**Systems, Spheres and Feedback Loops**

**Learning Target:** Earth’s systems, being dynamic and interacting, cause feedback effects that increase or decrease the original changes.

**Success Criteria:**

* Distinguish between positive and negative feedback loops.
* Describe differences in Earth’s geosphere, lithosphere, hydrosphere, atmosphere, biosphere in response to a change to Earth’s surface.

**Vocabulary**:

* Positive feedback loop
* Negative feedback loop
* Predator
* Prey
* Erosion
* Deposition
* Albedo effect
* Geosphere
* Lithosphere
* Hydrosphere
* Atmosphere
* Biosphere

**Literacy**: B. (n.d.). "The dice are loaded": Climate change and the flooding in Louisiana. Retrieved October 09, 2016, from https://newsela.com/articles/louisiana-flood-climate-change/id/20744/

**Homework**: You will need to research using the Internet in order to discover the answers to the following questions.

1. How does the loss of ground vegetation influence water runoff and soil erosion? Describe.
2. How do dammed rivers influence groundwater recharge, sediment transport downstream, and coastal erosion?
3. How does the loss of wetlands cause a decrease in local humidity that further reduces the wetland extent?
4. Read the assigned article and answer the four quiz questions. Illustrate one of the feedback loops discussed in the article below.