



Drought adaptation strategies for Eastern Oregon and Washington: Rangelands

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Drought adaptation and rangelands



- A biophysical understanding
- Manage the message
- Not all droughts are the same:
 - How to find drought
- Find a few ideas/tools that work and stick to them



Biophysical understanding



- Reduce invasive species; e.g. cheatgrass
- Maintain perennial grass vigor & cover
- Focus on appropriate grazing regimes
- Promote more appropriate fire regimes



Biophysical understanding

Is this landscape as resilient to
drought as it should be?

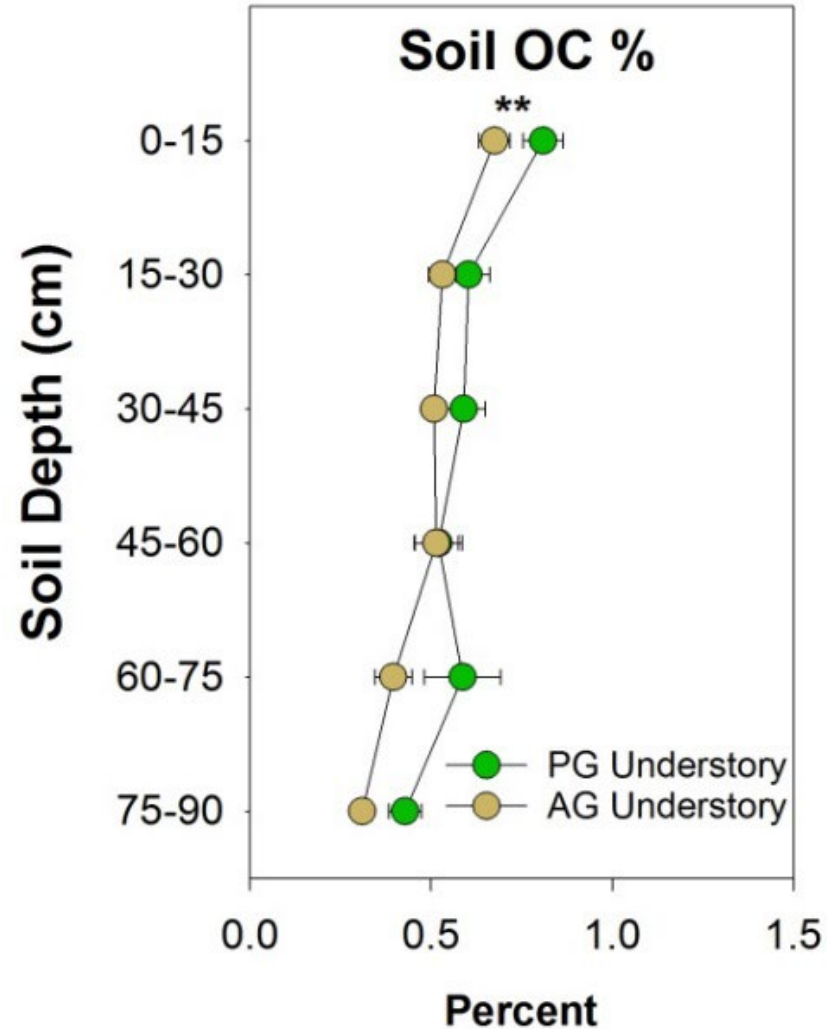
Why or why not?



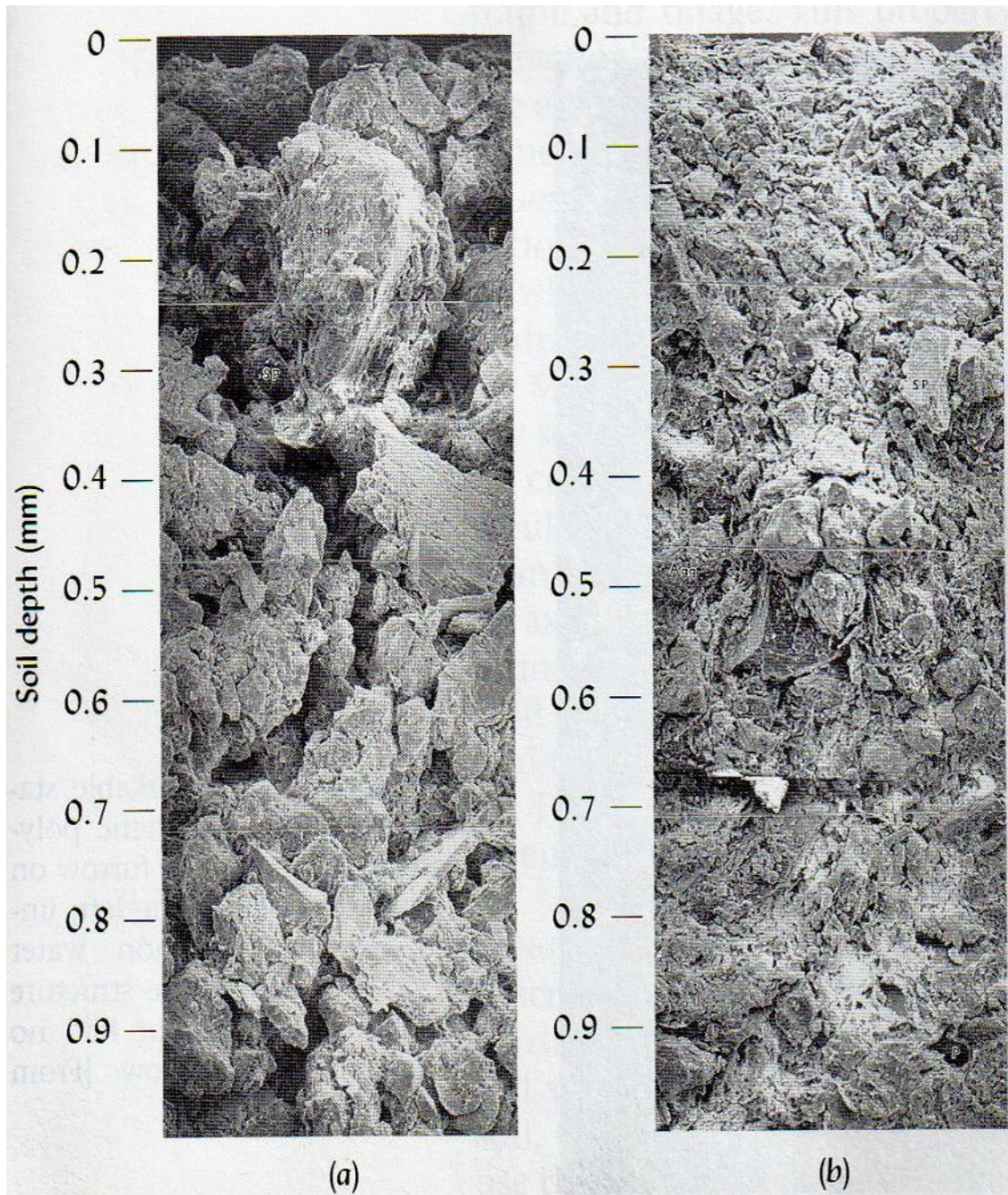
<http://www.orionmagazine.org>



Biophysical understanding

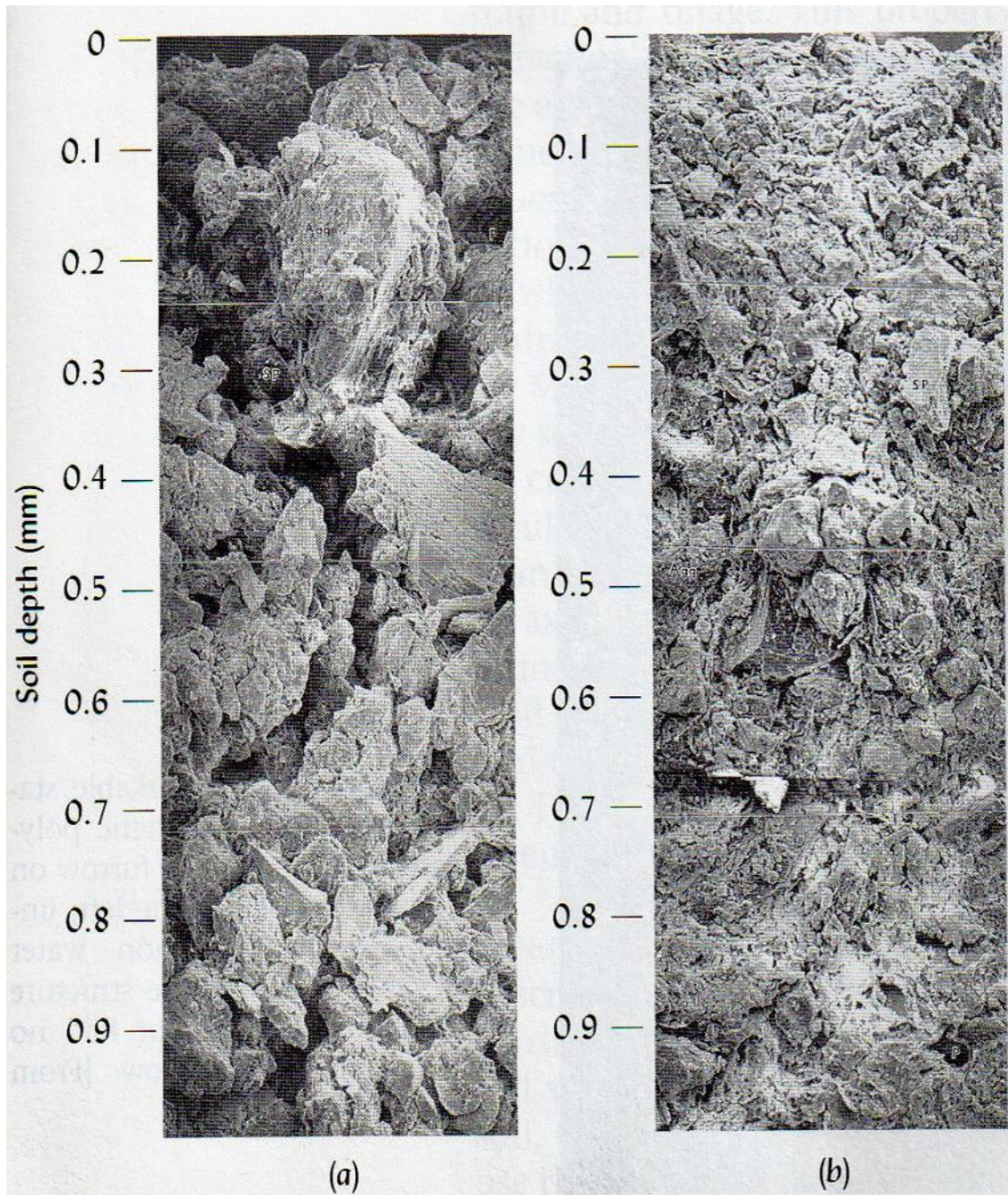


SOC = resiliency



Battle is won or
lost here!

*Courtesy:
Marlon Winger*



Increased infiltration



Increased microbial activity



Increased soil organic matter

*Courtesy:
Marlon Winger*

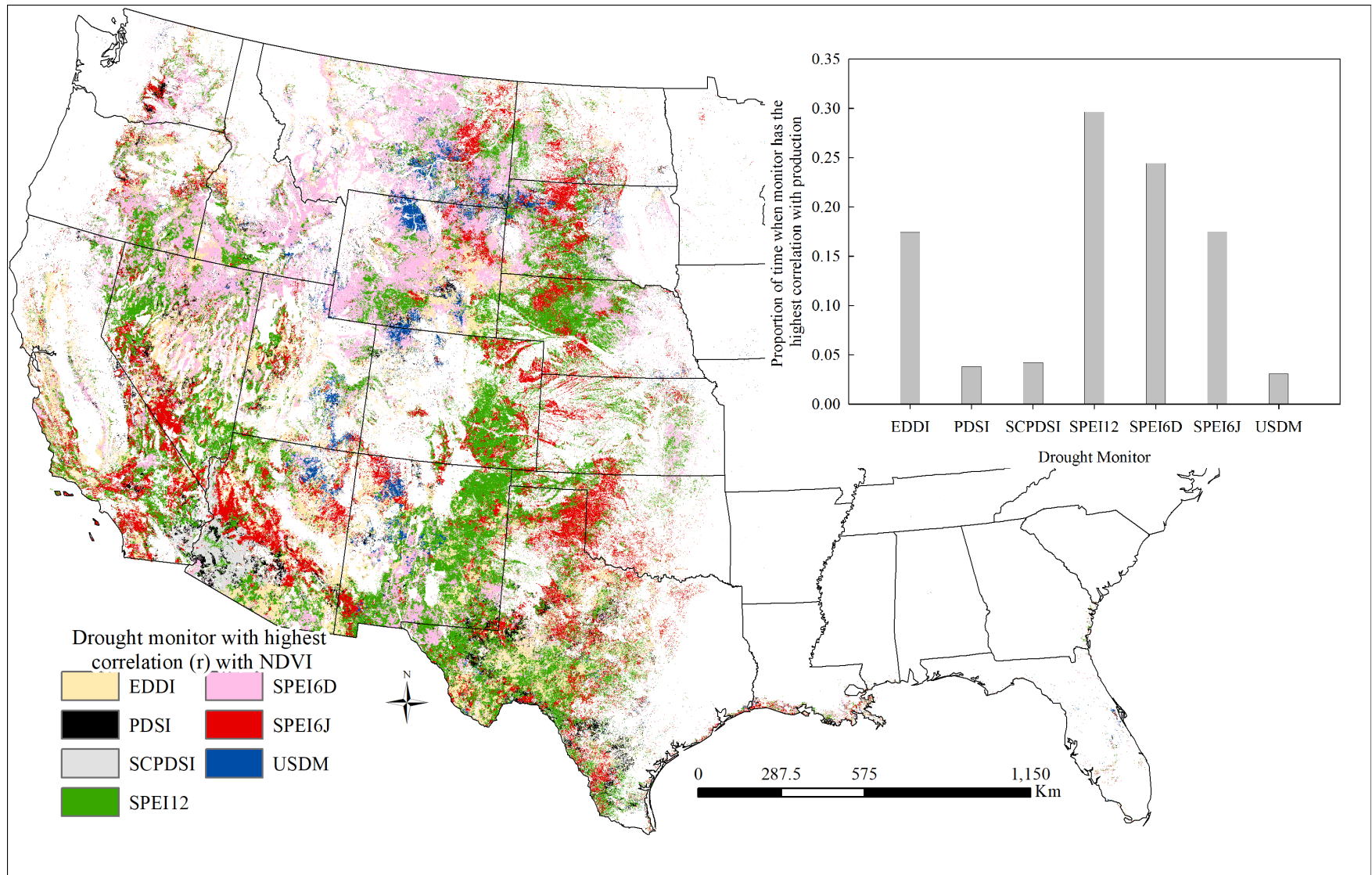
Manage the message



- Often confounding signals
- Be clear about what is the target when we talk about drought
- For example, drought is not 1:1 with forage



Manage the message



Not all droughts are the same

Crops?



<https://droughtreporter.unl.edu/map/>

<https://www.drought.gov/drought/data-gallery/us-crops-and-livestock-drought>

Livestock?



Water?



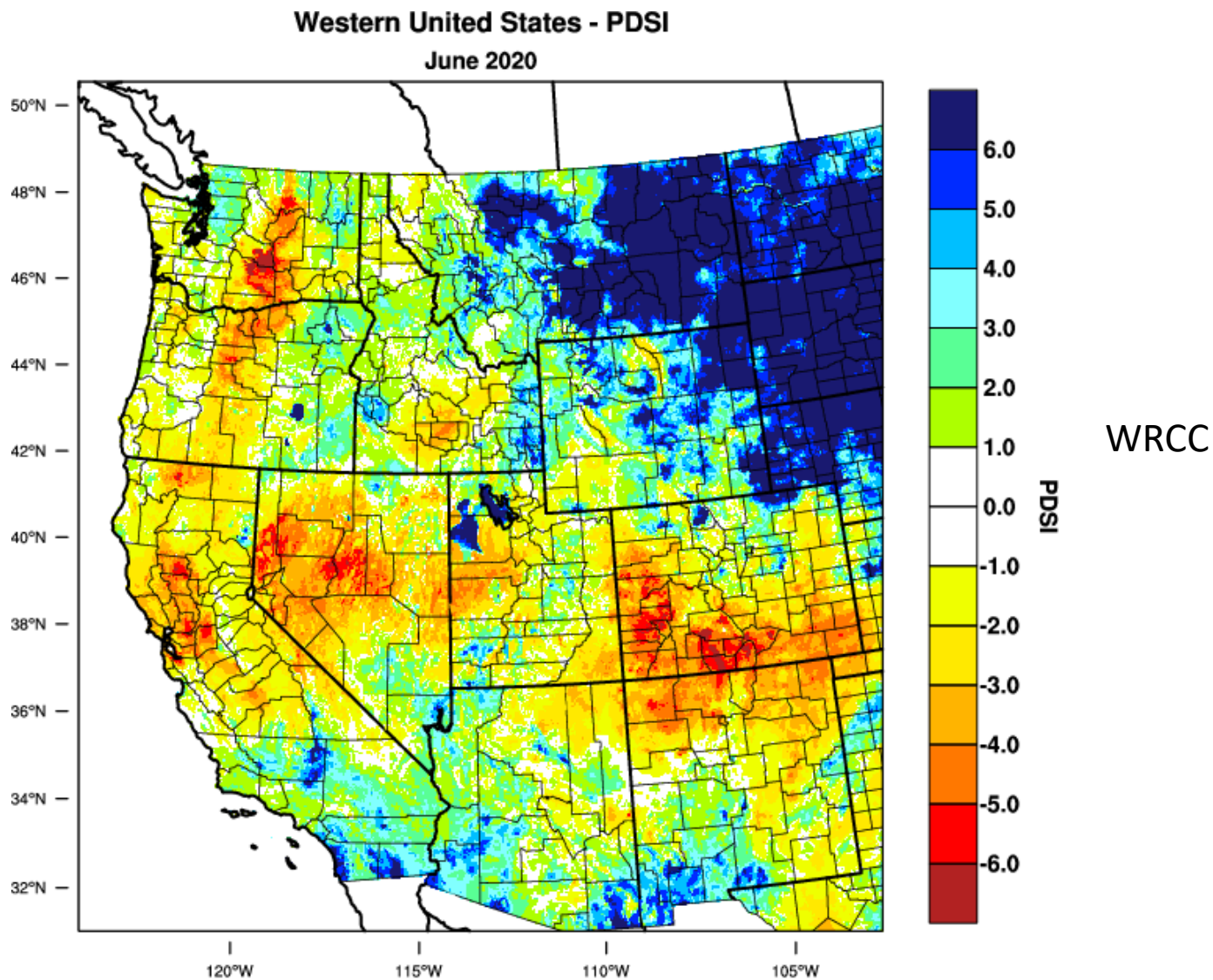
<https://wrcc.dri.edu/wwdt/about.php>

<https://www.fuelcast.net/>

Forage?



Not all droughts are the same



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 16 JUL 2020



Not all droughts are the same

FuelCast (July 28, 2020)

U.S. Fuelcast

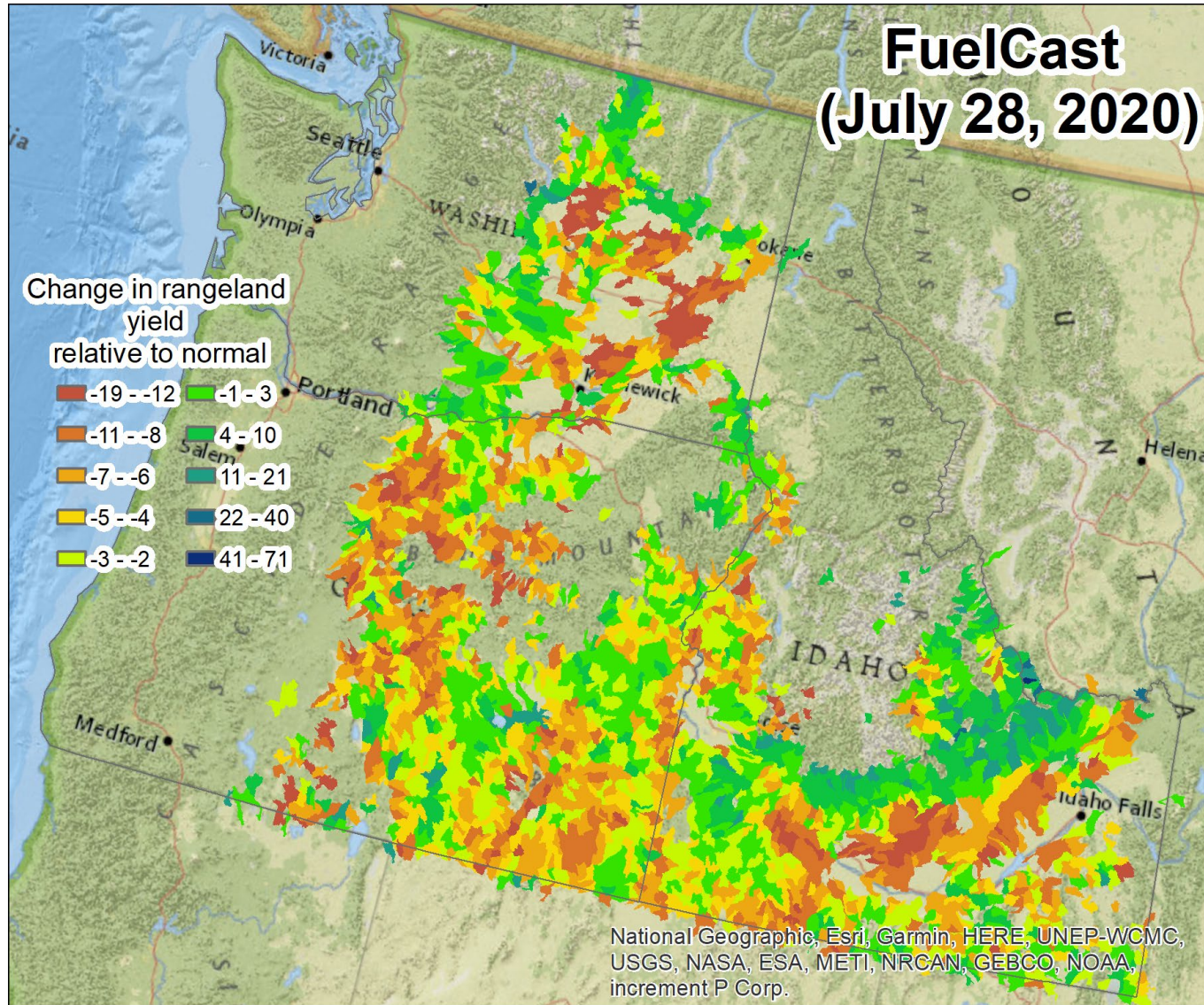
Change in rangeland
yield (fine fuel)
relative to normal



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Not all droughts are the same



A few tools: find a couple that work for you!



3 Tools you might not know about

- 1) [Adaptation Library](#)
- 2) [Livestock producer resiliency stories](#)
- 3) [Near Real Time Forage and Fuel assessments](#)
- 4) [Reading The Tea Leaves](#)

