

# Fixing the Law to Allow for Agency Adaptive Management for Ecosystem Services

---

Robin Kundis Craig

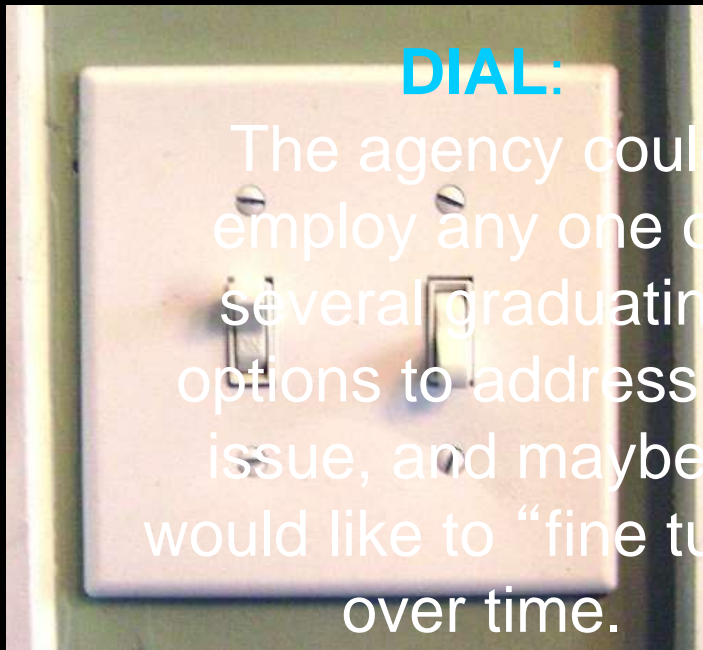
(based on work with J.B. Ruhl)

William H. Leary Professor of Law

**ACES Conference**

**Jacksonville, FL © December 7, 2016**

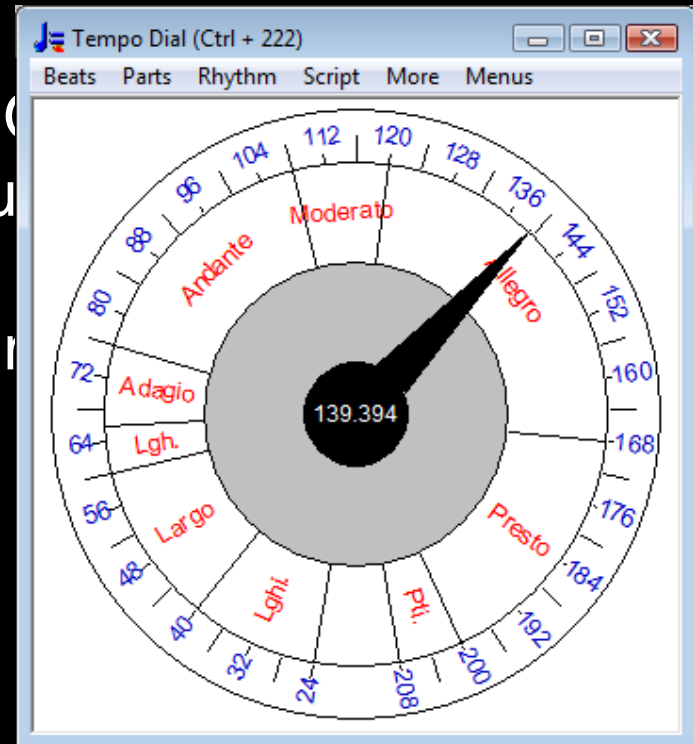
# THE PROBLEM: One Administrative Law, Two Types of Agency Decision



**DIAL:**

The agency could employ any one of several graduating options to address an issue, and maybe it would like to “fine tune” over time.

mutu  
com  
at



# EXAMPLE: Changing Ecosystem Services in the Everglades and Impacts on Species

---



**Cape Sable Seaside Sparrow**

Photo care of U.S. Fish &  
Wildlife Service

**Everglades Snail Kite**

Photo care of U.S. Fish &  
Wildlife Service



# The “Light Switch” Decision: Listing Each Species under the ESA

---

- ESA § 4
- By statute, species are listed through modified notice-and-comment rulemaking, reviewable under “arbitrary and capricious” standard.
- USFWS must make the decision “solely on the basis of the best scientific and commercial data available to him.”
- THREE options: **don't list**; list as **threatened**; list as **endangered**.
- FIVE statutory FACTORS:
  - Habitat loss
  - Overutilization of species
  - Disease or predation
  - Inadequacy of existing regulation
  - Other natural or manmade factors affecting the species' continued existence.

# The Outcomes for Our Birds:

---



- Listed as **ENDANGERED**, 1967 = “in danger of extinction throughout all or a significant portion of its range.” ESA § 3.

- Listed as **ENDANGERED**, 1967 = “in danger of extinction throughout all or a significant portion of its range.” ESA § 3.



# The “Dial” Decision: How to Recover the Species

---

- ESA § 4: USFWS “shall develop and implement plans [“recovery plans”] for the conservation and survival of endangered species and threatened species . . . .”
- Priority goes to species that are in conflict with development.
- Plan must include “site-specific management actions” to achieve recovery.
- “Conservation” = bringing the species “to the point at which the measures [under the ESA] are no longer necessary.” ESA § 3.

# The Problem for Our Type 1



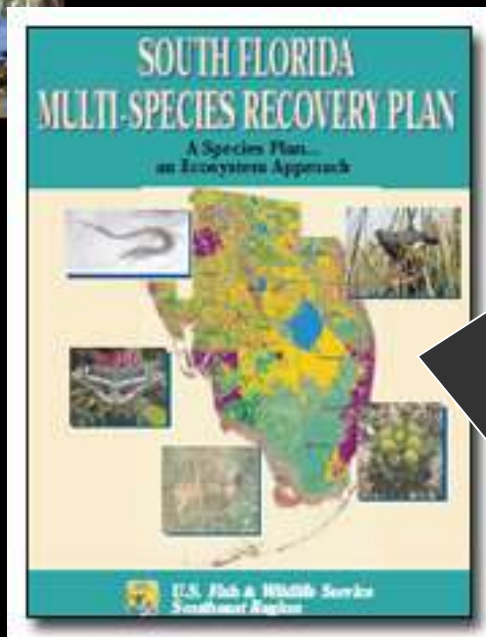
Figure 4. Cape Sable Seaside Sparrow sub-populations.



# So What Do You Do in the Everglades? Adaptive Management!



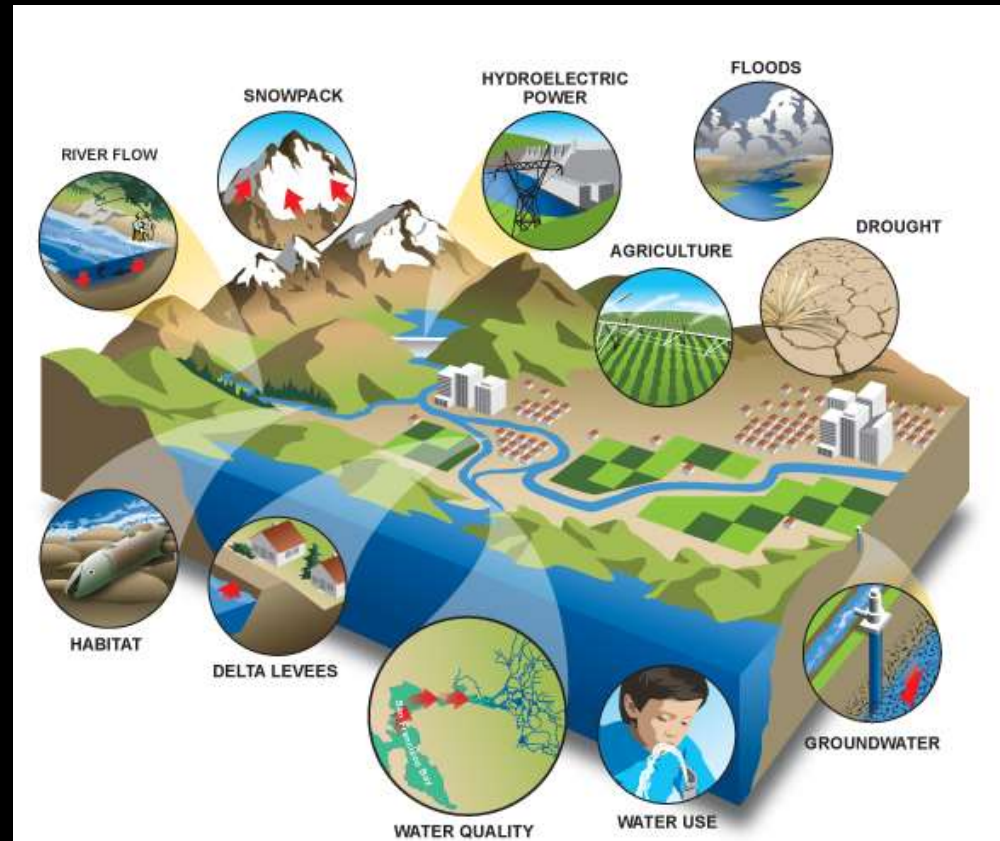
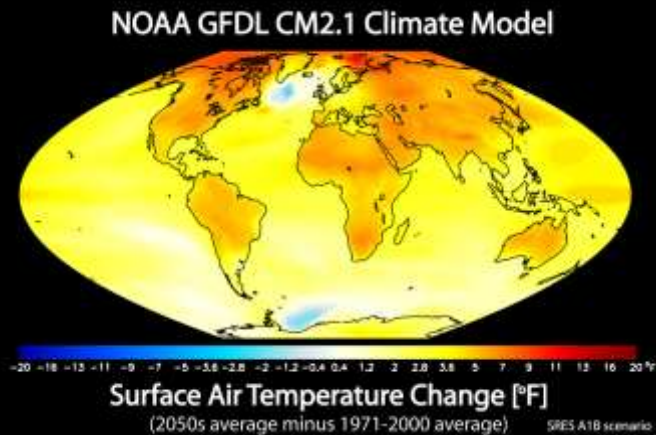
National Academy Press



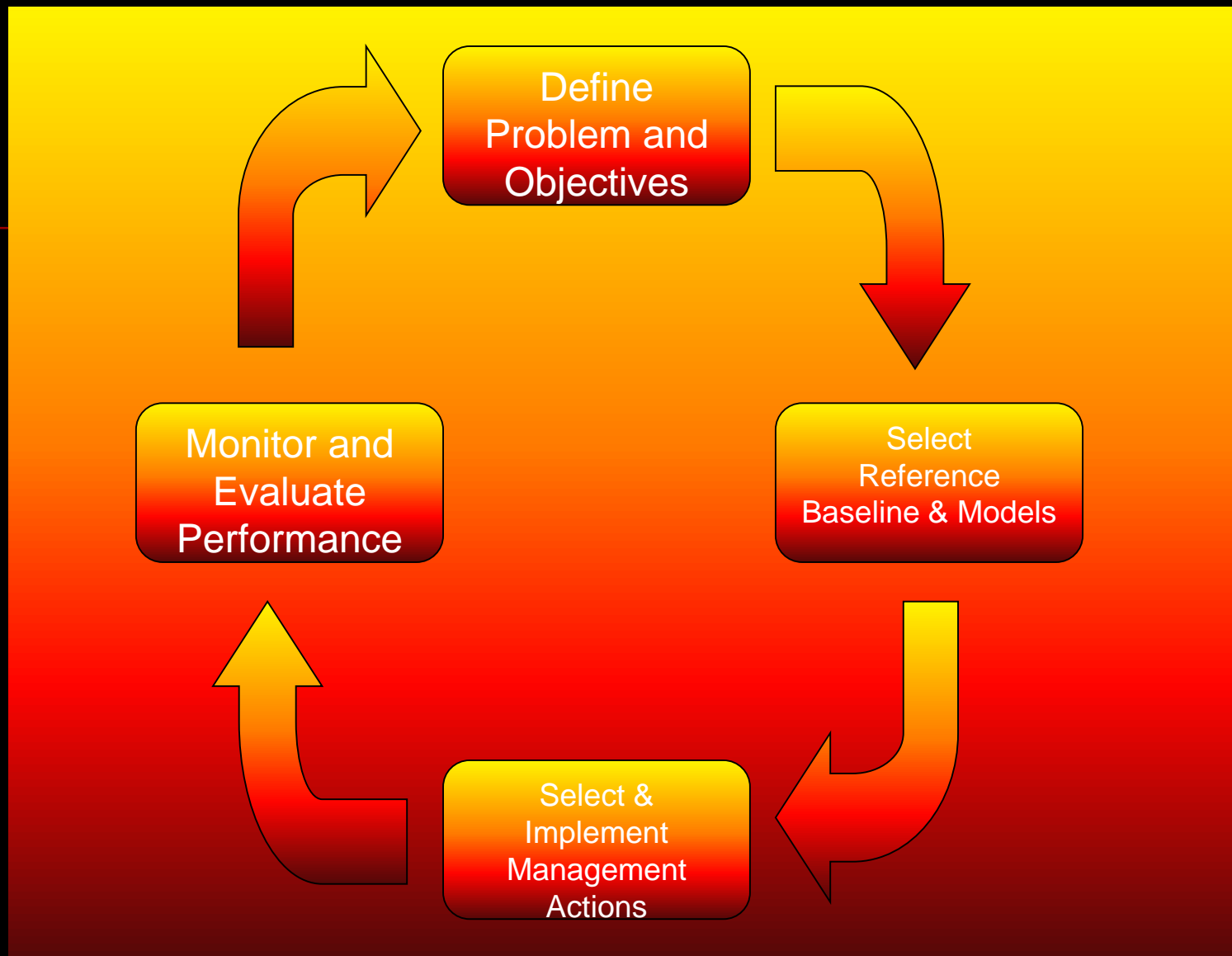
“Competed in 1999 in partnership With agencies of the Department of Interior, the South Florida Multi-Species Recovery Plan acts as a ‘living document’ that allows for the recovery of listed species through **adaptive management techniques** based upon the most current science and research. The plan looks at species recovery through a landscape lens, rather than the traditional species-by-species approach.”



# Adaptive Management Will Also Be Increasingly Important Because of . . .



Graphic care of State of California.



The Adaptive Management Process

# The Structural Problem

---

Administrative agencies “have not often been rewarded for flexibility, openness, and their willingness to experiment, monitor, and adapt.”

R. Edward Grumbine, *Reflections on “What is Ecosystem Management,”* 11 *Conservation Biology* 41 (1997).

# Other Current Legal Impediments to Adaptive Management

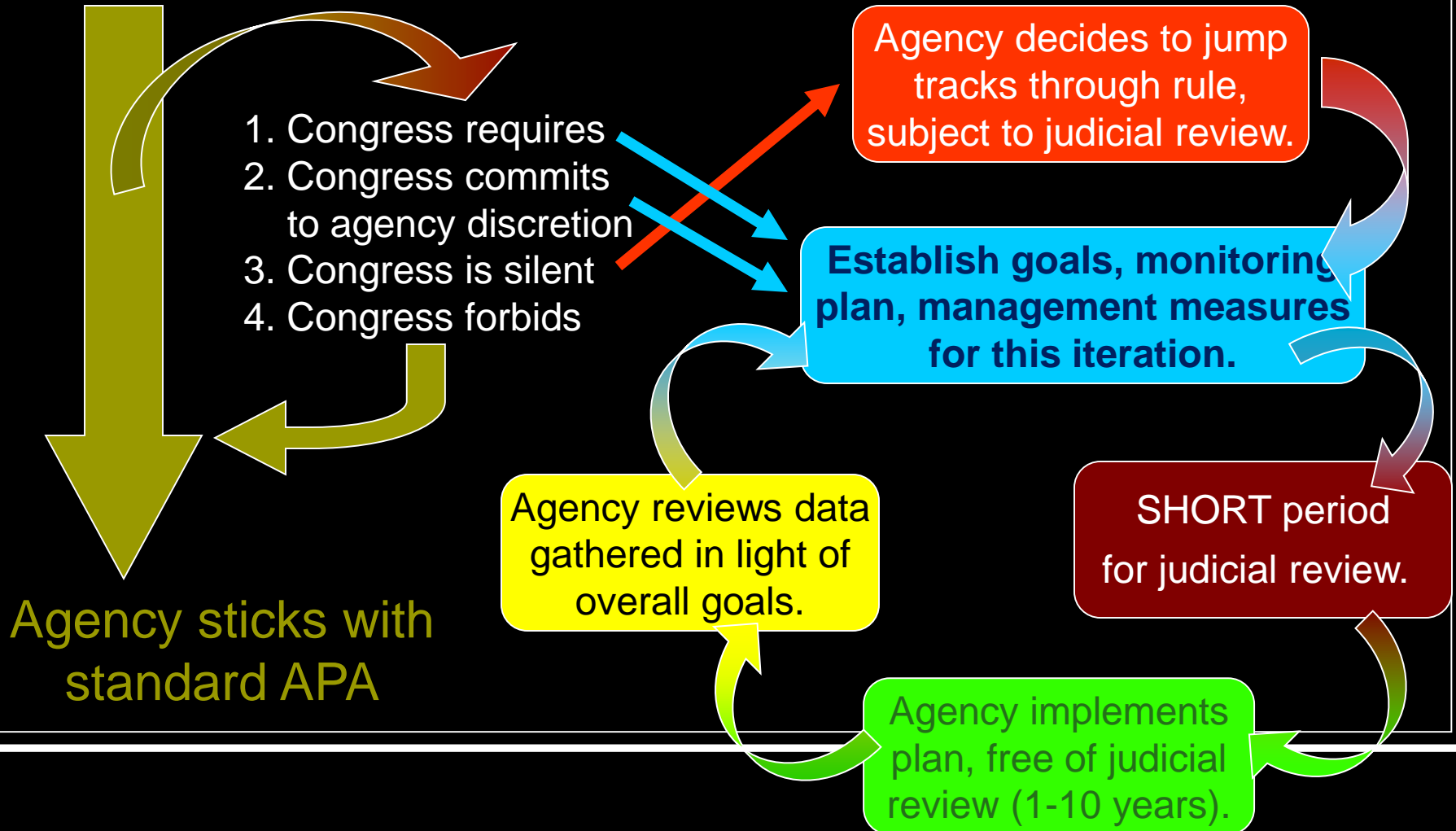
---

- **Public Participation Requirements**
  - Absolutely important for agency accountability, transparency of agency decisionmaking, avoiding agency capture, etc.
  - HOWEVER, current requirements are best suited to light switch decisions.
- **Judicial Review Requirements**
  - Again, absolutely important to promote a number of administrative law values, including agency accountability and proper separation of values.
  - HOWEVER, judicial review of EVERY adjustment an agency makes would thwart adaptive management.
- **Finality Values: AM is an ongoing process by definition, so how do we achieve finality?**

# Our Proposal: Embrace the Cycle!

## “Normal” Track

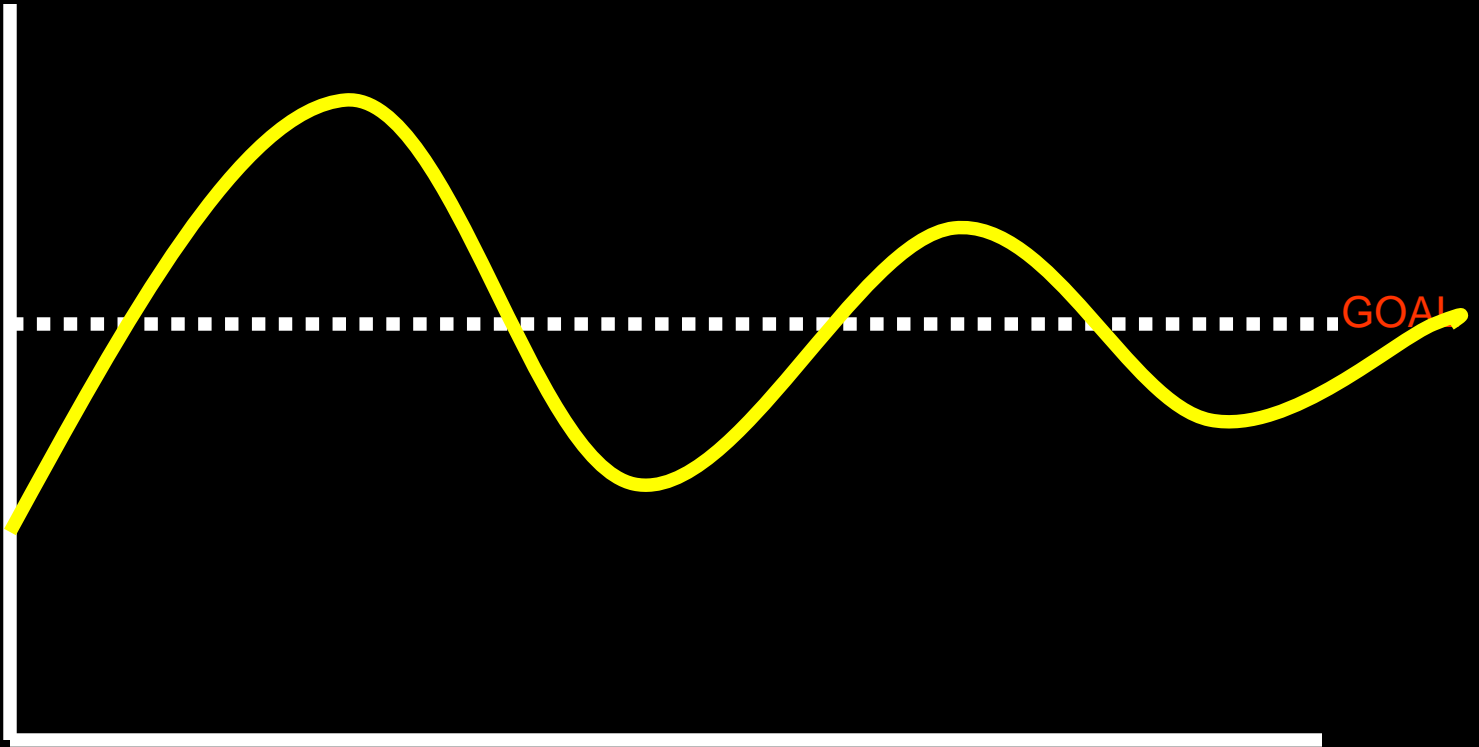
## Adaptive Management Track



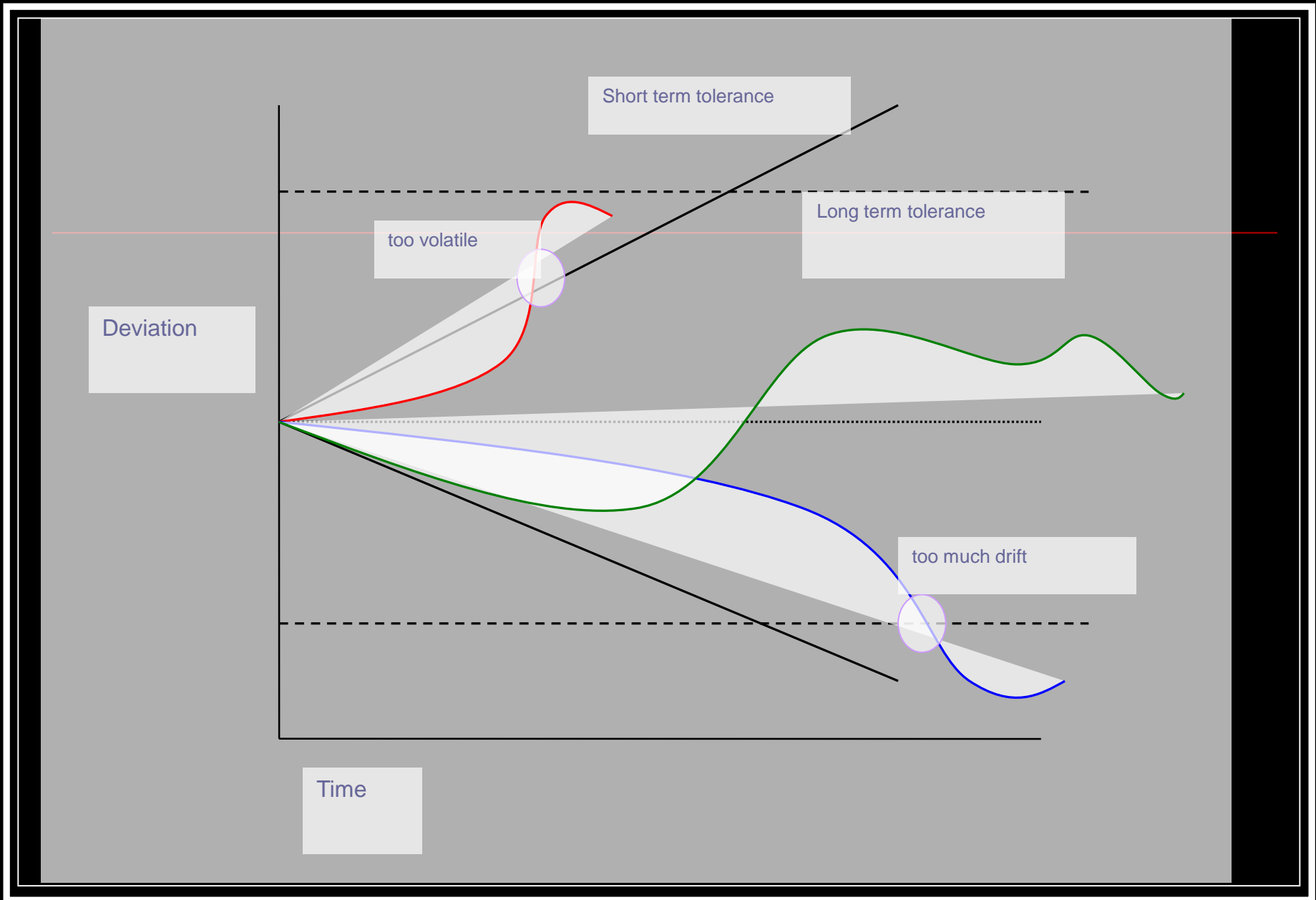
# The Ideal Result for Adaptive Management

---

Management  
State



Time



**RED** result might justify emergency intervention; **BLUE** requires adjustments to plan.

