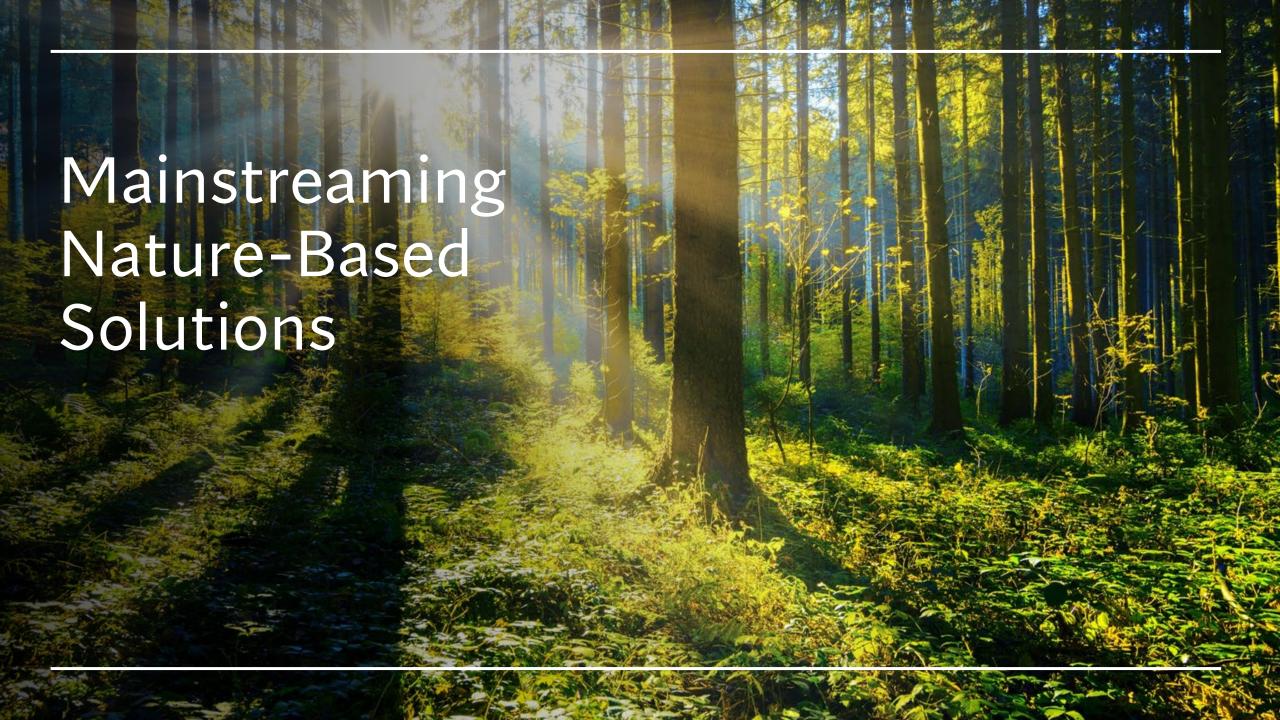
# Moving forward on the National Nature Assessment and Other Federal Nature Efforts

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Chris Hartley, PhD | USDA
ACES | Dec 2024



What are the big federal efforts on nature over the last decade?

- Mainstreaming nature-based solutions
- Conservation (America the Beautiful)
- Natural Capital Accounting (Environmental Economic Accounts)
- National Nature Assessment

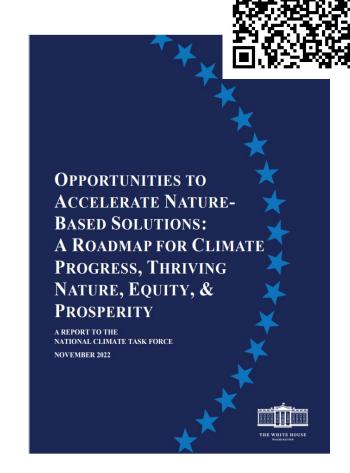


## Nature-Based Solutions Roadmap

#### **GOALS**

- **Provide a common vision** of what Nature-based solutions (NBS) can achieve
- Elevate nature-based solutions as a go-to option for addressing needs whether that is climate change or economic development.
- Show that we have decades of experience and know enough about NBS to scale up now
- Give agencies a strategic path to unlock the full potential of NBS particularly in newer areas given large federal investments in infrastructure and disaster recovery/hazard mitigation



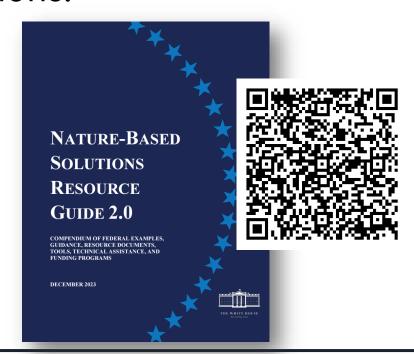


## Barriers to accelerating deployment

- 1. Insufficient awareness of NBS
- 2. Regulatory and policy hurdles (conventional bias)
- 3. Difficulty with cost-benefit analysis
- 4. Insufficient and uncoordinated funding
- 5. Limited federal, community and workforce knowledge and skills
- 6. Gaps in evidence of effectiveness:

## Federal Funding

Identified 140 federal funding programs that are supporting or could support nature-based solutions.







### America the Beautiful

A ten-year, locally led campaign to conserve and restore the lands and waters upon which we all depend, and that bind us together as Americans

#### **Executive Order 14008 Sec. 216.**

#### **Conserving Our Nation's Lands and Waters**

- Calls for DOI, USDA, DOC, and CEQ to submit a report to the National Climate Task Force recommending steps to achieve *conservation* of at least 30 percent of U.S. lands and waters by 2030
- Directs agencies to work with State, local, Tribal, territorial governments, agricultural and forest landowners, fishermen, and other key stakeholders
- Directs agencies to propose guidelines for determining whether lands and waters qualify for conservation, and to establish mechanisms to measure progress toward the 30-percent goal. Emphasizes specific conservation benefits biodiversity, climate, and equity and invites actions that also cover a broader spectrum of ecosystem service benefits

## 8 Principles of Conservation

Pursuing a collaborative and inclusive approach

Conserving
America's lands
and waters for the
benefit of all
people

Supporting locally led and locally designed conservation Honoring Tribal sovereignty and supporting the priorities of Tribal Nations

Pursuing conservation and restoration approaches that create jobs and support healthy communities

Honoring private property rights and supporting voluntary stewardship efforts of private landowners

Using science as a guide

Building on
existing tools and
strategies with an
emphasis on
flexibility and
adaptive
approaches

## 6 Focus Areas

- Create more parks and safe outdoor opportunities in naturedeprived communities
- Support Tribally led conservation and restoration priorities
- Expand collaborative conservation of fish and wildlife habitat and corridors
- Increase access for outdoor recreation
- Incentivize and reward the voluntary conservation
   efforts of fishermen, ranchers, farmers, and forest owners
- Create **jobs** by investing in restoration and resilience

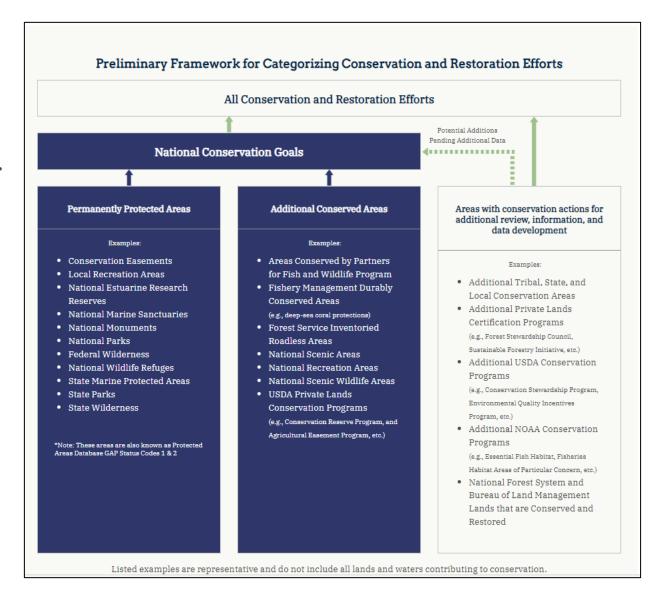
## What is Conserved?

#### Informed by:

- Written comments via *Federal Register* and public listening sessions 12,000+ written comments / 34,000+ submissions
- Conversations with Federal agencies, States, Tribes, scientists, and other stakeholders
- Best available science

## Status

- Since the launch of the *America the Beautiful* initiative in early 2021, the U.S. has conserved more than 41 million acres.
- Funding has been provided by the Bipartisan Infrastructure Law, the Inflation Reduction Act, and the Great American Outdoors Act.
- The U.S. is on track to meet the goal of protecting, conserving, or restoring at least 30 percent of U.S. lands by 2030.
- Approximately one-third of U.S. marine areas across the country are currently conserved.



## Conservation.gov

## American Conservation and Stewardship Atlas

This digital Atlas helps illustrate and document locally led, partnership-driven conservation and restoration work that is underway in communities across America.

This beta version of the Atlas brings together science, data and knowledge on biodiversity, climate change impacts, and equity to help inform and inspire land, water, and wildlife conservation and restoration efforts of individuals, land managers, policymakers, and communities.

#### Explore the Atlas



#### Federal Restoration and Resilience Projects

Restoration and resilience projects, funded through the Bipartisan Infrastructure Law, are transforming landscapes and waterscapes nationwide. These projects include partnership-driven efforts to eradicate invasive species, clean up abandoned mine lands, restore free-flowing rivers, and more.

Learn More



#### Supporting Conservation Ambition and Progress across the U.S.

Learn about our efforts to track conservation progress across America's lands and waters.

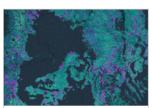
Learn More



#### Interactive Map

Explore data related to the America the Beautiful initiative through an interactive map application. The content in this application will continue to grow over time and support additional analysis functions.

Launch the Map

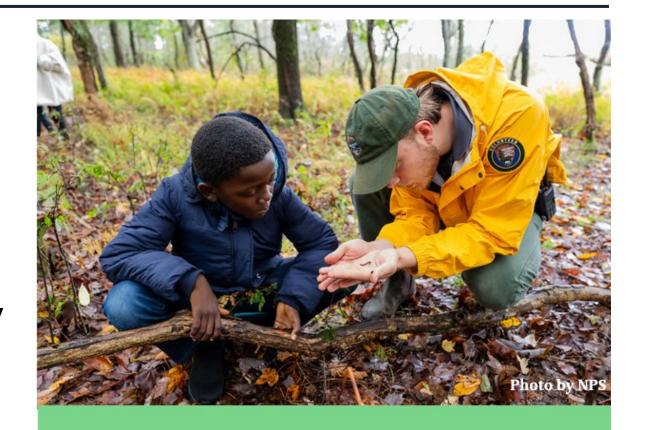


#### Open Data Catalog

This accessible, transparent catalog enables users to access and explore all data used within the Atlas.

Explore Data

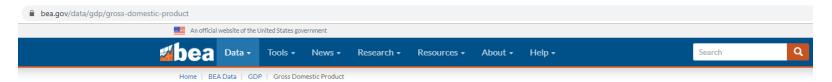
## Coming Soon!!!



America the Beautiful 2024 Annual Report



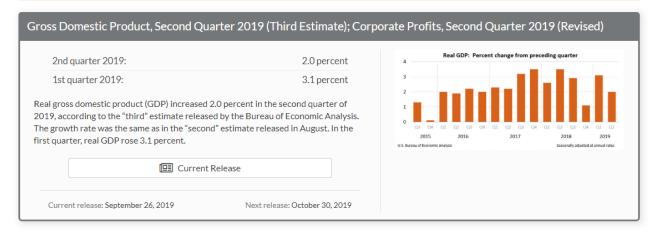
### Economic accounts & natural resources



#### An "institutional miracle"?

- Regularly produced & updated
  - Over time
  - Across industries
  - Multiple geographies (nationalstate-MSA-county)
- Independent & trusted
- Extremely high policy relevance
  - Support economic prediction (what will the effects of new policy x be on GDP, employment, trade...)

#### **Gross Domestic Product**



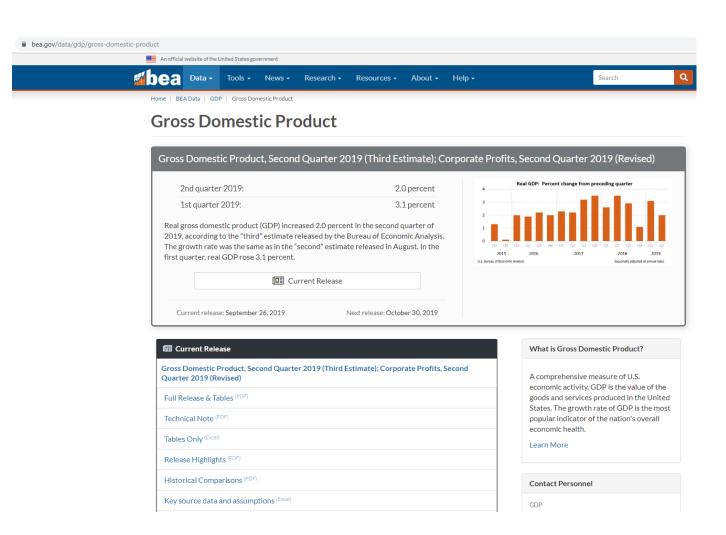
☐ Current Release	
Gross Domestic Product, Second Quarter 2019 (Third Estimate); Corporate Profits, Second Quarter 2019 (Revised)	
Full Release & Tables (PDF)	
Technical Note (PDF)	
Tables Only (Excel)	
Release Highlights (PDF)	
Historical Comparisons (PDF)	
Key source data and assumptions (Excel)	

Wha	at is Gross Domestic Product?
good State popu	mprehensive measure of U.S. nomic activity. GDP is the value of the its and services produced in the United es. The growth rate of GDP is the most ular indicator of the nation's overall nomic health.
Lear	n More
Con	tact Personnel
GDP	

## Economic accounts & natural resources

## BUT well-known & significant flaws!

- Include the role of labor & capital in generating prosperity, but not natural resources
- Doesn't account for depletion/damage (or protection/restoration) of environment that impact future prosperity
- Excludes some ecosystem services entirely (e.g., regulating ES)



## Developing pilot accounts for the U.S.: 2016-2020

- How can this information be used in decision making? (it won't go anywhere if it's not useful)
- Outreach to agencies
   & others, on "use cases"

### Participants













#### Funders

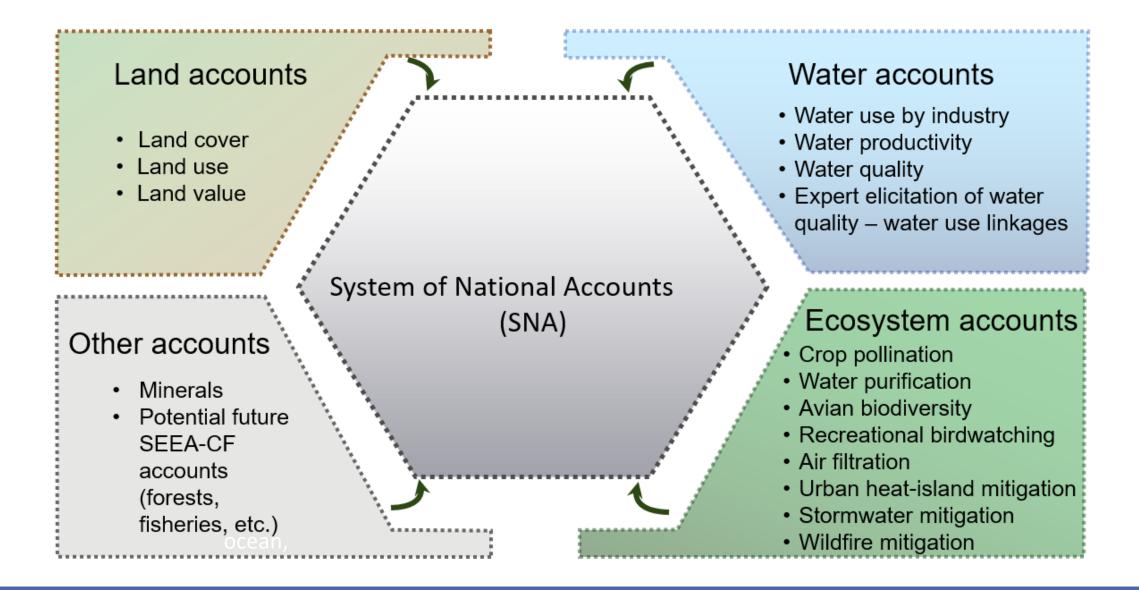








## Piloting natural capital accounts for the U.S.



## Using pilot accounts – understanding provision by ecosystem type

Recreational birding, 2011

Ecosystem type (land cover)	Thousands of birding days
Offshore	1,236
Open Water	5,207
Developed - Open	10,022
Developed - Low	7,420
Developed - Medium	3,553
Developed - High	1,046
Barren	1,408
Deciduous Forest	7,173
Evergreen Forest	3,816
Mixed Forest	692
Shrub/Scrub	1,966
Grassland/Herbaceous	1,833
Pasture/Hay	4,050
Cultivated Crops	2,634
Woody Wetlands	4,964
Emergent Herbaceous Wetlands	3,695
Total	60,715

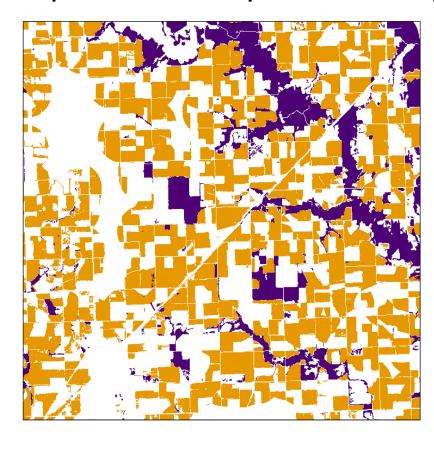
Developed land supplied more than 1/3 of birding days in the southeast

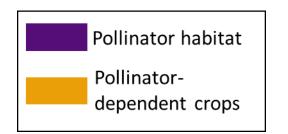
Forests, open water, and wetlands also important ecosystem types for birding in the southeast

## Using pilot accounts – cross-state comparison

### Ratio of pollinator habitat to pollinator-dependent crops

State	Ratio
AL	7.96
AR	0.57
FL	3.22
GA	9.85
LA	1.51
MO	1.25
MS	2.00
NC	5.84
SC	7.95
TN	3.01







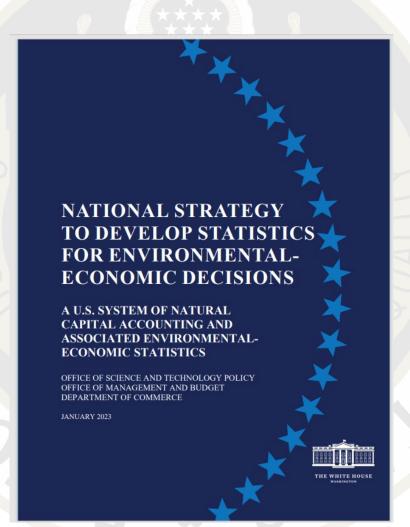
## Evidence & Innovation: Accounting for Nature

Nature is important to the economy—and our lives.

But we don't have a full picture of how.

Strategy to develop Natural Capital Accounts for the US

The White House Office of Science and Technology Policy (OSTP), the Office of Management and Budget (OMB), and the U.S. Department of Commerce led the development of the final National Strategy to Develop Statistics for Environmental-Economic Decisions, working with more than 27 federal departments and agencies and incorporating input received from the public.





## U.S. Global Change Research Program is conducting the first-ever National Nature Assessment by 2026

-EO 14072 on Strengthening the Nation's Forests, Communities, and Local Economies, April 2022

Assess the status, observed trends, and future projections of U.S. lands, waters, wildlife, biodiversity and ecosystems





## The NNA is a "Strategic" Assessment

#### Time Horizon:

Long-term outcomes, often spanning decades

#### Scope:

• Very comprehensive, incorporating multiple species, ecosystem interactions, and environmental factors, and diverse ecological and social outcomes

#### Complexity:

 Embrace complex social-ecological dynamics and may include a wider range of uncertainties

#### Outputs:

- General guidance that highlights a range of potential outcomes
- Helpful for informing high-level strategies and policy decisions

#### Management application:

- Exploring potential impacts of large-scale management strategies
- Sharpening thinking about issues and solutions

## Use-inspired + Inclusive

- Request for Information 3000+ comments
- 30+ Public Scoping Events
- Tribal Consultations
- Native Hawaiian Engagements









# What's happening? How does it impact people? Cross-cutting issues Bright Spots & Opportunities



#### **Chapter Headings**

- Overview
- Frameworks & Approaches to Assessing Nature
- Bright Spots in America's Nature
- The Status, Trends and Future Projections of Nature in the U.S.
- Status, Trends and Future Projections of Drivers of Change of Nature in the U.S.
- Nature and Equity
- Nature and Its Relationship to Cultural Heritage
- Nature and the Economy
- Nature and Human Health and Wellbeing
- Nature and Risk, Resilience, and Security
- Nature and Climate Change
- Opportunities for America's Nature

## Timeline

