## 11.373 Science, Politics, & Environmental Policy Day 5: ADVOCATES' USE OF SCIENCE

## I. Problem Definition and Causal Stories

What are advocates and what do they do in politics?

What are some of the general techniques advocates use to have a political impact?

What is problem definition—also sometimes referred to as "framing"?

- --What are causal stories, which are so critical to the success or failure of a problem definition?
- --What else is involved in problem definition, besides telling causal stories?

Why do advocates need causal stories? What are their political functions?

In the policy world, there is always choice about which causal factors in the lineage of possible factors to address, and different choices locate the responsibility and burden of reform differently (296).

Can you use Deborah Stone's typology to analyze the causal stories crafted by advocates in the cases we read for today? (Be clear, though, that the boundaries among these types are fuzzy.)

What kinds of stories are both compelling and credible? Why do some stories seem to work better than others?

Stone points out that science exercises some kind of constraint on the successful assertion of causal theories. But what, exactly, is that constraint? How does it work?

## II. Applying Concepts to Cases

Let's look at how advocates define problems and use science to tell causal stories in each of the cases we read for today:

How do Bolch and Lyons define the problem of climate change? (Hint: What do they say about environmentalists' definition of the problem? What do they think we ought to focus on?)

What do Sarewitz and Pielke say about the way environmentalists have defined the problem of climate change?

How does Wildavsky define the Alar problem? (Note that his formulation is very similar to Bolch and Lyons'.)

The Ehrlich's retaliate against work like Wildavsky's and Bolch and Lyons', which they say is responsible for a "brownlash." What are they trying to explain with respect to the role of science in how environmental problems get defined?

## III. Generalizations

Based on this discussion, let's try to formulate some generalizations about the role of science in environmental problem definition: