Including Stakeholders in Water and Wastewater Decisions

Stakeholder involvement is now an important piece of many water and wastewater decisions. The movement of environmental regulation away from technology-based standards to water-based outcomes, such as the development of local TMDL (Total Maximum Daily Load) standards is often accompanied by requirements that responsible agencies or districts consult or otherwise involve stakeholders in water management decisions. Ever increasing water demands plus declining supplies imply difficult trade-offs among agricultural, urban, ecological, industrial, and recreational water uses. Trade-offs depend both on what technologies can achieve for local or regional water quality and the relative importance of competing stakeholder interests.

Some of the key trade-offs managers need to address involving the “what and how” of stakeholder involvement include:

- Integrating technical and policy or value discussions in open forums.
- Respecting formal regulatory processes (e.g. EIRs) while using a stakeholder process to overcome their limitations.
- Providing meaningful stakeholder roles and responding to their needs while maintaining technical rigor and defensibility.
- Using good science and engineering while balancing effort versus accuracy in sampling, modeling, and assessment.
- Directing stakeholders to water quality, environmental, and financial outcomes rather than the means used to achieve them.

These trade-offs combine policy issues or stakeholder values (e.g. ecological quality, costs, drinking water quality, urban vs. agricultural use, etc.) with technical problems (effectiveness of chemical treatment, feasibility of reuse options, etc.). They also combine formal decision-making actions with a more open-ended process whose design is up to a water or wastewater district working with regulators and decision-makers. What’s needed therefore are ways to organize what a decision is about (values and technical assessment) with ways to integrate stakeholder views into the process for how a decision is made.

Our principle message is that analytic tools help organize complex choices, while public participation methods are essential to interact with stakeholders effectively about these choices. Using both sets of “tools” leads to successful integration of stakeholders into the decision-making process.

Public Participation Includes Two Main Parts: A Communication Exchange and a Decision Role for Stakeholders

If a single axiom is to be selected for stakeholder involvement, it is to involve stakeholders early on in the decision process and to give them a meaningful role in the decision-making process. Allowing stakeholders a role in how a decision is defined or framed is just as important as any final choices made. Controversy arises when the legitimacy of the decision-making process is questioned, and a means of precluding that is to assure adequate roles for stakeholders from the start. No process can guarantee better outcomes, but some role for public participation is often essential for many public works decisions. The graphic below provides an example of meetings used in a master planning stakeholder process.

Stakeholder interests for a WWTP expansion are summarized using a decision analysis “values hierarchy.”

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Managers need to combine analytical and process tools to succeed.

Techniques used included open-ended whole-group discussion; small work groups focusing on different technology choices; presentations from specialists on water quality comparisons; ranking of options; and real-time development of a final group opinion statement with “majority” and “minority” views.

Carollo Engineers provides high-level guidance in the form of a toolkit approach to the what and how of stakeholder involvement for participating in actual decisions.

The Tool Kit Approach Summarized Through “Seven Habits” for Stakeholder Involvement

1. Use decision analysis concepts to understand and organize stakeholder values. Aim for measurable consequences and clear trade-offs, but not unrealistic precision.

By using decision analysis tools, you are in the best position to balance effort and accuracy, and to fairly describe uncertainty. It helps guide, but does not tell you how to design information exchanges among stakeholders and decision-makers.

2. Keep close attention to how engineering, regulatory, legal, scientific, political and financial issues interact and change.

By identifying questions or issues as part of the decision frame, stakeholders can influence their resolution. Attention to critical framing issues will usually be essential for a manager gauging progress of the stakeholder process.

3. Define clear and meaningful roles and goals for stakeholders. Make these consistent with your decision-making responsibilities and the level of input or control appropriate for the decision.

A range of options from “consult” to “recommend” to “decide” are possible. In any case participants generally need to be able to compare options, understand consequences, and express their preferences in a meaningful way.

4. Begin stakeholder involvement early. Organize the stakeholder process into manageable steps which define progress and lead to a completed stakeholder product.

Stakeholder involvement is a “front-end” activity, so you need a strategic plan of the steps needed to create a stakeholder product (recommendation, vote/survey, etc.), and then just how it will be used as input by decision-makers (city council, regulators, district board, etc.).

5. Keep the process “values” focused, not “alternatives” focused. Orient participants to what they want to achieve rather than how they may want to do it.

A flaw in much decision-making is focusing too early and too much on decision options. From a policy perspective, it makes more sense to “work backwards” from water quality, environmental, and financial outcomes to the options which achieve them.

6. Know your stakeholders and their issues very well. Pay attention to issues and information appearing outside the stakeholder process.

A good stakeholder process will usually be an improvement over traditional “decide-announce-defend” decision-making. It will be more transparent and hopefully avoid confrontation.

7. Maintain trust and credibility. Once lost, they are almost impossible to regain.

Participants need to know that their views will be respected and heard, that they will be treated equitably, that critical decisions have not been made prematurely, that commitments will be met, and that information will be unbiased.