

Name: \_\_\_\_\_

Period #: \_\_\_\_\_

Date: \_\_\_\_\_

## **Dams: Helpful or Hurtful?**

### **Study Guide**

#### **What is the issue?**

- **Dams are structures built across streams, rivers or estuaries to retain water.**

#### **Benefits of Using Dams**

- Dams provide many benefits including:
  - Recreation
  - flood control
  - water supply
  - hydroelectric power
  - waste management
  - river navigation
  - wildlife habitat

#### **Then what is the problem?**

- Dams flood a vast area of land
  - Approximately 400,000 sq km worldwide have been flooded by dams
  - Forests are flooded and decompose
  - Dams can break and cause a massive flash flood.
- Riverbeds, banks, deltas, estuaries, and coastlines are changed
  - Disrupts natural seasonal changes in the river
  - Ends flooding that help to clean out the silt in rivers, causing them to clog
  - The silt that usually flows down to the Beaches and Estuaries is blocked by the dam.
  - Sediment load changes

- Sediment settles to bottom of river
- The settled sediment erodes and leaves poor habitat for fauna
- The coast beyond the mouth of the river is eroded

### **Who is Causing it?**

- Communities across the world use dams
- Farmers benefit
- Households benefit
- Big business benefits

### **What is being affected?**

- Plant and animal species lose habitats
- Migrations of fish are interrupted and often stopped
- Ecosystems are destroyed (dried/flooded)
- Food chains/webs are interrupted
- Endangered species are at risk of extinction
- Erosion alters the land

### **What is being done to help?**

- Suggestions for easing the effects of dam construction
  - make better use of the dams that already exist
  - try to make dams that have less environmental impact in the future
  - release more water from the reservoir that the dam created
  - inform people about what effects dams and hydroelectric power are having on the environment