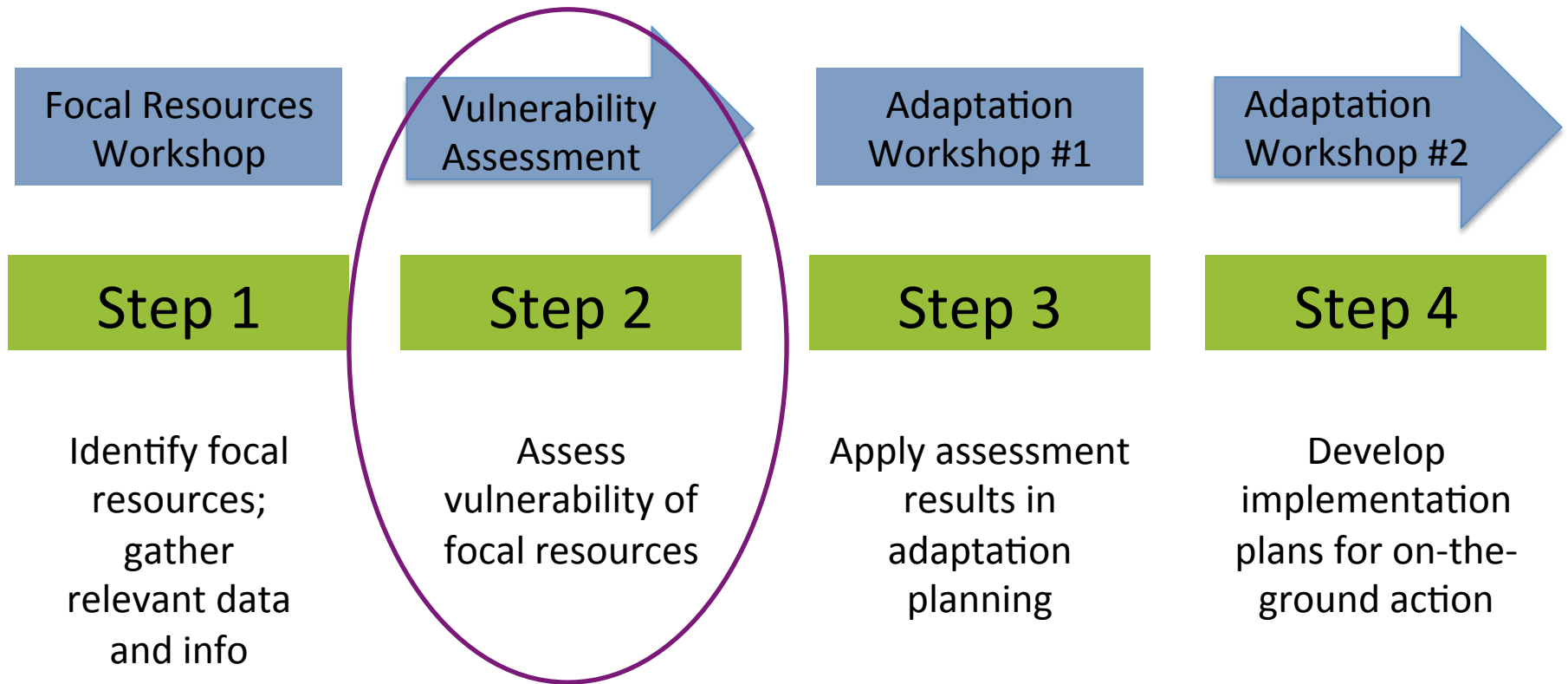


Next Up: Vulnerability Assessment

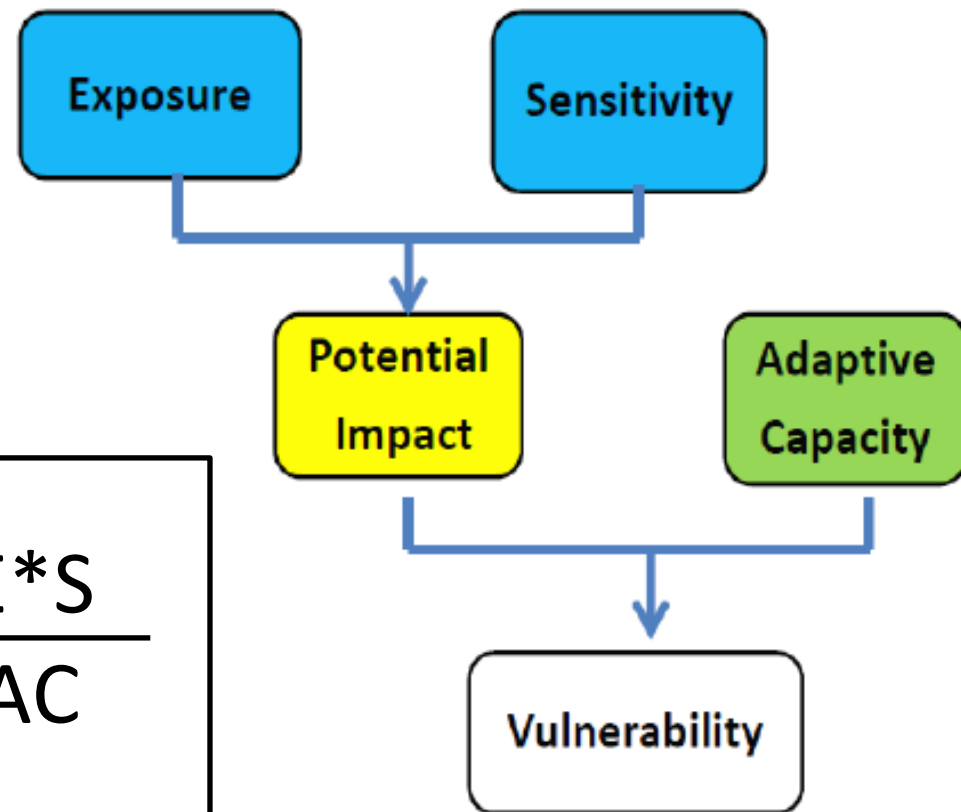


Background: Vulnerability Assessments

Function:
Identify what
resources are **most
vulnerable** and **why**

$$V = \frac{E * S}{AC}$$

Vulnerability Components



Assessing Sensitivity

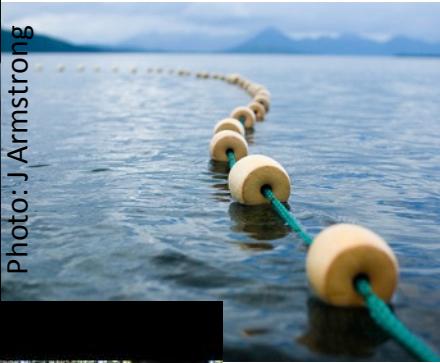
Measure of whether and how a resource is likely to be affected by a given change in climate.

Factors affecting sensitivity of habitats or species:

- Climate factors
- Disturbance regimes
- Non-climate stressors
- Dependencies
- Life history

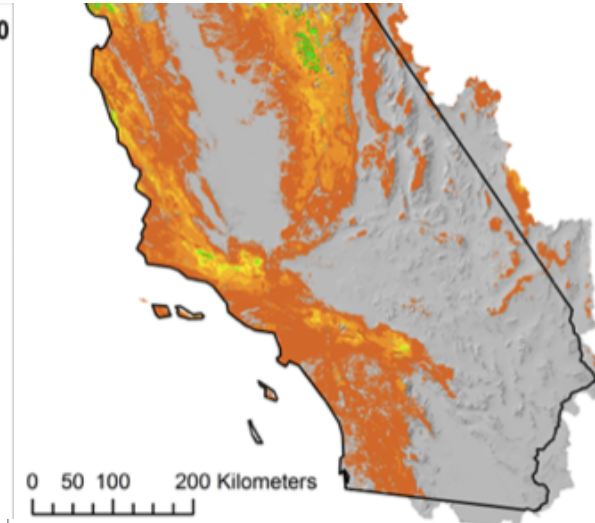
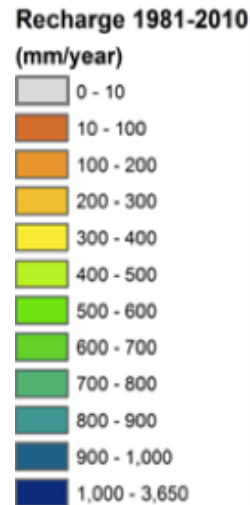


Photo: J. Armstrong



Assessing Exposure

Measure of how much of a change in climate or other environmental factor a resource is likely to experience.



Climate Variables
Annual Temperature
Precipitation
Snowpack
Runoff
Climatic Water Deficit
Recharge
Wildfire



Climate Western North America dataset and AdaptWest (Data Basin)



USGS Basin Characterization Model



USFS Western Wildland Threat Assessment Center (+ MC1 Vegetation Models)



Assessing Adaptive Capacity

Ability to accommodate or cope with climate change impacts with minimal disruption.

Factors affecting adaptive capacity of habitats or species:

- Extent & status
- Dispersal ability, dispersal barriers/landscape permeability
- Diversity
- Management potential



Degree of change a resource is likely to experience

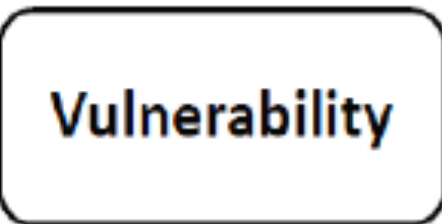
Whether and how a resource reacts to climate change



Ability to accommodate or cope with climate change impacts



$$V = \frac{E * S}{AC}$$

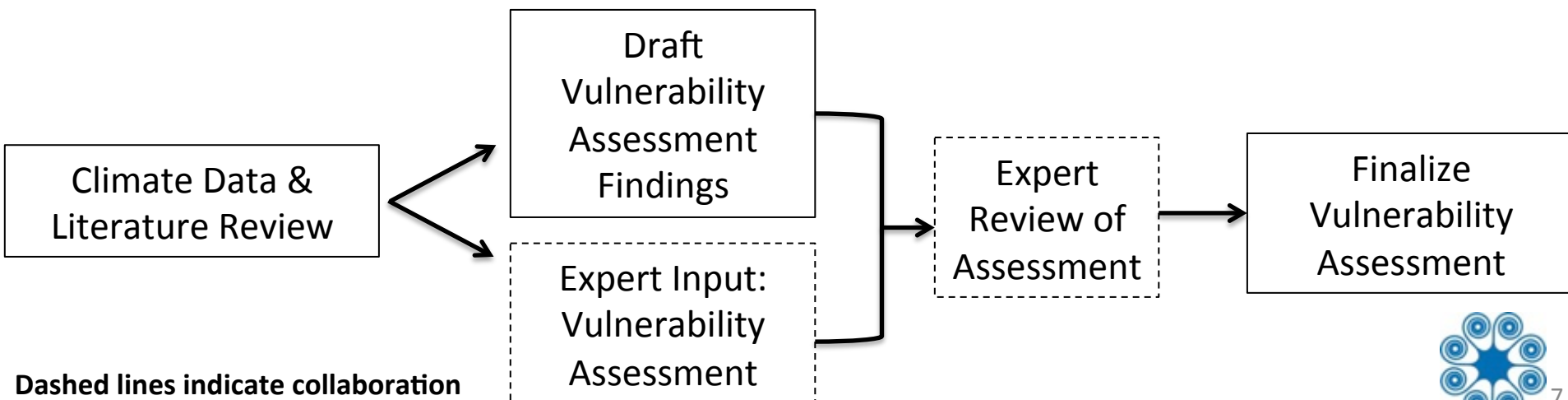


Vulnerability Assessment Process

Goal:
Evaluate vulnerability of selected resources to climate and non-climate stressors using literature review, spatial climate info & expert input

Process:

1. Literature review & gather climate data
2. Design vulnerability assessment survey
 - Includes each vulnerability component
3. Send survey to ~3-5 topic experts
4. Assemble draft assessment results
5. Send narrative to ~3-5 topic experts for review
6. Finalize assessment



Before You Leave...

1. Please turn in all activity worksheets!
2. Take food home!

Engagement Opportunities

1. Volunteer to be a vulnerability assessment expert
 - See sign-up sheet in front
2. Adaptation Workshop #1
 - Help us develop climate-smart actions to reduce resource vulnerabilities

