

Risk Management in Operational Fire Management

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My Bias

Fire managers are:

- action-oriented;
- risk averse;
- watching for the first constraint on their action.

Fire Management Programs are designed by government to *minimize risk* to society.

And we are good at it.

Risk

Risk is not Bad...

Risk Exists, to be Managed

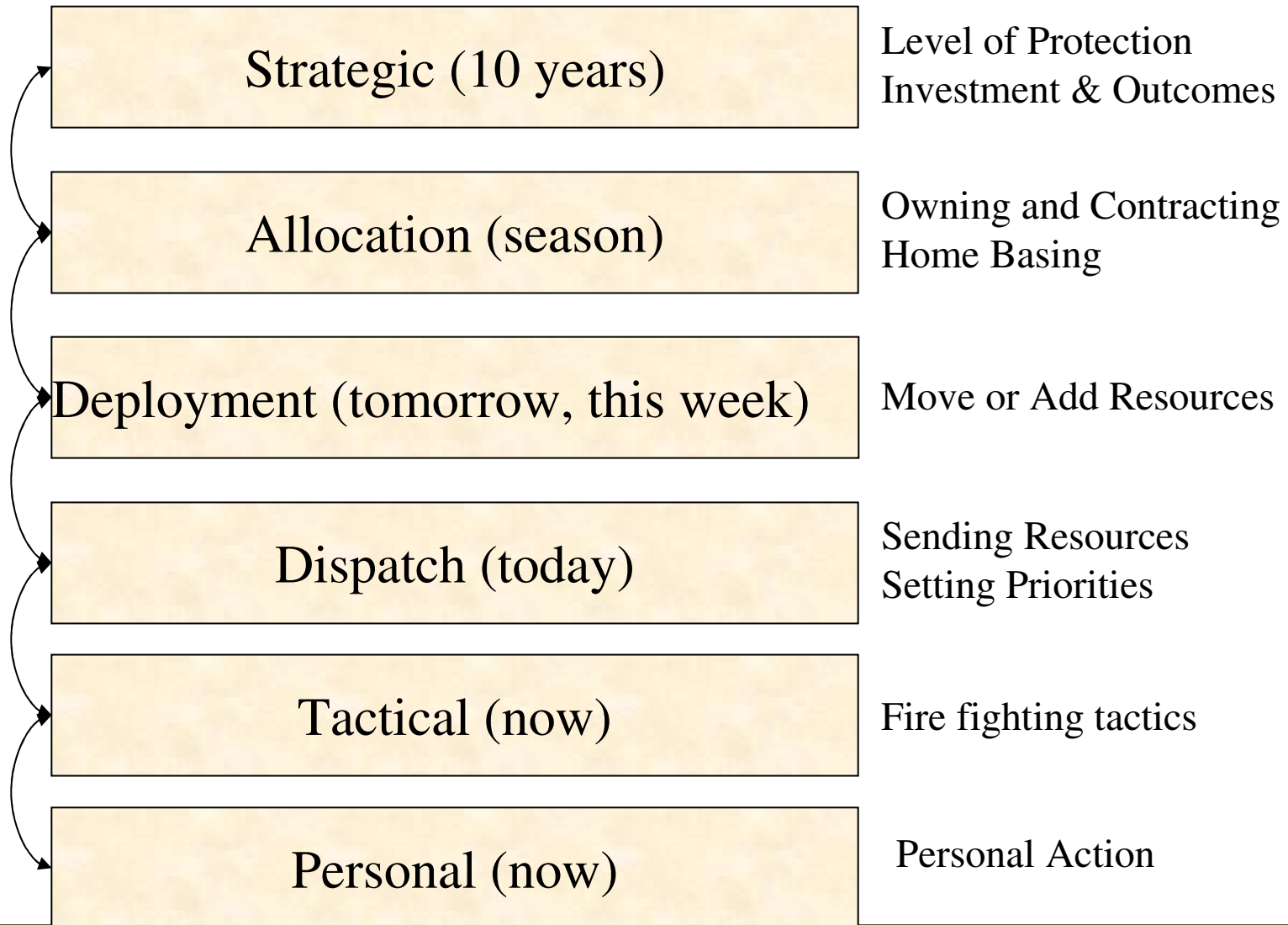
In all Risk is Opportunity

Complex Systems

Complex Systems
Uncertainty

Risk

Hierarchy of Fire Management Decisions



Are We Managing Risk?

Total Cost

- at the organizational scale

Fire in Support of Sustainable Ecosystems

- at the scale of land management



Do we Understand the Risk Picture?

“Normal” has changed...



“Your forest has a fire problem...”

Too much fire some days...

...and not enough for tomorrow.

“Assessing” Risk

1. Establish the Context
2. Identify the Risks
3. Analyze the Risks

		Hazard Probability				
		Unlikely A	Seldom B	Occasional C	Likely D	Frequent E
Severity	Catastrophic I			High	Extremely High	
	Critical II					High
	Marginal III	Low		Medium		H
	Negligible IV					

“Managing” Risk?

4. Evaluate your tolerance

5. Take Action

What can you do to prepare?

What can you do to provide the most options for the future?

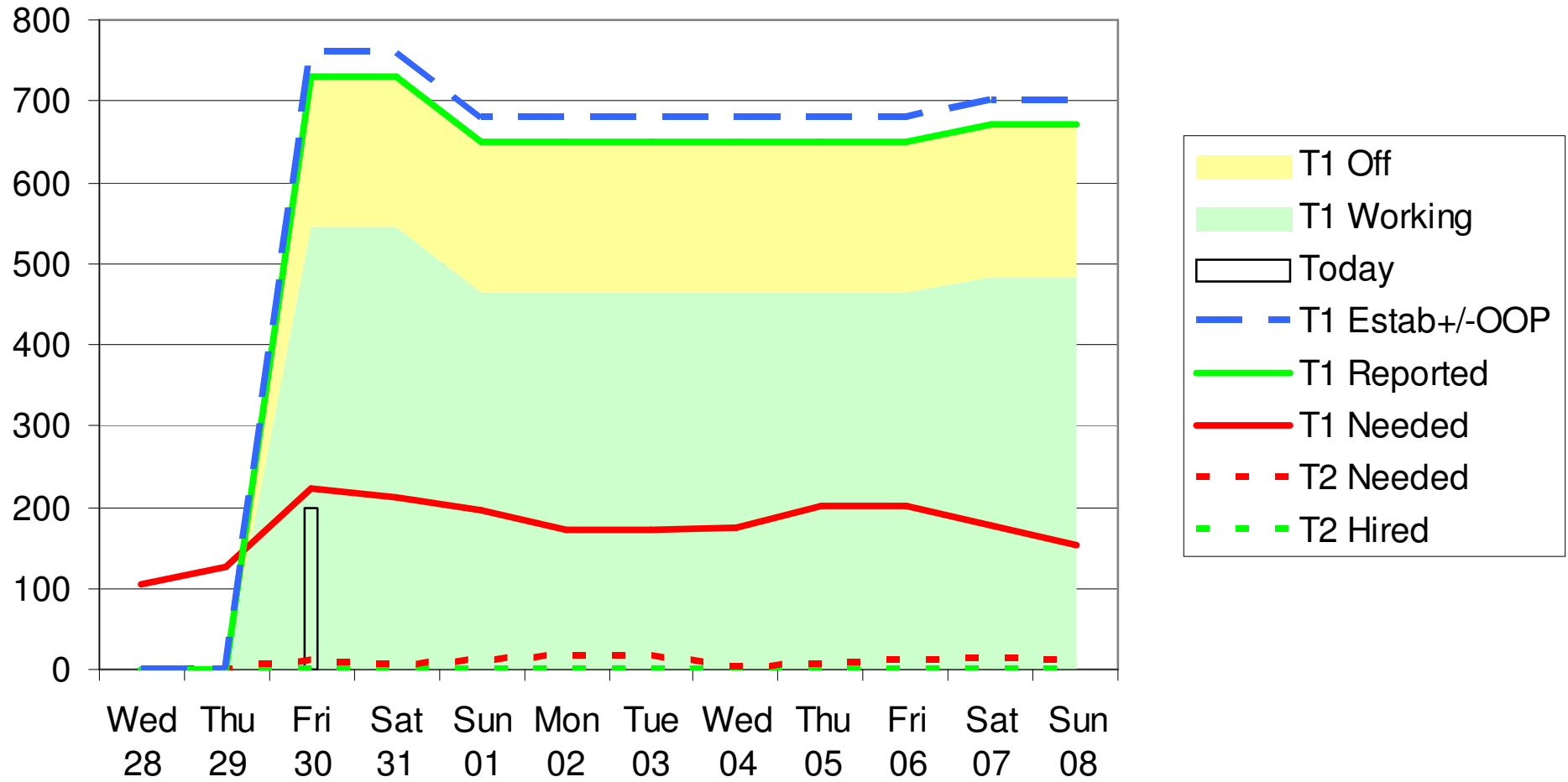
What are the triggers for action or re-planning?

Tolerance and Trigger Points

For the most part, fire managers have a plan for escalation.

Most do not have a process that will interrupt continuation down the same path.

Fire Fighters - Province



Risk Perception

Do you have any scars?

What about ones I can't see?

Does your organization have scars?

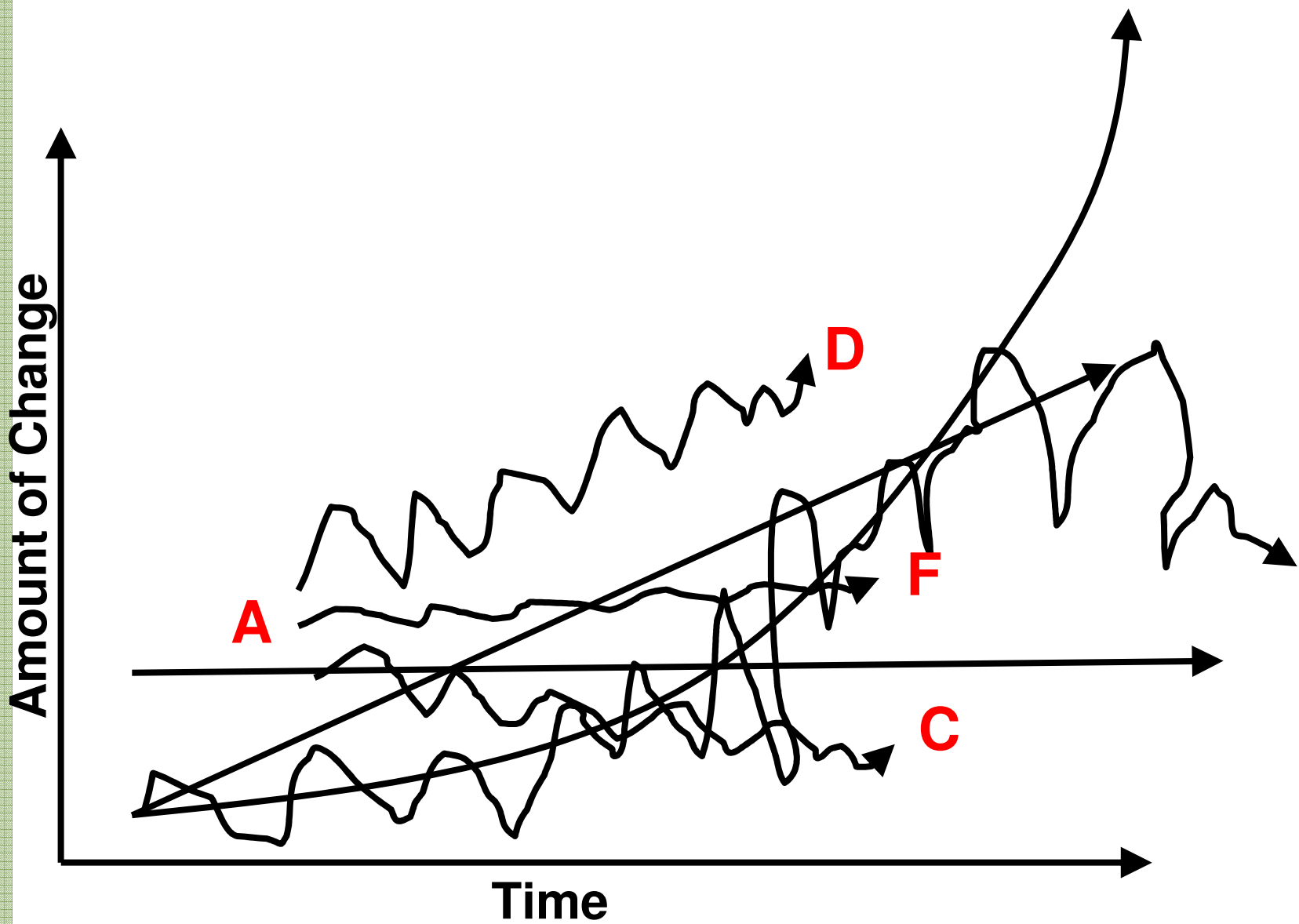
Complex Systems

Variability Rules

Extreme Events get Noticed

Scale Matters

Focus on Processes



Common Errors

Stressing about everything and no plan

Working toward a single scenario

No threshold for action

Focusing on short term risks, rather than short term actions to avoid long term risks

Final Thoughts...

The issues and opportunities are at the edges

Decisions are a process, not an event

- Support processes with information about the system
- It's going to be about people, in the end

Fire Managers need to stand up for front-line staff
...and front line staff need to build trust

Predictable Surprises

Surprises start with expectations...

Risk management is not about focusing on what you know...

...it's about imagining what you will do when confronted with what you should have expected, but didn't.

