## Field Procedure: Sketch Maps of Study Site

A sketch map is a drawing of your study area. A sketch map helps you document the location of a study site relative to the surrounding area, as well as provide location information about important features within your study site. A sketch map can be as detailed as you like, and can be a rough sketch based on estimated distances or the distances can be measured using meter tapes and a compass. Sketch maps should form an important part of your field notebook.

#### Equipment Needed:

- Pencils with erasers (colored pencils are nice, but optional)
- Paper template (Rite-in-the-Rain paper provides a durable long-lasting map, but regular copy paper is fine)
- \* Clipboard
- 🍀 25m or 50m Tape
- Pin flags (optional, but nice to help provide a boundary to your site and mark important features that should be mapped & measured)
- \* Compass (a sighting compass with a mirror is best)
- 🗯 GPS Unit
- **Base map or aerial photo (optional, but nice)**

### Example Sketch Map: (Provided by Mitch Burke's Spring 2009 Class at Greeley West High School)



## How To Draw A Sketch Map

- First walk the entire study site that you plan to map. Notice any feature that are important to include in your map. Major natural and artificial features should be mapped. These may include slopes, landforms, streams, large rocks, buildings or even trees. Slopes can be identified with arrows.
- 2) **Place Pin Flags** (optional) at the four corners of the area you are mapping to help you contain the boundaries of your map. Also mark any important feature you want to remember to map or make measurements to.
- 3) **Measure or pace the distance between corners.** Mark these distances (or approximations) on the edges of your map. It is good to draw a rectangular boarder to your map to help you contain the sketch map of your study site.
- 4) Take GPS coordinates. If the study site is fairly large get GPS coordinates for all 4 corners and the center. If the site is small < ~ 30 m x 30 m, then just take GPS for the center point. Mark these coordinates on your map.</li>
- 5) **Pick a location where you want to draw from.** This location should give you a good perspective of the whole study site. Also consider the compass direction you want the map oriented, often we orient maps with north facing up on the map, but as long a you add a north/compass arrow on your map you can orient it in which-ever direction is most appropriate for your perspective.

- 6) **Draw major land forms and feature.** This includes such features as buildings, large trees or boulders or streams first then add in minor features. Make observations or map legend items for major vegetation types/covers.
- 7) Add distances on map. If you make measurements you can include these distances directly on your map, or just use them to help you place features on the map.
- 8) **Annotate your map** as appropriate, for example you can note "Grassy area", "Exposed soil", or descriptions of other feature which are difficult to draw.
- 9) Add Map Elements: these include title, legend, scale bar (apprx.) north/compass arrow, date, study team names.
- 10) Add notes & observations. These can be written at the bottom of the map, on the back, or in a separate field notebook which are relevant about the site or current conditions. This can include location of study site relative to your school building or nearby streets or ball fields, the purpose for the study site, the current weather, and any other observations, such as animal activity or litter, etc.

Step	Basic Map Steps	Check Off
1	First walk the entire study site	
2	Place Pin Flags	
3	Measure or pace the distance between corners	
4	Take GPS coordinates	
5	Pick a location where you want to draw from	
6	Draw major land forms and feature	
7	Add distances on map	
8	Annotate your map	
9	Add Map Elements	
10	Add notes & observations	

# **Study Site GPS Coordinates:**

Note: include corner GPS coord. on map corners, if applicable

Center Latitude:

# Satellites: \_\_\_\_\_

Center Longitude:

**Other Notes**:

	Legend	North Arrow				
				Latitude:	Longitude:	Elevation:
			<u>Scale Bar:</u>			
				ther, other observations, etc.)		
				cription, study objective, wea		
				location information, site des		
Names:				Notes: (General .		

Date:

Sketch Map Title: