INTRODUCTION

Authority

(1988 Idaho Session Laws 1091, c. 370, Section 1)
(Relating to the Development of a Comprehensive State Water Plan)

"The legislature finds and declares that a central component of state sovereignty is the inherent right of the state to regulate and to control the natural resources of the state. In a state such as Idaho, it is essential that this state exercise its full authority to manage its water. To that end, it is the purpose of this act to provide for the full exercise of all the state's rights and responsibilities to manage its water resource."

Idaho Code 42-1734A
1988 Update of 1965 Legislation

(1) "The Idaho Water Resource Board shall, subject to legislative approval, progressively formulate, adopt and implement a comprehensive state water plan for conservation, development, management and optimum use of all unappropriated water resources and waterways of this state in the public interest. As part of the comprehensive state water plan, the board may designate selected waterways as protected rivers as provided in this chapter . . . ."

(2) "The board may develop a comprehensive state water plan in stages based upon waterways, river basins, drainage areas, river reaches, ground-water aquifers, or other geographic considerations."

Idaho Code 42-1734H
1988 Update of 1965 Legislation

(1) "The board shall designate the following waterways as interim protected rivers pursuant to section 42-1734D, Idaho Code . . . . (e) Henry's Fork from the Snake River from its point of origin at Henry's Lake to the point of its confluence with the backwaters of Ashton Reservoir."

Acknowledgements

For this plan, a prime input has been the Henrys Fork advisory group listed in the methodology section. This group, made up of basin residents, was created to bring up issues as viewed by different segments of the basin population.

The help of many federal and state agencies is greatly appreciated. Excellent cooperation was received from the planners of the Targhee National Forest, Bob Williams and Maureen McBrien and their staff. Idaho Department of Fish and Game regional fishery manager Steve Elle at Idaho Falls gave significant early input along with several state office personnel. Idaho Department of Parks, Harriman State Park manager, Gene Eyraud, as well as the state office planner, Mary Lucachick, were quite helpful many times. Several personnel from the Idaho Division of Environment's Pocatello field office provided input and review assistance. Lastly, personnel from the U.S. Bureau of Reclamation in Boise and Burley were involved at different times, particularly early in the study when Harold Ward gave much help as a result of the Teton Project reanalysis.

Basin Description

This portion of the state water plan is prepared for the entire part of the Henrys Fork basin in Idaho including the Falls River and Teton River drainage basins. The basin extends from the Idaho border to the Henrys Fork junction with the South Fork Snake River north of Idaho Falls (Figures 1 and 2). The Henrys Fork is a major tributary of the Snake River draining about 2,700 square miles in Idaho plus 500 square miles of Wyoming. Over 50 percent of the basin is public land. The average estimated amount of water entering the basin each year as precipitation is nearly 4,100,000 acre-feet. The amount leaving the basin as the annual flow for the Henrys Fork is 1,400,000 acre-feet.

Goals

Broad Basin Goals

As set forth in Idaho Code 42-1734A(1):

1. Existing rights, established duties and relative priorities of water established in the Idaho Constitution shall be protected and preserved.

2. Optimum economic development shall be achieved by the integration and coordination of the use of water, the augmentation of existing supplies, and the protection of designated waterways for all beneficial uses.

3. Adequate and safe supplies for human consumption and maximum supplies for other beneficial uses shall be preserved and protected.

4. Minimum streamflow for aquatic life, recreation, aesthetics, minimization of pollution, and the protection and preservation of waterways shall be fostered and encouraged, and consideration shall be given to the development and protection of water recreation facilities.

5. Watershed conservation practices consistent with sound engineering and economic principles should be encouraged.

One must note that while optimum economic development is stipulated, minimum streamflows are also stipulated. Within this framework, specific basin goals are listed below.

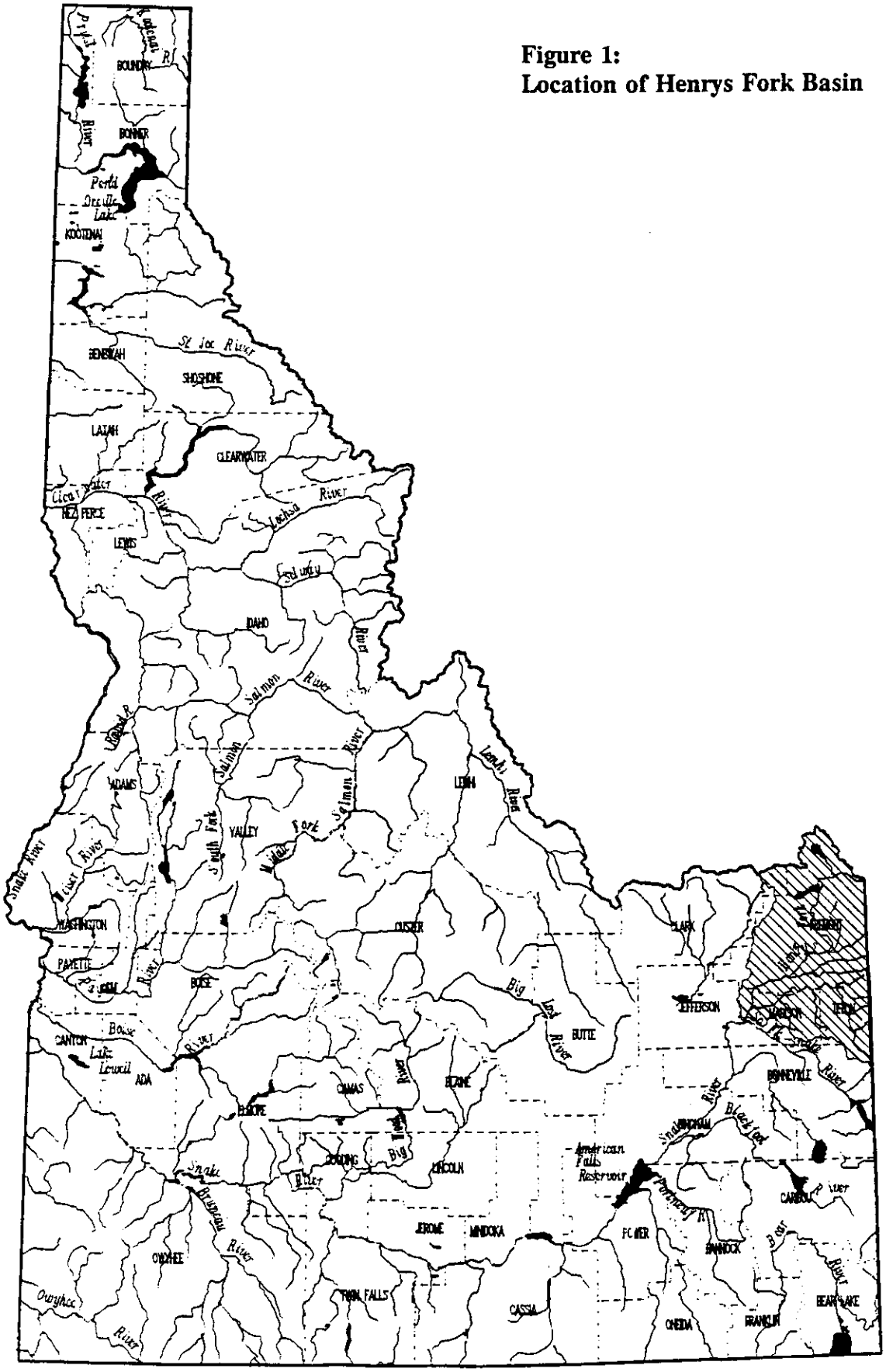
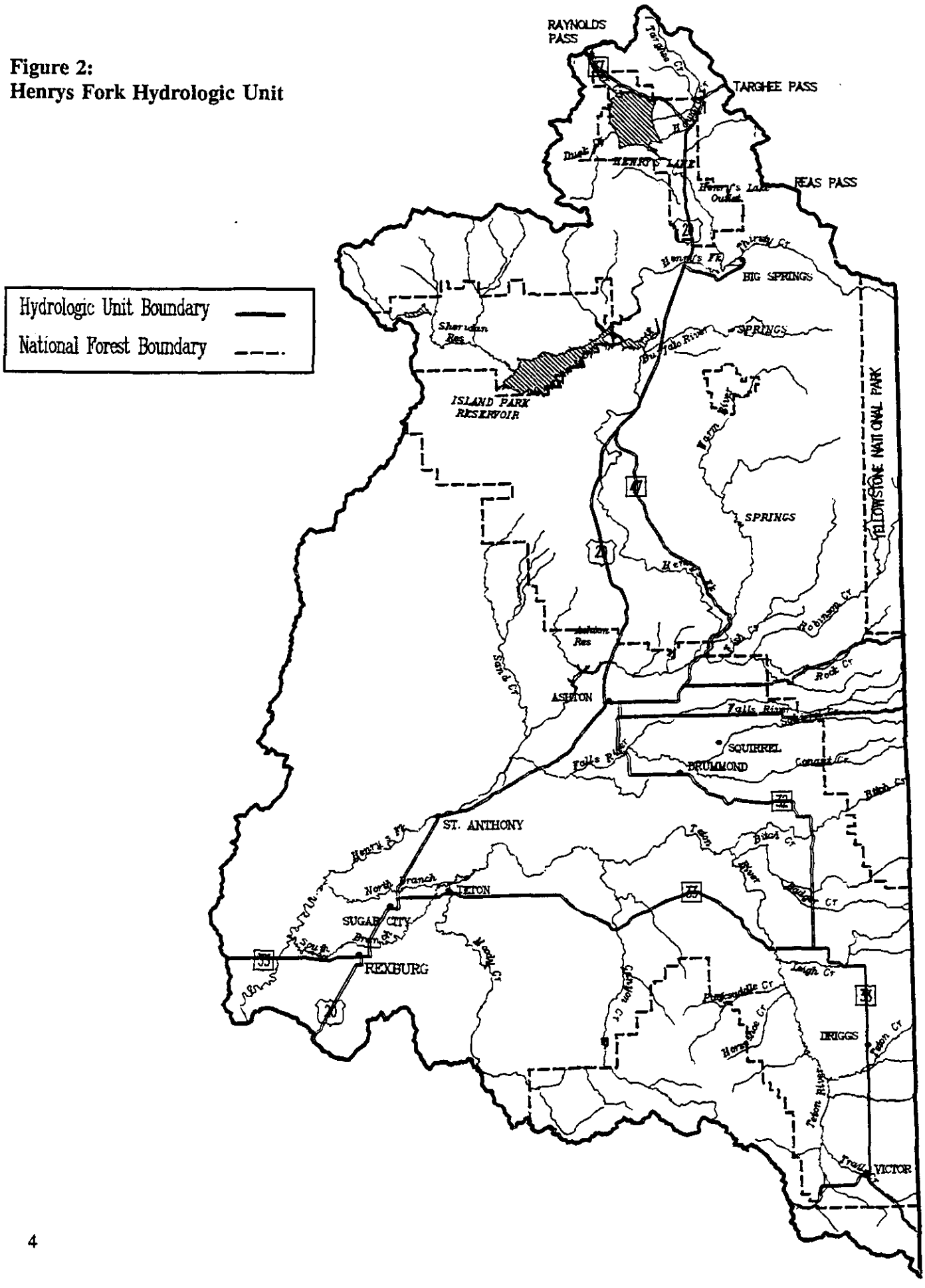


Figure 1:
Location of Henrys Fork Basin

Figure 2:
Henrys Fork Hydrologic Unit



Cultural Features, Human Resources, and Economic Activity Goals

1. Increase efforts to identify and care for historic and archaeologic sites.

2. Encourage long-range, sustainable economic growth that is sensitive to environmental concerns.

Basin-wide population growth is above the state average. The county with the highest recreational resources, Fremont County, however, has not increased in the last ten years. The recent growth largely has been in Madison County, a trade center with a large regional junior college. Teton County had fair growth in the last twenty years, largely resulting from a spill-over effect from Jackson Hole including many employees from that area living in Teton County.

The average economic level in all counties of the basin presents a different picture. The average income level of the counties has been declining relative to the U.S. average for the last 20 years as has the Idaho average.

The percent of families below the poverty income level and below the near poverty income level is considerably greater in all basin counties than the average in Idaho. In 1980 in the United States, 32 percent of the families were below twice the family poverty income (2 x $12,800) while in Idaho 38 percent were below this income. In Fremont, Madison and Teton counties, the percent below this near poverty income level was 50, 60 and 62 percent respectively. Thus, there appears to be many underemployed people in the basin. Similarly, the poverty rates of roughly 20 to 25 percent are considerably higher than the Idaho average. The seasonal employment of two main industries, agriculture and tourism, is a major cause of underemployment. Unemployment levels in Madison and Teton counties are similar and are sometimes lower than the State of Idaho average. In Fremont County the rate has been about 50 percent higher than the Idaho average unemployment rate.

The main industry in Fremont and Teton counties is agriculture. For Madison County, Ricks College appears to be the main income generator while agricultural related activities are a close second. For Fremont County, tourism is a significant factor, estimated to be about 30 percent of the agricultural sector value.

The basin possesses sites and artifacts of archeological and historical significance. Archeological and cultural sites, buildings, and artifacts provide critical historical information, and provide a visual glimpse and geographic link to people and events of our collective past.

Fish and Wildlife Goal

1. Maintain and enhance fish and wildlife populations and their habitat.

The Henrys Fork basin is rich in fish and wildlife diversity and abundance. The area is wintering and nesting ground for species of concern, such as the grizzly bear, the trumpeter swan, and the bald eagle. The streams, lakes, and reservoirs provide excellent habitat for fish, and draw international recognition from the fishing public. Wetlands and riparian vegetation around lakes and along streams provide critical habitat for wildlife species and fish.

Wildlife contribute to the food supply, recreation, education, and aesthetic pleasure of human beings. Title 36, Idaho Code declares all wildlife within the state of Idaho to be the property of the State of Idaho, and "It shall be preserved, protected, perpetuated, and managed." Protection of fish

and wildlife habitat is noted in both the Idaho Code and the 1986 State Water Plan, and is declared a beneficial use of water.

Development projects must take into consideration fish passage and the maintenance of fish and wildlife habitat. Potential conflicts with water projects revolve around the amount of water left in the streambed, and disturbance of nesting, calving and wintering areas.

Natural Features and Scenic Values Goal

1. Protect outstanding natural features and scenic values in the basin.

The Henrys Fork basin is rich in scenic landscape and prominent natural features. In particular, the basin is noteworthy for features of the Island Park caldera, views of the Teton mountain range, many canyon environments and Mesa Falls. Aesthetic factors are highly significant in determining the quality of an environment for human beings. Visual experiences which give pleasure and enjoyment, enrich our lives. Natural features of the basin are also important by virtue of scarcity and scientific study value. Protection of scenic resources and natural features is in the public interest.

The scenic and aesthetic value of water is noted in both Idaho Code 67-4301 to 67-4311 and the 1986 State Water Plan, and it is declared a beneficial use of water. Planning should protect and mitigate negative impacts to scenic landscapes and natural features from project development or general growth.

Aquaculture Goal

1. Ensure proper effluent controls are required for aquaculture.

Aquaculture at a commercial level is possible in certain areas of the basin. There are State of Idaho fish production facilities and limited farm-pond fish production facilities in the basin. There appears to be a potential for commercial fish production in the south of Rexburg to Newdale area; although, the necessary water would need to be pumped. For any new facility, the benefits to the economy must be balanced against negative impacts from effluent releases.

Domestic, Commercial, Municipal, and Industrial Water (DCMI) Goal

1. Good quality water must be maintained to meet the present and future domestic, commercial, municipal and industrial water use needs.

DCMI water generally has the highest priority of use. In the past and in the foreseeable future, the DCMI use in the basin has been and will continue to be small when compared to other uses.

The broad basin goals suggest all DCMI needs should be preserved and protected. Since natural flow water is fully appropriated in drought years, new DCMI water would need to be provided by ground-water appropriation, by a long-term rental agreement, or by the purchase of natural flow or storage water. The general source has been ground water and likely will continue to be ground water for most new uses.

Irrigation Goals

1. Encourage orderly and efficient new irrigation development in the basin within the statutory guidelines.

2. Initiate practices to further increase the net economic return from the existing land.

3. Improve safety practices to reduce canal drownings.

Irrigation provides the means by which the majority of the economic activity in the basin takes place. Recently, more efficient use has been made of the basin's land and water through crop selection and conversion to labor- and water-efficient irrigation systems. Some expansion in the amount of irrigated acreage has occurred. The economic health of the area appears to be well served by a continuation of these trends. Related is the large amount of recharge to the ground water by gravity irrigation over shallow soils which benefits down gradient ground-water areas. There are, however, environmental impacts during low-flow periods from diversion amounts which approach the available water supply.

Livestock Water Goal

1. Meet present and future water needs for livestock.

The amount of livestock water use is very minor; the water generally comes from ground water, thus impacts are very small. Grazing livestock will use surface water sometimes from surface runoff catchment ponds but largely from streamflows. The stream banks provide good vegetative feed and thus draw livestock for more than the water. In many areas, concentrated livestock movement can cause stream-bank damage which leads to a loss of protected, shaded, slow water areas for fish, other aquatic life and waterfowl.

The instream watering of livestock is suggested in 1984 state legislation (Idaho Code 42-113) as a use that should be continued. The requiring of this livestock water study element in the 1988 comprehensive water plan legislation reiterates the same 1984 legislative concern. Neither reference suggests that some guidance of livestock into selected areas is not acceptable.

This guidance into selected areas for watering is the approach encouraged in high-value stream areas by the fish management agencies. The amount of higher value feed made not available may be small if fencing is placed close to the stream bank. There are nonfish related wildlife needs for wide stream-bank areas. These issues can influence the width of stream-bank fencing or related protection, but are not directly water related.

To file a water right claim or an application for a water right permit for instream or adjacent livestock watering, would clearly notify all other potential water users of the need to provide for livestock water needs. This is important mainly when the livestock use is downstream of potential upstream diversions.

Mining Goal

1. Make water available for mining if the project is environmentally acceptable, is in the local public interest, and meets the other water appropriation criteria.

Sand and gravel production for local construction, mainly for roads, is the primary mineral production activity throughout the basin. There is a minor amount of water used to wash soil particles from the sand and gravel.

There are significant coal deposits in the Big Hole Mountain area of the basin, but the coal beds dip steeply which would make open-pit mining very costly. Underground mining for coal cannot

compete with open-pit mines in the West. Oil-shale deposits also are located in the same areas as the coal deposits as are a significant amount of phosphate deposits. Other phosphate deposits are located in the Centennial Mountain area adjacent to Montana. The beds of all these deposits dip steeply making an open-pit mine quite costly in relation to deposits in other areas of the West. Large expenses would need to be made for environmental mitigation measures to mine these sedimentary materials by open-pit methods.

The geologic structures in the basin suggest there is oil and gas potential but extensive folding, fracturing and volcanism evidently has prevented the collection of oil and gas into economical reservoirs. There is one small decorative building stone quarry in the basin as well as a few small gem stone occurrences that interest the part-time collector.

In summary, the mining associated water use and potential use in the basin is very small.

Navigation

Navigation for commercial purposes currently does not take place in the basin and is not likely to take place. Navigation for recreational purposes occurs, and is discussed in the recreational opportunities section under a boating category. Thus any related goals, objectives and recommendations are within the recreational opportunities section.

Recreation Goal

1. Protect the quantity and quality of prime recreation waters.

Outdoor recreation can be a powerful directive force which broadens and develops individual personality and achievement. Recreation affords a change from daily routines and helps relieve stress. Idaho's quality of life is often measured by the abundance of opportunities for outdoor recreation. Idaho has progressed through history fully reliant on her natural resources, economically and recreationally. Recreation can be an important economic factor in the basin. Not only do tourists bring money into the area, but many residents take advantage of the recreational opportunities in the basin rather than travelling to areas outside the basin and spending money there.

Water Safety is a necessary aspect of recreation. As mentioned in the irrigation section, public awareness of water safety issues needs to be continually advocated. Along this line, learn-to-swim campaigns have been mentioned.

There is public interest in paving primary access roads to encourage greater use of recreational resources not located on major highways.

Timber, Grazing and Dry Farming Goals

1. Encourage timber production, grazing, and dry farming at a sustained yield with protective provisions for riparian areas, recreation corridors, fire control, and erosion control.

2. Water yield should be a planning consideration.

3. Encourage the use of best management practices throughout the basin.

Each of these resource industries deals primarily with land-use issues and generally are regulated by other agencies. The water-related issues deal mostly with water quality as influenced by land use

and precipitation runoff. Water yield from grazing and forested land is increased significantly when the vegetation shifts more to a grass type.

Energy Conservation Goal

1. Achieve energy conservation through cost-effective retrofits and insulation improvements.

2. Encourage local units of government to adopt stringent construction standards to ensure that new construction will be energy efficient.

Energy conservation can be a cost-effective method of providing new energy resources. Energy conservation is not done in one project by one entity, but by a total of many small projects by many entities. Education therefore becomes an important part of any energy conservation program.

There is an appreciable amount of energy conservation potential in the basin. Energy savings are possible by residential, commercial and irrigation electric users, and by some industrial users. Currently education and regulatory programs are causing some energy conservation activities. More emphasis is needed in both areas.

Geothermal Energy Goal

1. The use of ground-water heat pumps for space heating is encouraged, especially where warm ground water exists.

2. High temperature geothermal uses are encouraged if the resource can be developed without appreciable impact upon other resource uses.

Geothermal water is available in the basin, but, in general, only low-temperature uses are possible. Aquaculture uses are discussed in a separate section. Earlier views of a high-temperature resource in the Island Park area now are questioned. Any drilling for warm water in the agricultural portion of the basin, that is downstream from Warm River, is far enough removed from the Yellowstone National Park area that any connection of systems would be unlikely. Low temperature uses mostly would be for space heating and generally would need to make use of ground-water heat pumps.

Power Development Goals

1. The Board's position is that the acquisition of cost-effective energy conservation and efficiency improvements are the most desirable actions at this time. Within these bounds, it is the goal of the Idaho Water Resource Board to encourage energy conservation and the development of new hydropower at existing dams and diversion structures whenever feasible.

2. In keeping with the State Energy Plan, it is the goal of the Idaho Water Resource Board to allow development of hydropower sites that are economically feasible, compatible with existing water rights, and environmentally acceptable on streams not designated for protection, on rivers that are designated as "Recreational Rivers" where hydropower is not prohibited, and in off-stream areas.

3. Proposals to develop new hydropower sites on protected rivers will be evaluated on a case-by-case basis. Where the need for and benefit to the state outweigh negative consequences associated with the proposed development, the Board will support such development.

There are several potential small hydroelectric sites in the basin. Their location along the basin's main water courses, however, in most cases, conflicts with the instream use of the water during the summer recreation season. Many of these conflicts are in such high value recreational use areas that the conflicts are difficult to mitigate. Even for the sites where mitigation is possible, the amount of power able to be produced is small.

In addition to state water right approval, any new project on the Henrys Fork down to Ashton Reservoir would require not only Federal Energy Regulatory Commission approval along with the agencies they consult but also congressional approval (1986 - Public Law 99-495; 100 Stat. 1243). The Idaho Water Resource Board has a 1,000 cfs summer minimum flow right for the Mesa Falls area which would prevent water being used for hydroelectric production except for the use of Island Park Reservoir or Henrys Lake storage releases for much of the summer period. The 300 cfs winter minimum flow in the Mesa Falls area will not greatly constrain power development, nor will the year-round 300 cfs flow from the mouth of the Buffalo River to the Mesa Falls area.

There are several small sites in the basin that appear economically feasible. The likely method of development would be with a partial stream diversion to a canal paralleling the stream. Then after a few miles, there would be a penstock for the drop to a stream-bank powerhouse. Dams also could develop these hydropower sites, although, the environmental changes would be much greater than with the stream diversion-canal method. In the Basin Resources portion of this plan nearly 30 potential hydropower sites are identified.

Flood Control Goal

1. Lessen annual property value losses and other economic impacts resulting from repeated flooding through economically feasible and environmentally acceptable actions.

Flooding from the lower Teton River between the mouth of the Canyon and the junction with the Henrys Fork is a common occurrence. General area inundation occurs more frequently than every 10 years. The general area flooding is increased by low bridge design of about nine structures over the Teton River of which at least three have beams under water during a 10 year flood. These low bridges in turn accentuate the local flooding and could make the bridge owners liable for the increased water inundation damages.

The Teton River bank full capacity appears to be 2,000 cfs while the 100 year flood is 13,000 cfs. Currently, about 11,000 acres would be flooded in the 100 year flood with a present value and project limit in lieu of purchasing a flood easement of $16,000,000. The Federal Energy Management Agency stipulates that the 100 year flood is the standard to be used in zoning for new development. The Corps of Engineers chooses the size of a flood control project based on the greatest net economic benefits (damages prevented in excess of project costs) consistent with protecting the environment.

A recent federal reanalysis of the feasibility of rebuilding Teton Dam allocated $49,000,000 of the construction cost to flood control while the least cost flooded area purchase option is only near $16,000,000. This is one of several factors which makes Teton infeasible at this time.

There also is a flooding problem on the lower Henrys Fork, below Ashton Reservoir, with special problems from four miles below St. Anthony to the junction with the Snake River. Limited control could come from more dual flood control-irrigation space being provided in the upstream reservoirs and exchanged for straight irrigation storage in main-stem Snake River reservoirs. Study is needed of this area to more fully identify the problem and solutions.

A reconnaissance flood control study would help in identifying alternatives for managing the Teton River and Henrys Fork flooding. There appear to be some flood control actions that could be cost-effective. Any federal project would require at least 25 percent nonfederal cost sharing.

Water Quality Goals

1. The surface water quality in the area shall be kept at a high level consistent with good nutrient levels for high aquatic life production.

2. In areas where aquatic life production can be increased through water-quality improvement, remedial actions are recommended.

3. Ground water shall be maintained at a high level to allow for its use as a drinking water supply.

The water quality in the basin generally appears good. Moderate nutrient loads promote plant growth which in turn supports a highly productive fishery in the upper Henrys Fork, Island Park Reservoir, and Henrys Lake. However, there have been summer periods with excessive algae growth and subsequent oxygen depletion in the Henrys Fork. Treatment of wastes from summer homes in the upper Henrys Fork basin is one solution to the problem of excess algae production. Further study of the need to limit nutrient addition to the upper river, Henrys Lake, and Island Park Reservoir appears to be needed. In certain areas and at certain times, additional nutrients could be beneficial for more instream fish production.

The Bureau of Reclamation is providing assistance to the Idaho Department of Health and Welfare in the development of a water quality management plan for Henrys Lake. The purpose of the lake management plan is to provide alternatives for controlling the input and recycling of nutrients. Completion of the management plan is expected in April, 1993.

In the lower Henrys Fork basin shallow perched water levels create an environment easily contaminated by household waste water. Area-wide sampling has shown some well contamination. Further study appears to be warranted in the lower basin. A potentially similar condition occurs in the upper Teton Valley. A study may show the need to upgrade the wastewater treatment for many rural homes. Ground-water contamination may occur due to the downward migration of agricultural chemicals.

In areas of rhyolitic rock radium-226 levels in the drinking water and soil gas radon-222 levels in buildings may be elevated. These areas are located in portions of the Island Park plateau and in the higher plateau lands east of the Henrys Fork.

The impact of runoff from erodible, cropped agricultural land should continue to be controlled. These lands generally are located on sloping plateau benches. Best management practices for farming of the land has been the recommended control strategy. Education has been the tool to encourage the use of the best management practices. New practices are being established as improved chemicals and improved equipment are being developed. As new best management practices are established, the control of sheet (general broad-area) erosion will be under control in the few areas where added control now would be beneficial.

Water Supply and Water Conservation Goals

1. Encourage a greater efficiency of use of the basin's water supply, including possible ground-water recharge during average flow and high flow years.

During an average year 4,100,000 acre-feet of precipitation occurs in the basin, of which 1,300,000 acre-feet evaporates from the ground and water surface or transpires through vegetation at the place of precipitation (evapotranspiration). An additional 1,400,000 acre-feet moves out of the basin through surface outflow. The remaining water is accounted for as follows:

Surface Water Irrigation Consumption	= 500,000 AF
Ground Water Irrigation Consumption	= 200,000 AF
Ground Water Outflow	= 700,000 AF

The above averages are highly variable. For example, the yearly average of 1,410,000 acre-feet of surface outflow under present conditions has varied from 440,000 acre-feet to 2,370,000 acre-feet. This highly variable outflow generally is stored at American Falls Reservoir for downstream users unless exchanged for use by upstream users.

Low water years provide considerably less water for surface water irrigation. The maximum allowable shortage in the worst year of record under current Bureau of Reclamation planning criteria is a 50 percent shortage. Additionally, no more than an average shortage of 10 percent per year over 10 years should be allowed. For the basin the worst average shortage has been less than the maximum allowable (50 percent). There are, however, a few canals that have greater than the maximum shortage. Several remedial measures could help lessen the low-flow year impact.

In general, there are five sources which might provide water for additional use: (1) the water bank, (2) water conservation, (3) pumping ground water, (4) weather modification, and (5) off-stream surface water storage.

First, in many areas of the basin, especially in the lower Henrys Fork basin, more water could be made available through increased use of the rental pool. In the upper basin stream flows may not be sufficient to provide exchangeable water. (Exchanges now require the approval of the water right holder.)

Water conservation on presently irrigated lands and in related distribution systems is a second source of water. Sandy soils located over much of the lower Henrys Fork basin, coupled with gravity irrigation methods command high water use. Similarly, distribution systems through these areas lose considerable amounts of water. The most cost-effective method of conserving water would be to change field application systems from gravity to sprinkler. This conversion is currently happening in the Henrys Fork basin. If large areas are changed to sprinkler irrigation, large amounts of water can be conserved. Perhaps the most economical method to conserve water in distribution systems in the lower valley area where ground water is available at depths of under 100 feet, is to change the entire system to ground water pumps.

During average and good water years there are advantages to inefficient water use in the Henrys Fork basin. Water applied in the Henrys Fork basin recharges the Snake Plain aquifer and is used primarily outside the basin. An ideal system would promote surface water use and gravity irrigation methods in high and average flow years, and ground water use and sprinkler irrigation methods in low flow years. Water conservation which results in reduced irrigation diversions could have third party impacts and these must be investigated as part of water conservation activities.

A third source of water would be ground water. In many areas where new lands for irrigation are located, ground water may be available only in limited quantities. Complete ground water studies are needed in the area east of St. Anthony and north of the Teton River and north of Bitch Creek as

well as in the Canyon Creek area. In the lower Henrys Fork valley large amounts of ground water are available at low lifts for supplemental water use in that area and for exchange purposes if water right requirements can be met.

A fourth source of water is weather modification based on cloud seeding. The success is generally an increase of 10 to 15 percent in precipitation, yet the increase in runoff may be a little greater. This may be a very low cost method of providing additional water. For less than a region-wide water using group, new legislation may be needed to allow the implementing group to acquire use of the increased water. Special conditions will be needed to provide that the other water users are protected.

The fifth source of additional water is new surface water storage. Several off-stream sites have been identified in the plan. The sites generally would allow the water to be used on higher ground than the proposed on-stream storage at the Teton site. Any surface water site will have a late storage priority, thus development might need to include the purchase or rental of water in a main-stem Snake River reservoir. These are off-stream sites in the sense that most of the water would be moved from the Falls River or the Teton River. Conflicting development would best be encouraged to move to other areas. (As noted earlier, a recent reanalysis of the feasibility of rebuilding Teton Dam has shown a federal project there not to be feasible. Future water needs may show a different result, even through the yield of water from the reservoir must be augmented during low flow years.)

A limited review of a privately developed Teton project may be helpful not only at this time but also in the future. Over time the need for electric energy increases. Thus, significant hydroelectric benefits from a Teton project when coupled with water storage and flood control benefits may make the project feasible in the future.

Planning Methodology

In 1988 the Idaho Legislature amended state water planning requirements and provided for the development of a comprehensive State Water Plan (Chapter 17, Title 42, Idaho Code). The State Water Plan may be generated in stages by developing comprehensive plans for each river basin, drainage area, river reach, ground-water aquifer, or other geographic area. The resources to be described in each plan are:

- Water Supply
- Timber
- Flood Control
- Mining
- Irrigation
- Livestock Watering
- Power Development
- Scenic Values
- Energy Conservation
- Natural or Cultural Features
- Fish and Wildlife
- Domestic, Commercial, Municipal, and Industrial Uses
- Recreational Opportunities
- Navigation
- Other Aspects of Environmental Quality and Economic Development

Each item is addressed in the following pages as they relate to the Henrys Fork basin.

The 1988 legislation directed the Idaho Water Resource Board to designate seven river reaches in the state as Interim Protected Rivers. One of these reaches was the Henrys Fork from its point of origin at Henry's Lake to the point of its confluence with the backwaters of Ashton Reservoir. This designation served to prohibit many types of activity within the river for a period of two years. The Water Board was charged with using the two years to develop a detailed plan for the area. Since interim protection for the Henrys Fork lasted only until July 1, 1990, the Department of Water Resources petitioned the legislature for an extension of the planning process. The Idaho Legislature extended the interim protection period through December, 1991.

On January 3, 1992 the Idaho Water Resource Board adopted a plan for the Henrys Fork Basin. A bill approving the Board's plan passed the Idaho Senate, but was defeated in the House of Representatives. In order to provide some state protection to waterways in the basin, the Idaho Legislature directed the Water Resource Board to place most of the Henrys Fork and portions of the Warm, Teton, and Falls Rivers as well as the Idaho portion of Bitch Creek in interim protection. This interim period could not extend for more than 10 days after the conclusion of the 1994 legislative session. On April 17, 1992 the Board placed the designated streams in interim protection until 10 days after the 1993 legislative session or until a new comprehensive state water plan for the Henrys Fork Basin was adopted by the Water Resource Board.

The Water Resource Board proposed changes to the plan they had adopted in January and circulated this new version for public review. Information meetings to inform the public about the proposed changes were held in Driggs, Ashton, and Rexburg on September 14, 15, and 16, 1992 respectively. Formal hearings were held in Idaho Falls on October 21 and St. Anthony on October 22, 1992. After reviewing the public comment, the Water Resource Board made further revisions to the plan and adopted this version on December 3, 1992.

The planning statute provides for the designation of protected rivers in the Comprehensive State Water Plan, based on a determination by the Idaho Water Resource Board (IWRB) that the value of preserving a waterway for particular uses outweighs that of developing the waterway for other beneficial uses. The protected designations are either as a Natural or Recreational River. A Natural River is defined as a waterway which possesses outstanding fish and wildlife, recreation, geologic or aesthetic values, which is free of substantial existing man-made impoundments, dams or other structures, and of which the riparian areas are largely undeveloped, although accessible in places by trails and roads. A Recreational River must also possess outstanding fish and wildlife, recreation, geologic or aesthetic values, but the segment might include some man-made developments within the waterway or within the riparian area of the waterway. In Idaho's protected river designations the riparian area is defined by the legislation as the area within 100 feet of the mean highwater mark of a waterway. Man-made developments or the lack thereof in the riparian area is a factor to be considered in determining the eligibility of a stream for protected status. However, when streams are designated for protection, the associated prohibitions apply only to the streambed.

Eligibility for state protected river designation in the Henrys Fork basin was based solely on the relative significance of the reach as a public resource, for example, to be eligible for protection a reach must contain at least one "outstanding" fish and wildlife, recreational, aesthetic or geologic value. An initial attempt to assess these values in the Henrys Fork basin has been documented by the Pacific Northwest Rivers Study (1985). That study was a cooperative effort of the three northwest states, Montana, the Indian tribes, the federal natural resource agencies and northwest power

agencies. A matrix of stream segment assets was assembled based on that study, and updated as noted on the matrix (see Resource Evaluation section of report).

The matrix was used to help identify stream segments with "outstanding" natural and recreational resource values. In order to highlight outstanding stream segments in the Henrys Fork basin, screening criteria were applied to the matrix values. Stream segments in the Henrys Fork basin that met criteria for outstanding fish and wildlife, recreational, aesthetic, and geologic resource values are described in the Resource Evaluation Section. After eligibility was determined, an assessment of the effects of designation on other identified resource uses was undertaken.

By statute, in designating a Natural River, the Board shall prohibit the following activities within the streambed:

- construction or expansion of dams or impoundments;
- construction of hydropower projects;
- construction of water diversion works;
- dredge or placer mining;
- alteration of the streambed; and
- mineral or sand and gravel extraction within the streambed.

In designating a Recreational River, the Board shall determine which of the activities listed above shall be prohibited or may specify terms and conditions under which the listed activities may go forward.

To supply further direction for the river basin planning effort, the Idaho Water Resource Board established Planning Rules and Regulations. A provision of the Rules and Regulations states, "The Board shall seek the involvement of volunteers from the geographic area to be affected by a portion of the comprehensive water plan. These volunteers shall constitute a local advisory group that shall inform the Board of local concerns throughout the planning process."

On January 31, 1989, a public meeting held in St. Anthony, Idaho, announced the beginning of the river planning effort for the Henrys Fork basin. The need for persons to serve on the citizens advisory group was announced. Selected local citizens for the Henrys Fork Advisory Group were:

Paul Bowen, Rexburg - Member of Upper Snake River Fly Fishers
Ed Clark, Ashton - board member Fremont-Madison Irrigation District
Jan Jensen, Island Park - resort operator
Arnold Kunz, Victor - Teton County Commissioner, 1989-1991
Mike Lawson, St. Anthony - Henrys Fork Foundation
Robert Lee, Rexburg - president, Hydro-Idaho, Inc. and Golden West Irrigation Co.
Del Raybould, Rexburg - irrigation interest member
James Siddoway, Teton - Fremont County Commissioner
Ronald Stoddard, St. Anthony - Stoddard Lumber Company
Bruce Webster, Rexburg - Madison County Commissioner - 1989-1991
Cal Wickham, Ashton - past manager of Fall River Rural Electric Coop
Keith Kunz, Victor - Teton County Commissioner, 1991-present
Reed Sommer - Madison County Commissioner, 1991-present

The Henrys Fork Advisory Group provided guidance and insight into resource values, use, and potential, basin goals, and plan recommendations. Members were selected who represented conflicting user viewpoints. While balance is sought, consensus is not necessary since the group is advisory in nature and attempts to insure that all potential uses and conflicts are considered during the planning process. Advisory Group meetings were held in St. Anthony at the Fremont County Courthouse. Meeting dates were:

#1 - April 5, 1989
#2 - October 25, 1989
#3 - June 14, 1990
#4 - November 20, 1990
#5 - February 13, 1991
#6 - February 26, 1991
#7 - April 17, 1991

Prior to the formal hearing process, the Board held information meetings in Ashton, Rexburg, and Idaho Falls. Hearings were held in Ashton, Rexburg, Idaho Falls, Driggs, and St. Anthony. Board member J.D. Williams acted as hearing officer. Written comments were accepted as part of the hearing record for 92 days after the original notice of proposed action appeared. Oral testimony was provided by 114 persons. The Board received 249 written comments relating to the Henrys Fork Plan. The Board weighed competing uses for the water resources of the basin. The Board endeavors to balance uses so that public interest concerns are met while providing for the overall benefit of the state.

Amendments to the Plan

The Water Resource Board will amend the water plan when it determines that amendments are in the public interest. The Board will consider proposals to amend the plan from private parties as well as state agencies. In the event the Board determines that any such proposal has a substantial possibility of not impairing the values which were the basis of the protected river designation the Board shall follow the public hearing process and procedures required for the adoption of the original plan (Sections 42-1734A and B, Idaho Code). The Board shall determine whether or not to amend the plan after weighing the impact the uses allowed by the proposed amendment would have on the other uses and values which were the basis of the original protected river designation. In addition, the Board shall review and reevaluate the Comprehensive State Water Plan at least every five years (Section 42-1734(B)(7)). All amendments to the state water plan shall be submitted for consideration of the Idaho Legislature as required by law (Section 42-1734B).