

Colorado

Stream Lines

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COLORADO DIVISION OF WATER RESOURCES

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COLORADO WATER: LIQUID GOLD 1990 STATE FAIR EXHIBIT A SUCCESS STORY

"The 1990 State Fair Industry/Technology Exhibit, *COLORADO WATER: LIQUID GOLD*, can definitely be labeled a success story," says John Kaliszewski, Program Manager for the Colorado Division of Water Resources and the Exhibit Coordinator. "The exhibit provided a rare opportunity for the Colorado water community to work together toward a common goal of advancing the public's awareness of the importance of water to Colorado."

The effort involved over 40 Colorado water organizations and in excess of \$400,000 in manpower and capital resources. An estimated 200,000 people went through the 13,000 square foot exhibit hall that was divided into three basic sections: Water: Where does it come from? Water: How is it managed? Water: How is it used? The exhibit addressed a variety of water related topics and issues, including the hydrologic cycle, Colorado's hydrologic system, water rights administration and interstate compacts, a historical perspective of water development in Colorado, groundwater, salinity, drought impacts, floods, wetlands, water resources planning, instream flow program, Colorado water use statistics, fishing, east slope/west slope challenges, water quality, hydropower, municipal water use, industrial water use, agricultural water use, water-based recreation, and xeriscape. The exhibit featured a 75-foot flowing stream and waterfall. A crowd

favorite was the Water Wheel of Fortune, complete with Vanna Waterdrop, where contestants won prizes for correctly answering water related questions.

"I believe that the exhibit represents a major step by the Colorado water community towards a continuing program in water resources education in Colorado," says Kaliszewski. "An informed public is an essential component in the future planning and development of Colorado's water." The commitment of the Colorado water community toward accomplishing this was evidenced at a VIP reception dedicating the opening of the exhibit in remarks made by Colorado State University President Albert C. Yates and State Engineer Jeris A. Danielson.



RESULTS OF THE WATER EDUCATION SURVEY
 CONDUCTED AT THE 1990 COLORADO STATE FAIR.
 By John Van Sciver

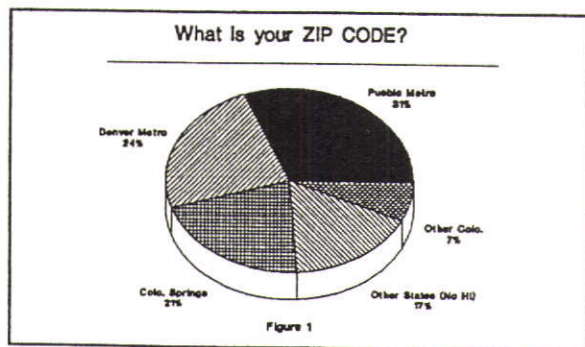
How much does the public know about water issues?

The 1990 Colorado State Fair was attended by 739,000, and at least 20% of them visited the Industry/Technology Exhibit "Colorado Water: Liquid Gold." The exhibit was made possible through voluntary cooperation of over 40 public and private organizations. Its purpose was to educate the public on water issues.

While in the exhibit hall, fair visitors could complete a survey, designed and conducted by Survey Products Inc. of Denver. The survey was educational while providing data concerning the general level of public knowledge and interest in water issues. The survey was also voluntary, and was conducted by keying in responses to a user friendly computer "survey box." Below are the results of the survey, completed by 7387 participants.

Who took the survey?

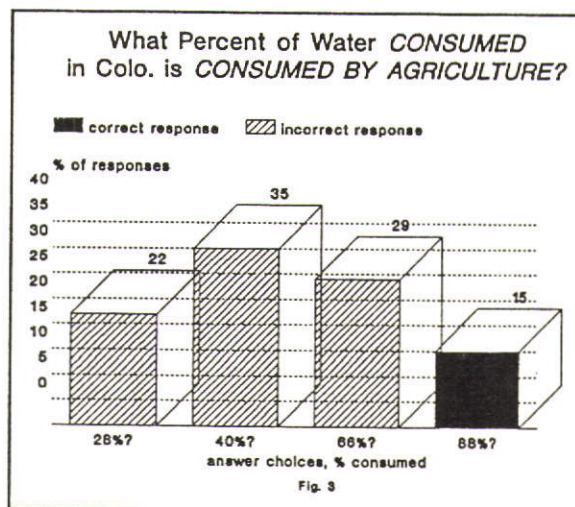
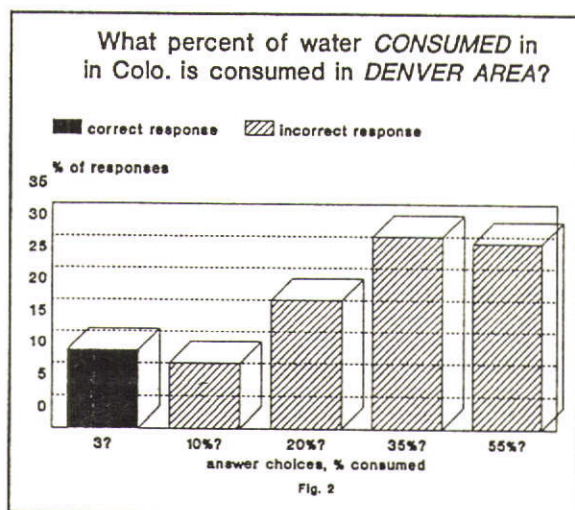
Of those taking the survey 83% were from Colorado, primarily from the Front Range (Figure 1). Of the remaining 17%, every state in the nation was represented except Hawaii. Even the State of Maine had 5 of its citizens take the survey. Regardless of this, the data generally represent opinions of Coloradans who live along the Front Range.



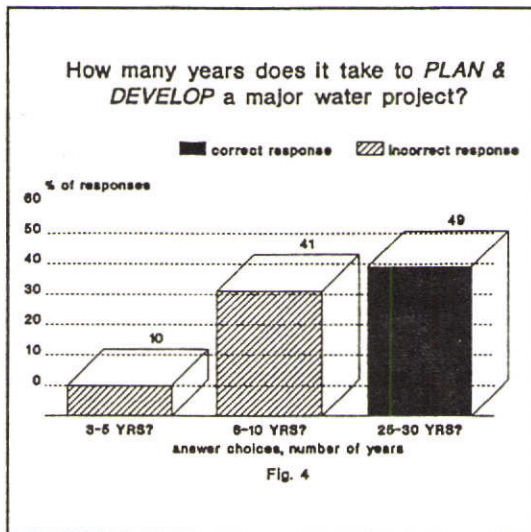
Do you know your water facts?

Five survey questions tested the general level of knowledge about water issues with the participant later being provided the correct answer to each question.

Questions 1 and 2 (figures 2 and 3) indicate that the public is generally misinformed about water consumption by cities and agriculture. This raises the question, where does this misinformation come from?

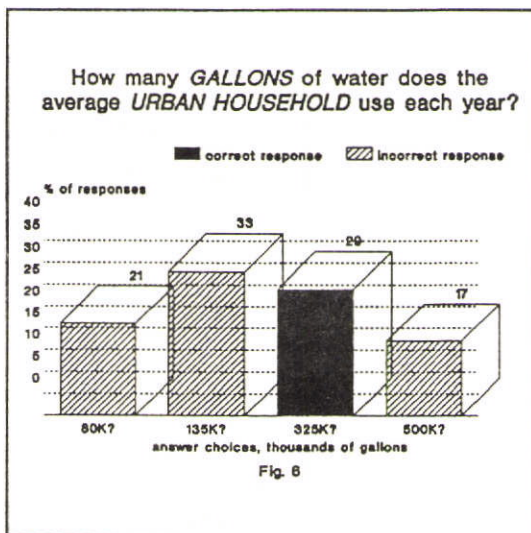
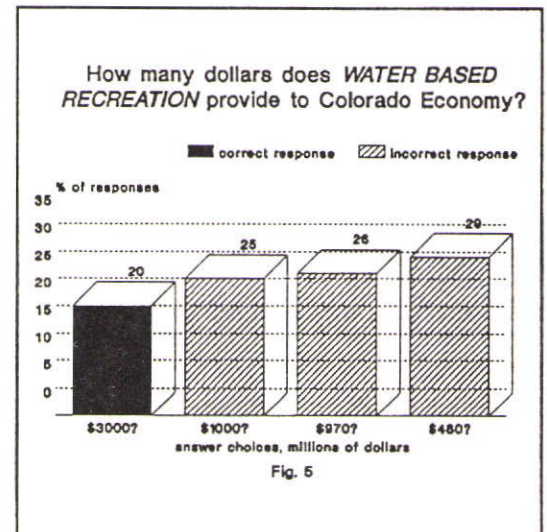


The public did well on Question 3 (figure 4 below), where the most popular response was the correct answer. This could be an area where the public is properly informed, possibly as a result of discussions concerning major projects like Two Forks Dam.



Public response to questions regarding recreational water dollars and water utilized by households (figures 5 and 6) indicated a general lack of knowledge in these areas, or that those who responded were merely uninformed (they had no information on the subject, and generally guessed at the answer).

From these first five questions it appears those who took the survey lacked significant knowledge on water facts (only one in five questions substantially correct). It is also clear many people have been misinformed (given the wrong information) on certain water facts. Misinformation is a serious problem, since it must first be unlearned before the correct information can be learned.

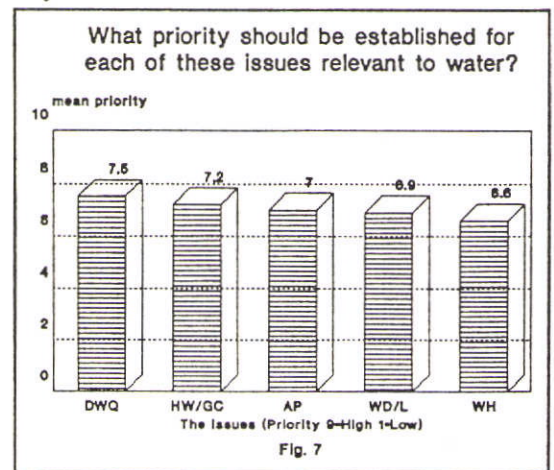


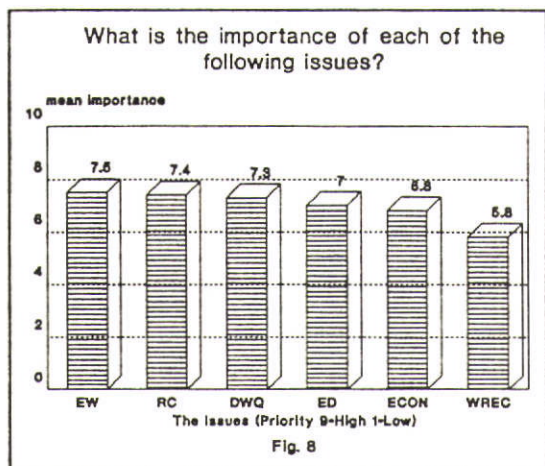
What's important to you?

A second part of the survey asked the public to rank certain issues according to priority or importance.

Five issues are compared in figure 7:

- What should be the priority of:
 DWQ=Drinking Water Quality?
 HW/GC=Hazardous Waste/Ground Water Contamination?
 AP=Air Pollution?
 WD/L=Waste Disposal/Landfills?
 WH=Wildlife Habitat?





While all issues were given an above average priority, the public selected drinking water quality (DWQ) as the issue which should be given the highest priority.

A similar set of questions asked people to rank the importance of six issues as shown in figure 8. Those issues were:

Having enough water for Colorado's needs (EW)

Reducing crime (RC)

Drinking water quality (DW)

Improving education (ED)

State economic development (ECON)

Water for recreation (WREC)

Again, water issues (EW and DWQ) compared or exceeded the importance of other issues like reducing crime (RC) or improving education (ED). In general, figures 7 and 8 indicate those who took the survey were at least as concerned about water issues as they were about other important issues.

Who told you that?

This was probably the most interesting question in the survey, and it went a long way toward explaining the response to questions 1 and 2 (Remember-"misinformation"). Figure 9 indicates that about 2/3 (68%) of those surveyed rely on the news media (TV, newspapers, radio) for information about water, while only 7% considered schools as their primary source.

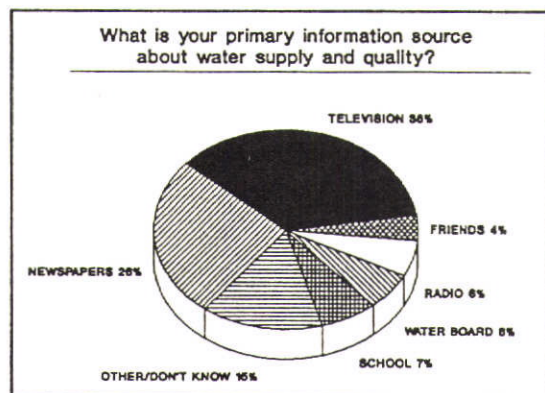
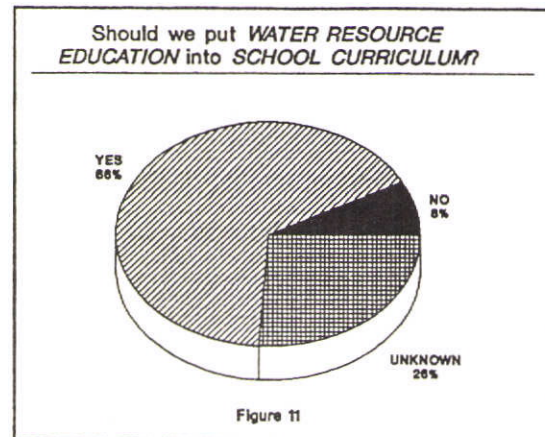
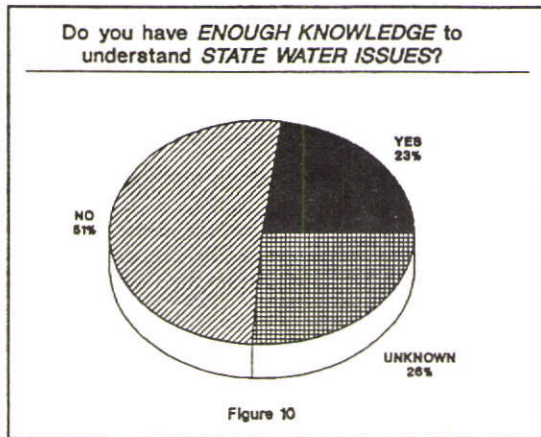


Figure 9

The news media is in the business of selling their product, and must therefore appeal to their audience and feed into emotional issues. The public perception that 35% to 55% of the state's water is consumed by the Denver Metro Area (instead of 3%) is based on misinformation. Schools could do better at providing scientific, factual information, but currently are not relied upon to a great extent.

Should schools teach water issues?

It isn't surprising that most people felt they did not have enough knowledge to understand state water issues (figure 10), nor is it surprising, because of the high priority assigned, that they would endorse the idea of water resource education in school curriculum (figure 11).



In summary

The people who participated in the State Fair Water Education Survey told us that they lacked the information and knowledge necessary to understand important water issues. They overwhelmingly supported the inclusion of water resource education in school curriculum.

A water resource education curriculum could be developed as a cooperative project by public and private water organizations/agencies, similar to the cooperative effort which produced the State Fair educational exhibit "Colorado Water: Liquid Gold." It would be important that the curriculum accurately address all sides of the issue.

LOCAL WATER USERS AND DAM OWNERS HONORED AS "1990 WATER MANAGERS OF THE YEAR"

This past fall several local water users and dam owners were honored by the Division as **Water Managers of the Year** for their accomplishments and contributions in promoting dam safety and maximizing the beneficial use of Colorado's water rights. Selections were made by the area Division Engineer and awards were presented at the annual Fall Water Commissioner Meetings held in each division. The Division is proud to be able to recognize these individuals for their outstanding service to the water community.

Water Manager of the Year for Division I is **Jim McClure** of the Denver Water Department. Jim is employed in the Raw Water Operations

Division and is involved in the daily delivery of water to Denver's water treatment plants. Because of the vast network of water rights operated by DWD, Jim must work closely with several water districts and various other water agencies and municipalities. Jim was honored for his valuable knowledge of the complex South Platte River system and his professionalism in dealing with situations involving several water users.

Colorado State Senator **Harold L. McCormick** from Canon City received Division II's Water Manager of the Year Award for 1990. Throughout his many years of service in the legislature, Senator McCormick has remained a staunch supporter of legislation maximizing Colorado's water rights and protecting her water users. Without his support, the Colorado

Satellite-Linked Water Resources Monitoring System would not have become a viable management tool used daily throughout the state. In looking to the future, Senator McCormick will be focusing on measures that will mitigate the adverse impacts of water right transfers from agricultural use.

Water Manager of the Year for Division III is rancher Melvin Getz of Monte Vista. Mr. Getz is secretary-treasurer of the Rio Grande Water Users Association and president of the Commonwealth Irrigation Company. His strong interest and concern for preserving the agricultural interests and way of life in the San Luis Valley has him involved in many areas, not just water. Mr. Getz has long been a source of common sense and innovative ideas concerning the operation and protection of water rights in the Valley, including the Rio Grande Interstate Compact, and has been very helpful not only to the water community and DWR, but to the entire San Luis Valley, in pursuing his ideas.

The Uncompahgre Valley Water Users Association in Montrose was Division IV's selection as Water Manger of the Year. President Jim Grett and Manager Jim Hokit were presented with the award. The Association was honored for its continuing commitment to improve management of its numerous operations through participation in the State's satellite monitoring program, cooperation in establishing and maintaining gaging stations for streamflows and diversion, and for its work in system improvements to maximize benefits to its water users.

Additionally, each year Division IV presents an award to a local dam owner for their safety improvements. The 1990 Dam Owner of the Year Award was presented to the Overland Ditch and Reservoir Company at the Division IV Water Officials semi-annual meeting on October 11th. President Pete Kasper and Secretary-Treasurer Sue Kasper accepted the award on behalf of the

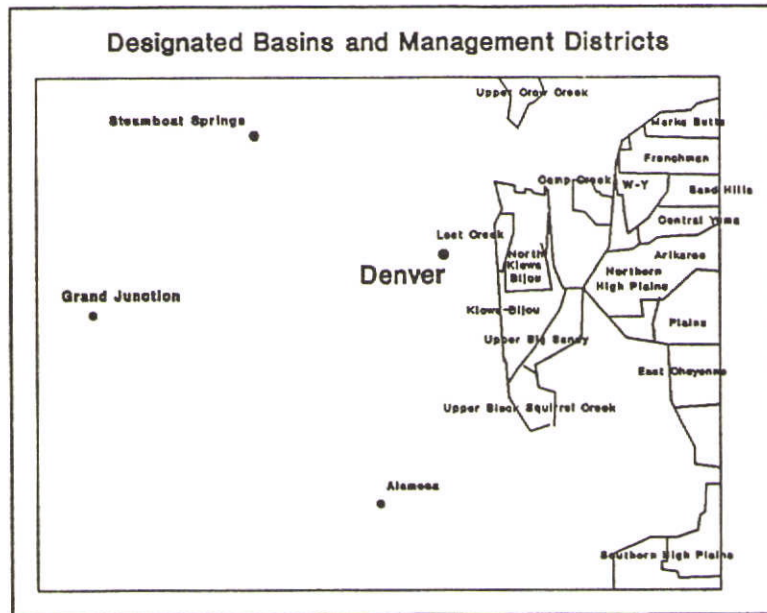
company. The company was cited for its support of Colorado's dam safety program and their cooperation in working with the Division, and particularly for the board's recent decision to rehabilitate Overland #1 Dam, which will not only assure a future water supply for company shareholders, but will have a positive impact on the regional economy as well.

Rancher Carl Trick, Sr. of Walden was honored by Division VI as their Water Manger of the Year. As a long-time owner of an irrigated ranch on the West Slope, Mr. Trick is well aware of the problems confronting water users in Colorado and has been politically active concerning water issues and supportive of the Division. In addition, he serves as secretary of the Colorado Water Resources and Power Development Authority and is active in the Colorado Cattlemen's Association.

Division VII's Water Manager of the Year Award was presented to David Engler, ditch rider for the Pine River Canal Company. Throughout the long, dry summer months Mr. Engler was very cooperative and worked daily with DWR personnel and local water users to ensure an adequate water supply for everyone.

Division Engineer Chuck Lile's Initiative Award was given to Bob Daniels of Allison, Colorado. Mr. Daniels was recognized for his special efforts in working with the water users of the Pine River Canal and the Degani Lateral.

Division VII's first award ever given for improvements to a dam was presented to the Leroy and Frances English Family for their rehabilitation of Keeler Reservoir this summer. Costly repairs were made to the outlet and headgate to improve the safety of the dam, requiring extensive planning, engineering and cooperation with water users on Elbert Creek.



DESIGNATED GROUND WATER BASINS
by
Purushottam Dass
Chief-Designated Basins Branch

The 1965 Ground Water Management Act created the Ground Water Commission and authorized the Commission to form designated ground water basins. The Act also allowed the formation of local ground water management districts within the confines of these designated basins. The Act calls for managing the ground water resources within such basins to allow full economic development of such waters.

The Commission to date has approved eight designated ground water basins, all located in the eastern Colorado Plains. A total of 13 ground water management districts have formed within these basins (see location map above).

All ground water permitting within the basins is done by the staff of the designated basins branch located in the Denver office. The branch has four full-time employees consisting of a supervising engineer, a professional engineer and two engineering technicians. Additional staff support is also available from other division employees on an as-needed basis. Field inspection assistance is available through a water commissioner located in Wray, and occasionally through other water commissioners in Water Divisions 1 & 2. Often field inspection assistance is also available from the managers of local management districts.

Currently, we receive approximately 110 large capacity well permit applications and 560 small capacity well permit applications each year. A small capacity well permit is normally limited to a 50 gallon per minute pumping rate and a specific use, but additional restrictions may be imposed through the rules of individual management districts. All applications for construction of wells or use of ground water are

submitted to the Denver office for consideration. Authority for approval lies with the Commission for large capacity well permits and with the State Engineer for the small capacity well permits.

Within the designated basins about 4900 large capacity wells have not yet been issued final permits. A final permit is the final determination of the water right associated with that well. It is equivalent to a Water Court decree adjudicating a water right outside the basins. Processing of final permits is a time-consuming job, and currently we have a temporary employee helping us with this work.

The Commission is in the process of adopting rules and regulations to manage designated ground water. Also, the State Engineer is in the process of revising the rules for small capacity well permits, hopefully resulting in eliminating the need for filing evidence of beneficial uses for most small capacity well permits. The Commission has also authorized a study to determine the feasibility of expanding the boundary of the Upper Black Squirrel Creek Designated Basin to the south. This study is partially funded by the Colorado State Land Board. The field work and drilling of test holes and monitoring wells are scheduled for this winter.

The Commission and districts are very much interested in pursuing conservation measures related to both water quantity and quality. Just recently the Commission, on the recommendation of the local districts, toughened its appropriation policy for all new large capacity well permits within the Northern High Plains Designated Basin. The new policy limits new appropriations net depletion of the aquifer to 40 percent over a 100-year period instead of the old policy allowing the same amount of depletion over a 25-year period. Existing well permits are not affected by this change of policy. Ground water levels in various aquifers within the basins are closely monitored through a network of 860 monitoring wells.

Great challenges lie ahead in the management of the limited ground water resources available within the designated basins to best meet the needs of the water users. The 1965 Act provided the local water users, by forming local ground water management districts and through representation on the Commission, a say in the control of this precious water resource for their socio-economic well-being.

Note from the Editors: This is the last in a series of nine articles that dealt with the geographic and governmental boundary lines regarding water in the State of Colorado.

NEW ASSISTANT DIVISION ENGINEER DIVISION I - GREELEY

The State Engineer is pleased to announce the promotion of David Fox to Assistant Division Engineer for Water Division I in Greeley. David is primarily responsible for the administration of the South Platte River above Denver and will be based out of the Denver office to provide better and quicker access to the local water users. His duties include litigation and river administration while also providing technical assistance and decree interpretation to the water commissioners. David is currently involved in the formulation of a management and administrative study within the Cherry Creek Basin and construction and design of the Julesburg Recharge Project.

THE GUNNISON: A RIVER IN TRANSITION

Keith C. Kepler, Division Engineer,
Division IV, Montrose

Conditional water decrees and pending applications on the Gunnison River are expected to determine the future of this great river.

Operation of Taylor Park and Blue Mesa reservoirs has benefitted both senior water rights and instream flows for the past 20 years. Favorable reservoir operations, combined with a relatively abundant water supply, have resulted in little demand for administration of the Gunnison River since the mid 1960s. This is unlike Colorado's east slope rivers which are constantly allocated to the last drop. Pending proposals for power production and east slope municipal water supplies, as well as the demand for an assurance of instream flows for environmental and recreational use, will create a greater demand on the river and more administration on the Gunnison. This article

identifies some of the current demands and pending proposals.

The Gunnison Basin

The Gunnison Basin may be considered to include three separate zones. The Upper Gunnison Basin, the Black Canyon, and the Lower Gunnison. Two major tributaries, the Uncompahgre River and the North Fork of the Gunnison, join the Lower Gunnison near Delta.

The Upper Gunnison area is a grand area of broad meadows stretching across wide valleys. Snowmelt-fed streams are captured in late spring and summer and diverted to flood these broad valleys. As much as 65,000 acres may be flood irrigated in this manner with a two-fold result: first, the production of a grass hay crop, and secondly, the annual recharge of a huge aquifer which filters out some sediment and serves to maintain streamflow later in the summer. The abundance of clear streams brings many recreational fishermen to the Gunnison country.

Blue Mesa Reservoir is Colorado's largest reservoir. The dam marks the end of the Upper Gunnison area. Below Blue Mesa dam is the beginning of the Black Canyon zone. Morrow Point and Crystal dams are at the top of this zone. Morrow Point and Crystal dams are used for hydro-electric generation but water levels are only varied slightly, the reservoirs remain nearly full all the time. Below Crystal dam is the Gunnison Tunnel diversion operated by the Uncompahgre Valley Water Users Association.

The famous Black Canyon of the Gunnison National Monument lies below the dams and the Gunnison Tunnel. A zone which is relatively natural in character exists from the beginning of the Black Canyon to the confluence with the North Fork of the Gunnison River. A recent bill (HR 5476) introduced by Congressman Ben Nighthorse Campbell proposes to make the Gunnison a wild and scenic river through the

Black Canyon and to make the Black Canyon a national park.

The Lower Gunnison is a varied area. Just above Delta a few ditches take water for the irrigation of riverbottom lands. A few miles below Delta the river drops into a sandstone canyon which continues nearly to Grand Junction.

Historic Water Rights

The Gunnison Tunnel, operated by the Uncompahgre Valley Water Users Association (UVWUA), claims an appropriation date of June 1, 1901. Although it was not adjudicated until 1913, it is the major senior water right, with decrees for 1300 cubic feet per second (cfs), most of which is absolute. Through the summer months this water is diverted to the Uncompahgre Valley for irrigation. Prior to the construction of Blue Mesa Reservoir, streamflow at the tunnel was often insufficient to meet the demand, with three results: a drying up of the river at the top of the Black Canyon, attempts to curtail junior upstream diversions, and releases of Taylor Park Reservoir water in an attempt to meet demand at the Gunnison Tunnel. The A-B Lateral Project, discussed later, will extend the season during which water would be carried through the Gunnison Tunnel.

Taylor Park Reservoir was completed in 1937 by the U.S. Bureau of Reclamation for the purpose of providing late season flows to the UVWUA project. This reservoir has a capacity of 106,000 acre-feet. It is the senior large capacity storage right in the Gunnison Basin.

Redland Canal near Grand Junction has a decree of 670 cfs for irrigation and production of hydroelectric power. Only during periods of extreme drought is there insufficient flow to meet this demand. Senior water rights on the Uncompahgre River and the North Fork of the Gunnison already control upper reaches of those streams during times of shortage.

Large reservoirs benefit stream flows and irrigation diversions

Constructed as a part of the Colorado River Storage Project, the Aspinall Unit (a/k/a Curecanti Unit) consists of Blue Mesa, Morrow Point and Crystal dams. Blue Mesa Reservoir has the largest capacity (940,000 acre-feet) of the three. The reservoirs have absolute storage and flow decrees resulting from a 1960 adjudication. Those decrees were obtained by the Colorado River Water Conservation District and assigned to the U.S. Department of the Interior. Section 7 of the Congressional authorization of the Colorado River Storage Project may prohibit the Bureau of Reclamation from placing a "call" on the river for direct flow or storage for power production.

Since construction of Blue Mesa Reservoir, administrative complications on the Gunnison River have eased. Releases for power have generally resulted in higher flows during times of natural low flows. In recent years, the Bureau has operated Blue Mesa Reservoir in a manner which has kept 300 cfs in the river through the Black Canyon. Blue Mesa Reservoir inundated the irrigated area between the City of Gunnison and the UVWUA Gunnison Tunnel. As a result, Taylor Park Reservoir releases no longer have to be shepherded through this irrigated valley for delivery to the UVWUA Gunnison Tunnel.

An agreement for the management of reservoir storage was first put forth in 1972 and revised in 1975. This agreement was between the Uncompahgre Valley Water Users Association, the Upper Gunnison River Water Conservancy District and the U.S. Bureau of Reclamation. It provided for the release of water from Taylor Park Reservoir for purposes of flow stabilization, fishery, and recreation. Water thus released would be credited to an account for the UVWUA in Blue Mesa. Since 1975 releases from Taylor have been used to stabilize flows and optimize downstream fisheries.

The Upper Gunnison River Water Conservancy District applied for a second filling decree for Taylor Park Reservoir in case no. 86CW203. That decree was granted on September 18, 1990, by the Water Court in Division IV. This new decree is based upon the 1975 agreement with the U.S. Bureau of Reclamation and UVWUA and on that basis gained a 1975 appropriation date. That date makes the second filling of Taylor Park Reservoir senior to Aurora's pending application to export water from Taylor Park. An appeal of 86CW203 to the Supreme Court is a possibility.

Conditional Rights and Pending Application In and Below the Black Canyon

Three entities, the City of Delta (W-3063 from 1977), Colorado Ute Electric (80CW322), and Pittsburgh & Midway Coal Company (C-5874 from 1969), have conditional decrees for large reservoir and/or direct flows with hydro-electric facilities on the Gunnison River below the Black Canyon. No final design or construction has been accomplished to date. Diligence cases are before the court for Pittsburgh & Midway and Colorado Ute. Little progress toward development has been made in the past four years on any of these applications. The Colorado Ute or P & M conditional decrees could control the river if built and for this reason they create an uncertain climate for more recent proposals.

The Nature Conservancy received a donation of a part of the Pittsburgh & Midway conditional rights. The Nature Conservancy proposes to seek a change of these conditional water rights to instream flow rights which would be held by the Colorado Water Conservation Board. That change application has not yet been filed with the Water Court.

The United States has a claim for a federal reserved water right through the Black Canyon National Monument pursuant to Case No. W-437 and the decision in United States v. City & County of Denver, 656 P.2d 1 (Colo. 1982).

This claim exists as an unquantified conditional right at this time. The relative priority of that right would be controlled by the date of creation of the National Monument in 1937. The National Park Service is now conducting studies in an attempt to quantify this right. If a large flow is requested, it could have a significant effect on how the river would be administered in the future.

Recent Applications

The A-B Lateral hydro power project is a proposal by the UVWUA to divert water through the Gunnison Tunnel on a year-round basis. Once in the Uncompahgre Valley, the water would be captured in a penstock and would drive a hydro-electric facility located on the Uncompahgre River, just north of Montrose. The UVWUA has a 1982 decree (82CW234) for 900 cfs and a 1987 decree for 235 cfs (87CW273). To the extent the water was used for irrigation, it would be carried under the senior Gunnison Tunnel irrigation decree. An Environmental Impact Statement was recently completed for this project and it appears to be moving forward. The UVWUA and the Bureau of Reclamation have agreed in the Final EIS that operation of the A-B Lateral project would not cause the flow in the Black Canyon to go below 300 cfs.

The City of Aurora and Arapahoe County have applications before the Division IV Court to export water from Taylor Park to the east slope (86CW37, 86CW226, and 88CW78). These applications were previously discussed in the March 1988 issue of *STREAMLINES*. The Aurora and Arapahoe applications remain before the Court with a trial now scheduled for June 1991. If upheld by the Supreme Court, the Upper Gunnison decree in 86CW203 casts doubt on the feasibility of Aurora's project as initially proposed. The record high 1984 water year produced 223,000 acre-feet at Taylor Dam while two fillings of Taylor Park Dam would equal 212,000 acre-feet.

The Dominguez Reservoir site was formerly considered by the U.S. Bureau of Reclamation. The reservoir would be located on the Gunnison River upstream of the city of Grand Junction and could be as large as 880,000 acre-feet. Two parties have independently shown an interest in this project in Division IV Water Court Case Nos. 89CW88 and 88CW161 (W-429) and a third party, the Pittsburgh & Midway Coal Company, has stated an intent to move their remaining conditional rights downstream to this location. It is not obvious that any of the parties interested in this reservoir site have a use for more than a small amount of water at this time. No ruling or decrees have been entered by the Water Court for this project.

Closing Thoughts

As the Denver Water Board discovered with Two Forks and as Animas-La Plata supporters have more recently found, the decision making process for a water project now includes much more than the Water Court. In nearly all the projects described herein, the federal government is involved either as a landowner or an owner of existing facilities. Environmental concerns also play an important role in obtaining federal authorization. The lack of economic feasibility prevents development of other projects, even though proponents may have extolled project benefits when seeking a conditional decree.

Many important decisions are still before the Water Court. Diligence issues are pending for the Pittsburgh & Midway and for Colorado Ute conditional decrees. The Nature Conservancy and CWCB have yet to file for the change of the conditional right donated by Pittsburgh & Midway. A trial for the Aurora and Arapahoe County applications is scheduled in June. The Upper Gunnison decision in 86CW203 will likely be appealed to the Colorado Supreme Court.

Conclusions

The Gunnison River is in a period of transition. For the past 25 years, management of the large reservoirs has aided both irrigation water availability and instream flows. While irrigation uses are protected by senior rights, some of the new demands will reduce flows in certain reaches of the river and will compete for the limited water supply. Instream flow proposals may provide some protection for streamflow in important parts of the river. Of the several projects now being proposed, those which will ultimately come into being will need to have a favorable Water Court decree, environmental approval and a favorable economic feasibility.

PUBLICATIONS

Two recent publications by the Division concerning the Denver Basin are available through our Records Section. They are:

GROUND WATER LEVELS IN THE BEDROCK AQUIFERS OF THE DENVER BASIN, 1990 by John C. Romero and Howard C. Bainbridge. Price \$5.00. This report covers ground water level measurements in approximately 150 wells in the four principal aquifers of the Denver Basin and includes hydrographs of selected wells.

GROUND WATER RESOURCES OF THE DENVER BASIN BEDROCK AQUIFERS by John C. Romero. Price \$25.00. This is a reprint of the original 1976 report which gives detailed information concerning the Denver Basin aquifers and is a valuable historical document.

The Division has numerous publications available for sale. A complete listing of publications can be obtained through the Records Section.

CITY OF GRAND JUNCTION RECEIVES NATIONAL DAM SAFETY AWARD

The City of Grand Junction recently received national recognition for its improved dam safety program by the Association of State Dam Safety Officials. The City was presented the Association's Western Region Award of Merit. Mr. Dan Vanover, Water Supply Supervisor for Grand Junction, accepted the award on behalf of the City at the Association's 7th National Conference held in New Orleans, October 14-18, 1990. Grand Junction was recognized for implementing an effective maintenance and monitoring program to improve the safety of its dams, as well as for major repairs it has made to several of the dams, and for its cooperation and support of Colorado's dam safety program.

ASSOCIATION OF WESTERN STATE ENGINEERS 63RD ANNUAL MEETING HELD IN STEAMBOAT SPRINGS

Colorado had the honor of hosting this year's 63rd annual meeting of the Association of Western State Engineers September 25-27th in Steamboat Springs. The Association is the official organization of the chief water resources administrator from each of the 19 western states. Sixteen states were represented at the three-day meeting, along with numerous Federal agencies involved with water resources. The Honorable Rebecca Love Kourlis, Water Judge for Division VI, gave the keynote address and special guest speakers included attorneys Clyde Martz, addressing interstate water transfers, Melinda Kassen, speaking on environmental issues, and David Harrison, providing comments on ground water.

Special thanks to Dan Boyd and Boyle Engineering Corp. for their hospitality!!!

1990 WATER COMMISSIONERS OF THE YEAR

DWR would like to extend its congratulations to the following employees for receiving their division's Water Commissioner of the Year Award for 1990. These commissioners were recognized for their communication with water users, ability to administer complex systems, reliability, commitment to the community, and their professionalism. They were honored by their co-workers and presented with their awards at each division's Fall Water Commissioner Meeting.

- | | |
|------------|--|
| Division 1 | Mark Curry, District 23, South Platte River in South Park |
| Division 2 | Doug Brgoch, District 16, Cucharas River and its tributaries |
| Division 3 | Ben Canon, District 20, Rio Grande |
| Division 4 | Crandall Howard, Districts 41 and 62, Uncompahgre Valley downstream from the Ouray county line and the many streams entering the Gunnison River from the south side between the Black Canyon and the Lake Fork of the Gunnison |
| Division 5 | George Anderson, District 70, Roan Creek |
| Division 6 | Elvis Iacovetto, District 58, upper end of the Yampa River |
| Division 7 | Bill Baker, Districts 32, 34, 69 & 71, McElmo Creek drainage |

Special congratulations to George Anderson, who has been a water commissioner for the Division since 1938!!!!

GROUND WATER MONITORING PROGRAM

This winter begins the fourth year of the Division's ground water level monitoring program. Within the next two months over 800 wells in the Northern and Southern High Plains will be measured. Detailed reports concerning water levels and ground water trends in these areas will be published in April of 1991.

The fall measurement program for the South Platte Alluvial Aquifer has been completed and a report should be available in March of 1991.

A detailed report concerning the state-wide ground water monitoring program will be included in the next issue of *STREAMLINES*.

RECORDS SECTION ANNOUNCES IMPROVED FACILITIES

The Records Section of the Division of Water Resources is proud to announce that it has recently acquired more space, including more work tables and greater elbow room. This should make the research process for water information much more palatable to all concerned.

Also, new equipment has been added to facilitate access to data including the CAR system (Computer Accessible Records). This system allows for faster, easier access to Water Court decrees and documents. One machine is already in use and another is on order. Court documents through 1982 are now accessible via this system and 1989 Division records are now also accessible via CAR. The additional space and improved technology should facilitate the water public in their continuing search for data.

GROUND WATER COMMISSION VOTES TO CONSERVE WATER

By Purushottam Dass, Chief, Designated
Ground Water Basins Branch

The Colorado Ground Water Commission, during its regular meeting held on November 9, 1990, in Denver, adopted a new policy to permit new high-capacity wells within the Northern High Plains Designated Ground Water Basin. This basin is located in eastern Colorado, and includes Phillips, Yuma and Kit Carson counties, and portions of Sedgwick, Logan, Washington, Lincoln, Cheyenne and Kiowa counties. To review new well permit applications, the Commission will limit the estimated decline of the ground water level in the Ogallala Aquifer to 40 percent in 100 years. The previous policy allowed for a 40 percent decline in 25 years. To apply this criteria, the Commission looks at the three-mile radius circular area around the proposed well site.

The new policy does not affect any high-capacity wells already permitted, nor the evaluation for replacement permits or any changes in the use of water from these wells. Also, this policy does not apply to any small-capacity wells used for domestic, livestock and commercial purposes pumping less than 50 gallons per minute.

The Commission monitors declining water levels by using a network of more than 700 wells within the basin. These wells are monitored annually in January of each year. On an average, water levels are declining nearly one foot each year. Whereas this new policy does not affect the current level of pumping, it strongly discourages development of new high-capacity wells in overappropriated areas.

Any questions or comments related to water wells within this basin may be directed in writing to the Colorado Ground Water Commission, 1313 Sherman Street, Room 821, Denver, Colorado 80203, or by phone at (303)

866-3581. Local ground water management districts will also be happy to answer any questions regarding water wells within their respective basins.



CENTRAL COLORADO WATER CONSERVANCY DISTRICT TO HOST CHILDREN'S WATER FESTIVAL

The Central Colorado Water Conservancy District will be hosting a Children's Water Festival on Tuesday, March 26, 1991, at Aims Community College in Greeley. Approximately 2,000 fourth and fifth grade students will participate in the one-day event that will educate and entertain students regarding water quantity and water quality.

For more information contact Tom Cech at (303) 330-4540 or Metro 825-0474.

CALENDAR OF EVENTS

- January 8 Special Meeting of the Rio Grande Compact Commission, El Paso, TX. Contact: Paula Lacey, DWR. (303) 866-3581
- January 9 1st Session, 58th Colorado General Assembly convenes.
- January 17-18 1991 Colorado Water Congress Annual Convention, Holiday Inn Northglenn, CO. Contact: Dick MacRavey, CWC. (303) 837-0812
- January 17-18 Colorado Water Conservation Board Meeting, Denver, CO. Contact: Maria Martel, CWCB. (303) 866-3441
- January 23-25 101st Quarterly Meeting of the Western States Water Council, Tucson, AZ. Contact: Craig Bell, WSWC. (801) 561-5300
- February 5 Board of Examiners of Water Well and Pump Installation Contractors, 8:30 a.m., 8th Floor Conference Room, 1313 Sherman Street, Denver, CO. Contact: Rolynda Bain, DWR. (303) 866-3581
- February 15 Colorado Ground Water Commission, 9:00 a.m., Room 318, 1313 Sherman Street, Denver, CO. Contact Rolynda Bain, DWR. (303) 866-3581
- February 25-26 10th Colorado Rural Water Association Annual Convention and Exhibit, Radisson South, Englewood, CO. Contact: Sharon Jenkins, CRWA. (719) 545-6748
- February 27-28 Colorado Water Engineering and Management Conference, Denver Marriott Southeast, Denver, CO. Sponsored by the Colorado Water Resources Research Institute and Office of the State Engineer. Contact: Janet Lee Montera, CSU. (303) 491-7425

CALENDAR OF EVENTS CONT.

- March 15-16 1991 Mountain States Groundwater Expo, sponsored by the Colorado Water Well Contractors Association, Holiday Inn East, Aurora, CO. Contact: Marlene Bruno, CWWCA. (303) 759-1756
- March 21-22 Colorado Water Conservation Board Meeting, Denver, CO. Contact: Maria Martel, CWCB. (303) 866-3441
- March 28 52nd Annual Meeting of the Rio Grande Compact Commission, El Paso, TX. Contact: Paula Lacey or Chris Fredrich, DWR. (303) 866-3581

WATER DIVISION NO. 5 WATER JUDGE RETIRES

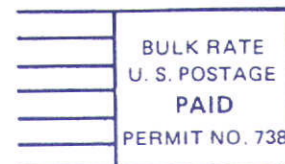
Chief Judge of the 9th Judicial District (Garfield, Pitkin and Rio Blanco counties), Gavin Litwiller, recently retired. Judge Litwiller was also the appointed Water Judge for Water Division No. 5 (Colorado River basin) since 1980. Litwiller, 55, was appointed to the district bench in 1972 and previously had served as Rifle's Municipal Court judge. He was appointed chief judge of District 9 in 1980. Supreme Court Justice Luis Rovira appointed District Court Judge Thomas Ossola to take Judge Litwiller's position.

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