

Welcome to

“The Map as Art – Illustrating our Place in Waterspace”

Map making

1. How have **new technologies** changed the job of map making in the 20th century?
 - [Brief History of Mapmaking](#)
 - [History of Mapmaking – more detailed](#)
2. Why do map makers use **symbols** to represent things?
 - <http://www.compassdude.com/map-symbols.shtml>
 - <http://www.nationalgeographic.com/xpeditions/lessons/09/g68/cartographyguidestudent.pdf>
3. Map makers are called **cartographers**. What education do they need, and how much do they earn?
 - [Occupational Outlook Handbook](#) – look near the bottom of the section on training to find cartographers, and near the top of the section on earnings.

Water basics

4. What does the United Nations call this decade (**2005-2015**)?
 - [Clean Water Oxford – Global](#)
 - [United Nations – Water for Life decade](#)
5. What is **Jay-Z** doing to help the United Nations?
 - [United Nations – Water for Life decade](#)

6. What are the main stages in the **water cycle**?

- [NC River Basins Book](#) - page 5, (7th page of booklet)
- [Kidzone – Watercycles](#)
- [USGS – Watercycles](#)

7. What is a **River Basin**?

- [NC River Basins Book](#) - page 1, (after 2 title pages)
- [Pam Tar River Foundation](#)

8. What is a **watershed**?

- [Clean Water Oxford – Watersheds](#)
- [Clean Water Oxford – Tar-Pamlico Rules](#)
- [NC River Basins Book](#) - page 1, (after 2 title pages)
- [Conservation Information – What is a Watershed?](#)
- [EPA – What is a Watershed?](#)
- [Upper Delaware – Watersheds](#)

9. What does **headwaters** mean?

- [Fishing at the Headwaters](#)
- [Answers.com – Headwaters](#)
- [Biology-online – Headwaters](#)
- [M-W.com – Headwaters](#)
- *** or use your dictionary!

10. What is **stormwater**?

- [Clean Water Oxford – Stormwater?](#)
- [NC DENR – What is Stormwater?](#)
- [Water-technology.net – Stormwater](#)
- [Erosioncontrol.com – Glossary](#)
- [Stormwater Authority.org – Glossary](#)

11. What is the difference between **point source** pollution and **non-point source** pollution?

- [Water-technology.net – Point-source-pollution](#)
- [Water-technology.net – Nonpoint-source-pollution](#)
- [Cjnetworks – Point Source](#)
- [Cjnetworks.com – Non-Point Source](#)
- [Sourcemolecular.com – Pointsourcepollution](#)
- [Sourcemolecular.com – Nonpointsourcepollution](#)

Water Geography of North Carolina and Granville County

12. How many River Basins are in North Carolina?

- [NC River Basins Book](#) - page 2, (4th page in booklet)
- [NC DENR – River Basins](#)
- [EENC – River Basins Map](#)

13. How many of them are entirely in North Carolina?

- [NC River Basins Book](#) - page 2, (4th page in booklet)
- [NC River Basins – Tar-Pamlico](#) - page 1
- [Pamlico-Tar River Foundation](#)

14. Where does it change from Tar to Pamlico? Why there?

- [NC River Basins – Tar-Pamlico](#) - page 1
- [Pamlico-Tar River Foundation – the River](#)

15. How many sub-basins in the Tar-Pamlico

- [NC DENR – Tar-Pamlico River Basin](#)
- [Clean Water Oxford – Fishing Creek](#)

16. What are the main geographic features of the Tar-Pam Basin?

Think about *lakes, state and national parks, wildlife areas.*

- [NC River Basins – Tar-Pamlico](#) - page 1
- [Pamlico-Tar River Foundation – the River](#)

17. What other watersheds cover part of Granville County?

- [Clean Water Oxford – Fishing Creek](#)
- [EENC – River Basins Map](#)

18. What are the six biggest cities in the Tar-Pamlico River Basin?

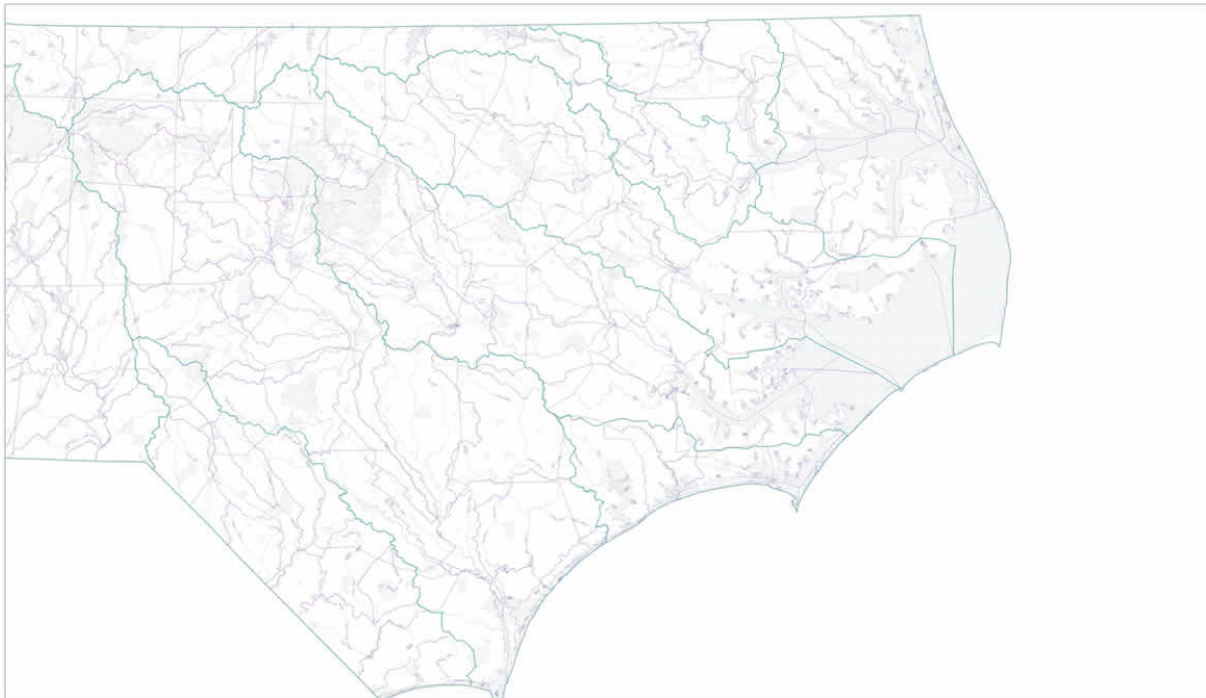
- [Clean Water Oxford – Tar-Pamlico](#) - play the movie

19. Draw the Tar-Pamlico River Basin.

Start with the blank map below.

Hint: The lines are already on the blank map – you just need to make them show better.

- Color the Tar River and Pamlico Sound with blue.
 - Draw a black outline for the Tar-Pamlico River Basin.
 - Mark the six biggest cities in the basin on your map also.
- [Clean Water Management Trust Fund map](#)
 - This one is great, but tricky.
 - In the left panel, select Hydrography (hydro = water).
 - Put a check by River Basin Boundaries and Major Hydrography.
 - Under Governmental, check County Borders.
 - Click the Refresh Map button.
 - Now, in the menu bar above the map, click on the Zoom In or Zoom Out buttons until you can see the Tar-Pamlico River Basin.
 - Use the Hand tool to move around where you want to be.
 - While you're here, look around and see what else it will tell you!
 - [NC Conservation Land Mapper](#)
 - This is slow sometimes, great other times.
 - At first it just shows the River Basins.
 - You can click on the Tar-Pamlico River Basin to zoom in.
 - If you put a check by Detailed Hydrography (hydro = water) and Major Hydrography (in the right-hand panel of site) it will show the rivers and creeks.
 - <http://h2o.enr.state.nc.us/basinwide/documents/tpa2.pdf> - page 2



How do people use the environment?

(**Environment** refers to the air, soil, water, weather, rocks, etc. in the world around us.)

20. Where (lake, river, wells, etc) does your **drinking water** come from?

(Do you live in Oxford?)

- [Clean Water Oxford – Cleanwater](#)

21. **Which watershed** does your drinking water come from?

22. **Who** drinks water from the Tar-Pamlico River Basin?

23. Where does the **sewage** go when you flush?

- [Clean Water Oxford – Cleanwater](#)

24. Where does **treated sewage** go?

- [Clean Water Oxford – Cleanwater](#)

25. **Why** is it important for the water in the rivers to stay clean?

- [Rhode Island – Watersheds](#)
- [Clean Water Oxford – Tar-Pamlico Stormwater Rules](#)
- [Clean Water Oxford – Cleanwater](#)
- [Pamlico-Tar River Foundation – Excess Nutrients](#)

26. What is your **favorite fish or seafood** to eat?

How do people effect ecosystems?

(*Ecosystem* refers to the environment and also the web of living things that can live together there.)

27. **Where** does the stormwater go?

- [Clean Water Oxford – Tar-Pamlico Stormwater Rules](#)
- [Clean Water Oxford – Tar-Pamlico](#)
- [Rhode Island – Watersheds](#)
- [NC DENR – Stormwater.Pollutants](#)

28. What are some of the **worst contaminants** in stormwater?

- [Clean Water Oxford – Tar-Pamlico Stormwater Rules](#)
- [Clean Water Oxford – What Can You Do?](#)
- [Rhode Island – Watersheds](#)
- [NC DENR – Stormwater.Pollutants](#)

29. Why is stormwater a **problem**?

- [Clean Water Oxford – Tar-Pamlico Stormwater Rules](#)
- [Clean Water Oxford – Tar-Pamlico](#)
- [Clean Water Oxford – Cleanwater](#)
- [Rhode Island – Watersheds](#)
- [Pamlico-Tar River Foundation – Concerns](#)
- [NC DENR – Stormwater.Pollutants](#)

30. What are some of the **endangered, rare, or important species** in the Tar-Pamlico River Basin? Where are they located?

- [NC River Basins – Tar-Pamlico](#) - page 1
- [Pamlico-Tar River Foundation – Concerns](#)

How do people use machines, technology, or new ideas to solve problems?

31. How can people and businesses help **reduce the pollution** in stormwater?
 - [Oceansprings.org](https://oceansprings.org)
 - [Clean Water Oxford – What Can You Do?](#)
 - [Clean Water Oxford – Report Violators](#)
 - [NC DENR – Stormwater.Pollutants](#)

32. What are some **new inventions** cities use to reduce the pollution in stormwater?
 - [NC DENR – Stormwater.Pollutants](#)

33. What is a **buffer**?
 - [NC River Basins Book](#) – page 7, (9th page of booklet)

34. **How** do buffers help the river?
 - [NC River Basins Book](#) – page 9, (11th page of booklet)

35. **What did the City of Oxford do in 2006** to help keep the water in the Tar-Pamlico River Basin clean?
 - [Clean Water Oxford – New Wastewater Treatment Plant](#)
 - [Clean Water Oxford – Timeline](#)