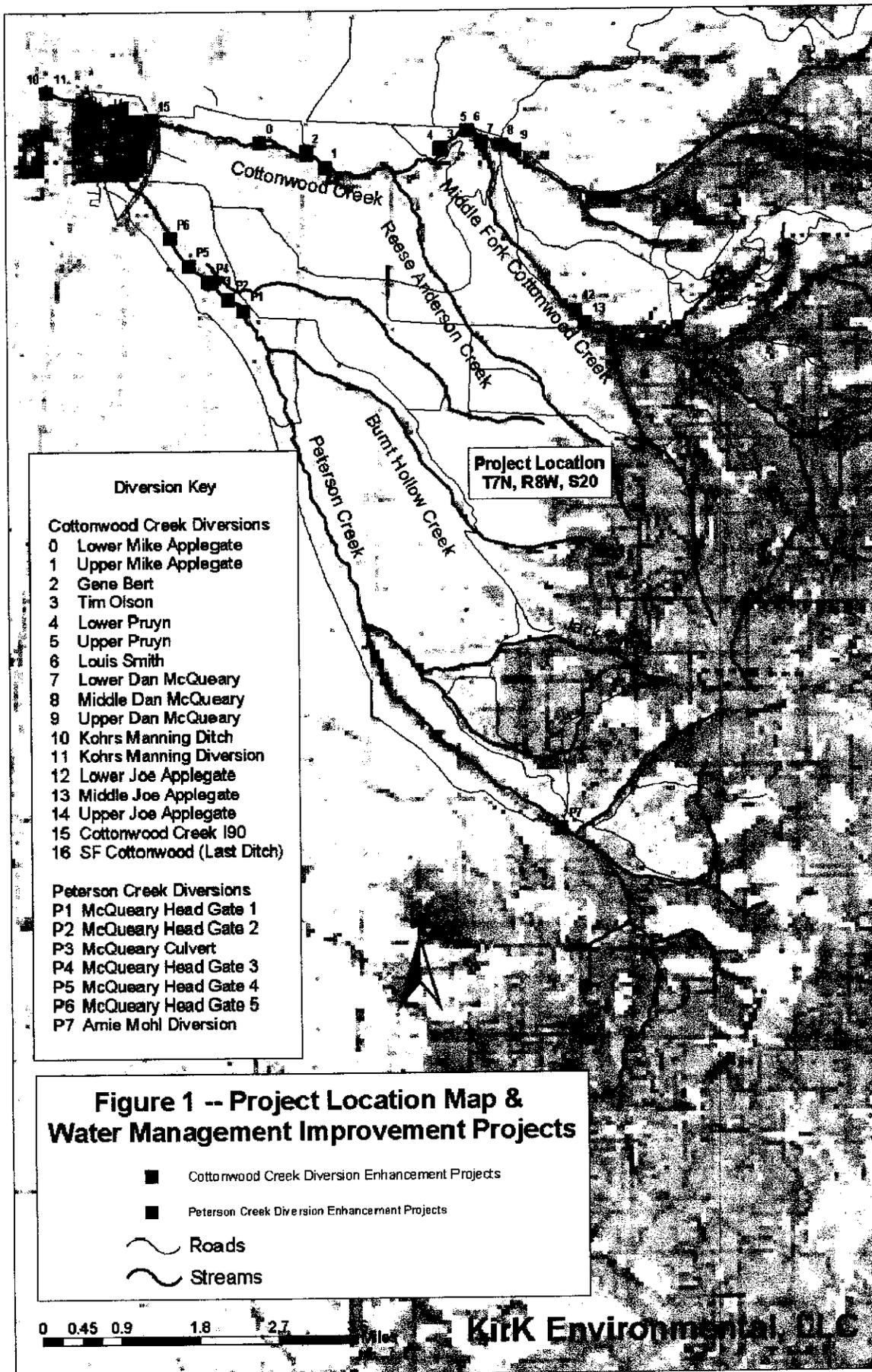




COTTONWOOD AND PETERSON CREEK RESTORATION PROJECT PHASE I

**Watershed Restoration Coalition of the Upper Clark Fork
In Association With The Deer Lodge Conservation District**

- Project calls for water management structures on lower Cottonwood Creek and Peterson Creek that will conserve water/improve in-stream flow/reduce sediment input/reduce nutrient input/enhance fish habitat & fish passage
- Project is one of many in the Cottonwood/Peterson Creek Drainages that are funded/seeking funding from FEMA, DEQ, DNRC, NRDP, BOR and private foundations.
- DNRC concerns focused on fish mortality issues. Project will incorporate management strategies to reduce potential for fish mortality and will remove step pool recommendations and replace with additional water management structures. Future grant funding will further address fish passage/fish loss potential.



(Map Site 0)
N0369923, W5139494

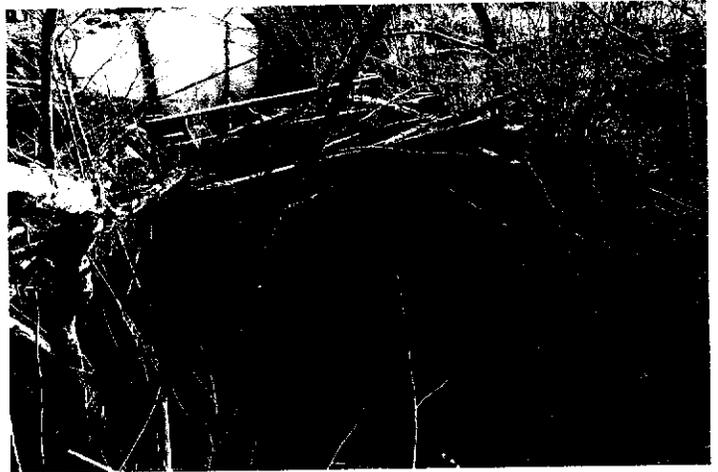


Characteristics

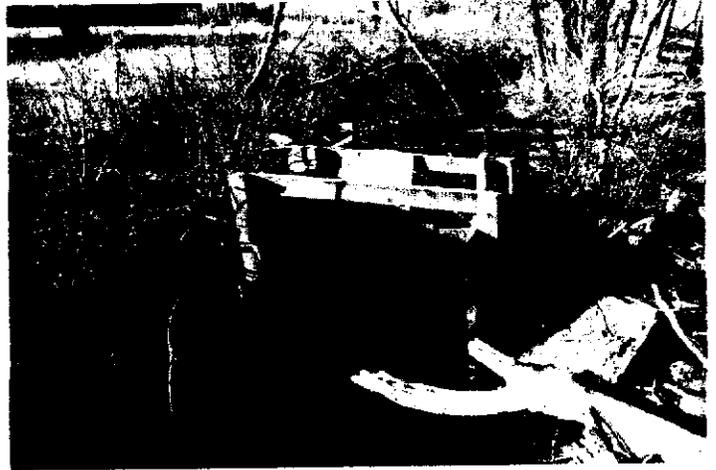
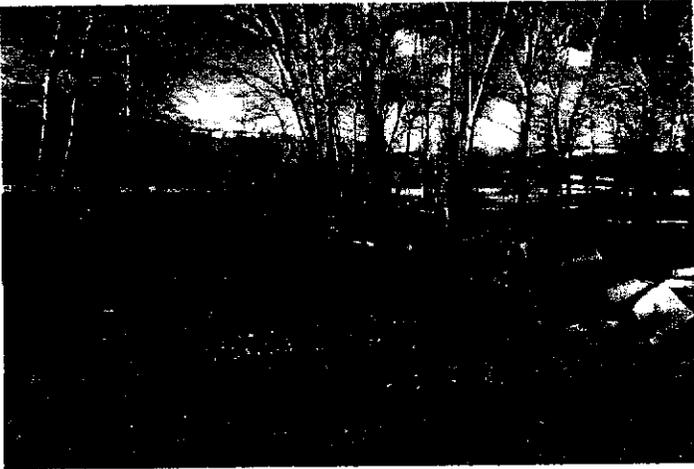
- Debris Diversion
- Old/dilapidated head gate
- Fish Barrier
- Sod-laden bottom-will drop upstream (issue)
Rocky cobbles downstream
- Straight Shot
- 42.5' across
- 2.5' depth downstream side
- 3.0' depth upstream side

Recommendations

- Possible infiltration gallery on the straight shot
- Remove debris and replace diversion structure



(Map Site 0) Continued...
N0369923, W5139494



(Map Site 1)
N0371129, W5139052



Characteristics

- Debris Diversion (hay bails)
- New Head Gate
- Fish Barrier
- Cobbles downstream, Gravels upstream
- 60' x 2.45' depth
- 1.6' drop

Recommendations

- Remove debris and replace diversion



(Map Site 1)
continued... N0371129, W5139052



(Map Site 2)
N0370774, W5139321

Characteristics

- Debris Diversion
- Head Gate in poor shape
- Fish Barrier
- Silt and Sand upstream
- Gravel and Cobbles downstream
- 30' x 1.8 depth

Recommendations

- Remove debris and replace diversion



North Half Restoration Project List

(Note: Planning is not completed on these projects, and changes and additions to this list are possible as the planning process continues)

Subwatershed Name	Project Designation	Brief Summary
Cottonwood Creek & tribs	N1	Mitigate livestock feeding operation- water routing
	N2	Mitigate livestock feeding operation - water routing
	N3	Move corals off-stream
	N4	Mitigate livestock feeding operation - move or water routing
	N5	Assess source of urban runoff & mitigate
Cottonwood Creek & tribs	M1	Pending assessment. MDEQ leads assessment/planning
	M2	Project is completed. USFS conducts LTM
Cottonwood Creek & tribs	P1	Provide off-stream water & prescribed grazing
	P3	Provide off-stream water & prescribed grazing
	P8	Provide off-stream water & prescribed grazing
	P9	Provide off-stream water & prescribed grazing
Cottonwood Creek	F1	Remove fish barrier at Interstate
	F2	Refurbish ditch crossing for fish passage in creek
Cottonwood Creek & tribs	D1	Remove earthen berm and replace with new diversion
	D2	Remove earthen berm and replace with new diversion
	D3	Replace old diversion to clear stream
	D4	Replace old diversion with new one for fish passage
	D5	Replace old diversion to clear stream
	D6	Replace old diversion to clear stream & fix stream channel
Cottonwood Creek	S1	Restore stream channel morphology and habitat for aquatic life and the fishery
Cottonwood Creek	I1	Flood to sprinkle irrigation, lease water for stream flow
	I2	Line ditch to minimize leakage, lease water for stream flow
	I3	Flood to sprinkle irrigation, lease water for stream flow
Cottonwood Creek	X1	Cross fence riparian pasture, prescribed grazing (pending)
	X4	Cross fence riparian pasture, off-stream water, grazing plan
Cottonwood Creek	R1	Riparian planting on Reese Anderson (completed)
	R4	Riparian planting on main stem, selected reaches
Peterson Creek	N6	Mitigate livestock feeding operation- move off-stream
	N7	Remove old feedlot from stream bottom
	N8	Assess source of urban runoff & mitigate
Peterson Creek	P2	Provide off-stream water & prescribed grazing (pending)
	P4	Provide off-stream water & prescribed grazing
	P5	Provide off-stream water & prescribed grazing
	P6	Provide off-stream water & prescribed grazing
	P7	Provide off-stream water & prescribed grazing
Peterson Creek	D7	Remove earthen berm and replace with new diversion
	D8	Remove earthen berm and replace with new diversion
	D9	Remove earthen berm and replace with new diversion
	D10	Remove earthen berm and replace with new diversion
Peterson Creek	I4	Line irrigation ditch from diversion to pipeline area
Peterson Creek	X2	Cross fence riparian pasture, off-stream water, grazing plan
	X3	Cross fence riparian pasture, off-stream water, grazing plan
Peterson Creek	L1	Build loafing area for livestock during winter season
Peterson Creek	L2	Plant shelterbelt & build loafing area for livestock wintering
Peterson Creek	R2	Riparian planting along stream corridor, w/ temp. fencing
	R3	Riparian planting along stream corridor with fencing
Peterson Creek	Sd1	Armor Interstate stream crossing at undercut slope and culvert

