

# Integrative Biology 102: Lecture Outline

## Nutrient Cycle Disruptions & Dead Zones

### Lecture Objectives

By the end of the lecture (and after studying the texts), you should be able to:

1. list anthropogenic sources of nitrogen and phosphorus in the environment.
2. explain the effects on the environment of nutrient loading.
3. describe and explain "dead zones."
4. list changes in your behavior and that of your community that can reduce nutrient loading.

**Reading:** Pages 402-404 in Cunningham

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### Terms

- \* hypoxia
  - \* eutrophication
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#### 1. Sources of nutrients

- \* Nitrogen loading

- \* Phosphorus loading

## 2. Effects of nutrient loading

- \* Eutrophication

- \* Other water pollution effects

- \* Acidification of the environment

- \* Loss of biodiversity, ecosystem changes

- \* Air pollution

- \*Other

### 3. Behavior changes

**For the next lecture** on DNA and Protein Synthesis, read Leventin & McMahon Chapter 1, pgs. 12-17 and 7, and in Cunningham, pgs. 116-120 and answer this question:

\* How do the messages of our genes become our characteristics?