

Lower Miller Creek Riparian Health Targeted Implementation Plan Modification, August 2023

Missoula Field Office, Missoula County

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Targeted Implementation Plan Modification

Two additional NRCS practices will be added to the suite of available practices offered to eligible participants that reside within the Lower Miller Creek Riparian Health Targeted Implementation Plan (TIP) Boundary. **Practice code 382 (Fence)** will be offered to help protect sensitive reaches of Miller Creek from browsing pressure associated with the resident deer and elk population. This practice will be used in tandem with **practice code 612 (Tree/shrub Establishment)** to facilitate establishment of native woody vegetation along Miller Creek. These two additions coupled with the previously approved Riparian Forest Buffer (Practice Code 391) will allow a full complement of options for landowners to help restore the riparian plant community composition and structure along Miller Creek. Plantings will be established within watering access of the stream.

Implementation

Original

Table 4. Anticipated NRCS deliverables to obtain goal of addressing 10,000 ft. of Miller Creek

Conservation Practice	2023	2024	2025	TOTAL
Riparian Forest Buffer (391)	3 acres	5 acres	7 acres	15 acres
Herbaceous Weed Treatment (315)	10 acres	15 acres	20 acres	45 acres
Well (642) - Stockwater	50 LnFt			50 LnFt
Pump (533) – 1 Stockwater/1 Irrigation	2 no.			2 no
Irrigation Sprinkler (442)	3 no			3 no
Irrigation Pipeline (430)	15,500 Lb.			15,500 Lb.
Livestock Pipeline (516)	10,560 ft.			10,560 LnFt
Watering Facility (614)	5			5 No.

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Table 4. Anticipated NRCS deliverables to obtain goal of addressing 10,000 ft. of Miller Creek

Conservation Practice	2023	2024	2025	TOTAL
Fence (382)		2,640 ft.	2,640 ft.	5,280 LnFt
Tree/Shrub Establishment (612)		300 no.	500 no.	800 no.
Riparian Forest Buffer (391)	3 acres	5 acres	7 acres	15 acres
Herbaceous Weed Treatment (315)	10 acres	15 acres	20 acres	45 acres
Well (642) - Stockwater	50 LnFt			50 LnFt
Pump (533) – 1 Stockwater/1 Irrigation	2 no.			2 no
Irrigation Sprinkler (442)	3 no			3 no
Irrigation Pipeline (430)	15,500 Lb.			15,500 Lb.
Livestock Pipeline (516)	10,560 ft.			10,560 LnFt
Watering Facility (614)	5			5 No.

Original

Table 5. Practice cost rate estimates used for projections (NRCS-HU Rates).

Conservation Practice	Description	Unit	Estimated Payment Rate	Extent of Practice	Total Cost
Riparian Forest Buffer (391)	Hand planted with protection tubes	No.	\$16.03	150 plants/acre x 15	\$36,067.50
Herbaceous Weed Treatment (315)	Chemical spot treatment	per acre	\$112.28	45 acres	\$5,052.60
Well (642) – Stockwater	Shallow Well, 50 ft. or less	LnFt	\$154.67	50 LnFt	\$7,733.50
Irrigation Sprinkler (442) x 3	Center Pivot, <600'	No.	\$1,458.47	52 Acres total	\$75,840.44
Irrigation Pipeline (430)	Buried <8" PVC	Lbs.	\$3.10	15,500 Lbs.	\$48,050
Livestock Pipeline (516)	Below Frost	LnFt	\$2.58	10,560 ft.	\$27,244.8
Watering Facility (614)	Automatic, no storage, < 450 gallons	No.	\$1,232.05	5	\$6,160.25
Pumping Plant (533) -Stockwater	Electric Powered, < 5 HP, with Pressure Tank or VFD	HP	\$3,385.79	1 HP	\$3,385.79
Pumping Plant (533) - Irrigation	Electric Powered, 30-74 HP	HP	\$319.51	30 HP	\$9,585.30
Pumping Plant (533) x 2	Aquifer Flow Test	Hr.	\$238.77	12 Hr	\$5,730.48
TOTAL					\$224,851

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Table 5. Practice cost rate estimates used for projections (NRCS-HU Rates).

Conservation Practice	Description	Unit	Estimated Payment Rate	Extent of Practice	Total Cost
<i>Fence (382)</i>	<i>Barbed/Smooth</i>	<i>No.</i>	<i>\$2.64</i>	<i>5,280 ft.</i>	\$13,939
<i>Tree/Shrub Establishment (612)</i>	<i>Per Plant, Tree, Hand planted</i>	<i>No.</i>	<i>\$1.52</i>	<i>800</i>	\$1,216
Riparian Forest Buffer (391)	Hand planted with protection tubes	No.	\$16.03	150 plants/acre x 15	\$36,067.50
Herbaceous Weed Treatment (315)	Chemical spot treatment	per acre	\$112.28	45 acres	\$5,052.60
Well (642) – Stockwater	Shallow Well, 50 ft. or less	LnFt	\$154.67	50 LnFt	\$7,733.50
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Watering Facility (614)	Automatic, no storage, < 450 gallons	No.	\$1,232.05	5	\$6,160.25
Pumping Plant (533) -Stockwater	Electric Powered, < 5 HP, with Pressure Tank or VFD	HP	\$3,385.79	1 HP	\$3,385.79
Pumping Plant (533) - Irrigation	Electric Powered, 30-74 HP	HP	\$319.51	30 HP	\$9,585.30
Pumping Plant (533) x 2	Aquifer Flow Test	Hr.	\$238.77	12 Hr	\$5,730.48
TOTAL					\$240,007

Original

Table 6. Anticipated NRCS deliverables to obtain goal of addressing 10,000 ft. of Miller Creek

Contributions	2023	2024	2025	TOTAL
NRCS EQIP FA	\$192,067	\$13,707	\$19,077	\$224,851

Modification

Table 6. Anticipated NRCS deliverables to obtain goal of addressing 10,000 ft. of Miller Creek

Contributions	2023	2024	2025	TOTAL
NRCS EQIP FA	\$192,067	\$21,133	\$26,807	\$240,007

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Summary of Modification

The Lower Miller Creek Riparian Health TIP modification will include two additional NRCS practices, **practice code 382 (Fence) & practice code 612 (Tree/shrub Establishment)**. An approved modification will increase the projected total EQIP funding to \$240,007 for the remaining two years of the TIP.

The resource concerns addressed are consistent with those identified in the original Lower Miller Creek Riparian Health TIP document. The primary resource concern identified is Bank Erosion from streams, shorelines, or water conveyance channels. The secondary resource concerns are Aquatic habitat for fish and other organisms & Elevated Water Temperature.

Goals, implementation, and measurement of outcomes will be unchanged from the original Lower Miller Creek Riparian Health TIP document.

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