

# Coastal Wetlands Might Be Our Best Infrastructure Investment

Our natural infrastructure--which altogether offers \$23 billion in value to the U.S. economy--is fraying fast. If we want the best value in protecting coastal cities from flooding, we better invest.

Hurricane Sandy showed the huge risk cities take when they build right up against the waterfront and put nothing in danger's way. The storm's surge caused so much damage to New York because there was nothing to break its flow. When the ocean began to rise, the water kept going at its natural speed.

That's why many smart people think we should be investing in coastal wetlands that can act like "horizontal levees" around cities. By impeding onrushing water, these natural habitats can help limit the damage from future storms when they inevitably occur.

A [new report](#) from Oxfam America and the Center for American Progress makes the case for wetland restoration by putting an economic value to all its benefits, which don't just include flood protection. In addition, wetlands can also help store carbon and other pollutants, help re-establish fish stocks, and re-open opportunities for recreation and tourism.

Below are a few points from the study, which brings together previous research as well as a new analysis of three coastal wetland projects funded with federal money.

## WETLANDS ARE DISAPPEARING

Back in 1989, President George H. W. Bush introduced a policy of "no net loss" to wetlands in the U.S. But it didn't have much effect. Over the next 16 years, wetlands disappeared at a rate of 59,000 acres per year. Between 1998 and 2009, America lost a wetland area larger than the

state of Rhode Island. At the same time, more and more people moved to live by the ocean. The coastal population has grown almost 40% since 1970, and now contributes 45% of national revenue. In other words, the coast has never been more valuable, and less protected by natural systems.

## **COASTAL PROTECTION**

A [study](#) of 34 U.S. hurricanes following Katrina and Rita found that the loss of one hectare of wetland area equates to \$33,000 in storm damage, and that existing wetlands provide protection worth between \$250 and \$51,000 per hectare per year. All together, wetlands offer \$23 billion to the U.S. economy, it says.

## **REDUCING POLLUTION**

Wetlands help filter pollutants such as fertilizer run-off from agricultural fields. One [analysis](#) found that major wetlands take out 5.8 million metric tons of nitrogen before runoff reaches drinking water, or flows into water bodies asphyxiating on algae blooms. Another [study](#) estimates that wetlands prevent \$13 billion in annual nitrogen pollution.

## **WETLANDS CREATE JOBS**

According to a study from the National Oceanic and Atmospheric Administration, \$1 million invested in coastal restoration creates 17.1 jobs, compared to just 8.9 jobs for every \$1 million invested in oil and gas development and other industrial activities. That includes the benefit to fisheries from improved stocks.

## **WETLAND RESTORATION IS A GOOD USE OF TAXPAYER MONEY**

Oxfam and the Center for American Progress commissioned [Abt Associates](#), a Massachusetts firm, to assess the value of three federally-funded wetlands projects: Virginia Seaside Bays, South San Francisco Bay Salt Ponds, and Mobile Bay in Alabama. It found \$15 million in net

economic benefits from increased floodwater capacity, better water filtration, and improved tourism.

The problem is these economic benefits don't "fit neatly into categories on the balance sheet of any one particular industry, corporation, or individual," the report points out, which makes arguing for action more difficult. Still, the groups recommended that federal, region and private-sector entities increase their investment in coastal ecosystem restoration projects and fund more monitoring.