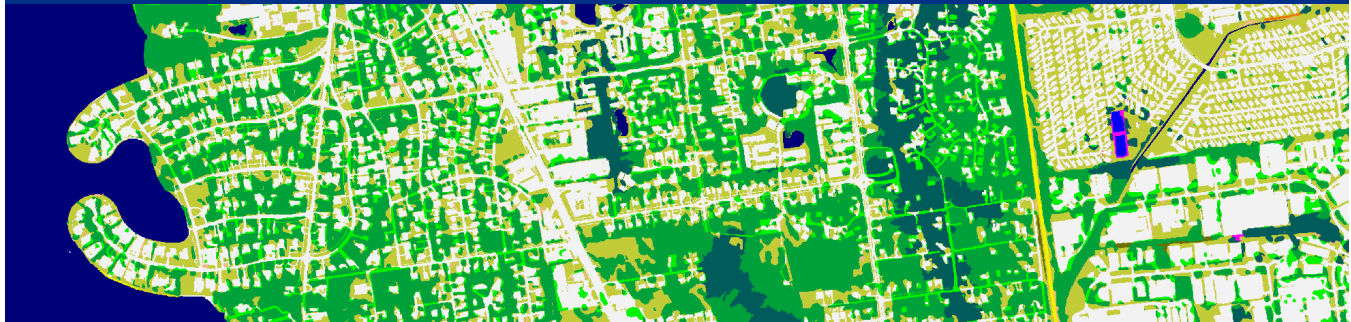


ANNOUNCING HIGH-RESOLUTION LAND COVER FOR THE COAST



30-meter C-CAP land cover data as compared to the 1-meter version. The higher resolution data are more conducive for use on the local level.

It's Our Best Yet.

NOAA is phasing in a new coastal land cover product, to be delivered from our [Digital Coast website](#). This 1-meter resolution product is replacing the current 30-meter resolution data.

Foundational 1-meter data sets will be available for every region, including Alaska and the territories, in 2024. Additional land cover data classes will be added, providing a full range of land cover classes (up to 20) by the end of 2025. This will be the first time Alaska land cover will be mapped.

Background and Overview

Land cover data are some of the most used data sets around, since many predictive models, such as sea level rise and stormwater management, depend on these data. Comparing one year to another also allows communities to document land cover change and impacts.

NOAA's Office for Coastal Management has provided the 30-meter, regionally-focused coastal land cover data (known as C-CAP) for decades. These data document 20 land cover types, including forests, wetlands, and impervious surfaces (roads, buildings, etc.).

While the 30-meter product is useful on a regional scale, community leaders have long asked for help to acquire a higher resolution product for use on a local level, as the acquisition cost can be prohibitive. Funding provided through the Bipartisan Infrastructure Law, partnerships with the private sector and others, and the savings realized when buying in bulk has allowed NOAA to fulfill this request. The data will be available, free of charge, from the Digital Coast website.

The 1-Meter Product

The first round of data, which is based on the most recent remotely sensed data available (2022 and 2021), will be released throughout 2024. The regional land cover data are refreshed roughly every five years; a similar refresh schedule is envisioned for these data. The delivery schedule is provided below.

PHASE ONE

Phase one will focus on foundational data layers—impervious, canopy, and water.

- **Contiguous U.S.** – Early 2024
- **Alaska (entire state)** – Early 2024
- **Pacific and Caribbean** – Early 2024



IMPERVIOUS



CANOPY



WATER

PHASE TWO

In this phase, NOAA is building on those foundational data layers to build a full scheme C-CAP land cover data offering, which includes up to 20 data categories and up to nine wetland types. The initial geographies for this work (see below), which is being funded in coordination with state and regional partners, will begin right away, but NOAA anticipates equipping the entire coast with the high-resolution data by the end of 2025.

- Tampa, Florida
- Houston, Texas
- Maine

PHASE THREE

The focus here is on data updates, and providing communities with land cover change maps and data. Change maps are created when data from one year are compared to another. With this information, communities can document many changing features, such as how much farmland has converted to development and changes in forest acreage, and obtain a better understanding of wetland loss and restoration successes. This information can also be used to understand how land use affects runoff and ecosystems.

NOAA is also working to keep our high-resolution data up-to-date every four to six years, as well as bringing it into compliance with newer products.

Making a Difference

Because of this effort, all locales will have equal access to the data needed to make science-based decisions about the future. Communities will be able to use the high-resolution data to improve sea level rise projections, protect businesses and homes from flooding, inform wetland restoration projects, and more. What follows is a partial list of the many uses of high-resolution land cover data.

- Wetland mapping
- Hydrodynamic modeling
- Flood risk assessments
- Stormwater management
- Mapping land cover change
- Predictive models
- Documenting wetland restoration success
- Documenting land cover change
- Understanding impact of land use practices
- Urban forestry
- Heat islands
- Tree equity
- Site mapping



Questions? Want More?

NOAA will distribute the high-resolution land cover holdings through the Digital Coast website as the data become available. However, if your community or business has a need for the data sooner than what the schedule provides, or for data beyond the current scope (see the examples below), please contact NOAA to discuss the options.

Data possibilities beyond the current scope include:

- Data in non-coastal portions of the state (or even non-coastal states)
- Land cover beyond the impervious, canopy, and water data for areas currently scheduled
- More detailed feature-type mapping, such as more detailed development or transportation features, or more detailed wetland habitat types

Contact us with your questions at coastal.info@noaa.gov.