

How FERC is Regulating New Technologies in Hydropower



National Hydropower Association Annual Conference
Washington, D.C.

April 28, 2010



FERC's Strategic Plan

**MISSION: RELIABLE,
EFFICIENT, AND SUSTAINABLE
ENERGY FOR CONSUMERS**

*Goal: Promote the development of safe, reliable,
and efficient energy infrastructure that serves the
public interest*

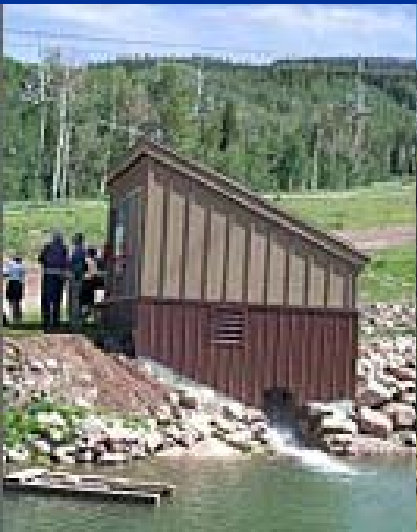


FERC Authorizations

- Preliminary permits
- Conduit exemptions
- 5-MW exemptions
- Licenses



SMALL HYDRO

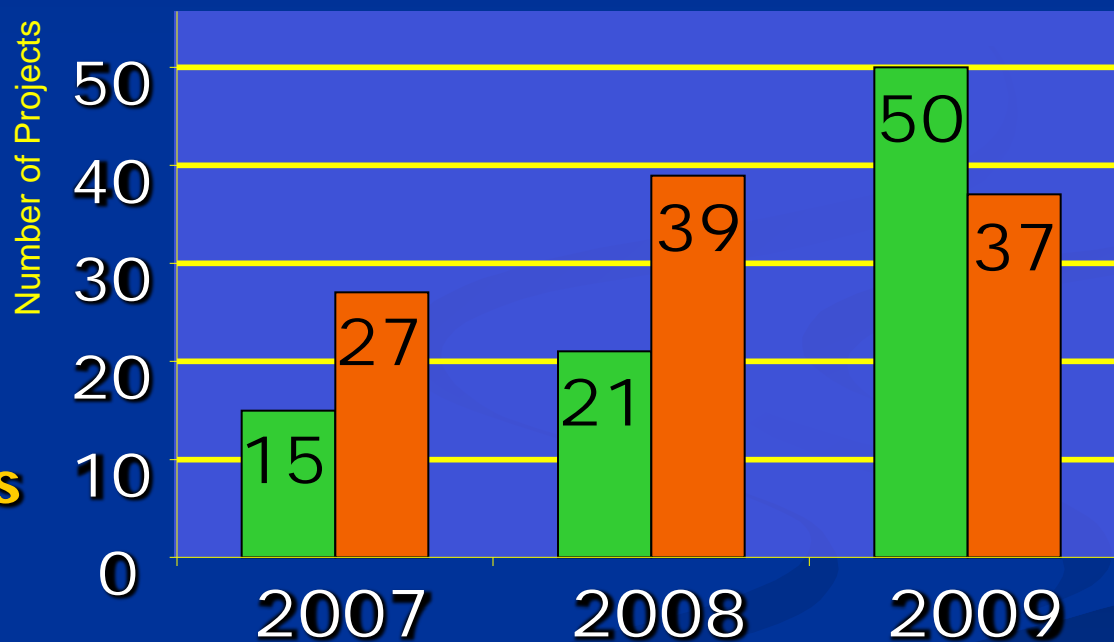




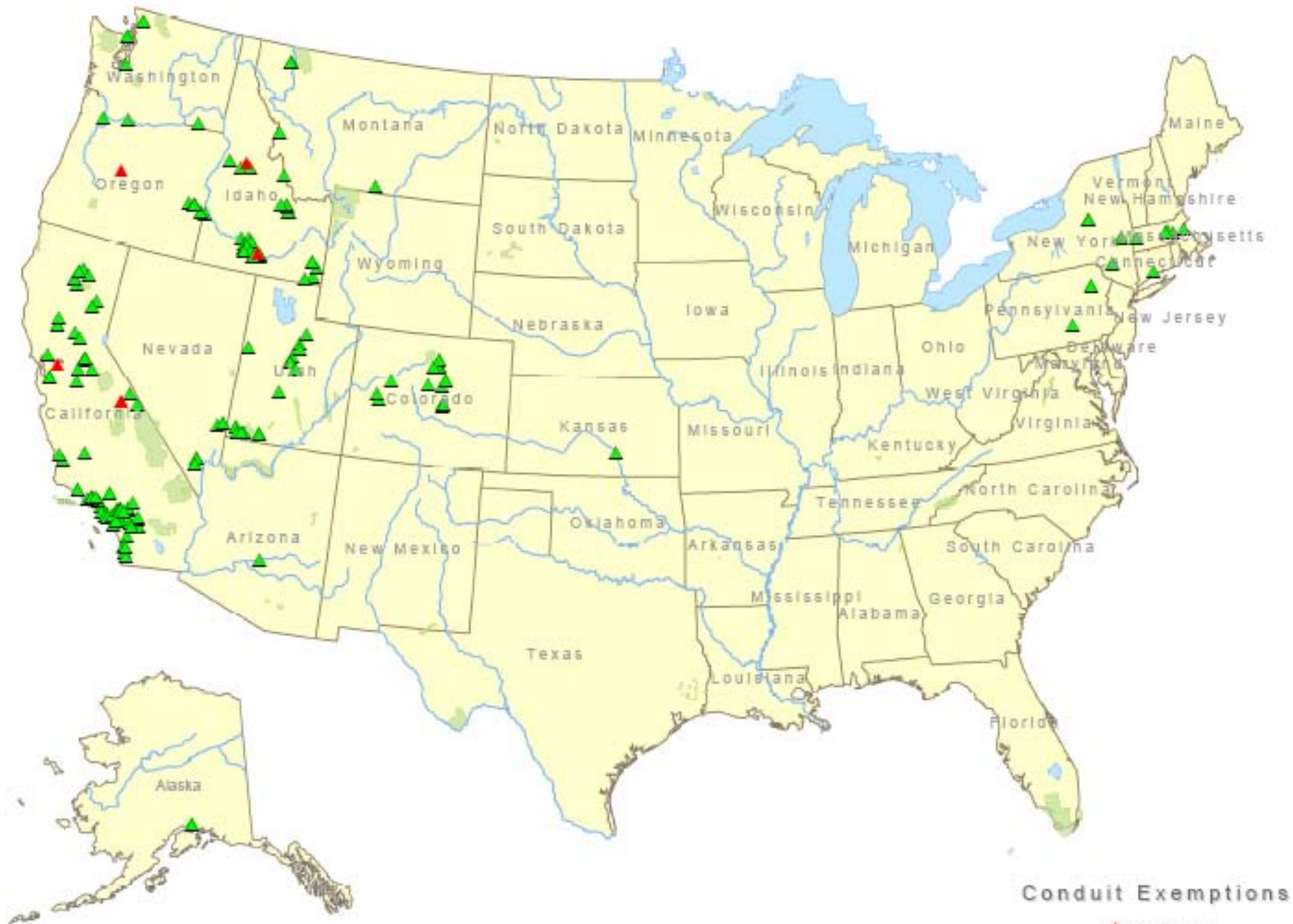
Increased Interest in Small Hydro

■ Issued Permits
■ Pending License/Exemption Applications

- **State and industry initiatives**
- **Inquiries at FERC**
- **More preliminary permits and licenses/exemptions in last 3 years**

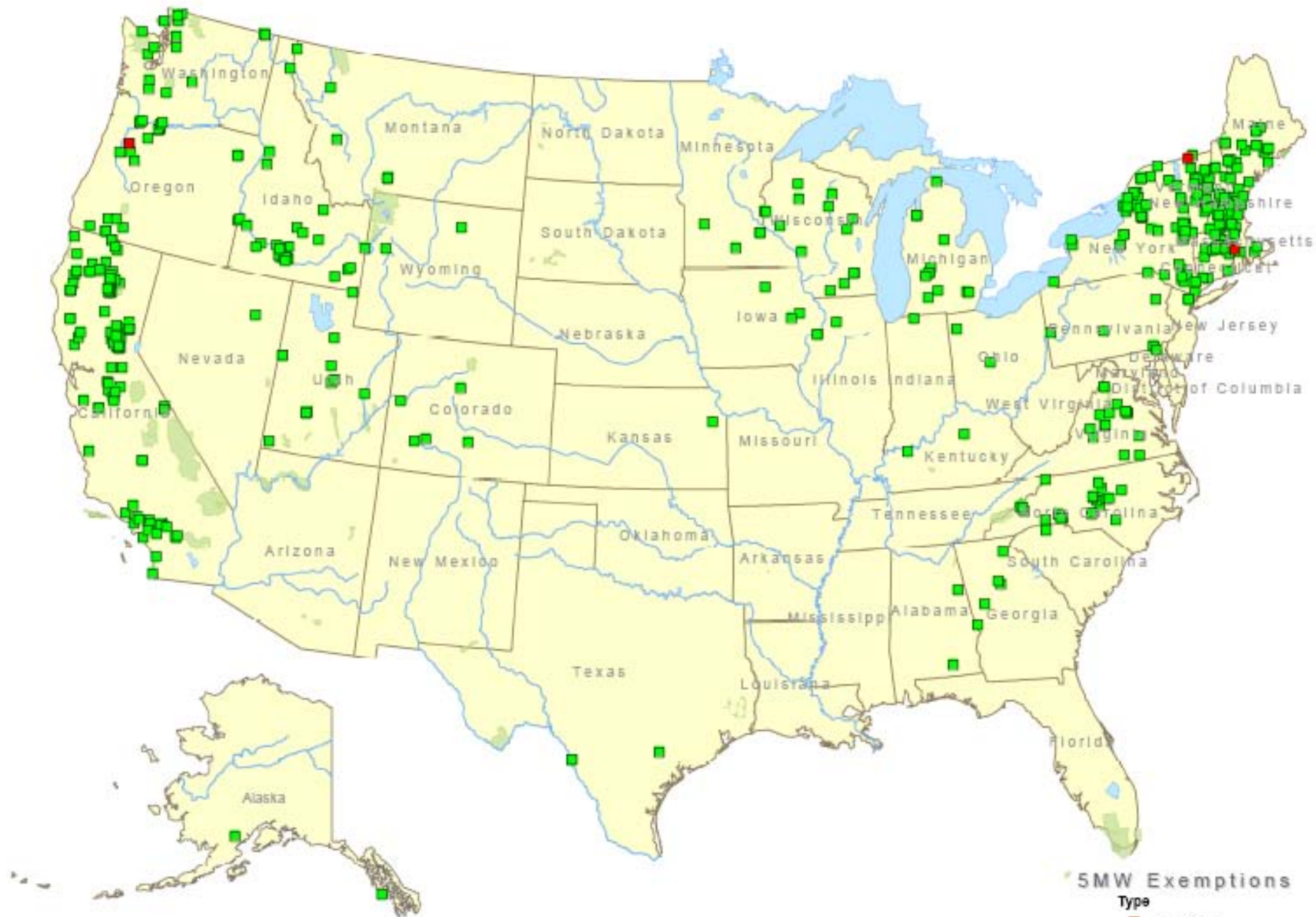


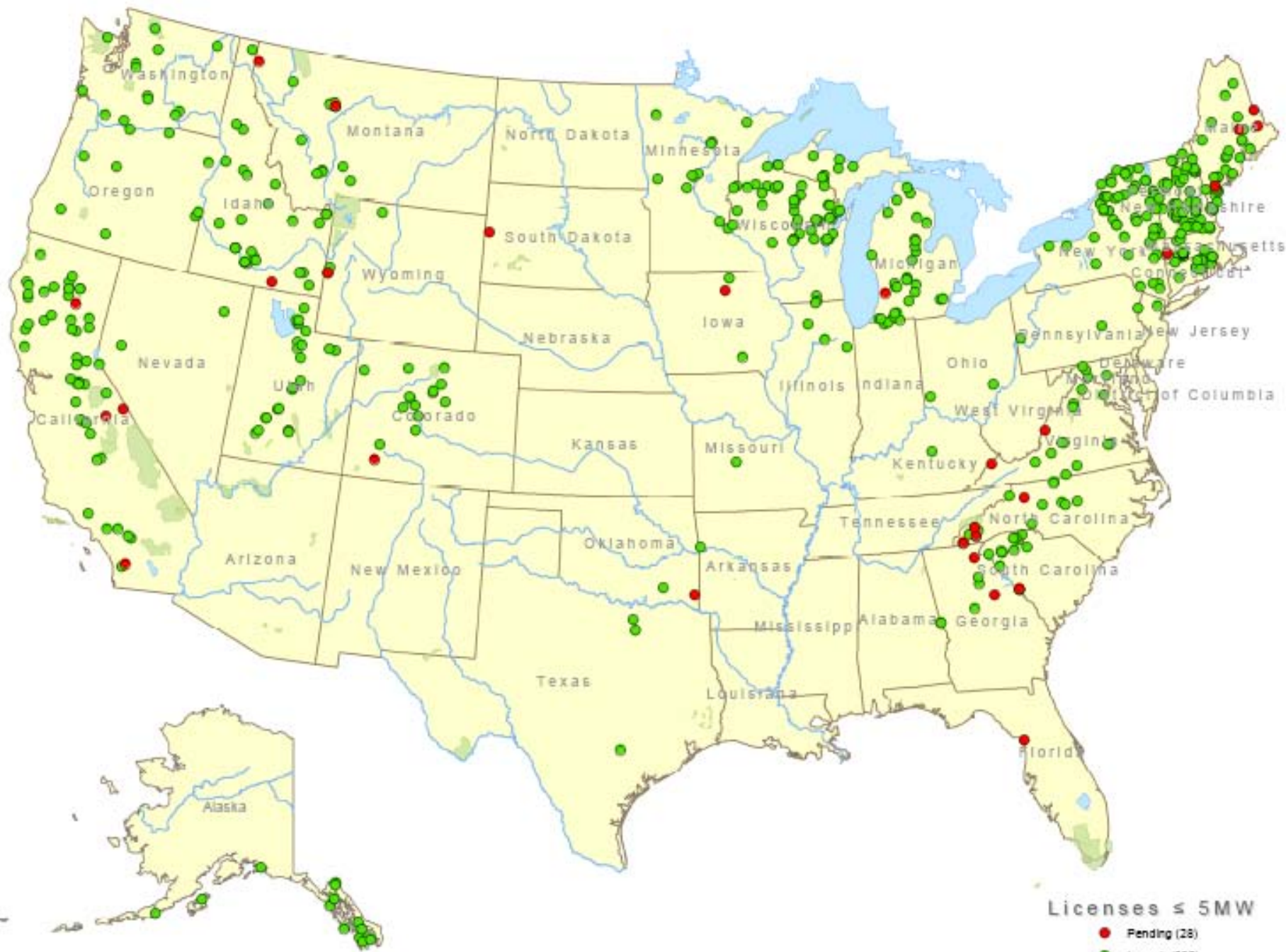
Source: Derived from OEP data



Conduit Exemptions

- ▲ Pending (5)
- ▲ Issued (187)







Existing guidance on how to expedite small hydro processing

FERC Actions that May Expedite Processing

- With resource agency coordination, waive some pre-filing requirements
- Combine scoping of issues with pre-filing consultation
- Combine public noticing requirements
- Shorten comment periods

See www.ferc.gov/Hydropower for additional guidance



Case study: Town of Afton's Culinary Water System Hydroelectric Project

- Proposed 225-kW project (P-13301) on existing water supply system, within Bridger-Teton National Forest
- License application (revised) filed May 27, 2009
- Requested expedited timeline to complete project within mandated timeframe of Wyoming SRF Program
- REA Aug. 2009, with new schedule
- Forest Service 4(e) conditions- Sept. 2009
- FERC EA and license order- Oct. 2009



Photo source: www.city-data.com/picfilesc/picc28593.php



FERC Technical Conference

December 2, 2009

- Purpose: to explore issues related to licensing small non-federal hydropower projects
- Over 40 comment letters from industry; federal, state, and local agencies; private citizens; and non-governmental organizations
- Suggestions included statutory, regulatory, and administrative changes



FERC Action Plan

- Adding new web-based resources to www.ferc.gov
- Updating MOUs with other agencies to improve coordination
- Continuing our small hydro hotline and email address to answer applicant questions
- Educating potential small hydro developers via a new education and outreach program



Web-Based Roadmap

Selecting a project site



Determining if a project is jurisdictional



Selecting a FERC process



Consulting with stakeholders



Preparing a license/exemption application



Schedule & Forecast

- Complete new web-based resources on www.ferc.gov by August 2010
- Add resources to the existing “Small/ Low-Impact Hydropower” page

FORECAST: Resources will result in better consultation and complete applications, allowing FERC to expedite licensing for small hydro

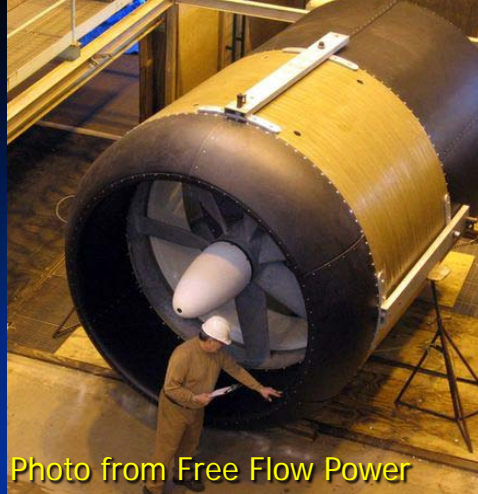


Photo from Free Flow Power



Photo from New York Tidal Energy Co.

HYDROKINETIC PROJECTS

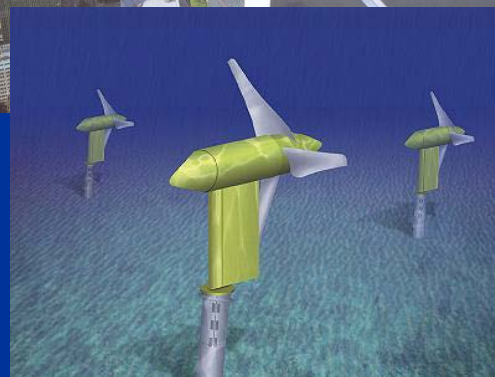


Photo from Verdant Power



Photo: Courtesy of Hydro Green Energy, LLC

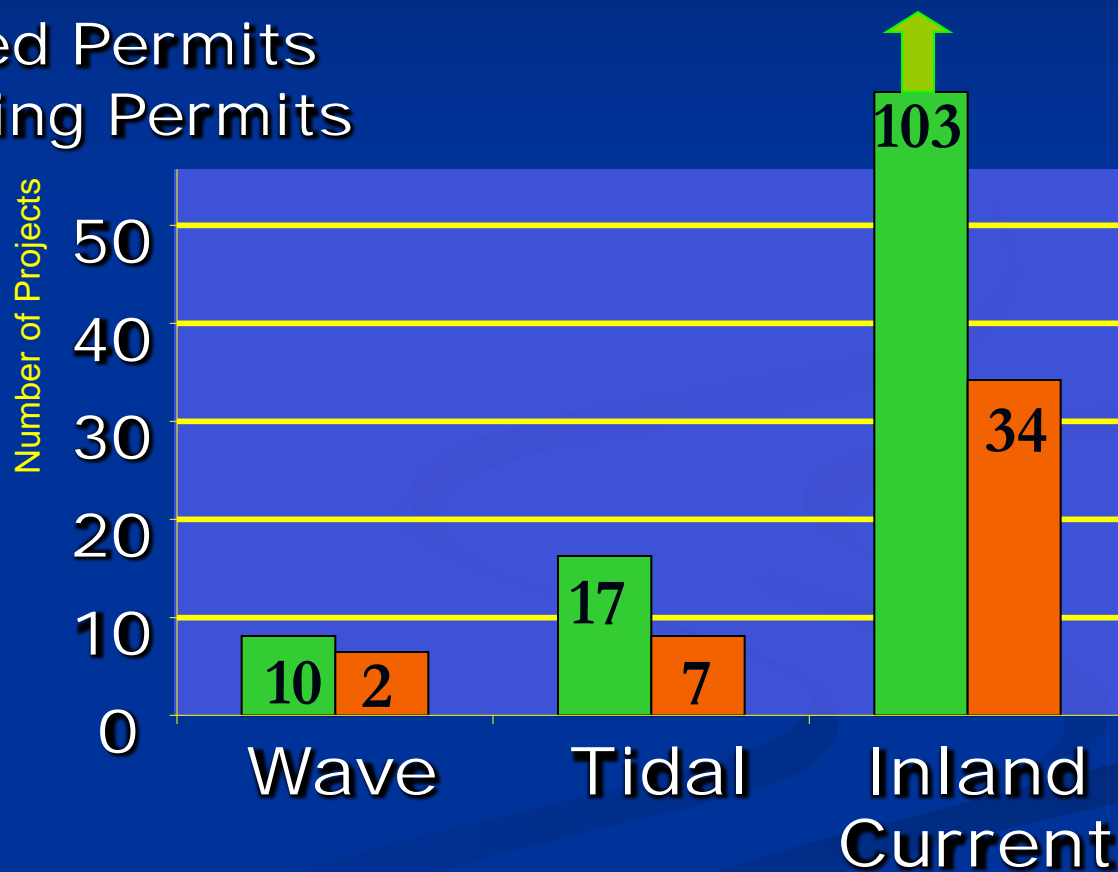
Photo from Ocean Power Technologies



Interest in Hydrokinetic Development

■ Issued Permits
■ Pending Permits

- Development of waivers to streamline procedures for pilot projects
- Inquiries at FERC
- State and federal agency MOUs



Source: Derived from OEP data



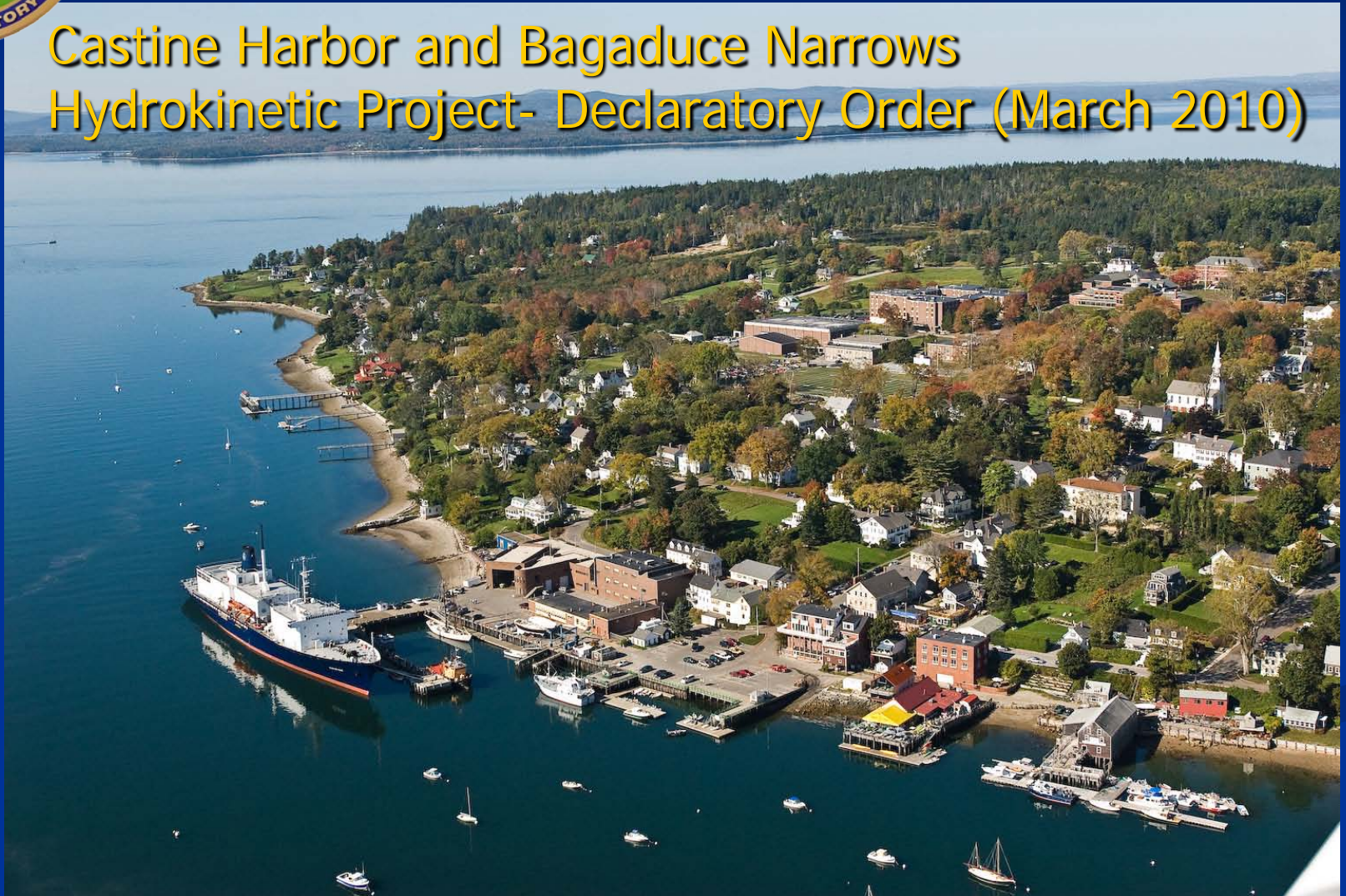
Device Testing (without grid connection) Commission Declaratory Orders

- You may request a Commission order to determine if a license is required (2 have been granted)
- Example: Maine Maritime Academy (Academy) filed a declaration of intention and petition for relief from the requirement to obtain a license for its proposed deployment and testing of devices at two coastal sites in Maine

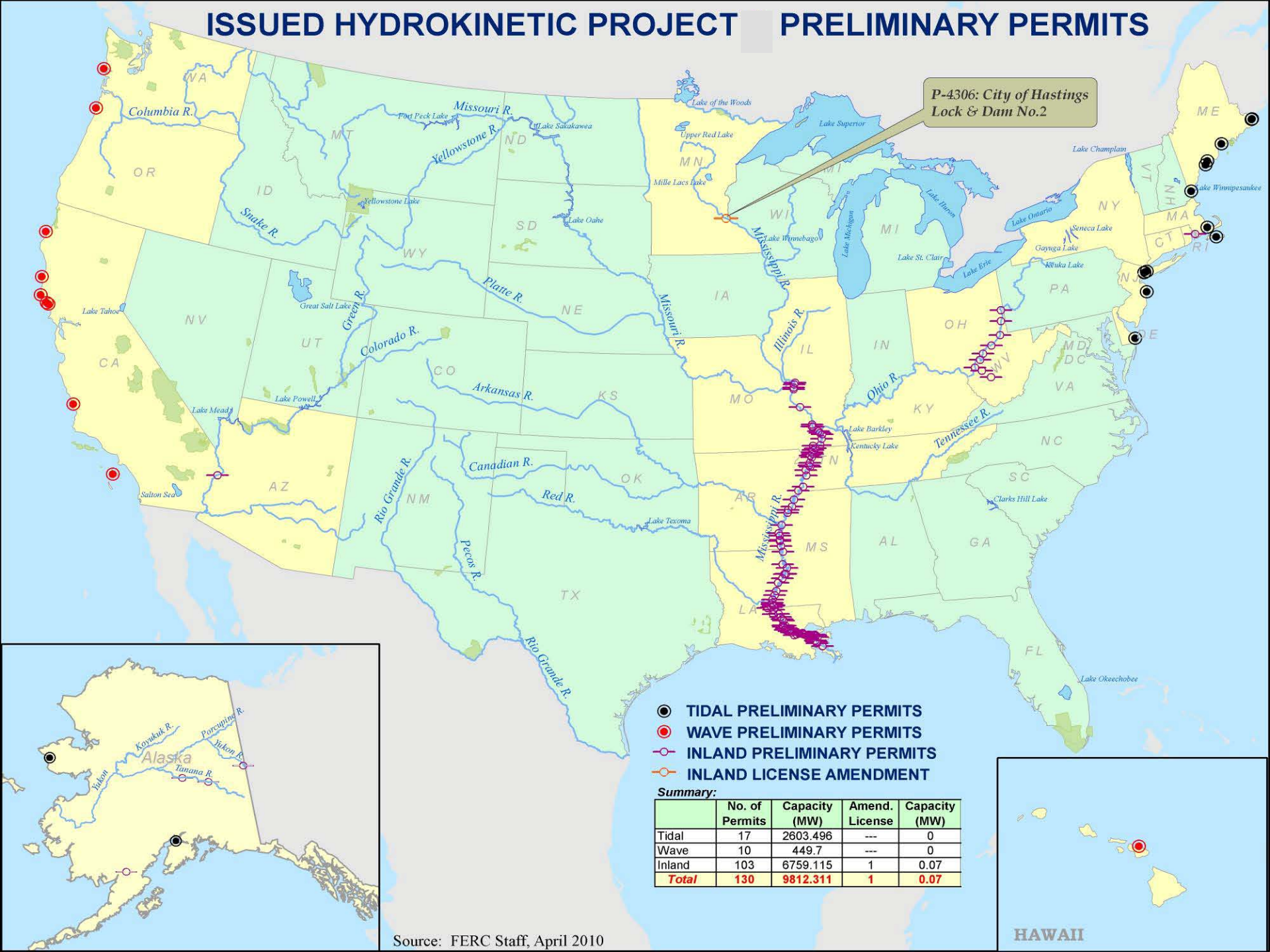


Device Testing (without grid connection) Maine Maritime Academy

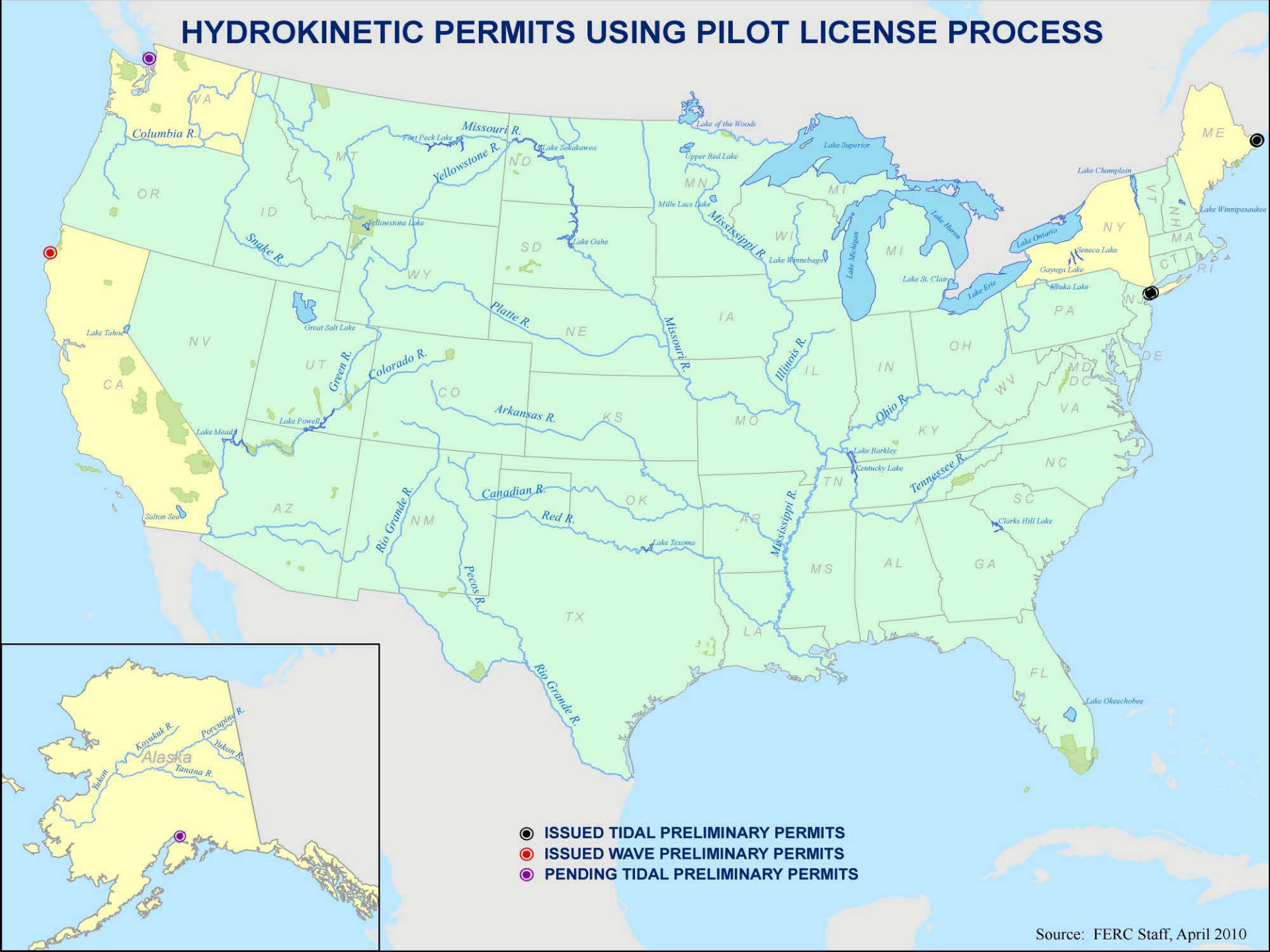
Castine Harbor and Bagaduce Narrows
Hydrokinetic Project- Declaratory Order (March 2010)



ISSUED HYDROKINETIC PROJECT PRELIMINARY PERMITS



HYDROKINETIC PERMITS USING PILOT LICENSE PROCESS

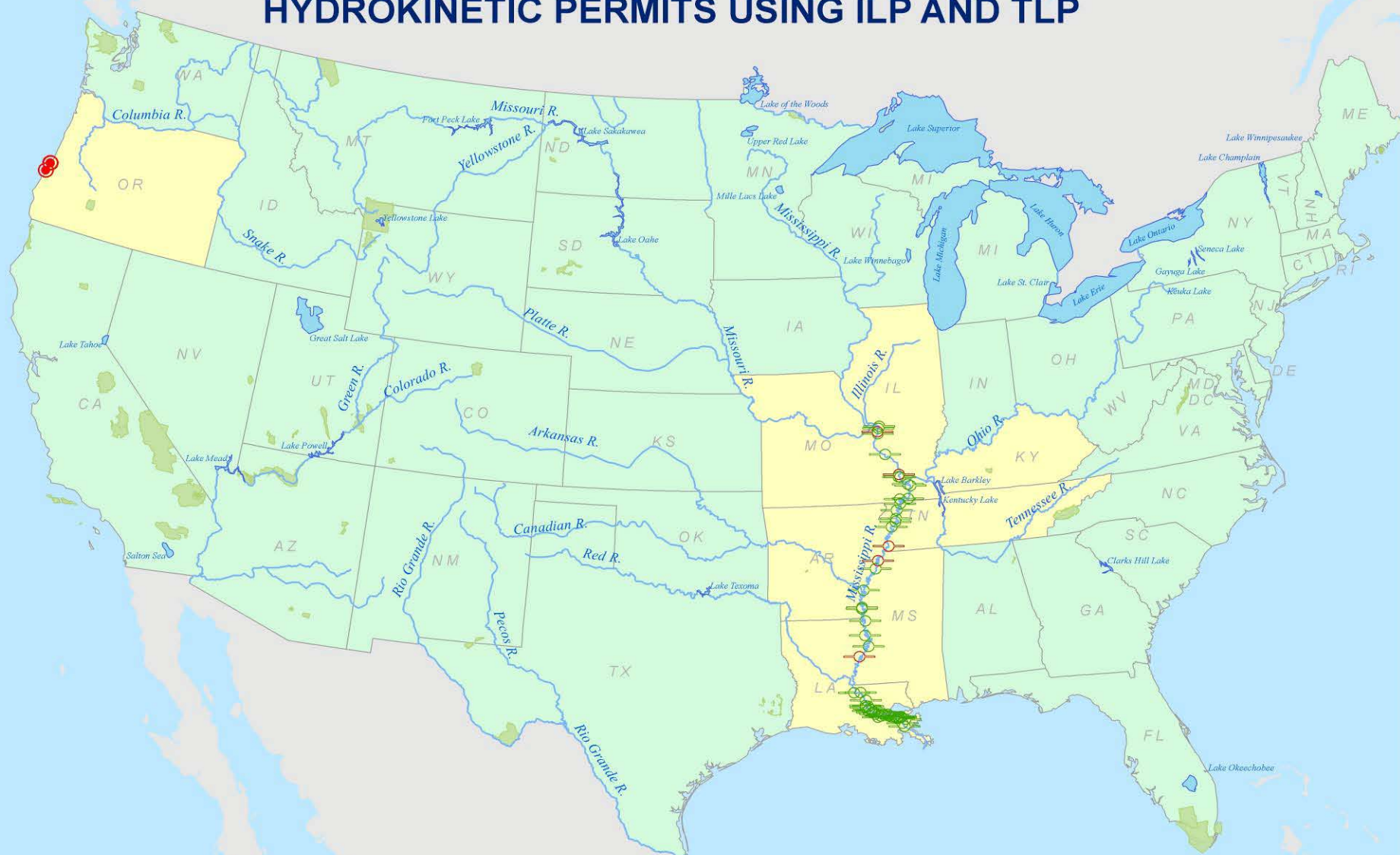




Pilot Projects: Status update

- Six applicants have filed draft applications and are developing final applications
 - ORPC Alaska, Cook Inlet Tidal Energy Project (P-12679)
 - Public Utility District No. 1 of Snohomish County, Admiralty Inlet Pilot Tidal Project (P-12690)
 - Pacific Gas & Electric Co, Humboldt WaveConnect™ Project (P-12779)
 - ORPC Maine, ORPC Eastport Tidal Energy Project (P-12680)
 - Verdant Power, Roosevelt Island Tidal Energy Project (P-12611)
 - New York Tidal Energy Company, East River Tidal Energy Pilot Project (P-12665)
- Waivers issued for Roosevelt Island Tidal Energy Project (May 2009)
- No final applications filed at this time (April 2010)

HYDROKINETIC PERMITS USING ILP AND TLP



- TLP - WAVE PRELIMINARY PERMITS
- TLP - INLAND PRELIMINARY PERMITS
- ILP - INLAND PRELIMINARY PERMITS



Existing Memoranda of Agreement

■ State Agency MOUs

- Oregon (March 2008)
- Washington (June 2009)
- Maine (August 2009)

■ Federal Agency MOUs (relevant to hydrokinetics)

- US Army Corps of Engineers (1981)
- Dept. of Interior (MMS) (April 2009)



Forecast for Hydrokinetics

- **Additional MOU development pending**
 - California
 - Updated Corps MOU
 - Project-specific LOUs with Coast Guard, with potential for agency-level MOU to follow
- **Further discussion with regards to complexities of preliminary permit and build-out boundaries**
- **Final license applications (for those receiving waivers) and pilot license issuances**

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Thank you, questions?