nrel-cables metatadata

For: Marine and Hydrokinetic Data Repository [mhkdr.openei.org](https://mhkdr.openei.org/)

# Submission Information

**Submission Name**: Submarine Cable Setback Polygons  
Provide a specific name for the title of this set of data resources that differentiates it from other submissions.

**Description**:  
Describe the data included in this submission. Include any assumptions or prerequisites for use.

This dataset of polygons describes recommended setback areas from submarine cables for marine renewable energy Development

1. cables\_100ft.geojson: The Code of Federal Regulations (CFR 585.301) specifies that the legal right of way for submarine cables is 100 ft (~30 meters) to either side of the cable (i.e., 200 ft wide).

2. cables\_2z.geojson: The International Cable Protection Committee (ICPC) of the North American Submarine Cable Association (NASCA) recommends setback distances for new facilities as the maximum of 500 m or twice the bottom depth (2z), per ICPC Recommendation 13 No. 2 (Communications Security, Reliability and Interoperability Council IV 2014). For depths 250 m, 2 \* depth is to be used.

3. cables\_3z.geojson: The ICPC of NASCA recommends setback distances for new cables as the maximum of 500 m or three times the bottom depth (3z), per ICPC Recommendation 2 No. 10 (Communications Security, Reliability and Interoperability Council IV 2014). So for depths 167 m, 3 \* depth is to be used.

For more details, please see the full report for which this data product is a supplemental output:

Submarine Cable Analysis for U.S. Marine Renewable Energy Development

by Ben Best and Levi Kilcher

National Renewable Energy Laboratory

Here also is the Github repository containing all the code for regenerating the product as submarine cable configurations change:

https://github.com/ecoquants/nrel-cables

**Keywords**: MHK, Marine, Hydrokinetic, energy, power, submarine cables, setbacks

Supply several keywords that describe the information in this submission.

For example: Point Reyes, wave energy, WEC, water velocity

# Organization and Contact Information

**Contact Name**: Ben Best

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**Organization**: National Renewable Energy Laboratory

The prime awardee or organization ultimately responsible for the submission.

**Origination Date**: 08/29/2019

The date the data in this submission was originally created, derived, or collected.

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# DOE Project Information

**DOE Project Title**: Competing Use Analysis for Offshore Renewables and Subsea Cables

The official title of your project, from your AOP or DOE award.

**DOE Project Number**: 02010400401

Your AOP WBS number or DOE award number.

For example: FY13 AOP 1.2.3.405, EE0012345, or GO12345.

**DOE Project Lead**: Hoyt Battey  
The person at DOE that you report directly to for this project.

# 1 Data Resource

No limits on file size or number of files.

**Resource Size Type Info Location Status**

nrel-cables\_setback-polygons.zip 7.90 MB Archive Complete

## Info

**Display Name**: nrel-cables\_setback-polygons.zip  
The name that will be used when displaying this resource.

**Resource Type**: Archive

**Description**:

The zip archive contains three GeoJSON files of polygons for each of the three setbacks described in the report:

1. cables\_100ft.geojson

2. cables\_2z.geojson

3. cables\_3z.geojson

Each of these outputs contains the following fields in the attribute table:

- region: regions within the US EEZ: Alaska, Atlantic Islands, East Coast, Gulf of Mexico, Hawaii, Pacific Islands, and West Coast.

- depth: depth bin relevant to marine renewable energy: 0 - 100 m, 100 - 200 m, 200 - 1,000 m

- depth\_beg: beginning number for depth bin

- length\_km: length in kilometers of contributing submarine cables

- area\_km2: area of setback

**Creation Date**: 08/29/2019

## Location

A picture containing tree, sign, text

Description automatically generated

**NE Bounding Coordinates**: 61.20097373, -64.32485154

**SW Bounding Coordinates**: 4.8752254, 141.19540676999998

# Moratorium

NO**: This submission is subject to a moratorium**.Check this box to hold the release of your data submission. This should be checked if your contractual or project requirements specify a future release date. The data submitter and/or principal investigator must verify that the release date specified matches the date explicitly stated in your award, AOP, or contract and the conditions of the moratorium have been previously agreed upon with your DOE project officer. The moratorium will apply to all resources in this submission.

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