

Locational Uncertainty and Conceptual Feature Types Key

DEFINITIONS: Pre-SF = Pre-Source Feature = spatial feature initially mapped or digitized into Biotics.
LU=Locational Uncertainty; LUT=Locational Uncertainty Type; CFT=Conceptual Feature Type.

1. LU of pre-SF and original observation ≤ 4.5 m in all directions.....LUT=Negligible
 2. Original observation was a single specimen or a group extending ≤ 9 m in all directions.....CFT=Point
 - 2' Original observation was a group of individuals extending > 9 m in at least one direction.
 3. Group inhabited a precisely located linear feature ≤ 9 m wide and > 9 meters long.....CFT=Line
 - 3' Group not limited to a defined linear feature, and/or inhabited $> 9 \times 9$ meters CFT=Polygon
- 1' LU of pre-SF and/or original observation > 4.5 m in at least one direction.
 4. LU of original observation > 4.5 m along a precisely located linear feature, and ≤ 4.5 m on each side of that feature (pre-SF must be a line that includes all LU along the feature)..... LUT=Linear
 5. Original observation was a single specimen or a group extending ≤ 9 m in all directions.....CFT=Point
 - 5' Original observation was a group of individuals extending > 9 m along the linear feature.....CFT=Line
 - 4' LU of original observation > 4.5 m in all directions.
 6. Pre-SF is a polygon that includes all LU associated with the original observation(s) (additionally consider defining **Unsuitable Habitat Feature(s)** in Biotics) LUT=Delimited
 7. Original observation was a single specimen or a group extending ≤ 9 m in all directions.....CFT=Point
 - 7' Original observation was a group of individuals extending > 9 m in at least one direction.
 8. Group inhabited a linear feature ≤ 9 m wide and > 9 meters long.....CFT=Line
 - 8' Group not limited to a defined linear feature, and/or inhabited $> 9 \times 9$ meters CFT=Polygon
 - 6' Pre-SF is a point, line, or polygon that does not include all LU associated with the original observation(s).
 9. LU varies significantly in different directions.
.....Recommend using LUT=Delimited, and/or define **Unsuitable Habitat Feature(s)** in Biotics
 - 9' LU roughly the same in all directions (use largest estimate)LUT=Estimated
 10. Original observation was a single specimen or a group ≤ 9 m across in all directionsCFT=Point
 - 10' Original observation was a group of individuals > 9 m across in at least one direction.
 11. Group inhabited a linear feature ≤ 9 m wide and > 9 meters longCFT=Line
 - 11' Group not limited to a defined linear feature, and/or inhabited $> 9 \times 9$ meters CFT=Polygon

Locational Uncertainty Type

Negligible (Precise Mapping)

Linear (Uncertain along a line)

Delimited (Uncertain in a defined area)

Estimated (Uncertain in all directions, buffer added by Biotics)

Conceptual Feature Type

Point

(Single organism or small group less than 9 m long or wide)

Line

(Group of organisms less than 9 m wide, more than 9 m long)

Polygon

(Group of organisms more than 9 m wide and long)

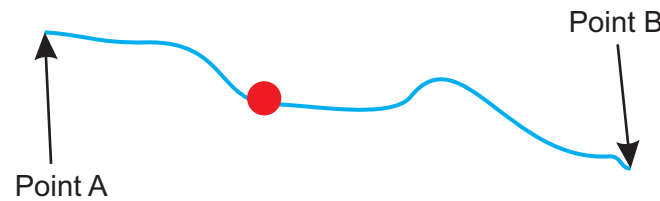
Very accurate location of an individual or small group, less than 4.5 meters gps position uncertainty.

Examples: high precision gps point of a nest, burrow, or small cluster of plants.



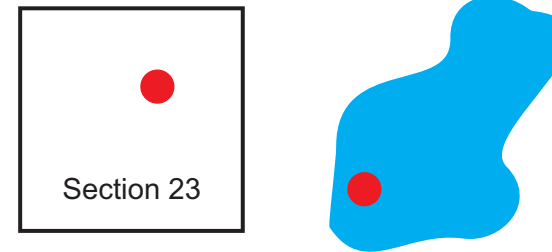
A single individual or small group located along a narrow linear feature.

Examples: a fish found in a creek between two landmarks, a plant collected along a road shoulder between two mile markers (or a buffered length (8 miles from town -> 7.5 to 8.5 miles from town.)



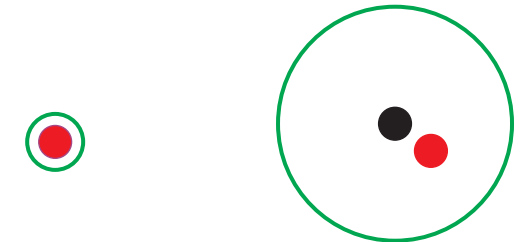
An individual or small group located in a defined area.

Examples: a museum or herbarium specimen located in a PLSS section, a fish in a lake, a plant in a visually distinct habitat such as white soil outcrops.



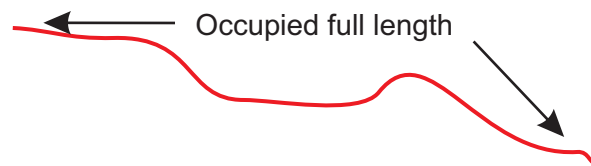
An individual or small group that is probably within a certain distance of a given point or landmark.

Example: gps point with more than 4.5 m positional uncertainty, old museum records "near Chicken Spring" or "half a mile from Wilson Ranch" or "Tonopah", a dot on a topo map.



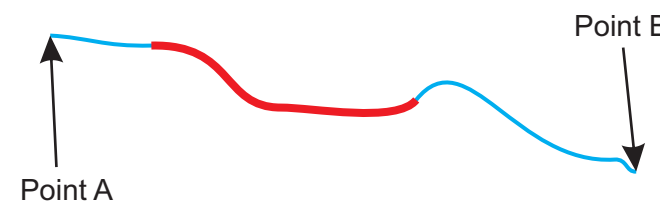
A group of organisms found along a linear feature, less than 4.5 m uncertainty at start and end point.

Examples: springsnails in small creek from source to pond, species found along entire length of a precisely mapped transect.



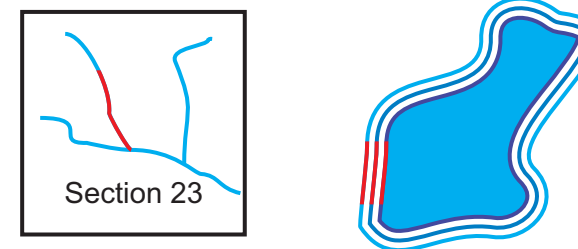
A group of organisms found along a linear feature, more than 4.5 m uncertainty at start and end point.

Examples: group of fish found in creek between two landmarks, plants found along 300 feet of road shoulder but start and endpoint uncertain.



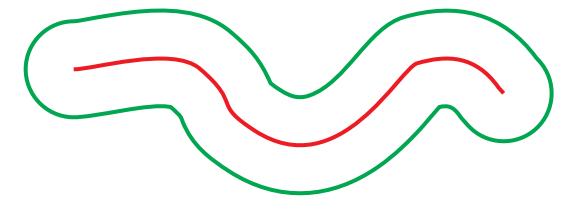
A group of organisms found along a linear feature, but there is uncertainty about the location of that feature within a defined area.

Examples: transect in a meadow, lake shoreline that changes year to year, one of several unnamed creeks in a PLSS section.



A group of organisms in a linear feature but there is uncertainty about the location of that feature without a defined area.

Examples: animals collected along an unmapped trail, plants seen along gps track with more than 4.5 m positional uncertainty.



A group of organisms found in an area, less than 4.5 m uncertainty around the perimeter.

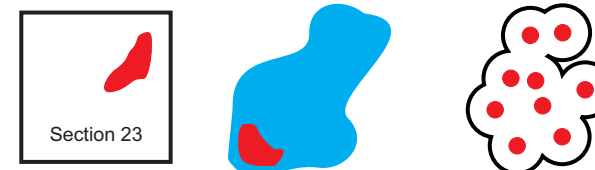
Examples: precise gps track around the edge of a group of plants, precise mapping of a small pond where the target species occupies the entire pond.



Not allowed, by definition, a polygon cannot fit inside a line.

A group of organisms but there is uncertainty about the location of that group within a defined area.

Examples: an acre of plants in a PLSS section, a large group of birds nesting somewhere in a marsh, gps points buffered more than 4.5 m and merged into polygons before creating source feature.



A group of organisms but there is uncertainty about the location of that group without a defined boundary.

Examples: a gis or gps polygon or group of unbuffered points with positional uncertainty more than 4.5 m, a hand drawn polygon from a topo map.

