



**Thirty-five million acres** of wetland forests provide valuable ecosystem services for people living in the US South, including:

- Protection from extreme events
- Recreation, tourism, and aesthetics
- Water filtration and waste treatment
- Food and pollination
- Climate regulation
- Raw materials.

**Wetland forest ecosystem services are worth more than \$500 billion per year.** But wetland forests are constantly under siege by external forces, including urban expansion, invasive species, increased demand for timber, conversion to intensively managed plantations or

agriculture, pollution, sea-level rise, and the changing climate. Over the next 30 years, how will we protect the valuable services our Southern wetland forests provide? What can we gain if we do the right thing? And what do we stand to lose if we do not invest in our forests?

We investigated how the value of wetland forests in the US South would increase if we protected more land, extended natural riparian buffers, and managed forests more responsibly. Here are the best facts from Florida.

### **Florida's Wetland Forests Are Worth \$80.8 Billion**

- Worth could increase up to \$7.5 billion by investing in conservation
- Wetland Forest Gem: Okefenokee Swamp, a 438,000 acre swamp that straddles the Georgia-Florida line
- 5.3 million acres of wetland forest, including 1,101 named swamps and 2,942 named streams in the state<sup>1</sup>

### **Protection From Extreme Events: Florida's Wetland Forests Provide \$24.2 Billion**

- Value in protection from extreme events and water flow regulation could increase up to \$2.1 billion by investing in conservation
- One flood event caused over a billion in damages since 1980<sup>2</sup>
- Between 1851 and 2004, 110 hurricanes and 35 major hurricanes (categories 3-5) made landfall on the Florida coastline<sup>3</sup>

### **Aesthetics, Tourism, and Recreation: Florida's Wetland Forests Provide \$20.2 Billion**

- Value in aesthetics and recreation could increase up to \$2.1 billion by investing in conservation
- Florida had 112 million visitors in 2016, who spent \$108.8 billion in and supported 1.4 million tourism jobs<sup>4</sup>
- Nearly 40% of Florida residents participated in wildlife-related recreation, spending \$9 billion in 2011<sup>5</sup>

### **Water Supply and Waste Treatment: Florida's Wetland Forests Provide \$18.6 Billion**

- Value in water supply and waste treatment could increase up to \$1.8 billion by investing in conservation
- More than seventy percent of Florida residents rely on public sewer systems. Many public facilities rely on natural infrastructure to reduce costs of waste and water treatment<sup>6</sup>
- Over ten percent of Florida residents rely on private water sources like wells. Residents rely on forests to naturally filter pollutants from their water supply<sup>6</sup>

### **Food and Pollination: Florida's Wetland Forests Provide \$11.7 Billion**

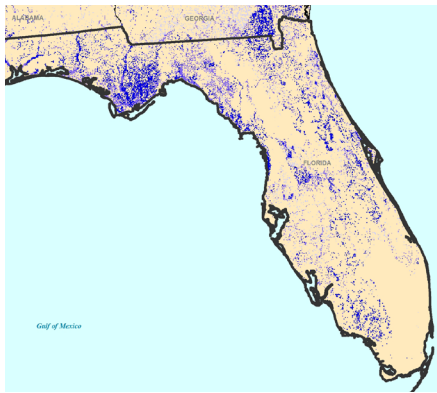
- Value in food and pollination could increase up to \$1.1 billion by investing in conservation
- Florida wetland forests provide habitat for pollinators of agricultural crops
- Roughly 2.1 million residents in Florida hunt or fish<sup>5</sup>
- In 2016, hunters purchased over 100,000 deer hunting licenses<sup>7</sup>
- In 2016, hunters harvested nearly 200,000 ducks and geese within Florida<sup>8</sup>

## Regulating Services: Florida's Wetland Forests Provide \$5.85 Billion

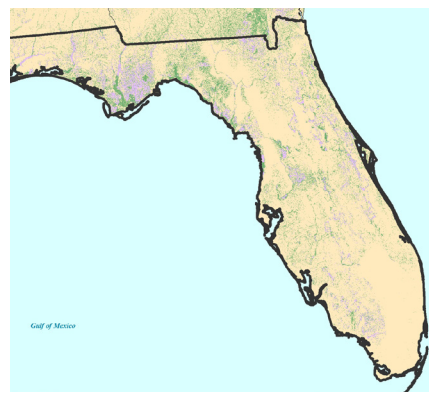
- Value in climate regulation, air quality, soil formation, and erosion control could increase up to \$265 million by investing in conservation
- There are an estimated 291 million megagrams of carbon stored in Florida wetland forests, and continual carbon storage reduces the worst impacts of climate change

## Raw Materials: Florida's Wetland Forests Provide \$167 Million

- In 2011, there were 52 forest product mills (e.g., pulp and timber) employing 6,462 people in Florida<sup>9</sup>
- Wetland forests currently provide raw materials worth \$167 million in value, this could increase to \$275 million by investing in conservation



There are 291,325,000 megagrams of carbon stored in Florida wetland forests.



Florida has 5.3 million acres of protected wetland forest (green), with an additional 2,222,000 acres of wetland forest proposed (purple) to be protected.

## REFERENCES

1. Florida Physical Features. Available at: <http://florida.hometownlocator.com/features/category,c.physical.cfm> (Accessed: 15th September 2017)
2. NOAA National Centers for Environmental Information. US Billion-Dollar Weather and Climate Disasters. (2017). Available at: <https://www.ncdc.noaa.gov/billions/events/US/1980-2017>. (Accessed: 11th September 2017)
3. US Mainland Hurricane Strikes by State, 1851-2004. Available at: <http://www.nhc.noaa.gov/paststate.shtml>. (Accessed: 15th September 2017)
4. Research. Visit Florida Available at: <https://www.visitflorida.org/resources/research/>. (Accessed: 15th September 2017)
5. US Fish & Wildlife Service & US Census Bureau. 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. (US Fish & Wildlife Service, 2014).
6. Census of Housing - Housing Characteristics In The US - Tables. Available at: <https://www.census.gov/hhes/www/housing/census/histcensushsg.html>. (Accessed: 18th September 2017)
7. Antler Nation. Realtree Available at: <https://www.realtree.com/deer-hunting/antler-nation>. (Accessed: 18th September 2017)
8. Harvest Trends | Flyways.us. Available at: <https://flyways.us/regulations-and-harvest/harvest-trends>. (Accessed: 18th September 2017)
9. The Southern Forest Products Industry. Available at: <http://usfs.maps.arcgis.com/apps/MapSeries/index.html?appid=7f8429df087e4c86951a7e69d93207a7>. (Accessed: 18th September 2017)