

Analyzing a System - Beachwood High School’s Retention Pond

	Pond System
Inputs to system	
Processes in this system	
Outputs of this system	
Natural changes that occur in this system	
Anthropogenic changes that occur in this system	

Define the property of water and then relate each property to the role in the pond:

Surface tension	
Capillary action	
Vaporization point	
Freezing point	
Universal solvent	
Specific heat	

Describe energy conversions occurring here that illustrate 1st Law of Thermodynamics:

Describe energy quality that illustrates the 2nd Law of Thermodynamics

To maintain a so-called “Steady State”, feedback loops take place in these systems. Describe examples of both types of feedback loops:

Negative	
Positive	