

Wetlands Basics/Fact Sheet/Outline

1. Definition (USFWS/NWI): "WETLANDS are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of the year."

2. Functions and Values

Watershed ecology

Nutrient flows

Water flows/quality

Habitat

Food Webs

(Primary) Productivity

Biodiversity

Plants
Blue/Green Algae > SUN

Flood Control

Chemical amelioration/flow rate/improved water quality

Nutrient storage (muck)

Nurseries (especially estuaries)

Transition zones (salmon)

Nutrient and Atmospheric Cycling (N, H₂O, S) and CO₂
Control/Sequestration

pulling in carbon + holding it.

3. Soils – hydric soils which are defined as soils that are "...saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation.." USCoE

4. Hydrology - "The area is inundated either permanently or periodically at mean water depths <6.6 ft [2 m], or the soil is saturated to the surface at some time during the growing season of the prevalent vegetation." USCoE.

5. Types A. Marshes, Swamps, Bogs, Fens (EPA) → Peat/Spagnum Moss
non-woody plants B. Marine, Estuarine, Riverine, Lacustrine, Palustrine (RB, UB, AB, US, ML, EM, SS, FO, OW)

6. Flora/Fauna Some animals with water requirements (amphibs, reptiles), other transients and/or adapted.
Plants must be adapted to root inundation, soil saturation, with occasional drying of soils.

7. Import and History Flood control, diversity, as above in functions. Nutrient rich soils make valuable farmland when drained. Ability to absorb wastes and provide water attracts industry. Peat from bogs and fens used as fuel. Wetland