

Developing a Rip Current Network for Long Island's Ocean Beaches (SHARC)

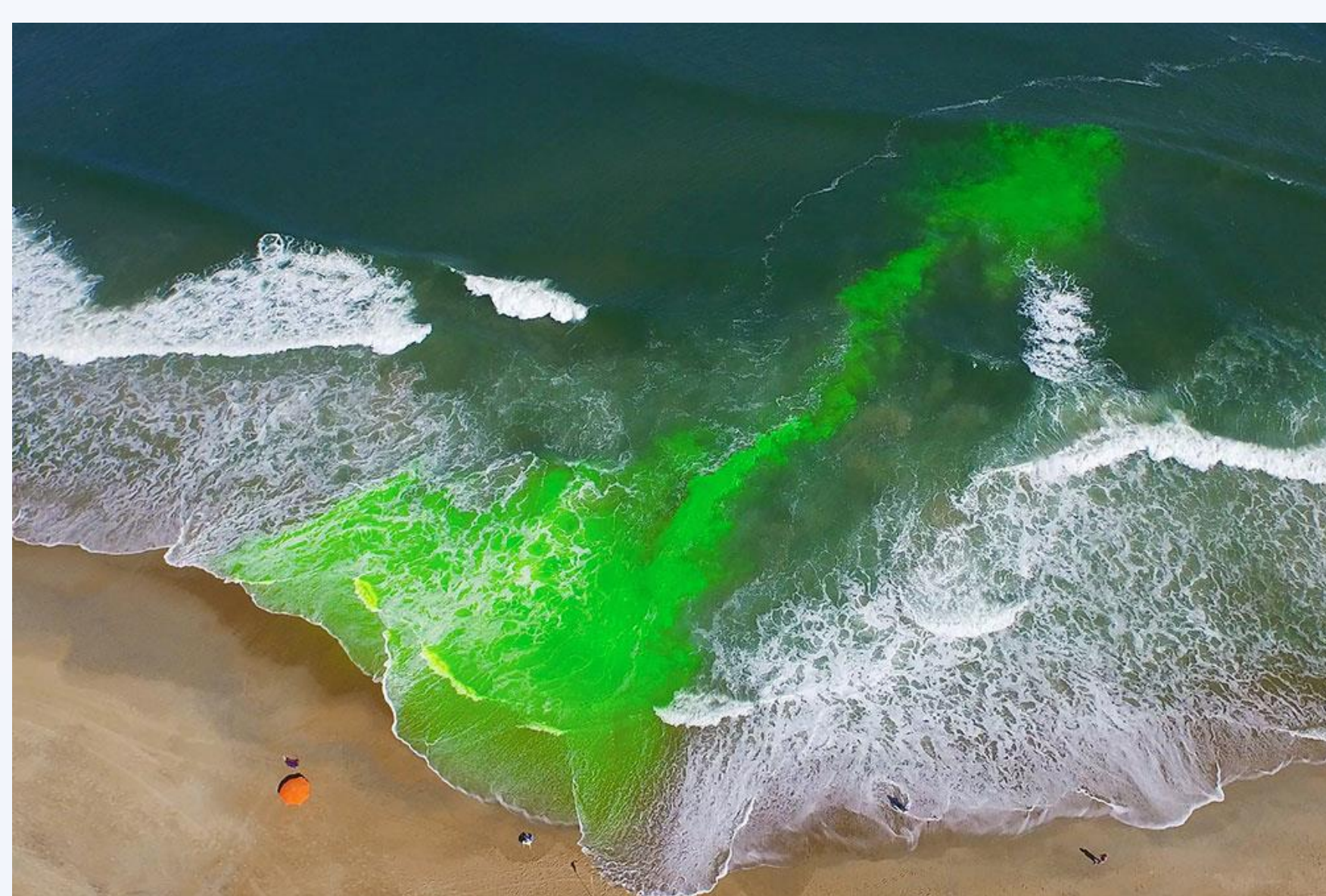
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New York Sea Grant, Mid-Atlantic Regional Association Coastal Ocean Observing System

Introduction

The Long Island beaches account for 87.5% of rip current fatalities that occurred in New York over the past five years.

Rip currents, "narrow channels of fast-moving water", move beachgoers away from shore creating a dangerous and prevalent surf-related hazards. This project, developed by New York Sea Grant and the Mid-Atlantic Regional Association Coastal Ocean Observing System is working to create a formal network of rip current professionals.



Example of a rip current channel moving water out past shore shown aerially with green dye.

Project Objectives

The project focus is to create a network of rip current professionals on Long Island to increase beach safety through improved collaboration and communication. This entails...

- Finding potential network participants and forming a core organizational team.
- Determining community needs and existing communication.
- Organizing seasonal workshops to bring together network professionals.

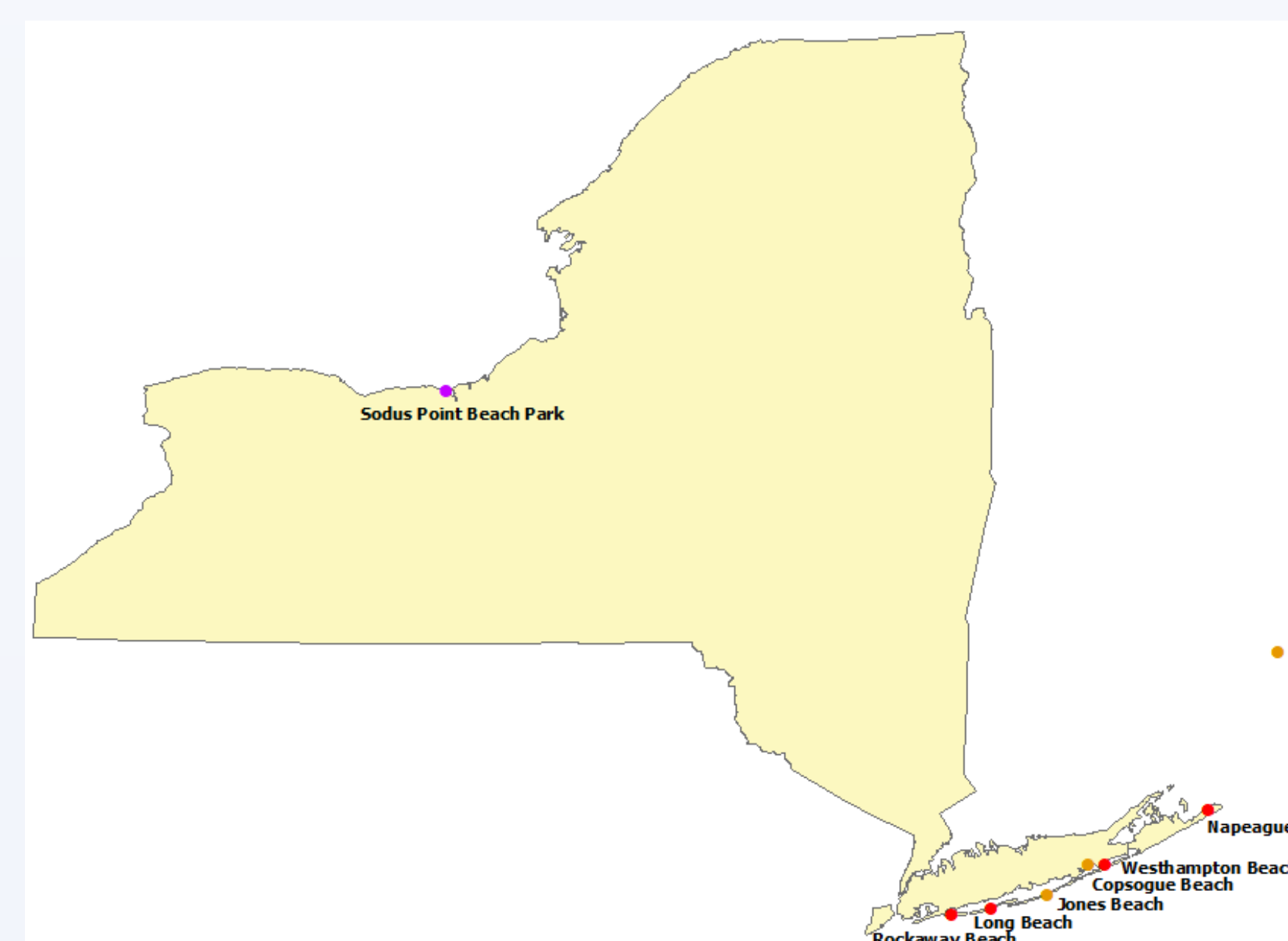
If successful, the network can also serve as a model for other Mid-Atlantic states and rip current areas in the future.



Study Site

The study site is centered on the Atlantic Ocean beaches ranging from New York City to Montauk, but the network draws membership from the surrounding area. The site encompasses a diverse group of beaches that fall under many jurisdictions including national, state, city, and local beaches.

The Long Island beaches are important because of their significance as a tourist attraction. NWS data shows that most NY rip current fatalities occur in Long Island specifically the Rockaways and Long Beach.



NWS Rip Current Fatalities in New York 2020

Survey Development

To assess interest in the network and organize a Fall 2020 workshop, we developed a needs assessment survey to be distributed to the initial participants.

Many survey considerations such as word choice, question order, and forced answering options were thought about in order to efficiently obtain information and retain interest.

After core team review, the survey was distributed to participants through NYSG, MARACOOS, and NWS channels.



Stakeholder Participant List

The list included the major network stakeholders of academics, weather forecasters, lifeguards, law enforcement, and government officials.

- **Academic Researchers:** composed of professors from various Long Island or New York City universities such as, Stony Brook, Hofstra, SUNY Maritime, and Hunter College.
- **Weather Forecasters:** primarily represented by the National Weather Service office in Upton, NY which provides surf forecasts and rip current threat levels for New York beaches.
- **Lifeguards:** potentially the most diverse and difficult stakeholder groups in the network but also the most important.
- The presence of "home rule" in New York, allows local municipalities to have jurisdiction over their areas and the ability to create their agencies. For lifeguards, this means that most beaches are guarded by personnel that represent the corresponding municipality such as the State Park of Jones Beach being guarded by NYS Park employees or Coopers Beach within Southampton Village being guarded by village employees.



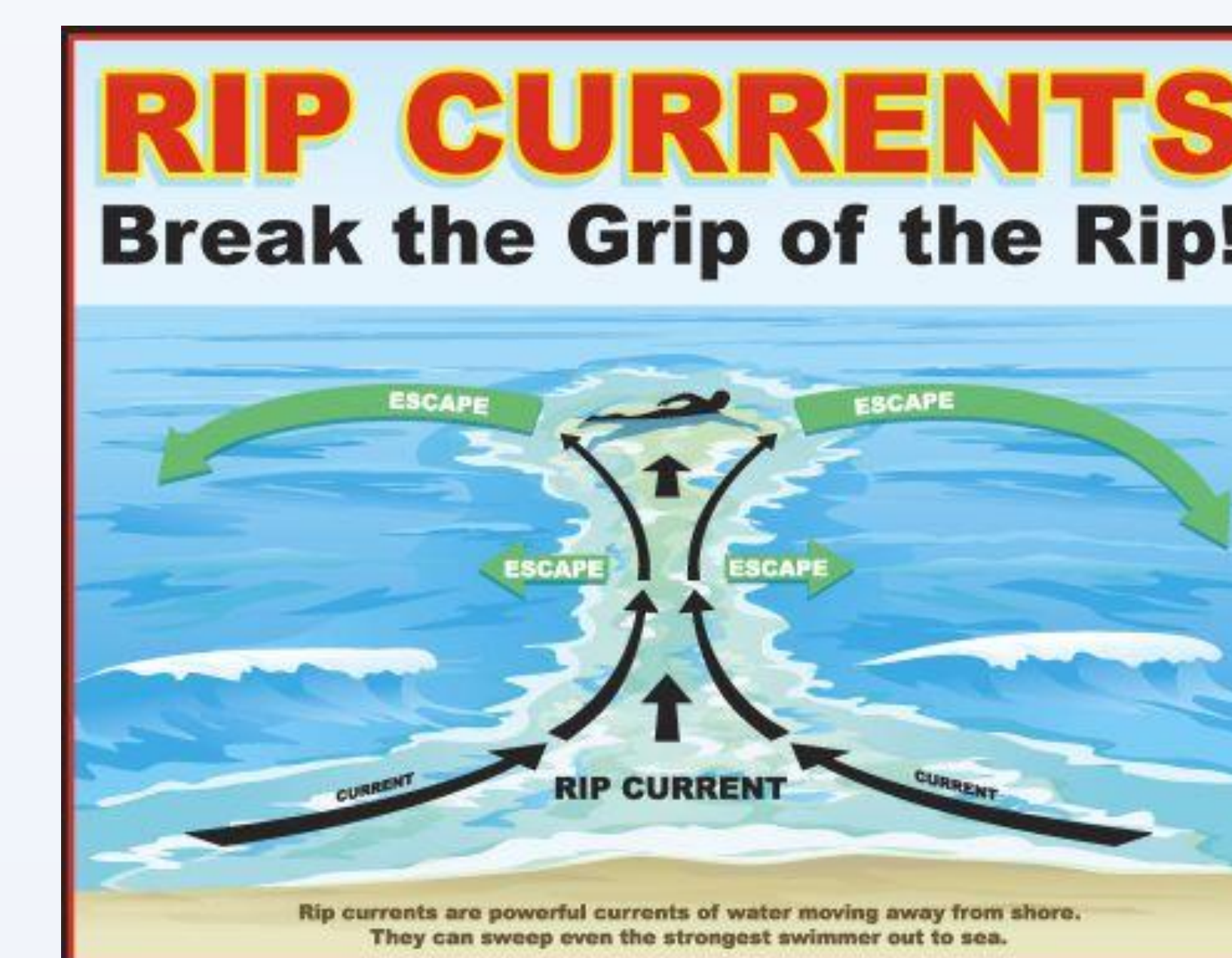
- **Safety Personnel:** organizations that protect beachfront communities including the police and fire departments, volunteer organizations and the Coast Guard.
- **Government Officials:** variety of local officials including beach managers, town councilman, or parks and recreation commissioners. Also includes county or federal water or emergency safety professionals.

Fall 2020 Workshop

The first rip current workshop, held in November 2020, was an overall success. The purpose of the workshop was to bring together local and regional experts to discuss their experiences with rip currents.

By utilizing the workshop format with break-out rooms, members could create connections and discuss relevant issues.

Future workshops including one for Spring 2021 are being planned and we hope to build upon the success of the first meeting.



Educational signage distributed by NYSG to inform beachgoers of rip currents.

- Finalize the Spring 2021 Workshop plans and host the event.
- Collaborate with outside consultants to improve network branding through a network name (SHARC), logo, and website.
- Continue to build the network participant list and improve key demographic engagement.

References

Bernhardt, J., Dusek, G., Hesse, A., Santos, W., Jennings, T., Smiros, A., Montes, A. Developing a Virtual Reality Video Game to Simulate Rip Currents. Journal of Visualized Experiments, in press, 2020.

NOAA. What is a Rip Current. National Ocean Service Website, accessed 06/06/2020