"I suggest that, if Colorado is to make the most efficient use of its water, including underground water -- and most certainly it must -- this session of the Legislature must develop the necessary legislation. The resources of my office, and all other State offices, are yours to command" . . (Governor John A. Love, Colorado)

WATER BILLS FLOOD COLORADO LEGISLATURE

CONTROVERSY AND CONFLICT. This will be the arena in which our 1965 Legislature must work in the attempt to settle one of the most important issues it has ever faced -- that of writing and passing a workable and equitable revised water code. Increasing conflicts resulting from increased pumping of underground water has led many water users to believe that time is running out. Representative Everett Cook (D-Canon City), chairman of the House Natural Resources Committee, nailed down the issue when he said: "This is our last chance to do something."

As a result of this demand at least 10 bills on water have been introduced in both houses and many more are yet to come. Public hearings are scheduled in order that interested parties can be given the opportunity of being heard. The results of these hearings will, in all probability, provide the impetus for new bills or revision of those already introduced. A digest of these measures cannot be made all inclusive and completely informative at this time. This digest must be
should have the solid backing of your board (The Colorado Water Conservation Board)." He urged the state not to attempt "unconstitutional and illegal efforts" to give the State Engineer authority over non-tributary water, or the rights to appropriate water regardless of origin by permit.

Felix Sparks in his answer to Governor Johnson stated: "Ground water is a major resource in all of that portion of Colorado lying east of the Continental Divide . . . The water resources of this state cannot be properly utilized or managed without extensive ground water use. In some parts of the state there is no other source of supply. Even in river valleys, extensive pumping of ground water is necessary." Sparks further stated: "Millions of dollars have already been expended in the construction of wells without any color of right or title, except for the vacuum which exists in our state water laws. Ground water uses should be entitled to protection consistent with constitutional mandates." Sparks suggested that it is the function of the Legislature to establish a law controlling the use of ground water in Colorado. In his letter to Johnson, Sparks quoted a portion of a recent Colorado State University publication entitled "Colorado's Ground-Water Problems":

When ground-water reservoirs contained vast untapped storage there was little interest in rules of law, because landowners could get all the water they wanted under natural conditions regardless of rights. But as these reservoirs become fully developed, limitations on the use of water are necessary to protect holders of water rights. Without legal protection, loss of the value of ground water to farmers and the local community can occur, if overdraft is permitted to continue until the reservoir is no longer capable of supplying water.

Sparks finalized his letter by stating: . . "The appropriation doctrine should not be made applicable to non-tributary ground waters . . .
No one in authority has said what law applies to the ground waters in Colorado as yet. *It is time someone did.* (Emphasis supplied)

Governor Johnson later admitted he erred in assailing director Felix Sparks on the San Luis Valley Closed Basin problem.

**WILDLIFE GROUP URGES OPENING OF SCHOOL LANDS**

THE COLORADO WILDLIFE FEDERATION, at its annual convention in Denver on January 10, adopted a resolution urging that the Colorado Legislature change the laws and regulations governing school land leases so that said lands be *opened to the public for recreational purposes*, including hunting and fishing. The resolution also urged that leases for the grazing of livestock be so made as to assure the public use of school lands for recreational purposes, including hunting and fishing. Other resolutions adopted by the Federation were

* Opposing artificial feeding of big game animals by the Game, Fish and Parks Department.

* Urging that the mountain lion be declared as a big game animal and that the existing $25 bounty be eliminated.

* Recommending that construction grants authorized in the Federal Water Pollution Control Act be increased to $200 million annually and that these funds be subsequently appropriated.

**EASTERN COLORADO POWDER DRY**

IN THE 1930's EASTERN COLORADO was called a "dust bowl, now the area is called a "powder keg." Laurence B. Phelps, chief of administrative services of the Colorado Agriculture Department, estimates that the drouth has trimmed from $60 million to $75 million off the state's gross farm and ranch income, mainly in winter wheat and cattle. "The outlook for the Colorado winter wheat crop is now a paltry 17 million bushels and
that it is too late for moisture to improve the range for cattle feed this year," Phelps said.

**JUDGE SETTLES WESTMINSTER WATER DISPUTE**

Judge Wm. E. Buck of the Boulder County District Court ruled in the dispute between Marcus F. Church, Trustee, the Mandalay Irrigation Company, and the City of Broomfield, plaintiffs, and the City of Westminster, defendant, that the *historic use of ditch rights* out of Coal Creek purchased by Westminster is the governing factor in determining the amount of water Westminster can divert and store. Judge Buck's decree granted Westminster the *right to divert 7.48 second feet* out of Coal Creek provided that not more than 3060 acre-feet be diverted during any moving 10 year period, with a one year maximum of 648 acre-feet. The total *adjudicated rights* of Westminster's share in the ditches amounted to 26.84 second feet.

The decree also granted Westminster the right to divert not more than 1230 acre-feet of water under its Last Chance Reservoir decrees during any moving 10 year period, with a one year maximum of 182 acre-feet.

Charles J. Beise, of Denver, was the attorney for the plaintiffs.

**GOVERNMENT SIGNS PAN-ARK WATER COMPACT**

INTERIOR SECRETARY STEWART L. UDALL on January 13 signed a contract with the Southeastern Colorado Water Conservancy District for the repayment of a large portion of the cost of the Fryingpan-Arkansas Transmountain Water Diversion Project. The district under the provisions of the contract, will repay $68,324,000 plus interest over a period of 40 years. The total cost of the project is estimated to be approximately
$170 million. Charles H. Boustead, general manager of the district, was in Washington for the contract signing. The instrument must also be signed by J. Selby Young, Colorado Springs, president of the district, and H. P. Dugan, Denver, director of Region 7, U. S. Bureau of Reclamation. Dugan and Young are scheduled to sign the contract at a meeting of the Board of Directors of the district in Pueblo on January 21.

If government expenditures on the project should rise during the 15-year construction period, the contract provides for corresponding increases in the amount of money the water district must pay. The district will meet contract payments by selling industrial, municipal and irrigation water and by collecting an ad valorem tax within the district which extends from Leadville to Lamar with an extension to Colorado Springs. The tax can total one mill on real and personal property though it cannot exceed \( \frac{1}{2} \) mill before water is delivered to users.

FOUR STATES IRRIGATION COUNCIL HOLDS MEET

AN IRRIGATION PROJECT can be compared to a business operation. A business to be successful must pay a dividend in money, and an irrigation project to be successful must pay a dividend by improving the local and general economy, Jack W. Boyd, secretary-general manager, Central Nebraska Power and Irrigation District, told the Four States Irrigation Council meeting in Denver on January 14.

Speaking before about 200 people attending the meeting, Boyd said that the principal responsibility of the manager of an irrigation district is to understand the problems of the people in the district.
"Prosperity comes to a community when there is located there-in a wealth producing industry; and that a responsible irrigation project can insure the future success of the entire area," Boyd said.

Floyd E. Dominy, U. S. Commissioner of Reclamation, speaking before the group attending the Council's annual banquet at the Brown Palace Hotel, warned the group that the Western states are confronted in this session of Congress with the biggest challenge ever to face the Reclamation movement. The West, he said, is faced with the problem of winning congressional authorization of a backlog of well planned and potential water development projects costing upwards of $2 billion. "You and I know that the economic contributions from reclamation are so extensive and diverse that from the national point of view, the long-range benefits from the projects completed and under way are so great that they ultimately will be counted in the billions of dollars," Dominy said.

A feature of the banquet was the annual presentation of "Headgate Awards" to those members of the council who distinguished themselves in service to irrigation and water conservation development. The Colorado award winner was Fred W. Wright of Monte Vista, president of the Santa Maria Reservoir Company. Other award winners were Ward Douglas of Courtland, Kansas, James C. Adams of North Platte, Nebraska and Earl Lloyd of Cheyenne, Wyoming. The awards were presented by Harold Fintus, of Gering, Nebraska, president of the council.

INCREASED CROP YIELD DOES NOT NECESSARILY INCREASE WATER USE

"It has been found that fertilization to increase crop production does not necessarily affect total water use," Doctor Frank G. Viets, Jr.,
chief soil scientist with the U. S. Department of Agriculture Research
Service in Fort Collins, told members of the 13th annual Colorado Ferti-
lizer Conference recently held in Fort Collins. Viets explained to the
group that 200 bushels of corn to the acre will not use twice as much
water as 100 bushels. The larger crop resulting from fertilization has no
or only slight effect on the total water used. The effect will depend on
the environmental condition of the amount of advected heat available.
Under most field conditions, there is only so much heat available for evapo-
transpiration. The modern conclusion, therefore is, 'it is largely heat
from net radiation that sets water use in adequately watered close growing
crops and not the size of the crop,' Doctor Viets said. 'Fertilizers
have little effect on water use but under most field conditions they are
essential for the efficient use of water,' Doctor Viets explained.

1964 IN REVIEW

The year of 1964 marked the beginning of the explosive conflicts
developing throughout the West in the demand and use of water. The year
also was noted for the passage of many national laws effecting natural
resources:

- On March 25 Secretary Udall ordered the release of water stored in
Lake Powell, behind Glen Canyon Dam, for the purposes of maintaining
power generation head at Boulder Dam. This action precipitated violent
opposition by the Upper Basin States. The Upper Colorado River Commission
met and acted to urge Udall to discontinue these releases and to maintain
storage in Lake Powell to reach power generation level at Glen Canyon Dam
as quickly as possible. The Commission felt that any delay in power
generation at Glen Canyon would seriously curtail payment plans for Upper Colorado River Basin water development. Udall rescinded his order and Lake Powell was allowed to fill to power level.

- The Colorado Water Conservation Board and the Upper Colorado River Commission joined in a resolution urging Congress to pass legislation authorizing the payment of power deficiencies at Boulder Dam out of the Colorado River Development Fund instead of the Upper Colorado River Development Fund.

- Glen Canyon Dam located on the Colorado River below Lees Ferry was substantially completed. Lake Powell was filled to power generation level, and electric power was wheeled to the first of the project's consumers.

- Secretary of Interior, Udall, broke out his plans for a multi-billion dollar water development program in the Pacific Southwest. Proposed project includes 2 large dams on the Lower Colorado River and plans for diversion of water from northern to southern California. Many northern California water users have voiced their objections, fearing that diversions out of their river basins will curtail their future plans. Many conservation leaders have voiced their objections, fearing that the proposed dam construction will encroach on national parks and monuments. Upper Colorado River Basin interests have demanded that the proposed project not interfere with the Colorado River Compact or the Upper Colorado River Basin development.

- Contracts were let for the construction of 2 major Colorado projects: The Rifle Gap Dam of the Silt Project and the Ruedi Dam of the Fryingpan-Arkansas Project.
The Colorado Water Congress initiated another drive for legislative improvement in Colorado laws.

The Colorado Legislative Council's Committee on Water, led by Senator Frank L. Gill (R-Hillrose), conducted a series of hearings on water problems throughout the state. The purpose of these hearings was to gather evidence and information to support proposed water law legislation to be considered by the 1965 Legislature. The main issue covered at the hearings was the conflict between surface water and well water users.

Important national legislation adopted included a bill authorizing the Bostwick Park, Fruitland Mesa and Savery-Pothook Reclamation projects; the Wilderness Act which established legal procedures for the setting aside of wilderness areas under direct congressional authorization; the Public Land Law Review Commission Act; and the Land and Water Conservation Act which provides federal aid for outdoor recreation development.

After a twenty year delay the Colorado Water Conservation Board endorsed a proposed $46 million dam on the South Platte River near Fort Morgan, called the Narrows Project.

Colorado Game, Fish and Parks Department lost a five year battle with East Rifle Creek water users over pollution of the stream caused by operation of the Rifle Creek Fish Hatchery. District Court Judge, Clifford Darrow awarded the water users $49,553 in damages and ordered the GF&P to cease and desist.
The Ralph M. Parsons Company, an engineering firm in Los Angeles, unveiled a plan for a $100 billion project to import surplus waters from Alaska to the water thirsty Western and Southwestern United States. This project has met with considerable legislative approval and studies are being urged.

Leonard R. Kuiper, 49, deputy director of the Colorado Water Conservation Board and national authority on reclamation and water problems, died in Denver on November 4. His passing was described as a great loss by all people connected with water administration and development.

THROUGH THE WATER METER

Water use in the Denver area during 1964 established an all time high. A report by the Denver Water Board showed that the total consumption of filtered water last year amounted to 53,504,370,000 gallons. Congressman Frank E. Evans met in Lamar with 40 representatives of the major Prowers County ditch companies to hear objections to the proposed 10,000 acre-foot permanent conservation pool at John Martin Reservoir. This proposal is being pushed by the area sportsmen and has been approved by the Colorado Water Conservation Board. Evans did not take a stand on the issue but he urged farmers and sportsmen to get together and reach some sort of an agreement. The State of Colorado has selected the Arkansas Valley as a pilot study on human and natural resources according to Jim Miles, director of commerce and development. The plan will be developed in cooperation with the federal government. Studies will be
made of water legislation, agricultural resources, trades and services.

A major water system program estimated to cost $700,000 is being considered by the City of Brighton. The project contemplates new piping and improved water treatment facilities. It is anticipated that water rates will have to be increased to help pay for the program.

The Lamar City Council passed a resolution to lease necessary land and rights-of-way to the Colorado Game, Fish and Parks Commission for the construction of a dam southeast of Lamar. The project, costing $225,000 will impound water to be used as a recreational area for sportsmen and as water storage for Lamar. Water users of Gunnison County have urged the U.S. Bureau of Reclamation to proceed with a feasibility study of the proposed Upper Gunnison Project. The Bureau of Reclamation office in Grand Junction reports that field work on classification of land for the proposed Grand Mesa Project near Cedaredge and Hotchkiss has been completed.

TO CORRECT AN ERROR

A WORD OMISSION ERROR was made in the January, 1965 issue of the NEWSLETTER in the release about the Bureau of Reclamation's approving a feasibility report on the Closed Basin Project in the San Luis Valley. Your editor believes that this project is of sufficient significance that the error should be correct. Two sentences in the story should be corrected to read:

The contemplated development would contribute to the alleviation of critical shortages in the Rio Grande Basin. The main objective of the project is to contribute water to the Basin for New Mexico and Texas to meet Compact commitments.