

# RECLAMATION

*Managing Water in the West*

FONSI NO. EC-1300-07-04

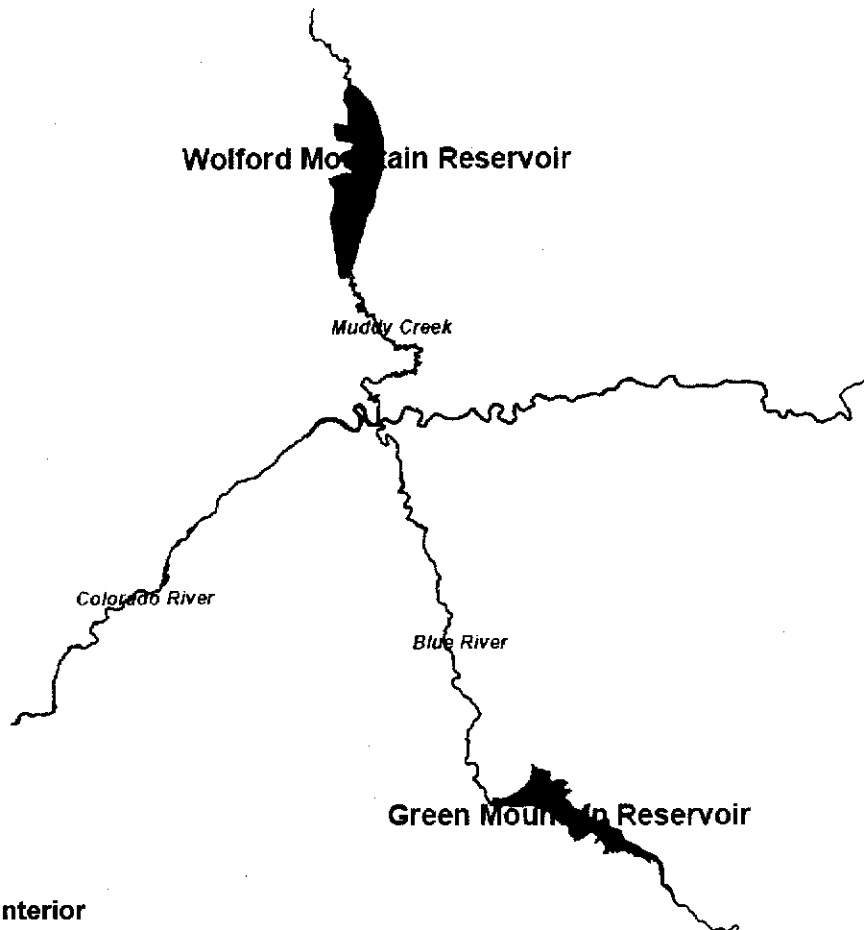
## Exhibit B – Agreement on Wolford Mountain Reservoir and Green Mountain Reservoir Exchanges

Finding of No Significant Impact

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

*Jaci Howell*  
Acting Area Manager

*Nov 9, 2007*  
Date



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

October 2007

## **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 contract to execute Exhibit B – Agreement on Wolford Mountain Reservoir / Green Mountain Reservoir Exchanges (Exhibit B Agreement) 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 contract with the Colorado River Water Conservation District (CRWCD), acting by and through its Colorado River Water Projects Enterprise, and Northern Colorado Water Conservancy District (NCWCD) to implement the Exhibit B Agreement for a term up to 40 years.

The Exhibit B Agreement was created to avoid shortages and/or to mitigate any existing shortage caused by an Operating Limitation at Green Mountain Reservoir (Green Mountain) by using available storage space and stored water at Wolford Mountain Reservoir (Wolford Mountain). This avoidance and/or mitigation would increase the reliability of water delivery to the beneficiaries in the service areas of both CRWCD and NCWCD. An Operating Limitation could result in a decreased rate of water release, required minimum or maximum elevation of the reservoir, a mandated reservoir evacuation, a limitation on the amount of inflow that could be stored, or any other constraint put in place by Reclamation that reduces the ability to make releases from Green Mountain. The two different types of exchanges involved in the Exhibit B Agreement are the Banking Exchange and the Borrowing Exchange.

The Banking Exchange would allow Reclamation, in anticipation of an Operating Limitation, to release water from Green Mountain that would be credited as a Wolford Mountain release. This release would be in exchange for crediting (banking) an equal amount of water in Wolford Mountain for later release to avoid or mitigate Green Mountain operating limitation shortages. The allowed banking period is from August 1 through October 31 but is expected to run from August through September. Banking would be expected to occur in commensurate proportion to current CRWCD water marketing demands. Reclamation could request up to 5,000 ac-ft of water to be banked to deal with potential shortages, which would be anticipated to occur in the latter part of October and the month of April. However, note these months represent general time periods (fall and early spring); exact dates may vary. Over the 40 year life of the contract the banking exchange could be utilized up to two of those years. However, it is possible that forecasts predicting the conditions that might give rise to a shortage could also occur an additional two times over the 40 year life of the contract. In the up to two years it is determined that all or a portion of the banked water is not necessary to alleviate a shortage,

Reclamation would direct a release of the banked water as soon as practicable and prior to the anticipated fill of Wolford Mountain (typically the latter part of May) in order to reduce the risk of spilling that banked water.

The Borrowing Exchange would allow Reclamation to alleviate potential shortages when not enough water has been banked ahead of time by borrowing water from Wolford Mountain to be released to avoid or mitigate Green Mountain operating limitation shortages. This release would be in exchange for a later release of water from Green Mountain Reservoir for Wolford Mountain purposes. Reclamation could request to borrow up to 1,000 ac-ft of water to deal with potential shortages, which would be anticipated to occur in April. However, note this month represents a general time period (early spring); exact dates may vary. Over the 40 year life of the contract the banking exchange could be utilized up to two of those years. CRWCD would intend to call for the release of the water in Green Mountain for Wolford Mountain purposes prior to November 1 of the same calendar year in which the Borrowing Exchange was conducted. There are two likely scenarios that were analyzed. The first involves CRWCD requesting release of the entire 1,000 ac-ft spread evenly over the month of May to go toward filling Wolford Mountain when it is out-of-priority. The second involves CRWCD requesting release spread over the months of July through October at a rate proportional to current demands.

## **FINDING**

In the attached Environmental Analysis, Reclamation evaluated the environmental consequences associated with implementing the Proposed Action Alternative. The following specific findings were ascertained:

- There are no impacts expected to threatened and endangered species, floodplains, wetlands, water quality, river physical properties, vegetation, soil, farmland, non-water related recreation, cultural resources, Indian trust assets, or environmental justice as a result of the issuance of the proposed contract.
- The expected direct and indirect impacts to reservoir operations and hydrology, aquatic resources, recreation, socioeconomics, and hydroelectric production are summarized in the table on the next page. Using a conservative estimate, fishery-related recreation is expected to experience a similar level of impact as those found for aquatic resources. Further, recreation-related socioeconomic resources are expected to experience a similar level of impact as those found for fishery-related (aquatic resources) and non-fishery water-related recreation. The socioeconomics of the Colorado River Basin are expected to experience up to a moderate beneficial impact in both the short- and long-term.
- The amount of additional contracts that will be issued under the Green Mountain Reservoir Water Marketing Program will not be greater than the approximately 20,000 ac-ft analyzed in the Final Supplement to the Final Environmental Statement Green Mountain Reservoir, Colorado Water Marketing Program (FSFES). Muddy Creek flows are expected to continue to be driven by river management at the current level. Therefore, the cumulative impacts to reservoir operations and hydrology, aquatic resources, recreation, and socioeconomics would not exceed those evaluated in the FSFES. No cumulative adverse impacts to hydroelectric production are expected.
- These impact level determinations support a finding of no significant impact.

**PROPOSED ALTERNATIVE IMPACT SUMMARY**

	<b>Green Mountain Reservoir</b>	<b>Wolford Mountain Reservoir</b>	<b>Blue River</b>	<b>Muddy Creek</b>
<b>Banking Exchange</b>				
Hydrology	Reduced Storage August-April	Increased Storage August-September (August-March for April Shortage)	Increased Flow August-September, Decreased Flow October (October-April for April Shortage)	Decreased Flow August-September; Increased Flow October (October-April for April Shortage)
Aquatic Resources	Minor Adverse	Minor Beneficial	Minor Adverse	*Short-Term Moderate Adverse Long-Term Negligible Adverse for October Shortage; Minor Adverse for April Shortage
Non-Fishery Water-Related Recreation	Minor Adverse August-April	Minor Beneficial August-September (August-March for April Shortage)	Minor Beneficial August-September, Minor Adverse October (October-April for April Shortage)	**Moderate Adverse August-September; Long-term Negligible Adverse; Moderate Beneficial October (October-April for April Shortage)
Hydroelectric Production	N/A	N/A	Minor Beneficial August-September; Negligible Adverse October-April for April Shortage	N/A
<b>Unneeded Banking Exchange</b>				
Hydrology	Reduced Storage August-March	Increased Storage August-March	Increased Flow August-September; Decreased Flow October-April	Decreased Flow August-September; Increased Flow October-April
Aquatic Resources	Minor Adverse	Minor Beneficial	Minor Adverse	Minor Adverse
Non-Fishery Water-Related Recreation	Minor Adverse August-March	Minor Beneficial August-March	Minor Beneficial August-September, Minor Adverse October-April	**Moderate Adverse August-September; Long-term Negligible Adverse; Moderate Beneficial October-April
Hydroelectric Production	N/A	N/A	Minor Beneficial August-September; Negligible Adverse October-April	N/A
<b>Quick Borrowing Exchange</b>				
Hydrology	Reduced Storage May-April	Reduced Storage April	Increased Flow May	Increased Flow April; Decreased Flow May
Aquatic Resources	Negligible Adverse	Negligible Adverse	Minor Adverse	Minor Adverse
Non-Fishery Water-Related Recreation	Negligible Adverse May-April	Negligible Adverse April	Minor Beneficial May	Minor Beneficial April; Minor Adverse May
Hydroelectric Production	N/A	N/A	No Impact	N/A
<b>Slow Borrowing Exchange</b>				
Hydrology	Reduced Storage July-April	Reduced Storage April-September	Increased Flow July-October	Increased Flow April; Decreased Flow July-October
Aquatic Resources	Negligible Adverse	Negligible Adverse	Negligible Adverse	Minor Adverse
Non-Fishery Water-Related Recreation	Negligible Adverse July-April	Negligible Adverse April-September	Negligible Beneficial July-October	Minor Beneficial April; Minor Adverse July-October
Hydroelectric Production	N/A	N/A	Negligible Beneficial July-October	N/A

\*Even if the 2 out of 40 years that the banking exchange is allowed were to occur consecutively it is anticipated that the aquatic resources would quickly rebound in the following years, resulting in no significant impact.

\*\*The duration is not expected to last more than 2 months and the frequency is not expected to occur more than 2 years for each banking exchange in the 40 year contract, resulting in no significant impact.

## **ENVIRONMENTAL COMMITMENTS**

Flows in the Blue River and Muddy Creek would not be lowered below the Colorado Water Conservation Board's Instream Flows as a result of the implementation of this alternative.

This alternative would not cause in a 12 hour period more than a 260 cfs (10% of bank full) increase in flows of the Blue River or more than a 60 cfs (10% of bank full) change in the flows of Muddy Creek in a 12 hour period, including other releases being made at the time.

Reclamation would not request a banking exchange greater than 2,500 ac-ft for the expected 2 week portion of the Operating Limitation anticipated to occur in October unless the Division 5 Engineer for the Division of Water Resources agreed to allow Reclamation to utilize owed-to-the-river accounting for that October Operating Limitation. This accounting would allow the up to 5,000 ac-ft of water to be released from Wolford Mountain to avoid or mitigate Green Mountain operating limitation shortages evenly over the entire month of October rather than at a higher rate during 2 weeks of October. If permission is not granted the impact of a 2,500 ac-ft release during two weeks of October would not exceed those of a 5,000 ac-ft released over the entire month.