Attendees: Mary, aubin, sean, dani, phil, natalie, bailie

USGS data/Cold water salmonids

- Stream temp data
    - Average summer months using - 4.5 and 8.5 climate prediction models
    - Predicted out to 2035 and 2075
    - Also has slope, aspect, and elevation
    - Does not cover the entire LCD boundary
- Barriers
    - Things that fish cannot go through - (waterfalls, culverts, dams, insufficient stream flow)
    - Barrier type is an attribute that can be distinguished
    - Whether it is a partial barrier or a complete barrier - MFishExtent
- Bull Trout Streams
    - Where BT reside during a portion of the season - overwintering, migration, and summer refuge
- WSCT_patches
    - There are areas above barriers that are genetically pure - if you find barriers that touch/intersect genetically pure areas, you could score those as less
    - Conservation populations based on watersheds
    - Does not have level of hybridization
- **How can we apply this data to the feature side of the equation?**
- Clint's team will do the analysis and provide us with the information (relative threat and threat levels)
- Thresholds:
    - Temp
        - WSCT - optimum for aug mean lower than 18 degree C, above or equal to 15 degrees C
        - BT - less than 15, greater or equal to 11 degrees C
- Next steps
    - Bailie and Aubin will fill out the tables and we will wait for Clint's GIS data
    - Aubin will work on riparian next

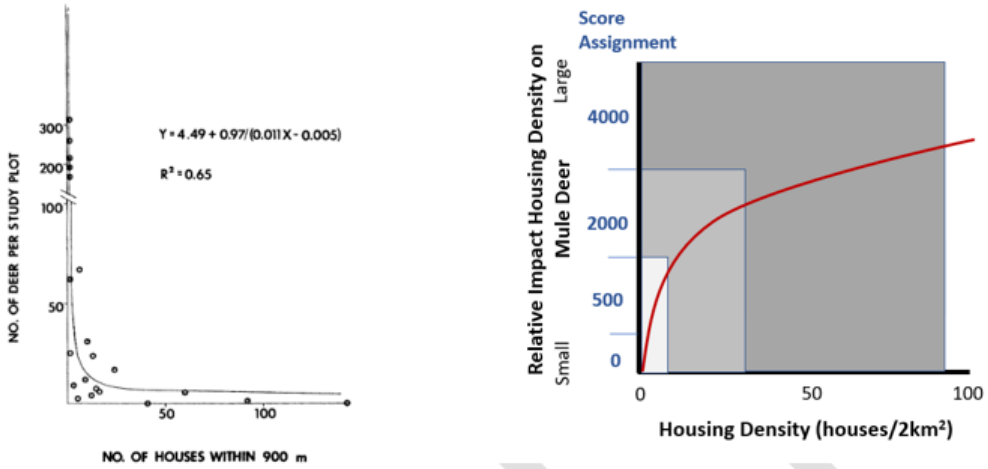

Figure 3: A: Number of deer observed in relation to housing density in the Gallatin Valley, MY 1981-1983 (from Vogel 1989). B: Estimated relationship among housing density and mule deer persistence with score assignments that we apply to Marxan cost calculations.

Indicator	Housing Density		Road Density		Traffic Volume		Score Sums
Relative Condition	Threat Intensity	Cost Score Assignment	Threat Intensity	Cost Score Assignment	Threat Intensity	Cost Score Assignment	
Poor	> 89 houses / 2 km²	4000	> 8.0 km roads / 2 km²	4000	Paved (high volume)	4000	12000
Fair	22 - 89 houses / 2km²	2000	3.711 - 8.0 km roads / 2km²	2000	Unknown (moderate volume)	2500	6500
Good	6 - 21 houses / 2km²	500	0.51 - 3.71 km roads / 2km²	500	Unpaved (low volume)	1000	2000
Very Good	< 5 houses / 2km²	0	≤ 0.5 km roads / km²	0	No Roads	0	0

Table 3: Scoring schema for three indicators of threats to mule deer conservation.