

Lesson Plan 15.

Monitoring with Visual Inspections and Photographs

Goals/Overview:

Understand why and how to conduct simple, but meaningful, visual inspections and photo-monitoring.

Learning Objectives:

1. Gain appreciation for the ways in which monitoring can fulfill compliance requirements and is a useful management and maintenance tool.
2. Understand the process for completing visual and photographic monitoring.
3. Gain ability, during visual inspections, to reconsider questions from Pasture Assessment—Worksheet 4 and Stream Assessment—Worksheet 5, as well as projects in Completed Projects—Worksheet 6 and Future Water Quality Projects—Worksheet 7, and update worksheets appropriately. For example, locations may be added or removed if conditions worsen or improve.
4. Learn how to conduct photo-monitoring.
5. Learn to use forms in RWQP Template to record observations and actions taken to improve water quality.

Introduction/Hook:

- Ranchers should take credit for maintenance normally done following large storms, such as cleaning plugged culverts, which is a beneficial practice for water quality management and an example of one of the primary purposes of visual inspections.
- Visual inspections are useful to make sure previous investments in ranch operations and conservation practices are not lost from deferred maintenance.
- Pictures say 1,000 words.

Materials/Speakers:

- Invited speaker and facilitator of discussion would be someone with knowledge in rangeland and watershed management and monitoring experience from UCCE, NRCS, RCD, or other relevant organization.
- Instructional video: “[Monitoring—Worksheet 10](#)” (26 minutes).
- Bring [RWQP Template](#) with extra copies of [Monitoring—Worksheet 10](#).
- Provide attendees handouts of pertinent resources.

Time Allocated:

Allow 50 to 60 minutes (30 minutes for presentation and 20 minutes for questions/discussion).

Procedures/Activities/Strategies/Questions:

- Open with a brief story or anecdote, welcome newcomers, and ask for outstanding questions or concerns.
- Review Pasture Assessment—Worksheet 4, Stream Assessment—Worksheet 5, Completed Projects—Worksheet 6, and Future Water Quality Projects—Worksheet 7 for projects, sites, and areas of the ranch to include in monitoring.
- Present video: “[Monitoring—Worksheet 10](#)”
- Review visual inspection methodology and schedule. Use [Monitoring—Worksheet 10](#), suggested in the [RWQP Template](#), to demonstrate how to record observations of RDM estimates, visual inspections, and photo-monitoring conducted throughout a given year.
- Complete the Session Evaluation Form (appendix A).

Conclusion/Self-assessment:

- Locate historical photos of ranch and retake current photo from same location to create a new photo-point for future ranch monitoring.

Resources:

California Rangelands Research and Information Center. 1995. Monitoring with ranch records. Monitoring Series no. 2. https://ucanr.edu/sites/UCCE_LR/files/180577.pdf

McDougald, N., B. Frost, and D. Dudley. 2003. Photo-monitoring for Better Land Use Planning and Assessment. Oakland: UC Agriculture and Natural Resources Publication 8067. Davis, California. <https://anrcatalog.ucanr.edu/pdf/8067.pdf>

Next Steps/Future Lessons:

- Consider who will be responsible for ranch monitoring and be sure the person understands the protocols.