As Water Supply Outlook Improves... CSU LIBRARIES

STATE LEGISLATURE CUTS SUCCESSFUL CLOUD-SEEDING PROGRAM

In spite of what appeared to be a tremendous success, the cloud-seeding program has been set aside by the Colorado Legislature for FY 1978-79.

The Colorado Water Congress actively supported the $250,000 request by the Colorado Water Conservation Board to continue the program, but the Legislature declined. Only about $21 million was available for funding new or expanded programs, while nearly $100 million had been requested. Cloud seeding was one of them.

The state-sponsored cloud-seeding program started late in 1976-77 winter season after Governor Lamm asked the Legislature to fund an emergency program to help fight the drought. The 1977 Legislature readily approved the 1977-78 program as drought conditions continued, but this year legislative and executive interest in cloud seeding waned as snowfall increased.

Many supporters of the cloud-seeding program believe the legislative cuts to be a major setback. Few are convinced the drought is over.

THE WATER SUPPLY OUTLOOK...

The following is a summary of water supply conditions for Colorado as issued by the Soil Conservation Service in collaboration with the CSU Experiment Station and the Colorado State Engineer as of 4/1/78:

OVERALL—Water supplies should range from near average to excellent. Reservoir storage remains well below normal, but there should be sufficient runoff to replenish stored water in all but the largest reservoirs. Soil moisture in irrigated areas ranges all the way from poor to excellent.

(Continued at top of page 2)
SOUTH PLATTE RIVER WATERSHED--The snowpack has decreased slightly from 130% on the South Platte Streams in February to 120% of normal this month. Streamflow forecasts are dropped proportionately. Carryover storage is 75% of normal, and can provide some supplemental supplies. Soil moisture along the front range is reported as fair to good.

ARKANSAS RIVER WATERSHED--Forecasts for summer streamflow are near normal. Carryover storage is practically non-existent, so some water shortages could exist this summer. Soil moisture conditions are reported as fair above Pueblo, and poor below Pueblo except around Rocky Ford. Here conditions are reported as good. Much more snow and precipitation are needed.

UPPER RIO GRANDE WATERSHED--Heavy snows the first part of March have produced a significant improvement in the mountain snowpack. Basin averages now range from near normal to a high of 146% of normal on the Culebra drainage. Low elevation snow is deficient and has disappeared in most areas. Streamflows are expected to be near normal on most watersheds except the Culebra, which should be well above normal. Reservoir storage remains 40% below normal.

SAN MIGUEL, DOLORES, ANIMAS AND SAN JUAN WATERSHEDS--The snow improved in this area. The Dolores drainage was especially hard hit and now has 159% of normal snow. If temperatures turn warm and remain so for a few days, some high water along low drainages can be expected. Certainly water supplies should be adequate. Carryover storage is 78% of normal.

GUNNISON RIVER WATERSHED--The snowpack in the Gunnison Basin is excellent and should provide adequate water this summer. Streamflow forecasts range from a low of 117% on the mainstem to 142% on the Uncompahgre. Snow on Grand Mesa is especially good. Carryover storage is 78% of normal. Soil moisture is reported as fair in the irrigated areas.

COLORADO RIVER WATERSHED--Streamflow forecasts are up slightly from a month ago. Current snowpack should provide excellent water supplies this summer. There is still another month when snow can fall in the high country. Carryover storage is only 47% of the 15-year average, so won't provide too much supplemental water. Soil moisture conditions range from fair to good in the irrigated areas.

YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS--These basins in the northern third of the state have the highest snowpack in Colorado. The Tower snow course has 175 inches of snow containing 75.7 inches of water—the highest ever recorded in Colorado. Many low areas will experience high water this summer. Soil moisture is reported as good.

LOWER SOUTH PLATTE RIVER WATERSHED--Streamflow forecasts were lowered slightly this month. The snowpack ranges from a low of 104% on the South Platte to 128% on Clear Creek. Summer flows should still be above normal. Reservoir storage is 79% of the 15-year normal, but will provide some supplemental supplies. Valley soil moisture from Fort Morgan east is reported as poor to fair.

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PUBLIC INFORMATION MEETING: Irrigation Water Use and Management Study.

Purpose: To learn your viewpoint on water conservation in irrigated agriculture and reactions to study findings. THURSDAY, MAY 11, 1978, 1:00 p.m. at the Main Post Office Bldg., Rm. 269, 18th & Stout Street, Denver, Colorado. All Organizations, Agencies or Individuals interested in Irrigation Water Use welcome.
Conserve Water Week

CONSERVE! WATER WEEK has been announced for the week of May 7-13th.

Governor Richard D. Lamm has declared the second week in May, as the week to again give our attention to Colorado water supply and demand. To promote this, a large publicity campaign is now being coordinated by regional drought coordinators and the Governor's office - with assistance from the Colorado Water Congress.

Governor Lamm is preparing taped comments for statewide distribution. He reminds water users that even though rainfall in several areas of the state has remedied a number of the effects of last year's drought conditions, it has not eliminated drought conditions in all parts of Colorado, nor has it eliminated the future threat of drought.

In an editorial, "When it rains, don't forget drought" published in "The Denver Post," August 14th of last year, Bill Hosokawa, editorial page editor, describes well the meaning behind this year's CONSERVE! WATER WEEK messages.

"Water can be likened to a person's cash income. We are accustomed to being paid every week or every month. We use most of that income on a current basis except that, if we are prudent, we put aside some of it in a bank for a rainy day. With water, we store as much as we can for times when it doesn't rain.

The dry times have stretched out now over several years and the banked water--stored in the soil, in reservoirs and the bogs and humus beds of high country--is nearly depleted...To rebuild those reserves...it will be necessary to get 120 per cent of normal precipitation next year".

He continues to emphasize the cyclic quality of nature and the importance water awareness and water waste conservation have, in a western way of life.

"Scientists...have learned that droughts...on an average of every 22 years. Studies have shown it's been this way for centuries...Man's efforts to overcome the effects of these cycles...so far are puny and the result is inconclusive at best...This year there has been much talk about a need for changing urban lifestyles...Perhaps so. But such talk is likely to subside when the rain returns, and we'll forget about all that until the next dry cycle...Ranchers know wet-dry cycles are a fact of western life...It is important to remember that, too".

Emilie C. Ailts, the Colorado Water Congress' Education-Information director, will be assisting in the water week efforts. The CWC is pleased to participate in the water awareness campaign, and was especially enthused about the use of the Captain Hydro theme, according to Ms. Ailts. The drought coordinators will be distributing Colorado Captain Hydro posters and buttons in their regions. This initial effort will be valuable not only to promote the water week themes, but will aid in sensitizing the state to the CWC's Colorado Captain Hydro program, she said.
Survey Results are IN....

Excellent conference! Particularly liked idea where you split part of session into "very technical" vs. "more general" talks. Encourage you to do more of this. Look forward to more of these! Also liked "controversy" of Lear's talk. People need to be shaken up once in awhile. These type of conference make membership in the CWC worthwhile.

Similiar quotes were noted, totals were made, and percentages calculated, after the last symposium-convention questionnaires were received in mid-April. Over fifty percent of the two page questionnaires mailed out in the beginning of March, were returned to the CWC offices.

Responses were generally favorable, but in all cases offered constructive criticism and suggestions for future meetings.

Sixty-one percent of those responding came from the Denver or Denver metropolitan area yet almost 50% were not CWC members. Thirty-five percent came from the Engineering field, 25% from government, 11% from industry, 11% from ranching and/or farming.

I realized your membership comes from a diverse number of fields. This is why I appreciated the "split session" concept, although the two concurrent sessions should be on separate subjects. As a scientist, I did feel the discussions could have been more specific and technical (i.e., summaries of reports completed or in progress, etc.)

Most (64%) of those answering, continue to prefer separate luncheon and registration fees, and only a slight majority (52%) would like to see the luncheon fare changed to a simpler cold or sandwich luncheon.

The speakers were thought of generally as good (73%),

The CWC symposium needed tighter control of speakers. Take a tip from the Geological Society of America; review talks or suggest to speakers that they practice and prepare more carefully.

but a large number of those responding would like talks supplemented by written material made available to them, and would have preferred more active exchange with speakers.

The program would be improved with a question and answer session after each section and you would have an excellent idea of the popularity of each.

Panel discussions and question/answer session are suggested to be expanded.

Written materials, especially by speakers are helpful because they tend to eliminate a lot of the #&@#!.
Survey Results....

The CWC staff was happy to see that 95% of those responding would consider attending more conferences.

Water is an important issue. Symposiums are opportunities to meet other people interested or involved in water problems.

Water users and technicians need more contact, including those students who had received not only exposure to issues unavailable to them at local universities, but college credit for attending.

The Congress allowed me to see the practical application of what I study at college. I very much appreciated the Congress lowering fees for students and every possible courtesy was extended to us.

The CWC staff is grateful for the fine return on these questionnaires and for the interest in our Education-Information program.

AGENCY REQUESTS IN SUMMARY

The following is a summary of appropriations requests for several state agencies affecting water users as presented in the "Long Bill" narrative, which was submitted to the Legislature by the Joint Budget Committee. The information is presented without editorial comment and is simply intended to inform the membership of the relative size and budgets of the agencies. (FTE means Full Time Employee)

<table>
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<tr>
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<th>1977-78 Appropriation</th>
<th>1978-79 Appropriation</th>
<th>Increase</th>
<th>%</th>
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<tbody>
<tr>
<td><strong>DEPARTMENT OF NATURAL RESOURCES</strong></td>
<td></td>
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<tr>
<td>General Fund</td>
<td>$10,119,131</td>
<td>$8,866,453</td>
<td>($1,252,678)</td>
<td>(12.4%)</td>
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<tr>
<td>Cash Funds</td>
<td>23,713,658</td>
<td>16,489,574</td>
<td>($7,224,084)</td>
<td>(30.5%)</td>
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<tr>
<td>Federal Funds</td>
<td>2,800,185</td>
<td>5,057,855</td>
<td>2,257,670</td>
<td>80.6%</td>
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<tr>
<td>Total</td>
<td>$36,632,974</td>
<td>$30,413,882</td>
<td>($6,219,092)</td>
<td>(17.6%)</td>
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<tr>
<td>FTE</td>
<td>1,074.4</td>
<td>1,120.8</td>
<td>46.4</td>
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| **Executive Director** |                      |                      |          |   |
| General Fund         | $495,785              | $175,884             | ($319,901) | (64.5%) |
| Cash Funds           | 68,236                | 86,152               | 17,916   | 26.3% |
| Federal Funds        | 68,487                | 54,396               | (14,091) | (22.6%) |
| Total                | $614,508              | $316,432             | ($298,076) | (48.5%) |
| FTE                  | 9.0                   | 11.5                 | 2.5      |   |

The recommended staffing in the Office of the Executive Director is increased by 2 FTE to assist the state in meeting its obligations in the recently signed agreement between the state and the Department of the Interior. These positions will work to incorporate state programs and plans into federal land-use decisions. The special
purpose programs of western states water council dues, weather modification and natural areas (0.5 FTE) are continued at the current level. The $100,000 appropriation for the Colorado water study is not continued as the study has been completed. The Drought Council is discontinued, and the Pine Beetle program is transferred to CSU.

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<th>1978-79 Appropriation</th>
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<tr>
<td>General Fund</td>
<td>$1,200,345</td>
<td>$753,799</td>
<td>($446,546) (37.2%)</td>
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<tr>
<td>Cash Funds</td>
<td>7,705,000</td>
<td>166,200</td>
<td>(7,538,800) (97.8%)</td>
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<tr>
<td>Federal Funds</td>
<td>58,193</td>
<td>58,053</td>
<td>(140) (0.3%)</td>
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<tr>
<td>Total FTE</td>
<td>23.0</td>
<td>24.0</td>
<td>1.0</td>
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There were two appropriations in 1977-78 which were not requested in 1978-79 and which cause the large reduction in funding. These were $350,000 from the general fund for weather modification and $7,705,000 from cash funds for the Water Conservation Board construction fund.

A significant portion of the workload of this division is devoted to minimum stream flow activities and the prime beneficiary of this effort is the Division of Wildlife. For this reason, one additional FTE has been recommended to help coordinate the work between the divisions and this activity is funded with wildlife cash funds. Stream gaging and compacts are funded at the requested level as are the flood plain studies.

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<tr>
<td>General Fund</td>
<td>$3,989,481</td>
<td>$4,468,642</td>
<td>$479,161 (12.0%)</td>
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<tr>
<td>Cash Funds</td>
<td>27,000</td>
<td>38,918</td>
<td>11,918 (44.1%)</td>
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<td>Total FTE</td>
<td>209.4</td>
<td>213.2</td>
<td>3.8</td>
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The recommended new FTE include 2.0 FTE water commissioners, 1.0 FTE well drilling inspector and 0.8 FTE engineering aide. All of the new positions are related to the impact of the drought. Special purpose items of compacts, water rights tabulations, high plains study, data network, San Luis Valley study, gaging stations, west slope aquifers and the South Platte study are recommended at the requested level. The water data bank is recommended at the requested level with the linear increase in cash funding being continued.

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<tr>
<td>General Fund</td>
<td>$117,582</td>
<td>-0</td>
<td>($11,582) (100.0%)</td>
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<tr>
<td>Cash Funds</td>
<td>12,693,932</td>
<td>12,867,734</td>
<td>173,802 (1.4%)</td>
</tr>
<tr>
<td>Federal Funds</td>
<td>1,926,473</td>
<td>2,622,078</td>
<td>695,605 (35.1%)</td>
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<tr>
<td>Total FTE</td>
<td>548.1</td>
<td>568.1</td>
<td>20.0</td>
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The game operations segment is continued at basically the same level of services. Recommended appropriations for land and water rentals, and wildlife damage are based upon expenditure trends for the first eight months of the current year. Federal aid programs which benefit game operations are increased by 20 FTE. Next year the requests for funds for these programs will be submitted along a seven program structure format.

General fund support of the non-game division is recommended to be discontinued. The entire amount that is estimated to be collected from the income tax refund check-off is utilized to match various federal funds for non-game.
TOMMY THOMSON IS NAMED WRC CHAIRMAN

Charles L. "Tommy" Thomson, General Manager of the Southeastern Colorado Water Conservancy District, Pueblo, and a past president of the Colorado Water Congress, was elected Chairman of the Board of Directors of the 50-state Water Resources Congress at its annual meeting in New Orleans. Thomson served as WRC President during the past year, and succeeds William B. Miller, of Chicago, as Board Chairman.

Vernon Behrhorst, Director of the Louisiana Intercoastal Commission, succeeded Thomson as WRC President. Ival Goslin, Director, Upper Colorado River Commission in Salt Lake City, was elected WRC Secretary. Maurice Stout, General Manager, Indianapolis, Indiana Water Company, was elected Treasurer.

CORPS OF ENGINEERS OPENS GRAND JUNCTION OFFICE

The Army Corps of Engineers has opened a field office in Grand Junction to administer its regulatory programs under the River and Harbor Act of 1899 and the Federal Water Pollution Control Act Amendments of 1972 and Section 404 (Dredge and Fill Permits).

The office will be the contact point for all permit matters in the service area covering Colorado west of the Continental Divide. Rodney Woods, a civil engineer, will head the regulatory office, located in the Federal Building, 400 Rood Ave., Room 230, Grand Junction. His telephone number is (303) 243-1199.

NAME THAT THEME...The CWC seeks your suggestions for an appropriate "theme" for the 1979 National Water Resources Convention to be held in Denver, November 7-9, 1979. Submit your ideas to the CWC headquarters office. CWC will host the convention, which will draw about 1,200 water users from throughout the west.

Want to take the Plunge?

Yes. Place my name on a mailing list for more information on the Colorado Captain Hydro program.

NAME ____________________________
ORGANIZATION ____________________________
ADDRESS ____________________________
(city) __________________ (state) __________________ (zip code) __________________
PHONE ____________________________

If you would like to know more about Colorado Captain Hydro, please fill this out, clip, and return to the Colorado Water Congress.
C.W.C. PLANNING CONFERENCE--JUNE 22, 23

The third annual CWC planning conference will be held Thursday and Friday, June 22 and 23, 1978, at the Vail Hilton Inn, Vail Colorado.

The purpose of this family-oriented, working-social, is to pinpoint priorities for the CWC and to develop strategies for dealing with those priority concerns. A special session will also be held for those interested in working with the CWC Capt. Hydro program and willing to assist in developing future programs for the CWC Water Education Program.

Registration is limited, with first priority to CWC Rules Committee, but registration is open to all interested members. No registration fee. Hotel rates are extremely reasonable. The entire program is designed to be a productive work-social experience. Brain-storming sessions will be carried over to the weekend for those interested in staying. For details, contact the CWC offices.

To accomplish great things, we must not only act, but also dream, and not only plan, but also believe.