

**Pine Creek/Sulphurbeds Allotment:  
Grassy Creek Spring  
Mary O'Brien  
Grand Canyon Trust  
2008-2010**

**2009 Update**  
Wayne Hoskisson  
Grand Canyon Trust

**2010 Update**  
Wayne Hoskisson/Mindy Wheeler

**(2008)** Grassy Creek Spring lies midway up Grassy Creek at the southern end of Pine Creek/Sulphurbeds Allotment in the Wildcat Pasture. An old spring development has broken down, and cattle are directly trampling the creek and spring area (Fig. 1) and the wetlands below the spring (Fig. 2). Capacity on the heavily-grazed adjacent uplands is questionable, given the cover of cattle-avoided lupine and cheatgrass (Fig. 3).

If this area were to be considered productive enough for cattle, a trough might be built near the older spring development, with an entrance from the road (Fig. 4). The cliff wall immediately behind would armor one side of the trough. Protection of the spring and its wetlands as well as the creek from trampling would remain a problem.

Major concerns:

- Violation of riparian utilization standards in creek and wetlands
- Elimination of spring and wetlands biota through trampling
- Increase in cheatgrass through continued use of the watering area

**(2009)** A barbed-wire and T-post enclosure was constructed around Grassy Creek Spring but the enclosure is non-functional and could not have been expected to withstand livestock pressure as constructed given the creek incision. The fence is down on the upstream and road sides (Figs. 6-8), cattle have grazed in the enclosure (Figs. 6, 7, 10 and 11), and the spring and brook are trampled (Figs. 7, 10, and 11). The head box is not protected because the enclosure is non-functional (Fig. 11).

In the Pine Creek Water Developments Report in the April 2009 *Tushar Grazing Allotments Collaboration: Final Report*, the Beaver Ranger District had stated, "Avoid using barb-wire or net-wire since this type fence will not stand up to the increased pressure from livestock." (By: Douglas Sorensen, Rangeland Management Specialist November 7, 2008) Following this instruction would be advisable for this spring."

The Management Actions in *Tushar Grazing Allotments Collaboration: Final Report* includes the following agreement:

**B. Water Developments**

Permittees agree to use the following water development construction standards at spring sources:

- An adequately sized enclosure that will effectively prevent livestock from entering the water source. Minimum enclosure size is 40' x 40', or larger as necessary to take in the entire source area.
- The enclosure must be built with extremely durable materials capable of withstanding the extra pressure exerted by livestock at these types of sites. Avoid using barb-wire or net-wire, since this type of fence will not stand up to the increased pressure from livestock.
- The spring source itself will be developed or re-built with new materials that are dependable and will withstand the elements. Appropriate construction materials are outlined in Doug Sorensen's Pine Creek Water Developments report: <http://tushar.ecr.gov/pdf/030309/creekwater.pdf>

*(Tushar Grazing Allotments Collaboration Final Report (April 2009, p 50)*

On Oct. 12, 2009, we saw cattle on the road adjacent to the spring (Fig. 5). When we followed the cattle, they headed north from the spring. The Pine Creek/Sulphurbeds Annual Operating Instructions indicate the Wildcat Pasture was to be rested for two years beginning in 2009.

**2010** The Grassy Creek Spring is within the Wildcat Pasture, which was to be rested in 2010. There was noticeable sign of trespass cattle in the area of the Grassy Creek Spring (Figures 12, 13 and 16). Although the enclosure for Grassy Creek Spring itself had been properly rebuilt and was successfully keeping cows out of the water source (Figs 12 and 13), the pasture around Grassy Creek was in poor shape. Bare ground, cheatgrass and houndstongue (*Cynoglossum officinale*) were dominant in the area just above the spring. In order for this area to become dominated by native perennial grasses to secure the soil as well as to reduce the level of houndstongue spread, the area likely needs a combination of fencing, noxious weed control and seeding with natives.



Fig. 1 (7/16/08) Pine Creek/Sulphurbeds: Trampled creek banks and wetlands; spring development in disrepair.



Fig. 2. (7/16/08) Pine Crk/Sulphurbeds: Trampled spring area and wetlands.



Fig. 3. (7/16/08) Pine Crk/Sulphurbeds: Slope adjacent to spring area. Lupine and cheatgrass are dominants.



Fig. 4. (7/16/08) Pine Crk/Sulphurbeds: Potential water trough with entrance from road



Fig. 5 (10/12/09) Cattle in Wildcat Pasture near Grassy Crk Spring



Fig. 6 (10/12/09) Exclosure fence at upstream end is down and cattle have been in the exclosure. One pole is already beginning to tip over.



Fig. 7 (10/12/09). The fence next to the road is only 2 ft tall and loose. Note cattle have been in the enclosure. The brook is trampled



Fig. 8 (10/12/09) The fence is broken. The T-post beyond the one in the center is falling over. Note bare ground and browsed willow.



Fig. 9 (10/12/09) This T-post near the road is broken near the ground. The base cannot be seen.



Fig. 10 (10/12/09) In the enclosure Grassy Creek is trampled. Note cow patties and bare ground.



Fig. 11 (10/12/09) The spring box is not protected because the enclosure is non-functional.



Fig 12 (10/9/2010) Grazed/ trampled area adjacent to fenced Grassy Spring. GPS coordinates 366072E 4256514N (UTM NAD 27)



Fig 13 (10/9/2010) Abundant and tall exotic creeping bentgrass (*Agrostis stolonifera*) inside fenced Grassy Spring.  
GPS coordinate 12N 366072E 4256514N (UTM NAD 27)



Fig 14 (10/9/2010) Bare and weedy ground just above Grassy Spring during a rest year for Wildcat Pasture.  
GPS coordinate 12N 366062E 4256614N (UTM NAD 27)



Fig 15 (10/9/2010) Bare and weedy ground just above Grassy Spring. Note strong presence of houndstongue 366021E 4256865N (UTM NAD 27)



Fig 16 (10/9/2010) Cattle prints close to Grassy Spring 366003E 4256683N (in a rest year for Wildcat Pasture)



Fig 17 (10/9/2010) Heavily browsed cottonwood in Grassy Creek area  
365944E 4256450N