

THE SEA CHANGE PROJECT

Spirituality, religion and art in environmental policy and practice

Summary

This project addresses environmental policy's failure to consider basic spiritual, ethical and cultural values. Governance focused on science and business economics cannot attain the goal of "Cherishing and Protecting the Earth", set by a 1990 declaration by leading scientists and 270 world religious leaders (Sagan 1990). British Columbia is in the midst of a formal review of a new pipeline to take Alberta Tar Sands bitumen to the BC coast for shipping to offshore markets. This project therefore links the upland waters to the seacoast, ocean and atmosphere. Our project will bring together scientists, Aboriginal spiritual and mainstream religious leaders and artists to review law and policy. The foundation has been laid. The preamble to Canada's Species at Risk Act invokes "aesthetic, cultural, spiritual, recreational, educational, historical, economic, medical, ecological and scientific" values, as does the Millennium Ecosystem Assessment and a growing ecological economics literature. Leading scientists, conservationists and writers have called for a 'sea or ocean ethic'. This proposal is for the startup phase of a 7-10 year program to develop the policy framework for such an ethic.

The big question is how environmental policy can contribute to the goal of cherishing and protecting the sea? The concept of *eco-social-spiritual community* (Haggan 2012) extends the 'social-ecological systems' approach to explicitly include spirituality as an integrative dimension of human experience. *Community* invokes relationship. *Spirituality* indicates the dedicated attention necessary to understand and strengthen relationships that contribute to flourishing. In so doing, we find meaning and purpose in life. Our project invites scientists, policy-makers and legislators into a conversation about spirituality as essential to how social-ecological relationships are nurtured and sustained. *Our key hypothesis is that we need to take spirituality seriously*—that the wonder that fuels our fascination is a spiritual gift; that the dedication of scientists, Indigenous people, theologians, artists and citizens to understand the world is a spiritual practice inspired by love for people, places, plants, animals and phenomena. Environmental policy can only become accountable to the citizenry when experts in the religious and spiritual traditions along with artists participate in policy formation, and take active part in project review and ecosystem approaches that reflect love as well as need. This, we suggest is no more radical than the first suggestion that social science had a role to play in fisheries management.

Our second core concept is the *secular sacred* that can draw on the insights of the world's spiritual and religious traditions without *belonging* to any one of them. The *Declaration on Preserving and Cherishing the Earth* called for recognition of "our planetary home" as sacred. Margaret Somerville (2006:74-6) and Michael Sandel (2012:7) argue that lacking a concept of the secular sacred, the language of commerce and the marketplace extends far beyond its proper sphere. The secular sacred is based on a spirituality of dedicated attention that confers the knowledge to enhance relationships that contribute to flourishing and unravel those that are destructive. The secular sacred can draw on the moral authority of science to report objectively; the authority of Aboriginal and local people committed to flourishing of people, species and places, the authority of religion to further values of gratitude, generosity, compassion, love and

justice; the authority of artists to represent complexity, tension and sustainability in ways that the dispassionate language of science and bureaucracy cannot. Figure 1 uses the metaphor of a starfish opening a clam to show how collective insights and sustained effort can reshape policy.

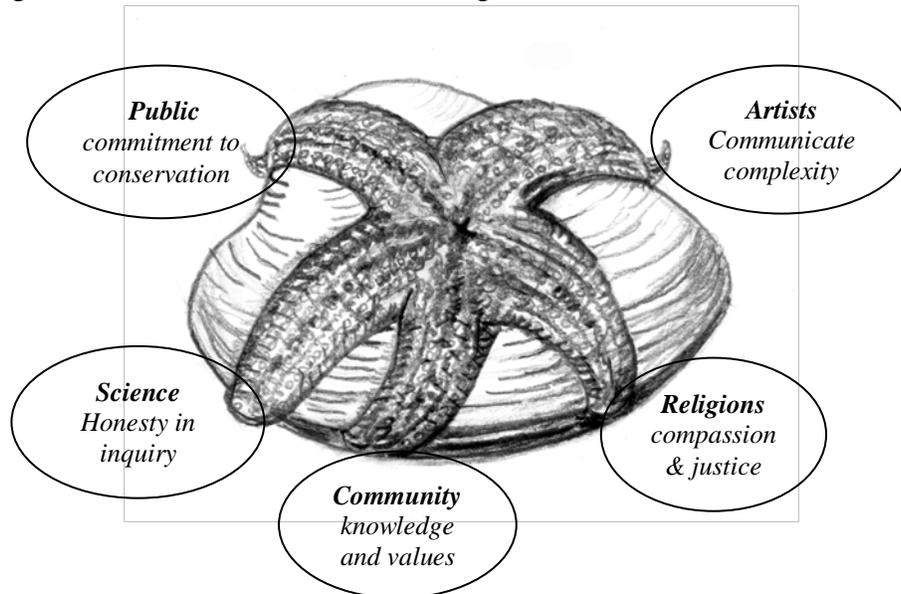


Figure 1. Elements of a more complete conversation on coastal and ocean values with potential to influence policy. *Pencil drawing courtesy of Emily Haggan-Köseoğlu.*

Why we need science *and* religion

What is the relationship between science and spirituality? Einstein (1954) remarked that science can tell us a great deal about what *is* but nothing about what *should* be, later formalized in Stephen J. Gould's (1997) doctrine of "non-overlapping magisteria". Many scientists have called on religious leaders to bring their resources to bear on conservation, e.g., The Union of Concerned Scientists (1992), the Pew Oceans Commission (2003), EO Wilson (2006), Auster *et al.* (2009). Given that world religions and their adherents own much of the planet's resources and pecuniary wealth (Wolfensen 2003; Sluka *et al.* 2011), a successful appeal could draw on fiscal resources to dwarf recent bank bailouts. Such proposals however fall short of bringing the insights of the world's spiritual and religious traditions into the actual work of environmental impact assessment and marine ecosystem-based management.

Many marine scientists are calling for a 'sea or ocean ethic' to guide a new relationship (Safina 2003; e.g., McLeod *et al.* 2005; Auster *et al.* 2009; Center for Ocean Solutions 2009; Pauly 2009). Such calls open the door to an exploration of what the world's spiritual and religious traditions have to offer. This leads inescapably to the conclusion that Einstein's realms of *is* and *should* are already bridged by coastal communities for whom resilience and long-term survival is not an option, but an imperative. What is needed, then, is an affirmation, formalization and rebalancing of elements that are already contained in traditional and local knowledge, ecosystem-based management and social-ecological systems, as sketched in Figure 2.

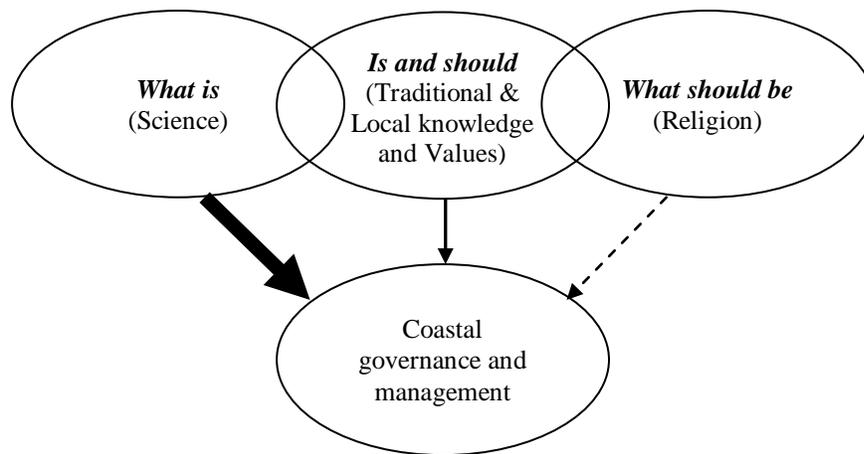


Figure 2 Three ‘magisteria’ that contribute to coastal and ocean governance and management. Weight of arrows indicates current influence and need to rebalance to reflect the moral authority of all three.

The Goal

The goal is to develop a plan for consistent inclusion of basic human values and the language of relationship in environmental legislation. The desired outcome is to identify what alternatives there might be to the current way of doing business. We might suggest a ‘new story’ of relationship between humans and non-humans, but examination of non-industrial societies suggests that scientific, economic, social, artistic and spiritual dimensions were woven into all aspects of existence. This interweaving is crucial to long-term flourishing of the web of relationships that connects living and non-living things.

If we fast forward to the present-day, scientists are deeply concerned about the depletion and extinction of species and ecological damage from climate change. Attempts to address the problem range from a desired shift to ecosystem-based management to whole ecosystem valuation frameworks to identify and quantify the ‘services’ that the planet provides to humanity. Spiritual and sacred values have re-entered the resource economics and resource management literature, but are often seen as a sub-subcategory of what the planet contributes to humanity (ecosystem services) as opposed to an integrative dimension of existence based on fundamental values of compassion and love in the sense of cherishing and protecting places, animals, plants and people to which we are deeply connected and committed.

The preamble to Canada’s Species at Risk Act (2002) states, “...wildlife, in all its forms, has value in and of itself and is valued by Canadians for aesthetic, cultural, spiritual, recreational, educational, historical, economic, medical, ecological and scientific reasons.” Similar lists pervade the ecosystem management and valuation literature. Many such papers go on to say that spiritual, religious and aesthetic values may even outweigh economic and scientific values. Statements on the difficulty of measurement quickly follow as the rationale for default to economic calculations. No-one has seriously suggested bringing ‘experts’ in the immeasurable values into the review of major initiatives such as salmon farming, the Enbridge Northern Gateway Project, fisheries subsidies or coast and ocean governance. *The idea therefore is to use Enbridge as a case study in what happens when such values and language are not part of the process.*

Enbridge as a case study

The Enbridge project consists of a new pipeline to carry tarsands bitumen to the British Columbia coast where tankers will ferry it to China and other destinations. The project has created enormous civil unrest and alarmed a broad swath of political spiritual leaders and authorities and artists. Fisheries scientists and four former fisheries ministers have condemned relaxing environmental standards. Anglican bishops of BC and Yukon cautioned the Prime Minister against overriding his own government's environmental review. KAIROS, representing eleven churches has published an '[Ethical Reflections](#)' paper, and called on the government to freeze further tarsands expansion. This is significant because existing pipelines are adequate for current production *and planned expansion*. Aboriginal participants in pipeline review are adamant that their concerns are neither understood nor addressed. Artists have taken a public stand in exhibits, books and film. The energy of unrest will catalyze a new research group that creates room for spirituality, morality, and cultural values within environmental policy discourse.

The Enbridge review panel has impeccable scientific credentials, but is not well equipped to address long-term moral, spiritual, and religious implications. The net result is a focus on economic arguments and the science that either supports or undermines the economics. We need the goods and services of the coast and ocean, but we also love them, which is to say we are committed to cherish and protect them. They are vital to the identity, culture and existence of many British Columbians, and citizens of the globe. If the oceans management focuses primarily on scientific quantification and economic valuation, it is no wonder that the immeasurable values of love, compassion, gratitude and generosity then become part of the counter-narrative of protest. The energy of unrest will catalyze a new research group that creates room for spirituality, morality, and cultural values within environmental policy discourse. *The goal therefore is to expand the framework of policy and expertise, not to add another voice of protest.*

Desired outcomes The key outcome is increased openness to spiritual, moral and artistic input into environmental policy dialogue, and ultimately, a shift in policy direction and priorities. The key audiences are thus policy-makers; educators in environmental policy and sciences; and the general public, in terms of their moral authority to hold policy-makers and public education institutions accountable for their environmental priorities and decisions. If our hypotheses are confirmed, a significant new line of inquiry—that of additional ways of fostering and implementing eco-social-spiritual community and the secular sacred—will open in both policy and educational circles. Measuring attitudinal shifts from one project intervention is notoriously difficult. Project impact should nonetheless be quantifiable from press and social media uptake following public education events; changes and amendments to course curricula in environmental policy and sciences; and number of educational and policy partners brought into dialogue through the project.

Inaugural phase

We are seeking support for the inaugural phase of a 7-10 year program. This consists of building a research team with the necessary expertise in all fields. It also requires an advisory body of high-profile people. The inaugural phase will include 1-2 workshops and will develop a workplan and funding strategy for the long-term program. Project events will make maximum use of social media and innovative formats such as intergenerational panel discussions. All findings, scientific papers, proceedings and events will be available on the web.

Long-term sustainability

A successful inaugural phase will build a base of collaboration that extends far beyond most interdisciplinary models. We are therefore confident that, as our partnership grows and matures, we will be able to secure funds from research councils in the sciences and arts, churches, ENGOs, UNESCO, government and sources for biodiversity conservation and ecosystem services. Over the next 6 months, we will apply to Canada's Social Science and Humanities Research Council 4-7 yr "Partnership Grants"; National Science and Engineering Research Council 1-3 yr "Strategic Grants provide funding for \$150,000/yr.; Canada Council for the Arts: also provide 1-year funding up to \$60,000 each for an artist and scientist to collaborate. Our international partners including the Society for Ecological Restoration and the Society for Conservation Biology will help to secure funds for the 7-10 years needed to achieve real change in environmental policy dialogue.

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Vancouver
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Citations

- Auster, P.J., Fujita, R., Kellert, S.R., Avise, J., Campagna, C., Cuker, B. *et al.* (2009) Developing an Ocean Ethic: Science, Utility, Aesthetics, Self-Interest, and Different Ways of Knowing. *Conservation Biology*, **23**(1): 233-235.
- Center for Ocean Solutions. (2009) Pacific Ocean Scientific Consensus Statement. URL: http://centerforoceansolutions.org/sites/default/files/pdf/consensus_statement.pdf, Accessed May 5, 2012, .
- Einstein, A. (1954) *Ideas and Opinions*. 1988. *Original title: Mein Weltbild and other sources*. Translated by: S. Bargmann. Bonanza Books, New York, 377p.
- Gould, S.J. (1997) Nonoverlapping magisteria. *Natural History*, **106**(2): 16-22.
- Haggan, N. (2012) Becoming Indigenous: Measurable and Immeasurable Values in Ecosystem-Based Management. PhD, University of British Columbia, Vancouver <https://circle.ubc.ca/handle/2429/43132>.
- McLeod, K.L., Lubchenco, J., Palumbi, S.R., Rosenberg, A.A., Boesch, D.F. and Carr, M.H. (2005) Scientific Consensus Statement on Marine Ecosystem-Based Management. URL: http://www.compassonline.org/science/EBM_CMSP/EBMconsensus, Accessed May 5, 2012.
- Pauly, D. (2009) Toward a conservation ethic for the sea: Steps in a personal and intellectual Odyssey. *Bulletin of Marine Science*, **57**(2).
- Pew Oceans Commission. (2003) *America's Living Oceans: Charting a Course for Sea Change. A Report to the Nation*. Pew Oceans Commission, Arlington. 144p.
- Safina, C. (2003) Launching a Sea Ethic. *Wild Earth*, **12**(4): 2-9.
- Sagan, C. (1990) Preserving and cherishing the earth—an appeal for joint commitment in science and religion. *American Journal of Physics*, **58**: 615-617.
- Sandel, M.J. (2012) *What Money Can't Buy: The Moral Limits of Markets*. Farrar, Straus and Giroux, New York, 256p.
- Sluka, R.D., Kaonga, M., Weatherley, J., Anand, V., Bosu, D. and Jackson, C. (2011) Christians, biodiversity conservation and poverty alleviation: a potential synergy? *Biodiversity*, **12**(2): 108-115.
- Somerville, M.A. (2006) *The Ethical Imagination: Journeys of the Human Spirit*. House of Anansi Press, Toronto, 270p.
- Union of Concerned Scientists. (1992) *World scientists' warning to humanity*. Union of Concerned Scientists, Cambridge, MA. <http://www.ucsusa.org/about/1992-world-scientists.html>.
- Wilson, E.O. (2006) *The Creation: An Appeal to Save Life on Earth*. W.W. Norton and Co., London and New York, 175p.
- Wolfensen, J.D. (2003) Foreword to Faith in Conservation. Pages xi-xii in: *Faith in Conservation: New Approaches to Religions and the Environment*. Palmer, M. and Finlay, V. (eds). World Bank, Washington, DC.