

Attachment A



Photo 1. Heavily trampled and altered stream banks on the South Fork Murderers Creek, immediately downstream of 2480-209 road crossing of the creek in the MCA, October 20, 2007. As shown in the photo, bank alteration was much greater than 20%, as corroborated by the measurements of Christie, resulting in high levels of bank instability and degraded stream conditions. The dearth of deep-rooted vegetation on the banks, caused by grazing, together with the vulnerable stream bank soils, render the stream banks extremely susceptible to alteration by livestock grazing. The bank instability and bank alteration has contributed to the extremely high levels of fine sediment in the stream bottom visible in the photo. The high levels of fine sediment degrade steelhead habitats in a variety of ways that reduce the survival and production of steelhead.



Photo 2. Another view of the same area as in Photo 1, heavily trampled and altered stream banks on the South Fork Murderers Creek, immediately downstream of 2480-209 road crossing in the MCA, October 20, 2007. Bank alteration was much greater than 20% in this area, as corroborated by the measurements of Christie, resulting in high levels of bank instability and degraded stream conditions. The dearth of deep-rooted vegetation on the banks, caused by grazing, together with the vulnerable stream bank soils, make the stream banks extremely susceptible to alteration by livestock grazing. The bank instability and bank alteration has contributed to the extremely high levels of fine sediment in the stream bottom visible in the photo. The high levels of fine sediment degrade steelhead habitats in a variety of ways that reduce the survival and production of steelhead.



Photo 3. Heavily trampled and altered stream banks on Big Boulder Creek (foreground) and Wray Creek, just upstream of their confluence in the LMFA, October 19, 2007. As shown in the photo, bank alteration was much greater than 20%, resulting in high levels of bank instability and degraded stream conditions. The dearth of deep-rooted vegetation on the banks, caused by grazing, together with the vulnerable stream bank soils renders the stream banks extremely susceptible to alteration by livestock grazing. The bank instability and bank alteration have contributed to the extremely high width/depth ratio in this stream, which along with the loss of riparian vegetation from grazing, is elevating water temperature. High water temperatures are a pervasive problem afflicting steelhead habitat in streams draining the LMFA.



Photo 4. Heavily trampled and altered stream banks on Mosquito Creek in the LMFA, October 19, 2007. As shown in the photo, bank alteration was much greater than 20%, resulting in high levels of bank instability and degraded stream conditions. The dearth of deep-rooted vegetation on the banks, caused by grazing, together with the vulnerable stream bank soils renders the stream banks extremely susceptible to alteration by livestock grazing. The bank instability and bank alteration have contributed to the extremely high width/depth ratio in this stream, which along with the loss of riparian vegetation from grazing, is elevating water temperature. High water temperatures are a pervasive problem afflicting steelhead habitats in streams draining the LMFA.



Photo 5. Heavily trampled and altered stream banks on Coyote Creek in the LMFA, October 19, 2007. As shown in the photo, bank alteration was much greater than 20%, resulting in high levels of bank instability and degraded stream conditions. The dearth of deep-rooted vegetation on the banks, caused by grazing, together with the vulnerable stream bank soils renders the stream banks extremely susceptible to alteration by livestock grazing.



Photo 6. Another view of the heavily trampled and altered stream banks on Coyote Creek in the LMFA, October 19, 2007. Photo was taken near the same location as Photo 5. As shown in the photo, bank alteration was much greater than 20%, resulting in high levels of bank instability and degraded stream conditions. The dearth of deep-rooted vegetation on the banks, caused by grazing, together with the vulnerable stream bank soils renders the stream banks extremely susceptible to alteration by livestock grazing.



Photo 7. Heavily trampled and altered stream banks of Wray Creek in the LMFA, October 19, 2007. As shown in the photo, bank alteration was much greater than 20%, resulting in high levels of bank instability and degraded stream conditions. The dearth of deep-rooted vegetation on the banks, caused by grazing, together with the vulnerable stream bank soils renders the stream banks extremely susceptible to alteration by livestock grazing. The bank instability and bank alteration have contributed to the extremely high width/depth ratio in this stream, which along with the loss of riparian vegetation from grazing, is elevating water temperature. High water temperatures are a pervasive problem in streams draining the LMFA.



Photo 8. Another view of the heavily trampled and altered stream banks of Wray Creek in the LMFA, October 19, 2007. As shown in the photo, bank alteration was much greater than 20%, resulting in high levels of bank instability and degraded stream conditions. The dearth of deep-rooted vegetation on the banks, caused by grazing, together with the vulnerable stream bank soils renders the stream banks extremely susceptible to alteration by livestock grazing. The bank instability and bank alteration have contributed to the extremely high width/depth ratio in this stream, which along with the loss of riparian vegetation from grazing, is elevating water temperature. High water temperatures are a pervasive problem afflicting steelhead habitat in streams draining the LMFA.