

# The Blue Ribbon Commission on America's Nuclear Future

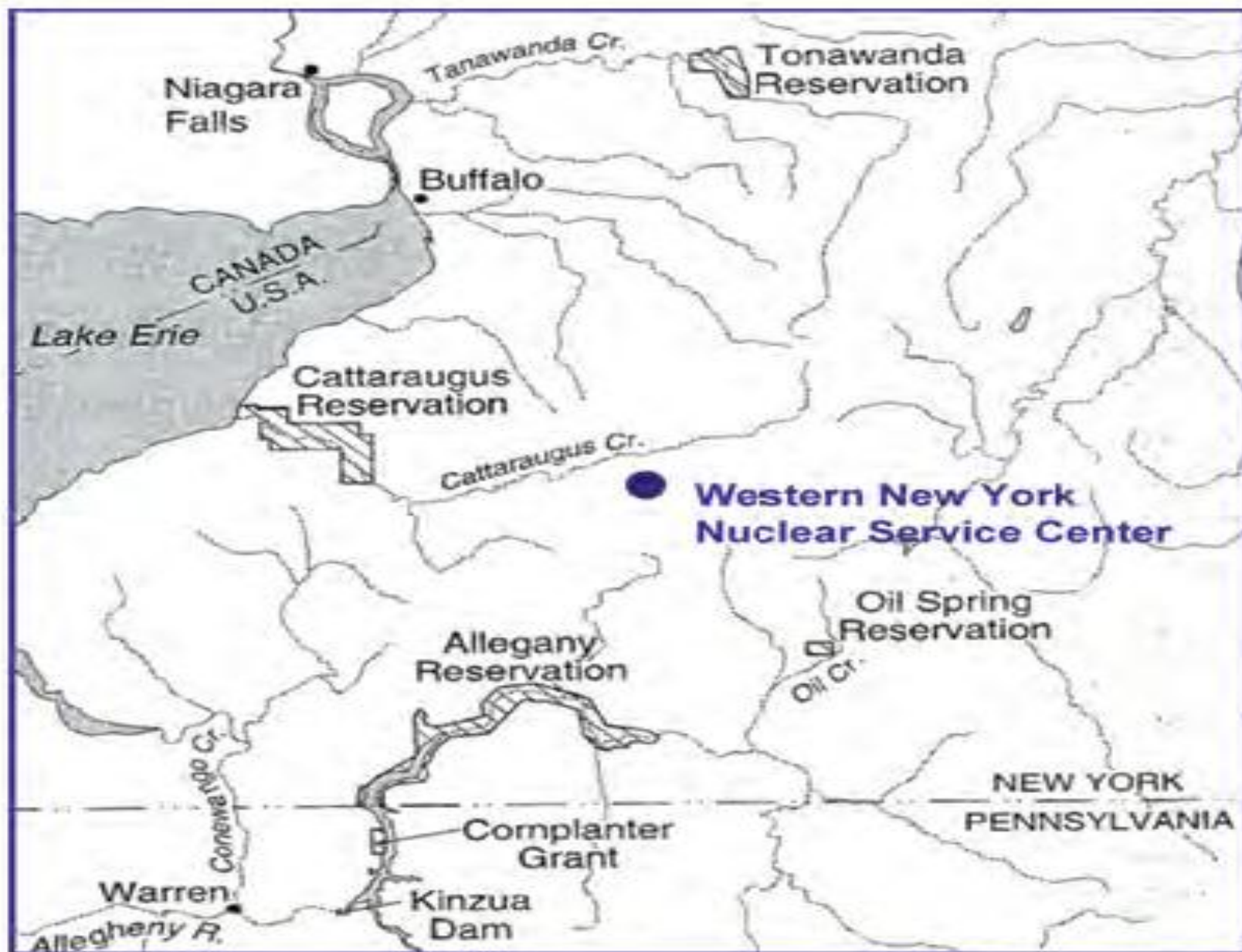
Eastern Regional Conference  
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West Valley Demonstration Project  
Environmental Setting

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# Site Description

- 30 miles SE of Buffalo, N.Y.
  - Town of Ashford, N.Y.
- Western New York Nuclear Services Center - 3,300 acres
  - West Valley Demonstration Project
    - 167 acres
- 9,200 people live within 6 miles of the site



# Geology

- Glaciated portion of the Appalachian Plateau
- Rests over 500 feet of glacial till deposits
  - North Plateau – reprocessing building, waste lagoons, tank farm
  - South Plateau – State Licensed Disposal Area, NRC Licensed Disposal Area

# Climate

- Average Year Round Relative Humidity -  
76%
- Temperature – 131 days/year with  
freezing temperatures, freeze/thaw cycle
- Precipitation – 40” Annual Rainfall  
100 – 150” snowfall annually

# Erosion Concerns

- Site crossed by several streams
- Quarry Creek, Erdman Creek, Frank's Creek
  - to Buttermilk Creek
- Stream Channel Cutting
  - Sheet erosion
  - Gully Migration
  - Slope Movement

# Groundwater

- Cattaraugus Creek Basin Aquifer System
- USEPA Region 2 Designated Sole Source Aquifer
  - Drinking water source for 50% of aquifer residents
  - 20,000 residents, 14 Towns in 4 Counties
  - 8 Municipal Water Supply Systems
- Existing contaminated groundwater plumes

# Surface Water

- Creeks tributary to Cattaraugus Creek
  - 45 miles upstream of Lake Erie
- 10 additional miles from Erie County Water Authority Sturgeon Point Water Treatment Plant  
550,000 residents



# Summary

- West Valley was poorly suited for a nuclear fuel reprocessing center
- West Valley is poorly suited for radioactive waste storage and disposal
- Critical need for Federal action for final deposition of 275 HLW canisters