Assess Vulnerability and Risk | Quality Control Checklist

WHO

This guidance is for the practitioner in the Assess Vulnerability and Risk step.

WHAT

After the spatial assessments are complete in the Assess Vulnerability and Risk step, the practitioner needs to examine and ensure that the results are accurate and the analysis was run correctly with the data and rulesets for the project.

SUPPORTING RESOURCES

- Refer to 2.8 Spatial Data Collection - Worksheet for raw spatial data inputs and to 2.10 Community Asset Types and Spatial Data - Worksheet for asset tags and assets with high criticality
- The 3.4 Ruleset Development - Worksheet will provide ruleset details for each assessment.

INSTRUCTIONS

- ☐ Read through the suggested QC items, below.
- ☐ Apply the checklist to the spatial analysis output, use the checklist provided if needed.
- ☐ Make the necessary changes to the assessments if an error was found.
- ☐ Run through the QC items again with the new results.
- ☐ Repeat as many times as needed to ensure results are accurate.

Quality Control Items

- ☐ Extent of hazard data matches desired assessment extent
- ☐ Extent of community asset data matches desired assessment extent
- ☐ Ensure community asset types are consistently and appropriately applied
- ☐ Check exposure of each hazard is accurately reflected within the attribute table of the parcels
- ☐ Check that high criticality types are consistently and appropriately applied to community assets
- ☐ Ensure that adaptive capacity rulesets are accurately applied to each impact pair
- ☐ Ensure that sensitivity rulesets are accurately applied to each impact pair
- ☐ Ensure that probability rulesets are accurately applied to each impact pair
- ☐ Ensure that consequence rulesets are accurately applied to each impact pair
- ☐ Check combinations of vulnerability, risk, and vulnerability and risk (see below for output combinations)

Component Combinations

Ensure all assessment components are combined accurately within the results.

Vulnerability

		Sensitivity		
		L	M	H
Adaptive Capacity	H	High adaptive capacity, low sensitivity (LOW)	High adaptive capacity, medium sensitivity (LOW)	High adaptive capacity, high sensitivity (MEDIUM)
	M	Medium adaptive capacity, low sensitivity (LOW)	Medium adaptive capacity, medium sensitivity (MEDIUM)	Medium adaptive capacity, high sensitivity (HIGH)
	L	Low adaptive capacity, low sensitivity (MEDIUM)	Medium adaptive capacity, medium sensitivity (HIGH)	Low adaptive capacity, high sensitivity (HIGH)

Risk

		Consequence		
		L	M	H
Probability	L	Low probability, low consequence (LOW)	Low probability, medium consequence (LOW)	Low probability, high consequence (MEDIUM)
	M	Medium probability, low consequence (LOW)	Medium probability, medium consequence (MEDIUM)	Medium probability, high consequence (HIGH)
	H	High probability, low consequence (MEDIUM)	High probability, medium consequence (HIGH)	High probability, high consequence (HIGH)

Combined Vulnerability and Risk

		Vulnerability		
		L	M	H
Risk	L	Low risk, low vulnerability (LOW)	Low risk, medium vulnerability (LOW)	Low risk, high vulnerability (MEDIUM)
	M	Medium risk, low vulnerability (LOW)	Medium risk, medium vulnerability (MEDIUM)	Medium risk, high vulnerability (HIGH)
	H	High risk, low vulnerability (MEDIUM)	High risk, medium vulnerability (HIGH)	High risk, high vulnerability (HIGH)