



Geoethics: what can we learn from existing bio-, ecological, and engineering ethics codes?

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Many scientific disciplines are concerned about ethics, and codes of ethics for these professions exist, generally through the professional scientific societies such as the American Geophysical Union (AGU), American Geological Institute (AGI), American Association of Petroleum Engineers (AAPE), National Society of Professional Engineers (NSPE), Ecological Society of America (ESA), and many others worldwide. These vary considerably in depth and specificity. In this poster, we review existing codes with the goal of extracting fundamentals that should/can be broadly applied to all geo-disciplines. Most of these codes elucidate a set of principles that cover practical issues such as avoiding conflict of interest, avoiding plagiarism, not permitting illegitimate use of intellectual products, enhancing the prestige of the profession, acknowledging an obligation to perform services only in areas of competence, issuing public statements only in an objective manner, holding paramount the welfare of the public, and in general conducting oneself honorably, responsibly, and lawfully. It is striking that, given that the work of these societies and their members is relevant to the future of the earth, few discuss in any detail ethical obligations regarding our relation to the planet itself. The AGU code, for example, only states that "Members have an ethical obligation to weigh the societal benefits of their research against the costs and risks to human and animal welfare and impacts on the environment and society." The NSPE and AGI codes go somewhat further: "Engineers are encouraged to adhere to the principles of sustainable development in order to protect the environment for future generations," and "Geoscientists should strive to protect our natural environment. They should understand and anticipate the environmental consequences of their work and should disclose the consequences of recommended actions. They should acknowledge that resource extraction and use are necessary to the existence of our society and that such should be undertaken in an environmentally and economically responsible manner." However, statements such as these still focus primarily on the value of the earth to generations of humans, rather than on the earth itself. They remain far from meeting addressing our obligation to the land as summarized, for example, by Aldo Leopold, widely regarded as the principal founder of the American conservation movement: "The individual is a member of a community of interdependent parts. The land ethic simply enlarges the boundaries of the community to include soils, waters, plants and animals, or collectively the land." In this poster, we compare and contrast the various existing codes and suggest ways in which ethical obligations to the community itself, as defined by Leopold, could be more clearly incorporated.