

DEPARTMENT OF NATURAL RESOURCES  
AND CONSERVATION

file



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GOVERNOR

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HELENA, MONTANA 59620-1601

Cover Letter

May 30<sup>th</sup>, 2014

TO: Governor's Office, Tim Burton, Rm. 204, State Capitol, P.O. Box 200801, Helena, MT 59620-0801  
Environmental Quality Council, Capitol Building, Room 106, P.O. Box 201704, Helena, MT 59620  
Dept. of Environmental Quality, Metcalf Building, P.O. Box 200901, Helena, MT 59620-0901  
Director's Office  
Dept. of Natural Resources and Conservation, 1625 11<sup>th</sup> Ave. Helena, MT 59620  
Director's Office  
Information Services Section  
Water Resources Division, 1424 9th Ave., P.O. Box 201601, Helena, MT 59620-1601  
Kim Overcast, DNRC Water Resources Div., Billings Regional Office, Airport Business Park, 1371  
Rimtop Dr., Billings, MT 59105-1978  
Montana Department of Fish, Wildlife & Parks, 1420 E. 6<sup>th</sup> Ave. Helena, MT 59620  
Director's Office  
Fisheries Division  
Gary Hammon, DFWP Region 5 Office, 2300 Lake Elmo Dr., Billings, MT 59105  
Ken Frazer, DFWP Region 5 Office, 2300 Lake Elmo Dr., Billings, MT 59105  
Robert Goffena, Deadman's Basin Water Users Association, 152 Goffena Rd. Roundup, MT 59072  
Montana Environmental Information Center, P.O. Box 1184, Helena, MT 59624  
Montana Audubon Council, P.O. Box 595, Helena, MT 59624  
Wheatland County Commissioners, 201 A. Ave. NW, Harlowton, MT 59036  
Wildlife Federation, P.O. Box 1175, Helena, MT 59624  
Trout Unlimited, P.O. Box 7186, Missoula, MT 59807  
Northern Plains Resource Council, 2401 Montana Ave. Suite 200, Billings, MT 59626-2336  
U.S. Army Corps of Engineers, 10 W. 15th St. Suite 2200, Helena, MT 59626  
U.S. Fish and Wildlife Service, MT Field Office, 584 Shepard Way, Suite 1, Helena, MT 59601

Ladies and Gentlemen:

The enclosed Finding of No Significant Impact / Decision Notice has been prepared for the Deadman's Basin Supply Canal Diversion and Headgate Replacement Project. Please feel free to contact James Domino at (406) 444-6622 (e-mail [jdomino@mt.gov](mailto:jdomino@mt.gov)) should you have any questions about the Notice or would like additional project information. Questions and information requests should be directed to: MT Dept. of Natural Resources and Conservation, State Water Projects Bureau, 1424 9th Avenue, P.O. Box 201601, Helena, MT 59620-1601, attn. James P. Domino. Copies of the Final EA are available upon request. The Final EA can also be viewed on the DNRC website at [www.dnrc.mt.gov](http://www.dnrc.mt.gov). Thank you.

Sincerely,

Tim Davis  
Water Resources Division Administrator

STATE WATER PROJECTS  
BUREAU  
(406) 444-6646

WATER MANAGEMENT  
BUREAU  
(406) 444-6637

WATER OPERATIONS  
BUREAU  
(406) 444-0860

WATER RIGHTS  
BUREAU  
(406) 444-6610

## FINDING OF NO SIGNIFICANT IMPACT- NOTICE OF DECISION

May 30<sup>th</sup>, 2014

Dear Reader:

The Montana Department of Natural Resources and Conservation (DNRC) released a draft Environmental Assessment (EA) on April 15<sup>th</sup>, 2014 on the Deadman's Basin Supply Canal Diversion and Headgate Replacement Project. Deadman's Basin Dam is an off-stream storage project located in Wheatland County, approximately 9 miles west of Ryegate, Montana. The dam is owned by the DNRC and operated and maintained by the Deadman's Basin Water Users Association.

The Deadmans Basin Water Project is primarily supplied by diverting flows from the Musselshell River at the Deadman's Basin Diversion Dam. This diversion is located approximately 6 miles north-west of the town of Shawmut, MT and approximately 10 miles east of the town of Harlowton, MT, just south of Montana Highway 12. The existing diversion dam consists of a 6-foot tall by 222-foot long concrete weir wall sitting on top of a 10-foot long concrete apron with 4-foot deep cut-off walls at each side. The dam is in very poor condition and is near failure. Much of this damage occurred during 2011 flooding which resulted in most of the Musselshell River Corridor being designated a Federal Disaster Area by the Federal Emergency Management Agency (FEMA). The 2011 damage to the diversion dam included major spalling, cracking, settlement, and scour extending underneath the concrete apron. Furthermore, riprap placed around the diversion after flooding in 1997 was completely missing after the 2011 flood.

In addition to the poor condition of the diversion dam, it also utilizes a less than ideal design. While effective for raising the upstream water surface elevation, the concrete weir wall diversion impacts the natural functions of the river and creates a safety hazard. The diversion impacts river function primarily by creating a fish barrier that significantly decreases the ability of fish to move upstream. Also, these types of diversions can be safety hazards because they tend to create a reverse roller downstream of the dam that once entered, is nearly impossible for a person to escape. The reservoir is an attraction for fishing and outdoor enthusiasts. Replacing this diversion structure will improve fisheries and public safety.

This repair project, which is based on a Preliminary Engineering Report developed by Dowl-HKM Engineering, will involve demolition of the existing 10' high by 222' long concrete diversion dam and construction of a new rock ramp diversion structure. The rock ramp design will enhance fish passage and be much safer from a maintenance and operational perspective, and be a substantial improvement for recreational related river passage. The existing concrete headgate structure will be modified to replace the existing twin 14'-6" radial gates with four 6' by 6' slide gates. The new headgates will remedy two problems: 1) It will stem water loss from the chronically depleted Musselshell River, and 2) it will redress the malfunctioning headgates that are nearly inoperable after the 2011 flooding.

The construction will generally proceed as follows:

- Construction of a cofferdam to temporarily divert the river into an old, pre-existing side channel, allowing it to flow around the construction site.
- Demolition and removal of a portion of the existing diversion.
- Constructing of a new rock ramp downstream of the diversion.
- Modification of the headgate structure and installation of the new gates.
- Removal of the cofferdam and restoration of the river channel to its original condition.
- Reclamation / reseeded of disturbed areas.
- Weed control measures implemented.

Construction is tentatively planned to begin on August 15, 2014, with the project completed by December 31, 2014. It is anticipated that the total disturbed area will be less than 1 acre.

The Montana Department of Environmental Quality, Montana Department of Fish, Wildlife and Parks, Montana Natural Heritage Program, U.S. Army Corps of Engineers and the State Historic Preservation Office were consulted as part of the draft EA process.

The public comment period closed on Wednesday, May 15<sup>th</sup>, 2014, with no comments received. Based on the EA's disclosure and analysis of potential impacts, the DNRC concludes that the proposed action will not result in any significant impacts. The DNRC will adopt the draft EA as the final EA and proceed with the project as planned. Copies of the Final EA are available upon request. The Final EA can also be viewed on the DNRC website at [www.dnrc.mt.gov](http://www.dnrc.mt.gov) in the Environmental Documents section. Please direct any questions to:

James P. Domino, MT DNRC  
State Water Projects Bureau  
1424 9th Ave., P.O. Box 201601  
Helena, MT 59620-1601  
(406) 444-6622, e-mail: [jdomino@mt.gov](mailto:jdomino@mt.gov)

Thank you for your interest.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tim Davis', with a long horizontal line extending to the right.

Tim Davis  
Administrator,  
Water Resources Division