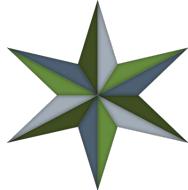


Pinyon-Juniper Management



Project Examples

by

Regenerative Stewardship, LLC





The foreground is the type of ground we start with. These arroyos, specifically where we have done treatment, sit right at and just below the breakline. Shale, little bit of grass, junipers, erosion.



This is the first treatment site 3 years after treatment. Notice the stump in the background for the next picture.



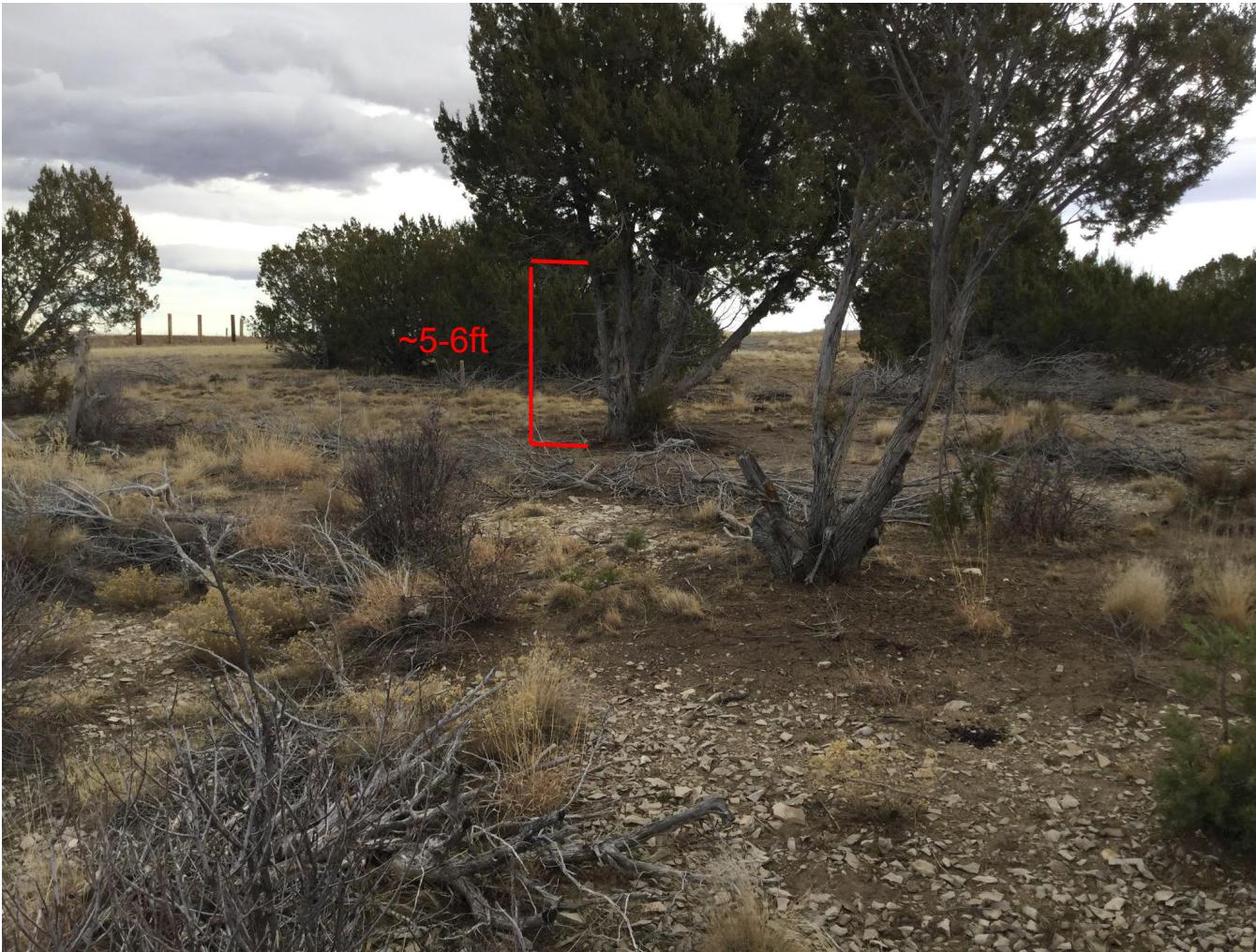
This is the same site 6 years post treatment.

Treatment of juniper stands involves clearing and highlining juniper trees and piling cut material on contour through the thinned area. At the time this photo was taken, the site had recently been grazed during the dormant season.



Same photo point as previous photo. Notice shrub in foreground.

Over this site, there was a 33% reduction of canopy, with an additional 15-20% highline on remaining trees.. Notice a significant increase in grass. Shrubs are still thriving (senesced in this picture during winter). Hydrologic function has been significantly improved in this site.



An example of "Highlining". These highlined trees will provide dappled shade to the project area. We have realized that highlining is a preferred strategy to clearing because of this effect. The dapple shade increase productivity in grass species during the extreme hot temperatures of mid to late summer.



This picture illustrates the importance of starting projects high in the watershed. This project was started at the edge of the grassland and pinyon juniper forest. This ensures that significant runoff events do not compromise the project work, and blends the two ecological sites together well.



This is the second treatment site on treatment day.. The "biomass wattles" are stacked 3-4 feet tall. The "biomass waddles" in the previous pictures from treatment site 1 were initially the same size.

Notice the pinyon pine in the left side of the picture. All pinyons are left intact to encourage population growth of this nut-bearing species.



This is the same site 4 years post treatment. Some positive results are being realized in the grass production. This pasture had been recently grazed during the dormant season and has heavy mule deer use during the winter.



This is the positive effect from the biomass wattles. The dark area is where the juniper needles fall and are incorporated into the soil as organic matter. This zone has higher moisture retention and is the "Spark Plug" that lights off the start of positive effects seen across the treatment sites.



Another example of the moisture holding capacity in the waddles.



Looking uphill at the majority of treatment site 2.

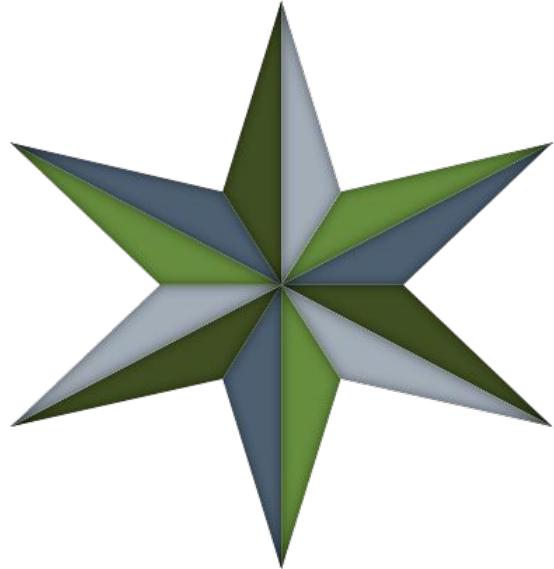
Adding a variety in the type of cuts made to junipers provides various perching opportunities for birds. Increasing line of sight distances while maintaining cover has increased deer and elk use of the treatment sites. Edge effect through the site has increased grass and wildlife diversity and production.



The positive aggregation of soil particles above the biomass waddle (foreground) compared to below. The color difference in the background is white shale, which has been lightly covered up by soil in the foreground.



This final picture is back at the first site looking most of the project site. The difference above and below the biomass waddles is striking. It's very apparent in this photo the amazing amount of positive gains that can be made from appropriate, prescriptive management.



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