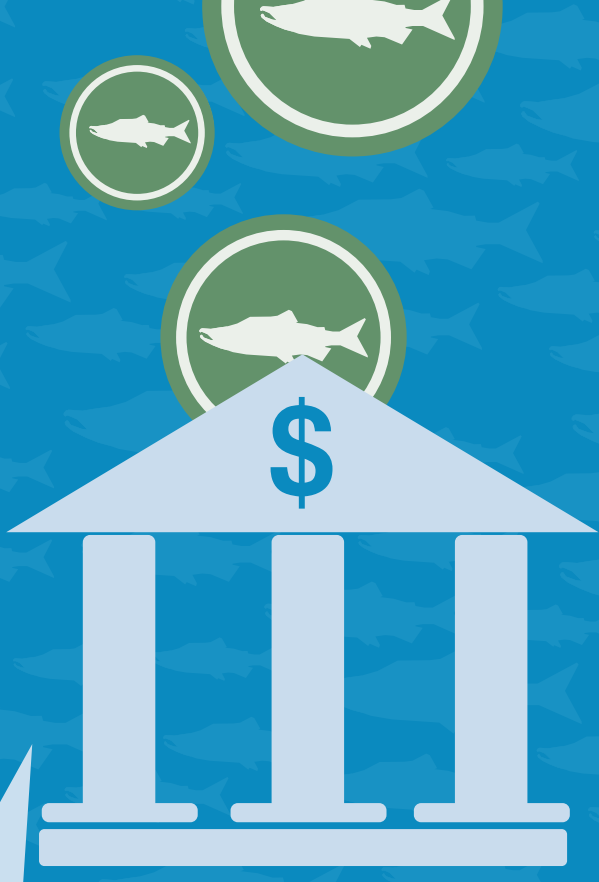


# The COLUMBIA RIVER BASIN





# ALL BANKS HAVE ASSETS

## RIVER BANKS MORE SO

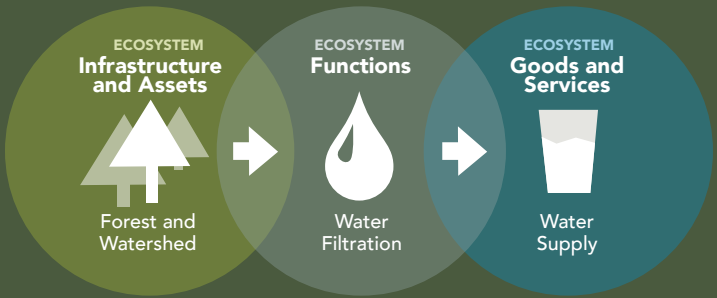
One example of valuable natural capital in the region is salmon, one of the most recognizable icons of the Columbia River Basin's many natural resources. Salmon play a critical role in the overall productivity and health of the basin and are a crucial component to the basin's economy. Tribal ceremonies surrounding salmon and other first foods are part of the basin's natural wealth.

## IMAGINE IF THE COLUMBIA RIVER BASIN WERE SUDDENLY DEVOID OF SALMON

How would you put a dollar value on that impact? That's what our study does, though it's not limited to salmon. The analyses in this report highlight the extensive value that the Columbia River Basin currently provides and demonstrates the potential to increase sustainable economic values of non-tribal commercial fisheries, recreation, existence, nutrient enhancement, and ecosystem services by modifying management regimes to engage in restoration activities and enhance conservation policies.

# Economy

STARTS WITH ECO



## Some of the resources valued in the Columbia River Basin

**RECREATION**  
Angling and tourism



**AESTHETIC INFORMATION**  
Real estate values enhanced by rivers, streams and attractive views



**FOOD PROVISIONING**  
Fisheries



**FLOOD-RISK MANAGEMENT**  
Buffers against disturbances to the local economy, such as flooding and landslides



**WATER SUPPLY**  
For residential and industrial consumption and hydropower.

**WASTE TREATMENT**  
Riparian wetlands removing nitrogen and phosphorous from agricultural runoff.



**HABITAT AND NURSERY**  
Natural habitats such as freshwater rivers and streams for salmon



# NATURAL CAPITAL

The Columbia River Basin is globally recognized for its abundant watersheds and rivers – a region full of immense forests, native vegetation, diverse wildlife, and numerous outdoor recreation opportunities. These assets have supported tribes and residents for millennia, but with industrial and urban development, the basin's rich resources have been degraded. When assets, whether built or natural, are not managed sustainably, economic loss occurs.

*The Value of Natural Capital in the Columbia River Basin: A Comprehensive Analysis* documents the immense economic value of the Columbia River Basin's natural assets and demonstrates the value to be gained by addressing ecosystem-based function in a modernized river management regime. If sustainably managed, the Columbia River Basin has the potential to provide enhanced natural wealth for present and future generations.



# NATURE'S VALUE

## THE COLUMBIA RIVER BASIN

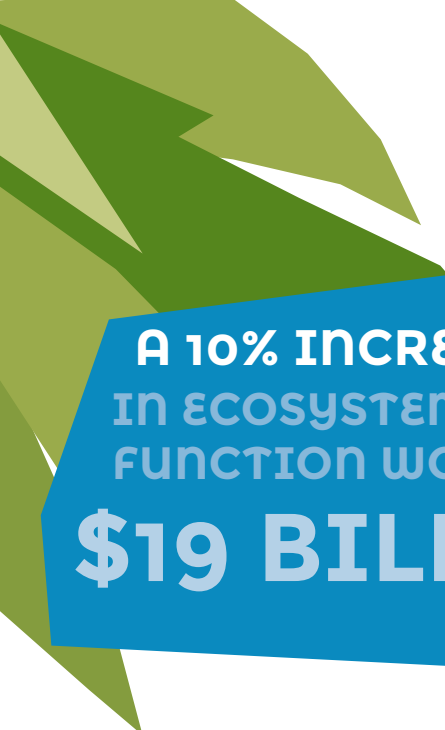
Currently, nature's value in the Columbia River Basin amounts to \$198.8 billion in ecosystem benefits. A modernized treaty offers \$200.3 billion in local and regional economic contributions – an increase of \$1.5 billion!

**\$198 BILLION  
ANNUAL BENEFITS**

Modernizing dam management and increasing water flows in low water years would enhance the basin's natural capital value.

Healthy, functioning natural capital is critical to the production of natural assets. The natural capital of an ecosystem consists of its structural components, such as trees, forests, soil and hill slopes. Natural capital produces dynamic processes (e.g. water flows, nutrient cycling, animal life cycles), which in turn create functions (e.g. water catchment, soil accumulation, habitat creation) that generate ecological goods and services (e.g. water, salmon, timber, flood risk reduction).

The benefits of natural assets are similar to the economic benefits typically valued in the economy, such as the services of skilled workers, buildings, and infrastructure. The ecosystem goods and services are provided over long periods of time. In most cases, ecosystems are the optimal systems for producing such goods and services.



**A 10% INCREASE  
IN ECOSYSTEM-BASED  
FUNCTION WOULD ADD  
\$19 BILLION  
IN VALUE**

**THE COLUMBIA  
RIVER BASIN HOLDS  
IMMENSE NATURAL  
CAPITAL VALUE**



## ECOSYSTEM-BASED FUNCTION

The Columbia River Basin tribes recognize the region's *ecosystem-based function*, a concept that acknowledges nature's voice and value simply by virtue of existing, independent of human assessment. From this perspective, humans are an integral part of ecosystems.

For the tribes, the basin has been their lifeblood since time immemorial. The watershed provides, protects, and nurtures subsistence and cultural resources, traditions, values, and landscapes throughout its length and breadth. Clean, abundant water is a core part of this concept. This resource must be sufficient to sustain life, healthy fish, wildlife, and plant populations that are vital to tribal traditions and way of life.

## ECOSYSTEM SERVICES

*Ecosystem services* is an economic concept. Any benefit that humans receive from nature is an ecosystem service, and these services are essential to human survival. Breathable air, drinkable water, nourishing food, and stable atmospheric conditions are prime examples.

Just as with other economic benefits, ecosystem services can be monetized and valued. When ecosystem services are lost, people experience economic impacts in terms of job losses, infrastructure costs, restoration costs, property loss to storm damage, or other costs.

Upper Columbia United Tribes worked with Earth Economics, Columbia River Inter-Tribal Fish Commission, Pacific Rivers, Save Our Wild Salmon, and WaterWatch of Oregon to develop *The Value of Natural Capital in the Columbia River Basin* report that shows the immense economic value of the Columbia River Basin's natural assets.



UCUT  
UPPER COLUMBIA  
UNITED TRIBES



PACIFIC  
RIVERS



EARTH ECONOMICS  
Taking nature into account