From:	Juliusson, Lara
To:	Doherty, Kevin
Cc:	Jason Tack; Jason Tack; Todd Lickfett
Subject:	Re: Some Decisions
Date:	Thursday, May 22, 2014 3:38:29 PM

It took 7 minutes 5 seconds to run a focal stats, 54 cell circular moving window (mean) on the 11-state 120 tall sage proportion dataset.

Lara

Lara Juliusson, Geographer/Ecologist
Sage-grouse Energy Team
U.S. Fish and Wildlife Service,
Region 6, Lakewood, CO
Lara_Juliusson@fws.gov
303-236-9876

On Fri, May 16, 2014 at 10:33 AM, Doherty, Kevin <kevin_doherty@fws.gov> wrote:

> Hi all,
> I talked with Tack yesterday about the spatial modeling and we have a few decision points so we can start processing data.
>
> First:
> a minimum mapping unit of **120 x 120m cell** will work for both the eagle and SG folks. To scale these up we would like to have it as a proportion of the habitat type within that pixel. Example, there should be 16 grid cells when we resample up from 30m to 120m cells. If 8 of the cells are grassland we would want the upsampled cell to be 0.5. If 4 of those cells are Tall sage (see below) we would want another raster with a value of 0.25 for the same area.
>
> As far as a few variables to get the process rolling:
>
> ***Landfire Landcover Classes:***
>
> **Grassland**
>
> **Tall sage** = (big sagebrush shurbland, big sagebrush steppe, and mountain sagebrush classes)
>
> **Low Sage** = (low sagebrush shrubland and steppe)
>
> **All Sage** = (Tall sage + Low sage from above)
>
> ******We may not need to build this grid it may be more efficient to just add the first two grids together after processing. Obviously depends on the speed of the moving windows!

Tack and I would also like to test the speed of processing **a 4 mile moving window.** After we have the 120x120 grid cells built, please run a 53 cell circular moving window.

Because Tack and I are mathematically challenged in our last set of emails, you can check our work!
4 mill buffer = [1 mile = 1,609.344 meter] * 4 = 6,437 meters: 6,437 meters / 120 = 53.6. However since we have a 120 cell if we minus 60 meters 53 cells is close.

Please give me a ring if you have any questions. I am working up the full list now and will go through it with Tack, We then should all get on the phone early next week to review/change/modify as needed based upon the group discussion.

Cheers
Kevin

--

Kevin Doherty, PhD

Spatial Ecologist

United States Fish & Wildlife Service

(303) 921-0524
kevin_doherty@fws.gov