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MIDDLE BIG HORN WATERSHED STUDY

LEVEL I STUDY – POTENTIAL PROJECT OVERVIEW

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INTRODUCTION

This Potential Project Overview catalogues the potential projects of the Middle Big Horn (MBH) Level I Watershed Study¹ performed by Y2 Consultants, LLC (Y2), Eagle Engineering and Surveying (EES, formerly Donnell and Allred), and Dahlgren Consulting (Dahlgren). This team was contracted by the Wyoming Water Development Commission (WWDC) on behalf of the Washakie County Conservation District and South Big Horn Conservation District, the project Sponsors.

The purpose of this project was to provide a comprehensive inventory of the watershed and bring forward potential watershed improvement and development projects across the study area. The study area includes approximately 1800 square miles. This project is located in north-central Wyoming and the study area includes parts of four counties: Washakie, Big Horn, Hot Springs, and Park.

This document accompanies the Middle Big Horn Level I Watershed Study Report. This document contains a summary table of the potential projects. The projects are numbered in no particular order, but projects from the same property or owner have the same initial number and sequential final numbers. A map of potential projects is provided in the Map Book on Map 35. The practicality of each project was determined based on funding availability, potential for environmental benefit, feasibility of construction, and longevity of the project.

ACRONYMS

OSLI	Office of State Lands and Investments
SWPP	Small Water Project Program
USBR	US Bureau of Reclamation
USDA	US Department of Agriculture
WCCD	Washakie County Conservation District
WDEQ	Wyoming Department of Environmental Quality
WWDC	Wyoming Water Development Commission

¹ Use of the names “Bighorn” as one word and “Big Horn” as two words can be highly variable. For this document the Middle Big Horn Watershed, the Big Horn River, the Big Horn Conservation District, Big Horn County, the Big Horn Canal, and the contract with the Wyoming Water Development Office will use two-words. All other uses for the mountains, basin, geologic formation, sheep, and forest will use one word following the United States Board of Geographic Names and the United States Geological Society.

POTENTIAL PROJECTS OVERVIEW AND SUMMARY TABLE

Project ID	Project Name	Latitude	Longitude	Project Type	Potential CFS	Potential acre-ft	Practicality	Funding Source	Sponsor	New or Rehabilitation
1-1	North Antelope Drainage District	44.365892	-108.037	Drainage	--	--	Medium	USBR WaterSMART, USDA Water & Waste Disposal Loan & Grant Program	Qualified Public Entity	Rehabilitation
2-1	City of Worland High Head Hydropower	44.025201	-107.874813	Power Generation	--	--	Low	WWDC Level II Planning Study, USBR WaterSMART	City of Worland	Rehabilitation
2-3	Newell Sargent Park Irrigation	44.005539	-107.958926	Irrigation	--	--	High	SWPP	City of Worland	Rehabilitation
2-4	Sanders Park Irrigation	44.01225	-107.954619	Irrigation	--	--	High	SWPP	City of Worland	Rehabilitation
2-5	Kiwanis Park Irrigation	44.0142	-107.943285	Irrigation	--	--	High	SWPP	City of Worland	Rehabilitation
2-6	Veterans Park Irrigation	44.022312	-107.940963	Irrigation	--	--	High	SWPP	City of Worland	Rehabilitation
2-7	Riverside Park Irrigation	44.017656	-107.968677	Irrigation	--	--	High	SWPP	City of Worland	Rehabilitation
3-1	Rattlesnake Ridge Stock Reservoir	44.071999	-107.871322	Silt Dam/Stock Reservoir	--	0.05	Low	SWPP, USDA Environmental Quality Incentives Program, OSLI Farm Loan, WCCD Community and Resource Enhancement Cost Share Program	Washakie County Conservation District	Rehabilitation
5-1	Neves Well	44.297881	-108.4891152	Well Development	--	--	Low	SWPP, OSLI Mineral Royalty Grant	South Big Horn Conservation District	Rehabilitation
5-2	Neves Spring Development for Stock Use	44.302662	-108.461456	Spring Development	1	--	Medium	SWPP	South Big Horn Conservation District	New Water Supply

Project ID	Project Name	Latitude	Longitude	Project Type	Potential CFS	Potential acre-ft	Practicality	Funding Source	Sponsor	New or Rehabilitation
6-1	Fifteenmile Spreader Dike Refurbishment	44.2681592	-108.4607147	Silt Dam/Stock Reservoir	--	3.16	Low	SWPP, USDA Environmental Quality Incentives Program	South Big Horn Conservation District	Rehabilitation
7-1	Highway 20 Drainpipe	44.3561501	-108.0400975	Drainage	--	--	Low	SWPP, USDA Environmental Quality Incentives Program	South Big Horn Conservation District	Rehabilitation
8-1	Bridge Refurbishment	44.3239394	-108.041411	Bridge Refurbishment	--	--	High	OSLI Mineral Royalty Grant	South Big Horn Conservation District	Rehabilitation
9-1	McKim Weir Reconstruction	44.269334	-108.0332479	Monitoring	--	--	High	OSLI Farm Loan	South Big Horn Conservation District	Rehabilitation
10-1	Fivemile Silt Dam Refurbishment #1	44.2388085	-108.2000015	Silt Dam/Stock Reservoir	--	0.00	Low	SWPP, USDA Environmental Quality Incentives Program	South Big Horn Conservation District	Rehabilitation
11-1	Burlington Pass Road Silt Dam Washout	44.2320167	-108.4321381	Silt Dam/Stock Reservoir	--	2.94	Low	SWPP, USDA Environmental Quality Incentives Program	South Big Horn Conservation District	Rehabilitation
12-1	Lungren Spring Development	43.6016007	-107.6772604	Spring Development	1.1	--	Medium	SWPP, OSLI Farm Loan	Hot Springs Conservation District	New Water Supply
12-2	Lungren Cattle Co. Silt Dam Erosion	43.6739121	-107.6477875	Silt Dam/Stock Reservoir	--	0.75	Low	SWPP, USDA Environmental Quality Incentives Program	Hot Springs Conservation District	Rehabilitation
12-3	Lungren Pipeline	43.6016007	-107.6772604	Pipeline	1.11	--	Medium	SWPP, USBR WaterSMART, OSLI Farm Loan	Hot Springs Conservation District	Rehabilitation
13-1	Big Horn Canal Erosion Feature	44.2346872	-107.9745444	Irrigation	--	--	High	SWPP	South Big Horn Conservation District	Rehabilitation
14-1	Kienlen Reservoir Rehabilitation	43.9707437	-108.1446808	Silt Dam/Stock Reservoir	--	0.00	Low	SWPP, USDA Environmental Quality Incentives Program, WCCD Community and Resource Enhancement Cost Share Program	Washakie County Conservation District	Rehabilitation

Project ID	Project Name	Latitude	Longitude	Project Type	Potential CFS	Potential acre-ft	Practicality	Funding Source	Sponsor	New or Rehabilitation
15-1	Fifteenmile Silt Dam Development	44.1658888	-108.477198	Silt Dam/Stock Reservoir	--	0.00	Low	SWPP, USDA Environmental Quality Incentives Program, WCCD Community and Resource Enhancement Cost Share Program	Washakie County Conservation District	Rehabilitation
16-1	Big Horn Land & Livestock Stream Restoration 1	44.2077661	-107.9150071	Riverbank Stabilization	--	--	Low	WDEQ 319 Funds, USDA Environmental Quality Incentives Program	South Big Horn Conservation District	Rehabilitation
17-1	Euler Stream Restoration	44.2211154	-107.942473	Riverbank Stabilization	--	--	Low	WDEQ 319 Funds, USDA Environmental Quality Incentives Program	South Big Horn Conservation District	Rehabilitation
18-1	Big Horn Land & Livestock Stream Restoration 2	44.2157022	-107.9322591	Riverbank Stabilization	--	--	Low	WDEQ 319 Funds, USDA Environmental Quality Incentives Program	South Big Horn Conservation District	Rehabilitation
19-1	Banjo Road Pipeline Conversion	43.99997	-107.9042086	Pipeline	4.53	--	High	SWPP, OSLI Farm Loan, USBR WaterSMART	Washakie County Conservation District	Rehabilitation
20-1	Stulc Irrigation Supply	44.4290324	-108.0237304	Irrigation	--	--	High	SWPP, OSLI Farm Loan, USBR WaterSMART	South Big Horn Conservation District	Rehabilitation
20-2	Stulc Riverbank Stabilization #1	44.4374864	-108.0330699	Riverbank Stabilization	--	--	Medium	WDEQ 319 Funds, USDA Environmental Quality Incentives Program	South Big Horn Conservation District	Rehabilitation
20-3	Stulc Riverbank Restoration #2	44.4356517	-108.0388795	Riverbank Stabilization	--	--	Medium	WDEQ 319 Funds, USDA Environmental Quality Incentives Program	South Big Horn Conservation District	Rehabilitation
21-1	Scheurman Settling Pond	44.1101685	-107.8880516	Settling Pond	--	--	Medium	SWPP, USDA Environmental Quality Incentives Program, OSLI Farm Loan	Washakie County Conservation District	New

Project ID	Project Name	Latitude	Longitude	Project Type	Potential CFS	Potential acre-ft	Practicality	Funding Source	Sponsor	New or Rehabilitation
21-2	Scheurman Pipeline	44.161038	-107.879784	Pipeline	6.41	--	Medium	SWPP, USBR WaterSMART, OS LI Farm Loan, WCCD Community and Resource Enhancement Cost Share Program	Washakie County Conservation District	New Water Supply
23-1	Hamilton Ditch Conversion	44.1392566	-107.8801042	Pipeline	5.55	--	Medium	SWPP, USBR WaterSMART, OS LI Farm Loan, WCCD Community and Resource Enhancement Cost Share Program	Washakie County Conservation District	Rehabilitation
23-2	Hamilton Spillway Refurbishment	44.1392481	-107.8863231	Irrigation	--	--	High	SWPP, OS LI Farm Loan WCCD Community and Resource Enhancement Cost Share Program	Washakie County Conservation District	Rehabilitation
24-1	Foss Ditch Conversion #1	44.2753843	-108.0304154	Pipeline	5.55	--	High	SWPP, USBR WaterSMART, OS LI Farm Loan	South Big Horn Conservation District	Rehabilitation
24-2	Foss Ditch Conversion #2	44.2768496	-108.0303806	Pipeline	5.55	--	High	SWPP, USBR WaterSMART, OS LI Farm Loan	South Big Horn Conservation District	Rehabilitation
24-3	Foss Ditch Conversion #3	44.2779961	-108.0279049	Pipeline	5.55	--	High	SWPP, USBR WaterSMART, OS LI Farm Loan	South Big Horn Conservation District	Rehabilitation
24-4	Foss Ditch Conversion #4	44.2390514	-107.9594129	Pipeline	5.55	--	High	SWPP, USBR WaterSMART, OS LI Farm Loan	South Big Horn Conservation District	Rehabilitation
24-5	Foss Ditch Conversion #5	44.2707118	-108.0208881	Pipeline	5.55	--	High	SWPP, USBR WaterSMART, OS LI Farm Loan	South Big Horn Conservation District	Rehabilitation
25-6	Ditch 11 Buried Pipeline	44.3275144	-108.0348137	Pipeline	5.55	--	High	SWPP, USBR WaterSMART, OS LI Farm Loan	South Big Horn Conservation District	Rehabilitation
26-1	Fivemile Silt Dam Refurbishment #2	44.19297	-108.040405	Silt Dam/Stock Reservoir	--	0.00	Low	SWPP, USDA Environmental Quality Incentives Program	South Big Horn Conservation District	Rehabilitation

Project ID	Project Name	Latitude	Longitude	Project Type	Potential CFS	Potential acre-ft	Practicality	Funding Source	Sponsor	New or Rehabilitation
27-1	Fivemile Silt Dam Refurbishment #3	44.283566	-108.199158	Silt Dam/Stock Reservoir	--	0.64	Low	SWPP, USDA Environmental Quality Incentives Program	South Big Horn Conservation District	Rehabilitation
28-1	Fivemile Silt Dam Refurbishment #4	44.285854	-108.163719	Silt Dam/Stock Reservoir	--	1.08	Low	SWPP, USDA Environmental Quality Incentives Program	South Big Horn Conservation District	Rehabilitation
29-1	Fivemile Silt Dam Refurbishment #5	44.285168	-108.16066	Silt Dam/Stock Reservoir	--	0.29	Low	SWPP, USDA Environmental Quality Incentives Program	South Big Horn Conservation District	Rehabilitation
30-1	Fivemile Silt Dam Refurbishment #6	44.242771	-108.162209	Silt Dam/Stock Reservoir	--	0.05	Low	SWPP, USDA Environmental Quality Incentives Program	South Big Horn Conservation District	Rehabilitation
31-1	Elk Creek Silt Dam Refurbishment	44.296078	-108.322578	Silt Dam/Stock Reservoir	--	0.28	Low	SWPP, USDA Environmental Quality Incentives Program	South Big Horn Conservation District	Rehabilitation
32-1	Tatman Silt Dam Refurbishment	44.288914	-108.485023	Silt Dam/Stock Reservoir	--	1.08	Low	SWPP, USDA Environmental Quality Incentives Program	South Big Horn Conservation District	Rehabilitation
33-1	Gallovich Spring Development for Stock Use #1	43.942966	-108.898453	Spring Development	1	--	Medium	SWPP, OSLI Farm Loan	Hot Springs Conservation District	New Water Supply
33-2	Gallovich Spring Development for Stock Use #2	43.9384	-108.902229	Spring Development	1	--	Medium	SWPP, OSLI Farm Loan	Hot Springs Conservation District	New Water Supply
33-3	Gallovich Spring Development for Stock Use #3	43.937687	-108.902191	Spring Development	1	--	Medium	SWPP, OSLI Farm Loan	Hot Springs Conservation District	New Supply

Project ID	Project Name	Latitude	Longitude	Project Type	Potential CFS	Potential acre-ft	Practicality	Funding Source	Sponsor	New or Rehabilitation
33-4	Gallovich Pipeline	43.937687	-108.902191	Pipeline	1.04	--	Medium	SWPP, USBR WaterSMART, OS LI Farm Loan	Hot Springs Conservation District	Rehabilitation
34-1	LU Sheep Ranch Spring Development for Stock Use	43.932133	-108.932671	Spring Development	1	--	Medium	SWPP, OS LI Farm Loan	Meeteetse Conservation District	New Water Supply
35-1	Feraud Drainage	44.004482	-108.28302	Drainage	--	--	High	SWPP, USBR WaterSMART WCCD Community and Resource Enhancement Cost Share Program	Washakie County Conservation District	Rehabilitation
35-2	Feraud West Reservoir	44.004604	-108.297821	Silt Dam/Stock Reservoir	--	1.18	Medium	SWPP, USDA Environmental Quality Incentives Program, WCCD Community and Resource Enhancement Cost Share Program	Washakie County Conservation District	New Water Supply
36-1	Harrison Pipeline #1	44.367184	-108.035683	Pipeline	6.41	--	High	SWPP, USBR WaterSMART, OS LI Farm Loan	South Big Horn Conservation District	Rehabilitation
36-2	Harrison Pipeline #2	44.364746	-108.045845	Pipeline	7.85	--	High	SWPP, USBR WaterSMART, OS LI Farm Loan	South Big Horn Conservation District	Rehabilitation
37-1	McKim Ditch Conversion #1	44.284061	-108.036362	Pipeline	6.41	--	High	SWPP, USBR WaterSMART, OS LI Farm Loan	South Big Horn Conservation District	Rehabilitation
37-2	McKim Ditch Conversion #2	44.280651	-108.012909	Pipeline	4.53	--	High	SWPP, USBR WaterSMART, OS LI Farm Loan	South Big Horn Conservation District	Rehabilitation
37-3	McKim Ditch Conversion #3	44.284153	-108.009247	Pipeline	4.53	--	High	SWPP, USBR WaterSMART, OS LI Farm Loan	South Big Horn Conservation District	Rehabilitation
37-4	McKim Ditch Conversion #4	44.290916	-108.007599	Pipeline	5.55	--	High	SWPP, USBR WaterSMART, OS LI Farm Loan	South Big Horn Conservation District	Rehabilitation
37-5	McKim Ditch Conversion #5	44.287766	-108.003288	Pipeline	5.55	--	High	SWPP, USBR WaterSMART, OS LI Farm Loan	South Big Horn Conservation District	Rehabilitation
37-6	McKim Ditch Conversion #6	44.291584	-108.039902	Pipeline	4.53	--	High	SWPP, USBR WaterSMART, OS LI Farm Loan	South Big Horn Conservation District	Rehabilitation

Project ID	Project Name	Latitude	Longitude	Project Type	Potential CFS	Potential acre-ft	Practicality	Funding Source	Sponsor	New or Rehabilitation
37-7	McKim Well Development #1			Well Development	--	--	Medium	SWPP, OS LI Mineral Royalty Grant	South Big Horn Conservation District	New Water Supply
37-8	McKim Well Development #2			Well Development	--	--	Medium	SWPP, OS LI Mineral Royalty Grant	South Big Horn Conservation District	New Water Supply
38-1	Montanez Drainage	43.935337	-107.968056	Drainage	--	--	High	USBR WaterSMART, WCCD Community and Resource Enhancement Cost Share Program	Washakie County Conservation District	Rehabilitation
39-1	Rayburn Siphon	43.981773	-107.988342	Pipeline	6.41	--	Medium	SWPP, USBR WaterSMART, OS LI Farm Loan, WCCD Community and Resource Enhancement Cost Share Program	Washakie County Conservation District	Rehabilitation
39-2	Rayburn Vega Ditch	43.977165	-107.989777	Pipeline	6.41	--	Medium	SWPP, USBR WaterSMART, OS LI Farm Loan, WCCD Community and Resource Enhancement Cost Share Program	Washakie County Conservation District	Rehabilitation
40-1	Zadra Irrigation System	44.39204	-108.028404	Irrigation	--	--	High	SWPP, OS LI Farm Loan	South Big Horn Conservation District	Rehabilitation
41-1	Asment Pipeline	44.3275	-108.041	Pipeline	6.41	--	High	SWPP, USBR WaterSMART, OS LI Farm Loan	South Big Horn Conservation District	Rehabilitation