

Discussion of a David Bella essay: Ethics and credibility of applied science.

By Dave Person.

"Something is clearly wrong with the way our society assesses environmental impacts. Too many shortsighted policies, assumptions, and deficiencies continue without effective challenge. Too much of the written material is mere filler that satisfies procedural requirements in ways that allow programs and projects to continue without serious critical review. Too many of the best environmental scientists, particularly those dedicated to the highest ideals of public service, have become cynical. Something is fundamentally wrong". Those lines were written by Dr. David Bella in an introduction to a remarkable essay in a remarkable U. S. Forest Service general technical report (PNW GTR-288) published in 1992. The report contains a series of essays on ethics, science, and natural resource policy.

Bella's essay describes one source of much that is wrong with assessments of environmental impacts: systemic distortion. Organizations produce and promote information favorable to their ambitions or programs. Information or opinions that favor the organization survive within the group, whereas those that are contrary are systematically filtered out. The result is the systemic distortion of reality. If each member simply fulfills their organizational role, they become mere "functionaries", constantly fed a diet of systematically selected information. They may not realize that for them systemic distortions define what is reasonable, responsible, and realistic. That is not conspiracy theory and no group of people is directly to blame. Instead it is the process of how an organization rewards its staff, how they fund or not fund work, how they assign staff holding favorable opinions versus those that dissent. It is the result of how information is passed on to upper levels of management, how tasks are compartmentalized, and how zealously people avoid debate or confrontation. Bella described how systemic distortion within NASA played a serious role in the deaths of the Challenger astronauts.

The upshot is that agencies and organizations should cherish their "trouble makers" or dissenters as sources of thinking outside the box. Organizations and agencies should promote internal debate and dialog about important policies and information. Of course I am jousting with windmills here. As one DuPont supervisor wrote concerning that company's monitoring of the disposal of nuclear waste - *"The problem lies with the system...it is not realistic to expect any chain of command to report unfavorably upon itself"*. Hence, professional organizations such as The Wildlife Society are critically important for maintaining the credibility of applied sciences. Bella argued that professional scientific societies needed to become more active as forums for debate about scientific information and how that information is used to formulate policy. He believes those organizations have a responsibility to preserve the dialogic community of scientists from the relentless corruption of systemic distortion. I strongly agree with him. I urge members to read David Bella's essay as well as the others contained in PNW-GTR-288. You can find it on the web at www.fs.fed.us/pnw/pubs/pnw_gtr288.pdf or e-mail me (dave_person@alaska.gov) for a copy.