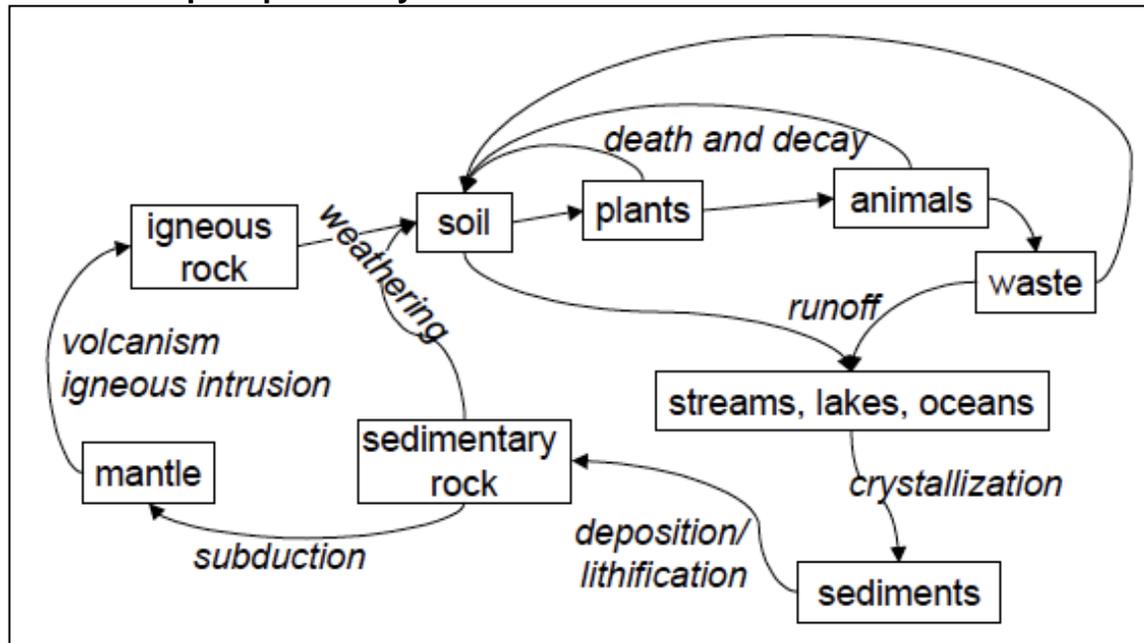


The natural phosphorus cycle

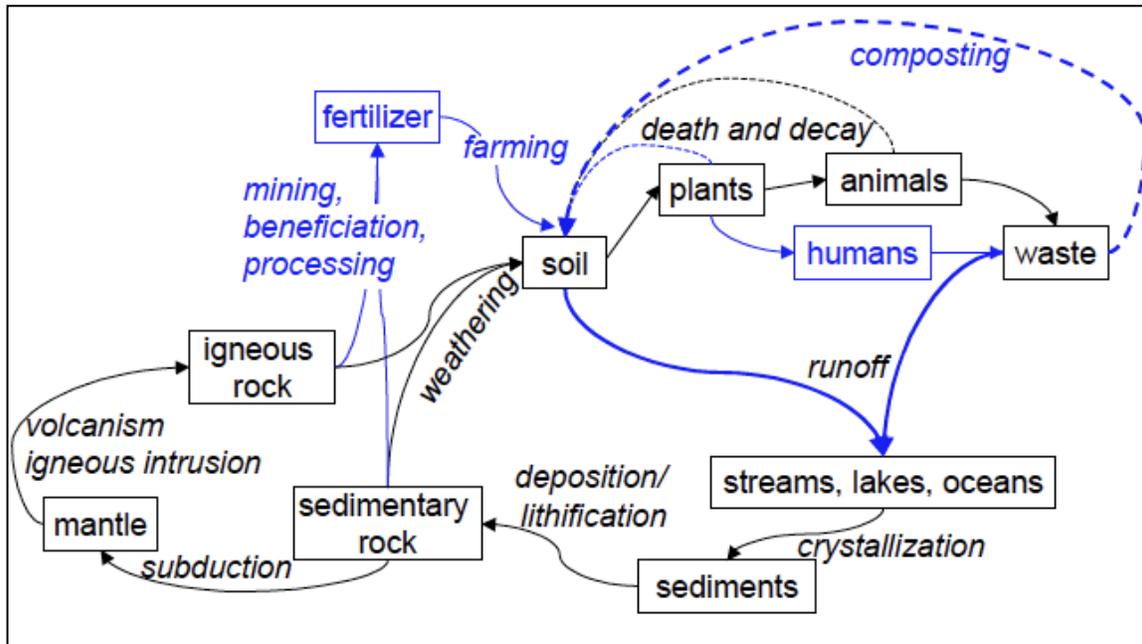


Phosphorus is not a very abundant element, but is essential to plant and animal life.

Much of the phosphorus in soil is found in a form that cannot be absorbed by plants.

- Organic phosphorus (in plant and animal tissue) can be readily absorbed.
- If $\text{pH} > 7.2$, soil phosphorus will combine with calcium to become an insoluble calcium phosphate mineral – most plants can't use phosphorus in this form.
- If $\text{pH} < 5.5$, soil phosphorus will combine with iron or aluminum, also making insoluble minerals – most plants can't use phosphorus in this form.
- Legumes (alfalfa, clover, etc.) are good at extracting phosphorus from minerals. That phosphorus becomes part of their plant tissue.

The phosphorus cycle with humans



The dashed lines on this map exist only if humans choose to compost and/or let plant and animals die/decay on the land.