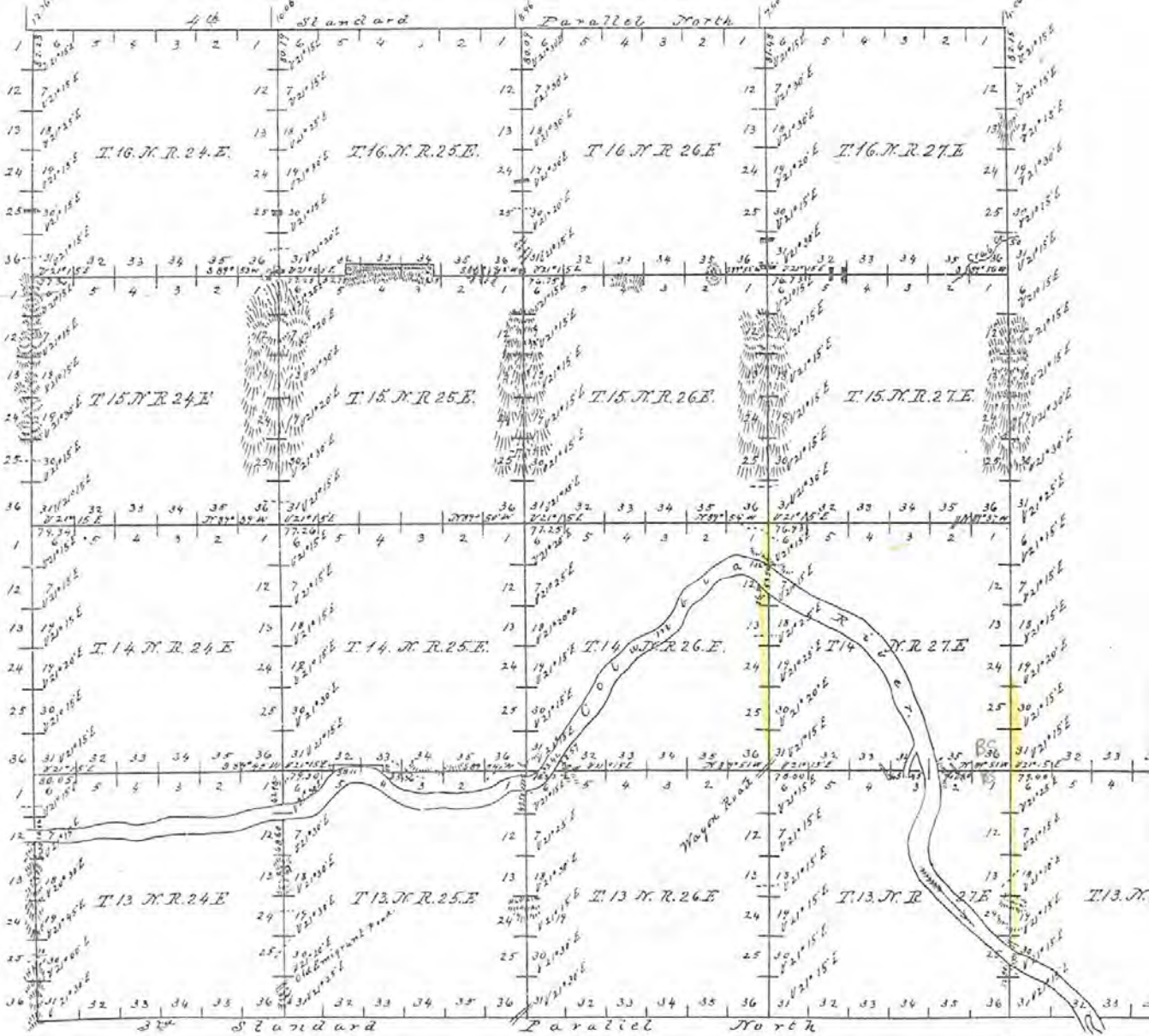


# 1867 General Land Office survey of township lines



Designated	By whom Surveyed	Contract		Amt of Survey			When Surveyed	When chargeable in the Genl. acct.
		No	Date	Miles	Chains	Links		
Lines	A. H. Simmons	93	13 <sup>th</sup> February 1867	203	61	9	21 <sup>st</sup> June 1867	14 <sup>th</sup> Dec. 1868

May 1867

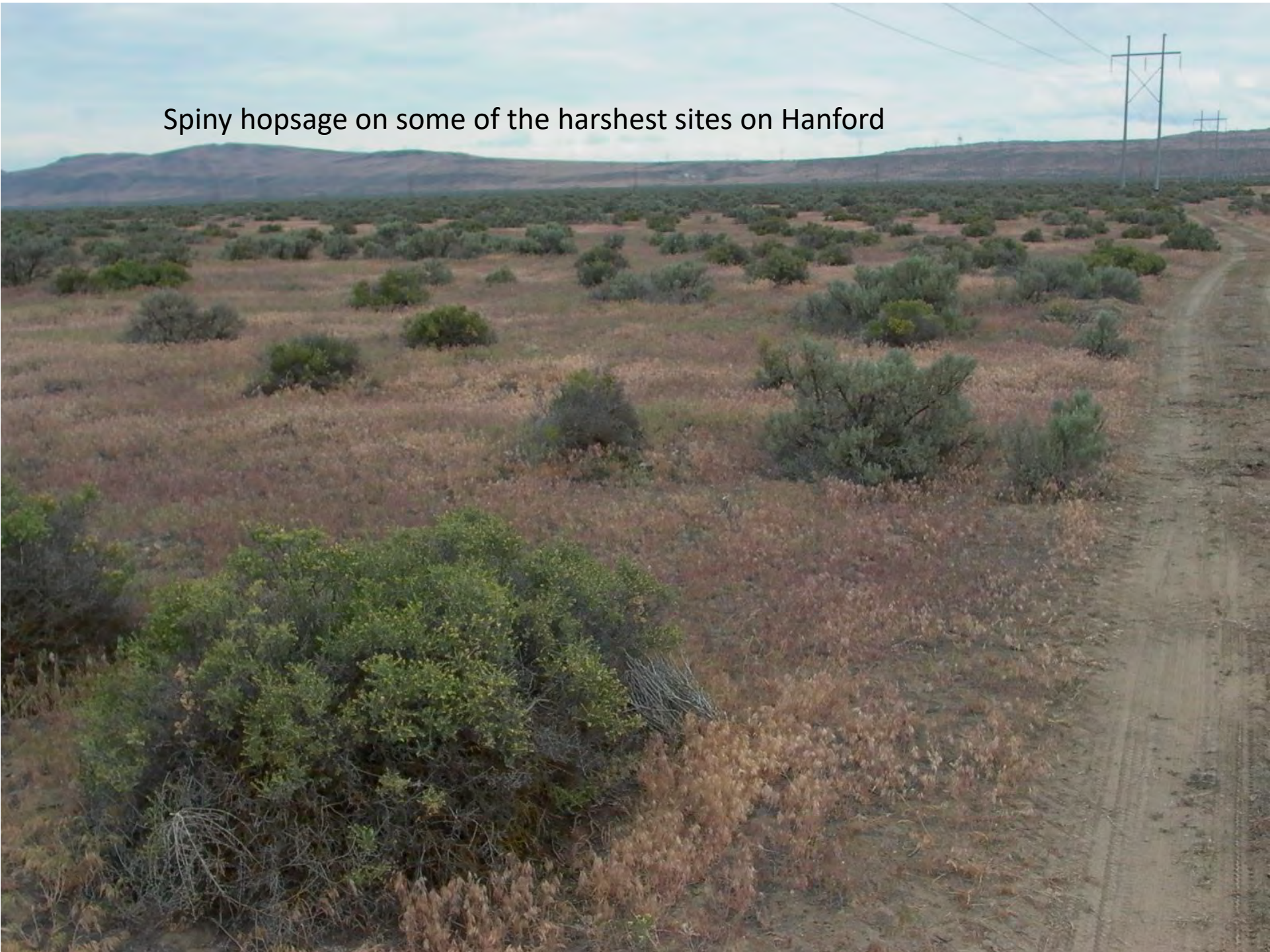
1861 502  
 14 27 North Boundary  
 1867 14 27 North Boundary  
 T14 R27E  
 1867 10.00 Set charred stake & post in mound of earth with  
 file for 1/4 Sec. cor.  
 10.00 Set charred stake & post in mound of earth, with  
 file for cor. to Secs. 2, 4, 5 & 6. Land level & sandy.  
 Vegetation White & Black Sage and grass  
 "White & Black Sage & grass"  
 Won N of Sec 4 1867 10.00 Set charred stake & post in mound of earth  
 with file for 1/4 Sec. cor.  
 10.00 Set charred stake & post in mound of earth  
 with file for cor. to Secs. 2, 4, 5 & 6.  
 Land sandy. Vegetation bunch grass BG.  
 Won N of Sec 5 1867 10.00 Set charred stake & post in mound of  
 earth with file for 1/4 Sec. cor.  
 10.00 Set charred stake & post in mound of  
 earth with file for cor. to Secs. 2, 4, 5 & 6.  
 Land sandy level. Vegetation bunch grass & White Sage.  
 BG & White Sage  
 Won N of Sec 6 1867 10.00 Set charred stake & post in mound  
 of earth with file for 1/4 Sec. cor.  
 10.00 Set charred stake & post in mound  
 of earth with file for cor. to Secs. 2, 4, 5 & 6.  
 Land level & sandy. Vegetation principally White Sage  
 General Description  
 This township contains the village of White  
 Sulphur in which place there are but  
 few inhabitants who derive their  
 support from the travel passing through  
 to British Columbia, & from pastoral  
 pursuits to which this township is a  
 certain extent is well adapted.  
 White Sage and Bunch Grass  
 being excellent feed for stock of all  
 kinds.  
 5/10/1867  
 Completed May 10 - 1867.  
 1867



## Winterfat distribution and cover



Spiny hopsage on some of the harshest sites on Hanford







*From calflora.org, accessed online*

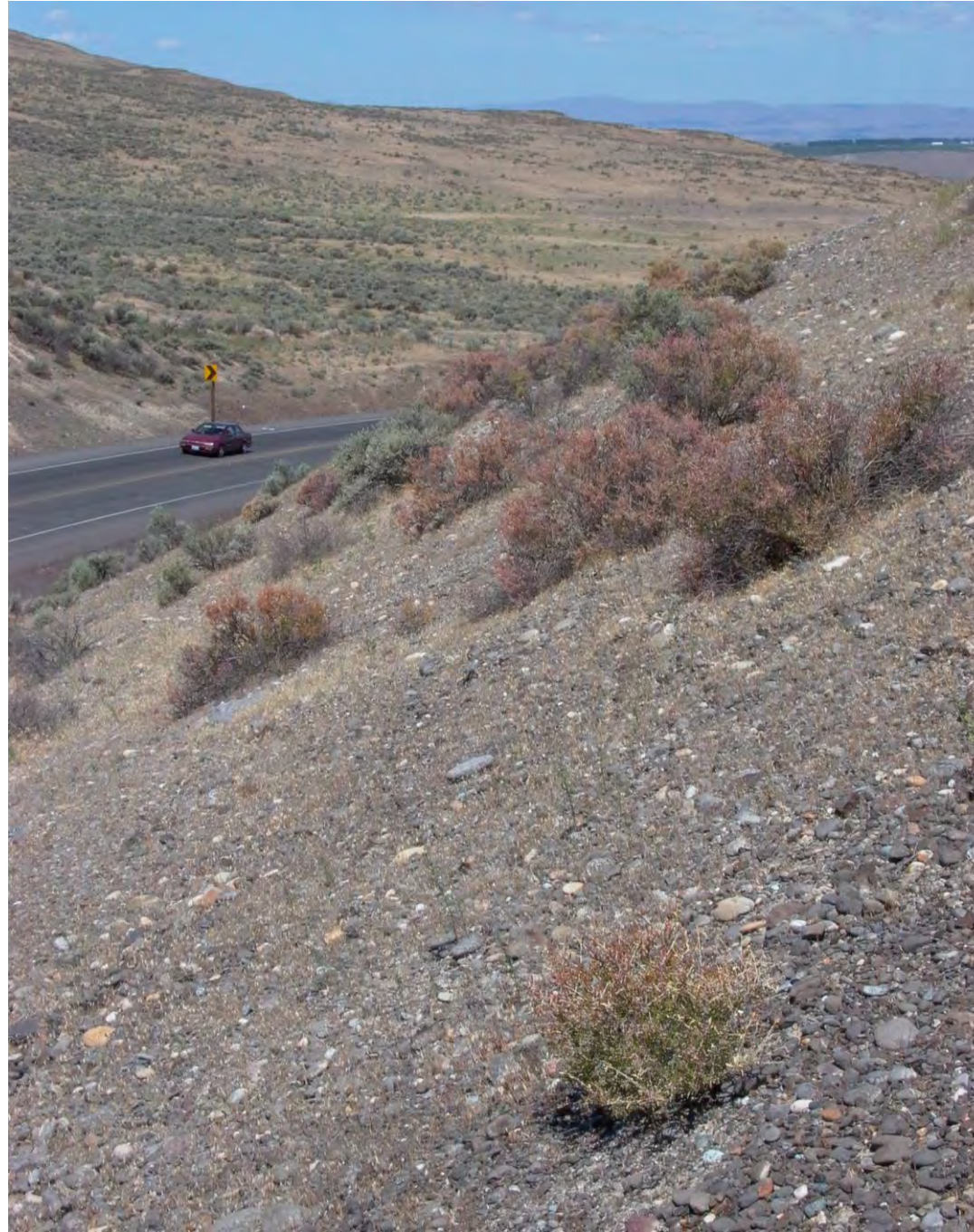




Spiny hopsage established on Vernita Grade road cut, southerly aspect on flood gravels.



Close up of established spiny hopsage area on Vernita Grade road cut, showing coarseness of flood gravels.





The only 'seedling' of a spiny hopsage plant that we've ever found, and we've been looking. Note how harsh the site is.







***White Bluffs area before and after wildfire  
Habitat previously included winterfat on slopes and  
spiny hopsage on flat surfaces.***







Green ephedra, big sage (and Snake River Wheatgrass) in 'borrow pit'



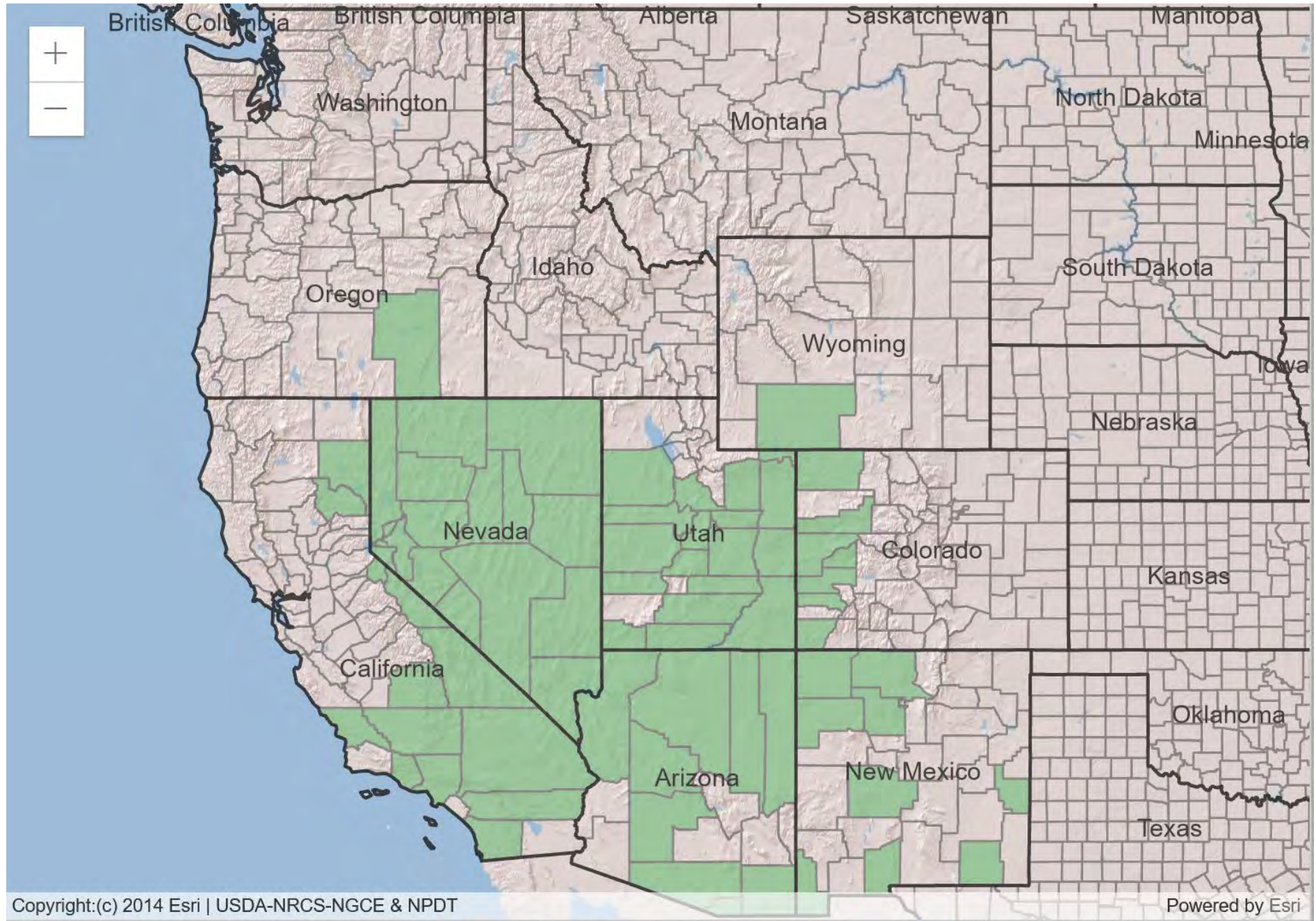


Green ephedra (and Snake River Wheatgrass) in 'borrow pit'





# Green ephedra distribution map





A photograph of a desert landscape with sandy soil and sparse vegetation. In the center, there is a small, bushy green plant with reddish-brown stems, identified as an antelope bitterbrush seedling. To its right, a black scale bar with a silver band is placed on the ground for size reference. The text is overlaid on the lower half of the image.

***Antelope bitterbrush seedlings from apparent  
Scatterhords of heteromyid rodents***



A photograph of a small, bushy plant with green, lobed leaves and reddish-brown stems growing in a sandy environment. The plant is the central focus, with its base buried in the sand. The surrounding sand is light-colored and textured. In the foreground, there are some small, green, spiky plants and a few small pink flowers. In the background, there are some dry, brown sticks and more green plants.

***Rodent handling of seeds before burying  
increases germination rates***















## ***Cheatgrass 'crop circles'***





































