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Senate Bill 280 (as enacted) House Bill 4579 (as enacted)

Sponsor: Senator Gerald Van Woerkom (S.B. 280) Representative Rebekah Warren (H.B. 4579)

Senate Committee: Natural Resources and Environmental Affairs

House Committee: Great Lakes and Environment

Date Completed: 6-29-09

#### **RATIONALE**

In an effort to control invasive species in Michigan, legislation was enacted in 2005 to prohibit a person from possessing certain plant, fish, and insect species, establish civil and criminal penalties for violating the ban, and establish the Invasive Species Advisory Council, whose duties include recommending additions to or deletions from the lists of prohibited and restricted species. The list of prohibited plant species includes yellow flag iris, a plant brought to the U.S. and Canada originally as an ornamental, as well as any of its fragments or seeds or a hybrid or genetically engineered variant. Since the list was created, this particular species has been shown not to present a nuisance threat in Michigan, and it was suggested that yellow flag iris be removed from the list. Also, it was suggested that recommendations to add new species to the prohibited and restricted lists be adopted.

In a related matter, Governor Jennifer Granholm abolished the Council and transferred its duties to the Department of Natural Resources (DNR) under Executive Reorganization Order 2007-10. It was suggested that statutory language be revised to reflect the transfer.

#### CONTENT

Senate Bill 280 amends Part 413 (Transgenic and Nonnative Species) of the Natural Resources and Environmental Protection Act to do the following:

**PUBLIC ACT 51 of 2009** 

**PUBLIC ACT 52 of 2009** 

- -- Remove yellow flag iris (Iris pseudacorus) and a hybrid or genetically engineered variant of yellow flag iris from the definition of "prohibited species".
- -- Expand the definition to include particular bird, crustacean, mammal, and mollusk species, in addition to fish, insect, and aquatic plant species.
- -- Add certain aquatic plant and fish species to the definition.
- -- Include in the definition of "restricted species" particular mollusk species.

# House Bill 4579 amends Part 413 to do the following:

- -- Authorize the Natural Resources Commission (NRC), after consulting with the Michigan Department of Agriculture (MDA), by order to add to or delete from the list of prohibited or restricted species any species other than an insect or plant.
- -- Authorize the Agriculture Commission, after consulting with the Department of Natural Resources (DNR), by order to add to or delete from the list of prohibited or restricted species any insect or plant species.
- Prescribe criteria for listing an organism as a prohibited or restricted species.
- -- Extend criminal penalties to the illegal possession or introduction of a prohibited or restricted species with intent to harm human health.

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- -- Authorize the MDA to administer and enforce Part 413 with respect to insect and plant species, and authorize the DNR to administer and enforce Part 413 regarding all other species.
- -- Replace references to the Invasive Species Advisory Council with references to the DNR.
- -- Delete a sunset date on annual reporting requirements.

The bills were tie-barred to each other. They will take effect on September 21, 2009.

# Senate Bill 280

# **Prohibited & Restricted Species**

Part 413 prohibits a person from possessing a prohibited or restricted species, except under one or more of the following circumstances:

- -- The person intends to present a specimen, for identification or similar purposes, to a certified or registered pesticide applicator, to a public or private institution of higher education, or to the DNR or any other State, local, or Federal agency with responsibility for the environment or natural resources.
- -- The person has been presented with a specimen for identification purposes in accordance with Part 413.
- -- The person possesses the prohibited species in conjunction with otherwise lawful activity to eradicate or control it.
- -- The possession is pursuant to a permit issued by the DNR for education or research purposes.

(House Bill 4579 amends these provisions to include references to the MDA in the case of insect and plant species.)

Senate Bill 280 revises the definitions of "prohibited species" and "restricted species" as described below.

Prohibited Aquatic Plants. Currently, the definition of "prohibited species" includes certain aquatic plant species and their hybrids or genetically engineered variants, or fragments or seeds of the species or hybrids and genetically engineered variants. The bill refers to seeds or other propagules of the species, rather than fragments or seeds. In addition, the bill deletes yellow flag iris from

the definition, and adds cylindro (Cylindospermopsis raciborskii), fanwort (Cabomba caroliniana), and starry stonewort (Nitellopsis obtuse).

Prohibited Birds, Crustaceans, & Mollusks. The bill adds to the definition of "prohibited species" all of the following, including a hybrid or genetically engineered variant or an egg of the species or of a hybrid or genetically engineered variant:

- -- Bird: Eurasian collared dove (Streptopelia decaocto).
- -- Crustacean: rusty crayfish (Orconectes rusticus).
- -- Mollusk: Brown garden snail (Helix aspersa), carthusian snail (Monacha cartusiana), giant African snail (Achatina fulica), girdled snail (Hygromia cinctella), heath snail (Xerolenta obvia), and wrinkled dune snail (Candidula intersecta).

Prohibited Fish & Insects. The definition of "prohibited species" includes certain fish and insect species, as well as their hybrids or genetically engineered variants. Under the bill, the definition also includes eggs of those species or of their hybrids or genetically engineered variants. Additionally, the bill adds the Eurasian ruffe (Gymnocehphalus cernuus), the round goby (Neogobius melanostomus), and the tubenose goby (Proterorhinus marmoratus) to the list of prohibited fish species.

<u>Prohibited Mammals</u>. The bill adds the nutria (Myocastor coypus) to the definition of "prohibited species".

Restricted Species. The current definition of "restricted species" includes specified aquatic plants, including hybrids and genetically engineered variants or fragments or seeds of the species or their hybrid or genetically engineered variants. The bill refers to seeds or other propagules, rather than fragments or seeds.

The bill adds to the definition of "restricted species" any of the following restricted mollusk species, including a hybrid or genetically engineered variant of the species or an egg of the species or of a hybrid or genetically engineered variant: quagga mussel (Dreissena bugensis) and zebra mussel (Dreissena polymorpha).

## <u>Invasive Species Advisory Council</u>

The bill repeals Section 41321, which established the Council and prescribes its membership.

## **House Bill 4579**

# **Commission Orders**

Under the bill, after consulting with the MDA, the NRC may by order add to or delete from the list of prohibited or restricted species any species other than an insect or plant species. After consulting with the DNR, the Agriculture Commission may by order add to or delete from the lists any insect or plant species. At least 30 days before the order is issued, the DNR or the MDA must post a copy of it on the Department's website and submit a copy to the Legislature, as well as the standing committees of the Senate and House of Representatives with primary responsibility for agricultural, environmental, or natural resources issues.

The bill requires the NRC or the Agriculture Commission, as applicable, to list a species as a prohibited species if it determines that the organism is not native to Michigan; the organism is not naturalized in Michigan, or, if naturalized, is not widely distributed in this State; and at least one of the following applies:

- -- The organism has the potential to harm human health or to severely harm natural, agricultural, or silvicultural resources.
- -- Effective management or control techniques for the organism are not available.

The bill requires the applicable commission to list a species as restricted if the organism is not native to Michigan; the organism is naturalized and widely distributed in this State; and at least one of the following applies:

- -- The organism has the potential to harm human health or to harm natural, agricultural, or silvicultural resources.
- -- Effective management or control techniques for the organism are available.

## **Introduction of Species**

Part 413 prohibits a person from introducing a prohibited species, a restricted species, or a genetically engineered or nonnative fish or aquatic plant, unless the introduction is authorized by a permit issued by the DNR or the MDA, as applicable. Under the bill, this provision also applies to a genetically engineered or nonnative bird, crustacean, mammal, or mollusk.

## **Permits**

Part 413 requires a person to apply to the DNR or MDA, as applicable, for a permit to possess or introduce a prohibited, restricted, genetically engineered or nonnative The application must accompanied by a fee based on the cost of administering Part 413. The applicable grant department must either administratively complete application and issue a permit or deny it. Under the bill, in determining whether to grant or deny an application for a permit for introduction of a genetically engineered organism, the DNR or MDA, as applicable, must consider whether any application for a Federal permit or approval for the organism has been granted or denied.

## Enforcement of Part 413

The bill requires the DNR to enforce Part 413, except with respect to insect or plant species. The MDA must enforce Part 413 with respect to insect and plant species.

#### Penalties

Under Part 413, a person who violates the prohibition against possession of a prohibited or restricted species is subject to a maximum civil fine of \$10,000 or \$5,000, respectively. If a violator knows that the possession is unlawful, the offense is a felony punishable by imprisonment for up to two years and a mandatory fine of at least \$2,000 but not more than \$20,000 for a prohibited species, misdemeanor punishable imprisonment for up to one year and a mandatory fine of at least \$1,000 but not more than \$10,000 for a restricted species. Part 413 prescribes additional criminal penalties for the introduction of prohibited and restricted species.

The penalties also apply to violations involving nonnative and genetically engineered fish and aquatic plants. Under the bill, the penalties also would apply to violations involving nonnative and genetically engineered birds, crustaceans, insects, mammals, and mollusks.

A person who illegally possesses a restricted or nonnative species with intent to damage natural, agricultural, or silvicultural resources is guilty of a felony punishable by imprisonment for up to two years and a mandatory fine of at least \$1,000 but not more than \$250,000. A person who illegally possesses a prohibited or genetically engineered species with intent to damage natural, agricultural, or silvicultural resources quilty of a felony punishable by imprisonment for up to four years and a mandatory fine of at least \$2,000 but not more than \$5,000. The bill extends these penalties to a person who illegally possesses a species with intent to damage human health.

## Invasive Species Fund

Under Part 413, the DNR may spend money from the Fund, upon appropriation, only for specified purposes, including public education about preventing the introduction of, controlling, or eradicating prohibited species, restricted species, and other nonnative species and genetically engineered fish, insects, and aquatic plants. Under the bill, the money also may be spent on public education regarding nonnative and genetically engineered birds, crustaceans, mammals, and mollusks.

# **Invasive Species Advisory Council**

The bill replaces references to the Council with references to the DNR in provisions prescribing the Council's duties. Part 413 requires the Council to submit to the Governor and the Legislature an annual report that makes recommendations on, among other things, additions to or deletions from the lists of prohibited and restricted species. Additionally, the report must make recommendations on the adoption of lists for of prohibited and restricted classes organisms other than fish, insects, and aquatic plants. Under the bill, instead, the DNR must submit the report, which must contain recommendations on the classes of genetically engineered or nonnative organisms covered by Part 413.

Part 413 also requires the annual report to make recommendations on preventing the introduction of and controlling or eradicating invasive or genetically engineered fish, insects, and aquatic plants; and educating citizens about their responsibilities and their role in preventing the introduction of and controlling or eradicating prohibited and restricted species, and invasive or genetically engineered fish, insects, or aquatic plants. Under the bill, these provisions include recommendations pertaining to birds, crustaceans, mammals, and mollusks.

The bill eliminates a July 19, 2010, sunset on the provisions regarding the annual reports and requiring the prescribed duties to be carried out in cooperation with the Aquatic Nuisance Species Council. In addition, the bill requires the DNR to carry out its duties in cooperation with the MDA.

MCL 324.41301 et al. (S.B. 280) 324.41302 et al. (H.B. 4579)

## **ARGUMENTS**

(Please note: The arguments contained in this analysis originate from sources outside the Senate Fiscal Agency. The Senate Fiscal Agency neither supports nor opposes legislation.)

## **Supporting Argument**

When the initial prohibited plant species list was established, yellow flag iris was included due to experience in other locations indicating that it can proliferate unchecked and result in the destructive impacts associated with nuisance species. In some other states, the species has spread primarily from gardens to wetlands and formed dense thickets, stifling other species (including those comprising waterfowl food). Yellow flag iris has not grown this way in Michigan, however, and the Invasive Species Advisory Council recommended that it be removed from the list of prohibited plants.

Eliminating yellow flag iris could be beneficial to the State's economy, since its vibrant color and ability to remove metals from wastewater make it an attractive option for rain gardens. When the species was included in the prohibited list, nurseries evidently experienced thousands of dollars in lost sales.

## **Supporting Argument**

The bills will help protect the environment by adopting recommendations from the annual reports to add new species, such as the zebra mussel, round goby, and nutria, to the prohibited and restricted lists.

The zebra mussel is of particular concern in the Great Lakes region. In Great Lakes Basin states, the cost to address problems caused by zebra mussels was \$3.0 billion from 1993 to 2003. Adult zebra mussels can anchor themselves to various firm surfaces, such as lakebeds, rocks, native mussel colonies, boat hulls, buoys, and facilities of municipal water systems, utilities, manufacturing operations. mussels also are thought to be responsible for the dramatic decline of the Diporeia population (a species of tiny shrimp-like creatures) and other species significant to the Great Lakes food web. In turn, native fish populations, such as lake trout, walleye, yellow perch, and whitefish, are threatened.

The round goby is another prevalent aquatic nuisance species. In addition to competing with native species for food and habitat, round gobies are believed to prey directly on some of those species. Round aobies actually consume large quantities of zebra mussels; any positive effect, however, is negated by the fact that zebra mussels, as filter feeders, consume toxins that are transferred through the food chain and ultimately affect several sportfish species. The recreational fishing industry is further affected by the aggressive nature of round gobies, which frequently take the bait anglers use to catch other species.

Nutria (large, semi-aquatic rodents indigenous to South America) were imported into Louisiana in the 1930s for the fur farming industry. They subsequently were released, either intentionally or accidentally, into the coastal marshes and began to cause extensive damage through their feeding and burrowing habits. The rodents transported to different locales for use in controlling aquatic weeds; as their population increased, however, they caused significant damage to marshes, rice and sugarcane fields, and levee systems, completely denuding some natural levees at the mouth Over the years, of the Mississippi River. several hurricanes pushed the population further inland and spurred the spread of the species to other states. With the decline of the international fur market, nutria harvests waned while reports of nutria damage increased. Reportedly, feral nutria populations have been found in 40 states, and are stable or growing in about one-third of those states.

In light of the environmental and economic damage such species can cause, they will be included among those banned in Michigan.

## **Supporting Argument**

The Invasive Species Advisory Council was abolished and its responsibilities were transferred to the DNR under Executive Reorganization Order 2007-10, which stated that the action "will contribute to a smaller and more efficient state government". The bills update the statute to reflect current practice.

## **FISCAL IMPACT**

The bills will have an indeterminate fiscal impact on State and local government. There are no data to indicate how many offenders will be convicted of unlawfully possessing or introducing restricted species. Local governments will incur the costs of misdemeanor probation and incarceration in local facilities, which vary by county. The State will incur the cost of felony probation at an annual average cost of \$2,000, as well as the cost of incarceration in a State facility at an average annual cost of \$32,000. Additional penal fine revenue will benefit public libraries.

Existing resources will cover monitoring and enforcement duties of the DNR and MDA.

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This analysis was prepared by nonpartisan Senate staff for use by the Senate in its deliberations and does not constitute an official statement of legislative intent.