The Colorado River Workshop

Issues, Ideas, and Directions

REPORT ON EMERGING TRENDS AND MANAGEMENT ISSUES OF THE COLORADO RIVER BASIN

(DRAFT)

February 2, 1996

Materials prepared for the
Colorado River Workshop
February, 26-28, 1996
Phoenix, Arizona

This report will be included as part of
the Colorado River Workshop proceedings.
A separate concluding report will be prepared at
the completion of this two year study

Prepared for the Bureau of Reclamation
by the Grand Canyon Trust under a cooperative agreement.

INTRODUCTION:

In October 1994, Grand Canyon Trust entered into a two-year Cooperative Agreement with the Bureau of Reclamation to conduct a study to gather information from stakeholders that identifies basin management issues and describes balanced, diverse perspectives and thinking about current and future management of water and related resources in the Colorado River basin. The results will be used to help Reclamation in meeting its responsibilities in management of the Colorado River basin resources. The study is based on facilitated discussions with a wide range of water users, managers and other stakeholders throughout the basin. The three explicit goals are to develop a comprehensive summary of the emerging trends and management issues facing Colorado River basin resource managers, solicit and compile the concerns and recommendations of stakeholders and members of the public interested in basin issues, and identify key components to create a workable dialogue among these various parties. The study workplan has been flexible, responding to input from stakeholders and evolving to produce the most useful product possible.

The effort is designed to be inclusive rather than exclusive. For the purpose of the study the Colorado River basin is defined as the watershed of the Colorado River and its service areas, an area sometimes referred to as the hydrocommons. Therefore southern California, the Wasatch Front of Utah, the Front Range of Colorado, parts of New Mexico's Rio Grande valley, and the Colorado River delta area are included. A stakeholder is defined as anyone with an active interest in the management of the Colorado River. In theory that could include private citizens on the far side of the continent or around the world. However in practice, we found those actively involved in basin issues to be located in or near the basin .

Products of the study include this draft report, a compilation of emerging trends and management issues within the basin; the proceedings of a stakeholder workshop on future management within the basin; and a final report discussing various management approaches based on information collected from stakeholders in the study and the results of the workshop. The final report will incorporate a set of balanced, diverse viewpoints representative of the study's participants.

During the facilitated discussions portion of the study, over 650 water users, managers and other stakeholders of the Colorado River were contacted and asked to characterize the most critical issues that face, or will face, the managers and users of the Colorado River over the next few decades. The study is not designed to statistically measure the level of concern or to rank the issues identified. The objective is to successfully characterize the issues of the Colorado River in a basin-wide context. Special attention was given to attaining broad diversity in geography and interest group representation. Input was gathered in individual phone conversations followed by mailed response forms. In addition, thirteen regional meetings were held to answer questions and receive input from stakeholders. These were held in Phoenix, AZ; Yuma, AZ; Las Vegas, NV; Ontario, CA; Salt Lake City, UT; Rock Springs, WY; Denver, CO; Farmington, NM; and St. George, UT. Meetings were also held with Bureau of Reclamation personnel in Phoenix, Salt Lake, Boulder City, and Denver. Over 240 stakeholders and managers attended these regional meetings. These meetings, not part of the original workplan, provided invaluable dialogue and insight into the issues of the basin.

Study participants by interest group and geography.

Interest groups:	
• Federal agencies	19%
• Tribal	16%
• Agriculture/rural	14%
• Municipal/industry	13%
• State agencies	12%
• Individual	11%
• Environmental	7%
• Power	4%
• Academic	4%
Geographies:	
• Arizona	26%
• Colorado	16%
• Utah	15%
• Nevada	12%
• New Mexico	10%
• California	13%
• Wyoming	6%
• Other	2%

Total # of Participants: 669

COMPILATION OF STAKEHOLDER ISSUES

Over 700 comments were received from stakeholders. These comments were entered in a data base and cataloged. A short summary of the point (or points) made in each comment was constructed and these were grouped within the ten issue categories originally suggested to stakeholders.

Revised issue categories:
# of comments by category

ISSUES INVOLVING HYDROPOWER PRICES/ MARKETING/REVENUES (75)

ISSUES OF ALLOCATIONS: RECONCILING SUPPLY AND DEMAND (189)
- Agricultural issues (46)
- Population growth/development issues (43)
- Native American issues (10)
- Water efficiencies/marketing issues (90)

ISSUES THAT INVOLVE THE INSTITUTIONAL FRAMEWORK OF BASIN MANAGEMENT (184)
- Institutional issues (139)
- Public participation issues(22)
- Native American issues (3)
- Issues with Mexico (10)
- Coordination between managers and users (10)

ISSUES INVOLVING PROTECTION OF ENVIRONMENTAL, RECREATION AND CULTURAL RESOURCES (179)
- Institutional issues (3)
- Native American issues (3)
- Issues involving Mexico (15)
- Environmental protection issues (157)
- Coordination between managers and users (1)

ISSUES INVOLVING ROLES OF FEDERAL, STATE, TRIBAL, AND LOCAL GOVERNMENTS. (111)
- Agricultural issues (4)
- Institutional issues (54)
- Population growth/development (1)
- Public participation issues(10)
- Native American issues (16)
- Issues with Mexico (6)
- Environmental protection issues (5)
- Water efficiencies/marketing issues (1)
- Coordination between managers and users (14)

TOTAL COMMENTS: 740

As expected, analysis of the results of the study revealed that the original categories did not capture the full range of possible comments. As a result, original categories were revised to reflect stakeholder comments. One category remained, the remaining 9 categories were combined into 3 new groupings, and one new category created. All comments were redistributed into these revised categories.

It is quite common for comments to directly relate to more than one area of concern. Often they can simply be expressed in two ways depending on which resource or user is impacting the other. The connection between the hydropower resource and environmental protection is one example. Many programs to protect natural and cultural resources increase project operational costs and therefore the cost of the power resource. On the other hand, operating dams to maximize power generation may cause damage to natural and cultural resources. With this relationship, changes in operations to protect natural and cultural resources have tended to decrease the quantity and quality of the hydropower resource. These linkages occur between many if not all critical issues.

A complete listing of the summarized comments appears in Appendix 1. Each individual comment was characterized to maintain the original sentiment. These comments and the discussion papers described below will form the basis for the Colorado River Workshop in Phoenix, Arizona on February 26 - 28, 1996. Copies of the verbatim comments with attributions are available on request from Grand Canyon Trust.

Seven discussion papers were commissioned in order to provide background information on issue areas that were repeatedly identified throughout the study. These issue areas were not site specific, but were intended to present an overview of the issue as it relates across the basin. Each paper presents a summary of the issue, description of the issue, options under consideration, and conclusion. Each paper has been reviewed by other experts with varying perspectives on the issue. The papers will provide background for management issue discussions at the Colorado River Workshop.

This report is presented as a draft, and suggestions to improve these characterizations are invited. It will be published in final form as part of the proceedings of the Colorado River Workshop.

PRELIMINARY OBSERVATIONS

The collecting and analyzing the hundreds of stakeholders comments has been a daunting but fascinating task. The summarized comments not only capture the thoughts of many people across the basin, but make for interesting reading. Despite the overwhelming number and diversity of responses, general trends emerged. These general trends fall into three areas.

The first addressed the competition for resources imposed on the system by the rise in importance of non-consumptive resources. These are reflected in the environmental, recreation, cultural, and other aesthetic values of the river system. However, these demands differ significantly from the consumptive demands placed on the system by traditional water uses and by population growth and development. Non-consumptive uses are forcing new thinking of basin management.

The second trend represents our response to these demands. Approaches are both traditional and non-traditional, focusing on local and regional conservation strategies along with allowing greater flexibility in shifting allocations through various marketing proposals. Generally these market approaches propose only temporary transfers of water resources.

Finally, stakeholder attention is focused on mechanisms to address these trends within the institutional framework of basin management. While there was a recognition that many parts of the system have been very successful in allocating resources vital to us all, a panoply of suggestions for new directions to explore were suggested.

No single solution stands out, nor would one be expected to. Our objective in this report is to define the issues, not suggest solutions. Along with bold suggestions for change come voices counseling caution in these explorations. The issues are complex and human. People have decided and will decide how to manage the resources of the Colorado River, and information is needed to do that. This study provides a start in that direction: a broad, balanced set of perspectives from across the political and jurisdictional lines created through the basin. The issues of the Colorado River basin will not be resolved through surveys; they will be decided by people engaged in meaningful dialogue.

The information provided here will form the basis for this sort of dialogue. Continuing with the Colorado River Workshop in Phoenix and concluding with the management report at the end of the two-year study, it is our hope that this process will provide a piece of the understanding needed to address the issues of the Colorado River basin.

DISCUSSION PAPERS PREPARED FOR WORKSHOP SESSIONS

- Integrating Native American Economic and Cultural Interests into the Colorado River Basin
  Kurt Dongoske, consultant
- Toward Range-wide Integration of Recovery Programs for the Big, Native Fishes of the Colorado River
  Robert Wigington and Dale Pontius, The Nature Conservancy
- Efficient Water Use in the Colorado River Basin: Opportunities and Implications
  Jim Dyer, consultant
- Hydropower Generation, Transmission and Marketing in the Colorado River
  Ken Maxey, Western Area Power Administration
- The Role of Science in River Management
  Steven W. Carothers and Dorothy A. House, SWCA Environmental Consultants
- Emerging Markets in Colorado River Water
  Rodney T. Smith, Stratecon
- Modernizing the Law of the River and Other Basin Institutions
  Larry MacDonnell and Bruce Driver, Sustainability Initiatives

ISSUES INVOLVING HYDROPOWER PRICES/MARKETING/REVENUES

Although not generally identified as the principal justification for reclamation projects on the Colorado River, the generation of hydroelectric power has played a critical role by providing funding for construction and operation of these projects. Seventy four comments reflected the importance of issues involving hydropower pricing, marketing, and revenues. These concerns reflect both hydropower's historic role as the funding source for water delivery projects and as a provider of relatively inexpensive, clean energy. Recently it has also provided funds for natural and cultural resource protection. The overriding issue appears to be the future quality and cost of the hydropower resource and the varying impacts any changes may have throughout the basin.

Impacts to hydropower could come from within or outside the basin. Such influences as increased efficiencies, new technologies, and deregulation within the power industry originate beyond the basin. The issue with the greatest number of comments (16) had to do with the proposed sale of federal generation facilities and/or marketing entities. The question of what evaluation criteria would be used if the transfers take place had both economic and environmental components. The second highest number of comments (14) mentioned influences within the basin, especially the costs and decrease in quality of the hydropower resource from increased protection for natural and cultural resources. There was concern over rising prices as well as a replacement source for lost capacity. Countering comments urged that environmental impacts be accurately reflected in power prices.

The importance of inexpensive power to irrigated agriculture was mentioned. On the other hand, the impact of relatively low power prices on region growth and related environmental impacts was identified. The direct impacts to recreation, natural and cultural resources as a result of operations to produce hydropower were identified as were potential conflicts between power demands and water demands. The conflict between high reservoir levels that benefit hydropower and decrease important flood control capacity, especially in the lower Colorado River, was identified.

SPECIFIC HYDROPOWER ISSUES IDENTIFIED IN COMMENTS

HYDROPOWER ISSUES: (75)

- Economic/environmental impacts of market-based pricing of hydropower resources.
- Expansion, reconstruction and/or construction of new hydropower facilities.
- Hydropower's role in funding project repayment and resource protection programs.
- Economic/environmental impacts of sale of federal generation and market entities.
- Impacts to hydropower resource due to industry deregulation and changing efficiencies.
- Impacts to hydropower resource due to cultural and natural resource protection.
- Hydropower's effect on growth and environmental issues
- Long-term power contracts remove flexibility from the system.
- Impacts of hydropower on recreation, cultural, natural, and other resources.
- Identification of hydropower as a critical issue.
- Impact on flood control from maximizing power resource

Total comments: 75

ISSUES OF ALLOCATIONS: RECONCILING SUPPLY AND DEMAND

The issues that involve finding solutions to supply and demand are predictably numerous (189 comments). A great many of these comments reflected on the relative values of water uses. Issues involving irrigated agriculture were mentioned in 46 comments. The traditional basin water user, agriculture, still consumes the majority of Colorado River water. Its economic importance to the rural areas of the basin and to the nation as a whole was an issue. The aesthetic and lifestyle connected with loss of farmlands is a concern. The pricing of water was mentioned often. Several participants commented on the impact of rising water prices on different crops, others made the comment that cost based vs. market based water pricing represents a subsidy to a specific sector. The impacts of environmental protection and competing demands by recreation and environmental tourism were identified. The consequences, both economic and environmental, of the potential sale of Federal water delivery facilities were an issue.

The primary reason given for increased demands on the river's water resource is the rapid population growth and development throughout the region (43 comments). Issues surrounding this growth included not only competing demands in consumptive uses but also an increase in non-consumptive value such as aesthetics, recreation, and natural resource protection. Increasing numbers of people and attendant development impacts rural communities and surrounding natural resources. The pressures of population growth necessitate better integration of land and water management especially in flood plain management. Increases in recreation sometimes conflict with efforts to achieve environmental resource protection. The use of water as a tool for managing growth was a suggested issue.

A key issue is the resolution of Native American water rights claims (10 comments). Several suggested that the uncertainty of these claims, and the potential for off-reservation water marketing, was creating tension within the basin.

The issues related to meeting increasing demands (90 comments) focused on stretching supplies (often expressed as conservation) and the ability to reallocate water resources (generally described as marketing). Agriculture seemed to hold the greatest potential for conservation; however, greater economic incentives for conservation were generally suggested. More efficient water use in agriculture can also include opportunities for inventive solutions to river salinity and other water quality issues but there can be negative effects on environmental resources such as artificial wetlands at the same time. Opportunities for integrated ground water management, for ground water and on-stream storage, and for water reuse were mentioned.

The pros and cons of interstate and intrastate marketing of water were the subject of several comments. Several comments supported the idea, while others argued that economics should not completely drive the system. Some mentioned the value in identifying flexibility within existing project authorizations to more equitably serve an expanded range of functions. The need for flexibility in the system was repeatedly expressed especially in regard to redefining water rights as land use changes. The issue of underpriced water and "use it or lose it" mentality (which, as several comments pointed our, is based on existing legal mandates) as fueling development and population growth and encouraging immediate use of water was identified. The definition of surplus and shortage conditions was mentioned as an issue of efficient water use.
Stronger enforcement of existing water laws was suggested along with drought planning and increasing supplies by enhancing precipitation. Finally it was pointed out that conservation is not always possible. The present per capita consumption of only 10 gal./day on the Navajo reservation (a fraction of the average non-reservation use) is more likely to increase than decrease.

SPECIFIC ALLOCATION ISSUES IDENTIFIED IN COMMENTS

Agriculture issues: (46)
- Impacts to irrigated agriculture from market-based pricing of water and power resources.
- Economic/social impacts to communities from declining agricultural base.
- Economic/social impacts agriculture from environmental protection measures.
- National economic impacts from rising costs for irrigation water.
- Consequences of privatization of federal water facilities
- The social and economic implications of agriculture's changing role in the basin

Population growth/development issues: (43)
- Competing demands for water from regional population growth.
- Implications of water delivery contracts negotiated on cost basis rather than market basis.
- Water as a tool in urban planning.
- Need to coordinate water management with land management
- Increasing aesthetic, "non-use", cultural, and recreation values
- Population growth/development impacts on rural areas and natural resources.
- Conflicts between recreation and environmental protection.

Issues involving Native Americans: (10)
- Uncertainties regarding Native American water rights claims.
- Implications of potential tribal water marketing.
- Resolution of Native American water rights claims

Conservation/water efficiencies: (90)
- Opportunities for conservation in agriculture and urban water use
- Difficulties in shifting water rights to meet changing landuses.
- Implications of potential interstate and intrastate water marketing.
- Impacts to water supplies from environmental protection.
- Conflicts between water conservation and environmental protection.
- Problems and opportunities for water reuse
- Opportunities for economic incentives from Federal, state, and local governments for conservation
- Identifying existing flexibility to more equitably serve an expanded range of functions.
- Opportunities to enhance precipitation
- Definition of surplus and shortage in water supplies.
- Integrate ground water management with surface water management.
- Opportunities for ground water and on-stream storage
- "Use it or lose it" mentality as disincentive for efficient water development
- Uncertainties involving Federal water rights.
- Opportunities for inventive solutions to river salinity and other water quality issues

Total comments: 189

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ISSUES THAT INVOLVE THE INSTITUTIONAL FRAMEWORK OF BASIN MANAGEMENT

Issues that involve the institutional framework of basin management drew the greatest number of comments (186). While many comments urged varying degrees of change to the management framework, several commented on the need to recognize where the present structure has served well. Of the 139 comments directed to the management framework, many urged greater flexibility (17), coordination (4), long-term planning (6) and regional or basin-wide emphasis(15). Basin-wide, regional, and watershed planning were all identified as attractive options. Many comments targeted the need for a common vision, a broad perspective and long-range planning. Others suggested benefits of a broader management perspective are to minimize conflicts, reduce litigation (although, as one comment pointed out, as long as there are legal divisions there will be litigation), and provide regional dispute resolution. Comments also recognized the problems with management of large geographical areas, the preeminence of states rights, and need for a more local voice. Several comments suggested that state issues be resolved within the state. One comment noted that critical management issues will likely change or new, more critical issues will emerge.

The benefits of effective integration of scientific data and information into management and the importance of education and knowledge were identified. Appropriate funding mechanisms were considered critical to many of the issues raised. Mechanisms to allow implementation of temporary, long-term water transfers is an issue. The need for greater certainty that agreements will hold in the long-term was identified. Flood control, navigation, recreation, wildlife and cultural resources were identified as important issues tied to successful management.

The issue of public participation was identified in 24 comments. Effective mechanisms for meaningful, affordable participation, the importance of education of the public on management issues and the benefits of better communication between managers and the public were suggested. Most comments identified the need for inclusive rather than exclusive processes but some disagreed, suggesting that stakeholder definition be limited to those receiving direct entitlements. In addition, the benefits and roadblocks from better coordination between managers and users was mentioned (10 comments) as a critical issue within the management framework. Some saw the potential for better forecasting of supply and demand, for determining uniform standards for science and for developing consensus based approaches to conserving and utilizing resources. Others questioned the ability of agencies with differing mandates and geographical areas to successfully coordinate efforts.

Comments on Native American issues focused on the challenge of successfully integrating their cultural and economic values into management and the importance of resolving their water rights claims. Issues involving Mexico included the increasing economic influence of Mexican agriculture with the implementation of the North American Free Trade Agreement and the benefits of greater coordination on shared resources. The benefits to better coordination on irrigation water management below the border and a better general knowledge of issues there was also identified.

SPECIFIC INSTITUTIONAL ISSUES IDENTIFIED IN COMMENTS

Institutional framework issues: (139)
- Preservation of the Law of the River, in recognition that the system works.
- Navigation and flood control are important issues
- Recreation and cultural resources are important issues
- Need to identify and balance many conflicting public values
- Benefits/concerns of basin-wide planning
- Opportunities for regional coordination
- Opportunities for a more proactive, flexible management framework
- Need for mechanisms to implement temporary, long term water transfers
- Long-term drought response.
- Benefits of long-term planning
- Integration of scientific data/modeling into management
- Finding appropriate funding
- Impacts of changing political climate.
- Integrate (and fund) non-consumptive as well as consumptive uses into management
- Importance of education/knowledge for public and managers
- Need for long-term certainty of agreements
- Implications for watershed planning

Public participation issues: (24)
- Designing new mechanisms for meaningful, affordable public participation
- Effective and inclusive, consensus based processes needed
- Definition of stakeholder; general public or water user?
- Education of public on management issues
- Better communication between agencies and users

Native American issues: (3)
- Incorporating economic and cultural institutions into management
- Resolution of Native American water rights claims

Issues with Mexico: (10)
- Mexico's growing economic influence due to NAFTA
- Coordination with Mexico on shared resources
- Greater knowledge and coordination of future demands
- Implications of irrigation water management in Mexico

Coordination between managers and users: (10)
- Lack of standardized methods for science
- Difficulty in reaching manageable solutions in larger geographical area
- Coordination between land and water managers
- Difficulty in integrating agencies with differing mandates
- Benefits in forecasting; i.e., droughts, future power needs, water needs.

Total comments: 186

DRAFT -- NOT FOR CITATION

ISSUES INVOLVING PROTECTION OF ENVIRONMENTAL, RECREATION AND CULTURAL RESOURCES

There were 179 comments concerning issues involving protection of environmental, recreation and cultural resources. The large number of comments indicates that the resolution of these issues, linked to population growth and shifting societal values, is important to successful management of Colorado River resources. Better (or lack of) coordination between managers, states, recovery efforts, and even between nations were repeatedly mentioned. Ecosystem approaches and creative partnerships were often cited as part of the issue. There were several comments describing the need to define and include better science, to strike a balance, to agree on goals and objectives.

There are many sub-issues involved. Endangered species restoration and water quality concerns were most often mentioned. The impact of critical habitat designation, the role of the federal government in listing species, and methods for implementing restoration were all considered issues. Funding for these programs and agreeing to recovery goals were considered important issues. Several comments focused on concerns over how the Endangered Species Act was interpreted and enforced and the very legitimacy of the Act. Riparian habitats on both sides of the international border were issues. Wetland protection, links between tributary and mainstem management, and coordination of land and water management were all mentioned. Water quality concerns went beyond salinity levels dictated by treaty obligations to Mexico. Eutrification, biocontaminants, agriculture runoff, heavy metals, municipal wastewater, point and non-point sources were all mentioned. Other issues commented on include: resolution of federal reserved rights; sedimentation of reservoirs, watersheds, and the mainstem; and the potential for construction of new reclamation projects.

Conflicts between resources and uses are common. Environmental and cultural resource protection impacts both the quality and cost of water and power resources. Dam and reservoir reoperation has impacted both the quality and cost of hydropower. But many comments mentioned the conflicts between other resources. Power and consumptive water use impact natural, cultural resources. Protection of these resources impacts water and power. Recreation can have impacts on environmental resource protection. Native and non-native species often conflict. Population growth and development was often mentioned as a contributing factor.

Along with these observed conflicts many comments centered on solutions. The need for coordination, flexibility, and ecosystem approaches were often mentioned. The benefits of a basin-wide perspective were identified. The protection of cultural resources and the challenges of incorporating tribal cultures into management were identified. Science was considered an important tool in managing non-consumptive resources, but there were several issues surrounding its effective use. Lack of information or incomplete data was considered an issue. Mechanisms for incorporating science into management are needed. The possibility of a new scientific bureau was suggested.

Several comments centered on concerns with Mexico. These varied from identifying the need for better coordination and exchange of information to the link between habitat protection south of the border and endangered species protection on the north. Meeting the treaty obligations for water quality was mentioned as an important issue.

SPECIFIC ENVIRONMENTAL AND CULTURAL ISSUES IDENTIFIED IN COMMENTS

Institutions: (3)
- Navigation and flood control issues

Native American issues: (3)
- Impacts to cultural resources

Issues involving Mexico: (15)
- Water quality, quantity to meet treaty obligations
- Water quality and quality from Mexico
- Delta ecosystem restoration
- Importance of habitat in Mexico to endangered species recovery/coordination of efforts
- Issues of deliveries to Mexico in excess of treaty agreements

Environmental protection issues: (157)
- Increasing importance of non-consumptive water uses
- Water quality issues
- Endangered species requirements
- Impacts to water/power resources from dam/reservoir reoperation for environmental protection.
- Sedimentation in reservoirs accumulation below Gila confluence
- Compartmentalized endangered species recovery efforts
- Impacts on state water deliveries
- Coordination of water management with adjacent land management
- Priorities in management of native and non-native species
- Impacts on native species from aquatic and riparian non-natives
- Conflicts between non-consumptive uses and hydropower resources
- Funding for environmental and cultural resource protection.
- Implications of increasing river recreation in regard to restoration efforts
- Non-use/extrinsic values
- All-American canal lining impacts ground water pumping in Mexico
- Link between mainstem and tributaries on environmental protection
- Impacts of population growth on natural/cultural resources
- Funding mechanisms for non-consumptive resource protection
- Recreation impacts on natural resource protection

Coordination between managers/users: (1)
- Opportunities for creative partnerships in natural resource protection

Issues involving roles of federal, state, tribal, and local governments.

Total comments: 179

ISSUES INVOLVING ROLES OF FEDERAL, STATE, TRIBAL, AND LOCAL GOVERNMENTS

The large number (111) of comments concerning the role of various governments in the basin seems to reflect the present national debate over the role of government. Interestingly there was more consistency in these comments than in other categories. Almost one third of the comments (33) pertained to the future role of the Bureau of Reclamation. Some suggested it continue its transition from water development to a management agency with a role in creating partnerships and facilitating management solutions. Others suggested that the federal government be removed completely from basin management. Lack of consistent planning was considered an issue. The economic and environmental implications of the sale of water and power generation and marketing entities were considered important issues. The importance of the historic funding role of the federal agencies was mentioned in terms of treaty obligations to Mexico, conservation incentive programs and in recovery of endangered species.

Water rights between states and the ability of states to develop water allocated under the Compact were both common issues. The question of future actions by Congress and federal agencies that would affect water management was a concern. The role of local governments in river management, the potential for local vision and watershed management were all mentioned. The issue of individual rights vs. the public good is important at all levels of management. The resolution of Native American water rights claims, the issue of tribal sovereignty and federal trust responsibilities were all identified as important issues. Potential impacts from endangered species protection that fall disproportionally on tribes was mentioned as well.

The ability for the basin states to develop their allocation under the terms of the Colorado River Compact was a primary concern in many comments. The present and future relationship between the state and federal governments (often defined as states' rights) plays prominently in this issue. Several comments stated the need for recognition and respect for the existing laws that control the water of the Colorado River basin.

SPECIFIC GOVERNMENTAL ROLE ISSUES IDENTIFIED IN COMMENTS

Agricultural issues: (4)
- Economic /environmental impacts of potential sale of water delivery facilities.

Institutional issues: (54)
- Future role of Bureau of Reclamation
- States vs. Federal commitment to Mexican treaty obligation
- Funding to meet treaty obligation: states vs. Fed.
- States vs. Fed role in water management
- States' ability to develop water allocated under Compact
- Water rights between states
- Issue of private property (or individual rights) rights vs. public good
- Funding to meet management goals

Population growth/development issues: (1)
- Pressures on upper basin water allocations from lower basin population growth

Public participation issues: (10)
- Potential for local vision, involvement in management process.
- Local or watershed management of resources
- Role of local government officials in management processes

Native American issues: (16)
- Resolution of water rights claims
- Funding for development of water rights
- Federal Trust responsibilities
- Sovereignty of tribes

Issues involving Mexico: (6)
- Relative treaty obligations of Federal government and water users

Environmental protection issues: (5)
- Endangered species impact fall disproportionately on tribes
- Federal responsibility to funding endangered species protection

Conservation/water efficiency issues: (1)
- Opportunity for creative partnerships between Reclamation and water agencies

Coordination between managers/users: (14)
- Lack of a planning/facilitating agency to coordinate agency efforts
- Opportunities for creative partnerships between states, between states and tribes.

Total Comments: 111