### **Quotations by Robert T. Lackey**

#### Natural Resource Management and Policy

Compiled by students of FW 620 (Ecological Policy)<sup>1</sup>

"Fisheries . . . are normally managed on soft objectives . . . something like wise or best use. The jargon is quite acceptable for public consumption . . . but management effectiveness cannot be evaluated with soft objectives or goals."

Lackey, Robert T. 1974. Priority research in fisheries management. *Wildlife Society Bulletin*. 2(2): 63-66.

"Even in the relatively isolated venues of academic and government laboratories, an assertion that ecosystem health is not a scientifically sound concept may be sufficient cause for being branded a political reactionary."

Lackey, Robert T. 2001. Values, policy, and ecosystem health. BioScience. 51(6): 437-443.

"Tacitly, the assumption is that pristine, or less altered, is good and preferred, whereas highly altered ecosystems, by contrast, are less desirable, if not degraded."

Lackey, Robert T. 2001. Values, policy, and ecosystem health. BioScience. 51(6): 437-443.

"Ecosystems are complex, typically in both structure and function, and the diversity of species within an ecosystem may be important in determining how that particular ecosystem functions, but biological diversity is inherently no more important to ecosystems than nutrient cycling, carbon storage, or rate of photosynthesis."

Lackey, Robert T. 2001. Values, policy, and ecosystem health. BioScience. 51(6): 437-443.

"... economics has an important role in resolving competing societal preferences, but it is insufficient in itself."

<sup>&</sup>lt;sup>1</sup>We have discovered that the policy world is challenging one for those of us who have a strong natural resource management and science background. We, students taking FW 620 (Ecological Policy), have compiled a few of the quotes take from the publications of Professor Lackey, that we think capture the essence of his message. We hope that future students will find these quotes useful as the wade through the policy case studies. This is a living document: you are invited to add quotations.

Lackey, Robert T. 2001. Values, policy, and ecosystem health. BioScience. 51(6): 437-443.

## "... most scientific information is of a fine scale and narrowly focused and thus only indirectly relevant to many ecological policy questions."

Lackey, Robert T. 2001. Values, policy, and ecosystem health. BioScience. 51(6): 437-443.

## "The most pervasive misuse of ecosystem health is insertion of personal values under the guise of scientific impartiality."

Lackey, Robert T. 2001. Values, policy, and ecosystem health. BioScience. 51(6): 437-443.

#### "An ecosystem altered by human influences is obviously different from the previous state, but there is no scientific basis for a specific ecological state to be considered better (more healthy) and thus the benchmark."

Lackey, Robert T. 2001. Values, policy, and ecosystem health. *BioScience*. 51(6): 437-443.

#### "Ecology has become much more than a scholarly discipline; it has impacts far beyond simply enhancing our understanding of ecosystems."

Lackey, Robert T. 2001. Values, policy, and ecosystem health. BioScience. 51(6): 437-443.

## "Try to explain to the average person that salmon are at risk of extinction when fresh salmon are available at the local grocery store year around at relatively modest prices."

Lackey, Robert T. 2001. Pacific salmon and the Endangered Species Act: troublesome questions. *Renewable Resources Journal*. 19(2): 6-9.

#### "Threatened and endangered salmon are the only listed animals for which government routinely licenses large numbers of people to kill them."

Lackey, Robert T. 2001. Pacific salmon and the Endangered Species Act: troublesome questions. *Renewable Resources Journal*. 19(2): 6-9.

#### "... there is no inherently scientifically correct approach to restoration, but rather a suite of alternatives with 'best' largely being a function of which vision of restoration objective one accepts." Lackey, Robert T. 2001. Pacific salmon and the Endangered Species Act: troublesome questions. *Renewable Resources Journal*. 19(2): 6-9.

"... it may appear that society and its political institutions are unable to act on the salmon restoration issue, but, in fact, they are making decisions daily on the importance of maintaining ore restoring wild salmon compared to competing societal priorities."

Lackey, Robert T. 2001. Pacific salmon and the Endangered Species Act: troublesome questions. *Renewable Resources Journal*. 19(2): 6-9.

## "It is not our role as scientists to assert that society should make the changes necessary to restore wild salmon, but our implicit public optimism about restoring wild salmon perpetuates an avoidance of reality."

Lackey, Robert T. 2001. Defending reality. Fisheries, Bulletin of the American Fisheries Society. 26(6): 26-27.

*"Fisheries scientists should be realistic and avoid being either optimistic or pessimistic."* Lackey, Robert T. 2001. Defending reality. *Fisheries*, Bulletin of the American Fisheries Society. 26(6): 26-27.

#### "... apart from equivocal polling data, opaque political rhetoric, and grand statements of intent, there is little tangible evidence that most people are willing to make the substantial personal or societal changes needed to restore large runs of wild salmon."

Lackey, Robert T. 2001. Defending reality. Fisheries, Bulletin of the American Fisheries Society. 26(6): 26-27.

#### "Restoring wild salmon is only one of many competing, important priorities and the public is entitled to be accurately informed about the long-term prospects of success."

Lackey, Robert T. 2001. Defending reality. Fisheries, Bulletin of the American Fisheries Society. 26(6): 26-27.

## "The most important single driver determining the ecological future of the Pacific Northwest is the human population — its size and distribution, as well as the activities of individual people and their institutions."

Lackey, Robert T. 2001. Policy conundrum: restoring wild salmon to the Pacific Northwest. In: *Proceedings of the Biennial Conference of the International Institute of Fisheries Economics and Trade*, July 10-14, 2000, Corvallis, Oregon.

# "Based on historic patterns, another cyclic climatic and oceanic change likely will occur early in the 21<sup>st</sup> century, last several decades, and stimulate modest increases in the size of wild salmon runs generally, but the long-term trend is likely to remain downward."

Lackey, Robert T. 2001. Policy conundrum: restoring wild salmon to the Pacific Northwest. In: *Proceedings of the Biennial Conference of the International Institute of Fisheries Economics and Trade*, July 10-14, 2000, Corvallis, Oregon.

"Although often debated politically over narrow, simplistic alternatives (e.g., breaching a particular dam, closing fishing in certain locations, banning a type of fishing gear, approving a specific river

### dredging request), salmon restoration is a pervasive issue that could directly affect all residents of the region."

Lackey, Robert T. 2002. Restoring wild salmon to the Pacific Northwest: framing the risk question. *Human and Ecological Risk Assessment*. 8(2): 223-232.

### "An appropriate and realistic policy objective for salmon restoration is neither obvious nor intuitive. No societal consensus exists on what the restoration should be, exclusive of sweeping generalities."

Lackey, Robert T. 2002. Restoring wild salmon to the Pacific Northwest: framing the risk question. *Human and Ecological Risk Assessment*. 8(2): 223-232.

# "... who decides whether it is more important to have thriving populations of exotics such as book trout, walleye, and smallmouth bass or thriving populations of native species such as Chinook salmon, Pacific lamprey, and bull trout?"

Lackey, Robert T. 2002. Restoring wild salmon to the Pacific Northwest: framing the risk question. *Human and Ecological Risk Assessment*. 8(2): 223-232.

#### "... a societal consensus on an explicit and realistic restoration objective remains elusive, and will likely be so for the foreseeable future. The usually, but de facto societal policy objective appears to be one that attempts to slow the rate of decline such that there remain residual runs of wild salmon." Lackey, Robert T. 2002. Restoring wild salmon to the Pacific Northwest: framing the risk question. *Human and Ecological Risk Assessment*. 8(2): 223-232.

### "There are winners and losers in policy choices, so the prospect of authentic win-win solutions is illusory."

Lackey, Robert T. 2003. Appropriate use of ecosystem health and normative science in ecological policy. pp. 175-186. In: *Managing for Healthy Ecosystems,* David J. Rapport, William L. Lasley, Dennis E. Rolston, N. Ole Nielsen, Calvin O. Qualset, and Ardeshir B. Damania, editors, Lewis Publishers, Boca Raton, Florida, 1510 pp.

#### "... even among scientists, ecology has been treated more as a belief system than a science."

Lackey, Robert T. 2003. Appropriate use of ecosystem health and normative science in ecological policy. pp. 175-186. In: *Managing for Healthy Ecosystems,* David J. Rapport, William L. Lasley, Dennis E. Rolston, N. Ole Nielsen, Calvin O. Qualset, and Ardeshir B. Damania, editors, Lewis Publishers, Boca Raton, Florida, 1510 pp.

"... wild salmon are well on their way to attaining a status enjoyed by some of their notable brethren — wolves, condors, grizzlies, bison — wild animals that are unlikely to disappear entirely, but struggle to hang on as remnants of once flourishing species in small portions of their original range." Lackey, Robert T. 2004. A salmon-centric view of the twenty-first century in the western United States. pp. 131-137. In: *Proceedings of the World Summit on Salmon*, Patricia Gallaugher and Laurie Wood, editors, Simon Fraser University, Burnaby, BC, Canada, 346 pp.

"Now, we decide whether a particular run of salmon will fall under the bureaucratic tentacles of the Endangered Species Act, a decision that can affect the lives of millions of people, define the careers of thousands of biologists, and, as well, provide economic sustenance to hordes of lawyers."

Lackey, Robert T. 2011. Science: beacon of reality. Plenary Lecture, 141<sup>st</sup> Annual Meeting of the American Fisheries Society, September 5, Seattle, Washington.

"Think about the Pacific Northwest in 2100. Think about the human population of these three States and one Provence, not 15 million as we have today, but 50 to 100 million residents. Imagine, a quadrupling or quintupling of the human population of the Pacific Northwest by 2100!"

Lackey, Robert T. 2011. Science: beacon of reality. Plenary Lecture, 141<sup>st</sup> Annual Meeting of the American Fisheries Society, September 5, Seattle, Washington.

"Hardly a week passes that I don't receive an online petition from an advocacy group asking me, and other scientists, to sign as a show of support to remove a particular salmon-killing dam for reasons that sound like science, read like science, are presented by people who cloak themselves in the accoutrements of science, but who are actually offering nothing but policy advocacy masquerading as science."

Lackey, Robert T. 2011. Science: beacon of reality. Plenary Lecture, 141<sup>st</sup> Annual Meeting of the American Fisheries Society, September 5, Seattle, Washington.

"Normative science is a corruption of science and should not be tolerated in the scientific community — without exception."

Lackey, Robert T. 2013. Normative science. *Terra Magazine*, Oregon State University, Winter Issue, Volume 8(2): 36.

"Policy-makers, not scientists, decide whether preserving salmon runs should trump flood protection, irrigated agriculture, or electricity generation. As the public and decision-makers balance policy alternatives, what they need from scientists are facts and probabilities. What they do not need from scientists are their or their employer's values and policy preferences masked within scientific information disguised as being policy neutral."

Lackey, Robert T. 2013. Normative science. *Terra Magazine*, Oregon State University, Winter Issue, Volume 8(2): 36.

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