



Quarterly Newsletter of the Office of the State Engineer

Cooperation Leads to Restoration

Elvis Iacovetta, Water Commissioner, Water Division 6, District 58

When the idea to help fund the restoration of diversion dams was first discussed, the Upper Yampa Water Conservancy District (UYWCD) could not imagine how important the program would become. Due to natural stream erosion and the lowering of the stream channel, ditch owners constructed diversion dams to force water into their ditches. These were constructed by pushing the gravel bottom up into a dam with dozers and backhoes. This resulted in acceleration of river channel erosion and the ditch owners having to construct higher dams. Some dams would need to be replaced several times a season. After years of destroying the river armor, many headgates are now several feet above the stream bottom.

In an effort to stop stream channel erosion and make agricultural diversions more environmentally sound, the UYWCD created funding for restoration projects. The UYWCD, under the direction of manager John Fetcher, is the main organizer for the projects. At first, water commissioners from the Division of Water Resources identified possible ditches for restoration. Currently, ditch owners themselves are also asking for assistance. John Fetcher has been the driving force to get the projects

started, to keep them moving, and on budget. In all cases, additional sources of money have been obtained. The policy of the UYWCD is to fund, after other monies have been used, up to 50 percent of the ditch owner's responsibility. The balance is to be paid by the ditch owners.

Working in conjunction with the UYWCD, the Natural Resource Conservation Service (NRCS) engineers determine the cost, help ditch owners apply for funding from the Environmental Quality Incentive Program (EQIP), and oversee the construction of the projects.

To date, seven diversion projects and one ditch project have been completed. The projects vary from moving the headgate upstream so that a diversion dam is not needed, to a high-tech inflatable bladder that lifts the diversion dam. The most common solution is a lay-down structure that is constructed with sheet piling. As the streamflow decreases, arms are lifted and pinned, with boards placed between them. Costs for these projects have ranged from \$15,000 to \$288,500.

The two projects most recently completed are the Bird/Ira Van Camp Ditches and the Enterprise Ditch. The Bird Ditch is located on

Bear River in District 58 and is decreed for 11.6 cfs. The Ira Van Camp Ditch is on the opposite side of the stream and they share a common diversion dam. It is decreed for 0.99 cfs. In recent years, concrete blocks have been put in the stream as a diversion dam because there is not enough gravel left to make a dam. New headgates and a lay down structure were built.

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Cooperation Leads to Restoration (cont.)



Before construction — Ira Van Camp headgate in the foreground and the Bird Ditch on opposite sides of the creek with plastic tarp used as headgate. Cement blocks are in the creek.



After construction — new diversion and headgates. Boards will be placed between steel uprights to create the diversion dam.

The Enterprise Ditch is on Walton Creek in District 58 and is decreed for 29 cfs. Not only was a lay-down structure built and the headgate rebuilt, this project will move two other ditches to the location of the Enterprise Ditch, so that all three will have one diversion point. The other ditches involved are the Excelsior and Windsor. They are decreed for 12.5 and 6 cfs, respectively.

The Smith Ditch is located on Elkhead Creek in District 44. The ditch is decreed for 23 cfs. An inflatable bladder filled by an air compressor lifts the diversion dam. In addition to funding from the NRCS and the UYWCD, money was also contributed by the Colorado River Water Conservation District.

The Brock Ditch is in District 57 on the Yampa River. It is decreed for 21.5 cfs. The original headgate is on an old oxbow. A deeper channel was dug from the

river to the headgate and concrete structures at the river and headgate were built. This eliminated the need for a diversion dam.

The Cary Ditch in District 57 is on the Yampa River. It is decreed for 26 cfs. The headgate was relocated upstream to allow for a better gradient. At this new point, no diversion dam was needed. Since the headgate was moved quite a distance, a new ditch was built to connect the new diversion point to the existing ditch. An easement was negotiated with the Union Pacific Railroad to relocate the new section of the ditch down their right-of-way.

The Dever Ditch is in District 58 and is decreed for 8.5 cfs. A rock structure was placed in the stream to channel the water toward the headgate. Funding for this project came from UYWCD, the City of Steamboat, and Mount Werner Water and Sanitation District.

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Enterprise Ditch and headgate before construction.



During construction of the new diversion dam and headgate for the Enterprise Ditch.

Cooperation Leads to Restoration (cont.)

The Woodchuck Ditch is in District 58 and is decreed for 14.79 cfs. This is the only ditch restoration project that has been done to date. The unique situation is the proximity of the ditch to the growing development around Steamboat Springs. The ditch has always been susceptible to washing out. It runs along a steep hillside above new houses. The ditch easement was across non-ditch owners' properties and access was becoming a problem. The solution was to pipe the ditch for approximately 1,000 feet along the hillside.

The Stafford Ditch is in District 58 on the Yampa River. It is decreed for 21 cfs. This was the first lay-down structure to be installed.

The project that is currently being engineered is one that

involves four ditches on the Yampa River in District 57. They are the Marshall Roberts, Williams, Walker, and Shelton Ditches. They are decreed for 19.19, 19.43, 44.50, and 53.52 cfs, respectively. This is by far the largest environmental restoration project to be undertaken thus far. The Army Corps of Engineers (COE) is expected to contribute a substantial amount of money through their Ecosystem Restoration Program. Negotiations between the ditch owners, the COE, and the UYWCD over costs and designs are still being worked on before the project can be finalized. The estimated cost is between \$1.82 and \$2.5 million.

New projects are continually being identified. Considering the success of the completed projects, the program will continue for years to come.

Water Rights Administration Fee Program

On Wednesday, March 17, 2004, Representative Brad Young and Senator Peggy Reeves of the Joint Budget Committee introduced House Bill 04-1402, calling for the repeal of the Water Administration Fee Program. The fiscal appropriations in the bill would provide full funding to replace the General Fund amount taken out last year for water administration, provide money to refund all water administration fees received, and cover the costs associated with issuing the refund checks and dissolving the program.

The Water Administration Fee Program was created during a time of challenge in Colorado with intent to continue providing a crucial government service to the citizens of this state in a fair and equitable manner. At the time Senate Bill 03-278 was crafted in 2003, Colorado was enveloped within a se-

vere financial crisis and an extended period of severe drought. The proposed legislation will abolish the program and require the State Engineer to cease collection of Water Administration Fees and to refund those fees already collected no later than June 30, 2004.

This proposal was developed with two primary considerations:

1. The legislative economic forecast indicates that the amount of revenue received from the water administration fees would be equal to the amount refunded by TABOR in fiscal year 2004-05. This means that for every dollar received in fees, the State of Colorado would be required to refund a dollar.
2. The general concept that water resources are a life-sustaining necessity and of comprehensive value to all of Colorado's citizens is a benchmark that pre-dates statehood.

Thereby, it is appropriate to fund water administration through general funds.

Passage of this bill will require approval in both the Colorado Senate and House of Representatives, followed by approval of the Governor. The Division of Water Resources will provide progress reports of HB 04-1402 on both its Web site (www.water.state.co.us/wateradminfees.asp) and on the recorded information line at 877-866-WAFP (9237).

Staff have initiated the process to refund fees collected under the program as directed by HB-1402 which was signed by the Governor on April 7. Checks have also been held since the introduction of HB-1402 and will be returned to the owners, which is a less costly process than having a refund check prepared.

Rio Grande Compact Meeting

The annual Rio Grande Compact meeting was held on March 25 in Alamosa with an estimated 120 persons in attendance. The Commission approved the report of the Engineer Advisers as well as the budget for the next year and signed letters to the Governors of the respective states. The Commission, consisting of Joe Hanson for Texas, John D'Antonio for New Mexico, and Hal Simpson for Colorado, approved one resolution addressing federal changes in procedures to compact accounting and requesting the federal agencies to obtain approval of the Commission in advance.

The accounting for calendar year 2003 resulted in Colorado using most of its accumulated credit water in Elephant Butte Reservoir and leaving 1,200 acre-feet of credit water in the reservoir. After discussions with the Texas Commissioner, Texas agreed to accept relinquishment of the remaining credit water after the computations on evaporation to the end of March are completed. This will allow the Conejos Water Conservancy District to use about 1,100 acre-feet of water inadvertently stored over the winter. Under the provisions of the compact, this water should not have been stored, being that Elephant Butte reservoir had less than 400,000 acre-feet of water in storage most of last year. Absent this agreement, the wa-

ter would have had to be delivered to the state line.

The U.S. Fish and Wildlife Service (USFWS) informed the Commission that it was considering planting the endangered Silvery Minnow above Cochiti Reservoir. Commissioner Simpson expressed concern about this and asked that the USFWS keep the Commission informed in writing if it is indeed intending to plant the Silvery Minnow in this reach of the river.

The Rio Grande Water Conservation District hosted a reception on the evening of March 24 at the Inn on the Rio Grande, which was well attended.

Republican River Coordinating Committee

The Republican River Coordinating Committee, chaired by Senator Mark Hillman and Representative Greg Brophy, held three meetings this year to deal with implementing the requirements under the Final Settlement Stipulation (FSS) for the Republican River Compact litigation. During the last meeting on March 20 in Wray, draft language was reviewed for creating a Repub-

lican River Water Conservation District, and information on conservation easements and the Conservation Reserve Enhancement Program was reviewed as well. The Committee chairs decided to move ahead with legislation for a new Water Conservation District and directed Mr. Peter Ampe, Assistant Attorney General, to make changes to the draft and submit the final document to

Senator Hillman for submission to Legislative Drafting. The next meeting date was not set since it was thought that focus should be on the legislation in the near term. Public meetings have been conducted when the opportunity arises and a meeting with water users in the Arikaree and South Fork basins was held on May 24 in Idalia.

Association of State Dam Safety Officials, Dam Safety 2004, ASDSO's 21st Annual Conference. September 26-29, Phoenix, Arizona. The conference topics include dam failures and incidents, hydrology and hydraulics, emergency preparedness, security at dams, dam owner issues, dam safety regulatory programs, dam inspections, dam construction, rehabilitation and design. Additional information on the conference is available at <http://www.damsafety.org>. The conference location is the Pointe South Mountain Resort. Information on the resort can be found at <http://www.pointesouthmtn.com>.

ASDSO invites all persons interested in the safety of dams to submit abstracts of papers to be considered for presentation at the ASDSO 21st Annual Conference. The conference will be held September 26-29, 2004 at the Pointe South Mountain Resort in Phoenix, Arizona. Engineers, geologists, hydrologists, dam owners, state, local or federal officials, industry representatives and others working in the field of dam safety are invited to share their experiences in all aspects of dam safety.

Information available from the Colorado Division of Water Resources through our Web site at www.water.state.co.us

Decision Support Systems tools and data that provide:

- historic, real-time and administrative water resources data
- models to simulate surface water, ground water and consumptive use
- tools to view and manipulate real-time and historic data.

Arkansas River Daily Report plus ditch and reservoir data.

Geographic Information System maps of aquifers, designated basins, irrigated acres, lakes and rivers, and more.

Real-time stream flow and reservoir data updated every hour.

Cumulative Yearly Statistics Reports of annual surface water use and ground water well application and permitting activity since 1992.

Monthly Water Supply Conditions reports since April 1999 of mountain-based water supply conditions in the major river basins.

A List of Water Well Construction and Pump Installation Contractors and information including compliant procedures, policies, and rules and regulations for water well construction and pump installation.

Dam Safety emergency preparedness information, application forms and instructions, and dam safety rules and regulations.

Ground Water application forms, ground water rules and regulations.

A List of Publications, including abandonment lists, annual reports, compacts reports, guides and newsletters.

Division of Water Resources policies, rules and regulations.

Data May Be Purchased from the Division of Water Resources. Some data that is available for free on-line is also available on CD-ROM; this includes diversion records, stream flow records and water rights tabulations. Other purchasable data includes well data subscriptions with well permitting data and 15-minute satellite monitoring data.

Please visit our Web site for more information

Human Resources

New Employees

Tracy Thurau became a member of the Records Section in Denver on June 1, 2004. A primary duty of Tracy's is providing research, information, interpretation and/or copies of historical documents for wells, water rights, diversion records and various files to the public and staff. Tracy has a strong background in customer service and two and one-half years experience with collecting samples and recording data for precipitation information.

Cynthia Love joined Water Supply Team 456 in the Denver office in June 2004, filling the vacant Engineer-in-Training II position. Cynthia recently completed her Masters of Science degree in Water Resources and a Bachelor of Science in Civil Engineering. Her work experience includes several years working on public sector civil and water resources engineering projects, which included operation and analysis of hydraulic and hydrologic models.

Sarah Reinsel started on June 21, 2004 on the Designated Basins Team in the Denver office as Engineer-in-Training II. Her main focus will be processing new and changes of water rights outside of the Denver Basin aquifers, within the Designated Basins. Sarah graduated from University of Colorado at Boulder in May 2003 with a B.S. in Environmental Engineering.

Rebecca Elder joined the Division 6 staff in Steamboat Springs on April 1, 2004. Rebecca was hired as an Engineering/Physical Science Assistant II, responsible for the administration of water rights in the lower White River drainage in Water District 43. Rebecca and her husband live outside of Rangely, Colorado, where they run an outfitting business during the fall and winter seasons.

Tom Fiddler started in April 2004 with the Division 7 office in Durango as Water Commissioner for Water District 30 on the Florida River. Tom comes from the Eagle Valley in Gypsum where he worked for several years for the Water and Sanitation Districts.

David Hoffman started in April 2004 with the Division 7 office in Durango as Water Commissioner for Water District 31 in Bayfield. David has lived in the Durango area since around 1980 and has worked in real estate research.

Gary Vance started in April 2004 with the Division 7 office in Durango as Deputy Water Commissioner for Water District 30 on the Animas River. Gary recently completed degree work at Fort Lewis College and was employed as a temporary in the Division 7 office last fall.

Jeff Montoya was hired as the new deputy water commissioner with the Division 2 office in Water District 19, which includes the Purgatoire River and its tributaries. Jeff has a valuable background in agricultural water use and administration in the Trinidad area and possesses a great knowledge of locations and owners of water rights in the area due to his prior work throughout the region. Jeff also is a Master Electrician and has an Associates Degree in Electronics from Trinidad State Junior College.

David Kelly was hired as the new deputy water commissioner with the Division 2 office in Water District 11. This position's area of responsibility is the administration of the water rights in the Cottonwood and Chalk Creek drainages, as well as other nearby tributaries in the Buena Vista area. Dave's experience with water rights and irrigation include growing up on the nearby Kelly Ranch, fifteen years as a wildlife/fish hatchery technician for the Division of Wildlife, and as the temporary deputy water commissioner in this same position during 2003.

Human Resources *(cont.)*

Robert "Bob" Schulz joined Division 3 in April 2004 as Water Commissioner for the Trinchera Creek watershed (Water District 35). The district has three major creeks, multiple minor tributaries with many small water rights, two irrigation reservoirs, large irrigation systems with many alternate points of diversion, many irrigation wells, two towns with municipal water systems, several complex augmentation plans, the Nature Conservancy's Zapata Ranch, and the Great Sand Dunes National Park. Bob spent many years working with the National Park service and retired from the service after finishing up as Chief of Interpretation at the Great Sand Dunes. His experience with the Park service included enforcement through interpretation and administration.

Ray "Tom" Stewart started in April 2004 in Division 3 as Water Commissioner in Water Districts 25 and 26, which include Saguache and San Luis Creeks. From the Tarbell Transmountain diversion at the head of Saguache Creek to the Baca Ranch north of the Great Sand Dunes and the many ditches and wells between, this district poses many challenges for water administration. Tom worked for the Willet Ranch on the lower Conejos for many years, operating the direct flow irrigation systems and working with the Water Commissioners to keep compact water deliveries on the Conejos from being impeded. He was also the ditch rider for three ditches in that area. Tom has been a reserve deputy for the Conejos County Sheriff's office since 1986, a member of the local Fire Protection District, and president of the local school board.

Wayne Peck became Assistant Water Commissioner for the Alamosa, LaJara basin (Water District 21), in April 2004. This district contains two reservoirs, two rivers with cross connecting ditches, imported water from the Rio Grande and Conejos rivers, and drain waters. Wayne has been assigned to work the lower end of the district where all these sources of water come together. He has the daunting task of assuring that the water is delivered to the proper headgate from the proper source and in the proper amount. Wayne came to the valley in 1986 and started working at the Summitville Mine gold extraction plant and quickly went from the new guy to the Senior Plant Operator. Wayne moved on to become the manager of the Elk Creek Ranch, a vacation-homeowners ranch, where he maintained all the facilities and operated the irrigation system for this mountain "community" ranch.

Retirements

Chuck Roberts retired from the Division the end of May 2004. Chuck began state service with the Colorado Department of Transportation in Pueblo on May 1, 1969. After numerous attempts to become a hydrographer, Chuck transferred to the Division of Water Resources in February 1973 and worked in the Ground Water Section at the Denver office. He left DWR a few years later to work for the Water Quality Control Division for three and one-half years, and returned to DWR's Engineering Section in July, 1981. In 1985, Chuck was transferred to the Division 1 Office in Greeley. In October 1986, he was promoted to Assistant Division Engineer in Division 2, and became Acting Division Engineer during May through October 1988. Chuck transferred to the Geotechnical Branch in April 1994 where he worked until retirement.

Eddie Taylor retired the end of June 2004. Eddie worked as the Senior Water Commissioner in Water District 6 (Boulder Area) in Division 1 prior to transferring to Division 2 in the late 1980's where he served as the Senior Water Commissioner in Water District 12 (Canon City Area) until 1993; and from 1993 until the present, as the Senior Water Commissioner in Water District 10 (Colorado Springs Area). Eddie received the Water Commissioner of the Year award in 1991 in Division 2 and received numerous commendations for the extra effort that he undertook in helping water users solve difficult water problems throughout his tenure with the DWR. Eddie will especially be remembered for the extensive work he did on the Fountain Creek Watershed Project and for the work he did to help make improvements to data used in the Fountain Creek Transit Loss Model by tirelessly working with local water users down Fountain Creek. We wish Eddie the very best as he enjoys his retirement.



CALENDAR OF EVENTS

- July 20-21** Colorado Water Conservation Board Meeting, Delta, Colorado; for more information, contact Catherine Gonzales at 303-866-3441
- Aug 3** Colorado Board of Examiners of Water Well Construction and Pump Installation Contractors Meeting, Denver, Colorado; for more information, contact Gina DeArcos at 303-866-3581
- Aug 20** Colorado Ground Water Commission Meeting, Northern Colorado Water Conservancy District Board Room, Berthoud, Colorado; for more information, contact Marta Ahrens at 303-866-3581
- September 21-22** Colorado Water Conservation Board Meeting, Glenwood Springs, Colorado; for more information, contact Catherine Gonzales at 303-866-3441

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