



The Ackerson Meadow Restoration Project



Photo by Robb Hirsch

What is the purpose of this project?

Ackerson Meadow and South Ackerson Meadow make up the largest mid-elevation meadow complex in Yosemite National Park. These scenic meadows are important habitat for the State endangered great grey owl and little willow flycatcher, as well as a suite of additional at-risk wildlife species. Currently, a large erosion gully network, up to 14 feet deep and 100 feet wide, is actively draining 90 acres of former wetlands in the meadow complex and threatening an additional 100 acres of wet meadow habitat. The gully network is a result of over a century of landscape manipulation including domestic water diversion, farming, ranching, and timber harvest. Yosemite National Park and the Stanislaus National Forest jointly propose to implement actions to reduce erosion and restore wetland functionality at Ackerson and South Ackerson Meadows. Additional goals of the project include:

- Protect existing intact wetlands from advancing gullies and headcuts, and re-establish hydrologic processes and conditions characterized by sheet flow and shallow dispersed swales.
- Restore the former extent of wetlands in Ackerson and South Ackerson Meadows by re-establishing sustained high water tables (water table within 12 inches of the soil surface for 21 days per year).
- Minimize and mitigate impacts related to restoration actions
- Restore natural habitat for at-risk wildlife species.
- Enable tribal participation in ecological restoration, tending, and gathering of traditional use plant materials.
- Provide continued grazing on US Forest Service-managed lands while protecting recovering wetlands, riparian areas, and archeological resources.
- Remove invasive plant species that threaten native species.
- Preserve wilderness character. In designated wilderness, minimize impacts to wilderness character by limiting restoration activities and tools to the minimum required to restore water tables and prevent further degradation.

How would the NPS restore the meadow?

The NPS is considering options for restoration methods to restore the meadow including the following:

- Completely fill the erosion gullies to the level of existing meadow terraces to restore original topography, hydrology, and vegetation. Fill material will be generated from a combination of nearby upland hillslope soil excavations and locally generated wood chips and biochar. Approximately 151,000 cubic yards of fill will be needed.
- Intermittently fill the erosion gullies to the level of existing meadow terraces with a stair-step sequence of earthen plugs to restore wetland hydrology and vegetation. This alternative would create open water ponds up to 12 feet deep between the plug features. Fill will be generated as above, and approximately 57,000 cubic yards of fill will be needed.
- Encourage sediment deposition and erosive flow energy within the erosion gullies by installing beaver dam analogs (BDAs) and natural materials to create a stair-step sequence of ponds about 3 feet deep within the active channels. This treatment will require hand tools and manual labor, no fill or heavy equipment will be needed. Long-term maintenance of the structures will be required. This alternative would not fully restore the gullies to natural meadow topography, rather it would enhance the wetland and floodplains within the gully network. The park has also considered the introduction of beavers to the meadow for restoration purposes but considers that action infeasible at this time. The planning team is interested in your additional comments on the introduction of beaver.
- Use a combination of intermittent fill and BDAs to fill the gullies to the level of existing meadow terraces to restore meadow hydrology and reconnect with the floodplain. This alternative would use soil from the same sources as the other fill alternatives in the deeper portion of the gullies and use BDAs in the areas where the gullies are less than 3-5- feet deep. This would require less fill than the full fill option and more fill than the intermittent fill option.

How can I comment and participate?

The park plans to initiate a formal environmental assessment process toward the end of 2020. At this time, the park requests input on issues that the planning team should address in the upcoming planning process, additional alternatives to meet the purpose of the plan, information the park should consider in the upcoming analysis, and other feedback.

Public participation is essential for the success of this and all other park projects. Here are ways to learn more about the Ackerson Meadow project and/or comment:

- **Attend the Ackerson Meadow Restoration Project Public Webinar on August 5th from 4:30 pm PT to 5:30 pm (Pacific Time).** You will have an opportunity to learn more about the project and ask questions during the webinar. The link to register and watch the webinar is available at <https://parkplanning.nps.gov/ackerson>.
- Submit comments by August 25th on the NPS Planning, Environment, and Public Comment (PEPC) link at <https://parkplanning.nps.gov/ackerson>. The webinar will also be recorded and available online at this link.