

6.3.7 Adair Creek

Adair Creek (Figure 6-27) originates in the foothills of the Crazy Mountains, and flows through private lands until its confluence with the Shields River. The only fisheries data available for this stream is a survey in 1975 that reported capture of seven cutthroat trout in a 250-ft-long section of stream (Berg 1975).

Baseline investigations to determine species composition and distribution of fish are the primary conservation need for Adair Creek. This information would provide the basis for developing specific recommendations for cutthroat trout conservation.

6.3.8 Crazy Head Creek

Crazy Head Creek (Figure 6-27) originates on the west side of the Shields River valley, and flows for about 7 miles before its confluence with the Shields River. The only available fisheries data comes from a survey in the 1970s that found lake chub (Berg 1975). As Crazy Head Creek flows entirely through rangeland and lacks headwaters in a montane environment, it may not have habitat or thermal regime suitable for support of a cold-water fishery. Determining Crazy Head Creek's potential to support salmonids is a conservation need.

6.4 Upper Yellowstone-Lake Subbasin (HUC 10070004)

The Upper Yellowstone-Lake Subbasin begins downstream of Bridger Creek, and extends past Billings, Montana. The majority of the basin is in private ownership, although numerous state-owned sections are present. This watershed lies within the Northwestern Great Plains Ecoregion, and has the characteristically gentle topography and low elevations typical of Montana prairies.

This historic distribution of Yellowstone cutthroat trout in this HUC was likely limited, as most streams possessed prairie stream affinities such as warmer water temperatures, fine streambed materials, and relatively high dissolved solids. The Yellowstone River and several of its tributaries are the only streams predicted to have supported Yellowstone cutthroat trout historically (Figure 6-35).

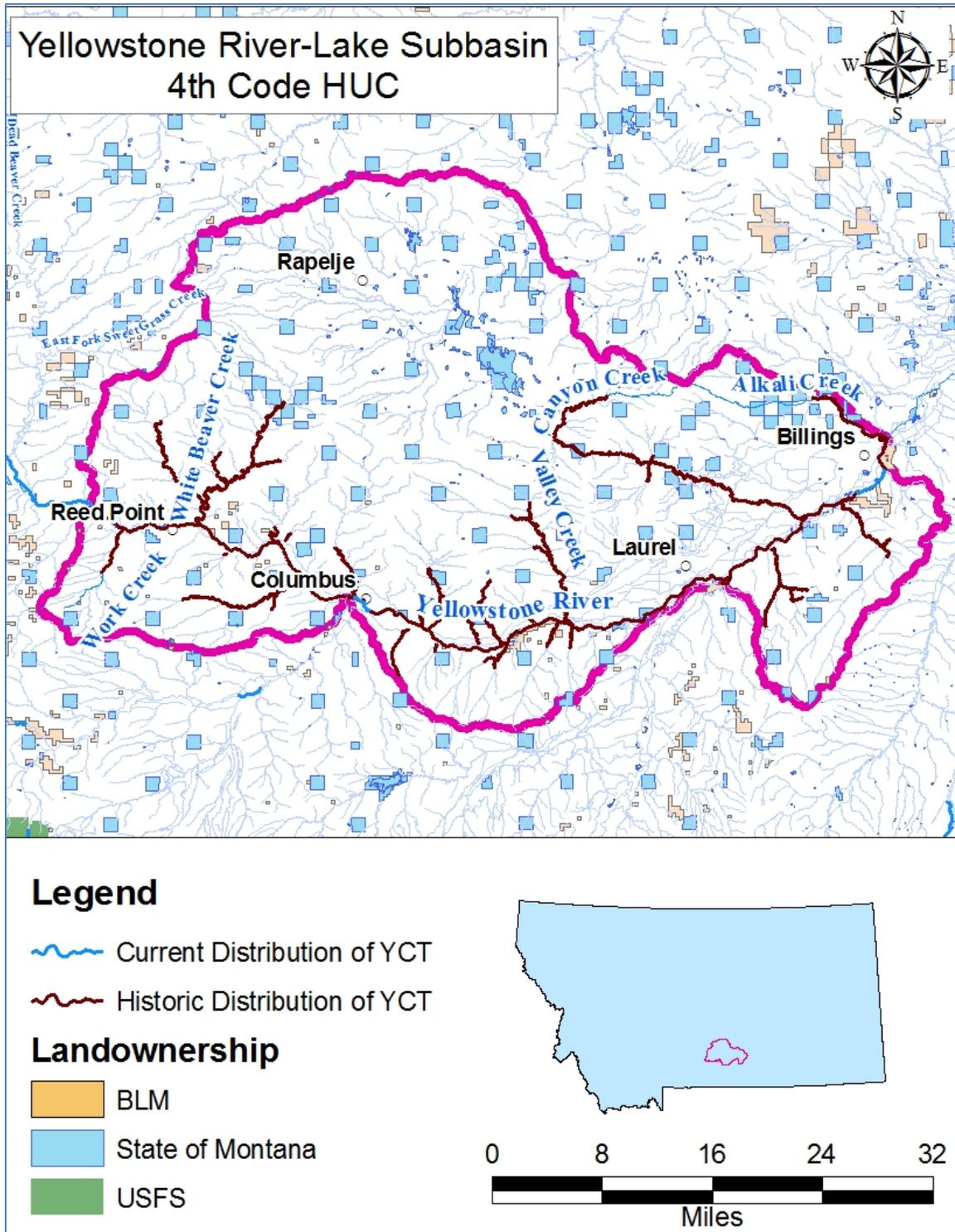


Figure 6-35: Upper Yellowstone River – Lake Basin Subbasin (HUC 10070004)/

Yellowstone cutthroat trout were historically present in this subbasin; however, recent assessments consider them to be extirpated. Factors likely contributing to their absence in the Yellowstone River and tributaries include thermal regime, lack of suitable spawning habitat, and

introductions of nonnative brown trout and rainbow trout. Although some of these factors relate to human activities, the natural potential for Yellowstone cutthroat trout in this HUC is marginal.

Currently, fish community composition varies along this portion of the Yellowstone River, and this variation reflects its transition from a cold-water fishery towards a warm-water fishery. Cold-water species including mountain whitefish, brown trout, and rainbow trout occur throughout this portion of the Yellowstone River, but become rarer near Billings (MFISH database). Warm-water species such as channel catfish, goldeye, flathead chub, and river carpsucker begin to comprise a portion of the fish assemblage in the downstream portions of the Yellowstone River (MFISH database).

Given the natural limitations for Yellowstone cutthroat trout in the Upper Yellowstone – Lake Subbasin, this area is a low priority for implementation of specific conservation actions. Projects that promote recovery of fluvial Yellowstone cutthroat trout upstream of this HUC may increase the representation of Yellowstone cutthroat trout in this part of its range. A greater abundance of Yellowstone cutthroat trout upstream may result in fluvial fish moving into these lower reaches, especially during seasons when water temperatures are favorable for this sensitive species.

6.5 Stillwater River of the Yellowstone Subbasin (HUC 10070005)

The Stillwater River (Figure 6-36) begins in the Beartooth Mountains near Cooke City and flows north and east approximately 70 miles before entering the Yellowstone River in the town of Columbus. Several major tributaries feed the Stillwater River. The West Fork Stillwater River flows about 25 miles and joins the Stillwater near the town of Nye. East Rosebud and West Rosebud creeks measure about 40 miles each and form Rosebud Creek, which flows a short distance before joining the Stillwater River near the town of Absarokee.

Land uses are typical of the region. The forested higher elevations support timber harvest, livestock grazing, and recreation. Agriculture is the primary land use in the valley portions of the watershed, and includes livestock production and irrigated crops. Water demands for irrigation result in periodic dewatering in portions of the Stillwater River and two of its tributaries (Table 6-56).