PDHonline Course C274 (4 PDH)

Beneficial Use of Dredged Material – Habitat

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GLOSSARY

TERMS

Aquatic Habitat Typical submerged communities extending from near sea, river, or lake level down several feet, such as tidal flats, oyster beds, clam flats, or fishing reefs.

Beach Biota All living organisms, which occupy the intertidal and dune zones of sandy beaches.

Beneficial Uses All productive and positive uses of dredged material, which cover broad uses ranging from fish and wildlife habitat development, to human recreation, to industrial/commercial uses.

Benthos The aggregate of animals and plants that are fixed or crawl upon the sea-bottom.

Colonial Nesting A term used to describe the habitat of numerous bird species, especially waterbirds, of nesting in large groups, often with nests only 1 to 2 feet apart.

Colonies Large groups of breeding birds that habitually nest together for protection and sociability in single or mixed groups.

Consolidation Describes the effect caused by dewatering and desiccation of dredged material substrates, usually resulting in lessening of volume of the material.

Containment Area Any site used for the temporary or permanent confinement of dredged material and may or may not have a permanent retaining structure

Desiccation Cracks Large cracks occur on fine-grained dredged material or deposited river sediment during dewatering and consolidation.

Dragline Trenching Dewatering dredged material by making trenches inside disposal sites with dragline equipment.

Dredged Material Any sediment under a body of water, which is dredged by any method and removed to a disposal location.

Effluent Quality Quality of water coming over the weir in a dredged material disposal site during and after a disposal operation.

Fish Farm Commercial production of several species of fish or shellfish (catfish, trout, shrimp,crayfish, and others) in man-made ponds or in protected, maintained natural coastal bays.

Fishing Reef Any underwater structure, natural or man-made, which changes the bottom topography and offers cover, food, and protection to fish and other aquatic organisms.

Green Manure Legume or grass crops grown solely for fertilizer and while in active growth are turned into the topsoil with a plow or disk for topsoil texture and nutrients.

Habitat Diversity The occurrence within one ecosystem of several types of wildlife or fisheries habitat. Large dredged material islands may have maritime forest, shrub communities, grass/herbaceous areas, bare ground, and marsh on different parts of the island at the same time.

Hydraulic Pipeline A dredged material discharge pipeline that carries slurry material to the disposal site. It may be floating or positioned on land.

Intermittent Dredging The shutting on and off of a dredging operation on a scheduled basis, 1 houron/1 hour off for instance, to allow time for settling of sediments and the effluent water to slow down.

Islands Upland habitat completely surrounded by water or wetlands.

Low Maintenance Habitat Habitat that requires almost no labor-intensive management such as mowing or protection and once developed is allowed to progress at its own pace.

Low Wave Energy Wave energy with tidal ranges averaging 1 to 2 feet, in areas naturally or artificially protected from the fetches and ship traffic.

Monitoring The collection of physical, chemical, and environmental data to determine impacts of dredging and dredged material disposal operations.

Natural Colonization The habitation by natural invasion by generally highly adaptable and opportunistic species such as smartweeds.

Ocean Dumping Disposal of dredged material via barges into designated disposal sites in deep open water.

pH A measure (0.0 to 14.0) of acidity and alkalinity of soil, water, and other liquids where 7.0 is neutral. A pH of 5.5 to 7.5 is best for plant and animal growth.

Problem Soil Any soil not suitable for beneficial use due to soil physical, chemical conditions or engineering properties.

Propagules Any piece of plant material that will form a new plant, seeds, tubers, sprigs, bulbs, and cuttings.

Riverine Utility Craft (RUC) Craft for use in water and soft mud whose flotation is provided by twin Styrofoam-filled rotors. Useful for dewatering fine-grained dredge material.

Seedbed Preparation Clearing, plowing, disking, and cultivation of dredged material for to be seeded.

Slurry A term describing the mixture of soil or sediment and water hydraulically dredged and pumped to a disposal site.

Substrate The foundation upon which all things exist; soil is a substrate supporting plants, animals, buildings; bay bottom is the substrate supporting benthic communities.

Target Species A desired species or groups of species which a habitat development is directed toward.

Turbidity Condition in water where high sediment loads cause clouding. May smother aquatic vegetation.

Weir Outfall structure build into the dike of a CDF for release of effluent and best drainage of ponded water and to allow more dropout of sediment.