

Supplementary material:

Restoration of riparian areas following the removal of cattle in the Northwestern Great Basin

In Environmental Management

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On the following pages are 64 sets of photographic pairs from Hart Mountain National Antelope Refuge, Oregon showing riparian conditions before the removal of cattle in 1984-1991 compared to after the removal of cattle in 2013-2014. Just above each photo is the site number, year and month of photo, UTM zone, and the UTM coordinates of easting and northing. These photo pairs are available free of charge and if reprinted, this article should be cited as the source.

003 1990 Mar ~11 T 292139 4727664.jpg



003 2014 April 11th ~11 T 292139 4727664.jpg



004 1988 Sep ~11 T 285916 4721524.jpg



004 2013 Sep 8 ~11 T 285916 4721524.jpg







008 1987 summer ~11 T 288303 4719157.jpg



008 2013 Aug 7 ~11 T 288303 4719157.jpg



009 1987 Sep 10 ~11 T 287122 4717806.jpg



009 2013 Aug 7 ~11 T 287122 4717806.jpg



010 1987 Sep 10th ~11 T 286800 4717670.jpg



010 2013 Aug7th ~11 T 286800 4717670.jpg



011 1987 Sep 10th ~11 T 286321 4718024.jpg



011 2013 Aug 7th ~11 T 286321 4718024.jpg



012 1987 Sep 10th ~11 T 286196 4718251.jpg



012 2013 Aug 7th ~11 T 286196 4718251.jpg



014 1984 April 12th ~11 T 280714 4714951.jpg



014 2014 April 11th ~11 T 280714 4714951.jpg



017-01 1985 April 29th ~11 T 281935 4714255.jpg



017-01 2014 April 11th ~11 T 281935 4714255.jpg



017-02a 1985 April ~11 T 282258 4714063.jpg



017-02a 2014 April 11th ~11 T 282258 4714063.jpg



018 1991 May 13th ~11 T 279396 4714030.jpg



018 2014 April 11th ~11 T 279396 4714030.jpg



019 1991 May 13th ~11 T 279323 4713975.jpg



019 2014 April 11th ~11 T 279323 4713975.jpg



020a 1990 Aug 21st ~11 T 279313 4713969.jpg



020a 2013 Aug 8th ~11 T 279313 4713969.jpg



021 1991 May 13th ~11 T 279348 4713933.jpg



021 2014 April 11th ~11 T 279348 4713933.jpg



0007 4:16Z 1990
Rock Creek - Oct 1990



025 1990 Nov ~11 T 279824 4712340.jpg



025 2013 Oct 27th ~11 T 279824 4712340.jpg





028 1990 Oct ~11 T 279031 4710579.jpg



028 2013 Oct 27th ~11 T 279031 4710579.jpg



029 1989 Oct ~11 T 279957 4709984.jpg



029 2013 Oct 27th ~11 T 279957 4709984.jpg



031 1980 Nov ~11 T 279897 4709891.jpg



031 2013 Oct 27th ~11 T 279897 4709891.jpg



032 1984 summer ~11 T 283136 4709514.jpg



032 2013 Aug 12th ~11 T 283136 4709514.jpg





037 1990 Oct ~11 T 275203 4708178.jpg



037 2013 Oct 27th ~11 T 275203 4708178.jpg





042 1989 Oct ~11 T 274579 4705911.jpg



042 2013 Oct 26th ~11 T 274579 4705911.jpg



044 1989 Oct ~11 T 276466 4706593.jpg



044 2013 Oct 27th ~11 T 276466 4706593.jpg



047 1989 Oct ~11 T 276551 4706606.jpg



047 2013 Oct 27th ~11 T 276551 4706606.jpg



048-01 1990 Oct ~11 T 276494 4706590.jpg



048-01 2013 Oct 27th ~11 T 276494 4706590.jpg





050 1990 Oct ~11 T 276562 4706509.jpg



050 2013 Oct 27th ~11 T 276562 4706509b.jpg



051 1991 Sep 20th ~11 T 277040 4706048.jpg



051 2013 July 25th ~11 T 277040 4706048.jpg



052 1991 Sep 30th ~11 T 277653 4704941.jpg



052 2013 July 25th ~11 T 277653 4704941.jpg



053 1991 Sep 28th ~11 T 277725 4704832.jpg



053 2013 July 25th ~11 T 277725 4704832.jpg



054 1989 July ~11 T 277944 4704550.jpg



054 2013 Aug 16th ~11 T 277944 4704550.jpg



057 1984 July ~11 T 277966 4704529.jpg



057 2013 July 25th ~11 T 277966 4704529.jpg



061 1985 Aug 13th ~11 T 278040 4704495.jpg



061 2013 Aug 16th ~11 T 278040 4704495.jpg



063 1988 Aug ~11 T 275585 4703988.jpg



063 2013 Aug 10th ~11 T 275585 4703988.jpg



064 1991 Apr ~11 T 282692 4702737.jpg



064 2014 Apr 11th ~11 T 282692 4702737.jpg



065 1987 fall ~11 T 276490 4700915.jpg

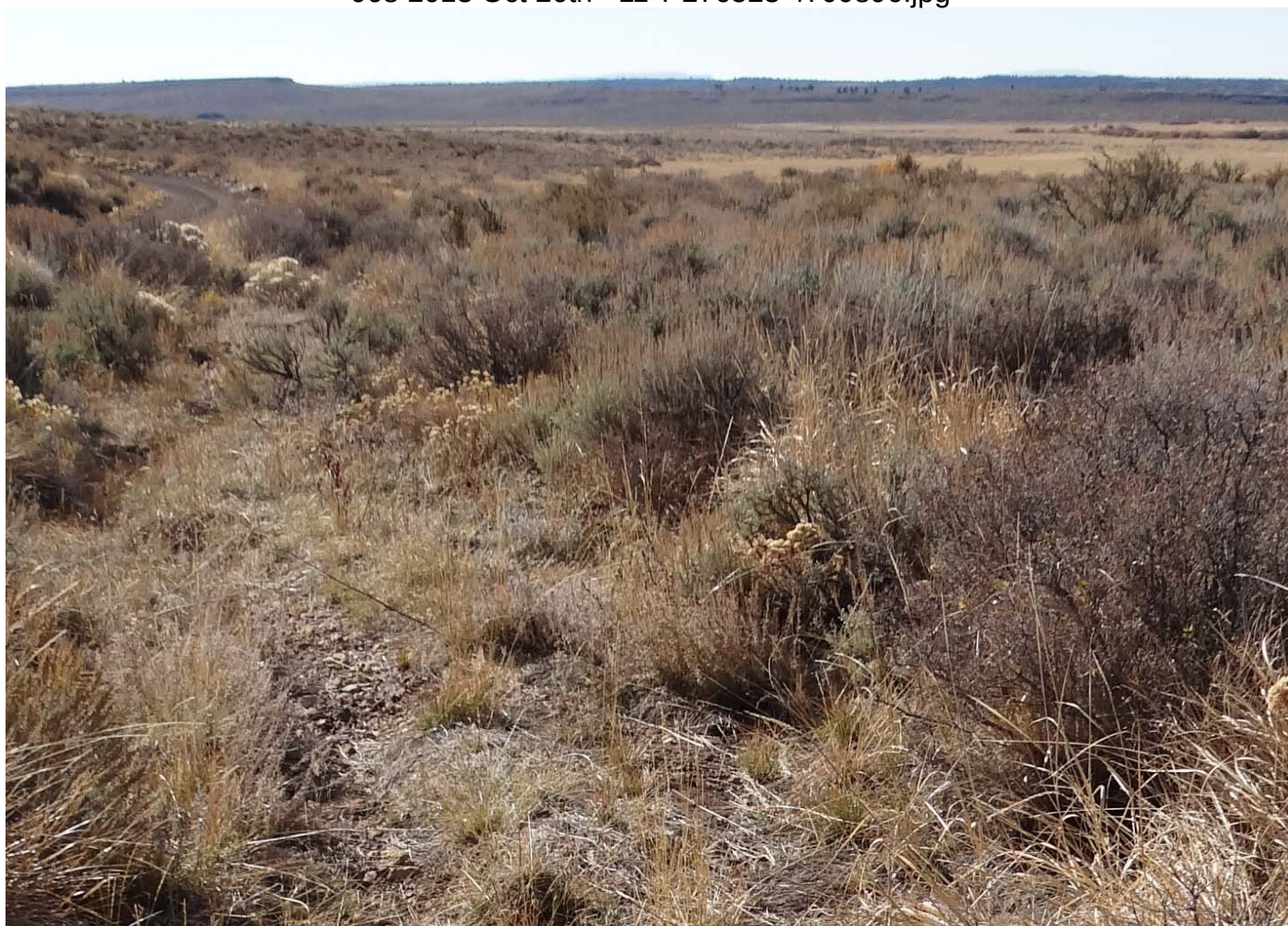


065 2013 Oct 26th ~11 T 276490 4700915.jpg





068 2013 Oct 26th ~11 T 276523 4700896.jpg



069a 1989 summer ~11 T 272773 4700844.jpg



069a 2014 April 12th ~11 T 272773 4700844.jpg



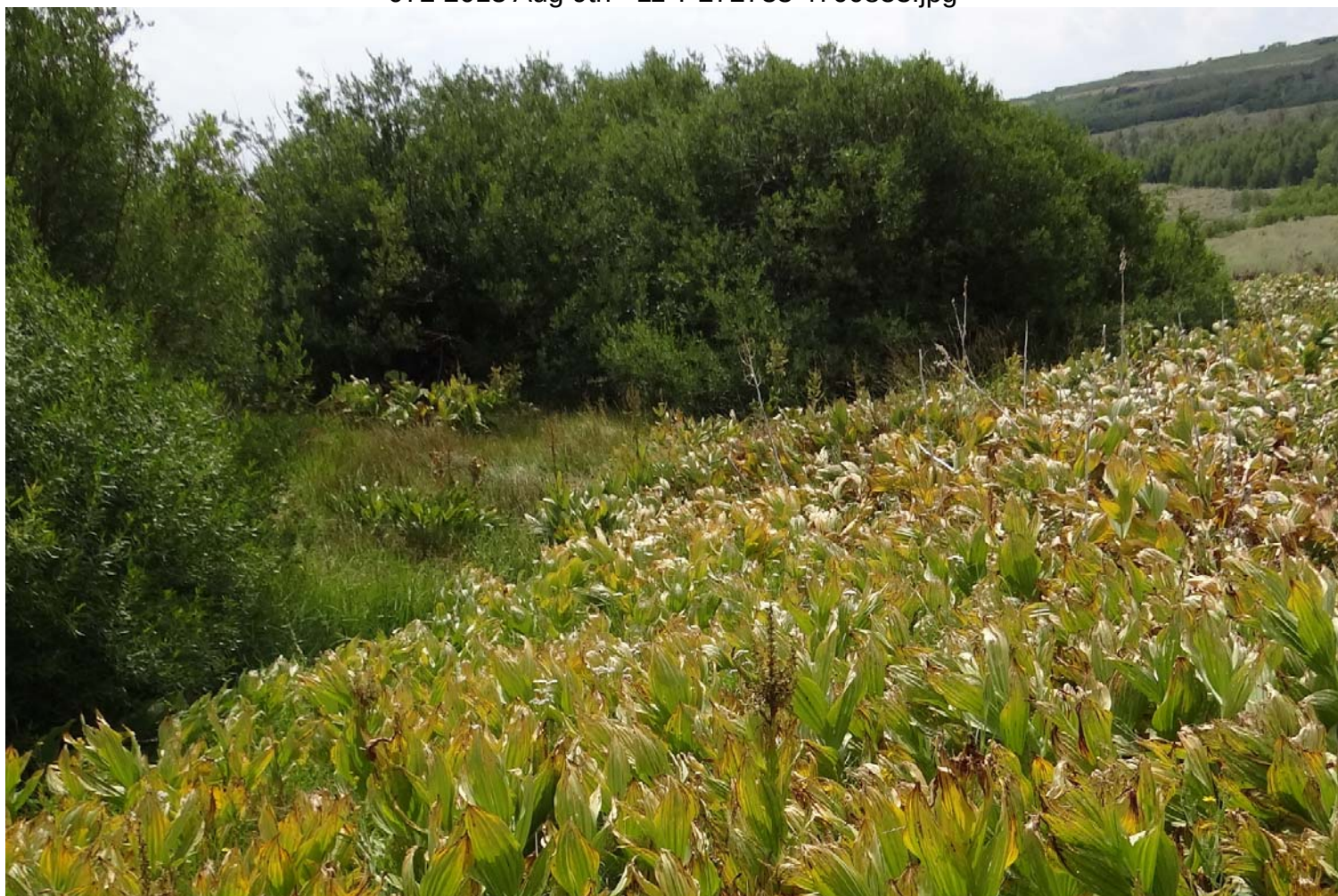
070 1990 Oct ~11 T 272756 4700967.jpg



3007.4.169.1990
Stockade Creek
Oct 1990

070 2013 Oct 26th ~11 T 272756 4700967.jpg





073-01 1988 ~11 T 272783 4700769.jpg



073-01 2013 Aug 9th ~11 T 272783 4700769.jpg





074 2013 Aug 9th ~11 T 278042 4700143.jpg



075 1988 ~11 T 277899 4699969.jpg



075 2013 Aug 9th ~11 T 277899 4699969.jpg



076 1987 ~11 T 277734 4699817.jpg



076 2013 Aug 9th ~11 T 277734 4699817.jpg



079 1990 Nov ~11 T 275505 4697863.jpg

3007 4.166.1990 Guano Creek South of Post Meadow - Nov 1990



079 2013 Oct 26th ~11 T 275505 4697863.jpg



080b 1990 Apr ~11 T 274062 4696303.jpg



080b 2014 Apr 11th ~11 T 274062 4696303.jpg



083-01 1990 Apr ~11 T 273645 4694808.jpg



083-01 2014 April 11th ~11 T 273645 4694808.jpg



084 1990 Apr ~11 T 273762 4694666.jpg



084 2014 Apr 11th ~11 T 273762 4694666.jpg



085 1990 Apr ~11 T 273636 4694639.jpg



085 2014 April 11th ~11 T 273636 4694639.jpg



088-01 1991 Aug 26th ~11 T 279284 4692412.jpg



088-01 2013 Aug 14th ~11 T 279284 4692412.jpg



088-03 1989 Sep ~11 T 278066 4693109.jpg



088-03 2013 Oct 25th ~11 T 278066 4693109.jpg



090 1989 Aug ~11 T 279579 4692311.jpg



090 2013 Aug 14th ~11 T 279579 4692311.jpg



091 1989 Oct ~11 T 279569 4692283.jpg



091 2013 Oct 25th ~11 T 279569 4692283.jpg



092-01 1989 Oct ~11 T 279776 4692304.jpg



092-01 2013 Oct 25th ~11 T 279776 4692304.jpg





093 1989 Sep 12th ~11 T 278751 4688109.jpg

3007.4.130.1989

Guano Creek in Reservoir Lk. Unit - 9-12-89?



093 2013 Aug 14th ~11 T 278751 4688109.jpg



094 1990 Nov ~11 T 278922 4687978.jpg



094 2013 Oct 25th ~11 T 278922 4687978.jpg



095 1990 Oct ~11 T 278914 4687942.jpg



095 2013 Oct 25th ~11 T 278914 4687942.jpg



096 1984 Aug 16th ~11 T 291824 4687557.jpg



096 2013 Aug 14th ~11 T 291824 4687557.jpg

