

## Chapter NR 154

## BEST MANAGEMENT PRACTICES AND COST–SHARE CONDITIONS

NR 154.01 Purpose and applicability.  
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**Note:** All documents incorporated by reference in this chapter may be inspected at the department and the Legislative Reference Bureau, One East Main Street, Suite 200, Madison, Wisconsin, 53701. Copies of these documents may be obtained from the Department of Natural Resources, Bureau of Watershed Management, 101 South Webster Street, Madison, Wisconsin 53702.

**NR 154.01 Purpose and applicability.** (1) The purpose of this chapter is to identify best management practices, technical standards and cost–share conditions that apply to the department, state agencies, governmental units, the Board of Regents and cost–share recipients when serving to provide or receive cost–share funds under ch. NR 153 or 155. These provisions and provisions contained in chs. NR 153 and 155 shall be met in administering grants under chs. NR 153 and 155.

(2) The provisions of this chapter apply to cost–share agreements and grants signed after May 1, 2020, unless a waiver is granted by the department under s. 281.65 (4) (e), Stats.

**History:** CR 00–036: cr. Register September 2002 No. 561, eff. 10–1–02; 2015 Wis. Act 330 s. 20: am. (1) Register April 2016 No. 724, eff. 5–1–16; CR 19–002: am. (2) Register April 2020 No. 772, eff. 5–1–20.

**NR 154.02 Definitions.** As used in this chapter:

(1) “Best management practice” as defined in s. 281.65 (2) (a), Stats., means a practice, technique or measure, except for dredging, which is determined to be an effective means of preventing or reducing pollutants generated from nonpoint sources, or from the sediments of inland lakes polluted by nonpoint sources, to a level compatible with water quality objectives established under this chapter and which does not have an adverse impact on fish and wildlife habitat. The practices, techniques or measures include land acquisition, storm sewer rerouting and the removal of structures necessary to install urban structural practices, facilities for the handling and treatment of milkhouse wastewater, repair of fences built using grants under this chapter and measures to prevent or reduce pollutants generated from mine tailings disposal sites for which the department has not approved a plan of operation under s. 289.30, Stats.

(2) “Cost–effective” means economical in terms of the tangible benefits produced by the money spent. Tangible benefits include pollution control, fish and wildlife habitat enhancement, enhancements to recreation, public safety, economical operation, economical maintenance and enhanced life expectancy of the best management practice.

(3) “Cost–share agreement” means the agreement established between the governmental unit and the cost–share recipient which identifies the best management practices to be used on the cost–share recipient’s lands and the cost estimate, installation schedule and operation and maintenance requirements for these best management practices.

(4) “Cost–sharing” means the action of financing a best management practice, or conservation practice by means of a cost–share agreement.

(5) “Dam” means any artificial barrier in or across a waterway, which has the primary purpose of impounding or diverting water. “Dam” includes all appurtenant works, such as a dike, canal or powerhouse.

(6) “Department” means the Wisconsin department of natural resources.

(7) “Governmental unit” means any unit of government including, but not limited to, a county, city, village, town, metropolitan sewerage district created under ss. 200.01 to 200.15 or 200.21 to 200.65, Stats., town sanitary district, public inland lake protection and rehabilitation district, regional planning commission or drainage district operating under ch. 89, 1961 Stats., or ch. 88, Stats. Governmental unit does not include the state or any state agency.

(8) “Landowner” means any individual, partnership, corporation, municipality or person holding title to land.

(9) “Land operator” means any individual, partnership, corporation, municipality or person having possession of or holding a lease in land and who is not a landowner.

(10) “Nonpoint source” means a land management activity which contributes to runoff, seepage or percolation which adversely affects or threatens the quality of waters of this state and which is not a point source under s. 283.01 (12), Stats.

(11) “NRCS” means the natural resources conservation service of the U.S. department of agriculture.

(12) “Priority watershed plan” means the detailed portion of the areawide water quality management plan prepared for priority watersheds as described in s. NR 120.08.

(13) “Project sponsor” means a governmental unit or state agency applying for and receiving grant assistance under s. 281.65 or 281.66, Stats.

(14) “Structural height” means the difference in elevation in feet between the point of lowest elevation of a dam before overtopping and the lowest elevation of the natural stream or lake bed at the downstream toe of the dam.

(15) “Technical guide” means the NRCS field office technical guide, published by the NRCS, which is incorporated by reference for this chapter.

**Note:** Copies of the technical guide are on file with the department and the legislative reference bureau. Copies of individual standards contained in the technical guide may be obtained from a county land conservation department, an NRCS field office, or the national NRCS website at: <http://www.nrcs.usda.gov>, or the Wisconsin NRCS website at: <http://www.wi.nrcs.usda.gov>.

(16) “Wetland” or “wetlands” has the meaning specified under s. 23.32 (1), Stats.

(17) “WPDES permit” means a ch. 283, Stats., Wisconsin pollutant discharge elimination system permit.

**History:** CR 00–036: cr. Register September 2002 No. 561, eff. 10–1–02.

**NR 154.03 Cost–share rates.** (1) STATE COST–SHARE RATES. (a) The cost–share rates in this section apply to eligible costs in projects funded under chs. NR 153 and 155 unless specified otherwise in this section.

(b) Except in cases of economic hardship, the maximum state cost–share rate for individual best management practices cost–shared in a targeted runoff management project under ch. NR 153 may not exceed 70%.

(c) The cost–share rates for best management practices implemented in an urban nonpoint source water pollution abatement and storm water management project under ch. NR 155 are as follows:

1. The cost–share rate may not exceed 70% of the eligible costs for individual best management practices committed on

signed cost-share agreements or nonpoint source grants prior to October 29, 1999.

2. The cost-share rate may not exceed 50% of the eligible cost for individual best management practices committed on signed cost-share agreements or nonpoint source grants after October 29, 1999.

(d) The state cost-share rates for land acquisition, storm sewer rerouting and removal of structures necessary to install structural urban best management practices may not exceed 50% of the eligible costs.

(e) Cost-share funding authorized under s. 92.14, 281.65, 281.66 or 281.665, Stats., shall be considered part of the state rate.

(f) In cases of economic hardship, cost-share rates and flat rates in this section shall be increased in accordance with sub. (3), if the project is funded under ch. NR 153.

(g) The department may provide cost sharing up to the original cost-shared rate to replace an agricultural best management practice cost-shared under ch. NR 153, in accordance with s. NR 153.15 (2) (b).

(h) The cost-share rates for agricultural best management practices on cost-share agreements funded under ch. NR 153 and signed prior to May 1, 2020, may be amended to use the rates identified in this section.

(i) The following conditions further specify eligibility criteria for cost-share reimbursements under this section:

1. Wildlife habitat recreation associated with implementation of contour farming and stripcropping funded under ch. NR 153 has a maximum state cost-share rate of 70%.

2. Flat rates identified under par. (j) may be used in lieu of calculating cost-share amounts for any project.

3. For the best management practice under s. NR 154.04 (25), riparian buffers, a single payment in addition to installation costs may be made in accordance with the following:

a. For riparian buffers under s. NR 154.04 (25), \$500 per acre used for the buffer.

c. Payments under this subdivision are eligible only for acreage upon which a commodity crop was harvested in at least 2 of the 5 years prior to the signing of the cost-share agreement. The 2 years need not be consecutive if separated by non-grain portions of a normal crop rotation.

4. Cost-share payments for high residue management systems may not be made for more than a total of 4 years.

5. Cost-share payments for cover crop may not be made for more than a total of 4 years.

6. Cost-share payments for nutrient management may not be made for more than a total of 4 years.

7. Cost-share payments for pesticide management may not be made for more than a total of 4 years.

8. The maximum amount cost-shared for leases of manure storage tanks shall be 70% of the down payment and lease cost of the tank during the grant period of the watershed project.

(j) A governmental unit may use the following state cost-share rates per acre in lieu of the state cost-share percentage listed in this section:

1. \$9.00 per acre for contour farming.

2. \$13.50 per acre for strip cropping.

4. \$18.50 per acre per year for high residue management systems.

5. \$70.00 per acre per year for cover crop.

7. A governmental unit may establish a flat rate for cost-sharing critical area stabilization in order to simplify the administration of cost-share funding for this best management practice. The flat rate shall be calculated based on the cost-share rate, up to 70%, and the average cost of the practice.

8. \$10.00 per acre for nutrient management plans.

(2) LOCAL SHARE. (a) The local share of project costs for projects funded under ch. NR 153 or 155 may include funds from federal, local or private sources, or state sources not identified under sub. (1) (e).

(b) In-kind contributions of labor and material used directly in the installations of best management practices may be considered part of the local share of best management practice costs, if properly described and substantiated to the cost-share agreement grantor.

(c) The value of a conservation easement donated to the department, or to any person approved by the department under s. 281.65 (8) (m), Stats., may be considered as a portion of or all of the landowner's or land operator's share of a cost-sharing grant.

(3) ECONOMIC HARDSHIP. (a) The governmental unit submitting an application under s. NR 153.17 shall exceed the cost-share limits identified under sub. (1) if the landowner or land operator that will provide the local share of best management practice installation either meets the application and economic hardship requirements in this subsection or meets the application and economic hardship requirements in s. NR 120.18 (4).

(b) The landowner or land operator shall submit an application to the governmental unit in accordance with this subsection in order to be considered for a determination of economic hardship. The governmental unit may not make a determination of economic hardship for cost-share purposes until it has received a completed application.

(c) The landowner or land operator shall include the following financial information and supporting documentation in the application:

1. A signed and notarized statement by a certified public accountant or accredited financial institution certifying that, based on a financial statement prepared according to generally accepted accounting principles that:

a. The landowner or land operator is unable to make the cost-share contribution normally required under sub. (2).

b. The landowner or land operator will be able to pay the balance of the cost to install the cost-shared practice if the landowner or land operator receives hardship cost sharing under par. (e).

2. A certification by the landowner or land operator in a sworn affidavit that the landowner or land operator has provided to the certified public accountant or accredited financial institution under this section a full and true disclosure of the landowner's or land operator's financial condition, including a copy of the landowner's or land operator's latest farm financial statement.

3. The department may require that it approve the method used by the certified public accountant or accredited financial institution under this paragraph.

(d) The governmental unit shall make a determination of economic hardship based on the recommendation of the certified public accountant or accredited financial institution on the application received in par. (c).

(e) If evidence of economic hardship is verified in accordance with the criteria in par. (c), the governmental unit shall increase the cost-share rate in accordance with this paragraph for all best management practices for which the landowner or land operator is eligible.

1. If the cost-share amount is based on a cost-share rate, the cost-share rate shall be increased so that the cost-share rate is not less than 70% and not greater than 90%.

2. If the cost-share amount is based on a flat rate, the flat rate shall be increased so that it approximates a cost-share rate that is not less than 70% and not greater than 90%.

(f) The governmental unit shall notify the department in writing when it has made a determination of economic hardship.

**History:** CR 00-036: cr. Register September 2002 No. 561, eff. 10-1-02; CR 19-002: am. (1) (h), (i) 1., 3. (intro.), r. (1) (i) 3. b., am. (1) (i) 5., (j) 1., r. (1) (j) 3.,

am. (1) (j) 5., r. (1) (j) 6., am. (1) (j) 8., (3) (a) Register April 2020 No. 772, eff. 5–1–20; correction in (1) (j) 5., (3) (a) made under s. 35.17, Stats., Register April 2020 No. 772.

**NR 154.04 Best management practices, cost–share eligibility and standards.** (1) GENERAL APPLICABILITY. (a)

The best management practices, technical standards and cost–share eligibility conditions in this section may be used to achieve compliance with the performance standards under ch. NR 151 and shall be used, in conjunction with the other provisions of this chapter and chs. NR 153 and 155 to determine cost–share amounts.

(b) Inconsistencies between provisions concerning cost–share eligibility or cost–share conditions contained in portions of ch. ATCP 50 incorporated by reference into this section, and provisions concerning cost–share eligibility or cost–share conditions contained in ch. NR 153 or this chapter, shall be resolved in favor of the cost–share eligibility and cost–share conditions provisions in ch. NR 153 or this chapter.

(c) The cost–share conditions and standards for all best management practices listed in this chapter shall apply to all cost–share and grant agreements signed after May 1, 2020.

(2) GENERAL CONDITIONS. (a) The cost–share conditions in this subsection apply to best management practices funded under chs. NR 153 and 155. The conditions in this subsection, subs. (3) to (42) and chs. NR 153 and 155 shall be met in administering grants under chs. NR 153 and 155.

(b) Any references to s. ATCP 50.40 made by cross–reference in this section do not apply to the department.

(c) Notwithstanding cross–references to ch. ATCP 50, the department shall make all required determinations for the purposes of chs. NR 120, 151, 153, 155, 216, 243 and this chapter.

(d) If the department finds that a standard or best management practice in this section is not adequate to implement a performance standard, it shall notify the state agency responsible for the standard or best management practice in writing, or institute the technical standard development process of ch. NR 151.

(e) All of the standards and best management practices in this chapter are considered cost–effective best management practices if they are implemented in accordance with ss. NR 153.15 (6) or 155.15 (5).

(f) Wetlands may not be destroyed or degraded as a result of installing a best management practice.

(g) Erosion and sediment generated from the construction of the best management practice shall be controlled in conformance with the applicable performance standards in ss. NR 151.105 and 151.11, using the technical standards developed pursuant to subch. V of ch. NR 151 or equivalent methodology.

**Note:** Copies of construction site erosion control technical standards are available electronically at [https://dnr.wi.gov/topic/stormwater/standards/const\\_standard-s.html](https://dnr.wi.gov/topic/stormwater/standards/const_standard-s.html).

(h) Permanent and temporary vegetative cover including materials such as seed, mulch, fertilizer, trees or shrubs, except for conventional agricultural cover crop, shall be established where necessary to prevent soil erosion during and after the installation of a best management practice in this chapter.

(i) Preparation, grading, shaping and removal of obstructions necessary to allow the installation of best management practices shall be conducted on the site.

(j) Temporary or permanent fencing and the repair of fencing necessary to implement or protect a best management practice shall be built.

(k) All required permits, including those mandated by the department, shall be obtained prior to installing a best management practice listed in this chapter.

(L) A best management practice listed in this chapter and which are conducted below the ordinary high water mark may be eligible for cost–sharing only when the practice is a cost–effective

means of preventing or reducing pollutants generated from sources of runoff or from sediments of inland lakes polluted by runoff, or a practice designed to promote and enhance fish habitat.

(m) If the department determines that a best management practice or technical standard cross–referenced in this chapter to ch. ATCP 50 is cost–effective to address a non–agricultural or transportation performance standard required by subch. III or IV of ch. NR 151, the department may use the best management practice or technical standard, or may modify the best management practice or technical standard according to the procedures of subch. V of ch. NR 151.

(2m) VOLUNTARY USE OF UPDATED TECHNICAL STANDARDS. The department may cost–share a more recent version of a technical standard listed in this subchapter or cross–referenced in this chapter to ch. ATCP 50 if all of the following apply:

(a) The more recent version of a technical standard listed in this subchapter or cross–referenced in this chapter to ch. ATCP 50 provides water quality benefits at least as beneficial as the version listed in this subchapter.

(b) The more recent version of a technical standard listed in this subchapter or cross–referenced in this chapter to ch. ATCP 50 has been developed by the department according to the procedures of subch. V of ch. NR 151, adopted by NRCS, or adopted by another applicable technical standards entity listed in this subchapter.

(c) The landowner or grantee voluntarily agrees to the use of the more recent version of a technical standard listed in this subchapter or cross–referenced in this chapter to ch. ATCP 50 to implement the best management practice.

(3) MANURE STORAGE SYSTEMS. (a) The department may provide cost–share grants to implement manure storage systems.

(b) Except as provided under par. (c), the provisions for a manure storage system included in s. ATCP 50.62 shall apply.

(c) The following are exceptions to par. (b):

1. Leases of manure storage tanks are eligible for funding in accordance with this chapter.

2. The department may not award a cost–share grant for a manure storage system if the landowner or operator holds a WPDES permit or if the department determines that the landowner or operator is required to hold a WPDES permit.

(4) MANURE STORAGE SYSTEM CLOSURE. (a) The department may provide cost–share grants to implement closure of manure storage systems.

(b) The provisions for a manure storage system included in s. ATCP 50.63 shall apply.

(5) BARNYARD RUNOFF CONTROL SYSTEMS. (a) The department may provide cost–share grants to implement barnyard runoff control systems.

(b) Except as provided under par. (c), the provisions for barnyard runoff control included in s. ATCP 50.64 shall apply.

(c) The department may not award a cost–share grant for a barnyard runoff control system if the landowner or operator holds a WPDES permit or if the department determines that the landowner or operator is required to hold a WPDES permit.

(6) ACCESS ROADS. (a) The department may provide cost–share grants to implement access roads.

(b) The provisions for access roads included in s. ATCP 50.65 shall apply.

(7) TRAILS AND WALKWAYS. (a) The department may provide cost–share grants to implement trails and walkways.

(b) The provisions for trails and walkways included in s. ATCP 50.66 shall apply.

(8) CONTOUR FARMING. (a) The department may provide cost–share grants to implement contour farming.

(b) Except as provided under par. (c), the provisions for contour farming included in s. ATCP 50.67 shall apply.



(c) A cost-share grant under ch. NR 153 may be used to mitigate loss of wildlife upland habitat if all of the following conditions apply:

1. Mitigation is warranted because of contour farming implemented using a cost-share grant provided under ch. NR 153.

2. Mitigation is conducted in accordance with the NRCS field office technical standard; wildlife upland habitat management – 645 (July, 2000). The NRCS technical standard 645 (July, 2000) is incorporated by reference for this chapter.

**Note:** Copies of NRCS technical standard 645 may be obtained at the department of natural resources and the legislative reference bureau, Madison, Wisconsin.

**(9) COVER CROP.** (a) The department may provide cost-share grants to implement cover crops.

(b) The provisions for cover crops included in s. ATPC 50.68 shall apply.

**(10) CRITICAL AREA STABILIZATION.** (a) The department may provide cost-share grants to implement critical area stabilization.

(b) The provisions for critical area stabilization included in s. ATPC 50.69 shall apply.

**(11) DIVERSIONS.** (a) The department may provide cost-share grants to implement diversions.

(b) Except as provided under par. (c), the provisions for diversions included in s. ATPC 50.70 shall apply.

(c) A cost-share grant under ch. NR 153 may be used to mitigate loss of wildlife upland habitat if all of the following conditions apply.

1. Mitigation is warranted because of diversions implemented using a cost-share grant provided under ch. NR 153.

2. Mitigation is conducted in accordance with the NRCS field office technical standard; wildlife upland habitat management – 645 (July, 2000).

**(11m) FEED STORAGE RUNOFF CONTROL SYSTEMS.** (a) The department may provide cost-share grants to implement feed storage runoff control systems.

(b) The provisions for feed storage runoff control systems included in s. ATPC 50.705 shall apply.

**(12) FIELD WINDBREAKS.** (a) The department may provide cost-share grants to implement field windbreaks.

(b) The provisions for field windbreaks included in s. ATPC 50.71 shall apply.

**(13) FILTER STRIPS.** (a) The department may provide cost-share grants to implement filter strips.

(b) The provisions for filter strips included in s. ATPC 50.72 shall apply.

**(14) GRADE STABILIZATION.** (a) The department may provide cost-share grants to implement grade stabilization structure.

(b) The provisions for grade stabilization structure included in s. ATPC 50.73 shall apply.

**(16) LAKE SEDIMENT TREATMENT.** (a) *Definitions.* In this subsection, “lake sediment treatment” is defined as a chemical, physical or biological treatment of polluted lake sediments for purposes of minimizing potential adverse impacts from the pollutants.

(b) *Eligible costs.* A cost-share grant may reimburse the following:

1. Costs for the design and treatment of lake sediments with chemical compounds, including aluminum sulfate, sodium aluminate, ferric chloride, calcium hydroxide and calcium carbonate.

2. Costs for treatment of lake sediments with physical or biological methods, including the aeration of water overlaying lake sediments and the biological manipulation of organisms which exacerbate sediment contamination of overlaying lake water.

(c) *Ineligible costs.* Costs for the dredging of sediments are ineligible for reimbursement.

(d) *Design, construction and maintenance.* A cost-share grant under ch. NR 153 or 155 may not reimburse any costs related to

lake sediment treatment unless all the following conditions are met:

1. Water quality objectives are achieved through the control of polluted lake sediments.

2. Significant nonpoint sources of the pollution to the lake are controlled prior to treatment of lake sediments.

3. The department approves the engineering design for the lake sediment treatment plan prior to implementation of the plan.

4. All necessary and required federal, state and local permits are obtained prior to construction.

5. The design and implementation of lake sediment treatment plans are conducted in accordance with standards and best management practices approved on a case-by-case basis by the department.

**(17) LIVESTOCK FENCING.** (a) The department may provide cost-share grants to implement livestock fencing.

(b) The provisions for livestock fencing included in s. ATPC 50.75 shall apply.

**(18) LIVESTOCK WATERING FACILITIES.** (a) The department may provide cost-share grants to implement livestock watering facilities.

(b) The provisions for livestock watering facilities included in s. ATPC 50.76 shall apply.

**(19) MILKING CENTER WASTE CONTROL SYSTEMS.** (a) The department may provide cost-share grants to implement milking center waste control systems.

(b) The provisions for milking center waste control included in s. ATPC 50.77 shall apply.

**(20) NUTRIENT MANAGEMENT.** (a) The department may provide cost-share grants to implement nutrient management.

(b) Except as provided under par. (c), the provisions for nutrient management included in s. ATPC 50.78 shall apply.

(c) 1. Costs for soil and plant nutrient testing, including residual nitrogen analysis, and costs for nutrient analysis of manure and other organic wastes are eligible for cost-sharing to implement nutrient management provided that testing and analysis are conducted by a laboratory certified under s. ATPC 50.50.

2. A cost-share grant under ch. NR 153 may not reimburse nutrient management costs under this subsection unless the landowner or land operator agrees in writing to maintain a minimum horizontal separation distance of 100 feet in all directions from any potable well, non-potable well, reservoir or spring when spreading manure, injecting manure or applying manure by other means.

**(21) PESTICIDE MANAGEMENT.** (a) The department may provide cost-share grants to implement pesticide management.

(b) The provisions for pesticide management included in s. ATPC 50.79 shall apply.

**(22) PRESCRIBED GRAZING.** (a) The department may provide cost-share grants to implement prescribed grazing.

(b) The provisions for prescribed grazing included in s. ATPC 50.80 shall apply.

**(23) RELOCATING OR ABANDONING ANIMAL FEEDING OPERATIONS.** (a) The department may provide cost-share grants to implement relocation or abandonment of animal feeding operations.

(b) The provisions for relocating or abandoning animal feeding operations included in s. ATPC 50.81 shall apply.

**(24) RESIDUE MANAGEMENT.** (a) The department may provide cost-share grants to implement residue management.

(b) Except as provided under par. (c), the provisions for residue management included in s. ATPC 50.82 shall apply.

(c) A cost-share grant under ch. NR 153 may not reimburse costs for continuous no-till unless surface applications of nutrients, including animal manure, are prohibited or the surface application of nutrients is in compliance with s. NR 151.07. Continu-

ous no-till is defined as implementation of the practice for 3 or more consecutive years.

**(25) RIPARIAN BUFFERS.** (a) The department may provide cost-share grants to implement riparian buffers.

(b) Except as provided under par. (c), the provisions for riparian buffers included in s. ATCP 50.83 shall apply.

(c) The following are exceptions to par. (b):

1. Single payments in addition to installation cost-shared in accordance with s. NR 154.03 (1) (i) 3.

2. Eligible costs for easement purchases shall be determined in accordance with s. NR 153.25 rather than ch. ATCP 50.

3. Riparian buffer widths under this subsection shall be a minimum of 35 feet from the top of the channel as defined in s. NR 151.002 (46).

**(26) ROOFS.** (a) The department may provide cost-share grants to implement roofs for animal lot and manure storage structures.

(b) The provisions for roofs included in s. ATCP 50.84 shall apply.

**(27) ROOF RUNOFF SYSTEMS.** (a) The department may provide cost-share grants to implement roof runoff systems.

(b) The provisions for roof runoff systems included in s. ATCP 50.85 shall apply.

**(28) SEDIMENT BASINS.** (a) The department may provide cost-share grants to implement sediment basins.

(b) Except as provided under par. (c), the provisions for sediment included in s. ATCP 50.86 shall apply.

(c) Sediment basins with embankments of 15 to 25 feet in structural height or with maximum storage capacities of 15 to 50 acre-feet in volume may be cost-shared only if the department makes a finding, in writing and prior to construction, that failure of the structure would have minimum potential to endanger life or real or personal property.

**(29) SHORELINE HABITAT RESTORATION FOR DEVELOPED AREAS.** (a) *Definitions.* In this subsection, "shoreline habitat restoration" means the establishment in developed areas of a shoreline buffer zone of diverse native vegetation that extends inland and waterward from the ordinary high water mark. The shoreline habitat restoration design seeks to restore the functions provided by the original, natural vegetation, and includes a mixture of native trees, shrubs, ground cover or wetland species. This practice includes the following:

1. Natural recovery. Used where native vegetation will recover naturally when a site is protected from disturbance, due to the presence of existing native plants, and adequate seed sources and site conditions. This method may be applied to wet margins of lakes or rivers where turf grasses are not well established and in shallow water areas adjacent to shoreland restoration areas.

2. Accelerated recovery. Used in areas not suited for natural recovery. Native vegetation is established by seeding and planting. This method shall be used in areas where dense turf grasses have been maintained for several years. This may also be used in limited situations where one or more layers of natural vegetative cover have been removed if approved by the department.

(b) *Eligible costs.* Costs eligible for cost-sharing reimbursement include:

1. Costs for shoreline habitat restoration when existing shoreline vegetation lacks the structure or complexity to support habitat functions for littoral and riparian areas.

2. Costs for plants, seed, mulch and erosion control materials.

3. Costs for labor and services necessary for installation.

(c) *Ineligible costs.* Costs ineligible for cost-sharing reimbursement include:

1. Cost for practice design unless approved by the department.

2. Cost for plants, seed, mulch or other materials not approved by the department.

3. Costs for shoreline erosion control materials such as riprap or biologs unless approved by the department.

4. Cost for materials for stairs, walkways, paths or other access structures.

(d) *Design, construction and maintenance.* A cost-share grant under ch. NR 153 may not reimburse any costs related to shoreline habitat restoration for developed areas unless all the following conditions are met:

1. No violations of county and local shoreland zoning requirements are present on the entire property.

2. Runoff from roofs, driveways or other hard surfaces on the property is maintained in sheet flow with no channels or gullies, to the greatest extent possible using downspout runoff spreaders, directing runoff to flat or gently sloping grassy areas and minor landscaping to temporarily pond or spread out runoff or other means.

3. No channelized flow occurs through the restoration.

4. If fertilizer use is desired outside the buffer area, zero-phosphorus types are used unless soil tests specifically indicate a need for phosphorus and the project sponsor approves its use.

5. No changes in land use or management may occur that cause increased pollution to surface water from sources that were controlled prior to the installation of a shoreline habitat restoration practice.

6. The buffer created by shoreline habitat restoration extends the entire length of the lot along the shoreline except that a viewing and access corridor is allowed. The corridor is not eligible for cost sharing. Corridors may not exceed 30 feet in width and may encompass no greater than 30% of the property for lots less than 100 feet wide. The restoration area design may include the provision of water access, the enhancement of desirable views, the screening of unwanted views and consideration of privacy. Where buildings are set back 50 feet or more, the buffer shall extend at least 35 feet inland from the ordinary high water mark. Where buildings are set back less than 50 feet, a no touch zone where no vegetation is removed or land is disturbed shall extend to within 15 feet of the structure.

7. Shallow water areas that are capable of supporting aquatic vegetation waterward of the ordinary high water mark shall be managed so that vegetation, land or other habitat features are not disturbed after the buffer is established. Areas waterward of the viewing and access corridor are exempt from this condition.

8. An evaluation of existing vegetation on the site is necessary prior to the selection of plant materials and restoration method. The natural vegetation that occurs in the region or vicinity of the restoration site shall be considered in developing restoration plans.

9. In order to restore the functional values of the vegetative buffer, it shall consist of 3 layers: a ground cover, a shrub layer and a tree canopy. Vegetation in all 3 layers shall be vigorous, diverse and structurally complex. The only exception to this requirement may be where natural conditions in the region lack these characteristics.

10. Vegetation shall be adapted to the local soils, climate and the surrounding vegetation. Only species approved by the project sponsor may be planted. Native species are required, and invasive species such as reed canary grass and purple loosestrife are prohibited.

11. The project sponsor shall identify the most appropriate recovery methods for each individual site.

12. The following conditions apply to installation practices:

a. Comply with local NRCS planting recommendations to determine recommended planting dates for ground covers, shrubs and trees.

b. Exposure of bare soil shall be kept to an absolute minimum by using methods such as black plastic covers to remove competing weeds. All exposed soils shall be mulched. A temporary seeding is required on sites where permanent ground cover will not be established until the following year. A temporary or companion seeding is required on any exposed slopes exceeding 12%. Mulching and netting or erosion control matting is required on slopes exceeding 20%.

c. Zero-phosphorus start-up fertilization is permitted. Phosphorus application is only permitted where soil tests indicate deficiencies.

d. Herbicides approved for use near water may be used only where essential, and with the approval of the project sponsor.

e. Heavy equipment is prohibited, except where specifically approved by the project sponsor, to prevent soil compaction. If heavy equipment is used, tree roots shall be protected by not driving over the root zone.

13. The following conditions apply to practice operation and maintenance:

a. All buffer areas are to be managed as no-touch zones unless otherwise approved by the department.

b. Fertilizers are prohibited after the buffer is established.

c. Herbicides are prohibited except as approved by the project sponsor, where this is the best method to control undesirable invasive species.

d. Burning to clear or maintain buffer areas may be conducted if approved by the project sponsor, and is limited to regions where prairies are the natural habitat.

e. Cutting of trees or shrubs may be done only to prevent safety hazards, or to remove undesirable competitive species, and shall be approved by the project sponsor.

f. The forest floor duff layer and leaf litter shall remain intact to provide a continuous ground cover and meet the habitat functions of this practice.

g. Lawn mowing is permitted in the viewing and access corridors. Elsewhere, mowing is prohibited except in established prairie buffer areas, and in accordance with a mowing plan approved by the project sponsor. In viewing and access corridors, mowing is allowed to a minimum height of 10 inches, and only as needed to reduce competition from undesirable species. Mowing may occur only between August 1 and September 1 to avoid disturbance of nesting birds and allow regrowth before winter.

h. Vehicles, boats, docks or other equipment storage shall be excluded from the restoration area to prevent soil compaction and damage to the buffer vegetation. Boats and docks may be temporarily stored during non-growing seasons as long as vegetative cover is unaffected.

i. The access corridor may not channel runoff to the waterbody and shall be located to avoid areas of high runoff or erodible soils. Grass or other cover that will hold the soil is required for the access corridor.

j. Except for areas waterward of the access corridor, areas waterward of the buffer shall be managed as no-touch zones.

k. The shoreline habitat restoration project complies with UW-Extension Publication GWQ014, *Shoreline Plants and Landscaping*, DNR Publication PUBL-WM-228, *Home on the Range – Restoring and Maintaining Grasslands for Wildlife*, which are incorporated by reference for this chapter, or similar publications as approved by the project sponsor.

**Note:** This document is available electronically at <http://clean-water.uwex.edu/pubs/pdf/shortpl.pdf>.

14. The landowner or land operator agrees to maintain the shoreline habitat restoration project.

**(30) SINKHOLE TREATMENT.** (a) The department may provide cost-share grants to implement sinkhole treatment.

(b) The provisions for sinkhole treatment included in s. ATCP 50.87 shall apply.

**(31) STREAMBANK OR SHORELINE PROTECTION.** (a) The department may provide cost-share grants to implement streambank or shoreline protection.

(b) Except as provided under par. (c), the provisions for streambank or shoreline protection included in s. ATCP 50.88 shall apply.

(c) The 25% cost-share limitation for a cost-share grant for rock and timber riprap used to establish fish habitat in s. ATCP 50.88 (2) (b) does not apply to grants issued by the department.

**(31m) STREAM CROSSING.** (a) The department may provide cost-share grants to implement a stream crossing.

(b) The provisions for stream crossing included in s. ATCP 50.885 shall apply.

**(32) STRIPCROPPING.** (a) The department may provide cost-share grants to implement stripcropping.

(b) The provisions for stripcropping included in s. ATCP 50.89 shall apply.

**(33) SUBSURFACE DRAINS.** (a) The department may provide cost-share grants to implement subsurface drains.

(b) The provisions for subsurface drains included in s. ATCP 50.90 shall apply.

**(34) TERRACE SYSTEMS.** (a) The department may provide cost-share grants to implement terrace systems.

(b) The provisions for terrace systems included in s. ATCP 50.91 shall apply.

**(35) UNDERGROUND OUTLETS.** (a) The department may provide cost-share grants to implement underground outlets.

(b) The provisions for underground outlets included in s. ATCP 50.92 shall apply.

**(36) WASTE TRANSFER SYSTEMS.** (a) The department may provide cost-share grants to implement waste transfer systems.

(b) The provisions for waste transfer systems included in s. ATCP 50.93 shall apply.

**(37) WASTEWATER TREATMENT STRIPS.** (a) The department may provide cost-share grants to implement wastewater treatment strips.

(b) The provisions for wastewater treatment strips included in s. ATCP 50.94 shall apply.

**(38) WATER AND SEDIMENT CONTROL BASINS.** (a) The department may provide cost-share grants to implement water and sediment control basins.

(b) The provisions for water and sediment control basins included in s. ATCP 50.95 shall apply.

**(39) WATERWAY SYSTEMS.** (a) The department may provide cost-share grants to implement waterway systems.

(b) Except as provided under par. (c), the provisions for waterway systems included in s. ATCP 50.96 shall apply.

(c) The following are exceptions to par. (b):

1. Single payments in addition to installation costs are cost-shared in accordance with s. NR 154.03 (1) (i) 3.

2. Eligible costs for easement purchases shall be determined in accordance with s. NR 153.25 rather than ch. ATCP 50.

**(40) WELL DECOMMISSIONING.** (a) The department may provide cost-share grants to implement well decommissioning.

(b) The provisions for well decommissioning included in s. ATCP 50.97 shall apply.

**(41) WETLAND DEVELOPMENT OR RESTORATION.** (a) The department may provide cost-share grants to implement wetland development or restoration.

(b) The provisions for wetland development or restoration included in s. ATCP 50.98 shall apply.



**(42) URBAN BEST MANAGEMENT PRACTICES.** (a) *Definitions.* In this subsection:

1. “Structural urban best management practices” means detention basins, wet basins, infiltration basins and trenches and wetland basins.

2. “Urban best management practices” means structural urban best management practices and other source area measures, transport system and end-of-pipe measures designed to control storm water runoff rates, volumes and discharge quality. “Source area” means a component of urban land use including rooftops, sidewalks, driveways, parking lots, storage areas, streets and lawns from which storm water pollutants are generated during periods of snowmelt and rainfall runoff.

(b) *Eligible costs.* Cost-sharing may be provided for:

1. Costs for excavation, grading, mulching, seeding, necessary landscaping, piping, drop spillways and other measures required to implement the practice.

2. Costs for land acquisition, including storm sewer rerouting and the removal of structures necessary to install structural urban best management practices.

3. Costs for materials and labor for the initial installation of groundwater monitoring wells required by the department.

4. Costs, on a prorated basis, for multi-purpose practices which manage both water quality and unrelated water quantity problems.

(c) *Ineligible costs.* Cost-sharing under this chapter may not be provided for:

1. Costs for best management practices, land acquisition, storm sewer rerouting or removal of structures where the practices serve solely to solve drainage and flooding problems unrelated to water quality improvement.

2. Costs for removal or disposal of accumulated sediments or other materials needed to properly maintain the practice.

(d) *Design, construction and maintenance.* The department shall identify acceptable standards for each structural urban best management practice enumerated in an approved priority watershed plan, approved priority lake plan or project grant.

1. A cost-share grant under ch. NR 153 or 155 may not reimburse costs for urban best management practices under this section unless those practices comply with all the following that apply:

a. Wet detention basins shall be designed consistent with the Wisconsin department of natural resources conservation practice standard 1001, wet detention basin 1001 (October 2007), which is incorporated by reference for this chapter.

ab. Infiltration basins shall be designed consistent with the Wisconsin department of natural resources conservation practice standard 1003, infiltration basin 1003 (October 2004), which is incorporated by reference for this chapter.

af. Bioretention devices shall be designed consistent with the Wisconsin department of natural resources conservation practice standard 1004, bioretention for infiltration 1004 (October 2014), which is incorporated by reference for this chapter.

ak. Vegetated swales shall be designed consistent with the Wisconsin department of natural resources conservation practice standard 1005, vegetated swale 1005 (December 2017), which is incorporated by reference for this chapter.

ap. Proprietary storm water sedimentation devices shall be designed consistent with the Wisconsin department of natural resources conservation practice standard 1006, proprietary storm water sedimentation devices 1006 (April 2009), which is incorporated by reference for this chapter.

as. Infiltration trench shall be designed consistent with the Wisconsin department of natural resources conservation practice

standard 1007, infiltration trench 1007 (May 2012), which is incorporated by reference for this chapter.

aw. Permeable pavement shall be designed consistent with the Wisconsin department of natural resources conservation practice standard 1008, permeable pavement 1008 (February 2016), which is incorporated by reference for this chapter.

ay. Site evaluations for storm water infiltration practices including bioretention devices, infiltration basins, and infiltration trenches shall be conducted consistent with the Wisconsin department of natural resources conservation practice standard 1002, site evaluation for storm water infiltration 1002 (September 2017), which is incorporated by reference for this chapter.

b. The governmental unit, landowner or land operator shall submit preliminary designs for each identified alternative to the department for review and comment.

c. Based on the review of the preliminary designs for each alternative, the governmental unit, landowner or land operator shall submit a detailed design including pertinent information addressing each criterion listed in subd. 3., for the selected alternative prepared by a registered professional engineer or other individual trained in the design of the practice and approved by the department, to the department for review and approval.

**Note:** Copies of urban best management technical standards may be inspected at the offices of the department’s bureau of watershed management and the legislative reference bureau, all in Madison, WI. They are also available electronically at [https://dnr.wi.gov/topic/Stormwater/standards/postconst\\_standards.html](https://dnr.wi.gov/topic/Stormwater/standards/postconst_standards.html).

2. The department shall consider standards developed under the process in subch. V of ch. NR 151 and other documents when identifying acceptable standards for urban best management practices.

3. The department shall approve or disapprove within 90 days the detailed design based on the following criteria:

a. Adequacy of pollutant control to protect surface water, groundwater and wetland resources in accordance with the objectives of a watershed plan. Applicable performance standards identified in ch. NR 151 may be considered and addressed in the detailed design.

b. Consistency with water quality provisions of department approved plans, such as priority watershed or lake plans, integrated resource management plans, remedial action plans or well-head protection plans, or with existing local storm water management ordinances or plans that meet minimum department requirements.

c. Structural integrity of the design.

d. Aesthetics.

e. The degree to which other environmental considerations are integrated in the proposal.

f. The adequacy of the provisions for long-term maintenance of the structural practice.

g. Other pertinent factors.

h. The department may waive or modify the review or approval procedures under this subdivision.

4. Any waiver shall be specifically described in the grant agreement or the cost-share agreement.

5. The department may consider providing cost-sharing for accelerated or high efficiency street sweeping systems.

6. The owner of the practice agrees to maintain the practice.

**History:** CR 00–036: cr. Register September 2002 No. 561, eff. 10–1–02; CR 09–112: am. (25) (c) 2., (39) (c) 2. Register December 2010 No. 660, eff. 1–1–11; correction in (25) (c) 2., (39) (c) 2. made under s. 13.92 (4) (b) 7., Stats., Register December 2010 No. 660; CR 19–002: am. (1) (c), (2) (g), cr. (2m), am. (3) (b), (4) (b), (5) (b), (6), (7), (8) (b), (9), (10) (b), (11) (b), cr. (11m), am. (12) (b), (13) (b), (14), r. (15), am. (17) (b), (18) (b), (19) (b), (20) (b), (c) (1), (21) (b), (22) (b), (23) (b), (24) (b), (25) (b), (26) (b), (27) (b), (28) (b), (30) (b), (31), cr. (31m), am. (32), (33) (b), (34) (b), (35) (b), (36) (b), (37) (b), (38) (b), (39) (b), (40) (b), (41) (b), (42) (c) 1., (42) (d) 1. a., cr. (42) (d) 1. ab., af., ak., ap., as., aw., ay., am. (42) (d) 2. Register April 2020 No. 772, eff. 5–1–20; correction in (2) (g), (2m) (b), (42) (d) 1. a. made under s. 35.17, Stats., Register April 2020 No. 772.