Cross-posted at The Berkeley Blog.

If you've never heard of the <u>President's Council of Advisors on Science and Technology</u>, you're not alone. It's not a group that's often in the news. But its new report, "<u>Sustaining Environmental Capital</u>: <u>Protecting Society and the Economy</u>," is worth a read.

This report does two important things. First, it defends the role of government in protecting the nation's environmental capital, explaining why private actions alone cannot be expected to adequately protect public goods. That's certainly not a new idea for those of us in the environmental policy world, but you have to admit it takes some guts these days to publicly endorse government action in almost any arena. If you, like me, wish the president would spend a bit more of his time and energy explaining why government has a positive role to play beyond the national defense context, you'll find it heartening that at least his White House is finally doing so, at least on a small scale.

Second, the report calls for better use of existing knowledge and better generation of new knowledge in support of that governmental role. Specifically, the report recommends that the U.S.:

- institute a quadrennial assessment of the nation's ecosystems and the benefits that flow from those ecosystems;
- take a leading role in international efforts to assess biodiversity and ecosystem services:
- prioritize expenditures for conservation programs based on cost efficiency;
- identify important data gaps and clarify agency roles and funding to fill those gaps;
- improve tools for valuing ecosystem services and use the results to inform planning and management decisions;
- establish an eco-informatics initiative to ensure that key data "are published in machine-readable, interoperable format to facilitate research engagement by public, private, academic, and other stakeholders, and to support policy- and decision-making at Federal, state, and local levels."

There's certainly room to quibble about the details of the report, but the overall message is important and undeniable: As a nation, we need to do a better job of factoring the environment into our decisions, and we can't do that without better information. I'm very glad to see that message coming out of a White House that has too often disappointed its conservation-minded supporters.

Of course, saying it and making it happen are two different things. The information

initiatives the report calls for will need funding — not much, but given the nation's current budget woes even a little might seem like a lot to ask. And even in much better budget days, calls to devote significant government resources to environmental information-gathering have generated more opposition than support. (Remember way back in the 1990s, when the National Academies called for "A Biological Survey for the Nation" and then-Interior Secretary Bruce Babbitt tried to take that advice?)

The report's authors missed the chance to make a stronger case for the funding they believe is needed. They did an impressive job of showing that many current conservation expenditures are not carefully targeted or evaluated for cost-effectiveness or performance effectiveness. But that section of the report isn't directly connected to the calls for better information tools. Seems like a direct comparison of the money currently being spent, much of it blindly, with the much smaller sums that could make a big difference in the information landscape would have been helpful. In an interview with <u>Science Insider</u> (subscription needed), Rosina Bierbaum, PCAST member and chair of the working group responsible for the report, suggested that the recommended quadrennial ecosystem assessments would cost about \$5 - \$10 million each. That's a pittance compared to annual conservation expenditures, and well worth it if it significantly improves the effectiveness of those expenditures.

Hopefully a next step for PCAST will be to lay out estimates of how much the measures it recommends would cost, how much they could be expected to improve conservation decisionmaking, and where the money might be obtained from existing sources. And hopefully others in the White House and elsewhere in the administration will take up the cause of improving the nation's understanding of its natural capital and how best to invest in it.