

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

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*The Colorado Division of Water Resources, a full service agency committed to providing the finest in water resource management for the people of Colorado*

## ***Division Appoints New Assistant State Engineer***

State Engineer Hal Simpson has appointed Jack Byers as the new Assistant State Engineer. Jack replaces Dick Stenzel, who accepted the Division Engineer's position for Water Division 1 in September of 1995. Jack is a native Coloradoan from Arvada, Colorado.

Jack brings with him extensive skills in management, supervision, dam safety, water operations, and water management and obtained these skills while working as a regional manager for the private consulting firm of MSE-HKM in Wyoming and through various positions in the Bureau of Reclamation. As Assistant State Engineer for the Division of Water Resources, Jack will have oversight responsibilities of the state's dam safety program, the geotechnical program, the hydrography program, ground water modeling and the board of examiners. One of Jack's first jobs will also be to oversee implementation of the requirements of Senate Bill 74, which involves the economic life of the Denver Basin and various other issues along the South Platte River.

His exceptional experience and managerial skills are a welcome addition to the Division of Water Resources team. We welcome him aboard with open arms and are confident that his association with us will be one full of new challenges, opportunities and success.

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## ***Colorado River Decision Support System Update***

The Colorado River Decision Support System (CRDSS) is a collection of computerized water resource databases, models and tools. This multi-year, multimillion dollar project is being sponsored by the Colorado Water Conservation Board (CWCB) and the Colorado Division of Water Resources (DWR) to provide a stronger foundation for the State and others to make decisions on Colorado River issues and to provide a tool for water resource planning, management and administration within Colorado.

The first development phase, which began in January 1994, is nearing completion and will result in an integrated system containing tabular databases, map databases, consumptive use models, water resource planning models, and 'Big River' models and means of access.

In 1991, as a result of endangered species recovery efforts and discussions concerning Colorado River operations among the seven Colorado River Basin states, Colorado determined that it needed

## *CRDSS cont.*

to be able to better evaluate and analyze water resources data and issues. A subsequent feasibility study in 1993 identified 90 major types of water resource information used by State, federal and local water user agencies. Though the State will be the primary user of the system, the system will also be used by local water users and federal agencies. Identified needs were grouped into general need categories and prioritized. The highest ranked need categories are indicated below.

- Interstate Compact Analysis:
  - Annual Reservoir Operations Planning
  - Compact Policy Evaluation
- State Water Resource Planning:
  - Basin wide Water Resource Planning
  - Project Yield/Development Analysis
  - Appropriation and Management of Instream Flow Rights for Endangered Species
- State Water Rights Administration:
  - Real Time Administration
  - Water Rights Operation/Yield Analysis
  - Compact Administration within Colorado

Training for the current system has been completed for both State and non-State representatives in the use of the system.

A development team headed by Riverside Technology, Inc. of Fort Collins was selected for the first two and one half years of CRDSS Development. Other members of that development team include Colorado State University and W.W. Wheeler and Associates. Boyle Engineering Corporation and Enartech, Inc. have been added to the CRDSS Development Team for the 3rd CRDSS development year. The Boyle/Enartech Group brings a fresh set of eyes as well as expertise in water resources and water rights.

To manage the development of the CRDSS, a State Project Management Team was established consisting of senior staff members of the CWCB and DWR and a contract Project Manager. To provide additional guidance during CRDSS development, a 20 person technical advisory committee (TAC) has been formed which includes major Colorado River water users, federal and state representatives.

Questions on the CRDSS Project should be directed to Ross Bethel, CRDSS Project Manger, c/o Colorado Water Conservation Board, 1313 Sherman Street, Room 721, Denver, Colorado, 80203, phone (303) 866-3441, ext. 308, fax (303) 866-4474.

### ***State Engineer Responds to North Fork Fish Loss***

As State Water Engineer and as an avid fly fisherman, I was deeply saddened by the loss of thousands of fish in the North Fork of the Cache la Poudre River in September of this year.

Contrary to newspaper reports, my office never ordered or required the owners of Halligan Reservoir to drain the reservoir for any reason. The reservoir owners had experienced problems with the reservoir's outlet gate for several years, and decided to lower the reservoir to inspect the gate and correct the problem. When we became aware of the Company's plans, my dam safety engineer rightly concluded that would be a good opportunity to inspect the upstream face of the dam. Allegations that we ordered the drawdown and release of water are simply not true. Dam safety inspections do not require the release of water from a reservoir. I order reservoirs to be drained only when imminent loss of life or property are of concern due to structural dam problems. Neither problem exists at Halligan Reservoir.

I am taking steps to ensure that when we know of releases of water from reservoirs into such valued streams in the future, that we will notify the Division of Wildlife as we agreed to do. Three committees have been formed to assist in this endeavor. With regard to the North Fork, the technical committee is examining recovery efforts both long and short term. A task force committee, including my Division Engineer, representatives from the Division of Wildlife, environmental interests and water user groups is looking at long term notice solutions in the North Fork. Statewide, representatives from the Division of Wildlife, the state's Water Quality Control Commission and the State Engineer's Office, are examining ways to improve and modify the existing memorandum of understanding regarding notification of pending releases. Finally, I have ensured that the existing memorandum of understanding between my office and the Division of Wildlife is understood throughout all levels of our organization.

It still remains unclear that even if all parties are fully informed, whether reservoir owners will agree to follow protective measures desired by the Division of Wildlife. In these cases, we must rely on the recognition of water owners to avoid needless harm to streams and downstream property owners.

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### ***CWCB Launches Arkansas River Flood Study***

On August 27 and 28, the Colorado Water Conservation Board (CWCB) held meetings in Lamar and Rocky Ford to gather public input for a study that will investigate problems related to recent flooding in the Arkansas River basin and identify possible solutions.

During 1995, the CWCB and the U.S. Army Corps of Engineers held meetings in southeast Colorado to assess local support and potential obstacles to solving flood-related problems in the lower Arkansas River basin. The CWCB then sought and received legislative authorization and funding for the Arkansas River Multi-Objective Management Plan. The board is authorized to spend \$150,000 on the study during the fiscal year that began July 1.

The plan will focus on two reaches of the river - from Pueblo reservoir to John Martin Reservoir, and from John Martin Reservoir to the Colorado state line. The Albuquerque District of the Corps of engineers will contribute money to jointly fund the study of the lower reach.

Specific issues the study will address include channel conveyance, sediment deposit, vegetative management, reservoir operations and riparian plantings and removal.

## ***Colorado Contractors Had Busy 1995***

Recent data from the Colorado Division of Water Resources showed that more than 6,100 new water wells were constructed in Colorado during 1995. The data shows that the number of permit applications received for the July 1, 1994 - June 30, 1995 period were 12,232 with 11,090 permits issued and 283 denied. That was the largest number of permit applications in recent years, and was about 10 percent higher than 1993 - 1994. Data for 1995 - 1996 are about the same as for 1993 - 1994.

Well permit applications vary from month to month with the peak number arriving in the May to August period. The number of applications received from November through January is the lowest, with only about half that of the peak summer months.

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## ***Arkansas Ground Water Well Testers Approved***

Hal Simpson, State Engineer, announced that he recently approved well testers for groundwater wells in the Arkansas River basin. These individuals passed testing parameters to allow them to conduct Power Consumption Coefficient (PCC) ground water well testing that is required under the Rules and Regulations Governing the Measurement of Tributary Ground Water in the Arkansas River basin. Consumers should be aware that an individual performing PCC tests on wells within the valley must either be a registered professional engineer or be approved by the State Engineer for their PCC well tests to be considered valid. The individuals approved are:

*Vern Bauer* of Burlington, *Trent Satman* and *Wes Stratman* of Pueblo, *Fred Bregar* of Pueblo, *David Simpson*, Pueblo, *Brad Young*, Lamar, *Betty Plese* of Pueblo, and *Guy Watters*, Cheraw, Colorado.

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## ***Visit Us on the World Wide Web***

The Division of Water Resources is now on the World Wide Web with a home page providing various information regarding Colorado water. The site can be reached through the Department of Natural Resources home page by clicking water at the bottom of the page. The Department's home page is located at <http://www.dnr.state.co.us> You can also visit the site directly at <http://www.dnr.state.co.us/water/>

In this site you will find useful information about our organization, information on which residential well permit application you need to fill out, surface water information, dam safety information, record information and a list of phone numbers. Streamflow information is also provided including a list of all of the Watertalk numerical codes for you to use when accessing the popular Watertalk phone service of the Division, which provides real time stream flow data.

The home page is still in its infancy, however, updates and improvements will be continuing. The next phase will begin to add regional information from each of the seven division offices and the designated basins, more readily accessible data, well construction information, rules and regulations, and interstate compact information.

## ***Cluster Developments Under House Bill 96-1364***

House Bill 96-1364, passed during the last legislative session, allows the State Engineer to issue limited residential well permits, in over-appropriated areas, in accordance with a new presumption of non-injury, but only when the county has approved the cluster development under certain limiting conditions as detailed in the bill. Upon approval of such a cluster development the county is required to notify the State Engineer of their approval and provide a copy of the plan.

Nothing in the bill requires a county to adopt such a land use process, or prohibits the counties from approving other types of cluster developments that don't comply with the terms of the subject legislation. However, in over-appropriated areas, a court approved plan for augmentation would be needed if that land division was approved as a subdivision.

Following is a summary of the major provisions of the bill:

1. At least two-thirds of the total original tract must be contiguous open space.
2. The open space cannot be developed for at least forty years.
3. The number of residential lots cannot exceed two for each thirty-five acre increment within the cluster development. This is based on an allowance of one lot per thirty-five acre increment plus bonus lots not to exceed 100%. The county decides how many bonus lots are allowed.
4. Only one well permit is available for each residential lot within the cluster development.
5. Only one single-family dwelling (including outside uses) can be served by each well.
6. The amount of water available for withdrawal from each well within the cluster development is based on one acre-foot for each thirty-five acre increment divided by the number of residential lots. This means the maximum annual withdrawal would be one acre-foot per well, assuming the standard one lot per thirty-five acre increment was approved, or a maximum of one-half ( $\frac{1}{2}$ ) acre-foot per well assuming the county approved the maximum number of bonus lots.
7. The use limits to be placed on the well permits approved pursuant to the new presumptions will be those normally placed on a "domestic" permit with the additional limit of one single-family dwelling. The same return flow conditions that apply to other presumption wells also apply to these permits. In addition, the permit will indicate approximately how much lawn and garden it may be possible to irrigate with the amount of water approved.
8. A totalizing flow meter will be required to be installed on each well, and the well owner will be responsible for reporting the annual withdrawals.

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## ***Division of Water Resources to Accept Visa and Mastercard Credit Cards***

In an ongoing effort to provide better service to our customers, beginning in January 1997, the Division of Water Resources will begin to phase in acceptance of payment for all services rendered via the convenience of credit card. In particular, this will offer walk-in customers more choices in their methods of payment. Both Visa and Mastercard will be accepted in the Denver office. Regional office acceptance will be phased in over the next year.

## CALENDAR OF EVENTS

- January 23 Preparation for licensing exam, Colorado Water Well Contractors Association , \$10.00 fee. Red Lion Inn, Colorado Springs, CO. Contact Carol Brooks, CWWCA, at (303) 759-1756 for more information.
- January 24 & 25 Colorado Water Well Contractors Association Annual Meeting with seminars and exhibits. Red Lion Inn, Colorado Springs, CO. Contact Carol Brooks, CWWCA, at (303) 759-1756 for more information.
- January 29 & 30 Colorado Water Conservation Board (CWCB), Board Meeting in conjunction with the Colorado Water Congress. Holiday Inn, I-25 and 120th Avenue, Northglenn, CO. Contact Vivkie Ta, CWCB, at (303)866-3441, for more information.
- January 30 & 31 Colorado Water Congress (CWC), 39th Annual Convention, Holiday Inn, I-25 and 120th Avenue, Northglenn,CO. Contact CWC, at (303) 837-0812 for more information..
- February 4 Board of Examiners of Water Well Construction and Pump Installation Contractors, Room 615, 1313 Sherman Street, Denver, CO. Contact Marta Ahrens DWR, at (303) 866-3581.
- February 6 Colorado Ground Water Commission, Room 318, 1313 Sherman Street, Denver, CO. Contact Marta Ahrens, Division of Water Resources (DWR), at (303) 866-3581.
- February 26 - 28 Colorado Rural Water Association (CRWA), 16th Annual Training Seminar and Exhibition, Red Lion Inn, Colorado Springs, CO. Contact Herman Wooten , CRWA, (719) 545-6748 for more information.

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