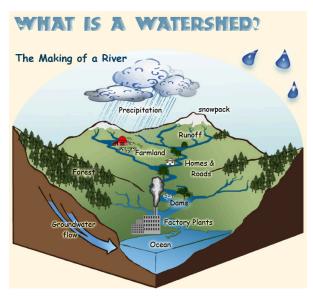
## **Publication 1: The Watershed**

Our lakes are essentially a sink for the water that originates on the uplands around them, its watershed. When rain falls on the highest point of a lake's watershed, the drop can ideally get absorbed into the landscape or unfortunately roll on the surface, bonding to many things along the way, including other drops, nutrients, pollutants, and eroded sands, silts and minerals. Our goal is to make erosion more difficult and make it more difficult for water to flow directly into the waterways.



Source: https://www.fs.usda.gov/rm/boise/research/techtrans/projects/scienceforkids/watersheds.shtml Image Credit: A. Vincente, U.S.Forest Service

In turn, we will encourage more water to infiltrate the soils, allowing the deposition of any eroded sands and silts onto our uplands along with the nutrients and pollutants. Factors that may determine how much of the water gets infiltrated into the soil include the types of soil and the amount of impervious surfaces. No landscape will prevent all erosion or all drops and particles from making their way directly to the lake, but there is always room for improvement. Here is a video, about 9 minutes, produced by the Environmental Protection Agency.

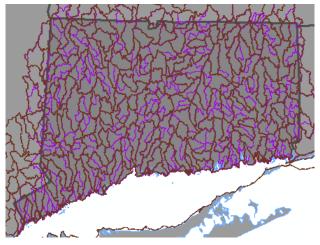
■ Reduce Runoff: Slow It Down, Spread It Out, Soak It In

Now we have a starting point for focusing our efforts, our watershed. The US Geological Survey's (USGS) technical name for a watershed is a Hydrologic Unit and they are assigned Hydrologic Unit Codes (HUC). Most of our lakes here in CT are part of Region 01, New England with the exception of a handful of lakes on the western edge that belong to Region 02, Mid-Atlantic. Therefore, knowing we share our watershed with numerous other states would make it unrealistic as a single person or a small non-profit to focus on effective areas of change. Let's remember simple and basic, the theme of this program.



Region 01, New England Image Source: https://cteco.uconn.edu/help/watersheds.htm

To help us with this, USGS further divides the hydrologic units up to 8 smaller levels, each division identified by a two digit number. The map below shows the USGS HUC 12, or six levels smaller than the HUC 2 shown above. CT DEEP has made its own basin divisions, but these are not always the same as the USGS ones. Here is an image of USGS HUC 12 (brown) and the DEEP subregional basins (purple)



Source: https://cteco.uconn.edu/help/watersheds.htm

These smaller basin divisions can help you to start with smaller projects and focus on partnerships with stakeholders within your focus basin, as well as, the government agency and legislative representatives for those areas.

## **Task 1: Identify Your Watershed**

This is where we invite you to identify your watershed to a point you feel is manageable. Here is tool to help you: <a href="https://modelmywatershed.org/">https://modelmywatershed.org/</a>

Model My Watershed - Introduction and Suggested Starter Questions

Get Started Button on the left.

- Get CT in the center and zoom in until the whole state is visible
- Select Boundary
  Remember the subdivisions of HUCs HUC 12 will be smallest.

## If that is still overwhelming try this

- Delineate Watershed
  - Continental US Medium Resolution
  - o Tap your lake
    - You may find you have more than one just do each one separately
- Analyze your watershed
  - Explore the tabs Streams, Land, Soil, etc.
    - These statistics can be downloaded and used later
    - Here are some starter questions to get your curiosity flowing.
      - What can you learn?
      - How many streams?
      - Do you have a stream or river group you could partner with? Hint: Try searching the stream or river name in your favorite search engine.
      - What types of soil are in your watershed?
      - Do you have any point source discharge sites?
      - Make a note, we will talk more about these in the future.
      - Do you have any large farms? Look under the animals tab.
- Continue to get curious
  - Share your curiosity questions with us so we can share with other members.
- Try the Local Watershed Assessment Tool by UCONN CLEAR <a href="https://experience.arcgis.com/template/68b1ebdd244a4f1a800a15af0e600">https://experience.arcgis.com/template/68b1ebdd244a4f1a800a15af0e600</a>

   307/page/Home/
- Who are the Legislative Representatives for the rivers and lakes of your sub basin watershed of interest?