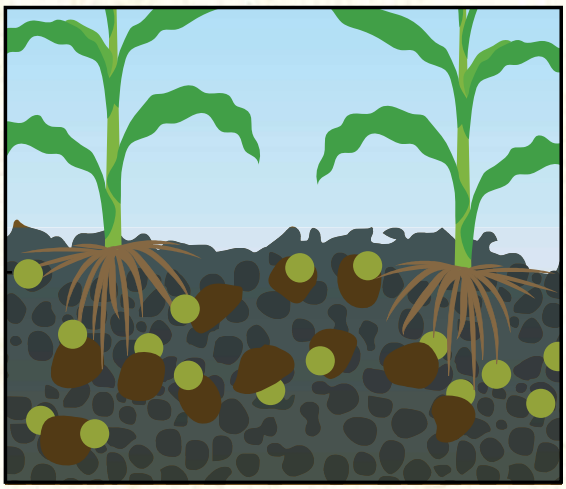
A Closer Look

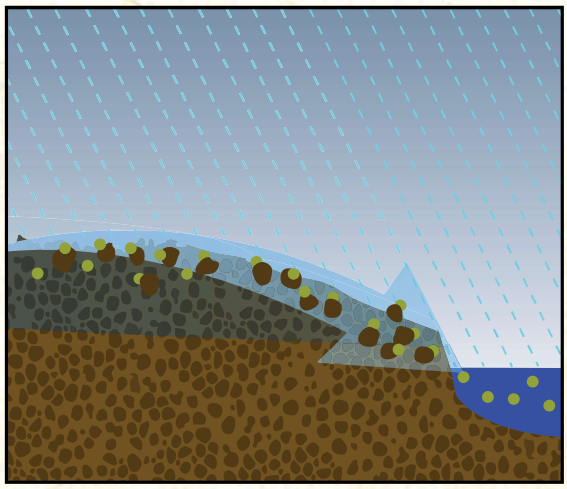
How Does Phosphorus Move?

PHOSPHORUS
is found in multiple forms:

- Particulate (sediment-bound) Phosphorus
- Dissolved Reactive Phosphorus



Particulate phosphorus binds closely with sediment. When soil is transported in the process of erosion, particulate phosphorus is also on the move.



Sediment that moves with surface runoff accounts for the majority of phosphorus (P) from Iowa fields delivered to streams.

Recent studies suggest the amount of dissolved P lost from fields and its impact on water quality is greater than often assumed. Dissolved P can infiltrate and move through subsurface pathways – an area of emerging concern.

DID YOU KNOW?

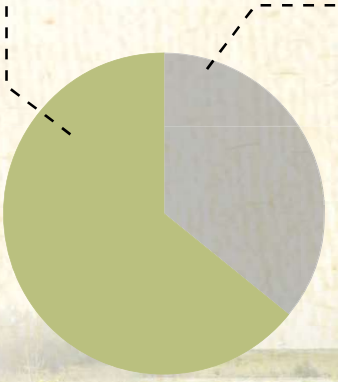
Phosphorus is present in all of the world's fresh waterbodies, but humans contribute to the concentration and extent in our water.

64%
AGRICULTURAL SOURCES

- Annual cropping systems
- Rich soils
- Nitrogen fertilizer and manure application

36%
URBAN/ OTHER SOURCES

- Wastewater treatment plants
- Industrial facilities
- Lawn fertilizers
- Dishwashing detergents



Sources of Phosphorus in Iowa (Iowa Nutrient Reduction Strategy)

WATER QUALITY MATTERS TO US ALL!

Iowa State University researchers estimate that Iowans would be willing to pay about **$30 million per year** for recreational improvements from the better water quality associated with full implementation of our state's Nutrient Reduction Strategy! The Nutrient Reduction Strategy takes a science-based, voluntary approach to target 45% reductions in nitrogen and phosphorus loads.

CONSERVATION LEARNING GROUP

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