

Mill Creek Invasive Species Evaluation from Powerdam to the confluence

Based on field observations from a site visit on November 23rd

By Kara Dohrenwend and Sara Melnicoff

BACKGROUND

Mill Creek from the Powerdam to the confluence of Right and Left Hands is a highly used recreation area that has changed a great deal over the past 15 years. Closure of the Powerdam area, and the road to Potato Salad Hill from Creek right to cars except in the parking area coupled with extensive revegetation efforts by the BLM with the help of the Mill Creek Partnership, Plateau Restoration Inc and Rim to Rim Restoration from the late 1990s through 2004/05 successfully reestablished native plants in this area, as well as in vehicle tracks up the slopes to the south.

Over the past 10 years, Russian olive and Pampas or Ravenna Grasses have become very established in this stretch of Mill Creek. Work was done around 2001 and 2002 to work on olive removal in Mill Creek with the Mill Creek Summer Work Program. Some additional removal work has been done in the past few years. The grasses, however, have expanded greatly over the past few years.

Vegetation maps were completed with the help of the Mill Creek Summer Work Program in 2001. Low flown aerial imagery exists at BLM from this time period as well. It may be useful to map the current olive and grass areas prior to removal efforts to help track efforts in the canyon, and help with longer term planning efforts.

Recent reincarnation of the Mill Creek Partnership through efforts by The Solutions shows an increase in local volunteer interest in working on protecting the native plant communities in Mill Creek Canyon.

OBSERVATIONS

While there is a marked increase in olives over the past 10 years, many of these olives are small, less than 15 feet in height, and a few are very large (over 35 feet in height). There are a few located downstream and near the Powerdam, but they become much more dense at the confluence.

The invasive grasses have moved in thickly in some areas. At this time they are not enormous grasses, but based on pampas and Ravenna grass establishment in other watershed they will spread quickly.

Both species could be addressed in this stretch of creek by volunteer labor during the next 12 months.

SUGGESTED ACTIONS

There is urgency to this invasive control effort because it has been shown in other areas of Mill Creek, and in other watersheds, that Russian olive trees and invasive Ravenna and pampas grasses can rapidly spread and begin to dominate healthy native vegetation communities, especially in riparian areas. The recent work in Mill Creek spearheaded by The Solutions suggests that now is a good time to plan some long term efforts to control Russian olive and invasive grasses in the canyon.

1. An important first step would be to map olives and grasses throughout the canyon to allow a better understanding of the extent and distribution of the trees (including size/age) in the canyon. This could be done fairly quickly with the help of recent aerial imagery and some time hiking the canyon. The Powerdam to Confluence stretch could be done very quickly and possibly first, to plan for work in this stream reach sooner than later.
2. Even prior to mapping, it would be advisable to remove the seedheads from the grasses located in Mill Creek from around the Powerdam to the Confluence. This area seems to be fairly heavily populated with these plants, and removal of seedheads would reduce the grasses spread in the coming growing season in a very low impact manner, and still allow for the grasses to be mapped prior to removal.
3. Soon after mapping the olives present from Powerdam to the Confluence it would be easy to remove all the small olives – with the help of volunteers. These trees are small, and the biomass could be scattered in a lop and scatter technique in some areas, and in other places the biomass could be used to close unwanted social trails. Volunteers could cut biomass leaving a high stump (3 to 4'). Later, herbicide applicators could low stump these trees and apply herbicide.
4. There are also a large number of saplings that are smaller than 2" caliper. These could be weed wrenched and scattered by volunteers.
5. Fortunately there are few truly large Russian olives in this stretch of creek. Many of these larger trees could be girdle treated and left standing to leave some habitat structure and minimize debris piles.

Mapping of the invasive plant extent and distribution in Mill Creek Canyon would be the first step to creating an invasive species control plan for the canyon. RRR, PRI and The Solutions could partner up with BLM to draft this plan and apply for WRI funds for 2013 and later to help fund removal efforts in the canyon.