"In looking ahead, the greatest challenge of the future is to increase our available water supplies. This implies that we must not only obtain more water but we must also distribute it more efficiently and manage and use it more wisely. The challenge, therefore, is both to technical and managerial expertise." (Floyd E. Dominy, Commissioner of Reclamation, November 1, 1967)
possible for junior wells to pump, when they could otherwise be shut down, by the payment of a 50-cent per acre-foot fee. Wells would be installed and administered by the State of Colorado.

This is the text of Eckles' proposed law:

SECTION 1. The State Engineer shall place no restriction upon any existing well operating under a permit from the State Engineer, except as provided by Section 148-18-37, C.R.S. 1963 as amended, unless he determines that diversions from such well are causing a material injury to the vested rights of other appropriators WHETHER AT THE TIME SUCH WELL IS PUMPED OR LATER: PROVIDED HOWEVER, THAT THE USE OF WATER THRU ANY WELL SHALL NOT BE RESTRICTED IF A WATER USE FEE AS SET FORTH IN SECTION 2 HEREOF HAS BEEN REMITTED TO THE OFFICE OF THE STATE ENGINEER.

SECTION 2. All users of water thru wells located in the alluvial gravels of streams historically capable of sustained surface flows for at least 10 continuous days, which may be restricted in accord with Section 1, will pay a water use fee of 50¢ per acre foot.

SECTION 3. The State Engineer shall determine the historic flow of the various "main stem" streams of the State at at least three locations during the months of October, November, December, January, February and March for the years 1950 thru 1964 inclusive, and shall determine the arithmetic average flow for each such month. Following such determination he shall cause to be delivered, each month to each river, thru wells located in the alluvial channels, a volume of water equal to the difference between the historical flow and the measured flow. Such delivery shall be made during the month following such measurement and shall be considered in adjusting the actual flow in the month delivered. Any flow in excess of said historical average shall be subject to appropriation by junior appropriators in order of their priority and shall have no effect on deliveries for shortages occurring during the previous month.

The State Engineer shall also cause water to be delivered to the stream from the alluvial deposits of said streams at such points and from such wells as he deems necessary to result in the most efficient utilization of such waters, at a rate equal to one-half of the amount of appropriation from wells which based on Geological and Hydrological evidence have an effect on the flow of the surface stream at the approximate time at which they are being pumped.

All costs of this section are to be from the water use fees collect-
ed under Section 2 hereof.

Eckles said the fees paid by pumpers would be used to pay for the cost of installation and operation.

Senator Gill said Eckles' proposal merits wide circulation and study, and that he believed the plan could be integrated into any system which may result from the implementation of S.B. 407.

Herb Vandemoer, member of the Colorado Water Conservation Board, and Bob Giacomini, attorney and president of the Water Users Protective Association of Water District No. 64, both of Sterling, presented to the committee a plan the Association has developed for the administration of South Platte River water in Water Districts Nos. 64 and 1 during the 1968 irrigation season. The plan will be circulated among District Nos. 64 and 1 water users and would be put into operation effecting all users who sign. Under the plan, water users would adopt a cooperative exchange agreement on a voluntary basis with a clear understanding that no ditch company, irrigation district or individual water user would waive any rights existing under Colorado law. The plan would provide that:

- Direct flow ditches and reservoir systems above Balzac in District No. 1 will voluntarily curtail withdrawals from the river after October 15 to allow downstream reservoirs to begin their winter fill.

- Beginning in the spring of 1968 all ditches and reservoir systems in both districts will voluntarily, where possible, use other means (wells or reservoir water) to obtain their early irrigation water to allow maximum reservoir fill and to allow ditches without adequate wells to use direct-flow river diversion.

- After April 15 throughout the irrigation season of 1968, reservoirs
will not make a call on the river, and direct flow ditches will make every attempt to obtain decreed priorities of water through whatever means is available; and if the ditch is yet short of water it will first contact the office of the Water Users Protective Association of Water District No. 64 and will allow a period of 5 days for the voluntary agreement to function through informal exchange of water within and between Water Districts Nos. 1 and 64, and that a formal call will not be invoked until the persons administering the voluntary agreement shall have had a chance to obtain the necessary water.

- The South Platte River will be administered under the appropriation system, under adjudicated priorities, if all efforts to provide the necessary water fail.

Giacomini said a similar system of water administration was successful last year and that it should favorably operate again this coming irrigation season.

Giacomini appointed Herb Vandemoer, Keith Propst and Alex Michel, all of Sterling, as the administrative committee to put the plan into effect until such time as legislation proposed by S.B. 407 is passed.

The plan was praised by Wm. Mattern, state supervising engineer.

Engineering testimony was presented by W. W. Wheeler of Wheeler and Associates, John Patterson of Woodward, Clyde and Sherard, both of Denver, Mort Bittinger and Associates, Ft. Collins, and David Gottlieb, Wright Water Engineers, Denver. All hold contracts with the Colorado Water Conservation Board for the making of studies according to S.B. 407. Their testimony indicated that they might recommend a system of integrated water use between wells and surface diversions.

Frank Starkley, attorney for the Northern Colorado Water Users Association, questioned the constitutionality of H.B. 1066, and he urged that it not be enforced until laws to be recommended in accordance with
S.B. 407 have been passed.

**ITEMS IN BRIEF**

Seven ditch companies along the Arkansas River and CF and I Steel Corporation in Pueblo filed notice in the district court in Las Animas of their intention to enter the case in which the Colorado Game, Fish and Parks Department has filed for a 10,000 acre-feet storage right in John Martin Reservoir. The seven ditch companies who are reported to oppose the department's action are Bessemer Irrigation Co., Fort Lyon Canal Co., Buffalo Canal Co., Amity Mutual Irrigation Co., Fort Bent Ditch Co., Oxford Farmers Ditch Co. and the Highline Canal Co. In its petition to the court, the state agency asked for the immediate right to store 5,000 acre-feet from its Muddy Creek Reservoir 25 miles south of Las Animas and for 5,000 acre-feet from elsewhere.

* * * * *

The cities of Aurora and Colorado Springs have been sued for $3.69 million in connection with construction of the Homestake water diversion project. Metropolitan Paving Co. Inc., and Gill Construction Co., both of Oklahoma City and the Tecon Corporation of Dallas, who held the contract for laying of the main conduit, brought the suit claiming they incurred this amount of money in extra expenses because Aurora and Colorado Springs officials allegedly failed to advise them of rocky soil conditions they would encounter and because of changes in backfilling specifications. The case was filed in the U.S. District Court in Denver.

* * * * *

Colorado River Water Conservation District approved an action to ask the Colorado congressional delegation to include the Battlement Mesa Project in the Colorado River legislation now before Congress which would authorize the Central Arizona Project and five western Colorado projects. In a related action, the board approved a plan by Phil Smith, secretary-engineer, to seek endorsement of the project by the National Rivers and Harbors Congress. The board also allocated a $5,000 sum to match an allocation by the Middle Park Water Conservancy District to finance initiation of a feasibility study on the proposed Middle Park Project which would include the Troublesome and Rabbit Ear Projects and which would include what could be salvaged from the proposed Parshall Project.

* * * * *

Game, Fish and Parks Department reports the completion of two recreational use reservoirs financed through department funds: Miramonte
Reservoir, 20 miles south of Norwood, at a cost of $302,300, providing 410 surface acres of water; and Echo Canyon Reservoir, located 5 miles south of Pagosa Springs, providing 118 surface acres. Besides recreational development of the land areas, both reservoirs will be developed by the department as trout fisheries.

* * * * *

U.S. Supreme Court, in a procedural move regarding a Colorado water case, invited the Justice Department to file a brief representing the position of the U.S. Government before the court makes its decision. The case was filed by the Colorado River Water Conservation District asking the court for permission to appeal a decision of the Colorado Supreme Court which gave water rights to the Four Counties Water Association which are superior to those granted to the district.

The case involves rights of the association to divert western slope water to the eastern slope and the rights of the district to the storage and use of water for the Rabbit Ears, Troublesome, Wessels and Toponas Projects proposed to be built in northwestern Colorado by the Bureau of Reclamation.

* * * * *

Pueblo voters on November 7 approved a $1,775,000 bond issue to finance a payment to the City of Aurora for an annual delivery of up to 2,500 acre-feet of water out of the Homestake Project. In a surprise election the voters also removed the $100,000 limitation on water board expenditures without a vote of the people. Twice before this issue had been defeated, the last time by a margin of 1,875 votes. The removal of the charter rule will enable the Pueblo Water Board to acquire more water and to make plant improvements when the money is available.

* * * * *

Ed. C. Johnson, former Governor of Colorado and member of the Upper Colorado River Commission, writing for The Phoenix Gazette in Phoenix, Arizona, charged Senator Henry Jackson (Wash), chairman of the Senate Interior Committee, of adopting a stalling tactic by demanding that no water import studies be included in the proposed Central Arizona Project legislation. "If an import provision should be incorporated in S-1004 (CAP Bill), the Central Arizona Project would be enacted before sundown today," Johnson said.

"We must return to reality. All seven Colorado Basin States must
have supplementary water - that fact is self evident. S-1004, the in-
famous upper-cut by Secretary Udall, will not succeed. The State of
Colorado is not helpless. There are many violent answers to S-1004 as
enacted by the Senate. The Upper Basin too can resort to upper-cuts,
but such a contest among the Colorado River States is not the way to
proceed. A better procedure should be developed now."

* * * * *

A long-range water resource study of the upper reaches of the Colo-
rado River is now underway, according to an announcement by Ival Goslin,
executive director of the Upper Colorado River Commission. The study,
to be coordinated by the Commission, will make an inventory of present
and future water supplies, water needs, and measures needed for flood
control and for pollution control.

The plan was the subject of a meeting held in Denver on November
7-8 and 9. Sectional work groups were chaired by Fred O. Case of the
Soil Conservation Service, Cecil B. Jacobson of the Upper Colorado River
Commission and Paul S. Shafer of the Bureau of Reclamation.

* * * * *

Logan County Commission George H. Moore of Sterling was elected
president of the Colorado Association of County Commissioners at its
annual meeting in Denver on November 18, succeeding Sam J. Steele of
Maybell who became a member of the association's executive committee.
Other officials elected include Alamosa County Commissioner Harold D.
Foster of Alamosa as first vice-president, Baca County Commissioner Sam
Gordon of Springfield as second vice-president, Douglas County Commissioner
Russell Higginson of Palmer Lake as third vice-president and Delta County
Commissioner Wayne A. Gore, Delta rancher, as fourth vice-president repre-
senting the Western Slope. J. Fred Schneider, Denver attorney, was re-
appointed general counsel and secretary-treasurer.

THROUGH THE WATER METER

Farmers Home Administration approved a $151,000 allotment to the
century-old mining town of Black Hawk to rebuild its water system . . .

A dynamite blast and a puff of smoke marked the groundbreaking ceremony
for the start of the $82 million South Platte Chatfield Dam above Denver
on October 28. U.S. Rep. Michael J. Kirwan (Ohio), chairman of the
Public Works Appropriations Committee, gave the principal address . . . Charles Woolley of Cedaredge was appointed acting deputy water commissioner in Water District 40 succeeding the late Frank Brezonick, who died in a traffic accident at the Paonia Reservoir on September 12 . . . Henry P. Caulfield, executive director of the Federal Water Resources Council, predicts that in the not-too-distant future the diversion of water from the Northwest to water thirsty Southwest may materialize . . . Colorado-Ute, a rural electric cooperative, filed a new application with the Colorado Public Utilities Commission for permission to operate its $30.5 million generating plant at Hayden in accordance with a recent agreement with Public Service Co. of Colorado . . . Richard T. Eckles, Natural Resources Coordinator, reports that the Federal Water Pollution Control Administration has advanced a tentative plan calling for the removal of 175,000 acres of land from agricultural production in the Arkansas Basin in Colorado for the purpose of improving water quality . . . Pueblo Regional Planning Commission approved an application for federal assistance in implementing a far-reaching plan for a resource and conservation development project embracing Pueblo, Huerfano, Las Animas, Fremont and Custer Counties . . . Denver District Judge Sherman G. Finesilver, presiding in a Teller County District Court case brought by the City of Colorado Springs, ruled that the city has a right to condemn a 26 acre area on Pikes Peak and block construction of a luxury motel which would be located in the city's water shed . . . District court in Delta granted requesty by Cedaredge and the Upper Surface Creek Domestic Water
Association for new points of diversions out of Surface Creek in accordance with the provisions of S.B. 141 passed by the last Legislature . . .

**Colorado Supreme Court** ruled that the town of Westminster illegally canceled a contract with the Northwest Water Corporation in 1963. The high court, in a 5-0 decision, ordered the contract reinstated, but gave the city the right to cancel it again provided legal procedures are complied with . . . **Department of the Interior** reports that Federal Reclamation provided 24 million acre-feet of water during 1966 for agricultural, municipal and industrial uses . . . **U.S. Geological Survey**, during the period October 30 and November 10, conducted a study to measure the depth of water in wells and the streamflow gains and losses in the South Platte River Valley, according to an announcement by E. A. Moulder, district chief of the Water Resources Division. The purpose of the study is to define the hydrology of the river valley so that the effects of changes in water use can be predicted . . . **Town of Creede** plans a $150,000 water supply improvement program . . . **Storage of excess runoff** in Bureau of Reclamation reservoirs in nine Western states prevented downstream flooding which would have caused damages estimated at $43,250,000 during the first half of 1967, according to an announcement by the Department of the Interior . . . **Canon City** set December 12 as the voting date to establish the Park Center Water District and the election of a five-member board of directors . . . **Bret Kelly and Verdon L. Johnson** were elected to the Pueblo Water Board for six-year terms beginning January 1, 1968 . . .
Standley Lake Water and Sanitation District north of Denver approved a ten-year contract to purchase water from the City of Westminster at a price of 38 cents per 1,000 gallons, according to an announcement by O. E. Cady, manager. The contract carries a ten-year renewal clause.

APPOINTMENTS

State Engineer Ralph Owens announced the appointment of Wm. Mattern, division engineer, to the position of supervising division engineer, and Fred Paddock as supervising water resource engineer in charge of dam construction, replacing Rees Brooks, recently retired. Harlan W. Erker was appointed as senior water resources engineer replacing the late George Colburn.

WATER OFFICES CHANGE HEADQUARTERS

Colorado water officials have completed their move from the State Services Building to the Columbine Building at 1845 Sherman Street, Denver, Colorado. Coordinator of Natural Resources - Room 231, State Engineer and the Ground Water Commission - Room 101, and the Colorado Water Conservation Board - Room 102.

COMING EVENTS

Regular meeting of the Colorado Water Conservation Board, Wednesday, December 13, 1967, Room 132, State Services Building, 1525 Sherman Street, Denver, Colorado, 10:00 A.M.

DEADLINE NEWS

National Reclamation Association, at its annual convention in Honolulu, Hawaii during the week of November 12, elected Jim Sorenson, Visalia, California attorney, president for the coming year, and Bob Barkley, manager of the Northern Colorado Water Conservancy District, as Colorado director. Other Colorado officers include Jack Ross, Denver attorney, as the Colorado member of the resolutions committee with John Sayer, Denver attorney, as alternate. Ralph Adkins, Pueblo attorney, was made a member of the Water Users Committee, replacing Bob Barkley who was elected to the board of directors. Harold Christy, Pueblo, retiring president, was appointed alternate to Bob Barkley.