

## Oyster restoration goals

The Deepwater Horizon Oil Spill Alabama Trustee Implementation Group Draft Restoration Plan II and Environmental Assessment (2018)<sup>1</sup> is the guiding policy document for oyster restoration in Alabama. Goals for the estuary, adapted from the 2018 Plan, include:

- **Deploying different types of cultch material** to facilitate positive settlement and growth of oysters on select reef areas.
- **Identifying water bottoms** in areas of mid-to-lower Mobile Bay capable of supporting oyster cultch.
- **Increasing public awareness** of oyster restoration efforts.

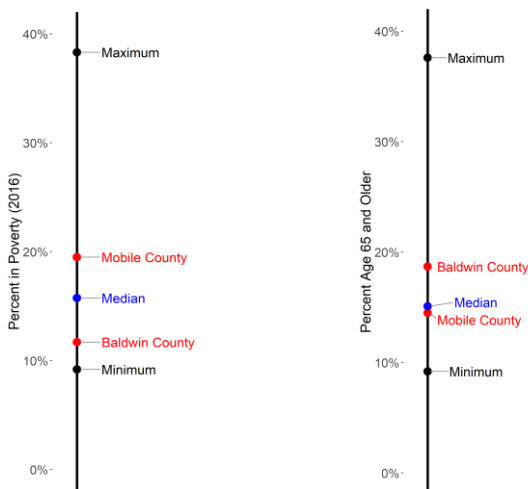
## Local projects

- The **Alabama Department of Conservation and Natural Resources** plans to restore 600 acres of oyster reefs in Mobile Bay, Mississippi Sound and Bon Secour Bay by planting 50,000 cubic yards of cultch<sup>2</sup>.
- **The Nature Conservancy** is working with partners to lead efforts to plan, install, and monitor oyster restoration projects in Mobile Bay. As of 2017, these projects covered 9,782 linear meters of constructed oyster substrate<sup>3</sup>. TNC is working with partners and local stakeholders, as well as using mapping tools, to identify the best location and design for these projects to maximize co-benefits, including wave attenuation and protection from coastal erosion.
- The **Mobile Bay Oyster Gardening Program** has produced almost 800,000 oysters<sup>4</sup> and created an interactive oyster scavenger hunt with artwork by local artists and sponsorship by local businesses to support reef restoration.
- The **Oyster Shell Recycling Program**, led by the Alabama Coastal Foundation, has collected more than 6.9 million shells from local restaurants, which will be used to restore oyster reefs in Alabama waters<sup>5</sup>.

*Note:* In the following sections, the line graphs compare the counties surrounding Mobile Bay (as shown in the map above) with all of the U.S. counties that border the Gulf of Mexico. In each graph, the Mobile Bay counties are shown in red, the minimum and maximum of all of the Gulf coastal counties in black, and the median of all Gulf coastal counties in blue.

## Demographics

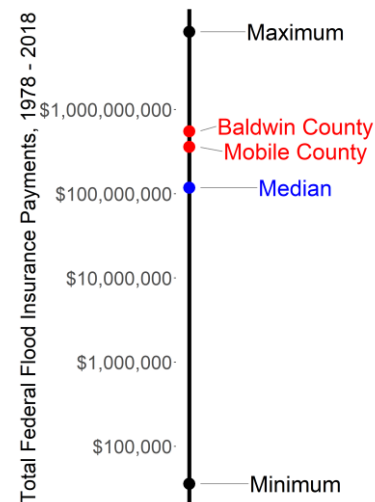
Baldwin County has a lower poverty rate<sup>6</sup> and a higher proportion of older people<sup>7</sup>, while Mobile County has a higher poverty rate and a slightly lower proportion of older people, than most Gulf coastal counties.



Mobile County has 18.9% food insecurity<sup>13</sup>, which is higher than the median Gulf coastal county (14.3%), and Baldwin County has 12.3% food insecurity.

## Flood vulnerability

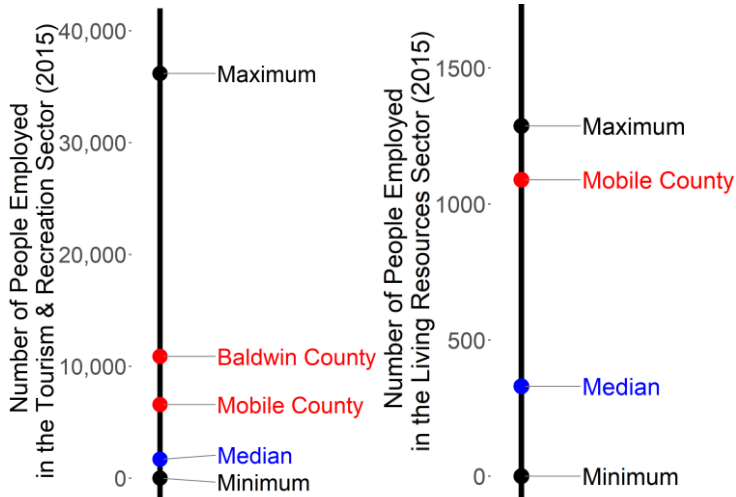
Mobile Bay counties have received more money from federal flood insurance payments than most Gulf coastal counties<sup>8</sup>.



As of 2010, more than 46,000 people were estimated to live within one mile of the shoreline in Mobile Bay counties<sup>14</sup>. That's more than 7% of their total population.

## Economy

Mobile Bay counties employ **more people in the recreation sector** (includes charter and recreational fishing, boat tours, marinas, campsites, hotels, and restaurants), and Mobile County employs **more people in the living resources sector** (includes commercial fishing, aquaculture, seafood processing, and seafood markets), than most Gulf coastal counties<sup>9</sup>.



The recreation sector makes up 7.1% of GDP in Baldwin County, and 1.1% of GDP in Mobile County.

The living resources sector makes up 0.18% of GDP in Mobile County<sup>10</sup>.

Note: Economic data on the living resources sector for Baldwin County are not available due to confidentiality issues.

## Recreation

Saltwater fishing is a recreational activity related to healthy estuaries that is popular among residents and visitors of Alabama. According to a 2011 survey<sup>11</sup>:

**134,000 people** participated in saltwater fishing in Alabama.



Saltwater anglers spent an average of **\$108 per person** on fishing trips and equipment.



Saltwater anglers spent about **1.5 million days** fishing, or about **11 days per angler**.



**Red drum** were particularly popular among saltwater anglers.



## Oyster farming in Alabama

Since 2009, oyster farms have become a rising trend in Alabama<sup>12</sup>. The 2018 Plan<sup>1</sup> lists one of its goals as constructing an oyster hatchery at the Claude Peteet Mariculture Center to encourage oyster recruitment in Mobile Bay.

As of 2016...

**18+ acres**

Used for oyster aquaculture



**\$1.9 million+**

Farm-gate value of Alabama oyster commercial operations

**14+**

Oyster farms in Alabama

## References

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- 3: Haner, J. personal communication. 5 November 2018.
- 4: Oyster Gardening on Mobile Bay. <https://oystergardening.org>.
- 5: Alabama Coastal Foundation. "Oyster Shell Recycling Program." <https://www.joinacf.org/oyster-shell-recycling-program>.
- 6: United States Census Bureau. "All Ages in Poverty." *Small Area Income and Poverty Estimates*. 2016. <https://www.census.gov/data-tools/demo/saie>.
- 7: United States Census Bureau. "DP05: ACS Demographic and Housing Estimates." *2012-2016 American Community Survey 5-year Estimates*. 2016. [https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\\_16\\_5YR\\_DP05&src=pt](https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_16_5YR_DP05&src=pt).
- 8: Federal Emergency Management Agency. 2018. Loss statistics from Jan 1, 1978 through May 31, 2018. <https://bsa.nfipstat.fema.gov/reports/1040.htm>.
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- 12: Auburn University Marine Extension and Research Center. "Alabama Shellfish Aquaculture Situation and Outlook Report: Production Year 2016." [http://masgc.org/assets/uploads/publications/1312/alabama\\_shellfish\\_aquaculture\\_situation\\_and\\_outlook\\_report\\_2016.pdf](http://masgc.org/assets/uploads/publications/1312/alabama_shellfish_aquaculture_situation_and_outlook_report_2016.pdf).
- 13: Gundersen, C., A. Dewey, A. Crumbaugh, M. Kato, & E. Engelhard. 2018. *Mind the Meal Gap 2018: A Report on County and Congressional District Food Insecurity and County Food Cost in the United States in 2016*. Feeding America. <http://www.feedingamerica.org/research/map-the-meal-gap/by-county.html>.
- 14: United States Census Bureau. 2010. "P1: Total Population." *2010 Census*. <https://factfinder.census.gov>; United States Environmental Protection Agency / EnviroAtlas. 2013. "Dasymeric Population in the Conterminous United States." <https://enviroatlas.epa.gov/enviroatlas/DataFactSheets/pdf/Supplemental/DasymericAllocationofPopulation.pdf>; National Geospatial-Intelligence Agency. "World Vector Shoreline." <https://shoreline.noaa.gov/data/datasheets/wvs.html>.