

What is a Wetland?

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What is a Wetland?



Wetlands and streams are necessary components of a healthy ecosystem.

What is a Wetland?



Photos Courtesy of IDEM

Wetlands - contain standing water or have water at or near the soil surface for part of, or all year, including the growing season

What is a Wetland?

A Typical Wetland

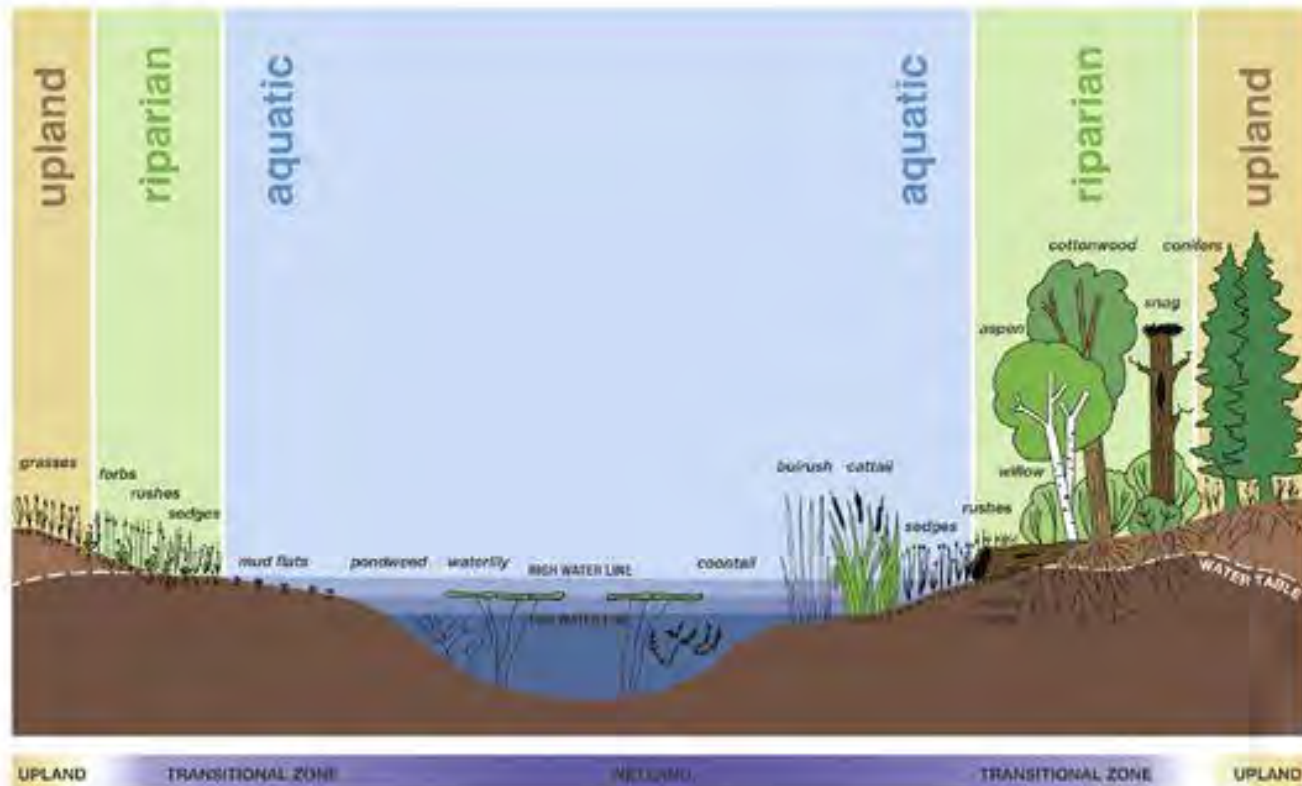


Image Courtesy of IDEM

Different from both dry land (upland) and deep water of lakes and streams, wetlands often occur in the transitional zones between these features.

What is a Wetland?



What is a Wetland?

Many different types of wetland ecosystems exist in Indiana



Floodplain Forest



Wet Meadow



Shallow Marsh



Wet Prairie

Photos Courtesy of IDEM

How Wetlands Function

Wetlands develop in areas of poorly drained soils.

As these areas are flooded, often for prolonged periods of time, the water saturated-soils no longer produce oxygen.

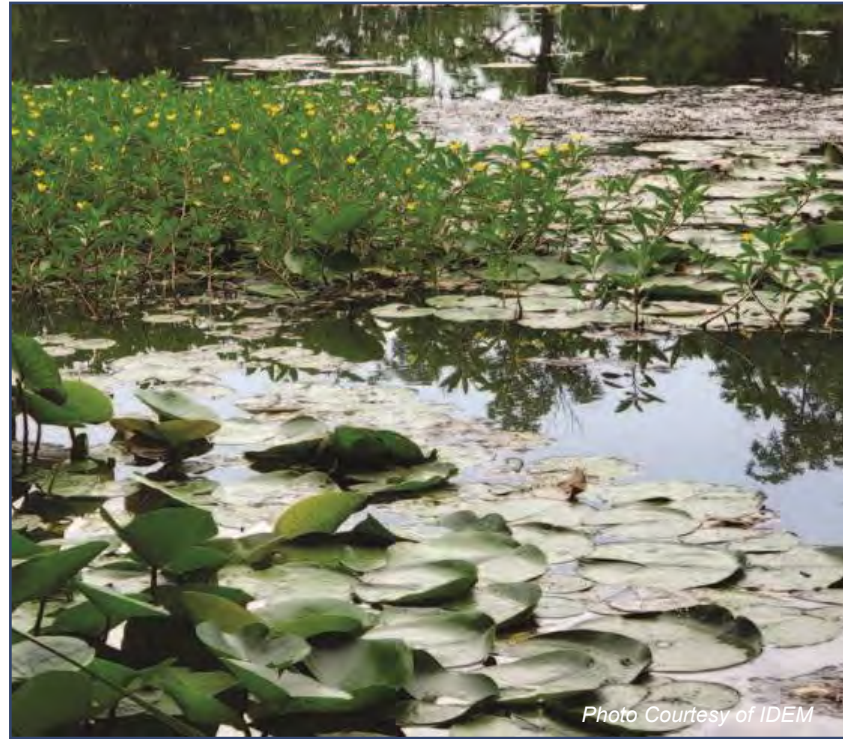
How Wetlands Function



Image courtesy of IDEM

The process allows vegetation adapted to poorly drained soils to thrive.

How do I know if my land has wetlands?



Wetlands are defined by three criteria: **vegetation, hydrology, & soils**

Criteria 1: Vegetation



Nearly 5,000 different hydrophytic (water loving) plants occur in wetlands.

Criteria 2: Hydrology



Refers to the presence of water at or above the soil surface long enough to significantly influence the plant types & soils that occur in the area.

Criteria 3: Soils



Approximately 2,000 different types of hydric soils occur in wetlands across the United States.

Wetland Determinations & Delineations

Wetlands are identified through a process known as **determinations**.
Delineations are the process of using determination data points to identify and map the location & extent of a wetland at that time.

There are no known precise wetland maps!

National Wetland Inventory Map

The screenshot displays the National Wetlands Inventory web application. The interface includes a top navigation bar with the title "National Wetlands Inventory" and subtext "surface waters and wetlands". Navigation links for "ABOUT", "GET DATA", "PRINT", and "FIND LOCATION" are present. A left sidebar contains "BASEMAPS" and "MAP LAYERS" sections. The "BASEMAPS" section lists options: STREETS, SATELLITE, HYBRID, TOPO, TERRAIN, GRAY, OPEN STREET MAP, NATGEO, USGS TOPO, and NAT'L MAP. The "MAP LAYERS" section includes checkboxes for "Wetlands", "Riparian", "Riparian Mapping Areas", and "Data Source", along with sub-options for "Source Type", "Image Scale", and "Image Year". There are also checkboxes for "Areas of Interest", "FWS Managed Lands", and "Historic Wetland Data". The main map area shows a satellite view with a blue river and a green wetland area labeled "PFO1A". Other features include a "Measure" tool, a "LEGEND" button, and a scale bar at the bottom left showing "1:4,514" and coordinates "40,994 | -85.273". The bottom right corner features the "POWERED BY" logo for "esri".



Not for regulatory purposes;
not field verified &
not delineated

What a
Wetland is
Not

What a Wetland is NOT



Photo Courtesy of Google Images



Photo Courtesy of Google Images



Photo Courtesy of National Geographic Society



Photo Courtesy of Flickr



Photo Courtesy of Google Images

Mosquito & monster-infested places from your worst nightmares

What a Wetland is NOT

Wetland
Life Thrives
Beyond
Mosquitos &
Monsters



Photo Courtesy of USFWS



Photo Courtesy of Indiana DNR



Indiana DNR



Audubon Society



Photo Courtesy of Indiana DNR



Indiana DNR

What a Wetland is NOT: a Mosquito Sanctuary



Excessive mosquito populations are often a sign of stagnant water.

Things you can do:

- Dispose of unwanted cans & tires
- Clean clogged roof gutters
- Drain flat roofs
- Flush sump pump pits regularly
- Change water in bird baths, fountains, & troughs twice / week
- Turn over unused wading pools & containers that collect rainwater

What a Wetland is NOT



- **Detention (dry) Basin** – holds water temporarily after rain / storm events; slow release over time period
- **Retention (wet) Pond** – holds water year-round; improves water quality
- **Constructed Wetlands** – Artificial treatment systems that use natural processes involving wetland vegetation, soils, & their associated microbial assemblages to improve water quality (source: EPA)

Thank you!