

**THE FEDERAL ROLE IN WATERSHED PARTNERSHIPS**



**WESTERN GOVERNORS' ASSOCIATION**

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## PREFACE AND ACKNOWLEDGMENTS

The generous support of the Ford Foundation to the Western Governors' Association (WGA) and a coalition of partners has made possible a sustained effort to examine the changing nature of western water management, to assess the potentials of watershed partnerships for improved management in specific areas, and to develop a series of reports which suggest ways toward more effective use and protection of water and related natural resources.

An informal partnership among WGA, the Western States Water Council (WSWC), the University of Colorado Natural Resources Law Center (NRLC), and the National Conference of State Legislatures (NCSL) explored and prepared reports on various elements of the water management system as it operates in the region.

In 1991, WGA and the Western States Water Council held a workshop in Park City, Utah, to examine changing values and competing demands for western water. Bringing together senior representatives from a broad array of interests, the workshop spontaneously resulted in a statement of principles -- the Park City Principles -- and a consensus on the utility of further workshops. Four other workshops ensued, addressing the role of the public interest, the practicality of the principles, state capacity for playing the pivotal role in adapting to changing demands, and watershed partnerships as a means to pull it all together.

The NRLC developed a book of case studies of existing watershed partnerships, a paper analyzing and outlining state roles in watershed partnerships, and a report (for the Western Water Policy Review Advisory Commission) analyzing watershed partnerships and tracing the history of federal involvement. The WSWC developed a paper for state water managers on establishing a state strategy to support and encourage watershed approaches. NCSL developed guidance brochures for legislators on state legislation fostering watershed partnerships. WGA prepared a strategic guide for watershed partnership organization and operations, and WGA and NRLC conducted interviews on watershed efforts in the states of California, Montana, New Mexico, Oregon, and Washington for the use of all. Many of the individuals interviewed are quoted in this report.

In addition, WGA coordinated a broad partnership addressing long term sustainability for Great Plains economies, communities, families and ecosystems -- the Great Plains Partnership. The Partnership has recently been folded into a larger WGA initiative entitled Stewardship of Natural Resources. Similarities to the broader look at watershed collaboratives are striking. Focus groups across the region were assembled to assess local responses to changing circumstances. These exchanges refined an approach for community dialogs and decision making involving the mix of private and public interests.

A final source of information for this paper has been the set of basin studies prepared for the Western Water Policy Review Advisory Commission. The Commission sought analyses of the experiences in the Colorado, Columbia, Platte, Rio Grande, Sacramento, and Truckee-Carson

River Basins. These studies, despite very different challenges in each basin, found considerable commonality in the governance problems they identified.

This report concentrates on federal roles in watershed partnerships. It assesses existing patterns of intergovernmental and public/private interactions in water management, reviews principles for reform, and outlines specific actions to be taken or avoided.

This report was prepared for the WGA by Frank Gregg and Jo Clark. The authors acknowledge with appreciation the work of others who have addressed watershed governance. They also draw heavily on their cumulative experience in the field.

Additional copies of this report and more information on the WGA and its natural resources work can be obtained on the WGA web site at [www.westgov.org](http://www.westgov.org). You may contact us at Western Governors' Association, 600 17th Street, Suite 1705 South Tower, Denver, CO, 80202. Phone: (303) 623-9378; Fax: (303) 534-7309.

## EXECUTIVE SUMMARY

People around the West are working hard to improve and sustain the health of the region's watersheds. Those who live near or care about a stretch of river and its watershed are talking, experimenting, learning, and sharing in experiments in natural resource governance. Through these partnerships, private landowners and business, local officials, staffs of local, state, and federal natural resource agencies, and members of various interest groups are integrating concerns for community, economic welfare, quality of life, water supply and quality, and aquatic and riparian systems in efforts to develop and apply solutions which all have had a hand in generating.

With authority and responsibility for managing natural systems divided among levels of government and multiple interests, both experience and logic suggest that interaction among interests at the level of the natural system is the better way -- perhaps the only way -- to achieve effective use, management and protection. The federal role in promoting, supporting, and strengthening -- but not stifling -- these locally-based partnerships will be critical.

The logic of the watershed as the essential unit for interaction is powerful. Every use of water, soil, and vegetation within the watershed affects the condition of these basic resources; every change in the condition of the resource base affects the life forms which make use of its components. The system is interdependent and interactive. Healthy watersheds reflect the presence of well-functioning hydrologic, ecological, and human communities. Watersheds are "nested"; they can be identified and analyzed at scales ranging from those of a tiny rivulet to major basins, and to the scale necessary to address problems of concern in holistic ways. The word "problemshed" is often useful in much the same vein as "watershed," and is particularly apt when working with aggregations of watersheds and with interwatershed issues.

In many ways, the complexity of our social systems resembles that of the natural systems on which we depend. Our governmental system is also "nested" at scales ranging from unincorporated rural areas and small towns through counties, cities, and states -- and the nation into which these levels of authority are aggregated. Authority is deliberately divided among levels; each level has a concern for its natural resource base. Private property interests, business generally, all manner of interest groups, scientists and professionals pervade the governmental structure, seeking satisfaction of demands which have often exceeded system capacity.

Duplication in the governance system is pervasive. But the governmental system and our private institutions combine to provide access to natural resource values for a wide range of affected interests. We assume that the condition of the natural system is the only meaningful measure of accountability for our stewardship. It follows that the trick in achieving sustainable, healthy natural systems rests in integrating the exercise of public and private authority and responsibility at the level of the natural region.

People around the West, in both private and public sectors, are demonstrating their conviction that such partnerships can be made to work. Among the projects on watershed management

undertaken by the Western Governors' Association, the Natural Resources Law Center, and the Western States Water Council, this report focuses on illustrating how the federal government can function as a partner in and supporter of watershed partnerships and in the process enhance its effectiveness in meeting national goals.

Principles for a system of watershed governance begin with the knowledge that the interactive nature of the natural system requires cooperation among those whose actions affect the system. Examination of the existing intergovernmental system suggests that the states -- as the pivotal point between local and federal governments and as the holder of major authorities in natural resources -- have a central role to play in making the system work in natural resources. Those concerned with natural resources have at this period an opportunity to effect a historic intergovernmental bargain in integrated natural resources management in which:

- State governments make authentic commitments in law and action to the full range of values in water and related natural resources. States lead in developing partnerships for integrating local, state, and federal actions through collaboration with each other and with private interests.
- The federal government recognizes this pivotal state role. It continues to establish standards to protect public health, fulfill trust responsibilities, and avoid regional economic competition at the expense of equity, environment, and sustainability.
- Parties at interest seek their ends at the level of the natural system, making use of stronger state commitments, federal cooperation and such evolving tools as water markets, water and wetland banks, conservation, and fine-tuning of large water project purposes, allocation of benefits, and operations.

Weaknesses of the existing system hamper development of effective partnerships. Beyond the formidable barriers of overlapping and often conflicting interests and authorities, examples include:

- Complex planning processes, often required of and dominated by federal agencies, may consume funds, expertise, and energy better used for incremental approaches to achieving balance among uses and assuring sustainability. Many feel called upon to participate even though they cannot expect timely on the ground actions.
- Incentives are lacking in public policy to encourage focus of public and private participants on the resource base as a system which is affected by diverse arrays of authority and interest.
- Funding is particularly hard to come by for key actions to fill gaps between narrowly directed goals and actions, including gaps between and among public and private roles.
- Agency concentration on prescribed procedures and narrow interpretations of ability to respond to partnership priorities is commonplace (and often encouraged by agency clienteles); Weaknesses in good faith disclosure and cooperation result.
- Legal constraints hamper certain major categories of action, including water transfers,

water use efficiency requirements, and realistic pricing of natural resource vendibles such as hydropower and water withdrawal and consumption.

- Habits and incentives of conflicting interests to establish dominance may exclude consideration of diverse values represented in the natural systems, and may sustain polarization harmful to all.

While recognizing that watershed partnerships work because they can be tailored to individual and partnership needs, the following recommendations are suggested as keys to constructive federal involvement.

1. Embrace a new paradigm
  - Commit to sustainability of the resource base and to sustainable levels of resource use as an overriding goal for watershed and basin management;
  - Work in partnership to establish ecological goals and constraints for each basin;
  - Align federal natural resource activities with watersheds and river basins (and seek linkages with other natural resource system-based activities, including ecosystem and species protection);
  - Accept the legitimacy of partnerships at the level of the natural region in which common problems demand cooperation;
  - Experiment with ways to link individual partnerships into larger networks.
2. Enhance federal coordination
  - Provide incentives to agencies for coordination at basin and basin/watershed levels;
  - Improve the information base for watershed and basin activities by coordinating data collection and management, focused on problem priorities.
3. Provide support to and be a part of watershed partnerships
  - Learn to respect the partnership idea;
  - Reward partnership efforts in agency personnel evaluations, budget allocations, and in the utility of policies and effectiveness of implementation;
  - Make decisions in the partnership context;
  - Participate in state watershed and natural resource councils;
  - Measure success of federal efforts against the health of natural systems.

The watershed -- the natural system -- provides the arena for learning, for trust-building, and for coordinated action; in short, the arena for civic competence in water and related natural resources management in a democratic federal system with an incentive-based private economy.

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# THE FEDERAL ROLE IN WATERSHED PARTNERSHIPS

Western Governors' Association

## INTRODUCTION

### *The Vision*

Scattered around the West are experiments in natural resources governance which are working. Called *watershed partnerships*, agency representatives, private landowners, business leaders, and members of various interest groups are integrating concerns for community, economic welfare, quality of life, water supply and quality, and aquatic and riparian system health. Generations of effort have established environmental and conservation concerns as key components of the American agenda. The ingredients for a workable legal, administrative, scientific, and technological framework for action are substantially at hand. The will to make effective use of these tools is growing across the region. People recognize the opportunity to make the system work at the level at which responsibility for stewardship can be meaningfully assessed -- at the level of the natural system.

Many of the partnerships are still young and most are relatively small-scale. Evidence to date suggests that agreements can be reached, implemented, and adjusted over time with the consent of the "partners" if respect for others' interests and responsibilities is evident, and information, authority, resources and expertise are brought to bear in concert.

Given the complex nature of natural systems, the range of values they provide, and the demands society places on them, it seems inevitable that interaction among parties at interest at the level of the natural system is the better way to achieve effective use and management and protection of natural resources in the range of problem situations, scales and diversity of interests. The federal role in promoting, supporting, and strengthening, but not stifling, these locally-based partnerships will be critical.

### *The Need is Urgent*

The fundamental pressure for these new approaches arises from the contrast between the nature of natural systems and the nature of society's incentives and actions in making use of them.

The natural system -- the watershed and the array of resources and subsystems within it -- is integrated by natural processes. The movement of water over land, underground and through channels affects:

- soil conditions,
- types and distribution of vegetation,
- water qualities and timing and rates of flow,
- qualities of aquatic, riparian and upland habitats, and
- the capacity of the system to perform its functions over time.



The nature of the watershed makes the case for integrated action in use and protection.

In contrast, society's approach is reflected in the pursuit of specific interests which may overlap, conflict, exceed system capability, and ultimately threaten the health of the system itself. With some exceptions, our laws are also designed for specific objectives. The fit between the nature of natural systems and our institutions is at best awkward.

In and around the various experiments in collaboration is a system that is often seen as bureaucratic, rigid, out of step with today's values regarding water, and unable to adapt to the growing evidence of unanticipated cumulative impacts. From almost every quarter -- federal agencies redefining missions, states recognizing that they have to broaden their concerns to include changing values, environmental activists pushing for protection in court and in negotiations, tribes fighting to develop tribal water codes and make more productive use of their rights, cities and farmers learning to practice conservation and stewardship -- comes evidence of the need for change and willingness to work for it.

With corresponding frequency, the logic of focusing on watersheds as an essential unit for integrating use, management and protection is becoming more widely recognized. Watersheds range in size from the drainage area of a tiny rivulet to the level of major river basins. Watersheds are "nested"; they can be aggregated to reach the scale needed to address interrelated concerns.

Fortunately, the image of the watershed seems to be both easy to grasp and powerful. Watershed participants interviewed for this paper noted that people respond with surprising ease to the notion of the watershed, suggesting an intuitive recognition of the watershed as a living system which may be healthy or degraded, nourishing or sterile, depending on its use and care.

While natural resource-based economic interests, environmental protection, and recreation interests and governments at all levels recognize that there is much to do, the effort is not yet adequate to the gravity of natural system problems. As government involvement has increased, so has the complexity of achieving coherence at the level of the natural system. As stated by one of the people interviewed for this report:

“We have drifted to policy-based resource management, instead of resource-based policy management. We manage according to laws, not the health of the resource. We have no ability to react to change or to assess original assumptions. Acts and programs are organized by function and level of government; they are not integrated at the level at which natural resources do the integration. *The result is that programs can meet every standard of public administration and yet cause destruction of natural systems.*”

### ***The Context for Change***

The American political and economic systems have proved to be astonishingly responsive to change. The systems encourage freedom of choice in who governs (and how much and to what ends) and in the pursuit of personal goals. Government authority is fragmented among levels and

among branches at each level; there is no single dominant center of power. Our incentive-based private economy has stimulated unparalleled growth in productivity, and while its success has placed severe pressures on the sustainable capacity of natural systems, the combination of economic and political freedom has also produced wealth, knowledge, expertise, technology and a strong legal basis for effective remedies.

By the early years of the 20th century, overexploitation, scarcity, waste of natural resources gave rise to demands from natural resource professionals and reform-minded political leaders for “conservation,” a movement which historian Samuel T. Hays described as “the gospel of efficiency.” In the 1980's Hays described the evolution of environmental concerns after World War I as three eras focusing successively on beauty (areas and systems of special scenic, wilderness, and wildlife values), health (water and air pollution, pesticides, toxic substances in the environment generally), and permanence (sustaining healthy natural systems, with some emphasis on protecting biological diversity).

The movement towards partnerships concerned with specific natural systems is an evolutionary response to concerns for beauty, health, and permanence in a society which focused earlier on developing its economy.

The deliberate division of power among government levels and between governments and an incentive-based economic system provides both special problems and opportunities for making federal roles more meaningful.

## **THE EXISTING SYSTEM: A SKETCH**

### ***The Intergovernmental Setting***

Concern for water and watersheds is shared by governments, from unincorporated rural areas to small towns, major cities, states, and the nation.

#### **Local**

*General purpose local governments* -- towns, cities, counties -- are major players. Control of private land use, usually in the form of zoning, is a key role. Floodplains, groundwater recharge areas, and riparian and wetland habitats are examples of water-related lands addressed through land use regulation; loss of natural flooding and floodplain storage, nonpoint pollution generally, and landfill siting are other concerns which may be addressed through land use controls.

Local government units build and operate municipal water supply and water pollution control systems, own appropriative water rights, and contract for federally developed water and power. They also hold land for public purposes; lake and stream shorelines and riparian areas are favored sites for parklands. Local highway and road locations strongly affect locations and kinds of development.

*Special purpose districts* organized under state law are common in municipal water supply, irrigation and water quality. Special purpose districts are prime contractors for delivery of federally developed water and power in much of the West.

## State

The *states'* position in the federal system reserves to them authorities not specifically vested at the federal level. The balance between state and federal authority shifts with political and legal fashions, but the duality of power endures. In natural resources use and protection, states have developed bodies of law, administrative agencies, and supporting systems of research and education. They are major landowners in most of the West, with state trust lands, parks and forests, and wildlife areas as examples. They have largely unchallenged primary authority in water rights administration, including quantification of federal and Native American rights through adjudications under state laws. They are regulators of natural resource use and protection under their own authority and as agents for exercise of federal authority.

The states also influence the performance of local governments. Authorities of counties, cities, and towns as well as special purpose districts are specified by the state. Many federal-local interactions take place through state agencies, including the flow of federal grant money and oversight of local implementation of federal programs. The states occupy a critical and precisely pivotal role in the federal system for managing natural resources.

Not surprisingly, states are innovators in searching for ways to promote intergovernmental and public/private natural resource partnerships. Oregon, Washington, and California, for example, have developed particularly strong state-level efforts for watershed collaboratives in which federal involvement has proved productive.

## Federal

The *federal government* involvement in natural resource issues in the West is unique. To understand the scope of federal activities in the watershed context, some knowledge of the history and current status of federal authorities and actions is important.

This evolution is discussed by Robert Adler in his article "Addressing Barriers to Watershed Protection" (*Environmental Law*, 25:4, 1995, pp.973-1106) and Doug Kenney in Appendix A ("Regional Water Resources Management in the Western United States: a Historical Review of Institutional Issues and Experimentation," pp.1-44) in the report prepared for the Western Water Policy Review Advisory Commission (*Resource Management at the Watershed Level: an Assessment of the Changing Federal Role in the Emerging Era of Community-Based Watershed Management*, October 1997). The final report of the Commission itself (*Water in the West: the Challenge for the Next Century*, draft October 1997), also discusses these matters in some detail.

## *History*

The federal government has been involved in water resources development, especially navigation, almost from the beginning, and has a century-long history of watershed involvement. For most of that time, watershed statutes were intended to optimize the use and development of water resources, while more recent statutes aim to increase environmental protection. In total, however, the basis for integrated watershed management, protection and restoration programs is still inadequate.

A long series of Progressive Era proposals dealt with improved coordination for comprehensive development of river basins. While most were not adopted by Congress, the various federal navigation and flood control laws beginning with the River and Harbors Act of 1899, the reclamation laws beginning with the Reclamation Act of 1902, and the Federal Power Act of 1920 began an effort to capture the watershed concept. The prime incentive here was to justify mission-oriented water development programs and allow agencies such as the Corps of Engineers, the Bureau of Reclamation, and the Federal Power Commission to proceed with competing individual projects. The 1917 Newlands Act gave the Corps the authority to do comprehensive studies of watersheds involved with flood control plans, putting the Corps at the center of multipurpose river development. The resulting documents often became river basin plans for development which included navigation, hydropower, irrigation, municipal and industrial supply, and other uses in addition to flood control.

The New Deal and Post-War proposals attempted to use comprehensive river basin planning and development to provide jobs and promote regional economic development. Of the proposals, only the Tennessee Valley Authority was approved as a centrally-directed model. In other basins -- the Colorado, the Columbia, the Missouri -- federal agency projects became the instrument for "comprehensiveness," which in practice came to mean public water projects sited and operated for limited purposes.

In 1965, the Water Resources Planning Act was passed with a purpose of providing river basin planning and improving cooperation and coordination, with emphasis on improving the effectiveness of federal actions.. Although it created a federal Water Resources Council and joint federal-state river basin commissions (discussed later in this paper), its purpose still focused on use and development, if with some increasing recognition of environmental values.

In the years immediately following 1965, Congress turned its attention to environmental concerns in a suite of laws which have both emerging and latent powers relative to watershed management. They include the Clean Water Act, amendments to the Fish and Wildlife Coordination Act, the National Environmental Planning Act, the Endangered Species Act, the Safe Drinking Water Act, a host of federal land management statutes governing the Forest Service, Bureau of Land Management, National Park Service, and others, and a series of regional watershed protection or management programs such as the Northwest Electric Power and Planning Act and the Colorado River Basin Salinity Control Act.

The history of federal participation in watershed management is clearly still being written. The government remains a major player.

#### *Current Status*

The federal government is the largest landowner in the West. It owns, in national forest and national park lands, most of the high elevation watersheds in which the critical snowpack accumulates, as well as (through BLM) much of the western rangelands. It has trust responsibilities with respect to Native American reservation lands and water rights.

Through the Bureau of Reclamation and the Corps of Engineers, the federal government is the major developer and operator of large-scale water and hydroelectric power projects in the West, and is distributor of benefits generated by the projects through long-term contracts. The U.S. Department of Agriculture, through what is now the Natural Resources Conservation Service, has developed numerous small flood control and other reservoirs, and NRCS and other USDA agencies are prime sources of research and financial and technical support in natural resources.

Protection of migratory waterfowl and endangered species are firmly established as arenas for federal action through the Fish and Wildlife Service. Both programs are generators of controversy throughout the region; both have implications for use of non-federal lands and waters. The Federal Energy Regulatory Commission maintains exclusive jurisdiction of hydroelectric project licensing, although states are asserting a stronger role under the Clean Water Act to assure that projects comply with water quality standards.

Over the past decades the federal government, primarily through the Environmental Protection Agency, has also become the instrument for establishing and securing the enforcement of baseline protections for air and water quality, for control of toxics, and for "remediation" of toxic sites. A long series of statutes and court cases have confirmed a federal role as both an initiator and the arena of last resort for protecting and sustaining the health, beauty and productivity of natural resources and environmental systems. Now a path is needed through the bulwark of agencies, laws, regulations, and programs to a collaborative system that delivers those results.

#### *Constraints*

The range of federal laws and programs enable many agencies to do many things. Conflict, overlaps, and gaps are common. Despite the plethora of authorities and agencies, there are constraints on federal capability to function well in watershed partnerships with the best of will. Some laws establish detailed and rigid procedures which must be followed. Others are encumbered by volumes of regulations and policy guidelines. Some program timelines such as NEPA guarantee that decisions will be several years in the making. Some such as the Federal Advisory Committee Act can be used to discourage voluntary partnerships.

In addition to statutes and regulations, court orders may affect an agency's ability to act. Budget priorities tend to reflect the power of constituencies seeking specific outputs such as water supplies or hydroelectric production. Money for support of partnerships to help get more out of the combined efforts of public and private partners tends to be overlooked, even for such basic resources as trained facilitators and coordinators.

Federal field staffs, sometimes with support from up-the-line administrators, have made remarkable progress in shifting toward more flexible, tailored solutions. This report is aimed at facilitating these efforts.

#### *The System Summarized*

In short, we have in environmental use, management, protection and restoration a classic illustration of overlapping government and public and private interests and actions. The pattern is flexible and boundaries are fuzzy. The pattern is also more or less deliberate; it is a source of

the nation's resilience in the presence of dramatic economic, political, and ecological change.

One way to illustrate the result is to visualize a three-tiered variation on Rubik's cube (a multi-tiered cube of smaller cubes which form the basis for a popular puzzle). The cubes in each tier are marked so as in the aggregate to show the full range of natural resource concerns. There are no missing concerns at any level; each of the three primary tiers of the federal system asserts an interest in each area of concern.

Private property interests, all manner of interest groups, lobbyists, scientists and professionals surround and pervade the governmental structure (honeycombs swarming with bees might be illustrative), interacting with each other and with government policy-makers and administrators at each level and in each area of concern. Each level of government also seeks to influence the actions of the others.

Duplication among government levels appears to reach ludicrous proportions. Redundancies in specific program areas are characteristic. Over the decades, interest groups have worked to develop laws, agencies, expertise and public money to achieve their specific ends in use and protection of natural systems. But each government level has a responsibility to the governed in the area it serves. The issue is not the legitimacy of concern at each level; it is how to address individual, local, state, regional and national goals through a mix of public and private interactions at a scale at which the condition of the natural system can be monitored, problems identified, and coordinated actions taken.

Legislative oversight is divided; so, especially at the federal level, is administrative responsibility. There is conflict, inefficiency, overlapping authority and efforts, singleminded pursuit of narrow goals, lack of mutual confidence and respect. But the system has also produced solid progress in resource development, water and air quality protection, toxic substances control, mined land reclamation, efficiencies in use of water, use of ecological concepts in forest and range management and many other fields.

Increasingly, people at the level of the problemshed are reinventing government themselves. The watershed (and ecosystem and other "problemshed") partnerships have emerged from the grassroots as ways of making effective use of the tools made available over recent decades. There is little need for more authority or agencies or programs. The trick in the game of environmental management is to involve the diverse array of authorities, interests, and actors in collaborative pursuit of differing ends while protecting the health of the natural system; to so array the cubes that they are consonant rather than contrary. The watershed provides the arena for learning, for trust-building, for coordinated action: in short, the arena for achieving civic competence in water and related natural resources management in a federal system.

## PROBLEMS AND DISSATISFACTIONS WITH THE EXISTING SYSTEM

While the existing system includes an array of private interests and public agencies capable in the aggregate of responding to current and future demands, satisfactory outcomes are far from automatic.

### *Systemic Weaknesses*

Systemic weaknesses hamper productive partnerships:

- The overriding weakness of the system is that it does not provide a system of accountability or corrective action for the cumulative effect of society's use and management of natural systems.
- Public planning is often disconnected from on-the-ground actions. It is driven by legislation and/or regulations. It is often top down, cumbersome, and expensive in time and dollar costs. In the absence of effective partnerships, narrowly focused planning often makes analysis of cumulative effects of actions by individual agencies nearly impossible.
- Lack of funding for key tools of integrated watershed management (e.g. compatible data collection and analysis strategies, dependable monitoring), and "orphan" action needs such as restoration of already damaged areas is endemic.
- Rigidities make it difficult to pool funding, personnel, and other resources across agency and governmental lines, even with the best of will. Agencies tend to fall back upon prescribed procedures and narrow interpretations of ability when they respond to partnership priorities.

As one person interviewed put it, "No conceivable form of public participation in bureaucratically isolated planning and implementation processes can produce coordinated management."

An underlying concern of all watershed participants is the willingness of higher levels of authority to make and respect decisions worked out at problemshed levels. Comments from the interviews suggest a common cause of restraint by centrally directed bureaucracies, state as well as federal:

"The biggest problem for adaptive, responsive performance of government agencies is upper middle management. The most ingrained commitment to measuring successes in terms internal to the agency is found here; so is resistance to measuring success by the overall condition of natural systems. The latter is a threat to professional cadres and organizational units within agencies devoted to fairly narrow responsibilities and constituencies. These functional program specialists at higher levels within the agencies have the least contact with the complex process of integrated management of natural systems."

A veteran public land administrator in California emphasized that there are few unbreachable limits on innovation within the broad framework of law, administrative policies, and budgets;

canny agency administrators invent ways to finesse directives which hamper sound management with unproductive procedural fetters. Responsiveness to synergistic opportunity at the problemshed level is both a function of agency culture and on-the-ground leadership.

### *Specific Water Management Concerns*

Non-point source pollution (as distinct from “point” discharges such as those from industrial processes and sewage treatment systems) is a major concern. It is addressed in the Clean Water Act as a voluntary program, and agencies such as the Natural Resources Conservation Service work actively with farmers and ranchers to improve on-the-ground practices. Under the Act, states are required to develop plans for cleaning up non-point sources, but there are no specific requirements for the plans nor for enforcement. State 319 programs, through funds from EPA, pay for state-approved efforts to improve non-point sources. A different section of the Clean Water Act, 303(d), requires states to list all quality-impaired waterbodies in the state and establish total maximum daily loads (TMDLs) for each one. The TMDLs are to be distributed across all sources of pollution, even contaminated sediments and groundwater inflows, as a baseline for clean-up.

Non-point source programs, including TMDLs, are hampered by unspecific guidance, split jurisdiction, lack of good data, lack of knowledge of what works best, the potential for significant costs, and fear accompanied by resistance from local landowners. Watershed partnerships can bring together those with responsibility for ensuring clean-up, those who may be causing some of the pollution, and others affected by or interested in the quality of the water. Partnerships can mesh concerns over pollution with those of aquatic ecosystems, and can factor in land use, water management, local economies, and other relevant considerations. Partnerships can help prioritize needs, gather critical data, share costs, bypass authority shortcomings, and work to build trust and reduce fear.

Although aquifers usually have different boundaries than the overlying watershed, groundwater management can benefit from the same kind of approach. Like non-point source pollution, groundwater management is not addressed in a specific body of federal law although aspects of it are incorporated in various laws such as the Safe Drinking Water Act. Protection of groundwater quality is covered partially under laws guiding safe drinking water, disposal of hazardous waste, and other pollution. Allocation of the use of groundwater is governed under state law, although often under different laws than those governing surface water. Management linkages to related concerns such as associated wetlands, interconnections with surface waters, and use of aquifers for storage and conjunctive management vary by state. Governance of interstate and international aquifers often end up in court. Watershed partnerships usually don’t include groundwater issues, even though groundwater pumping may undercut partnership efforts to restore instream flows.

Groundwater management calls for collective responses, at both the local level and perhaps the state or regional management level. Again, bringing the collective resources to bear of those who have legal authority, those who have water rights to use the groundwater, and those who are affected by the management decisions is almost certainly the most effective way to proceed.



Public lands management presents a somewhat different challenge for water management. The federal public lands agencies (Bureau of Land Management, Forest Service, National Park Service, Fish and Wildlife Service, Department of Defense, and Department of Energy) generally operate independently from each other and even more independently from water agencies and state agencies. Their focus traditionally is within the boundaries of their ownership.

BLM and the Forest Service have multiple use mandates which require them to balance uses such as grazing, logging, mining, wilderness protection, and recreation. The FWS, while also providing multiple uses, is most concerned with habitat, especially for game species on their refuges and for endangered species wherever critical habitat is designated. The NPS both protects and makes available scenic and cultural treasures. DOD and DOE usually have tightly designated uses related to national defense.

Clearly, land uses impact receiving waters, both quantity and quality. The fact that headwater streams arise on the higher elevation lands in which ownership is overwhelmingly federal makes the federal land agencies critical elements of successful partnership in most of the West. In addition, riparian areas and floodplains begin to fuzz the distinction between land and water. In general, the only approach that makes sense for integrating concerns, actors, and actions with respect to land/water interactions is a partnership approach. Fortunately, many existing partnerships have been formed to address overlapping concerns.

In addition to watersheds, partnerships are being formed by state and federal agencies and private interests to address complex issues in response to “ecosystem” concerns and concepts. Doing so is a formidable challenge, in part because -- unlike watersheds -- ecosystem boundaries of concern vary with the nature and location of specific components under stress. The concept of sustainable ecosystems is, nonetheless, becoming widely accepted even by those who fear its impacts; concerns for aquatic ecosystems, riparian systems, floodplains, natural flows, native species, and healthy habitats are becoming accepted parts of stewardship. Because of the stakes involved -- the costs of putting things right, the complexity of issues, interests, and players, and uncertainty about cause and effect -- open, adaptive partnerships are essential. While specific requirements of the Endangered Species Act sometimes erode the volunteerism which is the preferred motive for partnership, the basic principles for productive results apply.

## **HOW AND HOW NOT TO DO IT**

### ***No Single Solution***

Lack of a comprehensive, integrated, approach to natural resource management is often described as the heart of the problem. But the nature of “the problem” varies with the resource base of concern and the community which makes use of it. A single model is distinctly not the solution. The solution lies in the directions followed by most successful watershed/problemshed partnerships; in institutions built from the bottom up by those who have stakes, interests and authorities in a specific water resource system and use them to find ways to adapt to changing demands while preserving system health.

## *Principles for Making the System Work*

### Park City Principles

The Park City Principles resulted when a very broadly representative group, after three days of working through case studies and other exercises, recognized how much commonality existed in their views and wanted to capture those agreements. Although the principles were written for water management generally, they capture much of what is needed at the watershed (and “problemshed”) level as well.

1. *Recognize diverse interests:* There should be meaningful legal and administrative recognition of diverse interests in water resource values.
2. *Problemshed approach:* Problems should be addressed in a holistic or systemic way that recognizes cross-cutting issues, cross-border impacts and concerns, and the multiple needs within the broader “problemshed” -- the area that encompasses the problem and all the affected interests.
3. *Flexible, predictable, adaptable:* The policy framework should be responsive to economic, social and environmental considerations. Policies must be flexible and yet provide some level of predictability. In addition, they must be able to adapt to changing conditions, needs, and values; accommodate complexity; and allow managers to act in the face of uncertainty.
4. *Decentralize to states:* Authority and accountability should be decentralized within national policy parameters. This includes a general federal policy of recognizing and supporting the pivotal role of states in the federal system as well as delegation to states and tribes of specific water-related federal programs patterned after the model of water quality enforcement.
5. *Negotiation and market-like approaches:* Negotiation and market-like approaches as well as performance standards are preferred over command and control patterns.
6. *Joint Policy Participation:* Broadly-based state and basin participation in federal program policy development and administration is encouraged, as is comparable federal participation in state forums and processes.

Workshop participants agreed that the fundamental test of the system is its ability to resolve water problems. States emerged as the pivotal level for facilitating problem solving and integrating related factors. States were charged with strengthening water laws and institutions responsive to the entire range of water values and interests. They were also called upon to be more proactive in anticipating problems and initiating solutions.

The federal government was encouraged to focus on such national policy goals as: stewardship, sustainability, a sound natural resource base for the economy, protection of public health, natural system health, and environmental amenities. Negotiating international agreements on water and other cross-border concerns, exercising trust responsibilities, establishing baseline protections, enlisting and encouraging efforts of state, local and regional entities, and managing federal lands and water projects are among key elements of federal responsibility. Backstop support in such forms as research, technology innovation, and improved practices may also be cost effective federal contributions.

### Principles from the Great Plains Partnership

Throughout the West, the value of natural resources in economic, environmental and social terms continues to change quickly. Less than a century ago, the development and extractive use of minerals, water, forests, and fisheries to speed the development of the region was an unquestioned goal. Communities and community values were assumed to benefit from development. In recent years, the traditional resource industries -- mining, timber, agriculture -- are, however, shrinking as a percentage of the regional economy, and concerns about sustainability and the protection of environmental health and beauty are placing additional constraints on traditional industries and traditional practices. Communities throughout the West feel the impacts of change, and often see the government as cause rather than agent. Their concerns for the future are real.

The Great Plains provide a particularly poignant example. The WGA-facilitated Great Plains Partnership examined perceptions of people in a region in which agriculture is the foundation of the economy, sense of community and personal worth. Land ownership is overwhelmingly private, in contrast to the great expanse of federal lands from the Rockies westward. The growth of cities, population, and urban and amenity-based economies of much of the West has bypassed much of the Great Plains.

Focus groups conducted for WGA under this program underscored the way local resource users can integrate seemingly opposing views in a region of private land ownership still linked to agriculture. They hold strong, if contradictory, beliefs in both the rights of private land owners and their obligation to manage their resources for the common good. They believe that legislatures and government agencies must set parameters for how resources are used, and allow local residents to be part of the solutions. They also want to find ways both to maintain the resources and sustain the economies and lifestyles of the people who use them.

Their suggestions include:

- define success as finding ways to sustain natural resources while addressing the concerns of the people who make use of them, with everyone involved in the search for solutions;
- move agencies beyond the narrow exercise of authority to recognize benefits of collaboration;
- balance landowners' rights in the use of the lands with their responsibilities, acknowledging that safeguards are needed when responsibilities are not met;
- use flexible rather than prescriptive standards in regulations; avoid micromanagement;
- provide greater leeway for local decisions as more likely to produce solutions adapted to specific situations and more likely to be implemented; and
- support development and transfer of technologies and practices likely to improve results in terms of resource protection and satisfaction of individual and community needs.

### The Compulsion for Order

The frustration with lack of information among agencies at any one level, especially the federal level, is so evident as to tempt people trying to make the system work to demand a single voice in major natural resource decisions. Nothing causes more frustration in collaborative problem-

solving than discovering a deal is not a deal -- that it is impossible to gain a unified commitment from the federal government. Some principles to guide approaches to this problem arise from examination of earlier attempts to achieve coordination among federal agencies in seeing implementable solutions at field levels.

A federal Department of Natural Resources incorporating various combinations of federal land, water, and other natural resource agencies has been proposed and defeated on several occasions, most recently in 1978-79. One weakness of the idea in the context of this paper is that it is not clear that the culture of a single department with aggregated federal authorities in natural resources would tolerate diverse viewpoints of individual agencies with differing and sometimes conflicting missions, let alone be committed to decentralized decision processes. Expression of differing agency perspectives are critical components of a constructive federal role in partnerships. At some point the differences need to be worked out, preferably at the site level where they can accommodate specific conditions. Unless delegation to field levels and other systems for assuring collaborative field level decision processes were insisted upon, the result might well be a pattern of decisionmaking insensitive to specific natural systems or to the aggregate public interest.

Other efforts to design "rational" approaches to federal coordination have produced little. For example, the Water Resources Planning Act of 1965, was an effort that was developed over several years of effort but was abandoned in the 1980's for reasons relevant to this paper. WRPA provided for an independently-staffed Water Resources Council comprised of the heads of appropriate federal departments. There was no state voice in the Council. The Council was instructed to prepare periodic national and regional assessments of water resource needs and conditions.

Joint federal/state river basin commissions were to be established at the request of basin governors to prepare and keep up to date "comprehensive, coordinated, joint" plans recommending federal, state, local and nongovernmental actions and priorities for implementation. The focus remained on federal projects wherever either federal agencies or specific interest groups saw possibilities for action. States were invited to participate, but were not specifically funded to do so.

WRPA was modestly ambitious but obsolete. Federally-led water planning of the '30's, '40's, and '50's had historically focused on decisions about federal projects. But by the late '60's many of the best sites had already been developed. The high point of federal project development had passed. However, the project focus of WRPA continued. In the meantime, new grant programs channeled federal dollars directly to states for clean water, protection of fisheries and wildlife, riparian and wetland values, and outdoor recreation opportunity. These initiatives responded to emerging public concerns; WRPA did not.

Among lessons from the WRPA experience was that the machinery (the Water Resources Council and river basin commissions) was more complex and costly than it needed to be given their limited authority to affect outcomes. Rules for planning were embedded in elaborate procedures which took over a decade to complete in final form. In the meantime, both the

Council and commissions were constrained from coordinating ongoing programs -- the focus was on a safely distant planning horizon. Adaptive planning and action on the model embraced by watershed advocates was frowned upon.

Periodic efforts have been made to revive the Council and provide a formal way for state perspectives to be brought to bear in federal agency deliberations. That temptation is to be avoided. Each Administration will evolve its own way of interacting with states on issues such as natural resources in which responsibility is shared. These are intensely political matters. The important issues will be dealt with at political, not senior civil service, levels. Governors are the key to interactions at the level of Administration policy. Future efforts to systematize federal roles and federal/state interactions in natural resources should move toward developing systems of accountability for federal (and state/private) programs based on the condition of specific natural systems. No doubt measures of impute and outputs of specific programs of agencies will continue to be gathered. But the baseline for measurement of cumulative action is the condition of the system. There is little prospect of designing laws and administrative structures in Washington which will automatically produce harmony in the field.

Over the last 10 years, several examples of common sense, flexible coordination have been tried. During the Bush Administration, a number of negotiations were undertaken to resolve Indian water rights disputes, with states, federal agencies, and other interests involved as well as tribes. They encountered two problems that were particularly relevant to this paper. One, no guidelines were provided to federal negotiators in the field on what would be acceptable and what wouldn't. Negotiators had to take their best shot and hope someone higher up in the Department of the Interior would approve the agreement. Second, even if Interior signed off, almost predictably the Office of Management and Budget, and often the Department of Justice, would not. That meant the settlement would either be bounced back to the local negotiators to try again in another round of "Twenty Questions" or the settlement would be sent to Congress only to have OMB and DOJ testify against the settlement.

Interior responded in two ways. The Department worked with both OMB and DOJ to develop guidelines and created an informal, high level, problem solving team. The guidelines were quickly criticized by those involved in negotiating as too prescriptive, and eventually the high level team exercised its judgment in using the guidelines flexibly, allowing exemptions as dictated by local circumstances. In addition the high level team took the lead in working out differences with OMB and DOJ to assure that ultimately a single federal position was agreed to.

A second current example of improving federal coordination while encouraging local initiative through flexibility involves Interior's response to complaints about the Endangered Species Act. In response to criticism that the Act's implementation was onerous and unfair, Secretary Babbitt adopted a new implementation policy which exempts small landowners from the Act, encourages development of voluntary habitat conservation plans, and promises "A deal is a deal" -- landowners protecting habitat for one threatened or endangered species would be guaranteed no further restrictions if a second listed species should be discovered.

The new public land grazing regulations proposed by the Clinton Administration includes many

elements of watershed partnerships, and has stimulated some ranchers and other interest groups to informal efforts to work out patterns for resolving grazing-related issues amicably. These examples demonstrate that to some extent improvements in coordination and implementation can be made administratively without creating rigid, cumbersome structures or regulations.

### ***The Intergovernmental Bargain***

In the aggregate these principles provide the basis for a historic bargain in which:

- State governments make authentic commitments in law and action to the full range of interests and values in water resources, including values such as environmental protection and enhancement, effective recognition of Native American resource use goals which have been pressed primarily at the federal level. The states also lead in development of forums for integrating state, substate, and federal actions in arenas ranging from small watersheds to interstate commons, and for joint consideration of changes in federal and state program policy.
- The federal government recognizes the pivotal role of the states as actors and as intergovernmental integrators. The government continues to establish standards to protect public health, protect ecosystem sustainability, fulfill trust responsibilities, and forestall pursuit of economic advantage within states or regions by lowering environmental standards. Federal agencies cooperate in watershed level decision processes, invite participation in federal program policy issues, and delegate exercise of appropriate federal authorities to states on the water quality enforcement model -- with authority for federal backup in the form of an environmental safety net..
- Clienteles which occupy favored positions in current state water and related resource programs accept the extension of authentic state commitment to new players, values and actions in return for a diminished direct federal role and better access to federal (and state) decision processes at decentralized levels.
- Interests now oriented toward federal protection/action accept a continuing shift toward federal deference to state administration, including delegations conditioned by federal standards and policy sideboards, in return for authentic state commitments to values and goals now sought through federal laws and direct actions.
- Parties at interest seek their ends at the level at which the problem is posed (as distinct from confrontational volleying at the level of maximum media exposure). Opportunities for progress are further enhanced by such evolving tools as water markets with third party protection, water and wetland banks, conservation as a source of “new” water, and more flexibility in federal water project allocations and operations.

Finally, in the interviews, one person captured the essence of what both workshop and focus group participants were getting at. He quoted Luna Leopold as observing that, “The way we treat rivers reflects the way we treat ourselves, or each other.” He continued:

“The history of rivers is that we give them hardened parameters wherein they cannot get out. We eliminate their redundancy, their curvatures. We eliminate their complexity and turn them into a linear relationship. The same mindset is how a lot of folks want to do watershed planning. We have to celebrate redundancy, ambiguity, diversity because that’s where creativity and the

ability to adapt comes from. The human tendency is to keep moving towards more order, but if you look at the development of organisms, you go too far towards order and you're dead -- you can't adapt any more. Watersheds are the same way. The mentality to control needs to go."

## **A BETTER WAY**

The nature of natural systems and the institutions through which society acts to use, develop, manage, and protect them require a new basic frame of reference -- a new paradigm. Steps include:

### **1. Embrace a new paradigm.**

The paradigms which have directed government natural resource programs in the past are getting shopworn. Scientific management decisions on the allocation of values by professional cadres rather than elected officials or their appointees, drawing upon enhanced knowledge, research capability, and professional practice, has proved to be largely unworkable. A telling example of the inertia of old paradigms is reached in analysis by the Western Water Policy Review Advisory Commission of the findings of the 1973 National Water Commission. That work had been regarded the best study of its kind in the water field. But analysis showed that in 1973, in the midst of the great era of environmental concern and related innovation, the National Water Commission continued to primarily focus on an out-moded emphasis on project development.

A new vision is needed. Although water management may be conducted by a complex interactive network of rules, activities, and players -- the Rubic's cube -- most levels of jurisdiction and interests are keenly sensitive to cues from the federal government. Through widely enunciated goals from the pulpits of authority, legislation, agency administrative styles, and specific program guidance, the federal influence sets directions and others react.

The new paradigm should ask stakeholders, including federal agency staffs, to:

- Commit to sustainability of the resource base and to sustainable levels of resource use as an overriding goal for watershed and basin management.

Unreasonable exploitation of watersheds, and river basins and other natural systems is short-sighted at best and calamitous at worst. Considerable work is still required before sustainability becomes a fully operable goal, but common sense can go a long way towards achieving it in the interim. A legislative commitment is tempting. More telling would be broad Administration support of specific actions leading toward effective vehicles for achieving sustainability through partnership approaches. The existing body of federal law may approach adequacy for this purpose.

- Work in partnerships to establish ecological goals and constraints for basins and watersheds.

Major disruptions in which resource system use has exceeded ecological limits or thresholds have occurred in virtually all river basins, leading to loss of highly valued renewable resources, costly after-the-fact mitigation and penalties, and local economic disruption. These limits become apparent as species are listed, Clean Water Act sanctions are imposed, resource-dependent industries collapse, treaty rights are upheld, floods or other no-longer natural disasters occur, or law suits create significant change. In most basins, crises may revolve around the triggering event, but the event in fact is just the first alarm. Uncorrected, the ecology and economy of the entire basin could easily collapse as crisis follows crisis.

Preventive action costs less and works better than remediation. As monitoring is improved, better data is available, research advances, and coordinated adaptive management becomes more widely used, the possibility of establishing a jointly agreed-ecological framework or model for the basin which signals where and when limits have to be set and/or imposed becomes feasible.

- Align federal natural resource activities with watersheds and river basins (and seek linkages with other natural resource system-based activities, including ecosystem and species protection).

As the utility of partnerships for management of natural systems becomes more effectively and more deeply embedded in intergovernmental and public/private interactions, the government should try again to delineate federal regional boundaries for natural resource agencies which correspond to natural watershed and river basin boundaries and cut across departmental and independent agency boundaries.

Such a focus will enhance the capacity for cross-agency coordination, for having direct ties with local stakeholders, and most importantly for giving geographic focus to agency programs, where specific areas are treated as a unit.

- Accept the legitimacy of partnerships at the level of the natural region in which common problems demand cooperation.

Partnerships should be embraced where they make sense. Similarly, the geographic focus for the partnership should be the “problemshed;” in most cases, especially in water management, the watershed or linked watersheds will be the appropriate focus. With other issues, the definition may be based on airsheds, ecosystems, political boundaries, or simply an arbitrarily defined area based on the problems.

- Experiment with ways to link individual partnerships into larger networks.

One of the questions often raised by skeptics of voluntary partnerships is whether a series of separate watershed partnerships can equate to integrated basin management. The goal would not be to cover the basin with uniform partnerships nor to direct them from the basin level. Rather, the goal is to figure out ways that work to ensure that the sum is



greater than the parts and that basin stewardship is accomplished. Without such linkages, it is possible for partnerships to conflict, get in each other's way, duplicate efforts, or overload agencies and others with requests for participation. The goal should also include efforts to bring partnerships representing relatively narrow ranges of interest within the ambit of partnerships addressing multiple issues. For instance, it is important that water quantity and water quality concerns are addressed jointly as would be true for riparian and upland issues together with aquatic ones. Again, flexibility in forms, methods and scope of action is a key; let the form arise from the situation.

This model is strongly preferred over any effort to create or operate watershed level partnerships as formal components or wards of large basin institutions, as was recommended by the Western Water Policy Review Advisory Commission.

## **2. Enhance federal coordination.**

The arguments for federal coordination are overwhelming. The task involves intra- as well as interdepartmental coordination. Most major agencies have a number of separately administered programs operating in a state or watershed. For example, EPA may delegate some responsibilities to a state under the Clean Water Act and others under the Safe Drinking Water Act. In addition, a host of other EPA programs, such as air quality, mine runoff, pesticides, and disposal sites, are administered under different laws, which often affect water resources in a given watershed or basin. EPA may also operate programs directly with municipalities or tribes located in the same area. Differing Interior, Agriculture, Energy, FERC and Defense programs also have internal coordination problems at the watershed level. State agencies exercising delegated federal authority or receiving federal support often echo federal programs.

The resulting thicket of requirements, processes, and funding may force Rube Goldberg-like solutions, ones which are far from optimal but do skirt the roadblocks to progress. Sometimes not even inspired tinkering works, and the result can be anger, frustration, and eventually loss of confidence in government. That's a high cost. It can be reduced through better coordination.

Government can pull together overlapping regional agency offices with divided responsibilities in a basin or watershed. In other words, if there are two or more U.S. Forest Service, Bureau of Reclamation, BLM, state NRCS offices, or EPA regional offices involved, the federal government should have them coordinate internally rather than having multiple voices from the same agency. This principle applies with equal force to state and other complex units of government or other large organizations.

It is important, however, that improved federal coordination not be at the expense of collaboration with local stakeholders and other agencies of jurisdiction. It is easy for "federal family" efforts to be seen with suspicion by those who are excluded. That is not to say that partnerships are always the right approach. Sometimes tough enforcement or single agency action is most appropriate. In deciding which way to go with watershed or basin initiatives, however, the burden of proof should rest on those who do not want to open their decision processes to involvement from others.

- Provide incentives to agencies for coordination at basin and basin/watershed levels.

Federal coordination, while important at congressional, headquarters and regional levels, is critical at the basin level wherever large-scale water development projects, diversions, major pollution problems, or systemic species threats occur. In the West, that means almost everywhere. In addition to providing a geologic and hydrologic focus, the basin may be the intermediate level between individual watershed partnerships and distant headquarters staffs. The relative power of agencies and constituencies in the West reflects the early regional focus on maximum physical development of river systems, and the historic emphasis on diversion for out-of-stream use as a condition of a right to the use of water.

Some basins already have mechanisms for basin coordination, usually through compact commissions. The commissions may not include federal agencies as members, they may have a limited focus, and they may address policy, not interagency coordination. Many basin organizations are constrained by compact language or details of congressionally-approved basin and project acts which limit flexibility. In most cases, even compact commissions don't exist.

The establishment of broadly representative basin councils may be needed. It is critical these not be imposed top down, based on some rational planning model. A council having representation from smaller watershed partnerships is likely to be perceived as more knowledgeable and legitimate than one which does not. The effectiveness of basin councils, like watershed partnerships, depends on genuine recognition and understanding of the range of issues and stakes, willing participation, commitment, and trust. In the West, with its history of large-scale project development and long-term commitments of project purposes to specific sets of interests (at the expense of "newer" values), special efforts will be needed to incorporate Native American and environmental concerns.

The Columbia is an example in which a long-established way of doing business at the basin level was strengthened in recognition of changing conditions in the region's energy situation and severe threats to valued fisheries. It seems likely that the short-range future will bring changes in the patterns of basinwide organizations, in statutes and compacts which empower them, and in capacity for responsiveness to changing values.

- Improve the information base for watershed and basin activities by coordinating data collection and management, focused on problem priorities.

In the name of budget-cutting, the federal government in general appears to be significantly reducing its data gathering and analyses. The problem here may be lack of confidence in the world of information technologies, in which "techies" in product innovation and use tend to put more emphasis on novelty than in practical protocols governing what is really needed for what purposes at what detail and cost over what time periods. The federal role is critical. Federal agencies have, in many cases, had the expertise, the equipment and the capacity to gather and analyze critical data. Much of

that investment has produced minor returns, in part out of agency preferences for their own systems and lack of incentive for rigor in system design and authorization. Through partnerships, many of the obstacles federal agencies have encountered on gathering data on private lands can be avoided.

A particularly important data need is that acquired from monitoring targeted to key parameters pertinent to management actions. Monitoring can document change over time. The effects of cumulative actions can be assessed, both to learn how to adapt to reach goals and to know when goals are reached. Monitoring is also an important tool for building trust and institutional capacity. One interviewee from the Northwest stated:

“We need money for 5-10 years of monitoring. In the department, nothing is available for monitoring. We need to answer, ‘Did we do what we intended, and if we didn’t, what did we do?’ It is difficult to admit a failure, but we must if we’re going to learn.”

### **3. Provide support to and be a part of watershed partnerships.**

Partnerships of various kinds have emerged throughout the West. Driven sometimes by federal or state agencies and sometimes by locals who are fed up with government inaction, some have become models of democracy and of the ability to overcome large obstacles. Federal agencies can be key to their success, but it is imperative that agencies accommodate themselves to the partnership. Partnerships can be fragile, built on shared knowledge and experience and the trust which results. They can also be exceedingly tough when bonded around common purpose and common sense solutions.

- Learn to respect the partnership idea.

Watershed partnerships work when the players feel ownership and acknowledge mutual responsibilities and interests. Agencies have financial and technical resources and authority to implement laws, but in the watershed setting they are participants, not directors.

Agencies in watershed partnerships need to take the risk of being forthcoming about what they can do as well as what they find difficult or impossible. Emphasis on finding ways to cooperate rather than citing restraints will be taken as evidence that the "partner" is there in good faith.

Local resource-using interests often characterize such federally-endorsed concepts as ecosystem management and biological diversity as new rationalizations for sustaining power in government agencies and professional cadres. That prospect becomes less likely as the promise of partnerships emerges.

An experienced federal land manager in Salem, Oregon asked if he felt "diminished" by opening his land planning and management decision processes to alteration through

interactions at the watershed level responded: “We’re in the same boat, looking at the system as a whole. They value what we can do, and they value what we can contribute as professionals because they trust the process. That’s a switch.”

Another person with long experience working with watershed partnerships put a reverse twist on the value of partnerships:

“It sounds kind of fluffy, but really it’s true, you’re not going to force something down people’s throats. They have to understand and accept the need for it. They have to understand that it affects them personally. They need to buy in. They need to buy in or it will not be successful. Period and flat out. Not if or maybe. It will not be successful.”

- Reward partnership efforts in agency personnel evaluations and budget allocations, and in assessments of the utility of policies and effectiveness of implementation.

Government at all levels can increase the utility of watershed partnerships by:

- encouraging employees to participate in collaborative processes with the intent of finding ways of enhancing management, protection and appropriate use of the resource system;
- giving field staffs authority to speak for the agency within broad policy constraints and funding limitations;
- offering financial support and other incentives to help accomplish shared goals;
- providing flexibility in program requirements, regulations, employee assignments and other rules that can get in the way of partnership problem solving;
- giving priority, within their mandates, to implementing the results.

Government can also provide:

- technical assistance, including data, information and expertise;
- process assistance, including funding for facilitation, teambuilding, and conflict negotiations;
- authority to solve problems, as allowable under law;
- legal sidebars to assure local solutions fall within national goals and standards.

One person captured the essence: “Perhaps the most important thing government can do is to make the suite of government agencies (and their laws, regulations, offices, levels, and programs) easily, or at least coherently, accessible to those on the ground.”

- Make decisions in the partnership context.

How much power and how much funding does a watershed partnership need to control directly in order to be effective? Not much, according to the general tenor of interview comments, workshops, and other partnership forums. Most agreed that substantive

authority for management actions should not be conferred directly on watershed councils. Doing so is seen as eroding incentives for collaboration, and the partnership becomes one more body contesting for power. From the interviews, “The prospect of influencing others is a powerful incentive for people to work cooperatively.”

The partnership's basic need for money is to help in initial organization, establishing and maintaining communication, involving the community in defining missions, methods and goals, and in evaluating results of and revising strategies for coordinated actions. Monitoring and on-the-ground projects generally will necessarily be borne in large part by participating agencies and private interests, in programs coordinated through the partnership. An experienced watershed participant said:

“The money the partnerships can expect to control directly is very small compared to the resources of existing agencies and interest. The partnership can fill in the gaps, link up actions of others, start new strategies -- use their funds for synergistic purposes.”

Experience in Oregon has also shown that relatively small amounts of project money controlled by the partnership may produce extraordinary returns by timely filling of gaps that are beyond the immediate capability of the partners. A veteran from Oregon observed:

“We’re talking about a watershed program that would meld partnerships and come to agreement on a common set of goals and objectives. What we want is to see people working together, each carrying out their own powers and responsibilities, not necessarily under new or different authority, but in concert with each other. This makes the watershed council concept more of a continuous process of tailoring and knitting and mending and altering, rather than a grand plan or scheme.” She added, “To take a lot of programs that would traditionally be working in isolation and weave them into something greater means the tools we need the most are the tools to do the weaving.”

The use of these tools may require change in attitudes: respect for each other’s interests and expertise, patience, flexibility to adapt, understanding of the role institutional culture plays, being collectively proactive rather than reactive, and perhaps most difficult, acceptance that milling around and false starts until a common vision develops are the norm. None of these things lend themselves to being legislated, regulated, fit into organizational boxes, or scored on a balance sheet.

- Participate in state watershed and natural resource coordinating councils.

There is potential for increasing effectiveness of federal participation in local watershed initiatives through lively involvement in state level natural resources coordinating councils. The state of California has a joint federal-state-local-private biodiversity council (which was in fact generated by federal initiatives according to a senior state

official), and welcomed by state and private sectors. The council has subdivided the state into large ecoregions and has councils for each. The ecosystem council is working toward stronger linkages with watershed organizations around the state, an evolution likely to continue to occur.

Oregon and Washington both have state wide state-federal coordinating councils with statutory recognition. Federal agencies participate as advisors. Montana (and other western states) has a state wide federal-state council organized around the notion of Coordinated Resource Management (CRM). While originally evolved to bring federal, state, and private interests together in addressing grazing management issues in the West, the concept is also being used in a number of places for watershed based coordination efforts. Portions of the Upper Feather River watershed, for instance, are operating under a CRM-chartered agreement.

A recent symposium on nonpoint pollution control held by the Western States Water Council in Salt Lake City produced a steady flow of reports on constructive collaboration between the EPA, state water resource agencies, and local cooperators in watershed approaches to nonpoint pollution control and related instream and riparian issues.

Given the general pattern of strained federal-state relationships in water of recent years, the appreciation of the partnership approach in the nonpoint arena is particularly striking. This experience suggests that the most productive initiative from the top levels of an agency may be unqualified support of the general notion of cooperation at the natural resource region level, with recognition of the impossibility of sensitive management if the actions of the various levels of government and the public private sector are not meaningfully coordinated.

- Measure success of federal efforts against the health of natural systems.

Traditionally the success of agency efforts is measured by specific inputs compared to specific outputs -- how much money and personnel does a program require and what are the units of clients served, board feet cut, tons mined, etc. When efforts are made to improve natural systems, the measurements still are often how many citizens were given an opportunity to comment, what kind of partnerships are formed, how have flows been modified, how have grazing regimes been altered. The need is to establish indicators for desired future condition and then monitor whether actions taken are enhancing, reducing, or staying neutral to achieving that condition and over what time. When conditions don't improve, results should be taken as indications of the need to change the intervention, not as indications of failure of the program.

## CONCLUSION

Doug Kenney of the Natural Resources Law Center at the University of Colorado School of Law prepared a paper for the Western Water Policy Review Advisory Commission entitled, “The Federal Role in Improving the Mechanisms of Governance: Some Normative Considerations.” It contains a memorable quote:

“We have entered an era in which the public places unprecedented demands on water managers, and consequently, on the mechanisms of governance that structure decision-making efforts. Modern normative requirements call for decision-making processes that are widely accessible and pragmatic, encouraging the consensual interaction of an ever-broadening diversity of parties and perspectives in problem-solving exercises that are to be creative, adaptable, scientifically credible, regional, and increasingly proactive. This is to occur in an environment fostering broadly-focused and integrated resource management, promoting economic, environmental, and cultural sustainability, and balancing objectives of economic and administrative efficiency and distributional equity. Compounding this formidable list of normative objectives is the difficulty in reconciling the potentially paradoxical demands for regulated markets and coordinated decentralization, the expansion of positive incentives and elimination of subsidies, the promotion of flexible management programs that retain certainty, and a mandated preference for voluntary processes.”

This ideal is not likely to be reached in any process. But given what we know isn't working, watersheds nested into basins nested into the nation offer new possibilities for civic competence in natural resources management. It is worth the effort to fully explore these possibilities.