



Riparian Condition Monitoring in Nez Perce National Historical Park

Importance:

Riparian Vegetation – interface between upland and streams

There is an intimate connection between riparian areas, stream channels and the surrounding landscape. Riparian vegetation is a product of regional geomorphology, hydrology, stream channel characteristics, upland vegetation, land use and water use. For this reason, riparian vegetation has a profound influence on habitat for both aquatic and terrestrial organisms. This connection between the surrounding landscape, riparian areas and aquatic habitats makes monitoring riparian condition an important aspect of natural resource monitoring in the Upper Columbia Basin Network (UCBN).

2011 Status

In 2011 the UCBN estimated the status of greenline and channel cross-section wetland ratings, effective ground cover, and woody vegetation cover for 1 selected stream reach on Lapwai Creek in the Spalding Unit and 3 selected reaches on Jim Ford Creek in the Weippe Prairie Unit of Nez Perce National Historical Park (NEPE). Basic metrics are summarized for all 4 sample reaches in the table below. These measures provide important baseline indications on the conditions of riparian vegetation along both sampled streams, to which future samples will be compared. 2011 was the first year of monitoring in NEPE and the stream reaches will be re-sampled in 2014.

Management Applications

- Provide information on the condition of riparian habitats
- Detect habitat degradation and potential concerns to park management
- Provide feedback on the success of park management and restoration activities
- Inform integrated assessments of climate change impacts on park resources

Objectives

- Determine the status and trend of riparian condition, as measured by greenline and channel cross-section wetland ratings (i.e., obligate wetland riparian plant species cover), effective ground cover, and greenline woody vegetation cover for selected wadeable stream reaches.



2011 monitoring on Lapwai Creek (NEPE-Spalding) included the assessment of greenline and cross-section wetland ratings.



2011 monitoring on Jim Ford Creek (NEPE-Weippe Prairie) has contributed to the establishment of baseline conditions, which include determining cross-section weed cover and effective ground cover.

Nez Perce National Historical Park Riparian Condition Summary 2011

Measure	Lapwai Creek (Spalding Unit) Current Condition (August 2011)	Jim Ford Creek (Weippe Prairie Unit) Current Condition (August 2011)
Greenline wetland rating (mean)	47.8	80.43
Cross-section wetland rating (mean)	44.3	49.90
Effective ground cover (%) (mean)	72.1	90.70
Greenline woody cover (%) (mean)	35.3	1.30
Reach alien cover (%) (mean)	18.8	17.97