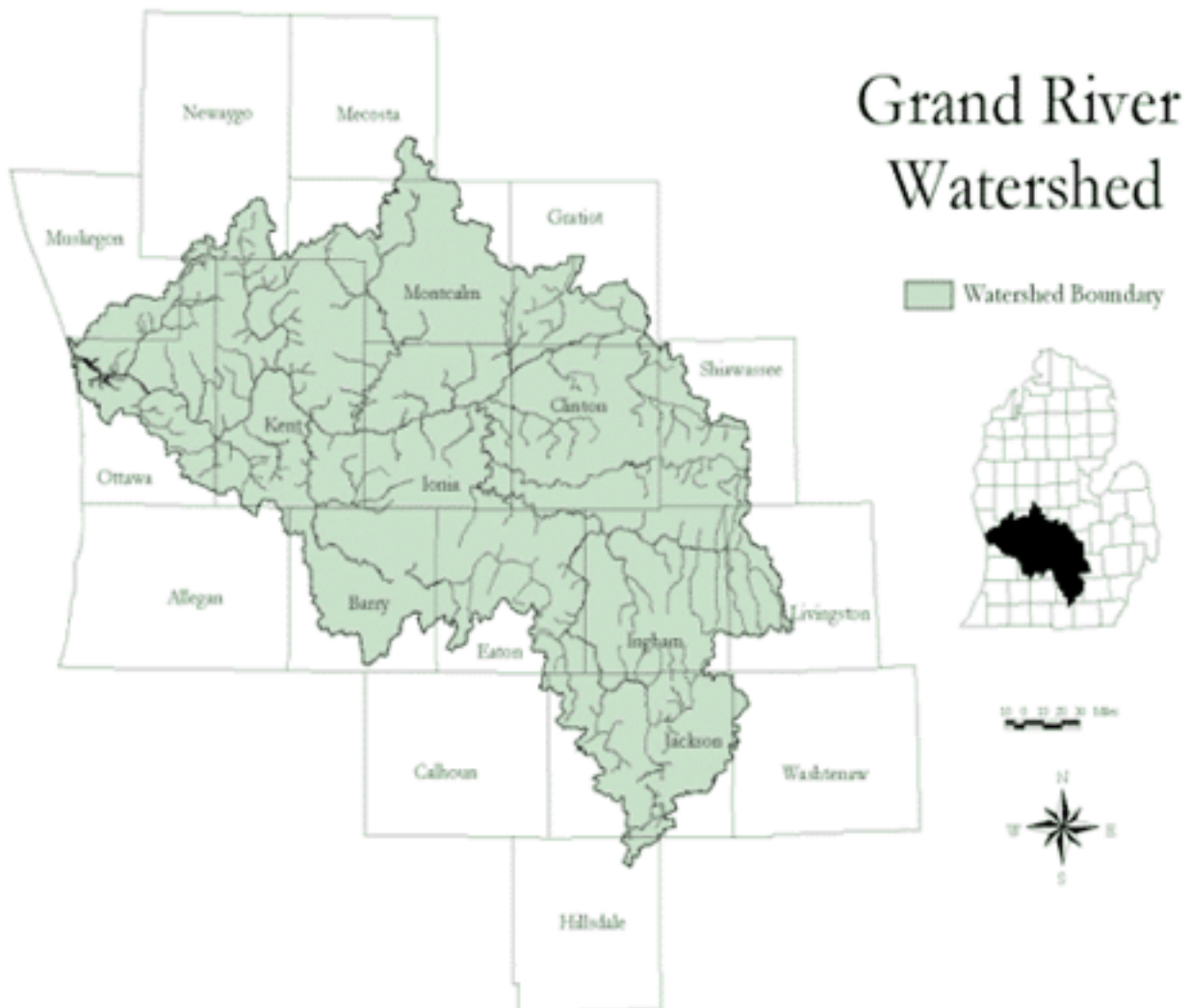


# What is a Watershed? (Part A)

## Background

- A watershed is an area of land that drains into a body of water such as a river lake or bay. Watershed boundaries are defined geographically by ridges or lines of high elevation. It is mainly the topography of a region that will determine its boundaries.
- Every place on the Earth is part of a watershed. In the continental US there are 2,110 watersheds; including Hawaii, Alaska, and Puerto Rico, there are 2,267 watersheds.
- Hudsonville belongs to the Lower Grand River watershed which encompasses 2909 square miles of land.
- Watersheds can be large or small. Every stream or river has an associated watershed. Smaller watersheds join to become larger watersheds.



## Procedure

1. Using dark marker (black, brown, or purple) gently trace the tops of the mountain ridges.
  - Carefully follow the ridge as far as it goes.
  - These ridges are the boundaries of your watersheds.
5. Using a BLUE SHARPIE MARKER draw in where you think rivers and lakes would be in your landscape.
  - For rivers, it is easiest to start at the bottom of a valley and follow it uphill.
  - If there are valleys that can't go down any further that may be the position of a lake.
6. Take a spray bottle and simulate rain by spraying OVER the landscape while your paper is on a flat surface.
  - Do not spray directly at the landscape
  - Spray horizontally so drops of water fall onto the paper.
7. Allow your landscape to dry in the area where you are directed by the instructor.
8. After your mountain is dry, add the locations of rivers and lakes to your topographic map.

# What is a Watershed? (Part B)

## Reflection

1. What determines the boundary of each watershed? \_\_\_\_\_
2. Which describes a watershed ?
  - a. the area around a lake that drain into the lake
  - b. the area around a river that drains into the river
  - c. all land on Earth, divided by ridges and areas with high elevation
  - d. all of these.

Examine the Hydrology and Topography maps for the Lower Grand River Watershed. Note that the Grand River runs across the middle of the watershed and leads to Lake Michigan which would be on the left side of the maps.

3. What is the elevation range for the majority of the Grand River's path ? \_\_\_\_\_
4. What is the highest elevation range for the watershed? \_\_\_\_\_
5. Notice the 3 main tributaries (rivers that lead to the Grand River) on the TOPOGRAPHY MAP. Now use the Hydrology Map to identify them.
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
6. What elevation range do the three main tributaries fall into? \_\_\_\_\_ How does this elevation compare to the range for the Grand River? higher / lower
7. Are there any large lakes in the LGR Watershed? \_\_\_\_\_  
Why do you think that may be? \_\_\_\_\_