

Decision-Making for a Resilient Future for Scott Valley

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Scott Watershed Informational Forum

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Overview

- Decision making in general
- Structured decision framework
- Next steps

What are choices?

A selection among competing alternatives

Personal

Professional

Societal

Decisions

what actions will I take?

Judgments

what am I for or against?

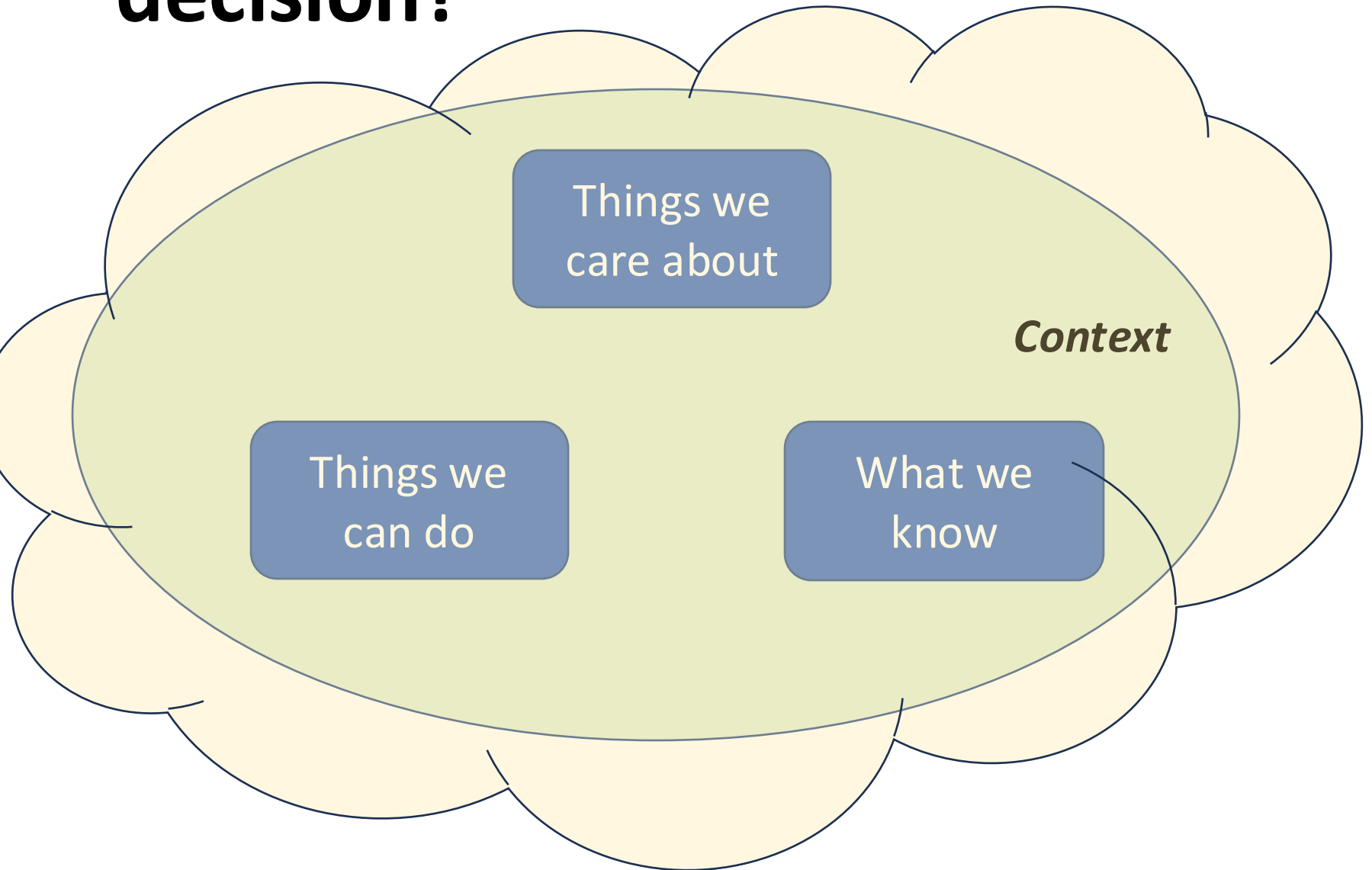
What makes decisions hard?

- We need to make judgments about both facts and values
 - Facts are about “what is”, values are about “what ought”
- We need to make trade-offs
 - Values are often in conflict, we can’t always have our cake and eat it too
- The future is uncertain
 - The relevant facts in decision making are about the future – predictions
- We have to work with other people
 - People have different beliefs and values, they may not know or like or trust each other

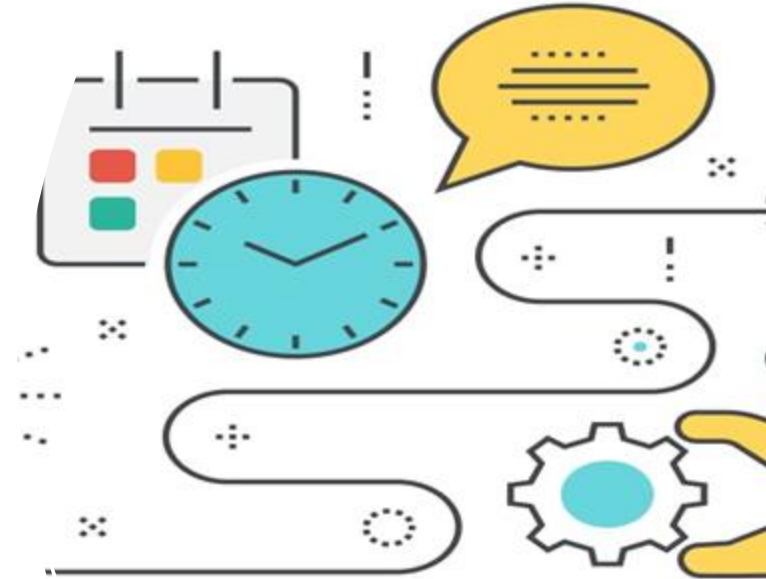
Structured Decision Making:

An organized approach for helping people, especially groups, work together to make informed, defensible and transparent choices

What are the different parts of a decision?

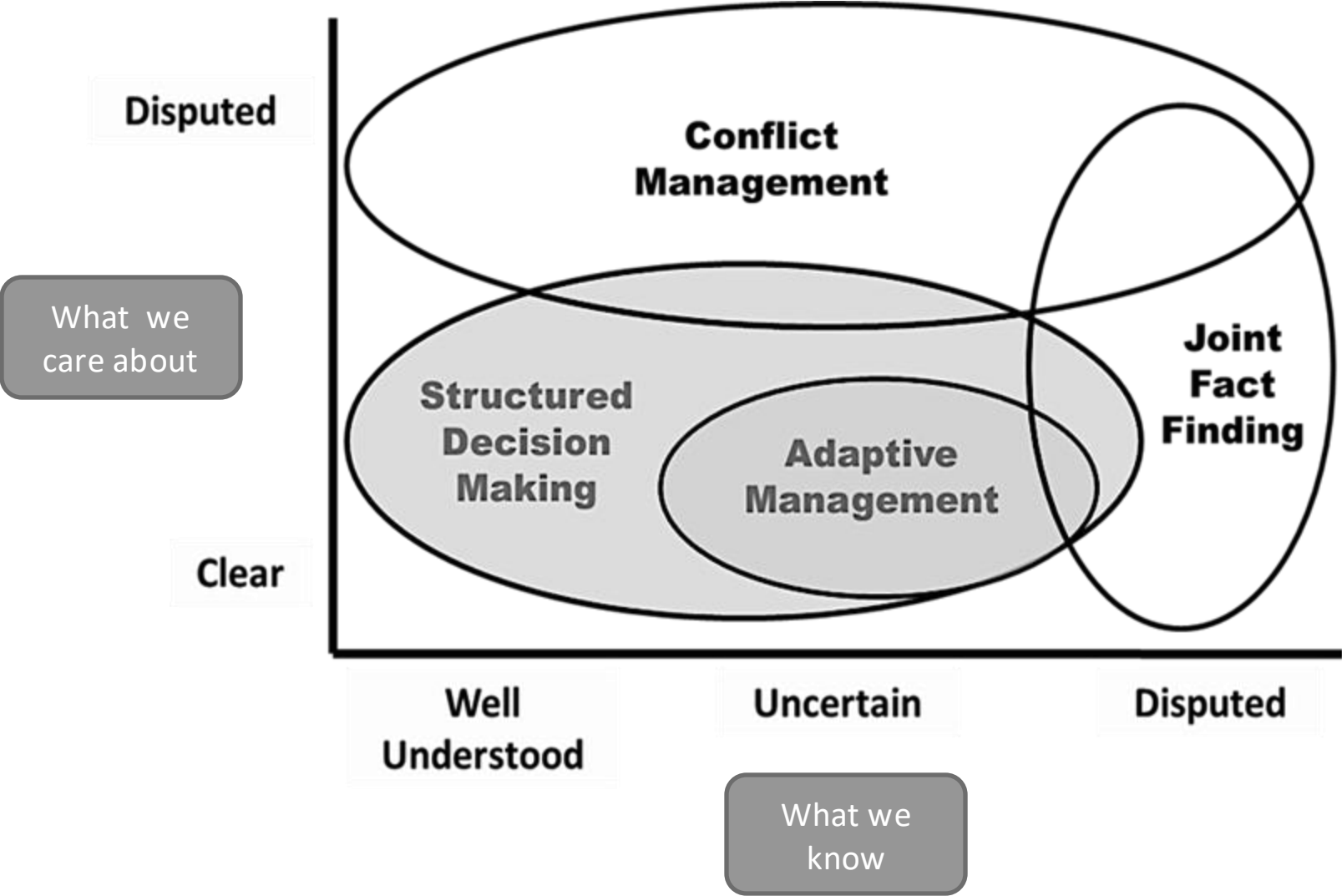


Turning this into a process



- **What's the decision** (or problem, or opportunity)?
- **What do we care about** when it comes to this decision?
- **What can we do?** What actions can we take?
- What will **the consequences of those actions** be in terms of what matters to us?
- How do we want to handle **trade-offs and uncertainty?**

Not always the right tool...



Putting it all together:

Example land management decision

What do we care about?

	Preferred direction
Implementation cost	Lower
Benefits to at-risk species	Higher
Landowner income	Higher

Putting it all together:

Example land management decision

What can we do?

	Preferred direction	Option A	Option B	Option C
Implementation cost	Lower			
Benefits to at-risk species	Higher			
Landowner income	Higher			

Putting it all together

Example land management decision

	Preferred direction	Option A	Option B	Option C
Implementation cost	Lower	1	2	5
Benefits to at-risk species	Higher	5		1
Landowner income	Higher	2	3	3

What do we know?

What's the "best" choice?

	Preferred direction	Option A	Option B	Option C
Implementation cost	Lower	1	2	5
Benefits to at-risk species	Higher	5	3	1
Landowner income	Higher	2	3	3

What's missing?

	Preferred direction	Option A	Option B	Option C
Implementation cost	Lower	1	2	5
Benefits to at-risk species	Higher	5	3	1
Landowner income	Higher	2	3	3

What's missing?

	Preferred direction	Option A	Option B	Option C
Implementation cost	Lower	1	2	5
Long-term costs	lower	2	2	5
Protection offered to at-risk species	Higher	5	3	1
Landowner income	Higher	2	3	3
<i>From cattle</i>		2	3	3
<i>From yoga retreats</i>		5	3	1

What's missing?

	Preferred direction	Option A	Option B	Option C
Implementation cost	Lower	1	2	5
Long-term costs	lower	2	2	5
Protection offered to at-risk species	Higher	5	3	1
Landowner income	Higher	2	3	3
From cattle		2	3	3
From yoga retreats		5	3	1
Spiritual integrity of landscape	Higher	2	4	3

Benefits of structured decision making

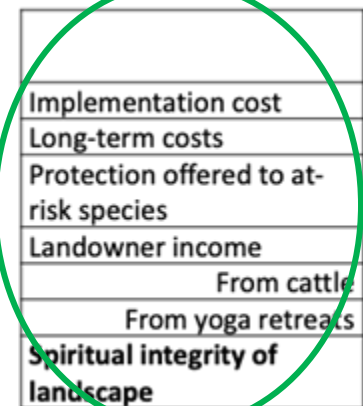
- It changes how we think and talk together
 - Deeper understanding, collective ownership
- It helps us learn together
 - Collaborative problem-solving
- It uses science for science things and values for values-based things
 - My science can't disprove your values or vice-versa!
- Foundation for better alternatives
 - Creative, address all values
- Focus time and energy where it matters

Using this for river restoration decisions in the Valley

- SRWC asked me to come help make sure *all* concerns are incorporated into river restoration work
- To do this we need to understand what all the concerns are, and come up with a way to build those into project evaluation.

What do we need to talk about?

- Framing
 - How do different people view the “problem” to be solved?
- Exploring concerns and values in the Valley when it comes to restoration decisions
 - Create a shared understanding of what matters
 - Make all values visible
 - Be explicit about decision criteria



	Preferred direction	Option A	Option B
Implementation cost	Lower	1	2
Long-term costs	lower	2	2
Protection offered to at-risk species	Higher	5	3
Landowner income	Higher	2	3
From cattle		2	3
From yoga retreats		5	3
Spiritual integrity of landscape	Higher	2	4

The “how”

- One-on-one interviews with range of affected people to get concerns and values
 - What matters to you?
 - What are your goals?
 - What’s wrong with the current situation? What’s right?
 - What are you ultimately trying to achieve? Avoid?

The “how”

- One-on-one interviews with range of affected people
- Draft proposed list of evaluation criteria
 - Ask interviewees: are your concerns captured?
 - Ask SRRAPP, others: do you understand these?
 - Develop proposed metrics: units of measurement and how the evaluation happens

The “how”

- One-on-one interviews with range of affected people
- Draft proposed list of evaluation criteria
- Test proposed criteria against past, current, or hypothetical projects
 - Predict consequences
 - Evaluate tradeoffs, risks, analysis with SRRAP

The “how”

- One-on-one interviews with range of affected people
- Draft proposed list of evaluation criteria
- Test proposed criteria
- **Confirm criteria for future use**

What this allows us to do

- Shared language for what matters
- Way to make all concerns visible
- Easier to see what the tradeoffs are and how big they are
- Helps pinpoint places where uncertainty about consequences could be important

*Thank you, and I hope to talk with many of
you soon!*

Decisions are the only means you have to change your future life.

--Professor Ronald Howard