The Oil Drum: Campfire
Discussions about Energy and Our Future

Solutions, Mitigation, Adaptation, etc.

Posted by Nate Hagens on December 2, 2009 - 6:15pm in The Oil Drum: Campfire
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When I first started my Phd 4+ years ago, I was fascinated, concerned and rather obsessed with the various details surrounding the limits-to-growth phenomenon, a situation I had been blissfully unaware of up until around 2000. I delved deep into the specifics of peak oil, non-energy input limitations, and neuroscience based drivers of our resource demand that would be difficult to work in reverse. My advisor, Robert Costanza was much more 'solutions' focused - and much less interested in such details as the date of Peak Oil, subsequent decline rate or debt/energy relationship. He had analyzed and written about net energy and biophysical limits decades ago and had seen the general writing on the wall. Via possibly different paths, I've now arrived at the same place as he: I've learned enough of our complicated socio-economic tapestry to stop delving into the details and start to think about solutions.

This Campfire is a brief announcement of a new publication, "Solutions", and some thoughts in that direction.

There is a new hard-copy and online journal pertaining to 'solutions', overseen by Robert Costanza, David Orr, Paul Hawken and John Todd. (I encourage everyone to read the great essay by Dana Meadows on leverage points linked above and below).

Here is an excerpt from their main page:

> The aim of Solutions is to encourage and publish integrative solutions to the world's most pressing problems: climate disruption, loss of biodiversity, poverty, energy descent, overfishing, air, water, and soil pollution, and human population growth, to name a few. There is already plenty of discussion about these problems, along with an abundance of isolated and technical solutions, some of which may prove to be extremely valuable. Solutions is a forum for putting the pieces together, prompting intelligent discussion of what can be done, and what should be done. To read Editor-in-Chief Robert Costanza's vision for Solutions, click here.
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> Solutions is an online and print journal, a hybrid between a popular magazine and a peer-reviewed journal. It is intended for a broad audience that reaches beyond traditional academic journals to the informed public. It will provide a much-needed forum, devoted to whole-system solutions and the design of an integrated human and natural world.
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> Solutions uses a much more constructive, transdisciplinary review process than typical journals. We encourage collaboration and co-authorship between original authors and reviewers.

This constructive review process improves the quality of articles and enables the development of innovative, integrative, and whole-system solutions. It allows for broader, more transdisciplinary perspectives on a topic, creating articles that appeal to a larger community, with a stronger chance of being implemented.

What qualifies as a solution?

We are looking for solutions that are seriously creative: they should be novel, perhaps even surprising, but also well-thought out and credible.

We prefer solutions that take a whole-systems approach. What do we mean by that? A system can be a community, a corporation, a government, or even the entire global environment. If you want to solve a problem, you need to look at these systems in their entirety and at several, nested scales, from local to global. Rather than focusing on a single link, look at the whole chain. When you start looking at the world this way, it becomes clear: everything is connected.

What are examples? A solution can be local, such as the development of a sustainable eco-village or eco-city. Or it can be grand and global, the development of an atmospheric trust to cap and trade greenhouse gases.

It doesn't have to solve all problems, but it should recognize what problems it can solve, and what others it might cause. Solutions should address the institutional and cultural changes that may be required.

Problems can be solved at many levels. Dana Meadows, founder of the Sustainability Institute, described the most effective places to act as leverage points. At what point in the system—from a corporation to the global environment—can you make a small shift and spark a major change? A solution can be as simple as a shift in taxes or subsidies, or it can try to change the global economy. We welcome concrete goals, but we won't shy away from efforts to think outside the system or transcend a paradigm.

Nate here. When we discuss "Solutions" we should be aware that under wide boundary conditions, there are of course NO solutions optimal for everyone/thing. Different demographics, different generations, different species etc will be better or worse off. I prefer the term 'mitigation' as the problems facing human civilization probably have a collective empty set solution. CLEARLY however, there are many many benign paths relative to the current default one, and I applaud the efforts to create a Solutions Journal instead of further scientific refining of threads of a tapestry whose emerging image is pretty obvious. Irrespective of whether you call it 'solutions' or 'mitigation', I think the time is well past for analysis and ripe for bold, surprising action. Before we see either bold or surprising actions, however, we might need to define, either consciously or otherwise, what our real goals are: solutions or mitigation for whom and over what time scale? If we never address the 'who' or 'what,' the 'how' will be difficult to achieve.

My own feeling is that sustainability or sustainability-lite are both dead in the water if we continue to focus on supply side changes. Unless we address a) the reward superhighway in our neural structure that results in cravings for higher and higher reward baselines and b) self-deception and belief systems inhibiting behavioral change, we will probably slow the descent of

the current paradigm but not change its trajectory. These are the two areas that I will personally be researching, exploring, and writing about going forward.