

# NORTH CAROLINA



**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 North Carolina.

### **North Carolina's Wetland Forests Are Worth \$27 Billion**

- Worth could increase up to \$5.1 billion by investing in conservation
- Wetland Forest Gem: 15,907 acre Green Swamp in southeastern North Carolina
- 2.4 million acres of wetland forest, including 533 named swamps and 9,322 named streams in the state<sup>1</sup>

### **Protection From Extreme Events: North Carolina's Wetland Forests Provide \$8 Billion**

- Value in protection from extreme events and water flow regulation could increase up to \$1.5 billion by investing in conservation
- One flood event cost over a billion dollars in damages since 1980<sup>2</sup>
- Between 1851 and 2004, 46 hurricanes and 12 major hurricanes (categories 3-5) made landfall on the North Carolina coastline<sup>3</sup>

### **Aesthetics, Tourism, and Recreation: North Carolina's Wetland Forests Provide \$6.6 billion**

- Value in aesthetics and recreation could increase up to \$1.4 billion by investing in conservation
- North Carolina had 54.6 million visitors in 2015, who spent \$21.9 billion and supported 211,490 tourism jobs<sup>4</sup>
- Nearly half of residents participated in wildlife-related recreation, spending \$3.3 billion in 2011<sup>5</sup>

### **Water Supply and Waste Treatment: North Carolina's Wetland Forests Provide \$6 Billion**

- Value in water supply and waste treatment could increase up to \$1.2 billion by investing in conservation
- Half of 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 a third of 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: North Carolina's Wetland Forests Provide \$3.8 Billion**

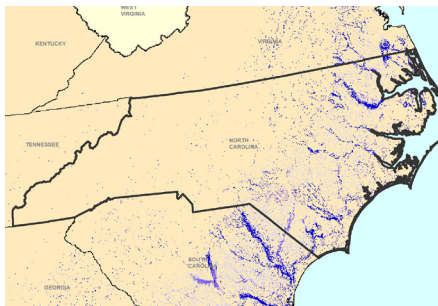
- Value in food and pollination could increase up to \$780 million by investing in conservation
- Wetland forests provide habitat for pollinators of agricultural crops
- Approximately 1.4 million residents in the state hunt or fish<sup>5</sup>
- In 2016, hunters purchased 250,000 deer hunting licenses<sup>7</sup>
- In 2016, hunters harvested over 500,000 ducks and geese within the state<sup>8</sup>

## Regulating Services: North Carolina's Wetland Forests Provide \$2.3 Billion

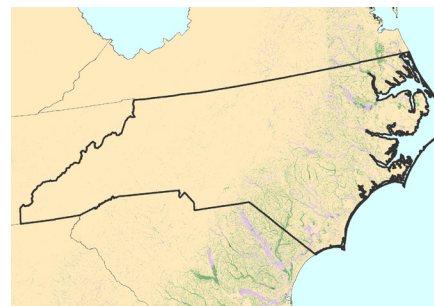
- Value in climate regulation, air quality, soil formation, and erosion control could increase up to \$178 million by investing in conservation
- There are an estimated 134 million megagrams of carbon stored in the state's wetland forests, and continual carbon storage reduces the worst impacts of climate change

## Raw Materials: North Carolina's Wetland Forests Provide \$171 Million

- In 2011, there were 135 forest product mills (e.g., pulp and timber) employing 9,766 people in the state<sup>9</sup>
- Wetland forests currently provide raw materials worth \$171 million in ecosystem services value, and investing in conservation could increase the worth to \$177 million



There are 133,718,000 megagrams of carbon stored in North Carolina wetland forests.



North Carolina has 2.4 million acres of protected wetland forest (green), with an additional 717,000 acres of wetland forest proposed (purple) to be protected.

## REFERENCES

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