

Colorado

Stream Lines

QUARTERLY NEWSLETTER OF THE OFFICE OF THE STATE ENGINEER
COLORADO DIVISION OF WATER RESOURCES

1313 Sherman St. Room 818, Denver, CO 80203 - (303) 866-3581

Summer 1993, Vol. VI, No. 3

Water Division 5 Meets With State Engineer

On June 11 in Glenwood Springs, the State Engineer met with members of the Water Division 5 water community to discuss issues of mutual interest.

The event, co-sponsored by the Water Division 5 Bench Bar Committee, was attended by approximately 70 water lawyers and engineers who practice in Division 5.

The purpose of the meeting was to provide the State Engineer's position on issues that are often litigated in the Colorado River basin Water Court while simultaneously allowing the participants to express their viewpoint directly to the State Engineer and his staff. In doing this, it was hoped that communication would be facilitated, misunderstandings over the State Engineer's position would be fewer, and ideas and solutions to common problems faced by all concerned would be forthcoming, ultimately leading to reduced litigation costs for all concerned.

Specific issues discussed included, Good v. Bell and the ramifications of the state's position with regards to this Supreme Court decision, extension of use and existing

wells, priority dates and augmentation plans, Statement of Beneficial Use requirements, speculation in water resources, springs and wells, and alternate and supplemental points of diversion. A lively debate occurred on many of the issues and a committee was formed consisting of meeting participants and the State Engineer's staff to attempt to work out solutions to many of the problems discussed.

Overall, the participants thought the meeting was very useful and the State Engineer plans on doing this again in Division 5 every few years. Also, future meetings with the water community are being planned for other Water Divisions throughout the state.

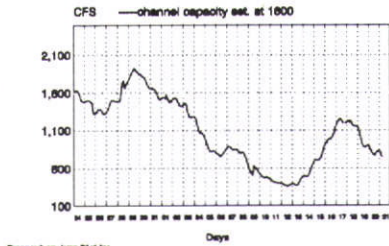
The State Engineer would like to thank the Water Division 5 Bench Bar Committee, specifically Lee Leavenworth of Leavenworth and Lochhead, Scott Balcomb of Delaney and Balcomb, and Judge Thomas Ossola, Water Court Judge, Water Division 5, for their assistance in bringing this meeting together.

To serve the needs of the public while conserving, protecting, developing and maximizing the beneficial use of the state's present and future water supplies.



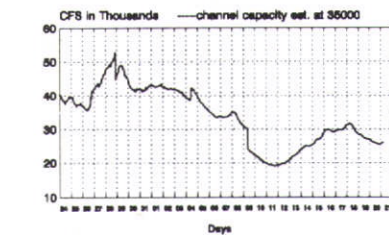
Satellite Monitoring Assists In Flood Watch

North Channel Conejos River near Lasauses
May-June 1993



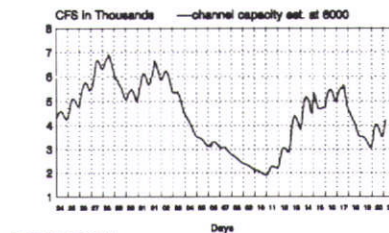
Prepared on June 21st by
Division of Water Resources

Colorado River at Stateline
May-June 1993



Prepared on June 21st by
Division of Water Resources

Animas River at Durango
May-June 1993



Prepared on June 21st by
Division of Water Resources

The satellite-linked monitoring system became very useful during the spring run-off of late May and early June. With the very high snow pack and the heavy rains of May, the threat of flooding was substantial in many areas. Since the satellite monitoring system collects real-time data from various stream gaging stations throughout the state and is immediately accessible, the system was available for use by many entities to monitor the progress of the run-off.

The hydrographic branch of the Office of the State Engineer reviewed the existing data collection points and selected 45 locations which could be used to monitor the stream flow at sites where floods were most probable. The various field offices of the Division then supplied information concerning the channel capacity at each of the selected sites. Each morning the data for the previous 24 hours were reviewed and 12 to 20 locations, depending upon the existing conditions, were charted (see samples). These charts were then supplied to the Governor's Office, the media, the weather service, the Department of Natural Resources and the Colorado Water Conservation Board on a daily basis. Direct computer access to the data was also given to some county emergency offices on the western slope. This allowed Delta County, for example, to directly monitor stream flow at key locations.

This data provided the above mentioned entities with up to the minute real time information on stream/river levels and allowed for better management of extremely dangerous situations.

Ground Water Policies Available

A compilation of current policies with regards to wells and ground water is available for purchase from the Office of the State Engineer. Policies regarding exempt uses, 600-foot spacing requirements, Good v. Bell, and various policies concerning the Denver Basin aquifers are just a few of the 20 different policies included in the packet. A copy of the packet can be obtained from the Records Section in Denver at 1313 Sherman St., Rm. 818, Denver, CO 80203. The cost is \$20.

Legislative Highlights

Bills that passed relating to water issues during the recent legislative session were as follows:

House Bill 1240 - Tabulation of Water Rights

Sponsored by Representative Mary Blue and Senator Linda Powers, this bill authorized the State Engineer to issue an official water rights tabulation every two years. This replaced the old system of issuing a tabulation every four years with a revision following 18 months later.

Senate Bill 260 - Fees for Gravel Pit Reviews

This bill, sponsored by Representative Tim Foster and Senator Don Ament, was a late bill introduced to replace a similar bill, House Bill 1184. It passed on the last day of the session and increases the fee for first time gravel pit review to \$1343, which is good for two years. It provides for a renewal fee of \$217.

Senate Bill 241 - Extension of Provisions Which Create A presumption of No Material Injury on Wells

Sponsored by Senator Mike Bird and Representative Lewis Entz, this bill's purpose was to correct an error in 1991 legislation that would have repealed the State Engineer's ability to issue household use only well permits and wells on tracts

larger than 35 acres under the presumption of no material injury. This bill passed on the last day of the session and allows the State Engineer to continue to consider issuance of well permits that meet the presumptions set forth in section 37-92-602.

Senate Bill 76 - Funding of Satellite Monitoring

This bill approved additional funding for the controlled maintenance of the Satellite Monitoring System from the Colorado Water Conservation Board Construction Fund. The measure was sponsored by Senator Bird.

House Bill 1060 - Water Well Application Notices

This bill amended last year's HB 92-104 concerning entities that had to be notified of the intent to withdraw ground water. This bill limited the parties who had to be notified to a more reasonable scope. This bill was sponsored by Representative Jeanne Atkins.

Denver Office Reorganizes

The Denver office of the Division of Water Resources has recently undergone a significant reorganization. The reorganization has replaced the previous major functional groups of "Ground Water" and "Engineering" with two geographically allocated groups that are responsible for all activities, including well permitting, substitute supply plans, and review of water court case applications. (See 1 page insert enclosed in this issue of *Stream Lines*). The reorganization was effective June 1st, (See **Reorganization** on Page 8).

The Division of Water Resources monitors 300 gaging stations. Of those, 220 are overlapped by the satellite monitoring system. The Division also maintains records on 160 of those sites.

SUMMARY OF INTERSTATE COMPACT MEETINGS

By Hal Simpson, State Engineer

RIO GRANDE COMPACT

The Rio Grande Compact Commission held its 54th Annual Meeting in Santa Fe, New Mexico, on March 25, 1993. At this meeting, the Commission received reports from the Bureau of Reclamation, the Corps of Engineers, and the U.S. Geological Survey. The Engineer Advisers reported on the scheduled and actual delivery of water by each state for 1992.

Colorado had a scheduled delivery at the stateline of 190,700 acre-feet and its actual delivery was 240,600 acre-feet. With its accrued credit of 22,900 acre-feet on January 1, 1992, Colorado's accrued credit on January 1, 1993 increased to 70,900 acre-feet. This is a rare situation and resulted from unusual runoff conditions. It was our intent to reduce the accrued credit in Elephant Butte Reservoir to near zero in 1992, but it could not be accomplished due to high return flows and runoff below the major water uses on the Rio Grande and Conejos River.

New Mexico encountered similar circumstances with its scheduled deliveries being 679,300 acre-feet and its actual deliveries 795,000 acre-feet. Its accrued credit increased to 165,700 acre-feet on January 1, 1993.

With such a large amount of accrued credit water in Elephant Butte Reservoir and the large runoff potential this year, there was considerable discussion at the meeting about the possible spill of credit water. In particular, Colorado and New Mexico interpreted the Compact's language to not require an annual accounting of deliveries in a year of spill of credit water. Texas strongly disagreed. No resolution of this issue is likely absent litigation. Fortunately, it appears that Elephant Butte project storage came within about 50,000 acre-feet of filling but did not spill. Texas and New Mexico water users below Elephant Butte Reservoir will have a three-year supply in project storage of 2,200,000 acre-feet on July 1, 1993.

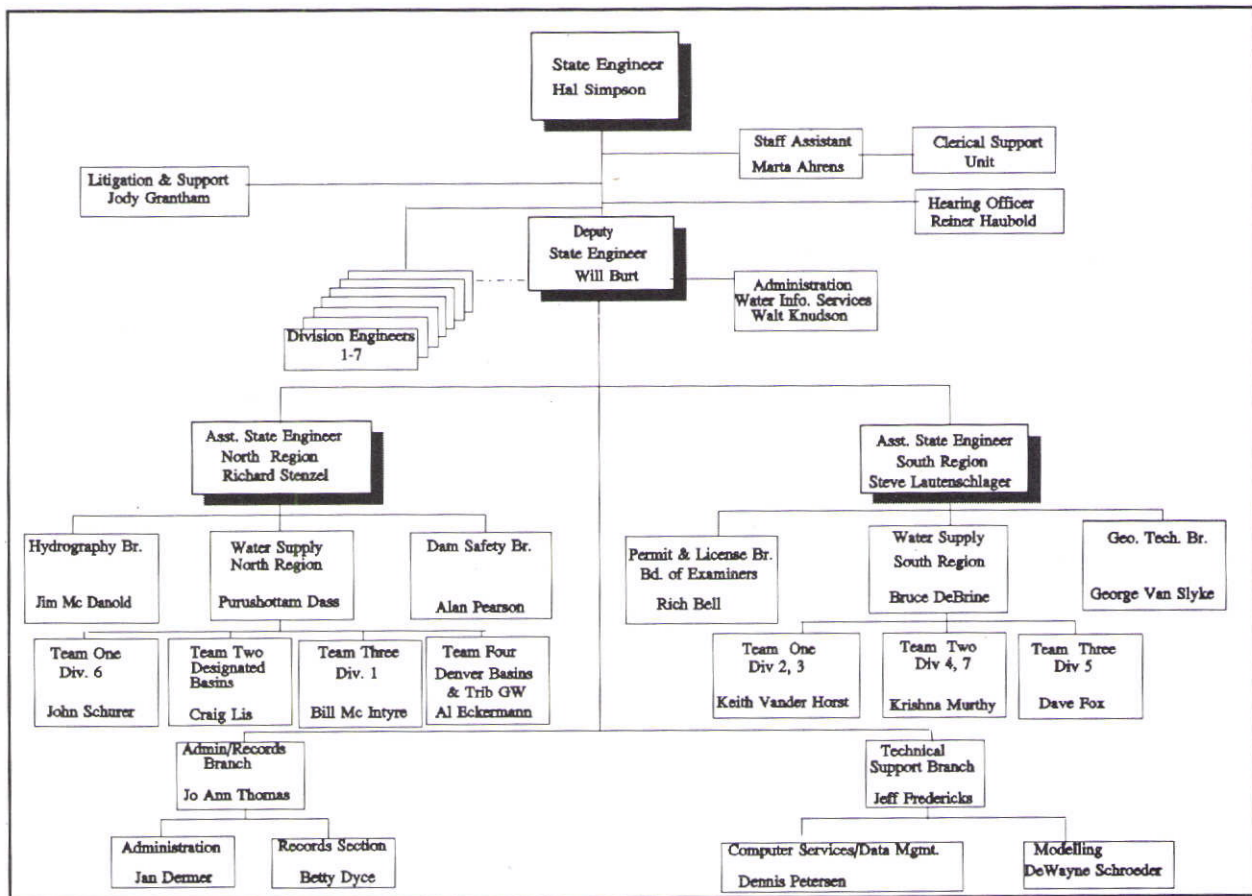
The Commission discussed its annual budget and could not reach agreement on each state's contribution. It was Colorado's position that its costs to operate the seven compact gaging stations had not been considered in all previous compact years. Texas and New Mexico agreed that each state's actual costs should be determined and included in a revised procedure to equalize costs. The Commission decided to meet at a later date to finalize the budget.

The Commission also discussed at length the proposed listing of the Silvery Minnow on the Endangered Species list of the U.S. Fish and Wildlife Service (USFWS). The Commission agreed to discuss this issue again at a later date and to prepare Commission comments to the U.S. Fish and Wildlife Service.

The Commission met for a second time on June 15, 1993 in Albuquerque, New Mexico to continue its annual meeting. At this meeting, the budget was finalized with Colorado's large cost to operate the seven gages (\$38,598) recognized for the first time. As a result, Colorado will receive a credit in the budget for this expenditure.

The Commission continued its review of the potential ramifications of the listing of the Silvery Minnow which are very serious due to the fact that any Federal action impacting the Rio Grande above Elephant Butte

Organizational Chart of the Division of Water Resources



NORTH REGION GROUP, Assistant State Engineer, Richard Stenzel:

Water Supply North Region Supervisor -- Purushottam Dass

Team One - Div. 6

John Schurer
Bahman Hatami

Team Two - Basins

Craig Lis
Rick Nielsen
Rich Cooper
Wtr. Comm.

Team Three - Div. 1

Surface Water
Bill McIntyre
Dick Wolfe
Tamara Cunningham
Mel Malley

Team Four - Div. 1

Ground Water
Al Eckermann
Glenn Graham
John Bilisoly

Hydrography Branch Supervisor -- Jim McDanold

Sr. Prof. Engr. (Vacant)
Dave Dzurovchin
Chuck Shaffer
Richard Poelker

Dam Safety Branch Supervisor -- Alan Pearson

Steve Spann
Mark Haynes

SOUTH REGION GROUP, Assistant State Engineer, Steve Lautenschlager:

Water Supply South Region Supervisor -- Bruce DeBrine

Team One - Div. 2,3

Keith Vander Horst
Heidi Frey
Bill McCaw

Team Two - Div. 4,7

Krishna Murthy
Fred Loo

Team Three - Div. 5

Dave Fox
Judy Sappington
Jeff Deatherage

Permit & License Supervisor -- Rich Bell

Norm Hill
Sandy Johnson
LaVera Davis

Geotechnical Branch Supervisor -- George Van Slyke

John Romero
Lloyd Hershey
Steve Joliat

The following people are assigned to the **DEPUTY STATE ENGINEER, Will Burt:**

Technical Support Branch Supervisor -- Jeff Fredericks

Computer Support Data Management Branch Supervisor -- Dennis Petersen

Brian Fleming	Julie Kraus
Jean Van Loan	Stephani Schupbach
Diana Melaragno	Leah Lewis
Greg Ibarra	Statistic Analyst (Vacant)

Modelling Branch Supervisor -- DeWayne Schroeder

Brian Ahrens
SB-87 Position (Vacant)
Tech 1-B (Vacant)

Admin./Records Supervisor -- Jo Ann Thomas

Jan Dermer, Staff Asst.
Carol Quintana

Records Section Manager -- Betty Dyce

Joe Matthews
Violet Rodriguez
Bonnie Tusinger
Jo Campbell
Sue Kawano

Clerical Support Unit Manager -- Marta Ahrens

Vacant - Secretary North Region
Janet Godwin - Secretary South Region
Crystal Carter - Secretary Technical Support Branch
Susan Garcia
Jolene Velasquez

Contact people for the **Compacts** as listed in the Denver office:

Compact Engineers

Keith Vanderhorst	Rio Grande Compact
Brian Ahrens	Costilla Creek Compact
Bill McIntyre	Republican River, South Platte River Compacts

Reservoir will require a Section 7 review by the USFWS under the Endangered Species Act. Any depletion could be viewed as harmful to the species resulting in a jeopardy opinion. The Commission will express its concern in a letter to the USFWS on August 10, 1993. It appears that a recovery plan similar to the one developed for the Upper Colorado River basin must be approved and implemented in order to prevent significant impacts of present and future water projects needing Federal permits.

COSTILLA CREEK COMPACT

The Costilla Creek Compact Commission met on May 14, 1993 in Santa Fe, New Mexico to review water deliveries, approve the annual budget, and to review the duties of the Water Master employed by the Commission.

Water deliveries for 1992 pursuant to water right priorities as established in the Compact were reviewed and found to be properly done. A new Water Master has been employed with training from the retiring Water Master accomplished in the late summer of 1992. Mr. Bobby Tribble, a former United States Geologic Service employee, replaced Mr. Jack Yapple who has been the Water Master for approximately ten years.

The budget for 1993-1994 was approved, with each state contributing approximately \$35,000 to the annual operations. The Costilla Creek Compact allocates water to the irrigation of about 7,200 acres in both states. Thus, the cost to administer this Compact of about \$5.00 per irrigated acre is probably the highest of any compact in the West.

REPUBLICAN RIVER COMPACT

The Republican River Compact Administration met on June 10, 1993 in Topeka, Kansas, to review the report of the Engineer Advisers concerning allocation and consumptive use of water in each basin pursuant to the Compact and to receive reports from the Bureau of Reclamation and Corps of Engineers.

Colorado's adjusted consumptive use allocation was 39,750 acre-feet, which is less than the original Compact allocation of 54,100 acre-feet. This reduction is due to below average streamflow conditions in 1992. Colorado's computed consumptive use was 21,560 acre-feet, which is within its adjusted allocation. Kansas' consumptive use was 36,230 acre-feet, which is less than its adjusted allocation of 214,230 acre-feet. Nebraska's consumptive use was 234,300 acre-feet, which is less than its adjusted allocation of 260,670 acre-feet.

Kansas has expressed concern at the last three annual Compact meetings about overuse of water by Nebraska in certain sub-basins. The overuse is related to the use of tributary ground water. Nebraska has taken the position that ground water was not included in the original Compact allocations, and as a result, it is not in violation of the Compact. The Administration has established a legal committee consisting of a member from each state's Attorney General's office to review all historical documents and report to the Commission by May 1, 1994.

Water Level Measurements Available

During the winter and spring of 1993, over 1000 wells were measured as part of the state-wide ground water monitoring program. Wells were measured in all designated basins except Crow Creek, the South Platte alluvial aquifer and the bedrock aquifers of the Denver Basin. Reports have been prepared for all of the areas and are available from the Division's Record Section. In general, water level declines are less than historically recorded. This is mainly due to decreased pumping resulting for the wet summer of 1992.

The well monitoring network for the West Slope will be measured beginning in June, and the first annual report will be available some time in the fall.

Cooperative Ground Water Mapping Study Undertaken

The Division's Geotechnical Services Branch has begun a cooperative study with the United States Geological Survey to map the shallow alluvial aquifer of the South Platte drainage in an area from the Douglas County line north to the Weld County line. The results of this study will be published in the form of a hydrologic atlas which will contain maps showing the thickness of the alluvial materials, depth to ground water and direction of ground water movement. Other cooperators in the study include numerous municipalities and government agencies within the study area. Most of the work will be a joint effort between the USGS and the Division and will be accomplished over a two-year period. Principal investigators are Stan Robson of the USGS and George VanSlyke of the Division.

New Assistant Division Engineer Appointed in Division 7; New Senior Professional Engineer in Denver Office

The State Engineer has appointed Bruce Whitehead as the new Assistant Division Engineer for Water Division 7 in Durango. Bruce has a strong background in hydrography and has served as a hydrographer in Water Division 3 for the past 12 years.

Also, Dave Fox has returned to the Division of Water Resources as a Team Leader for Water Division 5. Dave left Water Resources to work for the Division of Parks in 1989. Dave's previous experience in the water resource arena will allow him to immediately step in and assist in one of our busiest divisions.

Notice From the Board of Examiners

The Board of Examiners of Water Well Construction and Pump Installation Contractors intends to revise the Water Well Construction and Pump Installation Rules. Interested parties are requested to provide input and or participate in the rulemaking process. Anyone wishing to receive announcements and notices of meetings should submit a written request to:

Board of Examiners
att: Reiner Haubold
1313 Sherman Street, Room 818
Denver, CO 80203
FAX (303) 866-3589

For questions or further information please call Reiner at: (303) 866-3581.

CWCB LOANS AVAILABLE TO WATER USERS

\$2 Million Allocated for Emergency Dam and Canal Repairs

As part of the annual Colorado Water Conservation Board (CWCB) Construction Fund bill, an emergency infrastructure repair account has been created that will enable the Board to make loans for repairs of raw water-related infrastructure -- such as dams, ditches and raw water pipelines -- during emergencies. Two million dollars will be transferred from the construction fund to the new account.

"When the idea of establishing an emergency repair account came up last fall, we had no idea how soon those funds might be needed," said CWCB Director Chuck Lile. "The heavy snowpack and increased flood potential this spring made the creation of this emergency account especially timely."

During the spring of 1992, when water officials identified a need for emergency repairs on Sanchez Dam in Southern Colorado, the legislature was still in session and therefore able to allocate funds to fix the problem.

"At that time, the Board realized a special account was needed so that the state could respond immediately to water infrastructure-related emergencies that arose when the legislature was not in session," Lile explained.

Funds from the emergency account will be available for loans to entities that must repair their facilities to prevent risk, injury or damage to human health or wellbeing, or crops. The loan terms are the same as those for the construction fund.

Non-emergency Loans Also Available for Construction or Rehabilitation of Raw Water Dams, Reservoirs and Canals

The CWCB Construction Fund was established in 1971 to make low interest loans for the development and rehabilitation of raw water projects. Projects which will increase the beneficial consumptive use of Colorado's undeveloped compact entitled waters, and projects for the repair and rehabilitation of existing raw water dams and delivery systems are the highest priority. Construction Fund projects must pass through the annual legislative process, with an August 31, 1993 application deadline for consideration during the 1994 legislative session. Standard loan terms are interest at approximately 5% (fixed at 2 percent less than the U.S. Government 30-year Treasury Bond rate for the life of the loan), and a term of 20 years. Loans are made for up to 75% of project cost; however, all loan terms are adjustable at CWCB Board discretion, based on special need.

CWCB Loan Summary Information

Program: Colorado Water Conservation Board (CWCB), Construction Fund and Emergency Account

Eligible Projects: Construction of raw water supply projects, or repair of existing projects (dams, canals, pipelines, well fields, etc.). Project studies are also eligible.

Type of Assistance: Loans (up to 75%).

Terms: Standard repayment period is 20 years, with interest at 200 basis points less than the U.S. Government 30 year Treasury Bond rate (fixed rate for the term of the loan.) Loan terms are adjustable based on special need, at the discretion of the Board.

Eligible Recipients: Water Conservancy District, Water User Association, Irrigation District, Private Association, etc., as well as Municipality, County, City, etc.

Maximum Amount: No Limit (Subject to available funds)

Special Requirements: Approval by the CWCB and Legislature (emergency does not require prior legislative approval). Loans to government agencies must be reviewed by Water and Power Authority

Application Deadline: Ongoing; Project must be ready for recommendation to the Board by September for funding under next year's legislation. For emergency repairs, apply any time.

For more information about low interest loans from the emergency account or the construction fund, Call the CWCB at (303) 866-3441.

(Reorganization, Cont. from page 3).

but a complete transfer of duties will come more gradually, mainly as training in new duties is completed.

Where possible, individuals previously assigned to the two previous functional groups were placed into the same regional groups that they served in their previous assignment.

Long term objectives of the reorganization are a more diversified career development opportunity without the necessity of reassignment to a different section, a more integrated team approach in providing those services related to the seven field divisions, and a potential for levelling out workload peaks.

To date, the reorganization has gone smoothly. Affected individuals have physically moved, and several training sessions have been completed. More training is planned in the near future.

CALENDAR OF EVENTS

- | | |
|-----------------|---|
| August 19-20 | Colorado Ground Water Commission, meeting to be held in Breckenridge, Co. Contact Marta Ahrens, DWR at (303)866-3581. |
| September 9-10 | Colorado Water Conservation Board, meeting to be held in Alamosa, CO. Contact Dori Romero, CWCB at (303)866-3441. |
| September 23-24 | Colorado Water Congress, Water Law Seminar, Holiday Inn, Northglenn, CO., at I-25 and 120th Avenue. Contact CWC (303)837-0812. |
| September 27-29 | The Association of Western State Engineers meeting, in the state of Washington. Contact Marta Ahrens, DWR at (303)866-3581. |
| October 19 | Colorado Water Congress Workshop on Legal Ethics in Water and Environmental Law, Holiday Inn, Northglenn, CO., at I-25 and 120th Avenue. Contact CWC at (303)837-0812. |
| October 20 | Colorado Water Congress Workshop for Board Members of Water Conservancy/Conservation Districts, Holiday Inn, Northglenn, CO., at I-25 and 120th Avenue. Contact CWC at (303)837-0812. |
| October 21 | Colorado Water Congress 13th Annual Workshop on Federal and State Water Quality Developments, Holiday Inn, Northglenn, CO., at I-25 and 120th Avenue. Contact CWC at (303)837-0812. |
| October 27-28 | Seeking an Integrated Approach to Watershed Management in the South Platte Basin, University Park Holiday Inn, Ft Collins, CO. Contact Kathleen Klein (303)491-6308. |
| October 27-29 | Rocky Mountain Ground Water Conference in Albuquerque, NM. Contact Michael Campana, Department of Earth and Planetary Sciences (505)277-3269. |

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