



United States Department of Agriculture
Natural Resources Conservation Service

Making Better Maps for Color Blind Producers

A Factsheet from the Washington State Civil Rights Advisory Committee

Roughly 1 in 20 people have some sort of color vision deficiency. Color blindness is a genetic condition that occurs more frequently in men (1 in 10) than women. It can occur when there is a problem with the color-sensing cones in the eye's nerve cells.

Red and green color deficiency is the most common, but some people have trouble seeing blue and yellow. These people almost always have trouble seeing red and green colors as well. In rare cases people with achromatopsia can't see any color at all. Source: WebMD



You can use a website called [Vischeck](http://www.vischeck.com/vischeck/) to upload image files and see if your map is legible for a color blind person.
<http://www.vischeck.com/vischeck/>

This is an example of a typical NRCS Plan Map for a **non-color blind** producer.



This is how a producer with **red-green** color deficiency would see that same Plan Map.

NOTICE: The red lines over the forest, the red section lines and the green rectangle are very difficult to see.





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Map Making Tips

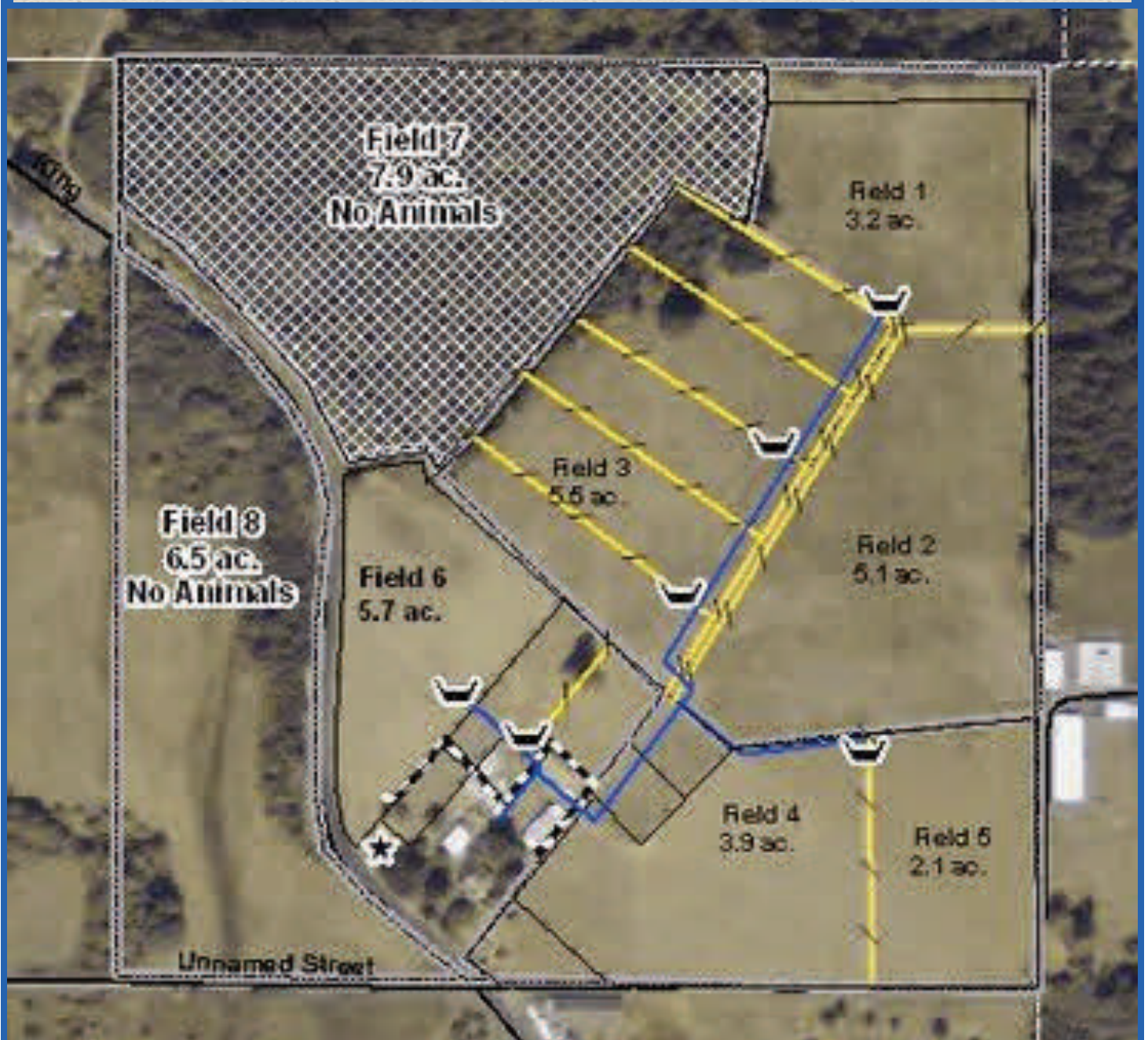
- Xerox your Plan Map to black and white and see if the practices are still understandable. If they are, then most likely your color blind producer will be able to read it.
- Use high contrast colors.
- Use symbols, shapes or patterns to indicate practices instead of colors.
- Recommended colors for **red-green** color deficiency: black, white, dark purple, bright yellow, dark blue, yellow-orange.
- Use easy to read fonts, halos or callout boxes to improve text legibility.

This Plan Map has been adjusted using the tips on the previous page for a producer with red-green color deficiency.

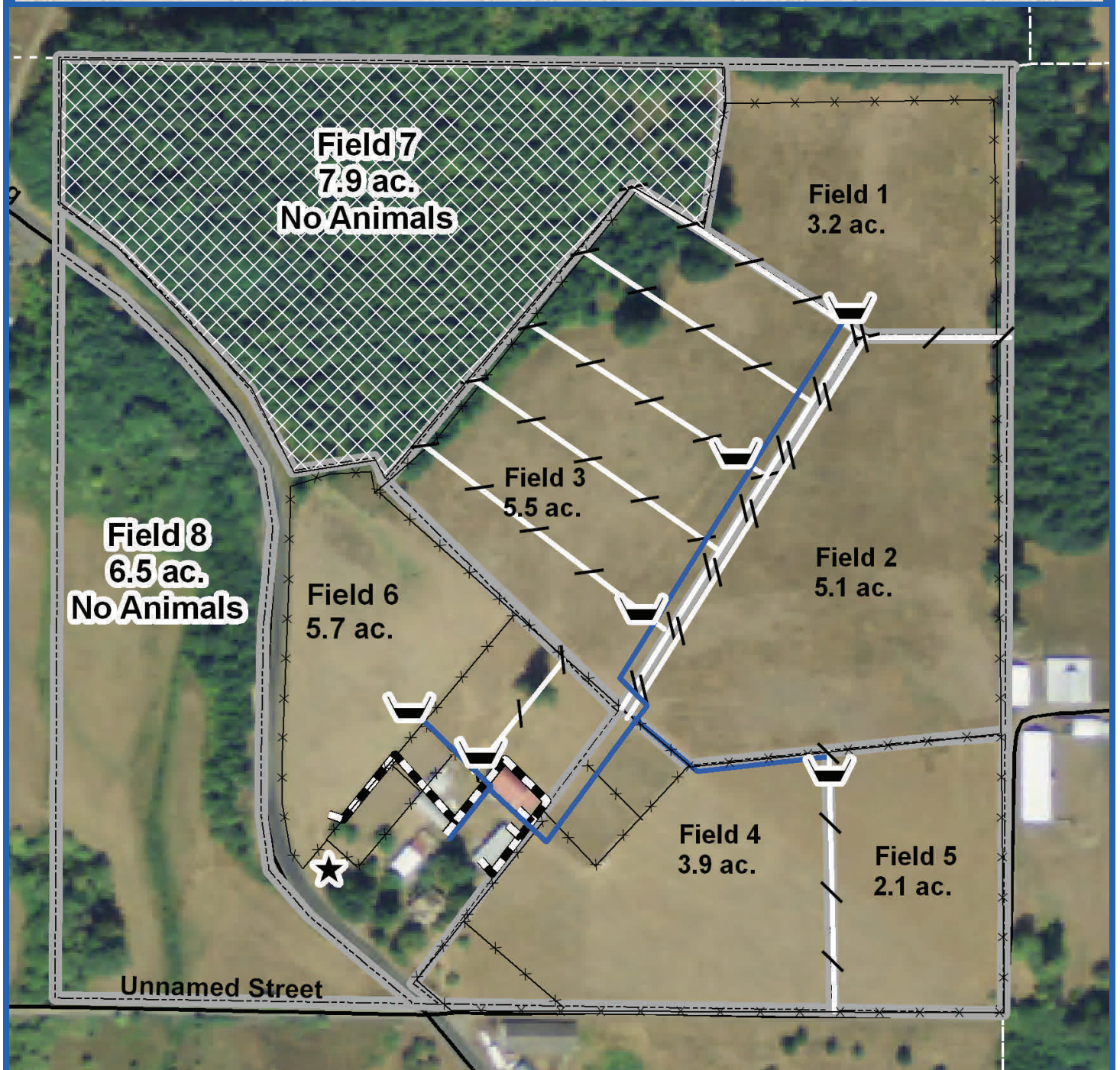


This is what the Plan Map on the previous page looks like after uploading it into Vischeck.

The practice lines, patterns, symbols, colors and fonts are all much more visible for a **red-green** color deficient person.



This Plan Map has been adjusted for a producer with **blue-yellow** color deficiency.



This is what the Plan Map on the previous page looks like after uploading it into Vischeck.

NOTICE: The dark blue line shows up against the brown pasture, but it would not show up against the green trees.

