12.3.15

Wetlands cont.

500 plant species of concern in the wetlands

more than 80% of amphibians in the state live in wetlands

25% of the states 41 species and reptiles live in the wetlands

more than 120 species of native birds call the wetlands home

wetlands are a food factory – they produce lots of food; primary productivity is extremely high

spawning grounds in

nearly 200 species of amphibians as well as ducks, geese, swans, bitterns, herons all reproduce there

spawning grounds for freshwater fish

bullhead, yellow perch, northern pike, muskellunge, walleye, bluegill

coastal wetlands – estuaries, brackish water

salmon, flounder, striped bass, bluefish, menhaden

cycling nutrients – another function of wetlands

phosphorus, nitrogen, potassium

buffer zone – another function of wetland

absorbs excess water from floods, controls rate and flow of water coming into or out of an urban zone, protects the coastlines

pollution control – another function of wetlands

sediment is Pa’s #1 pollutant

helps with air pollution – plants absorb pollutants in air and water

suburban swamps

best practice

by 2020 – Philadelphia will have lost 173,000 acres of space due to development

urban wetlands

buffer water, reduce flooding

trap and filter much of the iron, lead, copper that is in urban runoff

aid in treating large volumes of substances in most urban runoff

factors that affect wetlands and waterways:

1. human activities – in the past 400 years, more than half of the 220 million acres of wetlands in the US have been lost due to human activities, through agricultural, urbanization, etc.

pet waste, mining (acid mine drainage), industry, waste disposal

2. watershed quality – index of watershed indicators (IWI) , more than a dozen factors they take into consideration – including whether there is a dam in the area, human population