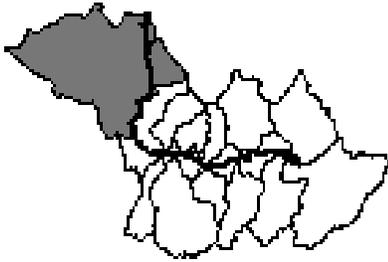


## Ecological Reporting Unit Summary - South Fork Clearwater



**Location and Size** - Camas Prairie ERU encompasses an area approximately 199,000 acres in size. The ERU includes the private land and other ownership west of the Forest Boundary. See Map 7.

### Overview

Most of this ERU is in private ownership. It includes the basalt plateau of the Camas Prairie, and the steep canyons at lower elevations along the larger streams and the South Fork Clearwater. The landscape was once dominated by grassland and shrubland steppe on the prairie and a mosaic of grassland, shrubland and open ponderosa pine and Douglas-fir in the canyons. Cottonwood, Grangeville, Harpster, Kooskia, Stites, and Clearwater are centers of residential development. The findings for this ERU are more general than the others, since it contains minimal National Forest land and an indepth analysis was not attempted. For these same reasons, coordination opportunities are presented, rather than recommendations.

### Summary of Findings

**Aquatic:** Streams in this ERU are among the most heavily impacted in the subbasin. In those reaches on forested lands, stream conditions are probably comparable to other parts of the subbasin, where similar levels of disturbance have occurred. Conversely, most streams on agricultural lands have been highly modified by riparian tree and shrub removal, field plowing, channelization, channel erosion, sediment yield, and sediment deposition. Livestock feedlots and season-long grazing have impacted certain reaches. As the streams flow from the Camas Prairie via breaklands to the mainstem South Fork, erosion of channels is common due to steeper gradients and altered upstream and riparian conditions. When these streams reach the South Fork valley floor, their gradients drop considerably, and substantial deposition of bedload sediment has resulted in aggraded channels. Fish habitat in tributary streams has changed significantly from historic conditions. Impacts include wider, shallower channels, loss of pools, loss of riparian shading, warmer summer water temperatures, and substantially increased sediment yields.

The lower South Fork Clearwater River flows through this ERU. Its sensitivity to disturbance varies between confined and unconfined reaches, with the latter being more sensitive. The lower reaches of the South Fork have been affected to various degrees by aggradation, channelization, diking, riparian vegetation removal, and encroachment by developments, such as roads and buildings. Aggradation of the river is associated with bedload from upstream sources, but most noticeably from the major Camas Prairie tributaries (e.g. Butcher, Threemile, and Cottonwood Creeks) and local bank erosion. In the unconfined reaches, the net result is a channel that is wider, shallower, and with less large pools than existed under natural conditions. Fish habitat has been affected through less cover, less deep holding water, elevated sediment yields, and warmer summer water temperatures. In some years, much of the lower South Fork becomes unsuitable for cold water salmonids due to warm water temperature. For fish species that migrate through this area, either to reach upstream spawning areas or downstream migration of juveniles, the habitat loss in the main stem has reduced connectiveness and rearing capability.

**Vegetation:** Annual grasslands and noxious weeds have become established on grassland habitat types on low elevation steep south facing slopes. This has resulted in loss of bunchgrass community structure, diversity, and habitat for dependent wildlife populations. On the prairie, native bunchgrasses and shrublands have been largely replaced by annual crop land, hay, or pasture. Once extensive camas fields are now generally limited to nontillable areas. Significant areas of open ponderosa pine in the canyons have been lost to timber harvest, and conversion to agricultural uses or shifted to Douglas-fir with succession and fire suppression.

**Wildlife:** Historical elements no longer present or much reduced include Columbian sharp-tailed grouse, burrowing owl, and mountain quail.

**Air Quality:** Air quality in this ERU is generally good, however, air quality is adversely affected by field plowing, agriculture burning and native surfaced and gravel roads open year round to travel. The degradation of the air quality is cyclic, corresponding to dry field conditions for plowing in the spring and fall and dry weather for burning agriculture stubble in the fall. Incentives through the Farm Program to keep residue on highly erodible soils has reduced agriculture burning the past several years. Normally, good transport winds quickly disperse the effects of all air quality degradation, keeping the general air quality good.

## **Opportunities for Cooperative Work**

**Aquatic Monitoring and Restoration:** Cooperative water quality monitoring efforts have been undertaken in the lower South Fork, with the primary agencies being the US Geological Survey, Idaho Division of Environmental Quality, and Nez Perce National Forest. These efforts are expected to continue, and possibly expand, both in scope and with respect to the number of agencies involved.

Numerous interagency efforts are underway at the scale of the Clearwater River Basin to address aquatic conditions and needs. These include a Basin Advisory Group and Technical Advisory Team dealing with Water Quality Limited Streams and implementation of the Governor's Bull Trout Plan. Another basinwide effort is the Clearwater Focus Program, which is funded by the Bonneville Power Administration and jointly administered by the Idaho Soil Conservation Commission and the Nez Perce Tribe. The Nez Perce National Forest has been involved in these efforts.

The Cottonwood Creek Soil and Water Quality Project is an example of an interagency effort underway within this ERU. A Watershed Advisory Group was recently formed for Cottonwood Creek, a Water Quality Limited Stream, to recommend specific actions needed to restore water quality. Nez Perce National Forest aquatic personnel have periodically provided technical assistance on public and private projects within the Camas Prairie ERU, typically at the request of State and local agencies.

**Noxious Weed Control:** The Forest Service is working with Idaho County in a cooperative effort to manage noxious weeds in the South Fork of the Clearwater River. The intent of the partnership is to develop common objectives and priorities for the management of specific noxious weeds found in the basin. Personnel and equipment may be pooled to efficiently utilize available skills in the control and management of high priority noxious weeds. A larger committee has been formed to coordinate weed management across the Clearwater River Basin. This committee includes Idaho, Nez Perce, Lewis, Clearwater and Latah Counties, Clearwater and Nez Perce National Forests, Cottonwood Resource Area-BLM, Clearwater RC&D, Idaho Department of Fish and Game, Idaho Department of Lands, Idaho Transportation Department, and other interested groups and organizations. Opportunities exist to continue to cooperate with all the weed control partners in the Clearwater drainage.

**Fire Suppression:** The Forest Service cooperates with the State of Idaho for fire suppression, fire prevention, fire training and fuels treatment. Opportunities do exist to cooperate with rural fire departments, however, there are only a few organized rural fire departments at this time that have jurisdiction in this ERU. As more fire departments become organized then the opportunity exists for cooperation in fire training, fire prevention, surplus equipment acquisition, and fire suppression in the urban interface.