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Standard Guide for Stakeholder Engagement on Environmental Risk Management and Climate¹

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1. Scope

1.1 This guide provides a series of steps to develop and execute an effective stakeholder engagement process for a broad spectrum of environmental projects including, but not limited to, site remediation and brownfields development, as well as local and regional climate resiliency and climate vulnerability initiatives. This guide does not apply to broad programmatic initiatives.

1.2 Effective *stakeholder* engagement in site remediation, brownfields redevelopment, habitat restoration, climate resiliency, *climate vulnerability*, and flood prevention and control projects requires a process that is based on mutual education, effective communication about the project and its impacts, identification of the interests that will be affected, and open discussion about how to address those interests to the extent that is possible. The General Accountability Office suggests that core principles and strategic approaches enhance stakeholder participation (GAO 2006)(1)². The National Oceanic and Atmospheric Administration (NOAA) reported that stakeholders developed more robust mitigation measures that addressed multiple hazards when they integrated climate variability into vulnerability and risk assessments associated with flooding and other natural disasters in the East Bay area of California's San Francisco Bay. (NOAA, 2021)(2).

1.3 An effective *stakeholder* engagement process (see Fig. 1) can create benefits for large projects, including:³

1.3.1 Improved, sustainable outcomes, because the final project plan builds on local capacity and knowledge and considers local and regional issues that may require resolution in order to move forward.

1.3.2 Shared understanding of perspectives, issues, challenges, alternatives, and how these influence the desired or necessary outcomes

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² The boldface numbers in parentheses refer to a list of references at the end of this standard.

³ Adapted from Udall Foundation. *Principles for Effective Stakeholder Engagement in Infrastructure Permitting and Review Processes*. 2020

1.3.3 Credibility of and predictability for the project plan that comes from transparency

1.3.4 *Stakeholder* support for the planning process through shared data, ideas, funding, and political support

1.3.5 Strengthened relationships among *affected parties* for moving forward on the project.

1.3.6 Satisfying any legally-required public notice and participation requirements.

1.3.6.1 *Stakeholder* engagement should not be confused with the public participation requirements of the National Environmental Policy Act codified in 40 CFR §6.203. because NEPA potentially does not involve stakeholders until later in the project development process. In addition, NEPA's public participation process is not as flexible as that described in this guide.

1.3.7 Welp and Stoll-Kleeman (2006)(3) reported additional benefits of engaging stakeholders and affected parties in decisions regarding natural resources management. These benefits include:

1.3.7.1 Enhanced understanding,

1.3.7.2 Developing new options,

1.3.7.3 Decreasing hostility among participants through improved dialog and discussion,

1.3.7.4 Enlightening legal policy makers,

1.3.7.5 Producing competent, fair, and optimized solutions,

1.3.7.6 Accelerating the decision-making process.

1.4 In order to identify prospective *stakeholders*, ISO 26000 clause 5.3.2 suggests that an organization should ask the following questions:

1.4.1 To whom does the organization have legal obligations?

1.4.2 Who might be positively or negatively affected by the organization's decisions, activities, or anticipated outcomes?

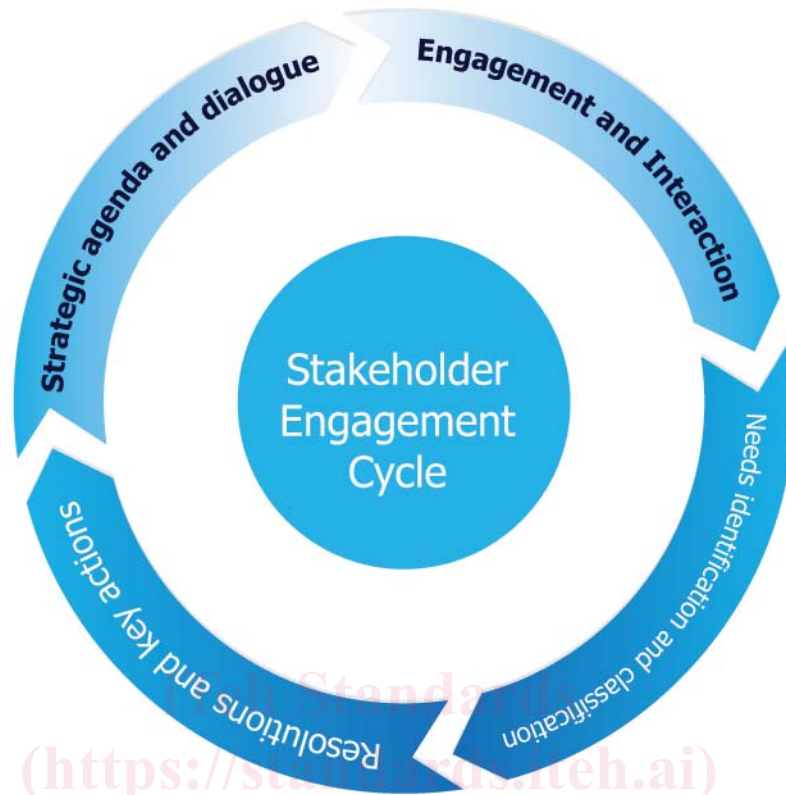
1.4.2.1 Mediators and facilitators are expected to be neutral parties.

1.4.3 Who is likely to express opinions and concerns about the decisions and activities of the organization?

1.4.4 Who has been involved in the past when similar concerns needed to be addressed?

1.4.5 Who can help the organization address specific impacts?

STAKEHOLDER ENGAGEMENT



Source: Eurofleets <https://www.eurofleets.eu/stakeholders/>

FIG. 1 Stakeholder Engagement Process

1.4.6 Who can affect the organization’s ability to meet its responsibilities?

1.4.7 Who are the *affected parties* that would be disadvantaged if excluded from the engagement?

1.5 Stakeholder prioritization criteria

1.5.1 Identification of criteria to prioritize *stakeholder engagement* may be useful for some projects (Sharpe, 2021)(4). These criteria include, but are not limited to:

- 1.5.1.1 Level of interest,
- 1.5.1.2 Proximity, including nearby property owners,,
- 1.5.1.3 Fairness,
- 1.5.1.4 Magnitude of impact,
- 1.5.1.5 Underrepresented and underserved populations,
- 1.5.1.6 Probability of impact,
- 1.5.1.7 Level of community influence,
- 1.5.1.8 Cost, and
- 1.5.1.9 Time to implement a proposed project plan.

1.6 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recom-*

mendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

2. Referenced Documents

2.1 *ASTM Standards:*⁴

E2348 Guide for Framework for a Consensus-based Environmental Decision-making Process

2.2 *Code of Federal Regulations:*⁵

25 CFR 479a(2) Publication of list of recognized tribes

40 CFR §6.203 Public participation.

25 U.S.C. 83.1 Part 83 - Procedures for Federal Acknowledgment of Indian Tribes

⁴ For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard’s Document Summary page on the ASTM website.

⁵ Available from DLA Document Services, Building 4/D, 700 Robbins Ave., Philadelphia, PA 19111-5094, <http://quicksearch.dla.mil>.

2.3 US EPA References:⁶

EPA-100-R-00-04 U.S. EPA. Stakeholder Involvement & Public Participation at the U.S. EPA, , January 2001
 U.S. EPA. Better Decisions through Consultation and Collaboration, 2015 <https://www.epa.gov/international-cooperation/better-decisions-through-consultation-and-collaboration>

2.4 Other References:

Federal Emergency Management Agency. Guidance for Stakeholder Engagement, Preliminary Production Process. November 2019
 ISO 26000-2010 Guidance on Social Responsibility⁷

3.2.5 *consensus building, n*—is a process in which people agree to work together to resolve common problems in a relatively informal, cooperative manner.

3.2.5.1 *Discussion*—Consensus Building is a technique that can be used to bring together representatives from different *stakeholder* groups early in a decision-making process. A neutral third party (*mediator* or *facilitator*) helps the people design and implement their own strategy for developing group solutions to the problems (see Guide E2348).

3.2.6 *facilitation, v*—is a process used to help a group of people or parties have constructive discussions about complex or potentially controversial issues.

3.2.6.1 *Discussion*—The facilitator provides assistance by helping the parties set ground rules for these discussions, promoting effective communication, eliciting creative options, and keeping the group focused and on track. *Facilitation* can be used even where parties have not yet agreed to attempt to resolve a conflict

3.2.7 *fair treatment, n*—as defined on EPA’s Environmental Justice Website, means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences from industrial, municipal, and commercial operations, or the execution of federal, state, local, and tribal programs and policies.

3.2.8 *information exchange, n*—a meeting at which participants share data or ideas, provide information, express concerns, or provide individual input.

3.2.8.1 *Discussion*—*Information exchanges* can help define the problem and issues for further discussion, build trust, improve relationships, and allow interest groups to hear first-hand the concerns of other *affected parties*. Information exchanges offer a chance to see reactions to “what if” proposals, allowing the project proponent to gauge the level of acceptance or opposition to proposed actions.

3.2.9 *meaningful involvement, n*—means potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health; the public’s contribution can influence the regulatory agency’s or proponent’s decision; the concerns of all participants involved will be considered in the decisionmaking process; and the decision makers seek out and facilitate the involvement of those potentially affected.

3.2.10 *mediation, n*—is a process in which a neutral third party (the mediator) helps disputants reach a mutually satisfying settlement of their differences.

3.2.10.1 *Discussion*—*Mediation* is often voluntary, informal, and confidential. The mediator helps the disputants to communicate clearly, to listen carefully, and to consider creative ways to reach resolution. The mediator makes no judgments about the people or the conflict and issues no decision. Any *agreement* that is reached must satisfy all the disputants.

3.2.11 *mediator, n*—is a person who mediates—helps to settle a dispute or create *agreement* when there is conflict

3. Terminology

3.1 This section provides definitions of terms not unique to this practice, descriptions of terms specific to this guide, and a list of acronyms and abbreviations used herein. The terms are an integral part of this guide and are critical to its understanding and use.

3.2 Definitions, Acronyms, Abbreviations

3.2.1 *affected parties*—stakeholders who are or may be impacted by any agency’s or project proponent’s decisions.

3.2.2 *agreement*—a mutually acceptable decision that the parties agree to implement.

3.2.2.1 *Discussion*—Processes that produce *agreements* can reduce the total time needed to reach a final decision, build support among *stakeholders*, lead to early implementation, and greatly reduce the threat of second-guessing and future litigation. *Agreement* processes seek consensus between the project proponent and stakeholders.

3.2.3 *alternative dispute resolution (ADR), n*—as defined in the Administrative Dispute Resolution Act of 1996, is “any procedure that is used to resolve issues in controversy, including but not limited to conciliation, *facilitation*, mediation, fact finding, minitrials, arbitration, use of ombuds or any combination thereof.” 5 U.S.C. 571(3); these *Alternative Dispute Resolution* techniques involve a neutral third party, a person who assists others in designing and conducting a process for reaching *agreement*, if possible.

3.2.3.1 *Discussion*—The neutral third party has no stake in the substantive outcome of the process. Depending on the circumstances of a particular dispute, neutral third parties may be agency employees or may be from outside the agency or the entity proposing the project. Typically, all aspects of ADR are voluntary, including the decision to participate, the type of process used, and the content of a final *agreement*, if any.

3.2.4 *climate vulnerability*—describes the degree to which natural, built, and human systems are at risk of exposure to climate change impacts.

⁶ Available from United States Environmental Protection Agency (EPA), William Jefferson Clinton Bldg., 1200 Pennsylvania Ave., NW, Washington, DC 20460, <http://www.epa.gov>.

⁷ Available from International Organization for Standardization (ISO), ISO Central Secretariat, Chemin de Blandinnet 8, CP 401, 1214 Vernier, Geneva, Switzerland, <https://www.iso.org>.

between two or more people or groups by acting as neutral third party. A facilitator can serve the role of a mediator.

3.2.12 *outreach, n*—The process by which *affected parties* are informed of the project proponent’s goals, decisions, and actions.

3.2.12.1 *Discussion*—*Outreach* gives the public and *stakeholders* access to scientific and technical information to better understand the issues. While outreach is a critical element in the success of the other forms of consultative and collaborative processes, this handbook does not specifically address outreach activities.

3.2.13 *recommendation, n*—the end product of group deliberations.

3.2.13.1 *Discussion*—*Stakeholder* groups often review or develop data that are quite specific. The group, often together with proponent personnel and a mediator, deliberates and develops joint *recommendations*. In this way, decision-makers receive the benefit of different viewpoints distilled into specific *recommendations* from the group. *Stakeholders* can also highlight a range of options and illuminate the pros and cons of each option (Munns 2019) (5).

3.2.14 *stakeholders, n*—are individuals or representatives from organizations or interest groups that have a strong interest in the proponent’s proposal, project, work, and policies.

3.2.15 *stakeholder action, n*—a process to empower members of an industrial sector, NGO or affected community to develop creative solutions that they themselves will implement.

3.2.15.1 *Discussion*—The *stakeholder action* process, which often consists of a series of meetings, workshops, dialogues, or other interactive gatherings, emphasizes the generation of solutions that are acceptable to all involved. Individuals usually participate as representatives of organizations or constituencies, rather than themselves.

3.2.16 *timely information, n*—means distributing information sufficiently far in advance so that the stakeholders have enough time to review relevant material, decide whether to become involved, and make plans for that involvement.

3.2.16.1 *Discussion*—*Timely* applies to the availability of background information on particular issues, as well as notice of public meetings, public comment periods, or other critical involvement activities.

3.2.17 *tribe, n*—means an Indian or Alaska Native tribe, band, nation, pueblo, village, or community that the Secretary of the Interior acknowledges to exist as an Indian tribe pursuant to the Federally Recognized Indian Tribe List Act of 1994, (see 25 U.S.C. 83.1)

3.2.17.1 *Discussion*—The Secretary of the Interior publishes, on an annual basis, prepares a list of all federally-recognized Indian Tribes. See 25 CFR 479a(2).

3.2.18 *vulnerable communities, n*—populations at heightened risk and exposure to adverse impacts of climate change due to location and geography.

3.2.18.1 *Discussion*—Vulnerable communities experience heightened risk and increased sensitivity to climate change and have less capacity and fewer resources to cope with, adapt to, or recover from climate impacts. These disproportionate effects are caused by physical (built and environmental), social, political, and/or economic factor(s), which are exacerbated by climate impacts. These latter factors include, but are not limited to, race, class, sexual orientation and identification, national origin, and income inequality.

3.3 *Acronyms, Abbreviations, and Initialisms*

3.3.1 *ADR*—Alternative Dispute Resolution

3.3.2 *EPA / US EPA*—United States Environmental Protection Agency

3.3.3 *ISO*—International Organization for Standardization

3.3.4 *NGO*—Non-governmental organization

4. Summary of Guide

4.1 A procedure for this guide is provided in Section 6. This guide does not apply to broad programmatic initiatives.

5. Significance and Use

5.1 *Stakeholder* engagement, in the *climate vulnerability* context, most often refers to the *meaningful involvement* of *affected parties* in planning or decision-making efforts in order to integrate their knowledge and values with a particular project’s more specialized knowledge and purpose. In turn, *stakeholders* are often broadly defined as those people who are affected by or can affect a decision and range from the “average” citizen to groups of highly interested or invested decision-makers.

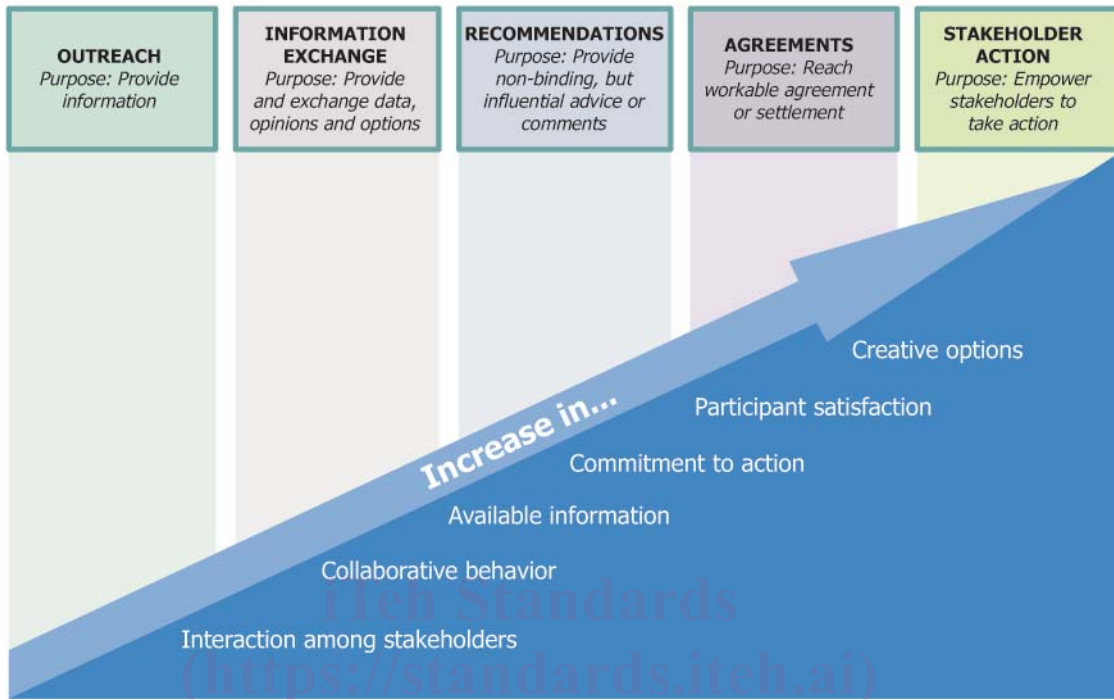
5.2 It is important that *stakeholders* understand the role they are invited to play in a public engagement program. This will help provide clarity to the process and help avoid misunderstandings. *Stakeholder* roles may naturally evolve over the period that they are engaged in a public process, and as transition occurs, it is wise to redefine these roles. When an advisory committee or partnership between public agencies is established, it is helpful to develop a charter or other memo of understanding that describes the roles and responsibilities of all involved.

5.3 EPA’s *Public Involvement Spectrum* (2015)(6) can provide useful tools. Fig. 2 illustrates a spectrum of public involvement options that may be appropriate.

6. Procedure

6.1 Establish a realistic budget for, and integrate the stakeholder engagement process into the project timeline.

Public Involvement Spectrum: A Range of Possible Processes



Source: U.S. EPA's Public Involvement Spectrum

FIG. 2 EPA Public Involvement Spectrum.

6.2 Provide Clear Goals and Avenues for Stakeholder and Public Participation:

6.2.1 A well-planned engagement effort supports and complements the overall planning process (Udall 2020)(7). Well-informed *stakeholders* and citizens who understand the project and permitting process and who can identify and capitalize on opportunities for their involvement can facilitate broader community acceptance (see Fig. 3). For example, the California Department of Water Resources has developed and deployed a stakeholder engagement plan addressing Groundwater Sustainability and Climate (see CalDWR 2018)(8).

6.2.1.1 From the earliest stage of the project, identify and communicate:

- (1) The goals and schedule of the project planning and development process and opportunities for *meaningful involvement*
- (2) Commitment from project sponsors and others to *stakeholder* engagement effort
- (3) Key milestones and timelines in the project development process

6.2.2 Analyze the needs for *meaningful involvement* and *stakeholder* engagement in the particular project and develop options to meet those needs (see Fig. 3 regarding the continuum of processes for public participation).

6.2.3 Engage *stakeholders* in the planning for the stakeholder engagement process.

6.2.4 Institutionalize *stakeholder* engagement by funding it, staffing it, and making public commitments to it.

6.2.5 Examples of best practices, tools, techniques:

6.2.5.1 Establish a public information and education effort at the outset or before the start of the approval and permitting process.

6.2.5.2 Ensure that subject matter experts are not talking over the *stakeholders*.

6.2.5.3 Develop and share a process map with the public and *stakeholders* so that they can see where their input fits into the decision-making process

6.2.5.4 Develop overarching goals for the *stakeholder* and public engagement effort

6.2.5.5 Develop an organized engagement approach at the outset, and update and modify it as needed

6.2.5.6 Treat *stakeholder* engagement the same as any other planning component, including creating timetables, budgets, staffing, and management.

6.3 Stakeholder Identification and Accessibility⁸:

6.3.1 *Stakeholder* identification should be carried out with the objective of establishing which individuals and organizations may be directly or indirectly affected (positively and

⁸ Adapted from Udall Foundation. *Principles for Effective Stakeholder Engagement in Infrastructure Permitting and Review Processes*. 2020

	Explore/Inform	Consult	Decide	Implement
Outcomes	<ul style="list-style-type: none"> Improved shared understanding of issues, process, perspectives, etc. Lists of concerns Information needs identified Explore differing perspectives Build relationships 	<ul style="list-style-type: none"> Identification of priority concerns, issues and topics Comments on draft planning products Suggestions for approaches Discussion of options Establishment of a community of stakeholder groups 	<ul style="list-style-type: none"> Consensus-based agreements on project plan or plan components 	<ul style="list-style-type: none"> Multi-party agreements to implement projects collaboratively
Parties Involved	<ul style="list-style-type: none"> Federal Agencies, States, Tribes, and other governmental entities Interest Groups Public 	<ul style="list-style-type: none"> Federal Agencies, States, Tribes, and other governmental entities Stakeholder Advisory Group Interest Groups, NGOs Public Scientists, Subject Matter Experts Resource management bodies 	<ul style="list-style-type: none"> Interagency Implementers State, Federal, and Tribal Authorities Stakeholders implementers 	<ul style="list-style-type: none"> Implementing Agencies Stakeholder Advisory Groups Federal agencies Other entities contributing resources to the implementation of a project

Source: *Principles for Effective Stakeholder Engagement in Infrastructure Permitting and Review Processes*, National Center for Environmental Conflict Resolution.

FIG. 3 Spectrum of Stakeholder and Public Involvement Mechanisms in Infrastructure Permitting Processes

negatively) by the project proponent’s activities or may have an interest in or influence on the project (see [Appendix X2](#)).

6.3.1.1 As part of the *stakeholder* identification process, the following factors should be considered:

(1) The project’s potential impacts during construction and operation.

(2) What type of *stakeholder* engagement is mandated by treaty, law, and project standards?

(3) Who is likely to be affected (directly or indirectly) by potential impacts in the project’s area of influence?

(4) Who are the vulnerable groups requiring special engagement efforts?

(5) Who supports or opposes the changes that proponent’s activities or projects will bring and why?

6.3.2 *Stakeholders* identified by this process belong to one of the following groups:

6.3.2.1 Directly affected population: this includes all owners and users of land and other resources affected by project land access.

(1) The goal of *fair treatment* encourages the consideration of *stakeholders* who may be impacted by noise, emissions, wastewater discharges, stormwater, changes in traffic patterns, and energy use.

6.3.2.2 Project affected communities: this entails *fair treatment* of residents of communities in the project area of influence with regards to short-term and long-term impacts, including traffic patterns, emissions, energy use, and stormwater discharges.

6.3.2.3 Vulnerable groups: *stakeholders* directly or indirectly affected by project’s size and location, who, by virtue of gender identity, sexual orientation, religion, ethnicity, indigenous status, refugee/migrant status, age, disability, economic disadvantage or social status, may be more adversely affected

by project impacts than others and who may be limited in their ability to claim or take advantage of project benefits.

(1) This may include women, tribes, ethnic minorities, children, young people, elderly/retired, single-headed families, households with low income, and disabled people.

6.3.2.4 National and Tribal governments.

6.3.2.5 Regional, state, provincial, county, and municipal government.

6.3.2.6 Public districts including, but not limited to: education, health, hospitals, ports, public safety, public utility, water utilities, and transportation.

6.3.2.7 Local businesses and operators, agricultural institutions/associations.

6.3.2.8 Non-Governmental Organizations (NGOs); local, regional, national NGOs and associations.

6.3.2.9 Media.

6.3.3 Providing adequate and appropriate opportunities for all interested parties to participate and inclusion of diverse voices, ideas, and information, can assist in sustainable decision-making. The project proponent should:

6.3.3.1 Ensure participation from the full range of potentially *affected parties*.

6.3.3.2 Identify and address barriers to *meaningful involvement* (for example, funding, geographic issues, capacity for participating, accessibility, lack of information).

6.3.3.3 Be sensitive to the needs, interest, and resource levels of *stakeholders* and the public

6.3.4 Recommended best practices, tools, and techniques include:

6.3.4.1 Conduct a stakeholder analysis that includes *outreach* to any entity that is affected or that has information or other resources to contribute to the project.

6.3.4.2 Consider the establishment of a balanced *stakeholder* advisory group to foster public discussion of trade-offs and solutions.

6.3.4.3 Periodically commit stakeholder group accomplishments to writing; for long-term advisory groups, develop a handoff package to bring on newer representatives and avoid inconsequential repetition of prior discussions.

6.3.4.4 Periodically reconfirm the scope and timeline of future participation, and confirm options for making up for lost time or progress in decision-making.

6.3.4.5 Identify ways to overcome barriers to participation, including:

(1) Multiple locations for stakeholder engagement to increase accessibility.

(2) Excellent online information sharing and document repositories for populations with limited internet access.

(3) Collaborative technologies (for example, web streaming meetings, online forums).

(4) Travel support for staff and *stakeholders* (for example, for a stakeholder advisory committee representative).

6.4 *Build Transparency and Openness:*⁹

6.4.1 Outline the scope and limitations of the stakeholder engagement process.

6.4.1.1 A *stakeholder* engagement process will necessarily be limited by a range of factors. These may include time, staff, transport, funding, and stakeholder capacity. It is important to outline the scope and limitations of the *meaningful involvement* as this will allow for a transparent and achievable engagement process (see Appendix X2.2.1).

6.4.2 Identify negotiable and non-negotiable elements.

6.4.2.1 Each engagement project will have a set of factors or decisions that can be influenced by *stakeholders* and a set that cannot. These are the project's negotiable and nonnegotiable elements (for example, statutory or treaty constraints, siting constraints). It is important to identify these elements at this stage so they can be communicated clearly to stakeholders during the engagement process. This will allow *stakeholders* to understand what they can influence and where their energy is best spent.

6.4.3 Information about planning and decision making should be communicated in a forthright manner to *stakeholders*, with appropriate opportunities for dialogue and feedback, resulting in a mutual understanding. The project proponent should clearly demonstrate an interest in soliciting feedback and an openness to learning from *stakeholders*:

6.4.3.1 Establish clear and consistent communication channels.

6.4.3.2 Periodically disseminate information about the project for review and feedback.

6.4.3.3 Demonstrate openness to learning from *stakeholders*.

6.4.4 The project proponent may employ several techniques to achieve effective stakeholder engagement and dialog, including:

6.4.4.1 Implement a broad suite of communication tools and techniques.

6.4.4.2 Promote a common understanding of key processes, terminology, decision and project milestones, decisions, and technical challenges through substantive discussions and dissemination of *timely information*.

6.4.4.3 Inform *stakeholders* about how to provide input and how it will be used.

(1) Describe how *recommendations* will be incorporated into the decision-making process.

6.4.4.4 Provide periodic reports on how *stakeholder* and public input impacted project design and implementation.

6.4.4.5 Produce and share meeting summaries of critical discussions for public distribution.

6.4.4.6 Consider convening a workshop and use the alternative dispute resolution process to remove impediments to shareholder action (see BLM, 2009) (9).

6.5 *Empower Informed Engagement:*

6.5.1 Through a shared understanding of the issues and the planning process among decision makers, *stakeholders*, and the public, an understanding of the challenges posed by the project and potential solutions can be developed.

6.5.1.1 The user should encourage quality, informed, and interactive dialogue, including between technical experts and *stakeholders*.

6.5.1.2 The *user* should not expect immediate, well-informed and high-quality participation but work towards these conditions. If individual contributors are unable to adapt to stakeholder expectations, the user should determine if the group needs to undergo training or turnover (or both).

6.5.1.3 Engage in mutual education about the project complexities and provide technical information in an appropriate format for *stakeholder* and public use. Clearly discuss unknown factors regarding *climate vulnerability* with regards to mitigation measures. Consider a broad array of tools and techniques to gather information from *stakeholders*, including comment forms, surveys, interviews, websites, and workshops.

(1) Workshops (as opposed to public hearings) are an excellent means of removing real or perceived barriers between *stakeholders* and technical experts.

6.5.1.4 Tailor presentations to non-technical audiences and have translators readily available to assist stakeholders for whom English is not a native language.

6.5.1.5 Provide impartial *facilitation* for technical and decision-making discussions.

6.6 *Ensure Timeliness of Participation:*

6.6.1 Assure meaningful and robust outcomes by providing *timely information* to *stakeholders* and the public. This allows *affected parties* time to prepare and respond to proposed actions and plans; it also builds trust in the *stakeholder* engagement process. Adequate advance notice is essential for *meaningful involvement* (see Fig. 4).

6.6.1.1 Coordinate the planning process and the timing of the *stakeholder* engagement activities to allow for inclusion of *stakeholder* input into preliminary decisions and products.

(1) Disseminate a project timeline with engagement opportunities noted and highlighted.

⁹ Adapted from Udall Foundation. *Principles for Effective Stakeholder Engagement in Infrastructure Permitting and Review Processes*. 2020.