

**Blue Gold – Path to Water Conservation**  
**High School Description and TEKS Overview**  
**3 – 3 ½ hours in Length**  
**Inside/Outside**



During this lesson students learn that water is a non-renewable resource, and make informed choices regarding the source, use, management and conservation of water after participating in hands-on activities that focus on the urban water cycle process and human water consumption. The identification of nitrogen, phosphorous, and sulfur found in waste water and its effect on the ecosystem will be discussed. Students will participate in a model of the urban water cycle, predicting the effects of water usage in the future and how their use of water can be a factor. Legislation regarding water use in Texas will be discussed

### **Environmental Systems**

- Diagram abiotic cycles including the hydrologic cycle (4.C)
- Document the use and conservation of non-renewable resources as they pertain to sustainability. (5.C)
- Identify non-renewable resources that must come from outside and ecosystem such as water. (5.D)
- Analyze and evaluate the economic significance and interdependence of resources within the environmental system (5.E)
- Analyze and predict the effects of non-renewable resource depletion (7.C)
- Identify causes of water pollution, including point and nonpoint sources (9.A)
- Analyze past and present local, state, and national legislation. (9.K)

### **Aquatic Science**

- Identify the role of nitrogen, and nutrient cycles in an aquatic environment. (6.A)
- Identify sources of water in a watershed (7.A)
- Analyze the cumulative impact of human population growth on an aquatic system (12.B)
- Understand the impact of various laws and policies of water laws.

