



Department of
Environmental
Conservation

Salmon management work around Lake Champlain 2025 to present



Presentation by Nicole Balk, NYSDEC [10 min]
and
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June 29th Zoom 1-230pm

Atlantic salmon in Lake Champlain

DEC stocks the Saranac with 70K fry & 50K yearling salmon

Boquet with 200K fry and 60K yearlings.

Evaluating stocking:

- Parental Based Tagging study conducted by USFWS = genetics
- Known parentage, so stocked fish captured as adults can be traced back to their origin
- Adult fish caught have a fin clip taken by us or anglers. It gets sent to the lab and we can then tell:
 - Size at stocking (fry or yearling)
 - Location of stocking
 - Genetic strain (normal or Thiamine Tolerant)
- We can then modify our stocking practices to optimize survival

Samples collected from the Saranac, Boquet, Ausable and Winooski rivers during surveys - **River Creel**, **Boquet resistance board weir**, fall spawning surveys, trap netting, Winooski fish lift.

River Creel 2024, 2025 - annual

Saranac and Boquet rivers

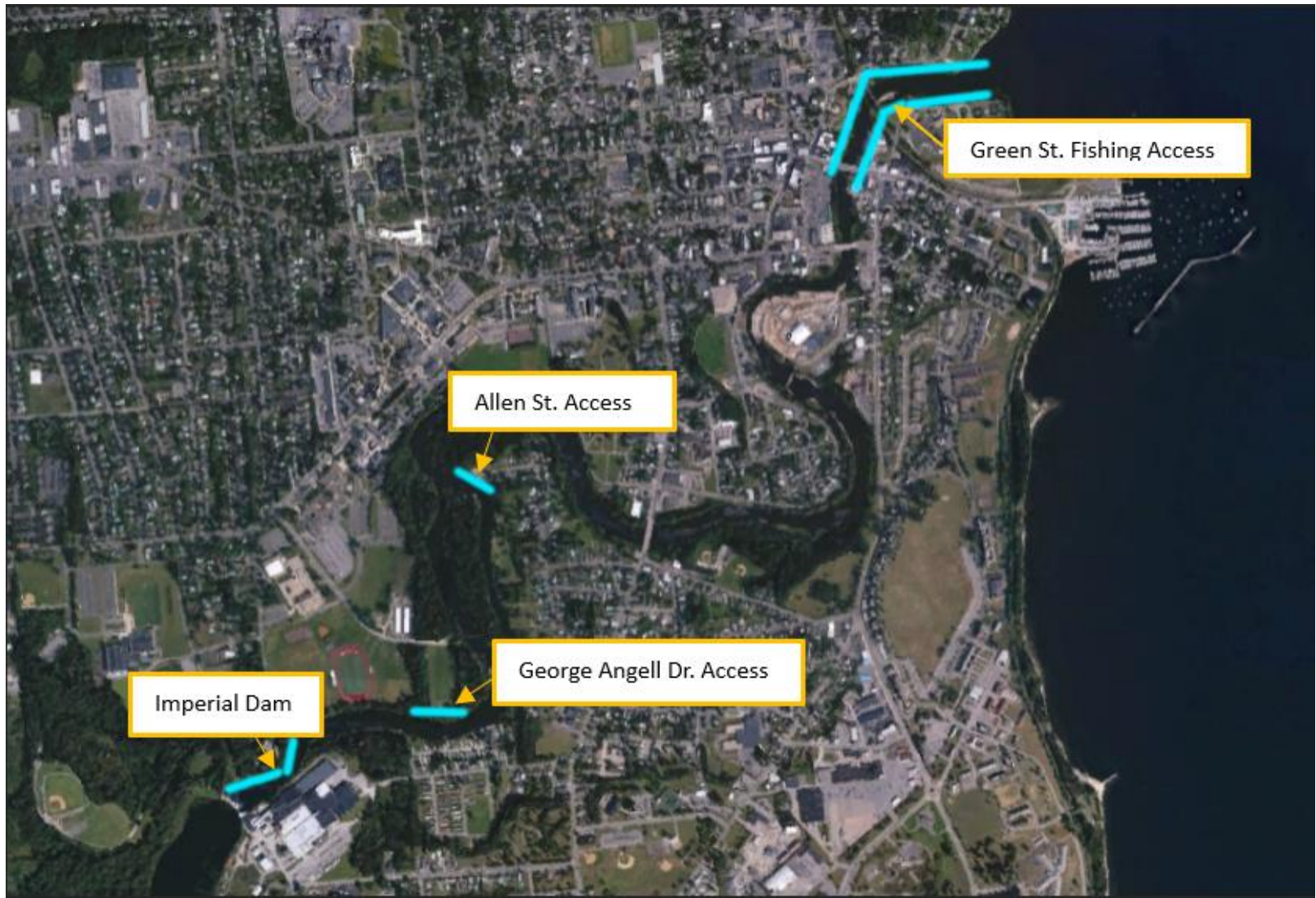
Purpose: To better understand angler use and expectations for the Atlantic salmon fishery and to guide management actions.

- Last river creel was in 1996 on the Saranac, 2016 on the Boquet
- 2023: Pilot survey to see where and when anglers were fishing
- 2024 & 2025: Full survey September 15 through November 30.

Collected data on:

- Catch & harvest rates
- Preferred target species
- Size structure
- Angler opinions on the quality of the fishery

Map of Saranac River survey sites. Blue indicates survey area; the yellow arrows indicate access points.



River Creel – Results Saranac

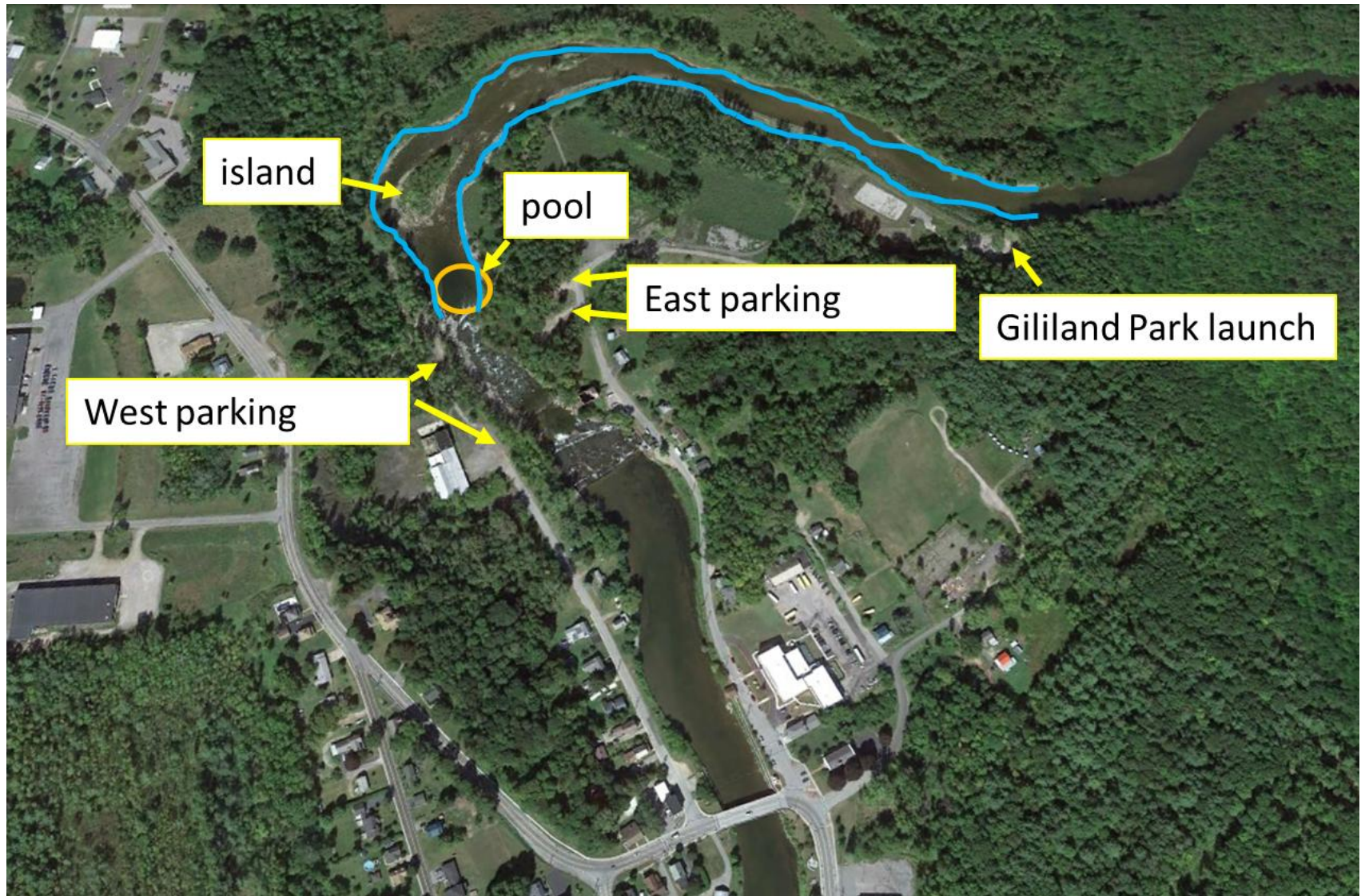
2024

- 116 interviews
- 46% of the interviews were at Allen Street (private), 31% at Green St.
- 97% targeted Atlantic salmon, 3% Brown trout
- Ave. trip length was 2 hours and 6 minutes
- Total estimated effort was 2,123 hours
- 102 salmon caught (0.43/h), 4 harvested
- 45 salmon measured, 12-25 inches, ave. 19.1 inches
- 157 PBT samples collected by anglers
- 35% of anglers satisfied with day of fishing

2025

- 101 interviews
- 84% of the interviews were at Allen Street (private), 14% at Imperial dam
- 100% targeted Atlantic salmon
- Ave. trip length was 5 hours and 24 minutes
- Total estimated effort was 3,304 hours
- 115 salmon caught (0.49/h), 0 harvested
- 41 salmon measured, 8-30 inches, ave. 20.5 inches
- 101 PBT samples collected by anglers
- 59% of anglers satisfied with day of fishing

Map of Boquet River survey site. Blue representing survey area; the yellow arrows indicate access points.



River Creel – Results Boquet

2024

- 55 interviews
- 40% of the interviews were at the fishing pool in Willsboro below the SR-22 bridge, 31% at the west bank, 27% at the east bank.
- 100% targeted Atlantic salmon
- Ave. trip length was 2 hours and 38 minutes
- Total estimated effort was 923 hours
- 11 salmon caught (0.08/h), 1 harvested
- 5 salmon measured, 12-20 inches, ave. 16.4 inches
- 9 PBT samples collected by anglers
- 60% of anglers satisfied with day of fishing

2025 – extremely low flows

- 25 interviews
- 52% of the interviews were at the east bank, 32% at the fishing pool, 16% at the west bank.
- 100% targeted Atlantic salmon
- Ave. trip length was 4 hours and 8 minutes
- Total estimated effort was 975 hours
- 6 salmon caught (0.15/h), 0 harvested
- 3 salmon measured, 17.2-21.5 inches, ave. 19.2 inches
- 2 PBT samples collected by anglers
- 24% of anglers satisfied with day of fishing

Resistance Board Weir

Weir trap entrance



Overhead view of the weir from drone



10/30
Flow: 75 cfs
Too low!



11/1 Flow: 804 cfs. Too high!



11/9
Flow: 181 cfs
IDEAL



Resistance Board Weir

USFWS purchased the weir in 2025 (\$136K)

Installed in July 2025

Operational Sept 2025, but extremely low flows required taking it in and out of trapping mode. Fished 38 days.

Effective!

- Despite on/off trapping, trapped 61 salmon
- Very little bycatch, other species
- Learning curve – 57 salmon caught on the panels, can adjust the panel angles during different flows

Resistance Board Weir

Between the weir and trap netting, 132 salmon were caught on the Boquet in 2025 (67 males, 65 females)

Maximum length was 722 mm (28.4 inches), male

Max weight was 6,500 grams (14.3 pounds), male

In 2026, if we get normal flows we expect quite a few more salmon in the trap.

- Estimate population size
- Estimate survival and return rates

Number of fish trapped overlapping the flow graph

