

INVESTING IN NATURE

The Economic Benefits of Protecting Our
Lands and Waters



U.S. Fish & Wildlife Service
Coastal Program

Nature provides us with numerous benefits. From the pure pleasure of experiencing it, to the food and water it provides us, the value of these benefits is priceless.

Having a good estimate of nature's value allows communities to make informed land management decisions and effectively advocate for land protection.

That's why more and more experts are quantifying the economic worth of nature's benefits. Research shows that land conservation has an impressive economic value by boosting local economies through tourism and jobs, saving money on health care, filtering drinking water, providing natural disaster mitigation, and more.

While this brochure presents a snapshot of some of this research on the economic benefits of nature, it is just a starting point for people to understand the diverse value of natural places. To learn more and see the reference sources, visit www.lta.org/investinnature. The Land Trust Alliance and U.S. Fish and Wildlife Service – Coastal Program hope this brochure helps to support land and water protection efforts across the country. After all, the more that people understand the value nature provides, the more they will care about protecting it.





Cover: Forested Lake Shoreline, CO, by Marinzolich/iStock | Previous page (L-R): Fisherman by SolStock/iStock; Bird Watching, courtesy of USFWS; and Drinking Water after a Run by Ferrantraite/iStock | Current page (Circle clockwise): Yoga by GlobalStock/iStock; Water Cascade by PeopleImages/iStock; Chesapeake Bay Oystermen by Chesapeake Bay Program; Volunteers Planting Native Vegetation at the Site of the Former Pond Lily Dam in New Haven, CT, courtesy of CT Fund for the Environment/Save the Sound; and Manini at Kingman Reef National Wildlife Refuge by K. Pollock/USFWS.



HEALTH

The Benefits and Savings of Getting Outside



Nature is good for you—from reducing stress and depression to improving cardiovascular health, research shows that nature can help people be healthier and spend less on medical costs. Access to natural areas such as parks and greenways helps ensure that as many people as possible can benefit from nature’s medicine.

SPOTLIGHT | Improving Health with a Greenway in Alabama. Obesity and obesity-related illnesses cause serious health problems for adults and children in the United States and cost an estimated \$192 billion per year in health care. Alabama has the second highest rate of obesity in the nation. One community’s answer to the problem was creating a new trail system in Jefferson County.

Through a grant from the Centers for Disease Control and Prevention, the accredited Freshwater Land Trust (AL) is developing a 750-mile trail system that links communities throughout the county, including Birmingham, the state’s most populous city. Many of these trails are located in neighborhoods with the highest rates of diabetes, high blood pressure, and other obesity-related illnesses.

LOCAL BENEFITS

\$21+
MILLION

The urban trail system in Jefferson County, Alabama, will save residents \$21 million–\$43 million in medical costs annually.¹



Previous page: Day Hike by Ryan J. Lane/iStock | Current page: Cyclist in a Park by Leo Patrizi/iStock; and Children Walking along Five Mile Creek, AL, by accredited Freshwater Land Trust (AL).



CLEAN WATER

The Price of a Healthy Drink



Forests, grasslands, and wetlands help filter stormwater and recharge groundwater. By protecting the lands around water sources, we can provide clean drinking water to people and reduce water treatment costs.

SPOTLIGHT | New York City's Clean Water Secret is Land Protection. New York City's water supply system is a model for other cities. Using surface water reservoirs, the system provides 1.2 billion gallons of clean drinking water daily to 9 million people. And land protection is the key to its success, because the protected lands surrounding the reservoirs act as natural filters for the clean water that pours out of the city's faucets.

A coordinated effort among government agencies, nonprofits, and communities helped to protect more than 100,000 acres of forests and other natural habitats across the city's watersheds. Local land groups, like the Catskill Center and the Watershed Agricultural Council, help secure easements on lands around drinking water reservoirs, preserving natural habitats while reducing pollutants that impact water quality.

LOCAL BENEFITS

\$7
BILLION

New York City saves about \$7 billion in water treatment infrastructure costs by drawing its drinking water from protected watersheds.²



Previous page: Protected Lake Shoreline, NV, by Mickie1/iStock | Current page: Drinking Water after a Run by Alija/iStock; and Long Island Wetlands, NY, by Alison Perry Photography/iStock.



LOCAL ECONOMIES

How Nature Supports Communities



How can land and water protection boost local economies? Experts are connecting the dots using economic impact studies that identify the value nature provides in the form of jobs, recreation, tourism, increased home prices, and much more.

SPOTLIGHT | In Alaska, Livelihoods Depend on Nature. Salmon and bears are some of the iconic wildlife of Alaska. The Matanuska-Susitna Borough (Mat-Su), is the fastest developing region in the state. To ensure that salmon, bears, and other wildlife remain on the landscape, strategic habitat conservation is necessary. To protect the habitat that fish, wildlife, and people depend on, the U.S. Fish and Wildlife Service – Coastal Program

works with the accredited Great Land Trust (AK) to prioritize landscapes and waterways for protection. This partnership collaborated with the tribal corporation Eklutna, Inc.—the largest private landowner in Anchorage—to protect 4,800 acres that support vital habitat for five species of salmon. The area also connects two popular wildlife and recreational areas that are critical for subsistence hunting and recreational and commercial salmon fishing in the Mat-Su.

LOCAL BENEFITS

1,900
JOBS

Spending on sport fishing supports as many as 1,900 jobs and generates as much as \$64 million in income for workers in the Mat-Su Borough.³





STORM PROTECTION

Natural Defenses Against Flooding and Sea-Level Rise



Land protection is a crucial strategy for mitigating the impacts of climate change. Marshes, wetlands, forests, mangroves, and oyster reefs can reduce flooding and erosion caused by storms and defend coastal communities from sea-level rise. Protecting natural areas saves lives and property and reduces the need for expensive infrastructure such as floodwalls and levees.

SPOTLIGHT | After Hurricane Sandy, Making the Coast More Resilient in Connecticut. For years, the community of Woodbridge in New Haven, CT, endured persistent flooding during heavy rain and storms. Residents recalled canoeing down flooded streets and repairing damaged homes.

The destruction caused by Hurricane Sandy highlighted a need to conserve natural defenses against flooding. Flood relief came to Woodbridge with the

removal of Pond Lily Dam, which was funded by Hurricane Sandy disaster relief efforts. Aging dams such as Pond Lily can pose a risk to nearby communities by increasing flood levels during storms and being prone to breaching.

The Coastal Program worked with numerous partners, including the New Haven Land Trust (CT), to remove the dam and restore natural stream functions. Removing the dam made this flood-prone area a safer place.

LOCAL BENEFITS

\$1.5
MILLION

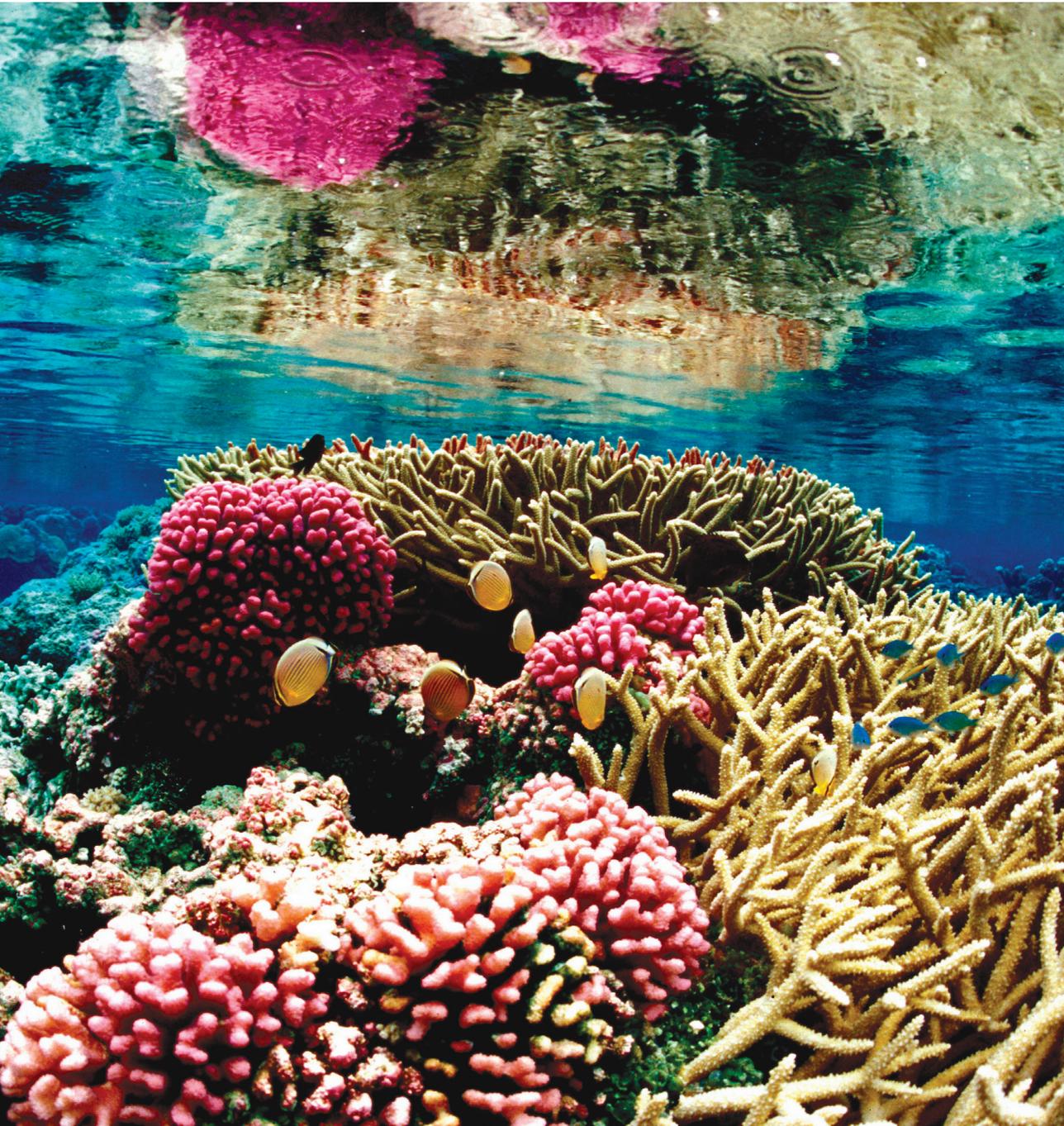
A similar type of dam removed in Taunton, MA, saved an estimated \$1.5 million in emergency response costs caused by flooding.⁴





SUSTAINABLE FISHERIES

Protecting Local Fishing Traditions



Protecting marine habitats helps safeguard species diversity, improve fish populations, and foster resiliency in the face of environmental changes—while balancing fishing and recreational uses.

SPOTLIGHT | Community-Based Subsistence Fishing in Hawai'i.

The community of Ha'ena had always operated on a “catch what you need” ethic, passed from generation to generation. But when fish catches dropped, they knew something had to change. To address overfishing and preserve cultural traditions, the

community developed a 3,583-acre subsistence fishing area to protect coral reefs, fisheries, and fishing traditions. The Coastal Program helped the community develop a management plan for monitoring the fishing area, which now serves as a model for other communities.

LOCAL BENEFITS

\$360
MILLION

Coral reef ecosystems in Hawai'i generate an estimated \$360 million a year for the local economy, which includes recreation and fisheries.⁵



From land trusts to private landowners, a variety of organizations and individuals are working to protect land and waters for many different reasons. Natural habitats—whether public or private, undeveloped or working landscapes—provide numerous benefits to people, including significant economic value for strong communities.



PROTECTING NATURE MAKES GOOD FINANCIAL SENSE

Health

- ▶ People who engage in moderate exercise outdoors can save an average of

\$1,100

in medical costs annually.⁶

- ▶ In the city, trees can make you feel **7 years** younger and **\$10,000** richer.⁷

Clean Water

- ▶ Treating drinking water from an unprotected watershed can cost

10 times

more than treating water from a protected watershed.⁸

- ▶ Trees can provide urban communities over **\$3.6 million** in stormwater benefits annually.⁹

Local Economies

- ▶ Proximity to protected lands, like National Wildlife Refuges, can increase urban home values by

3-9%.¹⁰

- ▶ Nationally, bird watching supports more than **660,000 jobs** and **\$31 billion** in employment income.¹¹

Storm Protection

- ▶ Coastal wetlands provide storm protection valued at

\$23.2 billion

per year by helping to reduce the severity of impacts from hurricanes in the United States.¹²

- ▶ An acre of protected land can save local communities an average of **\$380** in stormwater treatment costs annually.¹³

Sustainable Fisheries

- ▶ One acre of mangroves can be worth more than

\$15,000

as a nursery for commercial fish.¹⁴

- ▶ Coral reefs have a value of over **\$100 million** to commercial fisheries in the United States.¹⁵

About the U.S. Fish and Wildlife Service – Coastal Program

The U.S. Fish and Wildlife Service – Coastal Program works with willing partners to restore and protect habitats that benefit fish, wildlife, and people. Since 1991, local staff have provided technical and financial assistance to communities to protect over 2.1 million acres of habitat.

Learn more at www.fws.gov/coastal

About the Land Trust Alliance

The Land Trust Alliance works with more than 1,000 land trusts across the country that are conserving millions of acres of land in local communities every year. The Alliance supports these land trusts through training, resources, and advocacy to help accelerate land conservation across the country.

Learn more at www.landtrustalliance.org

Together, the Land Trust Alliance and the U.S. Fish and Wildlife Service – Coastal Program are helping communities to protect the lands and natural places that are important for people and wildlife.

Find out more—see references and additional statistics about the economic benefits of nature at: www.lta.org/investinnature