



Monitoring Riparian Condition in the UCBN

Network parks where resource is being monitored

- Big Hole National Battlefield (BIHO)
- City of Rocks National Reserve (CIRO)
- John Day Fossil Beds National Monument (JODA)
- Nez Perce National Historical Park (NEPE)
- Whitman Mission National Historical Site (WHMI)

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 UCBN.



A short segment of Lapwai Creek flows through the Spalding Unit of NEPE before entering the Clearwater River. Invasive weeds in this and other parks are a considerable threat to native riparian vegetation.

Objectives:

1. Determine the status 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 in BIHO, CIRO, JODA, NEPE, and WHMI.
2. Determine the direction and magnitude of change over time for obligate wetland riparian plant species cover, effective ground cover, and woody vegetation cover, and establish whether those changes reflect impacts from management or land use activities in BIHO, CIRO, JODA, NEPE, and WHMI.
3. Determine the condition of riparian zones along selected wadeable UCBN stream reaches, relative to PIBO sample reaches in the same watershed.
4. Determine the status and trend in the cover of non-native invasive plant species (e.g., *Acroptilon repens*) found along UCBN streams, as estimated from PIBO sample reaches.

Management Applications

- Provide information on the condition of riparian habitat
- Detect habitat degradation and concerns to park management
- Support park resource planning and restoration efforts

2010 Status

In August 2010 the UCBN submitted a draft protocol for peer review. The UCBN riparian condition monitoring protocol uses an existing monitoring protocol developed by the United States Forest Service (USFS) PACFISH/INFISH Effectiveness Monitoring (PIBO-EM) Program. In addition to the use of an existing protocol the UCBN has formed an interagency agreement with the USFS, for the PIBO program to use their monitoring teams to collect riparian monitoring data in UCBN parks, ensuring consistency and enhancing efficiency. Using the PIBO protocol will provide a unique opportunity to examine park riparian resources relative to other streams in the Pacific Northwest.



Restoration of the riparian zone and stream channel along Doan Creek-WHMI

Contact Information

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