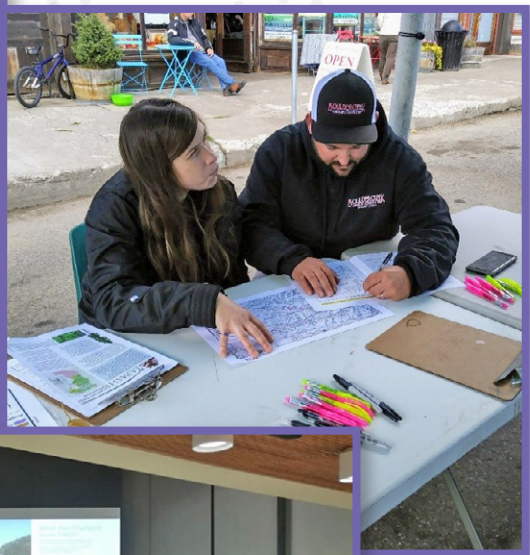




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Embracing the Public Participation Process for Developing Desired Conditions: Building Relationships for Actionable Knowledge



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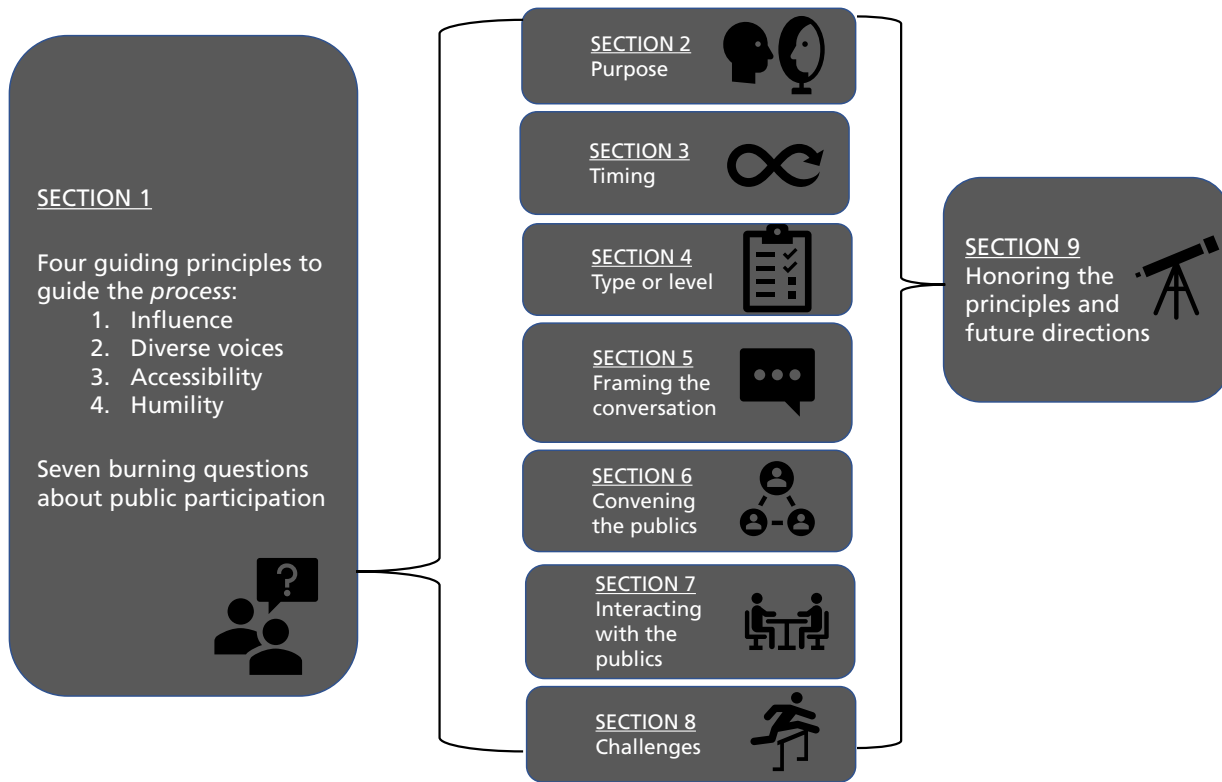
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Contents

1. Introduction: Guiding Principles for Public Participation and Questions For Practitioners to Consider	3
2. Purpose: Outcomes and Opportunities	9
3. Timing: Benefits of Public Input Throughout the VUM Framework.....	13
3.1. Facilitating Diversity, Equity, Inclusion, and Access by Engaging Throughout the VUM Framework	13
3.2. Understanding the Potential for Conflict	16
4. Types or Levels of Public Participation	19
5. Framing the Conversation: Exploring How People Connect to Nature and Place	27
6. Convening the Public: Considering Communities of Interest and Communities of Place	37
7. Engaging and Hearing from the Diverse Publics With a Variety of Methods	41
8. Challenges for Implementing Meaningful Public Participation.....	47
9. Reflections and Future Directions: Honoring Principles for Effective Public Participation.....	51
References	55

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1. Introduction: Guiding Principles for Public Participation and Questions For Practitioners to Consider

The Interagency Visitor Use Management Council (Council) provides guidance on visitor use management (VUM) policies and aims to develop legally defensible and effective interagency implementation tools for VUM. The Council underscores the critical nature of desired conditions development by referring to the challenging task as the heart of visitor use management (Interagency Visitor Use Management Council 2021). The Council defines desired conditions as “statements of aspiration that describe resource conditions, visitor experiences and opportunities, and facilities and services that an agency strives to achieve and maintain in a particular area” (Interagency Visitor Use Management Council 2021:13). To develop new and relevant desired conditions, change previous desired conditions, or understand the appropriateness of maintaining established desired conditions, the Council stresses the importance of engaging the public.

Agencies have long been motivated to ensure that opportunities for public participation are provided. However, in many instances participation has been viewed as a process to fulfill legal requirements, or as a tactic to manage relationships with various, often adversarial, publics (Predmore et al. 2011b). In recent decades, the tenor of discussion around public participation appears to be shifting, with an aim towards more substantive public participation, which may include rich dialogue, attempts to share power, and explicit recognition and incorporation of multiple sources of knowledge. Indeed, the range of terminology around public participation has blossomed to include terms such as public input, public involvement, civic engagement, stakeholder engagement, and other similar terms (e.g., see Leong et al. 2011). In this paper we use the term “public participation” to for all processes that seek active participation from the public in agency decision-making. This contributed paper provides practitioners using the Council’s desired conditions guidebook with support related to public participation; we do this by providing fundamental information in the main text, with additional details and case study examples in boxes.

Fundamentally, we suggest there is value in establishing a clear, transparent process where assumptions underpinning various concepts and ideas (e.g., desired conditions, level of public participation, barriers, decision-making sideboards) are identified and communicated. Our discussion throughout is based, in part, on the assumption that developing desired condition statements is often a complex and challenging task, and public participation can support an understanding of multiple worldviews for completion of this task. However, we suggest that there is a need to trust that the public participation process will yield the needed outcome (i.e., desired condition statements), even if the process wanders away from the somewhat narrow need of desired conditions statements.

We recommend striving for a consensus in understanding the process, integral concepts, and people and institutions involved; not necessarily a consensus in the decisions made. Reaching consensus in outcome (i.e., the selected visitor use management or planning approach) may not be possible, given the diversity of values held by the American public. Instead, it may be more realistic to strive for a fair, transparent, and equitable process that people accept and embrace. In other words, if there is trust and a perception of fairness in the process, there is more likely to be acceptance of the outcome (Stern and Coleman 2015; Stern and Baird 2015). Such an approach to public participation aligns with current thinking around recreation management, which has evolved from primarily managing “what visitors do on public lands [and waters]” to also being about “how decisions are made to manage recreation and about how agency employees work with folks who care about recreation” (Williams and Blahna 2007:67) (see details box).

Focusing on both process and results

If a creative, inclusive, and collaborative approach is intended, then members of the public will likely have opinions related to both the process of developing desired conditions, and the desired conditions themselves. Therefore, if the sponsoring Federal agency is interested in increasing the influence of the public with regard to desired conditions, then it can help to extend the same influence to other relevant aspects of the task, including other elements of the Council’s VUM framework (e.g., building the foundation), the decisions about who has a voice, and the design of the public participation process.

As practitioners pursue a process for public participation around desired conditions (and VUM more broadly), we suggest embracing four guiding principles. These four principles draw from, or overlap with, foundational tenets of public participation laid out in a variety of sources, including the core values articulated by the International Association for Public Participation (2016:20-23), the principles embraced by the Department of the Interior (Leong et al. 2009:35), and the standards for respectful relationships between researchers and communities (Hawai’i Sea Grant, nd). It is worth stressing that embracing the four principles below may, to some extent, require public participation. For instance, defining how to incorporate diverse voices in a respectful way (principle 2) would benefit from what the public thinks is respectful.

- 1. Promising influence - Public participation constitutes a promise to the public that they will influence the process and desired conditions:** It is important to clearly articulate how public participation will influence decision-making, and what aspects of the process the public will have influence upon. Fully honoring this principle requires transparency about decisions that have been made, as well as the decisions that have not been made (i.e., clearly articulate the decision/deliberation space). If members of the public feel that the agency is concealing pre-determined decisions or performing hollow input-collecting activities, then it can erode trust and reinforce entrenched negative perceptions of government processes.
- 2. Honoring diverse voices - Public participation constitutes a promise that people's multi-faceted connections to nature and place will be heard, documented, and incorporated into the process in a respectful way:** Transparency and rigor related to understanding the complexity and diversity of people's connections (e.g., activities, identity, heritage) to federally administered lands and waters is critical. Pursuing such transparency and rigor can facilitate listening and learning from the public and, importantly, it provides an opportunity for the public to learn from one another.
- 3. Committing to accessibility - Public participation includes a commitment to accommodate diverse publics by making the process accessible:** Providing access to the public participation process requires many considerations, including when and where an event is held, how the agency can creatively 'go to where the people and communities are', how people are welcomed and included, the language(s) used, the ways to facilitate the basic needs of participants (e.g., meals, childcare), the ways in which information is communicated and elicited, and addressing less visible barriers to participation (e.g., self-consciousness around the ability to engage, anti-government views).
- 4. Showing humility - Public participation is approached with humility, open-mindedness, reciprocity, and a recognition and acceptance of historical contexts:** A basic premise of public participation for desired conditions development is that the path forward is not readily apparent, a reciprocal relationship exists between all involved where the ideas of diverse participants are heard and integrated, and there may need to be efforts to reconcile previous attempts to develop desired conditions that were not adequately inclusive, or that overlooked past traumas. Honoring this principle suggests that fundamental documents and processes, such as the Council's VUM framework itself, are starting points, or working documents and processes that are being co-developed, subject to change, and evolving through a reciprocal exchange of ideas. Showing humility starts with the agency reaching out to the public for help, while also claiming past shortcomings.

We aim to provide ideas for developing a process that honors the above principles, but also recognize that the ideas provided herein are influenced by our positionality as federal employees (see the details box).

Author positionality and part of our paper review process

This contributed paper was developed by a group of federal employees, most of whom are social science researchers. As a result, our paper is influenced by institutional norms and power; for instance, as researchers, we are not allowed to assert that federal practitioners *should* take a particular action (e.g., engage in a highly collaborative public participation process), but instead we can highlight the *potential value* of taking a particular action. This policy-neutral stance, which is required by all federal scientists, generally necessitates less assertive language around the pros and cons of some decision. This less assertive and neutral posture highlights the influence that a powerful institution has on even these foundational ideas around public participation. We acknowledge that some readers may find the neutral tone frustrating, particularly within the context of centering equity and justice. As part of the process of developing our contributed paper, we contracted with five Independent Community-Based Organizations (ICBOs) representing underserved communities to conduct a review to generate ideas around how we could better convey principles of equitable public participation, such as those highlighted by the ICBOs and 'Allies Workgroup' (2022). One suggestion was to include more assertive language about the benefits of centering equity through more collaborative approaches to public participation – as stated in one review comment: “we were left craving a more definitive and stronger stance on equity-centered public participation models.” We provide this anecdote to acknowledge the influence of federal institutions and the positionality of us authors on the foundational ideas provided herein.

While it is both challenging and potentially undesirable to fully prescribe exactly what that process will look like (given the various combinations of potential situational contexts), committing to a process acknowledges a place-based approach whereby there is a plurality of viewpoints about meanings of place and desired conditions, as well as a need for a plurality of public participation methods. In other words, there is no one-size-fits-all approach, and contextual understanding is critical to build a thriving community, and to support meaningful engagement with all affected groups, including minoritized populations to promote diversity, equity, and social justice. We do not provide a roadmap, with explicit connections, between public participation and finalized desired conditions statements; however, we think the information provided herein, in combination with the specific guidance provided in the desired conditions guidebook, provides practitioners with a foundation to engage the public for desired conditions development.

In support of developing a thorough and transparent public participation process, each section addresses a core question:

- **Section 2:** What are the potential outcomes and opportunities of public participation?
- **Section 3:** Within the Council's VUM framework, when might public participation occur?
- **Section 4:** What are the different level(s) or type(s) of public participation, and which are most helpful in which situations?
- **Section 5:** What does the conversation with the public about desired conditions look like, or what are the broad goals/descriptions of what the public wants to see and experience?
- **Section 6:** Who are the diverse publics?
- **Section 7:** How can agencies engage the public?
- **Section 8:** What are the barriers to engaging in effective public participation?
- **Section 9:** How might the four guiding principles be implemented in practice, and what are the future directions for improving public participation in support of developing desired conditions?

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2. Purpose: Outcomes and Opportunities

Thorough consideration of the purpose of public participation can serve clear communication with the public, as well as the design of the public participation process. We briefly discuss several potential opportunities, and perhaps resulting outcomes, that public participation can provide.

Fulfilling legal requirements: Public participation processes are often motivated by the need to meet the relevant mandate(s). Public input is required through various laws, regulations, and policies (See details box). While there is a high level of discretion regarding what constitutes sufficient public participation within the context of these mandates, the requirements provide at least some level of interaction with the public in a variety of contexts.

Laws, policies, and public participation

Administrative Procedures Act of 1946 (APA, 5 U.S.C. § 551 et seq):

Requires that the public is informed of, and sometimes given the chance to comment on, agency activities.

National Historic Preservation Act of 1966 (NHPA, 16 U.S.C. § 106 et seq.):

Requires that the views of the public and other interested parties are considered prior to making final decisions.

National Environmental Policy Act of 1969 (NEPA, 42 U.S.C. § 4321 et seq.):

Requires “meaningful” public participation throughout the NEPA process.

National Marine Sanctuaries Act of 1972 (NMSA, 16 U.S.C. § 1434 et seq.):

Requires at least one “public hearing” to understand how designation affects interested parties.

National Forest Management Act of 1976 (NFMA, 16 U.S.C. § 1604 et seq.):

Requires public participation in the “development, review, and revision of land management plans”.

Negotiated Rulemaking Act of 1996 (5 U.S.C. § 561 et seq., 1996):

Supplementing the APA rule making provision, this law allows for “negotiated rulemaking” whereby agency representatives engage with stakeholders (sometimes prior to public comment periods) to develop an approach to some issue.

Executive Order Facilitation of Cooperative Conservation (Exec. Order No. 13352, 69 Fed. Reg. 52989, Aug. 26, 2004):

Orders that the implementation of laws relating to the environment and natural resources promote “cooperative conservation, with an emphasis on appropriate inclusion of local participation in Federal decisionmaking”.

National Park Service Director's Order of Civic Engagement and Public Involvement (NPS DO #75A, 2003 and renewed in 2007):

Articulates a commitment to civic engagement and directs all NPS units and offices to embrace civic engagement for “creating plans and developing programs”.

USDA Forest Planning Rule of 2012 (National Forest System Land Management Planning, 77 Fed. Reg. 21162, April 9, 2012): Requires opportunities for public participation in a variety of components of the planning processes; also provides guidance on what should be considered in the public participation context (e.g., cost, diverse roles, jurisdictions).

Relationship building through shared understanding of diverse perspectives: Some types of public participation constitute partnerships, which generally require a need to build trust, understand identity, and acknowledge and distribute power (Dietsch et al. 2021b). Public participation provides the opportunity to build trust and relationships, and to learn about people by going into their comfortable spaces (e.g., communities centers, churches, neighborhood celebrations); capitalizing on such opportunities can result in a shared understanding about people's relationships with place. Public participation requires empathy, vulnerability, risk taking, and time (Dietsch et al. 2021b; Armatas et al. 2021b).

Creating actionable knowledge and social learning: Creating actionable knowledge is “undeniably a social enterprise” which includes relating to people and negotiating meanings among interested parties in specific contexts (Stern et al. 2021:3). Actionable knowledge recognizes that scientific evidence in the absence of interpersonal relationships and social contexts is inadequate for producing action (Levin 2013; Stern 2018; Roux et al. 2006). Public participation can facilitate the creation of a shared knowledge base, whereby local knowledge, Indigenous knowledge, scientific knowledge, and professional knowledge are highlighted and discussed for addressing the task at hand. This knowledge base can lead to the development of new insights, while also recognizing that the managing agencies are not the only source of valuable knowledge. Committing to a more collaborative approach represents a different way of doing things, and it provides a space where different perspectives can be integrated and heard.

Incorporating cultural dimensions: Gee et al. (2017) articulated two reasons for incorporating the cultural dimensions of a human-nature relationship in a way that is comparable to economic and ecological dimensions. First, cultural dimensions, within each specific planning context, need to be defined and rooted in a specific place. These cultural dimensions may be created and assigned by Tribes and Indigenous peoples with ties to the land prior to European conquest, socio-cultural groups with long-term land tenure relationships, local communities with long histories of association with a place, and more recent communities acting in

specific cultural and temporal contexts. Second, these cultural dimensions should be understood spatially, when possible and appropriate. Cultural dimensions might include cultural landscapes, like sites and may be more symbolic or metaphorical, like origins, myths, or legends. Cultural dimensions also might be rooted in cultural practices, such as those involved in subsistence. Parker and King (1990) provide guidelines for evaluating and documenting cultural dimensions, with a discussion of both engaging traditional communities and considering intangible heritage and cultural values.

Decolonizing and confronting the past: Jacobs et al. (2022:203) asserted that “decolonizing federal institutions requires the complete restructuring of governmental processes [and] managerial frameworks”, as well as the blending of different ways of knowing and the understandings of the world around us. Further, Dietsch et al. (2021a) suggested it is important to create space for minoritized communities to both highlight past and ongoing trauma and ‘transgressions’, or stories of resistance and action that underscore ways that connections to nature have been maintained despite systemic obstacles put in place by dominant cultures. Public participation processes, particularly those that look to share power, provide an opportunity to significantly change the way agencies approach VUM. By creating space for public knowledge and priorities to share power, public participation processes can decenter dominant knowledge production and institutional practices.

Considering social-ecological systems: A social-ecological systems (SESs) perspective accepts that natural and social systems are interrelated and linked, with multiple variables interacting in complex ways across spatial and temporal scales (McGinnis and Ostrom 2014; Berkes and Folke 1998; Berkes et al. 2008). Within the context of VUM, an SESs perspective is increasingly embraced to highlight both the on and off-site social and ecological outcomes of recreation management (the ‘to whom’ and ‘where’ of different outcomes/benefits), the varying entities that may be influenced (individuals, households, communities, society, wildlife, the environment, tourism system), and different ways to approach well-established issues (e.g., might recreationists have positive effects on wildlife?) (Morse 2020; Morse et al. 2022; Miller et al. 2021). There are many ways to consider SESs within a VUM project, but public participation and the diverse voices that it engages provides an opportunity to learn about the various ways that public lands and waters influence the surrounding communities and natural systems. Additionally, public participation processes can help increase understanding about how external factors or drivers (e.g., changing climate, population changes) may influence public lands and waters.

Creative solutions: The current era of recreation management is defined by a focus on diversifying connections (e.g., spiritual, heritage, social), which is a shift from a previous era focused on diversifying activities (e.g., backpacking, paddling, hunting) (Blahna et al. 2020). This shift in recreation management reflects increased attention and knowledge of diverse human-nature or human-place relationships and public land management institutions, both of which are rooted in a past that has resulted in varying opportunities (or lack thereof) of access to public lands and waters (see details box). Further, there is the increasing recognition of the significant role of

public lands and waters in broader social-ecological systems. Aligning these ideas with VUM and desired conditions development will require an openness to other's perspectives, critical thinking, diverse partners and institutions, and experimental approaches.

NATIVE Act and diversifying connections

The Native American Tourism and Improving Visitor Experience (NATIVE) Act of 2016 seeks to, in part, "support Native American tourism and bolster recreational travel and tourism", "expand heritage and cultural tourism opportunities", and "enhance and improve self-determination and self-governance capabilities" in Native American and Native Hawaiian communities. As agencies continue to progress into a new era of recreation management, diversifying connections and incorporating diverse partners into planning and decision-making processes will be critical for meeting the purposes of the NATIVE Act.

3. Timing: Benefits of Public Input Throughout the VUM Framework

It is challenging to provide guidance on the practice of public participation for developing desired conditions without understanding how public participation is infused throughout the broader VUM process. Therefore, we approach VUM, and the nested desired conditions idea, broadly herein. That is, visitor use management focuses attention on managing visitor use and settings on public lands and waters, and that management is guided by desired condition statements, which eventually focuses on finer scaled objectives such as facilities and human-offered services. However, we stress the need to have, or at least begin with, broad conversations about human-nature/place relationships (or some similar framing), and the influence that the public may have throughout the full VUM cycle (i.e., elements 1-4 in the Council's VUM framework). These conversations might include discussions of the primary problem to be addressed (i.e., why is the agency considering establishing new or changing existing desired conditions, and do people agree with the problem framing), management actions (i.e., how desired conditions are achieved), of how nature is viewed (e.g., as kin), or of how public lands and waters are perceived (e.g., America's best idea, symbols of oppression, barriers to economic opportunities).

This broad topical, spatial, and temporal approach to VUM and desired conditions development is supported by the guidebook, which provides specific guidance that desired conditions “respond to conditions in the broader landscape”, and “consider the whole system...[and] contribute to ecological, social, and economic sustainability” (Interagency Visitor Use Management Council 2021:13-14). The broad approach is also important for facilitating diversity, equity, inclusion, and access in the public participation process, and understanding potential areas of conflict within the day-to-day interactions with the public.

3.1. Facilitating Diversity, Equity, Inclusion, and Access by Engaging Throughout the VUM Framework

The first element of the VUM framework is “build the foundation”, which includes clarifying purpose and need, reviewing an area's purpose (e.g., applicable legislation), assessing and summarizing existing information, and developing a project action plan. There is value in incorporating the public into the foundational stage of VUM, whereby shared language, foundational assumptions and understanding of historical context, and barriers and facilitators of accessing the process are established. Engaging the public during this foundational stage can facilitate and work towards addressing diversity, equity, inclusion, and access, which contributes to the potential that public lands serve and support all people. It is at this foundational stage that ‘power and privilege’ (e.g., personal and group identities, acknowledging and addressing history), as discussed by the Independent Community-Based Organizations and Allies Workgroup (2022), can be explicitly discussed in detail.

Establishing these basics for public participation can help to ensure that diverse populations are seen and heard. For some segments of society, the desired conditions set may threaten their livelihoods, reduce access to the resource, and impact their cultural identity or traditional practices; thus reinforcing the potential need to include diverse publics. Further, while the administrative history of a protected area (i.e., its federal legal status) provides guidance for desired conditions, it may both obscure the rich history prior to designation and, additionally, be a source of trauma for some groups with historic or contemporary landownerships, land tenure relationships, memories, or other ties to a place or events that occurred there. For example, within the context of marine VUM at Papahānaumokuākea Marine National Monument, the history outlined by Kikiloi et al. (2017) is relevant, which emphasizes the importance of the Northwestern Hawaiian Islands for a variety of reasons (e.g., transportation, survival, connection to one another, cultural preservation), starting between 800-1000 AD. As another example, the stories of Japanese American immigrants and their relationships with specific places, which are influenced by experiences including World War II confinement and incarceration (Burton et al. 2000; National Park Service 2021), provide a unique perspective that needs incorporation during the foundational stage of desired conditions development. Indeed, several National Park Service sites have approached desired conditions through this lens (e.g., Manzanar National Historic Site), with the Amache National Historic Site currently developing desired conditions through this lens.

While enabling legislation for public lands and waters provides general sideboards for decision-making, agency specific guidance may provide greater clarity about how to address existing historical context (see details box). As Masur (2009:88) explained, traditionally associated peoples may not be legally privileged (though they may be privileged in administrative policy); but being proactive with these communities can lead to fewer misunderstandings through “positive, culturally sensitive engagement.”

National Park Service and cultural resource management guidance

The NPS established guidelines for cultural resource management, which includes a broad range of topics such as research, planning, stewardship, and management of cultural landscapes, archeological resources, and ethnographic resources (National Park Service 1998). For ethnographic resources (chapter 10 of National Park Service (1998)), the guidelines are explicit that traditionally associated groups are considered differently than general recreationists, and emphasis is partly on resources significant to non-recreational users (e.g., park neighbors, traditional residents). Traditional users are thought of as ‘special client populations’, who have an association with the Park enduring at least two generations, and their preferences should be, at the very least, identified and thoroughly considered.

Explicit acknowledgement of historical context can support the need for developing a shared vision about desired conditions (as well as the specific question of whether existing desired conditions are adequate). For instance, when considering Black communities in America, Finney (2014) pointed out that the complexity of a Black individual's experience has not been fully acknowledged, which has consequently constrained the ways Black Americans speak about the relevance of nature. Further, Finney (2014) highlighted how incomplete historical contexts impede shared visions (details box), and when wondering about the adequacy of existing desired conditions statements, this underscores the importance of asking who is involved in informing and choosing desired conditions in the first place.

Creating a shared vision may require starting anew

“While all individuals may imbue a landscape with meaning, only some meanings gain traction in our quest to define ourselves and the places we live, or to shape a national narrative that supposedly reflects the beliefs and experiences of all Americans. We are less anxious to acknowledge that in order to have achieved certain goals on the road to become a nation, American identity was also informed by how some people “Othered” particular groups to advance certain tenets of Americanism, including economic freedom and prosperity. Whether we leave out the removal of American Indians from their land, or the refusal to give ex-slaves their forty acres and a mule, the effort to airbrush the definition of an American collective identity on the national landscape has stymied our ability to fully comprehend who Americans are collectively and individually.” (Finney 2014:76)

To bring a racial justice lens into planning work, Rose et al. (2022:54) stress the need to pay attention to language (e.g., using Indigenous place names, or names with place-based meaning), to allow for the telling of complete and complex histories of place, and to allow “people to freely express their connection” to a place. We would add that closely considering language would extend to even fundamental terms like “desired conditions”, which is an established term used in natural resource planning to convey the need to determine some goal for managers to strive towards. However, it is worth highlighting that commonly-used recreation frameworks (which include ‘desired conditions’) are historically grounded in consumer and economic theory, are generally rooted in Euro-American ideologies and assumptions about the positionality of people in nature (i.e., conveys a unidirectional flow of nature to humans), and implicitly privileges western, professional knowledge (Williams et al. 1992; McCool et al. 2007). As Jacobs et al. (2022) pointed out, the current functions of federal land management agencies lack Indigenous perspectives on human-nature relationships, as well fundamental ideas like responsibility, reciprocity, and redistribution.

3.2. Understanding the Potential for Conflict

Allowing for an exploration of the broad relevance of nature and place can accommodate sentiments that are inclusive of, but not solely about, desired conditions. In other words, deep-seated values or conflicts, opinions about management actions, preferred recreation experiences, and concerns about the impacts of visitor use on adjacent communities are important discussions, which are likely to be covered throughout the VUM framework (but not necessarily within the desired conditions step). An unconstrained discussion aligns with guidance of public participation experts (see details box). If a VUM project falls on the high side of the sliding scale of analysis (i.e., the Council's suggestion that the investment of time, money, and other resources are commensurate with the complexity of the project), then the potential need of both early engagement, and exploratory discussions around human-nature relationships is pronounced.

Conflict and exploratory conversations

The International Association of Public Participation (IAP2) uses a three-level pyramid, where the top is occupied by 'positions' (what people say they must have), the middle is occupied by 'interests' (the reasons behind positions), and the bottom is occupied by 'values' (deeper drivers or sentiments shaping interests); they encourage practitioners to avoid discussing the top two tiers (which likely capture the more specific ideas captured by desired conditions) prior to discussing and understanding the broad range of 'values' in the room (International Association for Public Participation 2016a). Similarly, the conflict model by Madden and McQuinn (2014) uses a three-level pyramid, where the top is occupied by 'dispute' (the most obvious, tangible manifestation of conflict), the middle is occupied by 'underlying conflict' (a history of unresolved disputes), and the bottom is identity-based or deep-rooted conflict (which involves values, beliefs, or social-psychological needs that are central to identity). "The energy, effort and processes needed to address these different levels of conflict differ greatly" (Madden and McQuinn 2014:101).

Conflict or confusion might arise around the meaning of specific terms (e.g., 'value' is interpreted differently across disciplines and colloquially) (Williams & Watson, 2007). Desired condition statements should be detailed enough to specify the meaning of terms (e.g., scenic, solitude, heritage) that may have different meanings to different people. However, our knowledge is increasing about the multi-dimensionality of different, often fundamental VUM constructs. For instance, solitude is an experiential component that wilderness lands are meant to support, and it is increasingly recognized as multidimensional (Lang and Borrie 2021; Engebretson and Hall 2019). As a result, defining solitude as specifically represented by limited visitor encounters, for instance, is not necessarily going

to support the desired experience of all recreationists interested in solitude. If solitude, or other concepts, are operationalized in VUM to favor an aspect of the concept, then explicit acknowledgement of this may be worthwhile. Returning to the idea of public lands perceptions and the importance of language, it is worth acknowledging that wilderness designated lands are often criticized within the context of Indigenous relationships with lands and place. The Wilderness Act is sometimes perceived as being anti-Indigenous or, at the very least, the language in the Wilderness Act is criticized as being insensitive to long-standing use and management of lands by Indigenous people – that is, wilderness is not a place void of human impact.

Conflict could also arise around management strategies, particularly when implementing the framework where the ‘what’ (i.e., desired conditions) are considered separately from the ‘how’ (i.e., management strategies). In other words, during public participation processes, it is unlikely that discussions of *what* can be easily separated from *how*, at least without a clear process for revisiting the desired conditions if agreement around management strategies cannot be reached. Because fundamentally, management actions or the path to achieving desired conditions will have probable consequences, which may (or may not) be acceptable or worthwhile to some. For example, within the context of on-site recreation experiences, research has shown that some are not willing to tradeoff seeing fewer people with increased regulation (Lawson and Manning 2003), and some people may feel safer when encountering people. Generally, tradeoffs between the experiences (often the what), and access (often the how) are contentious (Seekamp and Cole 2009). This underscores the importance of creating a shared understanding among the diverse publics, by clearly communicating and co-producing the decision-making sideboards, and relating those sideboards to feasibility barriers (e.g., institutional boundaries, laws, regulations, capacities).

As another example in the SES context, Johnson Gaither (2019) discussed a watershed project in Atlanta, where the preservation of sociocultural and environmental values as a goal (i.e., the *what*) was well established. However, the specific path toward achieving this goal (i.e., the *how*) comes at the risk of gentrification and the displacement of residents, as has happened in similar contexts (Checker 2011; Curran and Hamilton 2012; Immergluck & Balan 2018). Johnson Gaither (2019:10) recommended that an “evocative antidisplacement narrative needs to be constructed that frames the black exodus from west Atlanta as a gross injustice.” This recommendation highlights the importance of both visioning around the consequences of pursuing a set of desired conditions and recognizing how the actions within a public space can influence adjacent communities.

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4. Types or Levels of Public Participation

The terms public participation, civic engagement, public engagement, and public consultation are often used interchangeably to describe the same, broad idea: “communicating with and involving citizens in government activities” (Clarke and Leong 2016:2). Here, we use public participation to refer to any of these endeavors. Both scholars and practitioners have added detail to the broad idea, which can provide specificity about the public participation process, including power dynamics, commitment to stakeholders and rightsholders (i.e., tribal members with reserved rights), decision-making roles, agency goals, and potential methods. For instance, within federal land management agencies, *tribal consultation* generally refers to a specific government-to-government process, which is wholly separate from the public participation discussed herein. The separate tribal consultation process does not preclude tribal involvement in the more general, public participation process, though the former may influence the way that tribal members approach the latter. On the other hand, the public participation process discussed herein does potentially include advisory council “bodies”, sometimes referred to as Federal Advisory Council Act (FACA) committees (see details box). Another federal agency distinction worth mentioning is *civic engagement* and *public involvement* in the National Park Service, with the former referring to ongoing interactions and general relationship building with the public, and the latter referring to more episodic interactions where the public is engaged around a specific context (e.g., a plan revision). There are significant resources focused on the nuances of public participation, both within general contexts (International Association for Public Participation 2016a), agency-specific contexts (e.g., Leong et al. 2011; Clarke and Leong 2016), and issue-specific contexts such as wildlife management (Lauber et al. 2012; Leong and Decker 2020) and recreation management (Williams and Blahna 2007). Fundamentally, these resources generally convey, on a spectrum, the different types (or levels) of public participation, with a variety of associated considerations.

FACA and collaborative public participation

FACA is a law that can influence what collaborative planning looks like. The purpose of the legislation is to ensure that citizen involvement in federal decisions is equitable, and that no one individual or group has undue influence (Williams 2013). FACA applies when:

1. A federal agency establishes, utilizes, controls, or manages the collaborative effort (e.g., sets agendas, names a Designated Federal Officer, dictates membership); and
2. The group consists of some non-federal members; and
3. The group aims to provide the agency with consensus advice or recommendations.

FACA only applies when all three criteria are met, but there is significant nuance around each criterion. According to USDA Forest Service (2011:1), the simplest way to avoid triggering FACA is to hold events that are “open to all and transparent” and seek individual input not consensus from the group. Openness and transparency are paramount to honoring the four principles established at the outset of this paper.

Table 1 provides an overview of the different approaches to public participation. It is important to stress that moving toward a different type of public participation will require a continued effort by agencies and an openness to new (or previously unused) approaches to engage the public. Three paradigms for practitioners to consider are the top-down governance model, the public input governance model, and the public engagement governance model (Leong et al. 2009b; Leong et al. 2011; Leong et al. 2009a). Governance is commonly defined as a complex process of interaction and decision-making, which necessarily goes beyond governmental organizations and includes diverse actors such as communities, private sector organizations, and non-governmental organizations (Graham et al. 2003; Lemos and Agrawal 2006; Pahl-Wostl 2015; Tropp 2007). Governance institutions include both formal (e.g., laws, administrative rules, budgets) and informal (e.g., agency culture, employee beliefs and potential biases, personality types) factors that influence the complex process of interaction and decision-making. The potential for, and actual process of, public participation with diverse publics is influenced by the values, assumptions, and administrative norms, habits, and practices that shape governance institutions.

It is important to consider these three governance models, summarized below, when considering which approaches to public participation to pursue.

Top-down governance model (agency tells the public) - column 1 in Table 2:

- Characterized by an assertion of statutory authority for the agency to act, input requires significant initiative from the public, stakeholders may intervene through political and legal avenues.
- Criticized as not meeting standards when NEPA requires public participation.
- Potential benefits to agencies and/or the diverse publics include timely action, lower costs, efficiency, public “acceptance” (even if grudgingly given), the ability to make many decisions, quickly reach many members of the public, and a simplistic communication approach through mass information dissemination (e.g., news articles, social media).
- Could be appropriate when the decision is low on the Council’s sliding scale of analysis (e.g., limited geographic extent, low impact on surrounding communities or other areas within the publicly administered unit), when a disaster situation requires quick action with subsequent deliberation once immediate health and safety threats have been addressed, when the decision space is narrow (e.g., designing a river access site), or when potential controversy is low.

Public input governance model (agency hears from the public) – columns 2 & 3 in Table 2:

- Characterized by clear separation between the agency and the public, effort by the agency to engage the public, emphasis on the public as different stakeholder or interest groups, substantive communication between the agency and the public that leads to mutual learning, and a closed decision-making approach.
- Criticized when participation processes constitute ritualistic ways for members of the public to vent, for little emphasis on dialogue between different interest groups (agency becomes mediator and interpreter of different positions), and public input may be collected without clear articulation of how such input influenced decisions (i.e., information extraction).
- Potential benefits to agencies and/or the diverse publics include more informed, fairer, wiser, and more implementable decisions, and an ostensible attempt to effect procedural or recognition justice.
- Most appropriate when the decision is moderate on the Council’s sliding scale of analysis (e.g., several different interested groups, scale extends beyond unit borders, visitor experiences will change), the decision space is relatively large, and controversy potential is moderate.

Public engagement governance model (agency and public learn from one another) - columns 4 & 5 in Table 2:

- Characterized by an emphasis on common interests over competing interests, interaction among different interest groups, integrating different types of expertise, rich dialogue, two-way inter-change, mutual learning, the agency as a part of the community, relationship-building based on reciprocity, power sharing, and an open decision-making process.
- Criticized for being challenging to implement, time and resource intensive, and influenced by those who have the privilege to show up and dominate the input process.
- Potential benefits to agencies and/or the diverse publics include more sustainable decisions, enduring relationships, and improved capacity to address future issues together.
- Most appropriate when the decision is high on the Council’s sliding scale of analysis (e.g., lasting impact of the project, impact extends beyond the region, a high number of interested groups), the decision space is expansive (e.g., broad scale visitor planning), known equity issues are involved, and potential for controversy is high.

Table 1. Different approaches agencies can take for public participation

Type of Participation*				
1	2	3	4	5
Inform Authoritative/ Passive receptive	Consult Inquisitive	Involve Intermediary	Collaborate Transactional	Empower Co-management
Associated goals of agency with different levels of public influence**				
Provide publics with balanced, objective, and accurate information	Inform and then obtain publics feedback	Work directly and consistently with the publics to thoroughly understand and consider public input	Partner with publics to develop and evaluate all facets of the issue	Partner with public to develop and evaluate, to seek consensus, and share power on (and co-implement) decision.
Agency commitment or promise to the publics**				
Keep the public informed, receive unsolicited comments	Keep the publics informed, listen to feedback, describe how feedback influenced direction.	Work with publics ensure input is integrated, describe how input influenced the decision.	Look to publics for advice and innovation, solution formulation, and incorporate input into decisions.	Co-produce solutions, and share (or yield) decision-making power.
Role of the agency and probable frequency of interactions with publics				
Decider and listener; occasional	Decider and reviewer; occasional	Decider and reviewer; frequent	Leader and team member; frequent	Co-leaders or co-producers; frequent
Methods for agency interaction with the publics				
Fact sheets; newsletters; websites; press releases; webinars; open houses	Public comment; public meetings; open houses	Focus groups; surveys; expert panels	Workshops; charrettes; citizen juries; joint fact-finding	Board of directors; FACA committees; shared stewardship

Notes: *Two different public participation frameworks, with different language, are represented: top (International Association for Public Participation 2016b); bottom (Lauber et al. 2012; Leong et al. 2011).

**A synthesis of frameworks (i.e., International Association for Public Participation 2016b; Lauber et al. 2012; Leong et al. 2011).

We do not suggest that the approaches further to the right-hand side of the spectrum should be used all the time, instead, the existence of the spectrum of approaches chronicles the historical evolution of more inclusive, dialogue-based types of public participation. There are still instances where all types or levels of public participation may be more (or less) appropriate depending on the situation, as described in the corresponding governance models above. The emergence of the processes outlined in columns 4 and 5 reflects a shift in public land and water management, where an ‘active resource use and management era’ (characterized by dominant themes such as sustainable uses, diversifying activities, managing visitors and settings) has given way to an ‘emerging era of people and land interactions’ (characterized by collaboration and partnerships, diversifying connections, and social-ecological systems) (Walesh 1999, Leong et al. 2011, Blahna et al. 2020). That is, the science and practice of land management, perhaps through a recognition of the value-laden and complex nature of the problems being addressed, increasingly recognizes the benefit of public engagement. As Cervený et al. (2018) suggest, there is a need for *robust* public participation and new methodologies.

If a more collaborative approach is pursued (i.e., column 3-5 in Table 1), then honoring the principles above will require, to some extent, the co-development of a governance process. For a practitioner pursuing such a collaborative approach, we recommend reading chapter 7 in Stern (2018:125-173), which is an accessible and thorough introduction to the various considerations and theories that support effective collaboration. The guidance provided by Stern (2018), which cannot be fully conveyed herein, highlights several critical components to effective teamwork which, if fully articulated, will facilitate a transparent process for developing desired conditions. For instance, a simple model of the main drivers of team effectiveness is presented, which starts with inputs and ends with outcomes (see details box, adapted from Stern (2018:130-131)).

Drivers of team effectiveness

1. *Inputs*: factors influencing a team’s operations, such as organizational context, existing expertise, initial goals and task design, and the characteristics of the resource.
2. *Processes*: operations and activities of the team.
3. *Emergent states*: characteristics that develop over time (e.g., trust, shared mental models).
4. *Outcomes*: Observable results (e.g., desired condition statements, improved partnerships).

Within the context of these different drivers of team effectiveness, discussions may cover the extent that the agency can share power, the perceived decision-space, roles and responsibilities of different members of the team, different perceptions of risk, and an agreed upon charter or governance framework that outlines rules/ethics of engagement and the specific ways that the non-governmental entities can influence decisions (see case example box).

Papahānaumokuākea Marine National Monument

The Northwestern Hawaiian Islands (NWHI) are considered a sacred place important to Hawaiian history and the cultural origins of Native Hawaiians. This region has cosmological significance connected to Hawaiian creation chants such as the Kumulipo which describes Hawaiian cosmology as being composed of two realms: pō, a place of deep darkness reserved for the gods and spirits, and ao, the realm of light and consciousness where mortals reside. This cosmic worldview is understood by the geography of Hawai‘i. The Tropic of Cancer divides the Hawaiian Archipelago into these two realms where to the north Native Hawaiians recognize as pō because the sun does not reach the zenith. Located to the south in the tropics are the inhabited Hawaiian Islands. The historical accounts that occurred in the NWHI shaped the social, religious, and political development of traditional Hawaiian society and provided an extensive voyaging sphere that supported prolonged recurring access and use by Native Hawaiians which has continued in contemporary times.

Papahānaumokuākea Marine National Monument (continued)

In 2006, President George W. Bush established what is now known as the Papahānaumokuākea Marine National Monument (PMNM) (Presidential Proclamation 8031, 8112). The monument is co-managed by the National Oceanic and Atmospheric Administration, U.S. Fish and Wildlife Service, the State of Hawai'i Department of Land and Natural Resources, and the State of Hawai'i Office of Hawaiian Affairs, and Native Hawaiians have consistently led the development and governance of the monument. Its management is based on indigenous Hawaiian knowledge and management practices, as expressed in the *Mai Ka Pō Mai* guidance document published in 2021 that helps the permeation of Native Hawaiian culture into all aspects of management. The [Mai Ka Pō Mai guidance document](#), (Office of Hawaiian Affairs et al. 2021) was collaboratively developed with Native Hawaiian community members for more than 10 years and is based on a conceptual representations of Hawaiian cosmology and worldview. It includes five management domains and 20 strategies that promote adaptive management while advancing inclusion, diversity, equity, and justice. The development process and outcome of *Mai Ka Pō Mai* also highlights how cultural and historical context of a place can not only inform decision-making but can also structure management decision-making through placed-based knowledge, values, and precepts that achieve outcomes acceptable to the monument co-managing agencies and Native Hawaiians.

The proclamation included a Hawaiian word, “pono,” which was defined with the assistance of Native Hawaiians. It states, “Pono means appropriate, correct, and deemed necessary by traditional standards in the Hawaiian culture.” Significant cultural components were intertwined with the creation and management of the PMNM. The naming of PMNM derived from ancient Hawaiian traditions and the Office of Hawaiian Affairs became a co-manager in 2008 and a co-trustee of PMNM in 2017.

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5. Framing the Conversation: Exploring How People Connect to Nature and Place

Desired conditions statements are the tip of the iceberg; on their own they are concise and, often, quite narrow. For instance, the desired conditions guidebook guides practitioners to exclude from the statements information including management actions, and “background, history, or context information” (Interagency Visitor Use Management Council 2021:13). To be clear, the guidebook underscores the importance of background, history, and context by stressing, for instance, the importance of values, beliefs, and preferences, and the purpose of an area’s designation. And management strategies are critical within the VUM framework, as they constitute an entire element.

Within the context of public participation to develop desired conditions, it may be counterproductive to start with a narrow focus on desired conditions statements. This is partly because that which underpins desired conditions statements is incredibly complex, and members of the public may struggle to articulate the types of information that neatly fits into desired conditions. It is worth stressing that decades of social science findings have effectively highlighted the complex and varied ways that people relate to, and interact with, nature and place. But collective efforts have not yet yielded a unified framework for conceptualizing and articulating the ways that people interact and connect to nature and place; given the different ways that people think about their connections to nature and place, a unified framework is perhaps an impossibility. Therefore, we recommend a broad framing of how people relate, interact, or connect with (non-human) nature and place.

A broad framing can support desired condition development by ensuring that diverse perspectives, with corresponding history, background, and context, are voiced and understood by agency decision-makers and members of the public alike. A broad framing recognizes that: (1) people organize their connection to public lands and waters in diverse ways; (2) public lands, waters and other federally administered units are viewed both positively and negatively; (3) public lands, waters and other federally administered units are rooted in place (with historical context) and, therefore, necessarily wade into environmental, social, economic, and political issues and; (4) there may be some people and communities that lack awareness about public lands and waters.

We suggest that incorporating public participation conversations and activities around a broad framing can support dialogue around what diverse publics view as most important regarding public lands and waters, which:

- Facilitates a social-ecological systems perspective (it does not constrain thinking to the administrative boundaries of a protected area);
- Provides opportunities to incorporate human-centered benefits (e.g., individual experiences and activities) alongside other, perhaps less tangible, benefits (e.g., intrinsic values); and

- Provides an opportunity for the public and agencies to co-produce an approach for deriving specific desired conditions from broader connections and interactions with nature and place.

Broad conversations around diverse connections and interactions with nature and place provide the ingredients for writing desired conditions, though there is no universally accepted recipe for how those ingredients are combined to yield the final outcome (i.e., written desired condition statements).

Even a cursory overview of the various typologies and ways that people's connection to nature and place are conceptualized is beyond the scope of our effort, but we provide two interrelated and broad framings for how people connect to nature and place. The first framing is illustrated in Figure 1, and it highlights the various components of place connection, with a focus on the interaction that one has on-site, or directly with the federally administered unit. Figure 1 suggests that one's relationship with place is affected by one's expectations. Expectations are shaped by one's values, attitudes, and beliefs about human-nature relations that they have learned and cultivated over time (not associated with a particular place). Your expectations of that place are also shaped by: (a) your direct experiences of being in that place, including the people you are with, the activities you are engaged in, the feelings and sensations you had there, and the biophysical setting you encountered; (b) narratives of that place that have been generated by your memories (including collective memories of communities) and accumulated experiences of the place, as well as the stories, information, and knowledge shared by others of the place; (c) social constructions or shared meanings of place determined by society and its governing institutions, which can be signified by its labels (UN World Heritage Site, UNESCO (United National Educational, Scientific, and Cultural Organization), wilderness area, City landfill, etc.), and by existing land management regimes, landownerships, and historic uses and tenure relationships in that place. All of these overlapping and mutually modifying factors affect how you perceive that place, what you can expect to do there or find there, and how you develop bonds with the place.

Figure 1. Conceptual overview of how place connections are shaped.

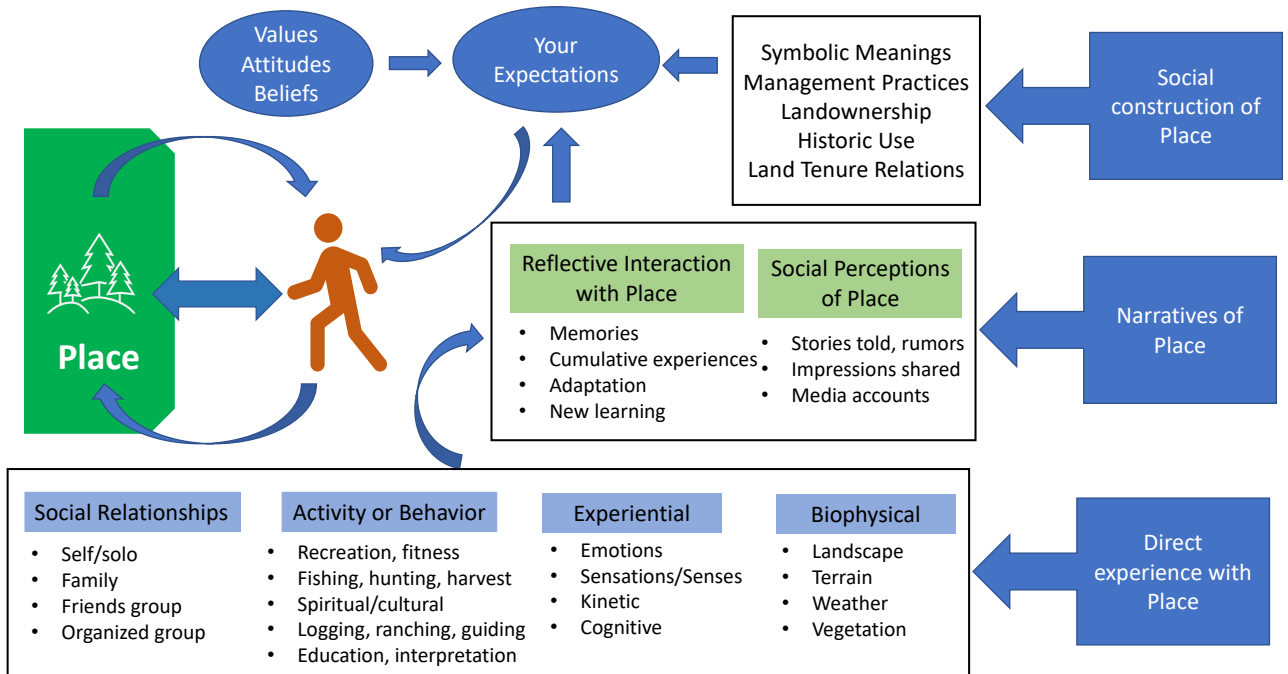
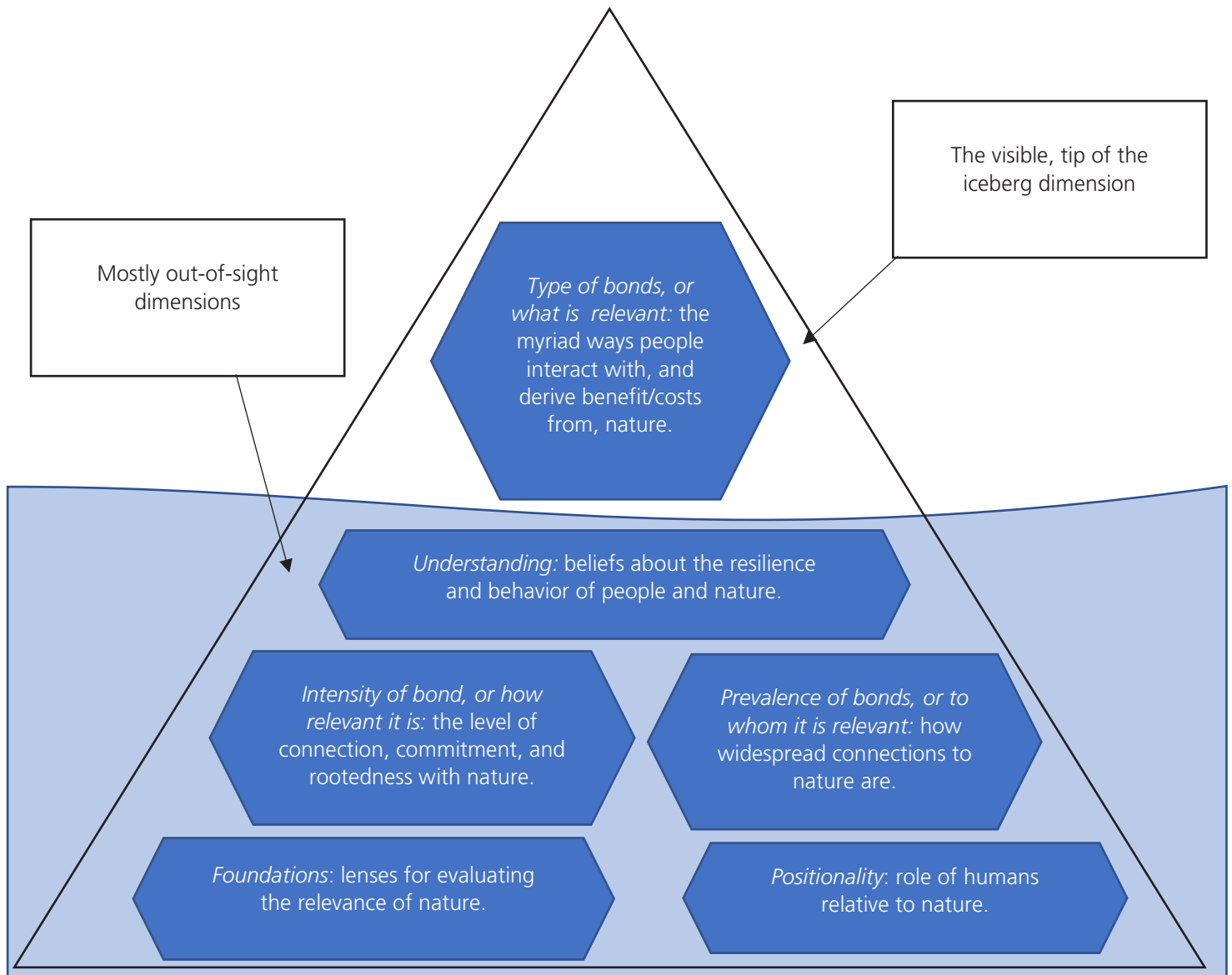


Figure 2 illustrates several dimensions of human-nature relationships that are likely helpful to think about, explore, and communicate while engaging (and planning to engage) the public in discussions related to desired conditions. Figure 1 has an on-site focus and proposed interactions between different components, whereas Figure 2 makes no attempt to distinguish how the various concepts interact or influence one another, beyond being a part of the human-nature relationship. Also, the different dimensions should not be interpreted as mutually exclusive, or even as particularly distinct. And finally, Figure 2 only implicitly captures the complexity that results from public lands and waters being rooted in a specific place. For instance, it does not explicitly acknowledge the fact that VUM is implemented in areas that are administered by a natural resource management agency. That is, members of the public will not only have a relationship with the settings (e.g., nature, interpretive site) of a particular federally administered unit but, interrelatedly, they will also have a relationship with the federal government and its constituent parts. We briefly discuss each dimension of Figure 2 and, generally, suggest that desired conditions statements make visible only a limited amount of the human-nature relationship (i.e., the types of bonds are the tip of the iceberg).

Figure 2. Dimensions of human-nature relationships in relation to desired conditions.



Note: The Figure draws on ideas of Flint et al. (2013), though dimensions are added and augmented.

Types of bonds, or what is relevant, roughly captures the various ways that people derive costs or benefits from nature (e.g., recreation experiences, water quality, physical and mental health) (see details box). It is important to note that there may be people who feel severed from the various benefits provided by federally administered units; that is, people may struggle to articulate or visualize the relevance of public lands and waters. Generally, desired conditions statements are most derivative of the type-of-bond dimension. However, ensuring other dimensions are acknowledged and discussed, either at an earlier stage of public participation process or simultaneous with desired conditions discussions, is potentially critical, as discussed within the context of facilitating diversity, equity, and inclusion (Section 3.1).

Types of bonds

Types of bonds may be somewhat analogous to ecosystem services (de Groot et al. 2002), 'service providing units' (Kontogianni et al. 2012), or the experience opportunity and settings of the recreation opportunity spectrum (ROS) (Driver et al. 1978), to name a few. Typologies for such human-nature interactions are numerous (e.g., Cervený et al. 2018; Van Riper and Kyle 2014). People interact with, and assign value to, publicly administered lands and waters for a variety of specific and general reasons. Generally, interactions might include health and wellness, discovery of nature and learning, income, food and provisions, culture and heritage, recreation and lifestyle, biological diversity, and therapeutic benefits. Each of these broad categories can be narrowed to specific activities (e.g., motorized recreation, foraging for mushrooms), and/or motivations, emotions, feelings, and sensations (e.g., connecting with ancestors, building confidence and fitness, feeling small in a big universe, reflecting and introspection). Subsequently, these type of bonds connections may be articulated as settings of public lands and waters (e.g., recreating away from the sights and sounds of other humans).

Positionality includes views on the appropriate role of nature, or the position of humans in relation to nature. Examples from the literature include humans as owner/dominator, steward, partner, or participant (van den Born et al. 2001), or somewhat differently, humans as connected users, sympathizers, controllers, and/or lovers (Bauer et al. 2009). These human positions assume a freedom to engage with the land and its resources, which is not an assumption that holds for all people over time. For instance, some human positions towards nature could be described as historically or contemporarily disenfranchised (e.g., Native Americans, African Americans, poor Appalachian Whites). Wildland settings could elicit fear, trauma, or memories of violence, oppression, and terrorism, as discussed by Johnson and Bowker (2004) with regard to the collective or vicarious memories of African Americans.

Including the positionality dimension within desired conditions statements is infrequent, perhaps due to both the challenge of finding corresponding indicators and thresholds, and the potential influence of the historical context where "conditions" implied nature and people as apart from one another. However, the notion of positionality could underpin desired conditions statements and be explicitly discussed in supporting documentation. And reframing the idea of desired conditions by engaging the public around agreed upon language can increase the integration of positionality into formal desired conditions statements. For instance, an area showing few signs of human use (and the needed management to achieve such conditions) might be justified to protect social experiences of connected users, as well as limiting the potential for wildlife interaction (a

potentially important reason to those who view nature through a partnership lens). As another example, a desired condition statement might stress opportunities for interpretation of a place, with a goal of elevating the stories of those historically or contemporarily disenfranchised (such stories need to be respectful, and ideally, co-produced with those who have been or continue to be disenfranchised). Land management approaches articulated by Indigenous groups may elevate this dimension to be most visible, often when discussing reciprocity. For instance, consider the “desired outcome” articulated within a Native Hawaiian guidance document for management of a Marine National Monument: “activities cultivate reciprocity and community for those accessing Papahānaumokuākea ” (Office of Hawaiian Affairs et al. 2021:24, emphasis added). Similarly, the Snoqualmie Tribe asks recreationists to “commit to experience the lands in a way that is centered in mindfulness, rather than conquest” (Snoqualmie Tribe, n.d.). Highlighting the potential benefit of engaging the public around the subtle shift in language used from desired “conditions” to “outcomes” may seem trivial. However, if one views plants and animals as kin or rocks as having souls, then framing the whole pursuit as developing desired *conditions* may feel disrespectful, like if the proposed task was “designing” a loved one.

Foundations include different lenses, or fundamental views, for evaluating or assigning importance to nature and place. Foundations often include values frameworks, which are numerous. For instance, different people may adopt wholly or partially, an economic/instrumental lens (utility that humans receive from nature), an ecological/biophysical lens (priorities for the sustainability of natural systems), an ethical/intrinsic lens (value independent of human benefits or services – nature for its own sake), a social/shared lens (collectively shared goals, norms, expectations and traditions), and/or a relational lens (preferences, principles and virtues about relationships between humans and nature) (Borrie and Armatas 2022). Williams and Watson (2007) articulated a similar framework. Another lens worth explicitly mentioning is spiritual/religious, as it can be highly influential to how people perceive VUM. Like the positionality dimension, the foundations dimension of the human-nature relationship likely will not appear in a desired conditions statement, but one or more lenses can serve as rationale for established desired conditions (particular lenses may or may not be agreeable to different members of the public).

Understanding includes beliefs related to the resilience and behavior of nature, people, and places. In the context of potential VUM activities aimed at climate change mitigation, it might be worth acknowledging “Global Warming’s Six America’s”, which includes people who are dismissive, doubtful, disengaged, cautious, concerned, and alarmed (Leiserowitz et al. 2021). Fischer and Young (2007) studied public understanding of biodiversity concepts, including balance, food chains, and irreversible loss. With regard to recreation management and visitors, research has shown that recreationists are adaptable (Cole and Williams 2012; Parry and Gollob 2018). The idea that recreationists are adaptable may (or may not) be an idea that different members of the public adopt. The understanding that people have regarding the environment, visitor’s experiences within the unit,

and the impact of the unit on adjacent communities may not appear in desired condition statements. However, understanding of the social-ecological system, as a dimension of the human-nature relationship, will likely influence perceptions of desired conditions, as well as management strategies (see case example box to see how planners adapted to changing climate conditions).

Ski areas, climate change, and an expansion of summer activities

In 2011, President Obama signed the Ski Area Recreational Opportunity Enhancement Act, which clarifies and expands the types of activities ski resorts located on National Forests can offer year-round, particularly for the summer months. Prior to this legislation, most resort permits allowed only winter sports, such as cross-country skiing, downhill skiing, sledding, snowboarding, and snowshoeing.

Downhill skiing is the most popular winter sport activity in the national forests (USDA Forest Service 2020). There are 122 ski resorts that operate under a special use permit in national forest land (USDA Forest Service 2017), in which visitation to these resorts generates about \$3.4 billion in local spending (USDA Forest Service 2020). In addition, the aggregate net economic benefits for reach as much as \$4 billion (Chapagain 2018). However, more recently downhill skiing demand has been stagnant and, in some areas, decreasing due to various factors, including having fewer snow days due to climate change (which causes resorts to open later and close sooner in the season) (Sánchez et al. 2021), increasing cost of equipment and lift tickets, and changing demographics and outdoor recreation preferences.

To address the decrease demand of winter sports, the Ski Area Recreational Opportunity Enhancement Act expands resorts permit year-round. The public provided comments to the [Federal Register](#) for development of the Forest Service guidelines for the expansions of special use permit. More than 300 comments were received and feedback from those comments were used to develop final guidelines to determine the nature-based summer recreation activities to be allowed in national forest land (USDA Forest Service 2014). Based on this process, some of the type of activities permitted by the new guidelines are zip-lines, mountain biking, and disc golf. The Forest Service expect that expanding summer recreation activities in ski resorts will result an increase of in summer visit to national forest by 600,000 and will have a \$32 million in additional direct spending to local economy (USDA Forest Service 2017).

Intensity of bond, or how relevant public lands and waters are, captures the level of connection, commitment, and rootedness with nature and/or place. The intensity-of-bond dimension, advanced significantly by place research (Williams and Miller, 2021), is a reminder that federally administered units are rooted in local contexts, and often overlay lands and waters with complex histories (Williams and Stewart, 1998). Identity, attachment, reliance, and dependence of self, place, and culture are captured by this dimension (Gee et al. 2017; Kyle and Johnson 2008; Murphy et al. 2021). While references to cultural reliance and identity, for instance, may not be highly visible in VUM desired conditions, this dimension may be particularly important when it comes to navigating complex histories and deep-seated conflicts.

Prevalence of bonds, or to whom it is relevant, captures how widespread connections with nature and place are (Williams 2014; Hein et al. 2006). Desired conditions such as clean water may be important to all people, while deeply personal experiences or places may be important to an individual or a particular community. Federally administered units may be valuable for clear reasons, to people onsite, people off-site, and future generations; further, the existence of natural and cultural resources may be important for some yet-to-be articulated reason. Desired conditions statements rarely articulate the intended beneficiary, which may be because desired conditions are intended to support the public, at large. However, given that the public is not homogenous (it may be helpful to think of the general public as plural, not singular), it is likely critical to discuss who (and who does not) benefit from a particular set of desired conditions in a public participation setting.

Figure 1 and Figure 2 do not provide guidance on the specific path to final desired condition statements, but incorporating perspectives on the various facets of human interactions and relationships to nature and place can, to reiterate, provide the needed ingredients. Further, it is important to note that understanding the broad ways that people interact with and relate to nature and place cannot be completed with any single method (Williams, 2013; 2014). Instead, individual methods or activities provide partial understandings, which can be cobbled together with other approaches to gain a more holistic understanding (see case example box).

Finally, as stressed in the case example, it is important to ensure diverse voices are heard and, further, methods allow for explicitly highlighting different perspectives.

Broad exploration of human-nature relationships for comprehensive river management planning

The Flathead National Forest and Glacier National Park are jointly leading a comprehensive river management planning process for the Flathead Wild and Scenic River (WSR) system in Montana. Community meetings were part of the planning process, which included a structured activity where 157 participants prioritized 47 'human and ecological meanings and services' (HEMS), and 19 interested people provided additional context through follow-up discussions. Overall, the activity focused on understanding broad connections to the Flathead WSR to support an understanding of diverse human-nature relationships with the system. The 47 HEMS mostly included type-of-bonds (Figure 2)/ direct interactions with place (Figure 1) aspects, including activities (e.g., dispersed camping), opportunities (e.g., experiences with limited planning), motivations (e.g., social time with friends and families), provisioning benefits (e.g., local economic support), and environmental benefits (e.g., water quality). Follow-up discussions provided people the opportunity to explore the other aspects in Figure 1 and Figure 2, and provide insight into the planning process itself. Themes yielded from the follow-up conversation related to connections and interactions with nature and place included spirituality, generational and cultural continuity, conflict on the river corridor, and the erosion of unconfined recreation. Themes related to the planning process included a desire for a concerted effort and holistic approach to management and planning (i.e., a SES perspective), the goal for a high level of communication and transparency, and enhanced community engagement.

Sources: (Armatas et al. 2020; Armatas et al. 2022)

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6. Convening the Public: Considering Communities of Interest and Communities of Place

A fundamental need of any public participation process is identifying and convening people. The International Association for Public Participation (2016:5) defines the public as “any individual or group of individuals, organization or political entity with an interest in the outcome of a decision.” The prevalence-of-bonds dimension of the human-nature relationship will support discussions of who may want to participate in a VUM project. Adding detail to this discussion may benefit from thinking about communities of interest and communities of place. Prior to moving on, herein, the public would include members of Tribal Nations, who may engage outside the formal government-to-government process; however, *Tribal Nations as a whole, are more appropriately considered not as part of the public, but as sovereign nations.*

Generally, the public and communities, in any place, are seen as heterogenous and varied. When convening a diverse range of people or communities, it may be helpful to consider both communities of place (e.g., local organizations such as friends groups, chambers of commerce), as well as communities of interest (or “collectives with shared values, norms, and priorities”) (Walker and Hurley 2004:738). Communities of place include not only members of a local community, but also those who may be invested in a local community, irrespective of their physical location (e.g., somebody who moved away from a place they love, one’s original hometown). Communities of interest might include affinity groups (e.g., Outdoor Afro, Latino Outdoors, Disabled & Outdoors, the Outdoorist Oath), working parents, religious/faith-based groups, cultural groups, young people, older people, low-income families and individuals, and unemployed people.

The communities of interest and communities of place cannot be predetermined, as those who may want to engage on a given VUM project will vary by context. However, thinking broadly about communities of interest and place will facilitate the definition of spatial and temporal scale and, relatedly, the complexity of a VUM project and the corresponding public participation approach. Consulting existing resources, such as the National Visitor Use Monitoring program (see details box), may also generate ideas about who is (or is not) actively visiting public lands and waters.

The [National Visitor Use Monitoring program](#) estimates the volumes of visitors to National Forests and Grasslands, while also providing descriptive information about visitation, including activity participation, demographics, visit duration, satisfaction, where people are traveling from, and trip spending connected to a visit.

It is beneficial to, early in the process, identify barriers to public participation, to increase the chances that such barriers can be overcome. By starting early, it may be possible to more effectively navigate logistics, such as securing funding to support participants, finding ways to go to where people are (i.e., venues that do not require people to travel to an agency established location), and building relationships with important (though potentially vulnerable) populations that are worth engaging such as school-aged children.

Finally, it is also important to include interests that are not represented by a formal group. Hunters, for example, may not belong to organized groups, yet their interests are important. Latinx forest users also may not be included in some of the groups invited though, as mentioned, there may be active outdoor interest groups geared to people-of-color. While reaching different communities or individuals may be challenging, and there may be a subset of the public who may not engage, regardless of the effort put forth by the agency, there are some examples of successful engagement of challenging-to-reach populations (see case example box).

Engaging underrepresented stakeholders: the missing middle

During 2020-2021, Region 5 of the Forest Service (USFS) began a stakeholder engagement initiative focused on conversations with “missing middle” communities, which refers to stakeholders or communities with whom the Forest Service lacks connection (not necessarily people who take a middle or median position on some issue). The goal of this initiative is to identify where missing middle communities might share the USFS purpose and values.

As California becomes more diverse with changing demographics, the missing middle relationship-building focuses on equity, diversity, future generations, and sustainable resource management. This stakeholder engagement initiative aims to create public awareness about forest conservation, with an emphasis on underrepresented stakeholders, connecting diverse interests to advance shared stewardship, and enabling the underserved, rural and urban missing middle to find connections with USFS plans and projects.

The missing-middle effort follows the framework developed through the [Public Engagement Reference Guide for Forest Service Employees](#), which consist of: clarifying the why, identifying who to engage, listening with curiosity, and reflecting and validating. So far, the missing-middle initiative identified three strategies that can help advance shared interest: 1) Build a workforce development pipeline in ways that concurrently nurture a next generation stewardship ethos, 2) Harness California’s powerful community of innovators to help solve persistent problems holding conservation back, and 3) Empower employees to leverage today’s digital era to build relationships that advance conservation.

Engaging underrepresented stakeholders: the missing middle (continued)

The hope is that these three strategies will help to shift mindsets and habits to encourage employees to find new people to engage to obtain fresh perspectives, network into new communities, and change the conversations. Missing-middle engagement may lead to more productive problem-solving, increase public support, and build stronger relationships that help the agency in conservation efforts and desired condition development.

Up to this point, we have presented a significant amount of material around selecting a type of public participation (i.e., columns 1-5 in Table 1), contextualizing the approach in the broader VUM cycle, the potential value of considering broad connections to nature and place, and identifying who may want to engage. However, a practitioner is still left with the need to organize (or co-organize) a public participation process, develop relationships with people who may engage in the process, and develop a thorough understanding of diverse human-nature relationships.

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7. Engaging and Hearing from the Diverse Publics With a Variety of Methods

The type of public participation approach chosen (e.g., inform, empower) will greatly influence the technique(s) employed for interacting with the public. For instance, if agencies are simply informing the public about some decision (i.e., zero public participation is planned), then it is only a matter of communicating the decision, which includes taking stock of what is known about the diverse public connections to nature and place, as well as the rationale for not including the public in the process. On the other hand, if a more collaborative approach is implemented, then there may be a need to both co-develop a collaborative process and learn about the various ways that the public connects to nature and place.

There are numerous techniques for engaging the public, and we cannot review these techniques in any detail. Broad overviews exist in the scientific literature (e.g., Vacik et al. 2014; Rowe and Frewer 2005), and the International Association for Public Participation (2016b) (IAP2) provides an overview specifically targeting practitioners. The IAP2 guide categorizes techniques into those used for sharing information (e.g., briefings, websites), for collecting and compiling input (e.g., comment forms, surveys, interviews), and for bringing people together (e.g., public meetings, workshops, citizen juries).

When sharing information (one-way communication to the public), it is likely beneficial to aim for a diversity of communication methods; as the International Association for Public Participation (2016a:116) highlights, people respond differently based on a proclivity for visual, auditory, or tactile learning (see case example box).

Communicating the Wild and Scenic River planning process

The Flathead National Forest and Glacier National Park used multiple communication techniques for explaining the basic planning process. During public meetings (and posted online) starting in 2019, the planners provided a [poster](#) on its approach to cooperative management, as well as a [video](#) laying out the basics of comprehensive river management planning.

When collecting input or bringing people together, it is also beneficial to use a combination of methods and locations. A combination of science-driven tools and approaches, facilitated techniques, and other ways of knowing supports an understanding of the diverse publics, which will help public land management agencies maintain relevance and be responsive to changing social-ecological systems. We distinguish, in a blurry way, between the more facilitated techniques

(as taught in public participation classes) and rigorous social science techniques that would add structure to the process with a clear process moving from gathering input, to analysis, to report out that contextualizes results. Suggesting this is a 'blurry' distinction acknowledges that many of the facilitated techniques taught in public participation courses, such as focus groups, workshops, or revolving conversations, could be documented or transcribed, analyzed, and contextualized within both existing theories and applied issues. That is, many public participation techniques are underpinned by social science principles, and often draw from quantitative or qualitative research methods.

There may be a benefit in integrating more rigorous and structured social science methods into the public participation sphere, including increased transparency, enhanced confidence in the process, and opportunities to build trust (Armatas et al. 2021a; Cervený et al. 2022). Further, structured methods create a record of what was heard, which can be made accessible for current and future generations of people who may be interested in the public process and decisions made, but did not engage during the public participation process. Or, similarly, there may be people who are interested, but are unaware of the opportunity to engage or are unaware of the existence of public lands and waters. Moreover, there may be people who have a vested interest in public resource management but who lack the experience or knowledge about how to engage. While the specific details of how information is compiled and analyzed (i.e., methodological details) may not be of interest to all, transparency is facilitated by ensuring that access to such documentation is easy, should there be interest. See the "sustainable roads strategy" case example box for a summary of an effort that engaged members of the public with multiple participation approaches.

Collaborative approach to a sustainable roads strategy

In the Mount Baker-Snoqualmie National Forest, a collaborative approach to designing and implementing a public engagement approach was used to develop a Sustainable Roads Strategy. The Travel Management Act (2005) required each national forest to develop a plan for establishing a designated road system. In the northwest Cascades vegetation is dense and forest roads are the primary means of forest access for recreation, employment, and subsistence. The prospect of road closure was contentious, and pressure mounted among competing interests with strong attachments to this place. The Sustainable Road Strategy would outline a prioritization process for determining roads that would be maintained into the future and others that may be repurposed or decommissioned.

The MBS NF sought public input on which roads to prioritize for the plan. Multiple stakeholder groups (i.e., trail organizations, logging companies, conservation groups, tourism providers) convened to form

Collaborative approach to a sustainable roads strategy (continued)

the Sustainable Roads Cadre. Cadre leaders worked side-by-side with USFS social scientists and national forest officials to develop, test, and implement a public engagement approach that promoted dialogue, encouraged deliberation, and recognized strong place connections. The approach relied on Human Ecology Mapping, a participatory GIS tool developed by USFS social scientists that uses maps to capture landscape values, resource uses, and ecosystem benefits. Cadre leaders were directly engaged in tool design, helped to pilot test the instrument with 26 Cadre members, and were trained on how to guide table discussions and gather mapping data. Led by MBS NF officials, supported by Cadre facilitators, and hosted by Cadre sponsors, the engagement effort was launched in eight communities and involved 300 participants sharing their priority forest destinations and roads. A companion online engagement effort brought in an additional 1560 voices. The mapping data that resulted identified forest destinations of high importance to stakeholders and captured forest roads that catered to diverse forest visitors. The resulting 'public use data layer' was instrumental in shaping the Sustainable Road Strategy and informing planners which roads were vital for public use.

The collaborative nature of this public engagement effort was important for building bridges between stakeholder groups who often find themselves on opposite sides of the issue and for enhancing trust with the USFS. Using maps as to capture critical forest interactions encouraged participants to share stories and talk about the places of importance that they held in common, even if they might disagree about preferred uses or desired site conditions. One year later, the study team returned to the communities and shared results about priority roads and forest destinations – placing poster-sized maps on the walls for open discussion. This provided a second opportunity for feedback, deliberation, and relationship-building. When the public sees how their input has been used and how the agencies are being accountable, it can help to build enduring trust among agencies and stakeholders.

Sources: (Cervený et al. 2021; McLain et al. 2017)

While there are potential benefits for integrating social science approaches into public participation, there is a need to consider the time requirements of such efforts (particularly as it relates to agency timelines). Also, it is important to be cautious about the interpretation of structured social science approaches within public participation forums. For instance, when compiling input in public participation efforts, the knowledge created is derived from an interested public, as opposed to the general public (Brown et al. 2014; Rasch 2019; Cerveny et al. 2018). In social science parlance, the interested public is generally a purposeful or targeted sample, not a random sample. With the interested public, the results are not representative of the distribution of sentiments; (Rasch 2019) found public 'preferences' of those attending public meetings to be different in magnitude (though perhaps not different in composition) from the general public. On the other hand, public participation events may provide the opportunity to compile input from a more diverse public that would be yielded from a random sampling approach. And, further, without the ability to interpret findings as representative of the distribution of sentiments (e.g., we cannot state that 40% of the public supports some proposal), then the goal becomes understanding the diverse range of perspectives. In the public participation sphere, Armatas et al. (2021a) argued that removing the interpretation related to distribution reduces the power of well-represented, well-financed, and vocal interest groups to influence the conversation.

Facilitated techniques and applied social science provide two options for understanding diverse connections and interactions with nature and place, but recognizing the importance of local knowledge, allowing for free-flowing conversations and storytelling, and embracing other approaches to conveying connections to nature and place is also important. Indeed, embracing diverse ways of knowing suggests a broad conceptualization of "best available science", where the production and application of knowledge is derived from a range of legitimate sources that include indigenous knowledge (Office of Science and Technology Policy 2022), and the expertise built on experience, and place-based knowledge (Bartel 2014). Such knowledge includes traditional and unwritten (oral) systems of understanding and dissemination of knowledge (see case example box).

Best available science and marine sanctuaries

Often federal land management agencies are mandated to consider the (variously named) best available scientific information (BASI) within decision-making (e.g., [the NOAA Fisheries guidelines](#)). The requirement is not a reason to delay decision-making (it does not require the development of new knowledge), but instead it strives to use the most reliable and relevant information that can be obtained to inform the decision. There are existing resources that discuss the various sources of knowledge that qualify, the vague aspects of the idea (i.e., what is “best?”), and the potential challenge of applying the concept to qualitative social science (Charnley et al. 2017; Esch et al. 2018).

In NOAA’s Office of National Marine Sanctuaries, there is an increasing focus on engaging, cooperating, and coordinating with Indigenous peoples in management and decision-making, partly by recognizing the value of and incorporating traditional knowledge in discussions, deliberations, and understanding of the places and people associated with marine sanctuaries. This approach adopts the most fundamental meaning of science as a method used to gain knowledge. For national marine sanctuaries, expert workshops are often conducted to complete periodic assessments of the status and trends of sanctuary resources, including, water, habitat, living, and maritime heritage resources, and the services they provide. During these workshops, numerous forms of information are considered and are accepted as a basis for judgment in rating resource and service status and trends. BASI is the most reliable and relevant information that can be obtained to inform a decision, which may be derived from rigorous experimentation, hypothesis testing, observation, experience (or vernacular knowledge). Such information may be available in peer-reviewed or grey literature, or it may come from an expert, local, or traditional knowledge holder. Its reliability depends on robustness of the information and the extent of agreement among those with relevant expertise; and it is used at the appropriate time and application scope in the decision-making process. This approach to BASI may provide a useful starting point for the discussion of traditional knowledge and its appropriate use and value in decision-making.

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8. Challenges for Implementing Meaningful Public Participation

While public participation provides an opportunity for advancing inclusive, equitable, and creative decision-making, and lasting partnerships with non-agency entities, there are several complexities and challenges. We list and summarize several considerations well-recognized by scientists and practitioners, which are worth explicit acknowledgement and communication to the public in practice. Generally, the specific challenges and complexities discussed below are shaped by agency bureaucratic culture, hierarchical organization, approach to scientific management, perceptions that the public has limited knowledge to offer, and organizational capacity (Pringle et al. 2015; Cervený et al. 2020).

- **Limited time and the need for specific skills to lead public participation:** Public participation is often seen as an additional task for employees above and beyond existing duties, which requires building relationships and informal socialization (which are not generally incentivized or reimbursed and are expected to happen on their own time). Additionally, public participation events greatly benefit from professional facilitation and coordination. However, agency employees may or may not have formal training in these areas and additional funds to train or hire additional staff may not be available.
- **A traditional reliance on quantitative (usually biophysical) science:** Increasing the influence of public participation on decision-making, and being inclusive of different ways of knowing, requires the consideration, discussion, and application of knowledge derived from multiple sources (e.g., social sciences, local knowledge).
- **Turnover:** Building partnerships and relationships takes time and personal connections, which is complicated by turnover within organizations, as well as within multi-partner collaboratives (Coleman et al. 2021; Armatas et al. 2021b). Turnover within agencies may be exacerbated by incentivizing “moving around to move up”; that is, promotions and careers advancements are contingent upon moving into different roles, typically in different locations.
- **Differences between agency representatives and non-agency participants:** Agency employees are paid during public participation processes, but others involved may or may not be. For instance, representatives of formal organizations may be paid, whereas volunteers or unaffiliated individuals are likely unpaid. If the public participation approach is fully collaborative (where all people involved are essentially contributing in equal ways), then concerns of pay inequity become increasingly salient. Also, research has found that there are fundamental differences between agency representatives and those who generally engage in natural resource collaboratives (e.g., agency representatives are more likely to be female, younger, and have higher income) (Davis et al. 2017). Members of the public may not be able to afford time off, pay for childcare or transportation to attend public events to participate, further access constraints to the public process by underserved populations.

- Legal constraints to public participation processes:** While NEPA requires public participation whenever a federal agency considers an action that may significantly impact the environment, legal standards are satisfied by the public input processes towards the left side of the public participation spectrum in Table 1. Agencies historically have prevailed in court with processes that meet only legal minimums, which disincentivizes the more resource intensive and time-consuming public participation approaches on the right side of the spectrum in Table 1. The Paperwork Reduction Act of 1995 complicates systematic 'information collection' from the public, though there are some exceptions for public participation and engagements within NEPA processes; further, collaboratives may have more flexibility to engage the public with systematic approaches. Also, if a more collaborative (i.e., empower, co-management, citizen control) type of public participation is embraced, then the Federal Advisory Committee Act of 1972 (FACA), as well as the Negotiated Rulemaking Act of 1996 (NRA) may be utilized (Leong et al. 2011). Committees established under these laws can be time consuming to set up and entail long commitments by participants. If one of these processes is not used, collaboratives must be careful not to create consensus agreements that direct agency action. Participants can provide input as individuals, however. And to reiterate, engaging Tribal communities within public participation processes is influenced by the more formal, government-to-government consultation process.
- Public influence on decisions:** Fundamentally, federal agencies (and their representatives) have the power to impede or facilitate the impact of public input, which is influenced by individual philosophies that reject or accept collaborative models (particularly on the part of Interdisciplinary Team leaders), past experience with the public, concerns with litigation, and discretion about what constitutes 'substantive' input (Hoover and Stern 2014; Predmore et al. 2011a). Relatedly, there is a traditional reliance on, and comfort with, traditional rational, expert-based planning models (linear process), as opposed to a more iterative collaborative land management process (Williams and Blahna 2007; Leong et al. 2006; 2007). Finally, common approaches to public participation, such as limiting in-person comments to a short amount of time (e.g., a minute maximum time) or requiring heavily on written comments, have both perceived and real limitations to public influence.
- Including and communicating with diverse communities:** There is a clear desire to engage with, and learn from, a diverse range of people and communities. However, as more people and communities are included in a process, it can be challenging to develop a process that accommodates the inevitable differences among those involved. For instance, people learn and interact in a variety of ways (e.g., visual learners versus listening learners, extroverts and introverts, deferring to elders out of respect), have different views of science (and what information is legitimate or not legitimate), have different relationships with the resources and preference for how to engage with them, have varying levels of trust with the agency, are influenced by chosen language in different ways, and view public participation differently. Additionally, agency practitioners and those hired to support the process, such as facilitators, bring their own biases to the public participation process. These differences and potential biases need to be

navigated throughout the public participation process.

- **Politics and changing administrations:** Public agencies operate within inherently political contexts, which can influence decision-making and the ways that public input is applied. For instance, if input is gathered for a project and, subsequently, a different political party gains power, then there will be pressure to manage to a new set of priorities. In other words, a change in political administrations may influence how public input is integrated (or not integrated) into a decision.
- **Public agencies and working with non-governmental entities:** Public participation, particularly as the process aims for greater public influence (i.e., columns 4 and 5 in Table 1), is fundamentally about increased participatory or deliberative democracy. Top-down approaches to governance rely on representative democracy and are not actively participatory. Public input processes that meet minimum legal requirements (columns 2 and 3 in Table 1) are the most common, and perhaps where agency representatives are most comfortable. As such, there may be a need to actively resist the tendency toward public input approaches. However, this can be challenging in practice, as Wyborn and Dovers (2014) point out, because (relative to non-governmental entities) governments: are generally bound by shorter-term cycles (budgets, elections); have difficulty with flexibility, adaptiveness and learning (e.g., admitting uncertainties; responding to public accountability and demand for clear goals; required adherence to specific mandates and operating procedures which are often incongruent with non-governmental actors); are accountable to public-sector employment systems that reduce adaptiveness – all which make for a difficult operating environment relative to the non-state actors they hope to engage. Plus, agencies are likely to prevail in a legal challenge even when using a public input approach to public participation.

The relevance of these barriers may vary across the different types of public participation approaches (e.g., turnover is less of an issue if an ‘inform’ (column 1 in Table 1) approach is taken). While there is no existing silver-bullet solution to these challenges, honoring the principles outlined above, and considering the lessons learned below can provide support for overcoming these issues.

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9. Reflections and Future Directions: Honoring Principles for Effective Public Participation

Considering the foundational information provided above, we briefly reflect on the four guiding principles (Section 1) and provide thoughts for future directions for public participation in the context of visitor use management (VUM).

Promising influence: Demonstrating the impact of public participation

If public agencies ask for input, it is critical to communicate or demonstrate to the public what was done with that information. Too often people are asked to participate in something, but then feel that the information disappears to no end. Potential consequences of such perceptions, particularly if there are multiple requests for input, include input fatigue and disillusionment with the process and the agencies. There may be several ways to demonstrate the impact (or lack thereof) of public participation input, including:

- Providing an overview (with a published primer) about pertinent agency rules (e.g., FACA concerns), processes (e.g., NEPA timelines and needs), and manager opinions about decision space;
- Publishing the findings from public participation on agency websites;
- Explicitly referencing the findings from public participation in planning and management decision documents;
- Even when some desires cannot be accommodated (e.g., motorized activities in wilderness), they can still be explicitly addressed and recognized (responding to ‘concerns’ in the NEPA process does this effectively);
- Developing collaborative charters, whereby terms related to power sharing, influential knowledge sources, and decision-making processes are made explicit (keeping FACA requirements in mind); and
- Making connections between the final desired conditions statements, the rationale for those decisions, and the insights gained during public participation.

As Rorty (1988) stated: “even if the reasons that prompt an action are appropriately justified, they usually underdescribe and underdetermine the detailed thoughtfulness required for appropriate action” (cited in Forester 1999:221). Explicitly highlighting the detailed thoughtfulness of agency practitioners, as it relates to public participation input, can serve to honor the influence principle.

Honoring diverse voices: Hearing and communicating different connections to nature and place

People connect and relate to nature and place in diverse, and sometimes overlapping, ways. It is important to provide the space to explore the different meanings people assign to nature and place, and discuss the different benefits and experiences derived from places and activities conducted in them. Figure 3 illustrates how just one person might view the same place. To highlight the varying perspectives, including analysis of public participation input that resists aggregated generalities, and instead stresses multiple different perspectives may be valuable. Also, clearly communicating the effort put forth to gather input from a diverse range of people, as well as the results of that effort supports a transparent process.

Figure 3. A basic conceptualization of how one person might view a place.



Committing to accessibility: Making the process accessible

Finding diverse ways for people to connect to the planning process will encourage widespread participation. Agencies can integrate emerging technologies (video-conferencing, phone apps, virtual reality), seek (or hire) partners to help provide access to underserved communities, and hold meetings in various places including places of worship, community centers, tribal centers or other sites familiar to target groups. Traditional, in-person public meetings are a start, but they tend to cater to a limited portion of the public. Specifically, meetings held during work hours generate interest from government entities and tribes, professional organizations, highly resourced non-governmental organizations, and other paid professionals with a vested interest in the issue. Meetings held during evenings attract some adults with

leisure time but are not easily accessible to working parents and to persons without transportation. For some, attending in-person public meetings is not comfortable, safe, or feasibly possible. When agencies work collaboratively with partners to design public participation opportunities and recruitment strategies, outreach can be expanded beyond traditional groups to include many others. Non-local stakeholders are able to engage through online opportunities (e.g., survey or virtual public participation events). However, some potential participants to virtual public participation may be inhibited by limited technology, lack of internet, or feeling uncomfortable connecting virtually. Some projects have found success meeting people where they are at community fairs, farmer's markets, or public events and using rapid assessment tools to gather input (Helmer et al. 2020). New tools are being developed to quickly assess public values, interests and uses of public resources at table events.

Showing humility: Demonstrating the nearly impossible task

According to Forester (1999:224, emphasis original): "the human calculator tries to be a skilled engineer, to find a best solution, 'to solve'. In contrast, the person of practical judgment tries to be a sensitive and principled moral improviser: to attend to both the unique details and the general norms and principles relevant to this complex circumstance." In the context of VUM and public participation, the agency is operating as people of practical judgment in locally situated complex circumstances. These complex issues include navigating conflicting perspectives around what recreation activities should be given priority or, sometimes more fundamentally, navigating the basic need to determine (often recreation-focused) conditions of a place imbued with a troublesome history (e.g., a physical space procured through violent dispossession). These issues are generally not solvable by agency practitioners, and Seekamp and Cerveny (2009) found that agency employees take such public service tasks seriously, feel guilt about not being able to do more, and generally accept the necessity of partnerships. Generally, there is an earnestness embodied by agency practitioners which, when combined with a request for public participation (i.e., help addressing a nearly impossible task), can serve to facilitate collaborative efforts. Having detailed conversations with the public about the challenging issues with no single correct answer (e.g., value-laden discussions such as desired conditions) takes time, but it may foster empathy, trust, and relationship building (Armatas et al. 2021b).

Future Directions

We close with three future directions, which implicitly recognize that collaborative efforts with the public are highly theorized about but perhaps less tested in practice (though, collections of case studies do exist (e.g., Wondolleck and Yaffee, 2000; Wondolleck and Yaffee, 2017)). First, we see value in contextualizing public participation within the Council's entire VUM framework. In other words, how might we engage the public around foundations, or management strategies, or indicators and standards? Second, honoring the influence principle, with explicit commitments to share power, may be particularly limited in practice. As such, we

provide an open call for the circulation of existing (or future) examples of formalized approaches to honoring the influence principle. Finally, there remains a pressing need to finding new ways to recognize and welcome underserved publics, as well as new ways to elicit and communicate values and priorities for use of public resources. A potential next step for researchers and practitioners in this context is to highlight what equitable public participation looks like within the context of different approaches to public participation (i.e., the different columns in Table 1).

By integrating the ideas herein and pursuing these future directions, we hope to facilitate effective, transparent, and equitable and inclusive public participation processes, where diverse viewpoints and mutual learning lead to actionable knowledge for the benefit of developing desired conditions.

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