

## TOPIC 1.6

# The Phosphorus Cycle

### Required Course Content

#### ENDURING UNDERSTANDING

##### ERT-1

Ecosystems are the result of biotic and abiotic interactions.

#### LEARNING OBJECTIVE

##### ERT-1.F

Explain the steps and reservoir interactions in the phosphorus cycle.

#### ESSENTIAL KNOWLEDGE

##### ERT-1.F.1

The phosphorus cycle is the movement of atoms and molecules containing the element phosphorus between sources and sinks.

##### ERT-1.F.2

The major reservoirs of phosphorus in the phosphorus cycle are rock and sediments that contain phosphorus-bearing minerals.

##### ERT-1.F.3

There is no atmospheric component in the phosphorus cycle, and the limitations this imposes on the return of phosphorus from the ocean to land make phosphorus naturally scarce in aquatic and many terrestrial ecosystems. In undisturbed ecosystems, phosphorus is the limiting factor in biological systems.

#### SUGGESTED SKILL

 *Visual Representations*

##### 2.B

Explain relationships between different characteristics of environmental concepts, processes, or models represented visually:

- In theoretical contexts
- In applied contexts



#### AVAILABLE RESOURCES

- Classroom Resource > [AP Environmental Science Teacher's Guide](#)
- External Resource > [Environmental Literacy Council's AP Environmental Science Course Material](#)
- Classroom Resource > [Outdoor Education Experiences and AP Environmental Science](#)
- The Exam > Student Performance Q&A ([2014 Q4](#), [2015, Q1](#))
- The Exam > Samples and Commentary ([2014 Q4](#), [2015, Q1](#))