

Michigan Coastal Zone Management Program

Routine Program Change Concurrence Request: Enforceable Policies for the Protection of Endangered and Threatened Species

February 10, 2014

Introduction

The Michigan Coastal Zone Management Program (MCZMP), in the Office of the Great Lakes, Michigan Department of Environmental Quality, was approved by the National Oceanic and Atmospheric Administration (NOAA) in 1978, pursuant to Section 306 of the Federal Coastal Zone Management Act of 1972 (P.L. 109-58). The MCZMP, as approved, includes enforceable policies involving the management and protection of the Great Lakes coastal zone in Michigan that are contained in several State statutes and administrative rules. To keep the MCZMP current, it is occasionally necessary to update the description of those enforceable policies to reflect legislative amendments, rule revisions, and similar actions, and to seek NOAA's concurrence in the incorporation of such routine changes to the MCZMP as required under 15 CFR 923.84.

This document is a request by the State of Michigan for the concurrence of the Office of Ocean and Coastal Resource Management, NOAA, in the incorporation of the following Routine Program Change (RPC) to the MCZMP. The RPC addresses changes to Michigan's enforceable policies for the protection of endangered and threatened animal and plant species. Specifically, the enforceable policies are identified in the "State of Michigan Coastal Management Program and Final Environmental Impact Statement" submitted to the NOAA for review on May 19, 1978, and subsequently approved, as Act No. 203 of the Public Acts of 1974, Endangered Species Act ("Act 203"), and the administrative rules promulgated under the authority of Act 203. The enforceable policies in Act 203 and associated administrative rules were approved by the NOAA at the time the MCZMP was approved.

The provisions of Act 203 were incorporated into Michigan's environmental code in 1995. Today, the enforceable policies are known as Part 365, Endangered Species Protection, of the Natural Resources and Environmental Protection Act, Public Act 451 of 1994, as amended (NREPA), comprising sections 324.36501 to 324.36507 of the Michigan Compiled Laws, and the administrative rules promulgated under the authority of Part 365, comprising R 299.1021 to R 299.1028 of the Michigan Administrative Code.

To clarify terms used here, a statute, or act, is created by the Michigan legislature and made into law through the legislative process. It is the law of the land. Administrative rules are created, or promulgated, by state executive agencies according to the rulemaking process. Executive agencies use administrative rules to implement the statutes for which they are responsible. Administrative rules are not the law by themselves, but when they are duly-promulgated according to law, they have the force and effect of law.

Enforceable Policies Background

Generally, the purpose of these enforceable policies is to protect animal and plant species categorized as endangered and threatened in Michigan, and to list those species that either no longer exist in Michigan but occur elsewhere, or are believed to be completely extinct. The categories of endangered and threatened are similar but distinct from each other. A species that is endangered is nearly extinct throughout most or all of its natural range within the state. A threatened species is one that is not endangered yet, but which is likely to decline in number to the level of endangered at some point in the foreseeable future. Therefore, the enforceable policies are aimed at identifying and protecting endangered and threatened species in Michigan and promoting their recovery.

To implement these protections, the statute directs the Michigan Department of Natural Resources (MDNR) to develop the information necessary to promulgate rules that meet the statutory goals, and to maintain these rules with regular reviews and updates. The statute authorizes the MDNR to develop and implement programs and cooperative agreements that the department deems necessary to meet the statutory goals. The statute also prohibits a “taking” of any protected species unless the taking action is covered by a statutory exclusion, primarily, a permit from the department. Taking includes actions that may indirectly impair a species’ survival, in addition to direct threats. The department has limited discretion and guidelines it must follow before it authorizes the taking of a protected species. Law enforcement officers, police officers, sheriff’s deputies, or conservation officers enforce the statute and rules. Violation of the statute or rules is a misdemeanor punishable by imprisonment or fines.

Analysis of Routine Program Change

The RPC analysis is based on a comparison of the provisions of Act 203 that were in effect on May 19, 1978, to the provisions of Part 365 in effect today (Attachment 1), as well as a companion comparison of the previous endangered and threatened species rules promulgated under the authority of Act 203 to the current endangered and threatened species rules promulgated under the authority of Part 365 (Attachment 2). In the comparisons, all language in Act 203 and its administrative rules that is not present in Part 365 and its administrative rules appears in strike-through text. All language in Part 365 and its administrative rules not present in Act 203 and its administrative rules appears in underlined text. Where strike-through and/or underlined text indicates a noteworthy change, the change is categorized as substantive or non-substantive. Examples of substantive changes are:

- A practical change in what is required for the State or regulated community to comply with the statute or rules;
- A change in the consequences of actions or inaction by the State or regulated community; or
- A change in the type or extent of opportunities for public involvement.

All substantive changes are numbered consecutively in the attachments. The following analysis refers to these changes by number.

Statutory Changes

Part 365 includes three substantive changes made to Michigan's endangered species statute since May 19, 1978, as shown in Attachment 1. Change 1 is in section 324.36501 of the Michigan Compiled Laws, the definitions. A series of executive reorganization orders issued by Michigan governors under Article V, Section 2 of the Michigan Constitution, including Executive Orders 1991-31, 2009-45, and 2011-1, transferred the powers, duties, and authority from the former Commission of Natural Resources, the former MDNR, its director, and its various agencies, boards, and commissions, to the director of the new MDNR. The current language lacks references to the former commission, department, and director. Essentially, it gives effect to a change in agency decision-making structure.

Change 2 is in section 324.36505(5), prohibitions and exceptions. Change 2 incorporates Part 13 of the NREPA by reference. Part 13 was added to the NREPA by Public Act 325 of 2004, and was last amended by Public Act 98 of 2013. Part 13 establishes requirements for application for, and issuing of, permits required under several NREPA parts. MCL 324.36505(5) controls the department's permitting process for the taking of a threatened or endangered species. It specifies what the department must supply to the public, including blank application forms and instructions, and sets forth the time-tables necessary for approval or denial of applications. Under Part 13, the department's processing period following the receipt of an administratively complete permit application and complete fee is capped at 150 days, unless a site inspection or federal approval is required. If a site inspection or federal approval is required, the 150-day period is tolled pending completion of the inspection or receipt of the federal approval. Part 13 also requires that the department explain any denials of permit applications as fully as possible, citing, as specifically as possible, any scientific information that forms the basis of a denial.

Change 3 is in section 324.36505(6). Change 3 adds paragraphs (c) and (d) to subsection (6). Paragraphs (c) and (d) do not prohibit any activities related to raptors, raptor eggs, and raptor semen, so long as the acting parties have any permits required by Part 365.

Administrative Rule Changes

Twenty-five substantive changes have been made to Michigan's endangered and threatened species administrative rules since May 19, 1978, as shown in Attachment 2. The majority of the changes are updates to the lists of endangered and threatened species to reflect their current population status.

Change 1 is the same change to the rules as Change 1 above to the statute. It notes the change in authority from the previous department and its associated director, commissions, and agencies, to the new department, according to the Executive Orders noted above and MCL 324.36503.

Changes 2-7, 9, 10, 13-18, and 20-23, revise rules 299.1021 through 299.1028. Collectively, these changes update the endangered and threatened species lists for all

covered species to reflect recent scientific surveys and research, expert judgment, and taxonomic changes.

Change 12 establishes subsection (4) of rule 299.1023, which creates a list of fish thought to be extinct. If the listed fish are found to exist outside Michigan, they will be automatically added to the list of extirpated species, or species thought to no longer exist in Michigan. If they are rediscovered in Michigan, they will be automatically added to the list of threatened species.

Changes 8, 11, 19, and 25 add a new category to rules 299.1021 through 299.1028 for extirpated species, or species thought to no longer exist in Michigan but that exist elsewhere. If these species are found to exist in Michigan, they will be automatically added to the list of threatened species.

Change 24 adds subsection (3) of rule 299.1028, which exempts cultivated plants from the requirements of the rule.

RPC Justification

The MCZMP has evaluated these changes pursuant to 15 CFR 923, Subpart H and concluded that the changes described here constitute a Routine Program Change. They do not constitute a Program Amendment as defined by 15 CFR 923.80(d) because they do not substantially change any of the five Coastal Zone Management Act Program areas. The changes do not add or remove uses subject to management. The MCZMP has chosen not to employ special management areas and the changes do not affect that decision. The changes do not revise the approved MCZMP boundary. The changes embodied in the current Part 365 and its administrative rules collectively make refinements to the State's previously approved authority to protect and manage endangered and threatened species of plants and animals, and the MDNR's decision-making structure related to this authority. However, the changes to this authority do not substantially affect the resource or the regulated community, and the MDNR continues to hold the primary duty and responsibility for implementing this authority within the organization of State government. Finally, the changes do not affect coordination, public involvement, and the national interest.

ATTACHMENT 1

Comparison of the Provisions of Public Act 203 of 1974 to the Provisions of Part 365, Endangered Species Protection, of NREPA (1994 P.A. 451, as amended)

Act 203 Provisions (in effect on May 19, 1978)	Current Part 365 Provisions (as last amended by 2004 P.A. 325, effective September 10, 2004)	Change
<p>{No. 203.}</p> <p>AN ACT to provide for the conservation, management, enhancement and protection of fish, plant life, and wildlife species endangered or threatened with extinction; to provide for enforcement authority; and to prescribe penalties.</p> <p>The People of the State of Michigan enact:</p> <p>299.221 Short title. {M.S.A. 13.1204(1)}</p> <p>Sec. 1.</p> <p>This act shall be known and may be cited as the "endangered species act of 1974".</p> <p>299.222 Definitions. {M.S.A. 13.1204(2)}</p> <p>Sec. 2.</p> <p>As used in this act:</p>	<p style="text-align: center;"><u>NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT (EXCERPT)</u> <u>Act 451 of 1994</u> <u>ENDANGERED SPECIES</u> <u>Part 365</u> <u>ENDANGERED SPECIES PROTECTION</u></p> <p><u>324.36501</u> Definitions.</p> <p>Sec. <u>36501</u>.</p> <p>As used in this <u>part</u>:</p>	<p>Non-Substantive. Michigan environmental laws are drawn from the NREPA, a variety of laws reorganized into a single unified code. 1974 PA 203 – Endangered Species Act – was repealed and reenacted as Part 365 of NREPA on May 24, 1995.</p> <p>Non-Substantive. Citations in Michigan Statutes Annotated (M.S.A.) format removed here and below. This compilation of state statutes was formerly published by Lexis Law Publishing but is no longer updated.</p> <p>Non-Substantive. Section establishing the short title of the now-repealed act removed.</p> <p>Non-Substantive. Renumbering.</p> <p>Non-Substantive. Renumbering.</p> <p>Non-Substantive. Editorial changes here and below. Section 107 of NREPA states in full, "It is the intention of the legislature that editorial changes in the language of the statutes codified as parts within this act not be construed as changes to the meanings of those</p>

<p>(a) "Commission" means the commission of natural resources.</p> <p>(b) "Department" means the department of natural resources.</p> <p>(c) "Director" means the director of the department or the director's authorized representative.</p> <p>(d) "Endangered species" means any species of fish, plant life, or wildlife which is in danger of extinction throughout all or a significant part of its range other than a species of insecta determined by the commission or the secretary of the United States department of the interior to constitute a pest whose protection under this act would present an overwhelming and overriding risk to man.</p> <p>(e) "Fish or wildlife" means any member of the animal kingdom, including any mammal, fish, amphibian, mollusk, crustacean, arthropod, or other invertebrate, and includes any part, product, egg, or offspring, or the dead body or parts thereof. Fish or wildlife includes migratory birds, nonmigratory birds, or endangered birds for which protection is afforded by treaty or other international agreement.</p> <p>(f) "Import" means to bring into, or</p>	<p><u>(a)</u> "Endangered species" means any species of fish, plant life, or wildlife <u>that</u> is in danger of extinction throughout all or a significant part of its range, other than a species of insecta determined by the <u>department</u> or the secretary of the United States department of the interior to constitute a pest whose protection under this <u>part</u> would present an overwhelming and overriding risk to <u>humans</u>.</p> <p><u>(b)</u> "Fish or wildlife" means any member of the animal kingdom, including any mammal, fish, amphibian, mollusk, crustacean, arthropod, or other invertebrate, and includes any part, product, egg, or offspring, or the dead body or parts thereof. Fish or wildlife includes migratory birds, nonmigratory birds, or endangered birds for which protection is afforded by treaty or other international agreement.</p> <p><u>(c)</u> "Import" means to bring into,</p>	<p>statutes."</p> <p>(1) Substantive. Executive Order 1991-31 transferred the powers and duties of the Commission of Natural Resources, the Department of Natural Resources, the MDNR, the director, and various agencies, boards, and commissions contained therein relating to natural resources management and environmental protection to the director of a new MDNR.</p> <p>Non-Substantive. Definition of department is located at section 301(b) of NREPA: "Department" means the director of the department of natural resources or his or her designee to whom the director delegates a power or duty by written instrument.</p> <p>Non-Substantive. Re-lettering here and below.</p> <p>Non-Substantive. Editorial changes.</p>
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<p>introduce into, or attempt to bring into, or introduce into, any place subject to the jurisdiction of this state.</p> <p>g) "Person" means an individual, corporation, partnership, trust, association, or any other private entity, or any officer, agent, department, or instrumentality of the federal government, of a state or political subdivision of a state, or of any foreign government.</p> <p>(h) "Plant or plant life" means any member of the plant kingdom, including seeds, roots, and other parts of a member of the plant kingdom.</p> <p>(i) "Species" includes any subspecies of fish, plant life, or wildlife and any other group of fish, plants, or wildlife of the same species or smaller taxa in common spatial arrangement that interbreed or cross-pollinate when mature.</p> <p>(j) "Take" means, in reference to fish and wildlife, to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct.</p> <p>(k) "Take" means, in reference to plants, to collect, pick, cut, dig up, or destroy in any manner.</p> <p>(4) "Threatened species" means any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.</p> <p>299.223 Duties of commission. [M.S.A. 13.1204(3)]</p> <p>Sec. 3.</p> <p>The commission shall perform those acts necessary for the conservation,</p>	<p>introduce into, or attempt to bring into or introduce into any place subject to the jurisdiction of this state.</p> <p><u>(d) "Plant or plant life" means any member of the plant kingdom, including seeds, roots, and other parts of a member of the plant kingdom.</u></p> <p><u>(e) "Species" includes any subspecies of fish, plant life, or wildlife and any other group of fish, plants, or wildlife of the same species or smaller taxa in common spatial arrangement that interbreed or cross-pollinate when mature.</u></p> <p><u>(f) "Take" means, in reference to fish and wildlife, to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct.</u></p> <p><u>(g) "Take" means, in reference to plants, to collect, pick, cut, dig up, or destroy in any manner.</u></p> <p><u>(h) "Threatened species" means any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.</u></p> <p><u>324.36502 Duties of department.</u></p> <p><u>Sec. 36502.</u></p> <p><u>The department shall perform those acts necessary for the conservation,</u></p>	<p>Non-Substantive. Definition of person is located at section 301(h) of NREPA: "Person" means an individual, partnership, corporation, association, governmental entity, or other legal entity.</p> <p>Non-Substantive. Renumbering and retitling.</p> <p>Non-Substantive. Renumbering.</p>
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<p>protection, restoration, and propagation of endangered and threatened species of fish, wildlife, and plants in cooperation with the federal government, pursuant to Public Law 93-205, 87 Stat. 884, and with rules promulgated by the secretary of the interior thereunder.</p> <p>299.224. Management measures, determination; listing of endangered species</p> <p>Sec. 4-</p> <p>(1) The director shall conduct investigations on fish, plants, and wildlife in order to develop information relating to population, distribution, habitat needs, limiting factors, and other biological and ecological data to determine management measures necessary for their continued ability to sustain themselves successfully. On the basis of these determinations and other available scientific and commercial data, which may include consultation with scientists and others who may have specialized knowledge, learning, or experience, the commission shall promulgate a rule listing those species of fish, plants, and wildlife which are determined to be endangered or threatened within the state, pursuant to Act No. 306 of the Public Acts of 1969, as amended, being sections 24.201 to 24.315 of the Michigan Compiled Laws.</p> <p>(2) The commission shall conduct a review of the state list of endangered and threatened species within not more than 2 years after its effective date and every 2 years thereafter, and may amend the list by appropriate additions or deletions pursuant to Act No. 306 of the Public Acts of 1969, as amended.</p>	<p>protection, restoration, and propagation of endangered and threatened species of fish, wildlife, and plants in cooperation with the federal government, pursuant to <u>the endangered species act of 1973</u>, Public Law 93-205, 87 Stat. 884, and with rules promulgated by the secretary of the interior <u>under that act</u>.</p> <p><u>324.36503 Investigations; determinations; rule; review.</u></p> <p>Sec. <u>36503</u>.</p> <p>(1) The <u>department</u> shall conduct investigations on fish, plants, and wildlife in order to develop information relating to population, distribution, habitat needs, limiting factors, and other biological and ecological data to determine management measures necessary for their continued ability to sustain themselves successfully. On the basis of these determinations and other available scientific and commercial data, which may include consultation with scientists and others who may have specialized knowledge, learning, or experience, the <u>department</u> shall promulgate a rule listing those species of fish, plants, and wildlife <u>that</u> are determined to be endangered or threatened within the state, pursuant to <u>the administrative procedures act of 1969</u>, Act No. 306 of the Public Acts of 1969, being sections 24.201 to <u>24.328</u> of the Michigan Compiled Laws.</p> <p>(2) The <u>department</u> shall conduct a review of the state list of endangered and threatened species within not more than 2 years after its effective date and every 2 years thereafter, and may amend the list by appropriate additions or deletions pursuant to Act No. 306 of the Public Acts of 1969.</p>	<p>Non-Substantive. Citation format change.</p> <p>Non-Substantive. Editorial changes.</p> <p>Non-Substantive. Renumbering and retitling.</p> <p>Non-Substantive. Renumbering.</p> <p>Non-Substantive. Editorial changes.</p> <p>Non-Substantive. Citation format change.</p> <p>Non-Substantive. MCL sections 24.316 to 24.328 added to Public Act 306 of 1969 do not address rule promulgation.</p> <p>Non-Substantive. Editorial</p>
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<p>299.225 Programs; cooperative agreements. [M.S.A. 13.1204(5)]</p> <p>Sec. 5.</p> <p>(1) The director may establish programs, including acquisition of land or aquatic habitat, as are deemed necessary for the management of endangered or threatened species.</p> <p>(2) In carrying out the programs authorized by this section, the commission may enter into cooperative agreements with federal and state agencies, political subdivisions of the state, or with private persons for the administration and management of any area or program established under this section or for investigation as outlined in section 4.</p>	<p><u>324.36504</u> Programs; cooperative agreements.</p> <p>Sec. <u>36504</u>.</p> <p>(1) The <u>department</u> may establish programs, including acquisition of land or aquatic habitat, as are <u>considered</u> necessary for the management of endangered or threatened species.</p> <p>(2) In <u>implementing</u> the programs authorized by this section, the <u>department</u> may enter into cooperative agreements with federal and state agencies, political subdivisions of the state, or with private persons for the administration and management of any area or program established under this section or for investigation as outlined in section <u>36503</u>.</p>	<p>changes. Non-Substantive. Renumbering.</p> <p>Non-Substantive. Renumbering</p> <p>Non-Substantive. Editorial changes.</p> <p>Non-Substantive. Editorial changes.</p> <p>Non-Substantive. Citation change.</p>
<p>299.226. Taking, possessing, transporting, importing, exporting, processing, selling, or destroying endangered species</p> <p>Sec. 6.</p> <p>(1) Except as otherwise provided in this act, a person shall not take, possess, transport, import, export, process, sell or offer for sale, buy or offer to buy, nor shall a common or contract carrier transport or receive for shipment, any species of fish, plants, or wildlife appearing on the following lists:</p> <p>(a) The list of fish, plants, and wildlife indigenous to the state determined to be endangered or threatened within the state pursuant to section 4 or subsection (3).</p> <p>(b) The United States list of</p>	<p><u>324.36505</u> Prohibitions; exceptions.</p> <p>Sec. <u>36505</u>.</p> <p>(1) Except as otherwise provided in this <u>part</u>, a person shall not take, possess, transport, import, export, process, sell, offer for sale, buy, or offer to buy, <u>and</u> a common or contract carrier <u>shall not</u> transport or receive for shipment, any species of fish, plants, or wildlife appearing on the following lists:</p> <p>(a) The list of fish, plants, and wildlife indigenous to the state determined to be endangered or threatened within the state pursuant to section <u>36503</u> or subsection (3).</p> <p>(b) The United States list of</p>	<p>Non-Substantive. Renumbering and retitling.</p> <p>Non-Substantive. Renumbering.</p> <p>Non-Substantive. Editorial changes.</p> <p>Non-Substantive. Citation change.</p>

<p>endangered or threatened native fish and wildlife.</p> <p>(c) The United States list of endangered or threatened plants.</p> <p>(d) The United States list of endangered or threatened foreign fish and wildlife.</p> <p>(2) A species of fish, plant, or wildlife appearing on any of the lists delineated in subsection (1) which enters the state from another state or from a point outside the territorial limits of the United States may enter, be transported, possessed, and sold in accordance with the terms of a federal permit issued pursuant to section 10 of the endangered species act of 1973, 16 U.S.C. 1539 or an applicable permit issued under the laws of another state.</p> <p>(3) The commission may, by rule, treat any species as an endangered species or threatened species even though it is not listed pursuant to section 4, if it finds any of the following:</p> <p>(a) The species so closely resembles in appearance, at the point in question, a species which is listed pursuant to section 4 that enforcement personnel would have substantial difficulty in attempting to differentiate between the listed and unlisted species.</p> <p>(b) The effect of the substantial difficulty in differentiating between a listed and an unlisted species is an additional threat to an endangered or threatened species.</p> <p>(c) The treatment of an unlisted species will substantially facilitate the enforcement and further the intent of this act.</p>	<p>endangered or threatened native fish and wildlife.</p> <p>(c) The United States list of endangered or threatened plants.</p> <p>(d) The United States list of endangered or threatened foreign fish and wildlife.</p> <p>(2) A species of fish, plant, or wildlife appearing on any of the lists delineated in subsection (1) which enters the state from another state or from a point outside the territorial limits of the United States may enter, be transported, possessed, and sold in accordance with the terms of a federal permit issued pursuant to section 10 of the endangered species act of 1973, 16 USC 1539, or an applicable permit issued under the laws of another state.</p> <p>(3) The <u>department</u> may, by rule, treat any species as an endangered species or threatened species even though it is not listed pursuant to section <u>36503</u>, if it finds any of the following:</p> <p>(a) The species so closely resembles in appearance, at the point in question, a species which is listed pursuant to section <u>36503</u> that enforcement personnel would have substantial difficulty in attempting to differentiate between the listed and unlisted species.</p> <p>(b) The effect of the substantial difficulty in differentiating between a listed and an unlisted species is an additional threat to an endangered or threatened species.</p> <p>(c) The treatment of an unlisted species will substantially facilitate the enforcement and further the intent of this <u>part</u>.</p>	<p>Non-Substantive. Citation change.</p> <p>Non-Substantive. Citation change.</p> <p>Non-Substantive. Editorial</p>
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<p>(4) The director may permit the taking, possession, purchase, sale, transportation, exportation, or shipment of species of fish, plants, or wildlife which appear on the state list of endangered or threatened species compiled pursuant to section 4 and subsection (3) for scientific, zoological, or educational purposes, for propagation in captivity of such fish, plants, or wildlife to insure their survival.</p> <p>(5) Upon good cause shown and where necessary to alleviate damage to property or to protect human health, endangered or threatened species found on the state list compiled pursuant to section 4 and subsection (3) may be removed, captured, or destroyed, but only pursuant to a permit issued by the director. Carnivorous animals found on the state list may be removed, captured, or destroyed by any person in emergency situations involving an immediate threat to human life, but the removal, capture, or destruction shall be reported to the director within 24 hours of the act.</p> <p>(6) This section does not prohibit:</p> <p>(a) The importation of a trophy under a permit issued pursuant to section 10 of the endangered species act of 1973, 16 U.S.C. 1539 which is not for resale and which was lawfully taken in a manner permitted by the laws of the state, territory, or country where the trophy was caught, taken, or killed.</p> <p>(b) The taking of a threatened species when the commission has determined that the abundance of the species in the state justifies a controlled harvest not in violation of</p>	<p>(4) The <u>department</u> may permit the taking, possession, purchase, sale, transportation, exportation, or shipment of species of fish, plants, or wildlife which appear on the state list of endangered or threatened species compiled pursuant to section <u>36503</u> and subsection (3) for scientific, zoological, or educational purposes, for propagation in captivity of such fish, plants, or wildlife to <u>ensure</u> their survival.</p> <p>(5) Upon good cause shown and where necessary to alleviate damage to property or to protect human health, endangered or threatened species found on the state list compiled pursuant to section <u>36503</u> and subsection (3) may be removed, captured, or destroyed, but only <u>as authorized by</u> a permit issued by the <u>department pursuant to part 13</u>. Carnivorous animals found on the state list may be removed, captured, or destroyed by any person in emergency situations involving an immediate threat to human life, but the removal, capture, or destruction shall be reported to the <u>department</u> within 24 hours of the act.</p> <p>(6) This section does not prohibit <u>any of the following</u>:</p> <p>(a) The importation of a trophy under a permit issued pursuant to section 10 of the endangered species act of 1973, 16 USC 1539, which is not for resale and which was lawfully taken in a manner permitted by the laws of the state, territory, or country where the trophy was caught, taken, or killed.</p> <p>(b) The taking of a threatened species when the <u>department</u> has determined that the abundance of the species in the state justifies a controlled harvest not in violation of federal law.</p>	<p>changes.</p> <p>Non-Substantive. Citation change.</p> <p>Non-Substantive. Editorial changes.</p> <p>Non-Substantive. Citation change.</p> <p>Non-Substantive. Editorial changes.</p> <p>(2) Substantive. Permits must be issued pursuant to Part 13, which establishes time limits for the department to process administratively complete permit applications required under certain NREPA parts and rules including this part.</p> <p>Non-Substantive. Editorial changes.</p>
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<p>federal law.</p> <p>299.227 Enforcement of act and rules. [M.S.A. 13.1204(7)]</p> <p>Sec. 7.</p> <p>A law enforcement officer, police officer, sheriff's deputy, or conservation officer shall enforce this act and the rules promulgated under this act.</p> <p>299.228 Violations; penalties. [M.S.A. 13.1204(8)]</p> <p>Sec. 8.</p> <p>A person who violates any provision of this act and a person who fails to procure any permit issued under this act is guilty of a misdemeanor and shall be fined not more than \$1,000.00 nor less than \$100.00, or</p>	<p>(c) <u>Subject to any permits that may be required by the department, the possession, transfer, transportation, importation, or exportation or the transport or receipt for shipment by a common or contract carrier of a raptor or the captive-bred progeny of a raptor, a raptor egg, or raptor semen acquired in accordance with applicable state and federal laws and regulations which allow raptors, raptor eggs, or raptor semen to be used in falconry or in the captive propagation of raptors for use in falconry.</u></p> <p>(d) <u>Subject to any permits that may be required by the department, the selling, offering for sale, buying, or offering to buy a raptor that was captive-bred or semen from a raptor that was captive-bred in accordance with applicable state and federal laws and regulations which allow raptors or raptor semen to be used in falconry or in captive propagation of raptors for use in falconry.</u></p> <p>324.36506 Enforcement of <u>part</u> and rules.</p> <p>Sec. <u>36506</u>.</p> <p>A law enforcement officer, police officer, sheriff's deputy, or conservation officer shall enforce this <u>part</u> and the rules promulgated under this <u>part</u>.</p> <p>324.36507 Violation; penalty.</p> <p>Sec. <u>36507</u>.</p> <p>A person who violates this <u>part</u> or who fails to procure any permit <u>required</u> under this <u>part</u> is guilty of a misdemeanor <u>punishable by imprisonment for not more than 90 days, or a fine of not more than</u></p>	<p>(3) Substantive. Subsections 6(c) and (d) collectively state that activities regarding raptors, raptor eggs, or raptor semen are not prohibited by this part so long as any required permits are possessed.</p> <p>Non-Substantive. Renumbering and retitling.</p> <p>Non-Substantive. Renumbering.</p> <p>Non-Substantive. Editorial changes.</p> <p>Non-Substantive. Renumbering and retitling.</p> <p>Non-Substantive. Renumbering</p> <p>Non-Substantive. Editorial changes, however penalty is identical.</p>
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<p>imprisoned for more than 90 days, or both.</p> <p>299.229 Conditional enactment. [M.S.A. 13.1204(9)]</p> <p>Sec. 9. This act shall not take effect unless House Bill No. 5855 of the 1974 session of the legislature is enacted into law.</p> <p>299.230 Effective date. [M.S.A. 13.1204(10)]</p> <p>Sec. 10. This act shall take effect September 1, 1974.</p> <p>This act is ordered to take immediate effect.</p> <p>Approved July 11, 1974.</p>	<p>\$1,000.00 <u>or</u> less than \$100.00, or both.</p>	<p>Non-Substantive. Language tie barring act to passage of companion legislation removed.</p> <p>Non-Substantive. Section addressing effective date of repealed act removed.</p>
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ATTACHMENT 2

**Comparison of the Administrative Rules Promulgated Under the Authority of
 Public Act 203 of 1974 to the Administrative Rules Promulgated Under the
 Authority of Part 365, Endangered Species Protection, of NREPA
 (1994 P.A. 451, as amended)**

Act 203 Administrative Rules (in effect on May 19, 1978)	Part 365 Administrative Rules (as last revised effective April 9, 2009)	Change
<p>FISHERIES AND WILDLIFE DIVISIONS</p> <p>ENDANGERED AND THREATENED SPECIES (By authority conferred on the commission of natural resources by section 4 of Act No. 203 of the Public Acts of 1974, being §299.224 of the Michigan Compiled Laws)</p> <p>R 299.1021 Mollusks.</p> <p>Rule 1.</p> <p>(1) The following species of mollusks of class Pelecypoda (mussels) are included on the state list of endangered species:</p>	<p><u>DEPARTMENT OF NATURAL RESOURCES</u> <u>WILDLIFE DIVISION</u></p> <p>ENDANGERED AND THREATENED SPECIES By authority conferred on the <u>department</u> of natural resources by section <u>36503</u> of 1994 PA 451, MCL <u>324.36503</u>)</p> <p>R 299.1021 Mollusks.</p> <p>Rule 1.</p> <p>(1) The following <u>mollusk</u> species of class Pelecypoda (mussels) are included on the state list of endangered species:</p> <p><u><i>Epioblasma obliquata perobliqua</i></u> (Conrad) White catspaw</p> <p><u><i>Epioblasma torulosa ranqiana</i></u> (Rafinesque) [<u><i>Dysnomia torulosa ranqiana</i></u> (Lea)] Northern riffleshell</p> <p><u><i>Epioblasma triquetra</i></u> (Rafinesque) [<u><i>Dysnomia triquetra</i></u> (Rafinesque)] Snuffbox</p> <p><u><i>Ligumia nasuta</i></u> (Say) Eastern pondmussel</p>	<p>Non-Substantive. Retitling.</p> <p>(1) Substantive. Executive Order 1991-31 transferred the powers and duties of the Commission of Natural Resources, the MDNR, the director, and various agencies, boards, and commissions contained therein relating to natural resources management and environmental protection to the director of a new MDNR.</p> <p>(2) Substantive. List of mollusk species has been updated to reflect current endangered status of certain mussel species and changes in certain taxonomic names.</p>

<p>(b) Obovaria leibii (Lea) = O. subrotunda (Rafinesque).</p> <p>(a) Simpsoniconcha ambigua (Say).</p> <p>(2) The following species of mollusks of class Pelecypoda (mussels) are included on the state list of threatened species:</p> <p>(a) Pleurobema clava (Lamarck).</p> <p>(b) Elliptio complanatus (Dillwyn).</p> <p>(c) Cyclonaias tuberculata (Rafinesque).</p> <p>(d) Anodonta subgibbosa (Anthony).</p> <p>(e) Actinonaias ellipsiformis (Lea).</p> <p>(f) Lampsilis fasciola (Rafinesque).</p> <p>(g) Dysnomia triquetra (Rafinesque).</p>	<p><u>Ligumia recta (Lamarck) Black sandshell</u></p> <p><u>Obliquaria reflexa Rafinesque</u> <u>Threehorn wartyback</u></p> <p><u>Obovaria olivaria (Rafinesque)</u> <u>Hickorynut</u></p> <p><u>Obovaria subrotunda (Rafinesque)</u> <u>Round hickorynut</u></p> <p><u>Pleurobema clava (Lamarck) Clubshell</u></p> <p><u>Simpsonaias ambigua (Say)</u> [<u>Simpsoniconcha ambigua (Say)</u>] <u>Salamander mussel</u></p> <p><u>Toxolasma lividus (Rafinesque)</u> [<u>Carunculina glans (Lea)</u>] <u>Purple lilliput</u></p> <p><u>Toxolasma parvus (Barnes) Lilliput</u></p> <p><u>Villosa fabalis (Lea) Rayed bean</u></p> <p>(2) The following mollusk species of class Pelecypoda (mussels) are included on the state list of threatened species:</p> <p><u>Alasmidonta viridis (Rafinesque)</u> <u>Slippershell</u></p> <p><u>Cyclonaias tuberculata (Rafinesque)</u> <u>Purple wartyback</u></p> <p><u>Lampsilis fasciola Rafinesque</u> <u>Wavyrayed lampmussel</u></p> <p><u>Potamilus ohioensis (Rafinesque) Pink papershell</u></p>	<p>(3) Substantive. List of mollusk species has been updated to reflect current threatened status of certain mussel species and changes in certain taxonomic names.</p>
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<p>(3) The following species of mollusks of class Gastropoda (snails) are included on the state list of endangered species:</p> <p>None.</p> <p>(4) The following species of</p>	<p><u><i>Pyganodon subgibbosa</i> <i>Anodonta subgibbosa</i> (Anthony) Lake floater</u></p> <p><u><i>Truncilla donaciformis</i> (Lea) Fawnsfoot</u></p> <p>(3) The following mollusk species of class Gastropoda (snails) are included on the state list of endangered species:</p> <p><u><i>Catinella protracta</i> Franzen A land snail (no common name)</u></p> <p><u><i>Gastrocopta holzingeri</i> (Sterki) Lamda snaggletooth</u></p> <p><u><i>Guppya sterkii</i> (Dall) Sterki's granule</u></p> <p><u><i>Planorbella multivolvis</i> (Case)</u> <u>[<i>Helisoma multivolvis</i>] Acorn ramshorn</u></p> <p><u><i>Planorbella smithi</i> (F. C. Baker) An aquatic snail (no common name)</u></p> <p><u><i>Stagnicola contracta</i> (Currier)</u> <u>[<i>Lymanaea contracta</i>] Deepwater pondsnail</u></p> <p><u><i>Stagnicola petoskeyensis</i> (Walker)</u> <u>Petoskey pondsnail</u></p> <p><u><i>Vallonia gracilicosta albula</i> Sterki A land snail (no common name)</u></p> <p><u><i>Vertigo hubrichti</i> Pilsbry Hubricht's vertigo</u></p> <p><u><i>Vertigo modesta modesta</i> (Say) A land snail (no common name)</u></p> <p><u><i>Vertigo modesta parietals</i> (Annecy) A land snail (no common name)</u></p> <p><u><i>Vertigo morsel</i> Sterki A land snail (no common name)</u></p> <p><u><i>Vertigo cylinder</i> Sterki Deep-throat vertigo</u></p> <p>(4) The following mollusk species of</p>	<p>(4) Substantive. List of mollusk species has been updated to reflect current endangered status of certain snail species.</p> <p>(5) Substantive. List of mollusk</p>
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<p>mollusks of class Gastropoda (snails) are included on the state list of threatened species:</p> <p>(a) Lymnaea megasoma (Say).</p> <p>(b) Pomatiopsis cincinnatiensis (Lea).</p> <p>(c) Paludestrina (Fontigens) nicklineana (Lea).</p> <p>(d) Amnicola binneyana (Hannibal) = Cincinnatia emarginata (Say).</p> <p>(e) Zoogenetes harpa (Say).</p> <p>(f) Mesodon (Polygyra) sayana (Pilsbry).</p> <p>(g) Mesodon (Polygyra) elevata (Say).</p> <p>(h) Triodopsis notata (Deshayes) = Polygyra palliata (Say).</p> <p>(i) Anguispira kochi (Pfeiffer) = A. solitaria (Say).</p> <p>(j) Mesomphix cupreus (Rafinesque) = Omphalina.</p> <p>(k) Haplotrema concavum (Say) = Circinnaria.</p> <p>(l) Discus patulus (Deshayes) = Gonyodiscus perspectivus (Say).</p>	<p>class Gastropoda (snails) are included on the state list of threatened species:</p> <p><u>Catinella exile (Leonard) Pleistocene Catinella</u></p> <p><u>Catinella gelida (F. C. Baker) A land snail (no common name)</u></p> <p><u>Euchemotrema hubrichti (Pilsbry) Carinate pillsnail</u></p> <p><u>Euconulus alderi (Gray) A land snail (no common name)</u></p> <p><u>Fossaria cyclostoma (Walker) Bugle fossaria</u></p> <p><u>Hendersonia occulta (Say) Cherrystone drop</u></p> <p><u>Mesodon elevatus (Say) Proud globe</u></p> <p><u>Pallifera fosteri F. C. Baker Foster mantleslug</u></p> <p><u>Physella parkeri (Currier) Broadshoulder physa</u></p> <p><u>Vertigo bollesiana (E. S. Morse) Delicate vertigo</u></p>	<p>species has been updated to reflect current threatened status of certain snail species and changes in certain taxonomic names.</p>
<p>R 299.1022 Insects.</p> <p>Rule 2.</p> <p>(1) The following species of insects are included on the state list of endangered species:</p>	<p>R 299.1022 Insects.</p> <p>Rule 2.</p> <p>(1) The following <u>insect</u> species are included on the state list of endangered species:</p>	<p>(6) Substantive. List of insect species has been updated to reflect current endangered status of certain species.</p>

<p>None.</p> <p>(2) The following species of insects are included on the state list of threatened species:</p>	<p><u><i>Brychius hungerfordi</i> Spangler</u> Hungerford's crawling water beetle</p> <p><u><i>Catocala amestris</i> Strecker</u> Three-staff underwing</p> <p><u><i>Neonympha mitchellii mitchellii</i> French</u> Mitchell's satyr</p> <p><u><i>Schinia indiana</i> (Smith)</u> Phlox moth</p> <p><u><i>Schinia lucens</i> (Morrison)</u> Leadplant moth</p> <p><u><i>Somatochlora hineana</i> Williamson</u> Hine's emerald dragonfly</p> <p><u><i>Speyeria idalia</i> (Drury)</u> Regal fritillary</p>	<p>(7) Substantive. List of insect species has been updated to reflect current threatened status of certain species.</p>
<p>None.</p>	<p>(2) The following insect species are included on the state list of threatened species:</p> <p><u><i>Dryobius sexnotatus</i> Linsley</u> Six-banded longhorn beetle</p> <p><u><i>Erynnis persius persius</i> Scudder</u> Persius dusky wing</p> <p><u><i>Euphyes dukesi</i> (Lindsey)</u> Dukes' skipper</p> <p><u><i>Flexamia huroni</i> Bess and Hamilton</u> Huron River leafhopper</p> <p><u><i>Hesperia ottoe</i> Edwards</u> Ottoe skipper</p> <p><u><i>Incisalia henrici</i> (Grote and Robinson)</u> Henry's elfin</p> <p><u><i>Incisalia irus</i> Godart</u> Frosted elfin</p> <p><u><i>Lycaeides idas nabokovi</i> Masters</u> Northern blue</p> <p><u><i>Lycaeides melissa samuelis</i> Nabakov</u> Karner blue</p> <p><u><i>Oarisma powesheik</i> (Parker)</u> Powesheik skipperling</p>	

<p>R 299.1023 Fishes.</p> <p>Rule 3.</p> <p>(1) The following species of fishes are included on the state list of endangered species:</p> <p>(a) Longjaw cisco, <i>Coregonus alpenae</i> (Keelz).</p> <p>(b) Deepwater cisco, <i>Coregonus johanna</i> (Wagner).</p> <p>(c) Blackfin cisco, <i>Coregonus nigripinnis</i> (Gill).</p> <p>(d) Shortnose cisco, <i>Coregonus reighardi</i> (Keelz).</p> <p>(e) Shortjaw cisco, <i>Coregonus zenithicus</i> (Jordan and Evermann).</p> <p>(f) Blue pike, <i>Stizostedion vitreum glaucum</i> (Hubbs).</p>	<p><u><i>Ophiogomphus howei</i> Bromley Pygmy snaketail</u></p> <p><u><i>Papaipema silphii</i> Bird Silphium borer moth</u></p> <p><u><i>Tachopteryx thoreyi</i> (Hagen) Grey petaltail</u></p> <p><u><i>Trimerotropis huroniana</i> E. M. Walker Lake Huron locust</u></p> <p><u>(3) The following insect species are thought to be extirpated in Michigan, but will be listed automatically as threatened if rediscovered in the state:</u></p> <p><u><i>Nicrophorus americanus</i> Olivier American burying beetle</u></p> <p>R 299.1023 Fishes.</p> <p>Rule 3.</p> <p>(1) The following <u>fish</u> species are included on the state list of endangered species:</p> <p><u><i>Clinostomus elongatus</i> (Kirtland) Redside dace</u></p> <p><u><i>Erimyzon claviformis</i> (Girard) Western creek chubsucker</u></p> <p><u><i>Notropis anogenus</i> Forbes Pugnose shiner</u></p> <p><u><i>Notropis photogenis</i> (Cope) Silver shiner</u></p> <p><u><i>Noturus stigmosus</i> Taylor Northern madtom</u></p> <p><u><i>Opsopoeodus emiliae</i> Hay Pugnose minnow</u></p> <p><u><i>Percina copelandi</i> (Jordan) Channel darter</u></p>	<p>(8) Substantive. Category of insect species thought to be no longer in existence in Michigan has been added; if rediscovered in Michigan, these insect species will be added to the list of threatened species.</p> <p>(9) Substantive. List of fish species has been updated to reflect current endangered status of certain species.</p>
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<p>(2) The following species of fishes are included on the state list of threatened species:</p> <p>(a) Lake sturgeon, <i>Acipenser fulvescens</i> (Rafinesque).</p> <p>(b) Cisco or lake herring, <i>Coregonus artedii</i> (Lesueur).</p> <p>(c) Bloater, <i>Coregonus hoyi</i> (Gill).</p> <p>(d) Kiyi, <i>Coregonus kiyi</i> (Koelz).</p> <p>(e) Silver shiner, <i>Notropis photogenis</i> (Cope).</p> <p>(f) Redside dace, <i>Clinostomus elongatus</i> (Kirtland).</p> <p>(g) River redhorse, <i>Moxostoma carinatum</i> (Cope).</p> <p>(h) Northern madtom, <i>Noturus stigmosus</i> (Taylor).</p> <p>(i) Eastern sand darter, <i>Ammocrypta pellucida</i> (Agassiz).</p>	<p><u><i>Percina shumardi</i> (Girard) River darter</u></p> <p><u><i>Phoxinus erythrogaster</i> (Rafinesque)</u> <u>Southern redbelly dace</u></p> <p>(2) The following <u>fish</u> species are included on the state list of threatened species:</p> <p><i>Acipenser fulvescens</i> Rafinesque Lake sturgeon</p> <p><u><i>Ammocrypta pellucida</i> (Putnam)</u> Eastern sand darter</p> <p><i>Coregonus artedii</i> Lesueur Cisco</p> <p><u><i>Coregonus bartletti</i> (Koelz) Siskiwit lake cisco</u></p> <p><u><i>Coregonus hubbsi</i> (Koelz) Ives lake cisco</u></p> <p><u><i>Coregonus zenithicus</i> (Jordan and Evermann) Shortjaw cisco</u></p> <p><u><i>Hiodon tergisus</i> Lesueur Mooneye</u></p> <p><i>Moxostoma carinatum</i> (Cope) River redhorse</p> <p><u><i>Sander canadensis</i> (Smith) Sauger</u></p> <p>(3) The following <u>fish species are thought to be extirpated in Michigan, but will be listed automatically as threatened if rediscovered in the state:</u></p> <p><u><i>Coregonus nigripinnis</i> (Gill) Blackfin cisco</u></p> <p><u><i>Coregonus reighardi</i> (Koelz) Shortnose cisco</u></p>	<p>(10) Substantive. List of fish species has been updated to reflect current threatened status of certain species.</p> <p>(11) Substantive. Category of fish species thought to be no longer in existence in Michigan has been added; if rediscovered in Michigan, these fish species will be added to the list of threatened species.</p>
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<p>R 299.1024 Amphibians.</p> <p>Rule 4.</p> <p>(1) The following species of amphibians are included on the state list of endangered species:</p> <p>None.</p> <p>(2) The following species of amphibians are included on the state list of threatened species:</p> <p>(a) Marbled salamander, Ambystoma opacum (Gravenhorst).</p>	<p><u>Notropis anbllops (Rafinesque) Bigeye chub</u></p> <p><u>Notropis chalybaeus (Cope) Ironcolor shiner</u></p> <p><u>Notropis texanus (Girard) Weed shiner</u></p> <p><u>Polyodon spathula (Walbaum) Paddlefish</u></p> <p><u>Thymallus arcticus (Richardson) Arctic grayling</u></p> <p><u>(4) The following fish species are thought to be extinct, but will be listed automatically as extirpated if rediscovered outside Michigan and listed automatically as threatened if rediscovered within Michigan:</u></p> <p><u>Coregonus johanna (Wagner) Deepwater cisco</u></p> <p><u>Sander glaucus (Hubbs) Blue pike</u></p> <p>R 299.1024 Amphibians.</p> <p>Rule 4.</p> <p>(1) The following <u>amphibian</u> species are included on the state list of endangered species:</p> <p><u>Ambystoma opacum (Gravenhorst) Marbled salamander</u></p> <p><u>Ambystoma texanum (Matthews) Smallmouth salamander</u></p> <p>(2) The following <u>amphibian</u> species is included on the state list of threatened species:</p> <p><u>Acris crepitans blanchardi (Harper) Blanchard's cricket frog</u></p>	<p>(12) Substantive. Category of fish species thought to be extinct will be listed as extirpated if discovered outside of Michigan and threatened if discovered in Michigan.</p> <p>(13) Substantive. List of amphibian species has been updated to reflect current endangered status of certain species.</p> <p>(14) Substantive. List of amphibian species has been updated to reflect current threatened status of certain species.</p>
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<p>(b) Small-mouthed salamander, <i>Ambystoma texanum</i> (Matthes).</p> <p>(c) Western lesser siren, <i>Siren intermedia nettingi</i> (Goin).</p> <p>R 299.1025 Reptiles.</p> <p>Rule 5.</p> <p>(1) The following species of reptiles are included on the state list of endangered species:</p> <p>None.</p> <p>(2) The following species of reptiles are included on the state list of threatened species:</p> <p>(a) Black rat snake, <i>Elaphe obsoleta obsoleta</i> (Say).</p> <p>(b) Northern copperbelly, <i>Natrix erythrogaster neglecta</i> (Conant).</p> <p>(c) Kirtland's water snake, <i>Natrix (Clonophis) kirtlandi</i> (Kennicott).</p> <p>(d) Eastern box turtle, <i>Terrapene Carolina Carolina</i> (Linnaeus).</p> <p>R 299.1026 Birds.</p> <p>Rule 6.</p> <p>(1) The following species of birds are included on the state list of endangered species:</p>	<p>R 299.1025 Reptiles.</p> <p>Rule 5.</p> <p>(1) The following <u>reptile</u> species are included on the state list of endangered species:</p> <p><u><i>Clonophis kirtlandii</i> (Kennicott)</u> <u>Kirtland's snake</u></p> <p><u><i>Nerodia erythrogaster neglecta</i></u> <u>(Conant) Copperbelly water snake</u></p> <p>(2) The following <u>reptile</u> species are included on the state list of threatened species:</p> <p><u><i>Aspidoscelis sexlineata</i> (Linnaeus)</u> <u>Six-lined racerunner</u></p> <p><u><i>Clemmys guttata</i></u> <u>Spotted turtle</u></p> <p><u><i>Pantherophis gloydi</i> Conant (= <i>Elaphe vulpina gloydi</i>)</u> <u>Eastern fox snake</u></p> <p>R 299.1026 Birds.</p> <p>Rule 6.</p> <p>(1) The following <u>bird</u> species are included on the state list of endangered species:</p> <p><u><i>Ammodramus henslowii</i> (Audubon)</u> <u>Henslow's sparrow</u></p> <p><u><i>Asio flammeus</i> (Pontoppidan)</u> <u>Short-</u></p>	<p>(15) Substantive. List of reptile species has been updated to reflect current endangered status of certain species.</p> <p>(16) Substantive. List of reptile species has been updated to reflect current threatened status of certain species.</p> <p>(17) Substantive. List of bird species has been updated to reflect current endangered status of certain species.</p>
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<p>(b) Kirtland's warbler, <i>Dendroica kirtlandii</i> (Baird).</p> <p>(a) Peregrine falcon, <i>Falco peregrinus</i> (Tunstall).</p> <p>(2) The following species of birds are included on the state list of threatened species:</p> <p>(a) Double-crested cormorant, <i>Phalacrocorax auritus</i> (Lesson).</p> <p>(c) Red-shouldered hawk, <i>Buteo lineatus</i> (Gmelin).</p> <p>(b) Cooper's hawk, <i>Accipiter cooperi</i> (Bonaparte).</p> <p>(d) Bald eagle, <i>Haliaeetus leucocephalus</i> (Linnaeus).</p> <p>(e) Marsh hawk, <i>Circus cyaneus</i> (Linnaeus).</p> <p>(f) Osprey, <i>Pandion haliaetus</i> (Linnaeus).</p> <p>(g) Greater prairie chicken, <i>Tympanuchus cupido</i> (Linnaeus).</p> <p>(h) Piping plover, <i>Charadrius melodus</i> Ord.</p> <p>(i) Barn owl, <i>Tyto alba</i> (Scopoli).</p>	<p><u>eared owl</u></p> <p><u><i>Charadrius melodus</i> Ord Piping plover</u></p> <p><u><i>Dendroica discolor</i> (Vieillot) Prairie warbler</u></p> <p><i>Dendroica kirtlandii</i> (Baird) Kirtland's warbler</p> <p><i>Falco peregrinus</i> Tunstall Peregrine falcon</p> <p><u><i>Lanius ludovicianus migrans</i> (Palmer) Migrant loggerhead shrike</u></p> <p><u><i>Rallus elegans</i> Audubon King rail</u></p> <p><u><i>Tyto alba</i> (Scopoli) Barn owl</u></p> <p>(2) The following <u>bird</u> species are included on the state list of threatened species:</p> <p><u><i>Asio otis</i> (Linnaeus) Long-eared owl</u></p> <p><i>Buteo lineatus</i> (Gmelin) Red-shouldered hawk</p> <p><u><i>Corturnicops noveboracensis</i> (Gmelin) Yellow rail</u></p> <p><u><i>Cygnus buccinator</i> Richardson Trumpeter swan</u></p> <p><u><i>Dendroica cerulea</i> (Wilson) Cerulean warbler</u></p> <p><u><i>Dendroica dominica</i> (Linnaeus) Yellow-throated warbler</u></p> <p><u><i>Falco columbarius</i> (Linnaeus) Merlin</u></p> <p><u><i>Gallinula chloropus</i> (Linnaeus) Common moorhen</u></p> <p><u><i>Gavia immer</i> (Brunnich) Common loon</u></p>	<p>(18) Substantive. List of bird species has been updated to reflect current threatened status of certain species.</p>
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<p>(j) Loggerhead shrike, <i>Lanius ludovicianus</i> (Linnaeus).</p>	<p><u><i>Ixobrychus exilis</i> (Gmelin) Least bittern</u></p> <p><u><i>Seiurus motacilla</i> (Vieillot) Louisiana waterthrush</u></p> <p><u><i>Sterna caspia</i> Pallas Caspian tern</u></p> <p><u><i>Sterna forsteri</i> Nuttall Forster's tern</u></p> <p><u><i>Sterna hirundo</i> Linnaeus Common tern</u></p> <p><u>(3) The following bird species are thought to be extirpated in Michigan, but will be listed automatically as threatened if rediscovered in the state:</u></p> <p><u><i>Chondestes grammacus</i> (Say) Lark sparrow</u></p>	<p>(19) Substantive. Category of bird species thought to be no longer in existence in Michigan has been added; if rediscovered in Michigan, these bird species will be added to the list of threatened species.</p>
<p>R 299.1027 Mammals.</p> <p>Rule 7.</p> <p>(1) The following species of mammals are included on the state list of endangered species:</p>	<p>R 299.1027 Mammals.</p> <p>Rule 7.</p> <p>(1) The following <u>mammal</u> species are included on the state list of endangered species:</p> <p><u><i>Felis concolor</i> Linnaeus Cougar</u></p> <p><u><i>Lynx canadensis</i> Kerr Lynx</u></p> <p><u><i>Microtus ochrogaster</i> (Wagner) Prairie vole</u></p>	<p>(20) Substantive. List of mammal species has been updated to reflect current endangered status of certain species.</p>
<p>(a) Indiana bat, <i>Myotis sodalis</i> (Miller and Allen).</p> <p>(b) Eastern timber wolf, <i>Canis lupus lycaon</i> (Schreber).</p> <p>(2) The following species of mammals are included on the state list threatened species:</p> <p>(a) Least shrew, <i>Cryptotis parva</i> (Say).</p> <p>(b) Pine marten, <i>Martes americana</i> (Turton).</p>	<p><i>Myotis sodalis</i> (Miller and Allen) Indiana bat</p> <p>(2) The following <u>mammal</u> species are included on the state list of threatened species:</p> <p><i>Cryptotis parva</i> (Say) Least shrew</p> <p><u><i>Nycticeius humeralis</i> (Rafinesque) Evening bat</u></p>	<p>(21) Substantive. List of mammal species has been updated to reflect current threatened status of certain species.</p>

<p>(c) Southern bog lemming, <i>Synatomys cooperi</i> (Baird).</p> <p>(d) Pine vole, <i>Microtus pinetorum</i> (Le Conte).</p> <p>R 299.1028 Plants.</p> <p>Rule 8.</p> <p>(1) The following species of plants are included on the state list of endangered species:</p> <p>(h) <i>Arnica cordifolia</i> = <i>A. whitneyi</i>, Heart-leaved arnica.</p> <p>(p) <i>Baptisia leucophaea</i>,</p>	<p><u><i>Sorex fumeus</i> Miller Smoky shrew</u></p> <p>R 299.1028 Plants.</p> <p>Rule 8.</p> <p>(1) The following <u>plant</u> species are included on the state list of endangered species:</p> <p><u><i>Agalinis gattingeri</i> Small [<i>Gerardia gattingeri</i> Small] Gattinger's gerardia</u></p> <p><u><i>Agalinis skinneriana</i> (A. Wood) Britton [<i>Gerardia skinneriana</i> A. Wood] Skinner's gerardia</u></p> <p><u><i>Amerorchis rotundifolia</i> (Pursh) Hultén Small round-leaved orchis</u></p> <p><u><i>Androsace occidentalis</i> Pursh Rock-iasmine</u></p> <p><u><i>Antennaria rosea</i> Greene Rosy pussytoes</u></p> <p><u><i>Aristida tuberculosa</i> Nutt. Beach three-awned grass</u></p> <p><u><i>Arnica cordifolia</i> Hooker Heart-leaved arnica</u></p> <p><u><i>Arnica lonchophylla</i> Greene Longleaf arnica</u></p> <p><u><i>Asclepias ovalifolia</i> Dcne. Dwarf milkweed</u></p> <p><u><i>Asplenium ruta-muraria</i> L. Wall-rue</u></p> <p><u><i>Asplenium scolopendrium</i> L. var. <i>americana</i> (Fernald) Kartesz & Ghandi [<i>Phyllitis scolopendrium</i> var. <i>americanum</i> Fern.] Hart's-tongue fern</u></p> <p><u><i>Baptisia leucophaea</i> Nutt. Cream wild</u></p>	<p>(22) Substantive. List of plant species has been updated to reflect current endangered status of certain species.</p>
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<p>Cream wild indigo.</p> <p>(k) Castanea dentata, American chestnut.</p> <p>(n) Chamaerhodos nuttallii, no common name.</p> <p>(o) Chelone obliqua, Purple turtlehead.</p>	<p>indigo</p> <p><u>Besseya bullii</u> (Eaton) Rydb. Kitten-tails</p> <p><u>Botrychium acuminatum</u> W. H. Wagner Moonwort</p> <p><u>Bouteloua curtispindula</u> (Michaux) Torrey Side-oats grama grass</p> <p><u>Carex crus-corvi</u> Kuntze Raven's-foot sedge</p> <p><u>Carex heleonastes</u> Ehrh. Hudson Bay sedge</p> <p><u>Carex nigra</u> (L.) Reichard Black sedge</p> <p><u>Carex platyphylla</u> Carey Broad-leaved sedge</p> <p><u>Carex straminea</u> Willd. Straw sedge</p> <p><u>Castanea dentata</u> (Marsh.) Borkh. American chestnut</p> <p><u>Chamaerhodos nuttallii</u> Fern. Rock-rose</p> <p><u>Chasmanthium latifolium</u> (Michx.) Yates [<u>Uniola latifolia</u> Michaux] Wild oats</p> <p><u>Chelone obliqua</u> L. Purple turtlehead</p> <p><u>Dasistoma macrophylla</u> (Nutt.) Raf. Mullein-foxglove</p> <p><u>Dichantherium polyanthes</u> (Schult.) Mohlenbr Round-seed panic-grass</p> <p><u>Dodecatheon meadia</u> L. Shooting star</p> <p><u>Draba glabella</u> Pursh. Smooth whitlow grass</p> <p><u>Eleocharis atropurpurea</u> (Retz.) Kunth Purple spike rush</p> <p><u>Eleocharis microcarpa</u> Torrey Small-fruited spike-rush</p>	
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<p>(f) <i>Gentiana saponaria</i>, Soapwort gentian.</p> <p>(g) <i>Isotria medeoloides</i>, Smaller whorled pogonia.</p> <p>(a) <i>Lycopodium sitchense</i>, Sitka club-moss.</p> <p>(b) <i>Lycopodium</i>, sp. nov. J. G. Bruce, no common name.</p> <p>(m) <i>Nelumbo lutea</i>, American lotus.</p>	<p><u><i>Eleocharis nitida</i> Fern. Slender spike rush</u></p> <p><u><i>Eleocharis parvula</i> (R. & S.) Link Dwarf spike-rush</u></p> <p><u><i>Echinodorus tenellus</i> (Mart.) Buchenau Dwarf burhead</u></p> <p><u><i>Galium kamtschaticum</i> Schultes & J. H. Schultes Bedstraw</u></p> <p><u><i>Gentiana flavida</i> A. Gray [<i>G. alba</i> Muhl.] White gentian</u></p> <p><u><i>Gentiana puberulenta</i> J. Pringle [<i>G. puberula</i> Michaux] Downy gentian</u></p> <p><u><i>Gillenia trifoliata</i> (Muhl.) Baill. [(L.) Moench.] Bowman's root</u></p> <p><u><i>Gymnocarpium jessoense</i> (Koidz.) Koidz. Northern oak fern</u></p> <p><u><i>Hedysarum alpinum</i> L. Alpine sainfoin</u></p> <p><u><i>Hymenoxys herbacea</i> (Greene) Cusick</u> <u><i>Hymenoxys acaulis</i> var. <i>glabra</i> (Gray) Parker Lakeside daisy</u></p> <p><u><i>Hypericum sphaerocarpum</i> Michaux Round-fruited St. John's-wort</u></p> <p><u><i>Isoetes engelmannii</i> A. Braun Engelmann's quillwort</u></p> <p><u><i>Lygodium palmatum</i> (Bernh.) Sw. Climbing fern</u></p> <p><u><i>Mertensia virginica</i> Pers. (L.) Virginia bluebells</u></p> <p><u><i>Mimulus michiganensis</i> (Pennell) Posto & Prather Michigan monkey flower</u></p> <p><u><i>Nuphar pumila</i> (Timm) DC. [<i>N. microphylla</i> (Pers.) Fern.] Small yellow pond lily</u></p> <p><u><i>Nymphaea leiberghii</i> Morong Pygmy</u></p>	
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<p>(i) Opuntia fragilis, Fragile prickly pear.</p> <p>(j) Petalostemon purpureum, Red prairie clover.</p> <p>(e) Phyllitis scolopendrium var. americanum, Hart's tongue fern.</p> <p>(f) Polygonatum biflorum var. melleum, A Solomon's-seal variety.</p>	<p><u>water lily</u></p> <p><u><i>Ophioglossum vulgatum</i> L. [<i>Ophioglossum pycnostichum</i> (Fern.) Löve & Löve] Southeastern adder's-tongue</u></p> <p><u><i>Opuntia fragilis</i> (Nutt.) Haw. Fragile prickly pear</u></p> <p><u><i>Penstemon gracilis</i> Nutt. Slender beard tongue</u></p> <p><u><i>Phlox ovata</i> L. (<i>P. latifolia</i> Michx.) Wideflower phlox</u></p> <p><u><i>Plantago cordata</i> Lam. Heart-leaved plantain</u></p> <p><u><i>Platanthera ciliaris</i> (L.) Lindley [<i>Habenaria ciliaris</i> (L.) R. Br.] Orange-or yellow-fringed orchid</u></p> <p><u><i>Platanthera leucophaea</i> (Nutt.) Lindley [<i>Habenaria leucophea</i> (Nutt.) A. Gray] Prairie white-fringed orchid</u></p> <p><u><i>Poa canbyi</i> (Scribner) Piper Canby's bluegrass</u></p> <p><u><i>Populus heterophylla</i> L. Swamp or Black cottonwood</u></p> <p><u><i>Potamogeton pulcher</i> Tuckerman Spotted pondweed</u></p> <p><u><i>Prosartes hookeri</i> Torr. Fairy bells</u></p> <p><u><i>Proserpinaca pectinata</i> Lam. Mermaid-weed</u></p> <p><u><i>Rhynchospora (Psilocarya) nitens</i> (Vahl) A. Gray Short-beak beak-rush</u></p> <p><u><i>Rhynchospora recognita</i> (Gale) Kral Globe beak-rush</u></p> <p><u><i>Rubus acaulis</i> Michaux Dwarf raspberry</u></p> <p><u><i>Ruellia strepens</i> L. Smooth ruellia</u></p>	
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<p>(e) Scirpus hallii, Hall's bulrush.</p> <p>(d) Woodsia abbeae, A woodsia fern.</p> <p>(2) The following species of plants are included on the state list of threatened species:</p>	<p><u>Rumex occidentalis</u> S. Wats. Western dock</p> <p><u>Sanguisorba canadensis</u> L. Canadian burnet</p> <p><u>Schoenoplectus americanus</u> (Pers.) Schinz & R. Keller Three-square bulrush</p> <p><u>Scleria pauciflora</u> Willd. Few-flowered nut rush</p> <p><u>Scutellaria nervosa</u> Pursh Skullcap</p> <p><u>Silene virginica</u> L. Fire pink</p> <p><u>Solidago bicolor</u> L. White goldenrod</p> <p><u>Sporobolus clandestinus</u> (Biehler) Hitch. Dropseed</p> <p><u>Stellaria crassifolia</u> Ehrh. Fleshy stitchwort</p> <p><u>Subularia aquatica</u> L. Awlwort</p> <p><u>Tipularia discolor</u> (Pursh) Nutt. Crane fly orchid</p> <p><u>Trillium undulatum</u> Willd. Painted trillium</p> <p><u>Utricularia inflata</u> Walter [<u>U. radiata</u> Small] Floating bladderwort</p> <p><u>Vaccinium vitis-idaea</u> L. Mountain cranberry</p> <p><u>Viola epipsila</u> Ledeb. Northern marsh violet</p> <p><u>Woodsia alpina</u> (Bolton) S. F. Gray Northern woodsia</p> <p><u>Agoseris glauca</u> (Pursh) Raf. Prairie or</p>	<p>(23) Substantive. List of plant species has been updated to reflect current threatened status of certain species.</p>
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pale agoseris

Agrimonia rostellata Wallr. Beaked agrimony

Allium schoenoprasum L. (native variety) Chives

Arabis perstellata E. L. Braun Rock cress

Aristida longespica Poiret Three-awned grass

Aristolochia serpentaria L. Virginia snakeroot

Armoracia lacustris (A. Gray) Al-Shehbaz & V. Bates [*Armoracia aquatica* (Eaton Wiegand)] Lake cress

Artemisia ludoviciana Nutt. Western mugwort

Asclepias hirtella (Pennell) Woodson Tall green milkweed

Asclepias purpurascens L. Purple milkweed

Asclepias sullivantii Engelm. Sullivant's milkweed

Asplenium rhizophyllum L. [*Camptosorus rhizophyllum* (L.) Link] Walking fern

Aster drummondii Lindl Drummond's aster

Aster furcatus Burgess Forked aster

Aster modestus Lindley Great northern aster

Aster sericeus Vent. Western silvery aster

Astragalus canadensis L. Canadian milk vetch

<p><u><i>Bartonia paniculata</i> (Michaux) Muhl. Panicked screwstem</u></p> <p><u><i>Beckmannia syzigachne</i> (Steudel) Fern. Slough grass</u></p> <p><u><i>Berula erecta</i> (Nutt.) Fern. [<i>Berula pusilla</i> (Nutt.) Fern.] Cut-leaved water parsnip</u></p> <p><u><i>Botrychium campestre</i> W. H. Wagner Prairie Moonwort or Dunewort</u></p> <p><u><i>Botrychium hesperium</i> (Maxon & Clausen) W. H. Wagner & Lellinger Western moonwort</u></p> <p><u><i>Botrychium mormo</i> W. H. Wagner Goblin moonwort</u></p> <p><u><i>Botrychium spathulatum</i> W. H. Wagner Spatulate moonwort</u></p> <p><u><i>Braya humilis</i> (C. A. Meyer) Robinson Low northern rock cress</u></p> <p><u><i>Bromus pumpellianus</i> Scribner Pumpelly's brome grass</u></p> <p><u><i>Calamagrostis lacustris</i> (Kearney) Nash Northern reedgrass</u></p> <p><u><i>Calamagrostis stricta</i> (Timm) Koeler Narrow-leaved reedgrass</u></p> <p><u><i>Callitriche heterophylla</i> Pursh Large water starwort</u></p> <p><u><i>Caltha natans</i> Pallas ex Georgi Floating marsh marigold</u></p> <p><u><i>Calypso bulbosa</i> (L.) Oakes Calypso or fairy-slipper</u></p> <p><u><i>Camassia scilloides</i> (Raf.) Cory Wild hyacinth</u></p> <p><u><i>Carex albolutescens</i> Schw. Sedge</u></p> <p><u><i>Carex assiniboinensis</i> W. Boott Assiniboia sedge</u></p>	
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Carex atratiformis Britton Sedge

Carex conjuncta F. Boott. Sedge

Carex lupuliformis Dewey False hop
sedge

Carex media R. Br. Sedge

Carex novae-angliae Schwein. New
England sedge

Carex oligocarpa Willd. Eastern few-
fruited sedge

Carex rossii Boott Ross's sedge

Carex scirpoidea Michaux Bulrush
sedge

Carex seorsa Howe Sedge

Carex tinctoria Fern. Sedge

Carex typhina Michaux Cattail sedge

Castilleja septentrionalis Lindley Pale
Indian paintbrush

Ceanothus sanguineus Pursh Wild lilac

Cerastium brachypodum (Engelm. ex A.
Gray) B.L. Rob. Shortstalk chickweed

Cirsium pitcheri (Eaton) Torrey & A.
Gray Pitcher's thistle

Collinsia parviflora Lindley Small blue-
eyed Mary

Coreopsis palmate Nutt. Prairie
coreopsis

Corydalis flavula (Raf.) DC. Yellow
fumewort

Cryptogramma acrostichoides R. Br.
American rock-brake

Cypripedium candidum Willd. White

lady slipper

Cystopteris tennesseensis Shaver
Tennessee bladder fern

Dalibarda repens L. False violet

Dennstaedtia punctilobula (Michx.) T.
Moore Hay-scented fern

Dentaria maxima Nutt. Large toothwort

Diarrhena obovata (Gleason)
Brandenburg Beak grass

Dichanthelium leibergii (Vasey)
Freckmann Leiberg's panic grass

Draba cana Rydb. Ashy whitlow grass

Draba incana L. Twisted whitlow grass

Draba reptans (Lam.) Fern. Creeping
whitlow grass

Dryopteris celsa (W. Palmer) Small log
fern

Eleocharis compressa Sulliv. Flattened
spike rush

Eleocharis tricostata Torrey Three-
ribbed spike rush

Empetrum nigrum L. Black crowberry

Erigeron acris L. Fleabane

Erigeron hyssopifolius Michaux
Hyssop-leaved fleabane

Eryngium yuccifolium Michaux
Rattlesnake-master or button snakeroot

Eupatorium fistulosum Barratt Hollow-
stemmed Joe-pye weed

Eupatorium sessilifolium L. Upland
boneset

Euphorbia commutata Engelm. Tinted

spurge

Euphrasia hudsoniana Fernald & Weigand Eyebright

Euphrasia nemorosa (Pers.) Wallr. Eyebright

Festuca scabrella Torrey [*F. altaica* Trin.] Rough fescue

Filipendula rubra (Hill) Robinson Queen-of-the-prairie

Fraxinus profunda (Bush) Bush [*F. tomentosa* F. Michaux] Pumpkin ash

Fuirena pumila (Torr.) Spreng. Umbrella-grass

Galearis spectabilis (L.) Raf. Showy orchis

Gentiana linearis Froel. Narrow-leaved gentian

Gentianella quinquefolia (L.) Small Stiff gentian

Geum triflorum Pursh Prairie smoke

Glyceria melicaria (Michx.) C.E. Hubb. Slender manna grass

Gnaphalium sylvaticum L. Woodland everlasting

Gratiola aurea Pursh [*G. lutea* Raf.] Hedge-hyssop

Gratiola virginiana L. Annual hedge hyssop

Gymnocarpium robertianum (Hoffman) Newman Limestone oak fern

Helianthus mollis Lam. Downy sunflower

Hieracium paniculatum L. Panicked hawkweed

Hydrastis canadensis L. Goldenseal

Hypericum adpressum Raf. ex W. Bart.
Creeping St. John's-wort

Ipomoea pandurata (L.) G. F. W. Meyer
Wild potato vine or man-of-the-earth

Iris lacustris Nutt. Dwarf lake iris

Isotria verticillata (Willd.) Raf. Whorled
pogonia

Juncus brachycarpus Engelm. Short-
fruited rush

Juncus militaris Bigelow Bayonet rush

Juncus scirpoides Lam. Scirpus-like
rush

Juncus stygius L. Moor rush

Juncus vaseyi Engelm. Vasey's rush

Justicia americana (L.) Vahl Water
willow

Lactuca floridana (L.) Gaertner
Woodland lettuce

Lechea pulchella Raf. [*Lechea leggettii*
Britton & Hollick] Leggett's pinweed

Linum virginianum L. Virginia flax

Lonicera involucrata (Richardson)
Banks Black twinberry

Ludwigia sphaerocarpa Ell. Globe-
fruited seedbox

Luzula parviflora (Ehrh.) Desv. Small-
flowered wood rush

Lycopodiella margaritae J. G. Bruce, W.
H. Wagner, & Beitel Clubmoss

Lycopus virginicus L. Virginia water-
horehound

<p>Panax quinquefolius, Ginseng.</p>	<p><u>Moehringia macrophylla</u> (Hook.) Fenzl Big-leaf sandwort</p> <p><u>Morus rubra</u> L. Red mulberry</p> <p><u>Muhlenbergia richardsonis</u> (Trin.) Rydb. Mat muhly</p> <p><u>Myrica pensylvanica</u> Mirbel Northern bayberry</p> <p><u>Myriophyllum farwellii</u> Morong Farwell's water milfoil</p> <p><u>Nelumbo lutea</u> (Willd.) Pers. [<u>Nelumbo pentapetala</u> (Walter) Fern.] American lotus</p> <p><u>Oplopanax horridus</u> (Smith) Miq. Devil's club</p> <p><u>Orobanche fasciculata</u> Nutt. Broomrape</p> <p><u>Oryzopsis canadensis</u> (Poiret) Torrey Canada rice grass</p> <p><u>Osmorhiza depauperata</u> Phil. Sweet Cicely</p> <p><u>Panax quinquefolius</u> L. Ginseng</p> <p><u>Panicum longifolium</u> Torrey Panic grass</p> <p><u>Panicum philadelphicum</u> Bernh. Ex Trin. Philadelphia panic-grass</p> <p><u>Panicum verrucosum</u> Muhl. Warty panic grass</p> <p><u>Parnassia palustris</u> L. Marsh grass-of-parnassus</p> <p><u>Pellaea atropurpurea</u> (L.) Link. Purple cliff brake</p> <p><u>Penstemon calycosus</u> Small Beard tongue</p>	
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<p><u><i>Petasites sagittatus</i> (Pursh) A. Gray</u> Sweet coltsfoot</p> <p><u><i>Phacelia franklinii</i> (R. Br.) A. Gray</u> Franklin's phacelia</p> <p><u><i>Phlox maculata</i> L.</u> Wild sweet William</p> <p><u><i>Poa alpina</i> L.</u> Alpine bluegrass</p> <p><u><i>Poa paludigena</i> Fern. & Wieg.</u> Bog bluegrass</p> <p><u><i>Polemonium reptans</i> L.</u> Jacob's ladder</p> <p><u><i>Polygonum careyi</i> Olney</u> Carey's smartweed</p> <p><u><i>Polygonum viviparum</i> L.</u> Alpine bistort</p> <p><u><i>Polymnia uvedalia</i> L.</u> Yellow-flowered leafcup</p> <p><u><i>Potamogeton bicupulatus</i> Fern.</u> [<u><i>Potamogeton capillaceus</i> Poiret</u>] Waterthread pondweed</p> <p><u><i>Potamogeton hillii</i> Morong</u> Hill's pondweed</p> <p><u><i>Potamogeton vaseyi</i> Robins</u> Vasey's pondweed</p> <p><u><i>Potentilla paradoxa</i> Nutt.</u> Sand cinquefoil</p> <p><u><i>Potentilla pennsylvanica</i> L.</u> Prairie cinquefoil</p> <p><u><i>Prenanthes crepidinea</i> Michx.</u> Nodding rattlesnake-root</p> <p><u><i>Prosartes trachycarpa</i> S. Watson</u> Northern fairy bells</p> <p><u><i>Pterospora andromedea</i> Nutt.</u> Pine- drops</p> <p><u><i>Pycnanthemum muticum</i> (Michx.) Pers.</u> Mountain mint</p>	
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Pycnanthemum pilosum Nutt. Hairy mountain mint

Ranunculus ambigens Watson
Spearwort

Ranunculus cymbalaria Pursh Seaside crowfoot

Ranunculus lapponicus L. Lapland buttercup

Ranunculus macounii Britton Macoun's buttercup

Ranunculus rhomboideus Goldie
Prairie buttercup

Rhexia mariana L. Maryland meadow beauty

Rhynchospora scirpoides (Torr.) A. Gray Bald-rush

Ruellia humilis Nutt. Hairy wild petunia

Ruppia maritima L. Widgeon grass

Sabatia angularis (L.) Pursh Rosepink

Sagina nodosa (L.) Fenzl Pearlwort

Sagittaria montevidensis Cham. & Schlecht. Arrowhead

Salix planifolia Pursh Tea-leaved willow

Sarracenia purpurea f. *heterophylla* (Eaton) Fern. Yellow pitcher plant

Saxifraga paniculata Miller [*S. aizoön* Jacq.] Encrusted saxifrage

Saxifraga tricuspidata Rottb. Prickly saxifrage

Schoenoplectus hallii (A. Gray) S.G. Sm. Hall's bulrush

Scleria reticularis Michaux Netted nut rush

Scutellaria ovata Hill Forest skullcap

Scutellaria parvula Michaux [sensu lato]
Small skullcap

Senecio indecorus Greene Northern
ragwort

Silene nivea (Nutt.) Muhl. ex Otth
Evening campion

Silene stellata (L.) Aiton f. Starry
campion

Silphium integrifolium Michaux
Rosinweed

Silphium laciniatum L. Compass plant

Silphium perfoliatum L. Cup plant

Sisyrinchium atlanticum Bickn. Atlantic
blue-eyed-grass

Solidago houghtonii A. Gray
Houghton's goldenrod

Solidago missouriensis Nutt. Missouri
goldenrod

Spiranthes ovalis Lindley Lesser
ladies'-tresses

Tanacetum huronense Nutt. Lake
Huron tansy

Tofieldia pusilla (Michaux) Pers. False
asphodel

Trichostema brachiatum L. [Isanthus
brachiatus (L.) BSP.] False pennyroyal

Trichostema dichotomum L. Bastard
pennyroyal

Trillium nivale Riddell Snow trillium

Trillium recurvatum Beck Prairie trillium

Trillium sessile L. Toadshade

	<p><u><i>Triphora trianthophora</i> (Sw.) Rydb.</u> Nodding pogonia or three birds orchid</p> <p><u><i>Utricularia subulata</i> L.</u> Bladderwort</p> <p><u><i>Vaccinium cespitosum</i> Michaux</u> Dwarf bilberry</p> <p><u><i>Vaccinium uliginosum</i> L.</u> Alpine blueberry</p> <p><u><i>Valeriana edulis</i> var. <i>ciliata</i> (T. & G.)</u> Cronquest Edible valerian</p> <p><u><i>Valerianella chenopodiifolia</i> (Pursh) DC.</u> Goosefoot corn salad</p> <p><u><i>Valerianella umbilicata</i> (Sull.) A. W.</u> Wood Corn salad</p> <p><u><i>Viburnum edule</i> (Michx.) Raf.</u> Squashberry or mooseberry</p> <p><u><i>Viola novae-angliae</i> House</u> New England violet</p> <p><u><i>Viola pedatifida</i> G. Don</u> Prairie birdfoot violet</p> <p><u><i>Vitis vulpina</i> L.</u> Frost grape</p> <p><u><i>Wisteria frutescens</i> (L.) Poiret</u> Wisteria</p> <p><u><i>Wolffia papulifera</i> Thompson [<i>W. brasiliensis</i> Weddell]</u> Watermeal</p> <p><u><i>Woodsia obtusa</i> (Sprengel) Torrey</u> Blunt-lobed woodsia</p> <p><u><i>Zizania aquatica</i> var. <i>aquatica</i> L.</u> Wild rice</p> <p><u><i>Zizia aptera</i> (A. Gray) Fern.</u> Prairie golden alexanders</p> <p><u>(3) This rule does not apply to cultivated plants.</u></p> <p><u>(4) The following species of plants are</u></p>	<p>(24) Substantive. Cultivated plants are exempt from the provisions of R 299.1028.</p> <p>(25) Substantive. Category of</p>
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	<p><u>thought to be extirpated in Michigan, but will be listed automatically as threatened if rediscovered in the state:</u></p> <p><u><i>Agropyron spicatum</i> (Pursh) Scribner & J. G. Smith Bluebunch wheatgrass</u></p> <p><u><i>Aristida dichotoma</i> Michaux Three-awned grass</u></p> <p><u><i>Buchnera americana</i> L. Bluehearts</u></p> <p><u><i>Carex decomposita</i> Muhl. Log sedge</u></p> <p><u><i>Carex grvida</i> Bailey Sedge</u></p> <p><u><i>Carex haydenii</i> Dewey Hayden's sedge</u></p> <p><u><i>Cerastium velutinum</i> Raf. Field chickweed</u></p> <p><u><i>Commelina erecta</i> L. Slender dayflower</u></p> <p><u><i>Cyperus acuminatus</i> Torrey & Hooker Cyperus, Nut grass</u></p> <p><u><i>Dalea purpurea</i> Vent. [<i>Petalostemon purpurem</i> (Vent.) Rydb.] Purple prairie clover</u></p> <p><u><i>Digitaria filiformis</i> (L.) Koeler Slender finger grass</u></p> <p><u><i>Diphasiastrum (Lycopodium) alpinum</i> (L.) Holub Alpine clubmoss</u></p> <p><u><i>Echinacea purpurea</i> (L.) Moench. Purple coneflower</u></p> <p><u><i>Eleocharis geniculata</i> (L.) Roem & Schult. Spike-rush</u></p> <p><u><i>Eleocharis radicans</i> (Poiret) Kunth Spike rush</u></p> <p><u><i>Equisetum telmateia</i> Ehrh. Giant horsetail</u></p> <p><u><i>Fimbristylis puberula</i> (Michaux) Vahl Chestnut sedge</u></p>	<p>plant species thought to be no longer in existence in Michigan has been added; if rediscovered in Michigan, these plant species will be added to the list of threatened species.</p>
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Gentiana saponaria L. Soapwort
gentian

Glyceria acutiflora Torrey Manna grass

Hedyotis nigricans (Lam.) Fosb.
Hedyotis

Helianthus microcephalus Torrey &
Gray Small wood sunflower

Hibiscus laevis All. Smooth rose-
mallow

Houstonia caerulea L. Azure bluet

Isotria medeoloides (Pursh) Raf.
Smaller whorled pogonia

Lactuca pulchella (Pursh) A. Gray Blue
lettuce

Lechea minor L. Least pinweed

Lemna valdiviana Phil. Pale duckweed

Lespedeza procumbens Michaux
Trailing bush clover

Liatris punctata Hooker Dotted blazing
star

Liatris squarrosa (L.) Michx. Plains
blazing star

Lithospermum incisum Lehm. Narrow-
leaved puccoon

Lysimachia hybrida Michaux Swamp
candles

Mikania scandens (L.) Willd. Mikania

Mimulus alatus Aiton Winged monkey
flower

Muhlenbergia cuspidata (Hooker) Rydb.
Plains muhly

Onosmodium molle Michx. Marbleweed

<p><u><i>Oxalis violacea</i> L. Violet wood sorrel</u></p> <p><u><i>Paronychia fastigiata</i> (Raf.) Fern. Low-forked chickweed</u></p> <p><u><i>Phaseolus polystachios</i> (L.) BSP. Wild bean</u></p> <p><u><i>Phleum alpinum</i> L. Mountain timothy</u></p> <p><u><i>Phlox bifida</i> Beck Cleft phlox</u></p> <p><u><i>Polygala incarnata</i> L. Pink milkwort</u></p> <p><u><i>Polytaenia nuttallii</i> DC. Prairie parsley</u></p> <p><u><i>Prosartes maculata</i> (Buckley) A. Gray Nodding mandarin</u></p> <p><u><i>Rudbeckia subtomentosa</i> Pursh Sweet coneflower</u></p> <p><u><i>Scutellaria incana</i> Biehler Skullcap</u></p> <p><u><i>Scutellaria ovata</i> Hill Forest skullcap</u></p> <p><u><i>Senecio congestus</i> (R. Br.) DC. Marsh fleabane</u></p> <p><u><i>Sisyrinchium fuscatum</i> E.P. Bicknell Farwell's blue-eyed grass</u></p> <p><u><i>Sisyrinchium hastile</i> Bickn. Blue-eyed grass</u></p> <p><u><i>Tomanthera auriculata</i> (Michaux) Raf. [<i>Agalinas auriculata</i> (Michaux) S. F. Blake] Eared foxglove</u></p> <p><u><i>Tradescantia bracteata</i> Small. Long-bracted spiderwort</u></p> <p><u><i>Woodwardia areolata</i> (L.) T. Moore Netted chain fern</u></p>	
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