

ISSUE: Definition of Sediment and Soil

The Brownfields Study Group in its 2015 report (page 34) requested that the Department of Natural Resources clarify definitions of sediment and soil and resolve any discrepancies between definitions to provide certainty and consistency in demarcation of sediment and soil.

Importance

- What is the importance of this definition?
 - Determines standards/point of application for setting criteria.
 - Assists in the selection of appropriate disposal sites.
 - Aids in determining applicable funding sources.
 - In some cases it is advantageous to identify areas not continually under water, but affected by sediment transport (floodplain, wetland and depositional areas) as sediment (e.g. Legacy Act cleans up sediment but not soil).

Standards

- What is sediment and what criteria can/should be used to define it?
- What is soil and what criteria can/should be used to define it?
- Have the terms sediment and soil been defined in existing rules?
 - The term sediment has been defined in several existing rules. (Refer to page 3 for definitions of sediment.)
 - Can the existing sediment definitions be reasonably applied broadly?
 - Is there a need to change and/or consolidate the existing definitions?
 - If changes or consolidation are needed, how would it be accomplished (e.g. through guidance or rule revision)?
 - Are the definitions clear enough for Department staff and the public to:
 - Make a determination on the classification of the material (sediment or soil)?
 - Ensure consistency?
 - Is there a need to create a new definition that will apply across all Department programs?
- How does the ordinary high water mark determination impact the classification of sediment and/or soil? (Refer to pages 4 and 5 for definitions of ordinary high water mark.)
- How does a bulkhead line impact the classification of sediment and/or soil?
- Is material moved by a flood event considered sediment or soil?
- What standards apply to floodplain material?
- Is upland material to the water's edge considered soil?

Variations/Exceptions

- Are there instances when sediment would become soil and soil would become sediment?
- Are there limits on placement of sediments below the ordinary high water mark? Or does placement of sediments below the ordinary high water mark change the classification?
- When sediment is picked up, for disposal purposes, does it become soil?
- Are there instances when the Department must make the soil/sediment determination?

Special Requirements

- Should record searches be required in order to determine the ordinary high water mark or bulkhead line?
 - Who would complete this task?
- Should there be special sampling or assessment requirements?
 - Who would complete this task?
- Do we need to know the sediment/soil demarcation for development and VPLE sites?

Sediment Definitions

Rule/ Statute	Title	Heading	Definition
NR 151.002	Runoff Management	Definitions	(41) "Sediment" means settleable solid material that is transported by runoff, suspended within runoff or deposited by runoff away from its original location.
NR 152 Appendix A	Model Construction Site Erosion Control Zoning Ordinance s.05	Definitions	(22) "Sediment" means settleable solid material that is transported by runoff, suspended within runoff or deposited by runoff away from its original location.
NR 216.002	Storm Water Discharge Permits	Definitions	(27) "Sediment" means settleable solid material that is transported by runoff, suspended within runoff or deposited by runoff away from its original location.
Trans 401.04	Construction Site Erosion Control and Storm Water Management Procedures for Department Actions	Definitions	(29) "Sediment" means settleable solid material that is transported by runoff, suspended within runoff or deposited by runoff away from its original location.
NR 141.05 (36)	Groundwater Monitoring Well Requirements	Definitions	(36) "Sediment" means any solid material dropping from suspension in water, including clay, silt, sand and gravel sized particles.
NR 528.03	Management of Accumulated Sediment from Storm Water Management Structures	Definitions	NR 528.03(1) (1) "Accumulated sediment" means settleable solid material contained in storm water runoff that is collected, retained and subsequently removed from storm water management structures.
NR 528.o3	Management of Accumulated Sediment from Storm Water Management Structures	Definitions	(6) "End use" or "end use of accumulated sediment" means use in agriculture, landscaping, site stabilization, construction, transportation projects, fill, backfill, reclamation of disturbed sites including mine reclamation, the placement of accumulated sediment and similar uses.
NR 700.03	General Requirements	Definitions	(54) "Sediment" means particles in surface waters or wetlands that are derived from the erosion of rock, minerals, soils and biological materials, as well as chemical precipitation from the water column. Sediment particles are transported by, suspended in or deposited by water.
292.68	Reimbursement for disposal of PCB contaminated sediment	Definitions	(b) "PCB contaminated sediment" means sediment that contains polychlorinated biphenyls in a concentration of 50 parts per million or greater and that is dredged from the bed or bank of a navigable water in this state.

Ordinary High Water Mark Definitions

Rule/ Statute	Title	Heading	Definition
NR 151.002(32)	Runoff Management	Definitions	(30) "Ordinary high water mark" has the meaning given in s. NR 115.03 (6).
NR 115.03(6)	Wisconsin Shoreland Protection Program	Definitions	(6) "Ordinary high-water mark" means the point on the bank or shore up to which the presence and action of surface water is so continuous as to leave a distinctive mark such as by erosion, destruction or prevention of terrestrial vegetation, predominance of aquatic vegetation, or other easily recognized characteristic. Where the bank or shore at any particular place is of such character that it is difficult or impossible to ascertain where the point of ordinary high-water mark is, recourse may be had to the opposite bank of a stream or to other places on the shore of a lake or flowage to determine whether a given stage of water is above or below the ordinary high-water mark.
SPS 381.01(169)	SPS 381 Definitions and Standards	Definitions	(169) " <i>Ordinary high-water mark</i> " has the meaning specified under s. NR 115.03 (6).
PSC 114.001(1)(b)	Wisconsin State Electrical Code	Definitions	(b) "Ordinary high water mark" has the meaning given in s. NR 115.03 (6).
NR 323.03(10)	Fish and Wildlife Habitat Structures in Navigable Waterways	Definitions	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.
NR 325.03(9)	Maintenance, Repair and Removal Procedures for Boathouses and Fixed Houseboats on Navigable Waterways	Definitions	(9) "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.

Ordinary High Water Mark Definitions - Continued

Rule/ Statute	Title	Heading	Definition
NR 324.03(5)	Fishing Rafts in Navigable Waters	Definitions	<p>(5) "Ordinary high water mark" means the point on the bank or shore up to which the presence and action of surface water is so continuous as to leave a distinctive mark either by erosion, destruction of terrestrial vegetation, or other easily recognized characteristic. Where the bank or shore at any particular place is of such character that it is impossible or difficult to ascertain where the point of ordinary high water mark is, recourse may be had to other places on the bank or shore of the same stream or lake to determine whether a given stage of water is above or below the ordinary high water mark.</p>
30.102(1) Stats	Navigable Waters, Harbors and Navigation	Web Site Information	<p>(1) Navigability determination and ordinary high-water mark identification. If the department makes a determination that a waterway is navigable or is not navigable or identifies the ordinary high-water mark of a navigable waterway, the department shall publish that information on the department's Internet Web site. Any person may rely on the information posted under this section as being accurate. This section does not restrict the ability of a person to challenge the accuracy of the information posted under this section.</p>