

# RECLAMATION

*Managing Water in the West*

FONSI No. EC-1300-09-02

## 2009 Upper Arkansas Water Conservancy District Temporary Excess Capacity Contract, Fryingpan-Arkansas Project

Finding of No Significant Impact

Approved: \_\_\_\_\_ Date: \_\_\_\_\_



U.S. Department of the Interior  
Bureau of Reclamation  
Great Plains Region  
Eastern Colorado Area Office

March 2009

## **INTRODUCTION**

This Finding of No Significant Impact has been prepared to document the environmental review and evaluation of the proposed action in compliance with the National Environmental Policy Act of 1969, as amended. Based on the following finding, the Bureau of Reclamation (Reclamation) has determined that the implementation of a 2009 temporary excess storage capacity contract with Upper Arkansas Water Conservancy District (Upper Arkansas) would not result in a significant impact to the human environment, or natural or cultural resources.

## **PREFERRED ALTERNATIVE**

Reclamation evaluated the effects of two alternatives, including the No Action Alternative and the Proposed Action Alternative, and has selected the later as the Preferred Alternative. Under this alternative, Reclamation would enter into a one year temporary excess storage capacity contract with Upper Arkansas for storage of up to 1,000 acre feet (ac-ft) of non-project water in Pueblo Reservoir.

Reclamation's action is limited to issuance of the proposed contract. Upper Arkansas must comply with all conditions of any permits and/or agreements with the owners of the lands on which the reservoirs are situated or of the reservoirs themselves (see Environmental Commitments below).

Of the expected outflow, only the 37.2 ac-ft that would be exchanged to Rainbow Lake (Rainbow), Cottonwood Lake (Cottonwood), O'Haver Lake (O'Haver), North Fork Reservoir (North Fork), Boss Lake Reservoir (Boss Lake), DeWeese Reservoir (DeWeese), and the 400 ac-ft that would be exchanged to North Fork only were analyzed in this EA. The remainder of Upper Arkansas' request was within the scope of the Environmental Assessment and Finding of No Significant Impact No. EC-1300-06-02 signed April 2006. The 37.5 ac-ft Upper Arkansas would exchange is comprised of up to 15 ac-ft of contract water into North Fork, Boss Lake, or O'Haver; up to 13.2 ac-ft into Rainbow or Cottonwood; and 9 ac-ft into DeWeese.

The exchange/capture of the water in Boss Lake could occur between April and July as long as the conditions of the U.S. Forest Service (USFS) permit and the Colorado Division of Wildlife (CDOW) recommendation for the Lake Fork and Middle Fork of the South Arkansas below Boss Lake Reservoir (referred to hereafter as Boss Lake Creek) instream flow (ISF) are met. All other reservoirs could exchange/capture water as soon as the contract is issued as long as the conditions of the USFS permit are met and Colorado Water Conservation Board ISF are not injured.

With regard to DeWeese, Upper Arkansas would exchange up to 9 ac-ft of contract water into this reservoir in June and July or up to 2 cfs and 3 cfs in a 24 hour period, respectively. Releases from DeWeese would normally be in the

order of 0.5 cfs. However, for the purposes of this EA, the possible scenario with the potential to cause the most impact would only occur at the request of the Bureau of Land Management to improve flows in Grape Creek below the reservoir. In this case the exchanged water would be released starting November 16 at a rate of 2-3 cfs until it is gone in about 2-3 days.

## **ENVIRONMENTAL COMMITMENTS**

Upper Arkansas' contract would abide by the environmental commitments made in the Environmental Assessment and Finding of No Significant Impact No. EC-1300-06-02 in April 2006 (2006-2010 EA). Table 1 below outlines how compliance with these commitments would be made.

Upper Arkansas' exchanges would be limited to the timing, amount, and rate described above.

Upper Arkansas would abide by Colorado water law and any requirements of The Colorado Division of Water Resources - The Office of the State Engineer (State Engineer), which have jurisdiction over the administration of state waters. All of Upper Arkansas' exchange rights are junior to CWCB ISF. All the streams have CWCB ISF except for Boss Lake Creek. For exchanges involving Boss Lake Creek, Upper Arkansas has committed to not cause a decrease in the flows of Boss Lake Creek below the Colorado Division of Wildlife flow recommendation submitted to the CWCB as a result of the proposed exchanges at that location.

Upper Arkansas would have to comply with any agreements and/or permits that allow them to operate in the reservoirs. For example, the USFS has issued Upper Arkansas a Special Use Permit to operate in Cottonwood. Upper Arkansas and the Rainbow Lake Resort, Inc. have an agreement regarding Rainbow. Upper Arkansas and the DeWeese Dye Ditch and Reservoir Company have an agreement regarding DeWeese. North Fork, Boss, and O'Haver are on USFS lands. Upper Arkansas must comply with any Operating Plans and conditions of any Special Use Permits that are or may be issued from the USFS.

Upper Arkansas would have to maintain the annual flow regime recommended by the Colorado Department of Natural Resources to protect fisheries and non-fishery water-related recreation. Releases of the exchanged water from any of the reservoirs are expected to occur from April through October and would maintain the annual flow regime recommended by the Colorado Department of Natural Resources to protect fisheries and non-fishery water-related recreation. If Upper Arkansas chooses a 3-day release of augmentation water it has to be completed by October 15. Upper Arkansas may choose to release augmentation water after October 15 but, it must be released over a minimum of 10 days.

## **FINDING**

In the attached Environmental Analysis, Reclamation evaluated the environmental consequences associated with implementing the Proposed Action Alternative. The potential impacts are summarized in Table 2 below. Despite the potential adverse impacts shown to downstream aquatic resources, non-fishery water-related recreation, and fishery related recreation due to potential change in flows downstream of the reservoir, the exchanges would maintain flows at CWCB ISF levels. Flows would be maintained at CDOW recommendations for Boss Lake Creek ISF. Also, to minimize the adverse effects on fisheries and non-fishery related recreation, Upper Arkansas must maintain the annual flow regime recommended by the Colorado Department of Natural Resources. For example, to protect fisheries during fall spawning a 3-day release of augmentation water must be completed by October 15. If releases occur after October 15, it must be released over a minimum of 10 days.

Furthermore, Upper Arkansas must comply with all conditions of their permits with the USFS. The CWCB ISF program was designed to provide minimum stream flows to preserve the natural environment to a reasonable degree (CWCB 2007). Therefore, because of these constraints, the impacts found are not believed to be significant.

**TABLE 1 – COMPLIANCE WITH ENVIRONMENTAL COMMITMENTS IN 2006-2010  
EA**

<b>Environmental Commitment</b>	<b>2009 Compliance Determination</b>
All water must be transported, stored, and released in accordance with the laws of the State of Colorado.	To be included in contract.
By entering into a temporary excess capacity contract with Reclamation, for the use and distribution of United States waters, the Contractor shall comply will all sections of the Clean Water Act.	To be included in contract. Confirmed requests include no construction to transport and/or deliver the water.
If Reclamation enters into any long-term contracts during the term of the proposed action, the amount of storage and exchange covered by this EA will be reduced by the amount of the long-term contract.	The City of Aurora long-term excess capacity contract was signed on September 12, 2007. The 57,489 ac-ft total being requested for 2009 is still well under the now 70,000 ac-ft available for temporary contracts.
Reclamation will monitor temporary excess capacity operations including daily storage and release data for Contractors' accounts, to better understand real-time use of contracted storage. This will aid in understanding how temporary excess capacity is used and present the opportunity to adaptively manage future temporary excess capacity contract operations.	Monitoring ongoing. Year-end analysis planned. Modifications to operations will be made accordingly, if necessary.
Reclamation will work with the State's Water Quality Control Division (WQCD) and other interested parties to compare their water quality data with Reclamation's operational data described above to determine if there is a correlation between selenium concentrations on the Arkansas River from Pueblo Reservoir to the Rocky Ford head gate, and changing hydrology as a result of temporary excess capacity contract operations for the years 2006 through 2010.	WQCD confirmed collection of selenium data is ongoing. Reclamation will initiate a study toward the end of the 2006-2010 term to determine any correlations.
Temporary excess capacity contract operations shall not cause flows on the Arkansas River as measured at the Avondale gage to fall below 86 cfs.	Ongoing communication with signatories of the IGA (Intergovernmental Agreement between the City of Aurora, Colorado Springs Utilities, City of Fountain, Pueblo Board of Water Works, the District and the City of Pueblo to maintain certain flows downstream from Pueblo Reservoir to Fountain Creek), St. Charles Mesa Water District, and State Engineer to ensure compliance.
In support of the Upper Arkansas River Flow Program (Flow Program), Contractors may not exchange water from Pueblo Reservoir to upstream locations against releases made by Reclamation in support of the Flow Program, or make any exchanges from Pueblo Reservoir which would require Reclamation to release additional water to meet the objectives of the Flow Program.	To be included in contract. If a contractor requests to exchange water from Pueblo Reservoir against releases made in support of the Flow Program, the request will be denied. This would prevent entities from exercising a physical exchange against the outflow of Twin Lakes Reservoir from Pueblo Reservoir.

<p>Reclamation will not execute contract exchanges until the Natural Resource Conservation Service (NRCS) makes its annual May 1<sup>st</sup> water supply forecast, and Reclamation determines whether or not contract exchanges will affect its ability to operate in accordance with the Flow Program recommendations, or impair the ability of Fremont Sanitation District Wastewater Treatment Plan or the Salida Treatment Plant to meet their CDPES permit requirements.</p>	<p>The Aurora long-term excess capacity contract allows up to 10,000 ac-ft of exchange. However, no temporary exchange contracts have been requested for 2009, including Upper Arkansas' request. Therefore, this commitment is not applicable.</p>
<p>Reclamation will limit temporary excess capacity contract operations that have the potential to affect the Arkansas River below Pueblo Reservoir when flows are <math>\leq 500</math> cfs and <math>&gt; 50</math> cfs to a decrease of no more than 50% of the average daily flow as measured by adding the flow at the above Pueblo gage to fish hatchery return flows.</p>	<p>Reclamation will use the previous day's flows, as measured by adding flows at the Above Pueblo Gage to fish hatchery return flows, to determine whether this mitigation measure would be triggered. This commitment is included as a standard clause in all the contracts. Reclamation would not allow Upper Arkansas to exercise an exchange from a lower reservoir into Pueblo if flows fell below 50 cfs.</p>
<p>Reclamation will limit temporary excess capacity contract operations that have the potential to affect the Arkansas River below Pueblo Reservoir when flows are <math>\leq 50</math> cfs, as measured by adding the flow at the above Pueblo gage to fish hatchery return flows.</p>	<p>To be included in contract. See above.</p>
<p>Contractors that propose to store water that originates in the Upper Colorado River basin must either (1) sign a Recovery Agreement with the U.S. Fish and Wildlife Service, or (2) if the water originates in the Gunnison River basin, individual consultation with the Service may be required.</p>	<p>Confirmed completed.</p>
<p>Contracts will be conditioned to limit storage of west slope water to the volume modeled for this analysis, or 14,200 ac-ft per year, as discussed in the EA, Chapter 3, Section IV. If a request is outside of this condition, additional environmental compliance will be required.</p>	<p>Confirmed to be under the 14,200 ac-ft per year analyzed in the EA.</p>
<p>If the potential effects of future requests were not evaluated in EA No. EC-1300-06-02, as discussed in Appendix C, Hydrologic Model Documentation, additional environmental compliance will be required.</p>	<p>The portion of Upper Arkansas' request that involves exchanging reservoirs was found to be outside the scope of analysis of the 2006-2010 EA. Additional analysis of impacts to the hydrology of the exchanging reservoirs and streams out of the reservoirs, and to the aquatic resources, threatened, endangered and special status species, and recreation in those waters will be completed for the contract requests with this EA. Based upon the magnitude of the changes in flows expected with the Proposed Action Alternative, the scope of analysis will include the reservoirs and streams to the mainstem of the Arkansas River as impacts beyond that point are believed to be indiscernible. See Figure 1.1 for a location map. The analysis only discusses those streams directly below the reservoirs. However, it should be assumed that the level of impacts will gradually reduce with further distance from the reservoirs. See the 2006-2010 EA for the complete analysis for all other aspects of the 2009 requests.</p>

**TABLE 2 - PROPOSED ALTERNATIVE IMPACT SUMMARY**

	<b>DeWeese Res / Grape Cr</b>	<b>North Fk Res / North Fk S Ark R</b>	<b>Boss Lk Res / Boss Lk Cr</b>	<b>O’Haver Lk / Gray’s Cr</b>	<b>Cottonwood Lk / S Cottonwood Cr</b>	<b>Rainbow Lk / M Cottonwood Cr</b>
<b>Reservoir Levels, Surface Area &amp; Non-Fishery Water-Related Recreation</b>	Negligible Increase (Benefit) June – November	Long-term Moderate Increase (Benefit)	Long-term Negligible Increase (Benefit)	Long-term Negligible Increase (Benefit)	Long-term Negligible Increase (Benefit)	Long-term Minor Increase (Benefit)
<b>Downstream Flows &amp; Non-Fishery Water-Related Recreation</b>	Negligible Decrease (Adverse) 1 day each in June & July	Moderate Decrease (Adverse) Certain Days January – July	Moderate Decrease (Adverse) Certain Days April – July	Moderate Decrease (Adverse) Certain Days January – July	Negligible Decrease (Adverse) Certain Days January – July	Negligible Decrease (Adverse) Certain Days January – July
	Negligible Increase (Benefit) 2-3 days in November	Moderate Increase (Benefit) Certain Days May – October	Moderate Increase (Benefit) Certain Days May – October	Moderate Increase (Benefit) Certain Days Apr – October	Negligible Increase (Benefit) Certain Days July – October	Negligible Increase (Benefit) Certain Days July – October
<b>Reservoir Aquatic Resources &amp; Fishery-Related Recreation</b>	No Adverse Impacts	No Adverse Impacts	No Adverse Impacts	No Adverse Impacts	No Adverse Impacts	No Adverse Impacts
<b>Non-Water Related Recreation</b>	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact
<b>Downstream Aquatic Resources &amp; Fishery-Related Recreation</b>	Short-term Negligible Adverse	Short-term Negligible Adverse	Short-term Negligible Adverse	Short-term Negligible Adverse	Short-term Negligible Adverse	Short-term Negligible Adverse
<b>Greenback Cutthroat Trout</b>	N/A	N/A	No Adverse Impacts; Is Not Likely to Adversely Affect	N/A	N/a	N/A
<b>Canada Lynx, Mexican Spotted Owl, Uncompahgre Fritillary Butterfly, Unlisted Moonwort</b>	No Impacts; No Effect	No Impacts; No Effect	No Impacts; No Effect	No Impacts; No Effect	No Impacts; No Effect	No Impacts; No Effect

\*Note- Cumulative impacts are expected to be the same as those listed above except all have the potential to be long-term.