

# Broad Incidental Take Permit/Authorization for Common Activities

## Mussel Relocations (*all state listed mussel species*)

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### Background

The Broad Incidental Take Permit/Authorization for Common Activities, as provided for under s. 29.604 Wis. Stats., allows for the incidental taking (mortality) of certain endangered and threatened species that may occur as a result of activities occurring regularly across the landscape. The Department recognizes that mussel relocations are often required under individual incidental take permits/authorizations with similar minimization and mitigation measures, and therefore has issued this broad incidental take permit (used by non-state agencies and individuals) and broad incidental take authorization (used by state agencies) to cover this regularly occurring activity if the associated conservation measures are implemented. An incidental take permit or authorization is typically issued on a project-by-project basis, however a broad incidental take permit/authorization (BITP/A) was created for this situation so that an application, permit fee and public notice period is not required for each individual project.

*Please note that this BITP/A for Common Activities does not legally cover a project unless all conditions listed below (project definition, process, reporting and conservation measures) are met.*

*Additional federal approvals for species that are both state and federally listed may also be needed.*

### Project Definition

This BITP/A covers relocating mussels from a project area where take could occur to a location outside of the impact area. These mussel relocations may occur in conjunction with a variety of projects, including bridge replacements, dam repairs, rip rap or seawall projects, instream habitat projects, stream crossings (fords), etc.

### Process

The first step in determining whether a mussel relocation is necessary is to have an [Endangered Resources \(ER\) Review](#) or [Certified ER Review](#) conducted. Please note that if you are requesting another DNR permit or approval (e.g., Chapter 30 Permit, Stormwater Permit), the ER Review may be conducted as part of this process. If an ER Review or Certified ER Review has indicated the likely presence of threatened or endangered mussels within the project area and avoidance is not possible, this Broad Incidental Take Permit/Authorization (BITP/A) can be utilized.

If this process is not followed, the property owner and/or project applicant are liable for any and all take that may occur.

## Reporting

In order for a project to be covered under this BITP/A, all measures listed below under “Conservation Measures” must be followed. This includes submitting a Relocation Plan prior to beginning the relocation and a closing report within 60 days of completion of the project. If project activities cannot follow the measures below, the project does not qualify for a BITP/A and must apply for an [individual Incidental Take Permit/Authorization](#).

## Conservation Measures

All projects conducting mussel relocations must submit a **Relocation Plan** to the Endangered Resources Review Program ([DNRRERReview@wi.gov](mailto:DNRRERReview@wi.gov)) or appropriate [ER Review Liaison](#) and have it approved prior to beginning the relocation.

The Relocation Plan must include the following project-specific information:

- Project Name
- Project Location (e.g., address, GPS location, Township/Range/Section)
- Planned date(s) of mussel relocations
- Map indicating the location and extent of both temporary and permanent instream disturbance
- Map indicating the transplant location if determined prior to the Relocation Plan submittal
- Possible mitigation, marking, monitoring

In addition to the project-specific information listed above, the following measures are required of all projects and must be included in the Relocation Plan:

- **Relocation Team**: The relocation team provides personnel and equipment needed to complete all Conservation Measures in this document and the Relocation Plan. Sufficient staff must be available to ensure safety and quality of work and minimize stress to the mussels during all phases of the relocation effort. A malacologist experienced in unionid collection and monitoring techniques will coordinate collection and relocation efforts and monitoring as part of the relocation team, when required. The malacologist must be familiar with the identification of Wisconsin unionid mussel fauna and have expertise in the identification of rare species. **In addition, the relocation team will need state/federal permits to handle the mussels.**
- **Timing**: Relocations will occur in a timeframe that allows completion of all relocation work prior to initiation of activities that impact the streambed. This is to ensure that mussels do not move back into the relocation area before construction is initiated. The relocation schedule may be modified to occur in advance of project activities if mussels are not expected to move into the impact area (i.e., mussel moved in the late fall for an activity starting in early spring).
- **Water Temperature**: To minimize thermal stress to the mussels, air temperatures should be above 32°F and water temperature should be above 40°F.
- **Impact Area Delineation**: Mussels will be relocated from all areas of temporary or permanent instream impact. If the impact is a bridge, the new bridge structure and any temporary structures used to construct the bridge (i.e., causeways, temporary bridge, barging staging areas) should be

considered in the area of impact. All impact areas must include an appropriate buffer as dictated by substrate and flow conditions at that site. The impact area should be clearly marked, and the markers may remain in place throughout the length of the project (not just the relocation) if deemed necessary (*determined on a project-by-project basis*). This is to ensure that impacts to the streambed are contained within the areas where mussels were removed.

- Mussel Collection from the Impact Area: Following delineation of the impact area, the relocation team will establish transects or a grid within the collection area. All mussels in the impact area will be collected. Collecting from downstream to upstream is recommended as the most efficient approach. All mussels will be collected into mesh bags that will be maintained in the water. The number of mussels collected in each bag will be based on the size and number of mussels and adjusted to avoid overcrowding. All areas will be traversed at least twice to ensure all or an acceptable percentage of the total number of mussels within the area are collected.
- Holding, Processing & Transport of Mussels: Following collection of mussels from the substrate, the mussels will be maintained in water at ambient temperature during holding and subsequent transport to the relocation site. Out of water time during processing should be kept to the minimum required to identify and process. Water temperatures should be monitored throughout the relocation. At a minimum, all mussels collected will be identified, counted, and relocated. If required (*determined on a project-by-project basis*), mussels may also be measured, sexed, aged and/or uniquely marked on one or both valves. Gravidity of females should be noted only if appropriate and conducted cautiously.
- Transplant Area Delineation: The location of the transplant area will be approved in the Relocation Plan (listed above). The transplant area must include all of the following:
  1. Be close to the collection area with sufficient habitat to support a viable population.
  2. Have similar or better water quality, substrate, and fish fauna to the collection site.
  3. Not be influenced by factors detrimental to unionids (e.g., point discharge, dredging, navigation).
  4. Have an existing or historical mussel population with similar species composition.
  5. If required (*determined on a project-by-project basis*), samples may be collected within the transplant site to determine existing unionid density and substrate composition before relocating. Mussels collected during sampling will be returned to the transplant area.
- Placement of Mussels at Transplant Site: All endangered/threatened mussel species will be hand placed in a natural position within the substrate. The remaining mussels (not endangered/threatened) may be distributed by hand along the surface of the substrate above suitable substrate, or hand placed in the substrate. Mussels should be distributed evenly (by boat, diver, or wading) in suitable habitat. An initial swimover may be required at completion of the relocation efforts to make sure mussels are distributed evenly and to collect any fresh dead from initial mortality.

### Closing Report

A closing report must be submitted to the Endangered Resources Review Program ([DNRERReview@wi.gov](mailto:DNRERReview@wi.gov)) or appropriate [ER Review Liaison](#) **within 60 days of completion of the mussel relocation**. The closing report must include the following information:

- Project Name
- Project Location (e.g., address, GPS location, Township/Range/Section)
- Date(s) of mussel relocations
- Map indicating the location and extent of both temporary and permanent instream disturbance
- Map indicating the transplant location
- Species observed and any additional information collected
- Number of individuals of each species observed