

# TOOLS SELECTION

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## What is a Tool?

- Documentation and guidance
- Application of data access and analysis
- Regulatory action
- Engagement strategies
- Decision support system

**SOMETHING THAT HELPS YOU!!!**

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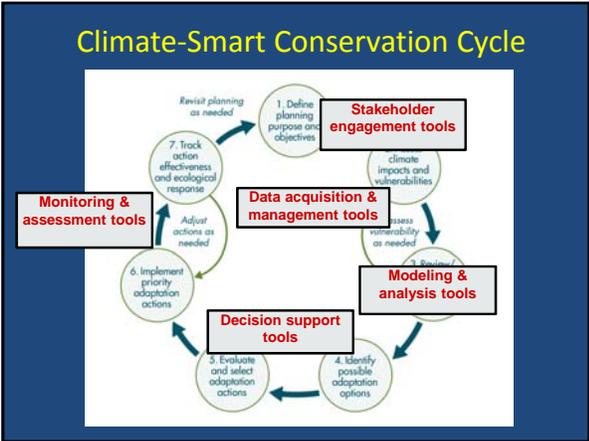
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## Two key principles for choosing data and tools

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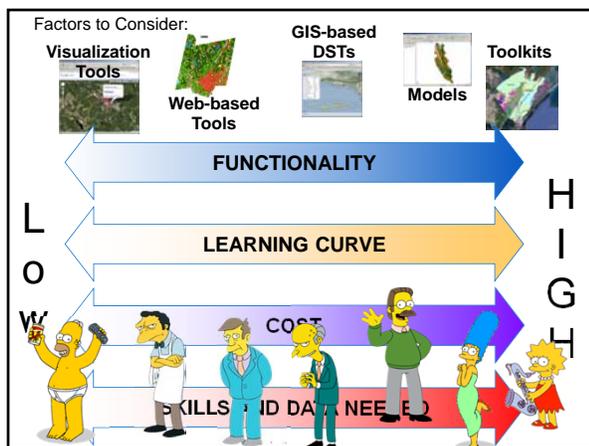
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## You don't have to pick just one!

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

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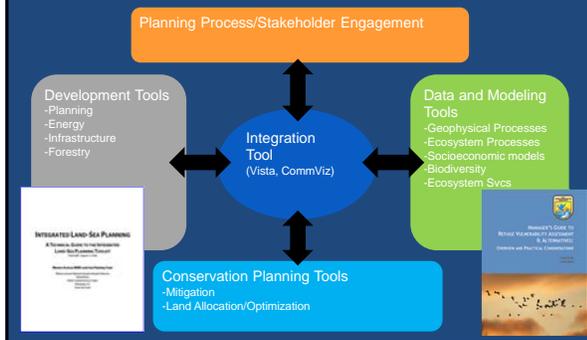
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### Toolkits: Linking groups of tools via interactive process



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### 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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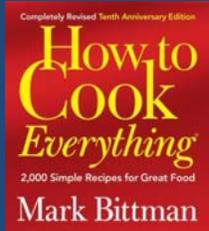
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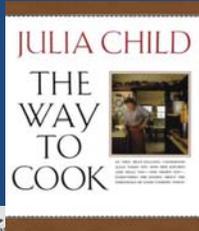
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Putting VA  
Principles into Practice



VS



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## Tool Types

- 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

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## Tool Types

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

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## Tool Types

- Portals
- Visualization
- Analytical
  - NatureServe Vista, CC Vulnerability Index
  - SLAMM

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## Tool Types

- Portals
- Visualization
- Analytical
- Socioeconomic
  - COAST
  - Spatial Trends in Socioeconomics

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## Tool Types

- Portals
- Data access
- Visualization
- Analytical
- Socioeconomic
- Indices

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## Tool Resources



ECOSYSTEM-BASED  
MANAGEMENT  
TOOLS  
NETWORK

ebmtools.org



DIGITAL COAST  
NOAA Coastal Services Center

<http://www.csc.noaa.gov/digitalcoast/>



Climate Tools Matrix



Climate Tools Decision Guide

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## EXTRA SLIDES

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## The Problem with Tools...

Complicated and Confusing



Tool Developer  
GIS Analyst  
Planner



Require considerable capacity

Tend to drive a top down, "Predict-and-Plan" process




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# WAYS TO THINK ABOUT TOOLS

Type

Function

How it assists planning process

Sectors addressed




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# HOW TOOLS AFFECT THE POLICY CYCLE



	Stakeholder Engagement	Scoping	Assess			Plan	Implement	Monitor
			Impact	Vulnerability	Risk			
CanVis	Blue arrow	Blue arrow	Yellow arrow	Yellow arrow	Yellow arrow	Red arrow	Green arrow	
SLR Viewer*	Blue arrow	Blue arrow	Yellow arrow	Yellow arrow	Yellow arrow	Red arrow	Green arrow	
Our Coast, Our Future*	Blue arrow	Blue arrow	Yellow arrow	Yellow arrow	Yellow arrow	Red arrow	Green arrow	
SimCLIM*	Blue arrow	Blue arrow	Yellow arrow	Yellow arrow	Yellow arrow	Red arrow	Green arrow	
SLAMM	Blue arrow	Blue arrow	Yellow arrow	Yellow arrow	Yellow arrow	Red arrow	Green arrow	
CommunityViz	Blue arrow	Blue arrow	Yellow arrow	Yellow arrow	Yellow arrow	Red arrow	Green arrow	
NatureServe Vista*	Blue arrow	Blue arrow	Yellow arrow	Yellow arrow	Yellow arrow	Red arrow	Green arrow	
HAZUS	Blue arrow	Blue arrow	Yellow arrow	Yellow arrow	Yellow arrow	Red arrow	Green arrow	
SoVI	Blue arrow	Blue arrow	Yellow arrow	Yellow arrow	Yellow arrow	Red arrow	Green arrow	
CCVI	Blue arrow	Blue arrow	Yellow arrow	Yellow arrow	Yellow arrow	Red arrow	Green arrow	
InVEST*	Blue arrow	Blue arrow	Yellow arrow	Yellow arrow	Yellow arrow	Red arrow	Green arrow	

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# TYPES OF TOOLS



Process



Visualization



Web-based



Desktop GIS



Toolkits




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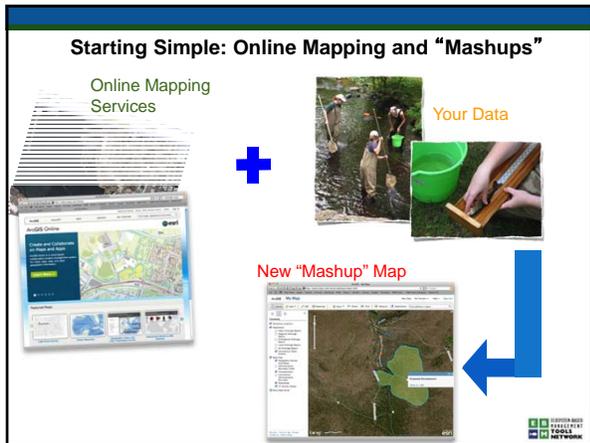
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### Web-based Tools

**SLR and Coastal Flooding Impact Viewer**  
(NOAA CSC)  
Geographic Focus: National

**Coastal Resilience**  
(The Nature Conservancy & Partners)  
Geographic Focus: Regional/Local  
(LIS, GOM, Florida Keys, Ventura area in CA)

**Climate Wizard**  
(The Nature Conservancy)  
Geographic Focus: National/Global

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### Pros & Cons of Web-Based Tools

Pros	Cons
✓ Easy to start: its all been done for you	✓ Often limited to pre-run packaged analyses
✓ Usually easy to use: good interfaces and limited options	✓ Usually limited to its data, can't integrate local data
	✓ Often can't readily save and download data and your results for further work

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Do it yourself Lobotomy

So you want to do more yourself?

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### GIS-based Decision Support Tools

communityviz®

A planning tool that allows communities to develop and compare alternate scenarios.



Community Planning



Urban Planning



Conservation



Parks



Transportation

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communityviz

Fly-through

ArcGIS Extension

Analysis

Multiple Scenarios

Dynamic

Intuitive

Interactive

communityviz

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## For the Serious DIY: Toolkits

I built my toolkit in just one weekend!

Planning projects have diverse needs and issues

Generally not a single, one-size-fits-all tool available

Still, there are many tools that can address parts of your needs, so....



Linking groups of tools through an interactive process gives the flexibility to address an almost unlimited number of issues, with existing tools.



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## Steps in Assembling a Toolkit

Produce an information workflow that supports your project objectives & decision product needs

Search & select tools that can produce the needed products from available data

Filter selection for tools that meet your resource/capacity

Try to pick tools that are able/proven to work together if possible



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	<b>Integrated Planning for Resilient Communities</b> Berkeley-Charleston-Dorchester, SC <b>Function:</b> Supports integrated hazard- and ecosystem-based land use planning
	<b>Integrated Land-Sea Toolkit</b> Mission-Aransas NERR, TX <b>Function:</b> DST to assess the effects of urbanization on water quality and biodiversity
	<b>Refuge Vulnerability Assessment &amp; Alternatives Toolkit</b> VA, NV, CA <b>Function:</b> Cumulative effects assessment for wildlife refuges and evaluate management scenarios



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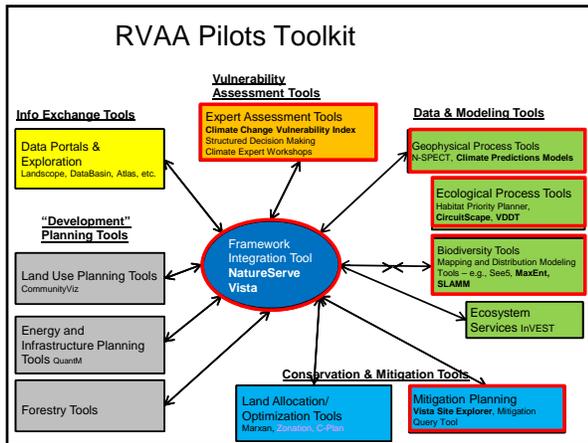
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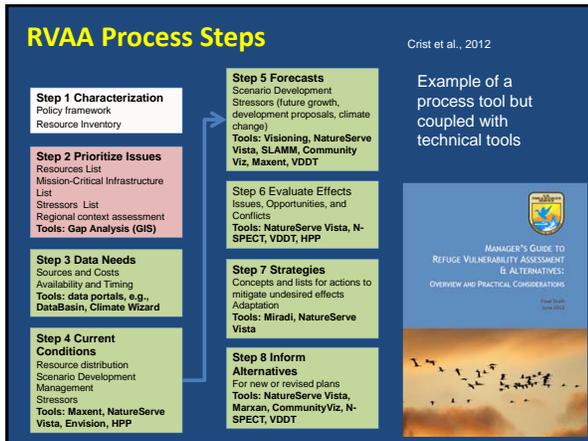
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