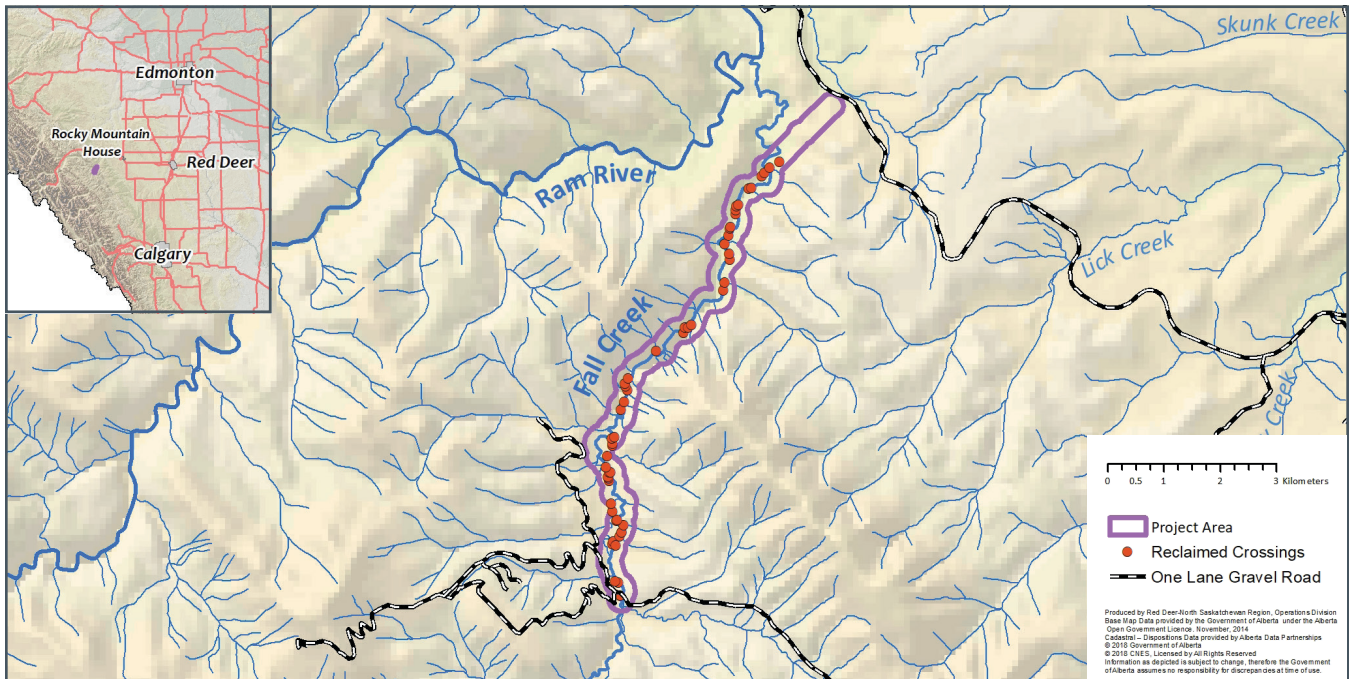


# Fall Creek Reclamation Project

## North Central Native Trout Recovery Program



Bull trout are currently at high risk of extirpation in the lower Ram River watershed. Alberta Environment and Parks (AEP) is working to recover the population as part of the North Central Native Trout Recovery Program. Based on the best available science, this species is currently limited by four key threats: mortality from fishing (including catch and release), poaching, habitat fragmentation (barriers that prevent fish movement), and reduced water quality (due to higher sediment loads). Fall Creek is a tributary of the Ram River and provides the main spawning habitat for the bull trout population, plus important rearing and overwintering habitat.



Illegal OHV crossing at Fall Creek before remediation.

## Fall Creek Reclamation Project

Undesignated off-highway vehicle (OHV) use around Fall Creek resulted in significant habitat degradation (Zee 2017) due to approximately 54 illegal watercourse crossings within a nine kilometers section of creek. OHV crossings are a double threat to bull trout and other fish present in the creek, including stocked cutthroat trout and mountain whitefish. Crossings act as sediment chutes, dumping large amounts of fine silt and clay into the creek when driven over by OHVs and during rain events. Increased sediment in streams smothers incubating bull trout eggs, renders spawning gravels unsuitable and reduces habitat for invertebrates and algae, the base of the aquatic food chain. Additionally, bull trout eggs can be crushed when OHV riders illegally enter the watercourse. At Fall Creek, 20 crossings are located near or right through known spawning habitat.

## Management Actions

AEP and Trout Unlimited Canada completed an intensive reclamation project in 2018 to prevent sedimentation and reclaim OHV crossings that pose a serious threat to bull trout. The project included several key components to promote the recovery of shoreline habitat, reduce illegal motorized public access through the watercourse, enhance enforcement and provide education. A subset of management actions included:



Illegal OHV crossing at Fall Creek after remediation. A log crib wall, soil wrap, coconut matting and willows were used to rebuild the bank and reduce sedimentation. Over time, natural processes will transform this crossing back into properly functioning riparian habitat.

- Reclamation plan development and implementation of bio-engineering methods at 54 OHV crossings over nine kilometers of Fall Creek
- AEP and Trout Unlimited Canada volunteer events to plant willows
- Restriction of illegal motorized access into the watercourse by downing trees, tree planting and installing enforcement signage at key access points
- Increased enforcement presence
- Installation of educational signage at high visitor-use areas in the watershed, project brochures, print materials, etc.

## Next Steps

AEP will evaluate the success of the project by assessing bull trout density through time following standardized sampling techniques within a scientifically rigorous study design (i.e., Before-After-Control-Impact). What we learn from this project will be used to inform future recovery actions across the East Slopes of Alberta.



OHV trail damage at Rocky Creek.



AEP staff using electrofishing to inventory fish populations.