

Expanding Ocean Economy Data: From Maine to the U.S. Virgin Islands



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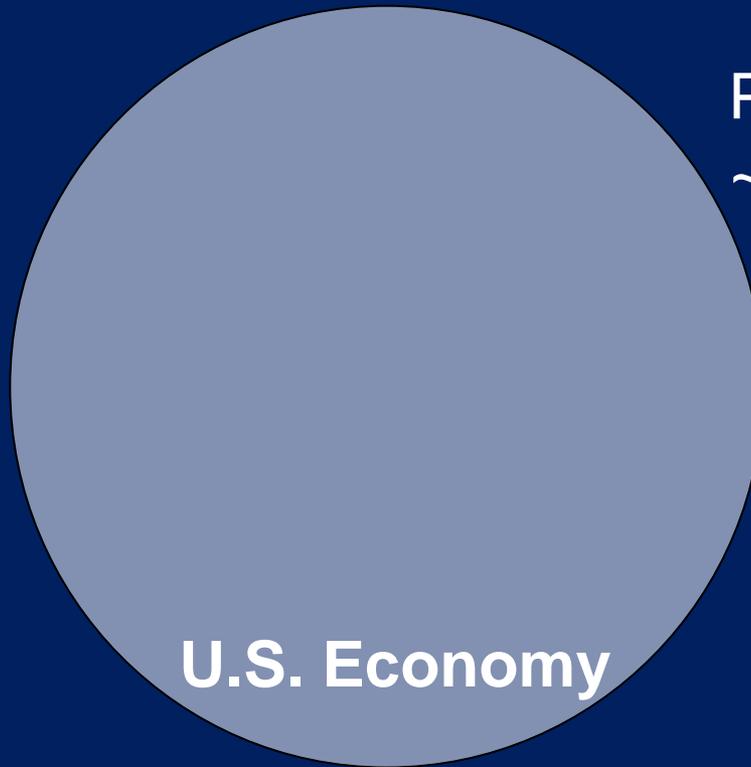
Overview

- Economics: National Ocean Watch (ENOW)
- Maine Pilot
- Virgin Island Pilot



The Coastal and Ocean Economies Compared to the U.S. Economy

National Gross
Domestic
Product (GDP)
~ \$16.5 Trillion



U.S. Economy



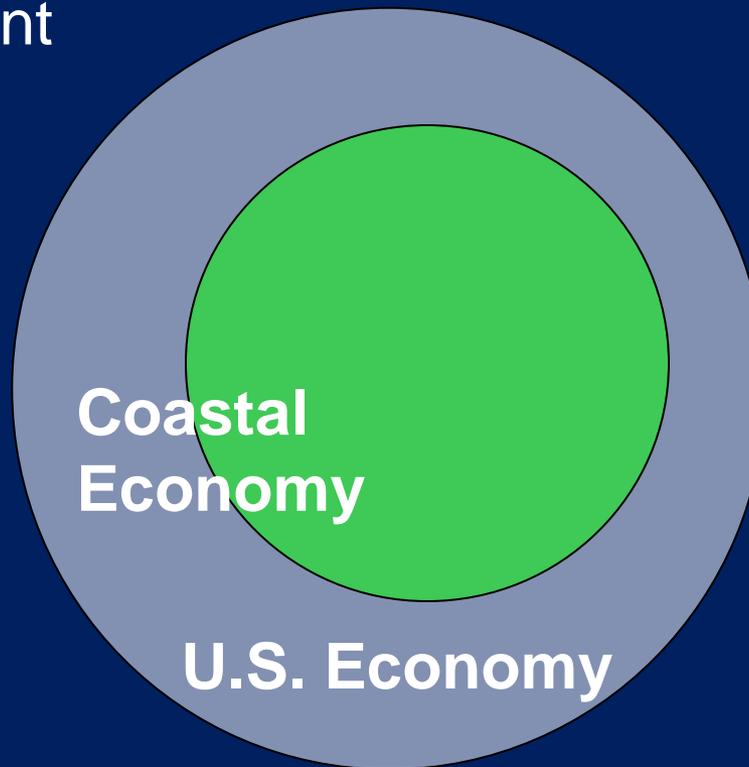
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The Coastal and Ocean Economies Compared to the U.S. Economy

Total Economy of
Shore-Adjacent
Counties

Coastal GDP ~
\$7.6 Trillion



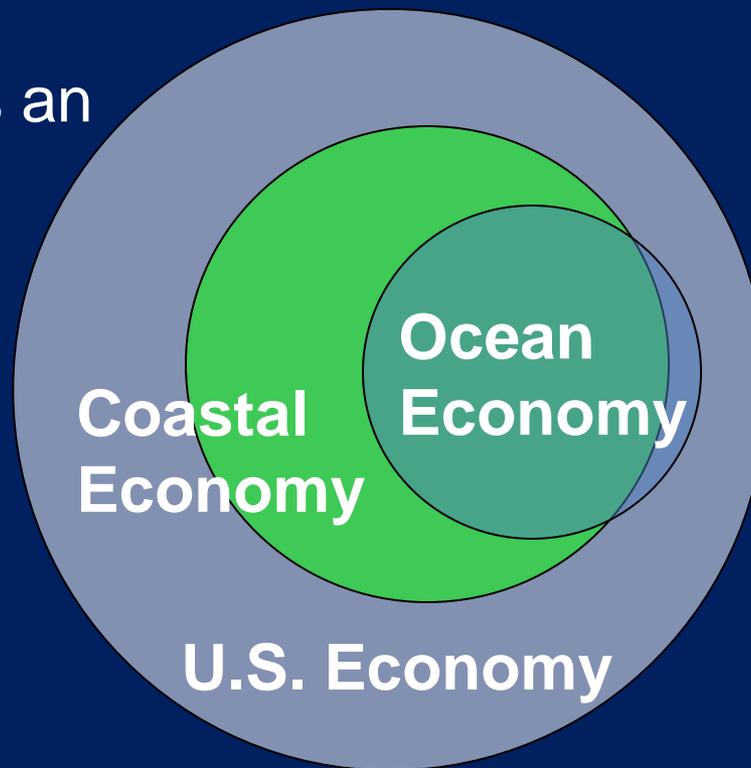
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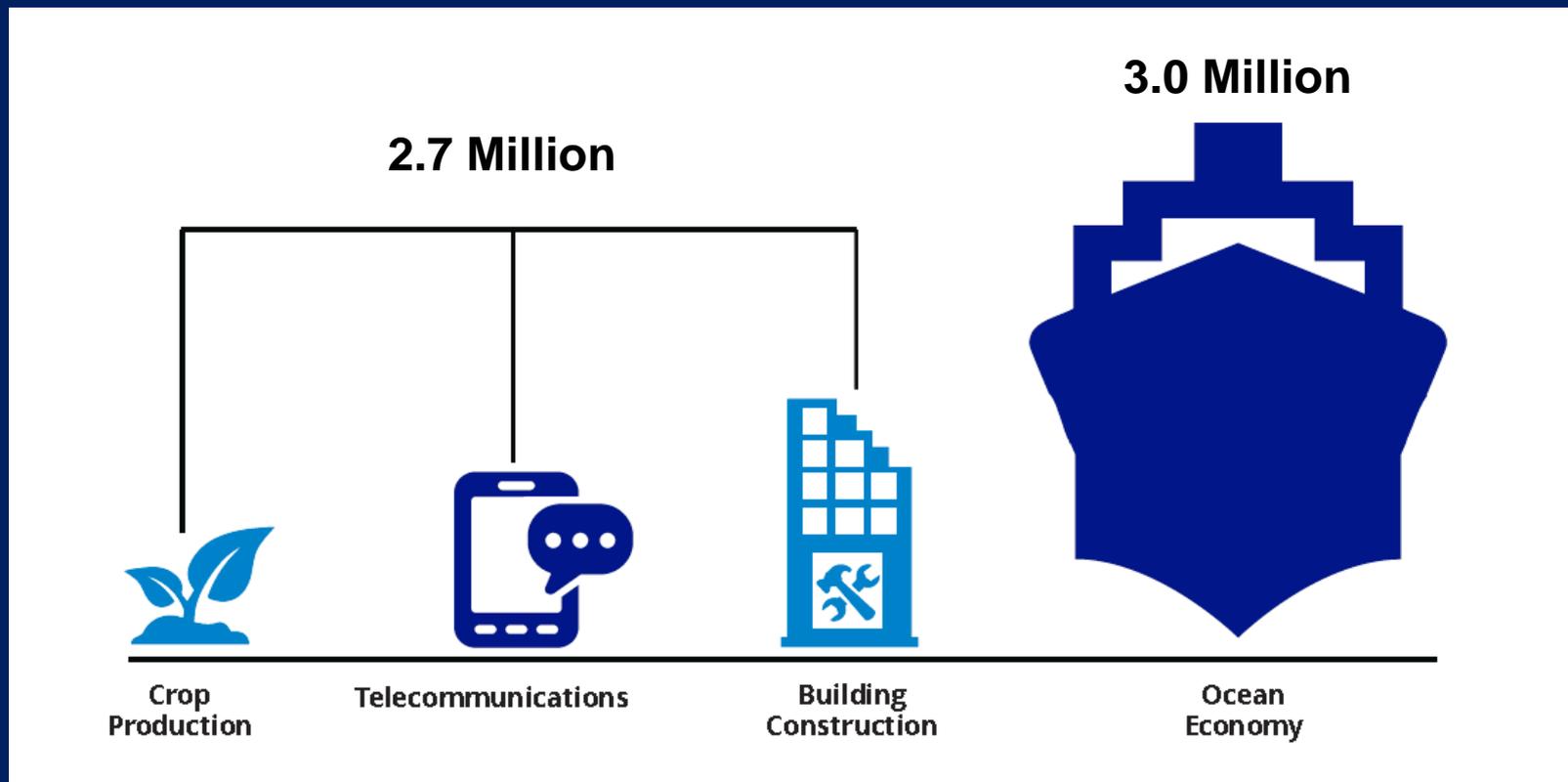
The Coastal and Ocean Economies Compared to the U.S. Economy

Economic Activities
Using Ocean
Resources as an
Input

Ocean GDP ~
\$359 Billion



Relative Size of the U.S. Ocean Economy



Economics: National Ocean Watch (ENOW)

Employment Statistics

Bureau of Labor Statistics

- Establishments
- Employment
- Wages

Bureau of Economic Analysis

- Gross domestic product

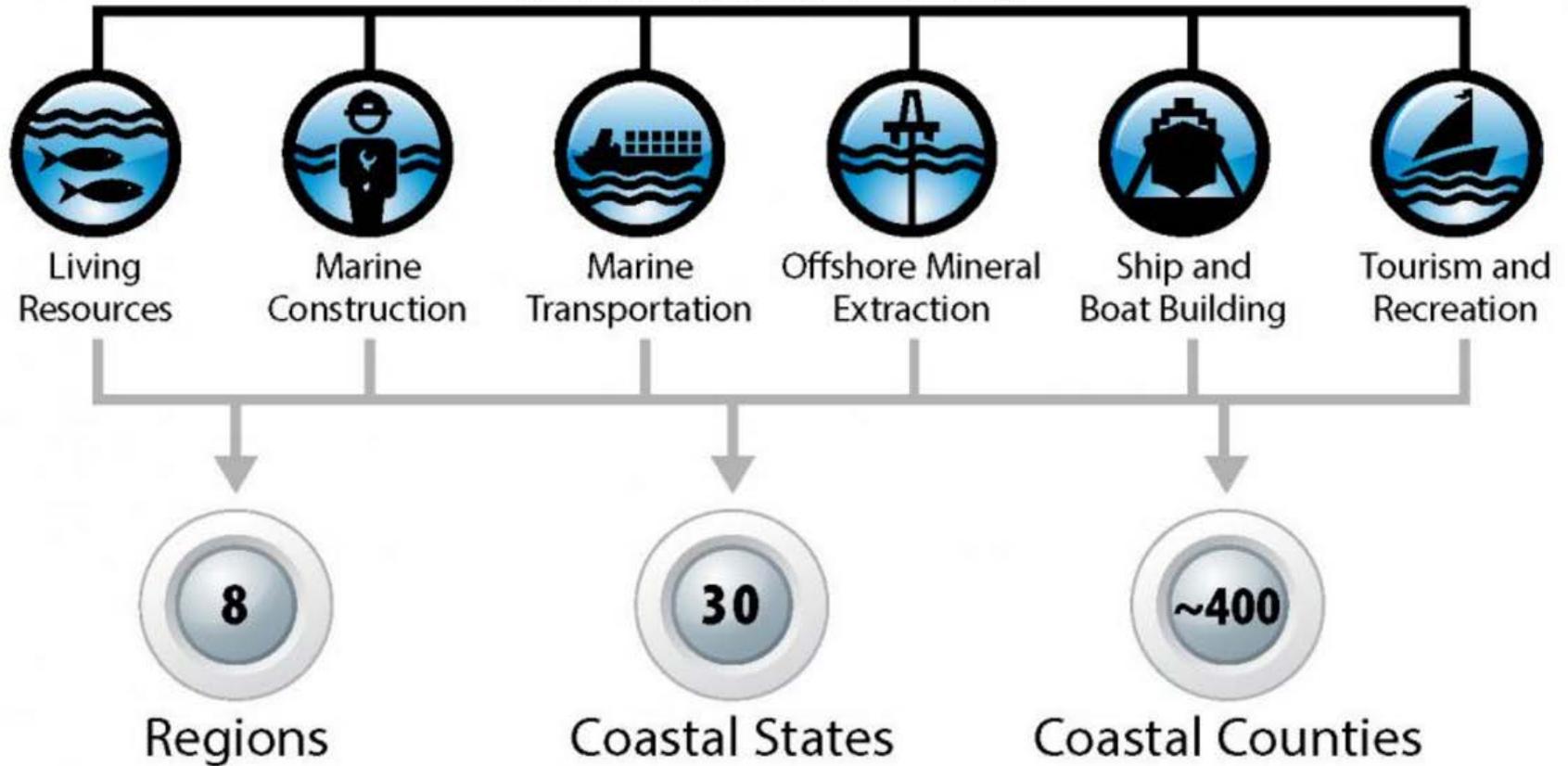
Statistics for Self-Employed Workers

Census Bureau

- Self-employed
- Gross receipts



SIX SECTORS



2005-2013



Importance of Ocean Economy Data

- Directly ocean-dependent activities
- Stakeholders
- Competing uses



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ENOW is a Starting Point

- Dig deeper to local communities:
 - Maine Pilot
- Expand data to territories
 - Virgin Island Pilot



ENOW Framework

North American Industry Classification System (NAICS)

Sector	Industry	NAICS Code	NAICS Industry
Living Resources	Fish Hatcheries and Aquaculture	112511	Finfish Farming and Fish Hatcheries
		112512	Shellfish Farming
	Fishing	114111	Finfish Fishing
		114112	Shellfish Fishing
	Seafood Processing	311711	Seafood Canning
		311712	Fresh and Frozen Seafood Processing
	Seafood Markets	445220	Fish and Seafood Markets



Local Ocean Economic Data

- Examples
 - Federal government: Zip Code Business Patterns
 - Local sources: Tax data, fishing licenses
 - Local knowledge: Place-based studies
- Limitations
 - Not consistent
 - Not comparable
 - No self-employment



Maine Pilot

- Generate ocean economy statistics at local community
- Use Zip Code Business Pattern (ZBP) Data

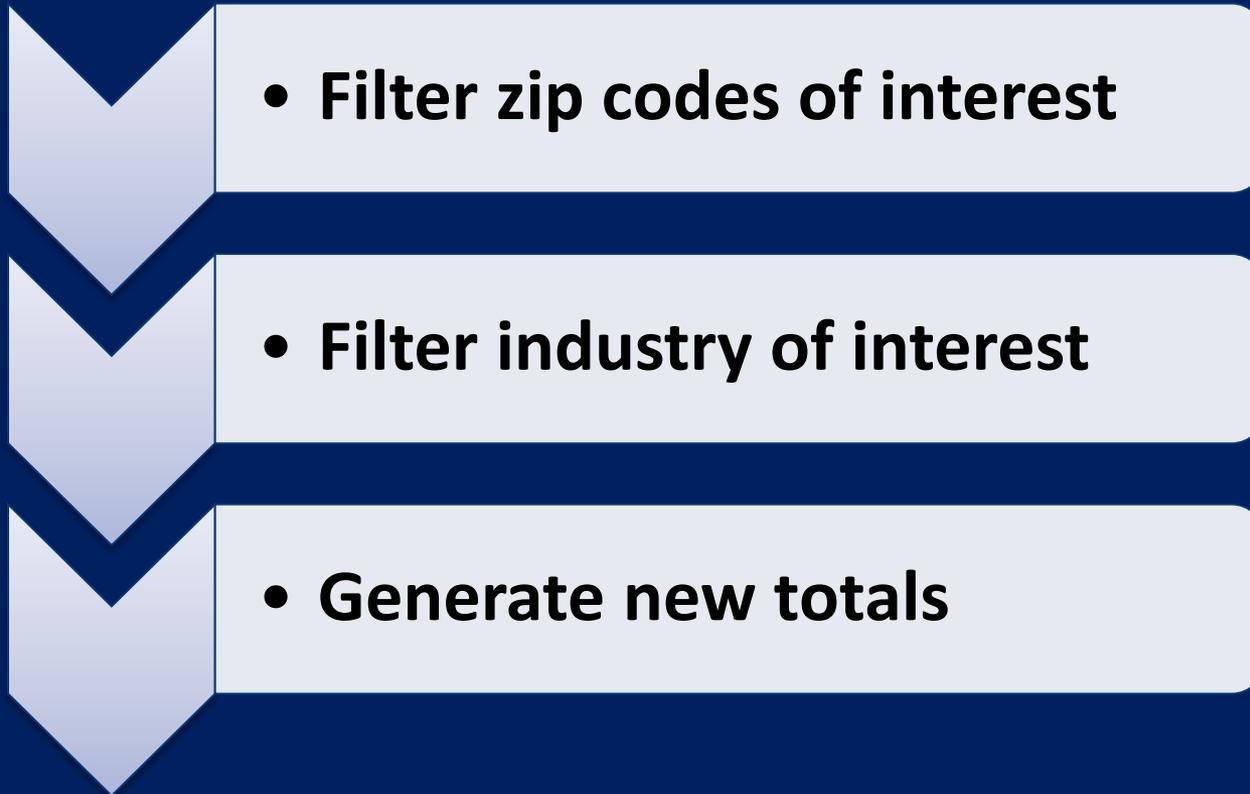
YOUR WORKING WATERFRONT ECONOMY

A Process Guide for Accessing Ocean Economic Data for
Characterizing Local Working Waterfront Economies

NOAA Office of Coastal Management
(843) 740-1200
www.coast.noaa.gov



Process Guide



Pilot Results:

Profile of Harpswell in Cumberland County, Maine

Town of Harpswell	Business Establishments	%	Employment	%
Total Economy	<i>151</i>	-	<i>458</i>	-
Ocean Economy Including Hotels and Restaurants	<i>44</i>	29%	<i>216</i>	47%
Ocean Economy Excluding Hotels and Restaurants	<i>32</i>	21%	<i>148</i>	32%



Expanding ENOW to USVI and Puerto Rico



Ground-truth pilot dataset:

- Assess accuracy of USVI & Puerto Rico ENOW data
- Describe ocean-dependent activities not captured
- Make recommendations for developing more complete characterization



USVI: Ocean-dependent and overall economy

	Establishments	Employment	Total wages (\$)
Living resources	1	ND	ND
Marine construction	2	ND	ND
Marine transportation	22	214	\$11.0
Offshore mineral resources	5	ND	ND
Ship and boat building	1	ND	ND
Tourism and recreation	373	6,524	\$161.8
Total ENOW	404	6,738	\$172.8
Total Economy	3,472	36,215	\$1,393
	11.6%	18.6%	12.4%



Findings: ENOW is good first step but underrepresents ocean-dependent activity

- Many self-employed workers
- More industries are ocean-dependent in USVI
- “Miss-classification”
- Non-disclosed employment and wage data

In-person meetings:

- Gold Coast Yachts
- Commercial fisherman
- Bureau of Economic Research
- Charter Yacht League
- Department of Natural Resources
- Department of Tourism
- USVI Game Fishing Club
- Hotel and Tourism Association
- National Park Service
- Virgin Islands Port Authority
- West Indian Company Limited



Tourism and Recreation: ENOW

Ocean industry	Establishments
Amusement and recreation services	39
Boat dealers	13
Eating and drinking places	240
Hotels and lodging places	44
Marinas	7
RV parks and campgrounds	2
Scenic water tours	19
Zoos and aquaria	9
Total	373



Tourism and Recreation: Study findings

- **\$1.23 billion in expenditures**
- **63 hotels in HTA**
- **150 + charter yacht boats**
- **168 vendors operating in the National Park**
- **12 + recreational charter fishing operations**
- **West Indian Company**
- **Vacation home rentals**
- **Retail, car rental agencies, taxis, airline industry**



Living Resources: Study findings

- 200 to 250 active local fishermen + helpers
- \$4.26 million in gross revenues for fishermen
- 8 + seafood markets, fish cleaners
- 1 aquaculture operation (UVI)
- Marine-based programs: NGOs, government-run conservation programs, UVI marine sciences program



Recommendations

- **Additional data sources –**
BER, DPNR, business registration, local BLS, VIPA
- **Additional sectors**
 - Location quotients
 - Expenditure data
- **Inventory of major businesses/organizations**
(e.g., Lexus Nexus)



Questions?
Need Technical Support?



ocm.enow@noaa.gov

www.coast.noaa.gov/digitalcoast/data/enow