MEMORANDUM

TO: Regional Director, Bureau of Reclamation
Attention: 440

FROM: Richard K. Aldrich, Field Solicitor
Pacific Northwest Region (Billings)


You requested our opinion and answer to three questions raised in your memorandum of January 31, 1989. Specifically you asked: (1) whether 43 U.S.C. § 386 and the provisions of 43 U.S.C. §§ 390aa et seq. apply to certain lands receiving non-Project irrigation water through Colorado-Big Thompson (C-BT) Project facilities; (2) whether 43 U.S.C. §§ 390aa et seq. applies to Municipal Subdistrict of the Northern Colorado Water Conservancy District (District) municipal return flows which are then sold for irrigation use either inside or outside the District boundaries; and (3) whether the use of federal facilities to deliver non-Project water causes that water to be considered commingled Project water when later used as a supplemental water supply to groundwater; therefore pre-empting the application of 43 U.S.C. § 386.

BACKGROUND

The District signed a repayment contract with the Bureau of Reclamation in 1938 (1938 Contract). In 1973, the Municipal Subdistrict (Subdistrict) signed a contract (1973 Contract) to use Project facilities to convey non-Project water for the Subdistrict's Windy Gap Project. Now the District and the Subdistrict propose to amend the 1973 Contract (Proposed Contract) and the contents of the Proposed Contract have prompted your inquiries. We have restructured your questions to reflect refinement by your staff and to avoid duplication of our responses.

1/ 43 U.S.C. § 390aa et seq. is known as the Reclamation Reform Act (RRA) of 1982. Applicable regulations are found at 43 CFR 426, especially at 426.5 and .18.
 QUESTIONS

Question 1. Does 43 U.S.C. § 386 - Act of June 16, 1938, effectively preclude the implementation of acreage limitations to all lands within the C-BT Project? 43 U.S.C. § 386 reads as follows:

The excess-land provisions of the Federal reclamation laws shall not be applicable to lands which on June 16, 1938, had an irrigation water supply from sources other than a Federal reclamation project and which will receive a supplemental supply from the Colorado-Big Thompson project.

We conclude that the plain language of the Act allows an exemption from acreage limitation to only those lands that were being irrigated on June 16, 1938, within the boundaries of the C-BT. Thus, once Project water is applied to lands not irrigated on June 16, 1938, the Reclamation law applies, including the relevant provisions of the RRA.

This conclusion is bolstered by the 1938 Contract, #9-07-70-W0020, which is still in force between the District and the United States and provides the following at Article 28:

EXCESS LANDS

28. It is understood that the provisions of the act of February 21, 1911, (36 Stat. 925) and Section 46 of the Act of May 25, 1926, (44 Stat. 636, 649) with regard to the appraisal and sale of and supplying water to excess irrigable areas in single ownerships shall govern the parties hereto and all lands to receive water from this project.

The Act of February 21, 1911, (Warren Act) found at 43 U.S.C. § 523 and § 524 reads in part:

Provided further, That water shall not be furnished from any such reservoir or delivered through any such canal or ditch to any one landowner in excess of an amount sufficient to irrigate one hundred and sixty acres: Provided, That nothing contained in sections 523 to 525 of this title shall be held or construed as enlarging or attempting to enlarge the right of the United States, under existing law, to control the waters or any stream in any State.

2/ "being irrigated" means land with a water right under Colorado law and that that water right had not been lost by abandonment or forfeiture.
Section 46 of the Act of May 25, 1926, reads in part:

Such contract or contracts with irrigation districts hereinbefore referred to shall further provide that all irrigable land held in private ownership by any one owner in excess of one hundred and sixty irrigable acres shall be appraised in a manner to be prescribed by the Secretary of the Interior and the sale prices thereof fixed by the Secretary on the basis of its actual bona fide value at the date of appraisal without reference to the proposed construction of the irrigation works; and that no such excess lands so held shall receive water from any project or division if the owners thereof shall refuse to execute valid recordable contracts for the sale of such lands under terms and conditions satisfactory to the Secretary of the Interior and at prices not to exceed those fixed by the Secretary of the Interior.

The 1938 Contract was signed after passage of 43 U.S.C. § 386. Thus Article 28 of the 1938 Contract appears to be a voluntary agreement by the District at least to accept acreage limitations for those lands for which the requirements were not statutorily waived.

Except for lands exempted by our interpretation of 43 U.S.C. § 386, all other lands irrigated by Project water are subject to prior law and 43 U.S.C. § 390cc(b)3/. At such time that the applicable contracts are amended, the District and Subdistrict can then administer water use on the above lands so as to benefit from the discretionary provisions of the RRA.

Question 2. Whether 43 U.S.C. §§ 390aa et seq., the Reclamation Reform Act, applies to Subdistrict municipal return flows which are sold for irrigation use either inside or outside the District boundaries?

Since you have explained that Subdistrict water deliveries can be either Windy Gap (non-Project) water or C-BT Project water, we break our answer into two separate parts. Normally, the Subdistrict delivers Windy Gap water. However, Article 10(a) of the Proposed Contract allows for the delivery of C-BT water in lieu of Windy Gap water.

1. Whether the Reclamation Reform Act applies to return flows derived from non-Project Subdistrict water rights which are carried through Project facilities pursuant to the 1973 Contract?

3/ Section 390cc(b) (203b) also imposes the requirements of §§ 209 through 230 (390ii through zz-1) as amendments to Reclamation law.
As we understand the facts, the Subdistrict has a state water right allowing it to divert water from the Colorado River Basin and apply that water to beneficial uses east of the continental divide. The Subdistrict has a contract (1973 Contract) with the United States allowing it to store and deliver its Windy Gap water through C-BT Project facilities.

Non-Project Water Delivery for Irrigation

The 1973 Contract between the United States and the Subdistrict is not a contract as defined in the RRA and 43 CFR 426.4(b). (See Associate Solicitor's Memorandum of August 28, 1985, (Federal Reclamation and Related Laws Annotated (Blue Books), Reclamation Reform Act Compilation, 1982-1988, p. CO81)). The 1973 Contract is a carriage contract for the use of federal facilities to deliver non-Project water. Therefore the discretionary provisions of the Reclamation Reform Act do not apply in this instance. However, regardless of what authority exists for the delivery of non-irrigation, non-Project water through federal facilities, reference must be made to the acreage limitations imposed on the transport of non-Project irrigation water through federal facilities by federal Reclamation law.

The Project Contracts

Article 15(c) of the 1973 Contract incorporates the 1938 Contract. Article 17 of the 1938 Contract specifically accepts the authority of 43 U.S.C. § 523 and § 524, better known as the Warren Act. Thus, it would appear that so long as the Subdistrict remains subject to prior law through its existing contracts, it is limited to delivering its non-Project irrigation water transported through federal facilities to 160 acres per single ownership on those lands which have not been exempted from acreage limitation by 43 U.S.C. § 386.

Acreage Limitations

The remaining question is whether the Warren Act applies in all instances, especially to M&I return flows. Under Colorado law, the right of reuse of return flows which result from the initial use of water is dependant on the nature of the water and the


5/ Non-Project irrigation water includes return flows from an initial M&I use.

6/ Unless these individuals have elected to come under the discretionary provisions of the RRA.

7/ We presume that the Subdistrict can abandon its return flows and then the appropriator of that water would not be under the acreage limitation constraints of the Warren Act.
intent of the appropriator. Tributary waters may not be used for other than the first use for which the water right was obtained unless such additional uses were a part of the original appropriation. 

Transmountain waters may be used, reused, successively used and used to extinction so long as the requisite dominion and control is present. In addition, water reduced to the dominion and control of the appropriator, becomes the personal property of the appropriator, subject to any return flow obligations which may exist. Consequently, because Windy Gap water is transmountain water, the Subdistrict can sell it as personal property and the contract can alienate all of the Subdistrict's rights in and to the water.

The Warren Act does not directly address the use of M&I return flows for irrigation. However, the intent of the Act is to prevent private parties from having an unfair advantage by using federal facilities and irrigating great acreages. Therefore in this instance, the Secretary must decide whether the use of federal facilities is intended to have such an unfair effect. We conclude that under the above facts, a proper gage of that intent is whether the original appropriator still controls the water when it is sold for irrigation. If he does not, then the Secretary may conclude that acreage limitations need no longer follow the water. Therefore, if the Secretary, upon review of the Subdistrict M&I contracts, concludes that the Subdistrict has alienated all of its dominion and control of the Windy Gap water, we believe that the Secretary is no longer obligated to require the imposition of the acreage limitations of the Warren Act.

2. Whether the Reclamation Reform Act applies to return flows derived from the use of Project water delivered to the Subdistrict in-lieu-of non-Project Subdistrict water?

A. Prior Appropriation and Return Flows

The broader question to first be answered is whether the United States must claim the ownership and control over the reuse of Project water beyond its initial use. Such a question initially is not a federal issue but rather a state water law issue because Section 8 of the Reclamation Act of 1902 requires the United States to adhere to state law concerning water use. The above question falls into this category. The subcategory for this issue is addressed under the topical heading of Waste, Seepage, Drainage and Return Flows. Generally, comprehensive treatises explain that the original appropriator maintains


control over the water during the first use and controls unused water until it is returned to a water course and abandoned by the appropriator. If the appropriator so desires, he may continue control of the unused water and put it to another beneficial use. Such control and use is superior to junior interests on the water course. We have found this to be a widely accepted point of water law and have found cases applying it to the United States. The key point is that the appropriator has the discretion to continue control and use. The appropriator may relinquish that control by abandonment; either informally, by allowing the water to re-enter a water course, or formally, by contracting its further use to another party.

We now address one more preliminary question: Is there a distinction between reuse of agricultural return flows and the reuse of M&I return flows? We can find no such distinction. Kinney, Hutchins and Clark all do not make water use distinctions in their discussion of ownership of "waste, seepage, drainage and return flows." Several states have cases applying the same ownership concept to different primary and successive uses: Wyoming Hereford Ranch v. Hammond Packing, 236 P. 764 (Wyo. 1925); City and County of Denver v. Fulton Irrigating Ditch Co., 506 P.2d 144 (Colo. 1972); Arizona Public Service Co. v. Long, 1989 WL 36849 (Ariz. 1989); Ripley v. Park Center Land and Water Co., 90 P. 75 (Colo. 1907); and see also Martz, Seepage Rights in Foreign Water, 22 Rocky Mt. L. Rev. 407. Since the


12/ On April 18, 1977, the Pacific Southwest Regional Solicitor's Office replied to an inquiry as to whether the reclaimed "waste water" of Vacaville, CA, initially delivered as part of the Solano Project, when sold to the Solano Irrigation district would still be considered project water and thus acreage limitations would apply. The Regional Solicitor noted that the master contract reserved waste, seepage and return flow water. He then concluded, without discussion, that the Vacaville effluent was neither waste, seepage nor return flow and thus the United States did not intend to reserve the same. Therefore, acreage limitation would not apply. We believe the facts surrounding the Proposed Contract are different and we offer a more thorough legal analysis.

United States is treated as any other appropriator, state water law on successive use of return flows applies to the United States.

However, Reclamation must adhere to any specific Congressional direction on water use. On this issue, we find that Congress is primarily interested in the economics of M&I use. That primary interest is reflected in the Reclamation Project Act of 1939. Subsection 9(a) requires the Secretary to analyze project water use for M&I and to report the probability of an M&I allocation returning construction costs. Subsection 9(c) authorizes higher prices for M&I water. We read (a) and (c) to require that the Secretary show a need for an M&I allocation and that the higher prices will pay for that allocation. Unfortunately, Section 9 does not provide instruction for the Secretary on successive use of project water initially used for M&I. Congress did not address this issue in the '39 Act nor in any other general Reclamation act. Rather, Congress requires water use to be a beneficial use and that use must employ sound management plans for conservation. Reclamation has exercised such a responsibility by controlling successive uses.

B. C-BT and Return Flows from M&I Use

Having concluded that the United States is not compelled to continue its control of Project water past the initial use, the question then is, can the United States, acting pursuant to Reclamation law and the C-BT Project authorization, contract with the Subdistrict to use Project water for M&I purposes in Colorado, and then control the use of the effluent return flows? And if so, does acreage limitation (including the RRA) apply to the irrigation use of the return flow?

The State of Colorado recognizes the United States as an appropriator of water and also recognizes both the District and Subdistrict as appropriators. Congress authorized the C-BT for multiple purposes. Colorado recognizes the rights of an appropriator to continue control of return flows, hence the right to apply the water to successive uses. The United States has served notice of its intent to continue control of return flows in Article 19 of the 1938 Contract. Article 19 reads in part:

It is understood and agreed that the United States does not abandon or relinquish any of the increment or seepage or return flow water coming from the irrigation of lands or other uses supplied with water from or through the works.

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constructed by the United States, but that the same is
reserved and intended to be retained for the use and benefit
of the District.

In Water Rights v. Northern Colorado Conservancy District, 677
P.2d 320 (Colo. 1984), the Colorado Supreme Court concluded that
Article 19 applied to the return flow of effluent from Estes
Park, Colorado's M&I use, and that the District, through the 1938
Contract, could rely on those flows as project water, available
for District use for agriculture. Estes Park has a contract with
the United States for 500 acre feet of C-BT water for municipal
use and also has a contract with the District for more M&I water.
Estes Park argued that it owned the effluent and could use it at
its discretion. The Colorado Supreme Court denied the Estes Park
appeal and affirmed the trial court's decision in favor of the
District. The Colorado Court affirmed the rights of the
United States and the District to the continued control of water
originally appropriated by the United States and the District.

Thus, the answer to your question on Subdistrict return flows is,
that as long as the United States and the District express an
intent to control return flows, even M&I effluent, as expressed
in Article 19 of the contract, the return flows continue to be
project water and acreage limitations apply to the irrigation use
of project water. However, the 1938 excess land waiver
statute would be effective where applicable.

C. The Effects of In Lieu Delivery Under the Proposed Contract

Article 10(a) of the Proposed Contract allows the delivery of
1938 Contract Project water in lieu of 1973 Contract non-Project
water under certain conditions. We understand the in lieu
delivery is not a mere exchange but rather a substitution with
later accounting. An exchange of water is usually defined as a
taking of Project water for non-Project use, with a release of
non-Project water for Project use. We believe both federal and
state law allow such an exchange. An in lieu delivery would
be a taking of Project water for non-Project use with a later

\[15\] 43 U.S.C. § 423e, 431 and 544. To the extent that the
Subdistrict contracts for the use of C-BT water and that
water eventually is used for irrigation, the Subdistrict has
a water service contract within the definition given in the
RRA; thus the RRA will apply.

\[16\] Section 14 of the Reclamation Project Act of 1939, 53 Stat.
1197; 43 U.S.C. § 389 grants the Secretary authority to
execute contracts "for exchange or replacement of water..."
Other authority is found at 43 CFR § 426.18(b)(iii)(B)(2) and
C.R.S. 1989 § 37-83-104.
accounting or release of non-Project water for Project use.\textsuperscript{17} While such a substitution appears to be legal,\textsuperscript{18} the practice may require the Secretary to require compensation for the use of Project water.\textsuperscript{19}

1. Project Water

If Project water is delivered in lieu of non-Project water (including its use as M&I return flows) for irrigation use, acreage limitation laws will apply. Thus, the water user would be required to comply with the discretionary provisions of the RRA or be subject to prior law and be limited by the provisions of 43 U.S.C. § 390cc(b), better known as the Hammer Clause. If the delivery is both Project and non-Project water, the commingling regulations as shown below would apply.

2. Commingled Water

If the Subdistrict's in lieu delivery for irrigation (including use of return flows) is non-Project and Project water, commingled, then the water user can be subject to the provisions of the RRA. Title 43 CFR § 426.18(b)(ii) requires that:

Where the facilities utilized for commingling irrigation water and nonproject water are constructed with funds made available pursuant to Federal Reclamation law, non-Project water will be subject to Federal Reclamation law and these regulations unless the district collects and pays to the United States an incremental fee which reasonably reflects an appropriate share of the cost to the Federal Government, including interest, of storing and/or covering the nonproject water. Such fee shall be established by the Secretary and shall be in addition to the district's obligation to pay for capital, operation, maintenance, and replacement costs associated with the facilities required to provide the service. The provisions of Federal Reclamation law and these regulations will be applicable to all landholders who receive irrigation water and, in the case of a

\textsuperscript{17} We do not believe 43 CFR § 426.18(b)(iii)(B)(2) applies because its intent is to address exchanges occurring at most within the current water year, not an in lieu delivery with replacement in later years.

\textsuperscript{18} 43 U.S.C. § 389.

\textsuperscript{19} Reclamation should analyze the benefit received by the Subdistrict if it diverts Project water paid for at a subsidized agricultural rate and uses the water for M&I purposes.
district which does not pay the incremental fee specified in this paragraph (b)(1)(ii), to all landholders who receive nonproject water delivered through Reclamation program funded facilities.

Thus in the case of non-Project water which is commingled, either full compliance with the RRA is required or an incremental fee must be paid in lieu of compliance with the RRA.

Abandonment

However, if the United States and the District elect not to continue control, Colorado law allows the water to be abandoned by the appropriator in favor of other appropriators. The question then is, can the United States and the District abandon its right to the effluent return flows? Yes, they can. The process is simple. First, the United States and the District must sign the Proposed Contract, which must contain a provision suspending the application of Article 19 of the 1938 Contract. Then the United States and the District must comply with Colorado law concerning notice of a change in water use. We presume that the Subdistrict can then obtain a water right to the use of the effluent return flows for any use considered beneficial under Colorado law. Such a water right would not be constrained by Reclamation law (i.e., acreage limitation).

Suspension of Article 19

The above process appears to be simple, but the decision of whether the United States can or should exercise its discretion as an appropriator is more complex. Reclamation must adhere to any limits Congress has imposed on its discretion. We are not aware of any general provisions by Congress except for possible tangential inferences from Congress authorizing the water to be used within the project boundaries. However, we find no general direction that water of a project must be consumed before leaving a project's boundaries; indeed historical practice shows that Reclamation has never attempted to accomplish 100% consumption.

We do believe that Congress has spoken to the consumptive use of Colorado River Basin water imported for use in the C-BT Project. The 1922 Colorado River Compact has been interpreted to require that Colorado River Water be made available for use only in states signatory to the Compact. Thus there is a requirement that the Secretary use reasonable efforts to assure that imported C-BT water, while under Reclamation control, does not flow out of the State of Colorado.

We do not read this interpretation to require 100% proof of consumptive use nor that the imported water be consumed within the Project for Project purposes. To the extent that Colorado is satisfied that the Compact terms are met, the Secretary can also be satisfied.
The final concern for the Secretary is the precedent of suspending Article 19 for the Proposed Contract. We believe the Secretary has the discretion for the suspension and we believe we can provide legal justification for addressing the facts of later proposals and coming to an opposite conclusion. However, many of your decisions are driven by policy considerations, not legal requirements.

Summary

In summary, we conclude that the Secretary is not required by federal or state law to exercise control over successive uses of Project water. However, the Secretary has shown an intent to control return flows from any C-BT project use and to apply those flows for further Project purposes. This continued control of Project water requires that acreage limitations continue to apply. When the Subdistrict delivers Project water in lieu of non-Project water to an M&I use, the effluent return flows are still Project water and a successive use for irrigation will need to comply with acreage limitations, unless 42 U.S.C. § 386 applies.

Since the Subdistrict (or its subuser) is eligible to contract for irrigation use, the acreage limitation provisions of the RRA will apply.21/ The Secretary has the discretion, however, to abandon the United States' rights to return flows. In doing so, the water would no longer be Project water. Abandonment would require the suspension of Article 19 of the 1938 Contract with the approval of the District. Such an abandonment probably will allow the Subdistrict to appropriate the water, and if so appropriated, federal Reclamation law would not apply.

Question 3. Whether the use of federal facilities to deliver non-Project water causes that water to be considered commingled Project water when later used as a supplemental water supply to non-District private water?

The mere use of Reclamation facilities to deliver non-Project water does not cause that water to be considered commingled Project water when later joined with non-District private water as a supplemental supply. Project water is water appropriated by the United States or a district as the water supply for a project. However, water appropriated by a private party can become Project water if it is bought or exchanged by the United States (or its contracting water user organization). As we explained earlier, non-Project water remains non-Project water, but the mere use of federal facilities requires the contracting water user to accept the application of certain Reclamation laws; such as acreage limitation. The acceptance of

20/ See definition of in lieu delivery at page 8 in the third full paragraph.

those Reclamation laws does not create such a change in the water so that 43 CFR § 426.18(b)(ii) [commingling incremental fee] would apply.

SUMMARY

1. Title 43 U.S.C. § 386 applies only to lands with a state recognized water supply as of June 16, 1938.

2. Title 43 U.S.C. § 390aa et seq. will apply to Subdistrict use of C-BT water eventually used for irrigation, unless the United States has abandoned its Project water right or the water is delivered to lands eligible for the § 386 exemption.

3. The Secretary has the discretion, with the consent of the District, to abandon municipal return flows, thus making the same available for appropriation by another party.

4. The use of C-BT facilities to transport Windy Gap water requires the Subdistrict to apply acreage limitations prescribed at 43 U.S.C. § 524, the Warren Act, unless the individuals or the water user organization has elected to amend their Project contracts pursuant to the RRA.

5. The application of Warren Act acreage limitations to Windy Gap water includes the irrigation use of municipal return flows by the original appropriator, unless complete dominion and control of the water has been assigned to another party.

6. The use of C-BT facilities to transport Windy Gap water does not turn Windy Gap water into C-BT Project water.

If you have any questions regarding this matter, please feel free to contact this office.

John C. Chaffin
For the Field Solicitor
March 4, 1997

MEMORANDUM

Joint Operations Center Operators, Attn: Mr. J. Chynoweth

Ms. Nancy Bellows
Director, Division of Power System Dispatching
Western Area Power Administration
PO Box 3700
Loveland, CO 80539

Subject: MARCH SCHEDULE OF WATER AND POWER OPERATIONS
(RESERVOIR OPERATION)
SOO No.19-97

COLORADO-BIG THOMPSON PROJECT AREA
WEST SLOPE OPERATION

GREEN MOUNTAIN RESERVOIR

Green Mountain Reservoir storage was 82,847 acre-feet, water surface elevation 7909.32 feet, on February 28, 1997. The release is currently at 400 c.f.s. and will be adjusted to pass inflow, replace for out of priority CBT Project depletions, and release storage for west slope downstream depletions as required which will draft the reservoir during March to near 65,000 acre-feet.

WILLOW CREEK RESERVOIR

Willow Creek Reservoir storage was 9,073 acre-feet, water surface elevation 8124.75 feet, on February 28, 1997. A minimum release of 7 c.f.s. to the river from Willow Creek Reservoir is required for March. The end-of-month target storage level should be near 9,700 acre-feet. Winter inflows will be stored and no pumping will be scheduled until April, 1997.

LAKE GRANBY

Lake Granby storage was 432,229 acre-feet, water surface elevation 8264.45 feet, on February 28, 1997. A flow of 20 c.f.s. at Granby Dam to the Colorado River is the minimum flow requirement for March. Pumping will be scheduled as needed to meet required Adams Tunnel diversions.
SHADOW MOUNTAIN RESERVOIR/GRAND LAKE

For March, the release to the Colorado River below Shadow Mountain Dam will be maintained at the minimum allowable fishery flow of 20 c.f.s. Shadow Mountain Reservoir and Grand Lake will be operated between the winter water surface elevations of 8366.5 and 8366.8 feet as long as ice cover is present.

ALVA B. ADAMS TUNNEL DIVERSIONS

Adams Tunnel diversions during March will be scheduled to meet the desired East Slope reservoir storage balance and project water deliveries. March diversions are expected to total about 16,900 acre-feet. Adams Tunnel diversions will be shut down March 16 to accommodate the installation of a pedestrian/bike trail at Lake Estes.

EAST SLOPE OPERATION

LAKE ESTES

A minimum release from Olympus Dam to the Big Thompson River of 25 c.f.s. will be maintained through March 31, 1997. Big Thompson River "skim" water will be stored in Lake Estes and returned to the river in the spring. Lake Estes will be drafted to water surface elevation 7460.0 feet starting March 17 to install a pedestrian/bike trail adjacent to the lake. This trail work will take about 3 weeks.

FLATIRON UNIT #3 PUMP/CARTER LAKE

Carter Lake storage was 101,040 acre-feet, water surface elevation 5740.04 feet, on February 28, 1997 and is expected to be about 109,000 acre-feet by the end of the month. Pumping to Carter Lake will be scheduled at about 550 to 600 acre-feet/day through March 15. Beginning March 17, Flatiron Unit 3 will be used as a generator to make deliveries to the Charles Hansen Feeder Canal.

FLATIRON AFTERBAY/CHARLES HANSEN FEEDER CANAL/HORSETOOTH RESERVOIR

Releases to the 930 c.f.s. section of the CHFC will be scheduled at the minimum release of 100 c.f.s. Horsetooth Reservoir storage was 138,606 acre-feet, water surface elevation 5420.81 feet, on February 28, 1997, and is expected to increase to about 142,200 acre-feet by the end of the month.

FRYINGPAN-ARKANSAS PROJECT

WEST SLOPE OPERATIONS

RUEDI RESERVOIR

Ruedi Reservoir storage fell to 67,177 acre-feet, water surface elevation 7725.83 feet, by February 28, 1997. That was 35,196 acre-feet (40.17 feet) below the crest of the spillway. A release of about 160 c.f.s. will be maintained to draft the Reservoir to a total storage of about 60,000 acre-feet by the end of March. If it becomes apparent that the spring runoff will be
significantly higher or lower than normal, then the release will be increased or reduced accordingly.

WEST SLOPE COLLECTION SYSTEM/CHARLES H. BOUSTEAD TUNNEL IMPORTS

No imports are anticipated until April.

FAST SLOPE OPERATIONS

TURQUOISE LAKE

Turquoise Lake storage fell to 76,380 acre-feet, water surface elevation 9837.57 feet, by February 28, 1997. That was 53,018 acre-feet (31.85 feet) below the top of the conservation pool. A minimum release of Project water equal to the lesser of native inflow or 15 c.f.s. will be released directly to Lake Fork as the native inflow is stored as winter water on behalf of the City of Colorado Springs through the fifteenth of the month. The native winter inflows have been, typically, about 3 c.f.s. After the fifteenth, any inflows greater than 15 c.f.s. will be diverted through the Mt. Elbert Conduit and returned to the Arkansas River via the Mt. Elbert Powerplant and Twin Lakes. A minimum Project water release of 6.7 c.f.s. will be made for the Leadville fish hatchery via the Mt. Elbert Conduit. No Boustead Tunnel, Homestake Tunnel, or Busk-Ivanhoe Tunnel imports are expected in March. Releases to the Mt. Elbert Conduit will be made around the clock on weekdays via the Sugarloaf powerplant as water is transferred to Twin Lakes. The Lake will continue to be drafted through the month.

MT. ELBERT CONDUIT/HALFMOON DIVERSION

A total delivery of about 15,400 acre-feet will be made from Turquoise Lake to Twin Lakes Reservoir in March via the Mt. Elbert Conduit and Powerplant. No Halfmoon Creek diversions are expected until April.

TWIN LAKES/MT. ELBERT FOREBAY

The combined Twin Lakes and Mt. Elbert Forebay storage fell to 113,400 acre-feet by February 28, 1997. That was 31,280 acre-feet below the bottom of the power pool. Releases for the Otero Pipeline are expected to average 85 c.f.s. in March. Native inflow will be stored for the Twin Lakes Reservoir and Canal Company as Winter Water through the fifteenth of the month. The native inflow will be released to Lake Creek after the fifteenth. No Twin Lakes Tunnel imports are anticipated in March. Project water will be released to augment the winter flows in the Arkansas River in an effort to enhance the brown trout fishery. The current Project water release of 400 c.f.s. will be maintained throughout the month unless spring inflow forecasts indicate a higher or lower release is necessary.

PUEBLO RESERVOIR

Pueblo Reservoir storage increased to 268,480 acre-feet, water surface elevation 4882.96 feet, by February 28, 1997. That was 11,531 acre-feet (2.47 feet) above the top of the conservation pool. The Reservoir content will continue to increase through mid-March as Project water is released from Twin Lakes and native inflow is stored as Winter Water. Under the Winter Water Storage Program the State allows a portion of the native inflow to the Reservoir to be stored between November 15 and March 15. The native inflow
will be released to the Arkansas River after the fifteenth. Significant releases of Project water are anticipated in March and other releases from Pueblo Dam will be made to make any required delivery of non-Project water.

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<tr>
<th>Unit / Powerplant</th>
<th>Maintenance Dates</th>
<th>Type of Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estes Unit 2</td>
<td>2/24/97 - 3/14/97</td>
<td>Annual Maintenance</td>
</tr>
<tr>
<td>Estes Unit 3</td>
<td>3/31/97 - 4/18/97</td>
<td>Annual Maintenance</td>
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<td>Pole Hill Unit</td>
<td>3/17/97 - 4/4/97</td>
<td>Annual Maintenance</td>
</tr>
<tr>
<td>Big Thompson Powerplant</td>
<td>2/24/97 - 3/14/97</td>
<td>Annual Maintenance</td>
</tr>
<tr>
<td>Big Thompson Powerplant</td>
<td>10/11/96 - 4/1/97</td>
<td>Winterize/Dewater</td>
</tr>
<tr>
<td>Mt. Elbert Unit 2</td>
<td>3/10/97 - 2/28/97</td>
<td>Annual Maintenance</td>
</tr>
</tbody>
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