

Arnold Schwarzenegger and Our Common Future

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On June 1, 2005, Governor Arnold Schwarzenegger gave a truly remarkable speech at the World Environment Day Conference in San Francisco. The crescendo, which was widely covered in the press, was that California would strike out on its own to combat global warming. Breaking ranks with President Bush's approach to climate change, Governor Schwarzenegger stated, "I say the debate is over. We know the science. We see the threat. And we know the time for action is now."¹ At the close of the speech, the Governor signed Executive Order S-3-05, which lays out a series of goals and target dates to reduce California's production of greenhouse gases.²

This is a curious situation. Arnold is a pro-business Republican who, until recently, exhibited very little concern for the environment in his political or personal life. Not long ago, the man owned seven Hummers. Perhaps the speech and the Executive Order are just cynical moves, designed to get votes in a predominately green state.³ But perhaps not,

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1. Governor Arnold Schwarzenegger, *Governor's Remarks at World Environment Day Conference*, June 1, 2005, http://www.governor.ca.gov/state/govsite/gov_homepage.jsp (follow "Speeches" hyperlink; then follow "2005" hyperlink; then follow "06/01/05 Governor's Remarks at World Environment Day Conference" hyperlink) [hereinafter *Governor's Remarks*].

2. Exec. Order No. S-3-05 by the Governor of the State of Cal., (June 1, 2005), <http://www.governor.ca.gov> (follow "Press Room" hyperlink; then follow "Executive Order" hyperlink; then follow "June 2005" hyperlink; then follow "Executive Order S-3-05" hyperlink) [hereinafter Executive Order].

3. The case for cynicism is strengthened by Governor Schwarzenegger's apparent embrace of "clean coal," as the predominant strategy for achieving the goals of the Western Governors Association's Clean and Diversified Energy

and given the current political options for addressing global warming, one might as well take Arnold at face value.

There might even be good reasons to take Arnold seriously as a conservation hero. With his profligate and flamboyant ways, he is the antithesis of the stereotype of the parsimonious environmentalist. So, just as Richard Nixon led the way towards normalizing relations with China, Arnold may be the ideal figure to take on global warming. And there is something even more complex at play. Arnold is an apt metaphor for America's relationship to consumption and the environment. Like Arnold, Americans want to have it all—big cars, good times, boundless economic growth and at the same time clean air and water, and plenty of beautiful places to play. This tension is not new. Throughout our environmental history, the greatest conservation successes have been achieved when Americans perceived they were getting more of something great. Conservation efforts have often failed when it seemed as if sacrifice was called for.

Addressing global warming requires confronting this tension in ways that have been avoidable, at least on the surface, with regard to other environmental threats to date. The causes of global warming require global solutions, which thus far have been elusive. Even more to the point, addressing global warming may require solutions that implicate our day-to-day habits as well as our macro patterns of production and consumption. And, as if that were not sufficiently daunting, there is unlikely to be any absolute certainty that the actions we take will be enough to result in climate-neutral policies soon enough to stave off the most serious effects. In short, to address global warming we will have to change our patterns of consumption in ways that impinge upon us in order to secure likely, though not certain, benefits for future generations. That is a tall order, particularly in our Arnold-like culture.

There is no way out of this predicament. A country that thrives on consumption cannot turn on a dime to reject it, for a whole host of complicated, interlocking cultural and

Initiative. See Mark Martin, *Importing Power, Fostering Pollution, 31 Coal-Fired Electric Plants in Permitting Stage*, S.F. CHRON., May 15, 2005, at A1, available at <http://sfgate.com/cgi-bin/article.cgi?f=/c/a/2005/05/15/COAL.TMP>. The plans, although they pledge to develop renewable energy sources, call for new coal-fired power plants throughout the west. *Id.*

economic reasons. Think, for example, back to the scorn and ridicule heaped on President Jimmy Carter in what has become known as his “malaise speech,” for daring to suggest that the solution to the energy crisis lay in obeying the speed limit and turning down the thermostat.⁴ Had we listened to Jimmy then, we might already be on our way to reducing the United States’ contributions to the greenhouse effect, and we might also be in a far less precarious position with regard to dependence on foreign oil. But we did not listen to Jimmy. Despite his pleas, today we import twice as much oil as we did before the embargo of 1973,⁵ and we burn two-thirds of that driving our greenhouse gas (GHG) emitting cars.

A review of the historical roles played by some of our nation’s most prominent conservation heroes further illuminates the inescapable predicament of the present. On the upside, for those who hope that we can and should address global warming, the pantheon of environmental heroes includes predominately manly men who captured the spirit and imagination of their times. Big, outsized figures, they appeared to force their agendas onto the political scene. Who better than the literally outsized Arnold to be the conservation hero of our day? On closer and more critical inspection, however, each of the heroes of times past only succeeded up to a point, that point being determined by the larger social and economic forces of a growth and consumption imperative. But, perhaps there is

4. See President Jimmy Carter, *Crisis of Confidence Speech*, (July 15, 1979), <http://www.pbs.org/wgbh/amex/carter/filmmore/pscrisis.html> (last visited July 7, 2005). This speech, which has become known as the “malaise speech,” even though President Carter never actually uses the word “malaise,” is quite remarkable in a number of ways. First, its soul-searching quality is something that we will likely never see again from a politician with national ambitions. Second, President Carter’s suggestion that we try seriously to do something about our dependence on foreign oil is quite poignant to consider now: “I am tonight setting a clear goal for the energy policy of the United States. Beginning this moment, this nation will never use more foreign oil than we did in 1977—never.” *Id.* Carter was only thinking about the oil embargo and supply problems that ensued as a result. But, had we embarked on Carter’s campaign to free us from foreign oil in a serious manner, we might be in much better shape to address today’s geo-political problems, which in many ways are even more serious.

5. See Jad Mouawad and Matthew L. Wald, *The Oil Uproar That Isn’t*, N.Y. TIMES, July 12, 2005 at C1, available at <http://www.nytimes.com/2005/07/12/business/worldbusiness/12oil.ready.html>.

hope. Arnold, the metaphor as well as the man, combines the illusion of boundless growth (consider even his own musculature!) with the professed commitment to achieving environmental sustainability. We apparently need the illusion even while we also desperately need the commitment. The fact that we as a society have produced Arnold, an icon of having it all touting the need to do better with less, may mean that we will indeed muscle our way out of this paradox towards what we hope is “our common future.”⁶

THE GOVERNATOR, CONSUMPTION, AND GLOBAL WARMING

Arnold’s Executive Order (E.O.) on global warming is ambitious in some respects, and fairly squishy in others. The goals for GHG emissions reductions are serious, with targets of reductions to 2000 levels by 2010, reductions to 1990 levels by 2020, and reductions to eighty percent below 1990 levels by 2050.⁷ By comparison, the Kyoto Protocol, which President Clinton signed but never submitted to the Senate,⁸ would have required the United States to reduce GHG emissions to five percent below 1990 levels during the period covered by the Protocol, which ends in 2012.⁹ The

6. See generally WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT, OUR COMMON FUTURE (1987) [hereinafter *The Brundtland Report*]. The Brundtland Report was not directed solely at the issue of climate change, but rather at the entire gamut of environmental and natural resource challenges posed by worldwide population growth and equitable demands for economic development. The Brundtland Report brought to public attention the costs that we are imposing on future generations if we fail to find ways to provide economic development without depleting existing resources. While *The Brundtland Report* did not focus exclusively on climate change, this issue, more than any other global environmental threat, requires us to think seriously about how to achieve the elusive “sustainable development” goals articulated therein, and not surprisingly embraced in the national global warming dialogue. See *infra* notes 84-88 and accompanying text (discussing sustainable development).

7. Executive Order, *supra* note 2.

8. The Senate made its opposition to the Kyoto Protocol clear even before the negotiations were finalized. In July 1997, Senator Hagel of Nebraska, a Republican, and Senator Byrd of West Virginia, a Democrat, introduced a “sense of the Senate” resolution stating that the United States should reject any agreement that committed it to reducing GHG emissions unless developing nations were obligated to reduce emissions as well.

9. See Conference of the Parties to the Framework Convention on Climate Change: Kyoto Protocol, Dec. 10, 1997, 37 I.L.M. 22 (1998), available at <http://unfccc.int/resource/docs/convkp/kpeng.pdf>.

California goals allow for a longer taper, but then require a much sharper reduction after several decades.¹⁰

In terms of implementation and enforcement, however, the E.O. provides very little. The E.O. requires the Secretary of the California Environmental Protection Agency (C.E.P.A.) to coordinate and oversee efforts to meet the targets with the Secretaries and Chairs of other relevant state agencies and commissions,¹¹ and to report to the Governor and the state legislature in January 2006 and biannually thereafter on the progress towards meeting the targets, as well as any effects from global warming and plans for mitigation.¹² Executive Orders tend, in general, to be policy statements rather than enforcement mechanisms, so perhaps criticism on this score should be tempered. But, without more in the way of guidance to the legislature and the agencies, it remains unclear what mix of regulatory or incentive-based tools, if any, will be implemented to meet the GHG targets.

In addition, there is the concern that California cannot do alone what other states may be willing to undermine.¹³ If the cost of doing certain kinds of business rises in California due to internalizing the price of GHG reductions, other states may pick up the slack and attract GHG-

10. This approach is somewhat consistent with the recommendations of one economist, who proposes that emissions should increase for some decades before turning sharply down. See Thomas C. Schelling, *What Makes Greenhouse Sense?*, 38 IND. L. REV. 581, 584 (2005).

11. Executive Order, *supra* note 2 (requiring the Secretary of C.E.P.A. to coordinate oversight efforts with “the Secretary of Business, Transportation, and Housing Agency, Secretary of the Department of Food and Agriculture, Secretary of the Resources Agency, Chairperson of the Air Resources Board, Chairperson of the Energy Commission, and the President of the Public Utility Commission.”).

12. *Id.*

13. Recently, there is also concern that some interest groups in California may be complicit in fostering the construction of coal burning power plants in neighboring states, like Nevada, to meet California’s energy needs. See Craig D. Rose, *Sempre Seeks More Coal Plants*, SAN DIEGO UNION-TRIB., Apr. 24, 2005, at H.1, available at [http://www/signonsandiego.com/uniontrib/20050424/new_1b24_coal.html](http://www.signonsandiego.com/uniontrib/20050424/new_1b24_coal.html); Susan Voyles, *San Francisco Blasts Power Plant Proposal*, RENO GAZETTE J., June 14, 2005, at 1A, available at <http://www.nevadacleanenergy.org/20050614RenoGazette.html>. So, not only may other states be able to undermine California’s efforts; apparently, California may be willing to facilitate that state of affairs.

producing industries in a way that makes up for any California-based reductions. The United States cited similar prisoner's dilemma concerns¹⁴ for pulling out of Kyoto, but as others have pointed out, until the United States, the largest producer of GHG emissions, joins in a cooperative solution there is little hope that other countries' efforts will be effective.¹⁵ In addition, there is the moral argument that, as the leader in GHG production, the United States should rightly bear the burden of reducing emissions. As Elizabeth Kolbert has put it:

Suppose for a moment that the total anthropogenic CO₂ that can be emitted into the atmosphere were a big ice-cream cake. If the aim is to keep concentrations below five hundred parts per million, then roughly half that cake has already been polished off, and, of that half, the lion's share has been consumed by the industrialized world. To insist now that all countries cut their emissions simultaneously amounts to advocating that industrialized nations be allocated most of the remaining slices, on the ground that they've already gobbled up so much.¹⁶

Governor Schwarzenegger's moral leadership in this regard is a clear departure from the Orwellian position embraced by the Bush Administration. President Bush has announced that not only is the United States withdrawing from any further Kyoto negotiations, but that the Administration is opposed to any mandatory curbs on GHG emissions.¹⁷ The Orwellian part is that in lieu of reducing

14. Some have labeled this a "battle of the sexes" problem, as opposed to a prisoner's dilemma. As Stephen Gardiner convincingly argues, however, the collective action problem posed by global warming is better characterized as a prisoner's dilemma because the non-cooperators not only stand to benefit economically, they also are likely in many scenarios to render the cooperator's efforts ineffective. Global warming is thus a true "commons problem" of the tragic variety. See Stephen M. Gardiner, *The Real Tragedy of the Commons*, 30 PHIL. & PUB. AFF. 387, 411-16 (2002).

15. Even climate experts who do not wholeheartedly endorse Kyoto cite this concern about the United States' failure to take a leadership position. See, e.g., Schelling, *supra* note 10, at 593.

16. Elizabeth Kolbert, *Annals of Science: The Climate of Man—III*, NEW YORKER, May 9, 2005, at 52, 59.

17. President Bush reaffirmed this position at the G-8 summit even amidst strong pressure from Tony Blair and the other G-8 leaders to address global warming by setting emissions goals. See Richard W. Stevenson, *8 Leaders Hail Steps on Africa and Warming*, N.Y. TIMES, July 9, 2005, at A1, available at

emissions, the Administration's plan is to reduce GHG "intensity." This is not a scientific term. Despite its ring of embracing a policy goal that would somehow reduce the effects of GHG emissions, what it actually refers to is a ratio of economic output to GHG emissions. As long as a company produces more economic output relative to its GHG emissions each year, it will be a less "GHG intense" industry even if its total GHG emissions continue to rise in absolute terms. Indeed, President Bush's intensity goals bear this out. In February 2002, the President set the (entirely voluntary) goal of reducing the nation's GHG intensity by eighteen percent over the next ten years.¹⁸ If the economy grows at the rate of three percent annually, as expected and hoped for by the Administration, total GHG emissions will rise by twelve percent. So we could reach the President's goal of being GHG intensity-free, and simultaneously continue indefinitely to increase our total GHG emissions.

In addition to Schwarzenegger's substantive break with the Bush Administration on the global warming issue, his speech is also striking in its general environmental rhetoric. Schwarzenegger starts with a refrain that resonates with the economic realities of much of the West, notwithstanding the current boom in oil and gas extraction:

Growing up in Austria, I was surrounded by clean air, crystal clear streams and lakes, magnificent mountains and much more. And I found all this beauty also when I came to California. In fact, I'm like so many people who immigrated here. *I came for the opportunity and stayed for the beauty.*¹⁹

Growth in many western communities is fueled by immigrants like Arnold who "come for the opportunity and stay for the beauty."²⁰ If "beauty" does indeed encompass

<http://www.nytimes.com/2005/07/09/international/europe/09summit.html> ("Mr. Bush blocked efforts by Mr. Blair to agree on specific targets for reducing emissions of greenhouse gases.").

18. See *President Announces Clear Skies & Global Climate Change Initiatives*, Feb. 14, 2002, <http://www.whitehouse.gov/news/releases/2002/02/20020214-5.html>.

19. *Governor's Remarks*, *supra* note 1 (emphasis added).

20. See RAY RASKER ET AL., SONORAN INSTITUTE, PROSPERITY IN THE 21ST CENTURY WEST (2004), available at <http://www.sonora.org/programs/prosperity.html>.

natural beauty, dependent upon intact ecosystems, which in turn depend on clean water, air, and soil, then in this banal little sentence is the seed of an ethic of sustainability. Our economic well-being in the West depends upon our ability to preserve the natural environment. Some notion of sustainability, regardless of how nebulous the concept might be, is integral to worldwide solutions to global warming.

With regard to the rest of the speech, Arnold could have been channeling the Executive Director of the Sierra Club. First, he acknowledges that, along with phenomenal technological progress, industrialization has imposed environmental costs:

[T]he march of progress has not come without consequences. For example, on the one hand thanks to innovation, technology, and discovery we have the ability to cure disease and help people live longer. And yet, on the other hand our impact on the environment has created great threats to public health and cut people's lives shorter.²¹

While this may sound basic to all but the most hardened anti-conservationists, free-market thinking that pervades both the federal government and certain influential think-tanks has rendered even this homely concession anomalous. And in another swipe at the free-market position on regulation, Schwarzenegger asserts that, "[p]ollution reduction has long been proven to be a money-saver for businesses. It lowers operating costs [sic] raises profits and creates new and expanded markets for environmental technology."²²

So, according to Arnold, industrialization without regulation is bad for the environment and for us, and regulation can even be good for business. But that's not all. To what must have been the delight of parsimonious environmentalists everywhere, Governor Schwarzenegger actually quotes John Muir:

The world we live in and what we do to the land, air and water affects all of us. John Muir a Scottish immigrant who launched America's conservation movement right here in California once

21. *Governor's Remarks*, *supra* note 1.

22. *Id.*

said “When one tugs at a single thing in nature he finds it attached to the rest of the world.”²³

Everything is connected. Our nation’s environmental leaders: Muir, Aldo Leopold, Rachel Carson, David Brower, and now Arnold Schwarzenegger, have all recognized this. But wait, *Arnold Schwarzenegger* in the company of those environmental giants? Am I making too much of a political act that may be cynically designed to appease the green voters of California but does very little to reduce the threat of global warming?²⁴

After all, green Arnold is relatively new. Hummer Arnold is the one better known by the public. Arnold Schwarzenegger was purportedly the first civilian to own a Hummer, the commercial adaptation of the Army Humvee.²⁵ The rumor is that Arnold was in Oregon filming *Kindergarten Cop* when he saw a fleet of Humvees driving on Interstate 5; he was so impressed that he convinced the manufacturer to make a civilian version for him.²⁶ General Motors now sells roughly 30,000 Hummers each year, and Arnold is credited with leading the way.

The Hummer is indeed the automotive version of Arnold—totally pumped up. The H2 weighs 8,400 pounds, and the H1 over 10,000 pounds.²⁷ Their weight, height, and stiffness result in three to four times higher rates of death in accidents with other cars.²⁸ The Hummer’s gas mileage is abysmal at 10 miles per gallon (and likely less in actual driving), and Hummers emit over three times more carbon dioxide than average cars.²⁹ So Hummers, like Arnold, represent a kind of outsized consumer excess. Particularly germane to the global warming issue, the fuel inefficiency and GHG profligacy of Hummers make them the

23. *Id.*

24. *See* Rose, *supra* note 13; Voyles, *supra* note 13 (describing the Governor’s apparent support for construction of a coal burning power plant in Nevada).

25. *See* Medea Benjamin, *An Earth Day Call to Arnold Schwarzenegger: Go Hummer Free*, COMMON DREAMS NEWS CENTER, April 22, 2004, <http://www.commondreams.org/cgi-bin/print.cgi?file=lvIEWS04/0422-02.htm>.

26. *See id.*

27. *Id.*

28. *See id.*

29. *See id.*

automotive equivalent of the middle finger to global warming activists. And when Arnold was elected Governor, he owned seven Hummers.

Not surprisingly, Schwarzenegger's Hummer habit became a target of conservationists, who urged Arnold to go Hummer-free in honor of Earth Day 2004.³⁰ In addition, they criticized him for failing to follow through on a campaign promise of converting one of his seven Hummers to hydrogen-based fuel.³¹ In response, in October 2004, Schwarzenegger unveiled G.M.'s first hydrogen Hummer.³² It was a new prototype, and not the retrofit of one of his own vehicles that the Governor had promised. As the only one of its kind, and one that the Governor did not even own, it was hardly the beginning of a brand new world of earth-friendly pseudo-military vehicles. Furthermore, many serious questions have been raised regarding whether hydrogen fuel cells are really the green answer to our energy problems.³³ Not surprisingly, some commentators have seized on the unveiling of the Hydrogen Hummer as evidence that Schwarzenegger is all show and no substance when it comes to the hard details of how we will actually reduce our fossil fuel consumption and curb GHG emissions.³⁴

Yet Arnold is popular precisely because many Americans embrace his "livin' large" ethos. To return to the "Nixon goes to China" theme, perhaps the populace will follow Arnold into a future of wind farms and fuel efficient cars even if that same populace (albeit a few decades earlier) disdained Jimmy Carter's sensible, but not very fun, example of wearing sweaters and installing solar panels. Even if Arnold is being disingenuous, and even if he isn't and the populace still won't follow him, where does that leave us in terms of gaining some purchase on what

30. Benjamin, *supra* note 25.

31. See Tim Molloy, *Schwarzenegger Unveils Hydrogen Hummer, But Not How He Planned*, DETROIT NEWS, Oct. 23, 2004, <http://www.detnews.com/2004/autosinsider/0410/23/autos-312839.htm>.

32. See Dan Lienert, *Arnold's Hydrogen Hummer*, FORBES.COM, Jan. 4, 2005, http://www.forbes.com/vehicles/2005/01/04/cx_dl_0104vow.html.

33. See Elizabeth Kolbert, *The Car of Tomorrow*, NEW YORKER, Aug. 11, 2003 at 36.

34. See Molloy, *supra* note 31.

scientific consensus tells us is the greatest environmental challenge to date? Could Carl Pope, the current Executive Director of the Sierra Club, move the masses to do something about global warming? Probably not, for a variety of cultural and political reasons. Could a democratic politician, or even a republican who has more credibility on environmental issues? Conceivably, but at the moment Arnold has more wide-spread appeal than some of the other politicians who have stepped up to the plate.³⁵ So, on the one hand, if anyone can convince the average, non-conservationist American that it is both right and “in” to do something about global warming, it just might be Arnold Schwarzenegger. And, on the other hand, we do not seem to have too many other options at the moment, notwithstanding the many impressive efforts at various local levels.³⁶

A glance at the history of American conservation highlights the challenges at hand. In some ways, Arnold is not anomalous among the personages that have been credited with some of the greatest pro-conservation policy turns in America. Yet all of these figures ultimately succeeded or failed depending upon the magnitude of the cultural and economic sacrifices required by their agendas.

THE GREAT BIG MEN OF AMERICAN CONSERVATION

George Perkins Marsh. Henry David Thoreau. John Wesley Powell. Gifford Pinchot. Theodore Roosevelt. John Muir. Aldo Leopold. David Brower. Oh, and Rachel Carson.

35. Of course, the public can be fickle. During the drafting of this essay, Arnold's approval ratings have taken a turn for the worse, with the latest figures in at only 34%. See Mark Baldassare, *Think Globally and Go for the Green, Governor*, SACRAMENTO BEE, Aug. 7, 2005, at E1. There is no suggestion, however, that this has anything to do with his stand on environmental issues. See *id.* Rather, his apparent conflict of interest over muscle magazine endorsements and steroid regulation, his campaign for a November special election, and his disagreements with unions representing teachers, nurses, and firefighters appear to be responsible for the approval rating drop. See Laura Kurtzman & Kate Folmer, *As Special Election Drive Falters, Governor Steps Back*, SAN JOSE MERCURY NEWS, July 25, 2005, at A1; see also Paul Rogers, *Governor's Green Rating Falls, Poll Shows*, CONTRA COSTA TIMES, July 21, 2005, at F4.

36. Many U.S. cities have taken initiatives to address global warming, including Seattle, Chicago, and Salt Lake City. See *Mayors Showcase Green Cities*, July 12, 2005, <http://www.cnn.com/2005/POLITICS/07/13/mayors.climateissues.ap>.

There is one woman in there. This is the list of the towering figures that we cover in fair detail in the gateway class of the natural resources and environmental law curriculum at the University of Colorado School of Law, which we call "Foundations of American Natural Resource Law and Policy." And even though we do have the formidably impressive and important Carson to represent the female sex, there is always a point mid-way through the semester, perhaps when I am describing the amazing fortitude, courage, etc., etc., of the fourth or fifth Outsized (White Male) Historical Figure, when I feel that the materials we have put together paint this very masculinist picture of conservation. And yet, it is true that the people that we discuss played pivotal roles in the advancement of conservation policies.

What is also true, however, is that the ones who managed to be successful in their own era were backed up by masses of regular folks to whom the policies mattered. And the ones whose ideas were too soon for their time, like Marsh and Powell, had to wait until the grass roots caught up with their prescience. In fact, in Powell's case, it is possible to look at current water law and policy in the West and argue that we aren't caught up, even now. My point is not that these larger-than-life Fathers of Conservation created our environmental regulatory state themselves, by sheer force of vision and will, and that therefore perhaps we need Arnold Schwarzenegger to do the same for global warming policy.

Rather, my point is that it may well take a towering figure like Arnold to turn the hard, objective work of swarms of scientists, and the passionate political work of global warming activists, into American policy. Whether ordinary folks are the ones who make history or not, it is the extraordinary ones who get recognized for it. Or, perhaps more accurately, ordinary folks usually need charismatic leaders to make their case in the court of public policy.

POWELL

To situate Arnold in the pantheon of Great White Male conservation leaders, it is not necessary to engage in a tedious march through the biographies of each of the above-named figures. Instead, a sampler will do. Starting with

John Wesley Powell is complicated, but perhaps appropriate. According to some commentators, Powell failed in his own time precisely because he lacked sufficient political savvy and charisma to convince the populace and their representatives that scientifically-based land use planning should pervade western policies about settlement and resource allocation.³⁷ According to others, Powell failed because politicians simply did not want to listen to, let alone heed, Powell's well-documented evidence of scarcity on the western landscape.³⁸

Yet, we talk about Powell today in part because of his forward-looking policy agenda, at least some of which has been adopted, and in part because he was a crazy, one-armed war hero who led the first party down the raging, unknown Colorado River through the Grand Canyon. In other words, Powell was no "girly-man." He was a pumped-up adventurer, albeit not nearly as photogenic as the Hollywood variety of today.

Powell's parents were immigrants, arriving in the United States in 1833 (the same year Darwin set out in the HMS Beagle to undertake his study of the origins of species). Like Arnold, Powell never received much in the way of formal academic education.³⁹ He attended classes at Illinois Institute, Illinois Normal, and Oberlin College, but never received a degree.⁴⁰

Unlike Arnold, however, Powell's first experience with government service was in the military. He enlisted in the Union Army and lost his arm in the Battle of Shiloh in

37. See WALLACE STEGNER, *BEYOND THE HUNDREDTH MERIDIAN* 235-42 (Penguin Books 1992) (1954), (describing the political fate of Powell's *Report on the Lands of the Arid Region*); see *id.* at 294-350 (recounting Powell's efforts to have his ideas about planning and science incorporated into western public policy, and the ultimate defeat in his own time of many of those efforts).

38. See DONALD WORSTER, *A RIVER RUNNING WEST: THE LIFE OF JOHN WESLEY POWELL* 358-59 (2001) (analyzing the "deadly silence" that fell around Powell's report). Worster describes the narrative that attributes Powell's failure to his own personality, but also takes issue with that assessment. According to Worster, "the author's naivete was not the main difficulty. Most of the failure to face reality lay with those congressmen who refused to give the proposed bills careful thought or to confront the scientific evidence behind them or to take the Mormon experience seriously." *Id.* at 359.

39. See STEGNER, *supra* note 37, at 11-16.

40. See *id.* at 15.

1862, returning nonetheless for another tour of duty.⁴¹ After the War ended in 1865, Powell resumed what would become his life's work: mapping the west and planning for its future. After several preliminary western trips, including scaling Pike's and Long's Peaks, Powell secured just enough funding to put together his Colorado River exploration party.⁴² In 1869, they set out from near Greenriver, Wyoming, hoping to stay on the river's brutal flow until after the Grand Canyon in Arizona, where it was known finally to relent to a slower pace.⁴³

It is all but unbelievable that the river that today sees 20,000 life-vest clad rafters and kayakers bounce gleefully down its rapids was, only 140 years ago, literally unmapped, but that was indeed the situation in 1869. Powell and his motley crew of volunteers had no idea what to expect, and the rumors about the river were rampant and bizarre, including that it went underground through a dark and terrifying tunnel. One explorer who had made some attempts to go up the river from the south concluded that "Ours has been the first, and will doubtless be the last, party of whites to visit this profitless locality. It seems intended by nature that the Colorado river, along with greater portion of its lonely and majestic way, shall be forever unvisited and undisturbed."⁴⁴

Powell defied this prediction, making it all the way down the river through the Grand Canyon, and then returning later to make a second trip in order to render his maps more accurate and collect further archeological and geographic data.⁴⁵ Powell's explorations of the Colorado River and its surrounding arid regions became the basis of his subsequent efforts to incorporate scientific knowledge of the land and its resources into rational planning for the settlement of the West. He tried to bring attention to the natural scarcity of water in the region, and hoped to adopt homesteading policies that would allow settlers to work within these natural limitations. For example, in his Report

41. *Id.* at 17.

42. *See id.* at 17-30.

43. *See id.* at 85-110.

44. WORSTER, *supra* note 38, at 130 (quoting Lieutenant Joseph C. Ives).

45. *See* STEGNER, *supra* note 37, at 136-45.

on the Lands of the Arid Regions, Powell proposed that instead of settling the West according to the arbitrary grid lines on the township surveys and allotting homesteaders square plots of 160 acres, homesteads should be divided into two categories, small eighty acre homesteads for farming and larger 2,560 acre pasturage homesteads for ranching, and that surveys of the land for purposes of settlement be based on the topography of the region.⁴⁶

Powell's rationale for his proposals drew on his experience on the land as well as his scientific knowledge. To farm and ranch successfully on lands that receive less than twenty inches of rainfall a year, Powell believed you would have to scale back on the farming operations and provide dramatically more land for grazing. Although Powell failed to get his proposals through Congress, he proved to be correct in his assessment of the inadequacy of the 160 acre homestead. Sixty-six percent of homesteaders failed to stay on the land,⁴⁷ and of those who managed to succeed, many had enlarged the de facto status of their property by grazing their cattle or sheep on nearby public land.⁴⁸

Wallace Stegner's biography of Powell, *Beyond the Hundredth Meridian*, helped to place Powell in the pantheon of conservation visionaries.⁴⁹ Like Powell himself, the book was ahead of its time. Stegner first published it in 1953, when large-scale reclamation projects were still thought to be the solution to the West's water and power problems. In some ways, Powell's vision of an agrarian west, fueled by smart science and engineering, had come true. In others, however, the mega-dams and the wasteful system of private water rights would have been a disappointment to Powell, who was a Jeffersonian populist at heart.

Donald Worster wrote a more recent biography of Powell, confirming many of Stegner's descriptions and assessments, and adding much more in the way of biographical detail as well as analysis of Powell's political

46. *Id.* at 225, 227, 229.

47. *See id.* at 220.

48. *See* CHARLES WILKINSON, *CROSSING THE NEXT MERIDIAN* 83 (1992).

49. *See* STEGNER, *supra* note 37.

successes and failures.⁵⁰ In addition, one fictionalized account of Powell's first Colorado trip and yet another non-fiction account were published in 2001.⁵¹ It seems we are in a mini-Powell revival. Today, John Wesley Powell is not exactly a household name, but he has his following. Every river rat who floats the Grand Canyon knows his story, and every student of natural resources law knows that from that river exploration came an understanding of scarcity and the need for planning that we have yet to fully internalize.

PINCHOT AND TR

Gifford Pinchot and President Theodore Roosevelt were a team, and both fit easily into the "larger-than-life" conservation hero theme that will lead us back to Arnold. To quote Charles Wilkinson, Gifford Pinchot was the "Grand Master" of the National Forest Service.⁵² His name is still revered in that agency, and invoking it is akin to calling on a holy spirit. Roosevelt appointed him, and he and Roosevelt together created the bulk of the national forest system that remains a public resource today. Pinchot became chief of the Division of Forestry in the Agriculture Department in 1898.⁵³ In 1905, he succeeded in having responsibility for the nation's 63 million acres of forest lands transferred from The Department of the Interior to The Department of Agriculture so that he could manage them.⁵⁴

Pinchot's management philosophy entailed ensuring that the forest resource would endure to provide timber for generations to come. He was not a "preservationist," in that he did not believe that lands he managed should be set aside from human use, but he also strongly believed that the forests should be managed scientifically for their most productive use over time. His creed, which is still the dominant concept officially embraced by the Forest Service,

50. See WORSTER, *supra* note 38.

51. See EDWARD DOLNICK, *DOWN THE GREAT UNKNOWN* (2001); JOHN VERNON, *THE LAST CANYON* (2001).

52. See WILKINSON, *supra* note 48, at 124.

53. *Id.*

54. *Id.* at 126.

was embodied in what has become known as “the Pinchot letter.” In the letter, which Pinchot drafted as a guidance document for the Secretary of Agriculture, Pinchot describes a utilitarian perspective on forests, but one that looks towards maintaining the resource for human use indefinitely. The letter provides in part:

In the administration of the forest reserves it must be clearly borne in mind that all land is to be devoted to its most productive use for the permanent good of the whole people, and not for the temporary benefit of individuals or companies You will see to it that the water, wood, and forage of the reserves are conserved and wisely used for the benefit of the home builder first of all where conflicting interests must be reconciled the question will always be decided from the standpoint of the greatest good of the greatest number in the long run.⁵⁵

Like Powell, Pinchot supported human use of natural resources, and like Powell, he advocated doing so sustainably within the sense that word would have had at the time. Unlike Powell, Pinchot had the power, the political connections, and the momentum of history to carry out most of his policy agenda. In the second half of the nineteenth century, the forests were ravaged. Excessive timber cutting, mining, and subsidies to the railroads, which provided free timber for construction as well as vast land transfers totaling 133 million acres, had taken their toll on the nation’s forests.⁵⁶ The forces were therefore building toward reform when Pinchot was just a child. Legislation passed in 1891 authorized the president to withdraw specified public lands from settlement to create forest reserves. President Harrison reserved 13 million acres of forest lands, and President Cleveland added another 26 million.⁵⁷ In 1897, Congress passed the Organic Act, providing funding and basic management guidelines for the Forest Service that would be in place for the next

55. *Id.* at 128 (quoting U.S. DEP’T OF AGRIC. FOREST SERVICE, THE PRINCIPAL LAWS RELATING TO THE ESTABLISHMENT AND ADMINISTRATION OF THE NATIONAL FORESTS AND OTHER FOREST SERVICE ACTIVITIES 67 (1964)).

56. *Id.* at 18, 121; *see also* CAROLYN MERCHANT, THE COLUMBIA GUIDE TO AMERICAN ENVIRONMENTAL HISTORY 126 (2002).

57. WILKINSON, *supra* note 48, at 122-23.

eight decades.⁵⁸ While there was certainly political turmoil surrounding the question of whether the federal government should become a permanent land manager, there was also sufficient support for the idea to make space for Pinchot to act.

That space turned out to be just big enough. Not long after Pinchot's success at transferring the forests from Interior to Agriculture and instituting his "greatest good for the greatest number" management philosophy, the western politicians rebelled against the creation of additional reserves. In 1907, Congress passed legislation that prohibited any further reserves in Colorado, Idaho, Montana, Oregon, Washington, and Wyoming.⁵⁹ The "no more forests" provision was appended to the annual appropriations bill, so Roosevelt was constrained to sign it. Before the moratorium went into effect, however, Roosevelt signed off on the "midnight reserves," setting aside an additional 16 million acres of forest lands in the now-forbidden states. Pinchot was instrumental in laying the groundwork for the reserves, having spent the previous months studying the maps and surveys and setting out the boundaries for these last-minute forest reservations.⁶⁰

The midnight reserves were the last conservation hurrah for Roosevelt and Pinchot. President Taft was elected in 1908, and Pinchot was fired after some internal conflicts in 1910.⁶¹ The idea of federal management and control has remained controversial, but the vast majority of Americans support the notion of national forests today. They do not know the history, but they know that they can walk anywhere on those lands, unrestrained by "no trespassing signs" or shouts of "off my property." They may have no concept of silviculture, but they are glad to have those trees around to protect, shelter, and shade.

Should they thank Roosevelt and Pinchot? Certainly these two determined men are responsible for the laws creating the preserves, and certainly Pinchot's influence on

58. *Id.* at 124.

59. *Id.* at 126.

60. *Id.* at 127; *see also* CHAR MILLER, GIFFORD PINCHOT AND THE MAKING OF MODERN ENVIRONMENTALISM 163-64 (2001).

61. *See* WILKINSON, *supra* note 48, at 127.

multiple use management is real. And just as importantly, history has identified these two figures as heroes of conservation. Like Powell, they make fitting subjects for biographies and anecdotes because their personalities match a certain vision of the rough-hewn American hero. Though Pinchot was educated at Yale and traveled in Europe, he was a tough guy. Take, for example, this story which Charles Wilkinson quotes with relish:

One of the most spectacular of Pinchot's many hikes with Roosevelt occurred late one afternoon after a telephone call from the President suggesting a walk. Pinchot went from his office to the White House dressed as he was . . . Because it had been raining hard, they soon found themselves wet to their knees as they walked along the Potomac River. When, with darkness coming on, their path was blocked by a canal, the President suggested that Pinchot and he swim it . . . [They] placed their wallets and other valuables in their hats, put their hats on their heads, and swam across . . . "And then," said Pinchot, "we walked back to the White House with much merriment." As soon as Pinchot reached home the comment of Mary McCadden, his childhood nurse, proved that such escapades were not uncommon. As his sleeve brushed her hand she quickly exclaimed: 'Drenched! You've been out with the President.'⁶²

These are real men, notwithstanding the reference to the "childhood nurse." The achievements are real too, of course, but telling the story through their biographies is easier because of their rugged appeal, and we seem to crave that narrative.

MUIR

In December 1874, John Muir climbed to the top of a Douglas Fir in the middle of a Sierra rainstorm and stayed there while the big tree whipped him back and forth. Hugging the tree, rain poring down his face, he savored every second of it.⁶³ What better character to lead a political movement on behalf of that tree and its landscape? Muir made the case for his beloved Sierra through his

62. *Id.* at 125 (quoting M. NELSON MCGEARY, GIFFORD PINCHOT: FORESTER-POLITICIAN 66 (1960)).

63. See JOHN MUIR, *Wind-Storm in the Forest*, in THE WILDERNESS WORLD OF JOHN MUIR 181 (Edwin Way Teale ed., 1982).

journalistic writings, and he also engaged in significant scientific research concerning the glacial history of the Yosemite Valley. Muir, founder of the Sierra Club, turned his fellow tree-huggers into a political force by organizing them and giving them an eloquent voice.

A contemporary of Pinchot and Roosevelt, John Muir was operating in the same historical milieu. The United States had been settled from coast to coast. The Gilded Age had exposed the public to the excesses of unbridled and monopolistic development. There was room to argue that rather than press on relentlessly with the industrialization of every corner of the country, the nation should pause to consider what should be left untouched. Muir gave expression to that impulse to preserve.

Like Powell, Muir was the son of immigrants and was raised with an intense religious fervor.⁶⁴ Also like Powell, Muir began to explore on his own at an early age. He walked from Indianapolis to the Gulf of Mexico.⁶⁵ He took a boat to San Francisco, and then hiked from there to Yosemite.⁶⁶ He undertook his Sierra explorations often with little more than a few crusts of bread and some tea for nourishment.⁶⁷ Muir wrote prolifically about his adventures and observations, publishing more than three hundred articles and ten books over the course of his life.⁶⁸ Through his writings, Muir developed a loyal following. He mobilized that support into a hearty band of activists willing to support his preservation agenda. Bolstered by his followers, Muir played a role in establishing Sequoia, Mount Rainier, Grand Canyon and Petrified Forest National Parks, and also met personally with President Roosevelt in 1903 in order to guide the President's conservation programs.⁶⁹ Muir's successes came to an end over the battle regarding construction of a dam and reservoir in the Hetch-Hetchy Valley. Like Yosemite Valley to the south, Hetch-Hetchy

64. Frank E. Burke, *Introduction to JOHN MUIR, WILDERNESS ESSAYS* vii, viii-ix (1980).

65. *Id.* at xi.

66. *Id.* at xii.

67. *Id.* at xxiii.

68. See Sierra Club, John Muir: A Brief Biography, http://www.sierraclub.org/john_muir_exhibit/life/muir_biography.html (last visited Oct. 13, 2005).

69. See *id.*

was carved by glaciers and made a striking composition of forest lands, canyons, and waterfalls. In 1901, San Francisco claimed that it needed to dam Hetch-Hetchy in order to meet its water supply needs. In the wake of the earthquake and fire of 1906, the pro-reservoir forces had political sympathy and momentum.⁷⁰ Furthermore, the country had just witnessed a spate of preservation initiatives, and some, including Gifford Pinchot, expressed the sentiment that Hetch-Hetchy could properly be sacrificed for this important urban need for water.⁷¹ Muir succeeded in making the dam a controversial political issue, but in the end he failed to stop it.⁷² He died not long thereafter.

John Muir was a wild man like Powell, a forceful and stubborn leader like Pinchot, and like both, today is a symbol for a set of ideas about the environment. And in Muir's final political loss, he is also a symbol of the perpetual tension between human consumption of our natural resources and their preservation. Whether fair or not as a representation of who he was and what he thought (and many would say it is indeed fair), the image of Muir, rain-soaked and whipped by the wind, clinging to that Douglas Fir, is an aptly romantic symbol of the preservationist position.

BROWER

In his book *Encounters with the Arch Druid*, John McPhee captures the personality of David Brower through the device of throwing him together with several equally informed and compelling personalities who hold differing views on conservation.⁷³ Brower floats through the Grand Canyon with Floyd Dominy, head of the Bureau of Reclamation and proponent of big dam projects. Brower hikes in the cascades with a mining engineer. It is no accident that in each pairing, there is one who favors development and there is Brower, accepting no argument

70. Marc Picker et al., *The Raker Act: Legal Implications of Damming and Undamming Hetch Hetchy Valley*, 21 U.C. DAVIS L. REV. 1305, 1306-15 (1988).

71. *Id.* at 1314.

72. *Id.* at 1312-18.

73. See JOHN MCPHEE, *ENCOUNTERS WITH THE ARCHDRUID* (1971).

that would lead to further degradation of the last remaining wild places.

Brower was born in Berkeley, California on July 1, 1912.⁷⁴ He grew up hiking, biking, and collecting butterflies around Strawberry Creek and in the Berkeley Hills.⁷⁵ Like Powell, Brower enrolled in college but never completed his degree. He opted for the mountains instead, joining the Sierra Club in 1933, and leading its High Trips in the mountains.⁷⁶ Brower achieved more than seventy first-ascents throughout the west, many in Yosemite and the Sierra.⁷⁷

Like Muir, Brower was not content to rest with his own explorations of the mountains. Muir first politicized the Sierra Club with the battle over Hetch-Hetchy, but Brower took the Club to the next level. In 1952, Brower became the Club's first Executive Director and famously opposed the damming of the Green River through Dinosaur National Monument.⁷⁸ In brokering the Dinosaur deal, Brower pledged to the Bureau of Reclamation that the Sierra Club would not voice opposition to the other major dam project in the Colorado Plateau, which was to plug Glen Canyon and create a dam and reservoir at what is now Lake Powell.⁷⁹ Brower came to regret this bargain, and in later years became a fierce voice in the seemingly quixotic effort to dismantle Glen Canyon Dam.

David Brower is probably best known for saving the Grand Canyon from the reclamation fervor that gripped federal agencies in the 1950s and 1960s. Boaters who float the Canyon today can still see the holes drilled in the walls of Marble Canyon, just before the river turns west into the inner gorge. The project had gotten that far before Brower's

74. See Ecotopia.org, Ecology Hall of Fame: David Brower, 1912–2000, <http://www.ecotopia.org/ehof/brower/bio.html> (last visited Oct. 24, 2005).

75. See Daniel Coyle, *The High Cost of Being David Brower*, OUTSIDE MAG., Dec. 1995, available at http://outside.away.com/outside/magazine/1295/12f_high.html.

76. See *id.*

77. See *id.*

78. See *id.* (the article, which otherwise accurately describes Brower's involvement, misnames the river that flows through Dinosaur National Monument as the Colorado River).

79. See Ecotopia.org, *supra* note 74.

aggressive campaign succeeded. At his urging, the Sierra Club hired a top advertising agency to design the effort, and the results included full-page advertisements in *The New York Times* and *Washington Post* with the captions: "Should We Also Flood the Sistine Chapel, So Tourists Can Get Nearer the Ceiling?"⁸⁰ It was 1966, and the public appetite for flooding what the Sierra Club had successfully presented as a sacred national treasure was scant. Brower succeeded in putting a halt to the dam at Marble Canyon. Meanwhile, the Internal Revenue Service had revoked the Club's 501(c)(3) tax exempt status due to excessive political lobbying; the transition from social hiking club to political interest group was complete.⁸¹

Like Powell, Brower scaled mountains and explored rivers. Like Muir, Brower galvanized the conservation movement. And like Pinchot and Roosevelt, Brower can fairly be credited with saving millions of acres of public lands for future generations. Like all of these, Brower was also a feisty, strong-willed, and often uncompromising character.

AND WHAT ABOUT CARSON?

What about Rachel Carson? Like Muir, she was a writer. Her book *Silent Spring* awakened millions of Americans to the extraordinary effects of what were then ordinary chemicals.⁸² DDT, which made life tougher for malaria bugs, also made life impossible for song birds and a whole host of other species up the food chain. As Arnold acknowledged, from an environmental perspective, everything is connected. The insight that you cannot tamper significantly with one strand of the natural web without disfiguring the entire tapestry was made commonplace by Rachel Carson.

In addition, Carson's main political message in *Silent Spring*, that ordinary citizens have a right to be informed about what corporations and the government are doing that affects the environment, was for a time largely successful.

80. See *id.*; Counterpunch.com, The Arch-Druid Passes: David Ross Brower, 1912-2000 (2000), <http://www.counterpunch.org/brower.html>.

81. See Coyle, *supra* note 75.

82. RACHEL L. CARSON, *SILENT SPRING* (1962).

In the wake of *Silent Spring*, Congress passed the National Environmental Policy Act, as well as the other big environmental regulatory statutes, all of which provide for extensive public notification and participation in the process of making and setting environmental standards for industry and government.

Rachel Carson's influence and success would be very difficult to replicate today. She accomplished what she did largely by remaining on the safe side of the typewriter. It seems unlikely in the current times that a single book could break through the constant noise of information, let alone capture and mobilize the public the way that *Silent Spring* did. Carson certainly has her analogues. Elizabeth Kolbert's series on global warming that appeared in *The New Yorker* appears to be an attempt to translate for the average (albeit *New Yorker* reading) citizen the volumes of objective science that indicate that global warming is real, serious, and on the brink of being utterly beyond our control.⁸³ But there is no current *Silent Spring* in terms of reach and impact, nor is there likely to be.

The reasons for this are grounded in the stubborn nature of the global warming problem as well as the precisely antithetical nature of our cultural and economic zeitgeist. The solutions to DDT and other poisonous chemicals were, compared to the solutions to global warming, fairly simple: test the chemicals and regulate them. Even with powerful and wealthy opposition from the chemical corporations, the political process proved to be surmountable.

Similarly, compared to the challenges of reducing global GHGs to pre-1990 levels, even the conservation and preservation feats achieved by Muir, Pinchot, Roosevelt, and Brower were relatively simple. Each required bucking at least one large and powerful constituency, and in some instances a confluence of constituencies. But forest reserves, for example, could be created with the stroke of a pen, and even when the political opposition rose to a fever pitch and over-rode the presidential power to create new forest reserves in most of the western states, some sneaky midnight signatures could create a lasting legacy of national forests.

83. See Kolbert, *supra* note 16.

Indeed, if we look at the track record of each of our conservation heroes, one worrisome theme is that the closer a policy position comes to requiring limitations upon the current generation, the more likely that policy is to fail. Powell, who wanted to pause homesteading long enough to implement a sustainable settlement policy, could not overcome the momentum to get people on the land as soon as possible.⁸⁴ Muir could not convince Congress that San Francisco could do without Hetch-Hetchy's water. Brower could stop a dam at Dinosaur, but only by letting one get through at Glen Canyon. Development is a constant, one-way ratchet, and we can achieve environmental progress only so long as we continue to put off the day when development and protection go head to head.

MAKING GLOBAL WARMING A MORAL ISSUE

I have so far been leaving something out. Each of our conservation heroes has become not just a symbol for a dry set of policy solutions, but also for a deep and resonant set of values. The values by and large complement each other, though not always easily. In addition, in some cases, in order to achieve some aspect of those values at the policy level, it was necessary to sacrifice other equally important values that, in the long run, have just as much to do with achieving the kinds of policies that will be necessary to address global warming.

Powell is associated with deeply Jeffersonian, populist values. Powell wanted to apply science to the settlement of the west because he had a vision about people on the land. Yes, water should be stored and diverted, because that is how to settle a land that receives less than twenty inches of rain fall each year, but storage and diversion should happen on a small scale, a scale that allows for participatory, democratic forms of governance over the resource.⁸⁵ Powell failed in this vision because the time was not right for reigning in appetites of any kind. The ideal may have been Jeffersonian, but the practices were those that ultimately

84. See WORSTER, *supra* note 38, at 356-70.

85. See *id.* at 354-58; see also STEGNER, *supra* note 37, at 224-29.

avored large-scale corporate interests.⁸⁶ Yet Powell is remembered today in part because he was more than a technocrat with a rationalist desire to include science in planning. We remember Powell because he had a vision, about which he cared deeply, of people on the land.

The same is true for the Pinchot/Roosevelt team. Pinchot wanted the forest resource preserved for the common man, "for the home-builder first of all."⁸⁷ The ecological benefits of managing the forests, rather than selling them to the highest bidder or opening them up for immediate clear-cut harvests, was in some sense a side-effect of achieving the goal of sustaining the resource for people over time. Both men, however, also appreciated the values inherent in vast open spaces. Pinchot was an avid outdoorsman and hiker, and Roosevelt, of course, was a big game hunter and explorer. Indeed, Roosevelt expressed his preservation impulse through his use of the Antiquities Act, designating Devil's Tower as the first national monument and using his executive power to initiate the national wildlife refuge system. The populist aims of Roosevelt's progressive era policies helped to dampen what could otherwise be the elitism of the executive branch's top-down approach to conservation policy. Using federal power for the people and against the corporations who would otherwise rape and pillage the land was a narrative that had widespread appeal, even if there was in fact an elitist element to some aspects of the conservation movement at that time.⁸⁸

Muir spoke to a different set of values. He gave voice to the impulse to identify spiritual and moral value in nature itself. Muir does not articulate the value of nature in precise analytical terms. To the contrary, his romantic prose itself expresses the sense of kinship and wonder that he feels with the natural world. There is beauty, wonder, and *goodness and rightness* in it. The passion that Muir incited in his readers, and still incites in the many

86. See WORSTER, *supra* note 38, at 358-59; see also STEGNER, *supra* note 37, at 221-23.

87. WILKINSON, *supra* note 48, at 128 (quoting U.S. DEP'T OF AGRIC. FOREST SERVICE, THE PRINCIPAL LAWS RELATING TO THE ESTABLISHMENT AND ADMINISTRATION OF THE NATIONAL FORESTS AND OTHER FOREST SERVICE ACTIVITIES 67 (1964)).

88. See SAMUEL P. HAYS, CONSERVATION AND THE GOSPEL OF EFFICIENCY (1959).

2005]

OUR COMMON FUTURE

951

wanderers and nature lovers who return to his passages today, is at the core of his political agenda.

Brower took that passion even further. The Sierra Club's advertisement that succeeded in stopping the dam at Marble Canyon invited the public to see the government's proposal as akin to the destruction not just of art, but of sacred property. The Sistine Chapel is not just anywhere; it's in The Vatican. We would be engaging in sacrilegious behavior to flood the Grand Canyon for the sake of today's water and power needs.

But what is the searing set of values that could mobilize the populace to address global warming? There are two questions that precede this: what are the values that motivate and inspire the environmental movement today, and why aren't they up to the task? As to the first question, it is of course very difficult to generalize about a movement that has become so dispersed that in some sense it no longer exists. As Bill McKibben points out, environmentalists' many victories have resulted in the atomization of their agenda:

Every valley in the country has some group busy trying to Make Things Better or at least Keep Them From Getting Worse. The environmentalist creed has sunk in deep in the last thirty years, has been lodged in so many laws and agencies and cerebellums that it's now a fixed part of the landscape.⁸⁹

So the "environmentalist creed" has gone local and global. It has also been intermingled with claims for equal treatment of minorities and the preservation of indigenous cultures. And relatedly, it has become married to the need to continue to provide education, health and livelihood to the earth's burgeoning human population under the rubric of sustainable development. The good news is that the environmental creed is everywhere. The bad news is that it is not all that distinct.

One repercussion of environmentalism's success is that it is not credited with many of the results. Instead, a narrative has emerged that attaches two narrow frames to environmentalism. The first is the crabby misanthrope

89. Bill McKibben, *An Atom of Difference*, ORION MAG., July-Aug. 2005, <http://www.oriononline.org/pages/om/05-4om/McKibben.html>.

frame. The second is the nerdy technocrat frame. Neither frame is fair or accurate in any broad way. Yet, like all narratives that catch on, there is some kernel of resonance within each.

The crabby misanthrope frame identifies environmentalists as grim, people-hating extremists who care more about obscure toads and old gnarly trees than babies and grandparents. I am overstating the frame, of course, but not by all that much. This frame exists in the minds of a surprisingly wide range of members of the public. Here is some evidence of it. A canvasser for "Environment Colorado," came to my door recently. I was not going to write her a check at that moment for a variety of reasons, but because I was a canvasser myself once and am supportive in general of her organization's work, I engaged her in some friendly small talk. She responded that it was quite pleasant to knock on doors in Boulder, as compared to her last gig in Colorado Springs, where part-way through the canvasser's introductory rap about the importance of retaining the "Roadless Rule" for Colorado's national forests, one woman cut in, exclaiming "that's the problem with you environmentalists. You like trees more than you like babies." The canvasser had not said one word about babies one way or the other, and yet the link between caring about trees and not caring about babies was entrenched in the mind of that particular resident of Colorado Springs. I am positive she is not an outlier, at least in certain communities.

Softer versions of this frame exist in the minds of many others. In a recent issue of *The New Yorker*, Jonathan Franzen confesses both his passion for bird-watching and his burgeoning understanding of the connection between the survival of the objects of his desire (the many diverse and rare bird species as well as his second wife), and our ability to address global climate change.⁹⁰ The essay, which arrives at Aldo Leopold-like conclusions in an engagingly self-absorbed kind of way, refers to Franzen's own ambivalence about "environmentalism." Consistent with the crabby misanthrope frame, Franzen humorously confesses that as

90. Jonathan Franzen, *My Bird Problem*, NEW YORKER, Aug. 8 & 15, 2005, at 52.

he fell in love with the landscapes of the American west, he fell increasingly out of love with its human inhabitants:

What sickened and enraged me were all the other human beings on the planet. The fresh air, the smell of firs, the torrents of snowmelt, the columbines and lupine, the glimpses of slender-ankled moose were nice sensations, but not intrinsically any nicer than a gin martini or a well-aged steak. To really deliver the goods, the West also had to conform to my wish that it be unpopulated and pristine.⁹¹

A bit later on, describing his state of mind after moving back to Philadelphia, a place where he felt less guilty about his own contribution to ruining the environment because “Eastern ecologies, specifically Philadelphia’s, had the virtue of being already ruined,” Franzen confesses that his desire to change his character in order to sustain his first marriage “was about as appetizing (and realistic) as volunteering for the drab, homespun, post-consumerist society that the ‘deep ecologists’ tell us is the only long-term hope for the planet.”⁹² Drab and homespun—who *would* want to do the hard work necessary to arrive at such a future? Similarly, postmodernist intellectual Andrew Ross describes a “grim backpacker” strain within environmentalism, criticizing aspects of the movement that he perceives are against modernity (and of course post-modernity).⁹³

And finally, the debate about the “Death of Environmentalism” has surfaced this frame as a problem for the movement. In their speech to environmental grant-makers, Michael Shellenberger and Ted Nordhaus accuse the big environmental non-profits of becoming distanced from the needs and concerns of ordinary folks.⁹⁴ So fair or not, this perception exists. As hinted at above, there is a kernel of fairness in it. Some enviros are explicitly misanthropic, prioritizing the survival of other species over the welfare of all of humanity. But they are a tiny, fringy minority. More challengingly, at the core of almost every

91. *Id.* at 57.

92. *Id.*

93. See ANDREW ROSS, *THE CHICAGO GANGSTER THEORY OF LIFE* (1994).

94. See Michael Shellenberger & Ted Nordhaus, *The Death of Environmentalism: Global Warming Politics In a Post-Environmental World* (2004), http://www.thebreakthrough.org/images/Death_of_Environmentalism.pdf.

instantiation of the environmental movement is a belief that other species, their ecosystems, their habitats matter, and matter deeply, to humanity, and yet meeting the needs of both appears to be staggeringly out of reach.

The nerdy technocrat frame is in part the legacy of Rachel Carson's success. Many environmental problems are scientific problems that can be addressed by better information about how our actions affect the world around us. A great deal of this information is scientific. The rest of it can be highly bureaucratic. Whether determining the issuance of a National Pollution Discharge Effluent System permit under the Clean Water Act or sorting through the alternatives of an Environmental Impact Statement, expertise and patience appear to be the leading qualifications. This frame results in at least two reactions that hinder the cause of engaging the public in addressing global climate change. First, passivity results from the sense that the experts are handling things. Second, alienation and boredom are caused by the mind-numbing attention required to wade through various bureaucratic documents that surround environmental decision-making. Passivity and boredom are unlikely seedbeds for the growth of a world-wide movement to change the way we live now.

Yet there is hope. The environmental creed is everywhere, and at the same time the creed itself has matured and expanded. Contrary to the view of environmentalism embodied in the crabby misanthrope frame, a mainstay of many local environmentalist agendas is promoting strong, healthy, local communities. As Bill McKibben writes:

More and more . . . I find myself writing about local economies—in part because their supply lines are shorter, their energy demands smaller. But in part because the food tastes sweeter, because the deeper community feels good, because electricity from the windmill on your ridge is better than electricity from the wrecked Appalachian mountain or the overstretched Mideast pipeline.⁹⁵

People are very much a part of this environmental agenda, just as they are in the global version of this embodied in sustainable development.

95. McKibben, *supra* note 89, at 3.

Sustainable development became a term of art after the publication of *Our Common Future*, the final report of the World Commission on Environment and Development, which was convened by the United Nations.⁹⁶ Known as “the Brundtland report,” after the Chairman of the Commission, Gro Harlem Brundtland, the publication explores environmental and development issues in tandem, and concludes that governments world-wide must take simultaneous efforts to address poverty and environmental degradation so that meeting the basic needs of humanity is not perpetually in tension with the long-term health of the environment. As the report explains at the outset:

There has been a growing realization in national governments and multilateral institutions that it is impossible to separate economic development issues from environment issues; many forms of development erode the environmental resources upon which they must be based, and environmental degradation can undermine economic development. Poverty is a major cause and effect of global environmental problems. It is therefore futile to attempt to deal with environmental problems without a broader perspective that encompasses the factors underlying world poverty and international inequality.⁹⁷

The report called on all nations of the world to adopt eight principles in order to integrate sustainable development into their policies. The principles are: (1) to revive growth in order to alleviate poverty, both for equitable and environmental reasons (noting that poverty is a major cause of environmental degradation); (2) to change the quality of growth: “Revived growth must be of a new kind in which sustainability, equity, social justice, and security are firmly embedded as major social goals;” (3) to conserve and enhance the resource base: “sustainability requires the conservation of environmental resources such as clean air, water, forests, and soils; maintaining genetic diversity; and using energy, water, and raw materials efficiently;” (4) to ensure a sustainable level of population: “Population policies should be formulated and integrated with other economic and social development programmes—education, health care, and the expansion of the livelihood

96. The Brundtland Report, *supra* note 6.

97. *Id.* at 3.

base of the poor;” (5) to reorient technology and manage risks; (6) to integrate environment and economics in decision-making; (7) to reform international economic relations; and finally (8) to strengthen international cooperation.⁹⁸

Since the Brundtland Report’s publication, there has been wide-spread acceptance of the general goals of sustainable development; who wouldn’t want to eliminate poverty and protect the environment? Not surprisingly, a follow-up study revealed that although there were hopeful signs in some respects, very little progress had been made on the poverty front, and the big picture was still one of over-consumption by the developed world and poverty and environmental degradation in the underdeveloped and developing worlds.⁹⁹ The goals are one thing; reorienting local and global institutions to reflect and achieve these goals is another.

Furthermore, there is something undeniably utopian in the sustainable development agenda. At its core is the notion that eliminating poverty (i.e., helping people and promoting equity and justice) is directly linked to solving our global environmental problems. There is a “we can have it all,” Arnold-like quality to sustainable development’s utopianism: “Guess what? The only way to really help all the people in the world is also to save the environment, and vice versa!” Yet we can certainly imagine a world in which vast swaths of humanity live in dire circumstances, and a minority lives in pollution free-zones surrounded by pristine open space, which is populated by diverse native species. This world would have to be deeply hierarchical, perhaps even fascistic, to maintain the drastic divisions in resources. But recall that Germany’s National Socialist party held the core belief that the homeland had to be cleared of vermin in order to restore the balance of nature.¹⁰⁰ So it is certainly not unheard of for fascistic governments to hold environmental goals, and it is

98. *Id.* at 363-65.

99. See LINDA STARKE, SIGNS OF HOPE: WORKING TOWARDS OUR COMMON FUTURE 161-67 (1990).

100. See Michael E. Zimmerman, *Heidegger and Deep Ecology*, http://www.tulane.edu/~michaelz/essays/heidegger/heidegger_deep_ecology.htm (last visited Oct. 24, 2005).

imaginable that extreme forms of human oppression could result in a world in which other species are better off. Similarly, we can probably imagine a world in which unsustainable forms of development have redressed a fair amount of global poverty, and as a result the globe is completely paved over, with a remnant handful of endangered species living in zoos.

In its utopianism lies sustainable development's deep moral vision. Yes, we can imagine a world in which there is less pollution, more biodiversity, and crushing poverty and oppression. And yes, we can imagine a world with less poverty and no nature. But we object deeply to those visions. And because we can also imagine a world in which there are local, healthy economies thriving due to clean energy technologies and sustainable resource practices; where communities can nurture ancient cultures without destroying their homelands; where the developed world has learned, happily, to live with less fossil fuel and, well, just less; and where, as a result, rare birds and butterflies, unheard-of newts and salamanders, wolves, and polar bears still roam their habitat—we cling to that vision instead. At least many of us do. It is a wildly vibrant vision. It is a vision that includes the well-being of people, now and in the future. It is neither misanthropic nor technocratic. Can Arnold Schwarzenegger be the poster boy for that vision?

Okay, okay. I can hear the objections. First of all, Arnold has signed an executive order addressing *global warming*. He has not endorsed a larger sustainable development initiative. Second, the executive order is not enforceable, has no specific implementation plans, and suffers from the “go it alone” problems discussed above. Third, well, he's Arnold, with the Hummers and all of that. I'll address these objections in turn.

First, global warming is a good place to start to promote sustainable practices. Despite the controversies surrounding anthropogenic climate change, Arnold is correct that there is scientific consensus about the fact that it is happening.¹⁰¹ Here is what we know: Combustion of

101. See Executive Order, *supra* note 2; see also Schelling, *supra* note 10, at 582. Schelling positions himself as a cautious, yet convinced, commentator on global warming:

fossil fuels produces CO₂, and other industrial activities produce additional GHGs.¹⁰² These gases trap heat.¹⁰³ Since industrialization began roughly 200 years ago CO₂ levels have risen from 280 parts per million to 380 parts per million, with most of that increase occurring in the last thirty years.¹⁰⁴ Finally, we know that the global surface temperature has risen sharply since 1950.¹⁰⁵ There is much that we don't know about climate, including the extent to which natural fluctuations are also contributing to the current warming effect, and the extent to which there might have been similar fluctuations in the past. Of even more concern, we don't know the precise consequences of climate change. Indeed, scientists, a careful lot, are reluctant to take bold positions on such questions.¹⁰⁶

We do know some of the immediate and likely consequences, however, and they are of grave concern. In Alaska, coastal areas are eroding and the permafrost is melting, causing human and animal disruption of various kinds. Throughout the northern and southern hemispheres, glaciers and ice caps are melting. Parts of the Antarctic ice shelf are collapsing. Sea levels are rising.¹⁰⁷ Furthermore, in the realm of the unknown there is even greater cause for alarm. For example, if the Greenland ice sheet melts, it could raise sea levels by as much as twenty-three feet. Scientists do not know how warm it would have to be to set that process in inexorable motion, nor can they predict the

I find the case for prospective greenhouse warming to be convincing In the two major unspecialized scientific journals, *Science* and *Nature*, one has to go back a decade or two to find serious doubts about the basic science. Rarely is there such scientific consensus as there is on whether the greenhouse effect is real, even though it cannot yet be uncontrovertibly detected in the recent climate record.

Id.; see also Daniel Sarewitz & Roger Pielke, Jr., *Breaking the Global Warming Gridlock*, ATLANTIC MONTHLY, July 2000 ("The [global warming] controversy is informed by strong scientific evidence that the earth's surface temperature has warmed over the past century.").

102. See Sarewitz & Pielke, *supra* note 101.

103. See *id.*; see also Schelling, *supra* note 10, at 581-82.

104. See Kolbert, *supra* note 16, at 54.

105. See Sarewitz & Pielke, *supra* note 101; Schelling, *supra* note 10, at 581.

106. See Sarewitz & Pielke, *supra* note 101; Schelling, *supra* note 10, at 581.

107. See Kolbert, *supra* note 16. See generally *The Big Thaw*, NAT'L GEOGRAPHIC, Sept. 2004, at 13.

precise effects of such a dramatic rise in sea levels, but the present signs are worrisome.¹⁰⁸

Global warming is therefore arguably the ideal prism through which to address the concerns of sustainable development. It is a problem with a global cause, but one to which developed nations have contributed disproportionately. It is a problem in need of a global solution, and that solution requires addressing our unequal patterns of consumption and finding renewable sources for energy world-wide. Finally, it is a problem, though potentially sweeping in magnitude, that richer nations will no doubt be able to weather much better than poorer ones. So it is not the case that we absolutely must do something about global warming or our (western, developed nation) children will suffer. They might not, and their children might not. Of course, they might, and their children's children likely will. And people in poorer nations certainly will, much sooner. And butterflies, birds, wolves, polar bears—any species dependent on its unique habitat, will certainly suffer at best and go extinct at worst. So deciding to address global warming is akin to having a vision about what is right in the world, for people and for the other species that live here with us.

Second, the legal means by which to address global warming are still in the experimentation stage. The Kyoto Protocol, celebrated in some quarters and maligned in others, reaches the end of its requirements in 2012. There will surely be a need for a continuation of some international accord. In the mean time, individual countries and local governments are experimenting with caps, trading schemes, goals, and other mixes of top-down and market-based mechanisms. It is too soon to condemn Arnold for a weak Executive Order, particularly when the state already has other, harder mechanisms in place.¹⁰⁹ In this context, with so much uncertainty, perhaps law's greatest function is symbolic.

108. See *A Planetary Problem: Elizabeth Kolbert Discusses Climate Change*, NEW YORKER ONLINE ONLY, May 2, 2005, <http://www.newyorker.com/online/> (follow "The Hard Drive" hyperlink).

109. See Christopher T. Giovinazzo, *California's Global Warming Bill: Will Fuel Economy Preemption Curb California's Air Pollution Leadership?*, 30 *ECOLOGY L.Q.* 893 (2003) (describing California's global warming legislation.).

Third, well, exactly: he's Arnold, with the Hummer and the big calves and the attractive, brainy wife and the ridiculous movies. Even I, a pointy-headed academic, have some understanding of his appeal. Back when Arnold was just a pumped up movie star, I went through a brief but intense phase as a fan. My fascination with Arnold started with his film debut in *Pumping Iron* and proceeded through *The Terminator*. Then it was over. Maybe I had reached my saturation point for special effects, pointless mayhem, and steroid-induced musculature. Nevertheless, my Arnold period left me with a sense of his allure. He is excessive and flamboyant. He seems always to be having a great time. He is utterly fake, yet he is also the real thing.

For all these reasons, Arnold is so quintessentially U.S. of A. at this historical moment. His life story could have been written by a novelist whose aim was to update the Horatio Alger myth in a post-modern, identity-bending way. Arnold is an immigrant who made good (by taking lots of drugs and spending endless narcissistic hours in a gym sculpting his body). Arnold is an upstanding family man (with a raunchy, bawdy, libertine side). Arnold is an environmentalist (who drives a Hummer, etc.). A pessimist might say that this only points to the conclusion that Arnold is a symptom of a culture that is in steep decline. Yet, if one views Arnold as a cultural symptom, his public embrace of environmental sustainability should be cause for some optimism; the culture would not have produced environmental Arnold unless it was ready for him. And is there a better person to embody simultaneously the confusion/contradictions/irony/earnestness/fakery/hopelessness/wild utopianism of the task before all of us on this planet? Of course, I would like to think so. There were and are a lot of reasons to stop being an Arnold fan. But here we are, in this cultural and natural world at this moment. And very few of us want to be told just to put on our sweaters and turn down the heat.

THE TROUBLE WITH HEROES

Heroes are never perfect, and often they aren't even really heroes in their own lifetimes. That is a status assigned to them by history, often because of the needs of historians or the people themselves to rationalize how we got from there to here. My squeamishness when I teach the

2005]

OUR COMMON FUTURE

961

Foundations of Natural Resources class is born of this insight. No matter which heroes we choose, they would only ever represent a tiny slice of the story behind our shifting laws and policies about how we treat the environment. It would have taken more than a wild, one-armed amateur scientist, or a tough, mono-focused mountaineer to change how we, the entire developed world, relate to the consumption of resources. So of course Arnold Schwarzenegger, the person, won't do the trick either. Yet I have chosen Arnold precisely because, in some sense, he is not really a person at all. (Apologies to Arnold, the person, and anyone who actually thinks of him that way.) Arnold is a product of our collective imagination; he is a cyborg upon which we project our dreams and fantasies. How else to explain his strange and unlikely life and career path? So if our collective fantasy is now telling us that the time is right to take on global warming, then we must indeed be ready. So let's go; never mind all the paradoxes and contradictions. Imagine the day in 2050, when the goals of Arnold's Executive Order have been met. Rare birds are perched and nesting in the Hummer Sculpture Garden, where all Hummers have been put to rest. Polar bears roam the arctic. Vibrant, local economies, powered by the sun, wind, and other, as-yet-unheard-of completely safe clean energy technologies, have replaced despondent poverty in the southern hemisphere. People still ski in Colorado, and there are still glaciers in Glacier National Park. People in the northern hemisphere drive much less, and as a result are vastly happier. They do don the occasional sweater when it gets cold, but they don't seem to mind it one bit.