**ES Sub-Team meeting**

**1/18/23**

Participants:

1. Colby Brungard
2. Jamin Johanson
3. Suzann Kienast-Brown
4. Jon Maynard
5. Suzanne Mayne
6. Travis Nauman
7. Jess Philippe
8. Greg Schmidt
9. Nathan Roe
10. Shawn Salley
11. Stephanie Shoemaker
12. Jim Thompson
13. Zach Van Abbema
14. Dave White

* Review last month minutes
* Update from other DSM focus team work
  + Quarterly FT meeting TH Jan 26th
* Inventory of member Interest and Skillsets
  + Please send to Suzann if you have not already done so
* Identify goals and timelines
  + Short-term items
    - Meeting frequency
      * Monthly but may adjust based on projects
    - What do members want to get out of each meeting? Discuss the meeting format (presentation, brainstorming, journal club, data review, etc)
      * All of the above
  + Long-term goals
    - Develop framework and workflows to deliver ES-DSM products consistently across special project area (PLU), soil survey area (MLRA), broad climate zones (region), and nationally
      * Institution requires standard scale for products with options for customization
      * Start national scale and resampling techniques to finer scales
      * Training data
        + Constrained by available point data at finer scales
        + Where should this data live? Need a central location
        + State modeling may benefit from site visits related to resource inventory done by FO staff
        + Tag partner data with ecological site
      * Class concepts
        + Groups for larger scales (MLRA, LRU, national)
        + STMs analogous to soil orders – very generalized

Invite folks working on generalized STMs to meeting to present their work – Travis

* + - * + ESGs are desirable for federal partners (BLM, USFS)
    - Create a DSM data covariate library most appropriate for DSM- Site and State mapping
      * On GCP
        + 30m DEM derivatives
        + 30m Landsat derivatives

Have GTAC Landsat disturbance removed but may want something different for this work

* + - * + Want to add Sentinel
    - Develop products that specifically feed decision support tools (CART, CD)
      * There is potential here…keep on the radar
    - Geomorphology/parent material
      * National level maps
      * Work is starting in ME
        + Once workflow is developed, can we apply nationally?
    - Species distribution maps
      * Species association w/in MLRA
      * SDM to ES and STM
      * Need association of species data
      * USGS inhabit model <https://gis.usgs.gov/inhabit/>
* For next meeting: Solicit presentations of current DSM-ES work in the group
  + Steph to present GNP project next month
* Action items
  + Meeting data/time for Feb
  + Steph to present in Feb
  + Quarterly FT meeting

**12/1/22**

Participants:

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6. Travis Nauman
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9. Nathan Roe
10. Shawn Salley
11. Stephanie Shoemaker
12. Jim Thompson
13. Zach Van Abbema
14. Dave White – absent

* Introductions – all
  + Location
  + Brief history/interest
* Overview
  + DSM FT structure – Suzann
  + Team charges/DSS priorities – Suzann
  + Expectations – Suzann
  + Research – Jon/Travis
    - Will share papers on cloudvault
  + IBM work – Shawn
    - Unsupervised classification based on regional inputs
    - First cut for clustering ecological groups
* Discussion – all
  + Where we’re heading (long-term)
    - What concepts do you need for an ecological site pixel?
      * Capability/condition/available management per pixel – overarching DSS goal
      * State mapping
      * Start with broad classes within the first year
    - Dynamic vs static properties
    - National vs regional modeling
  + What is the path forward?
    - Look at other ecosystem types/areas besides the west to test some of the current approaches
    - Training data – where do we have it, how do we assemble it?
      * NASIS tables/reports can now accommodate this type of data
      * Provisional ecological sites – what’s next?
        + Enter observation data into NASIS
        + National instruction in progress
    - Generic attributes with veg phases to identify state – canopy height, density, total cover via remote sensing data
    - Minimum set of properties that apply to all veg types
    - Stratification of the country as a strategy for veg prediction
    - Use soils data to help parameterize the veg mapping
    - Predicting sites as fuzzy concepts with potential as goal?
    - How to use keys?
    - Raster Soil Survey approach with focus on local/regional mapping to create product to inform management
  + Potential products (short-term)
    - National geomorphic map
    - Standards
  + Next meeting discussion
    - Geomorphology/parent material
    - Species distribution mapping
* Determine regular meeting schedule – all
  + Will start with monthly frequency
  + Next meeting will focus on identifying initial goals and timeline
  + Inventory of skillsets/projects for team members

