



**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 Texas.

### **Texas's Wetland Forests Are Worth \$53.9 Billion**

- Worth could increase up to \$4.9 billion by investing in conservation
- Wetland Forest Gem: Big Cypress Bayou
- 3.7 million acres of wetland forest, including 204 named swamps and 11,477 named streams in the state<sup>1</sup>

### **Protection From Extreme Events: Texas's Wetland Forests Provide \$16.1 Billion**

- Value in protection from extreme events and water flow regulation could increase up to \$1.2 billion by investing in conservation
- Seven flood events amassing over a billion dollars in damages each since 1980<sup>2</sup>
- 18 major flood events hit four gulf states, including Texas, between March of 2015 and August of 2016<sup>3</sup>
- Between 1851 and 2004, 59 hurricanes and 19 major hurricanes (categories 3-5) made landfall on the Texas coastline<sup>4</sup>

### **Aesthetics, Tourism, and Recreation: Texas's Wetland Forests Provide \$13.5 billion**

- Value in aesthetics and recreation could increase up to \$1.3 billion by investing in conservation
- Texas had 225 million visitors in 2015, who spent \$69.1 billion and supported 499,600 tourism jobs<sup>5,6</sup>
- Nearly forty percent of residents participated in wildlife-related recreation, spending \$6.2 billion in 2011<sup>7</sup>

### **Water Supply and Waste Treatment: Texas's Wetland Forests Provide \$12.3 Billion**

- Value in water supply and waste treatment could increase up to \$1.2 billion by investing in conservation
- More than two thirds of residents rely on public sewer systems. Many public facilities rely on natural infrastructure to reduce costs of waste and water treatment<sup>8</sup>
- Less than ten percent of residents rely on private water sources like wells. Residents rely on forests to naturally filter pollutants from their water supply<sup>8</sup>

### **Food and Pollination: Texas's Wetland Forests Provide \$7.8 Billion**

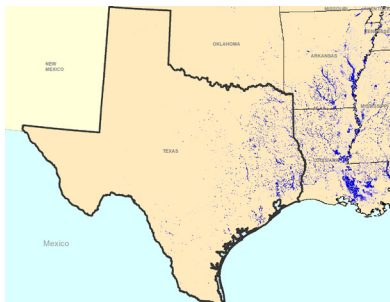
- Value in food and pollination could increase up to \$740 million by investing in conservation
- Wetland forests provide habitat for pollinators of agricultural crops
- Approximately 2.7 million residents in the state hunt or fish<sup>7</sup>
- In 2016, hunters purchased over a million deer hunting licenses<sup>9</sup>
- In 2016, hunters harvested over 1.3 million ducks and geese within the state<sup>10</sup>

## Regulating Services: Texas's Wetland Forests Provide \$4 Billion

- Value in climate regulation, air quality, soil formation, and erosion control could increase up to \$165 million by investing in conservation
- There are an estimated 121 million megagrams of carbon stored in the state's wetland forests, and continual carbon storage reduces the worst impacts of climate change

## Raw Materials: Texas's Wetland Forests Provide \$148 Million

- In 2011, there were 69 forest product mills (e.g., pulp and timber) employing 4,878 people in the state<sup>11</sup>
- Wetland forests currently provide raw materials worth \$148 million in ecosystem services value, and investing in conservation could increase the worth to \$227 million



There are 121,447,000 megagrams of carbon stored in Texas wetland forests.



Texas has 3.7 million acres of protected wetland forest (green), with an additional 1,516,000 acres of wetland forest proposed (purple) to be protected.

## REFERENCES

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