




What State Energy Officials Should Know About Hydropower

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Hydropower is in 48 States



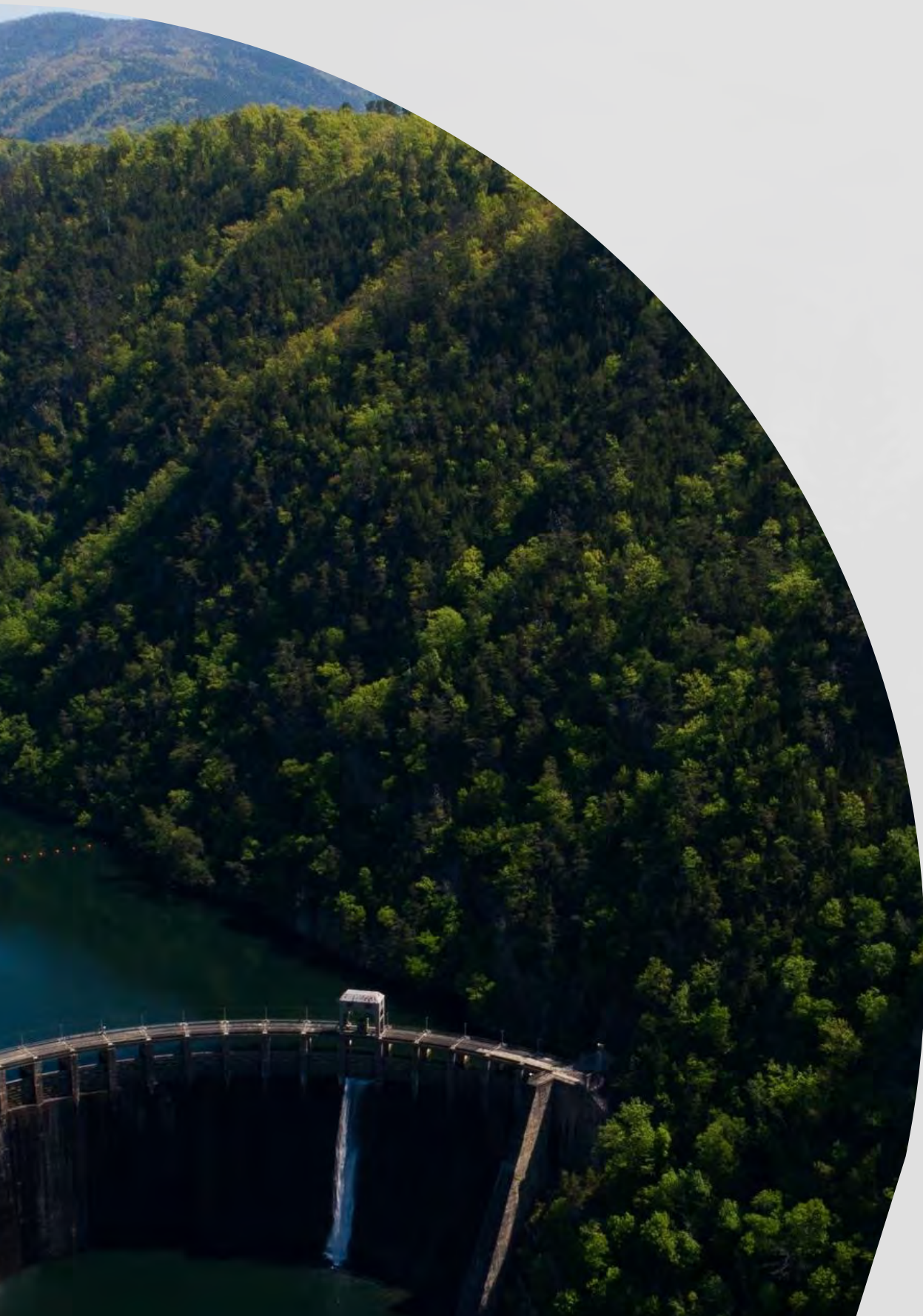


Water Power's Role on the Electricity Grid

- **Hydro provides power to 25+ million Americans**
- **Baseload generation**
- **Domestically secure**
- **Clean / emission-free**

Water Power at a Glance

- About 30% of U.S. renewable energy
- 80 GW of hydropower capacity
- 22 GW of pumped storage hydropower capacity
(96% of U.S. utility scale storage capacity)
- Globally produces more electricity than all other forms of renewables combined
- Exciting emerging marine energy technologies
(wave, tidal, current)



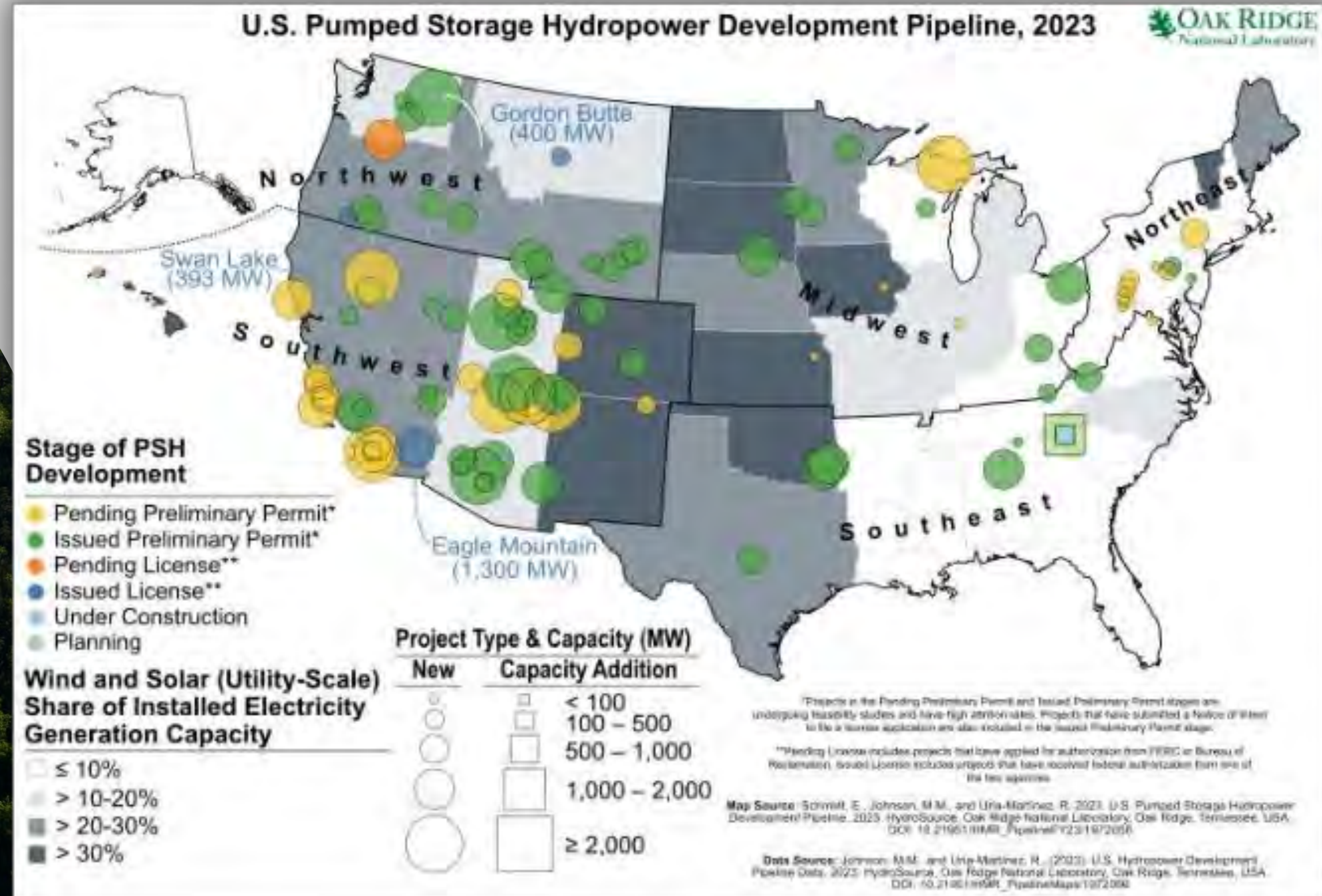
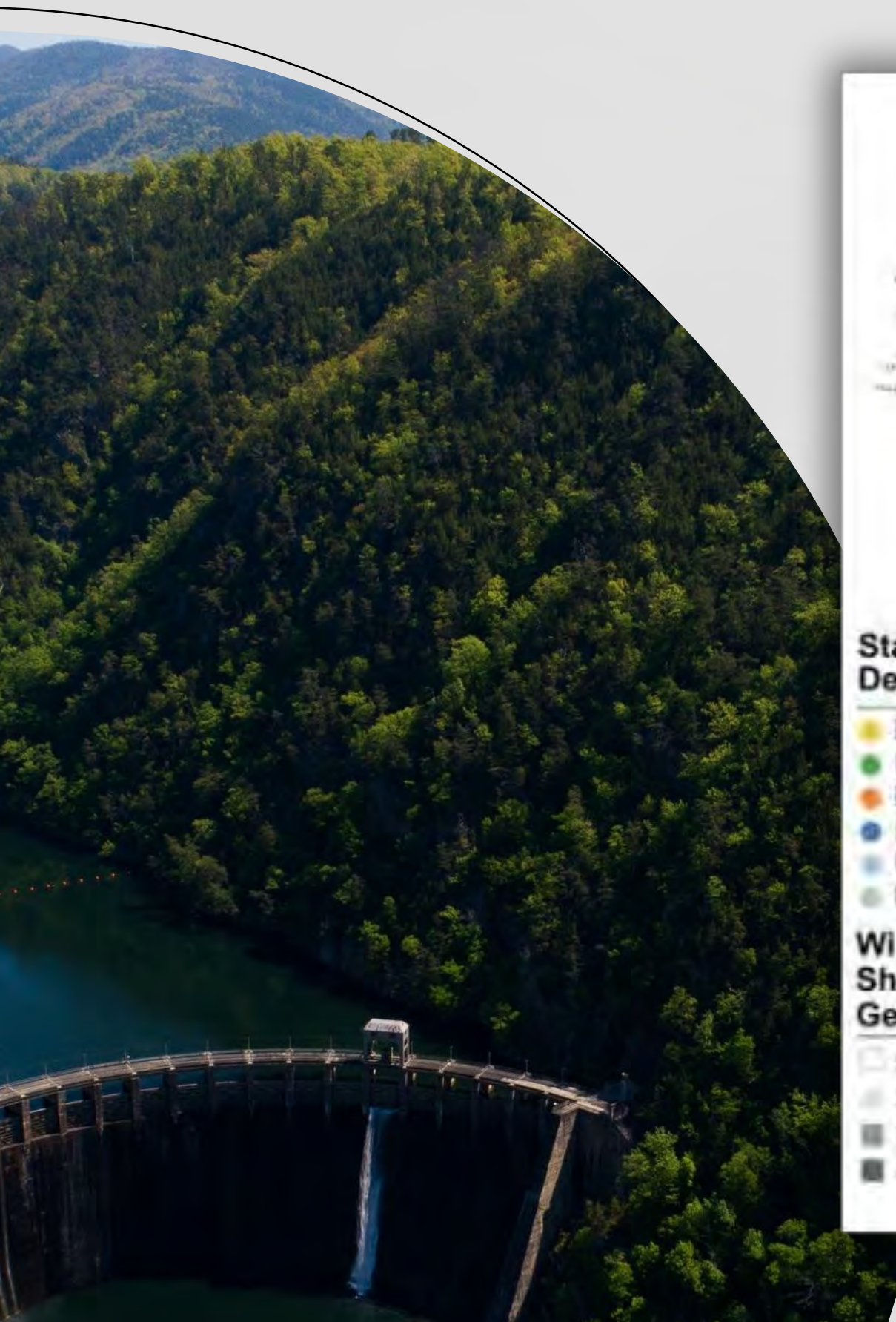
Challenges to the Fleet

- 40% of non-federal fleet is up for relicensing in next decade (and often takes 10+ years)



Read more

Growth Opportunities: Pumped Storage



Growth Opportunities: Marine Energy

- Untapped Potential - NREL identified potential electricity production of 2,300 TWh/yr - even 10% could power 22 million homes
- Predictable and Reliable Energy Sources - Tidal patterns are known years in advance, aiding grid planning and integration
- Local Impact: Stimulates economic growth in coastal and maritime regions; marine energy technologies also have remote and islanded community applications
- CA passed SB-605 to explore marine energy's role in state, now NHA is exploring future states



Action Items

- Know when facilities in your state are up for relicensing.
- Check with facility to explore if license surrender is a realistic risk.
- Evaluate impacts of potential surrender on grid reliability, essential grid services, etc.
- Reach out to your state's natural resource agencies to promote intra-state communication/coordination on relicensing issues.





Thank you!