Choosing the Right Watershed Management Structure

hoosing the most effective watershed management structure to guide the development of the watershed and individual subwatershed plans is one of the more complex decisions a watershed manager confronts. Successful watershed planning requires a strong organization to focus the resources of a diverse group of stakeholders to implement the plan. A long-term management structure is not only critical to prepare and implement the plan in a rapid fashion, but also to revisit and update the plan as project goals are achieved or circumstances change.

Communities can create a single authority for an entire watershed or a series of smaller authorities at the subwatershed level. Whatever its size, a successful management structure should define inter-agency and governmental partnerships and agreements needed to support the organization over the long term.

Some of the typical functions of a watershed management organization are described in Table 1. As noted by Clements *et al.* (1996), a single champion agency or organization is often needed to build the watershed management structure, and coordinate and involve the many stakeholders needed for the plan.

However, not every management structure can or should incorporate all of the functions described in Table 3. In the real world, where watersheds contain multiple jurisdictions, local governments lack certain management authority or funding is limited. The initial watershed management structure may take on a limited set of management functions.

Several different options are available to structure a watershed management organization. A watershed manager can choose between three broad models to organize the stakeholders for a management plan:

- 1. Government-Directed Model
- 2. Citizen-Directed Model
- Hybrid Model

The primary difference among the three management options concerns the organization ultimately responsible for directing the watershed plan. In the government-directed model, local or regional agencies assume responsibility for making decisions about how the watershed is managed. Conversely, the citizen-directed model is driven by citizen activists or grass roots organizations. A hybrid organization combines the best of both models and is recommended for most watersheds. The basic elements of these models are presented in Table 2.

Table 1: Functions of a Typical Watershed Management Structure

Acts as an umbrella organization:

- Establishes links with existing groups and agencies.
- Coordinates watershed stewardship programs.
- Provides funding for watershed planning actions and explores funding options for plan implementation.
- Serves as a clearinghouse for watershed monitoring data and mapping.
- Reviews and prioritizes management strategies to achieve maximum watershed protection.
- Sets goals for the watershed as a whole and its component subwatersheds.
- Identifies gaps in monitoring data and takes steps to acquire the information.

Operates as a forum for stakeholder input:

- Encourages cooperative exchange of information.
- Provides an opportunity for early conflict resolution on contentious issues.
- Allows face-to-face discussion of management and implementation issues.

Advocates for greater funding and support of the watershed.

Ensures long-term implementation of the plan:

- Monitors progress of plan implementation.
- Review development projects for compliance with plan objectives.

	Government-Directed Model	Citizen-Directed Model	Hybrid Model
Formation	Created by legislative authority.	Created at "grass-roots" level from citizens or other interested parties	Created with some governmental authority, with support from citizens.
Membership	Organization membership is appointed by governmental authority	Stakeholder participation is voluntary	Some members are required to participate, but many are volunteers.
Authority	Structure has regulatory authority over land use and other permits	Advisory capacity with no regulatory authority over land use or permits	Some members of the structure have regulatory authority, and others act in a volunteer or advisory capacity.
Funding	Funding is through taxes or levied fees	Funding is either by grant, donations, or sometimes by local government contributions	Much of the funding is through a steady source such as an agreement with a local government, but grants may also comprise a significant portion of the budget.
Implementation	Government agencies at the state, local and federal levels implement the plan.	Local governments implement the plan.	Local governments implement the plan, with some assistance from state and federal agencies.

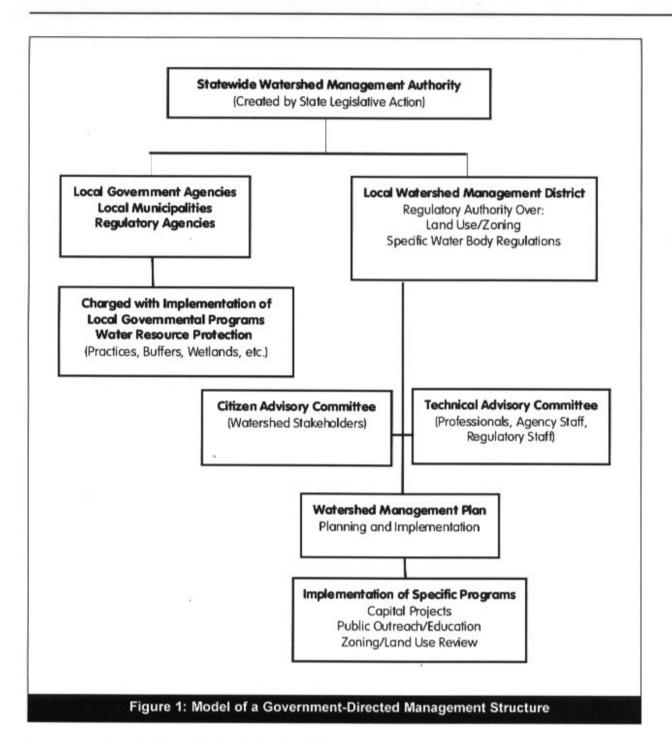
Model 1: Government-Directed

Government plays an important role in any of the watershed management structure, but has the greatest role in the government-directed model. In this model, a state, federal or regional government leads the watershed planning effort. While citizens have an opportunity to influence the plan, their involvement is usually advisory or temporary. The government-directed model is most useful when citizens are not yet aware of watershed problems, or are not organized. The management structure may be created by basin management agencies or required by local, state, or even federal regulatory agencies. A government-directed plan has the advantages of a consistent funding source, and legal authority. There may be some concern, however, that a government-directed management structure can exclude important stakeholders, or that citizens will not develop any ownership in the plan. Government agencies need to make the effort to ensure that citizens have a meaningful opportunity to be involved early and frequently throughout the watershed planning process if this type of structure is to succeed. An organizational chart for a government directed model is shown in Figure 1.

A coalition of agencies is often a loose collection of governmental agencies that realize that the only way to conduct a watershed plan is through a cooperative effort among the different jurisdictions and agencies within a watershed. This type of structure is frequently organized to address technical concerns dealing with a lack of monitoring data, inadequate coordination among various projects, or as a result of some concern over a particular resource. There are sometimes rivalries among the different agencies in this type of structure that can lead to less than enthusiastic support for the process. Citizen involvement can also be restricted if not specifically encouraged by the coalition.

Model 2: Citizen-Directed

In the citizen-directed model, citizen groups advocate for greater protection and drive the watershed planning process. As an outside force, they strive to engage local government to implement watershed plan

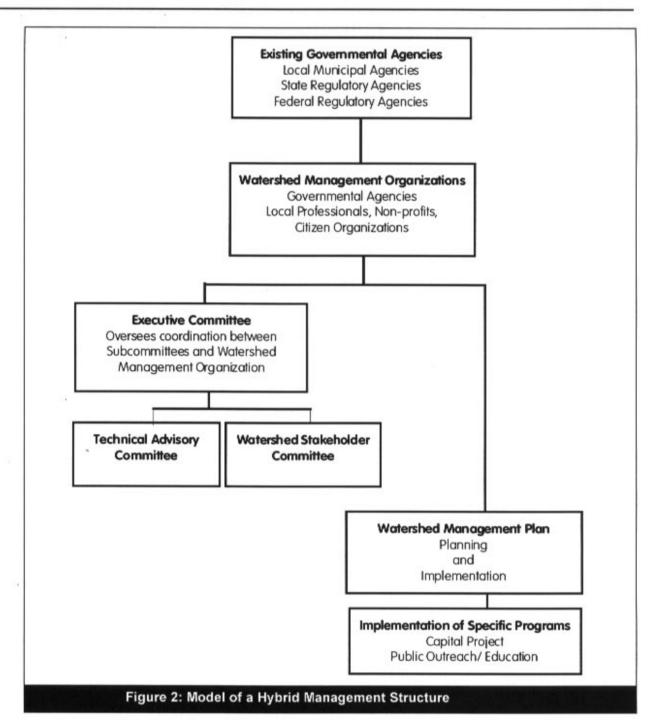


recommendations, but have little legal authority. This type of structure relies heavily on incorporating stakeholders at every phase. The plans produced by this type of management structure generally have strong support and ownership by the community. However, managers of citizen-directed efforts may run into difficulties securing stable funding. In addition, plan implementation can be difficult, since citizens can usually rely only on persuasion to enforce the plan. This model is most successful when it includes a strong cooperation with local government staff and elected leaders.

Model 3: Hybrid

A hybrid management structure combines the best elements of the government-directed and citizen-directed models. The hybrid model generally includes members from the local professional community, government agencies, citizens, and nonprofit organizations. The organization itself does not have regulatory authority, but makes recommendations to local governmental agencies to ensure that management strategies are implemented. Figure 2 illustrates the organizational structure of this type of institution.

The hybrid model seeks to incorporate as many stakeholders as possible in the watershed planning



process, either in an advisory or technical role. Technical committees are often set up to provide expertise on scientific issues, while citizen advisory committees

on scientific issues, while citizen advisory committees afford the public a chance to voice their opinions in the management process. The hybrid model will often review development projects within a watershed and evaluate whether a particular project is compatible with the comprehensive vision of the watershed plan. A central principle behind the hybrid model structure is that greater watershed improvements can be achieved when there is proactive involvement of many watershed parties.

Choosing the Most Appropriate Management Structure

The advantages and disadvantages of each of the basic structures are presented in Table 3. While the government directed structure may be the most financially stable, the citizen-directed structure offers the most opportunity for local ownership of the plan. The political climate or community, as well as the problems that need to be solved, will influence the decision of what structure is most appropriate.

	Table 3: Choosing the Best Management Structure				
	Advantages	Disadvantages	Where Best Applied		
Government- Directed Model	 Has legal authority to influence development. Has a secure funding source. Consistent staff are available. 	May not incorporate all interests. Citizens and local governments may not feel an ownership in the process.	Where the plan will require extensive regulations and land use rules to implement. Local community cannot raise the funds to develop and implement a plan. Community is not strongly mobilized to take initiative.		
Citizen- Directed Model	Local community has ownership in the plan. No stakeholders are forced to participate. Residents are less intimidated by other citizens than the government.	May be difficult to secure a stable funding source. Implementation may be difficult without legal authority. Since most members are volunteers, it may be difficult to complete the plan quickly. The most vocal groups may be over-represented.	The local community has a very strong interest in the water resource. The local government has an excellent relationship with local citizens groups and developers. Some external funding source, or a steady supply from local governments, can support the citizen group. Disagreements between different interests is not anticipated to slow the group's progress.		
Hybrid Model	Has some authority to implement the plan. Incorporates stakeholders from the public and the government. Usually has some stable funding source, and permanent staff. Technical expertise from many sectors can be used to formulate the plan.	Demands significant input from citizens and government.	Most watersheds.		

Setting Up an Effective Management Structure

It is crucial to choose a management structure that can be sustained over the life of the watershed planning process. A core set of features are needed to make watershed management structures effective:

- Adequate permanent staff to perform facilitation and administrative duties.
- A consistent, long-term funding source to ensure a sustainable organization.
- Inclusion of all stakeholders in planning efforts.
- A core group of individuals dedicated to the project who have the support of local governmental agencies.
- Local ownership of the watershed plan fostered throughout the process.
- A process for monitoring and evaluating implementation strategies.
- Open communication channels to increase cooperation between organization members.

The first two features, permanent staffing and longterm funding, are probably the most important. Clearly, having a permanent staff and adequate funding go hand in hand.

How long does it take to establish an effective management organization? The answer to this frequently-asked question depends on the level of stakeholder involvement. A reasonably small, highly motivated group of stakeholders with substantial agency support may establish a viable working organization within several months. As the number of stakeholders expands, however, more time must be spent on stakeholder identification and consensus building. A much longer time may be needed for a watershed organization to evolve into an effective team.

Another common feature of an effective watershed management structure is the reliance on a technical advisory committee (TAC) to support the overall watershed planning effort. A TAC is routinely made up of a public agency staff and independent experts who have expertise in scientific matters. The possible functions of a TAC include the following:

- Evaluate current and historic monitoring data and identify data gaps
- Coordinate agency monitoring efforts within the watershed to fill these gaps
- Interpret scientific data for the whole watershed management organization
- Assess and coordinate currently approved implementation projects

A citizen advisory committee (CAC) is also an important feature of an effective watershed management structure, particularly for a government-directed model. A typical CAC is open to broad citizen participation and provides direct feedback to the management structure on public attitudes and awareness in the watershed. Meaningful involvement by a CAC is often critical to convince the community and elected leaders of the need for greater investment in watershed protection. Some of the possible functions of a CAC are as follows:

- Organize media relations and increase watershed awareness:
 - · Press releases
 - Informational flyers
 - · Watershed awareness campaigns
 - Liaison between citizen groups and government agencies
- Provide input on workable stewardship programs
- Coordinate programs to engage watershed volunteers, such as:
 - · Stream monitoring
 - Stream clean-ups
 - · Adopt-a-Stream programs
 - · Tree planting days
 - Storm drain stenciling
- Explore funding sources to support greater citizen involvement

The Role of Government Coordination in Watershed Planning

Governmental coordination is another essential ingredient of successful watershed structure, especially when the watershed extends over more than one political jurisdiction. Without the participation of a broad spectrum of local, state, and federal agencies, most watershed planning endeavors will lack the financial or technical resources to sustain themselves. In particular, participation by local agencies is very important, since these agencies have the primary authority to regulate land use. The challenge for the watershed manager is getting such a diverse group of agencies to commit to do more than just attending meetings. Skillful bureaucratic bargaining is needed to establish the trust for agencies to share resources and data, develop and endorse a plan, and become true partners over the long-term. One instrument to help promote better coordination is political agreements that legitimize the watershed management partnership. These political agreements are often known as memorandums of understanding.

These agreements define how government agencies and other stakeholders will work together to create or sustain the watershed planning effort. They are statements of intent between the numerous government agencies (i.e., land use regulation, habitat assessment, etc.) and other interest groups that impact the watershed. They are not legally binding contracts, and are written in a general fashion in order to achieve a consensus. Partnership agreements such as these are typically short (one to two pages) and consist of a list of broad points outlining the goals and objectives for establishing the watershed management structure. The basic components of these agreements are as follows:

- List of parties and agencies formally in the plan
- · Vision statement for the partnership
- Watershed issues to be addressed under the agreement
- Commitment to provide assistance and coordinate planning efforts through a central management structure
- Agreement to use the watershed plan to guide land use or water management decisions by each partner
- Details on funding sources, length of the agreement, and how new partners will be addressed
- · Signatures of all partners involved

Summary

Watershed organizations are among the fastestgrowing groups of non-governmental organizations (NGOs) in the last decade. While there is no perfect recipe for the most effective kind of watershed management structure, one key ingredient is creative leaders who can both physically listen to other stakeholders and strenuously advocate what is right on behalf of the stream, creek, or river.

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