4ftX4ftX8ft size is necessary and reasonable because it is consistent with the limits set on other traps being regulated and is of sufficient size to not exclude any current trap designs.

#### Subp. 2a. Submerged Turtle Traps.

The proposed change would update the rule to include materials and dimensions of submerged traps that are currently in use by commercial turtle harvesters. The proposed change also moves language regulating the operation of submerged traps to this Subp. from Subp. 4. This language requires that traps be set in water sufficiently shallow to allow trapped turtles to breath by extending their heads above the water's surface. These changes are necessary and reasonable in order to allow harvesters to construct their traps from readily available materials, while allowing the escape of undersized turtles, and increasing the likelihood that trapped turtles would not drown if water levels rise before a trap has been emptied.

#### Subp. 2b. Floating Turtle Traps.

The proposed change would update the rule to include materials and dimensions of floating traps that are currently in use by commercial turtle harvesters. These changes are necessary and reasonable in order to allow harvesters to construct their traps from readily available materials.

#### Subp. 3. Prohibited methods of taking turtles.

The proposed change would repeal this section. It is necessary and reasonable to repeal this language because prohibited methods are already specified in statute (Minnesota Statutes, section 97C.605, Subd. 3. Taking; Methods Prohibited).

#### Subp. 4. Operation of turtle trap.

The proposed change would move regulations specific to the operation of submerged traps to Subp. 2a, as described above. The proposed change also specifies that to "service" a trap means to "empty" the trap. This change is necessary and reasonable in order to insure that traps are emptied with sufficient frequency to avoid trapped turtles from drowning before a trap has been emptied.

Finally, the proposed change limits to 40 the number of submerged traps and to 40 the number of floating traps that a licensee or apprentice can operate, and to 3 the number of traps that a recreational licensee may operate.

The DNR has licensed the commercial harvest and sale of turtles since 1975. In 1976 a limit of 40 traps per licensee was established by Commissioner's Order. In 1991, the format of Commissioner's Orders was changed to administrative rules, and the DNR continued to limit the number of commercial traps to 40 per licensee. At that time, most turtle harvest was directed at snapping turtles using submerged traps. In 1995, the legislature enacted a law permitting a new gear known as a floating trap.

-18-

This trap is largely used for taking painted turtles. The DNR interpreted the rule as now applying to both types of traps and continued to limit the licensee to 40 traps total regardless of design. This interpretation was recently challenged in court. A Stearns County court ruling directed the DNR to promulgate new rules to address or clarify the total number of each type of trap that a licensee was permitted to use.

These changes are necessary in order to clarify the limit on the number of traps that can be operated by any one licensee. Because limiting harvest to a specified number of turtles or pounds per year would be impractical and costly to enforce, this limit is the most reasonable means by which to try to maintain commercial turtle harvest at a sustainable level. The change is also reasonable because it is likely that the same licensee would not operate submerged and floating traps during the same time of year. Floating traps are used to capture basking species, primarily western painted turtles, which are the focus of harvest during May and June. In contrast, submerged traps are selective for snapping turtles, which are the focus of harvest later in the season. Consequently, a single licensee would likely operate only 40 traps at any one time, or would use only one type of trap because their business targets only one species of turtle.

# Subp. 5. Required marking of turtle trap

The proposed change would require that traps be marked with identification tags issued by the commissioner, with lost tags reported to the commissioner, and with the commissioner able to reissue lost tags. This change is necessary and reasonable because it provides a practical means of enforcing the limit on the number of traps, without placing an undue burden on the licensee.

#### Subp. 6. Turtles taken incidental to other operations.

The proposed change is technical in nature. The change would limit the possession, transport and sell of turtles taken incidental to other operations to those listed in subpart 1. It is necessary and reasonable to have this language reflected in this subpart so that it is consistent with the other changes being proposed in this section.

### Subp. 7. Required reporting by turtle seller.

The proposed change would require that licensees maintain records that document the daily location of traps and their operations. This change is necessary in order for the commissioner to be able to assess the pressure of commercial turtle harvest on local turtle populations. The change is reasonable because the licensee can easily accomplish recording the location of operation each day, and because this type of record keeping is consistent with other regulated commercial operations, such as frogs and Lake Superior commercial netting.

#### Subp. 8. Report on buying turtles for resale.

The proposed change would require that copies of turtle shipping documents, already required in this subpart, be sent to the commissioner annually. This change is necessary in order to more effectively monitor the commercial trade of turtles within Minnesota. This change is reasonable since the document is already required of the licensee, and providing the commissioner with a copy is not an undue burden.

#### Subp. 9. Size Limits

The proposed change would place size limits on two of the three commercially harvestable

-19-

species of turtles (as specified in Subp. 1). Spiny softshell and snapping turtles must be greater than 12 inches in length. Because these species are harvested for food, this limit is necessary and reasonable because it would allow the harvest of the large individuals the market demands, while protecting reproductive individuals (those over 7 inches for both species) for several years before they could be harvested. For snapping turtles, a species for which females are smaller than males, this also biases harvest toward males and retains more females for reproduction. These changes are necessary and reasonable since they allow a portion of the population to be harvested while leaving a portion of the reproductive population in the wild so that replacement can occur.

# Subp. 10. Turtle Nests and Eggs.

The proposed changes clarify that a person needs a permit to disturb a natural nest, that turtle sellers may not sell turtle eggs, and that a turtle seller may take eggs from harvested females and place them into man-made nests. This change is necessary in order to avoid unregulated possession of turtle eggs that would circumvent other rules and statutes governing turtle harvest. This change is reasonable since possession of turtle eggs by a person with either an aquatic farm license with a turtle endorsement or private hatchery license with a turtle endorsement would still be permitted to keep turtles for egg production, and to sell turtle eggs. Possession of turtle eggs must be regulated, if activities such as turtle farming are to be permitted, in a sustainable fashion.

#### 6256.0600 CLOSED SEASONS

The proposed change would prohibit the harvest of spiny softshells during the egg-laying period of June 1 to July 15. This change is necessary in order to protect gravid females preparing to lay eggs that would produce the next generation of turtles. A closed season is already in place for snapping turtles; a closed season for western painted turtles is not considered necessary at this time because the proposed size limit would preclude the harvest of reproductive females. This change is reasonable since it leaves the remaining 10<sup>1</sup>/<sub>2</sub> months of the year open to commercial harvest of spiny softshells.

#### 6256.0900 PROPAGATION OF TURTLES.

The proposed changes would establish guidelines by which the artificial propagation of turtles would be regulated. The changes would limit propagation to aquatic farm facilities with a turtle endorsement and that no natural ponds will be licensed for propagation. The changes would establish information needed to get a turtle endorsement added to a license; requirements for obtaining turtles, eggs, and broodstock; requirements for disposal; record keeping; and that other laws regulating aquatic farms and turtle propagation also apply. Turtle harvesters have asserted that if opportunities to harvest wild turtles are further restricted, they must be replaced with opportunities to raise turtles in captivity for commercial sale. The facility and operation must be in compliance with other state and federal laws and must not allow the escape of private aquatic life into the wild. Licensed turtle operators would also be allowed to collect turtles or eggs as long as they are permitted and doing it in a sustainable fashion. These changes in this subpart are necessary in order to avoid negative impacts by this new industry, and represent a reasonable effort to provide opportunities to establish a turtle farm.

# 6260.0500 REQUIRED NOTIFICATION OF OPERATIONS, SUBP 2.

The proposed language would require commercial fishing operators to report lost or stolen nets. Nets can be lost during storms, rapid water fluctuations, and other acts of nature that may occur after they are set. These lost nets continue to capture fish and other non-target species, like birds, and if not found in a reasonable time can result in a substantial waste of resources. They can also provide safety hazards to other recreational users. Nets that are stolen and then reset could create legal issues for commercial operators. The proposed changes are necessary and reasonable to reduce resource losses, provide information about potential safety hazards, and protect the licensee from being cited for illegal operations.

# 6260.2000 COMMERCIAL FISHING ON INLAND WATERS.

**Subp 3.** Use of seines. The proposed language would reduce the number of feet of small mesh near the bag of the seine. By reducing the amount of mesh near the bag, operators would be able to reduce the catch of non-target small gamefish in large seine hauls without sacrificing efficiency. The proposed changes are necessary to reduce the capturing of non-target rough and gamefish species during operations. This change is reasonable because it would eliminate the handling of many small walleye, yellow perch, and sunfish that are illegal to possess. It would also allow the commercial licensees to operate more efficiently and help in the compliance of the gross over-limits law (Laws of Minnesota for 2002, Chapter 270) which amended Minnesota Statutes, sections 97A.015, 97A.225, 97A.255, 97A.338, 97A42097A.421, 97C.505, and 97C.843.

**Subp 4. Use of hoop nets and Subp 5. Use of crib nets**. The proposed language would increase the minimum mesh size allowed. A larger mesh size would reduce the catch of non-target small gamefish because they would be able to swim through the net. The proposed changes are necessary to eliminate the capturing of non-target rough and gamefish species during operations. This change is reasonable because it would eliminate the handling of many small walleye, yellow perch, and sunfish that are illegal to possess. It would also allow the commercial licensees to operate more efficiently and help in the compliance of the gross over-limits law (Laws of Minnesota for 2002, Chapter 270) which amended Minnesota Statutes, sections 97A.015, 97A.225, 97A.255, 97A.338, 97A42097A.421, 97C.505, and 97C.843.

#### 6262.0100 GENERAL RESTRICTIONS ON TAKING FISH.

**Subpart 3. Take a Kid Fishing Weekend.** The proposed change in Subpart 3 would add an extra day to the Take a Kid Fishing Weekend. This change is necessary to make the rule consistent with a change made during the 2000 Legislative session (Laws of Minnesota for 2000, Chapter 473, Section 4, Subdivision 1) that added a day to the Minnesota Statutes, section 97A.445, Subd. 1 language. This change is reasonable because it would provide those who work weekends an opportunity to participate in this event.

Subpart 5. Possession of fish while on state waters. Currently, fish possession regulations are scattered throughout various laws. It is reasonable to make the following proposed changes because they would clarify existing laws, provide a common location for enforcement staff and anglers to refer to when looking for these laws, and help with future enforcement and compliance efforts.

The proposed language in Item A clarifies the existing law that allows an angler to hold fish in a live-well or on a stringer and then exchange these fish for another one that is caught later (often referred to as culling or sorting) provided they have less than a limit of fish in possession. Studies have documented that releasing a fish after it has been held for a time can contribute to higher fish mortalities (Goeman 199, Plumb, et al. 1988). The change is necessary and reasonable because it asks anglers not to

cull or sort fish once a limit of that species has been reduced to possession so that fewer fish are wasted.

The proposed addition in Item B is technical and would clarify existing laws that make it illegal to reduce to possession and angle for a species during its closed season. Currently, two different statute definitions are used to prohibit angling for a species during its closed season. Minnesota Statutes, section 97A.015, Subd. 34 defines that an "open season" is a period of time when a specified protected animal may be taken. Minnesota Statutes, section 97A.015, Subd. 47 definition of "taking" includes attempting to take wild animals.

Season closures are used to protect spawning concentrations of fish and protect limited stock for later harvest by a larger clientele (*Inland Fisheries Management in North America*. In recent years, TV sports shows and radio talk shows have depicted episodes of "catch and release fishing" during closed seasons. Studies have shown that overall mortality of fish that are caught and released is estimated to be from 5-20% (Goeman 1991, Plumb, et al. 1988.) The percent of mortality that occurs is based on the severity of the hook's puncture wound, handling techniques practiced by the angler, weather, and other environmental factors. The proposed change is necessary to inform anglers that this practice is illegal and to help protect fish during closed seasons. It is reasonable because it would clarify for anglers that this activity is illegal and helps with future angler compliance and enforcement.

Item C's proposed language would require an angler or persons fishing as a party to immediately release a fish if they already have a limit of that species. Studies have documented that releasing a fish after it has been held for a time can contribute to higher fish mortalities (Goeman 199, Plumb, et al. 1988). The change is necessary and reasonable to help decrease the number of fish that die after being released and help enforcement of possession limits.

Item D combines several existing rules (6262.3200, Subp. 4 and 5; 6264.0300 Subp. 1; and 6264.0400, Subp. 1) into one location. These existing laws make it illegal to have undressed fish in possession when fishing or on a water body with specific length limits that differ from statewide limits. It is necessary and reasonable to do this to provide law officials and the public an easier way of finding and referring to these laws. This change would also provide for a necessary exception: eating a meal of fish when staying overnight on a boat when it is moored or docked. This exception is necessary and reasonable because it provides a legal means for anglers to possess fillets of fish on waters with special length limits.

Item E clarifies that when a person is fishing they may not possess fish that are outside of or in excess of the limits for that water body. Currently this language is found throughout the various subparts of 6264.0300 and 6264.0400. This change is necessary and reasonable because it provides consistency across water bodies and should improve angler compliance. It also is reasonable because it puts this language in one place.

Item F clarifies that an angler who catches a fish on one body of water and needs to transport it back to their cabin or access site by crossing a water body with different regulations may do so as long as they do not stop to fish. On many of the waters where this is an issue, language has been written into those sections to allow this type of transport. This change is necessary and reasonable because the language would provide consistency across water bodies and should improve angler compliance. It is also reasonable because it puts this language in one place.

**6262.0300 FISHING REGULATIONS FOR LAKE SUPERIOR.** The proposed language would extend the season by one day if the closing date fell on a Saturday. This language would be less restrictive by allowing an extra weekend day of angling in some years. This change is necessary and

-22-

reasonable because it makes the Lake Superior season consistent with how other seasons are set so that angler confusion is reduced. It would also sometimes provide an extra weekend day of fishing that is beneficial to anglers and associated fishing industries, without impacting the fisheries resource.

### 6262.0500 WATERS CLOSED TO TAKING FISH.

**Subpart 2, Item B. St Louis and Carlton counties.** The proposed language would establish a seasonal fishing closure on a portion of Lake Superior for those anglers fishing from a boat. The closure of this area would correspond with the existing closure for lake trout. At times both charter captains and the general public target this area for salmon. However, anglers are unintentionally catching lake trout because they are congregated for spawning. Research shows that it can be beneficial to restrict anglers from areas where fish congregate on spawning or nursery grounds (Hill and Shell 1975.) The proposed language is necessary to help protect the lake trout that congregate in this area. It is reasonable to only include boat fishing in this closure, because shore anglers cannot access the congregating lake trout. It is also reasonable to provide this small sanctuary because many other good salmon fishing sites exist for the boat anglers to use.

**Subpart 2, Item H. Cass County.** The proposed change would create a seasonal closure on a portion of the Gull River in Cass County. This portion of the Gull River has been annually posted closed to fishing under the authority in Minnesota Statutes, section 97C.025. Research shows that it can be beneficial to restrict anglers from areas where fish congregate on spawning or nursery grounds (Hill and Shell, 1975.) The language is necessary and reasonable to protect large numbers of concentrated spawning walleye from potential over-harvest.

Subpart 2, Item I. Goodhue County and Subpart 2, Item J. Wabasha County. The proposed language would establish a 300 ft seasonal fishing closure below Lock and Dam 3 and 4 on the Mississippi River. Such areas below dams congregate large numbers of fish as they begin to migrate during spring spawning. When congregated in large numbers, the fish may become more vulnerable to harvest. This area also presents many safety hazards to anglers because of the extreme turbulence and sudden releases of water. These areas had been previously closed to fishing under the authority in Minnesota Statutes, section 97C.025. However, in April 2000, DNR conservation officers issued a ticket for fishing in one of these closed areas. The person took the case to trial. In July of 2000, Judge Gerard W Ring of the Third Judicial District Court, Wabasha County acquitted the defendant on the grounds that the state had not established the commissioner had ordered that these areas be closed. The language is necessary to establish the closure and provide protection to fish when they are most vulnerable to harvest.

Subpart 2a, Item B, C and H. These proposed changes are technical in nature. The repeals are necessary because the rules have expired. It is reasonable for agencies to help keep rules up-to-date by getting rid of obsolete language.

**Subpart 2a, Item J.** The proposed change for Item J would repeal this language and move it to 6262.0575. The need and reasonableness for this change is provided in that section.

# 6262.0575 WATERS WITH RESTRICTIONS ON TAKING FISH

**Subp. 4 Red Lake and tributaries.** The proposed language would prohibit the taking of walleye, including catch-and-release, on the Upper Red Lake and its tributaries (Beltrami County). The proposed changes will ensure that the original intent and existing interpretation of the law is accurately reflected in the rules. The lake has been closed to the harvest of walleye for the last three years to allow

the population to recover from over-harvest. The existing language doesn't prohibit catch-and-release of walleye and the fish are now at a size where anglers would be tempted to practice catch-and-release. Evaluations of the fishery have found that the fish population is still recovering and not able to withstand the incidentally mortality from catch-and-release fishing (various DNR management reports.) A more restrictive regulation is necessary to facilitate the recovery of this species.

Red Lake covers 275,000 acres. All of the Lower Lake (167,000 acres) and 60,000 acres of the Upper Lake are within the Red Lake Indian Reservation. Only members of the Red Lake Band of Chippewa Indians have access rights to reservation waters; 48,000 acres of the northern portion of the upper lake are available for recreational fishing by non-band members.

The last year that the Band commercially fished their portion of Red Lake was 1996. Their commercial harvest that year was 15,000 pounds. Since 1994, the average number of young-of-the-year walleye captured by shoreline seining has declined to less than one per seine haul. By comparison, the last strong year class (1985) produced a young-of-the-year abundance of 41 per seine haul, and moderate year classes (1989-1991) approximately 10 per seine haul. The mean number of walleye captured in experimental gill nets in state waters has declined from highs of 20 or more per lift to approximately 2-3 per lift in the mid to late 1990s (DNR Lake Management Report). Walleye abundance on reservation waters was reported to be even less. These numbers indicate that the walleye population had collapsed. There are currently still not enough walleye to sustain a commercial or sport fishery; but two strong year classes have been established that would rebuild the population if protected.

In 1997, the State and the Red Lake Band formed a Fisheries Technical Committee to investigate how to recover the walleye population. The Fisheries Technical Committee formulated a recovery plan and created a Memorandum of Agreement. It is necessary and reasonable to prohibit the taking of walleye until the population recovers. It is also necessary to honor the memorandum of understanding that was signed on 9 April 1999 by the DNR, Red Lake Band, and the Bureau of Indian Affairs, which closes Red Lake and its tributaries to walleye harvest and continues the moratorium on commercial fishing by the Red Lake Band until the population has recovered.

**Subp 5. Minnows in Southwestern counties.** The proposed language would close recreational bait harvest on streams and off-channel waters that are seasonally connected to those streams within the range of the federally endangered Topeka shiner (*Notropis topeka*). In Minnesota, the Topeka shiner is found within the Missouri River drainage in Lincoln, Pipestone, Murray, Rock, and Nobles counties. Recent research indicates, that in Minnesota, the Topeka shiner has a strong preference for slow and still waters. Because the streams with Topeka shiner have extremely variable flow, the species occupies main-stream channels during periods of low flow, but tends to move to the calm waters of "off-channel habitat" (i.e., side channels, oxbows, and backwaters) during periods of high flow. Once high waters recede and connections between the off-channel habitat and the stream disappear, some Topeka shiners remain in the off-channel habitat becoming isolated from the main stream. Surveys have shown that Topeka shiner populations thrive and reproduce well in these habitats.

The Topeka shiner was listed by the U.S. Dept. of Interior as an Endangered Species in 1998. This status protects the species from any taking. The federal Endangered Species Act (Sec. 3(18)) defines "take" as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Consequently, simply setting a bait trap within waters occupied by Topeka shiners could result in federal, criminal prosecution, and/or the issuance of an injunction against bait trapping. The proposed rule is necessary to make state law consistent with federal law. The proposed rule is reasonable because it would help anglers avoid circumstances in which a permitted activity could result in a violation of federal law and there are plenty of other areas available to obtain minnows. However, even without the proposed rule, any deliberate or incidental take of Topeka shiners would still be a violation of federal law.

# 6262.0800 OPEN SEASONS FOR TAKING WHITEFISH AND CISCOES SUBP 5.

The proposed change would establish a limit of 50 cisco on the Leech Lake Reservation. Before the early 1990's, angler interest in this species was low. High angler catch rates during March and April have resulted in a sizeable fishery for this fish over the last 10 years. Data from recent DNR creel surveys on Leech Lake indicate that nearly state licensed anglers harvest 50,000 lbs. of cisco annually. This amount exceeds the highest annual harvest recorded by the Leech Lake Band of Ojibwe's commercial fishery. Some reports from conservation officers and other officials have indicated that a large amount of the harvest may, however, be wasted. This change is necessary to help protect this fish, which are a valuable sport fish and key forage species. This change is reasonable because it is not likely to impact the current sport-netting fishery because a typical sport netter is not likely to exceed the 50 fish limit based on current records.

#### 6262.3300 EXEMPTION FROM FISH TRANSPORTATION REQUIREMENTS

The proposed change in this rule is technical. The consolidation changes being made in Minnesota Rules, part 6262.0100 move Minnesota Rules, part 6262.3200 Subp. 5 to that section and repeals the existing language in Minnesota Rules part 6262.3200. This change is necessary and reasonable because it would update this part with the correct references.

### 6264.0050 RESTRICTIONS ON DESIGNATED TROUT LAKES AND STREAMS.

The proposed change would allow the use of live leeches for fishing when on a designated trout lake. The original intent of this law was to prohibit fishing with only minnows. The reason for limiting the use of live minnows was to reduce the chance of unwanted introductions and the transmittal of diseases and parasites. The DNR doesn't have the same resource concerns with leeches. However, the definition of minnows in Minnesota Statutes Chapter 97A includes leeches. This change is necessary to allow anglers to use live leeches on designated trout streams. This change is reasonable because using leeches for bait would not impact stream trout populations in designated trout lakes.

# 6264.0300 DESIGNATED EXPERIMENTAL REGULATIONS SUBP. 32

The proposed change would delete the walleye and sauger combination limit of four fish. Rainy Lake is a border water that must meet a safe harvest allocation for walleye as agreed to by Ontario and Minnesota. The existing language provides for experimental fishing regulations that limit walleye and sauger harvest on Rainy Lake. In 2001, the Division of Fisheries used the exempt rule making process to adopt the walleye and sauger daily and possession limit of four fish that would have been effective March 1, 2002. The regulation that reduced the possession and bag limit for walleye to four fish was necessary to meet safe harvest allocations. The sauger was included in combination with walleye in the four fish daily and possession limit to simplify the regulation and was not necessary to reduce sauger harvest or to protect the sauger population. Businesses around the Rainy Lake area expressed concerns that a lowered sauger limit would hinder their ability to market and promote the fishery, especially during the winter season. As a result, the existing language in 6264.0300 and 6266.0700 was changed in 2002 by emergency rule to allow a limit of 8 walleye and sauger in the aggregate of which not more than

### 4 may be walleye.

The proposed change makes the emergency rule permanent. It is necessary and reasonable to make this change because allowing up to eight sauger in the angler's daily and possession limit may have a beneficial effect on the business community in the Rainy Lake area without resulting in overharvest of walleye.

# 6266.0100 GENERAL REGULATIONS FOR TAKING FISH ON BOUNDARY WATERS WITH ADJACENT STATES.

**Subp 2.** Possession limits on boundary waters. The proposed language in item C would make it illegal to release a fish once it was reduced to possession while fishing on the Minnesota-North Dakota border waters. North Dakota has already implemented such a regulation on its side of the river. Therefore, the proposed change is necessary and reasonable to maintain consistent regulations on the boundary waters and prevent angler confusion and problems with enforcement of different possession requirements on the same water. It is reasonable to require anglers to decide whether or not to release a fish immediately, because fish are more likely to die if they are held in live wells or on stringers prior to being released (Goeman 1991 and Plumb, et al. 1988.) The proposed language also moves language for the other border waters where sorting is prohibited to this part. This is necessary and reasonable because it creates a common area to find all of this information.

The proposed change in Item D is technical. It is necessary and reasonable to add this language to help clarify that all the general rules on possession, transportation, and packaging of fish apply to the boundary waters unless otherwise noted for those boundary waters. The Lake Superior section (6262.0300) was also included in this language because waters are shared with Wisconsin.

# 6266.0500 TAKING OF FISH ON MINNESOTA-WISCONSIN BOUNDARY WATERS. SUBP 3(D)

Item D is a technical language change that would add the species designations of "flathead and channel" to the catfish heading. This change is necessary to help the public distinguish between the two major species of catfish that make up this category. These two species are unique in terms of distribution, habitat requirements, and life history (Underhill 1974 and Hatch, et al. 1999). It is anticipated that different restrictions may be necessary in the future to adequately manage and protect them. The proposed change is reasonable because it alerts anglers that there are two different species of catfish and would help with future compliance should these two species have different fishing restrictions.

# 6266.0600 MINNESOTA-WISCONSIN BOUNDARY WATERS COMMERCIAL REGULATIONS.

**Subp. 8 Taking of turtles.** The proposed change would repeal the turtle language and make a technical reference change to the existing regulations. This change is necessary because the turtle regulations are already covered in Chapter 6256. It is reasonable to expect that obsolete or redundant language would be repealed or deleted as necessary.

**Subp.9 Taking of mussels.** The proposed change would no longer allow mussel harvest on Minnesota-Wisconsin border waters. Mussels have been harvested commercially from Minnesota waters for a variety of reasons since the turn of the last century. Commercial interests in mussels have gone from the production of buttons to, recently, the culture of pearls. In 1998, the demand for

commercial mussels declined dramatically because of a major die-off of Japanese oysters and the discovery of other less regulated markets in other countries. The requests for permits to harvest mussels went from 18 individuals to only three in 1999 and none in 2000 (DNR license data.) Only one permit has been issued since 2000.

Mussels are very long-lived, slow growing species that require fish to serve as hosts for the dispersal of young. They are relatively immobile which makes them susceptible to rapid changes in habitat and water quality. Half of the state's mussel species are classified as special concern, threatened or endangered in Chapter 6134. Data indicates that mussel populations have declined both in abundance and size structure both in Minnesota (Hart, et.al. 2001) and throughout North America (Anthony, et.al. 2001.)

Commercial harvest has also been shown to impact native populations in Lake Pepin and near Prairie duChien, WI (various DNR data.) Modeling of the three-ridge mussel populations on Lake Pepin suggests that even a 5% exploitation rate of adult mussels can cause extirpation over a period of years (Hart, et al 2002.)

Currently, the accidental introduction of zebra mussels has had a profound impact on native mussels. Research indicates the commercial mussel harvesting operations that result in the handling and disturbance of a variety of species and sizes of mussels can increase the rate and extent of colonization by zebra mussels. High mortality of native mussels of all sizes and species occurs under heavy zebra mussel infestation (Hart, et.al 2002.)

The proposed change is necessary to protect the long-term survival of these animals and provide for the recovery of native populations. It is reasonable to close these waters to commercial harvest at this time because it would affect only one person. A harvest closure is also being pursued by Wisconsin. This change is reasonable because it would allow for our regulations to be consistent with Wisconsin's.

#### 6266.0700 TAKING OF FISH ON MINNESOTA-CANADA BOUNDARY WATERS SUBP 2-6.

Subp 2. Species, seasons, and limits on Minnesota-Canada Boundary Waters. The proposed changes would add an extra day to the fishing seasons when the closing date fell on a Saturday, splits the current Lake of the Woods season and reduces the limit for walleye and sauger in the first part of the season, changes the Rainy Lake walleye and sauger limits, changes the sturgeon season and limits, and bans the use of gaffs in the Rainy River.

The affected waters are boundary waters shared by Minnesota and Canada. Minnesota entered into negotiations in 2000 with Ontario to look at the existing walleye, sauger, and lake sturgeon border regulations. Lake sturgeon stocks in Minnesota-Canada boundary waters are recovering from decades of low abundance due to over harvest and loss of habitat. Increased interest and rapidly expanding fishing pressure directed at sturgeon have resulted in harvest levels that are too high to support the recovery of this species. The proposed language is necessary and reasonable to reduce harvest levels within targets established for Minnesota-Ontario boundary waters that enhance the recovery of lake sturgeon.

In addition to the sturgeon regulations, it was determined that additional changes were also necessary for walleye. In 1999, a North American Free Trade Agreement suit was filed against Ontario that resulted in walleye season and harvest changes for both the Canadian and Minnesota sides of Lake of the Woods. The changes implemented in 1999 and extended in 2002 using the emergency rulemaking process are working. Consequently, Minnesota needs to continue the existing regulations for walleye and sauger. The proposed change is necessary and reasonable to meet our agreed to safe harvest levels. The need and reasonable statements and background for Rainy Lake are provided in the rule-byrule analysis of 6264.0300, Rainy Lake Experimental Regulation.

Subpart 6. Equipment. The proposed language would make it illegal to use gaffs on the Rainy River. A gaff is a large hook that is used by anglers to lift large fish into their boats. The use of a gaff often results in a large puncture wound and ultimately death of the fish. Utilizing a gaff on a water body were one can only harvest fish within certain limits would result in mortality of fish that must be released. This language is necessary to protect the large sturgeon in this water body so that the rehabilitation of this species is successful. It is reasonable to prohibit anglers from using gaffs because there are other less-damaging methods to land large fish.

#### Repealer Summary

#### 6212.2600 POSSESSION OF FISH. Subp. 2. Restrictions on sorting.

and reasona This language is being moved to MS 6262.0100 Subd. 5. The need and reasonableness for this change is provided in that section

**6256.0500 COMMERCIAL TAKING OF TURTLES.** Subp. 3. **Prohibited methods of taking turtles** This language repeals the rule language because it is already covered in MS 97C/605 Subd. 3. It is necessary and reasonable to eliminate redundant language.

6262.3200 PREPARATION AND PACKING OF FISH FOR TRANSPORTATION. Subp. 5. Fish with length limits on specific waters.

This language is being moved to MS 6262.0100 Subd. 5. The need and reasonableness for this change is provided in that section

**6264.0300 DESIGNATED EXPERIMENTAL WATERS.** Subpart 1. **General provisions.** This language is being moved to MS 6262.0100 Subd. 5. The need and reasonableness for this change is provided in that section

**6264.0400 DESIGNATED SPECIAL MANAGEMENT WATERS.** Subpart 1. **General provisions.** This language is being moved to MS 6262.0100 Subd. 5. The need and reasonableness for this change is provided in that section

6266.0400 TAKING OF FISH ON MINNESOTA-SOUTH DAKOTA BOUNDARY WATERS. Subp. 14. Possession requirement.

This language is being moved to MS 6266.0100 Subd. 2. The need and reasonableness for this change is provided in that section

6266.0500 TAKING OF FISH ON MINNESOTA-WISCONSIN BOUNDARY WATERS. Subp. 9. Possession requirement.

This language is being moved to MS 6266.0100 Subd. 2. The need and reasonableness for this change is provided in that section

#### **6266.0600 MINNESOTA-WISCONSIN BOUNDARY WATERS COMMERCIAL REGULATIONS.** Subp. 9. Taking of mussels.

This repealer eliminates the language that allows mussel harvest on the Minnesota – Wisconsin boundary waters. The need and reasonableness for this change is provided in the MR 6266.0600 section.

### **Review of Documents**

Sources cited in this document may be reviewed on workdays between 8:00 am and 4:30 p.m. in the

Section of Fisheries or Ecological Services office in the DNR headquarters, 500 Lafayette Road, St. Paul, Minnesota.

Upon request, this document and others can be made available in an alternative format, such as large print, Braille, or cassette tape. To make such a request, please contact Linda Erickson-Eastwood, by writing to 500 Lafayette Rd, Box 12, St Paul, MN, calling 651-296-0792 or toll free outside the metro area 1-888-646-6367 or TTY 651-296-5484 or toll free TTY 1-800-657-3929, or email to linda.erickson-eastwood@dnr.state.mn.us.

# Witnesses

If the rules go to public hearing, the witnesses below may testify on behalf of the DNR in support of the need and reasonableness of the rules. The witnesses would be available to answer questions about the development and content of the rules. The witnesses for the Department of Natural Resources include:

Linda Erickson-Eastwood, Program Manager Department of Natural Resources 500 Lafayette, Box 12 St. Paul, MN 55155

Roy Johannes, Commercial Fisheries Coordinator Department of Natural Resources 500 Lafayette, Box 12 St. Paul, MN 55155 Jay Rendall, Exotics Species Program Coordinator Department of Natural Resources 500 Lafayette, Box 25 St. Paul, MN 55155

Richard Baker, Research Coordinator Department of Natural Resources 500 Lafayette, Box St. Paul, MN 55155

Based on the foregoing, the DNR's proposed rules are both necessary and reasonable.

By: Gene Merriam, Commissioner

Department of Natural Resource

Dated: 5.7.03

#### **References** Cited

- J.L. Anthony, J.L and J.A. Downing. 2001. Exploitation trajectory of a declining fauna: a century of freshwater mussel fisheries in North America. Can. J. Fish. Aquat. Sci. 58: 2071-2090.
- Brooks, R.J., D.A. Galbraith, E.G. Nancekivell, and C.A. Bishop. 1988. Developing management guidelines for snapping turtles. Pp. 174-179 in <u>Management of Amphibians, Reptiles, and Small Mammals in North America</u>. USDA, Forest Service Gen. Tech. Rpt. RM-166.
- Close, L.M. and R.A. Siegel. 1997. Difference in body size among populations of red-eared sliders (Trachemys scripta elegans) subjected to different levels of harvesting. Chelonian Cons. and Biol. 2(4):563-566.

Cody WJ. 1961. Iris pseudacorus L. escaped from cultivation in Canada. Canadian Field Nat., 75: 139-142.

- Congdon, J.D., G.L. Breitenbach, R.C. van Loben Sels, and D.W. Tinkle. 1987. Reproduction and nesting ecology of snapping turtles (Chelydra serpentina) in southeastern Michigan. Herpetologica 43(1):39-54.
- Congdon, J.D., A.E. Dunham, and R.C. van Loben Sels. 1993. Delayed sexual maturity and demographics of Blanding's turtles (Emydoidea blandingii): Implications for conservation and management of long-lived organisms. Cons. Biol. 7:826-833.
- Congdon, J.D., A.E. Dunham, and R.C. van Loben Sels. 1994. Demographics of common snapping turtles (Chelydra serpentina) : Implications for conservation and management of long-lived organisms. Am. Zool. 34:397-408.
- Galbraith, D.A., R.J. Brooks, and G.P. Brown. 1997. Can management intervention achieve sustainable exploitation of turtles? Pp. 186-194 in Proceedings: Conservation, Restoration, and Management of Tortoises and Turtles An International Conference. New York Turtle and Tortoise Society.
- Gibbs, J.P. and G.D. Amato. 2000. Genetics and demography in turtle conservation. Pp. 207-217 in <u>Turtle Conservation</u>. M.W. Klemens, ed. Smithsonian Institution Press. Wash, D.C. 334 pp.
- Gigliotti, L.M., and W.W. Taylor. 1990. The effect of illegal harvest on recreational fisheries. North American Journal of Fisheries Management 10:106-110.
- Goeman, Timothy J. 1991. Walleye mortality during a live-release tournament on Mille Lacs, MN. North American Journal of Fish Management 11(1): 57-61.
- Hatch, J.T.; D.P. Siems, K.A. Schmidt, J.C. Underhill, R.A. Bellig and R.A. Baker. Unpublished 1999. A New Distributional Checklist of Minnesota Fishes, With Comments on Classification, Historical Occurrence, and Conservation Status.
- Hart, R. A., J. W. Grier, and A. C. Miller. 2002. Extirpations of harvested and zebra mussel colonized threeridge mussel populations in Lake Pepin, Upper Mississippi River, USA. The American Midland Naturalist, accepted upon revision.

Hart, R. A., M. Davis, A. C. Miller, and J. W. Grier. 2002. Changes in the freshwater mussel communities of

Lake Pepin, upper Mississippi River, Minnesota and Wisconsin, from 1990-1997. American Malacological Bulletin. In Press.

- Hart, R. A, J. W. Grier, A. C. Miller, and M. Davis. 2001. Empirically derived survival rates of a native mussel, Amblema plicata, in the Mississippi and Otter Tail rivers, MN. The American Midland Naturalist 146:254-263.
- Hill, T.K., and E.W. Shell. 1975. Some effects of a sanctuary on an exploited fish population. Transaction of the American Fisheries Society 104:441-445.

Inland Fisheries Management in North America. 1993. Publisher American Fisheries Society.

- Jancono C.C., US Geological Survey, 31 Aug. 2000; updated 30 Sept. 2001. Iris pseudacorus in the Frio River. http://nas.er.usgs.gov
- Jenniges, J.J. 2001. Age Determination of Common Snapping Turtles (Chelydra serpentina) in West Central Minnesota. M.S. Thesis, St. Cloud State Univ.
- Klemens, M.W. 2000. From information to action: Developing more effective strategies to conserve turtles. Pp. 239-258 in <u>Turtle Conservation</u>. M.W. Klemens, ed. Smithsonian Institution Press. Wash, D.C. 334 pp.
- Lovitch, J.E., R.A. Mittermeier, P.C.H. Pritchard, A.G.J. Rhodin, and J.W. Gibbons. 2000. Powdermill Conference: Trouble for the World's Turtles. Pp.16-17. Turtle and Tortoise Newsletter 1 (Jan 2000). Chelonian Research Foundation.
- Michigan State University Extension Ornamental Plants plus, 1998. Iris psuedacorus Yellow Flag. http://www.msue.msu.edu/msue/imp/modop/masterop.html
- Missouri Botanical Garden, March 2000. Kemper Center for Home Gardening. http://www.mobot.org/welcome.html
- Pappas, M.J., J. Congdon, and A. Pappas. 2001. Weaver Bottoms: 2001 turtle survey; management and conservation concerns. Unpubl. Report to Minnesota DNR and U.S. Fish and Wildlife Service.
- Plumb, J.A.; John M. Grizzle and W.A. Rogers. 1988. Survival of caught and released largemouth bass after containment in live wells. North American Journal of Fish Management 8(3): 325-328.
- Ramey V., Peichal B. 2001. Non-native plants in the United States, Iris pseudacorus L. Center for Aquatic and Invasive Plants, University of Florida and Sea Grant, University of Minnesota. http://plants.ifas.ufl.edu/seagrant/welcome.html

Underhill, J. C. and S. Eddy. 1974. Northern Fishes.

-31-