

# Submarine Cable Analysis for Marine Renewable Energy Development

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## 0.1 Introduction

try refs (Amante, Kilcher, Roberts, & Draxl, 2016; Communications Security, Reliability and Interoperability Council IV, 2014, 2016)

## 0.2 Covariates

- depth

## 0.3 Data

See Table 1.

### 0.3.1 Submarine Cables

- North American Submarine Cable Association (NASCA)
- data.noaa.gov:
  - NOAA Charted Submarine cables in the United States as of December 2012 - NOAA Data Catalog
  - North American Submarine Cable Association (NASCA) Submarine Cables - NOAA Data Catalog

Table 1: Data sources from preliminary report.

Data	Source	Website
Offshore Cables	National Oceanic and Atmospheric Administration (NOAA)	<a href="http://marinecadastre.gov/data/">http://marinecadastre.gov/data/</a>
Bathymetry	General Bathymetric Chart of the Oceans (GEBCO)	<a href="http://www.gebco.net/data_and_products/">http://www.gebco.net/data_and_products/</a>
U.S. Shoreline	NOAA	<a href="http://shoreline.noaa.gov/data/data/">http://shoreline.noaa.gov/data/data/</a>
Tide	Georgia Tech Research Corporation	<a href="http://www1.eere.energy.gov/water/">http://www1.eere.energy.gov/water/</a>
Wave	Electric Power Research Institute	<a href="http://www1.eere.energy.gov/water/">http://www1.eere.energy.gov/water/</a>
Wind (100m height)	AWS Truepower, LLC for windNavigator	<a href="http://apps2.eere.energy.gov/wind/">http://apps2.eere.energy.gov/wind/</a>

## 0.4 Maps

See Figure 1.

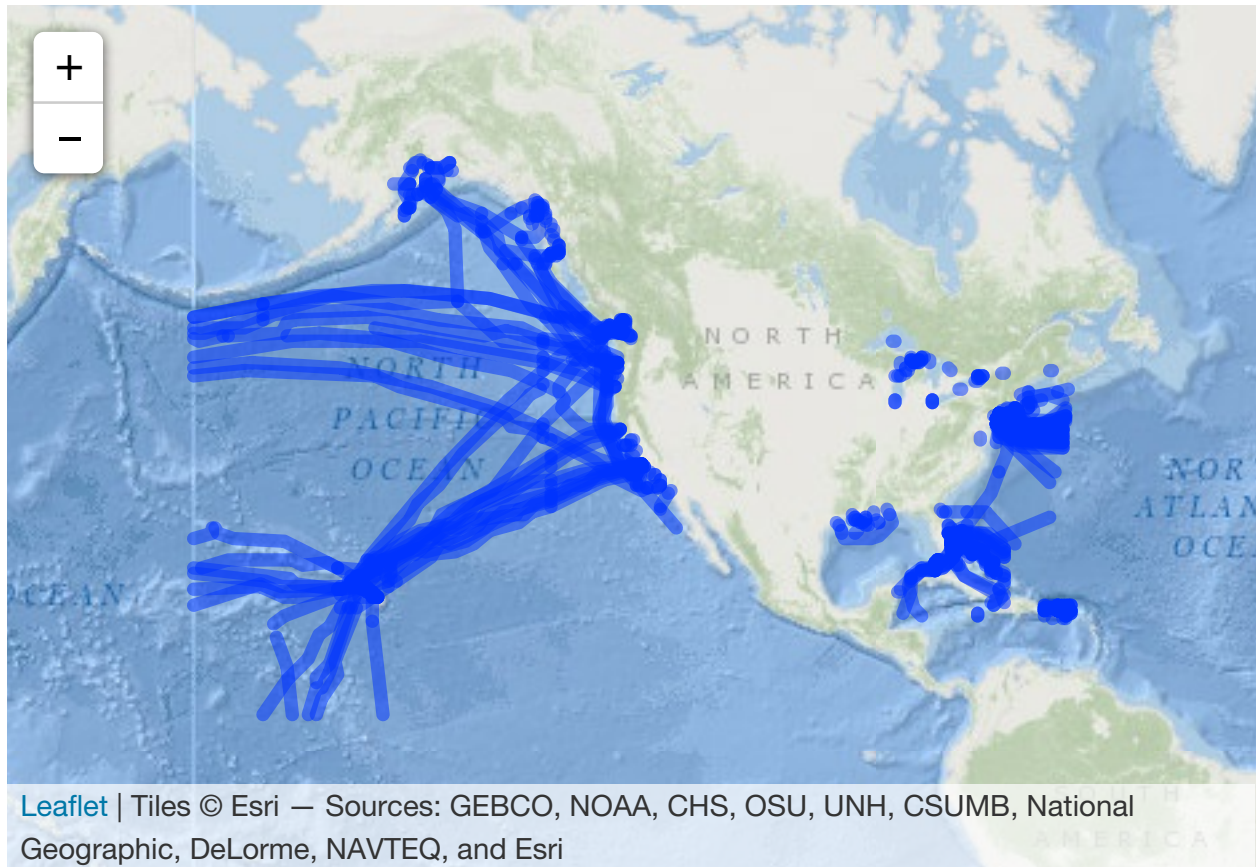


Figure 1: Map of NOAA Charted Submarine cables in the United States as of December 2012.

## 0.5 Cable Sharing?

## 0.6 Ecological

(A. B. Gill, 2005; Inger et al., 2009; Lester et al., 2013; Pelc & Fujita, 2002; Willsteed, Gill, Birchenough, & Jude, 2017)

## References

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Inger, R., Attrill, M. J., Bearhop, S., Broderick, A. C., James Grecian, W., Hodgson, D. J., ... Godley, B. J. (2009). Marine renewable energy: Potential benefits to biodiversity? An urgent call for research. *Journal of Applied Ecology*, 46(6), 1145–1153. <https://doi.org/10.1111/j.1365-2664.2009.01697.x>

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Pelc, R., & Fujita, R. M. (2002). Renewable energy from the ocean. *Marine Policy*, 26(6), 471–479. [https://doi.org/10.1016/S0308-597X\(02\)00045-3](https://doi.org/10.1016/S0308-597X(02)00045-3)

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