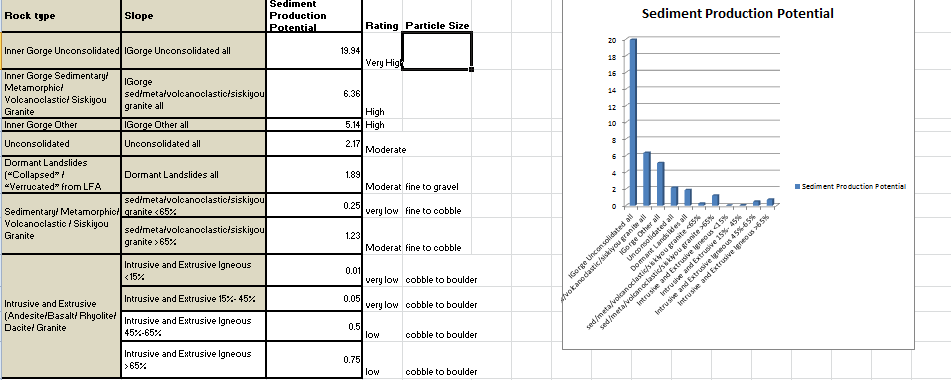
**LTA/LFA DATA MINING ELEMENTS**

**Highest Priority**

1. **Watershed and Aquatic Expression**
   1. *Hydrologic regime*
      1. Climatic Regimes –
         1. PRISM (average annual precipitation/temperature) (ask Chris Ringo for OSU data
         2. NRCS SnoTel? snow depth (source: NRCS website?)
      2. Water storage and routing
         1. Surface runoff (Hydrologic Group) (from SRI or NRCS soil layers)
      3. Groundwater inputs / aquifer recharge
         1. Flow duration
      4. Flooding potential (stream flow amounts) potential flooded area (terrain analysis?)
   2. Physical Expression
      1. Channel density - GIS
         1. Stream type
            1. Rosgen classification – Stream survey data (not comprehensive)
            2. Stream reach response (source, transport, deposition) see Buffington paper 0-3%= deposition, 3-8%=transport, >8%=source
      2. *Disturbance Regimes (needed or embedded above and below?)*
         1. *Floods*
         2. *Wind?*
         3. *Fire response*
      3. *Erosional Processes*
         1. Surface Erosion (disturbed, undisturbed) (need to discuss how to get at this)
         2. Mass Wasting -Jays LTA classification (needs refinement)
         3. Scarps, Avalanche tracks, landslide tracks from SRI point layer and DOGAMI SLIDO
         4. Slope (mean for LFA)
      4. *Sediment Regime*
         1. Production
            1. Source – Base Geology (use Landslide Risk categorization of rock-type erodibility (see Chart at back of doc.)
            2. Size – base on erodibility
         2. *Delivery*
         3. *Aquatic Special Habitats*
            1. Seeps – springs point layer NHD and NWI, SRI point layer?
            2. Ponds - NHD
            3. Streams NHD, perennial, intermittent, ephemeral, any tools to get at pattern?
            4. *Riparian Vegetation??? (here or in veg) – use plant association mapping if available (GNN?),*
         4. *Fish habitat* (The info below only available for areas where fish habitat exists)
            1. Fish Distribution / Maybe have a layer? (Karen to ask Jim)
            2. Spawning Substrate Quality – Stream Survey –
            3. Rearing potential - pools?(source: stream survey- )
         5. *Management Interpretations*
            1. Road construction / limitations - SRI
            2. Recreation opportunities / considerations

Streams, meadows, wetlands, cirques, etc.

1. **Terrestrial Expression**
   * + 1. *Overview of vegetation types (Linkages with Sect. a. above*.g., moraines 🡪 most productive veg., conversely veg type 🡪 landform / MU
          1. climate, elevation, aspect
          2. PNV (% of each in LFA) – includes non-forest areas - DONE
          3. Inherent soil productivity
          4. ?
          5. Understory recovery
          6. Overstory recovery
       2. *Disturbance regime*
          1. Fire – Landfire Fire Regime Groups (Ecoshare
          2. Insects/ Disease – Regional coverage % area with xx basal area loss.
          3. Invasives – see if there are any particular species by LTA?
          4. Windthrow
       3. *Terrestrial Special Habitats – SRI point Data*
          1. Cliffs – escarpments – LTA itself
          2. Caves – special habitat point layer?
          3. Talus
          4. Avalanche chutes SRI point layer
          5. Wet meadow - NWI, special habitat (forest by forest)
          6. Dry meadow - GNN
          7. Grassland – This will come from LTA (Chris)
          8. Hardwoods (e.g. oaks, aspen, chinquapin) – FIA/GNN current species
       4. *Management Interpretations*
          1. Forest Productivity (Timber)
          2. Veg management Considerations – logging system suitability (compactions)
          3. Range Productivity (cattle/sheep) -Range Considerations ???
          4. Restoration considerations (e.g. Juniper encroachment, veg density) – expert opinion



1. Channel density - GIS
2. PRISM (average annual precipitation/temperature) (ask Chris Ringo for OSU data
3. Stream reach response (source, transport, deposition) see Buffington paper 0-3%= deposition, 3-8%=transport, >8%=source
4. Surface runoff (Hydrologic Group) (from SRI or NRCS soil layers)
5. elevation,
6. aspect
7. Slope (mean for LFA)
8. Fish Distribution / Maybe have a layer? (Karen to ask Jim)
9. Scarps, Avalanche tracks, landslide tracks from SRI point layer and DOGAMI SLIDO
10. Seeps – springs point layer NHD and NWI, SRI point layer?
11. Ponds - NHD
12. Spawning Substrate Quality – Stream Survey –
13. Rearing potential - pools?(source: stream survey- )
14. Wet meadow - NWI, special habitat (forest by forest)

These are impt layers but still need work. I’ll let you know when they are ready.

1. Mass Wasting -Jays LTA classification (needs refinement)
2. Sediment Regime Source – Base Geology (use Landslide Risk categorization of rock-type erodibility (see Chart at back of doc – working with Carrie Gordon to edit.)
3. Size – base on erodibility (above)
4. Surface Erosion (disturbed, undisturbed) (need to discuss how to get at this)
5. Rosgen classification – Stream survey data (not comprehensive)