



Georeferencing Training

MAY 28, 2020

What is Georeferencing?

- 🌀 Georeferencing is the process of assigning coordinates to a locality
- 🌀 Cleaning and sorting data before georeferencing is a useful first step for supervisors
- 🌀 If coordinates are present on the label, include “coordinates recorded at time of collection” in Georeference Remarks

Example

SIM0013218 near Philadelphia

MARY1029805 Lancaster



GeoLocate

Map layers

Measuring

Editing “Options” to help your search

Ex. do error polygon, match water body, etc.

Always include Uncertainty
Adjust larger or smaller if needed

6 possible locations found

powered by: GEOLocate

Workbench

Georeference Options Clear Polygon Draw polygon Place marker Measure

Locality String: Philadelphia

Country: UNITED STATES OF AMERICA

State: Pennsylvania

County: Philadelphia

latitude: 40.007638 longitude: -75.133962 uncertainty: 22277 m error polygon

Save To Your Application



Locality

Country ? State/Province ? County ? Municipality ? Location ID ?

Locality ?

Security: Security not applied ? Deactivate Locality Lookup

Latitude Longitude Uncertainty ? Datum ? Verbatim Coordinates ?

Elevation in Meters ? Verbatim Elevation ? Depth in Meters ? Verbatim Depth ?

Georeferenced By Georeference Sources ? Georeference Remarks

Georeference Protocol ? Georef Verification Status ? Footprint Polygon

Record-by-record vs. Batch Georeferencing

 Batch Georeferencing is a valuable tool for georeferencing multiple records at once within one collection

Home >> Collection Management Menu >> Batch Georeferencing Tools

Query Form

All Countries All States All Counties

All Municipalities All Processing Status 

Locality Term:

Generate List

Return Count: 0

No localities returned matching search term

Latitude: N =

Longitude: W =

Error (in meters): **Datum:**

Footprint WKT:

Sources: georef batch tool 2020-05-21

Protocols:

Remarks:

Verification Status: reviewed - high confidence

Elevation: to meters to feet

Processing status: Leave as is Georefer by: mdmancini1

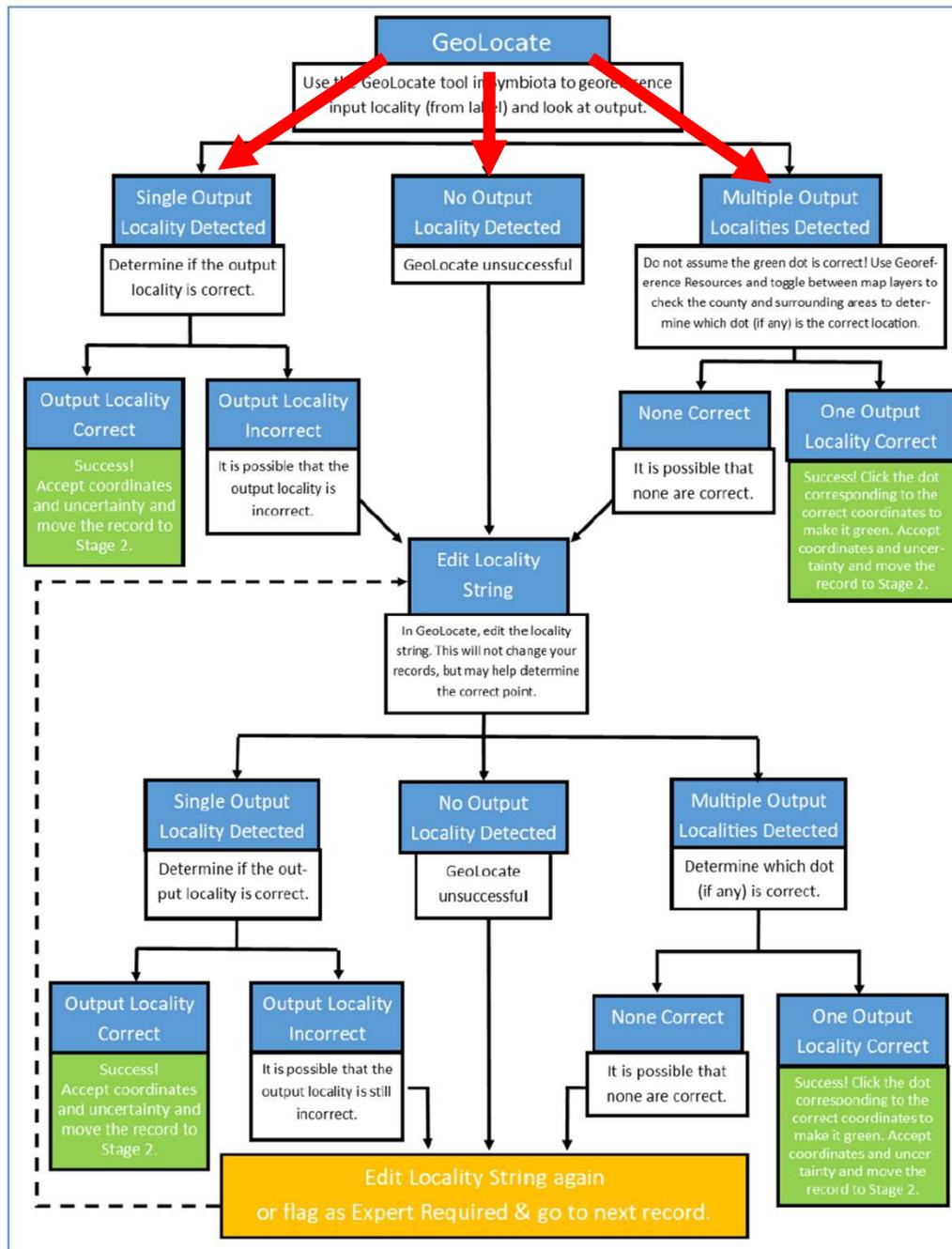
Update Coordinates

Statistics

Records to be Georeferenced
Total: 2436
Percentage: 55.8%

Note: Batch Georeferencing will not display records with no locality string.





GeoLocate detects one or multiple points

- 🌀 Check whether the point(s) is correct
 - Zoom out to see if it's in the correct county
 - Toggle between map layers –the place name might show up on the map in some layers but not others
 - You may need to uncheck “match water body” to prevent the point from being mistakenly offset.

Example

TAWES0000651 Purse State Pk (multiple points, edit to uncheck match water body, find the correct point, utilize map layers)
MARY1028291 Along the Potomac River, Cabin John



Polygons

- ☞ For simple named places check the box to “draw error polygon” and click GeoLocate.
- ☞ For complex geometric figures, the polygon data may be too large for GeoLocate to input (<80,000 character). In this case, rely on Uncertainty (error radius)
- ☞ Don't include polygons for offsets
- ☞ When to Manually Draw Error Polygon
Mainly for geographic features with easily distinguishable geometric boundaries.
- ☞ In short – don't spend too much time drawing polygons, only do so if it's fairly straightforward.

Examples

SIM0003261 Aspinwall (polygon)

MOAR0000212 Wissahickon Ravine (manually draw polygon)

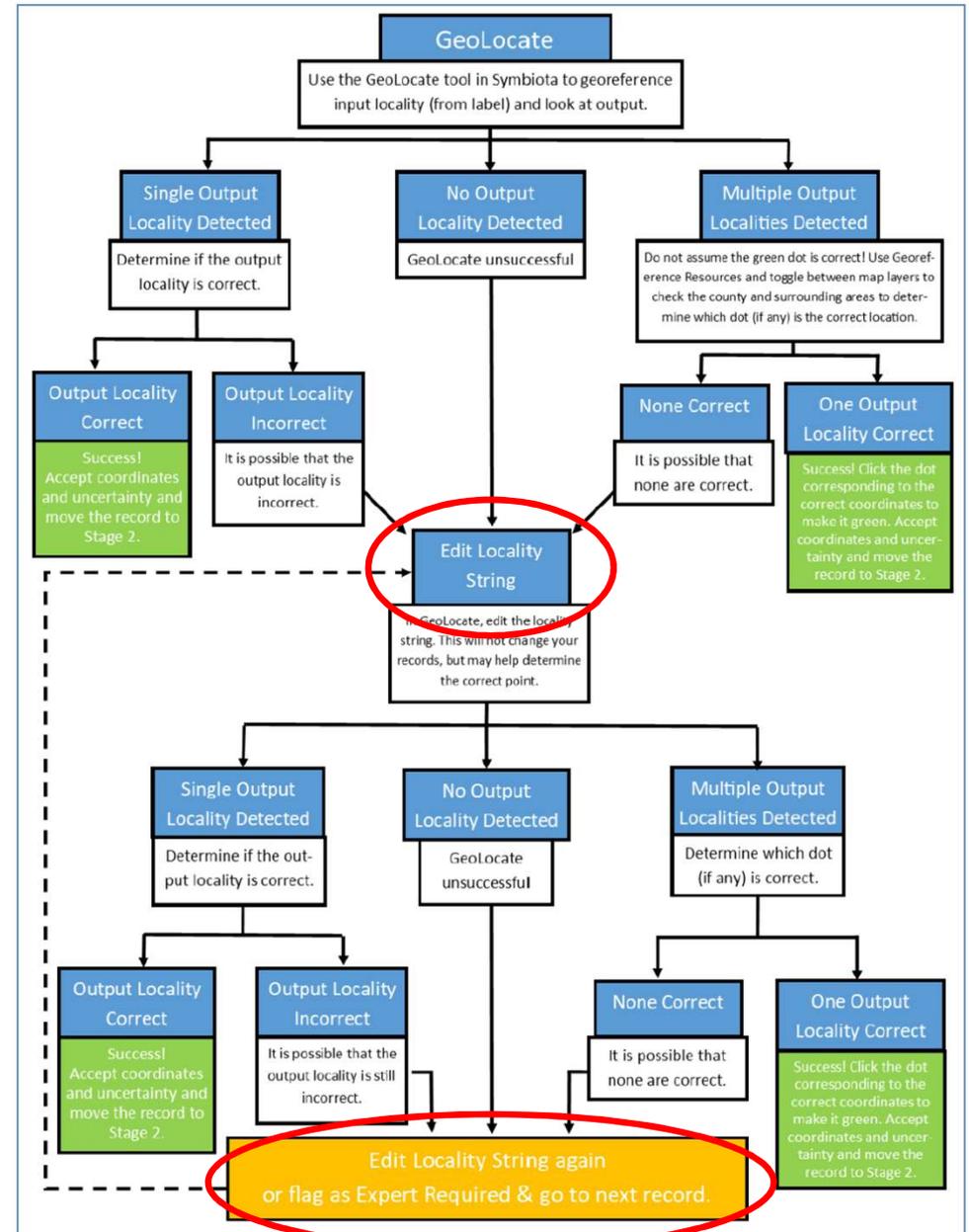


If points are incorrect OR If GeoLocate fails...

☞ Evaluate whether the record should be moved to closed...

ex. contradictory geographic information – the locality does not fall within the county listed on the label

☞ ...or whether the record can be re-processed after **editing the locality string**



Editing the locality string

☞ Use abbreviations that GeoLocate understands OR write out abbreviations for proper place names

ex. mi should be mi.

ex. east-northeast should be ENE

ex. WMA should be Wildlife Management Area

☞ Try to match the name that you found on the map

ex. some parks are not detectable as written on the label, but a slight wording change can help GeoLocate to detect the place

ex. Valley Forge Park might be detectable as Valley Forge National Park

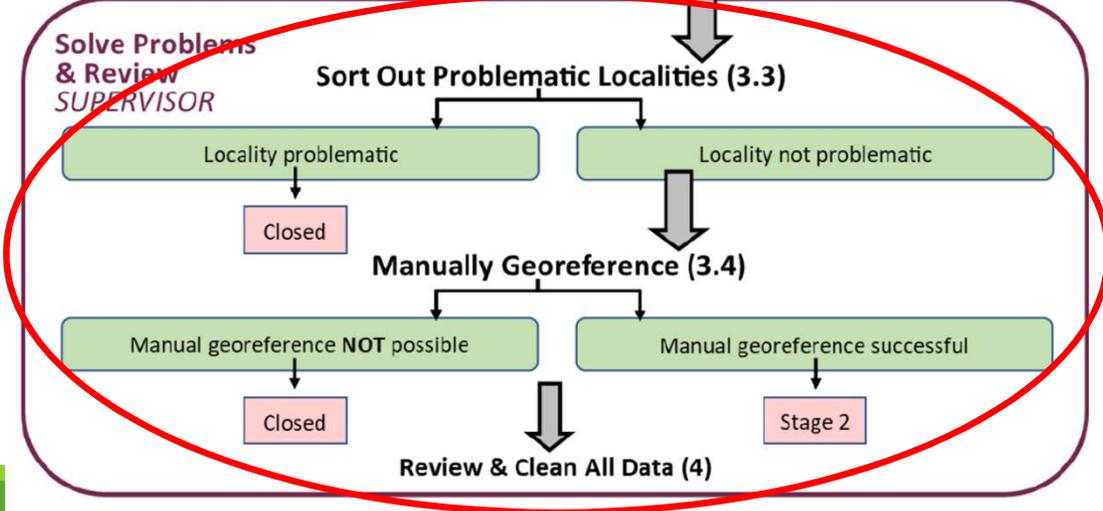
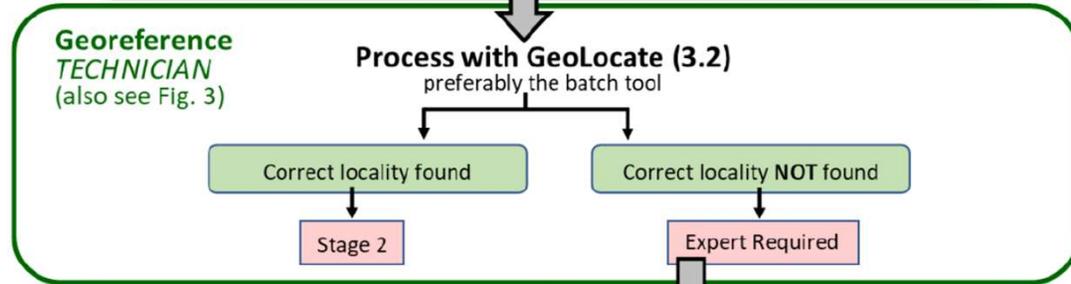
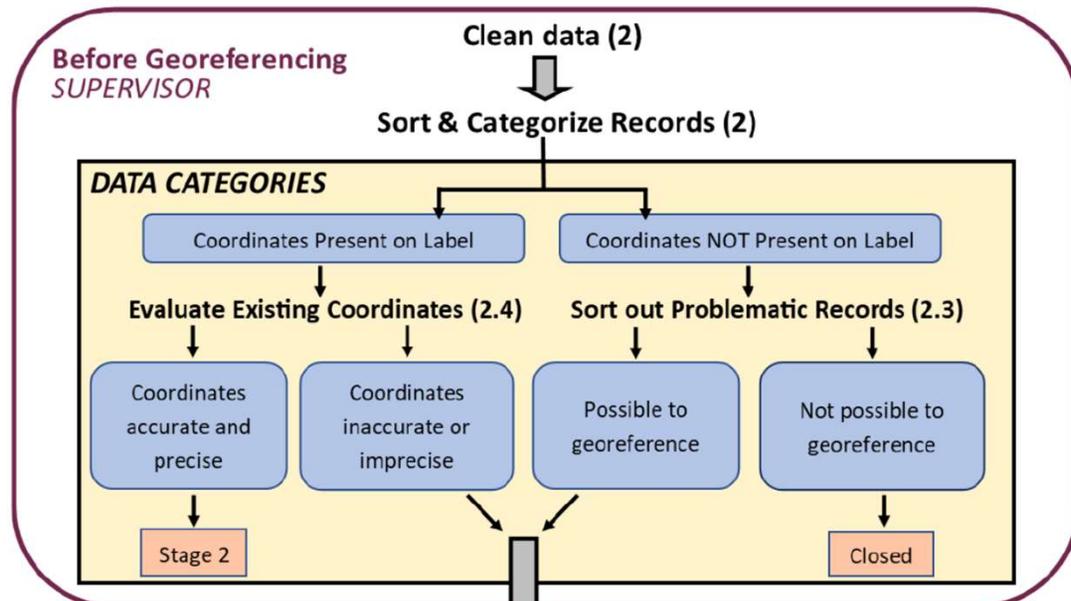
☞ Rearrange the locality string

ex. Susquehanna River, 2 mi. S of Harrisburg might be rearranged as 2 mi. S of Harrisburg, Susquehanna River OR take Susquehanna River out for the search.

Examples

TAWES0004477 Roundtop Hill (multiple points, uncheck match water body, edit locality string, find correct point, measure, utilize map layers)





Manual Georeferencing

- 🌀 Find the record using an outside source or map and enter the coordinates manually OR place or move the pin manually in the GeoLocate tool and input the coordinates.
- 🌀 Use Herpnet guidelines for manual georeferencing when possible
- 🌀 Enter your source
Note that there is a text limit of **255** characters including spaces and punctuation – keep sources relatively short
- 🌀 Include a brief explanation in Georeferencing Remarks as needed

Example

SIM0003205 Egbertville, Staten Island (visible on map but GeoLocate fails)



Moving Records to Closed

☞ If GeoLocate and Manual Georeferencing fail, change the processing status to closed and include a brief explanation in Georeferencing Remarks

Ex. not georeferenced, insufficient geographic information

☞ Avoid spending excess time on problematic localities

Examples SIM0008623 Central New York

