

RECLAMATION

Managing Water in the West

FONSI No. EC-1300-08-04

Green Mountain Reservoir Substitution and Power Interference Agreements

Finding of No Significant Impact

Approved:  Date: 12/19/08



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

December 2008

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 (NEPA) of 1969, as amended. Based on the following finding, the Bureau of Reclamation (Reclamation) has determined that entering into substitution and power interference agreements with Colorado Springs Utilities (Springs Utilities) and Western Area Power Administration (WAPA) 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, the No Action Alternative and the Proposed Action, and has identified the latter as the Preferred Alternative.

Under the Proposed Action, Reclamation would enter into up to a 40-year Substitution Agreement with Springs Utilities. This agreement would approve Springs Utilities' substitution plan according to the terms and conditions set forth in the 2003 MOAs (see Section 1.4.7 of the attached EA). The elements of the May 2003 MOA that are specific to the Proposed Action are the use of Wolford Mountain Reservoir and Homestake Reservoir as sources of replacement water in a manner consistent with the terms and conditions of the 2003 MOAs. Reclamation may approve the use of these additional water sources on a long-term basis, but Springs Utilities must submit for approval of its substitution plan specific for that substitution year. Another component of the Proposed Action (May 2003 MOA) is a contract water exchange, whereby Springs Utilities would provide up to 250 AF stored in the Upper Blue Reservoir to the Colorado River Water Conservation District (River District) each year in return for a like-amount of water stored in Wolford Mountain Reservoir. The 250 AF in Upper Blue Reservoir is intended for water users in the Blue River Basin including Summit County, Vail, Summit Resorts, and Breckenridge. A storage account in an amount up to 1,750 AF is maintained by the River District at Wolford Mountain Reservoir for the benefit of Springs Utilities to store Upper Blue Reservoir water exchanged into Wolford Mountain Reservoir.

In addition, under the Proposed Action, a long-term Power Interference Agreement would be formalized with Reclamation, WAPA, and Springs Utilities. Under the agreement, Springs Utilities would compensate for lost hydropower with power generated from their own facilities, at a time and location determined by WAPA. Springs Utilities reserves the right to pay WAPA monetarily or with power.

ENVIRONMENTAL COMMITMENTS

The agreements between Reclamation, Spring Utilities, and WAPA would abide by the environmental commitments presented in the Green Mountain Reservoir Substitution and Power Interference Agreements Environmental Assessment (EA).

Green Mountain Reservoir substitutions would be limited to the timing, amount, and rate described in the EA.

Springs Utilities 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 has jurisdiction over the administration of state waters.

To ensure the Preferred Alternative protects the natural environments in a manner consistent with the CWCB instream flow requirements above Dillon Reservoir, during substitution years, Springs Utilities' would refrain from diverting to the extent necessary in order to maintain flows at the instream flow levels. Compliance for this mitigation will be to maintain a flow of 5 cfs just upstream of Goose Pasture Tarn Reservoir. Flows at this location will be estimated based on the USGS gage 09046490 Blue River at Blue River, which is located just downstream of Goose Pasture Tarn Reservoir, plus diversions to storage at Goose Pasture Tarn.

Springs Utilities would comply with any agreements and/or permits that are required to allow them to implement the Preferred Alternative and operate in the reservoirs located in the Project Area.

FINDING OF NO SIGNIFICANT IMPACT

In the attached EA, Reclamation evaluated the environmental consequences associated with implementing the Proposed Action. The potential impacts are summarized in the table below. Based on this analysis, Reclamation has determined that the Preferred Alternative would not cause significant impacts.

Summary of Impacts from the Proposed Action

Affected Resources	Proposed Action
Hydrology	
Blue River	Average monthly flows in the Blue River downstream of the Continental-Hoosier System and upstream of Dillon Reservoir would decrease by up to 4.6 cfs or 8.9% in August and increase by up to 4.2 cfs or 21.5% in November. Flows below Dillon Reservoir would decrease by up to 7.8 cfs or 3.5% in May. Flows below Green Mountain Reservoir, would decrease by up to 8.1 cfs or 0.4% in June and increase by up to 1.2 cfs or 0.5% in October.
Williams Fork River	Monthly average flows in the Williams Fork River would decrease by a maximum of 8.3 cfs or 11.5% in March and increase by a maximum of 3.4 cfs or 2.5% in June.
Muddy Creek	Average monthly flows would decrease by a maximum of 5.7 cfs or 4.3% in June and increase by a maximum of 6.1 cfs or 4.4% in October.
Colorado River	Average monthly flows in the Colorado River downstream of the confluence with the Williams Fork River would decrease up to 6.3 cfs or 3.7% in March and increase by up to 4.1 cfs or 0.2% in June. Average monthly flows in the Colorado River near Kremmling would decrease by up to 8.1 cfs or 0.1% in June and increase by up to 4.6 cfs or 0.7% in October. Average monthly flows in the Colorado River downstream of the Eagle River would decrease by up to 8.1 cfs or 0.1% in June and increase by up to 4.6 cfs or 0.5% in October.
Eagle River	Average monthly flows in Homestake Creek would increase by a maximum of 7.6 cfs or 18.1% in August. In substitution years, average monthly flows would increase by up to 0.6 cfs or 2.3%.
South Platte River	Average monthly flows in the Middle Fork South Platte River would decrease by 34.1 cfs or 61.6% and increase by 4.3 cfs or 14.6% in August.
Upper Blue Reservoir	End-of-month contents in Upper Blue Reservoir would increase by up to 250 AF in August, September and October.
Dillon Reservoir	End-of-month contents in Dillon Reservoir would increase by up to 113 AF or 0.1% in all months and decrease by up to 522 AF or 0.3% in August.
Green Mountain Reservoir	End-of-month contents in Green Mountain Reservoir would increase by up to 414 AF or 0.3% in August and decrease by up to 479 AF or 0.6% in May.
Williams Fork Reservoir	End-of-month contents in Williams Fork Reservoir would increase by up to 564 AF or 2.8% in March and decrease by up to 37 AF or 0.1% in January through May.
Wolford Mountain Reservoir	End-of-month contents in Wolford Mountain Reservoir would increase by a maximum of 280 AF or 1.3% in December, January and February and decrease by a maximum of 343 AF or 1.7% in January and February.
Homestake Reservoir	End-of-month contents in Homestake Reservoir would decrease in seven months during the 56-year study period by up to 469 AF or 18.9% in August.
Montgomery Reservoir	End-of-month contents in Montgomery Reservoir would decrease by a maximum of 271 AF or 24.1% from October through March and increase by a maximum of 2,096 AF or 355% from August through November.
Elevenmile Canyon Reservoir	There would likely be no change in Elevenmile Canyon Reservoir contents.
Hydroelectric Generation	
Hydroelectric generation at power plants	<ul style="list-style-type: none"> • Flow changes would result in none to negligible changes in hydroelectric power generation at the following facilities: Dillon Reservoir Power Plant, Roberts Tunnel Power Plant, and Green Mountain Reservoir Power Plant. • Flow changes in the Colorado River near Kremmling could result in minor adverse short-term impacts to

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	<p>hydropower generation at the Shoshone Power Plant.</p> <ul style="list-style-type: none"> • Changes in the diversions through Homestake Tunnel could result in minor adverse short-term impacts to hydropower generation at the Mt. Elbert Power Plant. • Changes in the timing of substitution releases from the Williams Fork Reservoir may result in minor adverse short-term impacts to hydropower generation at the Williams Fork Reservoir Power Plant.
<i>Water Quality</i>	
River basins: Upper Colorado River and South Platte River	Flow changes would have negligible effects to the Upper Colorado River Basin or the South Platte River Basin.
<i>Aquatic Resources and Special Status Species</i>	
River basins: Blue River, Williams Fork River, Muddy Creek, Colorado River, Eagle River, and South Platte River	Flow changes would have negligible effects to aquatic resources.
Special status fish species in the Colorado River Basin	Flow changes in the Colorado River downstream of the confluence with the Eagle River would have no adverse effect on the endangered fish species along the Colorado River (no effect).
<i>Wetlands and Riparian Resources and Special Status Species</i>	
River basins: Blue River, Williams Fork River, Muddy Creek, Colorado River, Eagle River, and South Platte River	Flow changes would have negligible effects to wetlands and riparian resources.
Special status species associated with wetland and riparian areas	Flow changes would have no impact (no effect) on the adjacent riparian/wetland habitats that sustain special status species in the Study Area.
<i>Recreation</i>	
Recreational activities, including: fishing, rafting, kayaking, and boating	Because of the infrequent occurrence of substitution-related changes in stream flow, and the generally modest changes predicted to occur during those infrequent events, impacts to recreation are anticipated to be negligible.
<i>Socioeconomics</i>	
Economic benefits related to recreational opportunities and economic value of available water supply	<ul style="list-style-type: none"> • Minimal flow changes would have no discernable effect on recreation opportunities, such as fishing. Consequently, the economic benefits to Summit County from river and lake-related recreation activity are not anticipated to be affected. • The new water supply (250 AF of water from Upper Blue Reservoir each year to a West Slope Account for use by the River District's marketing program and its contractees) in Summit County would satisfy a portion of the needed supply to meet anticipated growth in demands. The benefits from this new supply would likely be greater than the contract price.