BEAR Creek — Oregon

Bear Creek is located at 3,500 feet elevation in the high desert of central Oregon. Precipitation

averages approximately twelve inches per year. Peak runoff normally occurs in mid to late February and summer thunderstorms are frequent.

This site within the Prineville District of the Bureau of Land Management has been grazed by domestic livestock since the late 1800s.

Prior to 1976 the riparian area was within a single pasture licensed for 72 animal unit months (AUMs) of forage from April-September. (One AUM = the amount of forage necessary to sustain a cow and calf for one month.)

Under this grazing strategy streamside vegetation was low in diversity and productivity. Streambanks were actively eroding. The stream channel was deeply incised and contained medium to high sediment loads. Summer streamflow was often intermittent and low in quality.

In August 1976 Bear Creek was wide, shallow, sediment-laden and warm. The stream was actively eroding the cutbank on the left.

In 1976-78, the BLM partially rested the area from grazing to restore the productivity of the riparian area.

In 1979 and 1980, the area was grazed for one week in September. In 1981-84 it was not grazed. In 1983 juniper trees on adjacent uplands were thinned to improve livestock forage and watershed conditions.

In 1985, the BLM divided the pasture containing the riparian area into three pastures and allowed grazing from the time of spring runoff (mid February) until April 15. Vegetation was allowed to regrow the rest of the year to protect streambanks against high runoff from summer thunderstorms and runoff the following spring. This regrowth also provided livestock forage for the following year.

As a result, streambanks stabilized, reducing erosion and sediment production. This increased stability minimized stream channel damage from a major thunderstorm in 1987 that extensively damaged comparatively poor condition