OHIO RIVER BASIN ALLIANCE

EESI
Environmental and Energy Study Institute

Materials will be available at:
www.eesi.org/090925rivers
Post about the briefing:
#eesitalk @eesionline

The Ohio River
Resilient and Healthy River Communities Series

Tuesday, September 09, 2025

About EESI

Nonpartisan Educational Resources for Policymakers

A bipartisan Congressional caucus founded EESI in 1984 to provide nonpartisan information on environmental, energy, and climate policies

Direct Assistance for Equitable and Inclusive Financing Program

In addition to a full portfolio of federal policy work, EESI provides direct assistance to utilities to develop “on-bill financing” programs

Commitment to Diversity, Equity, Inclusion, and Justice

We recognize that systemic barriers impede fair environmental, energy, and climate policies and limit the full participation of Black, Indigenous, people of color, and legacy and frontline communities in decision-making

Sustainable Solutions

Our mission is to advance science-based solutions for climate change, energy, and environmental challenges in order to achieve ***our vision of a sustainable, resilient, and equitable world***

Policymaker Education

OHIO RIVER BASIN ALLIANCE

EESI Environmental and Energy Study Institute

Briefings and Webcasts

Live, in-person and online public briefings, archived recordings, and written summaries

Climate Change Solutions

Bi-weekly newsletter with everything policymakers and concerned citizens need to know, including a legislation and hearings tracker

Fact Sheets and Issue Briefs

Timely, objective coverage of environmental, clean energy, and climate change topics

Social Media (@EESIonline)

Active engagement on Bluesky, Facebook, LinkedIn, X, and YouTube

eesi.org/rivers-briefings

EESI
Environmental and
Energy Study Institute

Resilient and Healthy River Communities Series

The Mississippi River

The Tennessee River

The Columbia River

The Colorado River

Upcoming Briefings

Artificial Intelligence: Implications for Energy and the Environment
Thursday, September 25, 3:30–4:30 PM

Grid Modernization
Thursday, October 9, 3:30–4:30 PM

How Can We Cut Industrial Emissions?
Wednesday, October 22, 9:00–10:00 AM

What Congress Needs to Know About COP30
November 4 – 6, 12:00–1:00 PM

Sign up for our *Climate Change Solutions* newsletter here: eesi.org/signup

What did you think of the briefing?

Please take 2 minutes to let us know at:
www.eesi.org/survey

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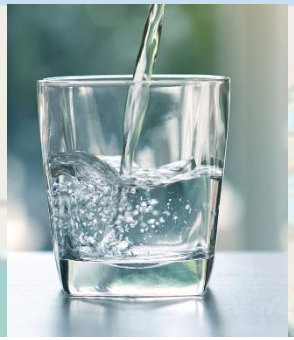
Tuesday, September 09, 2025

Ohio River Basin Alliance

Uniting in Vision, Strategy, Voice

Benefits of the Waterways of the ORB

Recreation & Tourism



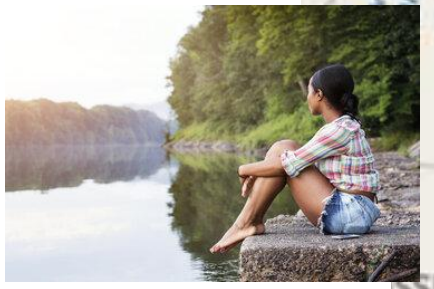
Drinking Water

Transportation

Rich Biodiversity

Aesthetics and Culture

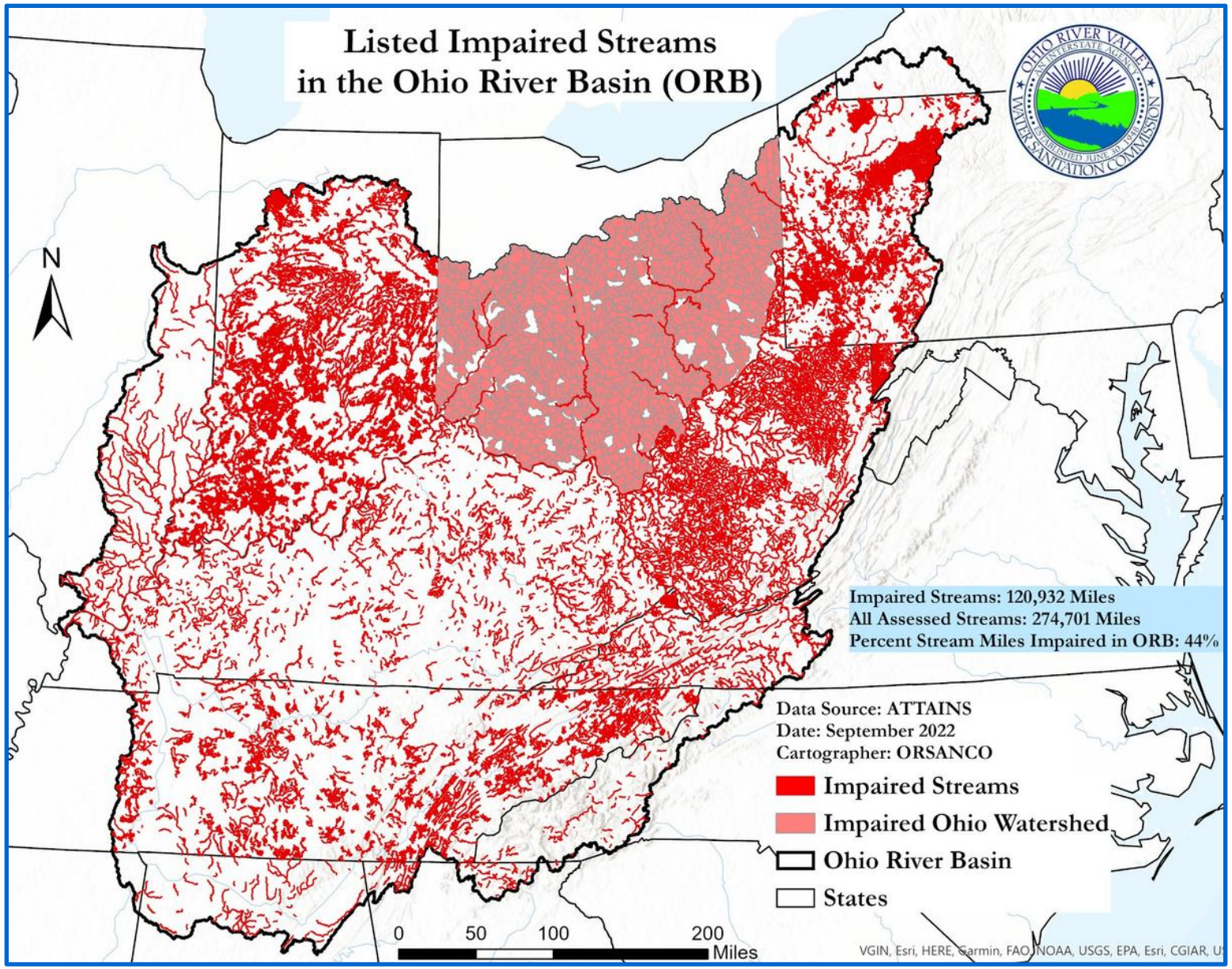
Economic



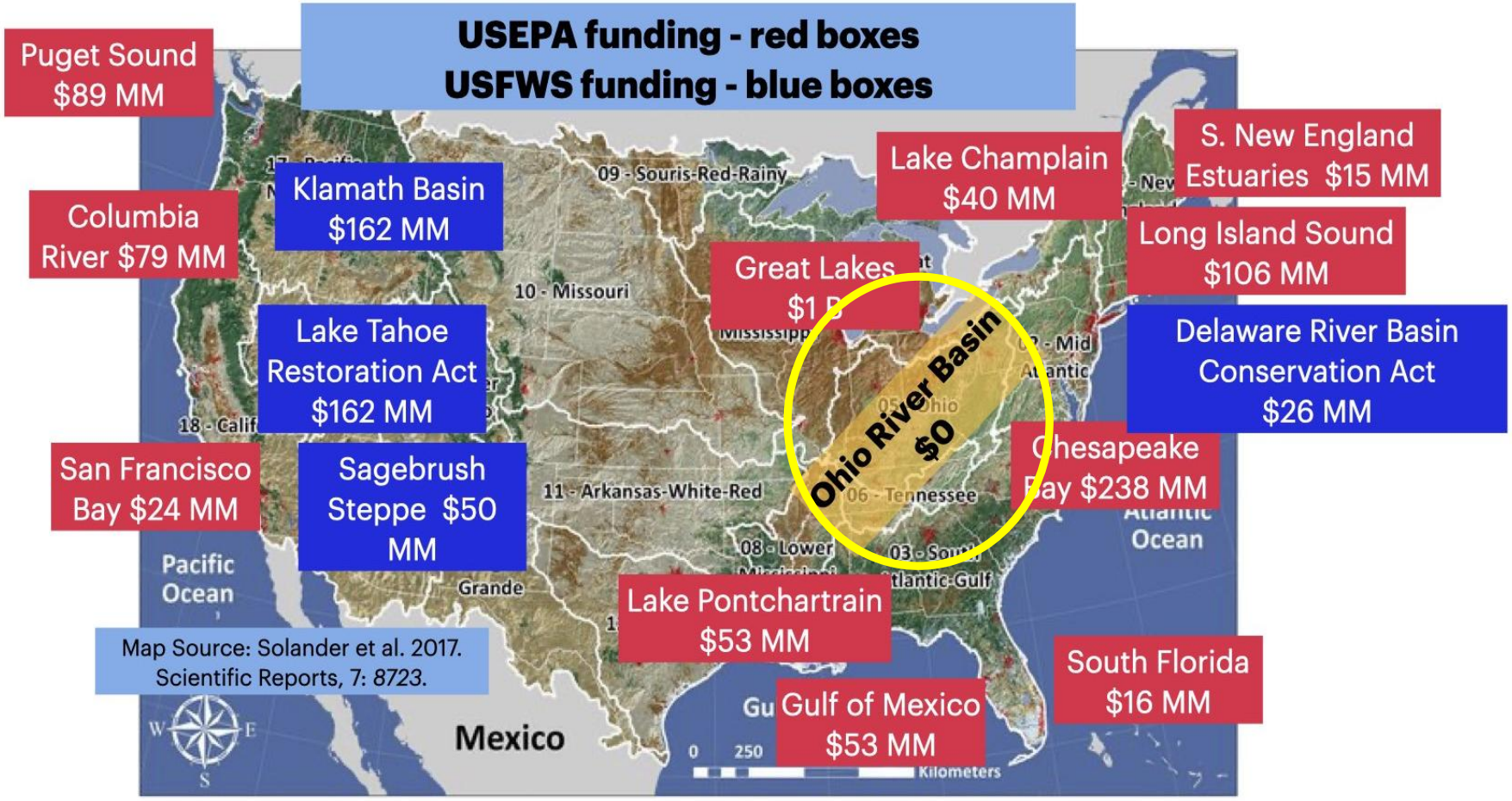
Public Health

Ecosystem Services

Challenges and Threats



Solutions: Large-scale, designated federal investments

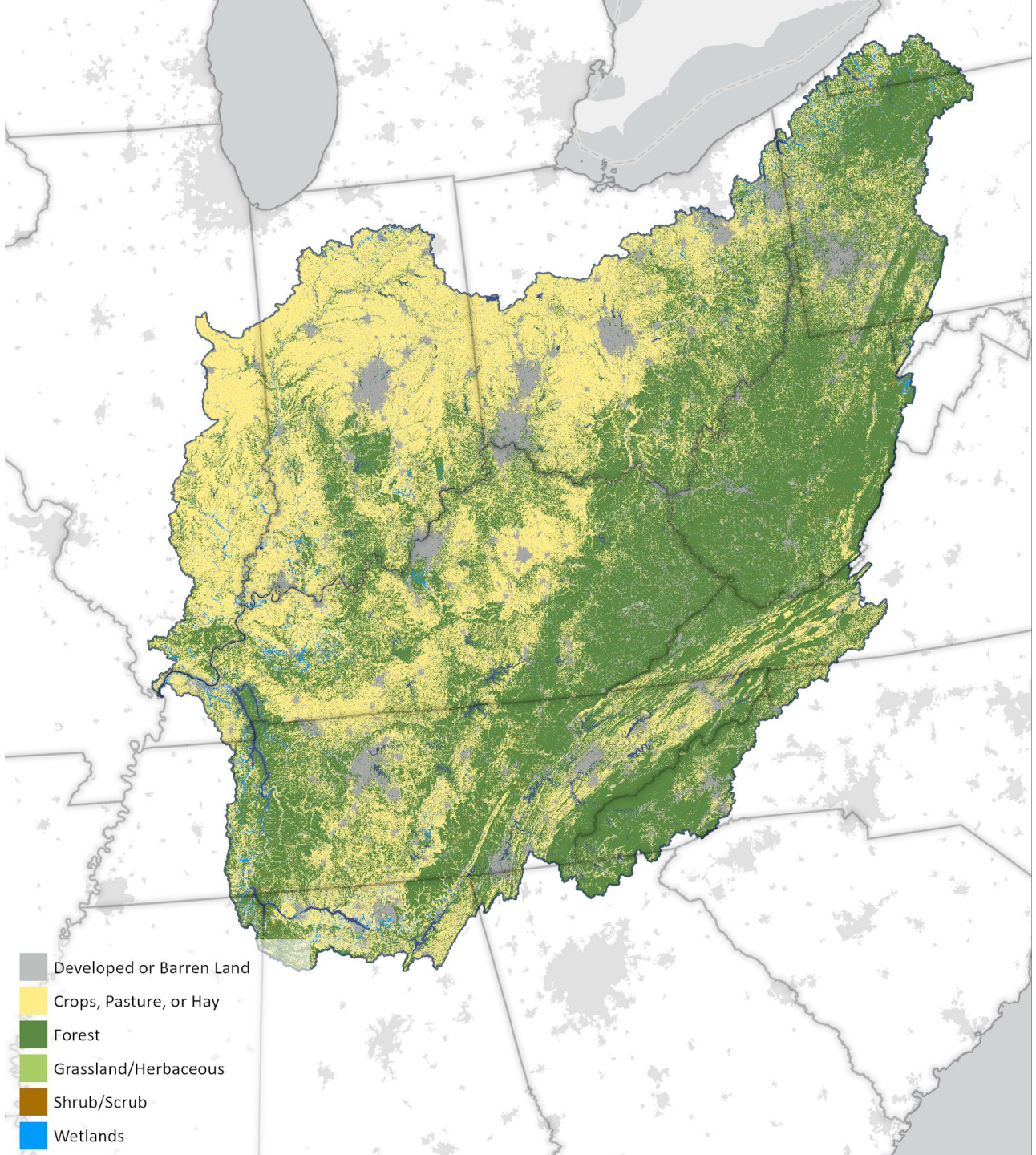


Geographic Ecological Restoration Funding
(Infrastructure Investment and Jobs Act)

130.5 MILLION ACRES

in the Ohio River Basin
across

14 STATES



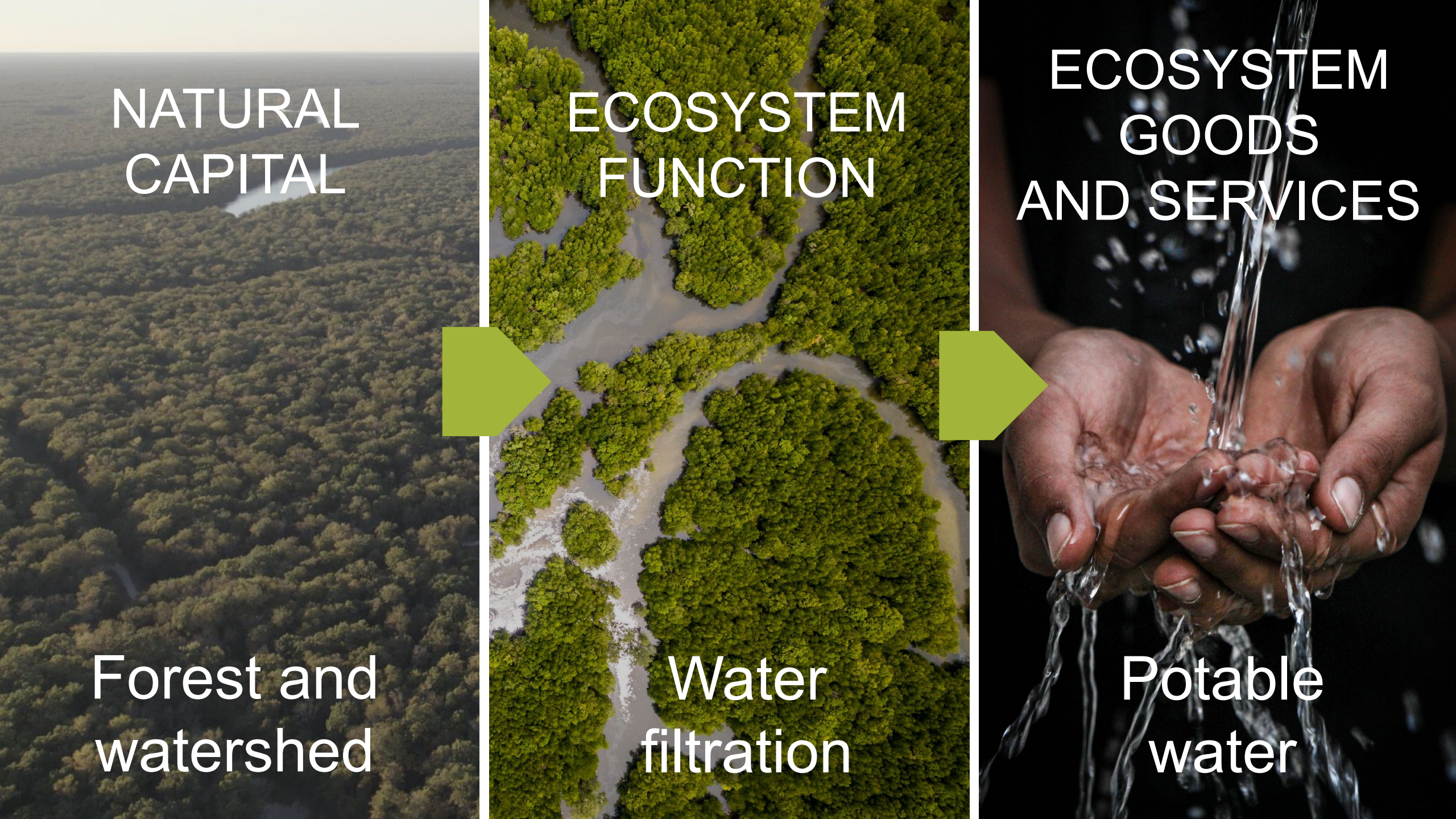
69 MILLION ACRES

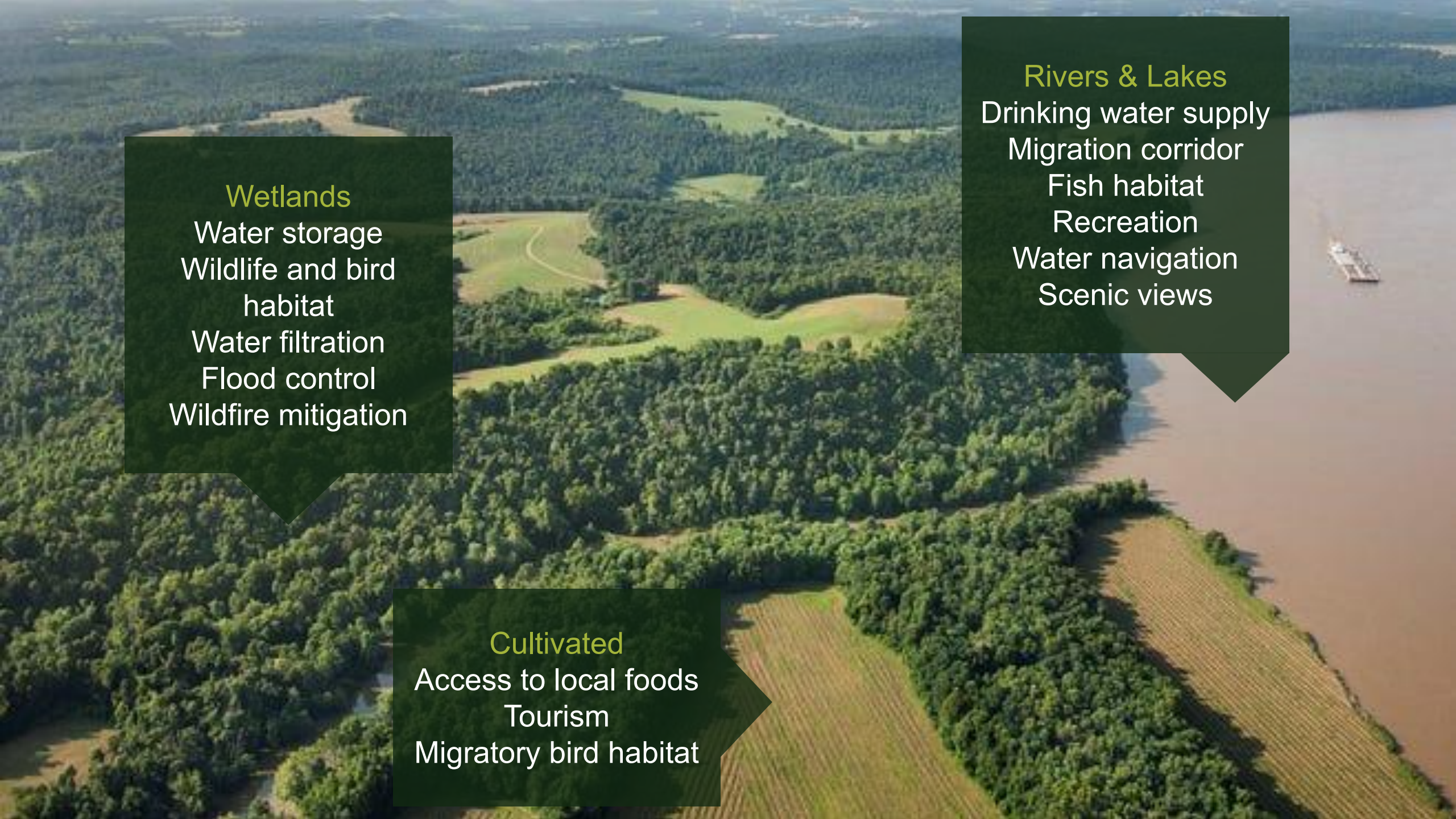
of natural ecosystems

$50 BILLION PER YEAR

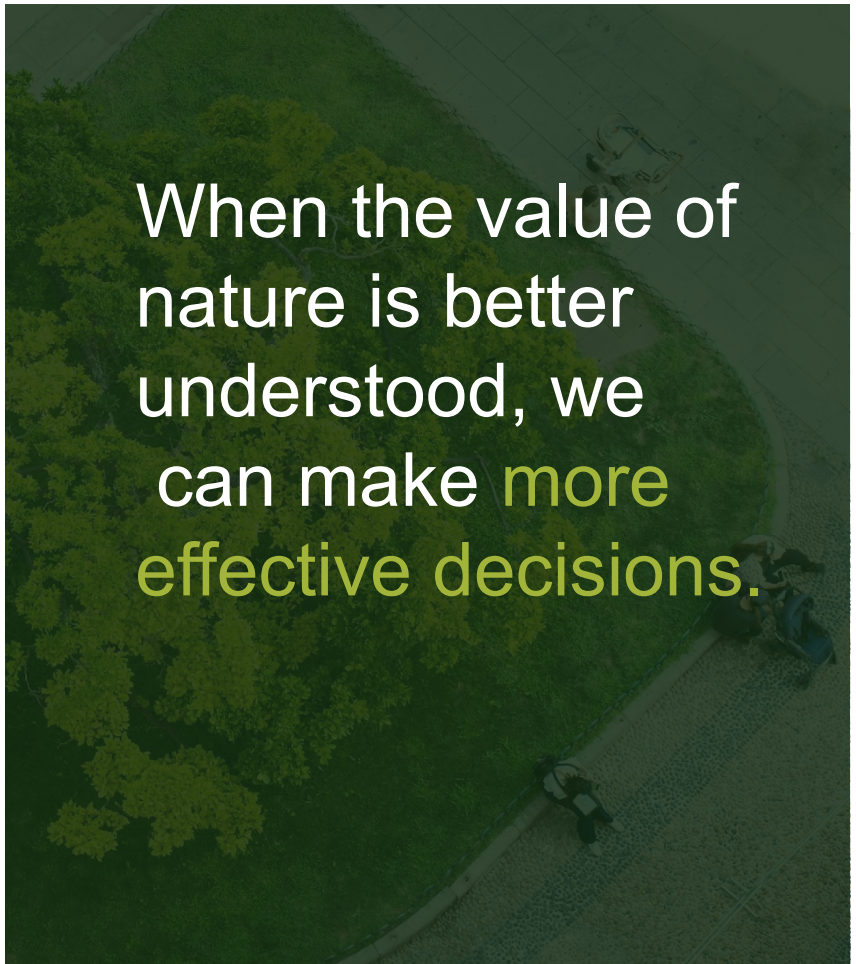
$1.17 TRILLION

asset value
over 30 years


NATURAL CAPITAL
ECOSYSTEM FUNCTION
ECOSYSTEM GOODS AND SERVICES
Forest and watershed
Water filtration
Potable water


Rivers & Lakes
Drinking water supply
Migration corridor
Fish habitat
Recreation
Water navigation
Scenic views
Wetlands
Water storage
Wildlife and bird habitat
Water filtration
Flood control
Wildfire mitigation
Cultivated
Access to local foods
Tourism
Migratory bird habitat

Why do we value nature?



How do we value nature?

Primary Methods

Gathering information *directly from the source*

- Surveys / Interviews
- Observing behavior
- Running experiments / tests

Secondary Methods

Using information others have *already collected*

- Reviewing academic studies
- Analyzing government statistics

Service	Methodology in ESVT
Aesthetic value	Hedonic price
Air quality	Avoided cost
Climate stability	Social cost
Disaster risk reduction	Avoided cost
Forage production	Market price
Habitat provision	Stated preference
Non-use value	Stated preference
Recreation	Travel cost
Stormwater regulation	Avoided cost
Water quality	Avoided cost
Water supply	Avoided cost

Ecosystem Services Valuation Tool

- Model based on meta-analysis
- 1,467 values across 181 studies
- High-level estimates of the value of ecosystem service benefits suitable for awareness-raising

Forests	64.06 million acres
Water	1.81 million acres
Wetlands	1.78 million acres
Grasslands	774,000 acres
Shrublands	532,000 acres

130.5 MILLION ACRES
in the Ohio River Basin across
14 STATES

69 MILLION ACRES
of natural ecosystems

$50 BILLION PER YEAR
in ecosystem services benefits, and
$1.17 TRILLION
over 30 years in benefits

How Federal Investment in Ecological Restoration Benefits People and Wildlife in the Ohio River Basin

Lisa Hollingsworth-Segedy, AICP

September 9, 2025

AMERICAN RIVERS

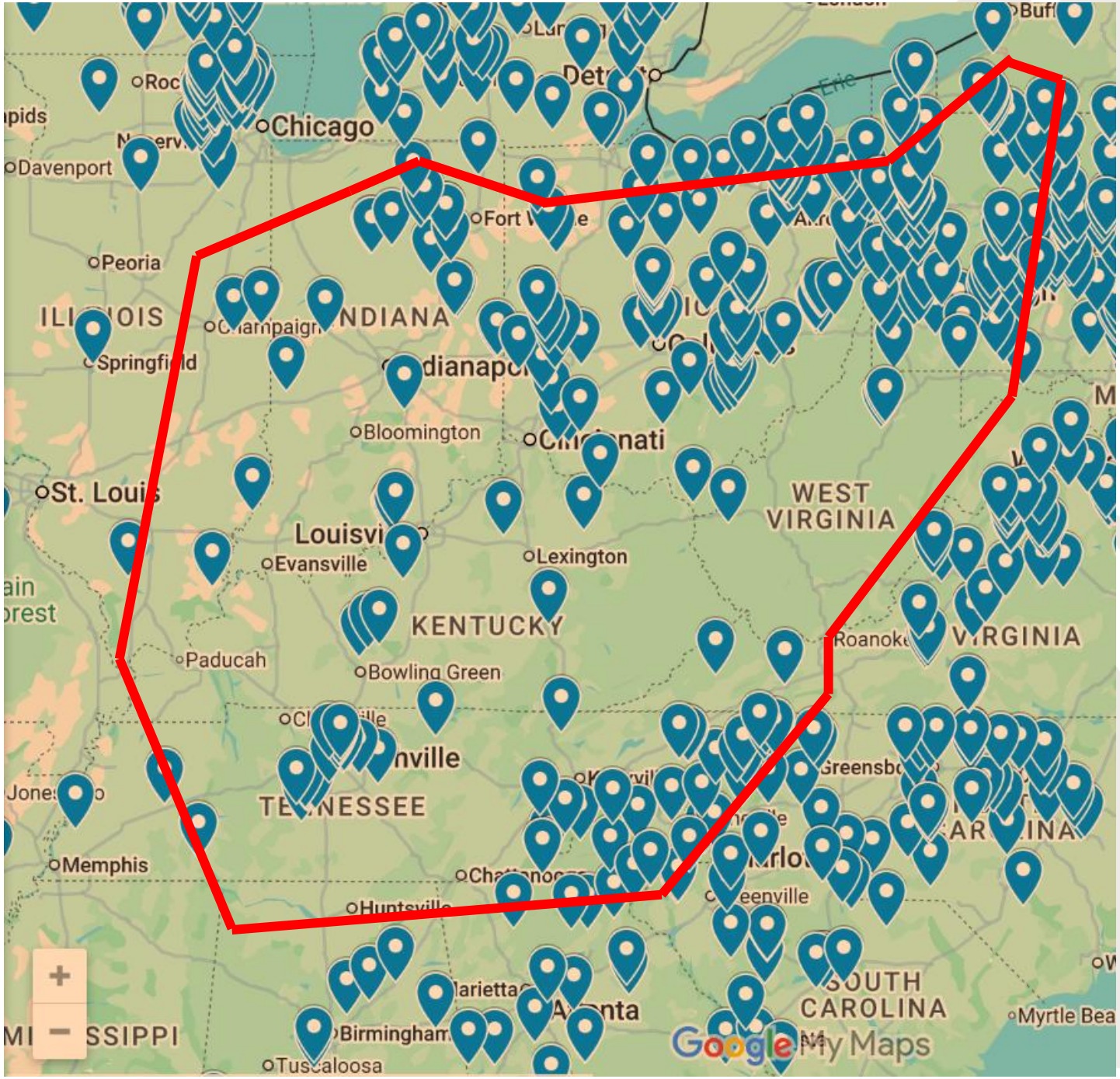

American Rivers protects wild rivers,
restores damaged rivers,
and conserves clean water for
people and nature.


CAT

Ecological Benefits = Human Benefits

Investing in Ecological Restoration in the Ohio River Basin provides:

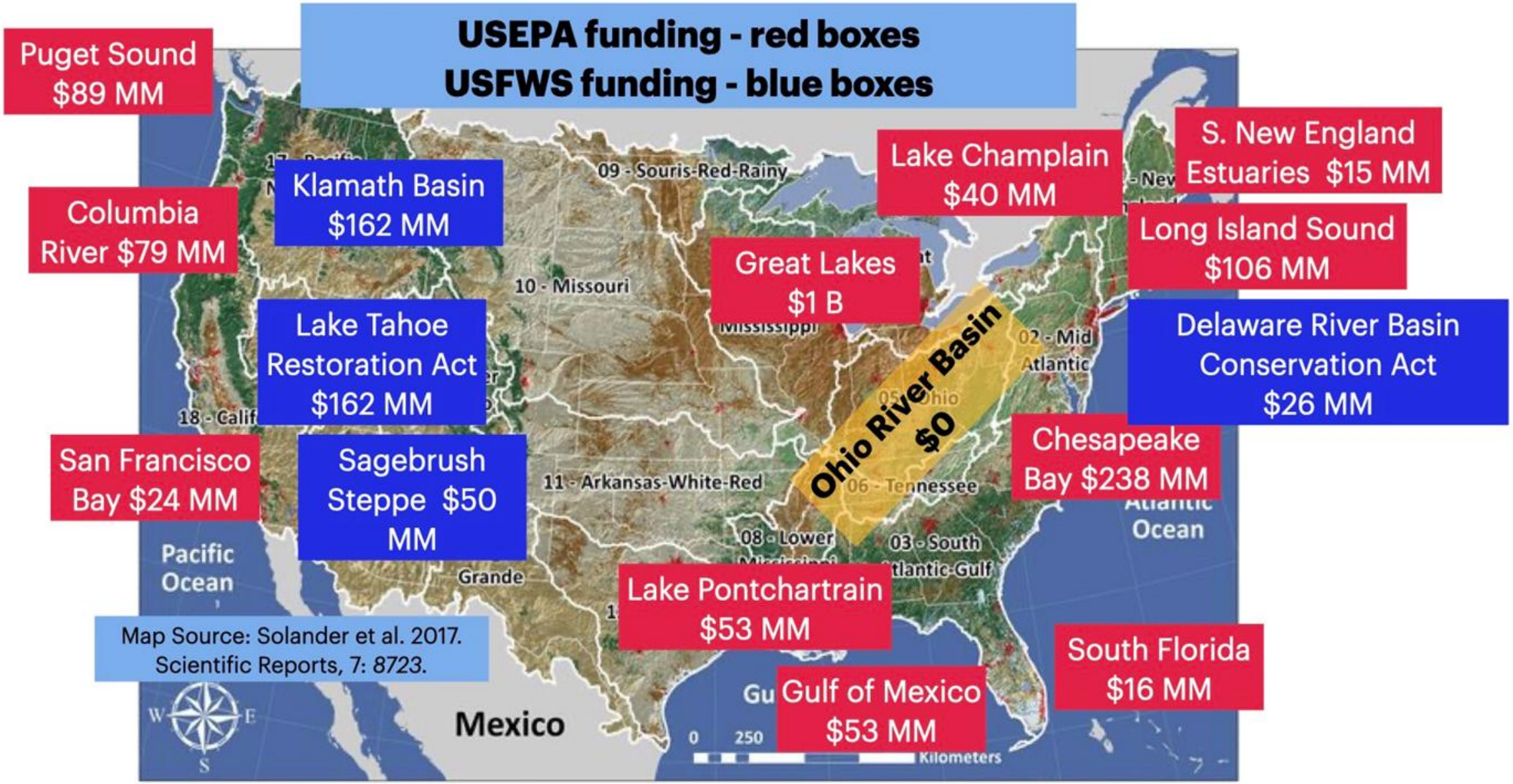
Clean Water
Wildlife Habitat
Outdoor recreation
Tourism
Economic opportunities
Resilience to floods and droughts



The value of (uncoordinated) federal investments in Ohio River Basin ecological restoration (Nature Based Solutions & Natural Infrastructure)

90 on-the-ground projects
Investments in improving rivers, floodplains, wetlands, and forests

$6 million in federal investment matched by $14 million non-federal funds



Source: National Wildlife Federation

Life Depends on Rivers℠

AMERICAN RIVERS

lhollingsworth-segedy@americanrivers.org
www.americanrivers.org

CHRISTINA LEE BROWN ENVIROME INSTITUTE

Human Health & the Ohio River

Lauren Anderson, MPA
University of Louisville

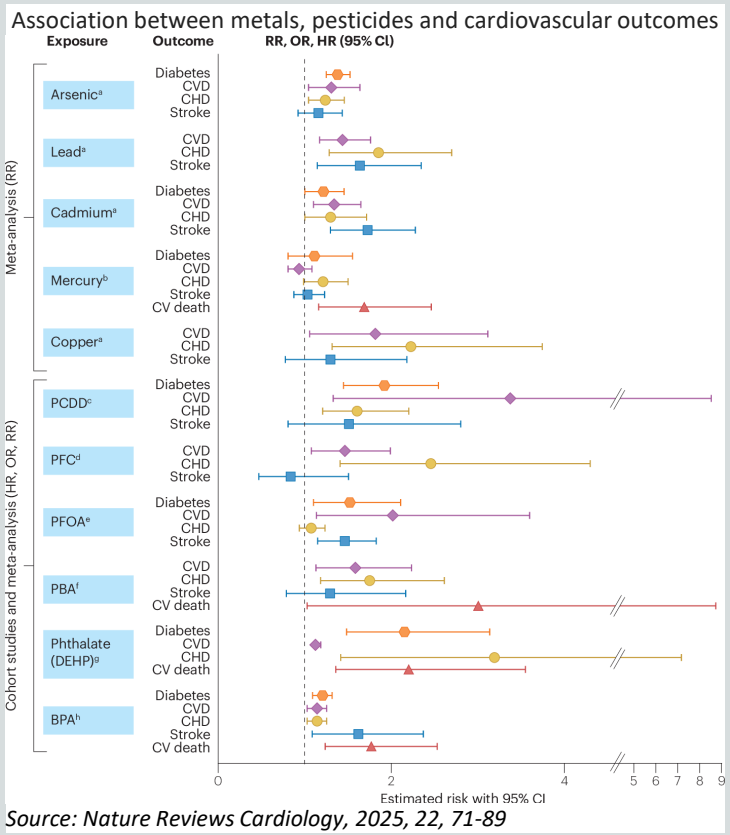
UNIVERSITY OF LOUISVILLE®

Pollution in the Ohio River

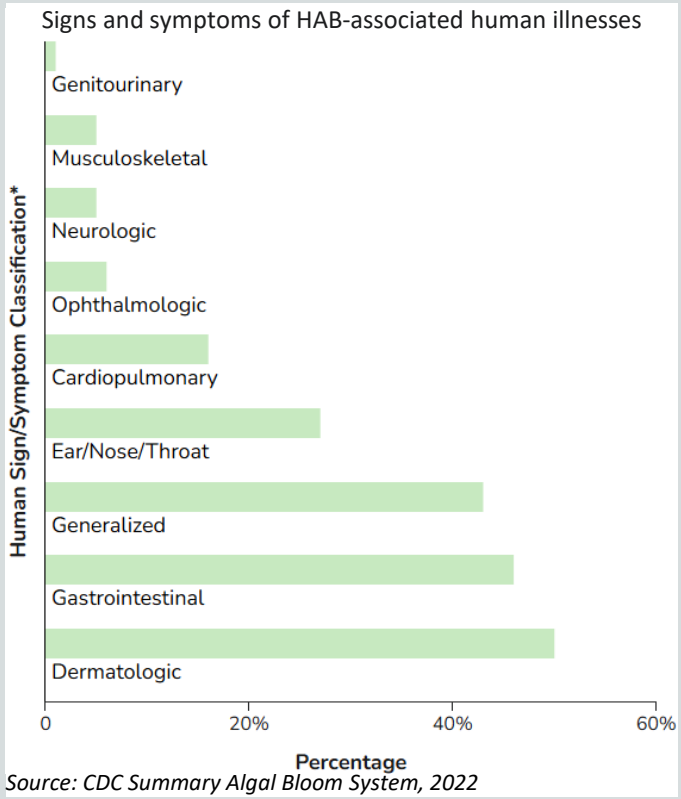
Exposure is multi-source and cumulative:

- Pollution primarily stems from industry, agriculture, and urban wastewater.
- Exposure impacts fish, wildlife, and humans via water, air, and food sources.

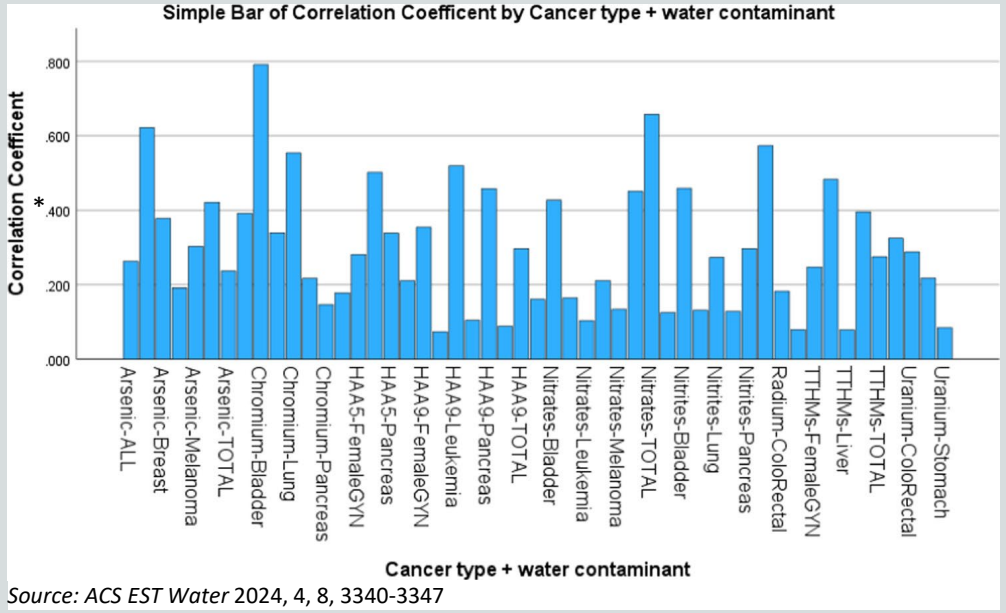
Impacts on Public Health



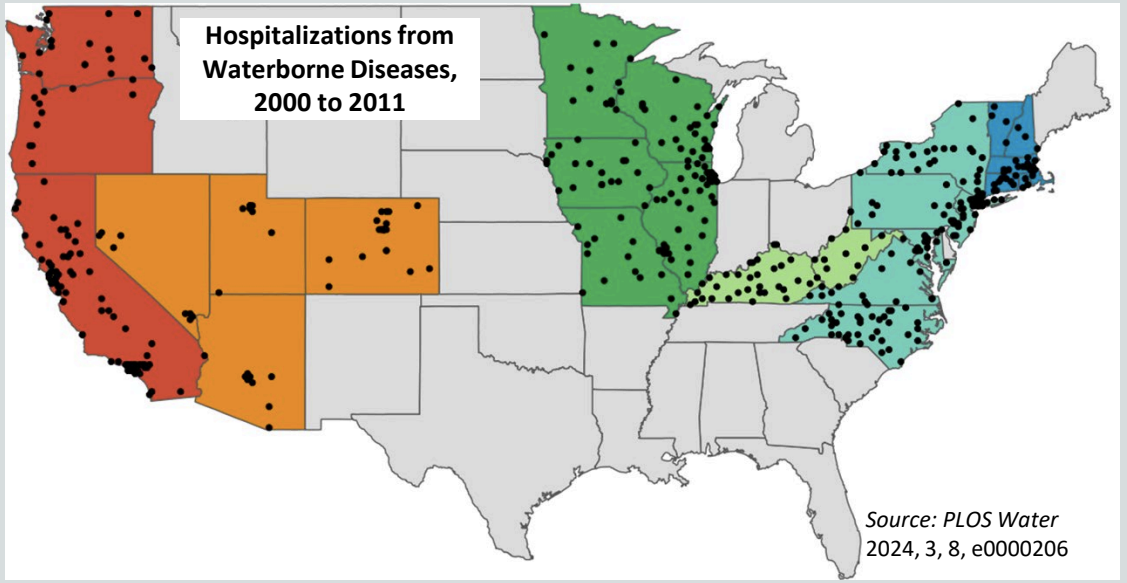
Source: Nature Reviews Cardiology, 2025, 22, 71-89



Source: CDC Summary Algal Bloom System, 2022



Source: ACS EST Water 2024, 4, 8, 3340-3347



Source: PLOS Water 2024, 3, 8, e0000206

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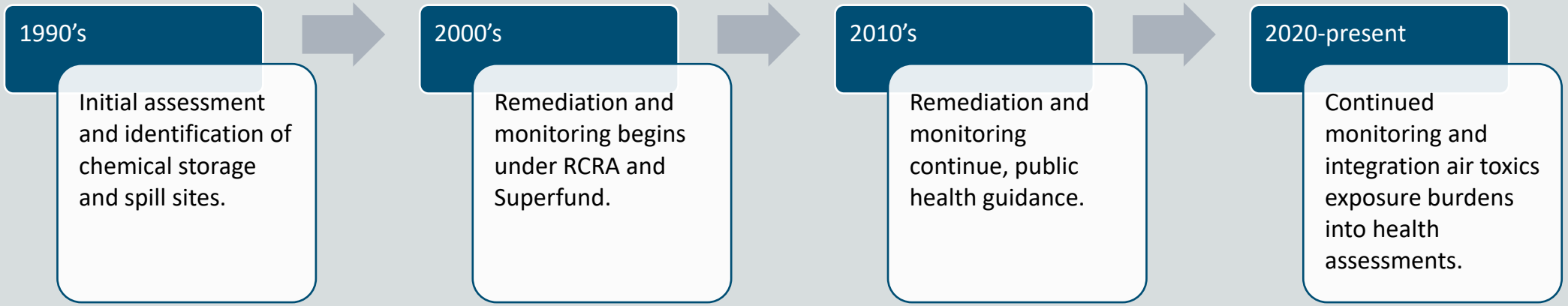
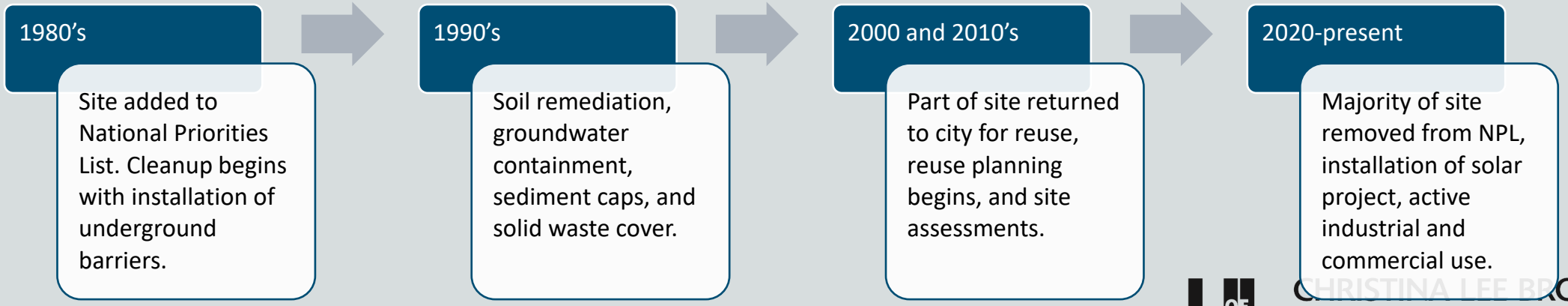
Mitigation and Remediation

- Mitigation: Rubbertown Industrial Corridor, Louisville, KY



- Remediation: Allied Chemical & Ironton Coke, Ironton, OH

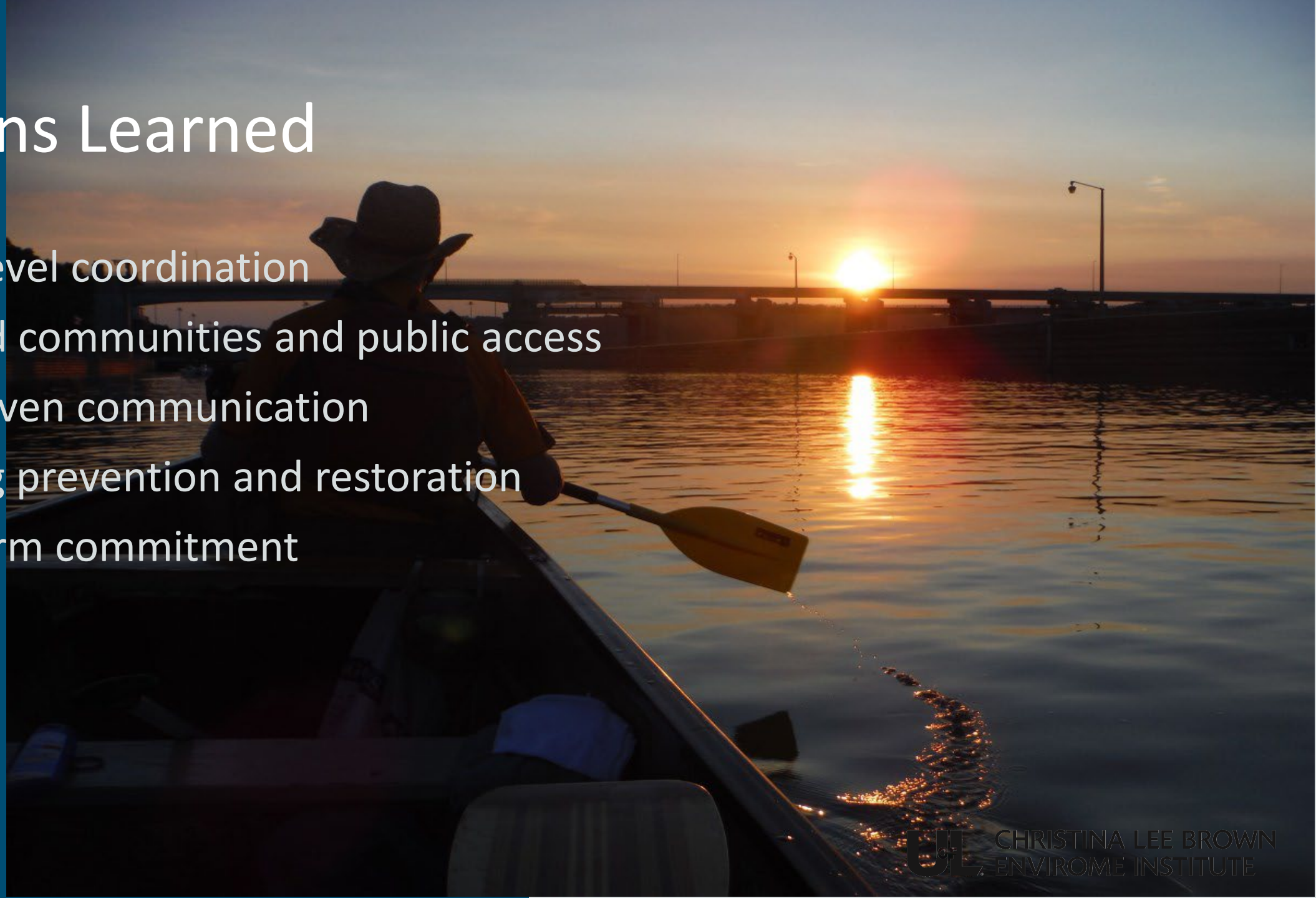


River and Watershed Interventions

- Cincinnati and Pittsburgh Green Streets Initiatives
- Recreational Access and Riverfront Restoration

Lessons Learned

- Multi-Level coordination
- Engaged communities and public access
- Data driven communication
- Layering prevention and restoration
- Long-term commitment



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