

SOP 20: Bathymetry layer package (deliverable SO_J)

Revision History Log:

Previous SOP version	Effective Date	Revised By	Changes Made	New SOP version
-	December 2017	Jamie Womble Bill Johnson	Initial version	1.0

Summary

A bathymetry layer of Glacier Bay is used as a boundary layer for restricting movement of sea otters to marine environments and for limiting inference to Glacier Bay. Covariates including depth, distance to shore, slope of ocean floor, and shoreline complexity are derived from this layer. This product will likely be static over the life of the program. At the inception of the program the covariates were derived from a Glacier Bay bathymetric raster as detailed in SOP 9. The SO_J deliverable documents the specific raster employed for this purpose. This particular raster will inform the analysis for the foreseeable future.

Detailed Steps

1. Project leader tasks
 1. When determined to be necessary, obtain a new raster file set that will be used as the basis for covariate data. The file set typically consists of several ADF files – a proprietary format readable by ESRI and other GIS software.
 2. Save the file set to the NPS network at [\\sean.glba.nps.gov\Data\SEAN_Data\Work_Zone\SO\SO_J\yyyy](\\sean.glba.nps.gov\Data\SEAN_Data\Work_Zone\SO\SO_J\yyyy) where yyyy is the year this raster was adopted as the basis for covariate data.
 3. Zip the file set into a file in that same folder named SO_J_yyyy.ZIP
 4. Submit to data manager for validation.
 1. Specify in the message this is deliverable SO_J for yyyy.
 2. The data manager will know where to find it.
2. Data manager tasks
 1. Create an entry for this in the submission log database.
 2. Copy the file to a directory in [\\sean.glba.nps.gov\Data\SEAN_Data\Staging\SO\SO_J\ssss](\\sean.glba.nps.gov\Data\SEAN_Data\Staging\SO\SO_J\ssss) where ssss is the submission number generated in the log.
 3. Validate against criteria stated in the Appendix.
 4. Report results to project leader.
3. Project leader tasks
 1. If submission is not valid
 1. Edit corrections until product appears to be in valid state.
 2. Resubmit to data manager for another validation attempt.
 2. If submission is valid then review final product for acceptance

1. If judged not to be of acceptable quality, despite meeting formal validation, notify data manager to withdraw the current candidate from further consideration.
 2. If judged to be of best quality then notify data manager it is accepted to be publicly disseminated
4. Data manager tasks
 1. If project leader wishes the deliverable withdrawn then mark it withdrawn in the submission log and inform project leader.
 2. If project leader accepts the candidate
 1. Install the SO_J file in Data Store repository using reference type Raster Dataset.
 2. Install file in the SEAN production web site.
 3. Record product status in tracking tables.
 4. Update the submission log for this candidate.
 5. Inform project leader the deliverable has been deployed.

Appendix SOP-20.A: Bathymetry layer package – detailed deliverable definitions

Purpose of Deliverable

Used as a basis for covariate data that will be used in the analysis.

Frequency Produced

SO_J must be accepted at the inception of program operations. It is likely to be static for the duration of the program.

Prerequisites

None.

Data Flow

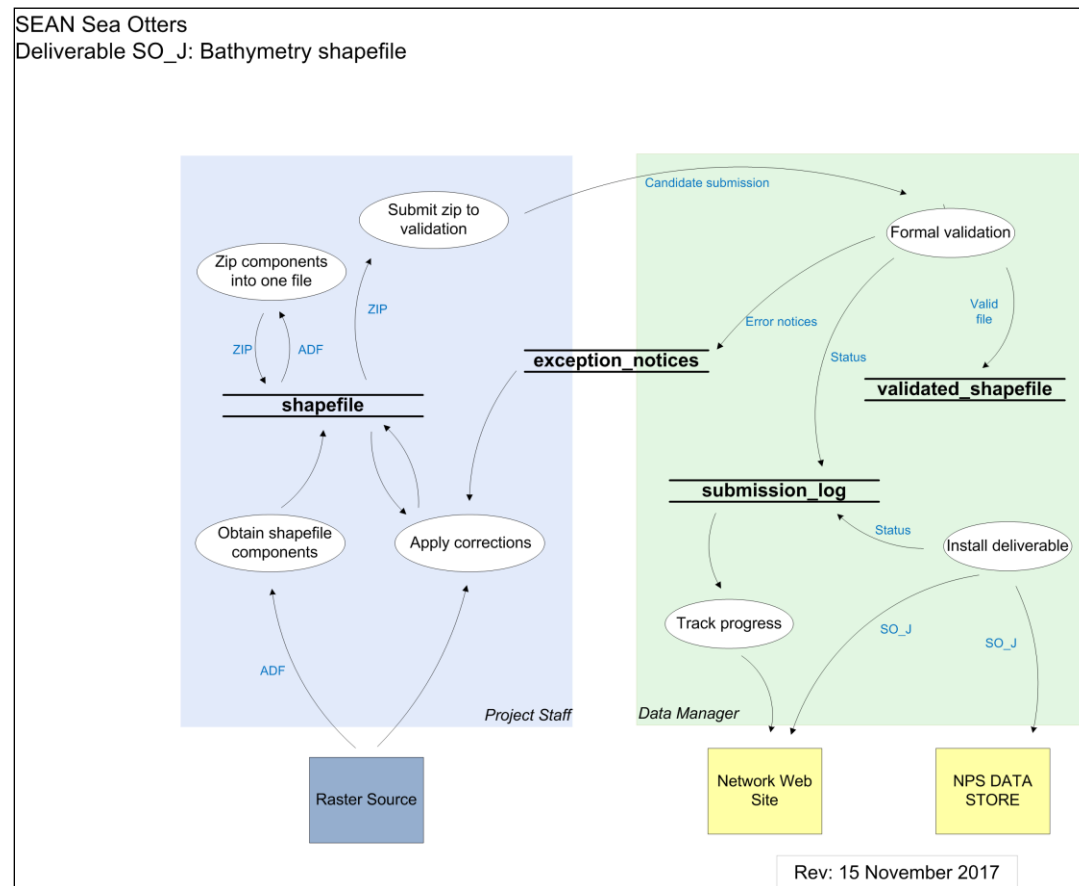


Figure SOP-20.A.1 Data flow required to generate final deliverable SO_J, bathymetry layer package.

Deliverable Definition Forms

Form A: Non-tabular Information Deliverable

<i>Vital Sign:</i> SO Sea Otters	<i>Deliverable ID:</i> SO_J	<i>Deliverable Title:</i> Bathymetry layer package
<i>File Format:</i> LPK	<i>Associated Software and Version:</i> ArcMAP 10.5 or later	<i>Revision Date:</i> 09-24-2018
<i>Expected Frequency:</i> Once for the entire course of the monitoring program	<i>Submission Unit:</i> Year effective	<i>ID of first protocol this applies to:</i> SO-2017.1
<i>What purpose does this deliverable serve?</i> Basis for covariates used in analyses. This is booked into NPS Data Store under reference type Raster Dataset.		
<i>Summary of content:</i> ESRI style LPK package of raster data files that reflect the bathymetric profile, slope, and aspect of Glacier Bay.		
<i>Mandatory validation criteria:</i> 1. The LPK package must be fully readable using ESRI ArcMAP. 2. When visualized, scope must include Glacier Bay proper. 3. Filename must be of the form SO_J_yyyy.LPK, where yyyy is the year this content was first used by the sea otter monitoring program.		
<i>Optional validation criteria:</i> None.		
<i>Deliverable ID of any other SEAN data products required to create this product</i> None.		
<i>Description and source of any outside data required to create this product:</i> NOAA bathymetric surveys.		