

Applying Ethics to the Challenges of Oceans Governance¹

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The oceans function as the regulatory system of planetary health and also contain a myriad of specific resources, most notably food, which human societies depend on. No single ecosystem is larger or more important than the oceans, yet its health is in decline. Effective governance of the oceans appears to be the only hope for reversing this trend. At this macro-scale, individual responsibilities are difficult to understand, because the challenges are so enormous. What needs to be done, and who should do it? These are questions of governance, and at the same time, they are questions of ethics. Good governance needs to be guided by ethical reflection.

In this paper we consider what an Ocean Ethics might look like, based partly on the emerging field of freshwater ethics (Brown and Schmidt 2010, Groenfeldt 2013), and on the growing literature connecting environmental values, psychology and aesthetics to ocean health (Dallmeyer 2003, Safina 2008, Nichols 2014). Concepts developed around governance of freshwater systems, particularly Integrated Water Resources Management (IWRM) provide a useful starting point for considering the role of ethics in oceans governance, but the unique features of the ocean suggest the need for a dedicated field of inquiry and application on "Ocean Ethics".

The notion of a "natural resource" which is how the international community has conceptualized freshwater (over the objections of Indigenous Peoples) does not help us relate to the oceans. Climate does not "do something" to the oceans; rather, the oceans are intrinsically part of the climate through dynamic interaction with the atmosphere. The fundamental role played by the oceans in creating the conditions for planetary health raises the stakes for governance, but it also simplifies the ethics. Debates about freshwater ethics get mired down in arguments about the "rights of nature". Does a river have an inherent right to flow, or is "environmental flow" only justified by the utilitarian benefits to people? Such debate has no rational merit in debates about the ocean, where the health of the planet is so clearly a function of the health of the oceans.

It is the premise of this paper that the health of the oceans is sacrosanct; human wellbeing depends on it. In the words of marine biologist, Stephen Palumbi, "Mama ain't happy, ain't nobody happy".² Where ethics *is* needed, however, is in the enormous challenge of

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² from his TED talk, June 2010,

https://www.ted.com/talks/stephen_palumbi_following_the_mercury_trail

conceptualizing and then implementing governance strategies that can save the oceans from the urgent crisis of anthropogenic climate change and over-exploitation of resources. How should we think about the oceans? What is a sustainable philosophy of the oceans? How can governance support value systems that will motivate the world's citizens to protect the oceans on which we all depend?

We need ethics to frame governance at two levels: First is the governance of the overall ocean ecosystem, or subsystems. Second is governance of particular "resources" which can too easily become over-utilized and mismanaged, whether fish stocks, undersea minerals, or even the ocean surface, which is becoming clogged with plastic debris.

What Ethics Can Bring to Oceans Governance

Raising awareness about the plight of the oceans seems to be what everyone concerned about the oceans wants to do. According to this sentiment, if only people knew what's happening with the oceans, they would be alarmed and would take action. But experience suggests that information alone is not enough. "Science informs the issue," notes Carl Safina, "but the issue is a moral issue."³ People need to care before the information can sink in. Ethics can provide a framework for defining the plight of the oceans in precise moral terms which can register emotionally and rationally at the same time. A single "fact" that shark populations are in rapid decline can, like a kaleidoscope, take on multiple ethical colors, each appealing to a distinct demographic who are attuned to particular ethical issues.

Marine biologists know that illicit fishing by criminal cartels to meet the luxury demand for shark-fin soup is upsetting ocean ecology. Their concern reflects an environmental ethic, and the fishermen are the proximate cause of the ecological destruction. But there is also a context. Why are those fishermen willing to work far from home, under dreadful conditions, for meager wages? The answer has to do with social injustice. How are the cartels allowed to operate, and why would seafood companies purchase their catch? The answers would reveal shortcomings in governance ethics at multiple levels, from the home port of the fishing boats, to local governments, and to corporate board rooms. From a resource economics perspective, the waste of cutting off the fin but not taking the shark, as well as the chain of ecosystem impacts unleashed in the process, are wantonly wasteful and a violation of economic ethics.

So far I have described four categories of ethical failure: (1) environmental, (2) social, (3) economic, and (4) governmental. There remains a fifth category of "cultural ethics" at two levels. One level is the fishing cartel's interference with traditional, indigenous cultures which depend upon healthy ocean ecosystems not only for subsistence, but also for cultural meaning: spirituality, identity, and deep enjoyment and purpose that come from a vibrant cultural and personal connection with the sea. Another level is the interference with the potential meaning which could, and should be conveyed through the fishing, transporting, selling, buying, and ultimate consumption of fish. This is not a sin of commission so much as omission. The sharks, and the other fish connected to that ecosystem, are being monetized as a bit of capital, rather than appreciated, and ultimately savored, as a bit of the Ocean. The potential cultural meanings of those fish has been thrown into the sea along with the doomed finless sharks.

³ from a video prepared for the Interfaith Oceans Initiative, accessed 6 March, 2016, <http://www.oceanethicscampaign.org/carl-safinas-plea-for-an-ocean-ethic.html>

These are the five categories of Ocean Ethics that I would like to explore. Each category is a perspective for regarding ocean "resources" as clusters of values that have both practical and moral significance. And each category is inextricably connected to all the other categories, much as one part of the ocean ecosystem is connected to all the other parts. In the following section, we explore these categories to understand their distinctive features and their inter-dependencies. The point I hope to illustrate is that oceans governance is not only about the ocean environment, nor only the blue economy, but also about people, culture, and governance of the ocean commons.

Categories of Ethics for Ocean Governance

Our starting point is the premise that ethics are bound up in governance whether consciously or unconsciously. The initial challenge is to identify the values underlying governance, and particularly the unconscious or implicit values. Once we can describe the operative values, we can then reflect and assess as to whether these are the values we wish to advance, or whether we could like to write ourselves a different set of ethical prescriptions. But before we enter the morass of values and ethics, it helps to have a map, or a framework, to guide our investigations.

As noted above, our proposed ocean ethics framework comprises five main categories: (1) environmental, (2) economic, (3) social, (4) cultural, and (5) governance. These categories refer simultaneously to normative values (What are our priorities? What should we value?) and to normative behaviors, or "ethics": Given these values, how should we act? What should we do and not do? These ethics can be applied to the governance of whole ecosystems (the oceans, one ocean, an ecosystem within the ocean) and also to governance of particular resources or categories of resources: fish stocks globally, or particular species. These five ethics categories and two domains of application, are depicted in Figure 1, below. Crosscutting these categories are some additional value principles, including the following:

- *Oceans as commons.* All people, including future generations, have a vested interest in the oceans, and from a moral perspective, we are joint owners of the oceans. What this really means is that we share a mutual responsibility in caring for the ocean commons. This principle can also be extended to non-human life forms (e.g., fish, plankton, etc.) and to the ecosystems, and geo-forms of the oceans themselves, and the whole planet.⁴
- *Oceans as connectors.* With the exception of people living in closed basins, the world is connected through the oceans. Whatever we do on the land eventually affects the oceans where the effects can even become multiplied through the food chain
- *Precautionary principle.* Given the high stakes of tampering with the oceans, directly or indirectly, we have an ethical responsibility to take pre-cautions.
- *Resilience.* The capacity to rebound after a disturbance is increasingly important for both natural systems (e.g., coral reefs) as well as human systems (coastal communities), as storms and droughts become more powerful due to climate

⁴ The concept of geoethics is being elaborated by the recently formed, International Association for Promoting Geoethics, www.geoethics.org.

change. Favoring approaches that enhance resilience becomes an important ethical consideration.

- *Multifunctionality.* Synergies among different values and functions can give more total aggregate value of all types (Netherlands Enterprise Agency 2016). The concept is essentially that "the whole can be greater than the sum of the parts". Our aim should be, for example, to enhance ecological resilience while also serving important social and cultural functions, contributing to local economies, and strengthening political engagement (governance value).

	<i>Environmental values/ethics</i>	<i>Economic values/ethics</i>	<i>Social values/ethics</i>	<i>Cultural values/ethics</i>	<i>Governance values/ethics</i>
<i>Governance of Ocean Eco-systems</i>					
<i>Governance of Ocean Resources</i>					

Figure 1. Domains of ocean governance (left) and domains of values/ethics (top).

1. Environmental values

A central principle of environmental ethics is "sustainable ecological function" (Tsing 2005: 109), which is different from the basically economic concept of "sustainable yield" in meeting human demands (which forms the basis of the current Sustainable Development Goals). The principle of maintaining robust ecological function implies the intrinsic value of these natural functions, beyond any utilitarian value to people. The value of biodiversity faces a similar tension. While nearly everyone would agree that there some amount of nature's abundant biodiversity should be saved, even if it has no clear utility to humans, how much biodiversity is justified? For a deep ecologist, all biodiversity might be considered sacrosanct.

Pollution policies bring out the distinguishing features of environmental values particularly starkly. How much ocean pollution, of what type, is ethical or not? Should pollution be considered a civil (pay a fine) or a criminal (go to prison) offense? When a coal-powered ferry discharges coal ash into the ocean, rather than paying the cost for disposal on land, is this an ethical crime against nature, or does it depend whether the local aquatic ecosystem is obviously damaged? It becomes easier to define good ethical behavior than to define the boundaries of bad, unethical behavior. Aldo Leopold (1949, p.2) summarized the ethics we should aspire to in this famous quote, "That land is a community is the basic concept of ecology, but that land is to be loved and respected is an extension of ethics."

2. Economic values

The twin faces of economic ethics are efficiency and frugality, ensuring that ocean resources, whether fish, seaweed, or minerals, are harvested and used with minimum wastage and for maximum utility. The concept of "sustainable yield" is important for protecting resource stocks, but the concept of "maximum sustainable yield" is dangerous because our information about dynamic fish populations will always be imperfect, and

yield targets need to be viewed through the lens of the precautionary principle (Holt 2011).

Economically useful ecosystem services of oceans include critical climate regulatory functions, food stocks (fish), and biodiversity stocks (the details of which remain mysterious with new species found almost daily). There is a moral imperative to govern the oceans effectively to protect these services, and manage these resources. There is usually a logic for doing so that extends beyond monetary rationalism. For example, protecting biodiversity in critical zones can simultaneously contribute to economic, environmental, social, and cultural aims, while also advancing governance best-practice. Aggregate utility, and in this sense, economic efficiency, can often be enhanced through strategies of multifunctionality (Netherlands Enterprise Agency 2016).

Indeed, economic ethics can serve to "complete the circle" in designing new initiatives that educate and inspire people to become engaged in ocean governance which can pay for themselves, or generate small profits. An example is ecotourism such as whale-watching, snorkeling, and diving which connect people with the ocean and can function as a business on a sustainable basis. Adding ecological values to existing business ventures is an important way that environmental and economic objectives can be mutually supportive, though it can also invite "green washing". Carnival Corporation and Royal Caribbean Cruises recently announced they were each teaming up with environmental NGOs (The Nature Conservancy and WWF, respectively) in the name of ocean conservation, and there is much potential for combining other forms of ocean tourism with environmental, social, cultural, and even governance objectives.

3. Social values

Ocean-dependent peoples include populations living on small islands, low-lying coastal areas, and the Arctic, as well as those directly or indirectly dependent on ocean resources (e.g., fishing). These groups have a special stake in the health of the ocean, though ultimately, all people and future generations also have a stake in the oceans for many ecosystem functions affecting the whole planet, as well as the right to enjoy marine biodiversity, clean ocean water, and safe and abundant seafood.

Social and environmental justice are key values which are directly affected by the effectiveness (or ineffectiveness) of ocean governance as well, of course, as climate governance. We see this most clearly in the disproportionate hardships faced by small island states and highly populated deltas of Asia and Africa from sea level rise and storm surges, and from Arctic populations facing the loss of their traditional subsistence base due to melting ice (which is also an issue of cultural ethics, discussed below). The rights of all future generations are implicated by governance failure resulting in changing climate and oceans, and particularly climate refugees who are forced to resettle to higher ground, or to another country.

4. Cultural values

Cultural values include the cultural lifeways, beliefs and practices (e.g., sacred navigation rituals in Hawaii) associated with oceans, and other ways in which the ocean contributes to spiritual, aesthetic, or psychological meaning. For Indigenous Peoples traditionally connected to oceans, the very existence of their cultures is at stake when fish populations crash from over-fishing, or migratory patterns change due to climate change. Their right

to their culture has been recognized since 2007 in the UN Declaration on the Rights of Indigenous Peoples. The broader principle is that culturally distinct communities have a right to pursue their own cultural happiness, and that this right is accorded to the group (the cultural community) as well as to the individual. On a global level, traditional societies constitute a form of cultural heritage in which all people, including future generations, have a stake.

Modern societies also derive important and necessary meaning through their cultural heritage, and contemporary cultural expressions. Cultural and psychological identity are fundamental to human wellbeing, and depend upon healthy relationships with both people and nature (Kellert 2003). Ethical implications of the cultural importance of oceans as ecosystems, or a particular symbolic or iconic fish species (e.g., blue-fin tuna) include (a) special efforts to protect culturally significant species, (b) incorporating these culturally powerful symbols into awareness campaigns and (c) developing ways for more stakeholders (both local and global) to utilize cultural messages in species/ecosystem protection (e.g., through seafood labeling, trade legislation, investor activism, etc.).

5. Governance values

The arrangements by which international actors seek to govern the oceans inevitably favor certain governance values and disfavor others. What stakeholders are recognized and given voice? How are Indigenous stakeholders, and civil society organizations engaged in oceans governance? How transparent and accountable are the governance bodies? What are the geographic boundaries and scope of the intended governance jurisdiction, and how are the boundaries established? Whereas international governance institutions need to respect national boundaries for reasons of political expediency, the boundary of the governance problematic is as broad as the oceans themselves, and includes land-based activities that impact the oceans, notably greenhouse gas emissions, and other pollutants entering through freshwater, land, or atmosphere.

Commonly accepted values in this regard include the principle of subsidiarity (management at the lowest practical level), i.e., favoring local management of local resources (e.g., coastal fisheries). The scope of ocean governance should include not only resource governance but also “knowledge governance” and decisions about what research topics are pursued and how the data are used. Commercial corporations utilizing ocean resources, or impacting ocean ecosystems, have social and environmental responsibilities which the governance system should address.

The principles of “integrity” should be applied as standards for ocean governance actors, whether public or private, namely (a) transparency, accountability, and representation of all stakeholder interests including Nature (environmental values), diverse cultures, and people, including future generations. Governance should also include effective and fair enforcement of rules and regulations. Finally, water conflict mechanisms need to be designed into the governance arrangements.

Invoking Ethics to Catalyze Ocean Governance

"Ethical blindness" is the term for not realizing there is an ethical problem (Palazzo et al 2012). "Ethical imagination" is the opposite, the capacity not only to see the ethical

problems, but also perceiving ethical connections and possibilities for new solutions (Werhane and Moriarty 2009). By applying creativity, ethics, and good governance, there can be scope for "moral optimism" (Muehlebach 2012). In this paper, I am suggesting that clarity of values and ethics can catalyze for a virtuous cycle leading to more effective ocean governance.

Since ethics do not operate in a vacuum, but rather through the application of values in practical contexts, the information base is critical. An ethically aware public needs to know basic information about oceans, yet without an ethical interest in the topic, the information cannot be absorbed (as Carl Safina notes in the quotation cited above). An educational outreach strategy would need to identify important information that is also emotionally compelling or find ways of packaging the messages in entertaining ways.

Why is this important? How will oceans governance benefit from an informed and ethically aware public? The answer, in my view has two parts. The obvious part is that effective oceans governance will depend on voluntary cooperation by a multitude of actors from individuals to corporations to governments. A broadly shared understanding about ocean health as a moral issue will establish a supportive context for governance. The second and less obvious reason that an informed public is crucial to effective and sustainable ocean governance is to guide the governance process and ensure accountability. The oceans are everyone's concern, and ocean governance needs to reflect the concerns of everyone.

Informing and mobilizing ocean stakeholders to become ethically aware ocean citizens calls for multiple kinds of knowledge: (1) information about the physical dynamics and health of the ocean, (2) information about ocean governance and resource management (e.g., seafood), (3) understanding the psychological and cultural importance of oceans, and (4) information about how to become involved in ocean governance.

1. What ocean citizens need to know about physical dynamics.

Probably the most important fact about ocean dynamics is the connection with the atmosphere, and the impacts of atmospheric CO₂ and other green house gases on the chemistry and ecology of the oceans. Since humans live in the atmosphere, showing how the atmosphere is seamlessly interconnected with the oceans brings everyone into a personal relationship with the oceans. This maga-fact also connects ocean ethics with climate ethics, so that messages about climate change convey an implicit reminder about oceans as well.

An easily overlooked fact about oceans is their connection to rivers, and most particularly the concept of oceans as recipients of the planet's effluent. Generally speaking, whatever is upstream will eventually find its way into the oceans. This relationship is most compelling when the physical proximity is close. In Washington, DC, for example, street drainages are marked with signs explaining "Flows into the Chesapeake", the once productive estuary downstream from the city. When distances are greater, the connection is more dimly perceived. Agricultural runoff in the Mississippi River, originating in America's midwestern states, creates a huge dead zone in the Gulf of Mexico (the world's second largest hypoxic zone after the Baltic Sea). This zone is well known, but thus far has not played a significant role in the public's moral imagination about agriculture, rivers, or oceans. Clearly there is a great need for more effective public awareness programs.

The most compelling symbol of land-sea connections is the huge plastic patches in the gyres of the major oceans. The largest, in the Pacific, is roughly twice the size of France (Jambeck et al 2015). It is easy to categorize the plastic debris as an issue of environmental ethics affecting the whole ocean ecosystem, but it is also a health issue for people ingesting the seafood containing plastic-borne chemicals as well as plastic fragments. Bringing people into the picture adds powerful social ethics into the equation, e.g., the right to safe food, and the right to a healthy environment. A further set of ethical considerations falls under the category of governance ethics. What is the corporate responsibility of plastic producers to address disposal issues (Tibbets 2015)? What is the responsibility of coastal cities (where much of the plastic waste stream originates) and their regional and national governments to establish and enforce pollution standards?

Other readily identifiable illustrations of the physical links between land and ocean ecosystems, are migratory fish and birds. Migratory fish provide an ethical link between how rivers are managed (dams obstructing migration; contaminated rivers) and the environmental, economic, social, and cultural consequences. Fish also represent cultural ethics. Salmon are the central cultural motif of Indigenous communities along the North Pacific coast of the US and Canada. A lesser known but potentially iconic messenger for ocean-land linkages is the American eel (*Anguilla rostrata*), which once migrated between the upper reaches of the Rio Grande in land-locked New Mexico, to the Sargasso Sea for spawning.

2. Knowledge about Ocean Governance and Resource Management

An important lesson from freshwater governance experience is that governance "integrity" depends upon transparency, accountability, and participation (TAP).⁵ Together, these three components serve as an antidote to financial, legal, and ethical corruption⁶ and help ensure that governance institutions are working honestly and with integrity. Of these three components, transparency is perhaps the most essential, but is inter-twined with accountability mechanisms and broad stakeholder participation in multiple facets of governance. For example, seafood certification schemes are a form of transparency which invites accountability, and allows for consumers to participate as actors in ocean governance.

The concept of integrity helps to assess the process of ocean governance, or "doing things right" but how can we hold governance institutions accountable for outcomes, i.e., for "doing the right things"? For this purpose, a set of standards is needed. In the world of freshwater, a "Water Stewardship Standard" was developed in 2014 ago by an organization established specifically for this purpose, the Alliance for Water Stewardship (AWS).⁷ While the focus is on environmental sustainability, the Standard also includes social requirements. As with the Marine Stewardship Council (MSC) Standard, companies meeting the standards are certified (by specially trained consultants trained by the Alliance) and use this in their public relations. In contrast to the MSC Standard, however the AWS Standard includes very detailed provisions for protecting ecosystem

⁵ For details, see the website of the Water Integrity Network, www.waterintegritynetwork.net

⁶ By "ethical corruption", I am referring to behaviors which may be legal, but which violate generally accepted norms.

⁷ The Standard can be downloaded from the website, www.allianceforwaterstewardship.org.

health, in terms of water quality and quantity abstracted, and through required watershed sustainability plans.



The relationship among ocean integrity, ocean stewardship, and ocean ethics, can be illustrated as a triangle. Fundamental ethical principles about the rights of nature, social justice, cultural sovereignty, etc. comprise the base of the triangle. Integrity in the process of conducting ocean governance comprises one side of the triangle, and specific stewardship outcomes comprise the other side. All three expressions of normative behavior (ethics, integrity and stewardship) imply certain expectations or standards by which governance performance can be assessed and governance institutions can be evaluated.

3. *Understanding the psychological and cultural importance of oceans*

Learning about what the ocean means to Indigenous peoples, traditional fishing communities, as well as modern surfers and residents of major ocean-front cities, offers another window onto the cultural and psychological values of the ocean. Even if we do not feel these values in the same way as, for example, an Indigenous Hawaiian fishermen, we can learn to realize that the ocean holds deeply important values in the hearts and minds of many different people and cultures.

Those benefits are the subject of research in psychology and neuroscience demonstrating that experiencing water can contribute measurably to human wellbeing. Water provides a stimulus for deep thinking and reflection (Neimanis 2012; Shaw and Francis 2008). Neuroscience has documented how even images of water can trigger the release of calming chemicals in the body (Nichols 2014), and the growing body of evidence from psychology about the principles of biophilia (Kellert and Wilson 1995; Kellert 2003) are consistent with the biochemical evidence.

The ocean also brings value to our lives through relationships. Dolphins, for example, are prized as swimming companions in eco-tourism settings. Kayaking tours, and even luxurious cruise lines tout the benefits of communing with the ocean. These feelings are both sensory and psychological, and serve as a component of personal and cultural identity. But identity associated with sense of place, or sense of relationship with the ocean in the abstract, or a particular ocean experience or seascape, is not fixed. It can be cultivated and strengthened, and even created anew through the practice of "placemaking" (Nicodemos 2013), whereby artists (usually) install visual cues along a river, lake, or the ocean, which facilitate our sense of belonging to that place. The famous mermaid in Copenhagen harbor serves this function. So too do sculptures of Sturgeon fish sprinkled along the streets of Sturgeon Bay, Wisconsin (See photo) reminding us of the now endangered fish that gave this city its name.



4. From Values to Ethics to Action: What to do?

Advocates for freshwater conservation organize campaigns against bottled water (e.g., "Take Back the Tap")⁸ because it is a needless expense that rewards private corporations that have captured an inherently common resource. Advocates for ocean conservation would join the campaign for another reason: Water bottles are made of plastic, and many of those bottles, particularly in coastal cities, will end up in one of the eleven major gyres of plastic debris which are killing birds, fish, and contaminating the fish that we eat.

The anti-plastic campaign can be waged through personal action (refusing plastic bags in stores), community action (local ordinances taxing or prohibiting plastic bags) or national environmental policies. Regardless of the scale, from personal to community, to national, actions depend on a values, systematized into an ethical position, that plastic bags and bottles are harmful and should not be used. Complementary values about personal responsibility might also be invoked to develop alternatives to plastic bags, e.g., reusable bags made of cloth, nylon, or even plastic (but preferably not!). The two sides of this solution, what not to do (Don't use disposable plastic bags) and what TO do, (Use reusable bags) comprise two complementary approaches: Don't do bad things; do good things.

One of the most important ways that individuals can participate in supporting ocean health is through choices about seafood. Buying from the "green list" instead of the "red list" on the Greenpeace guide⁹ is helpful; so too is choosing fish that are certified sustainable, e.g., by the Marine Stewardship Council. Even more important than the specific choice one makes is the consideration that goes into the choice. From the perspective of ethical awareness, any certification program can be helpful in raising questions and prompting ethical reflection (Bergleiter and Meisch 2015). The combined effects of consumer choice and values about corporate social responsibility offers the potential for positive feedback that can help protect ocean fisheries.

Whose Ethical Responsibility?

Within the world of freshwater the institution of a triennial World Water Forum was started in 1997 in response to the recognition that the whole world, including civil society, needs to be involved in protecting freshwater. The second World Water Forum, hosted by The Netherlands (here in The Hague) in 2000, used the motto, "Making Water Everybody's Business". This same motto could apply equally to oceans. The strategic importance of this concept is that it legitimizes everyone's involvement. It also implicitly assigns ethical responsibility to every actors in Oceans Governance.

Who are these actors? What are their roles, responsibilities, and opportunities for improving the health of our oceans and the wellbeing of all of us? Following is an incomplete list to illustrate the wide variety of people and organizations who are, or potentially could be, actively involved in oceans governance:

⁸ A campaign organized by the American NGO, Food and Water Watch, <http://www.foodandwaterwatch.org/campaign/take-back-tap>

⁹ Greenpeace lists several fish guides on their website, <http://www.greenpeace.org/international/en/campaigns/oceans/which-fish-can-I-eat/alternative-fish-guides/>

- *Individuals* make choices about cosmetics (which may contain microplastics), plastic bags and bottles, and seafood purchases
- *Corporations* make policies about their seafood sourcing, labeling, working conditions, and GHG emissions;
- *Governments* enact laws and enforcement policies/procedures, set industry regulations and incentives, set standards for pollution and emissions, and set chemical regulations;
- *Environmental NGOs* have been instrumental in raising ethical awareness about environmental issues (especially) but also social justice, economics, and corporate responsibility (e.g., Greenpeace).
- *Schools* convey a certain paradigm of what the ocean represent, and what our moral responsibilities as citizens and professionals might be.
- *Youth* have a natural legitimacy in representing the interests of future generations. Several youth NGOs are active in international freshwater policy initiatives, and in climate change advocacy, but so far, not in oceans governance.
- *International agencies*, including UN agencies dealing with water/oceans; labor conditions; human rights; Indigenous cultural rights and international development have a mandate and a comparative advantage in addressing oceans governance and related ethical issues.
- *Religions organizations* already understand morality and ethics, and have an opportunity to apply their moral perspectives to ocean governance. This is the idea behind the Interfaith Ocean Ethics Campaign (<http://www.oceanethicscampaign.org>).
- *Indigenous Peoples* in proximity to the sea have high stakes in the sustainability of oceans, and much knowledge about how to get there.
- *Research Institutes and other actors* - There are many more actors that I am not familiar with, but whose activities and strategic decisions will be important for in guiding oceans governance.

All these actors, and many more, are involved in ocean governance directly or indirectly, and have opportunities to advocate for an ethical perspective as part of an oceans governance agenda. In a sense, each and every actor who is a stakeholder (i.e., having a stake in the health of the oceans) could engage with ethics in two ways: First by promoting ethical awareness in oceans governance, and secondly, by advocating for particular values (e.g., social justice, rights of nature, etc.) in oceans governance policies. Either approach would raise awareness about ethics and contribute to a new understanding of oceans governance as based on a complex set of values and ethics.

Conclusions: Towards an Ocean Ethics Charter?

The approach to ocean ethics I have outlined in this paper incorporates values about the environment, society, economy, culture, and governance. Ocean governance is first and foremost about protecting ocean ecosystems, but it cannot, or should not, ignore related ethical issues such as social justice, cultural sovereignty, and stakeholder representation. Not only is it "right" that a broader set of ocean ethics be addressed, but synergies among the diverse ethical priorities could actually strengthen the environmental agenda.

But how would these ethics be given shape? How would they be articulated? Who would be involved and what legitimacy would they have to speak on behalf of the world's

oceans, as well as the world's 7.4 billion people? The approach being pursued in the field of freshwater ethics is to develop a "global water ethics charter", which is anticipated to be a concise set of principles, perhaps 3 to 5 pages in length. The ethical principles would be spelled out in enough detail that they could serve as a practical guide for policies, and with enough looseness that the principles could apply universally across different climates and cultures. The current (Version 2.0) draft is posted on the website of the Water Ethics Network (<http://waterethics.org/the-water-ethics-charter/>).

The (Fresh)Water Ethics Charter process was inspired by the Earth Charter, and like that Charter, we have based the content primarily on existing principles that were adopted or declared in other international forums. Thus, the Charter is mostly a summary of existing agreements and best practice. What is new is the integration of different categories of ethics beyond environmental ethics (economic, social, cultural, governance) and proposing the whole package as a new water ethic.

Might an Ocean Ethics Charter provide useful guidance for oceans governance? I would suggest that it could, and should, particularly given the plethora of new ocean initiatives and programs that are taking shape. A charter could provide an ethical map of the moral terrain of oceans governance, clarifying both what issues should be considered as a concern for oceans governance, and what issues lie outside that boundary. Most importantly, the process of developing an Ocean Ethics Charter would inspire the ethical imaginations of all involved and stimulate creative, multifunctional solutions.

References

Bergleiter, Stefan and Meisch, Simon (2015) Certification Standards for Aquaculture Products: Bringing Together the Values of Producers and Consumers in Globalised Organic Food Markets, *Journal of Agricultural and Environmental Ethics* 28:553–569

Brown, Peter and Schmidt, Jeremy (2010), *Water Ethics: Foundational Readings for Students and Professionals*. Island Press, Washington, DC.

Dallmeyer, Dorinda (Editor), 2003, *Values at Sea: Ethics for the Marine Environment*. University of Georgia Press, Athens, Georgia.

Groenfeldt, David (2013). *Water Ethics: A Values Approach for Solving the Water Crisis*. Routledge, London.

Holt, Sidney, 2011, Maximum Sustainable Yield: The Worst Idea in Fisheries Management. Blogpost from Breaching the Blue, <http://breachingtheblue.com/2011/10/03/maximum-sustainable-yield-the-worst-idea-in-fisheries-management/>

Jambeck, Jenna R., R. Geyer, C. Wilcox, T. R. Siegler, M. Perryman, A. Andrady, R. Narayan, K. L. Law. Plastic waste inputs from land into the ocean, *Science* Vol 347, Issue 6223 pp 768-771.

Kellert, Stephen (2003), *Human Values, Ethics, and the Marine Environment*, in Dallmeyer, Dorinda (ed), *Values at Sea: Ethics for the Marine Environment*. University of Georgia Press, Athens, Georgia (USA)

Kellert, Stephen and Wilson, E.O. (1995) *The Biophilia Hypothesis*. Island Press, Washington, DC.

Leopold, Aldo (1949), *Sand County Almanac*, Oxford University Press.

Muehlebach, Andrea (2013) *On Precariousness and the Ethical Imagination: The Year 2012 in Sociocultural Anthropology*. *American Anthropologist*, 115(2):297–311

Neimanis, Astrida (2012) *Thinking with water: An aqueous imaginary and an epistemology of unknowability*, Talk given at “Entanglements of New Materialisms” Linköping, Sweden

Netherlands Enterprise Agency, 2016. *Reinventing Multifunctionality: Combining goals, sharing means, linking interests*.

<http://english.rvo.nl/sites/default/files/2016/03/Reinventing%20Multifunctionality.pdf>

Nicodemus, Anne Gadwa (2013) *Fuzzy vibrancy: Creative placemaking as ascendant US cultural policy*. *Cultural Trends*, Vol. 22, Nos. 3–4, 213–222

Nichols, Wallace J. (2014) *Blue Mind*, Little Brown, New York.

Palazzo, G., Krings, F. and Hoffrage, U. (2012), *Ethical Blindness*. *Journal of Business Ethics* 109:323-338.

Safina, Carl (2008), *Toward a Sea Ethic: Expanding our idea of community is a first step to restoring the seas around us*. *The American Prospect*, November 21, 2008

Shaw, Silvie and Francis, Andrew (2008), *Deep Blue: Critical Reflections on Nature, Religion and Water*. Equinox, London.

Tibbetts, John H. "Managing marine plastic pollution: policy initiatives to address wayward waste." *Environmental health perspectives* 123.4 (2015): A90.

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4384192/pdf/ehp.123-A90.pdf>

Tsing, Anna Lowenhaupt (2005), *Friction: An Ethnography of Global Connection*. Princeton University Press.

Werhane, P. H. (1999). *Moral imagination and management decision making*. New York: Oxford University Press.