



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 Virginia.

Virginia's Wetland Forests Are Worth \$13.9 Billion

- Worth could increase up to \$1.3 billion by investing in conservation
- Wetland Forest Gem: The iconic Dismal Swamp that straddles the border between Virginia and North Carolina
- 927,000 acres of wetland forest, including 147 named swamps and 7,287 named streams in the state

Protection From Extreme Events: Virginia's Wetland Forests Provide \$4.2 Billion

- Value in protection from extreme events and water flow regulation could increase up to \$340 million by investing in conservation
- Three flood events amassing over a billion dollars in damages each since 1980²
- Between 1851 and 2004, 12 hurricanes and 1 major hurricanes (categories 3-5) made landfall on the Virginia coastline³

Aesthetics, Tourism, and Recreation: Virginia's Wetland Forests Provide \$3.5 billion

- Value in aesthetics and recreation could increase up to \$390 million by investing in conservation
- Virginia had 45 million visitors in 2016, who spent \$23.7 billion and supported 229,300 tourism jobs^{4,5}
- Nearly half of residents participated in wildlife-related recreation, spending \$3.5 billion in 2011⁶

Water Supply and Waste Treatment: Virginia's Wetland Forests Provide \$3.2 Billion

- Value in water supply and waste treatment could increase up to \$290 million 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 treatment⁷
- Over twenty percent of residents rely on private water sources like wells. Residents rely on forests to naturally filter pollutants from their water supply⁷

Food and Pollination: Virginia's Wetland Forests Provide \$2 Billion

- Value in food and pollination could increase up to \$180 million by investing in conservation
- Wetland forests provide habitat for pollinators of agricultural crops
- Approximately 840,000 residents in the state hunt or fish⁶
- In 2016, hunters purchased nearly 100,000 deer hunting licenses⁸
- In 2016, hunters harvested over 200,000 ducks and geese within the state⁹

Regulating Services: Virginia's Wetland Forests Provide \$1 Billion

- Value in climate regulation, air quality, soil formation, and erosion control could increase up to \$48 million by investing in conservation
- There are an estimated 47 million megagrams of carbon stored in the state's wetland forests, and continual carbon storage reduces the worst impacts of climate change

Raw Materials: Virginia's Wetland Forests Provide \$31 Million

- In 2011, there were 123 forest product mills (e.g., pulp and timber) employing 7,068 people in the state 10
- Wetland forests currently provide raw materials worth \$31 million in ecosystem services value, and investing in conservation could increase the worth to \$46 million



There are 47,321,000 megagrams of carbon stored in Virginia wetland forests.



Virginia has 927,000 acres of protected wetland forest (green), with an additional 398,000 acres of wetland forest proposed (purple) to be protected.

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