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Does the Public Expect Too Much from Science?



About the author: *Dr. Robert Lackey is a 27-year veteran senior scientist in EPA's Office of Research and Development's Corvallis, Oregon research laboratory.*

Recently I presented a talk to a group of community activists about [why salmon populations](#) along the West Coast have dropped to less than 5% of their historical levels. I've given such talks many times so I was confident that I had heard just about every question that might be asked. I was wrong.

The opening question was asked by a well-known political activist. He was direct, pointed, and bursting with hostility: *"You scientists always talk about our choices, but when will you finally tell us what we SHOULD do about the dramatic decline of West Coast salmon? Quit talking about the science and your research and tell us what we should do! Let's get on with it!"*

From the nods of approval offered by many in the audience, his impatience with science and scientists was broadly shared.

What does the [public expect from scientists](#) regarding today's ecological policy issues? Some examples of such policy challenges include the [decline of salmon](#); deciding on the proper role of wild fire on public lands; what to do, if anything, about climate change; the consequences of declining biological diversity; and making sense of the confusing policy choices surrounding "sustainability."

The lament “*if we just had some better science, a little more data, we could resolve this policy question*” is common among both scientists and decision makers. Calls for more research are everywhere in ecological policy debates.

In most cases, even if we had complete scientific knowledge about all aspects of an issue, the same rancorous debate would emerge. Root policy differences are invariably over [values and preferences](#), not science, data, and facts.

In a pluralistic society, with a wide array of values and preferences competing for dominance, the ecological policy debate is usually centered around whose [values](#) and preferences will carry the day rather than over scientific information.

So what was my answer to the emotionally charged question from the political activist?

It was: “*Science, although an important part of policy debates, remains but one element, and often a minor one, in the decision-making process. We scientists can assess the ecological consequences of various policy options, but in the end, it is up to society to prioritize those options and make their choices accordingly.*”

He wasn’t pleased.

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