

**BEFORE THE
DEPARTMENT OF NATURAL RESOURCES**

**NOTICE OF PUBLIC HEARING
Natural Resources Board Order SS-04-12**

NOTICE IS HEREBY GIVEN THAT pursuant to ss. 227.16 and 227.17, Stats, the Department of Natural Resources, hereinafter the Department, will hold a public hearing on amendments to NR 40, relating to NR 40 including clarification to the language and changes to the species listed under NR 40.04(2) and NR 40.05(2) Wisconsin's regulated invasive species list and at the time(s) and location(s) listed below.

Hearing Information

Date and Time

June 17, 2014
Tuesday
4:00PM

Location

Wisconsin Natural Resources Building
101 S. Webster Street, Madison, WI 53707
Room G09

The public hearing on June 17, 2014 will be webcasted live for those who are unable to participate in person. To request a ***webcast link***, please contact Terrell Hyde by noon on June 16, 2014 at DNRInvasiveSpecies@wisconsin.gov or by calling (608) 264-9255.

June 18, 2014
Wednesday
4:00PM

Wisconsin Natural Resources Service Center – Green Bay
2984 Shawano Avenue, Green Bay WI 54313
Lake Michigan Room

Reasonable accommodations, including the provision of informational material in an alternative format, will be provided for qualified individuals with disabilities upon request. Contact Terrell Hyde, Department of Natural Resources, Bureau of Natural Heritage Conservation, 101 S. Webster St, Madison, WI, 53707-7921; by E-mail to DNRInvasiveSpecies@wisconsin.gov or by calling (608) 264-9255. A request must include specific information and be received at least 10 days before the date of the scheduled hearing.

Availability of the Proposed Rules and Fiscal Estimate

The proposed rule and supporting documents, including the fiscal estimate, may be viewed and downloaded from the Administrative Rules System Web site which can be accessed through the link <https://health.wisconsin.gov/admrules/public/Home>. If you do not have Internet access, a printed copy of the proposed rule and supporting documents, including the fiscal estimate, may be obtained free of charge by contacting Terrell Hyde, Department of Natural Resources, Bureau of Natural Heritage Conservation, 101 S. Webster St, Madison, WI, 53707-7921; or by calling (608) 264-9255.

Submitting Comments

Comments on the proposed rule must be received on or before June 30, 2014. Written comments may be submitted by U.S. mail, fax, E-mail, or through the Internet and will have the same weight and effect as oral statements presented at the public hearing. Written comments and any questions on the proposed rules should be submitted to:

Terrell Hyde
Department of Natural Resources
Bureau of Natural Heritage Conservation
101 S. Webster St, Madison, WI 53707-7921

Fax: 608-266-2925

E-mail: DNRInvasiveSpecies@wisconsin.gov

Internet: <https://health.wisconsin.gov/admrules/public/Home> search "SS-04-12"

Analysis Prepared by the Department of Natural Resources

Statutes Interpreted: In promulgating this rule, s. 227.11 (2) (a), Wis. Stats., has been interpreted as allowing the department the authority to create and amend rules. Section 23.22 (2) (a) and (b) 6., Wis. Stats., has been interpreted as allowing the department the authority to create and amend the list of invasive species in Wisconsin and create related provisions, NR 40, Wis. Admin. Code.

Statutory Authority: The state statutes that authorize the promulgation of this rule are ss. 23.09 (2) (intro), 23.091, 23.11 (1), 23.22 (2) (a) and (b) 6., 23.28 (3), 27.01 (2) (j), 29.014 (1), 29.039 (1) 29.041, and 227.11 (2) (a), Wis. Stats.

Explanation of Agency Authority: Sections 23.22 (2) (a) and (b) 6. grant rule-making authority for regulation of invasive species.

Related Statutes or Rules: Section 23.22 (2) (b) 6. Wis. Stats., required the department to establish an invasive species rule. Chapter NR 40, Wis. Admin. Code, provides the lists of invasive species and associated requirements for preventing the introduction and spread of invasive species.

Plain Language Analysis: The department's Invasive Species Team worked with the Wisconsin Invasive Species Council and affected stakeholders to review and propose revisions to ch. NR 40, Wis. Admin. Code, relating to the lists of regulated invasive species.

Revisions classify additional invasive species into existing categories established in ch. NR 40, Wis. Admin. Code, making them subject to existing administrative rules and statutes that regulate the introduction, possession, transfer, and transport of invasive species in order to prevent them from becoming established in Wisconsin or to prevent already-established invasive species from spreading within the state.

In 2009, during the public input and initial rule drafting of ch. NR 40, it was recognized that many additional species may need to be evaluated and, if appropriate, categorized and listed under this rule. Most of these species are used by some sector of society and require input from the affected stakeholders. The proposed revisions in this Board Order will add species of plants, vertebrates, and invertebrates to the invasive species rule, and will clarify rule language, facilitate compliance, and improve organization of the rule.

A summary of the proposed revisions follows, ordered by Board Order SECTION and grouped by the type of revision. Additional supporting documents including the literature reviews for each of the proposed invasive species are available on the DNR's website (dnr.wi.gov) keyword "invasives."

SECTION 1 creates a definition for crayfish in ch. NR 40.

SECTION 2 revises the following NR 40 definitions:

- The definition of "disposal" is amended to include the consumption of an invasive species as food or other purposes that do not lead to the establishment, introduction, or spread of the species as disposal.
- The note under the definition of "invasive species" is amended to clarify that the definition of "invasive species" does not apply to organisms that are dead.
- The definition of "nonnative" or "nonnative species" is amended to include genetically modified (GM) variants of both native and nonnative fish and crayfish. GM fish are available for sale or may soon be available for aquaculture. Potential GM alterations, such as increased rate of growth, substantially alter how these organisms interact with the environment. The invasive species rule defines what it means to be genetically modified but does not differentiate GM fish from their parent species. Given that the risk they pose may differ, a mechanism to evaluate them separately is needed. These proposed revisions would allow for the continued sale of nonviable genetically modified aquarium fish such as the "GloFish™".
- The definitions of "nonnative fish species in the aquaculture industry" and "nonnative viable fish species in the aquarium trade" are amended to exclude GM variants of fish and crayfish of the species listed for the same reasons listed above in the "nonnative" definition amendment.
- The definition of "pet" is amended to exclude fish, crayfish and other aquatic invertebrates. Due to the risk posed by fish, crayfish and by other aquatic invertebrates the definition is revised to exclude these organisms from the exemption provided for pets.

- The definition of "species" is amended to exclude GM fish and crayfish species, cultivars, hybrids, and sub-specific taxa for the same reasons listed above in the "nonnative" definition amendment.
- The definition of "wild animal" is amended to exclude other aquatic invertebrates.

SECTIONS 2 and 30 remove eastern and western mosquitofish from the list of prohibited species under NR 40.04 and adds them to the list of "established nonnative fish species and established nonnative crayfish species" as defined in ch. NR 40.02. "Established nonnative fish species and established nonnative crayfish species" are regulated as a restricted species under ch. NR 40.05 (c) (1). Best management practices (BMPs) to reduce the risk of importing mosquitofish (*Gambusia affinis*) have been made available, but concerns remain because the BMPs do not provide a guarantee against possible enforcement action. In order to accommodate the use of imported bait that may be contaminated with the species, these revisions move the species from the prohibited category to the in the restricted fish category, "established nonnative fish species." This revision will not in itself authorize possession of mosquitofish, but would allow the department to permit possession in bait shipments and registered fish farm raceways, subject to specified conditions. This would enable the department to address concerns regarding the potential for dispersal of mosquitofish by bait dealers through additional requirements in permit conditions.

SECTION 3 clarifies the note on non-regulated species classification and removes the reporting and in-store education suggestions. Additionally, language on the beneficial use of non-restricted invasive species is removed as it creates the false impression that any beneficial use will exempt a species from listing.

SECTIONS 4 and 7 renumber the initial species listed in the NR 40 Prohibited Category to maintain alphabetical order.

SECTIONS 5, 8, 10, 12, 15, 17, 19, 21, 23, 27, 29, 33, and 35 add new species to the NR 40 Prohibited Category. The below species proposed for addition to the prohibited category are invasive species that the department has determined are likely to survive and spread if introduced into the state, potentially causing economic or environmental harm or harm to human health, but which are not found in the state or in those regions of the state where the species are listed as prohibited in s. NR 40.04 (2), with the exception of isolated individuals, small populations or small pioneer stands of terrestrial species, or in the case of aquatic species, that are isolated to a specific watershed in the state or the Great Lakes, and for which statewide or regional eradication or containment may be feasible.

- *Caulerpa taxifolia* (Killer algae)
- *Achyranthes japonica* (Japanese chaff flower)
- *Akebia quinata* (Fiveleaf akebia or Chocolate vine)
- *Arundo donax* (Giant reed)
- *Azolla pinnata* (Mosquito fern)
- *Berberis vulgaris* (Common barberry)
- *Cardamine impatiens* (Narrow leaf bittercress)
- *Celastrus loeseneri* (Asian loeseneri bittersweet)
- *Centaurea diffusa* (Diffuse knapweed)
- *Centaurea repens* (Russian knapweed)
- *Digitalis lanata* (Grecian foxglove)
- *Dioscorea batatas* or *Dioscorea polystacha* (Chinese yam)
- *Eichhornia azurea* (Anchored water hyacinth)
- *Eichhornia crassipes* (Water hyacinth, floating)
- *Fallopia x bohemicum* or *F. x bohémica* or *Polygonum x bohémicum* (Bohemian knotweed)
- *Glossostigma cleistanthum* (Mudmat)
- *Hydrocotyle ranunculoides* (Floating marsh pennywort)
- *Hygrophila polysperma* (Indian swampweed)
- *Impatiens glandulifera* (Policeman's helmet)
- *Ipomoea aquatica* (Water spinach)
- *Limnophila sessiliflora* (Asian marshweed)
- *Linaria dalmatica* (Dalmatian toadflax) except in Juneau and Bayfield counties
- *Lythrum virgatum* (Wanded loosestrife)

- *Nelumbo nucifera* (Sacred lotus)
- *Oenanthe javanica* (Java waterdropwort or Vietnamese parsley)
- *Oplismenus hirtellus* ssp. *undulatifolius* (Wavy leaf basket grass)
- *Ottelia alismoides* (Ducklettuce)
- *Petasites hybridus* (Butterfly dock)
- *Phellodendron amurense* (Amur cork tree) except male cultivars and seedling rootstock
- *Pistia stratiotes* (Water lettuce)
- *Ranunculus ficaria* (Lesser celandine)
- *Rubus armeniacus* (Himalayan blackberry)
- *Sagittaria sagittifolia* (Hawaii arrowhead)
- *Salvinia herzogii* (Giant salvinia)
- *Salvinia molesta* (Giant salvinia)
- *Solidago sempervirens* (Seaside goldenrod) except in Kenosha, Milwaukee and Racine counties
- *Sorghum halepense* (Johnsongrass)
- *Stratiotes aloides* (Water soldiers)
- *Taeniatherum caput-medusae* (Medusahead)
- *Tussilago farfara* (Colt's foot)
- *Typha domingensis* (Southern cattail)
- *Typha laxmannii* (Graceful cattail)
- *Wisteria floribunda* (Japanese wisteria)
- *Wisteria sinensis* (Chinese wisteria)
- *Dikerogammarus villosus* (Killer shrimp)
- *Melanoides tuberculata* (Malaysian trumpet snail)
- *Dendroctonus ponderosae* (Mountain pine beetle)
- *Geosmithia morbida* (Thousand cankers disease of walnut)
- *Grosmannia clavigera* (Blue stain fungus)
- *Ophiostoma montium* (Blue stain fungus)
- *Pityophthorus juglandis* (Walnut twig beetle)
- *Myocastor coypus* (Nutria)

SECTIONS 6 and 43 clarify that certain invasive plants are listed under both the prohibited and restricted categories in ch. NR 40. These plant species are sometimes called split listed plants.

Split listed plants are currently isolated to a specific region in the state but if introduced into other parts of the state are likely to survive and spread, potentially causing significant environmental or economic harm or harm to human health. These plants are regulated as restricted in the counties listed that have known populations and are prohibited elsewhere in the state.

SECTIONS 9, 11, 14, 18, 20, 22 and 28 update the list of county exceptions for split listed plants in the NR 40 Prohibited Category. Species are restricted in the listed counties and are prohibited elsewhere.

- *Anthriscus sylvestris* (Wild chervil) except in Adams, Barron, Crawford, Columbia, Dane, Dodge, Fond du Lac, Green, Green Lake, Iowa, Jefferson, Juneau, Kenosha, Lacrosse, Lafayette, Marquette, Milwaukee, Monroe, Ozaukee, Polk, Racine, Richland, Rock, Sauk, Sheboygan, Taylor, Vernon, and Walworth, Waukesha, and Washington counties
- *Bunias orientalis* (Hill mustard) except in Dane, Grant, Green, Iowa, and Lafayette, and Rock counties
- *Cirsium palustre* (European marsh thistle) except in Ashland, Bayfield, Chippewa, Clark, Door, Florence, Forest, Iron, Langlade, Lincoln, Marathon, Marinette, Menominee, Oconto, Oneida, Price, Rusk, Sawyer, Shawano, Taylor and Vilas counties
- *Conium maculatum* (Poison hemlock) except in Crawford, Dane, Grant, Green, Iowa, Jefferson, Kenosha, Lafayette, Milwaukee, Ozaukee, Racine, Richland, Rock, and Sauk, Sheboygan, Walworth, and Waukesha counties
- *Epilobium hirsutum* (Hairy willow herb) except in Brown, Calumet, Door, Kenosha, Kewaunee, and Manitowoc county counties
- *Glyceria maxima* (Tall or reed mannagrass) except in Brown, Calumet, Columbia, Dane, Dodge, Door, Fond du Lac, Green, Jefferson, Kenosha, Kewaunee, Manitowoc, Milwaukee, Outagamie,

- Ozaukee, Racine, Rock, Sheboygan, Walworth, Washington, Waukesha and Winnebago counties
- *Humulus japonicus* (Japanese hops) except in Buffalo, Crawford, Dane, Grant, Green, Iowa, Jackson, La Crosse, Lafayette, Monroe, Pepin, Richland, Sauk, Trempealeau, and Vernon counties
 - *Leymus arenarius* or *Elymus arenarius* (Lyme grass or sand ryegrass) except in Door, Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, and Sheboygan counties
 - *Torilis japonica* (Japanese hedgeparsley or erect hedgeparsley) in Ashland, Barron, Bayfield, Buffalo, Burnett, Chippewa, Clark, Douglas, Dunn, Eau Claire, Florence, Forest, Iron, Jackson, Lincoln, Oneida, Pepin, Pierce, Polk, Price, Rusk, St. Croix, Sawyer, Trempealeau, Taylor, Washburn, and Wood except in Adams, Brown, Calumet, Columbia, Crawford, Dane, Dodge, Door, Fond du Lac, Grant, Green, Green Lake, Iowa, Jefferson, Juneau, Kenosha, Kewaunee, La Crosse, Lafayette, Langlade, Manitowoc, Marathon, Marinette, Marquette, Menominee, Milwaukee, Monroe, Oconto, Outagamie, Ozaukee, Portage, Racine, Richland, Rock, Sauk, Shawano, Sheboygan, Vernon, Walworth, Washington, Waukesha, Waupaca, Waushara, and Winnebago counties

SECTIONS 13 and 34 remove the following species from the NR 40 Prohibited Category.

- *Chelidonium majus* (Celandine), a split listed plant, is proposed to be listed in the Restricted Category statewide.
- *Agrilus planipennis* (Emerald ash borer) is proposed to be moved from the Prohibited Category to the Restricted Category.
- *Cryptococcus fagisuga* (Scale associated with beech bark disease) is proposed for delisting from both of Wisconsin's regulated invasive species lists.

SECTIONS 16, 24, 25, and 26 revise scientific and common names in the NR 40 Prohibited Category to include accepted synonyms. Giant knotweed is renumbered to maintain alphabetical order.

- *Dioscorea oppositifolia* (Chinese Indian yam)
- *Egeria densa* (Brazilian waterweed or wide-leaf anacharis)
- *Polygonum perfoliatum* or Persicaria perfoliata (Mile-a-minute vine)
- *Fallopia sachalinensis* or Polygonum sachalinense (Giant knotweed)
- *Pueraria montana* or P. lobata (Kudzu)

SECTIONS 31 and 32 simplify the rule language and facilitate compliance by removing the list of nonviable fish species the department has determined to date and by referencing the definition of nonviable. The department has a definition of nonviable and a protocol for determining if a fish is nonviable.

SECTIONS 35 and 65 clarify that the department has made the formal determination that compliance with the conditions of permits issued for activities in navigable waters (Chapters 30 and 31), constitute reasonable precautions as defined in NR40 that will prevent the spread of prohibited and restricted invasive species.

SECTIONS 36 and 66 clarify that the exemption for pets only applies to pets obtained prior to their being listed as prohibited and restricted and the exemption would not allow for possession of offspring covered under the exemption to be transferred, except as a gift for restricted species only.

SECTIONS 37 and 67 remove the unnecessary note defining "wild animal" as it is already defined in NR 40.02 of this chapter.

SECTIONS 38, 39, 68, and 69 clarify that the transport, possession, transfer, or introduction of forest pests under quarantine is allowed within quarantine zones. Both prohibited and restricted forest pests may be subject to quarantine zones. If a quarantine is in effect, the intent of the invasive species rule in restricting the movement of invasive species has been met. Revisions specify that if movement of regulated materials such as untreated wood is taking place within a quarantine zone then the invasive species rule does not apply.

SECTIONS 40 and 75 update the list of DNR reporting and permitting contacts to a single "Statewide Invasive Species Coordinator, SS/7" in Wisconsin's regulated invasive species rule to simplify the reporting and permitting process and to enable the department to issue and monitor permits and reports statewide.

SECTIONS 41 and 74 create an exemption for the department staff to transport, possess, transfer, or introduce a regulated invasive plant, in the performance of their official duties.

SECTIONS 42, 70, 71, and 72 remove reporting requirement for restricted aquatic plants, algae and cyanobacteria and would allow the use of any restricted aquatic/wetland plants for identification, education, control or disposal without a permit.

SECTIONS 44 and 62 renumber the initial species listed in the NR 40 Restricted Category to maintain alphabetical order

SECTIONS 45, 47, 49, 51, 53, 55, 57, 59, 61, and 63 add new species to the NR 40 Restricted Category. The below species proposed for addition to the restricted category are invasive species that the department has determined are already established in the state or in that region of the state where the species are listed as restricted in s. NR 40.05 (2) and that causes or has the potential to cause economic or environmental harm or harm to human health, and for which statewide or regional eradication or containment may not be feasible. Plants proposed for addition to the restricted list will have the rule's effective date listed, added by the Legislative Reference Bureau when the rule is published. Restricted plants not also listed as prohibited under s. NR 40.04 (2) (b) and located in Wisconsin prior to the date the species is listed in NR 40.05 (2) may be transported, transferred, and introduced without a permit for a period not to exceed 3 years for herbaceous plants and woody vines, or 5 years for trees and shrubs, from the time that the species were included for listing by the department under this chapter.

- *Acer tataricum* subsp. *ginnala* (Amur maple) except all cultivars
- *Aegopodium podagraria* (Bishop's goutweed)
- *Alnus glutinosa* (Black alder) except all cultivars and hybrids
- *Artemisia absinthium* (Wormwood)
- *Berberis thunbergii* (Japanese barberry). This restriction only applies to the parent type, the variety *atropurpurea*, the hybrid of *B. thunbergii* x *B. Koreana*, and the following cultivars. *Berberis thunbergii* cultivars: Sparkle, 'Anderson' Lustre Green™, Erecta, 'Bailgreen' Jade Carousel®, Angel Wings, Painter's Palette, Inermis ('Thornless'), Pow Wow, Golden Ring, Kelleriis, Kobold, 'JN Variegated' Stardust™ and Antares. Variety *atropurpurea* cultivars: Marshall Upright ('Erecta'), Crimson Velvet, 'Bailtwo' Burgundy Carousel®, Red Rocket, 'Monomb' Cherry Bomb™, 'Bailone' Ruby Carousel®, JN Redleaf, Rose Glow and Silver Mile. Hybrid of *B. thunbergii* x *B. koreana* cultivars: Tara and 'Bailsel' Golden Carousel®.
- *Caragana arborescens* (Siberian peashrub) except the cultivars Lorbergii, Pendula, and Walkerii
- *Centaurea jacea* (Brown knapweed)
- *Centaurea nigra* (Black knapweed)
- *Centaurea nigrescens* (Tyrol knapweed)
- *Coronilla varia* (Crown vetch)
- *Euonymus alatus* (Burning bush) including the cultivar 'Nordine' and excluding all other cultivars
- *Filipendula ulmaria* (Queen of the meadow)
- *Galium mollugo* (White bedstraw)
- *Impatiens balfourii* (Balfour's touch-me-not)
- *Iris pseudacorus* (Yellow iris)
- *Knautia arvensis* (Field scabiosa)
- *Linaria dalmatica* (Dalmation toadflax) in Juneau and Bayfield counties
- *Lysimachia nummularia* (Moneywort) except the cultivar Aurea
- *Lysimachia vulgaris* (Garden yellow loosestrife)
- *Morus alba* (White mulberry) except male cultivars
- *Myosotis scorpioides* (Aquatic forget-me-not)
- *Myosotis sylvaticum* (Woodland forget-me-not)
- *Najas marina* (Spiny naiad)
- *Phalaris arundinacea* var. *picta* (ribbon grass or gardener's garters) and other ornamental variegated varieties and cultivars. This restriction only applies to the ornamental variegated varieties and cultivars of *Phalaris arundinacea* and does not include the parent type reed canary grass.
- *Pimpinella saxifraga* (Scarlet pimpernel)
- *Populus alba* (White poplar)
- *Robinia hispida* (Rose acacia)

- *Robinia pseudoacacia* (Black locust) except all cultivars
- *Solidago sempervirens* (Seaside goldenrod) in Kenosha, Milwaukee and Racine counties
- *Ulmus pumila* (Siberian elm) except hybrids and individuals used as rootstock
- *Valeriana officinalis* (Garden heliotrope)
- *Cipangopaludina japonica* (Japanese trapdoor snail or Japanese mystery snail)
- *Valvata piscinalis* (European valve snail)
- *Viviparus georgianus* (Banded mystery snail)
- *Agrilus planipennis* (Emerald ash borer)

SECTION 46, 48, 50, 52, 54, 56 and 60 update the list of counties with restricted designations for species in the NR 40 Restricted Category (prohibited elsewhere in the state):

- *Anthriscus sylvestris* (Wild chervil) in Adams, Barron, Crawford, Columbia, Dane, Dodge, Fond du Lac, Green, Green Lake, Iowa, Jefferson, Juneau, Kenosha, Lacrosse, Lafayette, Marquette, Milwaukee, Monroe, Ozaukee, Polk, Racine, Richland, Rock, Sauk, Sheboygan, Taylor, Vernon, and Walworth, Waukesha, and Washington counties
- *Bunias orientalis* (Hill mustard) in Dane, Grant, Green, Iowa, and Lafayette, and Rock counties
- *Chelidonium majus* (Celandine) except in Ashland, Barron, Bayfield, Burnett, Chippewa, Douglas, Dunn, Florence, Forest, Iron, Langlade, Lincoln, Marinette, Oconto, Oneida, Polk, Price, Rusk, St. Croix, Sawyer, Taylor, Vilas and Washburn counties
- *Conium maculatum* (Poison hemlock) in Crawford, Dane, Grant, Green, Iowa, Jefferson, Kenosha, Lafayette, Milwaukee, Ozaukee, Racine, Richland, Rock, and Sauk, Sheboygan, Walworth, and Waukesha counties
- *Epilobium hirsutum* (Hairy willow herb) in Brown, Calumet, Door, Kenosha, Kewaunee, and Manitowoc county counties
- *Glyceria maxima* (Tall or reed mannagrass) in Brown, Calumet, Columbia, Dane, Dodge, Door, Fond du Lac, Green, Jefferson, Kenosha, Kewaunee, Manitowoc, Milwaukee, Outagamie, Ozaukee, Racine, Rock, Sheboygan, Walworth, Washington, Waukesha and Winnebago counties
- *Humulus japonicus* (Japanese hops) in Buffalo, Crawford, Dane, Grant, Green, Iowa, Jackson, La Crosse, Lafayette, Monroe, Pepin, Richland, Sauk, Trempealeau, and Vernon counties
- *Leymus arenarius* or *Elymus arenarius* (Lyme grass or sand ryegrass) in Door, Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, and Sheboygan counties
- *Torilis japonica* (Japanese hedgeparsley or erect hedgeparsley) except in Ashland, Barron, Bayfield, Buffalo, Burnett, Chippewa, Clark, Douglas, Dunn, Eau Claire, Florence, Forest, Iron, Jackson, Lincoln, Oneida, Pepin, Pierce, Polk, Price, Rusk, St. Croix, Sawyer, Trempealeau, Taylor, Washburn, and Wood in Adams, Brown, Calumet, Columbia, Crawford, Dane, Dodge, Door, Fond du Lac, Grant, Green, Green Lake, Iowa, Jefferson, Juneau, Kenosha, Kewaunee, La Crosse, Lafayette, Langlade, Manitowoc, Marathon, Marinette, Marquette, Menominee, Milwaukee, Monroe, Oconto, Outagamie, Ozaukee, Portage, Racine, Richland, Rock, Sauk, Shawano, Sheboygan, Vernon, Walworth, Washington, Waukesha, Waupaca, Waushara, and Winnebago counties

SECTION 58 revises scientific names in the NR 40 Restricted Category to include accepted synonyms and renumbers to maintain alphabetical order.

- *Fallopia japonica* var. ~~*japonica*~~ or *Polygonum cuspidatum* (Japanese knotweed)

SECTION 61 adds viable genetically modified fish species to the list of restricted species.

SECTION 64 removes the red-eared slider with a carapace (top shell) less than 4 inches from the NR 40 Restricted Category as the sale of turtles of the size are already banned via Code of Federal Regulation – Title 21.

SECTION 73 removes the rusty crayfish from the list of species that may be transported, possessed, or transferred without a permit. Additionally this section clarifies that the rusty crayfish may be taken from the Mississippi River for use as bait on the Mississippi River as authorized under ch. NR 19.27 (4) (a) 1. a. While rusty crayfish (*Orconectes rusticus*) are abundant in many lakes, there are many lakes that are free of this species and their movement should be limited as with other restricted species. This revision will allow live crayfish to be used as bait on the Mississippi River as per NR 19 and will eliminate the exemption that allows live rusty crayfish to be transported.

SECTION 74 clarifies rule language pertaining to dead crayfish as bait, and creates a phase out period for restricted plants to facilitate compliance. The department exemption is explained with SECTION 41.

- The use of dead crayfish, including rusty crayfish, on all waters as bait are not prohibited under NR 40, but may be restricted under other applicable department rules relating to the use of bait for fishing purposes.
- A phase out period for restricted plants is created, where they may be transported, transferred, and introduced without a permit for a period not to exceed 3 years for herbaceous plants and woody vines, or 5 years for trees and shrubs, from the time that the species was added to the NR 40 Restricted Category. All plants listed in the NR 40 Prohibited Category are not included in this exemption. Plants added to the restricted list after 2009 have the rule's effective date listed. All plants without an effective date have been restricted since 2009 and remain restricted. Growing out potted trees and shrubs to a marketable size takes several years. When new species that are grown commercially in Wisconsin are added to the invasive species rule, businesses that have these species in inventory may have several years invested in their production. A phase out period for newly listed, restricted plants will reduce the burden for businesses to comply with the invasive species rule. As a similar but shorter investment may be made in planting crops for seed production or herbaceous perennial plants, a two tiered 3 and 5 year phase out period is proposed. This phase out applies only to restricted plants, not prohibited or split-listed species.

SECTION 76 updates the department's website address.

Summary of, and Comparison with, Existing or Proposed Federal Regulations: There are no known proposed federal regulations that would provide the ability for the state to act when newly establishing invasive species are discovered. Existing regulations address a narrow subset of noxious weeds under the Federal Noxious Weed Act (7 U.S.C. 2801 et seq; 88 Stat, 2148) or animals under the Lacey Act (18 U.S.C. 42-43, 16 U.S.C. 3371-3378), primarily species that are already too widespread for a more cost-effective prevention approach.

Comparison with Rules in Adjacent States:

- Illinois: The Illinois Department of Agriculture maintains a statutory list under Illinois Noxious Weed Law of about 9 species (www.agr.state.il.us/Laws/Regs/8iac220.pdf) and the Illinois Department of Natural Resources links to a more comprehensive list of 102 invasive species and a shorter list of plants, animals, insects and diseases (www.invasive.org/illinois/SpeciesofConcern.html).
- Iowa: Regulates several species of aquatic invasive plants, aquatic invasive invertebrates, and invasive fish (www.iowadnr.gov/idnr/Fishing/AboutFishinginIowa/FightingInvasiveSpecies/AquaticInvasiveInvertebrates.aspx).
- Michigan: Regulates a number of invasive aquatic plants - 18, fish - 12 plus all snakeheads, and other animals - 11 through Act 451 and requires prevention actions especially for aquatic invasive species ([www.legislature.mi.gov/\(S\(brw3y4554cagkv4554a24a45\)\)/documents/mcl/pdf/mcl-451-1994-iii-2-1-wildlife-conservation-413.pdf](http://www.legislature.mi.gov/(S(brw3y4554cagkv4554a24a45))/documents/mcl/pdf/mcl-451-1994-iii-2-1-wildlife-conservation-413.pdf)).
- Minnesota: Regulates both aquatic and terrestrial invasive species in a process similar to Wisconsin with prohibited, restricted, and non-regulated categories as well as prevention requirements including regulating the transport of water. The species regulated as prohibited include aquatic plants - 14 plus all federally listed species except *Ipomoea aquatica*, fish - 14, aquatic invertebrates - 5, mammals - 4. The species regulated as restricted include aquatic plants - 6, birds - 3, fish - 5, and aquatic invertebrates - 3. In addition all crayfish are regulated.

Summary of factual data and analytical methodologies: Following the enactment of ch. NR 40, Wis. Adm. Code in September of 2009, a list of species remained in need of assessment. These species and additional species presented to the department formed the list of species considered during NR 40 revisions. For each considered species, department staff completed a literature review to establish the potential ecological and economic threats presented by the species.

In 2012, at the request of the Wisconsin Invasive Species Council, species assessment groups (SAGs) convened with the charge of recommending a regulatory category (Prohibited or Restricted) or non-regulatory category (Caution, Pending, Non-restricted, or not invasive) for each considered species

to the Council. SAGs are comprised of taxa experts representing governmental, industrial, environmental, educational, and scientific organizations. SAGs are facilitated by DNR staff species experts. Each group utilized the completed literature reviews and professional expert knowledge of the species to make their determinations. The literature reviews are available for review.

For the revision process, eleven SAGs were formed:

- | | |
|---|---|
| 1. Terrestrial Plants: Trees, Shrubs and Vines | 6. Aquatic Invertebrates (besides crayfish) |
| 2. Terrestrial Plants: Ornamental Forbs and Grasses | 7. Fish and Crayfish |
| 3. Terrestrial Plants: Other Forbs and Grasses | 8. Plant Pests |
| 4. Terrestrial Plants: Forage, Turf and Biofuels | 9. Terrestrial Invertebrates |
| 5. Aquatic Plants, Algae and Cyanobacteria | 10. Vertebrates (except fish) |
| | 11. Fish and Wildlife Diseases (Funguses) |

After complete review of the species at hand, each SAG formalized a recommended designation for each species via Species Assessment Group Forms. These forms are available for review. On October 22, 2012 the SAGs presented their recommendations to the Wisconsin Invasive Species Council. The Council subsequently voted and approved the SAG recommendations with minor amendments. The Council then advised the DNR to consider the Council recommendations to revise the invasive species rule.

DNR staff experts on the department Invasive Species Team met in 2012 to consider language changes that were needed in the rule to clarify meaning, ensure consistency with existing rules, and assure practicality of the rule. These language changes were developed with input from SAG groups and industry experts as appropriate and are reflected in the board packet. An overview of these changes was presented to the Council for review and to solicit feedback.

In the winter of 2012-2013, DNR staff presented the Council's recommendations to the public in a series of informal public meetings. The department concurrently solicited public comments from scientific and industry partners as well as the general public. In the spring and summer of 2013 DNR staff used these comments and additional research to further refine DNR's recommended amendments to the rule.

Analysis and supporting documents used to determine effect on small business or in preparation of economic impact report: Pursuant to s. 227.127, Wis. Stats., the department is required to solicit comments on the economic impact of a proposed rule. Small businesses, as defined in s. 227.114(1), Wis. Stats., were asked to identify themselves as a small business in their comments. Following the public comment period on the economic impacts, a revised "Fiscal Analysis and Economic Impact Analysis" (EIA) was prepared containing relevant information that the department received. The department will submit the rule package and economic impact analysis to the Wisconsin Legislative Council under s. 227.15, Wis. Stats., along with the public hearing notice in accordance with ss. 227.17 and 227.18, Wis. Stats.

A small business regulatory flexibility analysis that contains the following provisions in s. 227.19 (3) (e), Stats., will be included in the final rule order:

1. The agency's reason for including or failing to include in the proposed rule any of the methods specified under s. 227.114 (2) for reducing its impact on small businesses.
2. A summary of the issues raised by small businesses during the hearings on the proposed rule, any changes in the proposed rule as a result of alternatives suggested by small businesses and the reasons for rejecting any alternatives suggested by small businesses.
3. The nature of any reports and the estimated cost of their preparation by small businesses that must comply with the rule.
4. The nature and estimated cost of other measures and investments that will be required of small businesses in complying with the rule.
5. The additional cost, if any, to the agency of administering or enforcing a rule which includes any of the methods specified under s.227.114 (2).
6. The impact on public health, safety and welfare, if any, caused by including in the rule any of the methods specified under s 227.114 (2).

The department's email distribution list used to solicit comments includes small businesses and small business associations. The distribution list will be available upon request to the Governor's Office of Regulatory Compliance.

Effect on small businesses: We expect considerable interest in the proposed rule revisions. Interested parties may include the nursery, landscape, forestry, seed and agriculture industries, fish farmers, bait dealers, commercial fishers and wholesale fish dealers, aquarium and ornamental fish dealers, game farms, anglers, landowners, gardeners, county and municipal governments, Native American Indian tribes, lake districts, state agencies, and environmental and conservation organizations.

The Wisconsin Invasive Species Council reviewed and assessed a list of species for inclusion in the proposed rule revision and actively engaged their contacts in the process. The Council includes representatives the Departments of Natural Resources; Administration; Agriculture, Trade and Consumer Protection; Tourism; Transportation and seven other Council members that are drawn from agriculture; nursery industry; NGOs (TNC); UW; and forestry.

As part of the information gathering and outreach process, Invasive Species Outreach Specialist Chrystal Schreck sent a letter to 600 retailers and growers and approximately 1100 licensed growers and dealers from the November 2, 2012 DATCP list of license holders updating them on the process in December, 2012. A series of informal public information sessions about the proposed changes to the rule were held from February 25 - March 15 in Madison, Milwaukee, Spooner, Rhinelander, and La Crosse to inform interested parties that the revisions were under development and to solicit informal comments on the potential impact of the rule. Approximately 41 people attended, and 52 public comments have been received during the informal discussion period.

For small businesses growing woody plants, a number of years have been invested into the infrastructure to grow particular species. To minimize economic impact of listing new species that are invasive in Wisconsin a phase out period of 5 years for trees and shrubs, and 3 years for all other plants once listed as Restricted would both reduce the economic impact and provide a defined period for achieving compliance without using permits for commercial activities. The compliance period would begin once the rule is in effect. Prohibited species would be immediately subject to regulation.

Through staff work with pet stores and other small businesses that had not previously been regulated by the DNR we learned that personal communication, clear and concise guides to regulated species, and education were important. Ensuring personal contact and taking an "education first" approach is consistent with DNR's policy of stepped enforcement and will be maintained for all taxa groups regulated under the invasive species rule.

Enforcement and administration for the invasive species rule and permits are already in place. Some changes due to the increased number of species requiring review and training for identification are anticipated but cost are expected to be absorbed within existing DNR budgets and by DATCP staff who enforce provisions of the rule at licensed nurseries. Staff from both agencies have met and developed guidelines to continue a partnership of joint and cooperative enforcement. Management costs may rise with the addition of new species to the list but as the options for cost-sharing for control have not been funded in the past, it is unlikely that there will be any discernible operational impact. The policy of stepped enforcement is compatible with the changes proposed to the rule as "education first" is the priority for compliance.

Effect on local governmental units: Pursuant to s. 227.137 Wis. Stats., the department solicited comments on the economic impact of the proposed rule, and coordinated with local governments that requested in the preparation of an Economic Impact Analysis (EIA). The Village of Cecil requested the department coordinate with them in preparation of the EIA. Department staff have been in consultation with the Village President.

Summary of Expected Economic and Fiscal Impacts: The economic cost of listing a species is highly dependent on the impact it is having now, how wide spread it already is, how it is currently being used in trade, and the availability of species that can be substituted for the proposed species. The assumption of a significant impact is a conservative estimate that does not generally take into account the availability of substitute non-invasive species or the value of preventing the introductions of invasive species. The impact of removing newly regulated organisms from trade has a potentially high short term impact. It is anticipated that businesses will substitute alternative, non-invasive species over time. The high estimate also reflects the diversity of species under assessment, as well as the fact that a number of these species may be used by various sectors of society. During the species assessment process, the economic costs and benefits were discussed for each species considered for inclusion in the rule revisions. Certain species may have larger potential economic impacts than others and will be highlighted in the discussion that follows.

Summary of Expected Benefits of Revisions to the Rule: Updating the regulated list of invasive species under NR 40 to include species that if removed from trade, or subject to reasonable precautions to prevent their spread can be contained, slowed, or prevented from establishing in Wisconsin reduces the ecological and economic harm caused by these invasive species in the future. Listing species under the invasive species rule encourages action across jurisdictions and can focus control and containment

efforts, improving their effectiveness. Invasive species are species that are non-native to Wisconsin and cause or have the potential to cause economic or environmental harm or harm to human health. By regulating these species that have been identified as causing or potentially causing harm and that have the potential to be controlled through regulation the intent is to create the largest possible benefit to both the economy and the department's mission to protect and manage the resources of the state. These rule revisions provide valuable economic benefits by reducing future control and management costs for regulated invasive species.

The alternative considered in the detailed Economic Impact Analysis report is not listing additional invasive species for regulation. Past efforts to quantify where the economic impact from controlling invasive species falls have identified that individual landowners generally bear the highest cost to mitigate the damage these species cause while the economic benefits of continued use of a species are limited to a much smaller contingent. The distributed impact of not listing species that are invasive species is likely to be greater.

Long Range Projections: The long range economic impacts include control costs, costs to comply with both the list of regulated species and with the required reasonable precautions, and increased enforcement burdens. The control costs for prohibited species where control is required when feasible will increase somewhat with the increased number of species listed as some of these species are likely to be introduced to Wisconsin and spread. However, it is anticipated that with a changing climate, continually increasing trade and exchange of materials, and the dispersal from populations already established, that the cost to control invasive species in Wisconsin will increase independent of the proposed regulation, and that regulation will reduce the number of these species being introduced.

The increased number of regulated species will reduce or eliminate those particular species in trade without restricting commerce overall since substitution of non-regulated species is likely. The long range implications for businesses are generally low as the initial cost to remove a species from sale and develop sources and propagation methods for substitute species will occur over a 1-7 year period and not reoccur. Costs to comply with reasonable precautions will be ongoing and are likely to decrease with time as new methods and tools increase the efficiency of these actions. The required reasonable precautions will continue to have benefits by reducing the likelihood that multiple species will spread through known pathways such as mowing equipment, forestry activities, boating, and nursery sales. The benefits of preventing the spread of invasive species will continue as long as the requirement to employ reasonable precautions remains in place.

The increased enforcement burden will require that both Department of Natural Resources and Department of Agriculture, Trade and Consumer Protection staff will spend more time reviewing and learning the listed species and working with regulated parties. It is anticipated that these increased costs will be absorbed by the existing staff and program.

The Small Business Regulatory Coordinator may be contacted at SmallBusiness@dnr.state.wi.us , or by calling (608) 266-1959.

Environmental Analysis

The Department has made a preliminary determination that adoption of the proposed rules would not involve significant adverse environmental effects and would not need an environmental analysis under ch. NR 150, Wis. Adm. Code. However, based on comments received, an environmental analysis may be prepared before proceeding. This analysis would summarize the Department's consideration of the impacts of the proposal and any reasonable alternatives.

Fiscal Estimate Summary

The economic cost of listing a species is highly dependent on the impact it is having now, how wide spread it already is, how it is currently being used in trade, and the availability of species that can be substituted for the proposed species. The assumption of a significant impact is a conservative estimate that does not generally take into account the availability of substitute non-invasive species or the value of preventing the introductions of invasive species. The impact of removing newly regulated organisms from trade has a potentially high short term impact. It is anticipated that businesses will substitute alternative, non-invasive species over time. The high estimate also reflects the diversity of species under assessment, as well as the fact that a number of these species may be used by various sectors of society. During the species assessment process, the economic costs and benefits were discussed for each species considered for inclusion in the rule revisions.

To determine implementation and compliance costs expected to be incurred, DNR Invasive Species Team staff and Wisconsin Invasive Species Council members compiled a list of individuals and

organizations who might be economically impacted by the proposed rule revisions or were affected by invasive species. Types of positive and negative effects from both regulating and not regulating were identified along with a method on how they might be quantified. Given the unknowns and the complexity of assessing the impacts, a relative impact of low-moderate-high (L/M/H) was determined. The economic cost of listing a species is highly dependent on its commercial uses, distribution, response to control tools currently available, level of impact, management needs, etc.

Dated at Madison, Wisconsin April 22, 2014

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

By Cathy Stepp
Cathy Stepp, Secretary *ch*