



Perspective

The Achilles heel of participatory conservation

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A B S T R A C T

Although participatory planning for conservation has gained prominence over the past few decades, whether this process is successful in protecting biodiversity is still controversial. Moreover, the initial, constitutive decisions about whom to include in the process may undermine the sometimes-implicit goal that non-participants will find the outcomes legitimate and equitable. Different pitfalls relate to the proper representation of all public interests, such as tyranny of the minority or conflicts of interest. We focus on the effective integration of the broad public interest into decisions on use and preservation of the environment, including biodiversity, and we argue why the broad public interest should be considered a prerequisite to processes that are democratic, legitimate and equitable. When narrower interests become entrenched, conservation conflicts can become chronic as opponents take irreconcilable positions and polarize debate. Participatory decision-making processes could be improved by codifying the democratic principles of intergenerational equity and the public trust doctrine. We make recommendations on how to integrate the broad public interest in conservation decisions.

1. Introduction

Continued loss of biodiversity and chronic environmental conflicts suggest that the conservation community needs to re-examine assumptions and practices upon which the conservation endeavor has been founded. Participatory planning processes are a prevalent practice that come with several assumptions that have rarely been scrutinised (Burgman, 2005; Peterson et al., 2005). Globally, public participation has become a generalized component of environmental decision-making in forestry, wildlife or water management and conservation (Rask and Worthington, 2015). At the beginning of the past century, Dewey (1927) defined public participation as deliberation on issues by those affected by a decision. Along these lines, a mainstream practice of participation has been to invite interest groups (i.e., associations of individuals or organizations sharing common interests and seeking to influence public policy in their favor; e.g., industry, nongovernmental organizations, professional associations or local communities; Klüver, 2013) together to negotiate, for instance, amounts and methods of use of natural resources. The approach can be implemented at different scales, from single, homogeneous communities up to multilateral, global conventions (Sandström, 2009; Maser, 2012).

Participatory processes in conservation generally aim to decide on the use or preservation of environmental components, whether species,

water, space, etc., or to plan actions affecting such components. An easy assumption is that the resulting decisions to allocate or preserve, or decisions to act or not to act, will be representative, legitimate and equitable if one invites different interest groups to participate. The actors deciding whom to invite and that list of invitees are part of the initial constitutive decisions. Constitutive decisions (i.e., the rules of how one decides) have not escaped scrutiny. This scrutiny has traditionally evaluated power dynamics against criteria such as democratic principles of representation, plurality and transparency (Gillingham, 2001; Raik et al., 2005; Agrawal and Ostrom, 2006; Clark and Milloy, 2014; Pomeranz et al., 2014; de Vente et al., 2016). The constitutive process in environmental decision-making has also faced varied critiques, such as conveners lacking legitimacy, participants not being truly representative, or nontransparent constitutive decisions. Even participatory processes that please all invitees may ultimately fail if broader societies consider the decisions illegitimate. Outright opposition to decisions and outcomes, litigation, political protest, or resistance may follow decisions in these cases.

For a constitutive process about the environment to be legitimate, it must identify all legal interests in the environment. This is not restricted to local interests or affected stakeholders, because a jurisdiction's legal interests may be universal to all citizens. In approximately three-quarters of countries with data, national constitutions mention rights to

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a healthy environment or responsibility for protecting a healthy environment (Boyd, 2014). Even those countries whose constitutions do not mention the environment, such as in the U.S.A., public trust doctrines supported by other constitutional provisions have been interpreted as protecting the environment (Case No. 6:15-cv-01517-TC, 2016). We define the public trust doctrine below. Constitutions and public trust doctrines confer rights and responsibilities on all citizens and on future generations, by the definition of a constitution as “the mode in which a state is constituted or organized; especially, as to the location of the sovereign power.” (Oxford English Dictionary, 2017). Therefore, sovereign power is permanently established by such constitutions, until amended or the sovereign destroyed. This definition leads to a simple but powerful conclusion. All citizens including future generations have an interest in their environments.

That conclusion has led to a branch of moral philosophy addressing intergenerational equity. We adopt Weiss' (1984) framing of this complex and multi-layered topic (Appendix A), but restrict ourselves to considering three generations (living adults, living youths and their unborn children), and a simple definition of the equity in their constitutional rights and responsibilities. We use equity to mean that each generation of citizens has the same right to an environment that they define as healthy for themselves. Although the definition of a healthy environment is open to debate and certainly varies between constitutions, we assume all constitutive processes should be governed by a concern with intergenerational equity as a moral principle and ethical duty, and all citizens are interested in the environments of their jurisdiction because a majority of constitutions provide for such interests. Even if the jurisdiction hosting the decision-making process does not have such a constitutional provision, other legal obligations may stem from lower-level legal instruments. The burden of proof therefore lies on those making constitutive decisions to prove that all citizens do not have an interest in participating. In sum, in our view, the legitimate and equitable answer to the question ‘who should be involved?’ will vary by jurisdiction and the existing legal and ethical principles binding the constitutive actors; the variations are beyond our scope at present.

Here, we focus on equity (are all interests balanced and considered?) and legitimacy (are the constitutive processes consistent with constitutional law and other legal instruments?) in environmental decision-making. We focus on the constitutive decisions (is the constitutive process legitimate and equitable?), or the decisions about who to involve in deciding on the use or preservation of environmental components, such as biodiversity. For simplicity, we refer to “the broad public interest” for the interest of current and future generations. Moreover, to simplify our text further, we replace the phrase “legitimate and equitable constitutive processes for making decisions about allocating or preserving the environment or decisions to act or not to act on components of the environment” hereafter as “participatory conservation decision-making”. We do not address the effectiveness of diverse interest groups in decision making or the efficiency of decisions, and we are centred on decision-making within the mainstream legal frameworks, not including remaining Indigenous law and governance frameworks.

2. Participatory conservation decision-making

Participatory processes emerged after a change in the management paradigm from a conventional top-down approach to a broader bottom-up consultation and involvement of some of the public, interest groups and beneficiaries. Aiming for democratic governance, decision implementers build constitutive processes that bring together multiple actors, in an attempt to account for diverse societal perspectives, opinions and values (Bixler et al., 2015) and in an effort to make more equitable distributions of benefits, costs and obligations. This approach is expected to strengthen the legitimacy of decisions in a transparent and trust-building process (Díez et al., 2015). Participatory process that has an underlying rationale of providing legitimacy to decisions

increases trust among participants (de Vente et al., 2016). In its multiple forms, participatory conservation decision-making is supposed to include all relevant actors who are affected by the decision or who should be part of the decision-making processes (Reed, 2008).

Consensus is sometimes an implicit or explicit goal in participatory conservation decision-making (Sidaway, 2005; Regan et al., 2006), but its associated pros and cons are not always understood or accounted for (Mouffe, 2000; Peterson et al., 2005; Treves et al., 2009). Consensus approaches aim for agreements and “win-win” outcomes, educate participants, or foster a sense of community. They can produce positive results under some forms of governance (Peterson et al., 2005). However, management by consensus can be also dangerous because many of these consensus-based approaches can legitimize the status quo, can reinforce power asymmetries, or can be vulnerable to deadlock by veto (Mouffe, 2000; Peterson et al., 2005).

If participatory conservation decision-making aims for legitimate and equitable decisions, the rules of who is convened should adhere to legal and constitutional provisions adopted by the broader society. The importance of legal and constitutional principles in participatory decision-making is reflected in calls from public leaders at all levels of government for greater public involvement in environmental decisions. For example, in European policy, the Aarhus Convention (entered into force in 2001) provides for the right of the public to participate in environmental decision-making (Wates, 2005), and the European Union promotes the principle of subsidiarity, which “...aims at bringing the EU and its citizens closer by guaranteeing that action is taken at local level where it proves to be necessary.” (eur-lex.europa.eu/legal-content/EN/ALL/?uri=URISERV:ai0017). In the United States, many federal government decisions are affected by the Federal Advisory Committee Act (P.L. 92-463; 5 U.S.C. App.), which “...has special emphasis on open meetings, chartering, public involvement, and reporting”.

Although participatory processes have gained prominence over the past few decades, they are not exempt from controversy. Their implementation from theory to practice has shown disparate results, and the outcomes have not always met expectations (Carr and Halvorsen, 2001; Halvorsen, 2003; Peterson et al., 2005; Blaikie, 2006; Forschten and Smith, 2014; von Essen and Hansen, 2015; de Vente et al., 2016). Some participatory processes often reproduce polarization between interest groups, and have even exacerbated existing conflicts (Rauschmayer et al., 2009; von Essen and Hansen, 2015; de Vente et al., 2016), particularly when they have been built to support decisions already taken (Apostolopoulou et al., 2012) or when the adopted actions have proven insufficient to reach planned or expected goals (Treves et al., 2006; Keulartz, 2009). Some have argued that a reliance on participatory conservation decision-making may be unproductive because deliberations (the primary source of legitimacy for decision-making outcomes) aimed at achieving a mutual understanding between interest groups are structurally precluded from taking place. For example, von Essen and Hansen (2015) have identified four barriers to deliberation within the stakeholder co-management model for Swedish wolf conservation: a strong sense of accountability, an overly purposive atmosphere, a commitment to decision as final outcome, and a perceived inability of the interest groups to influence decisions.

3. Broad public interest representation: a key pitfall in current participatory conservation decision-making

The lack of an appropriate representation of the broad public interest may lead to tyranny of the minority (i.e., broad public interests are subordinated to minority interests; Cooke and Kothari, 2001; Bishin, 2009), and the prevalence of conflicts of interest in individuals presumed to represent the broad public interest.

Actors typically not properly represented or acknowledged in participatory processes are some marginalized minorities or particular sections of local communities (e.g., Lane and Corbett, 2005; Daugstad

et al., 2006). But, paradoxically, the broad public interest is not properly represented or acknowledged either. This is a major caveat because the result of unrepresentative decision-making can result in tyranny by a minority (Bishin, 2009), which generates discord and perceptions of illegitimate, and inequitable outcomes.

The mere inclusion of multiple interest groups does not ensure good governance (Newig and Fritsch, 2009; Rauschmayer et al., 2009). The composition of groups engaging in participation and their associated preferences strongly influence the outcomes (Newig and Fritsch, 2009). Many participatory processes appear pseudo-democratic and often unwittingly incorporate power asymmetries and un-democratic exclusions. Pseudo-democratic processes often only consider influential interest groups, who are usually local or regional only, and economically interested (e.g., preference for hunters when deciding on wildlife use and conservation; Gill, 1996; Clark and Milloy, 2014). As a consequence, the broader public interest is not well represented. For example, hunters were framed as the central actors in the prescriptive North American Model of wildlife conservation (Clark and Milloy, 2014; Peterson and Nelson, 2016; Feldpausch-Parker et al., 2017).

Participatory conservation decision-making using pseudo-democratic methods can be skewed to favor powerful actors, or those who are very successful in perpetuating and communicating their interests. Such actors can easily hijack decision-making processes to favor narrow interests, diminish efforts at preservation for future generations by claiming more access for themselves, and distract the entire process from a focus on participants' moral and legal obligations to the broad public interest. Manipulation of conservation conflicts by scapegoating certain species for political leverage pose a threat of exacerbating conflicts between interest groups (Chapron and López-Bao, 2014). Results of pseudo-democratic participatory conservation decision-making include polarization, irreconcilable controversies, opposition to decisions, and the emergence of chronic conflict situations; with winner-takes-all and zero-sum games situations (i.e., the interest of some actors prevail, influencing decisions, whereas interests from other actors are not considered in the process) being often the norm (Redpath et al., 2013). Large carnivore management contains examples of the potential risk of pseudo-democracy and the prevalence of narrow interests in participatory processes (Appendix B).

Apart from which interest groups are involved in participation, the selection of their representatives also deserves attention, because of the influence that particular conflicts of interests may have on decisions. Representatives are often persuasive proponents drawn from their constituency precisely because they can clearly and loudly articulate the views of their group, including extreme ones (Nilsen et al., 2007). They are often selected to be active in the politics and the media, being chosen to hold a particular position, value or ideology, as well as manufacture uncertainty and use narratives with a high potential to shape opinions (Rohr and McCoy, 2010). As a consequence, representatives often exacerbate conflicts and have vested interests in not compromising. Indeed, they may have more extreme opinions than their constituents (Nilsen et al., 2007).

Conflicts of interest between interest groups can lead to inequitable and illegitimate outcomes regardless of the approach used to involve representatives (Hare and Blossey, 2014). The fact that the representatives profit, funding, reputation, or future success depend on the position defended or the decision made will also influence their decisions (Gill, 1996). Similarly, the slight improvement of hiring facilitators fails the test of independence precisely because interested parties hire them, and moreover, facilitators never have authority to enforce decisions.

4. Towards legitimate, equitable and democratic decisions

Effectively integrating the broad public interest into conservation decision-making, including preservation of environmental components for future generations (Sax, 1970; Maser and Pollio, 2012), is certainly

a challenge, but seems a prerequisite to participatory processes that are legitimate, equitable and democratic. Without considering the broad public interest, and a firm foundation in governance, powerful and narrow interests easily can capture decision-making processes (Sax, 1970; Nie, 2004), promoting the tyranny of the minority. A related and common challenge is addressing the expectation of equal power (i.e. equal ability to influence the participatory process) among all invitees. Otherwise, the result of unrepresentative and unequal power is that certain interests feel that they have lost power.

Legitimate, equitable and democratic processes demand careful planning to acknowledge the law and the representation required for legitimate decisions. Few participatory conservation decision-making processes attempt this at the outset because few conservationists are trained in law, ethics, or governance. We recommend giving voice to the broadest public interest in open, transparent and inclusive participatory processes, rather than attempting to balance pro- and anti-interests against each other numerically or in economic terms. All relevant actors affected by a decision should be properly identified (Jennings, 1999; Glickin, 2000; Reed et al., 2009) and be part of the process. In modern societies, diverse actors expect to be involved in management issues. In the case of large carnivore management, for instance, this implies giving voice to anyone that, on the one hand, are interested in these species and, on the other hand, could influence, or be influenced by them (Linnell, 2013).

A cornerstone in participatory conservation decision-making will be to properly represent all public interests, which requires one to identify and integrate all relevant actors, including the wider public and future generations. Interestingly, an approach to balancing the needs of current generations and those of future generations has been articulated in 175 years of jurisprudence on the U.S.A. public trust doctrine (Appendix C). However, even if multiple actors, including representatives of the broadest public, would be involved, participatory process might still suffer from democratic deficits.

An alternative abandoning the status quo observed in many environmental decision-making processes is to follow the public trust democratic principles in participatory conservation decision-making (Hare and Blossey, 2014). Numerous nations and 45 U.S.A. states recognize in statute or constitution that their governments have a public trust duty or a trust-like obligation that their citizens are sovereign over some or all environmental components (Bruskotter et al., 2011; Sagarin and Turnipseed, 2012; Blumm et al., 2014). Many of these governments implicitly or explicitly acknowledge that future generations are also beneficiaries of the environmental components.

The fundamental principle of the public trust holds democratic governments accountable for the preservation and regulation of use of environmental components as benefits for current and future generations (Appendix C), as opposed to narrow interests. The rights of future generations have priority over current uses in public trust thinking (Treves et al., 2017). That priority is both logical and moral. Logically, the aggregate of all future generations outnumber current user groups (living adults) therefore the current users are always a minority of all beneficiaries and thereby deserve less of the common assets. Also it is morally correct that preservation be guaranteed first, lest over-use lead to extinction or irrevocable depletion.

By identifying environmental components as assets held in trust for the future, governments acknowledge the utilitarian nature of many interests, but not to the exclusion of preservation, non-consumptive interests, and the intrinsic value of the components. Considering this starting point, participatory conservation decision-making is expected to provide intra- and intergenerational equity. Including democracy in the public trust principles acknowledges the rights of self-determination by all citizens to identify their own legal interests and adapt these interests as society's values change over time.

Under public trust thinking, government trustees (i.e., people responsible for allocation of environmental components) should represent the broad public interest, avoiding biases to particular interests or

private interest groups. The independence of trustees from current users makes them legitimate. Representatives in participatory conservation decision-makers must exclude self-interest from decisions, separating decisions about the allocation of benefits from the pressures that beneficiaries impose on them. The decisions will be inequitable if trustees were partial to even a few interests rather than envisioning the rights of the broad public interest and future generations, even if those interests are diffuse (Sax, 1970). The selection of the trustees should be guided by strict legal constraints to ensure transparency, fair treatment of all beneficiaries, and invulnerability to the pressures and demands imposed by beneficiaries (Horner, 2000; Hare and Blossley, 2014; Treves et al., 2017). An equitable and legitimate use of participatory processes under this framework would be to share information about current uses, and build consensus for interventions to achieve goals, which have been decided by impartial trustees.

In many situations, courts may be better choices for participatory conservation decision-making than legislators, if the judiciary is mandated to adjudicate cases and controversies and to defend the constitutional rights of citizens (in the U.S.A, the judiciary has been portrayed as the democratizer of the public trust; Sax, 1970, 1980). In the U.S.A., contrary to administrative agencies, courts are not as dependent on the favor and funding of interest groups, legislatures, and executive branches of governments. Some will view our proposal as top-down, but we would emphasize instead the bottom-up nature of our recommendations. Future generations (the true bottom) need a voice loud enough to drown out the clamour of current interest groups. However not all countries' courts are the best choice. The best organ of governance must be decided case by case in consideration of constitution, law, and the risk of corruption or special interest capture.

In any case, participatory conservation decision-making should be constituted by impartial trustees charged with monitoring and enforcing preservation and regulation of uses, as well as balancing competing current uses to uphold the priorities of the broad public interest beginning with preservation of environmental components for future generations. Finally, beneficiaries must be given the right to challenge decisions through civil action.

When tyranny of minority and prevalence of conflicts of interest are entrenched, environmental conflicts become chronic, or irreconcilable positions and polarization dominate. Environmental outcomes and participatory conservation decision-making could be improved by codifying the democratic principles of the public trust doctrine.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at <http://dx.doi.org/10.1016/j.biocon.2017.06.007>.

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