

PHOSPHORUS SOURCES IN THE WISCONSIN RIVER BASIN

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Phosphorus Facts

- Helps plants grow
- Many sources throughout the Wisconsin River Basin
 - Some have greater affects on water quality than others
 - Some easier to control than others



Sources of Phosphorus

Natural Sources

- Soil
- Wetlands
- Biota
 - Waste
 - Decomposition

Cultural Sources

- Waste
 - Human
 - Domestic animal
- Fertilizers
 - Agricultural
 - Lawn/Garden
- Erosion/Sedimentation
- Stormwater

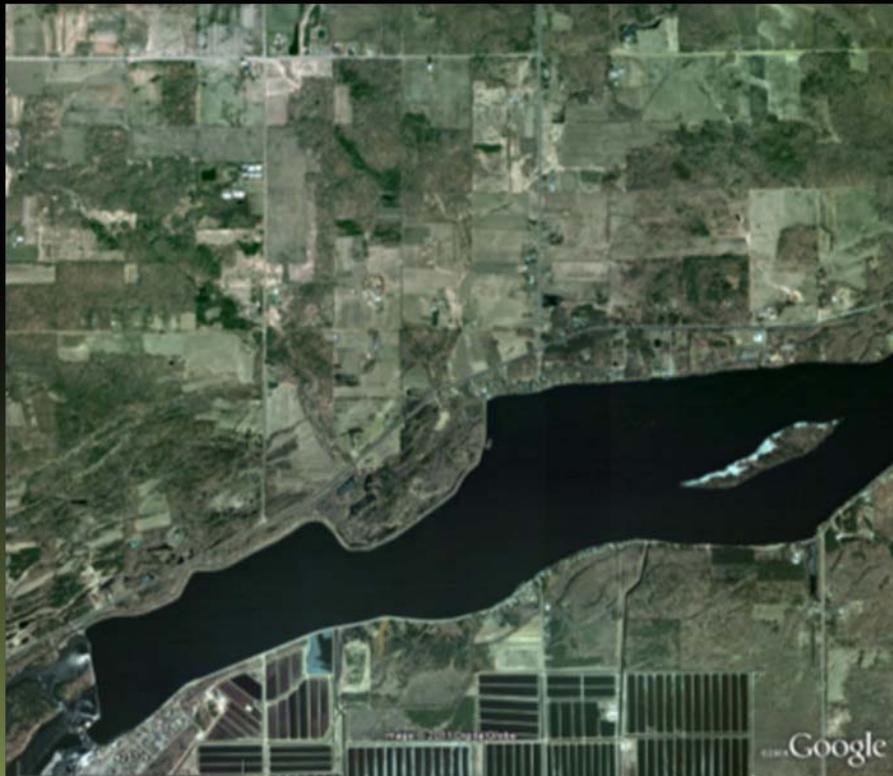
Point and Non-Point Sources

- Point – end of a pipe
 - Wastewater treatment plants, municipal, industrial
 - Regulated and monitored



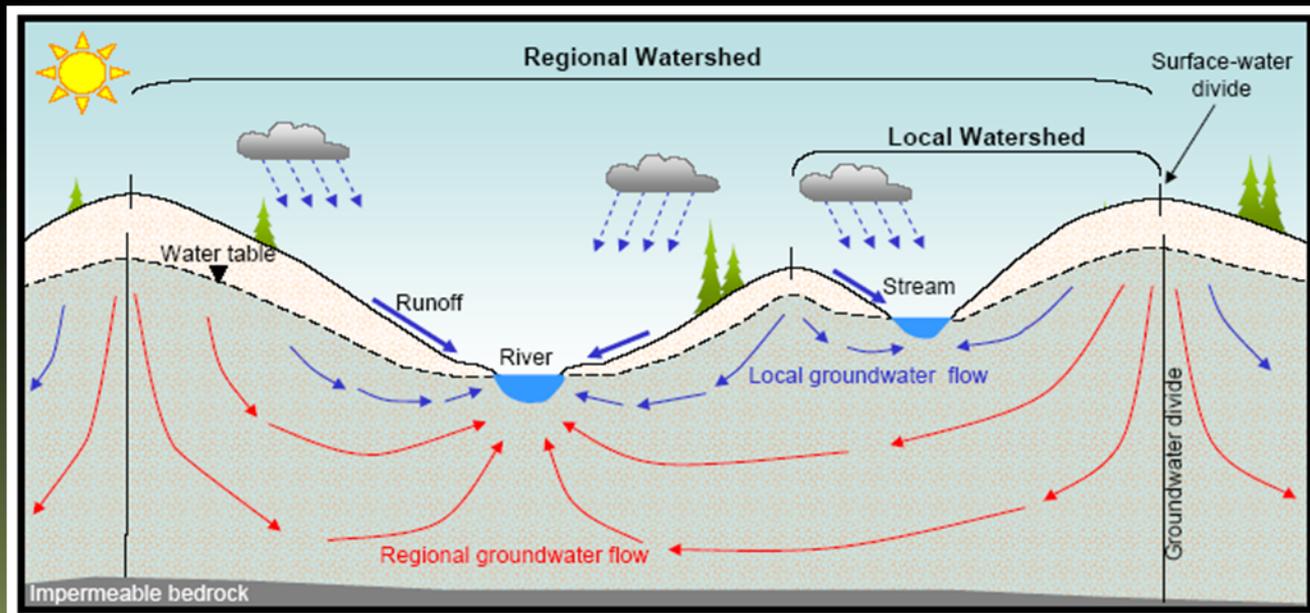
Point and Non-Point Sources

- Non-Point
 - Diffuse, often not as obviously connected
 - More of a challenge to manage



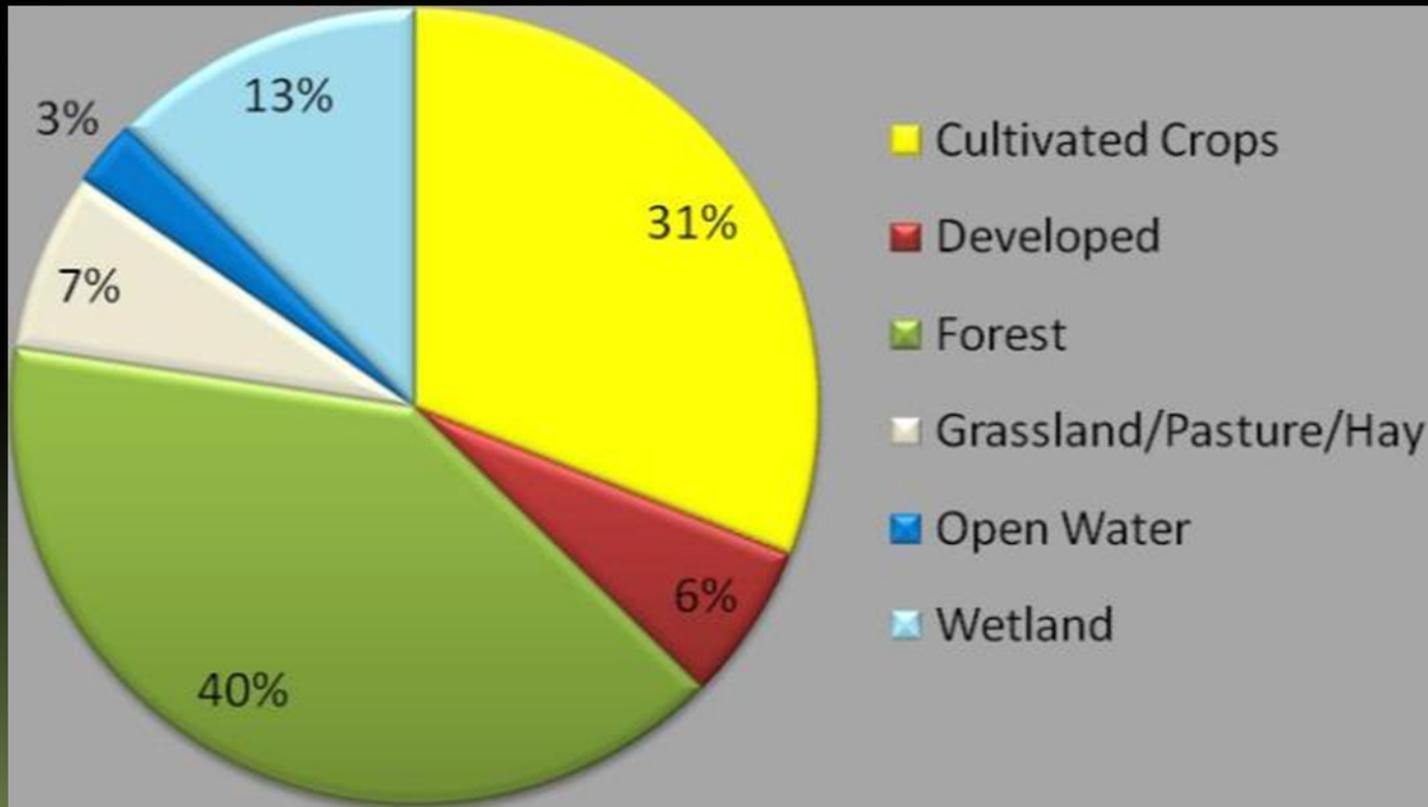
Routes of Water Movement to a Waterway (non-point)

- Runoff /overland flow
- Groundwater
- Storm sewers



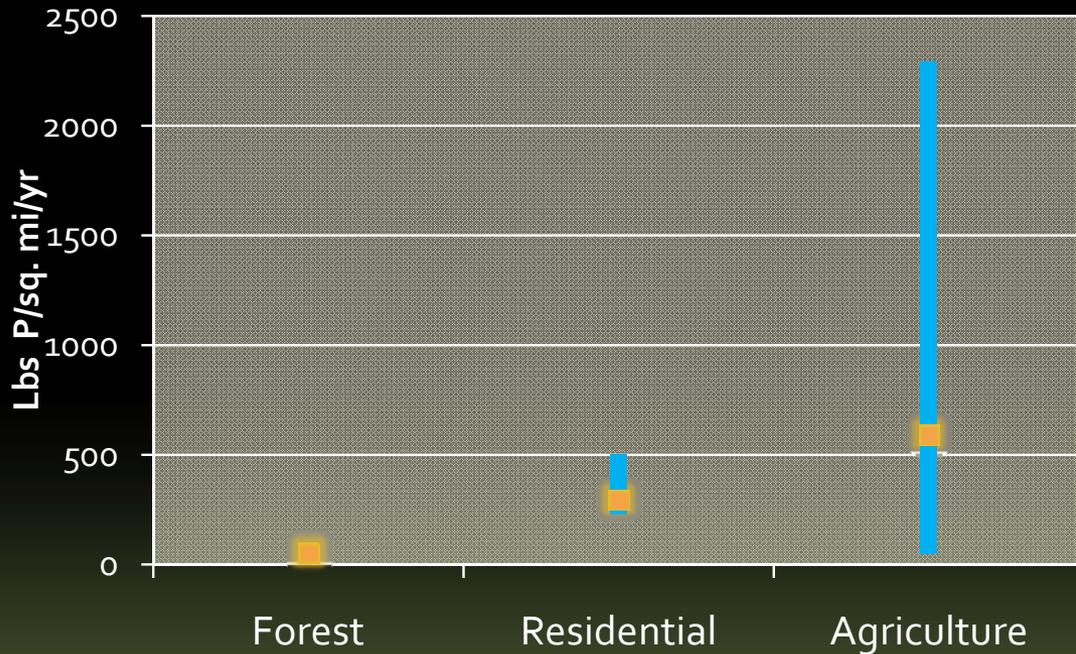
Land Use in the Wisconsin River Basin

Headwaters to Lake Wisconsin

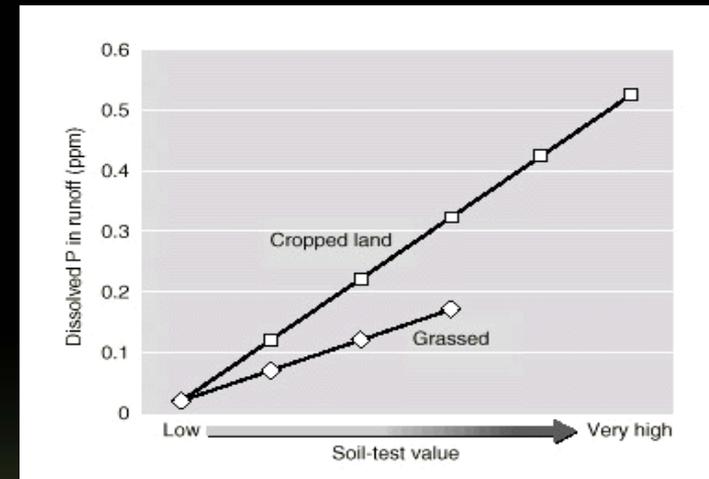


Land Use and Management Practices

Phosphorus Loading from Land Uses



Lillie, et al. 1993



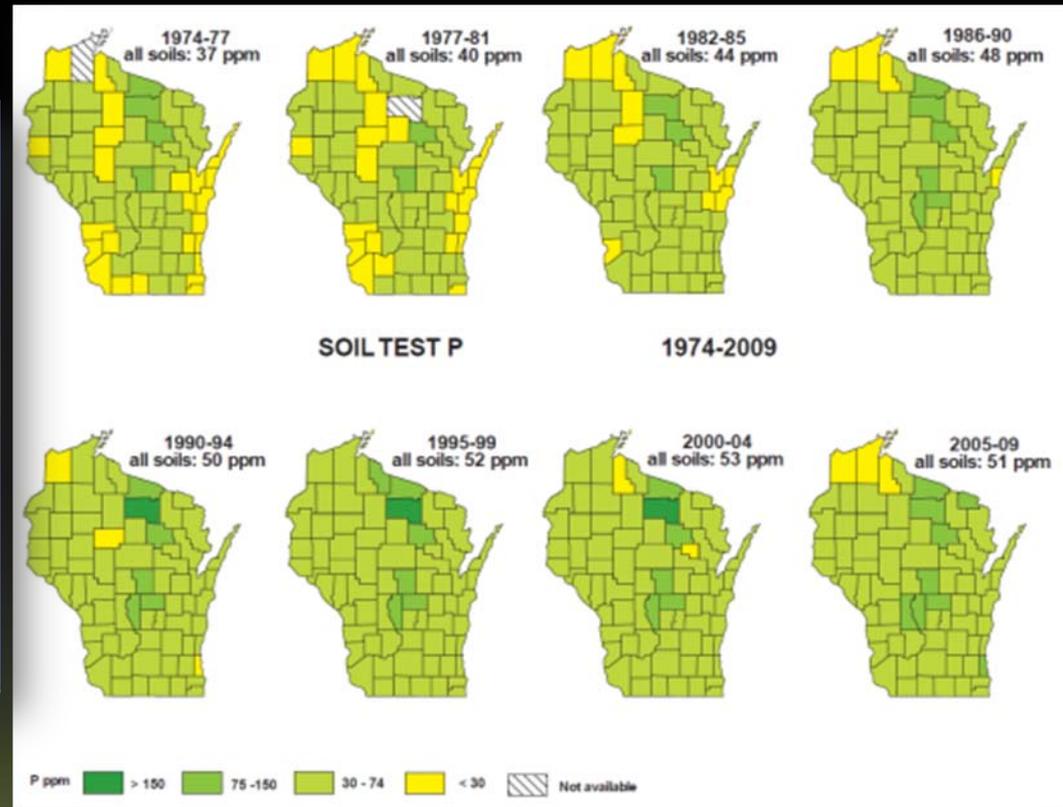
UIUC

Phosphorus in Soil

Wisconsin Soil Test P Trends: 1964-2009



J. Peters, 2011



Soil Erosion



Phosphorus Additions to the Landscape



Storm Water Management

Particles of soil and other debris are carried with storm water.



Near Shore Vegetation

Vegetation along the shoreland helps to improve the water quality in the runoff to the stream or river.



In-Lake Phosphorus

