



United States Department of Agriculture

What are the geospatial scales needed and national/regional/local data available to resolve indicators at the WS level?

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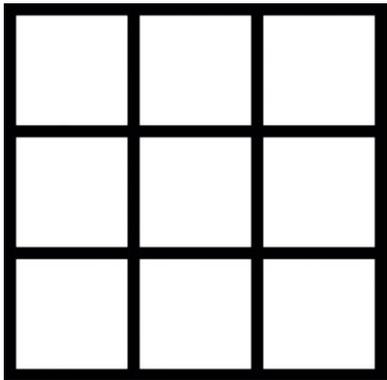
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Forest Service

# Geospatial data scales

Spatial



1m ↔ 1km

Temporal



min ↔ yrs.

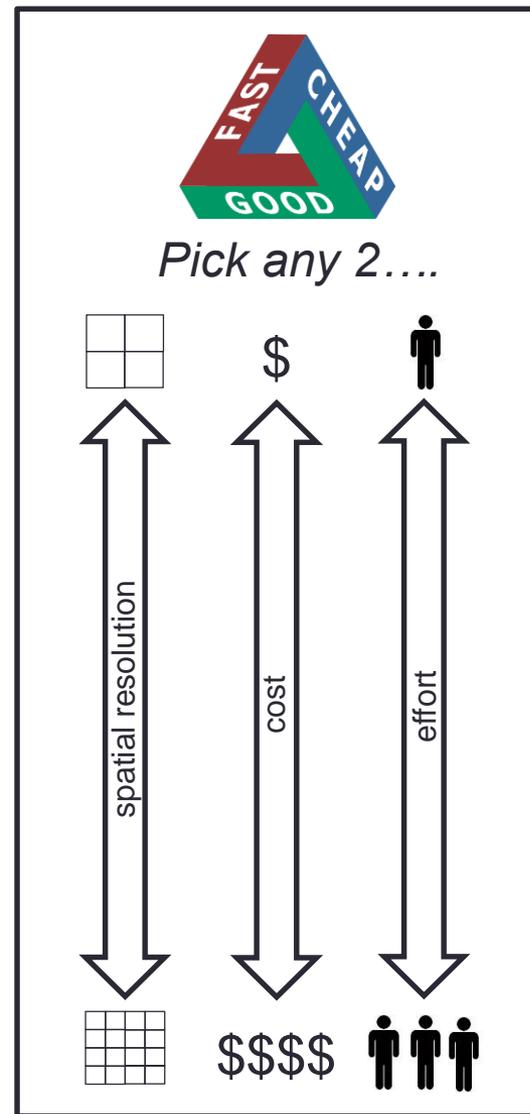
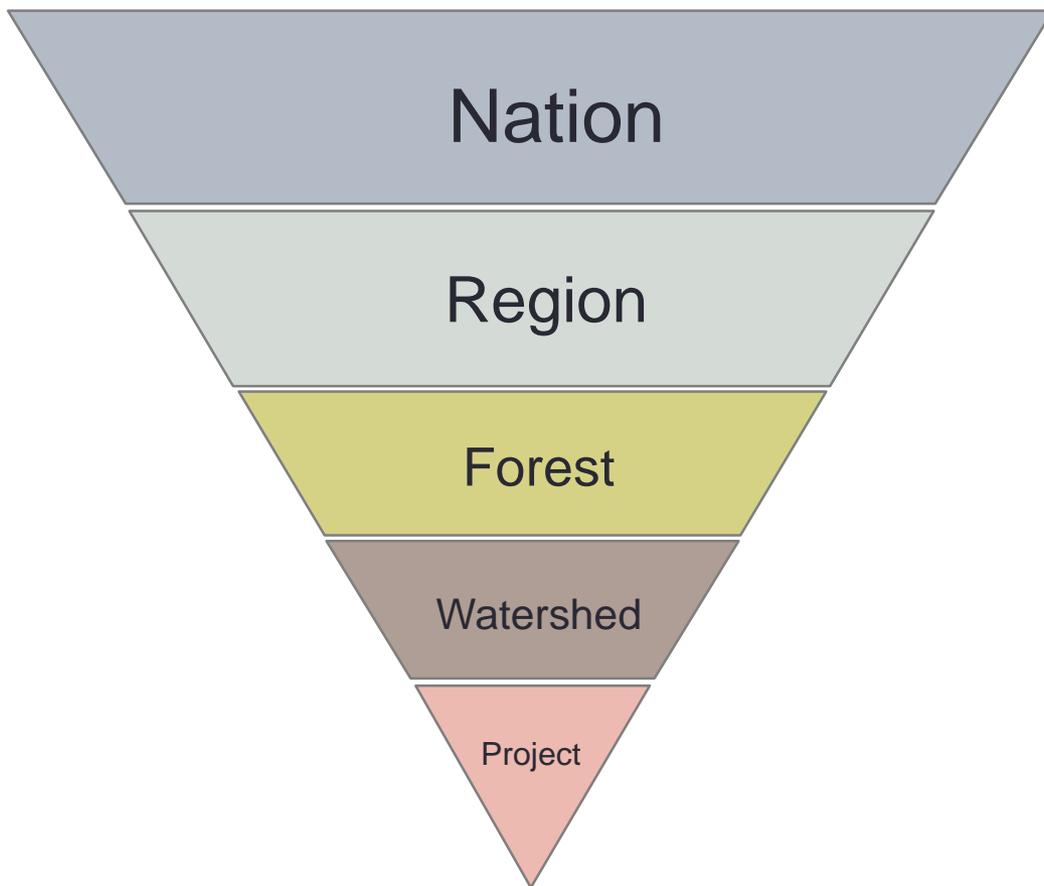
Thematic



species ↔ forest

# What is the question?

What are you after, an assessment across country or monitoring a watershed after a treatment...?



# Suggestions

1. Identify the question.
2. Keep it simple!
3. Don't over promise!
4. A multi-scale approach and appropriate datasets are needed.
  - Don't try to do everything in one shot!
5. Make some basic assumptions and live with them.
6. Stick with the basics.... there are no silver bullets here!
  - **LANDFIRE** (30m), **NLCD** (30m), **USGS NED** (10/30m) et al.
  - **USDA-USFS** corporate datasets
    - Many datasets are not comprehensive - reporting varies, be careful!
  - MODIS \ LSAT \ Sentinel – Google Earth Engine
  - Others?

# Questions to think about

## General

1. Is the WCF a qualitative assessment seeking a quantitative answer or a rigorous quantitative analysis?
2. What assumptions are you willing to make and live with?
3. How heterogeneous is each watershed?
4. Different scales for forestlands and rangelands?
5. Are aquatic and terrestrial ecosystem response times to treatments in line with data scales (spatial and temporal)?

## Geospatial data

1. How often are data updated? Will data source go away?
2. Corporate datasets or once-off datasets?
3. How much change year to year is expected?
4. If new products are needed, do they need validation?
5. Do modelled data sources require accuracy or uncertainty estimates?