

Water Policy Interim Committee

Review of storage projects
and new legislative funding

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Overview

- Background
- Current Work
- What's Next



Deadman's Basin Reservoir
Wheatland and Golden Valley Counties

State Water Projects (SWP)

- Branch of the Water Resources Division of DNRC
 - 22 FTE – BC remains vacant
 - Administer 18 water storage projects (DNRC owned)
 - 22 dams (all but 1 classified as high-hazard)
 - 250 miles of irrigation canals
 - Total storage ~ 380,000 acre-feet
 - Market ~ 322,000 acre-feet
 - Affiliated with 1,872 active water purchase contracts
- Own and operate the Broadwater Dam (Hydropower) Project at Toston, MT



SWP

<u>Project Name</u>	<u>Year</u>	<u>Storage (acre-feet)</u>	<u>Height (feet)</u>
Ackley Lake Dam	1938	6,722	51
Bair Reservoir Dam	1939	7,300	106
Cooney Dam	1937	28,230	102
Cottonwood Dam	1953	1,905	39
Deadman's Basin Dam	1941	72,218	60
East Fork Dam	1938	16,040	88
Fred Burr Dam	1949	525	50
Frenchman Dam	1952	2,801	44
Glacier Lake Dams	1937	4,200	57 (N), 20 (S)
Martinsdale Dams	1939	23,348	91 (N), 49 (E)
Middle Creek Dam (Hyalite)	1951	10,184	125
Nevada Creek Dam	1938	11,152	105
Nilan Dams	1951	10,092	54 (N), 51 (E)
North Fork of Smith River Dam	1936	11,500	84
Painted Rocks Dam	1939	32,362	143
Ruby River Dam	1938	37,642	112.5
Tongue River Dam	1940	79,071	93
Toston Dam (Broadwater)	1940	4,100	51.5
Willow Creek Dam	1938	18,000	105
Yellow Water Dam	1938	3,842	37

MONTANA STATE WATER PROJECTS DAMS



Background

- The precarious position of agriculture and the livestock industry in Montana during the early 1930's, aggravated by severe drought had groups and individuals looking for ways to better utilize Montana's water resources.



Nilan Reservoir

Background

- The Solution:
 - 1933–1934: Montana's Water Conservation Initiative
Governor Cooney partnered with President Roosevelt to secure federal funding through the Public Works Administration (\$5M—approximately \$127M today)
 - Legislative Action Creates State Board
House Bill No. 39 (approved January 9, 1934) established Montana's State Water Conservation Board, holding its first meeting on January 22, 1934
 - The intent for each state water project when built was to be self-sustaining with revenues derived from the Water User Associations (WUA).



Staff Meeting date unknown

Water Storage

- Why Is Storage Important?
 - Provides reliable water delivery for agriculture, municipalities and recreation needs to the citizens of Montana
 - Mitigates ever-changing water demands
 - Drought adaptation strategy
- Montana Drought Management Plan, 2023
 - #1 Recommendation (Water Supply, Storage, and Delivery)
 - Identify future and stable funding for rehabilitations (State Water Projects)
 - State Water Plan



East Fork of Rock Creek 1998

Water Storage

- SWPB's Role
 - Safely maintain our current dams
 - Identify projects that have increased storage potential
 - Explore alternative funding sources for costly rehabilitations
 - Diversify the portfolio of users to meet growing water needs
- Where To Start?
 - Feasibility studies
 - Water availability analysis
 - Basin characteristics (hydrology)
 - Legal challenges (downstream water rights)
 - Ability to pay analysis

**EAST FORK ROCK CREEK DAM
FEASIBILITY STUDY
ALTERNATIVES SUMMARY REPORT**

Prepared For:



Montana Department of Natural Resources & Conservation
State Water Projects Bureau
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Prepared By:



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April 2020

DNRC Contract Number: WE-DOWL-838
DOWL Project Number: 4028.21501.01

Rehabilitation Section

- From 181 Projects to 18:
 - 6 engineering staff
 - 22 dams
 - +250 miles of irrigation canals



Deadman's Barber Canal



East Fork of Rock Creek Spillway Rehab

Rehabilitation Work (1989-2024)

Dam	County	Rehabilitation Description	Year	Cost (mill)						
					Agriculture	Habitat	Municipal	General Recreation	State Park Leases	Federal Camping
Toston	Broadwater	Hydropower addition	1989	26	✓			✓		
Middle Creek (Hyalite)	Gallatin	Raise, spillway, seepage improvements	1992	5.2	✓		✓	✓		✓
Tongue River	Big Horn	Raise, spillways, outlet works, access	1999	48	✓			✓	✓	
Nevada Creek	Powell	Spillway, outlet works, toe buttress	2004	2.8	✓			✓		
Bair	Meagher	Spillway, outlet works, toe buttress	2004	2.7	✓			✓		
N. Fork Smith	Meagher	Spillway, outlet works, toe buttress	2006	0.8	✓			✓		
Ackley	Judith Basin	Spillway, outlet works, toe drainage	2009	1.4	✓			✓	✓	
Ruby	Madison	Spillway, outlet works, gatehouse	2014	16.9	✓			✓		
Painted Rocks	Ravalli	Toe Access (Bridge)	2021	1.5	✓	✓		✓	✓	
East Fork Rock Creek	Granite	Spillway, gatehouse, outlet conduit	2024	17-21	✓			✓		✓

Active Rehabilitation Projects

- **East Fork of Rock Creek Dam Rehab (Granite County)**
 - SWPB CARDD loan (16.9 million), WUA agreement (2.5 million)
 - Construction on schedule – Finish in 2026
- **Willow Creek Rehabilitation (Madison County)**
 - SWPB CARDD loan and grants (18 million), WUA agreement (2.5 million)
 - Projected to start construction in 2027
- **Painted Rocks Rehabilitation (Ravalli County)**
 - Completed the feasibility study
 - Environmental clearance task ongoing
- **Flint Creek Main Canal Improvements**
 - Construction underway – Finish Spring 2026.
- **Broadwater Jetty and Main Canal Rehab**
 - Final Design 75% percent complete
- **Tongue River Programmable Logic Controller**
 - Completed October 2025
- **Other smaller projects:** Deadman’s Canal improvement, North Fork and Nevada Creek Tower Safety

Montana law requires the Governor to submit a report on water storage to the Legislature. The Governor's Report on Water Storage in Montana prioritizes new rehabilitation and construction projects for the upcoming biennium and summarizes projects that occurred during the previous biennium (MCA 85-1-703).

[2025 Water Storage Report_FINAL.pdf](#)

Project Management Section and Other Priorities

- Section Components:
 - Dam Safety
 - Instrumentation and data collection
 - Hydrologic measurement
 - Environmental Program
 - Water Contracting
 - Emergency Action Plans (New Hire)
 - Land Use (Hiring)
- Annual Projects:
 - Owner inspections
 - 5-year Inspection/Operating Permit Renewals
 - Annual Meetings with WUA
 - Water Purchase Contracts
 - Regional engineering monthly monitoring
 - Emergency Action Plans (EAP) and Tabletop exercises
 - Lease Billing (Haying, Grazing, Cabin Sites, Fishing Accesses and State Parks)

Storage Outlook

MONTANA DNRC STATE WATER PROJECTS RESERVOIR CONTENTS

December 31, 2025

All Contents in Acre-Feet

RESERVOIR	TOTAL CAPACITY (includes dead storage)*	CONTENTS					% CAPACITY Dec-25	% AVERAGE Dec-25	READING DATE	ELEVATION feet	COMMENTS
		FULL POOL CONTENTS	30 YR AVERAGE 1994- 2024 December	LAST YEAR Dec-24	LAST MONTH Nov-25	PRESENT Dec-25					
CLARK FORK BASIN											
E.F. ROCK CREEK	16,040	7,788	8,544	7,906	8,338	52	107	1/5/2026	6,033.1		
NEVADA CREEK	11,207	5,277	2,677	--	--	--	--	--	--		
W.F. BITTERROOT	32,362	7,724	8,013	7,892	15,035	46	195	1/7/2026	4,691.5		
LOWER MISSOURI BASIN											
ACKLEY	6,722	3,066	3,826	3,780	3,919	58	128	12/26/2025	4,305.9	2,918 AF active storage	
BAIR	7,300	3,196	2,382	2,184	2,356	32	74	1/5/2026	5,298.4		
DEADMAN'S BASIN	75,968	43,304	53,712	53,493	57,815	76	134	1/5/2026	3,911.8	54,065 AF active storage	
FRENCHMAN	2,777	1,628	1,139	2,213	2,264	82	139	1/5/2026	2,263.7		
MARTINSDALE	23,348	9,380	--	10,711	10,606	45	113	1/6/2026	4,763.3		
N.FK. SMITH RIVER	11,406	5,849	--	4,750	5,219	46	89	12/26/2025	5,465.8		
YELLOWATER	3,842	1,665	1,273	1,375	--	--	--	--	--		
UPPER MISSOURI BASIN											
MIDDLE CREEK	10,184	5,782	5,402	5,335	5,363	53	93	1/5/2026	6,696.3		
NILAN	10,992	5,637	4,509	--	--	--	--	--	--		
RUBY RIVER	37,612	21,499	21,690	17,425	22,378	59	104	1/5/2026	5,375.5		
WILLOW CREEK	18,000	9,938	--	--	--	--	--	--	--		
YELLOWSTONE BASIN											
COONEY	28,230	18,276	20,778	19,423	20,386	72	112	1/5/2026	4,241.2	20,296 AF active storage	
COTTONWOOD	1,900	773	--	--	830	44	107	12/30/2025	5,096.5		
TONGUE RIVER	79,071	44,942	45,289	41,653	45,335	57	101	1/5/2026	3,417.6		

Summary

- Water storage is important to Montana and State Water Projects play a vital role
- Dam rehabilitations take time (5-10 years)
- Rehabilitation costs are increasing, revenues are not keeping up
- Reservoir monitoring is a priority for the bureau for safety, management, and public availability
- SWPB faces long-term funding and short-term staffing challenges that may limit our ability to rehabilitate and operate these facilities



Yellow Water at full pool

Funding State Water Projects

Rehabilitation Funding:

- State Special Revenue (Hydro earnings) and grants pay for approximately 85-90% of rehabilitation costs, using long-term loans
- Water marketing contract O&M rates set by Water User Associations pay back rehab loans (~10-15% total cost of construction)
- The loan and grants combinations are administered by SWPB
- Minor maintenance and repairs are the responsibility of the Water User Association

The Legislature's investment in Montana Storage last session provides long-term funding options

HB 924

- Montana Growth and Opportunity Trust
 - Water Development Account
 - \$10 million transfer – interest to be split 90/10
 - 90% State Water Projects Rehabilitations
 - 10% Pilot Water Storage Projects and Private Dam Inspections

HB 932

- Revised Marijuana State Special Revenue Account
 - Up to \$4 million per year for state-owned water storage projects.
 - Working with FWP on process – available July 2026

Questions



Painted Rocks spillway