New England Hydropower Company, LLC

Michael Kerr, CEO and Co-Founder
New England Hydropower Company LLC

Hydropower: A Dam Good Forum

February 26, 2015

Restoring North America's original renewable energy resource ™

Current Comment

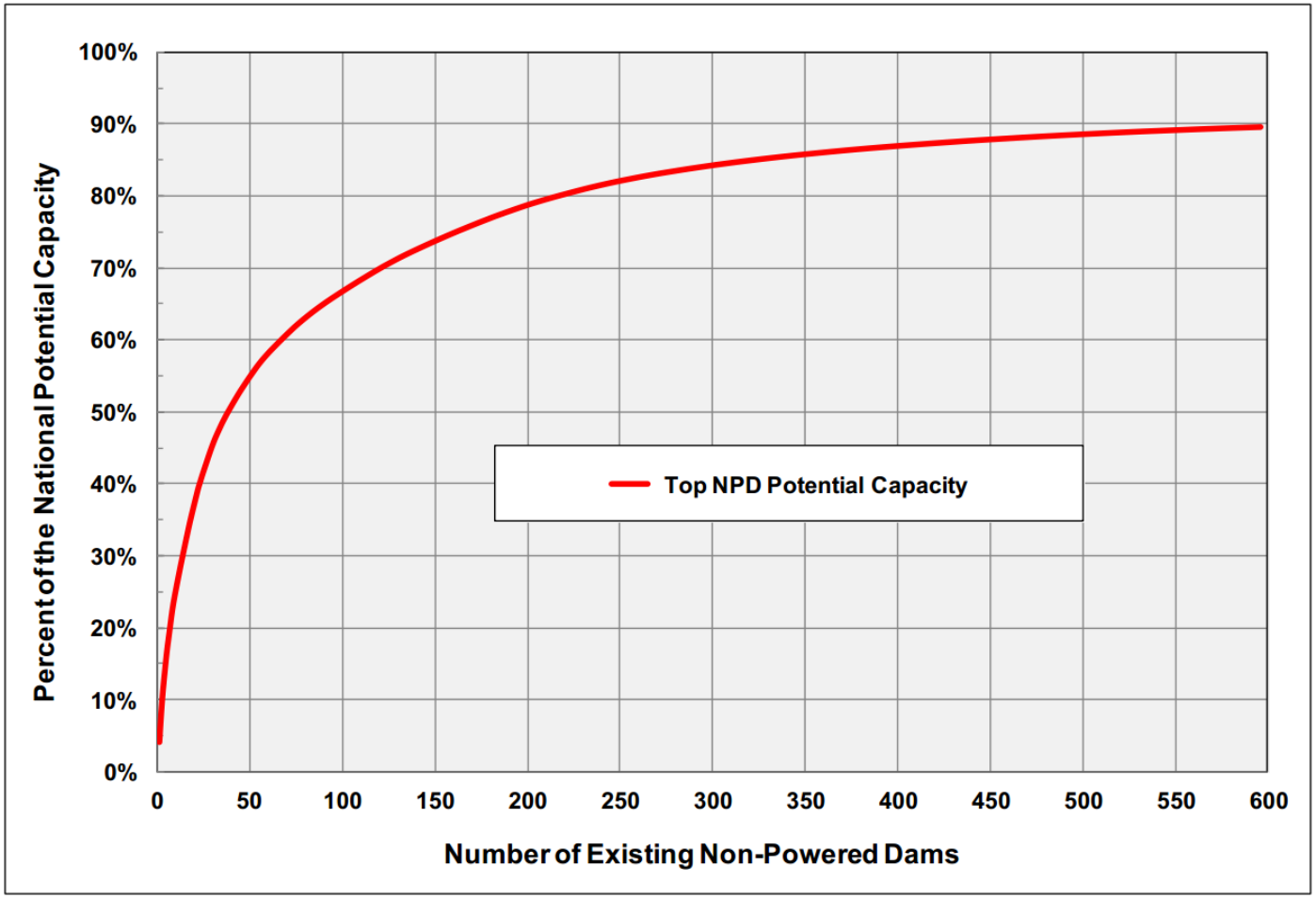
Should We Build More Large Dams? The Actual Costs of Hydropower Megaproject Development

published in March in Energy Policy. The study, by Atif Ansar, Bent Flyvbjerg, Alexander Budzier and Daniel Lunn, draws upon cost statistics for 245 large dams built between 1934 and 2007.

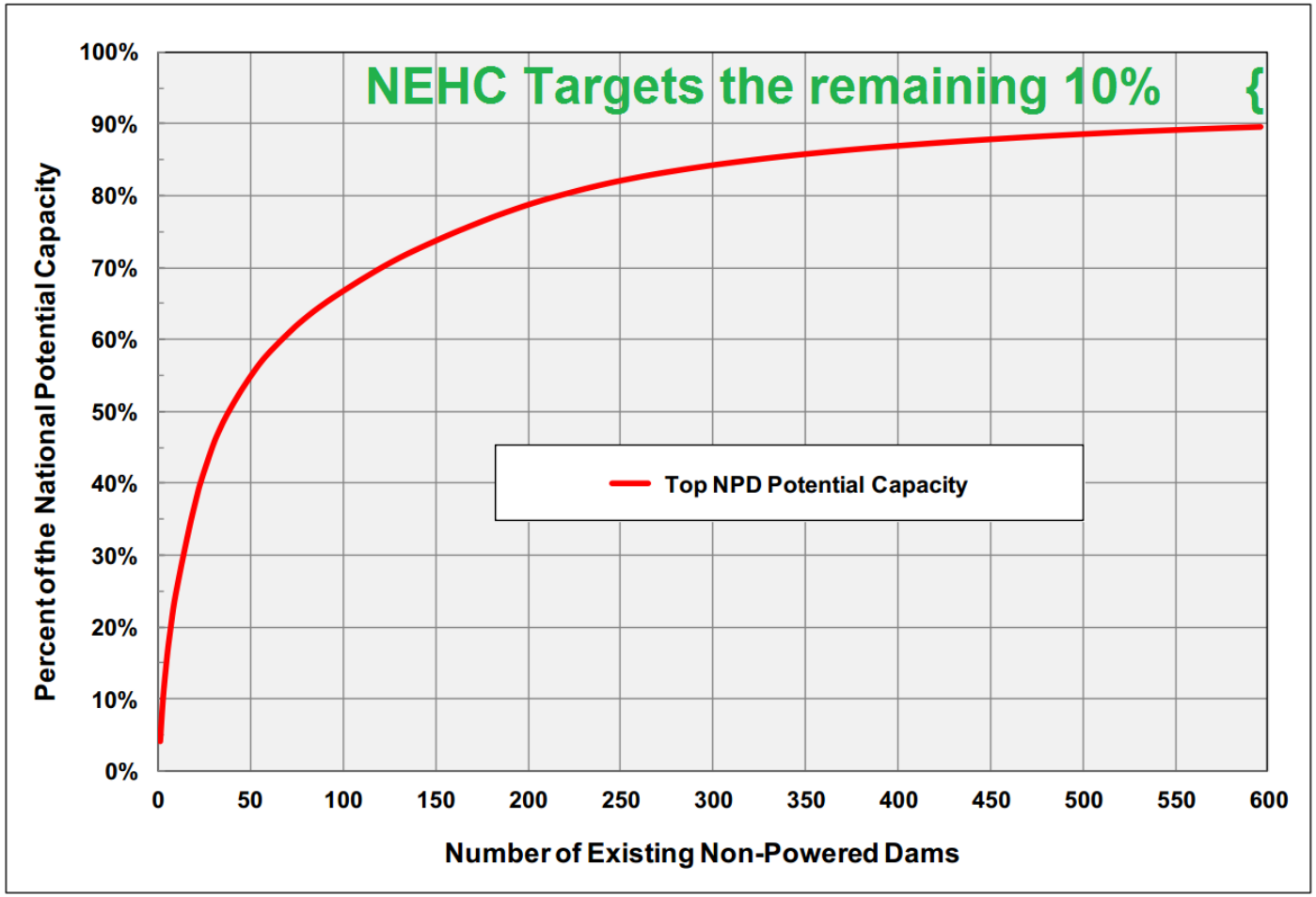
Instead of building enormous, one-of-a-kind edifices like large dams, the study's authors recommend ***"agile energy alternatives" like wind, solar and mini-hydropower facilities.*** "We're stuck in a 1950s mode where everything was done in a very bespoke, manual way," Mr. Ansar said over the phone. "We need things that are more easily standardized, things that fit inside a container and can be easily transported."

New York Times Aug 22, 2014 by Jacques Leslie

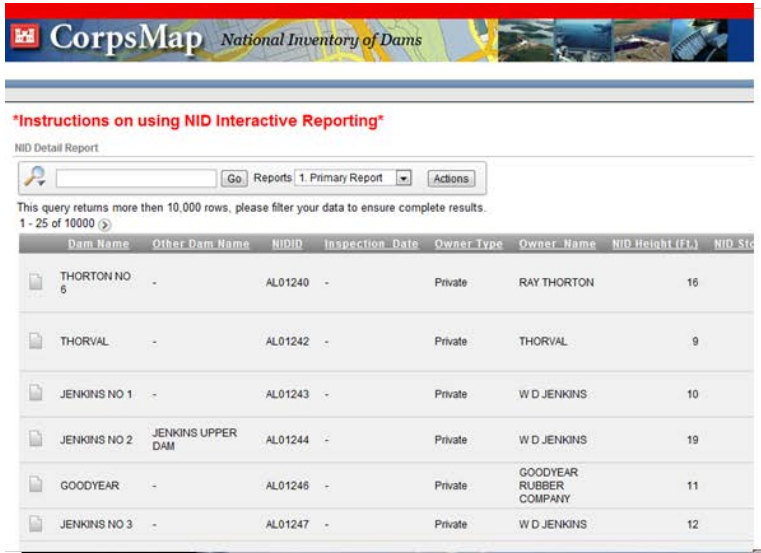
Traditional Hydropower targets sites greater than 1 MW

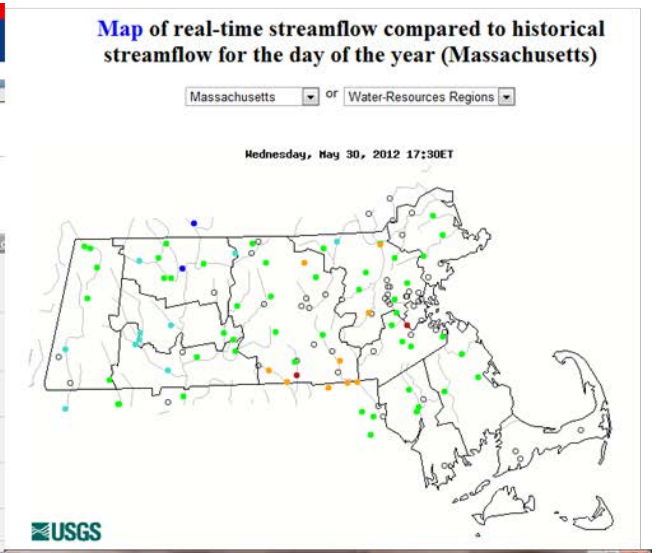


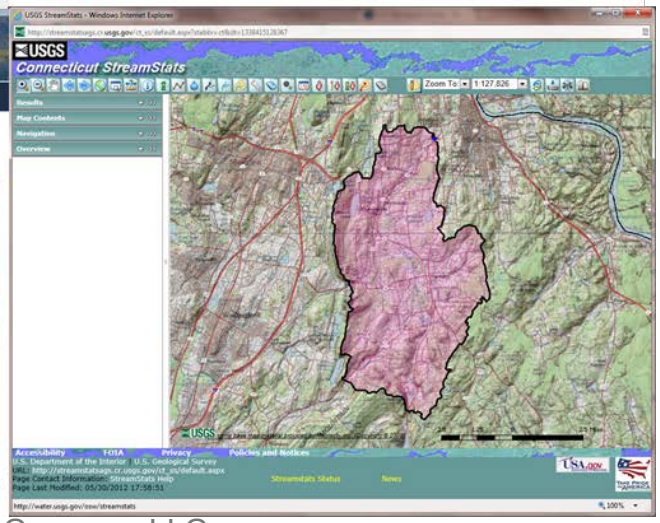
NEHC Targets the Long tail, ~54000 NPD's



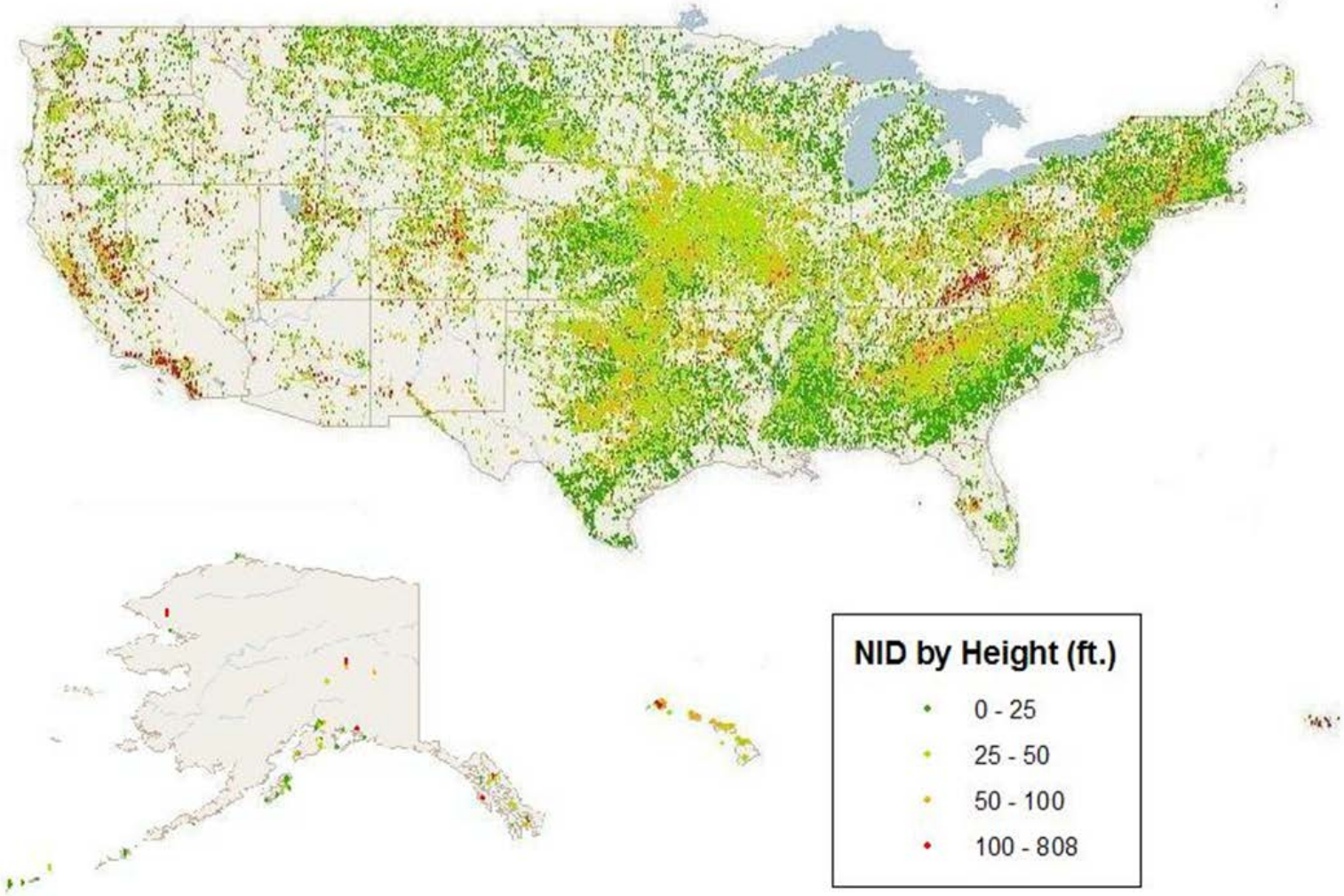
Data Abounds



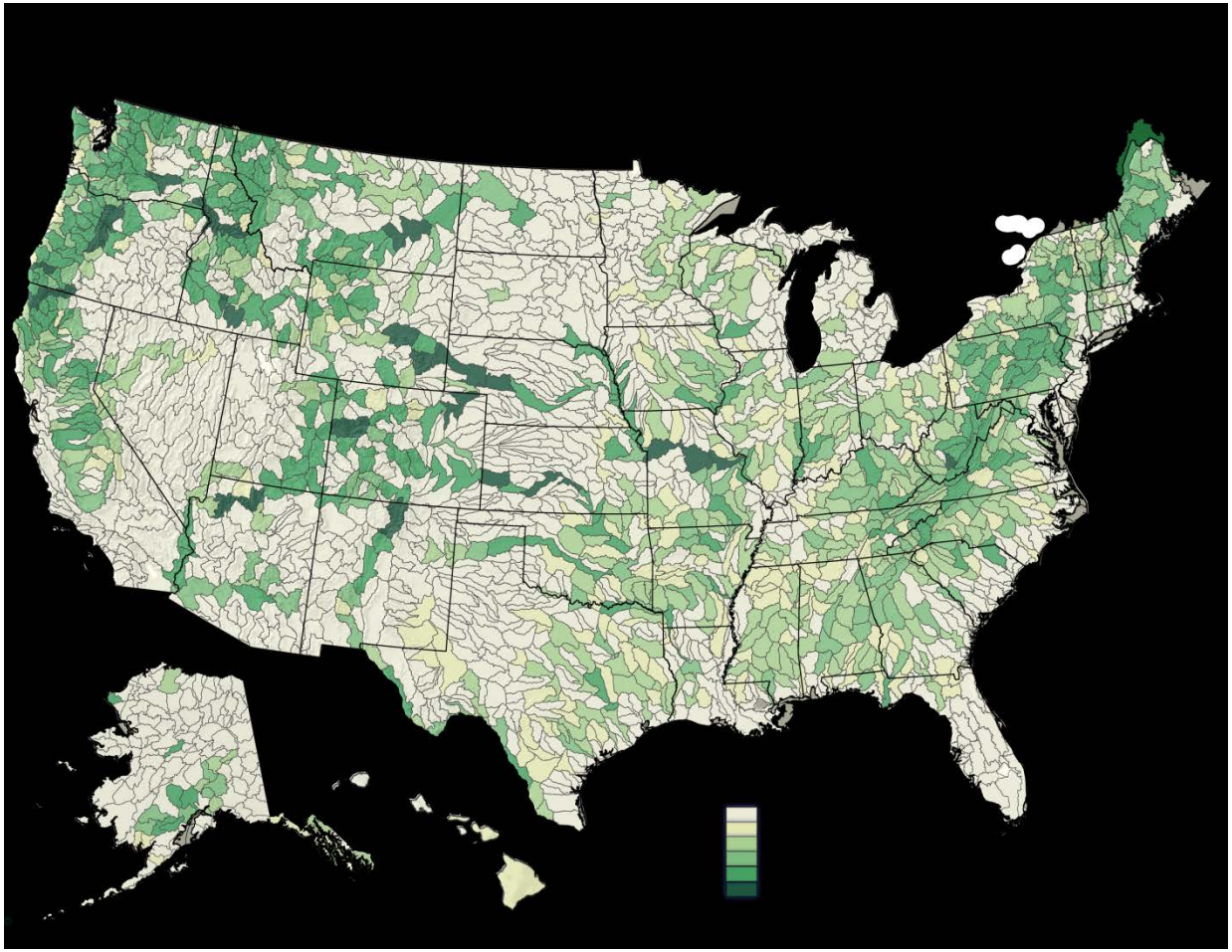




More than 80,000 Dams in the U.S.

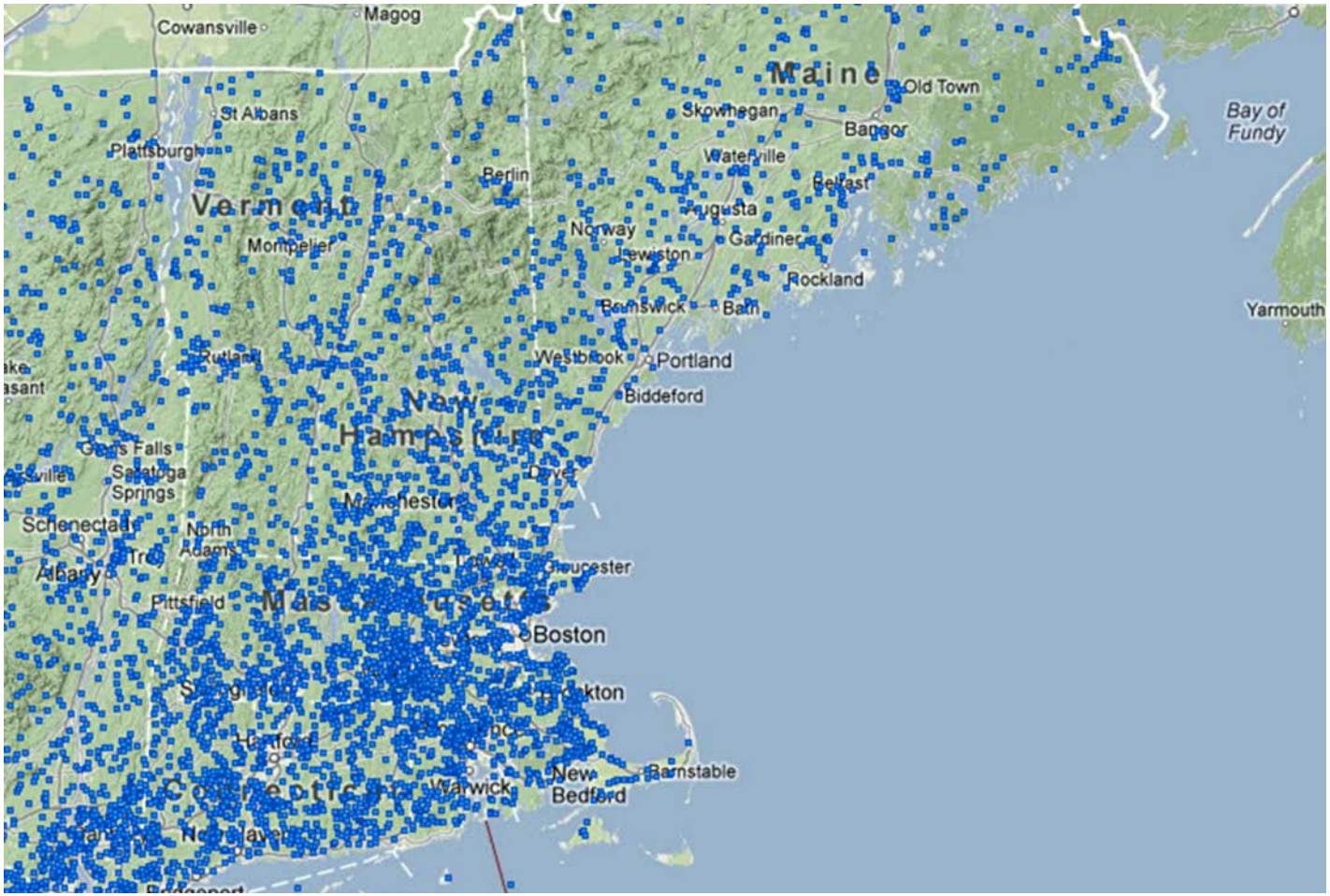


And so much New Stream Development Potential

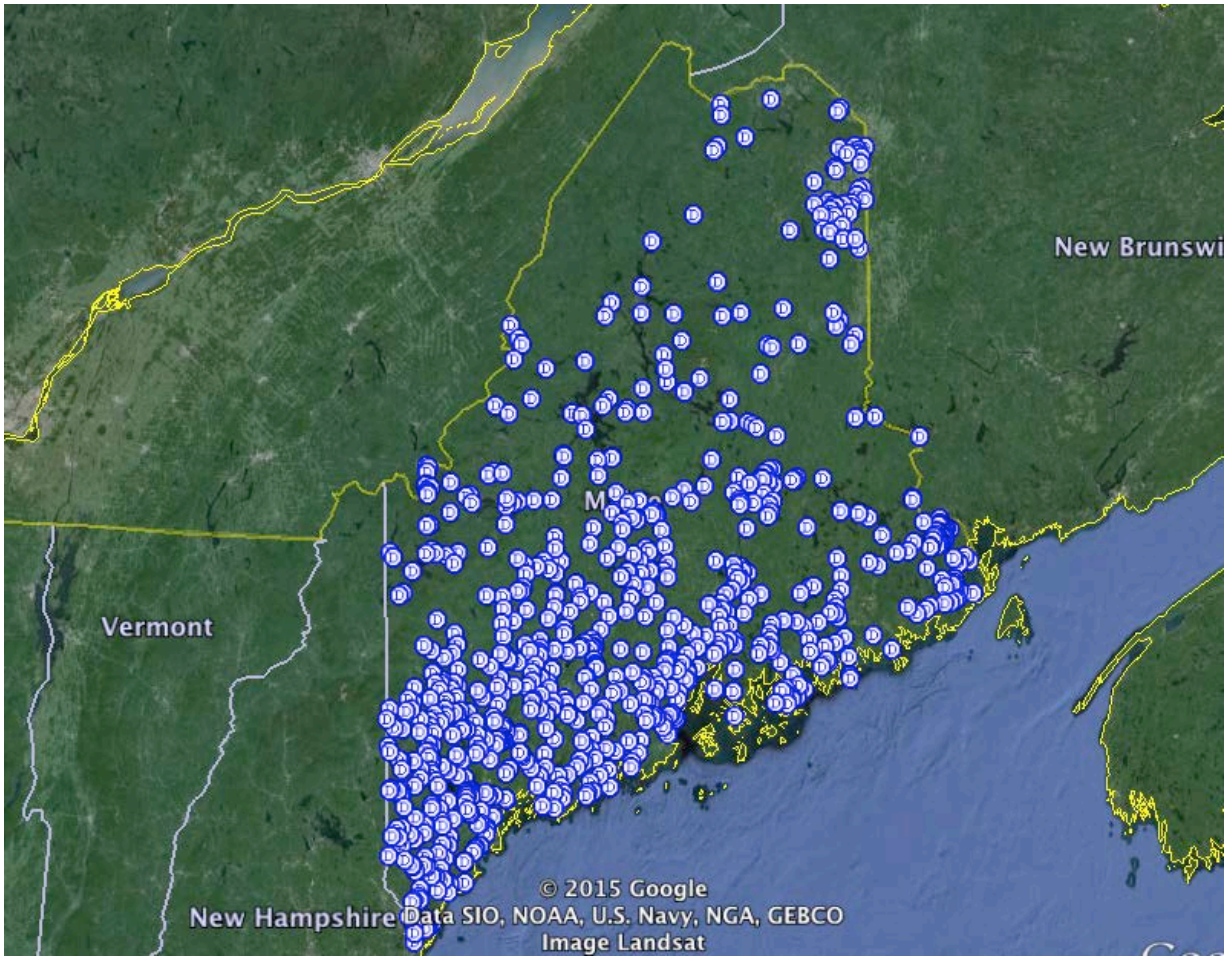


Ref: nhaap.ornl.gov

10,000 Dams in New England



Over 600 Dams in Maine Alone



Who We Are

- New England Hydropower Company (NEHC) is an owner, developer and operator of small-scale hydropower facilities based in Beverly, MA

- With:
  - a skilled experienced team of employees and partners experienced in small hydro permitting and development

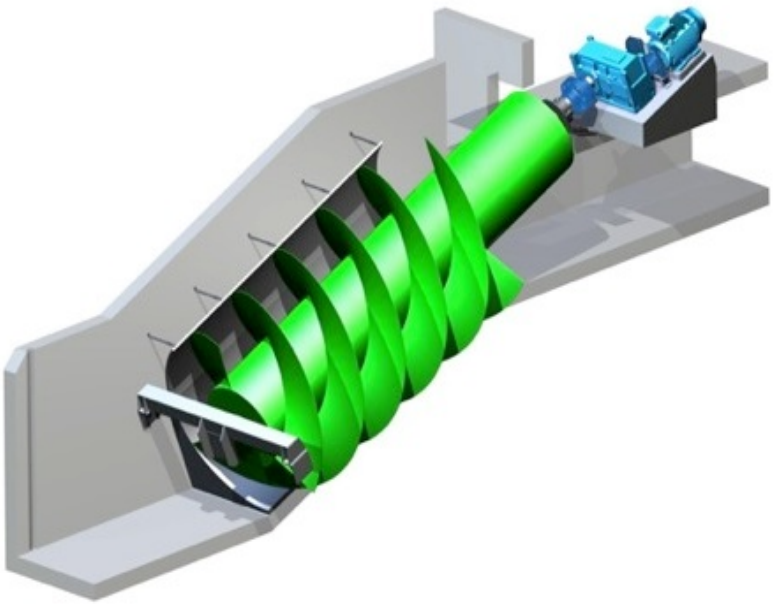
  - a target market of the 15,000 low head, non powered **existing** dams in the North East and a further 39,000 across the US

  - a strong reputation with U.S. Department of Energy, Energy Efficiency and Renewable Energy (EERE), U.S. Fish and Wildlife as well as State Agencies

- NEHC is creating a new profitable market segment in small scale hydro

The Reason It Works
Proven Technology, New Application

- 40-year plus useful life
- Inherent efficiency with gearing ~70%
- Capacity factor in NE typically 55%
- "Run of river" no river flow change
- Slow rotor speed at 30-40 rpms
- Fish friendly
- Low turbidity, low erosion
- Durable, low maintenance and debris tolerant



Hanover Pond Dam Meriden, CT

Owner: Town of Meriden
River: Quinnipiac River
Power Potential: 192 kW
Generation: 898,000 kWh
Mean Flow: 4.92 m^3/sec
Head: 4.87 m (16 ft.)
53% capacity utilization

FERC prelim. permit held by NEHC
City and CL&P – PPA
First commercial ASG in the U.S.

UK Project Installed by NEHC Partners in The Lake District

UK Project Installation By NEHC Partners

Pershore U.K.

Many Qualified Sites in New England

Enough to power over 40,000 homes
Meets 0.5% of home usage needs in New England

Does it count?

Enough to build a business

A valid contribution to the fight to reverse climate change