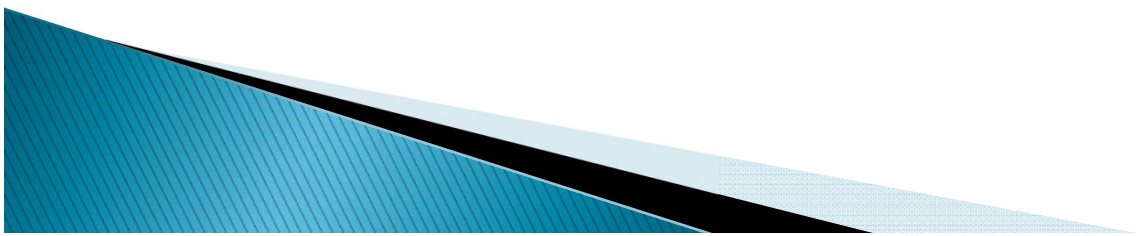
# Tools selection

Jennie Hoffman
EcoAdapt

# What we think you want to know
## *(but may not tell you)*

- What tools, processes, or approaches are best for helping me move forward?
  - Who to engage
  - How to engage them
  - What information/data I need and where to get it
- What are the best practices?
- What are the pitfalls to avoid?



# Two key principles for choosing data and tools

1. Your goals and objectives should drive the selection of tools and data, not vice versa

2. The sophistication of the VA should not exceed the sophistication of possible uses of VA results.

# Choosing tools and data comes back to the basic questions:

- *What is the goal of your VA?*
  - *"Assessment questions": what do you need to know to answer them?*
- *Who will use the output and how?*
- *What resources do you have?*

**If you don't ask the right question, every answer feels wrong**
***Ani DiFranco***

# Goal/question?

- Educate/engage
- Rethink conservation management goals/objectives
- Initiate/develop adaptation plans
- Integrate climate change into existing guidelines, processes, etc.

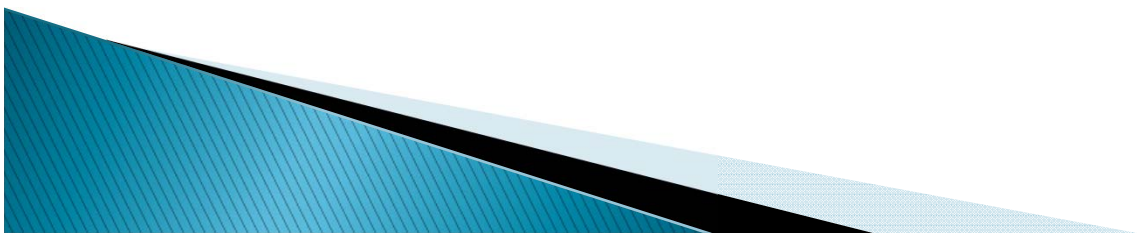
# Who and how?

- What do they do?
- What are their existing decision-making processes?
- How do they take in information?
- What's the level of scientific/technical comfort?
- Where are they relative to climate change?

# Resources?

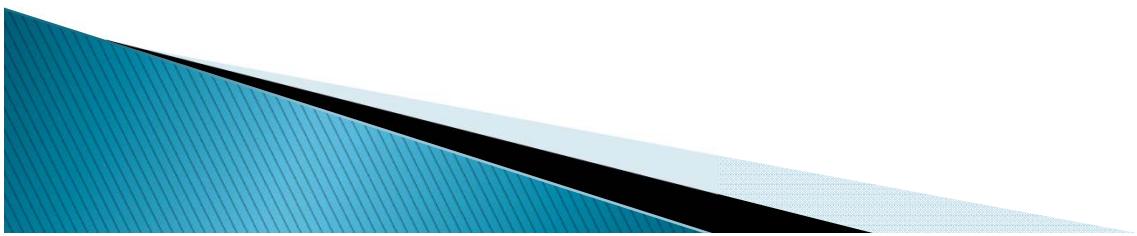
# Answering these questions helps you determine appropriate tool types…

- *Quantitative to qualitative*
- *Visual or not*
- *Complex models to transparent processes*
- *Descriptive or prescriptive*



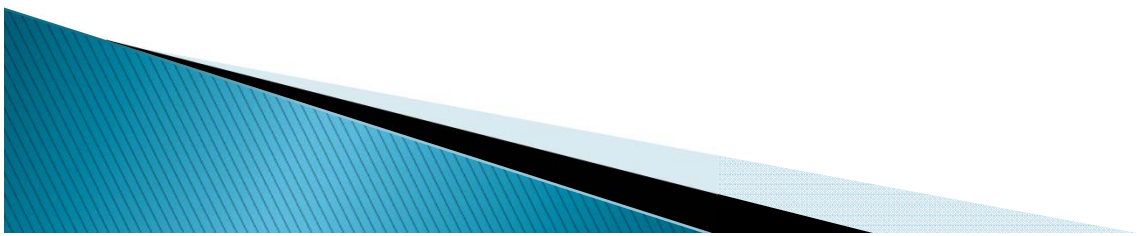
# …and data sets

- *Key drivers of vulnerability for your target*
  - *Specific climate variables*
  - *Critical species, community, and ecosystem characteristics*
  - *Important interacting stressors*
- *Necessary spatial and temporal resolution*
- *Necessary level of precision*

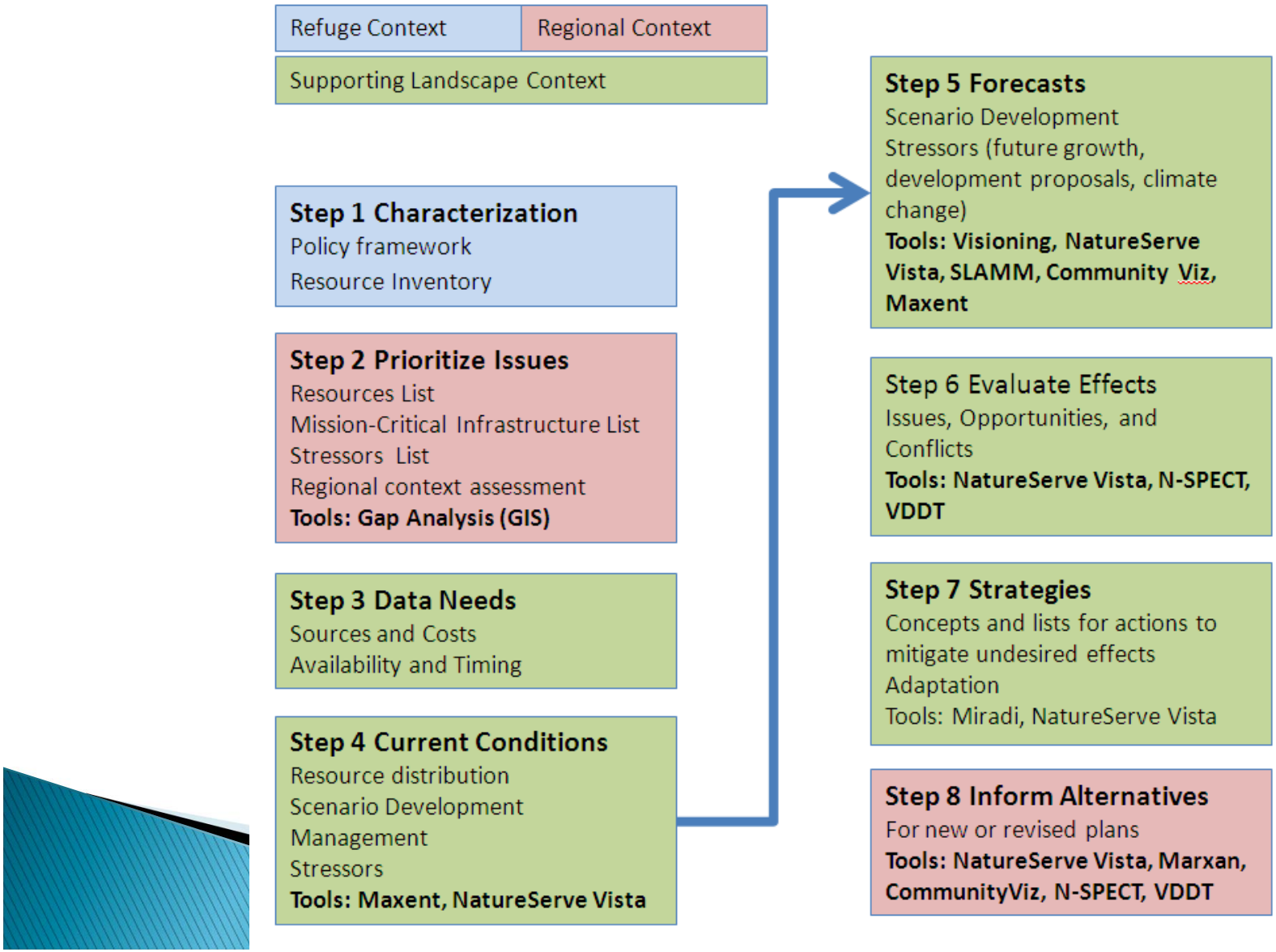


# You don't have to pick just one!

Can use different tools and data at different points in the engagement or adaptation planning process

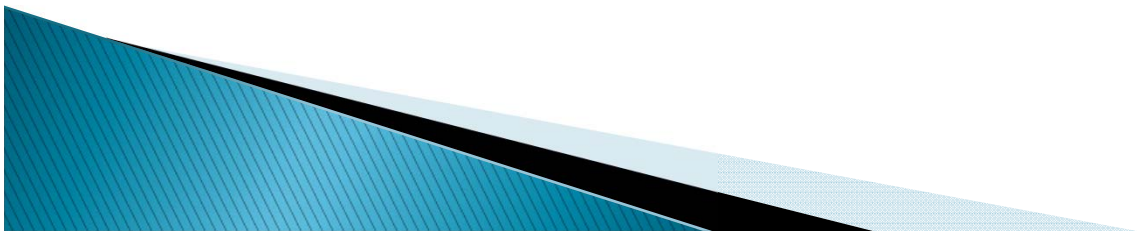


# NatureServe Refuge VA Framework



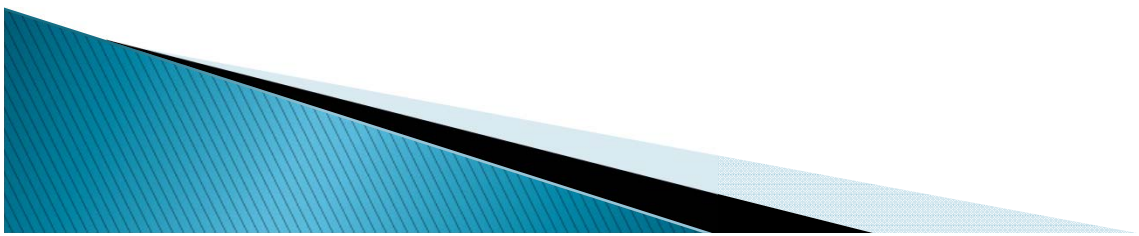
# A brief aside: The adaptation planning process working group

- Several formal/semi-formal process
  - Adapting Conservation Targets
  - TNC Climate Clinics
  - Geos ClimateWise
  - EcoAdapt Awareness to Action
  - EPA Expert Elicitation
  - NEAFWA Expert Elicitation
  - GBN Scenario Planning



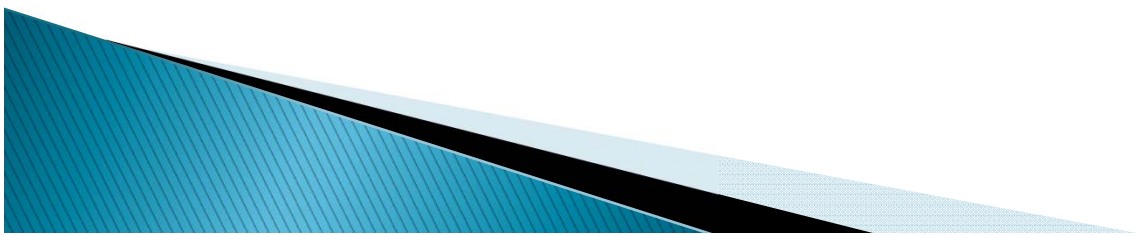
# A quick overview of tools and portals

- Portals
  - Tools portals, e.g. Digital Coast, EBM Tools, CAKE, WeAdapt
  - Data portals, e.g. PNW Climate Sensitivity Database, NE Climate Data, DataBasin, Climate Wizard



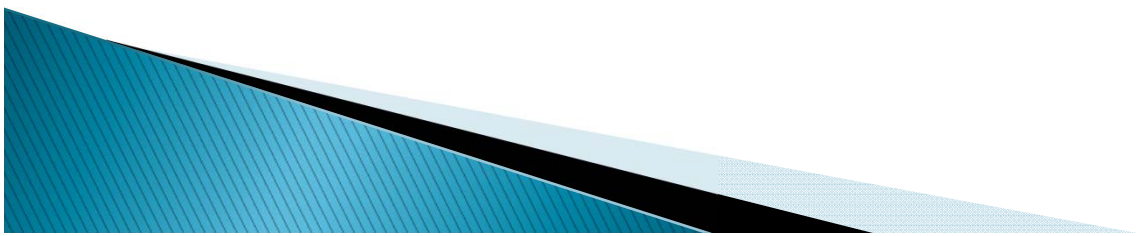
# Tool types

- Data access
- Visualization
  - Complex (e.g. Climate Wizard)
  - Simple (e.g. CanViz)



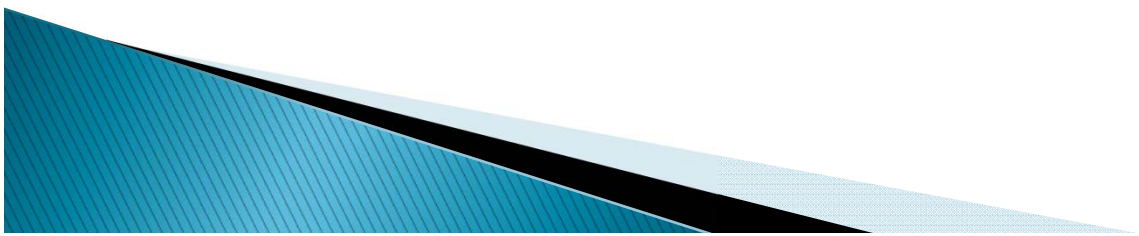
# Tool types

- Data access
- Visualization
- Analytical
  - NatureServe Vista, CC Vulnerability Index
  - SLAMM



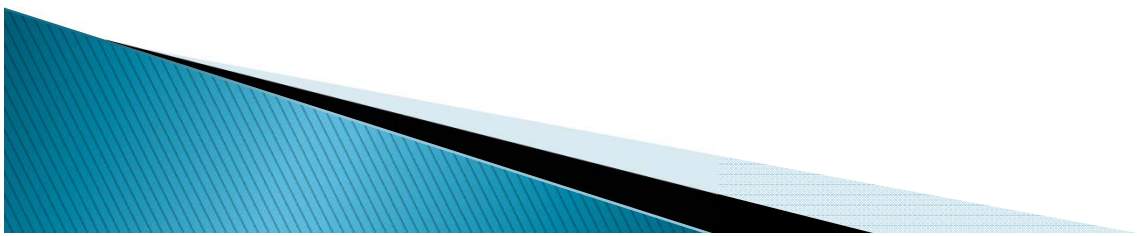
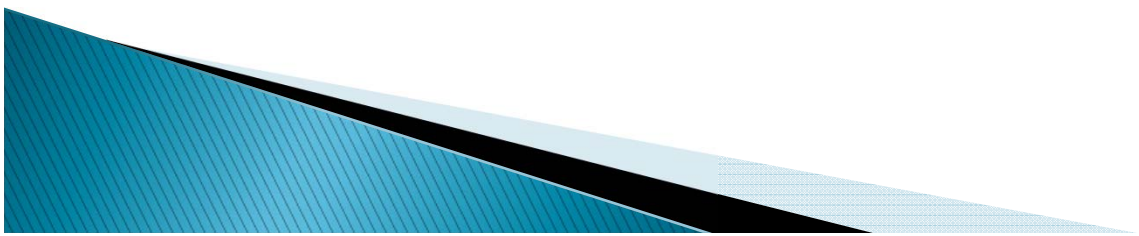
# Tool types

- Data access
- Visualization
- Analytical
- Socioeconomic
  - COAST
  - Spatial Trends in Socioeconomics



# Tool types

- Data access
- Visualization
- Analytical
- Socioeconomic
- Indices



# The spreadsheet