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State Water Planning to Protect Public Needs

David H. Getches

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STATE WATER PLANNING TO
PROTECT PUBLIC NEEDS

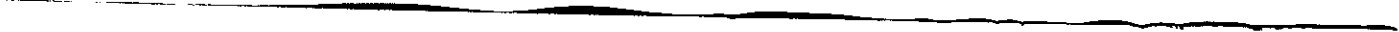
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University of Colorado
School of Law

Water as a Public Resource:
Emerging Rights and Obligations

Natural Resources Law Center
University of Colorado School of Law

June 1 - 3, 1987



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- I. The Rationale for State Water Planning
 - A. The purpose of water planning is to ensure that the water is available when and where it is required to meet a state's social and economic needs.
 1. It is "the prelude to informed decision-making." (U.S. National Water Commission, Water Policies for the Future 365 (1973).)
 2. It brings facts and data together with state policies.
 - B. Water is our most "public" resource.
 1. Distribution must be equitable.
 2. It is fundamental to human health.
 3. Physical movement and storage requires large investments, often public.
 4. Recreational uses are widespread.
 5. Interstate relations often depend on water issues.
 - C. Water is essential to economic development.
 1. Limited supplies must be allocated wisely.
 2. Economic activity and growth depends on adequate supplies and quality.
 3. Investment and location of new business may depend on water.
 - a. Domestic and industrial water.
 - b. Satisfaction of recreational and aesthetic needs.

D. Lack of planning frustrates other social goals.

1. Land use planning efforts may not succeed without consideration of water (and vice versa).
2. Inequitable distribution of water can create social unrest.
3. Scarce capital is needed for variety of projects.
4. Reliable markets for distribution of water depend on clear definition of limits, purposes and public interests in transactions.

E. State interests in interstate allocation may be jeopardized without planning. (See Ladd, "Federal and Interstate Conflicts in Montana Water Law: Support for a State Water Plan," 42 Mont. L. Rev. 267 (1981).)

1. The law of equitable apportionment may protect a state's right to unused water if a state has plans to use it. (Colorado v. New Mexico, 467 U.S. 310 (1984).)
2. Plans help to conform compliance with interstate compacts to the policy goals of an individual state.
 - a. Wise use of compact apportionments.
 - b. Fulfillment of compact obligations.

F. The West needs water planning more today than ever before.

1. In the past, mistakes were harder to make:
 - a. guesses were easier,
 - b. basic infrastructure was lacking,
 - c. costs were hidden.
2. We have a legacy of mistakes:
 - a. projects in the wrong place,
 - b. water committed to uses that do not serve current needs,
 - c. lost environmental values (canyons, streams, wetlands and wildlife habitat),
 - d. unmanageable repayment obligations for federal projects.
3. Demands for water are constantly growing while supplies are static.
4. New kinds of water uses (like instream flows) are placing great public demands on waters that may be largely allocated to private interests.

II. What is Comprehensive Water Planning? (See Schramm, "Integrated River Basin Planning in a Holistic Universe," 20 Natural Resources J. 787 (1980).)

- A. Divergent notions about planning lead to misconceptions and uninformed opinions.

Common misconceptions include:

1. A plan prescribes or precludes particular projects.
 2. Planning means that some state agency makes all the decisions.
 3. A plan locks in future directions and decisions, but circumstances change.
 4. Planning will solve water supply problems.
 5. A plan will produce project funding.
 6. Planning is inconsistent with prior appropriation doctrine.
- B. Sound planning begins with a broad and accurate data base.
1. All available water supplies are inventoried.
 2. Existing uses and rights are identified.
- C. Projections of future needs are important.
1. Alternative scenarios may be considered.
 2. The most desirable scenario(s) from the standpoint of state policy can be identified.
 3. At a minimum, the most accurate information available should be used to project a likely set of future demands.
 4. Interstate obligations (compacts, decrees, etc.) must be set forth.
 5. Quantified federal reserved rights can be considered and the likelihood of their development predicted. Uncertainties

caused by unquantified reserved rights can be identified.

- D. State policies must be articulated.
 - 1. General policies affecting water resource use and development should be expressed.
 - 2. Related policy goals must be defined (e.g., environmental, economic, social, etc.)
 - 3. Policy conflicts can be identified.
 - 4. Where policy decisions have not previously been made, appropriate boards, agencies and officials may be moved by the planning process to develop and articulate policies.
- E. Sound water planning is integrated with land use planning.
 - 1. There are significant lessons from land use planning that can be learned. (See Deknatel, "Possible Transfers of Experience from Land-Use Planning to Water Resources Planning," in American Water Resources Association, Unified River Basin Management - Stage II 227 (1981).)
 - 2. Land use plans rarely incorporate water issues; water plans ignore land use implications. (See U.S. National Water Commission, supra.)
- F. Water quality planning should not be divorced from water resource planning.

1. Congress required and funded water quality planning as a condition of receiving major construction grants under the Clean Water Act (33 U.S.C. § 1285), but it was unrelated to state water resource planning. The requirement provided an impetus to some states to institute water resource planning, however. (See U.S. Water Resources Council, supra, at I-2.)
 2. Most states plan and regulate water quality through agencies separate from those that plan and allocate water resources. (See Getches, "Controlling Groundwater Use and Quality: A Fragmented System," 17 Natural Resources J. 623 (1985).)
- G. Groundwater and surface supplies must be considered together in the context of conjunctive management.
- H. State environmental and other resource goals should be integrated into water planning:
1. recreation,
 2. fish and wildlife,
 3. flood protection,
 4. instream flow needs.
- I. State economic development plans, policies and goals should be reflected in a water plan.
- J. A plan should emphasize management of existing supplies:

1. opportunities for basinwide cooperation,
 2. water conservation and efficiency,
 3. possible exchanges,
 4. conjunctive use.
- K. A water plan should provide for continuous updating and revision.
1. New data should be incorporated regularly.
 2. Changing demographic projections and economic conditions should be periodically reflected in a plan, and adjustments made accordingly.
 3. State policy and law changes need to be incorporated in planning documents from time to time.
 4. There should be a regular schedule for revision and updating.
- L. Public involvement is necessary throughout the planning process.
1. A single state agency should coordinate water planning but wide participation should be sought from all state and local agencies whose interests are implicated.
 2. Local agencies and municipalities should play an important role.
 3. Water "experts" should be used for technical advice but not policy formulation.
 - a. Tendency to see issues narrowly.
 - b. Development bias.

- c. Orientation toward preserving status quo.

III. Planning Difficulties.

- A. Physical constraints as to where water occurs mean that water planning constantly encounters problems such as high economic costs and social and environmental trade-offs.
- B. Shifting demands require a future vision and flexibility to change plans.
 - 1. Demands will gradually change among functions, including domestic, industry, agriculture, energy, recreation, wildlife.
 - 2. Rural and urban needs shift.
 - a. Urban demands prey on rural agricultural rights.
 - b. If rural areas divest themselves of most of their water, they may later seek to repurchase water from cities or to buy water service from them.
- C. Inadequate funding can emasculate the planning effort.
 - 1. Politics favors ill-planned large development over carefully planned smaller developments.
 - 2. Those who disagree with planning directions often lobby against its funding.
 - 3. Few politicians perceive the gain in

1. Vested interests.
2. Those who control water institutions.
3. Rights holders who may be in conflict with the recognition of public rights.

IV. Putting "Teeth" in Water Planning.

- A. Many plans express lofty ideals but have no practical effect.
 1. Planning may still provide a data source for water decisionmakers and others.
 2. Ineffectual planning will not attract the participation and cooperation of people who should be involved.
- B. A plan can guide administrative and judicial decisionmaking (like a comprehensive land use plan).
 1. Definition of "public interest." Plans have not in fact been dispositive. See, *Johnson Rancho County Water Dist. v. State Water Rights Board*, 235 Cal. App. 2d 863, 45 Cal. Rptr. 589 (3d Dist. 1965); *Shokal v. Dunn*, 109 Idaho 330, 107 P.2d 441 (1985).
 2. Assist in determining how to achieve optimum utilization in water administration. See *Fellhauer v. People*, 167 Colo. 320, 447 P.2d 986 (1969).

(See *Fellhauer v. People*, 167 Colo. 320, 447 P.2d 986 (1969).)

3. Resolve conflicts with appropriations.
(See Grant, "The Idaho Water Plan: Two Threshold Constitutional Problems and Suggested Solutions," 15 *Ida. L. Rev.* 443 (1979).)

4. Plan could have presumptive effect in all state agency decisions.

C. Plans can recommend action by legislatures and boards.

1. Projects to be constructed and priorities.
2. Laws to enhance water management.
3. Regulations for water administration.

D. Plans perform an advisory function with state and federal agencies.

1. Data and policy represent state positions.
See Corps of Engineers regulations for dredge and fill permitting under Clean Water Act § 404 (33 U.S.C. § 1341), which defer to state policies. 33 C.F.R. § 320.4(j)(4).

2. Contradictory or inconsistent decisions would not receive state funding or other assistance.

E. Plans should furnish important advice and guidance to private decisionmakers.

V. Federal Water Planning.

- A. Almost all western water planning has been dominated by the federal government.
1. Federal interests stem from international and interstate dimensions of waterways.
 2. States generally have abdicated planning to federal government.
- B. Direct federal planning has occurred mainly through financing and construction of projects.
1. Project purposes include: navigation, hydroelectric, irrigation and drainage, reclamation, and flood control.
 2. Many states complied with federal planning requirements as a necessary prerequisite to federal largesse.
 3. Federal construction (and consequently project planning) activity is nearly dead.
 4. Many federal projects have developed water for areas and purposes that do not serve the most important interests of communities and states.
- C. Today the federal influence in water "planning" is expressed largely through regulatory controls that affect public and private activities.
1. Environmental statutes affect both the development and use of water.

- a. Endangered Species Act (16 U.S.C. §§ 1541-1543; Riverside Irrig. Dist. v. Andrews, 758 F.2d 508 (10th Cir. 1985)).
 - b. Fish and Wildlife Coordination Act (16 U.S.C. §§ 661-666c).
 - c. Wild and Scenic Rivers Act (16 U.S.C. §§ 1271-1287).
 - d. Clean Water Act (National Pollutant Discharge Elimination System, 33 U.S.C. §§ 1344).
 - e. National Environmental Policy Act (32 U.S.C. §§ 4331-4344).
2. Permits are required for all dredge and fill operations under Clean Water Act § 404 (33 U.S.C. § 1344).
 - a. Virtually all water development is regulated. (See United States v. Akers, 785 F.2d 814 (9th Cir. 1986).)
 - b. Broad public interest review.
 3. Hydropower projects require a Federal Power Act permit (16 U.S.C. §§ 790 et seq.).
 - a. expanded environmental review,
 - b. public interest concerns,
 - c. preemptive powers.
 4. Federal regulatory controls are uncoordinated and sometimes inconsistent.
 - a. Programs and laws exist and are admi-

nistered independent of one another.

- b. Not necessarily consistent with or mindful of state policies and interests.

- D. Unquantified federal reserved rights claims create unknown factors. (Cf. Arizona v. California, 460 U.S. 605 (1983).)
- E. Federal planning assistance to states has been largely unsuccessful.
 - 1. The Water Resources Planning Act of 1965 (42 U.S.C. §§ 1962-1962d-3) was intended to achieve "coordinated planning."
 - a. River Basin Commissions -- the operative level for planning.
 - b. The Water Resources Council, a panel of high level federal officials coordinated the basin efforts.
 - c. Financial assistance to states.
 - 2. Reasons for failure:
 - a. Inadequate funding.
 - b. Not used as basis for all water-related planning.
 - i. National Flood Insurance Act (42 U.S.C. § 4001) deals directly with local governments in planning activities.
 - ii. Westwide Study done by Bureau of

Reclamation.

- iii. TVA and compact commissions did not work through river basin commissions.
- iv. Water quality planning under Clean Water Act was separated from commissions.
- c. Did not address urban needs adequately.
- d. Local and private interests were not incorporated in process.
- e. Commissions required divided reports in absence of a consensus.
- f. States were unenthusiastic because it was a federally motivated and coordinated effort.

VI. Local Water Planning.

- A. Urban areas have the most sophisticated plans.
 - 1. Municipal and industrial water suppliers.
 - 2. Metropolitan area-wide agencies.
- B. Basin planning is rare. (But see Lower Colorado River Authority in Texas.)
- C. Typically planning is done by conservancy districts or similar entities.
 - 1. Not comprehensive planning.
 - 2. Often related to a particular development project.
 - 3. Rarely coordinated with state, basin,

regional or other water needs beyond the immediate area.

4. Concerned only with particular water problem or project, not broad social, economic, environmental, land use and other related issues.

VII. State Experiences With Water Planning.

A. A significant majority of states have water resources plans. (See U.S. Water Resources Council, State of the States: Water Resources Planning and Management (1980).)

1. Most planning efforts were initiated in response to federal financial assistance to water projects or the Water Resources Planning Act of 1965.
2. State planning programs vary widely in their content, purposes, comprehensiveness, and practical importance. (Western states' recent planning experiences are summarized in the Appendix.)

B. Historically, California has had the most extensive and important state plan.

1. Authorized in 1947.
2. Resulted in considerable federal and state project funding.
3. Has been regularly revised and updated (fifth revision in progress).

4. Originally development oriented; has become management oriented.
 5. Has not dealt with groundwater concerns, thus limiting its importance in Southern California and some other areas of the state. (See de Lambert, "District Management for California's Groundwater," 11 Ecology L.Q. 373 (1984); Comment, "Groundwater: A Call for a Comprehensive Management Program," 14 Pac. L.J. 1279 (1983).)
 6. Many local and regional districts act independently of plan.
 7. Plan did not deal adequately with some social needs in conflict with established allocation patterns; courts fashioned public trust doctrine.
- C. Recent state-initiated planning efforts tend to be comprehensive processes for planning water management.
1. Several progressive approaches have recently been started. Nebraska, Montana and Oregon have modeled their planning after Kansas, which has the most thorough program. Texas has also mandated comprehensive planning.
 - a. Process rather than "plan."
 - b. Primarily management oriented.

- c. Considers broad state needs related to water.
 - d. But not fully integrated with land use planning. (Alaska does some water planning in context of regional land use plans.)
 - e. Success will depend on funding and political acceptance of results.
2. Development-oriented plans have been common in the West (e.g., Nevada, North Dakota, South Dakota, Wyoming, Utah).
- a. Some were obligatory responses to the Water Resources Planning Act.
 - b. Generally fail to put water projects in context of statewide goals and policies.
 - c. Utah's planning, which is in progress, responds mainly to certain current needs such as flood control.
3. Plans rarely are policy-setting documents (though Idaho has developed essentially a policy document).
4. Some plans with comprehensive mandates are less broadly pursued.
- a. Washington has made several incomplete efforts; has become fixed on instream flow issues.

- b. Nebraska so far has done more public relations (pamphlets) than actual planning.
5. Many plans either have basin components or are done separately by basin.
- a. Oregon has combined its formerly basin-level planning with statewide planning.
 - b. North Dakota simply compiles development plans of basin planning groups.
 - c. Alaska does some regional planning, partly based on basin boundaries, partly on political boundaries.
 - d. Montana plan is formulated by hydrologic basins.
 - e. Arizona began a basin-oriented process but did not complete it.
6. Virtually every state has done some water planning.
- a. New Mexico has no plan or planning process but has required a water resource element in the Statewide Resource Plan and did an assessment of resources, problems, needs and growth projections in 1976.
 - b. Except for a few false starts in the 1970's (see Pascoe, "Plans and Studies: The Recent Quest for a

Utopia in the Utilization of Colorado's Water Resources," 55 Colo. L. Rev. 391 (1984)), Colorado has firmly eschewed all attempts to do any form of statewide water resource planning.

7. Some states have not used their plans.
 - a. Though statutes mandated a plan and numerous studies were done, Nevada has not integrated its many efforts or used the results of planning efforts to guide allocation and administration of water.
 - b. No state has a strong requirement that plans be followed or be revised as decisions are made.

VIII. The Consequences of Non-planning.

- A. Water resources are wasted.
 1. Competing water users may develop facilities that are premature, too large, too narrow in purpose, duplicative, or inefficient.
 2. Water decisions are made in isolation from most of society's needs.
- B. Limited financing is exhausted for less than optimal projects.

- C. Federal controls and policies will fill the gaps in state planning.
- D. Judicial remedies for socially unacceptable water resource decisions can be disruptive.
 - 1. The use of the public trust doctrine in California was a reaction to water allocation decisions that neglected important societal goals. (National Audubon Society v. Superior Court, 33 Cal. 3d 419, 189 Cal. Rptr. 346, 658 P.2d 709, cert. denied, 464 U.S. 977 (1983).)
 - 2. Other courts have suggested a willingness to depart from absolute protection of vested water rights in decisions concerning allocation, administration and use of water. (Fellhauer v. People, supra.)
 - 3. Courts are not as well equipped as the political branches of government to balance society's interests in water and to make decisions concerning the future.
 - 4. Unless difficult questions of how to incorporate other than narrow, short-run, localized values in water decisionmaking are found through the political process, they may be made or forced by the courts.

IX. Recommendations.

- A. States should adopt or revise planning pro-

cesses so that they are:

1. Comprehensive in coverage.
 2. Integrated with other planning processes.
 3. Primary expressions of state policy and direction in all water-related matters.
 4. Adequately funded.
 5. Enforceable through public water development, financing, allocation and administrative decisions.
- B. State water planning should be assigned to a high level agency.
1. With a broader mission than water development.
 2. Independent of pressures from special interests.
- C. The U.S. Bureau of Reclamation should provide major technical and financial assistance to states to assist in their planning efforts.
1. Data collection and management systems.
 2. Frameworks for state planning efforts.
 3. Information exchanges among states.
 4. Inducements in the form of opportunities for state or local management of federal facilities if there are adequate state plans.
 5. Assistance in developing management techniques.

D. Interstate organizations (Western Governors Association, Western States Water Council, National Governors Association, National Conference of State Legislators, etc.) should study and exchange information on water resources planning efforts.

APPENDIX

SUMMARY OF PLANNING ACTIVITIES IN SELECTED STATES*

Alaska

There are no statutes requiring compilation of a statewide water resource plan and as a result, Alaska does not have one. According to the Alaska Department of Natural Resources - Division of Land and Water Management, the Department would like to develop a state water plan, but there is no funding available. Attempts to secure funding from the legislature for a state water plan have been made during the past five years.

The Department prepares two types of land use plans that contain water resource components. Basin Area Plans are aimed at managing the state lands within particular political subdivisions. Basin Area Plans deal with all aspects of land and water management, but usually contain a limited amount on water resources. In addition to the Department, other state and federal agencies, individuals and interest groups participate in developing these Basin Area Plans. Basin Area Planning Teams, under the guidance of the Department, take the lead in soliciting input from the public and developing draft plans. Typically, these plans will contain discussions of water related issues such as water recreation, fish and wildlife habitat protection and management, and stream closures.

The second type of plan is called a Management Plan. These plans are comprehensive land use management plans compiled by hydrologic basins. Management Plans typically cover a much larger area than the Basin Area Plans. Management Plans may include discussions of the hydrologic environment including both surface and groundwater supplies, future demand, present uses, potential water development projects, water quality, watershed values including fish, wildlife and recreation, flood control, erosion, and impact of various uses on the watershed. The particular issues addressed in each Management Plan vary according to each hydrologic basin.

Generally, water resource planning does not appear to be either comprehensive or coordinated.

Arizona

In 1975, the Arizona Legislature passed A.R.S. §§ 45-2503 requiring the state to develop a state water plan. The Arizona

* Prepared by University of Colorado Law Student Keith Chidlaw

Water Commission responded by developing the Arizona State Water Plan consisting of three phases: (1) an inventory of resources and uses, (2) alternative future scenarios, and (3) a presentation of plans to meet these alternative scenarios.

The Arizona Water Commission published phase one in July, 1975. The inventory discussed sources (surface and groundwater), uses including agriculture, municipal and industrial, mining, hydropower, fish and wildlife, and supplemental supplies such as wastewater reclamation and reuse of return flows. Phases two and three were subsequently published.

The Department of Water Resources - Planning Section advises that the Arizona State Water Plan is now outdated because it has not been updated for a number of years. However, the Governor has recently proposed a new planning process that will guide water resource planning for a 50-year horizon.

Water resource planning in Arizona appears to have shifted toward management of groundwater. In 1980, the Groundwater Code was enacted (A.R.S. § 45-401) to provide for comprehensive treatment of the use and withdrawal of groundwater. The Groundwater Code requires Groundwater Management Plans be developed for certain designated groundwater basins. Furthermore, the Groundwater Code establishes four Active Management Areas and three Irrigation Non-Expansion Areas.

The Department of Water Resources is charged with developing Management Plans for each of the four Active Management Areas. To assist the Department in developing these plans, the Groundwater Code establishes a Groundwater User's Advisory Council for each Active Management Area. Council members serve as contributors and reviewers in the planning process and as liaisons with groundwater users within each Active Management Areas.

The Groundwater Code specifies that certain goals must be achieved through the Management Plans. The Department is given the authority to devise the means necessary to accomplish these goals. Factors considered in developing the Management Plan are promulgated by the Department with assistance from public input.

The Management Plan for the Phoenix Active Management Area was published in 1984 and spans the period from 1980-1990. The plan is divided into three main topics: (1) water resources, including demand, supply and future projections, (2) water resource management problems, including overdraft, pumping costs, subsidence and water quality, and (3) programs for agriculture, municipal and industrial conservation, and groundwater withdrawal management.

Generally speaking, water planning in Arizona seems to be directed toward management of its water resources.

California

California has been involved in active planning of its water resources for many years. In 1947, the California legislature directed the predecessor to the Department of Water Resources to begin a statewide water resource investigation in order to facilitate water resource management. This investigation was divided into three phases.

Phase I, completed in 1951, identified the state's water resources. Phase II, completed in 1955, concentrated on determinations of present and potential water requirements. In 1957, phase III, entitled The California Water Plan, was published. The California Water Plan was designed to be a comprehensive master plan to guide and coordinate the planning and construction of facilities to meet present and future beneficial needs.

The enabling legislation for the California Water Plan set forth the objectives of the plan. Calif. Water Code § 10005 states that the plan will require "orderly and coordinated control, protection, conservation, development and utilization" of the state's water resources. The Department took this general charge and developed a plan emphasizing these objectives.

The California Water Plan has undergone four major revisions and the Department is currently working on a fifth revision to be completed shortly. The 1966 update took into account changing conditions within the state since the 1957 plan was published. The 1966 report made adjustments for an increasing population rate growth, the construction of the State Water Project and an increase in irrigated acreage. Additional factors considered included flood control, power demands, water recreation, fish and wildlife, and water quality control.

The 1970 update adjusted for a decreasing rate of population growth along with a corresponding reduction in estimated future urban water use and reduced estimates of irrigated acreage. The update concluded that, based on projects authorized or under construction, sufficient water supplies would be available to meet 1990 requirements. The 1970 report paid more attention to the emerging environmental problems associated with water development projects, alternative land use policies and population dispersal.

The 1974 update again revised population projections downward, but projected increases in irrigated agricultural acreage and water use. Emerging issues discussed in the 1974 report included cooling water for electrical energy production, water deficiency risks, water exchanges, agricultural drainage, water use efficiency, transfers and waste water reclamation. In addition, the report departed from the earlier practice of developing a single forecast of future water use by presenting four different scenarios as to future conditions and events that affect water use.

The 1983 update takes a more comprehensive approach to comparing water use and water supplies. As part of this process, agricultural models were developed and applied for the first time. These models are especially helpful in assessing the general economic effects of increasing water and energy costs. The report also quantifies the effect of urban and agricultural conservation measures and the potential for water reclamation as a means of reducing water needs. The report considers nonstructural options for making more effective use of water supplies, particularly during times of shortage.

For planning purposes, the state is divided into twelve Hydrologic Study Areas (HSA). The specific problems present in each HSA are analyzed in developing a statewide policy with respect to a particular problem.

In addition, the state is divided into 16 water quality planning basins. Basin plans covering these 16 basins are prepared by the State Water Resources Control Board. These plans are binding upon the Department of Water Resources and are integrated into the California Water Plan.

Furthermore, California has divided the state's 394 groundwater basins into Groundwater Management Areas for those regions with overdraft problems. The 1983 Plan identified 40 basins known to have overdraft conditions with eleven of these basins falling within the critical category.

Specifically, the Water Plan discusses four main topics. These topics are: (1) beneficial uses, (2) protecting beneficial uses, (3) available water supplies, and (4) water use. Within each of these topics, specific issues are discussed. The category "beneficial uses" quantifies current and projected agricultural, urban, energy, instream and offstream uses, and associated issues. Within the topic "protecting beneficial uses," issues such as point-source and nonpoint-source pollution, toxic and hazardous materials, aquatic habitat destruction and flood management are discussed. "Available water supplies" inventories surface runoff, including delta and Nevada outflow requirements, wild and scenic river flow requirements, and many recommendations, programs and innovative technologies for increasing available supply or reducing demand. Finally, the "water use" section discusses conservation, waste water reclamation, greater efficiency of use and groundwater management techniques.

Even though the Department of Water Resources is responsible for state water planning, not all planning responsibility is vested in that agency. For example, water quality planning, standard setting and enforcement is handled by the State Water Resources Control Board. In addition, groundwater management is handled at the basin level with the Department not interfering with local decisions under most circumstances. However, the Department oversees groundwater management by setting goals and policies that the local groundwater districts are encouraged to

follow.

Water planning in California has seen a dramatic shift in emphasis since its inception. Originally water planning consisted of determining which water development project should be built. This notion of development-oriented planning was most clearly expressed in the implementation and construction of the State Water Project. The State Water Project, built mostly during the 1960's, consists of many dams, reservoirs and canals that transfer large amounts of water from the thinly populated yet moist regions of Northern California to the thirsty crops and population centers of Southern California.

The emphasis in water planning now appears to be on management of the present supply and satisfying future demand without building expensive new projects. Also, environmental values have come to the forefront with respect to project decisions.

It is difficult to say what the future holds for water planning in California. At the very least, any water resource management decision will entail extensive discussion of all related issues, thus providing a comprehensive analysis.

Colorado

In response to the Water Resources Planning Act, Colorado set out to develop a state water plan in the early 1970's. After preparing an inventory of resources and publishing a description of the laws and agencies concerned with water resources, the state abandoned the third part of the plan. It was to be essentially a development-oriented plan. It would have involved evaluation and perhaps prioritization among project proposals and consequently was controversial among water interests, leading to its being dropped.

Another effort was begun in 1976 with a legislative appropriation to do a "water study," which resulted in a volume of legal studies about Colorado water resources, and a collection of background information. The other component studies were not completed.

The legislature in 1983 removed a requirement that the Colorado Water Conservation Board, which assists in the financing of private water projects, conform its loans to a state water plan, signalling that no such plan would be forthcoming.

In the past, attempts by the executive branch to formulate state policy, even to express generalities that describe past practice, have been met by ringing criticism from water interests and some legislators. The Colorado Water Conservation Board has been asked by the Governor to give thorough consideration to state water policies and to set them out for the guidance of decisionmakers and the consideration of the legislature.

Idaho

In 1964, the people of Idaho passed a constitutional amendment which empowered the Idaho legislature to create a state water resource agency which would have the "power to formulate and implement a state water plan for optimum development of water resources in the public interest." The legislature responded to this authority by creating the Idaho State Water Resources Board in 1965.

Part I of the State Water Plan was published in 1974 by the Board and is entitled "The Objectives." It was aimed at identifying and defining the policies and objectives which the Board had adopted to govern the planning, development and conservation of the state's water and related land. The report went on to discuss objectives with respect to water use, hydropower production, environmental quality, erosion and sedimentation, fish and wildlife, aquaculture, flood control, agriculture, Indian lands and water rights, interbasin water transfers, recreation, federal reserved rights and wild and scenic rivers.

Part Two of the State Water Plan was adopted by the Board in late 1976. This document contains the projects and programs thought necessary to implement the objectives set forth in Part I. Water policy for the three river planning basins of the state is set out in Part II. In addition, the Board set forth further goals and recommendations to be used to guide future water management. Together these two documents comprised the State Water Plan.

Pursuant to statute which requires review of the State Water Plan every five years, the Board adopted a revised version of the State Water Plan in 1982. This plan reiterated the objectives of state water planning and modified some of the policies recommended as a means to accomplish the objectives.

The State Water Plan was most recently revised in December, 1986. In addition to consolidating some of the objectives, new policies were added concerning groundwater and water quality. The 1986 revision groups policy issues into five major categories: (1) water use, (2) conservation, (3) protection, (4) management and development issues, and (5) river basins. In devising the particular policies within each of these general categories, the Board seeks public and other agency input.

Not only does the State Water Plan devise policies for the entire state, but it also contains policies dealing with specific river basins. Some of these policies pertain to only a single basin while others are applicable to all three basins.

The objectives and policies that go into the State Water Plan are left to the discretion of the Board. Neither the Constitution nor statutes specify what policy issues are to be addressed in the State Water Plan.

Kansas

In 1981, Kansas revised its planning process in response to the State Water Resources Planning Act (K.S.A. 82a-901(a)). The Act states that the best means to achieve proper utilization and control of the state's water resources is through comprehensive planning. The Kansas Water Office is charged with formulating on a continuous basis a state water plan for the management, conservation and development of the state's water resources. (K.S.A. 82a-903.) In addition, this statute requires the Water Office to prepare basin plans as part of the state water plan.

In formulating the state water plan, K.S.A. 82a-907 requires that consideration be given to a number of factors. These include: management, conservation and development of water resources for the public benefit, alternative plans, programs and projects emphasizing efficient use, multi-purpose reservoir sites, safeguards to human and animal health through water quality management, existing water rights, groundwater, instream flow protection, habitat protection and state/federal/local cooperation.

The Kansas Water Office has taken these statutory directives and created the Kansas Water Plan. Even though called a water plan, the Water Office has developed what is better described as a planning process. Kansas views its water plan as a dynamic instrument subject to update and revision as new information is revealed and new policy implemented.

The Kansas Water Plan is divided into five major sections. Three of these sections, management, conservation and development are mandated by the Water Resource Planning Act. The two remaining sections, water quality and fish, wildlife and recreation, are not specifically mandated by the Act, but the Kansas Water Office has concluded that comprehensive planning must include consideration of these issues.

The Kansas Water Plan is further divided into statewide management issues and basin-specific management issues. Statewide issues are discussed in the sections on management, conservation, water quality and fish, wildlife and recreation. Basin issues are discussed in the development section.

Within the management section, topics include: mining pollution, minimum desirable streamflows, urban flood management, stream and aquifer restoration and reservoir restoration. Programs already implemented include financing for large reservoirs, water marketing, rural flood management and management for new reservoirs.

The conservation section includes discussions on agricultural, municipal and industrial conservation.

The water quality section includes policy discussions on public water supply considerations, county and subdivision

waste/wastewater management, mineral intrusions, remedies for water pollution and nonpoint-source pollution. A state groundwater information system has been completed within the section.

The fish, wildlife and recreation section includes discussions about riparian and wetland protection, river recreation and coordination of environmental concerns.

The development section contains the basin plans. The state has been divided into twelve river basins for which planning has been done. These basin plans contain consideration of issues specific to that area. In developing basin plans, the Kansas Water Office and the Kansas Water Authority are required to seek input from the local public and newly established basin advisory committees. The basin plans are reviewed by the appropriate basin advisory committee before submission to the Kansas Water Authority for approval.

The Kansas Water Plan is a planning process rather than a plan. It emphasizes management of water resources rather than development at this time.

Montana

In 1967, the Montana legislature passed the Water Resources Act (M.C.A. 85-1-203), which assigned water planning authority to the Water Resources Division of the Department of Natural Resources and Conservation. The Act not only set forth the general policies of the state to manage, conserve, use and protect its water resources, but also required the development of a state water plan. The Water Resources Act required that the water plan be comprehensive, coordinated, provide for multiple use, set out progressive programs for conservation, utilization and development of the state's water and propose efficient means of use.

Under the direction of the Department, the comprehensive water plan is to be formulated according to the hydrologic basins of the state and then adopted by the Board of Natural Resources and Conservation. The Department is also required to submit new sections of the state water plan to each general session of the legislature.

As mandated by the Act, a series of management plans were prepared for major river basins of the state. Together these management plans are the foundation of the state water plan. Montana does not currently have a comprehensive state water plan. Instead, Montana relies on these basin plans to constitute their water plan.

The Montana water plan is not viewed as a static document but rather an ongoing process that addresses key water alloca-

tion, quantification and management issues. This dynamic process, bounded by statutory policies and guidelines, allows innovative study of specific basin-related problems. However, this approach is being revised and a new type of planning is being implemented. The "new" state water plan is characterized as more of a planning process rather than a plan. This innovative approach is patterned after the Kansas scheme.

The Department has recently proposed revisions in the water planning process to reflect the format used for water planning in Kansas. The "new" state water plan is to be a collection of short individual management issue components bound in binder form. This format allows flexibility to revise individual components without requiring revision of the entire plan. Water planning is viewed as a continuous process with updates corresponding to additional information, changes in projections and changing social values. In addition, this format allows the plan to be developed incrementally with the number of components formulated each year depending on the availability of funds. The current goal is to complete an initial formulation of all plan components within six years.

The "new" state water plan is divided into two components: (1) statewide management issues and (2) basin management issues. To aid in development of these components, advisory groups have been created to work in conjunction with existing agencies. A State Water Plan Advisory Council has been organized to assist in the development of the statewide management component. This advisory council, composed of various public officials and private experts, sets annual priorities among components of the plan, assigns responsibility for drafting components to various agencies, and supervises the technical revisions of the draft components.

Local, basin-specific Citizens' Advisory Committees are to be organized to perform similar functions for the basin management issue components of the plan. These committees are appointed by the governor and provide local citizen involvement in the development and revision of plan components. The Board of Natural Resources must approve the basin management components prior to adoption by the Department. After the Department's adoption, the plan is submitted to the legislature for implementation.

The Department has recommended that the statewide management issues component of the state water plan be divided into three topics: (1) water supply management, (2) water quality management, and (3) aquatic and recreational management.

Under the water supply topic, the Department proposes components on water allocation including leasing, adjudications, permitting and reservations, reserved water rights, conservation, water development, including planning, selection and funding, hydropower, dam safety, flood protection, interstate compacts,

instream flows, groundwater management, weather modification and water resource information.

The water quality section may potentially include components such as standard setting processes, point-source pollution permitting processes, nonpoint-source pollution control, non-degradation, public water supply protection, groundwater quality protection and special quality problems including salinity, sedimentation, toxics and eutrophication.

The aquatic and recreational section might include components on riparian zone management, dredge and fill regulations, access and reservoir operation, endangered species and wetland preservation.

In addition, basin plans would include discussions and programs to deal with any of these problems specific to that basin. Some of the issues that might be discussed in the basin components include interstate water allocation, water shortages, and means to solve this problem, wild and scenic rivers, water reservations, dam rehabilitation, water quality, hydropower, nonpoint-source pollution, water use efficiency and federal reserved water rights.

Nevada

The concept of water resource planning in Nevada began with Senate Resolution Nos. 15 and 16 of the 1967 legislative session that directed the Division of Water Resources and the Legislative Commission to determine Nevada's future water needs and available water resources. In 1969, the legislature authorized the development of a comprehensive water resources plan (N.R.S. 532.105). In 1973, the legislature required that the state engineer complete the plan by 1975.

In response to this directive, the state engineer contracted with private companies and solicited public agencies to compile information regarding Nevada's water resources. Based upon the information obtained, two series of reports were ultimately published. The first series, "Water for Nevada," inventories state water resources and projection data. "Water for Nevada" contains 21 volumes that address specific topics, such as guidelines for planning, estimated water use, water supply, soil types, mining, population projections, desalting of water, fish and wildlife, recreation, agriculture, electric energy, economics and legal and administrative aspects. Included within these topics are discussions of specific issues including funding of projects, local control of water resources, groundwater depletion, transbasin diversions, preferred uses, future reservations, well permits, geothermal resources, flood control, navigability and environmental considerations such as watershed and vegetation management, sediment retention, critical wildlife habitat and rare and endangered species.

The second series of reports, "Alternative Plans for Water Resource Use," addresses water resource issues by specific regions of the state. This series divides the state into six hydrologic regions and discusses problems specific to each region. These reports provide basic data and information for decisions on proposed projects of primarily local concern. Management and water quality functions are not included in the planning process.

Though statutes mandate a state water plan, Nevada has not integrated the results of its data compilation to guide allocation and administration of water.

Nebraska

Prior to 1978, the emphasis in Nebraska water resource planning was to develop a final state water plan. In 1978, the notion of a blueprint for development was replaced by a continuing flexible planning process known as the State Water Planning and Review Process. This Process is divided into several main components: (1) policy issue analysis, (2) area planning project and program review, (3) data base gathering, and (4) project planning and design.

The key to Nebraska water planning is policy issue analysis. These policy issue studies will eventually provide a comprehensive treatment to the state's water resource problems. Policy issue studies completed to date address instream flows, water quality, groundwater reservoir management, water use efficiency, municipal need, supplemental supplies, energy, surface-groundwater integration and selected water rights issues including preferences, adjudications, groundwater property rights, transfer and interstate uses. Future studies are contemplated for stream channel alterations, flood control, drought management, water project financing and lake and wetland management.

In addition, area studies are prepared on problems specific to a particular region. These area studies are usually based on river basins or similar hydrologic units. However, these studies do not necessarily cover the entire basin.

The Natural Resource Commission is the lead agency in terms of water resource planning. The commission seeks assistance from other agencies and a public advisory board in making policy decisions.

Nebraska has been divided into natural resource districts for the purpose of coordinating management of water resources at the local level. These districts are charged with developing groundwater management plans. These plans are submitted to the commission for approval.

Nebraska water resource planning is most accurately characterized as a continuous, flexible planning process. Nebraska seems to place much more significance on managing its water resources than on trying to develop additional supplies. Furthermore, it appears that all aspects of water resource management and planning are ultimately consolidated in the Natural Resource Commission.

New Mexico

New Mexico does not have any type of state water plan. Statutes do not require integrated or comprehensive water resource planning. A water resource element is required in the state Planning Office's Statewide Resource Plan, however.

New Mexico appears to rely on its water law, particularly the appropriation doctrine, and the market system to allocate its water resources. According to the New Mexico Interstate Stream Commission, there is no anticipation that a state water plan will be developed in the near future.

The closest New Mexico has come to initiating a state water plan was the publication of the "1976 Assessment for Planning Purposes." This report, prepared by the state in conjunction with the Department of Interior and the Bureau of Reclamation, inventoried the natural resources of the state, described water problems and needs, projected future population growth, calculated present uses and future demands and discussed potential water management programs. Included within these topics, discussion of specific issues were presented such as recreation, wild and scenic rivers, water quality, groundwater, flood control, salinity, erosion, hydropower, development projects, fish and wildlife, agriculture, municipal and industrial uses, waste water reclamation, weather modification, desalinization and transbasin imports. The assessment analyzed these topics and issues in county and basin profiles.

Apparently, the Interstate Stream Commission and the State Engineer's Office attempted to secure funding from the state legislature to implement programs and planning addressing issues raised and discussed in the Assessment. Funding was not available, nor has it been available to update the Assessment. As it stands now, the Assessment is outdated and of little practical significance.

North Dakota

The North Dakota Century Code § 61-02-14 grants the State Water Commission broad powers and primary responsibility for managing the state's water resources. Nowhere in the statutes is

there a requirement that the Commission prepare a state water plan, but the legislature has clearly expressed a need for "comprehensive, coordinated and well-balanced short- and long-term plans and programs" for water resources. Century Code § 61-02-14 further gives the Commission authority to cooperate with the federal government in planning of dams, reservoirs and distribution systems for domestic, municipal, industrial, hydroelectric, irrigation, flood control and conservation purposes.

In response to growing water resource management needs, the Commission adopted the 1983 State Water Plan. The Plan has five separate divisions based on the state's major hydrologic subdivisions. Together these five basin division components constitute the state water plan.

The Commission identified a number of issues that should be considered when devising the goals and objectives for each region. These issues include flood control, erosion control, water development projects, water quality, irrigation, recreation, fish and wildlife, navigability, weather modification, drought management, energy and funding.

North Dakota's planning process emphasizes public participation throughout the process. Public participation begins with setting goals and objectives for each basin division. To assist public participation, seventeen Citizen Advisory Boards were created. These advisory boards are devised according to political boundaries within each basin division. Citizen Advisory Boards develop recommended action plans for their basin, including project priorities. These recommendations are passed along to the Commission, which has ultimate authority with respect to planning decisions.

The North Dakota water resource planning scheme has resulted in a framework within which development can occur. The 1983 State Water Plan is not really a plan, but a compilation of projects proposed by various basin planning groups.

Oregon

Oregon does not yet have a statewide water plan. Instead, they presently rely on a basin planning approach. However, Oregon is in the process of revising its approach to water resource planning.

The Water Resources Commission and Water Resources Department have been developing administrative rules and guidelines to guide basin planning. On January 30, 1987, the Commission appointed a subcommittee to assist staff in drafting rules to pursue statewide as well as basin planning. The subcommittee has been directed to seek input from state agencies and the Statewide Basin Planning Advisory Committee and have draft rules completed

by April 24, 1987. At that time, the Commission hopes to implement this new planning approach.

The two-phase planning process contemplated by Oregon would provide considerably greater direction in planning than presently occurs under the current basin planning program. Statewide issue planning has been recommended for conservation, protection of riparian zones, recreation, minimum streamflows, federal reserved water rights, watershed and land use management and other topics. Statewide goals and policies would provide criteria that basin planning could follow. In short, this new planning approach could streamline planning by providing comprehensive programs at the state level and allowing basins to manage their water resources based on localized conditions.

A number of criteria that could be integrated into basin plans include nonpoint-source pollution, watershed management, conservation, wastewater reclamation, instream flows, reserved rights, interbasin transfers, artificial recharge, drought management, conjunctive use, groundwater management and integration of state policies and plans.

Oregon's proposed planning approach is patterned after the approach used by Kansas and proposed in Montana. Oregon's new approach is characterized as more of a planning process than a plan. If implemented, this new approach will be on the leading edge of water resource planning and management. It appears that Oregon places more emphasis on management of water resources than on consideration of water development projects.

South Dakota

The idea of a state water plan dates back to 1972 when the South Dakota legislature entrusted the South Dakota Conservancy District with the development of a comprehensive State Water Plan. Simultaneously the legislature passed the South Dakota Water Resources Management Act to implement the Comprehensive State Water Plan.

In 1980, the conservancy district abandoned its attempt to create a general management plan and concentrated on a functional planning approach that emphasized specific project development.

In 1982, the legislature shifted the responsibility of developing a state water plan to the Board of Water and Natural Resources (S.D.C.L. 46A-2-2). The Board is further required to prepare and submit a yearly progress report on the State Water Plan to the Governor and the legislature.

The statewide goal of the plan is "to achieve optimum overall benefits of the state's water resources. . . through the conservation, development, management and use of those resources." The Board is charged with developing statewide policies for water

development. The Board has recognized that water development encompasses considerations including economic development, irrigation, conservation, domestic uses, tourism, rural water systems, lake restoration, recreation, flood control, watershed management, erosion control, drainage, water quality and water supply.

The 1984 State Water Plan consists of two components: (1) the planning component, and (2) the financing component. The planning component includes a natural resource inventory containing information such as existing water rights, water supply and water quality and a listing of potential water projects.

The financing component is comprised of the State Water Facilities Plan and the State Water Resources Management System. The State Water Facilities Plan identifies larger projects that require specific state and federal authorization and financing.

The planning process places responsibility on the local water development districts to develop, review and establish project priorities within their areas. Based upon these recommendations, the Board makes final decisions for each project based on eligibility criteria. In sum, the South Dakota State Water Plan is really a process for prioritizing development projects.

Texas

Texas Water Code § 16.051 mandates the "Director of the Department of Water Resources to prepare and maintain a comprehensive state water plan for the orderly development and management of the state's water resources in order that sufficient water will be available at a reasonable cost to further the economic development of the state." The Department is directed to amend and modify the plan in response to experience and changing conditions.

In response to this mandate, the Department adopted a state water plan, "Water for Texas," in 1969. The plan has been periodically updated, with a major revision being published in November, 1984. According to the Texas Water Development Board-Planning Division (a division of the Department of Water Resources), the plan is currently being revised to reflect changed conditions.

The Texas Water Code specifies that the state water plan must define and designate river basins and watersheds as separate units. As a result, the plan divides the state into eight regions. Specific problems within each basin are given attention. Even though planning is done by region, planning decisions are concentrated at the state rather than the local level. The Department, however, seeks input from other state, federal, and local agencies and the public in setting the goals and objectives

of the state water plan and particularly the regional components.

The Water Code is quite brief in its discussion of the topics which are to be addressed in the plan. The only specifically mentioned issues are consideration of the public interest, economic cost of programs, economic development of the state through water resource policies, bays and estuaries, navigation and existing water rights.

Additional issues and topics for inclusion within the state water plan have been developed by the Department in conjunction with the public and private sector. Under the section entitled "Plans to Meet Water Quality Protection and Water Supply Needs," the plan discusses projections of population and water requirements, public education and awareness, water quality protection, water quality enhancement, flood protection, bays and estuaries, drought contingency planning, weather modification, desalting, secondary recovery of groundwater, water supply development including both surface and groundwater, water importation, costs of programs and financing and allocation of water supplies to regional demands.

Planned action and policy recommendations cover topics such as conservation, financing, preservation of reservoir sites, groundwater management, water quality management, instream flows for fish and wildlife, mitigation, freshwater inflows to bays and estuaries and multi-state water planning.

Water resource planning in Texas appears to be ahead of many other western states. Texas water planning is accurately characterized as an integrated, comprehensive water quality and water quantity planning and management scheme.

Utah

In 1984, the Utah legislature passed Senate Bill 97 which directs the Division of Water Resources to develop and implement a state water plan to maximize the use of available water. No state water plan has been published yet, but according to the Division of Water Resources, that office is currently working on a comprehensive plan. Apparently, the Division publishes an annual summary of their progress with respect to the state water plan.

In 1985, the Division prepared a report entitled "State of Utah Water" which provides an overview of past, present and future water and related resource planning. Although not the state water plan, this report emphasizes development of surface water and flood control projects.

Enabling legislation is quite vague as to what the state water plan should include. It appears that the only requirement

is that the plan address long-term solutions to regional water problems and consider management options for agricultural, municipal, industrial, recreational, and wildlife uses and flood control. Additional topics and issues discussed in the State of Utah Water include energy/hydroelectric production, salinity control, water quality, existing water rights, changing demand, hydrologic and land use inventories, economic feasibility of development projects, and funding.

Utah is a leader among states in terms of water development projects due to three revolving fund programs designed to assist local regions in construction of water projects. Over 700 projects have been built using funds from these programs.

Water planning in Utah does not appear to divide the state into basins for planning purposes. Local regions though, do have influence over development projects and other programs that affect their region.

Utah water resource planning is best characterized as development oriented. Utah apparently perceives the need to develop additional water supplies to stimulate its economy. Utah is also very concerned about flood control projects and these are given high priority due to the recent flooding problems Utah has experienced.

Washington

The Water Resources Act of 1971 (RCW 90.54) directs the Department of Ecology to develop and implement a comprehensive state water resources program which will provide a process for making decisions on future water resource allocation and use. The purpose of the program is to ensure that the waters of the state are protected and utilized for the best interests of the people. The Act further provides that the Department may develop a water program in regional segments so that immediate attention may be given to waters of a given physio-economic region of the state or to specific critical problems of water allocation and use.

Pursuant to the mandate of the 1971 Act, the legislature passed WAC 173-500 et seq. which set forth a program to guide and facilitate the further development of the state's water resources. The program, known as the Water Resources Management Program, was to identify and foster development of water resource projects, declare use preferences, set forth streams closed to future appropriations, establish minimum flows necessary on perennial streams to provide for preservation of wildlife, fish, scenic, aesthetic, and other environmental and navigational values, allocate quantities for beneficial use, reserve water for future use, and designate areas within the state to be used for management purposes. The state was subsequently divided in 62

areas known as Water Resource Inventory Areas. These areas correspond to watershed basins within the state.

The current water resource management program has evolved considerably since the 1971 Act. The major elements of the state water resources program today are basin/instream resources management, ground water management, representation of the state's interest, project development and rehabilitation financing, new hydroelectric development, adjudication of water rights, water allocation, public safety and public involvement.

According to the Washington Department of Ecology, the emphasis of Washington's Water Resource Program is on instream flows management. Instream flow protection dates back to 1947 when the first law providing for the goal of minimum streamflows was passed. Under this and subsequent legislation providing for a formal process to protect instream flows, numerous streams have been closed to further appropriations and low flow provisions have been applied to individual permits on many other streams.

An Instream Resource Protection Program has been adopted for a number of the 62 Water Resource Inventory Areas. These programs establish specific minimum instream flow levels and seasonal stream closures to protect instream resources. The Department works with a number of interested groups, agencies and the public in developing instream protection measures which are tailored to the specific conditions and needs of the individual basins.

The change in emphasis from the development of comprehensive basin management programs to developing more narrowly scoped Instream Resources Protection Programs is linked to funding and changing priorities.

The state's instream flow programs have generated considerable controversy. As a result, in 1985 the Department decided to conduct a thorough program review and prepare an EIS for the instream flow and water allocation program. A draft programmatic EIS was released in January 1987. A final EIS is due shortly.

When the instream flow and water allocation EIS is final and a revised instream flow program is agreed upon, the Water Resources Program will then resume its water resources planning work. Until then, water allocation planning will be postponed except for data gathering.

Even though Washington doesn't have a state water plan, they do place a great deal of emphasis on water resource planning. At this time water resource planning is at somewhat of a standstill since most of the Department's resources are involved in the instream protection programmatic EIS.

Wyoming

The Wyoming Water Development Commission is given the responsibility for the coordination of Wyoming's water and related land resources planning (W.S. 41-1-106). The Commission is further charged with formulating and periodically reviewing and revising water and related land resources plans for the state and appropriate regions and river basins. (W.S. 41-2-107).

The water resource plans are to:

1. identify, describe and inventory quantity and quality of water, uses and water related activities;
2. identify and describe future demands and needs, opportunities for water development, control, withdrawal, storage, conservation, supply, distribution, drainage and disposal;
3. identify state, regional and local goals and management objectives for each plan; and
4. evaluate prospective and anticipated uses and projects.

The basic Wyoming framework water plan has not been revised or updated since May, 1973. This is primarily due to the Commission's preoccupation with responses to requests for assistance on specific projects. This has overshadowed any attempts to complete a new water plan.

In 1979, the Wyoming Water Development Program was established (W.S. 41-2-112). The program was established "to foster, promote and encourage the optimal development of the state's human, industrial, mineral, agricultural, water and recreational resources." The program provides procedures and policies for the planning, selection and financing of projects and facilities for the conservation, storage, distribution and use of water for the state's residents. Furthermore, the program encourages water development projects for irrigation, flood control, pollution abatement, preservation of fish and wildlife, protection of the public lands and to make water available for beneficial uses such as domestic, mining and industry, agriculture, hydropower, recreation and conservation of land resources.

Since the inception of the Wyoming Water Development Program, the Commission has undertaken a number of projects. These projects include river basin studies, area water development plans, irrigation projects, irrigation rehabilitation projects, multipurpose storage projects, evaluation of groundwater aquifers, salinity control studies and transbasin diversion studies.

Because of the water development emphasis, Wyoming's water

plan is not coordinated nor is it comprehensive. Rather, it is project development oriented. The current responsibilities of the Commission are to evaluate project feasibility and make recommendations relative to project and program development. The goal of the new development program is to proceed toward orderly development of water consistent with available financial resources.