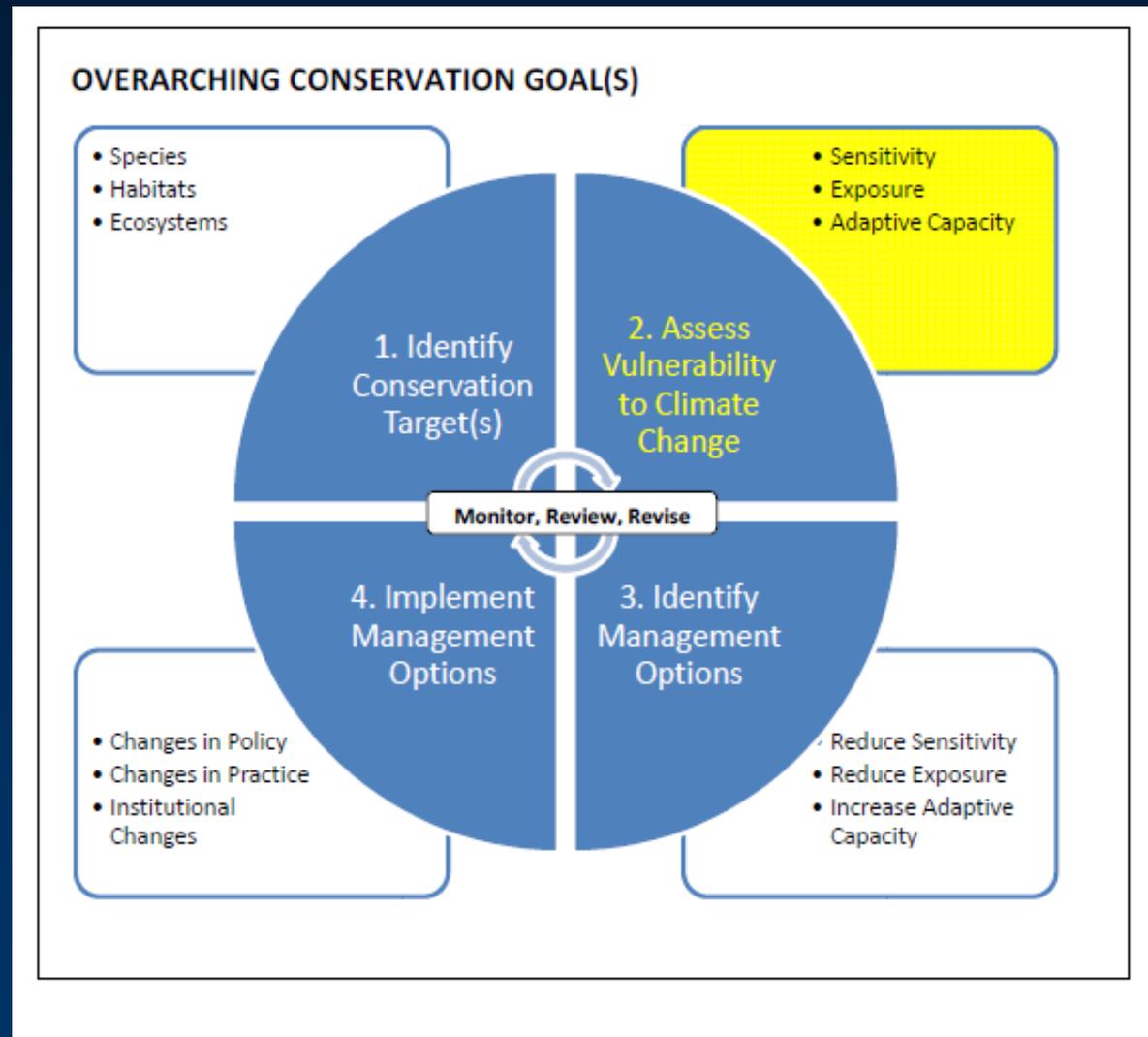


Adaptation Planning Framework



Why Assess Vulnerability?

Vulnerability assessments can help:

- Prioritize species and systems for management actions
- Develop management strategies to address climate change
- Efficiently allocate resources

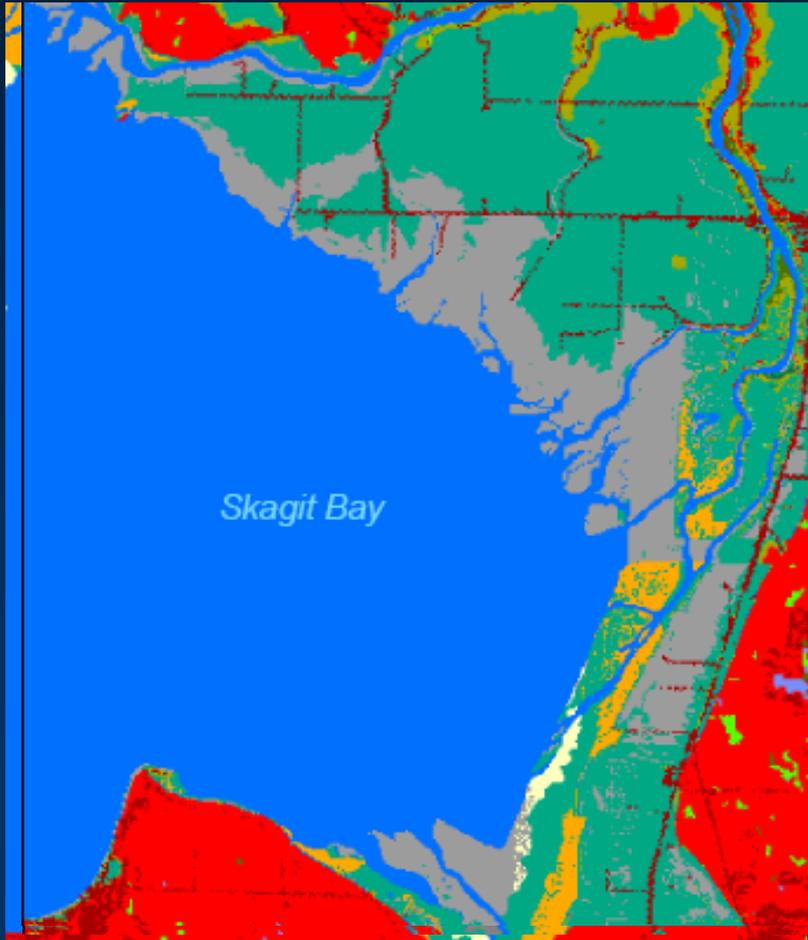
What vulnerability assessments *don't* do:

- Make a conservation decision for you



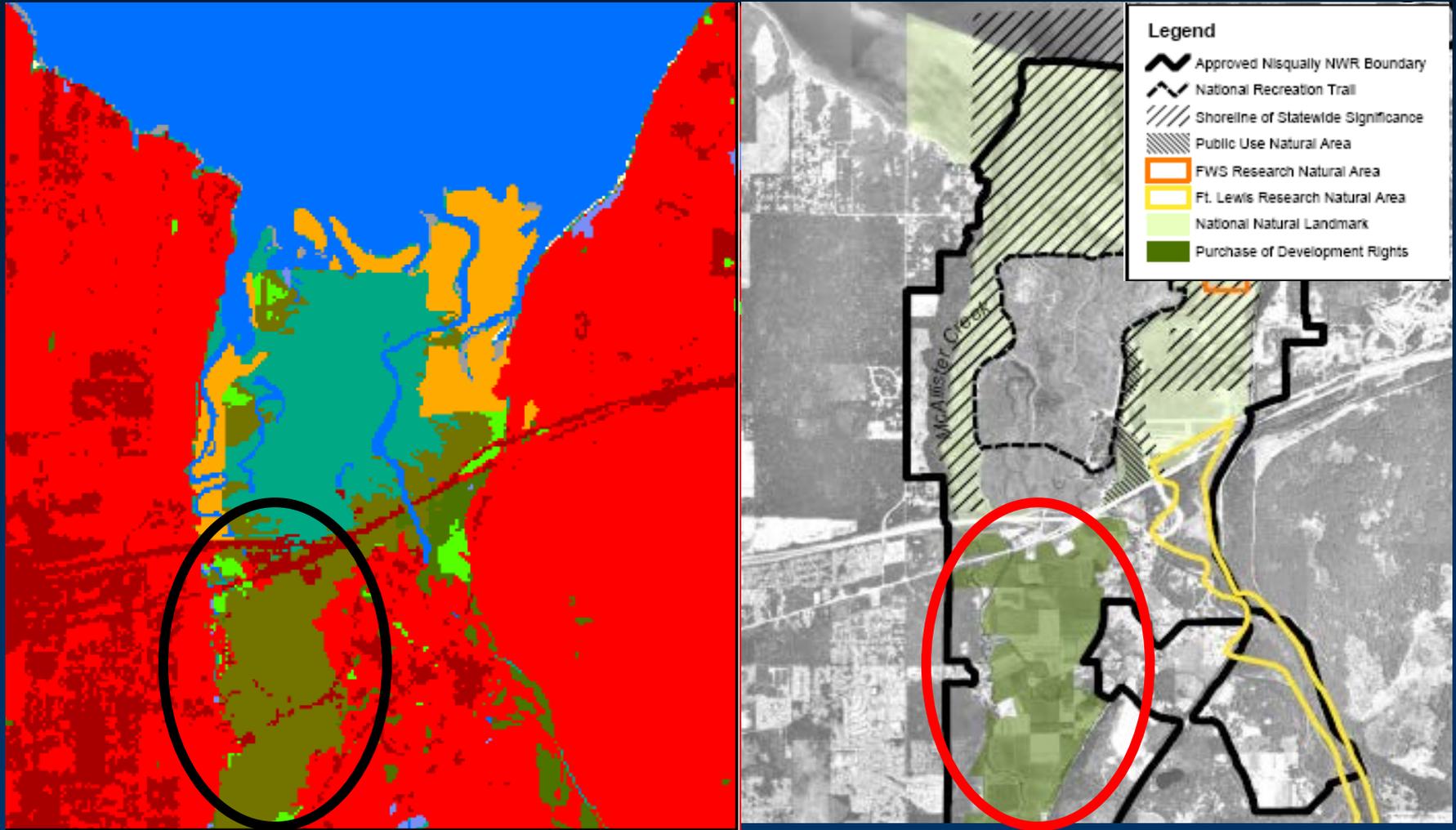
Using SLAMM Results: Prioritization/Mgt

Skagit Bay, Washington



Using SLAMM Results: Prioritization/Mgt

Nisqually NWR, Washington



Efficiently allocate resources

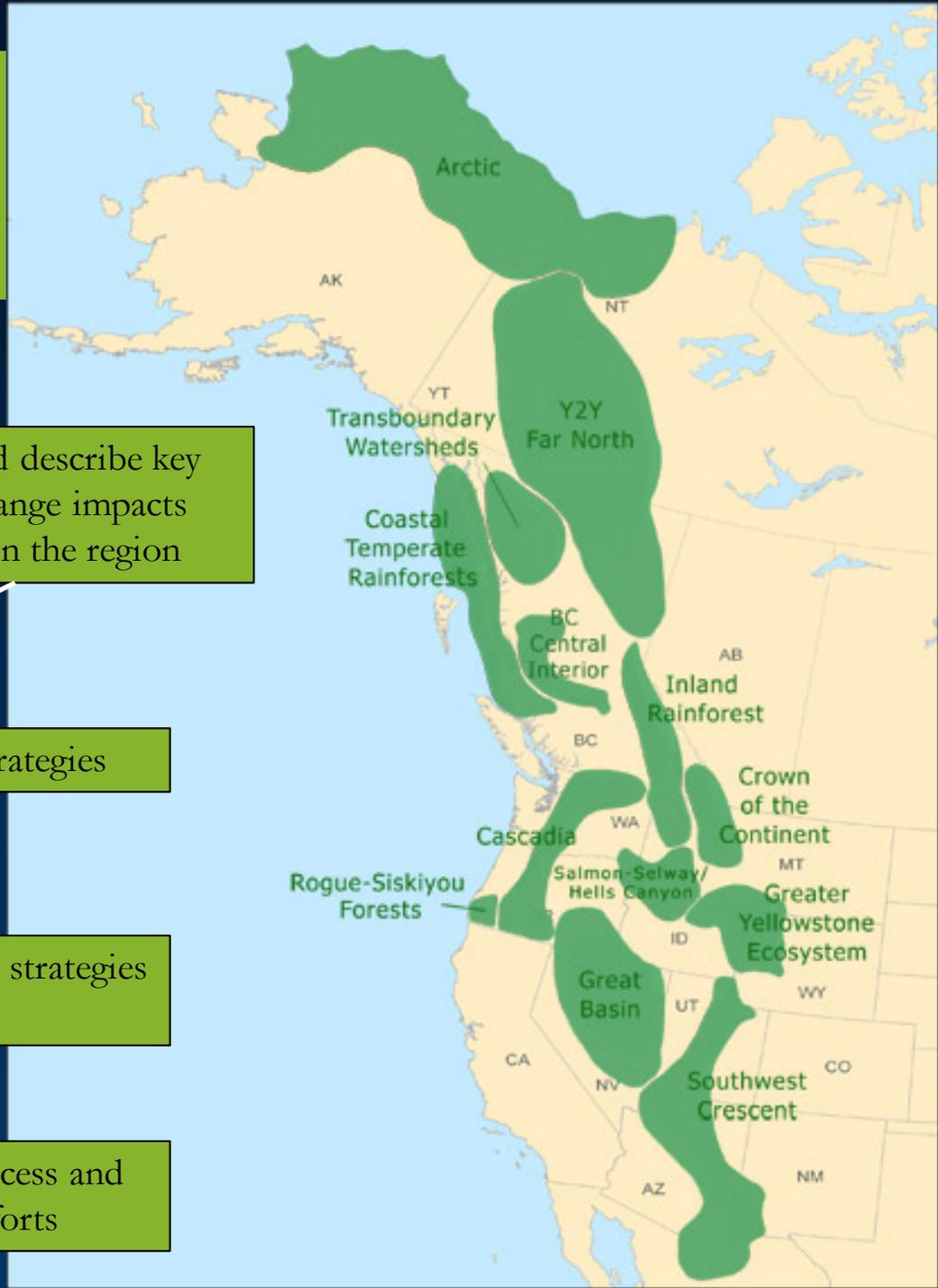
Identify organization, programmatic and strategic goals for the region

Identify and describe key climate change impacts expected in the region

Assess the vulnerabilities of the goals and strategies

Develop questions to evaluate vulnerability and strategies to reduce it

Create a guidance document to codify the process and thinking for application to subsequent efforts



Efficiently allocate resources

Identify organization, programmatic and strategic goals for the region

Identify and describe key climate change impacts expected in the region

Assess the vulnerabilities of the goals and strategies

PART 1: Evaluate vulnerabilities of currently funded projects to climate change

Overarching Goal: Connect ecosystem _____ to ecosystem _____ to enhance corridors and connectivity for species

Strategy X: Acquire lands or protect lands that provide opportunities for habitat connectivity and corridors

Example Project: Acquire X number of acres in new additions to the _____ ecosystem area



Efficiently allocate resources

Identify organization, programmatic and strategic goals for the region

Identify and describe key climate change impacts expected in the region

Assess the vulnerabilities of the goals and strategies

PART 1: Evaluate vulnerabilities of currently funded strategies/projects to climate change

OUTCOME: Identify questions to ask grantees and possible strategies they can implement to reduce project vulnerabilities

Overarching Goal: Connect ecosystem _____ to ecosystem _____ to enhance corridors and connectivity for species

Strategy X: Acquire lands or protect lands that provide opportunities for habitat connectivity and corridors

Example Project: Acquire X number of acres in new additions to the _____ ecosystem area

Efficiently allocate resources

Identify organization, programmatic and strategic goals for the region

Identify and describe key climate change impacts expected in the region

Assess the vulnerabilities of the goals and strategies

Develop questions to evaluate vulnerability and strategies to reduce it

Create a guidance document to codify the process and thinking for application to subsequent efforts

PART 2: Develop questions and guidance to evaluate new project proposals



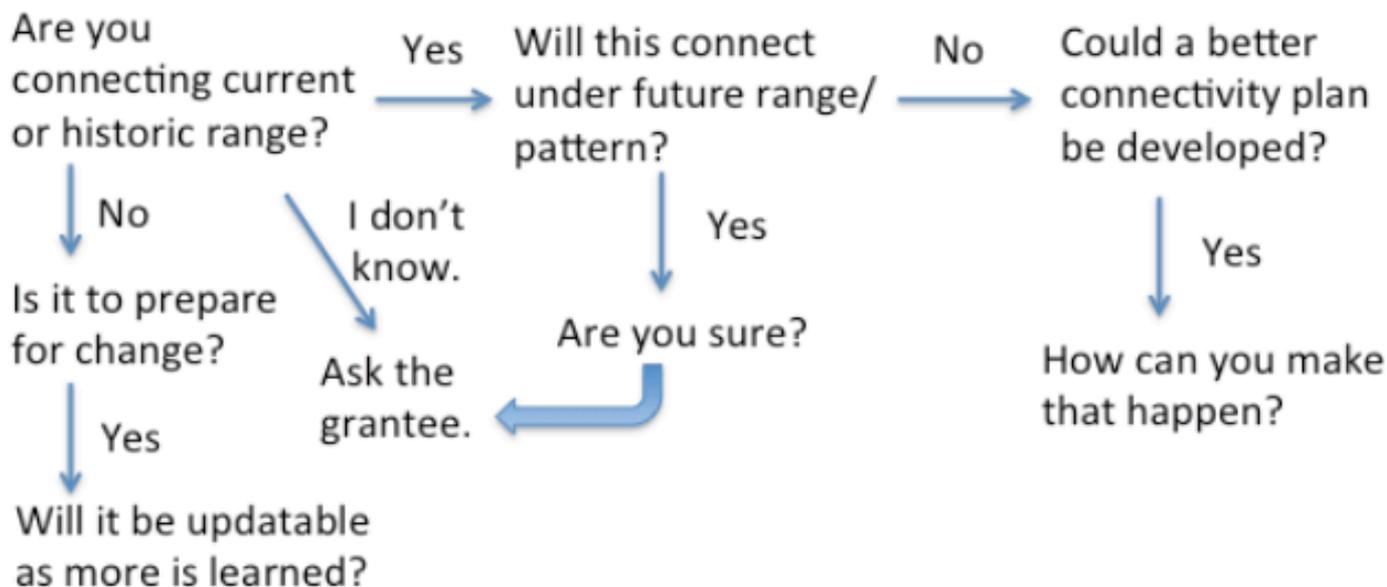
Efficiently allocate resources

Develop questions to evaluate vulnerability and strategies to reduce it



OUTCOME: Question paths/flow charts for each goal

Connectivity



→Are you providing connectivity for: movement under current conditions, in response to climate change, or something else?

→Will climate change affect connectivity?

→Can action be taken to select a variety of options for potential future connectivity pathways?

→Can action be taken to maintain connectivity in this location in the face of climate change?

Applying VAs to restoration plans



Will climate change negate salmon restoration efforts?

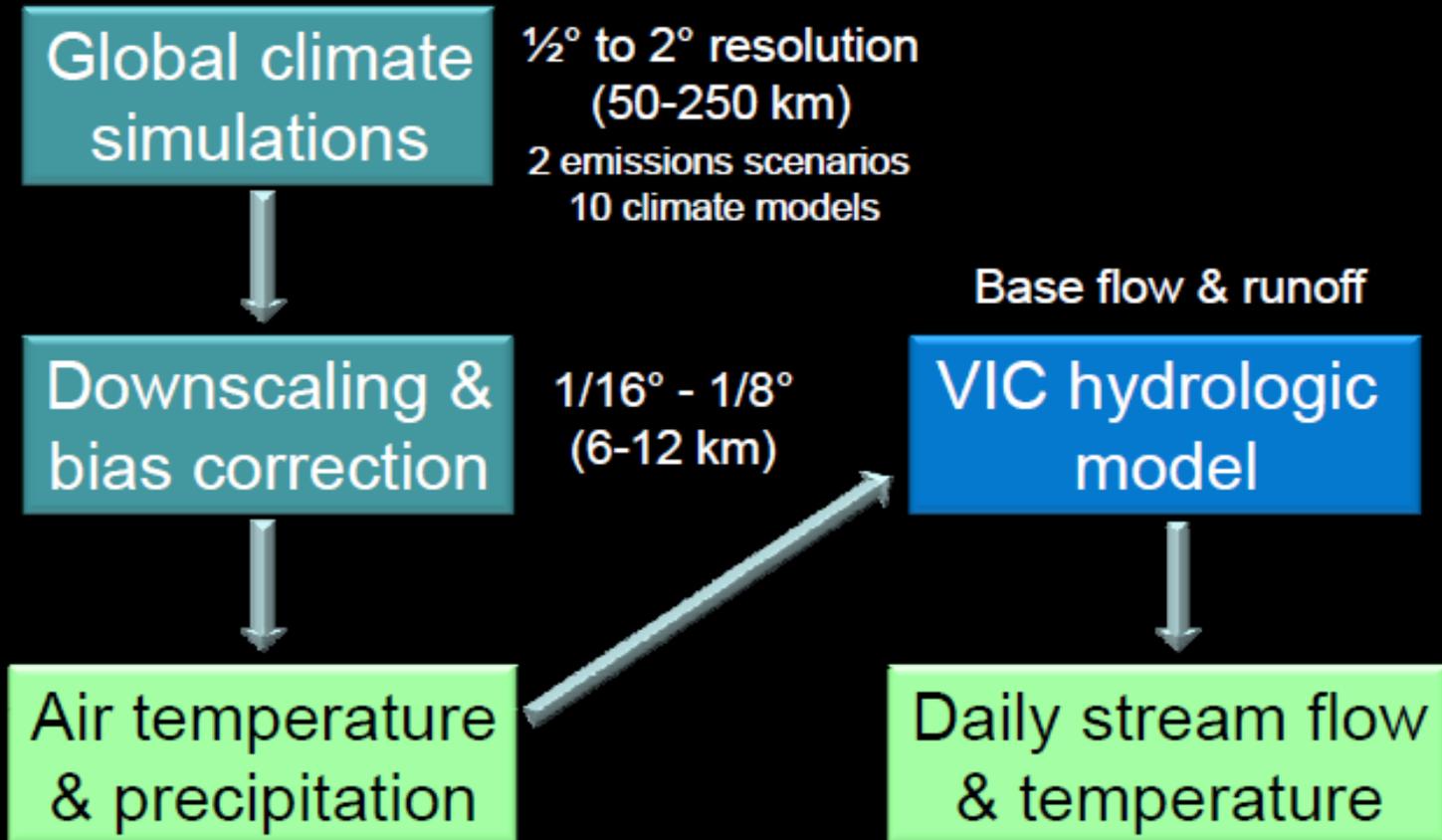
Restoring salmon in a changing climate

Tim Beechie, Hiroo Imaki, Jen Greene, George Pess, Phil Roni, Peter Kiffney
NW Fisheries Science Center

Alisa Wade-Wilcox
University of California Santa Barbara

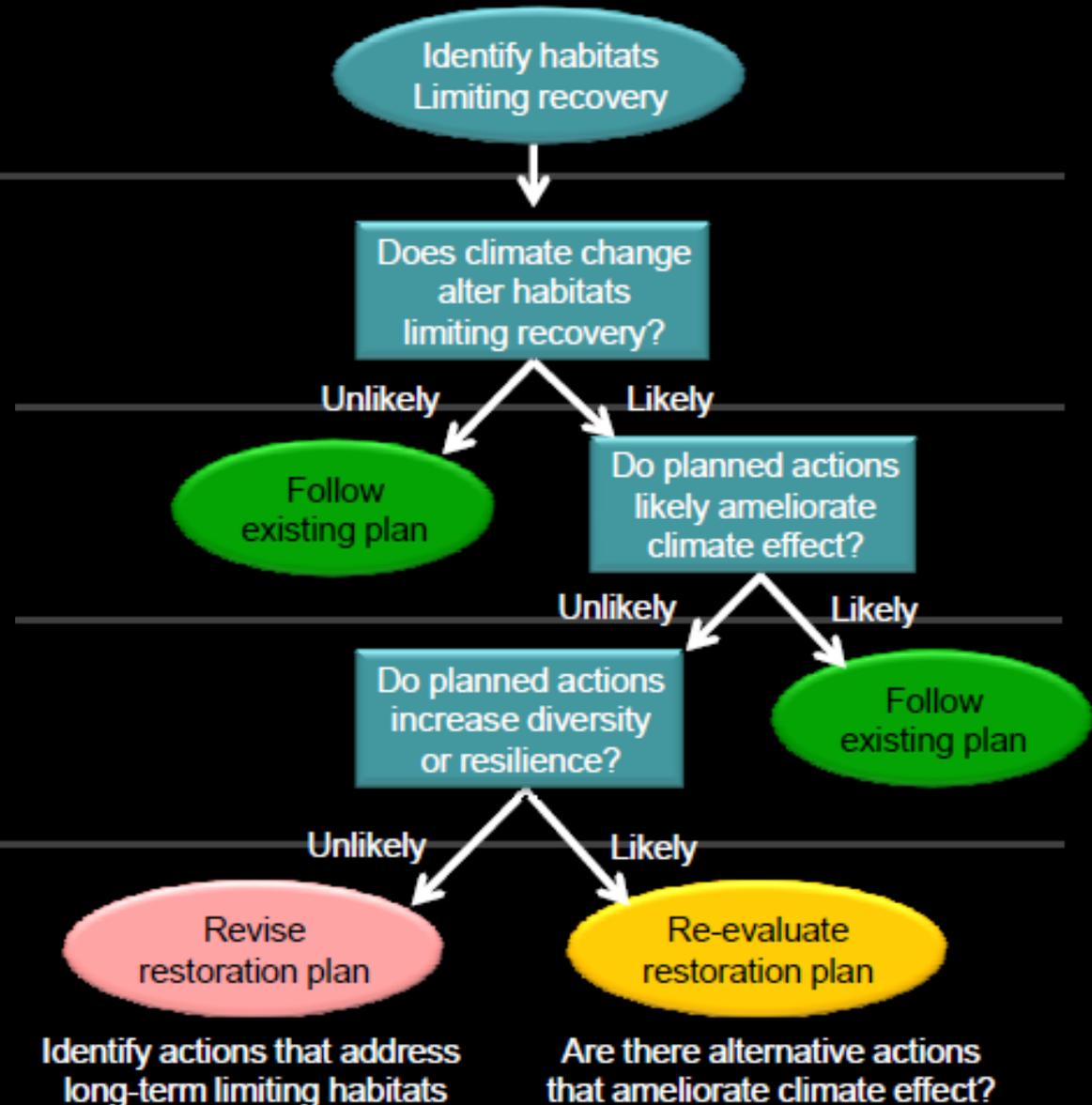
Huan Wu, John Kimball, Jack Stanford
University of Montana

Predicting climate change effects



Evaluating a restoration plan

Question 1: What habitats limit salmon recovery?



Applying VAs to State Wildlife Action Plans



Using Vulnerability Assessment Results to Inform Agency Decisions

Incorporating climate change into the FWC SWAP update

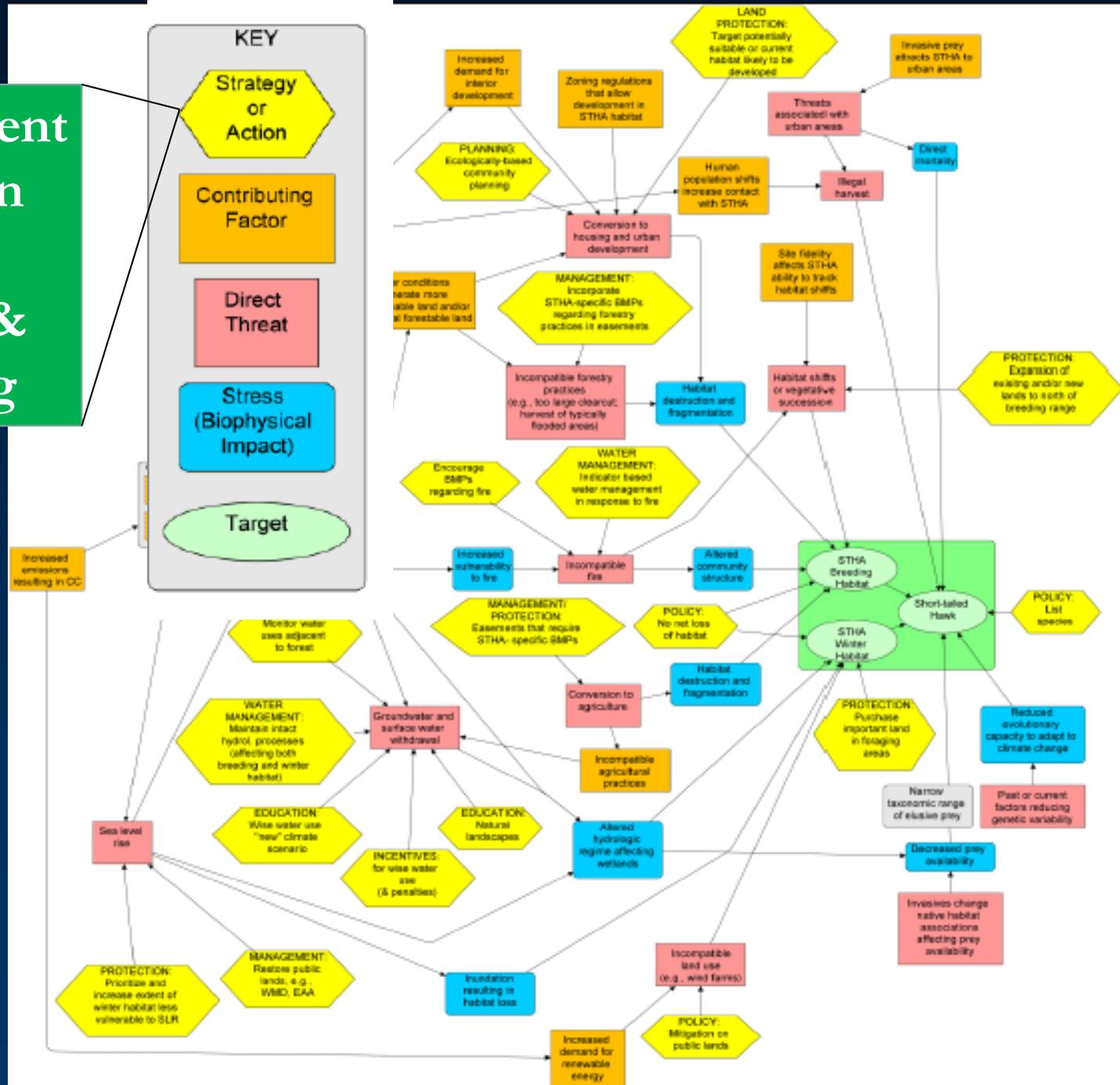


Natalie S. Dubois
Defenders of Wildlife

NCTC Climate Change Vulnerability Assessment Course
January 10-12, 2011, St. Petersburg, FL



- Management
- Acquisition
- Policy
- Research & monitoring

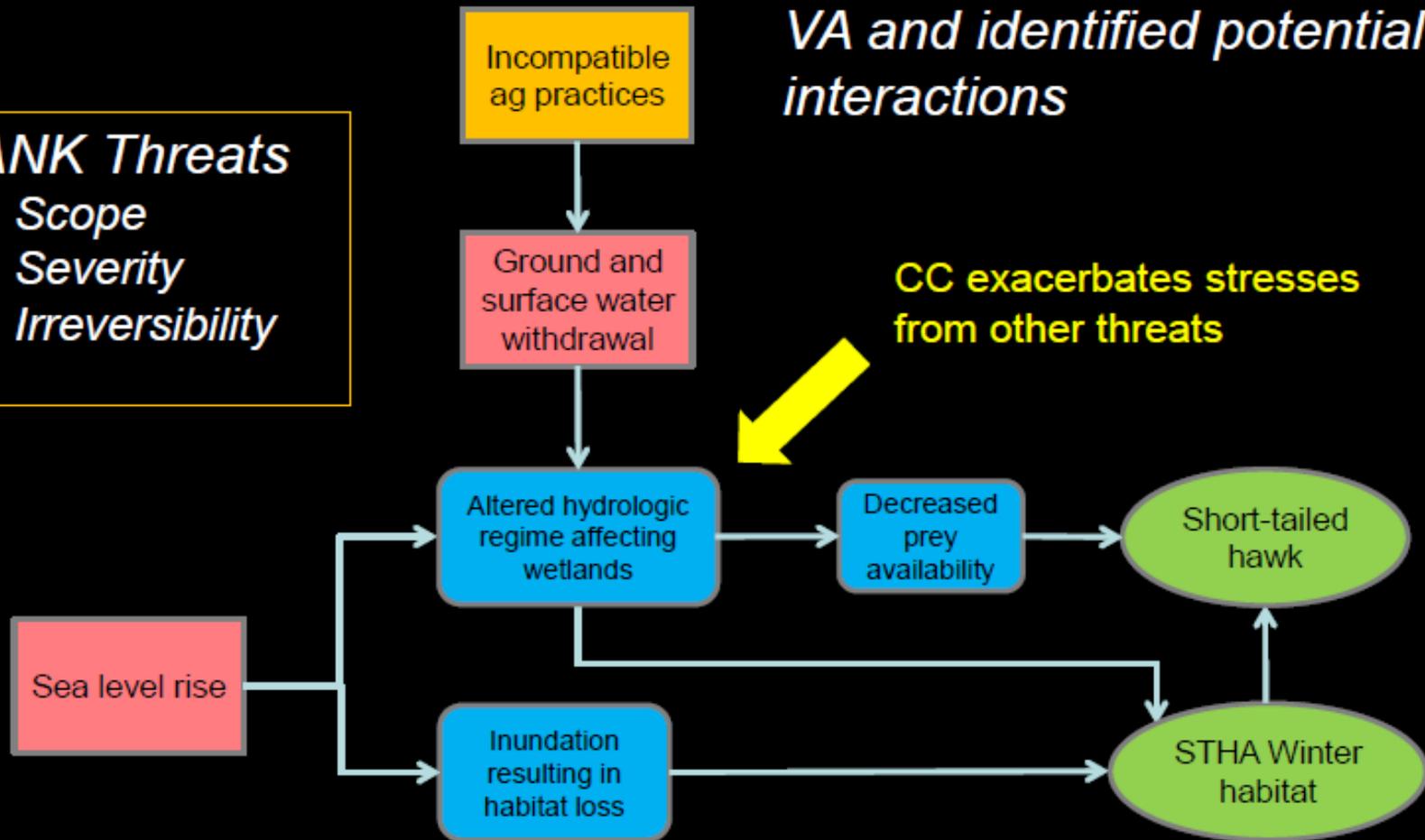


> Integrate into planning framework

Started with existing threats and stresses

Brought in elements from VA and identified potential interactions

RANK Threats
Scope
Severity
Irreversibility



Identify intervention points and actions

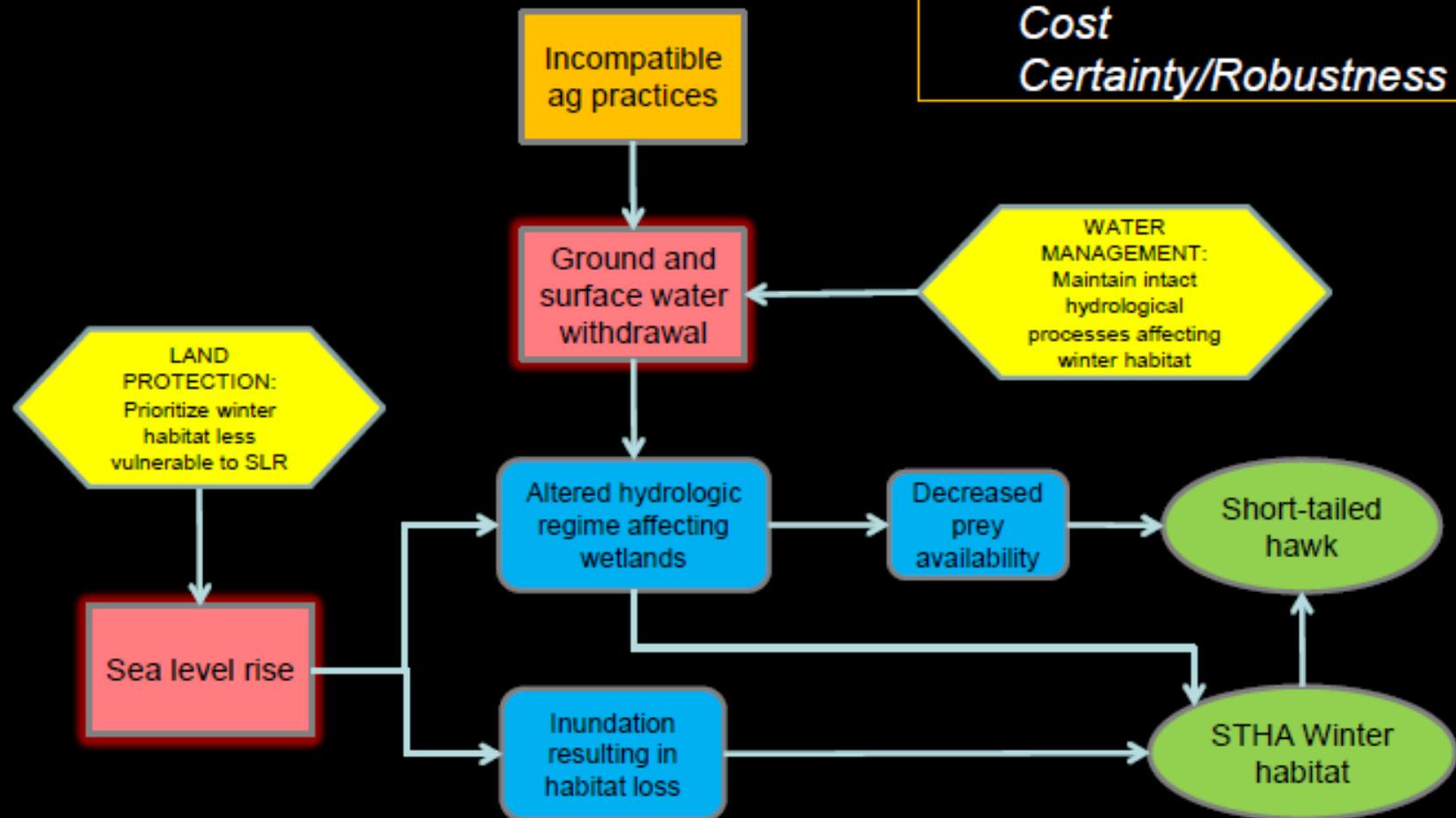
RANK Strategies

Benefit

Feasibility

Cost

Certainty/Robustness



Low-tech!



Problem Listing



Root Cause Analysis



Solution Development



WWF

for a living planet



**climate
WITNESS**

Climate Witness

Community Toolkit

WWF - South Pacific Programme



WATER SHORTAGE

ADAPATATION STRATEGY

COMMUNITY INITIATIVE

To develop and implement village rules on proper utilization of rainwater collected and maintenance of water storage tanks

To maintain some of the old village wells

EXTERNAL SUPPORT

To obtain more guttering and pipes that channel rainwater to village water tanks

To build more water tanks (fibre / cement) in the village

To obtain cement/plaster that will help fix old and leaking tanks.