

A Strategy for Managing Springs, Seeps, and Wetlands (Lentic Systems) on the Salmon-Challis National Forest



Developed by:

Bill Diage – Ecologist
Mike Foster – Wildlife Biologist
Carmela Leavitt – Range Specialist

April 2008

Springs and seeps come in a variety of sizes. Large, more perennial springs often become channelized and connect to perennial streams. Smaller springs and seeps typically do not have this connection and only flow or stay surfaced as saturated bogs or wetlands for short distances before infiltrating in to the soil. Flows fluctuate both seasonally and annually based on climate and precipitation.

Small spring flows do not create well defined channels, have stream channel characteristics, nor experience high flow events. As such, these spring systems don't fit the true definition of either lentic (standing water) or lotic (moving water) systems. However, in this document, spring systems will be considered lentic systems (rather than lotic systems) even though they do have surface flows.

Assessing the condition of lentic riparian areas is a difficult process. Currently, the only widely accepted procedure is the Properly Functioning Condition (PFC) method described in Technical Reference 1737-11 (BLM 1994) and Technical Reference 1737-16 (BLM 1999) published by the Bureau of Land Management. This method concludes with a determination the site is in properly functioning condition, is at-risk, or is non-functional.

The desired condition for the isolated upland lentic systems is properly functioning condition (PFC). PFC does not reflect any specific desired resource values or conditions. Rather, it reflects how well the physical processes are functioning to maintain a high state of resiliency. Priority will be placed on managing those systems that are currently functional-at-risk or non-functional.

Pending the results of this assessment, a review and evaluation of management opportunities will determine what options are available to meet the desired condition. Should it be necessary, designated monitoring areas will be established to monitor specific grazing indicator use values on a case by case basis designed to maintain or improve the target lentic systems. The adaptive management process will be used as the tool to refine management options and the appropriate implementation monitoring necessary to ensure meeting the stated desired condition.

A Process to Assess and Interpret Lentic Conditions

Lentic site assessments will focus on those areas identified as capable for livestock grazing or utilized by livestock. A cursory observation of the site will be made first in order to determine if a formal Properly Functioning Condition assessment is necessary.

Is the site functioning properly?

Yes - proceed to **Protocol for Lentic Sites in PFC** (see below)

No – **Go to Question 1**

Question 1

Are domestic livestock a significant factor in not meeting the desired conditions?

Yes - go to Step 1

No - fully document the observations and rationale for this determination.
Continue with current livestock management. Go to Step 4.

Step 1

- Schedule an interdisciplinary team for a site visit to assess properly functioning condition (PFC) using the protocols identified in BLM Technical References 1737-11 (BLM 1994) and 1737-16 (BLM 1999).

Step 2

- Evaluate current livestock management to identify any contributing factors that may have lead to the current conditions including aspects such as utilization levels, season of use, duration of use, intensity of use, kind and class of livestock, etc.
- Initiate adaptive management that is anticipated to obtain or trend towards meeting Properly Functioning Condition.
- Establish a photo point as a means to record observations resulting from changes in livestock management.
- Begin annual implementation monitoring at the established monitoring site location based on the selected management factor(s) determined above.

Step 3

- Using the photo records as a guide, reschedule a follow-up PFC assessment.

Is the site in properly functioning condition?

Yes - proceed to *Protocol for Lentic Sites at PFC*

No - Evaluate all factors that may be contributing to this finding and reinitiate adaptive management using Steps 1 and 2 above.

Protocol for Lentic Sites at PFC

Step 4

- Maintain (at a minimum) a photo point at the assessment location
- Retake photo points every 3-5 years
- Proceed to Step 5 if photo monitoring indicates a change of conditions or if changes in management needs arise (such as utilization checks indicate grazing use is not meeting prescription, fire events, drought impacts, excessive wildlife use, etc.)

Step 5

- Reschedule a follow-up PFC assessment to answer the question:

Is the lentic site in properly functioning condition?

Yes - go to Step 4

No – Answer Question 1 and re-initiate Steps 1 through 3 as appropriate.

References

BLM. Bureau of Land Management. 1994. Technical Reference 1737-11. Process for Assessing Proper Functioning Condition for Lentic Riparian-Wetland Areas.

BLM. Bureau of Land Management. 1999. Technical Reference 1737-16. A User Guide for Assessing Proper Functioning Condition and the Supporting Science for Lentic Areas.