
**Legislation, Regulation and Policy
for the Prevention and Control of
Nonindigenous Aquatic Nuisance Species:
Model Guidance for Great Lakes Jurisdictions**

Approved by the Great Lakes Panel on Aquatic Nuisance Species

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PREFACE

The report *Legislation, Regulation and Policy for the Prevention and Control of Nonindigenous Aquatic Nuisance Species: Model Guidance for Great Lakes Jurisdictions* is presented to the Great Lakes states and provinces to advance interjurisdictional consistency for the prevention and control of nonindigenous aquatic nuisance species (ANS). Although prepared specifically for the Great Lakes states and provinces, the model guidance also has applications for other jurisdictions in the region and beyond.

The Great Lakes Panel on Aquatic Nuisance Species is to be acknowledged for its valuable contributions to the development of the model guidance. Panel membership provided technical advice on existing state/provincial legislation regarding nonindigenous aquatic nuisance species prevention and control. Selected portions of the language appearing in the model guidance have been taken in entirety or adapted from existing legislation. The Panel also played an active role in building consensus for the structure and content of the model guidance through symposia discussions and extensive review of several drafts of the document. Their contributions, as well as the contributions of other interested parties, were critical to the success of the project.

The project grant titled *Model State Legislation for the Prevention and Control of Aquatic Nuisance Species in Coastal and Inland Waters* was made possible with funding from the National Oceanic and Atmospheric Administration (NOAA) and the Michigan Department of Environmental Quality (MDEQ), Coastal Management Program. The views expressed herein are those of the Great Lakes Panel membership and do not necessarily reflect the views of NOAA, or MDEQ.

Project activities were conducted under the Great Lakes Commission's Resource Management and Environmental Quality Program. Project staff, also providing support to the Great Lakes Panel, includes Katherine Glassner-Shwayder (principal author and project manager), Thomas Crane (program manager) and Matt Doss (project manager).

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INTRODUCTION

The Great Lakes jurisdictions have made notable progress in efforts to prevent or otherwise control the introduction and spread of nonindigenous aquatic nuisance species (ANS) in the Great Lakes region. The Great Lakes Panel on Aquatic Nuisance Species, chartered under U.S. federal law (P.L.10-646), has helped advance these efforts by providing a forum for discussion, consensus-building, coordination and action among relevant public, private sector and user group interests in the United States and Canada.

Despite progress in many areas, the Great Lakes Panel has recognized a particularly critical problem: a lack of interjurisdictional consistency in laws, regulations and policies directed at ANS prevention and control efforts. Preliminary research found gaps, inconsistencies and lack of coordination in areas such as the definition of aquatic nuisance species; handling, transport and reporting procedures; and the nature and focus of both regulatory and public information and education programs. Given the ecosystemic nature of ANS infestation problems, and the limited resources to address them, the Great Lakes Panel agreed that enhanced consistency between and among Great Lakes states, provinces, tribal authorities and other jurisdictions would ensure a more efficient and effective regional prevention and control program.

Project Overview

In late 1997, the Great Lakes Panel, with technical and administrative support from the Great Lakes Commission, received a grant from the Coastal Management Program of the Michigan Department of Environmental Quality for a project titled *Model State Legislation for the Prevention and Control of Aquatic Nuisance Species in Coastal and Inland Waters*. Project objectives included the development of a descriptive inventory and analysis of ANS legislation of the Great Lakes states and provinces; the identification of gaps and inconsistencies in that legislation as well as regulations and policies; the development of a reference guide and model language that addresses these gaps and inconsistencies; and the development of recommendations for promoting the model and encouraging adoption of its elements, as appropriate, in legislation of the Great Lakes states, provinces and tribal jurisdictions. As part of a multi-step process involving Commission staff research, the Panel sponsored symposia and extensive consultation with interested parties, culminating in the final report titled *Legislation, Regulation and Policy for the Prevention and Control of Nonindigenous Aquatic Nuisance Species: Model Guidance for Great Lakes Jurisdictions*.

Use of the Model Guidance

The Great Lakes Panel offers this model guidance for consideration by Great Lakes jurisdictions as laws, regulations and policies are developed and implemented (refer to **Appendix A** for membership listing of the Panel). Elements of the model guidance represent a broad array of options in terms of legislation, regulation and policy that are expressed in terms of model language. Recommendations associated with the model language also are presented in the model, as indicated by text in italicized, boldface type.

Legislative/regulatory regimes, policy practices, management approaches, societal preferences and ecological characteristics differ from one jurisdiction to the next in the Great Lakes region. Certain elements in the model guidance may therefore be relevant for some jurisdictions and inappropriate for others. Therefore, the model guidance should not be considered as an “all or nothing” proposition, but rather a comprehensive “tool kit” from which a jurisdiction can select the legislative, regulatory and policy tools best suited to its own needs. The items presented in the tool kit are supported by a majority of Great Lakes jurisdictions represented on the Great Lakes Panel, but not every item included in the model guidance is supported by every Great Lakes jurisdiction. Also, the ability to enforce provisions of the model guidance will vary from one jurisdiction to the next, as the relevance of a given provision may vary. Where possible, jurisdictions are encouraged to adopt uniform approaches to ANS prevention and control. If uniformity cannot be achieved, due to differences in approach among jurisdictions, a higher level of consistency in legislative, regulatory and policy approaches should be sought.

The model guidance is based primarily on the analysis of legislation, regulation and policy of the Great Lakes states. However, the model guidance does have applicability to the provinces, tribal governments and other jurisdictions in the Great Lakes region. The Great Lakes Panel recommends that the Great Lakes states, provinces, tribal authorities and other interested jurisdictions use the model guidance to: 1) identify gaps and unmet needs within their own jurisdictions; 2) formulate laws, regulations and/or policies that address these needs; and 3) enhance comprehensiveness and consistency from one jurisdiction to the next in the interest of an efficient and effective regional approach to ANS prevention and control.

The model guidance is directed at all waters within Great Lakes jurisdictions, including the Great Lakes, their tributaries and inland lakes, rivers and streams (both within and outside the Great Lakes basin). Guidance provisions are intended to apply throughout Great Lakes jurisdictions, including watersheds lying outside the Great Lakes basin.

In offering the model guidance to interested jurisdictions, the Great Lakes Panel emphasizes the following premises on which the model is based:

- The model guidance is not intended to replace, contradict or otherwise compete with existing laws, regulations and policies. The intent is to provide a benchmark for assessment and a means to enhance interjurisdictional consistency.
- The model guidance focuses on areas of management that are typically under the authority of state or provincial government. The model, however, does have application in a variety of settings, such as tribal authorities and local units of government.
- Effective prevention and control requires a careful balance between programs involving regulation, enforcement, voluntary compliance and information and education. Areas of emphasis can and will vary from one jurisdiction to the next.

- Interjurisdictional consultation and collaboration is a cornerstone of a consistent region-wide effort, and interjurisdictional agreements and other institutional arrangements should be pursued.
- Although the model guidance is considered a comprehensive collection of “tools” from the Great Lakes states for the development of ANS legislation, regulation and policy, other tools implemented in other jurisdictions may apply or can be created.

The model guidance does not recommend state and provincial regulatory provisions regarding ballast management in commercial vessels, as this transport mechanism is subject to regulation by the U.S. and Canadian federal governments. It is recommended, however, that state/provincial legislation, regulations and policy, under their concurrent authority to protect jurisdictional waters, support and augment the federal programs.

Several activities are underway to address the issue of ballast water management. The U.S. Coast Guard is reviewing the regulations applicable to the Great Lakes. Also, a petition has been submitted to the U.S. Environmental Protection Agency to repeal the exemption of ballast water discharge from vessels from the National Pollution Discharge Elimination System (NPDES) as mandated under the Clean Water Act. The Canadian departments of Transport, and Fisheries and Oceans are considering implementation of ballast regulatory authority, recently granted to the executive by Parliament. Of particular note is the legislation that has been introduced in the state of California (February 24, 1999) regarding the regulation of ballast water discharge (**Appendix B**). State and provincial agencies with responsibility for ANS prevention and control should follow these developments closely and position their programs accordingly.

Model Guidance Format and Content

The model guidance is organized into 15 sections and a series of appendices.

Sections 1-2 present the model guidance title and definitions of selected terms used in the text to help set the stage for the model ANS policy.

Section 3 makes recommendations regarding designated management authority and provides guidance for regional coordination, intra-agency communication and authorization for program implementation and funding.

Section 4 presents a four-tiered classification system for nonindigenous aquatic species and recommended criteria to guide in the classification process.

Sections 5-6 establishes a process for listing prohibited, regulated and unregulated species. It also defines prohibited activities and establishes a permitting process and seizure authority associated with violations of prohibited species provisions.

Section 7 addresses unlisted species, establishing a process for their examination, review and classification, and prohibiting certain activities without prior approval of the designated lead agency.

Section 8 calls for a designation process for waters infested by selected aquatic nuisance species.

Section 9 identifies activities in infested waters that are subject to prohibition or regulation.

Section 10 recognizes protected beneficial uses of nonindigenous aquatic species, establishes protocols for a permitting process, and identifies restrictions associated with certain uses.

Section 11 establishes an inspection program for watercraft, the aquarium trade, live bait operations, aquaculture facilities, fish hatchery facilities, the use of fishing gear, horticulture trade and other beneficial use activities deemed in need of inspection.

Section 12 provides for enforcement authority and outlines civil and criminal penalties.

Section 13 provides authority for information and education programs and recommends various components.

Section 14 provides authority to assess fees and surcharges for ANS prevention and control efforts through various existing mechanisms.

Section 15 calls on the designated lead agency to develop an emergency action plan to be implemented when the sighting/emergence of a new species necessitates action.

A Related Resource

A companion document to the model guidance is the Great Lakes Panel publication titled *Model Comprehensive State Management Plan for the Prevention and Control of Nonindigenous Aquatic Nuisance Species*. These management plans, as called for in the U.S. federal Nonindigenous Aquatic Nuisance Prevention and Control Act (P. L. 101-646), provide a mechanism to implement relevant laws, regulations and policies. The model plan, used extensively as guidance by the Great Lakes states since its release in 1996, advances three goals: preventing new introductions; limiting the spread of established populations; and abating the harmful ecological, economic, social and public health impacts resulting from infestation. The model state management plan which also promotes interjurisdictional consistency is an effective vehicle for implementing the laws, regulations and policies presented in the model guidance.

Legislation, Regulation and Policy for the Prevention and Control of Nonindigenous Aquatic Nuisance Species: Model Guidance for Great Lakes Jurisdictions

(Note: Text presented in italicized, bold typeface is not part of the model language of the

guidance; it consists of explanations or recommendations to assist in applying the guidance.)

Section 1. [*Short Title.*]

(This act may be cited as Legislation, Regulation and Policy for the Prevention and Control of Nonindigenous Aquatic Nuisance Species)

Section 2. [*Definitions.*]

- (1) “ANS” is an acronym used to refer to the term “aquatic nuisance species” (refer to definition below).
- (2) “Applicant” refers, in the context of this document, to a person who applies for a state/provincial permit for an activity involving nonindigenous aquatic nuisance species.
- (3) “Appropriation” means the act of taking possession of, or making use of, a waterbody or water flow.
- (4) “Aquaculture” means a form of agriculture that involves the cultivation of aquatic organisms, including, but not limited to, the sale of these organisms for consumption as food. Aquatic species used in aquacultural practices include, but are not limited to, fish, shellfish, mollusks, crustaceans, algae and other aquatic plants.
- (5) “Aquatic Macrophytes” means macroscopic plants that require growth in water or in hydric soils during at least one part of their life cycle.
- (6) “Aquatic Nuisance Species” (ANS) means a nonindigenous (non-native), water-dwelling plant, animal or other viable biological material that enters an ecosystem beyond its native range (such as aquatic organisms transferred from another watershed, state/province, country, continent) that is harmful and threatens the diversity or abundance of native species; the ecological stability of infested waters, wetlands or other property; or the commercial, agricultural, aquacultural or recreational activities dependent on such waters, including human health.
- (7) “Aquatic Nuisance Species (ANS) Task Force” refers to the national body established under the *Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990* (P.L. 101-646) to coordinate federal governmental efforts related to nonindigenous aquatic nuisance species in the United States with those of the private sector and other North American interests. (The Task Force, co-chaired by the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration, consists of federal agency representatives and *ex officio* members appointed by the co-chairs to represent non-federal governmental entities).
- (8) “Aquatic Species” means plants, animals and other biological material, including pathogens or parasites of aquatic plants and animals, dependent on aquatic ecosystems for at least a portion of their life cycle. Bacteria viruses, parasites and other pathogens of humans are excluded.
- (9) “Beneficial Use” refers, in the context of this document, to the use of those nonindigenous aquatic species that provide benefits in terms of economic, recreational and social effects (e.g., aquaculture industry, aquarium trade, stocking of salmon and trout for the sport fishing industry).
- (10) “Control” means, in the context of this document, eradicating, suppressing, reducing, or managing ANS populations, preventing ANS spread from areas where they

are present, and taking steps such as protection and restoration of native species populations and habitats to reduce the ANS impacts and to prevent further ANS invasions.

(11) “Department” refers, in the context of this document to the state/provincial department of natural resources or equivalent, such as the department of agriculture or division of wildlife, etc.

(12) “Director” refers, in the context of this document, to the director of the department of natural resources or equivalent such as the director of the department of agriculture, chief of wildlife, etc.

(13) “Dispersal” refers, in the context of this document, to the spread of nonindigenous aquatic species from one waterway to other waterways.

(14) “Diversion” means a withdrawal of water resources from its source for transfer to another waterway.

(15) “Environmentally Sound” refers, in the context of this document, to the methods, efforts, actions or programs implemented to prevent introductions or control the dispersal of nonindigenous aquatic nuisance species that minimize adverse impacts to the structure and function of an ecosystem. Environmentally sound methods also minimize adverse effects on non-target organisms, including humans, and ecosystems, and emphasize integrated pest management techniques.

(16) “Established” means (when used in reference to a species) occurring as a reproducing, self-sustaining population in an open ecosystem.

(17) “Great Lakes region” means the state, provincial and tribal jurisdictions that border on the Great Lakes and St. Lawrence Seaway. (Note: use of the term “region” implies that both the coastal and interior areas of the jurisdiction are included.)

(18) “Great Lakes Panel on Aquatic Nuisance Species” refers to the Panel convened under Section 1203 of the *Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990* (16 U.S.C. 4723).

(19) “Infested Waters” refers to waters of the state/province as designated by the Director under Section 8 of this guidance.

(20) “Importation” means, in the context of this document, the act of bringing or introducing species into any place subject to the authority of the state/province or other appropriate jurisdictions.

(21) “Intentionally” means to purposely or knowingly commit an act, such as an ANS introduction, release, transport, import and/or export.

(22) “Introduction” means, in the context of this document, the intentional or unintentional release, escape, dissemination, or placement of a species into an ecosystem as a result of human activity.

(23) “Manage” means, in the context of this document, to prevent new ANS introductions into waters of the state/province; to limit the dispersal of established ANS populations into uninfested waters of the state/province; and to abate harmful ecological, economic, social and public health impacts resulting from ANS impacts.

(24) “Native Species” refers to those plant or animal species originally living, growing or produced in an ecosystem within its historic range.

(25) “Naturalized” refers, in the context of this document, to a nonindigenous species that is established as a self-sustaining population through natural reproduction in the wild

outside its native range.

(26) “Nonindigenous Aquatic Species” means any non-native, water-dwelling plant, animal or other viable biological material that enters an ecosystem beyond its native range.

(27) “Possession” means to have as property or to take on ownership.

(28) “Prevent” means, in the context of this document, to identify and interrupt pathways by which nonindigenous aquatic nuisance species can be introduced and dispersed.

(29) “Private Waters” means any body of water by which the shorelines are entirely within the land owned by a person, with outflows that may or may not provide direct access to public waters (*states/provinces are advised to make adjustments to this definition of private waters as appropriate for their jurisdiction*).

(30) “Prohibited Nonindigenous Aquatic Species” or “Prohibited Species” refers to those nonindigenous aquatic nuisance species designated for their harmful impact to native aquatic species and ecosystems, and the harm to recreational and commercial use of the water resource. Upon introduction, prohibited species are most likely to survive, spread and become naturalized in jurisdictional waters. (Refer to Section 5 for regulations regarding prohibited species.)

(31) “Public Waters” means waters designated by federal, state or provincial rule or statute for public use (*states/provinces are advised to make adjustments to this definition of public waters as appropriate to their jurisdictions*).

(32) “Regulated Nonindigenous Aquatic Species” or “Regulated Species” refers to those nonindigenous aquatic species that are subject to permitting and regulations for beneficial uses such as research, aquaculture, aquarium trade, live bait, stocking, commercial and sport fishing, horticulture operations and other uses deemed appropriate by the Director or equivalent. (Refer to Section 6 for regulations and other stipulations regarding regulated species.)

(33) “Selected Aquatic Nuisance Species” refers to those nonindigenous species that are a proven nuisance and, therefore, are used in determining the designation of infested waters. In selecting those species for the designation of infested waters, consideration should be given to their distribution and potential distribution, likely means of spread, and the extent of the ecological and/or economic impacts that will result if their spread is not contained.

(34) “Species” means groups of organisms all of which have a high degree of physical and genetic similarity, can generally interbreed only among themselves, and show persistent differences from members of allied species.

(35) “Stocking” means, in the context of this document, the intentional introduction of any life stage of an aquatic plant or animal into public or private waters of the state, province or tribal jurisdiction.

(36) “Transport” means, in the context of this document, to cause or attempt to cause a nonindigenous aquatic species to be carried or moved across state/provincial boundaries, and includes accepting or receiving the species for transportation or shipment.

(Jurisdictions are advised that at this point in time commercial shipping is federally regulated and is not subject to the state/provincial regulations regarding the transport of nonindigenous aquatic nuisance species.)

(37) “Unlisted Nonindigenous Aquatic Species” or “Unlisted Species” refers to those

species that have not been designated as a prohibited nonindigenous aquatic species, regulated or unregulated nonindigenous aquatic species (refer to Section 7 for regulations and other stipulations regarding unlisted species).

(38) “Unregulated Nonindigenous Aquatic Species” or “Unregulated Species” refers to those nonindigenous aquatic species that do not require any regulation or permitting for beneficial uses (such as research, aquaculture, aquarium trade, live bait, private and public stocking) because they have been evaluated as relatively harmless for one or more of the following reasons: low likelihood to survive in waters of the state/province upon introduction/release (e.g., tropical fish); low level of potential impact to the resource or resource use; or populations already established and widespread (e.g., Coho salmon) (refer to Section 6).

(39) “Waters of the state/province” or “state/provincial waters” refers to all boundary and inland waters, including streams, rivers, lakes, ponds, wetlands, water-courses, waterways, wells, springs, irrigation systems, drainage systems and other bodies or accumulations of water, surface and underground, natural or artificial, that are situated wholly or partly within or border upon the state/province or are within its jurisdiction.

(40) “Watercraft” means a vehicle used or designed for navigation on water and includes seaplanes.

Section 3. [*Management Authority.*] Legal authority shall be granted to the Director of the Department or equivalent to facilitate the prevention of introduction and dispersal of nonindigenous aquatic nuisance species (ANS) in waters of the state/province. Key responsibilities to be associated with this management authority are as follows:

(a) Interjurisdictional agreements: The Director shall seek cooperation, as appropriate, with federal (U.S. and Canadian); state, provincial and tribal authorities; regional entities; political jurisdictions of the state/province, and with other agencies and organizations for the administration of any program established herein. In addition, the state/provincial management authority shall develop and implement programs that are compatible with existing federal legislation which include, among others, the *Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990* (16 U.S.C. 4701-4741), reauthorized as the *National Invasive Species Act of 1996* (16 U.S.C. 4701-4741); the injurious wildlife provisions of the *Federal Lacey Act of 1900* (18 U.S.C. 42) and the *Federal Noxious Weed Act*. ***(It is recommended that federal, state, provincial and tribal authorities pursue a cooperative relationship in the conduct of ANS management to further strengthen efforts to prevent ANS introduction and dispersal on a watershed basis.)***

(b) State/Interstate Aquatic Nuisance Species (ANS) Management Plan (as authorized by the federal *Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990*): The Department shall develop and institute a state/interstate ANS management plan to coordinate the statewide/watershed programs and private projects, as are deemed necessary, to prevent the introduction and dispersal of nonindigenous aquatic nuisance species. ***(It is recommended that the ANS management plans incorporate the following components: legislation and policy; research and surveillance; information and education; prevention, control and management; regulation and enforcement. Also recommended are the following documents to be used as references in the development of the state/interstate management plan: “Model***

Comprehensive State Management Plan for the Prevention and Control of Nonindigenous Aquatic Nuisance Species,” a product of the Great Lakes Panel on Aquatic Nuisance Species; and “Aquatic Nuisance Species (ANS) Task Force Guidance for State and Interstate ANS Management Plans.” It should be noted that the federal act authorizes, and the ANS Task Force encourages, joint or interstate plans involving states, provinces and tribal governments within jurisdictional borders. It is recommended that the state management plan be submitted for review by the national ANS Task Force; upon its approval, the plan is eligible for federal funding by the U.S. Fish and Wildlife Service. Refer to Appendix C for statutory language from the states of New York and Minnesota that establishes authority for the state/interstate comprehensive ANS management plan.)

(c) Program implementation:

(1) The legislative, regulatory and policy provisions established herein shall be authorized and conducted in conjunction with the state/interstate ANS management plan. ***(It is recommended that state/provincial funding and resources are allocated to implement ANS prevention and control programs. It is also advised that funding for implementation is taken as a shared responsibility of multiple levels of governance, including grants from the federal government, as well as revenues from private sources to augment state/provincial funds.)***

(2) The following mechanisms shall be authorized and utilized to facilitate program implementation: classification/designation of nonindigenous aquatic species (i.e. prohibited, regulated, unregulated and unlisted species); designation of infested waters; regulatory and rule-making provisions; permit and inspection procedures; enforcement and penalty stipulations; information and education activities; funding mechanisms; emergency action protocol.

(d) Intra-agency communication: The lead management authority shall be informed of proposed approvals of introductions of nonindigenous aquatic species by any other agency having authority over activities involving introductions, including introductions in aquaculture supervised by the Department of Agriculture, and all such introductions are subject to the provisions of this legislation.

Section 4. [*Classification of Nonindigenous Aquatic Species.*]

(a) Classes: The Director shall, as provided in this section, classify nonindigenous aquatic life according to the following categories:

- (1) Prohibited nonindigenous aquatic species (refer to Section 5).
- (2) Regulated nonindigenous aquatic species (refer to Section 6).
- (3) Unregulated nonindigenous aquatic species (refer to Section 6).
- (4) Unlisted nonindigenous aquatic species (refer to Section 7).

(A recommended resource for use in the development of a classification system for nonindigenous aquatic species is a report published by the Office of Technology Assessment of the U.S. Congress, “Harmful Non-indigenous Species in the United States.” Pertinent background information on this topic is presented in the OTA report excerpt from Chapter 4: The Application of Decision-Making Methods that is presented in Appendix D of this document.)

(b) The ANS classifications established in Sections 5-7 shall be instituted as ANS designations through rule-making or other appropriate state/provincial processes.

(c) Criteria: The following criteria shall be considered in the process of ANS classification:

- (1) Whether a species is native or nonindigenous.
- (2) The likelihood that ANS populations, upon introduction, will survive, become naturalized and spread to other waters of the state/province.
- (3) The magnitude of potential harmful impact on the following: native species, the natural ecosystem and long-term genetic integrity, human health, water-based recreation, commercial fishing, industrial water-users and other appropriate user groups.
- (4) Whether the species carries any known diseases, parasites or any nonindigenous species or other viable biological materials.
- (5) The technical and economic feasibility of eradicating or controlling the spread of the species once it is introduced into the waters of the state/province.
- (6) Other criteria that are deemed appropriate by the Director.

(d) Public notification of the ANS classification system: The Department shall conduct public notification of the ANS classification system. ***(The state/province should consider sharing information regarding procedures of ANS classification/designation with the other jurisdictions in the Great Lakes region. It is also recommended that a formal process, agreed upon by the Great Lakes Panel on Aquatic Nuisance Species, is used in implementing this notification process on a regional level.)***

Section 5. [*Prohibited Nonindigenous Aquatic Species.*]

(a) Listing Process: ***(Refer to Appendix E for administrative rules from the states of Ohio and Minnesota regarding the listing and regulations for prohibited species.)***

(1) Definition and associated regulations: Prohibited nonindigenous aquatic species refers to those species designated for their harmful impact to native aquatic species and ecosystems, and harm to the recreational and commercial use of the water resource. Upon introduction, prohibited species are most likely to survive, spread and become naturalized in jurisdictional waters. Prohibited species shall not be imported, transported, purchased, possessed, propagated or sold in the state/province or introduced/released into waters of the state/province except under the conditions specified in 5(c).

(2) A list shall be established of prohibited nonindigenous aquatic species based on the application of criteria as listed in Section 4(b). The list of prohibited species will include both common and scientific names, and authority and source of nomenclature. ***(Refer to Appendix F for a matrix on the nonindigenous aquatic species listed as prohibited in each of the Great Lakes states.)***

(3) An advisory committee, appointed by the Director, shall be formed to assist in the listing of prohibited species. ***(It is recommended that the advisory committee be established as a standing committee with a term of membership set at three years allowing for reappointment of members. Frequency of advisory committee meetings should be left to the discretion of the Director. Suggested***

representation on the advisory committee includes appropriate representatives from the Department, the academic community, as well as public/private interest groups whose goals and mandates are affected by the introduction and dispersal of a nonindigenous aquatic species. Refer to Appendix G for a description of Illinois' state advisory committee regarding aquaculture operations serving as an example for the formation of the other ANS advisory committees addressed in the model guidance.)

(b) Public Notification: Designations of prohibited species should be publicized among appropriate target groups within the state/province through the register, record and other mechanisms. *(Each state/province should consider sharing this information with other jurisdictions in the Great Lakes region. It is also recommended that a formal process, agreed upon by the Great Lakes Panel on Aquatic Nuisance Species, is used in implementing this notification process on a regional level.)*

(c) Prohibited Activities: Prohibited species shall not be imported, transported, purchased, possessed, propagated, or sold in the state/province or introduced/released into waters of the state/province except:

(1) under a permit issued by the Director for one or more of the following reasons:

(a) research

(b) educational project/program

(c) control activities

(d) other activities promoting ANS prevention and control as deemed appropriate by the Director;

(2) when being transported to the Department, or another destination as the Director may direct, in a sealed container for purposes of species identification or reporting the presence of the species;

(3) when being transported for disposal as part of a harvest or control activity under a permit issued by the Director pursuant to Section 10(c(2)), or as specified by the Director;

(4) when the specimen has been lawfully acquired dead and, in the case of plant species, all seeds are removed or are otherwise secured in a sealed container;

(5) in the form of herbaria or other preserved specimens;

(6) when being removed from watercraft and equipment, or caught while angling, and immediately returned to the water from which they came; or

(7) as the Director may otherwise prescribe by rule.

(d) Permitting:

(1) Use of prohibited species as specified in 5(c(1)) shall be conducted in compliance with permit requirements. *(It is recommended that the permit requirements for prohibited species are compatible with the standards established by the "Protocol for Evaluating Research Proposals Concerning Nonindigenous Aquatic Species," found in Appendix G of the "Aquatic Nuisance Species Program" established by the national Aquatic Nuisance Species Task Force.)*

(e) Seizure: The Director shall be authorized to seize or dispose of all specimens of

prohibited species that are unlawfully imported, transported, purchased, possessed, propagated, sold in the state/province or introduced/released into waters of the state/province. A person involved in such unlawful activities is subject to penalties as listed in Section 12: Enforcement/Penalties.

Section 6. [*Regulated and Unregulated Nonindigenous Aquatic Species Regarding Beneficial Uses.*]

(a) Listing Process:

(1) A list will be established of nonindigenous aquatic species that are approved for beneficial uses such as research, aquaculture, aquarium trade, live bait, stocking, commercial and sport fishing, horticultural operations and other uses deemed acceptable by the Director. The list of species will include both common and scientific names, and authority and source of nomenclature.

(2) As part of this listing process, the species will be further classified as regulated nonindigenous aquatic species and unregulated nonindigenous aquatic species based on the definitions and related implications cited below.

(a) Regulated nonindigenous aquatic species refers to those species that are subject to permitting and regulations regarding beneficial uses such as those specified in Section 10. Regulated species are legal to import, transport, purchase, possess, propagate and sell unless restricted by the species' beneficial use permit/regulations. A permit is required by the Director for the introduction/release of regulated species into waters of the state/province.

(b) Unregulated nonindigenous aquatic species refers to those species that have been evaluated as relatively harmless and therefore do not require any regulation or permitting for beneficial uses or under other circumstances. The following guidance shall be used in the classification of unregulated species: low likelihood to survive in waters of the state/province upon introduction/release (e.g., tropical fish); low level of potential impact to the resource or resource use in waters of the state/province; and populations already established and widespread in waters of the state/province (e.g., Coho and Chinook salmon, rainbow and brown trout).

(3) An advisory committee, appointed by the Director, shall be formed to assist in the listing process of regulated and unregulated species. ***(It is recommended that the advisory committee be established as recommended in Section 5(a(3)).***

(b) Public Notification: Designations of regulated and unregulated nonindigenous aquatic species that are approved for beneficial uses shall be publicized among appropriate target groups within the state/province through the register, record or other mechanisms ***(Each state/province should consider sharing this information with other jurisdictions in the Great Lakes region. It is also recommended that a formal process, agreed upon by the Great Lakes Panel on Aquatic Nuisance Species, is used in implementing this notification process on a regional level.)***

(c) Prohibited Activities:

(1) It is illegal to introduce/release into waters of the state/province a regulated

species without a permit issued from the Director. *(A discussion of prohibited activities involving regulated species is addressed in the excerpt taken from the OTA report “Harmful Non-Indigenous Species in the United States” found in Appendix D of this document. Based on this discussion, consideration should be given to prohibiting the importation of regulated species when applicable. States/provinces and other jurisdictions should establish regulations regarding prohibited activities of regulated species to the extent that is reasonable within the watershed.)*

(2) It is illegal to import, transport, purchase, possess, propagate, sell in the state/province or introduce/release into waters of the state/province any species that is not on the regulated/unregulated species list as defined in Section 6(a(2(a-b))) until approved by the Director (refer to Section 7 for application process for proposed use of unlisted nonindigenous aquatic species).

(d) Permitting:

(1) Use of regulated species will be conducted in compliance with permit requirements as specified for beneficial uses on a case-by-case basis in Section 10(b(1-7)).

Section 7. [*Unlisted Nonindigenous Aquatic Species.*]

(a) Listing Process: Those species that have not been classified as prohibited, regulated or unregulated will be considered as an unlisted nonindigenous aquatic species subject to the classification procedure as established in Section 4. *(Refer to Appendix H for statutory language from the state of Minnesota regarding procedures involving unlisted species.)*

(b) Application process for the classification and proposed use of the unlisted species: A permit application form as prescribed by the Director must be submitted regarding the proposed use of the unlisted species involving its import, transport, purchase, possession, propagation, sale in the state/province or introduction/release into waters of the state/province. The applicant must present sufficient information on the unlisted species to support a sound management decision regarding its classification and proposed use..

(c) Classification/Review Process: The Director will make the final decision regarding the classification and proposed use of the unlisted species based on the following sources of information:

- (1) Application of the criteria listed in Section 4(b);
- (2) A review of the application for the proposed use of the unlisted species;
- (3) Advisory committee recommendations

(It is recommended that an advisory committee be established as recommended in Section 5(a(3)) to assist in the classification/review process of unlisted species. Public hearings should be held to solicit public comment and allow for interaction of advisory committee members and interested parties. If it is found necessary, more information should be requested from the applicant and/or technical experts until sufficient knowledge is gathered on the unlisted species and its proposed use. It is important that all activities of the advisory committee are conducted in a manner that is public and transparent to gain and maintain public confidence in the decision-making process.)

(d) Notification: The applicant will be notified of the Director’s final decision regarding

the proposed use of the unlisted species. *(The overall process of classification, review and notification should be thorough yet timely in order to maintain an effective prevention and control program with timelines established either by state/provincial statute or rule-making process. A recommended time-frame for this process is 60 days from the time of receipt of the permit application.)*

(e) Prohibited Activities: It is illegal to import, transport, purchase, possess, propagate, sell in the state/province or introduce/release into waters of the state/province any unlisted nonindigenous aquatic species until Director grants approval through the classification/review procedure specified in Section 7(c). *(It is recommended that the process of listing/designating prohibited, regulated and unregulated species is completed to the extent possible before the prohibited activities regarding unlisted species becomes effective.)*

(In reference to Sections 4,5,6 and 7, consideration should be given by the Great Lakes states/provinces and tribal governments to establish similar classification, listing and designation systems and associated application/permitting procedures to enhance interjurisdictional consistency regarding ANS prevention and control programs in the Great Lakes region. The Great Lakes Panel on Aquatic Nuisance Species is suggested as a forum to help facilitate such processes in a timely framework.)

Section 8. [Designation of Infested Waters.] *(It is recommended that in the process of designating infested waters, each state/province consult with relevant jurisdictions and interests. The Great Lakes Fishery Commission is positioned to facilitate this process under the auspices of the Commission's Council of Lake Committees with implementation of guidance presented in the consensus-based document entitled "A Joint Strategic Plan For Management of Great Lakes Fisheries.")*

(a) The Director shall designate waters of the state/province as infested by selected aquatic nuisance species that are a proven nuisance. *(In selecting those species for the designation of infested waters, consideration should be given to their distribution and potential distribution, likely means of spread, and the extent of the ecological and/or economic impacts that will result if their spread is not contained. The recommended term for such species is selected aquatic nuisance species).*

(b) The process of designating infested waters is to be instituted through rule-making or other appropriate state/provincial processes.

(c) Public notification of those waters designated as infested shall be conducted through the state/provincial register or record and public awareness programs, such as waterfront signage, listings in fishing regulation pamphlets and use of geographic information systems. *(Refer to Appendix I for an example from the state of Minnesota on the designation of infested water and related public notification.)*

(d) The Department shall enforce the provisions as listed in Section 9 that specify prohibited and regulated activities on waters infested by selected aquatic nuisance species. *(It is recommended that to support the designation process, a surveillance program and related early detection activities (particularly in areas where conditions are favorable for ANS infestation and naturalization) be established through the comprehensive state management plan. These programs/activities should be conducted on a cooperative basis between the*

Department, federal agencies, tribal authorities, Sea Grant programs, lake associations and other voluntary monitoring groups.)

Section 9. [*Prohibited and/or Regulated Activities on Infested Waters.*] ***(It is recommended that each state/province consult with other relevant jurisdictions and interests when promulgating provisions related to those waters designated as infested. The Great Lakes Fishery Commission is positioned to facilitate this process under the auspices of the Commission’s Council of Lake Committees with implementation of guidance presented in the consensus-based document entitled “A Joint Strategic Plan For Management of Great Lakes Fisheries.” The following provisions may vary depending upon the characteristics of the selected aquatic nuisance species responsible for the infested designation. Refer to Appendix J for sample language from Minnesota state rules regarding restricted activities in infested waters.)***

(a) Prohibited and/or regulated activities that apply to those waters designated as infested by selected aquatic nuisance species:

(1) Water taken from infested waters shall not be diverted, appropriated or transported on public roads of the state/province, except in the following cases:

- (a) in emergencies, such as fire emergencies;
- (b) as specified in water appropriation or public waters work permits; or
- (c) under a permit issued by the Director.

(2) A person shall not transport fish, plants and other living organisms in water taken from infested waters except in cases whereby a permit is issued by the Director.

(3) A person shall not transport aquatic macrophytes on any public roads of the state/province except when a permit is issued or under specified conditions.

(Refer to Appendix K for statutory language from the state of Minnesota regarding exceptions to the prohibited transport of aquatic macrophytes.)

(4) The taking of live bait from infested waters of the state/province by commercial operations and private anglers is prohibited except under specified conditions as authorized under Section 10(b(1)).

(5) A person transporting personal watercraft from infested waters shall comply with the following guidelines before leaving infested waters:

(a) Appropriate inspection procedures shall be conducted for the boat, trailer and other boating equipment (e.g., anchors, water ski or other towlines); and any plants, animals and mud that are visible shall be removed before leaving such waters.

(b) Drainage procedures shall be conducted for equipment (e.g., motor, livewell, bilge, transom well, bait containers) while on land before transporting the watercraft and associated equipment on public roads.

(c) Wash/dry procedures of watercraft and associated equipment (e.g., tackle, downriggers, trailer) shall be conducted in compliance with those prescribed in the boating section of the *Recommended Voluntary Guidelines for Preventing the Spread of Aquatic Nuisance Species Associated with Recreational Activities* as submitted by the Recreational Activities Committee of the federal ANS Task Force (**refer to Appendix**

L.)

(d) A person shall not place or attempt to place into waters of the state/province a watercraft and/or associated equipment with attached aquatic macrophytes, zebra mussels, or other prohibited species and selected aquatic nuisance species. (Examples of such include: recreational boats, trailers, and other associated equipment (anchors, center board, rollers, axles), bait buckets, weed harvesters, sport/commercial fishing equipment, commercial fishing vessels, research vessels and associated instruments.)

(It is recommended that reference is made to Appendix L for other voluntary guidelines involving recreational activities (e.g., scuba diving, waterfowl hunting, recreational angler live bait harvest, angling, seaplanes and personal watercraft.))

(6) The movement of fishing gear from infested to uninfested waters for purposes of fishery management, research, commercial and sport fishing shall be conducted in compliance with the following guidelines:

(a) All visible plant, animals and mud must be removed from fishing gear (i.e., nets, traps, buoys, anchors, stakes and lines used for purposes of fishing) when removed from infested waters;

(b) The fishing gear used in infested waters shall be decontaminated before use in uninfested waters by one of the following options: 1) drying for a minimum of ten days; 2) freezing for a minimum of two days; or 3) use of separate fishing gear for infested and uninfested waters.

(7) Water access and related recreational and commercial activities (e.g., boating, angling, sport/commercial fishing) in areas of infested waters is subject to closure by the Director for a period of time needed to adequately apply control treatments in such a manner that is both environmentally sound and protective of human health. ***(It is recommended that the decision-making process involving the closure of infested waters include all interested stakeholders through a mediation forum such as that established by the Council of Lake Committees of the Great Lakes Fishery Commission.)***

(8) Natural lakes, streams or wetland basins that are designated as infested waters will not be licensed by the Department for aquaculture operations or state/provincial and private fish hatcheries unless decontamination procedures or other appropriate measures are implemented to prevent the movement of live fish or water from the facility.

(9) Management of waters infested by nonindigenous aquatic nuisance plants:

(a) Where no public access is available, personnel associated with the Department may access waters of the state/province, after providing notification to the occupant or owner of adjacent land, to assess ANS infestations and to formulate methods of control and/or eradication.

(b) The Department and other interested entities shall establish a strategy that prioritizes areas of treatment through the comprehensive state management plan.

(c) Landowners who choose to control/eradicate infestations of nonindigenous aquatic nuisance plants shall do so in a manner recommended by the Department and in accordance with state/provincial regulations.

(10) Other restrictions regarding infested waters as determined to be necessary by the Director will be addressed through rulemaking.

(b) Persons violating the provisions listed in Section 9(a) are subject to penalties as listed in Section 12: Enforcement/Penalties. ***(In the enforcement of these provisions, it is to be noted that as of June 1999, commercial shipping is regulated under federal authority and is not subject to the state/provincial regulations regarding the transport of nonindigenous aquatic nuisance species.)***

Section 10. [*Permitting for Beneficial Uses and Management of Nonindigenous Aquatic Species.*] ***(It is recommended that the Great Lakes states, provinces and tribal authorities develop permits and associated applications to ensure that procedures for the beneficial use of nonindigenous aquatic species are adequate to prevent unauthorized ANS introductions. In so doing, it is recommended that these procedures are similar to enhance consistency in application of these procedures in the Great Lakes jurisdictions. The Great Lakes Fishery Commission is positioned to facilitate this process under the auspices of the Commission's Council of Lake Committees with implementation of guidance presented in the consensus-based document entitled "A Joint Strategic Plan For Management of Great Lakes Fisheries.")***

(a) Protocol for beneficial use permits: Those permits involving the beneficial use of nonindigenous aquatic species (i.e., live bait operations, aquaculture, stocking, commercial and sport fishing, horticultural, aquarium trade, among others) are subject to the following protocol:

(1) Those species designated as prohibited nonindigenous aquatic species are not eligible for beneficial use permits except for cases stipulated in Section 5(c) and other cases approved by the Director.

(2) Those species designated as regulated or unregulated are eligible for beneficial use permits under the conditions stipulated in Section 6(a(2)).

(3) Those species that are designated as unlisted as defined in Section 7(a) must undergo the classification/review process specified in Section 7(c). Upon classification and designation, species are subject to the guidelines stipulated in sections 10(a(1-2)).

(b) Requirement of beneficial use permits:

(1) Live bait operations permits: A license/permit from the Department is required for the taking of live bait for commercial purposes from waters of the state/province with application of the following restrictions: ***(In developing a permitting program for live bait operations, consideration should be given to mandatory training (i.e., identification and handling of prohibited species) for bait dealers on an annual basis to facilitate ANS-free operations, thus limiting unnecessary regulations.)***

(a) Prohibited nonindigenous aquatic species shall not be harvested, sold or propagated for use as live bait as stipulated in 5(c);

(b) The source of live bait used by bait operators shall be certified as free

- of prohibited species; and reports must be made on a regular basis on the incidence of prohibited species found in the supply of bait;
- (c) Permitted bait operations are subject to inspections to ensure that the proper measures are being taken to minimize the dispersal of prohibited species;
 - (d) Each licensee shall keep a record of all transactions in the sources and species of bait and other activities related to production, buying and selling of bait;
 - (e) The taking of live bait from infested waters of the state/province by commercial operations is prohibited except under conditions specified in a permit;
 - (f) A permit from the Department is required for the import/export of live bait to/from other states/provinces. *(This permit should apply to both private and commercial users of bait and out-of-state/province vendors entering into jurisdictions. It is recommended that the states/provinces consider requirements that commercial bait that is imported/exported is certified as ANS-free.)*

(2) Aquaculture permits: A permit from the Department is required for any person who is planning to engage in aquacultural operations that include the import, breeding, hatching, propagation, transport or sale of nonindigenous aquatic species and native species. The following restrictions apply:

- (a) The issuance of an aquaculture permit will require that all nonindigenous and native aquatic species used in aquaculture operations hold a certification of health that is approved by the Department in order to meet the following standards:
 - (1) Species used in aquaculture operations must not be designated as a prohibited nonindigenous aquatic nuisance species unless otherwise approved by the Director;
 - (2) Species must be free of certifiable diseases as designated by the Department with attention given to those communicable diseases that could be carried on nonindigenous aquatic species; *(Refer to Appendix M for the list of restricted disease agents and the guidelines for the control and management of disease agents as developed under the auspices of the Great Lakes Fishery Commission.)*
 - (3) Species and the water in which species are transported must be free of prohibited or otherwise harmful nonindigenous aquatic species, such as zebra mussels and nonindigenous aquatic macrophytes;
 - (4) The facility that serves as the source of aquaculture stock must be certified as having been inspected and found free of the following: 1) certifiable disease agents listed in **Appendix M**, and 2) nonindigenous aquatic nuisance species.
- (b) The issuance of an aquaculture permit will require an approved

evaluation of the aquaculture facility based upon level of potential risk of escapement that is conducted by a representative of the Department or equivalent. *(A hatchery classification system should be developed that corresponds to the capability of the facility to manage different levels of risk regarding the species. More protective measures should be used for facilities handling species with higher risk designations, such as nonindigenous aquatic species.)*

(c) It will be unlawful for any person engaged in aquaculture to rear or propagate nonindigenous aquatic species in waters other than those under private control including any body of water that would allow egress of the fish into waters of the state/province, unless the species is designated as unregulated as specified in Section 6 (a(2(b))).

(d) Natural lakes, streams or wetland basins that are designated as infested waters will not be licensed by the Department for aquaculture operations or state/provincial and private fish hatcheries unless decontamination procedures or other appropriate measures are implemented to prevent movement of live fish or water from the facility.

(e) Aquaculture operations in artificial water basins that have populations of prohibited species shall be conducted under license by the Department in compliance with the following guidelines: 1) nets, traps, buoys, stakes and lines that have been used in such a water body shall be dried for a minimum of 10 days or frozen for minimum of two days before they are used in non-infested waters; 2) all aquatic plants must be removed from the nets and other equipment that are removed from the artificial water basins.

(Refer to Appendix N for examples of aquaculture legislation, regulation and permits/applications from the states of Illinois, Michigan and Ohio.)

(3) Stocking permits for fish (both imported and non-imported): A permit from the Department is required for any person who is planning to engage in the stocking of fish in waters of the state/province that involve operations with viable fish eggs, sperm, fry and/or adults. The issuance of a stocking permit will require the following:

(a) Fish species that are imported for stocking purposes must not be listed as a prohibited species;

(b) The water in which imported fish are transported must be free of prohibited species;

(c) The facility that serves as the source hatchery must be free of certifiable diseases ***(refer to Appendix M)*** and prohibited species;

(d) Imported and non-imported fish are subject to periodic inspection for certifiable diseases with attention given to those communicable diseases that could be carried on nonindigenous aquatic species, and any other diseases found detrimental to the aquatic resources of the state/province as designated by administrative rules of the Department ***(refer to Appendix M)***.

- (e) Permits will be canceled upon the diagnosis of a certifiable disease at the source hatchery or upon inspection of imported fish that may be detrimental to the fishery resource of the state/province. ***(It is recommended that state requirements in Section 10(b(3)) be established in conjunction with the fish health inspection/certification process of the U.S. Fish and Wildlife Service.)***
- (4) Diversion/appropriation/transport permits regarding infested waters: A permit from the Department is required for the diversion, appropriation, and/or transport of infested waters as specified in Section 9(a(1)).
- (5) Horticultural permits:
 - (a) It will be unlawful for any person, corporation, governmental agency or department of the state/province to buy, sell, transport, offer for sale, distribute or regenerate plants or parts of plants that are classified as a prohibited species without a permit issued by the Director which will be issued only for experiments on the control and eradication of such plants pursuant to Section 5(c). ***(Refer to Appendix O for sample language from the state of Ohio regulating prohibitions on the sale and propagation of purple loosestrife. Refer to Section 11 on the inspection of beneficial uses for another regulatory approach for horticultural trade.)***
 - (6) Fishing restrictions will apply as specified in Section 9(a(6)).
 - (7) Aquarium trade ***(The numerous businesses involved in the aquarium trade would subject this industry to a particularly cumbersome permit process. It is therefore recommended that regulation of the aquarium trade is addressed through the inspection program as specified in Section 11.)***
- (c) Permits for the purpose of ANS control/management:
 - (1) Permits are required to manage/control prohibited, regulated or other nonindigenous aquatic nuisance species infesting waters of the state/province.
 - (2) Prohibited species may be transported for purposes of disposal as part of a control/management activity under a permit issued by the Department.

Section 11. [*Inspection of Recreational Vehicles/Equipment and Beneficial Use Operations.*] ***(It is recommended that the guidance provided below on watercraft and aquarium inspections serves as a template for other inspection operations. Suggested components for these inspection operations, illustrated in Section 11 (a-b), include authorization, information/education and enforcement.)***

- (a) Watercraft inspection operations:
 - (1) Authorization: The Director shall authorize personnel to inspect watercraft and associated equipment (e.g., trailers, bait buckets and fishing equipment) that are removed from infested waters.
 - (2) Information and Education: Inspectors are responsible for informing recreational boaters (and other appropriate recreational activity user groups) of various ANS pathways and proper measures required for compliance with existing ANS prevention and control guidelines for respective water-use

activities. *(A recommended resource for this activity is “Recommended Voluntary Guidelines for Preventing the Spread of Aquatic Nuisance Species Associated with Recreational Activities” found in Appendix L of this document.)*

(3) Enforcement: Persons refusing to remove prohibited species and other nonindigenous aquatic nuisance species from watercraft, trailer and other associated equipment are subject to penalties specified in Section 12.

(b) Aquarium trade inspection operations:

(1) Authorization: The Director shall authorize an ANS inspection program to monitor commercial businesses that sell ornamental water plants and aquarium plants and animals for prohibited species and ANS contamination of carrier water. *(It is recommended that the ANS inspection program for the commercial aquarium trade be based on a cooperative initiative between the Department of Natural Resources or equivalent and the Department of Agriculture.)*

(2) Information and Education: Outreach activities shall be conducted to inform groups of the commercial aquarium trade regarding those species designated as prohibited species in efforts to prevent their introduction and dispersal. *(It is recommended that target groups for this outreach program include, among others, plant nurseries, aquarium and pet stores, research and educational users of aquatic plants and animals and aquatic plant/animal suppliers such as wholesale distributors, biological supply houses, mail order firms, and fish farms.)*

(3) Enforcement: If prohibited species are detected, the department may quarantine the species and require the business to decontaminate or dispose of the species in a manner that will prevent their introduction into waters of the state/province. Businesses that repeatedly conduct activities involving prohibited plants and animals are subject to penalties specified in Section 12. *(Since inspection of the numerous businesses involved in the aquarium trade is not feasible even on an annual basis, it is recommended that penalties for noncompliance are stiff enough to send a message to the industry that marketing of prohibited species is off-limits.)*

(c) Live Bait Operations *(Insert specific information)*

(d) Aquaculture Facilities *(Insert specific information)*

(e) Fish Hatchery Facilities *(Insert specific information)*

(f) Fishing Gear *(Insert specific information)*

(g) Horticulture Trade *(Insert specific information)*

Section 12. *[Enforcement and Penalties.] (The following guidance is recommended to facilitate an effective approach to ANS regulation and the associated enforcement penalty system that also promotes interjurisdictional consistency regarding ANS prevention and control programs in the Great Lakes region:*

- *Explicit statement of regulatory provisions and associated level of penalty;*

- ***Establishment of penalties that are mandatory;***
- ***Along with conventional penalties, use of “penalties that fit the crime” such as conservation service to help protect and/or restore an aquatic ecosystems, the loss of business and recreational opportunities such as watercraft license revocations/suspensions and forfeiture of equipment and/or vehicles;***
- ***Enforcement of ANS regulatory provisions will be difficult and therefore deterrence of violations will require appropriate consequences to noncompliance as well as incentive programs to promote compliance;***
- ***Publicity will be needed to raise awareness for regulatory and associated enforcement/penalty program).***

(a) Enforcement Authority: The provisions adopted in this legislation will be enforced based on the authority established in Section 3(c(1-2)) and implemented by licensed officers of the state/province.

(b) Civil penalties: A person shall be issued a warning or assessed a civil penalty if engaging in conduct that violates regulatory provisions in the following sections:

- (1) Section 9: Prohibited and/or Regulated Activities on Infested Waters;
- (2) Section 10: Permitting for Beneficial Uses and Management of Nonindigenous Aquatic Species;
- (3) Section 11: Inspection of Recreational Vehicles/Equipment and Beneficial Use Operations;
- (4) Failure to comply with protocol for the escape of a nonindigenous aquatic nuisance species as specified in Section 15(c).

(c) Criminal penalties: A person shall be assessed a criminal penalty if engaging in the following acts of conduct:

- (1) Violation of provisions pertaining to prohibited nonindigenous aquatic species as specified in Section 5(c,e);
- (2) Noncompliance with permit requirements pertaining to use of prohibited nonindigenous aquatic species (i.e., research, education, control) as specified in Section 5(d(1));
- (3) Violation of provisions pertaining to regulated species as specified in Section 6(c(1-2));
- (4) Violation of provisions pertaining to unlisted nonindigenous aquatic species as specified in Section 7(e);
- (5) Refusal to obey enforcement requirements for inspection operations as specified in Section 11;
- (6) Subsequent (habitual) offenses in violation of any provision of this legislation; and
- (7) Violations involving license revocation orders or failure to pay fines.

(It is left to the discretion of individual states/provinces to specify the nature of civil and criminal penalties which may include, among others, fines (suggested range is from \$50 up to \$1,000), conservation service to help protect and/or restore aquatic ecosystems, watercraft/vehicle license suspension or permit revocation, forfeiture of equipment/vehicles,

jail terms. Refer to Appendix P for examples of regulatory provisions and associated civil and criminal penalties as established by statute in the state of Minnesota.)

Section 13. *[Authorization of Information and Education Programs.]*

(a) Authority shall be established for an information and education (I/E) program under the direction of the Department that functions in conjunction with the other components of the state/interstate ANS management plan, including legislation/policy, research/surveillance, control/management and regulation/enforcement. *(It is recommended that the I/E program operate in collaboration with Sea Grant programs, federal agencies, lake associations, recreational groups, environmental groups and other agencies and organizations with a present or prospective role in advancing ANS prevention and control efforts. Program development should occur in consultation with other Great Lakes jurisdictions to enhance coordination of information/education programming and to promote the dissemination of uniform and consistent messages.*

(b) It is recommended that the I/E program include, among others, the following objectives:

- (1) awareness of prohibited species as listed for the state/province, including their identifiable characteristics, adverse ecological and economic impacts, life cycle and behavior patterns and habitats;*
- (2) awareness and understanding of the pathways of ANS introduction and spread to help minimize invasions and infestations;*
- (3) knowledge of those waters of the state/province designated as infested;*
- (4) operational knowledge of the “Recommended Voluntary Guidelines for Preventing the Spread of Aquatic Nuisance Species Associated with Recreational Activities” found in Appendix L of this document; and*
- 5) awareness of regulations and associated enforcement/penalty program and an incentive program to promote compliance.)*

(A recommended reference for guidance on this section is the Great Lakes Panel publication, “Aquatic Nuisance Species Information and Education Materials Relevant to the Great Lakes Basin: Recommendations and Descriptive Inventory.”)

Section 14. *[Authorization of Fees/Surcharges.]*

(a) Authority shall be established for the operation of funding mechanisms to support ANS prevention and control through implementation of state/interstate ANS management plans as specified in Section 3(c(1-2)).

(b) It is recommended that the following funding mechanisms are considered for adoption:

- (1) watercraft license fee/surcharge*
- (2) aquaculture permit surcharge*
- (3) bait permit fee/surcharge*
- (4) fishing/waterfowl hunting license fee/surcharge*
- (5) commercial shipping surcharge*

(It is recommended that the costs of other ANS-related activities be assessed to establish other

long-term funding mechanisms. In addition, funding should be a shared responsibility of multiple levels of governance, including grants from the federal government, as well as revenues from private user groups to augment state/provincial funds.)

Section 15. [*Emergency Action.*]

(a) Emergency Action Plan: The Director shall develop an emergency action/response plan and have the authority to implement the plan in case the sighting/emergence of a new nonindigenous aquatic nuisance species or the impact of an existing species necessitates such action. To the extent possible, the development and applicability of each state/provincial emergency action plan should be coordinated with other affected states/provinces, federal agencies, tribal authorities, regional organizations and local jurisdictions.

(b) Protocol for new ANS sightings: As part of the emergency action/response plan, the following protocol shall be conducted if a new species is sighted in a previously uninfested area:

- (1) Verify identification through the Department in conjunction with the state's Sea Grant agency or equivalent agency in the provinces.
- (2) Notify appropriate agencies of the state/province.
- (3) Officially inform the public of the ANS sighting;
- (4) Survey/monitor infested water body to determine the extent (abundance and distribution) and ecological impact of ANS infestation;
- (5) Based on survey/monitoring results, develop a control/eradication plan for ANS infestations through the comprehensive state management plan;
- (6) Provide public notice and opportunity for review of the control/eradication plan. *(It is recommended that the public is provided a status report on the extent of the ANS infestation and potential for further spread, and an assessment of existing and potential economic/ecological impacts);* and
- (7) Implement control/eradication plan upon public approval.

(A recommended resource in the development of protocol regarding an ANS emergency action plan is the state of Minnesota's "Nonindigenous Fish in Inland Water: Response Plan to New Introductions.")

(c) Protocol for the escape of nonindigenous aquatic nuisance species:

- (1) A person who allows or causes the introduction/release of a nonindigenous aquatic species that is prohibited, regulated or unlisted shall notify the Director or other appropriate management authority within 48 hours after learning of the escape. The person shall make every reasonable attempt to recapture or destroy the introduced species.
- (2) A person who does not comply with this section is subject to penalties specified in Section 12(b(4)).

Literature Cited and Other Related Resources

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