

ACHIEVING STEWARDSHIP AND CONTRIBUTING TO A SUSTAINABLE SOCIETY THROUGH STAKEHOLDER INVOLVEMENT

ELIZABETH K. HOCKING
Environmental Assessment Division
Argonne National Laboratory, USA

Introduction

Many sites around the world are contaminated with radioactive or hazardous residuals. They are contaminated because (1) they were chosen as disposal sites, or (2) they became contaminated through use but cannot be completely remediated for economic or technological reasons. Stewardship of these contaminated sites will be required as long as the residuals pose a potential harm to human health or the environment.

The tasks of stewardship are to allow access to contaminated lands and resources only for uses that have been approved on the basis of a risk assessment, and to protect surrounding communities from exposure to contaminants. The goal of stewardship should be to accomplish these tasks while contributing to a sustainable society by allowing approved land uses.

In general, there is a bias against letting land lie unused. Property law is largely built on the basis of the transferability of land to keep it available for appropriate use. Even though some uses would be constrained for land with residual contamination, the land may be approved for other appropriate uses that can contribute to sustainability.

For example, the Waste Isolation Pilot Plant in the southwestern part of the United States is the burial site for transuranic radioactive waste. The waste is placed 2,150 feet underground in a 2,000 foot-thick salt formation. Resource mining on the site is foreclosed; however, the surface of the disposal site will be used for cattle grazing when all the waste has been placed in the repository. Other sites with residual contamination in the United States are being used as wildlife refuges. Using land under stewardship for its approved purposes may even forestall unapproved uses because land users will generally protect their interest in the land.

Working toward achieving the goal and tasks of stewardship requires meaningful involvement by the stakeholders affected by the contaminated lands. Meaningful stakeholder involvement requires identifying and engaging the right stakeholders, establishing rules of engagement for the stakeholder process, building and maintaining trust, and protecting intergenerational equity.

Although the following discussion is oriented toward establishing stewardship programs for existing contaminated sites, many of the principles and suggestions also apply to activities such as selecting a disposal site or establishing a stewardship regulation or policy.

Identifying and Engaging the Right Stakeholders

Involving stakeholders in a meaningful way in stewardship decisions first requires that the appropriate stakeholders be identified. The appropriate stakeholders are those

who represent the diverse and divergent interests affected by the site or activity, have standing in the affected area, and agree to abide by the rules of engagement established for the stakeholder process.

The integrity of the stakeholder process depends significantly on the willingness of decision makers to engage stakeholders with viewpoints that vary from their own. However, the stakeholders must truly and legitimately represent the interests affected by the activity or site and therefore have the standing within the affected community to participate in the stakeholder process.

Identifying the right mix of stakeholders requires understanding the concerns, issues, and objectives associated with the goal of the stewardship process. When the goal of the stewardship process is clearly described and adhered to, it will be easier for a facilitator and the stakeholders themselves to identify who is a legitimate stakeholder. If the goal of the stewardship process is to design a stewardship plan for a specific site that has been formerly contaminated through nuclear weapons development, stakeholders whose only objectives are to ban the use of such weapons might not be the right stakeholders for this site-specific task.

Once the stewardship process goal is clearly defined and the right stakeholders are identified, rules are required to effectively engage them.

Establishing and Adhering to Rules of Engagement

Rules of engagement for the stewardship process will reduce conflict and confusion and contribute to more effective stakeholder involvement. As with any group process, the basic rules of honest and open communication and respect among stakeholders are vitally important. Adhering to those basic rules will be much easier if all stakeholders clearly understand the limitations that apply to the process, who is responsible for making the final decision, how decisions are made, and the goal of the process.

Most stewardship processes will have to function within some limits that are beyond their control. These limits could be legal, financial, or temporal in nature. Because they impact the scope of the stewardship process, limitations must be made clear from the very outset so that all stakeholders understand them and the reasons behind them. Two of the most important limits relate to stewardship decisions.

Stakeholders must have a clear understanding of who is responsible for making the final decision and how decisions are made within the group process. The decision maker for some stewardship processes will be mandated by a law or regulation; in most cases, however, who makes the final decision will depend upon the nature of the goal of the process. In either case, the identity of the final decision maker must be made clear to avoid any stakeholder misconceptions that they are the ultimate decision makers.

The procedure for making any decisions within the stewardship process will also need to be defined before the process begins. Voting may be used in some stewardship processes; in others, the procedures might entail developing a general consensus of stakeholders' opinions or just getting a sense of stakeholder attitudes.

Adhering to the accepted rules of engagement can reduce the conflict that arises in most group processes and is especially important in a stewardship process because it often begins with a trust deficit.

Building and Maintaining Trust

The obstacles to building and maintaining trust among stakeholders in the stewardship process arise from an entangled environment of mistrust, frustration, and uncertainty. Much has been written about the mistrust directed at government officials by non-government stakeholders. The mistrust may be mutual. Government officials may see stakeholders as intruders, irritants, and problem creators. Frustration for all stakeholders can stem from the seemingly intractable nature of the problem under consideration.

Mistrust and frustration can also arise from the need to chart difficult but necessary choices in a sea of uncertainty. There may be considerable uncertainty about the characterization of the site being considered for stewardship. There may be additional uncertainty about the longevity and reliability of the planned contaminant containment systems, the monitoring systems expected to detect containment system failure, the land use controls expected to ensure that land is only used for approved purposes, and the system to provide information about the site to succeeding generations.

The best course of action for building and maintaining trust in such an environment is acknowledging uncertainty, communicating information, and building stakeholder capacity. These actions must continue throughout the stakeholder process.

In the face of uncertainty, some people may unrealistically react by refusing to acknowledge any uncertainty and hold rigidly to their beliefs that everything that needs to be known about the stewardship of a site is known. Other people, in the same atmosphere of uncertainty, may unrealistically reject what is known. Acknowledging uncertainties and developing plans for how to act in light of them can help reduce their negative impact on the stewardship process.

The trust that is necessary for stakeholders to accept uncertainty and certainties stems from appropriately communicating information. Information must be objectively presented, and it must be presented in forms that are understandable to stakeholders. For example, highly technical and complex scientific data will be desired and appreciated by some stakeholders. Stakeholders who do not have a scientific background may desire and benefit more from visual representations that portray information such as geologic formations, contaminant intensity and migration, or containment system design. Conveying information in user-compatible formats can build trust and enhance stakeholder participation.

The capacity of stakeholders to participate meaningfully in the stewardship process is often complicated by the fact that they come to the stewardship process with widely varying degrees of formal and informal education and experience with group processes. The prevailing governance or cultural system may also impede stakeholders from fully participating if the system inhibits questioning authority figures.

Training in the group process, the fundamentals of stewardship, and communication techniques can help level the playing field among stakeholders. A well-trained and experienced group facilitator can ensure that the playing field remains as level as possible during the stewardship process and that trust is maintained — even though it may be strained at times.

The information communication that is so important to building and maintaining trust must continue through time because stewardship will be required for as long as

residual contaminants pose a potential threat to human health or the environment. Stewardship may be required for several generations, and the interests of future generations should be taken into account when stewardship programs or decisions are being developed.

Protecting Intergenerational Equity

Intergenerational equity is defined here as the fairness of access to resources across generations. Resources can be natural as well as cultural. Natural resources include sensitive ecosystems, water bodies, minerals, and fossil fuels. Cultural resources include things such as sites, buildings, objects, plants, graves, and rock carvings that have cultural, historical, or archeological significance.

Because stewardship will limit some use of land and its resources to protect against the release of potentially harmful contaminants, future generations will have restricted access to those lands and resources. A second aspect of intergenerational equity and stewardship is that the risks and costs of stewardship programs devised by the present generation are borne, knowingly or unknowingly, by future generations.

Stewardship will always impose some resource use restrictions and some cost and risk obligations on future generations. The stewardship process should incorporate principles for intergenerational decision making to minimize these impositions.

In 1994, the U.S. Department of Energy requested advice from the National Academy of Public Administration on how it could integrate a fair, intergenerational balancing of the risks, costs, and benefits associated with its decisions into its decision making processes. In response, the Academy identified the following four principles for intergenerational decision making:

- Trustee Principle: Every generation has obligations as trustee to protect the interests of future generations.
- Sustainability Principle: No generation should deprive future generations of the opportunity for a quality of life comparable to its own.
- Chain of Obligation Principle: Each generation's primary obligation is to provide for the needs of the living and next succeeding generations.
- Precautionary Principle: Actions that pose a realistic threat of irreversible harm or catastrophic consequences should not be pursued unless there is some compelling countervailing need to benefit either current or future generations.¹

Stakeholders need to keep these principles in mind when participating in the stewardship process to ensure that future generations have access to the information needed to understand and deal with the obligations passed on to them.

¹ National Academy of Public Administration, "Deciding For The Future: Balancing Risks, Costs, and Benefits Fairly Across Generations," April 1995.

Work supported by the U.S. Department of Energy under contract W-31-109-Eng-38.

The submitted manuscript has been created by the University of Chicago as Operator of Argonne National Laboratory ("Argonne") under contract No. W-31-109-ENG-38 with the U.S. Department of Energy. The U.S. Government retains for itself, and others acting on its behalf, a paid-up, nonexclusive, irrevocable worldwide license in said article to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government.