The six business sectors that depend on the ocean for their existence make up what is known as the ocean economy. An economic report funded by NOAA’s Office for Coastal Management describes this information in detail for the U.S. Virgin Islands and Puerto Rico. This handout summarizes information for Puerto Rico.

Understandably, the report found that Puerto Rico is more reliant on ocean-related activity than most U.S. states. National employment statistics show that ocean industries support about 7 percent of the total employment, 3 times more than the average of 2 percent for ocean and Great Lakes states.

<table>
<thead>
<tr>
<th>Ocean Sectors</th>
<th>Establishments</th>
<th>Employment</th>
<th>Total wages ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living Resources</td>
<td>14</td>
<td>10</td>
<td>$145,331</td>
</tr>
<tr>
<td>Marine Construction</td>
<td>19</td>
<td>642</td>
<td>$19,816,175</td>
</tr>
<tr>
<td>Marine Transportation</td>
<td>123</td>
<td>3,406</td>
<td>$103,046,969</td>
</tr>
<tr>
<td>Offshore Mineral Resources</td>
<td>43</td>
<td>17</td>
<td>$334,582</td>
</tr>
<tr>
<td>Ship and Boat Building</td>
<td>5</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>Tourism and Recreation</td>
<td>4,091</td>
<td>62,645</td>
<td>$798,495,848</td>
</tr>
<tr>
<td>Ocean Economy</td>
<td>4,295</td>
<td>66,720</td>
<td>$921,838,905</td>
</tr>
<tr>
<td><strong>Total Economy</strong></td>
<td><strong>48,513</strong></td>
<td><strong>929,764</strong></td>
<td><strong>$24,903,000,000</strong></td>
</tr>
<tr>
<td><strong>Ocean Economy Share</strong></td>
<td><strong>9%</strong></td>
<td><strong>7%</strong></td>
<td><strong>4%</strong></td>
</tr>
</tbody>
</table>

Note: “ND” represents data that are “non-disclosed” for privacy purposes for industries below a certain size.

However, these figures do not capture the true level of ocean dependence here because many business activities are not captured in the national employment statistics, including self-employed workers, ocean activities not registered under traditional ocean sectors, and the partially ocean-dependent activities such as retail shops. By adding these activities to the total using locally obtained data, ocean job figures for Puerto Rico increase from 67,000 to nearly 156,000.

<table>
<thead>
<tr>
<th>Ocean Employment</th>
<th>National Statistics</th>
<th>Incorporating Additional Information</th>
<th>Percent Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living Resources</td>
<td>10</td>
<td>4,093</td>
<td>+40,830%</td>
</tr>
<tr>
<td>Marine Construction</td>
<td>642</td>
<td>4,023</td>
<td>+527%</td>
</tr>
<tr>
<td>Marine Transportation</td>
<td>3,406</td>
<td>11,961</td>
<td>+251%</td>
</tr>
<tr>
<td>Offshore Mineral Resources</td>
<td>17</td>
<td>0</td>
<td>N/A</td>
</tr>
<tr>
<td>Ship and Boat Building</td>
<td>ND</td>
<td>ND</td>
<td>N/A</td>
</tr>
<tr>
<td>Tourism and Recreation</td>
<td>62,645</td>
<td>135,578</td>
<td>+116%</td>
</tr>
<tr>
<td>Ocean Economy</td>
<td>66,720</td>
<td>155,655</td>
<td>+133%</td>
</tr>
</tbody>
</table>

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Details for each sector are provided on next page.

Note: A full report, Describing the Ocean Economies of the U.S. Virgin Islands and Puerto Rico (2016), can be found here: coast.noaa.gov/digitalcoast/training/econ-usvi-pr.html.
Living Resources Sector

Bureau of Labor Statistics reports:
- 9 fish and seafood markets, supporting 10 employees and $145,000 in wages
- 1 seafood and product preparation and packaging company

Local sources show more businesses and jobs in this sector:
- 42 fishing associations operate as seafood markets
- 32 fish and seafood markets
- 1,129 licensed fishermen
- 868 active fishermen, including 638 captains and 230 helpers
- 2.3 million pounds of fish caught in Puerto Rico, resulting in $6.9 million in commercial wholesale value and $20.7 million in retail sales

Some of the following programs also provide fisheries-related services:
- 8 environmental and conservation organizations, supporting 170 employees and $5.6 million in wages
- 64 government conservation programs, supporting 2,448 employees and $82.8 million in wages
- 39 environmental consulting businesses, supporting 267 employees and $9.7 million in wages
- Marine Life Science Program and Sea Grant Program at University of Puerto Rico

Offshore Mineral Resources Sector

Bureau of Labor Statistics reports:
- 36 limestone, sand and gravel businesses

Local sources confirm that there is very little activity within this sector:
- Offshore mineral extraction is prohibited in Puerto Rico
- Most sand and gravel for construction use is extracted from rivers and is not ocean related

Ship and Boat Building Sector

Bureau of Labor Statistics reports:
- 2 ship building businesses and 3 boat building and repair businesses

Local sources show more businesses than revealed in the employment statistics:
- 8 boat building businesses
- 18 boat repairing businesses listed on Puerto del Rey Marina’s website
- Companies and individuals provide air conditioning, woodworking, and welding services for ships and boats

Tourism and Recreation Sector

Bureau of Labor Statistics reports:
- 200 hotels and lodging places, supporting 5,582 employees and $112 million in wages
- 3,755 eating and drinking places, supporting 56,105 employees and $669 million in wages
- 135 businesses, 898 employees, and $16.8 million in wages supported by marinas, scenic tours, boat dealers, zoos and aquaria, RV parks and campgrounds, and other amusement and recreation services

Local sources identify many more hotels and lodging services:
- 250+ hotels endorsed by Puerto Rico Tourism Company
- ~2,700 Vacation Rental By Owner
- 25 casino hotels, supporting 7,904 employees and $201 million in wages
- 960 lessors of residential buildings, offices of real estate agents and brokers, residential property managers, and all other traveler accommodations businesses
- 3.2 million overnight visitors, many of whom do not stay in hotels

Local sources show a greater number of ocean-related recreational activities:
- 135 adventure and nautical tour operators endorsed by Puerto Rico Tourism Company
- 2,664 individuals work for nature parks and historical landmarks
- ~100,000 recreational fishermen
- $72 million spent by anglers on marine recreational fishing

Many other economic activities depend heavily on ocean tourism:
- 247 air transportation, taxi, passenger car rental, and travel agencies
- 29 motion picture and video production businesses
- 1.2 million people arrived on cruise ships; $198.2 million spent by cruise-ship lines, passengers, and crews
- 2.4% ($2.4 billion) of gross domestic product is directly tourism related, with total impact amounting to 7.3% ($7.4 billion)

Marine Construction Sector

Bureau of Labor Statistics reports:
- 19 marine-related construction businesses, supporting 642 employees and $19.8 million in wages

Government agencies that manage contracts and permits for marine construction activities:
- Puerto Rico Ports Authority

Some of the following businesses also perform marine construction services:
- 28 surveying and mapping businesses, supporting 81 employees and $1.9 million in wages

Marine Transportation Sector

Bureau of Labor Statistics reports:
- 13 deep sea freight businesses, supporting 42 employees and $1.3 million in wages
- 5 marine passenger transportation businesses
- 50 marine transportation services businesses, supporting 1,840 employees and $60.4 million in wages
- 57 warehousing businesses, supporting 1,524 employees and $41.3 million in wages

Many other contributors in both public and private realms are also predominantly ocean-dependent:
- 9 seaports and about 100 employees, supported by Puerto Rico Ports Authority
- 3 ferry and cargo operations, and 210 employees, supported by Maritime Transportation Authority
- 16 state transportation programs, supporting 3,895 employees and $144 million in wages
- 58 freight arrangement businesses, supporting 718 employees and $24 million in wages
- 2 water taxis commuting passengers between islands
- 2,440 individuals working in water-related transportation

Local operations of the large cargo companies, which are headquartered in Florida

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