



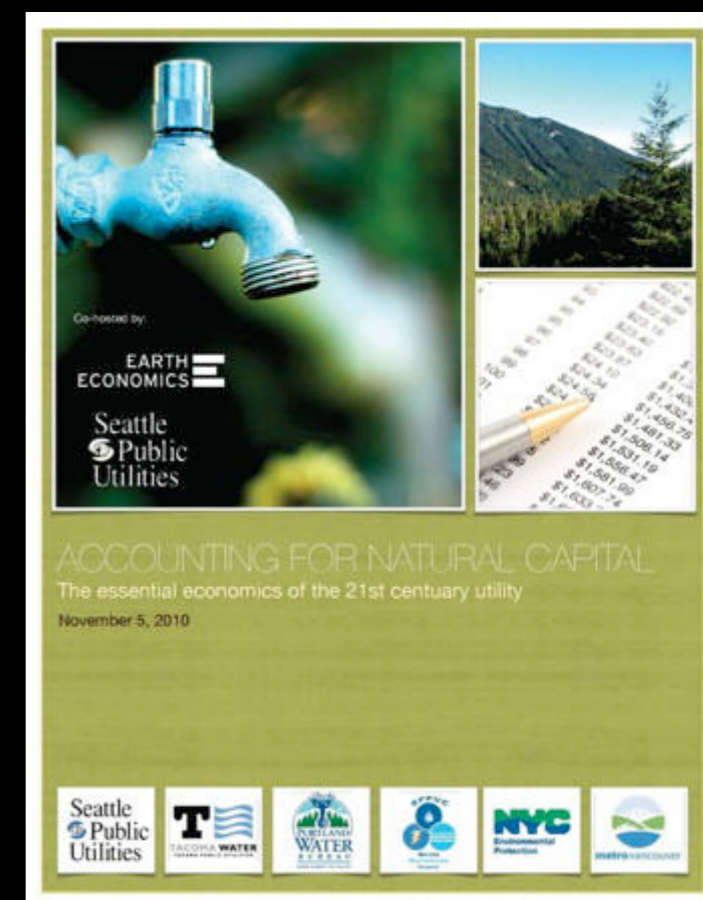
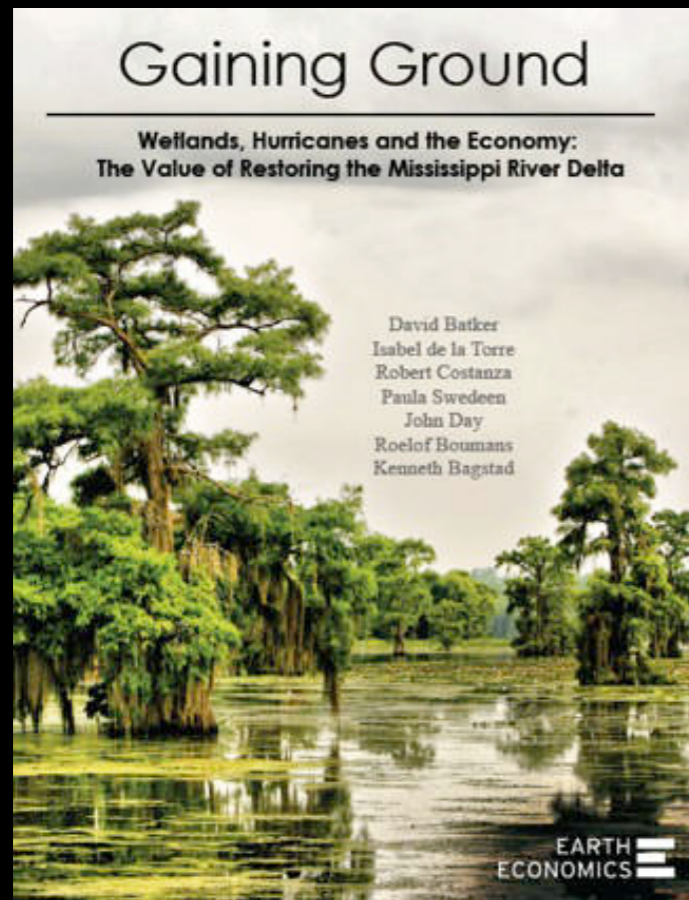
Valuing the Colorado River Basin

**EARTH
ECONOMICS** 

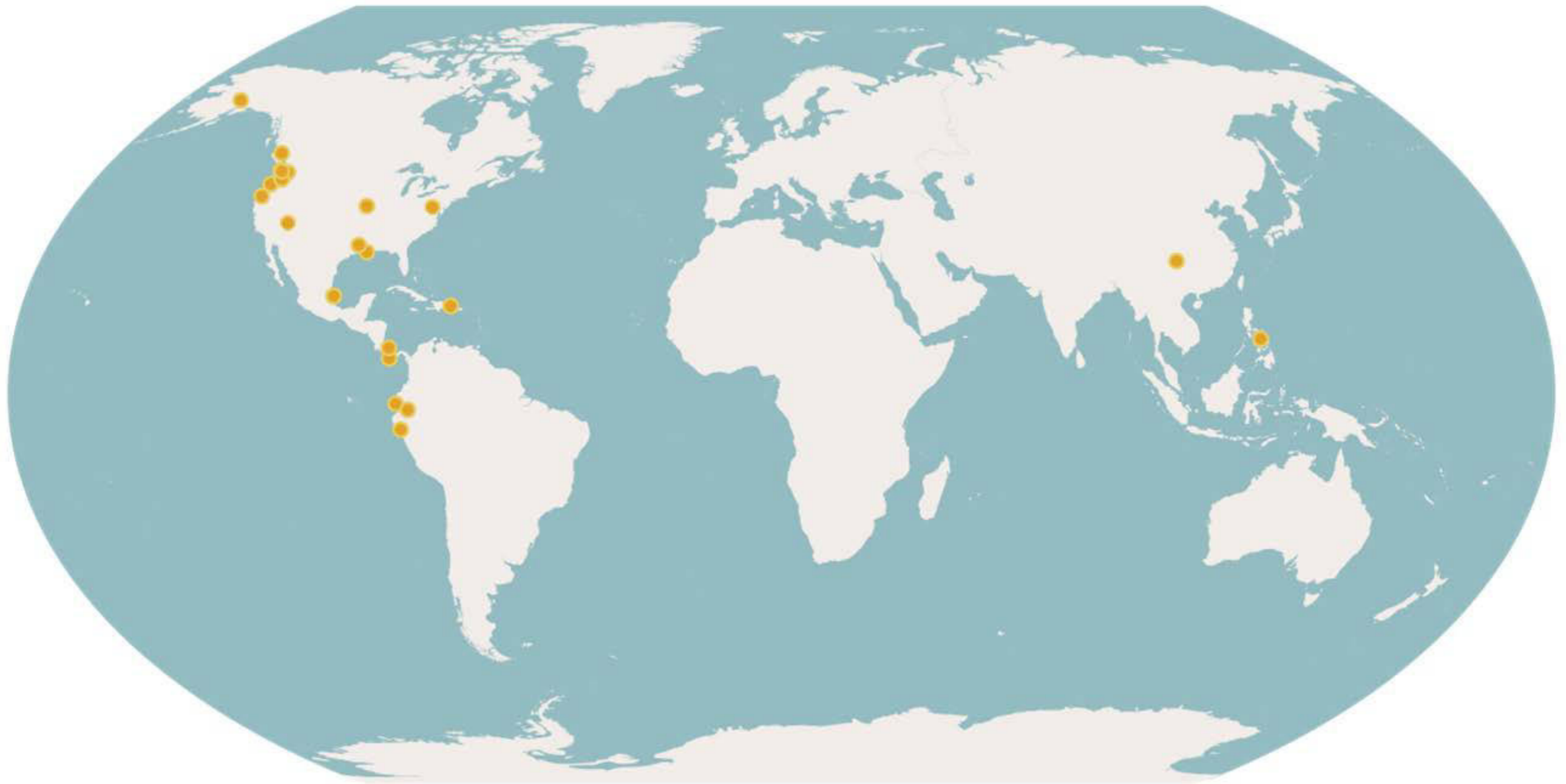
8.21.2014

Corinne Cooley
Project Lead

EARTH ECONOMICS



Where We Work



What
is



it
worth?





Freshwater Supply





Carbon Sequestration





Biodiversity





Recreation



Leveraging Capital for 21st Century Solutions



Built Capital



Social Capital



Human Capital



Natural Capital

Leveraging Capital for 21st Century Solutions



Dams, Bulkheads,
Levees, Roads



Regulatory Policy,
Government



People,
Ideas



Forests,
Shrublands

Built capital depreciates; natural capital is self-sustaining and appreciates



Colorado River Basin



Colorado River Headwaters



Mesa Verde Shrubland Prairies





Valuing the Basin

14 Land Cover Types

Grasslands

Coniferous Forest

Deciduous Forest

Mixed Forest

Riparian

Lakes and Reservoirs

Rivers and Streams

Shrub/Scrub

Desert/Barren

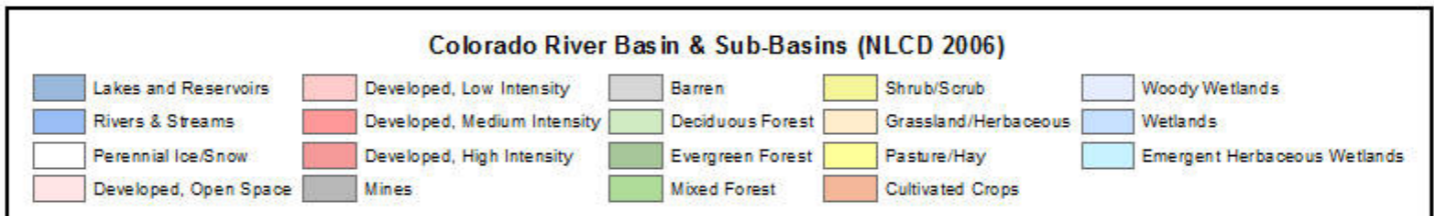
Cultivated

Pasture/Hay

Woody Wetlands

Emergent Herb Wetlands

Urban Greenspace





Context



Matters.



12 Ecosystem Services

Water Supply and Storage

Water Quality

Water Regulation

Flood Protection

Erosion Control

Air Quality

Recreation and Tourism

Habitat and Biodiversity

Aesthetic Information

Energy and Raw Materials

Food

Carbon Sequestration and Storage



Water Supply And Storage





Carbon Sequestration And Storage



Colorado River Basin Ecosystem Service Values

Annual value:
\$69.2-\$496.4 billion

Asset value (100 years):
\$1.8-\$12.1 trillion (4.125% discount rate)
\$7.0-\$49.9 trillion (0% discount rate)



Where did all those values
come from?



Avoided Cost

Travel Cost





Hedonic Pricing

Setting a price using benefit-transfer is like using real estate “comps.”





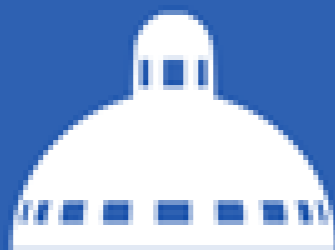
What could you do with
these values?



FEMA



\$10 million bond



GASB

Governmental Accounting Standards Board



Natural assets... ..At a distance?





Often what we don't count is not valued.

Thank You

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