DEPARTMENT OF ENVIRONMENTAL QUALITY

LAND AND WATER MANAGEMENT

WETLAND MITIGATION BANKING

These rules take effect 15 days after filing with the Secretary of State (By authority conferred on the department of environmental quality by section 30319 of Act No. 451 of the Public Acts of 1994, as amended, being §324.30319 of the Michigan Compiled Laws)

R 281.951 Mitigation banking definitions.

Rule 1. As used in the wetland mitigation banking rules:

- (a) "Act" means Act No. 451 of the Public Acts of 1994, as amended, being §324.101 et seq. of the Michigan Compiled Laws.
- (b) "Bank sponsor" means a person who independently or in cooperation with another person is responsible for the establishment, operation, and long-term management of a wetland mitigation bank.
- (c) "Ecoregion" means a geographic region of relatively homogenous ecological systems. For the purposes of the wetland mitigation banking rules, the mapped subsubsections found in the publication entitled "Regional Landscape Ecosystems of Michigan, Minnesota, and Wisconsin," Dennis A. Albert, 1994, north central forest experiment station, United States department of agriculture, shall be used to identify ecoregion boundaries.
 - (d) "Department" means the department of environmental quality.
- (e) "In-kind mitigation" means replacement of unavoidably lost wetland resources with created, restored, or, in exceptional circumstances, preserved wetlands of a similar physical/biological type, with the goal of replacing as fully as possible the functions of the lost wetland.
- (f) "Mitigation bank" means a site where wetlands are restored, created, or, in exceptional circumstances, preserved expressly for the purpose of providing compensatory mitigation in accordance with the provisions of the act in advance of authorized, unavoidable impacts to wetlands.
- (g) "Mitigation banking" means the process of restoring or creating self-sustaining functioning wetlands, or, in exceptional circumstances, preserving high-quality and threatened wetlands, as prior replacement for wetlands that are expected to be unavoidably impacted by development within a watershed or ecoregion.
- (h) "Mitigation banking agreement" means a formal written agreement between the bank sponsor and the department of environmental quality that identifies all relevant establishment, operation, and management considerations of a wetland mitigation bank.
- (i) "Mitigation credit" means a unit of value generally equivalent to 1 acre of created or restored functioning wetland that may be bought and sold on the open market.

- (j) "Out-of-kind mitigation" means the replacement of unavoidably lost wetland resources with created, restored, or, in exceptional circumstances, preserved wetlands that are physically or biologically different than the wetlands that were lost. Out-of-kind mitigation may result in the replacement of different wetland functions than the functions that were lost.
- (k) "Service area" means an area in which a bank can reasonably be expected to provide appropriate compensatory mitigation for impacts to wetlands. The service area will be defined on a watershed or ecoregion basis.
- (l) "Unavoidably lost" means a wetland impact which has been approved by the department in accordance with permit review criteria specified by the act.
- (m) "Watershed" means a drainage area within which the replacement of certain wetland functions, including hydrologic, water quality, and aquatic habitat functions, may be authorized by the use of a mitigation bank. Mitigation bank watersheds are illustrated in figure 1 in R 281.961.
- (n) "Wetland creation" means the physical and biological establishment of a wetland where a wetland did not formerly exist.
- (o) "Wetland function" means the physical, chemical, or biological processes which provide benefits to the public and which are recognized by the Michigan legislature in section 30302(1)(b) of the act.
- (p) "Wetland preservation" means the protection of an ecologically critical wetland in perpetuity through the implementation of appropriate legal and physical mechanisms.
- (q) "Wetland restoration" means the reestablishment of wetland characteristics and functions at a site where they have ceased to exist through the replacement of wetland hydrology, vegetation, or soils.

R 281.952 Purpose.

- Rule 2. (1) The purpose of the wetland mitigation banking rules is to provide for the statewide establishment and operation of mitigation banks as an alternative wetland mitigation option that will protect and enhance the wetland resources of the state while expediting the regulatory process.
 - (2) Mitigation banking may benefit the state's wetland resources as follows:
- (a) By providing for the establishment of replacement wetlands in advance of wetland losses
- (b) By consolidating small wetland mitigation areas at a single location in a manner that enhances the integrity of the wetland ecosystem.
- (c) By providing for improved design of mitigation sites through more efficient use of technical resources.
- (d) By providing for and encouraging the integration of wetland creation or restoration for purposes of compensatory mitigation with watershed, ecoregion, or community resource planning.
 - (3) The use of mitigation banking may benefit a wetland permit applicant as follows:
- (a) By reducing the total permit processing time.
- (b) By reducing the cost of compensatory mitigation due to the economy of scale associated with the consolidation of individual mitigation projects.

- (c) By increasing the predictability of mitigation costs.
- (d) By providing increased certainty as to the availability of wetland mitigation sites.
- (e) By facilitating compliance with the mitigation requirements of the act.

R 281.953 Applicability.

- Rule 3. (1) Any person may establish a mitigation bank and may buy, sell, or use mitigation credits as approved by the department to meet the requirements of the act.
- (2) The department may authorize the use of credits from an approved mitigation bank to satisfy all or a part of the wetland mitigation requirements associated with any permit application in accordance with applicable statutory criteria.
- (3) The department may authorize the use of credits from an established mitigation bank only to offset the unavoidable loss of wetlands as approved in accordance with the act. Before approving the use of a mitigation bank, the department shall determine that the applicant has taken all feasible and prudent steps to avoid the loss of wetland resources and has used all practical means to minimize impacts to wetlands. The establishment of, or purchase of, credits from a mitigation bank does not eliminate the need to comply with the permit review criteria established in the act.
- (4) Site-specific functions shall be replaced on site where practical and where the department has determined that on-site replacement is environmentally preferable. In these instances, use of a mitigation bank is not appropriate.

History: 1997 AACS.

R 281.954 Mitigation banks generally.

- Rule 4. (1) A mitigation bank is a site where wetlands are restored, created, or, in exceptional circumstances, preserved expressly for the purpose of providing compensatory mitigation in advance of the unavoidable loss of wetlands authorized by the act. A mitigation bank shall be maintained in perpetuity.
- (2) The objective of mitigation banking is to provide for the replacement of chemical, physical, and biological wetland functions that are lost as a result of authorized impacts. To the extent possible, the bank shall provide multiple functions. Single function, low-quality wetlands, such as
- wastewater ponds, will not qualify as mitigation sites. The wetlands in a mitigation bank are quantified as mitigation credits that are available for use by the bank sponsor or other persons to compensate for adverse impacts.
- (3) The number of credits in a mitigation bank will normally be based on the acres of created and restored wetland in the bank after monitoring by the bank sponsor demonstrates that wetland functions have been established.
- (4) In exceptional circumstances, the preservation of certain existing wetlands may also contribute to the number of mitigation credits. Not more than 15% of the total wetland acreage in any mitigation bank shall be for the preservation of existing wetlands.

Mitigation credit for preserved wetlands shall only be given if the department determines that all of the following provisions apply:

- (a) The preserved wetlands perform exceptional physical or biological functions that are essential to the preservation of the natural resources of the state or the preserved wetlands are an ecological type that is rare or endangered.
- (b) The preserved wetlands are under a demonstrable threat of loss or substantial degradation due to human activities that are not under the control of the bank sponsor and that are not otherwise restricted by state law.
- (c) Inclusion of the preserved wetlands in a mitigation bank and implementation of other actions identified in the mitigation bank plan will serve to protect functions associated with the wetlands that would otherwise be lost. Mitigation credit for preserved wetlands meeting these criteria will be given at a rate of 0.1 (one tenth) credit for each acre of preserved wetland.
- (5) A mitigation bank shall generally be planned and managed in a watershed or ecoregion context, or both and shall include restored, created, or, in exceptional circumstances, preserved wetlands that will provide functions which meet the needs of the watershed or ecoregion, or both.
- (6) Mitigation banks may be located on either public or private lands. However, a mitigation bank shall be established on public lands only if it furthers established management objectives that have been defined by the agency responsible for managing the public land, and with the approval of the agency responsible for management of that land.
- (7) A wetland mitigation bank shall provide a minimum of 10 acres of new wetland. The new wetland may consist of multiple sites that are a minimum size of 1 acre each and shall be administered under a single banking agreement.

History: 1997 AACS.

R 281.955 Mitigation banks; establishment.

- Rule 5. (1) The establishment and use of a mitigation bank are voluntary. The permit applicant has the option of providing compensatory mitigation for a single permitted action at the time of permit issuance. A mitigation bank shall be established in accordance with the wetland mitigation banking rules in order for credits from the mitigation bank to be authorized by the department as compensatory mitigation for wetland losses authorized under the act.
- (2) A person who chooses to establish and operate a mitigation bank shall enter into a written mitigation banking agreement with the department before construction of the mitigation bank or any sale or use of credits from the bank. The agreement shall define the size of the bank, the ecological type of wetlands to be included, wetland functions to be provided, the area to be served by the mitigation bank, and the requirements for establishment, operation, and long-term maintenance by the bank sponsor. The bank sponsor shall provide the department with all of the information needed to prepare the agreement. A mitigation banking agreement shall include all of the following elements and provisions:
- (a) A legal identification of the bank sponsor.

- (b) The mitigation bank's location and size, including a legal description of the property.
- (c) Ownership of the site and documentation that the bank sponsor is authorized to use the property. If the owner is not the bank sponsor, then the owner shall sign the mitigation banking agreement.
- (d) Bank goals and objectives and the geographic area to be served. The goal statement shall indicate the types of wetlands to be developed and the types of wetland losses for which the bank is to be used.
- (e) An analysis of the ability of the site to support a diverse wetland system.
- (f) Consistency with existing watershed or ecoregion management plans.
- (g) Long-term development trends in the area and their potential impact on the long-term viability of the wetland mitigation bank.
- (h) A description of baseline conditions at the proposed bank site, including delineation of all existing surface waters or wetlands.
- (i) The site development plan.
- (j) A long-term site management plan. If the person responsible for ongoing management of the site is not the bank sponsor, then the person shall sign the mitigation banking agreement.
- (k) The accounting procedures to be used to track the availability, sale, and use of mitigation credits and the procedures for notifying the department of the sale or use of credits.
- (l) Performance standards for determining mitigation bank success and certification of credits.
- (m) A monitoring plan to evaluate the achievement of performance standards and reporting protocol.
- (n) Provisions for financial assurances to be used to complete remedial action in the event of bank default or failure, and provisions for the release of financial assurances once an approved bank is determined by the department to be self-sustaining.
- (o) Provisions for the protection of the site in perpetuity, generally through a conservation easement or deed restriction.
 - (p) Assumption of liability for construction and operation by the bank sponsor.
- (q) If the bank will also be used to meet mitigation requirements of other federal, state or local agencies, the agencies also need to sign the agreement.
- (3) Before submitting a mitigation banking proposal to the department, the bank sponsor shall notify all affected local units of government and adjacent property owners of the proposed wetland mitigation bank and shall take reasonable steps to address any objections to the project. The bank sponsor shall provide copies of any comments received and documentation of efforts to resolve local issues to the department with the mitigation banking proposal.
- (4) The bank sponsor shall obtain the necessary construction permits for the alteration of existing wetlands or surface waters and all other required federal, state, or local approvals before initiating wetland creation or restoration activities. The permit review criteria in the act will be applied in reviewing an application to construct a mitigation bank.
- (5) Nothing in these rules preempts the need to obtain local approval for construction of a wetland mitigation bank under local zoning ordinances or other local regulations.

R 281.956 Mitigation bank credits; use standards.

Rule 6. (1) In determining whether credits from a particular mitigation bank may be used to meet the requirements of the act, the department shall consider all of the following factors:

- (a) The location of the mitigation bank relative to the permitted wetland impact.
- (b) The wetland types represented in the bank.
- (c) The sustainable wetland functions provided by the bank.
- (d) The area of wetland provided as mitigation relative to the impact.
- (2) In-kind mitigation is required unless the department determines that it is not practical or that in-kind mitigation is not essential and that out-of-kind wetland mitigation provides a greater benefit to the wetland resources of the state. The department may consider the use of an out-of-kind wetland mitigation bank based on 1 or more of the following criteria:
- (a) The types of wetlands restored or created in the wetland mitigation bank help to restore the historic balance of wetland types within the watershed or ecoregion.
- (b) The mitigation bank provides particular wetland functions that meet defined resource management needs and goals articulated in an established watershed or ecosystem plan and will contribute to the overall health of the ecosystem.
- (c) The mitigation bank supports a diverse wetland complex that offsets cumulative primary and secondary impacts within the watershed.
- (d) The mitigation credits will be used to offset the loss of wetland types that cannot readily be recreated in a manner that is consistent with the permit review criteria of the act.
- (3) The service area of a mitigation bank shall be appropriate to the functions provided. The department shall use all of the following criteria in defining the service area of a mitigation bank:
- (a) Functions that are dependent upon the location of the wetland in the subwatershed shall be replaced by mitigation credits from a bank or other site within the same subwatershed.
- (b) Wetland functions which are watershed dependent, but which are not specific to a subwatershed, will be replaced in the same watershed as the impact.
- (c) Wetland functions, such as migratory bird habitat, that are not dependent upon location in the watershed shall be replaced either within the same watershed or within the same ecoregion.
- (d) The mitigation required by an individual permit may be split so that location-specific wetland functions are replaced on site or within the same subwatershed area, while other functions are replaced through a bank that has a larger defined service area.
- (4) When credits from a mitigation bank are used, the mitigation ratio shall be determined based on the nature of the permitted wetland loss in accordance with R 281.925.

History: 1997 AACS.

R 281.957 Certification and approval of mitigation credits.

- Rule 7. (1) Before use of mitigation credits, the bank sponsor shall assess the establishment of wetlands in accordance with a monitoring program defined in the mitigation banking agreement and shall certify the extent to which performance standards defined in the mitigation banking agreement have been met. The design of the monitoring program shall measure the achievement of performance standards associated with the targeted wetland functions. Monitoring shall begin at least 1 year before use of credits. Once credits in the bank are used, monitoring shall continue on an annual basis until performance standards for the full establishment of the bank are met. Monitoring parameters shall include all of the following:
 - (a) Hydrology.
 - (b) Plant community structure.
 - (c) Animal community structure.
 - (d) Design acreage.
 - (e) Other measures as defined in the mitigation banking agreement.
- (2) The bank sponsor shall certify that appropriate wetland functions have been established in the mitigation bank pursuant to the banking agreement by submitting a report to the department that includes all of the following information:
- (a) All data collected during the monitoring program.
- (b) An evaluation of the status of wetlands in the mitigation bank as compared to design criteria.
- (c) A list of the number and type of credits for which approval is requested.
- (3) The department shall approve or disapprove the certification of the bank sponsor within 60 days of receipt of the sponsor's report. The department may determine that mitigation credits cannot be approved because the wetlands have not achieved design wetland functions or because of a lack of adequate information to document wetland functions. The department's evaluation may include an on-site inspection of the mitigation bank site if deemed necessary. If the department determines that wetland conditions have been established in accordance with the mitigation banking agreement, then the department shall issue a letter to the bank sponsor approving the number and type of wetland credits that are available for use and shall list the approved credits in a mitigation bank registry as required in R 281.958.
- (4) The department shall not authorize the use of credits from a mitigation bank in advance of initial restoration or creation of wetlands in the bank except as provided in R 281.960. The department may authorize the use of approved credits from the mitigation bank in accordance with the following schedule:
- (a) The use of 50% of approved mitigation bank credits will be allowed after the department determines that construction has been completed in accordance with plans and specifications included in the banking agreement and design hydrology has been achieved and maintained for at least 1 calendar year.
- (b) The use of an additional 25% of total credits will be allowed when the mitigation bank wetland plant community achieves 50% of design cover based on performance standards defined in the mitigation banking agreement.

- (c) The use of the final 25% of credits will be allowed when the created and restored wetlands in the bank are fully functional and meet performance standards defined in the mitigation banking agreement.
- (5) If the department agrees to inclusion of preserved wetlands in a mitigation bank in accordance with R 281.954, then the bank sponsor shall provide documentation of permanent protection of the wetlands through appropriate legal instruments and shall complete and document all other steps defined in the mitigation banking agreement needed to permanently protect the preserved wetland area before department approval of the use of the credits.
- (6) The department may audit a mitigation bank at any time to evaluate the status of the wetlands in the bank and to confirm the number of mitigation credits available. The department may inspect the physical premises of the bank at all reasonable times.

R 281.958 Registry of mitigation bank credits.

- Rule 8. (1) The department shall maintain a registry of established wetland mitigation banks and approved mitigation credits to track the generation and use of credits and to provide information to the public regarding the availability of credits. The mitigation bank registry shall include all of the following information:
- (a) A general description of the bank.
- (b) The total number of credits (acres) in the bank, the number previously used to meet mitigation requirements, the number offered for sale by the bank sponsor, and the number sold.
- (c) The number of acres of each major ecological type of wetland.
- (d) The defined service area of the bank.
- (e) The name and address of the bank sponsor.
- (f) The date of bank establishment by mitigation banking agreement, and the date of approval of mitigation credits.
- (g) An identification code for each approved mitigation bank.
- (2) Within 60 days of the sale of approved mitigation bank credits, the bank sponsor shall report the sale and the per credit sale price to the department. The sale price shall not be included in the registry.
- (3) The department shall list approved mitigation credits in the mitigation bank registry. Inclusion of uplands in mitigation bank plans is encouraged and may be essential to fully meet functional goals, however, uplands will not be included in the mitigation credits available in the bank, except as provided in R 281.960.
- (4) All information contained in the registry shall be readily available to the public.

History: 1997 AACS.

R 281.959 Long-term management and protection of wetland mitigation banks.

Rule 9. (1) The bank sponsor shall assure, through legally binding instruments, including leases, contracts, deed restrictions, or conservation easements, that the mitigation bank shall be maintained in perpetuity. Restrictive covenants that provide

for long-term management shall be included in any lease, sale, or other conversion and shall run with the property.

- (2) Long-term management is the responsibility of the mitigation bank sponsor and shall include site maintenance, monitoring of wetland conditions, remedial action needed to fully establish and maintain wetland characteristics in accordance with permit requirements, and notification of subsequent owners of limitations on the property. The bank sponsor shall submit a long term management plan as part of the mitigation banking agreement. Responsibility for the long-term management of a wetland mitigation bank may be transferred through the sale or lease of the property or through an agreement with another person if the department approves of the transfer and if the mitigation banking agreement is amended accordingly.
- (3) The bank sponsor may enter into a legal agreement with a state or local agency or a nonprofit resource management organization to manage the mitigation bank for a particular purpose as defined in the banking agreement. In this instance, the long-term management entity shall sign the banking agreement.
- (4) Before the use of any credits from an approved wetland mitigation bank, the bank sponsor shall provide financial assurances in the form of a performance bond, irrevocable letter of credit, or equivalent legal instrument that is sufficient to guarantee that mitigation bank establishment, monitoring, and, if necessary, remedial action will be carried out in accordance with the mitigation banking agreement. The mitigation banking agreement shall define the form and amount of the financial assurance to be provided and shall also define the temporal limits on the financial assurances tied to the achievement of performance standards that define the establishment of a fully functional, self-sustaining wetland. If the wetland by design is not self-sustaining, that is, if maintenance is required for dikes, dams, water control structures, or other components essential to the preservation of functional wetlands on the site, then the bank sponsor shall make financial provisions for perpetual management maintenance. A state agency that sponsors a mitigation bank may enter into a formal interagency agreement with the department to guarantee long-term protection and management of the mitigation bank instead of providing financial assurances.

History: 1997 AACS.

R 281.960 State priority wetland restoration areas.

Rule 10. (1) The department may, in cooperation with the department of natural resources, designate priority wetland restoration areas in large former wetland complexes which have been impacted by significant historic loss or degradation of wetlands and which have a high potential for successful wetland restoration. Areas so designated may include either public or private lands, but must have the potential to provide the public with vital wetland functions after ecologically sensitive restoration of wetland areas.

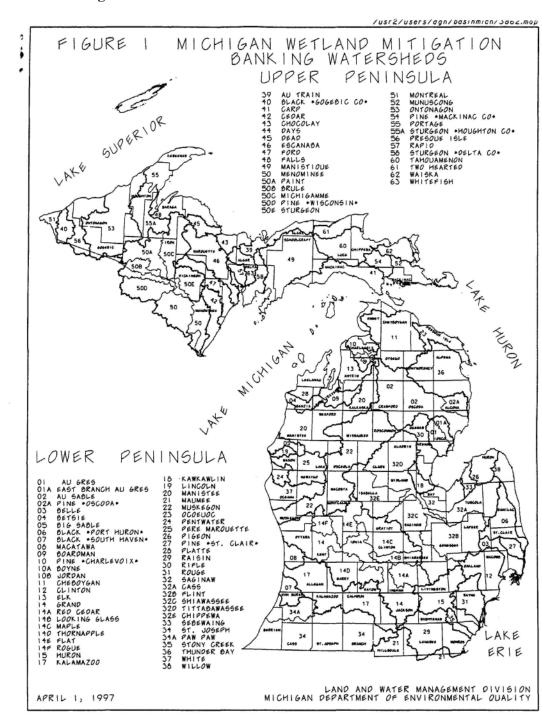
- (2) The department shall develop a management plan for each designated priority wetland restoration area and shall consider the concerns of the department of natural resources and the potential of the area to provide critical wetland for any of the following:
 - (a) Habitat.

- (b) Wildlife and fish production.
- (c) Flood control.
- (d) Water quality protection.
- (e) Groundwater recharge.
- (f) Recreation. Management plans which impact lands administered by the department of natural resources are subject to their approval.
- (3) The department may enter into partnerships with other state agencies, local units of government, or private parties to promote the restoration and protection of wetlands within a priority wetland restoration area in accordance with the management plan. The department may provide funding or in-kind services to the partnership to support the management plan.
- (4) Any person may establish a wetland mitigation bank within a priority wetland restoration area. All of the general requirements that apply to mitigation banks apply to mitigation banks established in priority areas, except for the special provisions specified in subrules (5) and (6) of this rule. The department may assist in the establishment of a wetland mitigation bank by identifying state lands suitable for use in the bank or by providing technical assistance.
- (5) The department may establish a mitigation bank within a priority wetland restoration area if a mitigation bank is not established by other parties within 1 year after designation of the priority wetland restoration area or if existing banks do not provide adequate capacity or wetland functions.
- (6) A wetland mitigation bank established within a priority wetland restoration area may utilize any or all of the following incentives if approved by the department in the mitigation banking agreement:
- (a) Up to 15% of planned wetland credits may be used before the establishment of wetland conditions if the department has approved the site plan and signed the mitigation banking agreement, the bank sponsor has obtained all state and local permits and approvals required for construction
- of the mitigation bank, and the bank sponsor has provided adequate financial assurances to ensure the timely establishment of wetland functions.
- (b) The department may approve partial mitigation credit for uplands within the priority wetland restoration area mitigation bank that are vital to the successful functioning of wetlands in the mitigation bank. The condition of these uplands shall be protected under a conservation easement or equivalent instrument. The mitigation banking agreement shall specify the credit received for uplands based on the extent to which the uplands directly enhance or maintain the integrity of the aquatic ecosystem, but in no case shall more than 0.5 credits be authorized for each acre of upland. Not more than 10% of the total acreage for which mitigation credit is given in a mitigation bank shall be upland.
- (c) The department may approve mitigation credit for the preservation of certain existing wetlands which provide exceptional functions or which represent rare wetland types, such as lakeplain wet prairie. Not more than 25% of the wetland acreage approved in a priority wetland restoration area mitigation bank shall be for the preservation of existing wetlands. The incentives specified in this subrule do not apply to any other mitigation bank.

R 281.961 Figure 1; Michigan wetland mitigation banking watersheds.

Rule 11. Figure 1 reads as follows:

**** See "Figure below" ****



History: 1997 AACS.