

## Kilgore-Camas Creek Meadows

Habitat diversity: Camas Creek Meadows occurs in an undulating area of basalt flows on the northeast portion of the Snake River Plain (Figures 16, 17). The meadows are bounded on the north by the Centennial Mountains and on the east by the Yellowstone Plateau. Camas Creek begins in the meadows, fed mainly by numerous snow-melt supported mountain tributaries. Springs also contribute flow. From west to east, Camas Creek tributaries including Crooked/Crab, West Camas, East Camas, Warm, Cottonwood, Ching, and Spring Creeks all flow through the broad meadow basin. These sinuous streams often parallel each other before coalescing to form Camas Creek. This network of low-gradient streams forms an extensive complex of wetlands extending from the Kilgore to Eighteen Mile.

Many of the wet meadows and willow bottoms have been converted to livestock pasture and cropland. However, according to remotely-sensed imaging and NWI mapping, there are many relict wetlands in floodplain stringers and some low-lying meadows. Because of the difficulty accessing private lands within Camas Creek Meadows, no plant community sampling occurred. However, older plots from adjacent National Forest land at the edge of the meadows sampled the following associations:

- aquatic sedge (*Carex aquatilis*)
- smallwing sedge (*Carex microptera*)
- Nebraska sedge
- creeping spikerush
- Booth's willow/beaked sedge (*Salix boothii/Carex utriculata*)
- Booth's willow/bluejoint reedgrass (*Salix boothii/Calamagrostis canadensis*)
- Geyer's willow/bluejoint reedgrass (*Salix geyeriana/Calamagrostis canadensis*)
- Geyer's willow/beaked sedge
- Geyer's willow/mesic forbs
- Geyer's willow/mesic graminoids
- Wolf's willow/bluejoint reedgrass (*Salix wolfii/Calamagrostis canadensis*)
- Wolf's willow/mesic forbs

Key environmental factors: Camas Creek Meadows is an extensive wetland complex of seasonally flooded meadows and scrub-shrub willow bottom in a landscape matrix of agriculture. Numerous streams and springs coalesce in a broad alluvial basin and support relict wetlands. The area is important as waterfowl breeding and migratory habitat and shorebird habitat.

Biodiversity significance: About 1,200 ha have been identified as an important waterfowl breeding area. It is also used as migratory waterfowl and shorebird habitat (Ratti and Kadlec 1992). Yellowstone cutthroat trout occur in some of the streams. Gray wolf (*Canis lupus*) and ferruginous hawk have been observed. Due to difficulty accessing private land, thorough inventories for at-risk species have not been completed. There is potential habitat for pink agoseris (*Agoseris lackschewitzii*), an at-risk wetland plant.

Wetland biodiversity:

*At-risk species:*

long-billed curlew ( <i>Numenius americanus</i> )	G5	S3B
Yellowstone cutthroat trout ( <i>Oncorhynchus clarkii bouvieri</i> )	G4T2	S2

Other wetland values: The importance of Camas Creek Meadows wetlands has been recognized in assessments determining wetland acquisition priorities using Land and Water Conservation Act funds (Hahn et al. 2005). Fishing and hunting has high potential but is currently limited to private lands where owners grant access. Camas Creek Meadows is valuable for its wildlife habitat and intact rural open space not yet converted to housing subdivisions.

Condition and land use: Many of the wet meadows and willow bottoms have been converted to livestock pasture and cropland. Numerous water diversions, ditches, and canals exist in Camas Meadows, diverting and managing flows for irrigation. Livestock grazing occurs in the meadows. A network of county roads accessing ranches and farmhouses exists. With the exception of a cluster of houses at Kilgore, overall residential density is low. The majority of the area is classified as agricultural and expected to have typically associated activities taking place, such as crop cultivation, control of weeds, pests, and predators (including use of herbicides and pesticides), and maintenance of water control infrastructure.

Some agricultural areas, old field pastures, and roadsides are very weedy with Canada thistle abundant. Another noxious weed, Dyer's woad (*Isatis tinctoria*), was observed in the East Camas Creek area. Timothy and other seeded hay grasses are common. The aquatic community is dominated by brook trout and some brown trout (*Salmo trutta*).

In addition to altered and reduced flows in streams, some stream reaches have been damaged by cattle grazing. Woody vegetation has been moderately hedged by livestock in some areas. These cumulative effects have accelerated streambank erosion and high sediment levels, and promoted stream entrenchment, invasion by noxious weeds, and elevated stream temperatures in some reaches. This has been documented where East Camas Creek enters the site and along several other streams such as Crooked and Crab creeks. Warm, Ching, Cottonwood, and Saw creeks are all listed as water quality limited segments for flow and habitat alteration, unknown pollutants, temperature, and pathogens.

Landscape context: Agricultural lands are adjacent to the western half of the site and parts of the northwest boundary. They may influence wetland functions and water quality. Roads frequently cross streams immediately upstream of the site and could affect hydrology and water quality. Further work to determine actual impacts is needed.