

Nature Based Solutions: Wetlands and bioswales



Wetlands have standing water for at least one full season per year and are considered the most biologically diverse of all ecosystems.

Bioswales, rain gardens, and constructed wetlands are human built sustainable drainage systems that provide many of the same functions as wetlands. These include :

- Water purification, particularly of heavy metals and nitrogen, through physical barriers (sediment) and processing by bacteria and aquatic plants.
 - Nutrient retention and slow release.
 - Water storage which mitigates flooding.
- Biodiversity support including floral resources for pollinators.
- Replenishes water stored beneath the earth's surface (groundwater), which is an essential source of drinking water and floral irrigation.
 - Shoreline stabilisation by buffering storm urges and fire breaks.
- Depending on size provide recreation opportunities and visual appeal, contributing to human well-being.