Rivers, Streams, Lakes & Ponds

What is a River?

* A natural channel containing flowing water.
* Has a Source

Melting snow

Groundwater

Runoff from rainwater

* Flows down because of
force of gravity

3 stages of river development

1) Youthful Rivers

2) Mature Rivers

3) Old Rivers

Youthful Rivers

* Has a steep Slope and fast-moving water.
* Contain:

Rapids – part of river where the current is swift

Waterfalls – steep fall of water, as of a stream from height.

Mature Rivers

* Water moves slower than the waters of youthful rivers do.
* The rivers wind back and forth in loops called meanders.

Old Rivers

* Water moves very slowly
* Has nearly flat slope

Floods easily because of this.

* Oxbow Lake – Curved lake formed when a bend in an old river is cut off at both ends.

Happens when flooding causes erosion and deposition along meanders.

* Example

Mississippi River

How Lakes and Ponds Form and change

What are lakes and Ponds?

* Lakes – low spots in earth’s surface filled with still water.
* Ponds – body of water similar to a lake but usually smaller and shallower

Unlike rivers and streams, lakes and ponds have relatively still waters.

Formation of lakes

* Low spots on earth’s surface are created in many ways.
* Kettle Lake – Lake formed by retreating glacier
* Earthquakes can cause low spots to form that fill with water.
* Meteorites can cause holes which can become lakes.
* Reservoir – Artificial Lake (man made lake by creating a dam on a river)

Lake Mead (Hoover Dam)

Life cycle of a Pond

* Ponds and lakes at their peak are clear pools of water
* As they grow older they can be filled with sand, silt and dead leaves.
* This causes the ponds and lakes to become meadows and marshes.