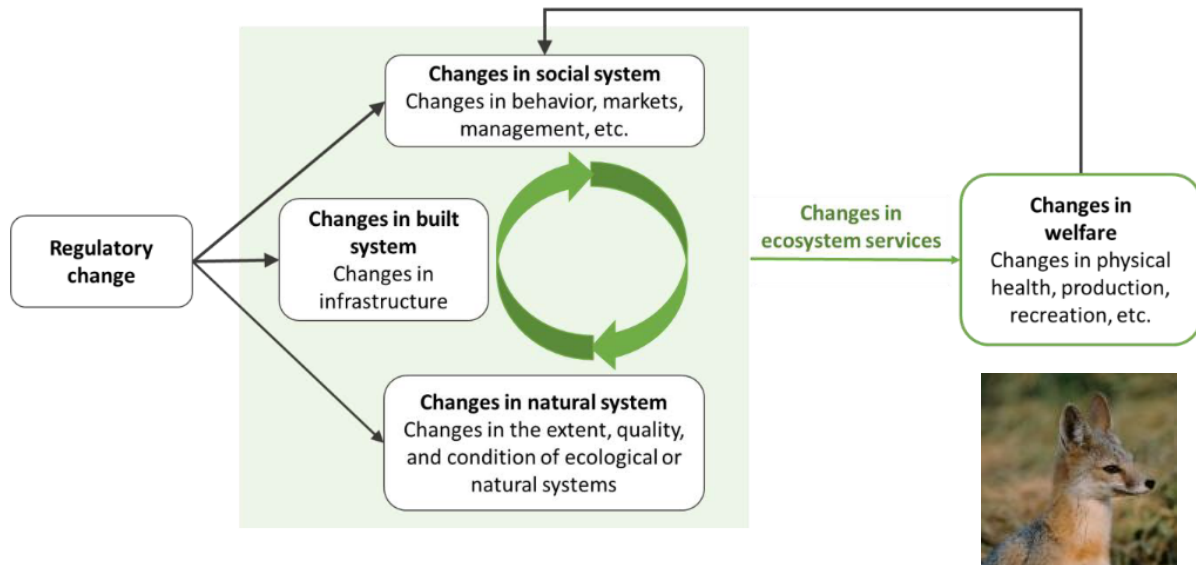


# The Value of an Ecosystem



On August 1, the federal government issued a draft of the [first-ever guidance](#) on how agencies are to make a full accounting of ecosystem services in a cost-benefit analysis of any decisions impacting the environment – including rule making, leases, procurement and construction.

Richard Revesz, an administrator with the Office of Management and Budget, and Arati Prabhakar, Policy Director for the Office of Science and Technology, marked the occasion with a blog post in which they noted that “Failing to fully account for nature’s bounty has led to undervaluing and erosion of our nation’s natural assets. We must measure what we value, not just value what is simple to measure.”

Ecosystem services are contributions to human welfare from the environment – ranging from health, visual amenities and opportunities for outdoor recreation to the religious practices of Native American tribes.

The guidance notes the interrelationship of natural assets and ecosystem services: “Common examples of the links between natural assets and ecosystem services include coral reefs, beach and dune systems, or wetlands (natural assets) that protect inland areas from storm surge (ecosystem service).”

That “undervaluing and erosion of our nation’s natural assets” has come about due to the tendency of ecosystem values and natural assets to place a distant second when agencies have gone about the task of evaluating the impacts and benefits of a project.

It has been a long, hard road to persuade federal agencies to improve their environmental accounting. Our chapter of the Sierra Club engaged in [a tussle with the US Fish and Wildlife Service](#) in 2005 when we disputed the agency's economic analysis of the impacts of designating critical habitat for the threatened California tiger salamander in 20 California counties, including San Luis Obispo. The central conclusion of the USFWS analysis was that 20 counties would incur \$367 million in "lost development opportunities" over twenty years, based on the notion that a designation of critical habitat would add \$27,000 to the cost of a \$2 million home, a "potentially disproportionate economic impact" that would be avoided by exempting thousands of acres from critical habitat protection.

We pointed out that their analysis was based on traditional neoclassical economics, which can't calculate natural capital: the worth of a wetland, estuary, forest or other natural landscape – or the cost to replace the services the environment provides — flood control, storm protection, fertilizer, pollination, water purification, climate regulation, etc. — if those services are lost to development. The federal analysis was overwhelmingly devoted to the negative economic impacts of critical habitat designation. It largely omitted the positive economic impacts of the inclusion of critical habitat and entirely omitted the negative economic impacts of exclusion of that habitat.

Under the Bush Administration, unsurprisingly, we lost that argument. The Biden Administration is now undertaking a regulatory overhaul, upgrading the policies and practices of federal agencies to bring them in line with current science.

After a period of public comment and peer review, the White House hopes to finalize the draft guidance within a year.