



WNY - Buffalo Waterways

Daisies & Brownies: complete 6 requirements, including #s 1 - 4

Juniors: complete 7 complete requirements, including #s 1 - 4

Cadette/Senior/Ambassador: Complete 8 requirements, including #s 1 - 4

Purpose: To increase Girl Scouts' knowledge of the Erie Canal, Niagara Falls, Lake Ontario, and Lake Erie in Western New York's history and development.

1. Learn about the Erie Canal:
 - How was the Erie Canal built?
 - How was the Erie Canal paid for?
 - Why was the Erie Canal also known as "Clinton's Folly" or "Clinton's Ditch?"
 - How did boats travel along the Erie Canal?
 - Why was the Erie Canal important?
 - How do locks and aqueducts work?
 - What is the canal used for today?
2. Learn about Niagara Falls:
 - How was Niagara Falls formed?
 - How much water flows over Niagara Falls every day?
 - What is hydroelectric power?
 - How is Niagara Falls used to create hydroelectricity?
 - How many watts of power does Niagara Falls generate annually?
3. Learn about Lake Erie:
 - Why was Lake Erie considered a dead lake in the 1960's?
 - How has Lake Erie improved?
 - What types of pollution still exist in Lake Erie?
 - What effect does pollution in Lake Erie have on Buffalo?
 - What can people do to decrease pollution?
4. Learn about Lake Ontario:
 - What does its name mean in the Iroquoian language?
 - What has happened to Lake Ontario's fish populations over time?
 - How and why have Lake Ontario's water levels been changing?
 - Smallest of the Great Lakes, how big is Lake Ontario?
5. Learn the Erie Canal song, "Low Bridge, Everybody Down." Teach the song to your Troop/Group, OR compose a song of your own about the Erie Canal.

6. Create a poster that shows a timeline of the construction of the Erie Canal; OR create a map of the canal route.
7. What is lake-effect snow? Create a poster that shows how lake-effect snow forms.
8. What kinds of boats navigate the Great Lakes? What sorts of boats traveled on the Erie Canal? Create a model of one of the boats you learned about.
9. Learn about invasive species in Western New York waterways.
10. What are micro-plastics and how are they affecting our water and waterways?
11. Create a poster about what you have learned.
12. If possible, participate in clean-up project at a river or lake.
13. If possible, visit two of the following: Niagara Falls, a section of the Erie Canal, a lock, an aqueduct, a hydroelectric power station, the Lower Lakes Marine Historical Society, Lake Ontario, or Lake Erie.

Resources:

Biking along the Erie Canal: <https://www.ptny.org/cycle-the-erie-canal>

Canalside Buffalo: <https://www.visitbuffaloniagara.com/businesses/canalside/>

Erie Canal History: <https://eriecanalway.org/learn/history-culture>

Niagara Power Vista: <https://nypa.gov/communities/visitors-centers/niagara-power-vista>

Lake Erie Facts: <https://www.livescience.com/34480-lake-erie.html>

Lake Erie Micro-Plastics: <https://www.ideastream.org/news/microplastics-are-everywhere-including-lake-erie-and-the-water-we-drink>

The Great Lakes (Environmental Protection Agency):
<https://www.epa.gov/greatlakes>

Invasive Species in New York Waterways:
<https://seagrant.sunysb.edu/ais/pdfs/AIS-LErieOnt.pdf>