



Wetlands: A Valuable Resource

What are Wetlands?

Wetlands are areas of land that have the following characteristics:

- o **Hydrology**– areas with water, either at the surface or within the root zone (groundwater)
- o **Soils** – that are saturated or flooded long enough to develop anaerobic (no oxygen) conditions
- o **Plants** – that are adapted to and need wet conditions

Why are wetlands so valuable?

Though we once believed that wetlands were not useful or valuable, we now know that they are among the most productive ecosystems in the world. Healthy wetlands function to provide:

- o **Water Quality** – Wetlands filter stormwater runoff that may contain sediment or dissolved pollutants.
- o **Groundwater Replenishment** – Wetlands retain stormwater and precipitation, allowing water to infiltrate the soil and recharge groundwater. Groundwater flows into streams & other water bodies, supporting aquatic life & replenishing drinking water supplies.
- o **Flood Control** – Wetlands act as a natural storage system for flood waters.
- o **Biodiversity** – Wetlands host a rich cross-section of important plants and animals.
- o **Scenic Quality** – Wetlands have a unique beauty that our aesthetic sensibilities have been broadened to recognize.
- o **Recreation** - Wetlands support hiking, birdwatching, wildlife photography, hunting and many other forms of recreation and education.

Wetland ecological value varies. The value depends on many factors such as topography, hydrology, surrounding development, and use intensity. Proper resource management can help maintain quality wetlands.

Wetlands Restoration & Creation in HEEP

Operation of the UConn landfill caused some nearby wetlands to be filled with solid waste. Sedimentation from historical disturbance and regrading activities damaged other wetlands. Landfill leachate also migrated into and contaminated groundwater in lower wetland areas.

The solution involved both:

- o “remediation” – or removing the contamination and restoring the wetlands, and
- o “mitigation” – or creating new wetlands to compensate for lost areas that could not be restored.

Because years of assessment and monitoring are needed to determine the degree of success, UConn will actively manage the HEEP.



tussock sedge



marsh marigold



red maple



skunk cabbage

Wetland Plants

