

## 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?

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## 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.

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## 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

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## Goal/question?

- Educate/engage
- Rethink conservation management goals/objectives
  - Is my work at risk? How serious is the risk?
- Initiate/develop adaptation plans
  - Where should I focus adaptation effort?
- Integrate climate change into existing guidelines, processes, etc.
  - How can I maximize my effectiveness?

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## Who and how?

- What do they do? Recovery plans, culvert design, funding allocation, etc.
- Group dynamics: Established, (dys)functional group or new group?
- Existing decision-making (quantitative? data-driven? Structured? etc.)
- Where they are relative to climate change (ready to make decisions, needs more capacity-building, etc.)
- Your relationship with them (one workshop → long process)

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## Resources?



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Answering these questions helps you determine...

- Scale
- Assessment target (species, location, management actions, etc.)
- Type of stakeholder engagement
- Decision framework

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...which in turn tells you what to look for in tools...

- Quantitative to qualitative
- Context-driven or data-driven
- Complex models to transparent processes
- Descriptive or prescriptive

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...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

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### Types of data/information

- Observations
  - Tells you **what but not why**; integrates all factors; varying degrees of sophistication
- Models
  - Represents current understanding of system; simplifies complexity; can create false sense of accuracy/certainty
- Experiments
  - Tests causal links; limited number of variables tested at a time.
- Expert opinion
  - Good when there is limited "hard" data; varying levels of structure and sophistication

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### You don't have to pick just one!

- Can use different tools and data at different points in the VA and adaptation planning process

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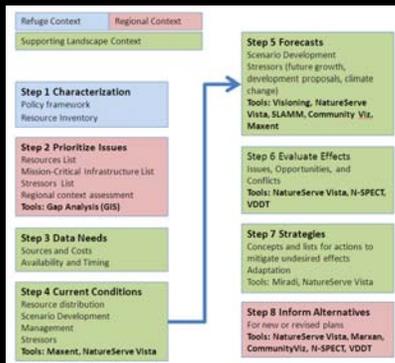
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### NatureServe Refuge VA Framework




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### VAs in the context of adaptation planning:

### The ad hoc adaptation planning working group

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### A range of approaches

- Qualitative to quantitative
- Climate-centric vs. climate-integrated
- Endpoint/goal of process
- Tools/models used (if any)
- Scale (time, space, sectors, complexity)
- Audience (focus, diversity)

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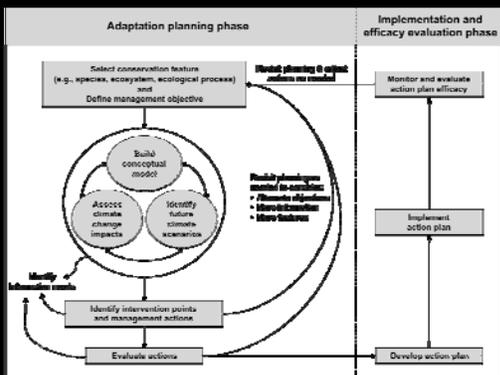
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### Adapting Conservation Targets (ACT) Framework



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### TNC: Updating a conservation action plan

1. Understand potential ecological impacts.
2. Create and revise "hypotheses of change."
3. Explore human responses.
4. Prioritize among climate-induced threats.
5. Assess whether climate change fundamentally changes the project.
6. Update or create strategies, assess feasibility and cost, re-prioritize full set of project strategies.
7. Develop measures, implement, adapt, learn

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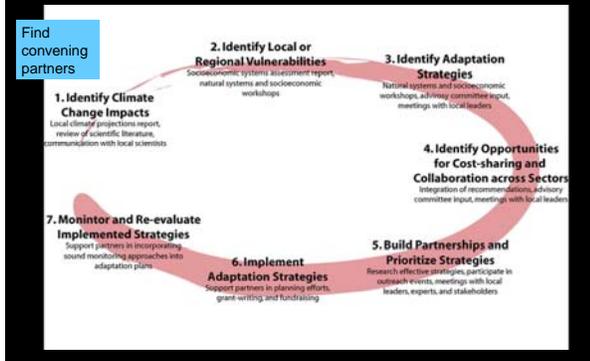
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### Geos ClimateWise




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### EcoAdapt A2A

- 4 basic questions:
  - What is your goal?
  - How are you trying to achieve it?
  - How might climate change affect your likelihood of success?
  - How can you increase your likelihood of success given these realities?
- If workshop goal is actual action, ask about
  - Key partners
  - Key resources
  - Step-by-step timeline, including who will do what
  - Assessing success

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