

## Chapter NR 345

## DREDGING IN NAVIGABLE WATERWAYS

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**Note:** Chapter NR 345 was created as an emergency rule effective April 19, 2004; chapter NR 345 was repealed and recreated by emergency rule effective August 24, 2004.

**NR 345.01 Purpose.** The purpose of this chapter is to establish reasonable procedures and limitations for exempt activities, general permits and individual permits for removal of material from the beds of navigable waterways as regulated under s. 30.20, Stats., in order to protect the public rights and interest in the navigable, public waters of the state as defined in s. 30.10, Stats.

**History:** CR 04-087: cr. Register April 2005 No. 592, eff. 5-1-05.

**NR 345.02 Applicability.** This chapter applies to removal of material from the bed of navigable waterways under s. 30.20 (1), (1g) (b), (1m), (1t) and (2), Stats. Any person that intends to remove material from the bed of a navigable waterway shall comply with all applicable provisions of this chapter and any permit issued under this chapter.

**Note:** For most dredging projects, the discharge of carriage return water is regulated by ch. 283, Stats., and requires a Wisconsin pollutant discharge elimination system (WPDES) permit. Similarly, for most dredging projects, the disposal of dredged material is regulated by ch. 289, Stats., and requires authorization under ch. NR 500. In accordance with 2003 Wisconsin Act 118, removal of material from non-navigable waterways is no longer regulated under s. 30.20, Stats.

**History:** CR 04-087: cr. Register April 2005 No. 592, eff. 5-1-05.

**NR 345.03 Definitions.** (1) "Area of special natural resource interest" has the meaning in s. 30.01 (1am), Stats., and as identified by the department in s. NR 1.05.

**Note:** "Area of special natural resource interest" means any of the following:

- (a) A state natural area designated or dedicated under ss. 23.27 to 23.29, Stats.
- (b) A surface water identified as a trout stream by the department under s. NR 1.02(7).
- (bm) A surface water identified as an outstanding or exceptional resource water under s. 281.15, Stats.
- (c) An area that possesses significant scientific value, as identified by the department in s. NR 1.05.

Information and lists can be obtained by contacting the department, or found on the department's website at [www.dnr.wi.gov](http://www.dnr.wi.gov), under the topic "Waterway and Wetland Permits".

(2) "De minimus" activity means the dredging of less than 2 cubic yards in a calendar year from a specific waterbody or disturbance of bottom material during the manual removal of aquatic plants that meet the requirements of s. NR 109.06 (2).

**Note:** Where the bed material is privately owned, the permission of the property owner is required.

(3) "Department" means the department of natural resources.

(4) "Dredged material" means any material removed from the bed of a navigable waterway by dredging.

(5) "Dredging" means any part of the process of the removal or disturbance of material from the bed of a navigable waterways, transport of the material to a disposal, rehandling or treatment facility; treatment of the material; discharge of carriage or interstitial water; and disposal of the material. For the purpose of ch. 30, Stats., dredging does not include "de minimus" activities as defined in sub. (2).

(6) "Final stabilization" means that all land disturbing construction activities at the site have been completed and that a uniform perennial vegetative cover has been established with a density of at least 70% of the cover for the unpaved areas and areas not covered by permanent structures or that employ equivalent permanent stabilization measures.

(7) "Hazardous substance" has the meaning specified in s. 289.01 (11), Stats.

**Note:** Notwithstanding substances that meet the definition of hazardous substances in s. 289.01 (11), Stats., for the purpose of removing material from the bed of navigable streams and lakes, "hazardous substances" include all chemicals present at concentrations at, or greater than the *threshold effect concentration* as published in Consensus Based Contaminated Sediment Evaluation (DNR 2001).

(7k) "Jetting" means the action of dredging bottom sediments, including disturbing or resuspending sediment, while using water or air forced through a hose by means of a pump or vacuum to dislodge and collect aquatic plants, tubers or seeds.

(8) "Manual dredging" means removal or disturbance of bottom material by hand or using a hand-held device without the aid of external or auxiliary power. Manual dredging is often associated with the collection of aquatic insects for bait, removal of nuisance vegetation or debris and the panning for gold or other material. For the purpose of ch. 30, Stats., manual dredging does not include "de minimus" activities as defined in sub. (2).

(9) "Navigable waterway" means any body of water with a defined bed and bank, which is navigable under the laws of the state. In Wisconsin, a navigable body of water is capable of floating the lightest boat or skiff used for recreation or any other purpose on a regularly recurring basis.

**Note:** This incorporates the definition at s. 30.01(4m), Stats., and current case law, which requires a watercourse to have a bed and banks, *Hoyt v. City of Hudson*, 27 Wis. 656 (1871), and requires a navigable waterway to float on a regularly recurring basis the lightest boat or skiff, *DeGavner & Co., Inc. v. DNR*, 70 Wis. 2d 936 (1975); *Village of Menomonee Falls v. DNR*, 140 Wis. 2d 579 (Ct. App. 1987).

(10) "Ordinary high water mark" means the point on the bank or shore up to which the presence and action of water is so continuous as to leave a distinct mark either by erosion, destruction of terrestrial vegetation or other easily recognizable characteristic.

(11) "Previously dredged area" means an area below the ordinary high water mark of a navigable waterway from which material was historically removed.

(12) "Riparian" means an owner of land abutting a navigable waterway.

(13) "Stabilize" means the process of making a site steadfast or firm, minimizing soil movement by the use of practices such as mulching and seeding, sodding, landscaping, paving, graveling or other appropriate measures.

(14) "Utility crossing" means dredging by plow, vibratory plow or open trench methods, below the ordinary high water mark of a navigable waterway for the installation of cables, conduits or pipelines by an entity providing service for conveying any fluids, gases, electricity and communications or other public or private utility functions.

**History:** CR 04-087: cr. Register April 2005 No. 592, eff. 5-1-05; CR 05-037: cr. (7k) Register December 2005 No. 600, eff. 1-1-06.

**NR 345.04 Dredging. (1) EXEMPTIONS.** (a) *Procedures.* Exemptions shall be processed according to the procedures in ch. NR 310.

(b) *Applicable activities.* The dredging of a farm drainage ditch which was not a navigable stream before ditching that meets all of the standards in par. (c), is exempt from the permit requirements of s. 30.20 (1) and (2), Stats., in accordance with s. 30.20 (1g) (a), Stats., manual dredging that meets all of the standards in

par. (d) is exempt from the permit requirements of s. 30.20 (1) and (2), Stats., in accordance with s. 30.20 (1g) (b) 2., Stats.

**Note:** Eligibility for an exemption or general permit does not automatically result in a federal permit or state water quality certification for fill in wetlands. Some projects involving minimal wetland fill may be eligible for authorization under a U.S. Army Corps of Engineers general permit which has already been granted state water quality certification [see non-reporting and 404 GP activities in the table at <http://www.mvp.usace.army.mil/docs/regulatory/WIMATRIX.htm>] or a general permit under s. 281.36(8), Stats. (under development) All other projects affecting wetlands will require individual water quality certification including public notice as required by s. 401, Federal Clean Water Act, and s. 281.36 (2), Stats., and carried out under chs. NR 103 and 299. For further instructions, see the department's website at [www.dnr.wi.gov](http://www.dnr.wi.gov) under the topic "Waterway and Wetland Permits."

(c) *Standards for dredging of a farm drainage ditch which was not a navigable stream before ditching.* Dredging of a farm drainage ditch which was not a navigable stream before ditching is eligible for an exemption subject to the following limitation:

1. The project is located in a navigable stream that does not have stream history.
2. The applicant has notified the department of the proposed project 10 days prior to dredging.
3. The dredging may not have a long-term adverse effect on cold-water fishery resource or may not destroy cold water or warm water fish spawning beds or nursery areas.
4. The dredged material may not be temporarily or permanently placed in a wetland, floodway or below the ordinary high water mark of a navigable waterway.
5. The person conducting the dredging is the riparian owner or has permission of the riparian owner to remove bottom material.

(d) *Standards for manual dredging activities.* Manual dredging is eligible for an exemption subject to the following limitations:

1. The dredging operation meets the definition of manual dredging in s. NR 345.03 (8).
2. The dredging may not be located in an area of special natural resource interest, or where there are public rights features as described in s. NR 1.06, or in perennial tributaries to surface waters identified as trout streams by the department in s. NR 1.02 (7).
3. The dredged material may not contain any hazardous substance as defined in s. NR 345.03 (7).
4. For each riparian property, the amount of bottom material dredged from a specific waterbody may not exceed 100 square feet in surface area and one foot in depth in a calendar year.
5. Any dredged material removed from the waterbody may not be temporarily or permanently placed in a wetland, floodway or re-deposited below the ordinary high water mark of a navigable waterway.
6. Erosion control measures shall meet or exceed the technical standards for erosion control approved by the department under subch. V of ch. NR 151. Any area where topsoil is exposed during construction shall be immediately seeded and mulched or ripped to stabilize disturbed areas and prevent soils from being eroded and washed into the waterway.

**Note:** These standards can be found at the following website: <http://dnr.wi.gov/org/water/wm/nps/stormwater/techstds.htm>

7. Mechanical equipment may not be operated below the ordinary high water mark or on the bed of a navigable waterway.

8. The applicant is the riparian owner or has permission of the riparian owner to remove bottom material.

**Note:** When the state is the riparian property owner, the requirements of s. NR 45.04 shall be met.

(e) *Standards for dredging necessary to place or maintain an exempt structure under s. 30.20 (1g) (b) 1., Stats.* The standards for this activity are contained in the rules that describe the exempt structures.

**Note:** Chapters NR 320, 323, 326, 328 and 329 contain rules regarding various exempt activities including culvert replacement, habitat structures, piers, boat shelters, riprap replacement, intake and outfall structures and dry fire hydrants.

(f) *Permit required.* 1. Activities which do not meet the standards in par. (c), (d) or (e) are determined ineligible for an exemption by the department shall require a general permit or contract or individual permit or contract.

2. The department has the authority under s. 30.20 (1m), Stats., to require a permit in lieu of exemption.

(2) GENERAL PERMITS. (a) *Procedures.* 1. General permits shall be processed according to the procedures in ch. NR 310.

2. If the department determines that a dredging proposal submitted under this section has the potential to impact an endangered or threatened species in accordance with s. 29.604, Stats., the application shall be deemed incomplete. The department may not consider the application complete or issue a general permit until the applicant submits documentation to demonstrate one of the following:

- a. The dredging project avoids impacts to the endangered or threatened species in accordance with s. 29.604, Stats.
  - b. The dredging project has received an incidental take authorization under s. 29.604, Stats.
3. If the applicant modifies their dredging project plans to meet the requirements of subd. 2., the modified plans shall be submitted before the department can consider the application complete or issue a general permit.

4. General permit applications under par. (i) for licensed aquatic nursery growers may be submitted to the department of agriculture, trade and consumer protection. Applications shall be considered received on the date they are received by the department.

**Note:** Applications may be obtained from the department's regional headquarters or service centers, or on the department's website at [www.dnr.wi.gov](http://www.dnr.wi.gov) under the topic "Waterway and Wetland Permits." DATCP has agreed to send application forms and instructions provided by the department to aquatic nursery growers along with license renewal forms. DATCP will forward all applications to the department for processing.

(b) *Applicable activities.* Dredging that meets all of the standards in pars. (c) and either (d), (f), (h) or (i) is eligible for a general permit under ss. 30.20 (1t) (b) and 30.206, Stats. Dredging that meets all of the standards in pars. (c) and either (e) or (g) is eligible for a general permit under ss. 30.20 (1t) (a) and (am) and 30.206, Stats.

**Note:** Eligibility for an exemption or general permit does not automatically result in a federal permit or state water quality certification for fill in wetlands. Some projects involving minimal wetland fill may be eligible for authorization under a U.S. Army Corps of Engineers general permit which has already been granted state water quality certification [see non-reporting and 404 GP activities in the table at <http://www.mvp.usace.army.mil/docs/regulatory/WIMATRIX.htm>] or a general permit under s. 281.36(8), Stats. (under development) All other projects affecting wetlands will require individual water quality certification including public notice as required by s. 401, Federal Clean Water Act, and s. 281.36 (2), Stats., and carried out under chs. NR 103 and 299. For further instructions, see the department's website at [www.dnr.wi.gov](http://www.dnr.wi.gov) under the topic "Waterway and Wetland Permits."

(c) *General permit standards.* In order to be eligible for a general permit, projects must meet all of the general permit standards in par. (c) in addition to the specific activity standards in par. (d) or (e).

1. The applicant shall provide information that the dredged material does not contain any hazardous substance as follows:

- a. Through the collection and laboratory analysis of the dredged material in compliance with ch. NR 347; or
- b. Through the review of historical dredge material information from the vicinity of the proposed project that was collected and analyzed in accordance with ch. NR 347; or
- c. By assessing the potential for hazardous substances to be present based upon the characteristic of the watershed, industrial and municipal discharges to the waterbody and dredge material data from similar waterways.

2. To protect fish habitat during spawning seasons, the dredging may not occur during the following time periods:

- a. For trout streams identified under s. NR 1.02 (7) and perennial tributaries to those trout streams, September 15 through May 15.

b. For all waters not identified in subd. 2. a. and located south of state highway 29, March 15 through May 15.

c. For all waters not identified in subd. 2. a. and located north of state highway 29, April 1 through June 1.

d. The applicant may request that the requirement in subd. 2. a., b. or c. be waived by the department on a case-by-case basis, by submitting a written statement signed by the local department fisheries biologist, documenting consultation about the proposed dredging project, and that the local department fisheries biologist has determined that the requirements of this paragraph are not necessary to protect fish spawning for the proposed project.

3. Any dredged material removed from the waterbody may not be permanently placed in a wetland, or floodway or re-deposited below the ordinary high water mark of a navigable waterway, except as provided for as backfill in accordance with par. (d) 9.

4. Dredged material may be temporarily placed for not more than 8 hours within a wetland or below the ordinary high water mark of a navigable waterway if the material is placed on matting with appropriate erosion control to prevent runoff. Any areas used for temporary placement shall be completely restored within 24 hours.

5. The project shall be conducted in a manner that prevents dispersal of sediment away from the project site. Temporary control measures such as silt curtains shall be used as needed, and shall be installed prior to dredging and removed from the waterbody no more than 24 hours after dredging is complete. Any temporary control measures shall follow all state lighting requirements and may not obstruct navigation.

6. Dredging shall be conducted to minimize the re-suspension of sediment to the maximum extent practicable in accordance with the following:

a. For trout streams identified under s. NR 1.02 (7) and perennial tributaries to those trout streams, the total suspended solid concentrations may not exceed 40 mg/L.

b. For all waters not identified in subd. 6. a., the total suspended solid concentrations may not exceed 80 mg/L.

7. Erosion control measures shall meet or exceed the technical standards for erosion control approved by the department under subch. V of ch. NR 151. Any area where topsoil is exposed during construction shall be immediately seeded and mulched or ripped to stabilize disturbed areas and prevent soils from being eroded and washed into the waterway.

**Note:** These standards can be found at the following website: <http://dnr.wi.gov/water/wm/nps/stormwater/techstds.htm>

8. Unless part of a permanent stormwater management system, all temporary erosion and sediment control practices shall be removed upon final site stabilization. Areas disturbed during removal shall be restored.

9. All equipment used for the project shall be de-contaminated for invasive and exotic species prior to use and after use. All equipment that comes in contact with infested waters, including but not limited to tracked vehicles, barges, boats, silt or turbidity curtain, sheet pile and pumps shall be thoroughly disinfected.

10. If the project location is within the riparian zone, the applicant is the riparian owner or has permission of the riparian owner to dredge the bottom material.

(d) *Standards for installation of utility crossing.* Dredging to install a utility crossing is eligible for a general permit subject to all of the following limitations:

1. The location of the utility crossing shall be located to reduce environmental impacts by minimizing the disturbance of the following: adjacent wetland corridors, banks with steep slopes and fish and wildlife habitat within the waterway.

2. The dredging may occur only to cross a navigable stream no more than 35 feet across.

3. The general permit may authorize up to 10 waterway crossings that are part of a single project.

4. The size of the open trench or plowed channel may not exceed 48 inches in width in perennial streams and 72 inches in intermittent streams where no flow is present during construction.

5. The dredging shall conform to the dimensions and elevations shown on the application.

6. All equipment used for the project shall be designed and properly sized to minimize to the extent practicable, the amount of sediment that is resuspended into the water.

7. Any area within 75 feet of the ordinary high water mark, where topsoil is exposed during construction, shall be stabilized within 24 hours to prevent soil from being eroded and washed into the waterway.

8. During construction and installation of the utility crossing, the entire volume of the stream flow shall be maintained downstream from the project site.

9. During excavation of the trench, dredged material may be temporarily stockpiled in an upland area provided it is separated from the stream by an installed silt fence or a protective, vegetated buffer strip not less than 20 feet in width.

10. The trench excavation, filling and installation of utility crossing the below the ordinary high mark shall be completed within an 8-hour period.

11. In perennial streams, clean, washed gravel or crushed stone or clean river stone originally removed from the utility trench or plowed channel, shall be used as backfill material to replace the excavated material. In intermittent streams with no flow present, the originally removed material may be used as backfill material for the dredged trench if the disturbed site is immediately stabilized.

12. When the dredging is complete, the streambed contours shall be the same as the pre-construction contours.

(e) *Standards for maintenance dredging in established drainage districts.* Dredging to maintain a district drain which is part of a drainage district established under ch. 88, Stats., is eligible for a general permit subject to the following limitations:

1. Unless the department previously authorized the project under s. 30.20, Stats., the dredging may not be located in an area of special natural resource interest.

2. Unless the department previously authorized the project under s. 30.20, Stats., the dredging may not be located where there are public rights features as described in s. NR 1.06.

3. Dredging shall comply with s. ATPC 48.32.

4. Maintenance of the district ditch and any structures in the ditch shall comply with the established specifications and compliance plan under ss. ATPC 48.20 and 48.22.

5. Dredging may not exceed the volume or extend beyond the dimensions of the previously dredged project.

6. The total amount of material removed from the area shall be less than 3000 cubic yards or, if greater than 3000 cubic yards, a previous environmental assessment or environmental impact statement shall meet the requirements of s. NR 150.20 (2) (c).

(f) *Standards for manual dredging.* 1. A general permit, subject to all of the following limitations may authorize manual dredging activities that do not meet the exemption standards in s. NR 345.04 (1) (d).

2. The dredging operation meets the definition of manual dredging in s. NR 345.03 (5).

3. For each riparian property, the amount of bottom material removed from a waterbody may not exceed 10 cubic yards in a calendar year.

4. The project may not be located where there are public rights features as described in s. NR 1.06.

**Note:** When the state is the riparian property owner, the requirements of ch. NR 45 shall be met.

(g) *Standards for maintenance dredging of previously dredged areas.* Maintenance dredging of material from an area from which

material has previously been removed is eligible for a general permit subject to all of the following limitations:

1. Unless the department previously authorized the project under s. 30.20, Stats., the dredging may not be located in an area of special natural resource interest, or where there are public rights features as described in s. NR 1.06.

2. The total amount of material removed from the area shall be less than 3000 cubic yards or, if equal to or greater than 3000 cubic yards, a previous environmental assessment or environmental impact statement shall meet the requirements of s. NR 150.20 (2) (c).

3. Dredging may not exceed the volume or extend beyond the dimensions of the previous dredge project.

4. The applicant has provided information that the area meets the requirements of "previously dredged area" as follows:

a. The applicant can demonstrate that previous removal of material was authorized by the department; or

b. The applicant can demonstrate historical information documenting the previous removal of material including the date of removal, the volume of material removed and location of the material disposal.

5. Unless the dredging project is for the removal of material associated with maintenance of a harbor or marina located on Lake Michigan or Superior, the material removed may not exceed 50,000 cubic yards.

(h) *Standards for jetting to harvest aquatic plants, tubers or seeds.* Jetting of the bottom sediments during the harvesting of aquatic plants is eligible for a general permit which will meet the substantive requirements of ch. NR 109, subject to all of the following limitations:

1. The project shall be in a location where the bed of the waterway is privately-owned or a location where the bed of the waterway is publicly-owned if the department determines that the project is consistent with the aquatic plant management activities authorized under ch. NR 109.

**Note:** Under Wisconsin law, the bed of natural lakes is publicly-owned, and the bed of rivers and streams is owned by the adjacent riparian to the center of the river or stream. For impoundments or raised lakes, the bed is privately owned to the edge of the natural lakebed.

2. The applicant shall be licensed by the department of agriculture, trade and consumer protection as a nursery grower under s. 94.10, Stats.

3. All dislodged aquatic plants and floating debris shall be removed from the waterbody at the end of each day.

4. The equipment and motors used for jetting loose the aquatic plants shall conform to the following specifications:

- a. The pumps may not exceed 6 ½ horsepower.
- b. The hoses may not exceed 3 inches inside diameter.
- c. The intake strainer may not exceed 3/8 inch mesh.

5. To provide for re-growth of aquatic plants, the area dredged may not exceed 50 feet by 15 feet and an area 5 feet in width shall be left undisturbed around all dredge sites regardless of its size. Multiple areas 50 feet by 15 feet may be dredged within a waterbody if consistent with subd. 6.

6. The general permit authorizes up to 5 acres of jetting, but no more than 50% of the aquatic vegetation from the waterbody.

7. Only one general permit shall be issued for each area of a waterbody on an annual basis.

(i) *Standards for dredging less than 25 cubic yards from a river or stream.* Dredging less than 25 cubic yards is eligible for a general permit subject to all of the following limitations:

1. The dredging may not be located on a lake or impoundment, in an area of special natural resource interest, or where there are public rights features as described in s. NR 1.06.

2. The bottom material shall be dredged by mechanical operation of a bucket excavator or backhoe.

3. The dredged material may not be temporarily stockpiled within 75 feet of the ordinary high water mark.

4. The removal of bottom material shall be located in less than 3 feet of water and within 50 feet of the ordinary high water mark.

5. The dredging may not result in water depth greater than 5 feet.

6. For each riparian property, the amount of bottom material dredged from a waterbody may not exceed 25 cubic yards in a calendar year.

(j) *Individual permit or contract required.* 1. Activities which do not meet the standards in par. (c) and either (d), (e), (f), (g), (h), (i) or (j) shall require an individual permit or contract.

2. The department has authority under s. 30.206 (3r), Stats., to require an individual permit or contract in lieu of a general permit.

**(3) INDIVIDUAL PERMITS.** (a) *Procedures.* 1. Individual permits shall be processed according to the procedures in ch. NR 310.

2. If the department determines that a proposal submitted under this section has the potential to impact an endangered or threatened species in accordance with s. 29.604, Stats., the application shall be deemed incomplete. The department may not consider the application complete or issue an individual permit until the applicant submits documentation to demonstrate one of the following:

a. The project avoids impacts to the endangered or threatened species in accordance with s. 29.604, Stats.

b. The project has received an incidental take authorization under s. 29.604, Stats.

3. If the applicant modifies their project plans to meet the requirements of subd. 2., the modified plans shall be submitted before the department can consider the application complete or issue an individual permit.

(b) *Applicable activities.* Any dredging which is not exempt under sub. (1) and is not authorized by a general permit under sub. (2), requires authorization by an individual permit pursuant to s. 30.20 (1), Stats.

(c) *Standards.* 1. Dredging which meets the standards in s. 30.20 (2), Stats., may be authorized under an individual permit or contract.

2. All applicable provisions in chs. NR 346 and 347 shall be met.

**History:** CR 04-087: cr. Register April 2005 No. 592, eff. 5-1-05; CR 05-037: am. (1) (d), cr. (2) (a) 4., and (2) (f) to (i), am. (2) (b), renum. (2) (f) to be (2) (j) and am. Register December 2005 No. 600, eff. 1-1-06.

**NR 345.05 Enforcement.** (1) Noncompliance with the provisions of ss. 30.20 and 30.206, Stats., this chapter, or any conditions of an exemption, general permit or individual permit issued by the department, constitutes a violation and may result in a forfeiture. The department may seek abatement under s. 30.294, Stats., for any violation of ss. 30.20 and 30.206, Stats.

(2) If the activity may be authorized by a general permit under s. 30.206, Stats., failure of an applicant to follow procedural requirements may not, by itself, result in abatement of the activity.

(3) When an after-the-fact permit application has been filed with the department, the department shall follow the procedures in ch. NR 301 for violations.

(4) Any violation of these rules shall be treated as a violation of the statutes they interpret or are promulgated under.

(5) No person may remove material from the bed of a navigable waterway if the activity is not eligible for an exemption, authorized by a general permit or individual permit issued under this chapter, or otherwise authorized under this chapter.

**History:** CR 04-087: cr. Register April 2005 No. 592, eff. 5-1-05.