

# Increasing the Potential of Small Hydropower Generation Through Responsible Development

**Gina S. Warren** | Associate Professor of Law

# Overview



- What is small hydropower?
- What is the proper framework for responsible development?

# Types of Hydro



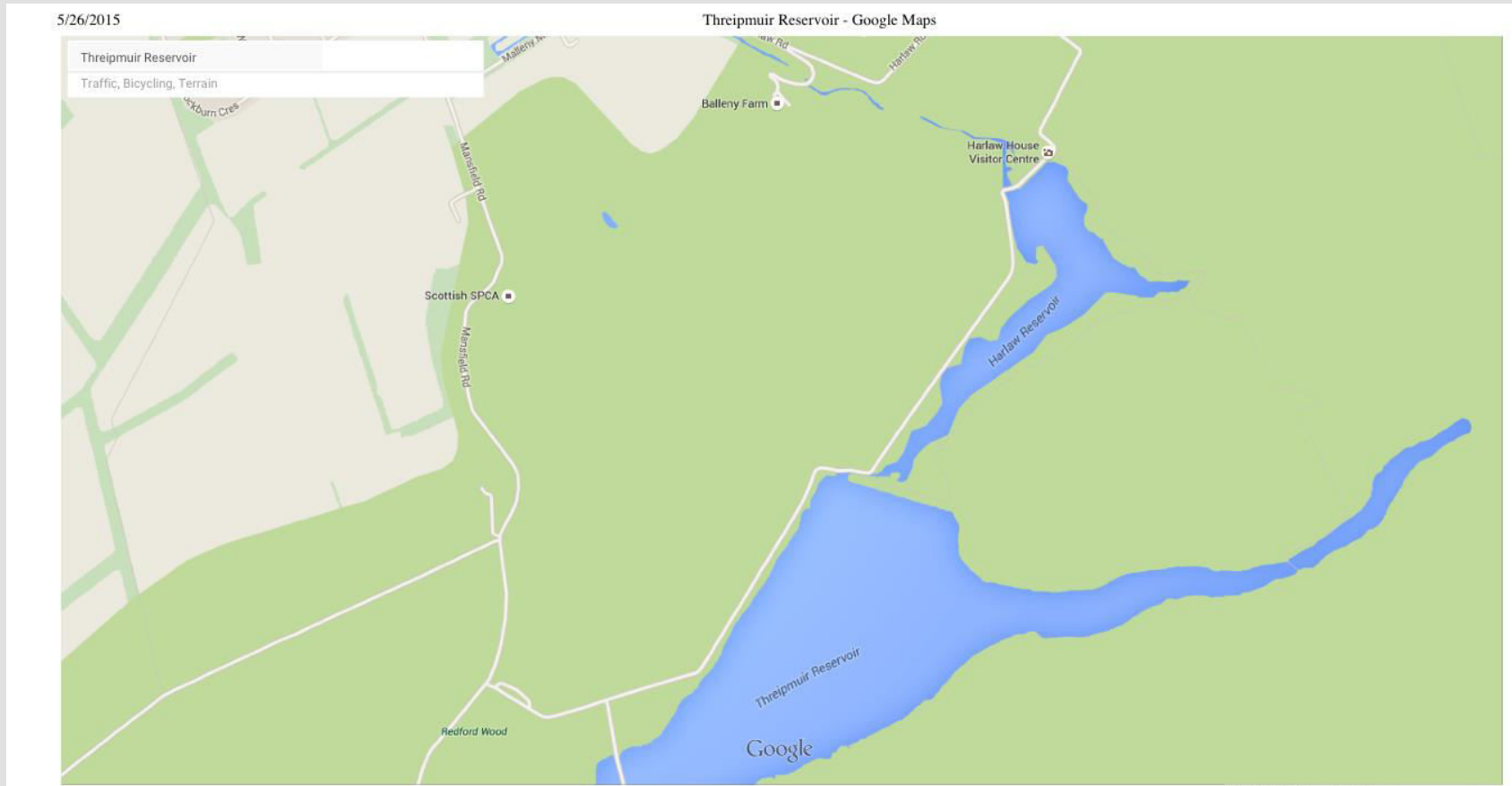
| Type   | Power Output | Applicability   |
|--------|--------------|---|
| Large  | >100MW       | Large urban populations   |
| Medium | 10-100MW     | Medium urban populations  |
| Small  | 1-10MW       | Small communities with possibility to supply electricity to regional grid |
| Mini   | 100kW – 1MW  | Small factory or isolated communities                                     |
| Micro  | 5-100kW      | Small isolated communities  |
| Pico   | <5kW         | 1-2 houses  |

# Types of Hydro

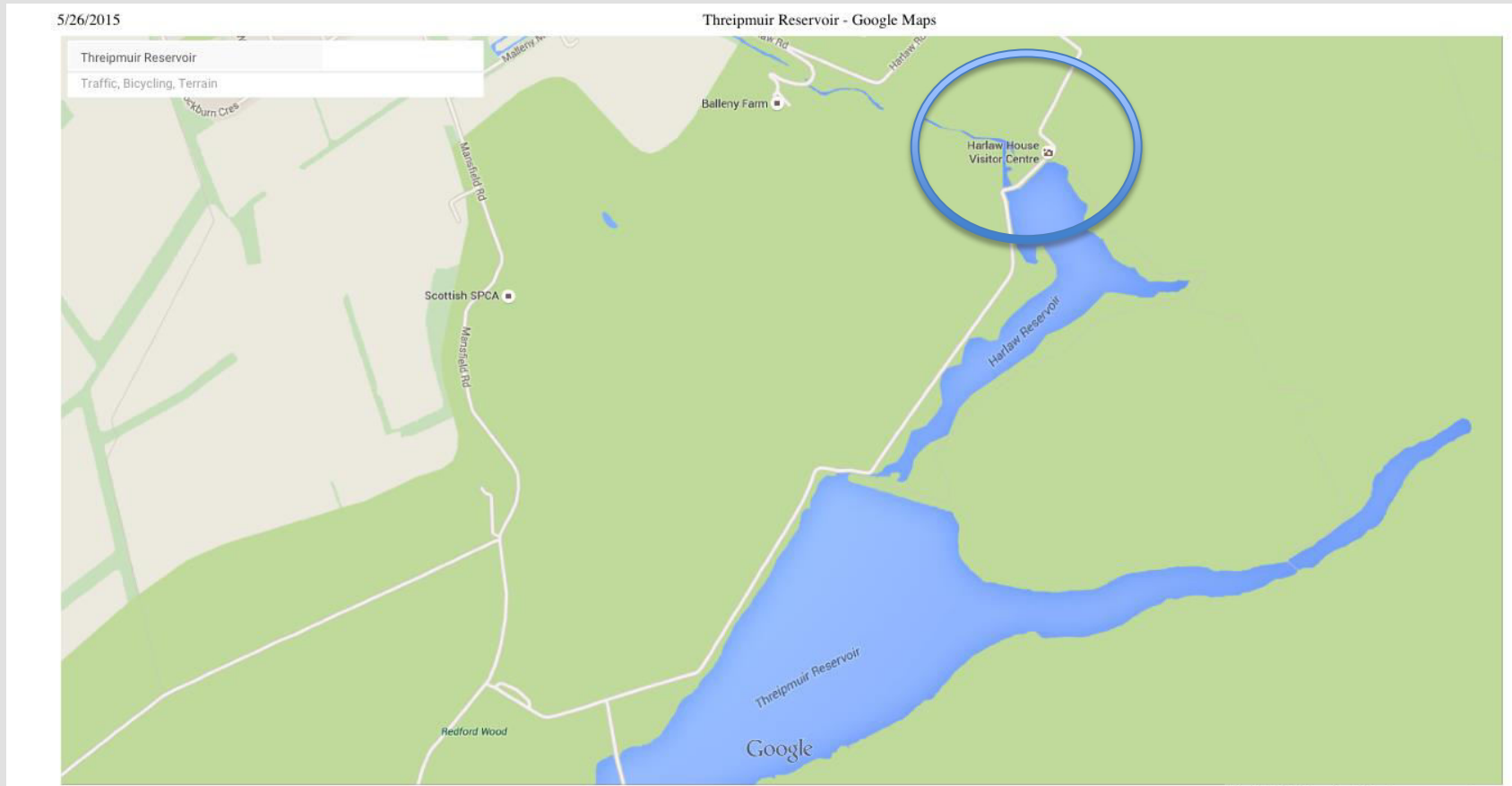


| Type   | Power Output | Applicability   |
|--------|--------------|---|
| Large  | >100MW       | Large urban populations   |
| Medium | 10-100MW     | Medium urban populations  |
| Small  | 1-10MW       | Small communities with possibility to supply electricity to regional grid |
| Mini   | 100kW – 1MW  | Small factory or isolated communities                                     |
| Micro  | 5-100kW      | Small isolated communities  |
| Pico   | <5kW         | 1-2 houses  |

# Harlaw Micro Hydro



# Harlaw Micro Hydro



# Harlaw Micro Hydro





# Harlaw Mico Hydro





# Harlaw Mico Hydro



TEXAS A&M  
UNIVERSITY



3/15/2016

- Requires:
  - Information
  - Governance Structure
  - Financing Incentives

# Information

- Feasibility of Location
- Technologies
- Human/Nature Impacts



# Governance Structure



- Efficient licensing process
  - Subsidiarity & flexibility
- Interconnection and feed in tariffs





- Government
- Community
- Private companies



# Action Plan:

- Technical, environmental knowledge
- Streamlined and flexible governance structure
- Incentives to public/private stakeholders



# Thank you!



**TEXAS A&M**  
UNIVERSITY

**Gina S. Warren**

**Associate Professor of Law**

**Texas A&M University School of Law**

**1515 Commerce Street**

**Fort Worth, Texas 76102**

**817.212.3935**

**[gswarren@law.tamu.edu](mailto:gswarren@law.tamu.edu)**