

A CHANGE ADAPTATION FRAMEWORK

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*A Southern Sierra Change Adaptation Workshop
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What are we to do?

What do we **value**?
Where do we value it
most?

What are **current
objectives** for these
things?

How **vulnerable** are
these things? Where,
when & why?

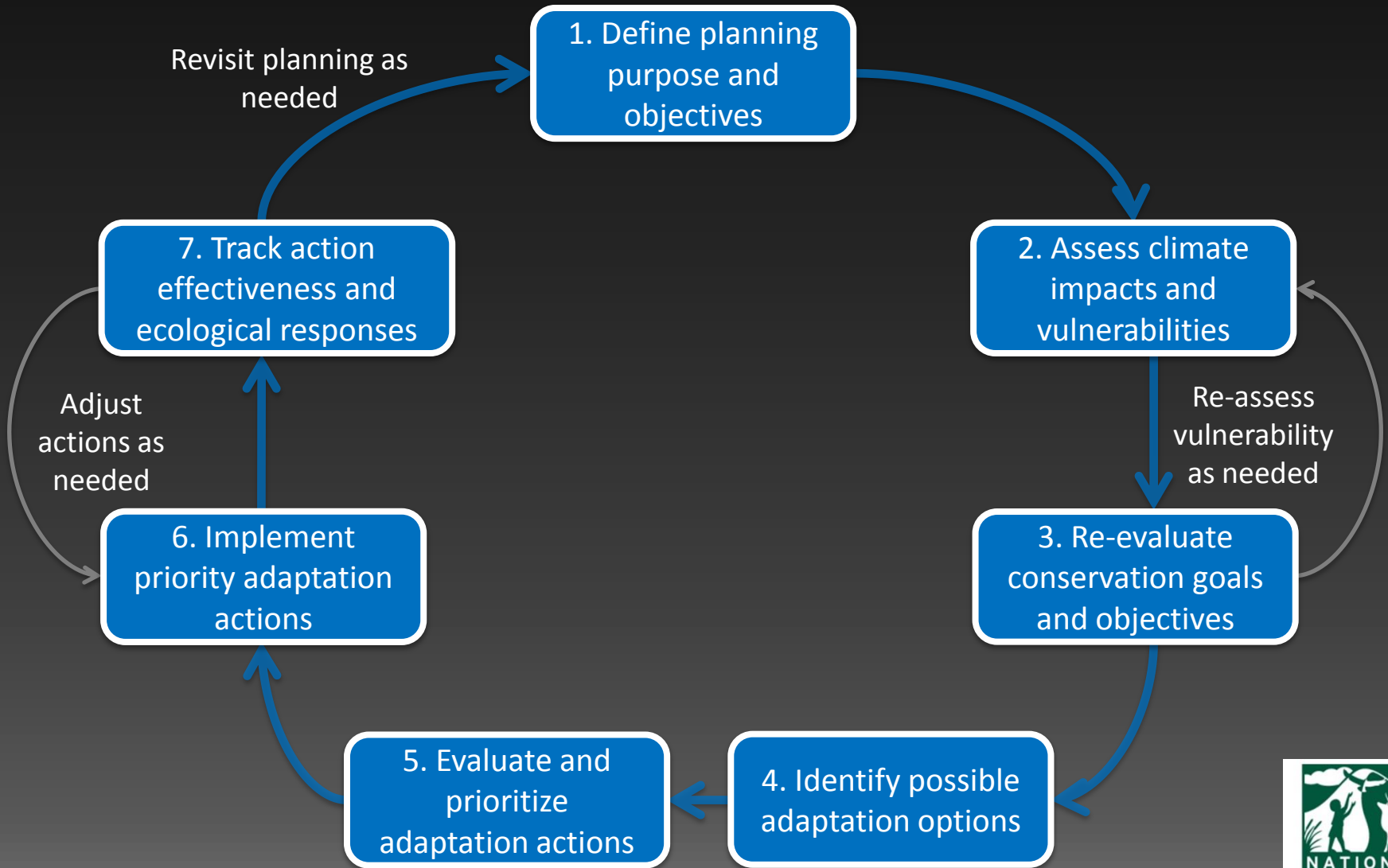
Do current objectives make
sense? What are **revised
objectives**?

What **strategies & tools**
accomplish revised
objectives?

How to **prioritize /decide**
(What to do? Where?
When?)

**SCIENCE +
VALUES**

Climate-Smart Conservation Cycle



Climate Retrofits and Beyond

Stage 1

**Business
as Usual**

- Traditional goals
- Traditional strategies

Stage 2

**Climate
Retrofit**

- Traditional goals
- Revised strategies*

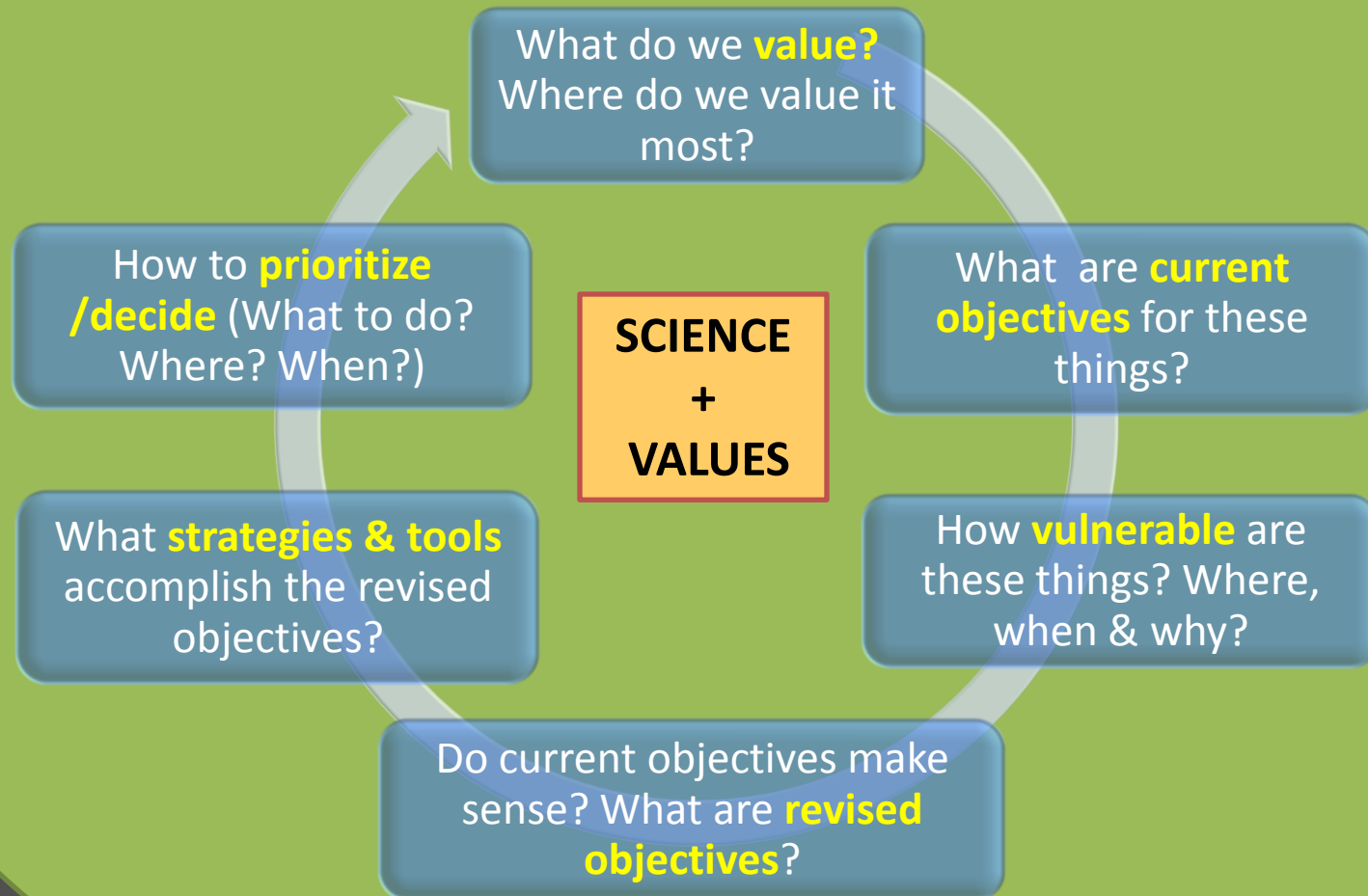
Stage 3

**Climate-
Smart
from the
Start**

- Revised goals*
- Revised strategies*

* Review and revised as needed, based on climate change assessments.

COOPERATE REGIONALLY



& LEARN TOGETHER



Example: Revised objectives for high-elevation forests

1. Self-sustaining high elevation white pine species (foxtail pine, whitebark pine, western white pine) exist within the ecoregion.
2. Transforming high-elevation forests retain existing soil and support species native to the ecoregion.

How to prioritize regionally where to manage for persistence, manage for change, or use restraint and observe?

Conservation from a regional perspective: A subalpine example

Greens = Potential Refugia

Low exposure to climate stress in 2070-2099

Red/orange = Early Exposure

High climate exposure early (2010-2039)

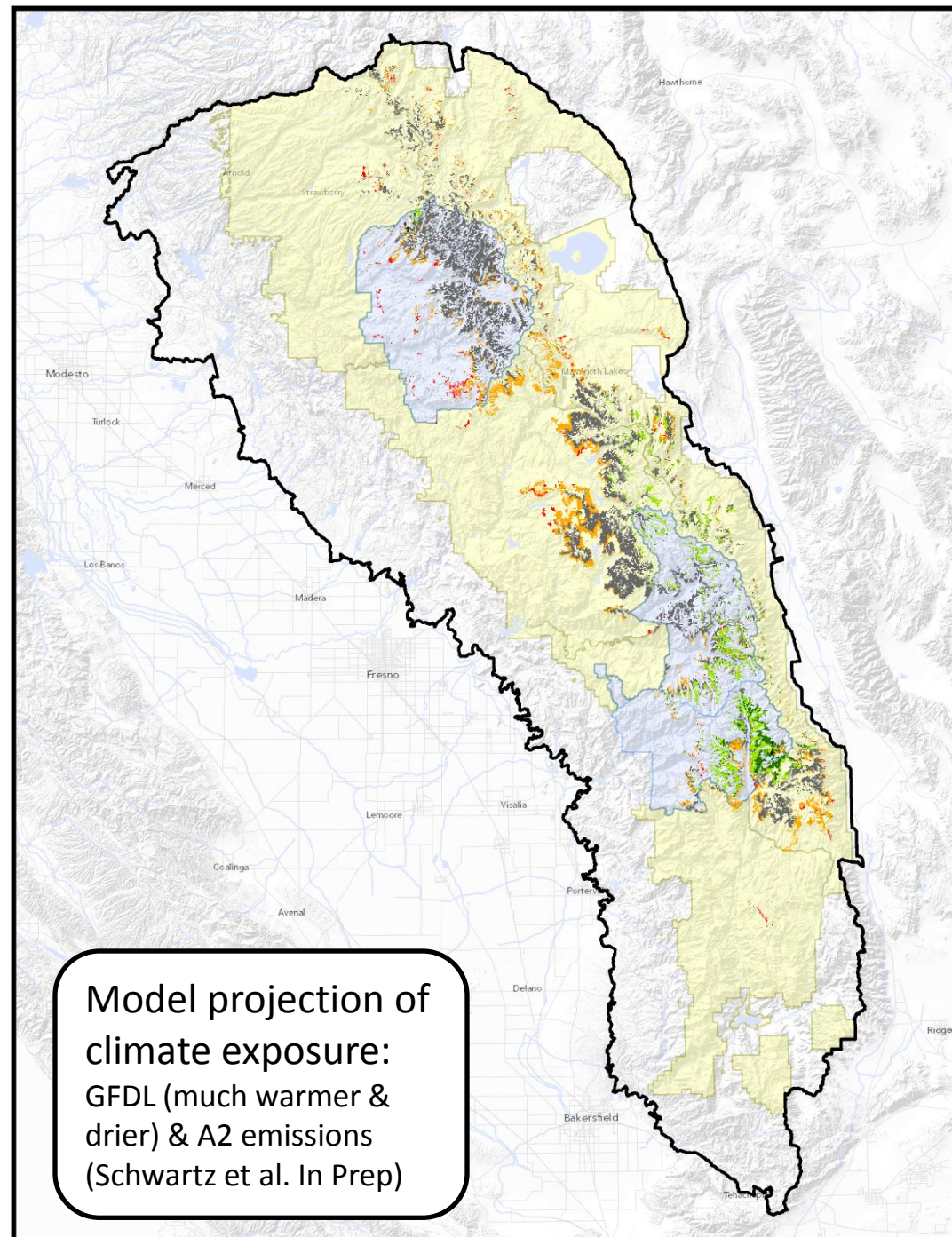
Grey = moderate/high exposure to climate stress in 2070-2099.

Land Ownership:

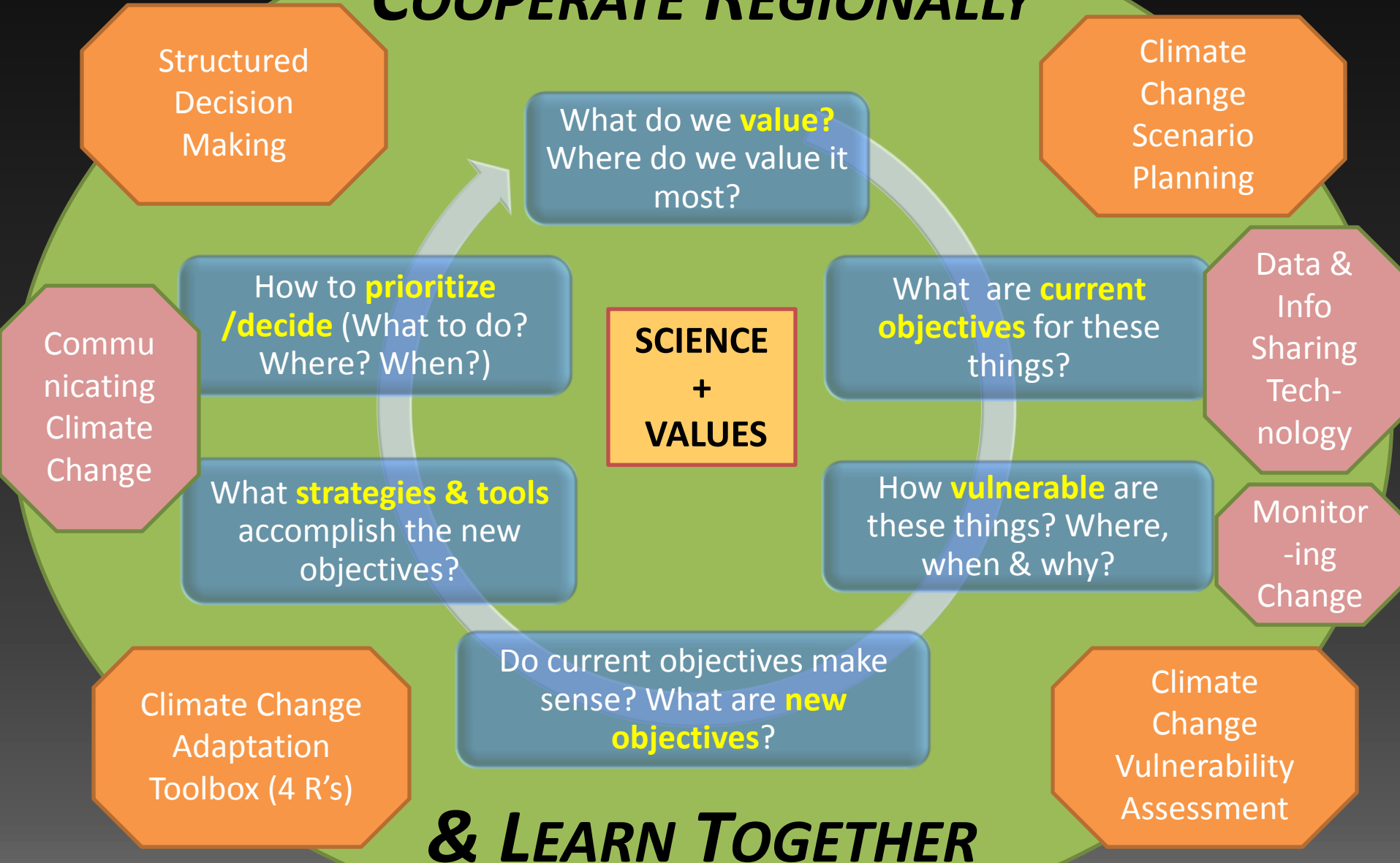
Light Yellow = USFS

Light Blue = NPS

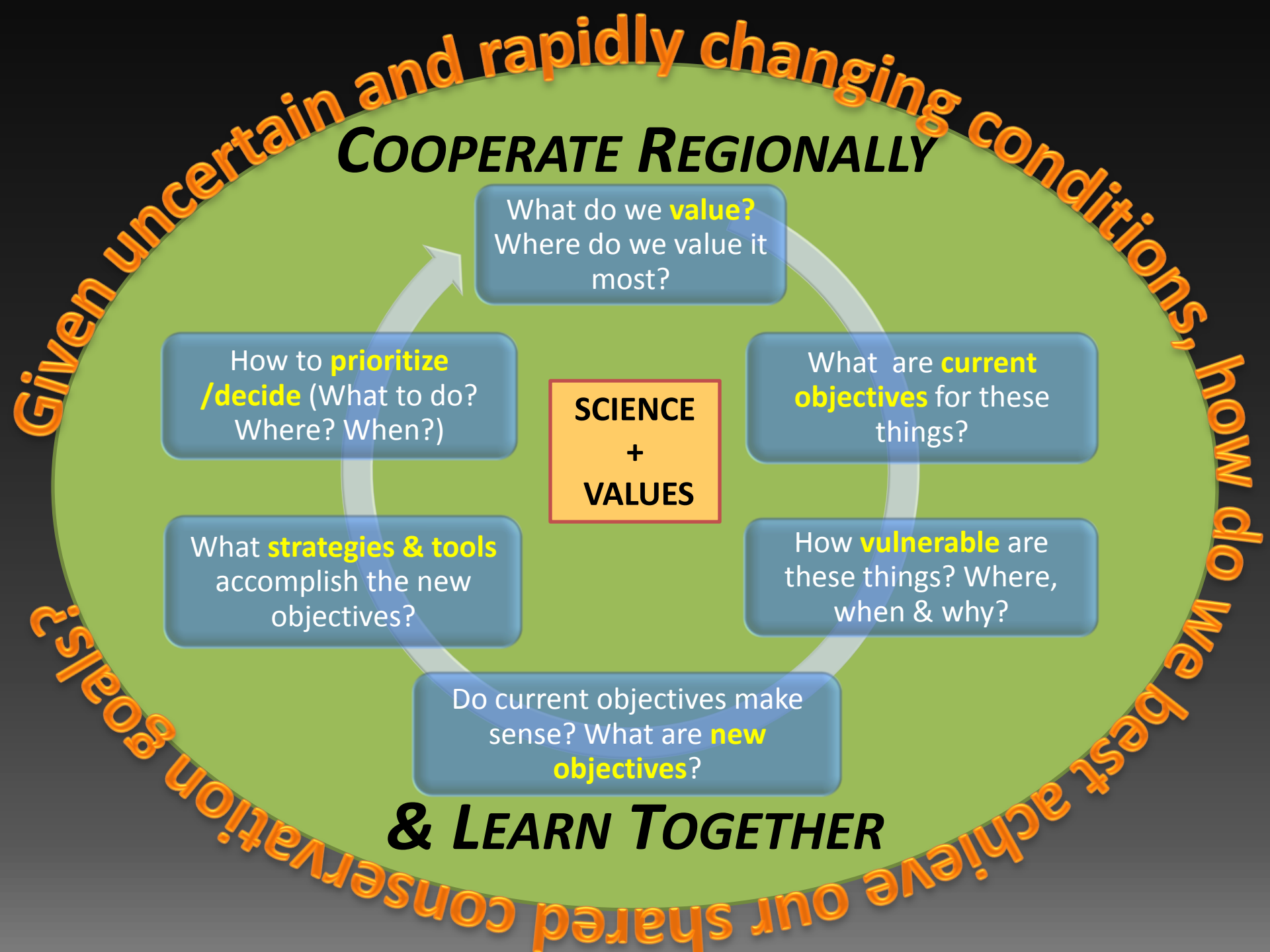
White = other



COOPERATE REGIONALLY



	Human Dimension Goals:	Opportunity	Experiential	present generations							
				future generations							
			Recreational	Wilderness	Minimize alterations of the community of life (untrammelled)						
					Maximize natural qualities						
					Minimize developments for any purpose (Undeveloped)						
					Provide opportunities for solitude & primitive experience						
					Allow commercially supported recreation to the "extent necessary"						
				hunting & fishing							
				camping and hiking							
				snow play							
			Educational								
		Culture	Diversity	race and gender							
				experience							
				tradition							
				perspective							
			Cultural Legacy	tribal							
				prehistoric							
				historic							
				ethnic							
		Community Capacity	People	skills							
				education							
				health and safety							
			Economy	public services							
				employment opp.							
				business opp.							
				housing							
				personal income							
			Politics/ Government	democratic principles							
				environmental justice							
				governance							
			Physical Infrastructure	Transportation							
				Water & Sewer							
				Communications							
				Energy Systems							



Workshop Organization

Session & Focal Question	Format	Tables
TODAY		
1 – INTRODUCTION: What do we know?	Plenary: presentations	N/A
2 – SHARED CONSERVATION VALUES: What do we really care about?	Plenary: presentations, exercise, discussion	Values grp (#)
Evening: POSTERS & COLLABORATION STATIONS		
TOMMORROW		
3 – VULNERABILITY: How can we determine the vulnerabilities of shared conservation values?	Plenary: presentations, mini-exercise	Critical Attribute grp
4 – STRATEGIES, CONSTRAINTS & TOOLS: What can we really <u>do</u> to prepare for rapid change and an uncertain future?	Plenary: presentations Then....Break-Out grp exercise	Critical Attribute grp
FRIDAY		
4 - REPORT-OUT	Plenary	
5 – CONCLUSIONS & NEXT STEPS: What's next?	Plenary: mini-exercise, presentations, discussion	Values grp (#)