

**Resources utilized when conducting Michigan Agriculture Environmental Assurance Program (MAEAP) Forest, Wetlands, and Habitat A\*Syst (FWH\*A\*Syst);  
October 2020 risk assessment booklet**

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\*Under “Property address” on Page 3 from the October 2020 MAEAP FWH\*A\*Syst, “Watershed name” is found by utilizing Michigan Department of Environment, Great Lakes, and Energy (EGLE) Wetlands Map Viewer (<http://www.mcgi.state.mi.us/wetlands/>) or the United States Geological Survey (USGS) National Map Viewer (<http://viewer.nationalmap.gov/viewer/>), both of which provide a name and number for the watershed.

Resources to which you should refer when completing a MAEAP FWH\*A\*Syst assessment are found in the table below. Please note that these resources are based on guidance drafted by the MAEAP FWH\*A\*Syst Committee. Also note that Risk Questions THAT MUST BE MET FOR MAEAP VERIFICATION ARE HIGHLIGHTED IN BLUE AND DENOTED WITH THE WORD “REQUIRED”; Risk Questions NOT REQUIRED FOR MAEAP VERIFICATION ARE NOT HIGHLIGHTED IN BLUE AND DENOTED WITH THE PHRASE “NOT REQUIRED”.

<b>Section 1 – Sustainable Non-Agriculture Land Management</b>
<b>1.00, REQUIRED – Discuss with the landowner.</b>
<b>1.01, REQUIRED – Confirm that the landowner has a land management plan and discuss with the landowner what has and will be implemented. Examine practices on the ground. For small-acreage parcels or parcels where detailed silvicultural prescriptions are not needed, and where the landowner has pursued a cost share application with the Natural Resources Conservation Service (NRCS), the documents provided as part of the NRCS application process (Record of Decision, Conservation Plan Map, Job Sheets, and CPA-52) can collectively serve as the land management plan.</b>
<b>1.02, REQUIRED – Refer to the land management plan and confirm that landowner objectives are stated.</b>
<b>1.03, REQUIRED – Refer to the land management plan and examine the plan to be sure that future conditions are discussed with management options that can reasonably be modified in case conditions change.</b>
<b>1.04, REQUIRED – Refer to the land management plan and make sure the plan writer is a natural resource professional. Refer to Table 2: W from the risk assessment booklet.</b>

**1.05, REQUIRED – Discuss with the landowner how often monitoring occurs.**

**1.06, NOT REQUIRED – Discuss with the landowner the location of property boundaries and whether they were surveyed by a licensed surveyor, and examine property boundaries on the ground.**

**1.07, REQUIRED – Ask the local Michigan Department of Natural Resources (DNR) Service Forester**  
**([https://www.michigan.gov/documents/dnr/ForestStewardshipProgram\\_Service\\_Foresters\\_LocationMap\\_464525\\_7.pdf](https://www.michigan.gov/documents/dnr/ForestStewardshipProgram_Service_Foresters_LocationMap_464525_7.pdf)) to perform a database check. If the Michigan DNR Service Forester finds that there is an archaeological site in the Section that contains the parcel, the next step is to contact State Historic Preservation Office (SHPO) Archaeologist Stacy Tchorzynski at 517-335-9840 or [tchorzynskis@michigan.gov](mailto:tchorzynskis@michigan.gov) and inquire about archaeological sites on the parcel. Also refer to the National Register of Historic Places (<http://www.nationalregisterofhistoricplaces.com/>).**

**1.08, NOT REQUIRED – Ask the landowner if he or she would like to designate any areas as Special Sites. Examples include remnants of former homesteads, former railroad grades, human or pet cemeteries, or areas with special natural beauty (particular patches of wildflowers or other plants).**

**1.09, REQUIRED – Refer to Michigan Forestry Best Management Practices for Soil and Water Quality**  
**([https://www.michigan.gov/documents/dnr/IC4011\\_SustainableSoilAndWaterQualityPracticesOnForestLand\\_268417\\_7.pdf](https://www.michigan.gov/documents/dnr/IC4011_SustainableSoilAndWaterQualityPracticesOnForestLand_268417_7.pdf)).**

**1.10, REQUIRED – Refer to the land management plan and compare with a field examination for water bodies and wetlands.**

- **Also refer to the Michigan EGLE Wetlands Map Viewer (<http://www.mcgi.state.mi.us/wetlands/>) for maps of water bodies and designated wetlands.**
- **Documentation of vernal pools will require a more detailed field examination as compared to water bodies and wetlands that appear on the EGLE Wetlands Map Viewer.**
- **For information about Riparian Management Zones (RMZs), refer to Michigan Forestry Best Management Practices for Soil and Water Quality ([https://www.michigan.gov/documents/dnr/IC4011\\_SustainableSoilAndWaterQualityPracticesOnForestLand\\_268417\\_7.pdf](https://www.michigan.gov/documents/dnr/IC4011_SustainableSoilAndWaterQualityPracticesOnForestLand_268417_7.pdf)). This document provides required RMZs for State Natural Rivers and Federal Wild and Scenic Rivers, as well as RMZs for water bodies that are not State Natural Rivers or Federal Wild and Scenic Rivers.**

**1.11, REQUIRED –**

- Designated trout streams: See [https://www.michigan.gov/dnr/0,4570,7-350-79119\\_79146\\_82436---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79119_79146_82436---,00.html) for information about trout and Designated Trout Streams and [https://www.michigan.gov/dnr/0,4570,7-350-79119\\_79146\\_82436-448503--.00.html](https://www.michigan.gov/dnr/0,4570,7-350-79119_79146_82436-448503--.00.html) for the Inland Trout and Salmon Regulation maps.
- State Natural Rivers: Refer to the Michigan DNR Natural Rivers database ([https://www.michigan.gov/dnr/0,4570,7-350-79136\\_79236\\_82211---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79136_79236_82211---,00.html)).
- Federal Wild and Scenic Rivers: Refer to the Wild and Scenic Rivers database (<https://www.rivers.gov/michigan.php>).
- Also refer to Michigan Forestry Best Management Practices for Soil and Water Quality ([https://www.michigan.gov/documents/dnr/IC4011\\_SustainableSoilAndWaterQualityPracticesOnForestLand\\_268417\\_7.pdf](https://www.michigan.gov/documents/dnr/IC4011_SustainableSoilAndWaterQualityPracticesOnForestLand_268417_7.pdf)) for information about RMZs and additional information about State Natural Rivers and Federal Wild and Scenic Rivers.

**1.12, REQUIRED** – Examine the parcel for presence of unused wells. FAP foresters should defer to the MAEAP technician or MAEAP verifier for this risk question.

**1.13, REQUIRED** – Ask the landowner if soil erosion permits have been obtained for any activities. Examine the site and determine if excessive erosion or sedimentation occurs based on Michigan Forestry Best Management Practices for Soil and Water Quality ([https://www.michigan.gov/documents/dnr/IC4011\\_SustainableSoilAndWaterQualityPracticesOnForestLand\\_268417\\_7.pdf](https://www.michigan.gov/documents/dnr/IC4011_SustainableSoilAndWaterQualityPracticesOnForestLand_268417_7.pdf)).

**1.14, REQUIRED** – Examine the site and determine if excessive gullying and sedimentation occurs, and if construction and maintenance meets the best management practice requirements, based on Michigan Forestry Best Management Practices for Soil and Water Quality ([https://www.michigan.gov/documents/dnr/IC4011\\_SustainableSoilAndWaterQualityPracticesOnForestLand\\_268417\\_7.pdf](https://www.michigan.gov/documents/dnr/IC4011_SustainableSoilAndWaterQualityPracticesOnForestLand_268417_7.pdf)).

**1.15, REQUIRED** – Discuss objectives with the landowner, as they pertain to prescribed fire. If the landowner is using prescribed fire treatments, discuss with the landowner and the local fire officer such as the township fire officer or other appropriate professional about rules related to burn permits, and also refer to the Michigan DNR burn permits management system (<http://www.dnr.state.mi.us/burnpermits/>) and the Michigan Prescribed Fire Council (<https://www.firecouncil.org/>). Also refer to Michigan Forestry Best Management Practices for Soil and Water Quality ([https://www.michigan.gov/documents/dnr/IC4011\\_SustainableSoilAndWaterQualityPracticesOnForestLand\\_268417\\_7.pdf](https://www.michigan.gov/documents/dnr/IC4011_SustainableSoilAndWaterQualityPracticesOnForestLand_268417_7.pdf)).

**1.16, REQUIRED** –

- If pesticides are being used, refer to and discuss Integrated Pest Management (IPM; [http://www.michigan.gov/mdard/0,4610,7-125-1566\\_2405\\_37164---,00.html](http://www.michigan.gov/mdard/0,4610,7-125-1566_2405_37164---,00.html)).
- Refer to the Environmental Protection Agency (EPA) pesticide label on pesticide container (following this label IS THE LAW).
- Refer to the Michigan Department of Agriculture and Rural Development (MDARD) pesticide certification and licensing requirements

([http://www.michigan.gov/mdard/0,4610,7-125-1569\\_16988\\_35289---,00.html](http://www.michigan.gov/mdard/0,4610,7-125-1569_16988_35289---,00.html)) and pesticide laws and regulations ([http://www.michigan.gov/mdard/0,4610,7-125-1569\\_16988\\_35291---,00.html](http://www.michigan.gov/mdard/0,4610,7-125-1569_16988_35291---,00.html)). Make it clear to the landowner that any contractor hired to apply pesticides MUST be on MDARD's list of Certified and Licensed Pesticide Applicators.

- Emphasize to the landowner the need to keep records of all pesticide applications.

**1.17, REQUIRED** – In the context of MAEAP FWH\*A\*Syst, fertilizer or other nutrient applications are most common with food plot management, and to a lesser extent the establishment of native wildflowers and native grasses. Discuss with the landowner the importance of keeping soil test records. Refer to the Michigan State University (MSU) soil test website (<https://homesoiltest.msu.edu/get-started>) for tips on getting started with a soil test.

**1.18, REQUIRED** – Refer to the land management plan and the NRCS Web Soil Survey (<https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>).

**1.19, REQUIRED** – Refer to the land management plan and cross reference with a site assessment for resource concerns.

**1.20, REQUIRED** – Refer to the land management plan and discuss with the landowner specific goals for habitats and wildlife species.

- Refer to Michigan Society of American Foresters (SAF) forest management page (<http://www.michigansaf.org/forest-management-in-michigan.html>) for information about managing various forest types.
- Refer to informational resources about wildlife and wildlife management, such the Michigan DNR Wildlife Action Plan ([https://www.michigan.gov/dnr/0,4570,7-350-79136\\_79608\\_83053---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79136_79608_83053---,00.html)) and “Managing Michigan’s Wildlife: A Landowner’s Guide” ([http://www.michigandnr.com/publications/pdfs/huntingwildlifehabitat/Landowners\\_Guide/index.htm](http://www.michigandnr.com/publications/pdfs/huntingwildlifehabitat/Landowners_Guide/index.htm)).
- Refer to informational pages and organizations that focus on particular groups of wildlife:
  - General wildlife: The Wildlife Society (TWS), Michigan Chapter (<http://michigantws.wixsite.com/mitws>)
  - Mammals: Michigan Quality Deer Management Association (QDMA; <https://www.qdma.com/michigan/>)
  - Birds: American Bird Conservancy (<https://abcbirds.org/>); Michigan Audubon Society (<https://www.michiganaudubon.org/>); Ruffed Grouse Society and American Woodcock Society (<http://www.ruffedgrousesociety.org/>); Quail Forever (<https://quailforever.org/>); National Wild Turkey Federation, Michigan Chapter (<http://www.nwtf.org/about/state/michigan>)
  - Fish and fish habitat: Michigan DNR Forests For Fish ([https://www.michigan.gov/dnr/0,4570,7-350-79136\\_79237\\_80945\\_83263---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79136_79237_80945_83263---,00.html)); Michigan Clean Water Corps (MiCorps; <https://micorps.net/>); Michigan Trout Unlimited (<http://www.michigantu.org/>)

- Herps (amphibians and reptiles): Michigan Society of Herpetologists (<https://www.facebook.com/michherp>)
- Insects: Michigan Entomological Society (<http://michentsoc.org/>); Michigan Pollinator Initiative (<https://pollinators.msu.edu/>)

**1.21, REQUIRED** – Refer to the land management plan and perform a site assessment to determine if pests (native and non-native) are present, if pest management is being implemented, and if so, if a range of activities are being considered.

- For information on forest health, refer to the Michigan DNR Forest Health page ([https://www.michigan.gov/dnr/0,4570,7-350-79136\\_79237\\_81077---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79136_79237_81077---,00.html)).
- Refer to and discuss IPM ([http://www.michigan.gov/mdard/0,4610,7-125-1566\\_2405\\_37164---,00.html](http://www.michigan.gov/mdard/0,4610,7-125-1566_2405_37164---,00.html)).
- For non-native invasive species, refer to the Midwest Invasive Species Information Network (MISIN; <http://www.misin.msu.edu/>) and the local Cooperative Invasive Species Management Area (CISMA; [https://www.michigan.gov/invasives/0,5664,7-324-103844\\_68072---,00.html](https://www.michigan.gov/invasives/0,5664,7-324-103844_68072---,00.html)).
- If the landowner is using pesticides, refer to the EPA pesticide label on pesticide container (following this label IS THE LAW).
- Also refer to MDARD pesticide certification and licensing requirements ([http://www.michigan.gov/mdard/0,4610,7-125-1569\\_16988\\_35289---,00.html](http://www.michigan.gov/mdard/0,4610,7-125-1569_16988_35289---,00.html)) and pesticide laws and regulations ([http://www.michigan.gov/mdard/0,4610,7-125-1569\\_16988\\_35291---,00.html](http://www.michigan.gov/mdard/0,4610,7-125-1569_16988_35291---,00.html)).

**1.22, REQUIRED** – Refer to the land management plan. It should indicate the whether a database check and inventory were conducted for Threatened and Endangered Species, AND how management activities will be implemented to avoid harming such species. If the information is not in the land management plan, do the following:

- Ask the local Michigan DNR Service Forester ([https://www.michigan.gov/documents/dnr/ForestStewardshipProgram\\_ServiceForesters\\_LocationMap\\_464525\\_7.pdf](https://www.michigan.gov/documents/dnr/ForestStewardshipProgram_ServiceForesters_LocationMap_464525_7.pdf)) to conduct a database check on the Michigan Natural Features Inventory (MNFI; <http://mnfi.anr.msu.edu/>) for Threatened and Endangered Species.
- Also refer to U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) map viewer at <https://ecos.fws.gov/ipac/location/index> for Threatened and Endangered Species.
- Also make note of any Threatened and Endangered Species (if you are able to identify them) during the field visit.
- PLEASE NOTE that Species of Special Concern ARE NOT the same as Threatened and Endangered Species.

**1.23, REQUIRED** – Refer to the land management plan. It should indicate the whether a database check and inventory were conducted for rare or sensitive habitats, AND how management activities will be implemented to avoid harming such habitats. If the information is not in the land management plan, do the following:

- Unique Natural Community Special Sites – Consult with the local DNR Service Forester. When the DNR Service Forester checks the MNFI database for Threatened and Endangered Species, unique natural communities will also show up in the results. For

MAEAP FWH\*A\*Syst, a unique natural community is any with the MNFI designation S1 (critically imperiled in Michigan) or S2 (imperiled in Michigan).

- The Michigan Tree Farm Committee has developed a definition for Forests of Recognized Importance (FORI) in Michigan. That definition has been slightly modified for MAEAP FWH\*A\*Syst, to include non-forested habitats, and such habitats should also be considered rare and sensitive habitats in addition to MNFI S1 and S2 habitats:
  - Forest is part of a large intact forest (> 500 acres) AND in Southern Michigan, where Southern Michigan is defined as a parcel in any county within the Southwestern Lower Peninsula or Southeastern Lower Peninsula denoted by the Michigan DNR Forest Stewardship Program map at [https://www.michigan.gov/dnr/0,4570,7-350-79136\\_79237\\_80945\\_81361-298690--,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79136_79237_80945_81361-298690--,00.html).
  - Habitat is located within 0.5 mile of a Great Lake.
  - Habitat provides habitat for Threatened or Endangered species. In other words, if an MNFI database checked showed potential for Threatened or Endangered Species and the habitat would provide habitat for such species, it is rare or sensitive.
  - Forest designated as a Michigan Deer Wintering Complex (see [https://www.michigan.gov/dnr/0,4570,7-350-79136\\_79608\\_81471-339639--,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79136_79608_81471-339639--,00.html) for information and maps).
  - Habitat is a riparian habitat along a unique river such as a Federal Wild and Scenic River or a State Natural River. Refer to the Michigan Wild and Scenic Rivers database (<https://www.rivers.gov/michigan.php>) and the Michigan DNR Natural Rivers database ([https://www.michigan.gov/dnr/0,4570,7-350-79136\\_79236\\_82211---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79136_79236_82211---,00.html)).

1.24, REQUIRED – Discuss with the landowner management for migratory birds. Refer to the Migratory Bird Treaty Act (<https://www.fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php>).

1.25, REQUIRED – Refer to the land management plan and perform a site assessment to determine if non-native invasive species are present, if management is being implemented, and if so, if a range of activities are being considered.

- For information on forest health, refer to the Michigan DNR Forest Health page ([https://www.michigan.gov/dnr/0,4570,7-350-79136\\_79237\\_81077---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79136_79237_81077---,00.html)).
- Refer to and discuss IPM ([http://www.michigan.gov/mdard/0,4610,7-125-1566\\_2405\\_37164---,00.html](http://www.michigan.gov/mdard/0,4610,7-125-1566_2405_37164---,00.html)).
- For non-native invasive species, refer to MISIN (<http://www.misin.msu.edu/>) and the local CISMA ([https://www.michigan.gov/invasives/0,5664,7-324-103844\\_68072---,00.html](https://www.michigan.gov/invasives/0,5664,7-324-103844_68072---,00.html)).
- If the landowner is using pesticides, refer to the EPA pesticide label on pesticide container (following this label IS THE LAW).
- Also refer to MDARD pesticide certification and licensing requirements ([http://www.michigan.gov/mdard/0,4610,7-125-1569\\_16988\\_35289---,00.html](http://www.michigan.gov/mdard/0,4610,7-125-1569_16988_35289---,00.html)) and pesticide laws and regulations ([http://www.michigan.gov/mdard/0,4610,7-125-1569\\_16988\\_35291---,00.html](http://www.michigan.gov/mdard/0,4610,7-125-1569_16988_35291---,00.html)).

1.26, NOT REQUIRED – Refer to the land management plan and discuss with the landowner specific goals for priority wildlife species.

- Refer to the Michigan SAF forest management page (<http://www.michigansaf.org/forest-management-in-michigan.html>) for information about managing various forest types.
- Refer to informational resources about wildlife and wildlife management, such the Michigan DNR Wildlife Action Plan ([https://www.michigan.gov/dnr/0,4570,7-350-79136\\_79608\\_83053---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79136_79608_83053---,00.html)) and “Managing Michigan’s Wildlife: A Landowner’s Guide” ([http://www.michigandnr.com/publications/pdfs/huntingwildlifehabitat/Landowners\\_Guide/index.htm](http://www.michigandnr.com/publications/pdfs/huntingwildlifehabitat/Landowners_Guide/index.htm)).
- Refer to informational pages and organizations that focus on particular groups of wildlife:
  - General wildlife: TWS, Michigan Chapter (<http://michigantws.wixsite.com/mitws>)
  - Mammals: Michigan QDMA (<https://www.qdma.com/michigan/>)
  - Birds: American Bird Conservancy (<https://abcbirds.org/>); Michigan Audubon Society (<https://www.michiganaudubon.org/>); Ruffed Grouse Society and American Woodcock Society (<http://www.ruffedgrousesociety.org/>); Quail Forever (<https://quailforever.org/>); National Wild Turkey Federation, Michigan Chapter (<http://www.nwtf.org/about/state/michigan>)
  - Fish and fish habitat: Michigan DNR Forests For Fish ([https://www.michigan.gov/dnr/0,4570,7-350-79136\\_79237\\_80945\\_83263---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79136_79237_80945_83263---,00.html)); MiCorps (<https://micorps.net/>); Michigan Trout Unlimited (<http://www.michigantu.org/>)
  - Herps (amphibians and reptiles): Michigan Society of Herpetologists (<https://www.facebook.com/michherp>)
  - Insects: Michigan Entomological Society (<http://michentsoc.org/>); Michigan Pollinator Initiative (<https://pollinators.msu.edu/>)

**1.27, REQUIRED** – Refer to the land management plan and perform a site assessment to determine if all cover types have been captured.

**1.28, NOT REQUIRED** – Discuss with the landowner the following programs:

- USFWS Partners for Fish and Wildlife program (<https://www.fws.gov/midwest/partners/>)
- Michigan DNR Wildlife Habitat Grant Program ([https://www.michigan.gov/dnr/0,4570,7-350-79134\\_81684\\_81685\\_81746---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79134_81684_81685_81746---,00.html))
- Michigan DNR Forests For Fish ([https://www.michigan.gov/dnr/0,4570,7-350-79136\\_79237\\_80945\\_83263---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79136_79237_80945_83263---,00.html))
- Farm Bill financial and technical assistance such as NRCS Environmental Quality Incentives Program (EQIP; <http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/eqip/>)
- Other programs and sources of information such as MDARD Conservation Easements ([http://www.michigan.gov/mdard/0,4610,7-125-1599\\_2558-146458--,00.html](http://www.michigan.gov/mdard/0,4610,7-125-1599_2558-146458--,00.html)), The Nature Conservancy (TNC) Conservation Easements ([https://www.nature.org/en-us/about-us/who-we-are/how-we-work/private-lands-conservation/?tab\\_q=tab\\_container-tab\\_element\\_670](https://www.nature.org/en-us/about-us/who-we-are/how-we-work/private-lands-conservation/?tab_q=tab_container-tab_element_670)), and easements offered by local land conservancies

**1.29, NOT REQUIRED** – Ask the landowner to provide documents showing that only qualified professionals, who carry insurance and follow natural resource laws, have helped manage the natural resources. There are numerous types of natural resource professionals:

- Foresters, wildlife biologists, and ecologists – This would include professionals who actively write management plans or implement habitat management such as tree marking for timber harvesting. Common credentials include MDARD Qualified Foresters, Certified FSP management plan writers, Technical Service Provider (TSP) foresters who write NRCS management plans, Certified Foresters with SAF, Registered Foresters with Michigan DNR, foresters with Association of Consulting Foresters (ACF), and Certified Wildlife Biologists with TWS.
- Arborists and tree service companies – This would include professionals who actively implement tree care work such as tree health treatments, tree removal near buildings, and tree pruning. A common credential for arborists is Certified Arborist with International Society of Arboriculture (ISA).
- Producers – This would include mills and loggers. Two recognized credentials for loggers are Qualified Logging Professional with Sustainable Forestry Initiative (SFI) and Master Logger.
- Pesticide applicators – In Michigan, to perform work for a fee where pesticides are being applied (common for controlling non-native and native forest pests and diseases), a contractor must be on the MDARD list of Certified and Licensed Pesticide Applicators.
- Planters – This would include professionals who offer planting services, including the planting of trees and shrubs, wildflowers, and grasses.

**1.30, REQUIRED** – Ask the landowner to provide documents showing records of all management activities.

**1.31, REQUIRED** – Discuss with the landowner or natural resource professional if management activities conform to the objectives specified in the land management plan.

## Section 2 – Forestry

**2.01, NOT REQUIRED** – Ask if the landowner/parcel is certified in the American Tree Farm System (ATFS; <https://www.treefarmssystem.org/>), SFI (<https://www.forests.org/>); or Forest Stewardship Council (FSC; <https://ic.fsc.org/en>).

**2.02, NOT REQUIRED** – Ask if the landowner is aware of the Commercial Forest Program (CF; [https://www.michigan.gov/dnr/0,4570,7-350-79136\\_79237\\_80945\\_83262---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79136_79237_80945_83262---,00.html)), Qualified Forest Program (QFP; [http://www.michigan.gov/mdard/0,4610,7-125-1599\\_28740-306518--00.html](http://www.michigan.gov/mdard/0,4610,7-125-1599_28740-306518--00.html)), or NRCS EQIP (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/eqip/>).

**2.03, NOT REQUIRED** – Discuss stocking with the landowner and perform a site assessment, particularly to ensure stocking has achieved desired levels within five years after timber harvesting activity (where such activity occurred), as well as stocking goals for tree/shrub planting projects. Stocking and productivity are subjective and depend on the objectives of the landowner and the opinion of the natural resource professionals (e.g., the minimum stocking



needed for an open-canopy oak forest or savanna is much lower than the minimum stocking needed for a closed-canopy oak forest).

**2.04, REQUIRED** – Determine if any trees have been harvested or if any reforestation practices (natural regeneration or planting of tree/shrub seedlings in already forested cover types) or afforestation practices (tree/shrub planting projects in previously non-forested areas) have taken place. If so, discuss stocking with the landowner and perform a site assessment. Stocking and productivity are subjective and depend on the objectives of the landowner and the opinion of the natural resource professionals.

**2.05, NOT REQUIRED** – Refer to the Generally Accepted Forest Management Practices (GAFMPs; [http://www.michigan.gov/documents/dnr/RightToForestActGAFMP\\_178260\\_7.pdf](http://www.michigan.gov/documents/dnr/RightToForestActGAFMP_178260_7.pdf)) and cross reference with a site assessment.

**2.06, NOT REQUIRED** – Refer to the GAFMPs ([http://www.michigan.gov/documents/dnr/RightToForestActGAFMP\\_178260\\_7.pdf](http://www.michigan.gov/documents/dnr/RightToForestActGAFMP_178260_7.pdf)) and cross reference with a site assessment.

**2.07, REQUIRED** – Refer to the land management plan and cross reference with a site assessment.

**2.08, REQUIRED** – If timber harvesting has taken place, ask the landowner to provide proof that timber contracts were used.

**2.09, REQUIRED** – Refer to the land management plan with scheduled management practices, harvest maps developed prior to harvesting activities, or descriptions from timber sale contracts. Maps or written descriptions detailing harvest boundaries, exclusion areas, sensitive sites, roads, and landings, are acceptable.

**2.10, NOT REQUIRED** – In Michigan, two recognized credentials for loggers are Qualified Logging Professional with SFI (see <https://sfimi.org/education-faq>) and Master Logger (see <https://mimlc.com/>).

**2.11, REQUIRED** – Refer to the land management plan and cross reference with Michigan Forestry Best Management Practices for Soil and Water Quality ([https://www.michigan.gov/documents/dnr/IC4011\\_SustainableSoilAndWaterQualityPracticesOnForestLand\\_268417\\_7.pdf](https://www.michigan.gov/documents/dnr/IC4011_SustainableSoilAndWaterQualityPracticesOnForestLand_268417_7.pdf)).

**2.12, REQUIRED** – Refer to the GAFMPs ([http://www.michigan.gov/documents/dnr/RightToForestActGAFMP\\_178260\\_7.pdf](http://www.michigan.gov/documents/dnr/RightToForestActGAFMP_178260_7.pdf)) and cross reference with a site assessment.

**2.13, REQUIRED** – Refer to the GAFMPs ([http://www.michigan.gov/documents/dnr/RightToForestActGAFMP\\_178260\\_7.pdf](http://www.michigan.gov/documents/dnr/RightToForestActGAFMP_178260_7.pdf)) and cross reference with a site assessment.

**2.14, NOT REQUIRED** – Refer to the Michigan DNR Biomass Harvesting Guidance ([https://www.michigan.gov/documents/dnr/WGBH\\_321271\\_7.pdf](https://www.michigan.gov/documents/dnr/WGBH_321271_7.pdf)).

### Section 3 – Wetlands (Forested and Non-Forested) and Water Management

#### **3.01, REQUIRED** –

- **Wetlands:** Cross reference the land management plan and site assessment with the Michigan EGLE Wetlands Map Viewer (<http://www.mcgi.state.mi.us/wetlands/>) to determine if wetlands are present.
- **100-year floodplains:** Cross reference the land management plan and site assessment with the Michigan EGLE Wetlands Map Viewer (<http://www.mcgi.state.mi.us/wetlands/>) AND NRCS Web Soil Survey (<https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>) to determine if 100-year floodplains are present. Based on soils descriptions from the Web Soil Survey, any soil type with a landform classification of floodplain should be considered a 100-year floodplain.
- **Great Lakes shorelines:** Refer to Michigan EGLE Great Lakes Shorelines Management Program at [https://www.michigan.gov/egle/0,9429,7-135-3313\\_3677\\_3700---,00.html](https://www.michigan.gov/egle/0,9429,7-135-3313_3677_3700---,00.html).
- **Critical Dunes along Great Lakes shorelines:** A permit is required for all new uses in Critical Dune Areas mapped by Michigan EGLE in the “Atlas of Critical Dune Areas”. For more information about critical dunes and relevant laws, visit [https://www.michigan.gov/egle/0,9429,7-135-3311\\_4114-9832--,,00.html](https://www.michigan.gov/egle/0,9429,7-135-3311_4114-9832--,,00.html). Also visit [https://www.michigan.gov/egle/0,9429,7-135-3311\\_4114-70207--,,00.html](https://www.michigan.gov/egle/0,9429,7-135-3311_4114-70207--,,00.html) for Critical Dune Areas by County and Township.
- **Inland lakes and streams:** Permits are required for activities such as crossing streams and disturbing land below the ordinary high water mark. For more information, visit [https://www.michigan.gov/egle/0,9429,7-135-3313\\_3681\\_28734---,00.html](https://www.michigan.gov/egle/0,9429,7-135-3313_3681_28734---,00.html). Also refer to the Michigan DNR Natural Rivers database ([https://www.michigan.gov/dnr/0,4570,7-350-79136\\_79236\\_82211---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79136_79236_82211---,00.html)) and the Federal Wild and Scenic Rivers database (<https://www.rivers.gov/michigan.php>).
- Refer to Michigan laws pertaining to wetlands, floodplains, shorelines, and inland lakes and streams, listed at the end of this resource document and ask the landowner if appropriate permits were obtained for any activities that took place.

**3.02, REQUIRED** – Refer to the land management plan and perform a site assessment to look for resource concerns. Focus on the wetland as an ecosystem and understand that there are many types of “acceptable” native wetlands, including swamps dominated by native trees, marshes dominated by native shrubs and herbaceous plants, fens, and bogs. Common resource concerns in wetlands include dominance by non-native invasive plants and drastic changes in hydrology due to human activity (e.g., improper drainage due to improperly sized culverts, or draining of a wetland due to ditches or tile drainage). Refer the landowner to the following resources:

- USFWS Partners for Fish and Wildlife program (<https://www.fws.gov/midwest/partners/>)
- Michigan EGLE Water Resources Division ([https://www.michigan.gov/egle/0,9429,7-135-3306\\_28610---,00.html](https://www.michigan.gov/egle/0,9429,7-135-3306_28610---,00.html))
- Michigan DNR Aquatic Habitat Management ([https://www.michigan.gov/dnr/0,4570,7-350-79136\\_79236\\_82943---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79136_79236_82943---,00.html))
- Michigan DNR Aquatic Habitat Grant Program ([https://www.michigan.gov/dnr/0,4570,7-350-79134\\_81684\\_81685\\_81743---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79134_81684_81685_81743---,00.html))
- Michigan DNR Forests For Fish ([https://www.michigan.gov/dnr/0,4570,7-350-79136\\_79237\\_80945\\_83263---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79136_79237_80945_83263---,00.html))
- MiCorps (<https://micorps.net/>)
- Michigan Trout Unlimited (<http://www.michigantu.org/>)
- Michigan Lakes and Streams Association (<http://www.mymlsa.org/>).

**3.03, REQUIRED** – Refer to the land management plan and perform a site assessment to look for proper filter strips, grasses waterways, and RMZs, and cross reference with Michigan Forestry Best Management Practices for Soil and Water Quality ([https://www.michigan.gov/documents/dnr/IC4011\\_SustainableSoilAndWaterQualityPracticesOnForestLand\\_268417\\_7.pdf](https://www.michigan.gov/documents/dnr/IC4011_SustainableSoilAndWaterQualityPracticesOnForestLand_268417_7.pdf)). Also look for any evidence of direct discharges of harmful substances in waterways and refer to the Water Resources Protection law at <http://www.legislature.mi.gov/documents/mcl/pdf/mcl-451-1994-ii-1-31.pdf>.

**3.04, NOT REQUIRED** – Based on identified resource concerns, discuss with the landowner potential restoration practices such as controlling non-native invasive plants, planting native wetland vegetation, or correcting hydrology issues. Correcting hydrology issues caused by factors such as undersized culverts, ditches, and tile drainage, will often require substantial time and resources, as well as multi-organizational collaboration given the permits required to commence activity, as well as the financial expenses. Refer the landowner to the following resources:

- USFWS Partners for Fish and Wildlife program (<https://www.fws.gov/midwest/partners/>)
- Michigan EGLE Water Resources Division ([https://www.michigan.gov/egle/0,9429,7-135-3306\\_28610---,00.html](https://www.michigan.gov/egle/0,9429,7-135-3306_28610---,00.html))
- Michigan DNR Aquatic Habitat Management ([https://www.michigan.gov/dnr/0,4570,7-350-79136\\_79236\\_82943---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79136_79236_82943---,00.html))
- Michigan DNR Aquatic Habitat Grant Program ([https://www.michigan.gov/dnr/0,4570,7-350-79134\\_81684\\_81685\\_81743---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79134_81684_81685_81743---,00.html))
- Michigan DNR Forests For Fish ([https://www.michigan.gov/dnr/0,4570,7-350-79136\\_79237\\_80945\\_83263---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79136_79237_80945_83263---,00.html))
- MiCorps (<https://micorps.net/>)
- Michigan Trout Unlimited (<http://www.michigantu.org/>)
- Michigan Lakes and Streams Association (<http://www.mymlsa.org/>).

**3.05, NOT REQUIRED** – Refer to the land management plan and discuss with the landowner any current wetland restoration activities that are taking place.

**3.06, NOT REQUIRED** – Ask the landowner if the wetlands are enrolled in a long-term program. Discuss with the landowner the USFWS Partners for Fish and Wildlife program (<https://www.fws.gov/midwest/partners/>), NRCS Wetland Reserve Easements (<https://www.nrcs.usda.gov/wps/portal/nrcs/mi/programs/easements/acep/STELPRDB1252394/>), MDARD Conservation Easements ([http://www.michigan.gov/mdard/0,4610,7-125-1599\\_2558-146458--,00.html](http://www.michigan.gov/mdard/0,4610,7-125-1599_2558-146458--,00.html)), and local easements that might be offered by local land conservancies, and refer to TNC Conservation Easements page (<http://www.nature.org/about-us/private-lands-conservation/conservation-easements/all-about-conservation-easements.xml>).

**3.07, NOT REQUIRED** – Refer to the land management plan and cross reference with a site assessment. Ask the landowner about any activities place in water bodies found on the parcel. Common resource concerns on water bodies include non-native invasive aquatic species, excessive use of mechanical or chemical removal methods to kill native aquatic plants that are actually beneficial to the aquatic ecosystem, excessive removal of dead woody material that is beneficial to the aquatic ecosystem, and insufficient RMZ (which can lead to excessive pollution runoff or sedimentation into the aquatic ecosystem). Refer the landowner to the following resources:

- USFWS Partners for Fish and Wildlife program (<https://www.fws.gov/midwest/partners/>)
- Michigan EGLE Water Resources Division ([https://www.michigan.gov/egle/0,9429,7-135-3306\\_28610---,00.html](https://www.michigan.gov/egle/0,9429,7-135-3306_28610---,00.html))
- Michigan DNR Aquatic Habitat Management ([https://www.michigan.gov/dnr/0,4570,7-350-79136\\_79236\\_82943---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79136_79236_82943---,00.html))
- Michigan DNR Aquatic Habitat Grant Program ([https://www.michigan.gov/dnr/0,4570,7-350-79134\\_81684\\_81685\\_81743---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79134_81684_81685_81743---,00.html))
- Michigan DNR Forests For Fish ([https://www.michigan.gov/dnr/0,4570,7-350-79136\\_79237\\_80945\\_83263---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79136_79237_80945_83263---,00.html))
- MiCorps (<https://micorps.net/>)
- Michigan Trout Unlimited (<http://www.michigantu.org/>)
- Michigan Lakes and Streams Association (<http://www.mymlsa.org/>).

#### Section 4 – Non-Forested Upland Habitat

**4.01, REQUIRED** – Refer to the land management plan and cross reference with a site assessment. A common resource concern in non-forested upland habitats is dominance by non-native invasive shrubs (e.g., autumn olive) or a mixture of non-native invasive forbs and grasses (e.g., spotted knapweed and smooth brome). A common restoration practice when the goal is to restore a healthy ecosystem while also keeping it non-forested, is to convert the poor habitat to one dominated by native wildflowers and native grasses. Refer the landowner to the following resources:

- Michigan Pollinator Initiative (<https://pollinators.msu.edu/>)
- Xerces Society Pollinator Conservation Resources: Great Lakes Region (<https://www.xerces.org/pollinator-resource-center/great-lakes>)
- USFWS Partners for Fish and Wildlife program (<https://www.fws.gov/midwest/partners/>)
- Michigan DNR Wildlife Habitat Grant Program ([https://www.michigan.gov/dnr/0,4570,7-350-79134\\_81684\\_81685\\_81746---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79134_81684_81685_81746---,00.html))

- **Farm Bill financial and technical assistance such as NRCS EQIP**  
(<http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/eqip/>)

**4.02, REQUIRED** – Refer to the land management plan, perform a site assessment and discuss with the landowner. Ask if any required permits were obtained. For more information about critical dunes and relevant laws, visit [https://www.michigan.gov/egle/0,9429,7-135-3311\\_4114-9832--,00.html](https://www.michigan.gov/egle/0,9429,7-135-3311_4114-9832--,00.html). Also visit [https://www.michigan.gov/egle/0,9429,7-135-3311\\_4114-70207--,00.html](https://www.michigan.gov/egle/0,9429,7-135-3311_4114-70207--,00.html) for Critical Dune Areas by County and Township.

**4.03, NOT REQUIRED** – Refer to the land management plan and discuss with the landowner. Refer the landowner to the following resources:

- Michigan Pollinator Initiative (<https://pollinators.msu.edu/>)
- Xerces Society Pollinator Conservation Resources: Great Lakes Region (<https://www.xerces.org/pollinator-resource-center/great-lakes>)
- USFWS Partners for Fish and Wildlife program (<https://www.fws.gov/midwest/partners/>)
- Michigan DNR Wildlife Habitat Grant Program ([https://www.michigan.gov/dnr/0,4570,7-350-79134\\_81684\\_81685\\_81746---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79134_81684_81685_81746---,00.html))
- Farm Bill financial and technical assistance such as NRCS EQIP  
(<http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/eqip/>)

**4.04, NOT REQUIRED** – Ask the landowner if the non-forested upland habitats are enrolled in a long-term program such as Farm Service Agency’s Conservation Reserve Program (CRP) Grasslands (<https://www.fsa.usda.gov/programs-and-services/conservation-programs/conservation-reserve-program/index>), or another type of conservation easement, such as those offered by local land conservancies.

## Section 5 – Other Environmental Risks in the FWH System

**5.00, REQUIRED** – Perform a site assessment and be sure to ask the MAEAP Verifier.

## List of Relevant Laws and Best Management Practices for MAEAP FWH\*A\*Syst

*There are numerous Federal, State, and local laws and regulations that are relevant to forestry and other habitat management. While all pertinent laws cannot be listed in detail, there are several that should be mentioned:*

### *Federal Laws—*

- Migratory Bird Treaty Act (1918) provides protection to birds officially listed as migratory birds. For more information, visit <https://www.fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php>.
- Federal Insecticide, Fungicide, and Rodenticide Act (1947) pertains to the Federal regulation of pesticide distribution, sale, and use. The text on EPA pesticide labels on pesticide containers should be interpreted as Federal law. For more information, visit <https://www.epa.gov/enforcement/federal-insecticide-fungicide-and-rodenticide-act-fifra-and-federal-facilities>.
- Wilderness Act (1964) established the National Wilderness Preservation System. There are 16 protected Wilderness areas in Michigan. Nordhouse Dunes is one example. For more information, visit <https://www.nps.gov/subjects/wilderness/index.htm>.
- National Historic Preservation Act (1966) secures protection of archaeological resources and sites on public land and land owned by Native Americans. For more information, visit <https://www.nps.gov/history/local-law/nhpa1966.htm>.
- Wild and Scenic Rivers Act (1968) established a national system of Wild and Scenic Rivers, whereby activities are regulated within buffer zones adjacent to such rivers. Of Michigan's approximately 51,438 miles of river, 656.4 miles are designated as Wild and Scenic. A couple of examples in Michigan include the Manistee River, below Tippy Dam to the bridge on State Highway M55, as well as the segment of the Pere Marquette River that is downstream from the junction of the Middle and Little South Branches to the junction with U.S. Highway 31. For more information about Wild and Scenic Rivers in Michigan, see <https://www.rivers.gov/michigan.php>.
- National Environmental Policy Act (1969) promotes the enhancement of the environment, and includes the requirement that all Executive Federal agencies prepare Environmental Assessments (EAs) and Environmental Impact Statements (EISs) that contain information about the potential environmental effects of proposed Federal agency actions. However, NEPA does not apply to the President, Congress, or the Federal courts. For more information, visit <https://www.epa.gov/nepa>.
- Clean Air Act (1970) provides regulation of air quality and air pollutants. For more information, visit <https://www.epa.gov/laws-regulations/summary-clean-air-act>.
- Clean Water Act (1972) provides regulation of pollutants in water of the U.S. For more information, visit <https://www.epa.gov/laws-regulations/summary-clean-water-act>.
- Endangered Species Act (1973) protects species currently in danger of extinction (Endangered) and those that may become Endangered in the foreseeable future

(Threatened). For more information, visit <https://www.fws.gov/endangered/laws-policies/>.

- Plant Protection Act (2000) provides that the Secretary of the U.S. Department of Agriculture (USDA) may issue regulations "to prevent the introduction of plant pests into the United States or the dissemination of plant pests within the United States." For more information, visit [https://www.aphis.usda.gov/plant\\_health/plant\\_pest\\_info/weeds/downloads/PPAText.pdf](https://www.aphis.usda.gov/plant_health/plant_pest_info/weeds/downloads/PPAText.pdf).

*State laws—*

- Commercial Forest Act, Parts 511 and 512 of Public Act 451, 1994, as amended (since 1925) is a property tax reduction program for eligible landowners with a written forest management plan and who are implementing management. For more information, visit [https://www.michigan.gov/dnr/0,4570,7-350-79136\\_79237\\_80945\\_83262---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79136_79237_80945_83262---,00.html).
- Right to Forest Act of 2002 provides that properly implemented forestry practices are protected from public or private nuisance complaints. For more information, visit [http://www.legislature.mi.gov/\(S\(squgiy55mmrxil45v01vq1rf\)\)/documents/mcl/pdf/mcl-chap320.pdf](http://www.legislature.mi.gov/(S(squgiy55mmrxil45v01vq1rf))/documents/mcl/pdf/mcl-chap320.pdf).
- QFP, Public Acts 42 and 45 of 2013 is a property tax exemption program for eligible landowners with a written forest management plan and who are implementing management. For more information, visit [http://www.michigan.gov/mdard/0,4610,7-125-1599\\_28740-306518--,00.html](http://www.michigan.gov/mdard/0,4610,7-125-1599_28740-306518--,00.html).
- Part 17, Michigan Environmental Protection Act, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) provides for the protection of air, water, and other natural resources and provides the right to any person to bring action against another person or entity regarding degradation to natural resources. For more information, visit <http://www.legislature.mi.gov/documents/mcl/pdf/mcl-451-1994-I-17.pdf>.
- Part 31, (Section 3108) Water Resource Protection (Floodplain Regulatory Authority), of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) regulates, through permitting, the construction, filling, or changing of grade within 100-year floodplains. For more information, visit <http://www.legislature.mi.gov/documents/mcl/pdf/mcl-451-1994-ii-1-31.pdf>.
- Part 31, (Section 3109) Water Resource Protection (Discharge into state waters), of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) addresses direct or indirect discharges of harmful substances. For more information, visit <http://www.legislature.mi.gov/documents/mcl/pdf/mcl-451-1994-ii-1-31.pdf>.
- Part 83, Pesticide Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), and related State regulations, regulate pesticide products including their use, the people that apply them, licensing requirements, and penalties. Refer to MDARD pesticide certification and licensing

- requirements ([http://www.michigan.gov/mdard/0,4610,7-125-1569\\_16988\\_35289---,00.html](http://www.michigan.gov/mdard/0,4610,7-125-1569_16988_35289---,00.html)) and pesticide laws and regulations ([http://www.michigan.gov/mdard/0,4610,7-125-1569\\_16988\\_35291---,00.html](http://www.michigan.gov/mdard/0,4610,7-125-1569_16988_35291---,00.html)).
- Part 91, Soil Erosion and Sedimentation Control (SESC), of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) prevents soil erosion and requires a permit for any earth change that disturbs one or more acres of land or that is within 500 feet of a lake or stream (exceptions include plowing and tilling for crop production and activities associated with logging or mining). For more information, visit [https://www.michigan.gov/egle/0,9429,7-135-3311\\_4113-8844--,00.html](https://www.michigan.gov/egle/0,9429,7-135-3311_4113-8844--,00.html).
  - Part 301, Inland Lakes and Streams, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) protects inland lakes and streams, whereby permits are required for activities such as crossing streams and disturbing land below the ordinary high water mark. For more information, visit [https://www.michigan.gov/egle/0,9429,7-135-3313\\_3681\\_28734---,00.html](https://www.michigan.gov/egle/0,9429,7-135-3313_3681_28734---,00.html).
  - Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) protects wetlands, which are defined as “land characterized by the presence of water at a frequency and duration sufficient to support, and that under normal circumstances does support, wetland vegetation, or aquatic life, and is commonly referred to as a bog, swamp, or marsh.” Under this regulation, activities such as placing fill material, removing soil, construction, and draining surface water are prohibited unless a permit is obtained from Michigan EGLE. For more information, visit [https://www.michigan.gov/egle/0,9429,7-135-3313\\_3687-10801--,00.html](https://www.michigan.gov/egle/0,9429,7-135-3313_3687-10801--,00.html).
  - Part 305, Natural Rivers Act, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), regulates development and land uses within designated State Natural Rivers. There are 16 State Natural River systems in Michigan. For more information, visit the Michigan DNR Natural Rivers database ([https://www.michigan.gov/dnr/0,4570,7-350-79136\\_79236\\_82211---,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79136_79236_82211---,00.html)).
  - Part 323, Shorelands Protection and Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), provides for the designation and management of areas along the Great Lakes shoreline, whereby a permit is required for certain activities in these designated areas. For more information, visit [https://www.michigan.gov/egle/0,9429,7-135-3313\\_3677\\_3700---,00.html](https://www.michigan.gov/egle/0,9429,7-135-3313_3677_3700---,00.html).
  - Part 353, Sand Dunes Protection and Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), provides designated Critical Dune Areas along the Great Lakes shoreline. A permit is required for all new uses in Critical Dune Areas mapped by Michigan EGLE in the “Atlas of Critical Dune Areas”. Visit [https://www.michigan.gov/egle/0,9429,7-135-3311\\_4114-70207--,00.html](https://www.michigan.gov/egle/0,9429,7-135-3311_4114-70207--,00.html) for Critical Dune Areas by County and Township.
  - Part 365, Endangered Species Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), protects



Threatened and Endangered species from being harmed during project activities, unless a permit is issued by Michigan DNR. For more information, visit <http://www.legislature.mi.gov/documents/mcl/pdf/mcl-451-1994-iii-1-endangered-species-365.pdf>.

- Part 413, Transgenic and Non-native Organisms, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), regulates the possession and movement of non-native terrestrial and aquatic organisms. For more information, visit <https://www.michigan.gov/invasives/0,5664,7-324-68071-368618--F,00.html>.
- Part 515, Forest Protection and Forest Fires Act, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), establishes machinery to protect forestlands from fires. A permit is required for burning on or adjacent to forestland. For more information, visit [http://www.legislature.mi.gov/\(S\(sdhfxmwzpz5psa4dqftfgdzpz\)\)/mileg.aspx?page=GetObject&objectname=mcl-451-1994-III-2-4-FOREST-FIRES-515](http://www.legislature.mi.gov/(S(sdhfxmwzpz5psa4dqftfgdzpz))/mileg.aspx?page=GetObject&objectname=mcl-451-1994-III-2-4-FOREST-FIRES-515).
- National Pollutant Discharge Elimination System (NPDES) – Michigan Environmental Protection Act, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) pertains to required permits for fixed forestry activities such as permanent log storage areas maintained by mills. For more information, visit <https://www.michigan.gov/statelicensesearch/0,4671,7-180-24786-245057--,00.html>.

***Local laws, ordinances, and other regulations vary by County and Township. County and Townships should be consulted for more details.***

***Best management practices (BMPs) pertain not only to Federal, State, and local laws and regulations, but also practices that “go beyond the law”.*** In Michigan, BMPs pertaining to forestry are published in the Michigan Forestry Best Management Practices for Soil and Water Quality

([https://www.michigan.gov/documents/dnr/IC4011\\_SustainableSoilAndWaterQualityPracticesOnForestLand\\_268417\\_7.pdf](https://www.michigan.gov/documents/dnr/IC4011_SustainableSoilAndWaterQualityPracticesOnForestLand_268417_7.pdf)). Michigan forestry BMPs that exceed the law include, but are not limited, to the following:

- Provide guidance on the prevention and cleanup of chemical spills during forest harvesting activities.
- Establish Riparian Management Zones (RMZs) along lakes, rivers, and streams that are not regulated as State Natural Rivers or Federal Wild and Scenic Rivers.
- Establish RMZs along Michigan DNR Designated Trout Streams. See [https://www.michigan.gov/dnr/0,4570,7-350-79119\\_79146\\_82436--,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79119_79146_82436--,00.html) for information about trout and Designated Trout Streams and [https://www.michigan.gov/dnr/0,4570,7-350-79119\\_79146\\_82436-448503--,00.html](https://www.michigan.gov/dnr/0,4570,7-350-79119_79146_82436-448503--,00.html) for the Inland Trout and Salmon Regulation maps.
- Protect vernal pools and seeps.

- Provide specifications pertaining to the planning and placement of forest roads, skid trails water diversion devices, stream crossings, log landings, to minimize erosion and rutting.
  - Use an IPM strategy to control non-native invasive species and other undesirable species.
- For more information, visit the Michigan IPM page at [http://www.michigan.gov/mdard/0,4610,7-125-1566\\_2405\\_37164---,00.html](http://www.michigan.gov/mdard/0,4610,7-125-1566_2405_37164---,00.html).