

Editor Mark Anderson-Wilk  
Soil and Water Conservation Society  
Ankeny, Iowa

August 29, 2008

Dear Editor Anderson-Wilk:

I enjoyed – and learned a lot from – reading your “Science and stewardship in a nonmonolithic conservation movement: Facilitating positive change” in the Sept/Oct issue. I’d like to discuss another dimension of the challenge, one that is particularly linked to the “attempt to better measure and quantify the value of ecosystem services....”

I have been concerned – recently and over the years – with several important aspects of the economic issues of conservation. The first was the initial – and national – conservation battle of the last century was between the two prominent “conservationists” Gifford Pinchot and John Muir over the Hetch-Hetchy dam proposal to supply water (especially following the earthquake and fire) for San Francisco on land newly administered by the U. S. Forest Service. That, of course, set the stage for creation (1916) of the National Park Service, following a “win” for the dam, and the much later controversy over Echo Park in Dinosaur National Monument, administered by the NPS. There are more examples of action/reaction in conservation.

To me, *Conservation* is concerned with the rate of resource *use* and *timing* and the relationships between them. I derive this from S.V. Ciriacy-Wantrup’s mid-century suggestion<sup>[1]</sup> that conservation be defined as “shifting rates of use toward the future.” Thus, I envision conservation as consisting of a range of mixes of *exploitation* and *preservation*, a spectrum relating resource use over time: *exploitation* is all use and no time; *preservation* is all time and no use. Specifically, any given resource unit, for example, a national forest, open space, wetland, prairie, etc., might serve varying mixes of exploitive and preservationist practices. The mix, of course is *strategy* – sound land use planning – and *tactics* consist of on-site land management practices.

For the multiple-use forests (debated at length in the 1950s and 1960s) and many other natural resources, this is a useful and fitting definition: it certainly seems to have met our needs before and perhaps well into the Environmental Movement. This “fit” has been applied successfully (and perhaps unknowingly), persisting until new conflicts developed under the Endangered Species Act of 1973. Since then there has been a growing awareness of the importance of Earth’s biodiversity in all biomes, oceanic phytoplankton and coral reefs, rainforests, tundra, deserts, wetlands, ice caps, grasslands, and forestlands. My own current and urgent concern is that maintenance of Earth’s biodiversity is of the utmost import to human sustainability.

That presents another problem growing out of Wantrup’s fundamental conservation concepts and the economy. Constant growth of our economy is both a financial benefit to our future and the source of civilization’s major environmental challenge. The connection may do our civilization in unless we act to prevent it. Why? First, we expect our economy to grow at the rate of about seven percent each year, meaning that our wealth doubles every ten years. Second, those biomes that we seek to exploit take on a new and urgent importance in terms of preservation. And, third, the practice of justifying current costs of infrastructure – especially for water resources – is based on use of the *discount rate* – the reciprocal of the *interest rate* – so that we might calculate a benefit/cost ratio favorable to our investment in dams, canals, water supply systems, and water-exploiting energy projects. The problem comes about when we note that that discount rate ensures that our descendants will pay for our inroads on those natural resources we seek to conserve. True, that is indeed shifting rates of use toward the future, in this case financial resources, and someone recently pointed out to me that “well, at least there will be more taxpayers to spread the costs.” Also true. But, of course, that is founded in the belief that the human population will continue to grow. And the reader can fill in the blanks.

In short, we face a major challenge, nay crisis? How do we manage these conflicts in resource use *now*? How do we do that effectively, equitably, and without passing the costs of our luxurious lifestyles to our children and grandchildren? We are already in imminent danger of major changes to our civilized lives; next may be a series of uncontrollable changes to our sustainability.

Sincerely,

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