



# KENTUCKY



**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 Kentucky.

### **Kentucky's Wetland Forests Are Worth \$1.9 Billion**

- Worth could increase up to \$500 million by investing in conservation
- Wetland Forest Gem: Cypress Creek Swamp, a 284 acre swamp that is one of the best remaining examples of a bottomland hardwood forest
- Kentucky has 180,000 acres of wetland forest, including 27 named swamps and 11,809 named streams in the state<sup>1</sup>

### **Protection From Extreme Events: Kentucky's Wetland Forests Provide \$570 Million**

- Value in protection from extreme events and water flow regulation could increase up to \$140 million by investing in conservation
- Two flood events amassing over a billion dollars in damages since 1980<sup>2</sup>
- Since 1851, there have been 14 major Mississippi river floods, impacting states along the river like Kentucky<sup>3</sup>

### **Aesthetics, Tourism, and Recreation: Kentucky's Wetland Forests Provide \$460 Million**

- Value in aesthetics and recreation could increase up to \$130 million by investing in conservation
- Kentucky had 60 million visitors in 2011, who spent \$9.2 billion and supported 192,697 tourism jobs<sup>4</sup>
- Almost sixty percent of residents participated in wildlife-related recreation, spending \$2.9 billion in 2011<sup>5</sup>

### **Water Supply and Waste Treatment: Kentucky's Wetland Forests Provide \$430 Million**

- Value in water supply and waste treatment could increase up to \$120 million by investing in conservation
- Almost sixty percent of Kentucky residents rely on public sewer systems. Many public facilities rely on natural infrastructure to reduce costs of waste and water treatment<sup>6</sup>
- Nearly twenty percent of Kentucky 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: Kentucky's Wetland Forests Provide \$275 Million**

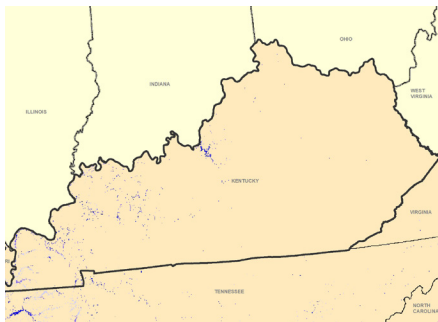
- Value in food and pollination could increase up to \$75 million by investing in conservation
- Kentucky wetland forests provide habitat for pollinators of agricultural crops
- Nearly 650,000 residents in the state hunt or fish<sup>5</sup>
- In 2016, hunters purchased nearly 200,000 deer hunting licenses<sup>7</sup>
- In 2016, hunters harvested over 150,000 ducks and geese within the state<sup>8</sup>

## Regulating Services: Kentucky's Wetland Forests Provide \$169 Million

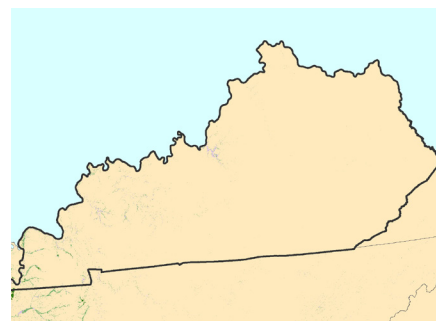
- Value in climate regulation, air quality, soil formation, and erosion control could increase up to \$16 million by investing in conservation
- There are an estimated 6 million megagrams of carbon stored in the state's wetland forests, and continual carbon storage reduces the worst impacts of climate change

## Raw Materials: Kentucky's Wetland Forests Provide \$14 Million

- In 2011, there were 225 forest product mills (e.g., pulp and timber) employing 4,488 people in the state<sup>9</sup>
- Wetland forests currently provide raw materials worth \$14 million in value



There are 6,321,000 megagrams of carbon stored in Kentucky wetland forests.



Kentucky has 180 thousand acres of protected wetland forest (green), with an additional 66,000 acres of wetland forest proposed (purple) to be protected.

## REFERENCES

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