



Towards Coherence: Tactical guidance for working differently (With examples from R2R)

Rene Henery, TU



Presentation Overview

- How you know it's time to try something new
- How we often work together vs. What's possible
- Foundation for coherent collaboration: Core components and... vibes
- Overview of Reorienting to Recovery (R2R)
- Foundation for Coherent Collaboration: R2R Examples (and a little inspiration?)
- Questions?

You know it's time to try something new in a human system when...

- ✓ Many/ most parties all want the same thing, but it's not happening
- ✓ Few/ none feel like things are “going great!”
- ✓ Many/ most parties express frustration with “business as usual”

If **one or more** of these are true, it's probably time to **try a new approach**.

How we often work together vs. what's possible

How we often work:

- Advocating for/ solving for our own interests
- Strategy/ cards hidden
- Adversarial or transactionally collaborative

What's possible:

- Advocating for/ solving for a collective interest set
- Transparency/ cards on the table
- Cooperative and reciprocal collaboration

How we often work together vs. what's possible

How we often work:

- Advocating for/ solving for our own interests
- Strategy/ cards hidden
- Adversarial or transactionally collaborative



What's possible:

- Advocating for/ solving for a collective interest set
- Transparency/ cards on the table
- Cooperative and reciprocal collaboration

****Making this transition does NOT require that we abandon our own interests, values or needs.****

Foundation for coherent collaboration: Core components and... vibes

Core Components:

1. A group of people who want to work together

- aka: coalition of the willing

2. A common understanding of the world/ system

- Not necessary that everyone agree, but everyone must see all parts and have a shared understanding on where there is uncertainty and where and why disagreement or difference exists (e.g. interests/values, different information, etc).

3. A common set of objectives

- Not everyone needs to prioritize the objectives the same way, but the whole system needs to be working together to solve for them.

4. A structured transparent process to consider actions, together

Foundation for a coherence building process: Core components and... vibes

Vibes:

1. **Receptivity** (listening first and deeply, seeing and valuing others)
2. **Authenticity** (showing ones-self, valuing one's own contribution)
3. **Care** and the intention of building **trust**
4. **Healthy stretch** (self awareness and self care)



Zones of Tolerance

- **Comfort zone** - Safe, easy, no risk, no growth, Fully open feeling
- **Stretch zone** – Difficult but rewarding, where the growth and learning occurs, feels like a stretch
- **Panic zone** – Where fear takes over, defensiveness, shame, avoidance or withdrawal, intellectualization, feeling of contraction, no learning or growth occurs



Zones of Tolerance

- **Comfort zone** - Safe, easy, no risk, no growth, Fully open feeling
- **Stretch zone** – Difficult but rewarding, where the growth and learning occurs, feels like a stretch
- **Panic zone** – Where fear takes over, defensiveness, shame, avoidance or withdrawal, intellectualization, feeling of contraction, no learning or growth occurs

Reorienting to Recovery (R2R) – Overview...

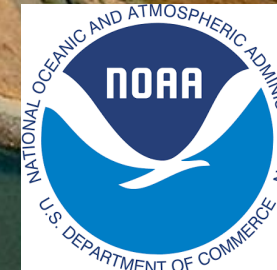
“If you want to change the system you need to get the system in the room...”

John Kania – Collective Change Lab

Reorienting to Recovery (*R2R*)

A Case Study in Values Informed, Landscape Scale, Collaborative
Decision Making Towards an Equitable Outcome

Dr. Rene Henery
Trout Unlimited; University of Nevada, Reno



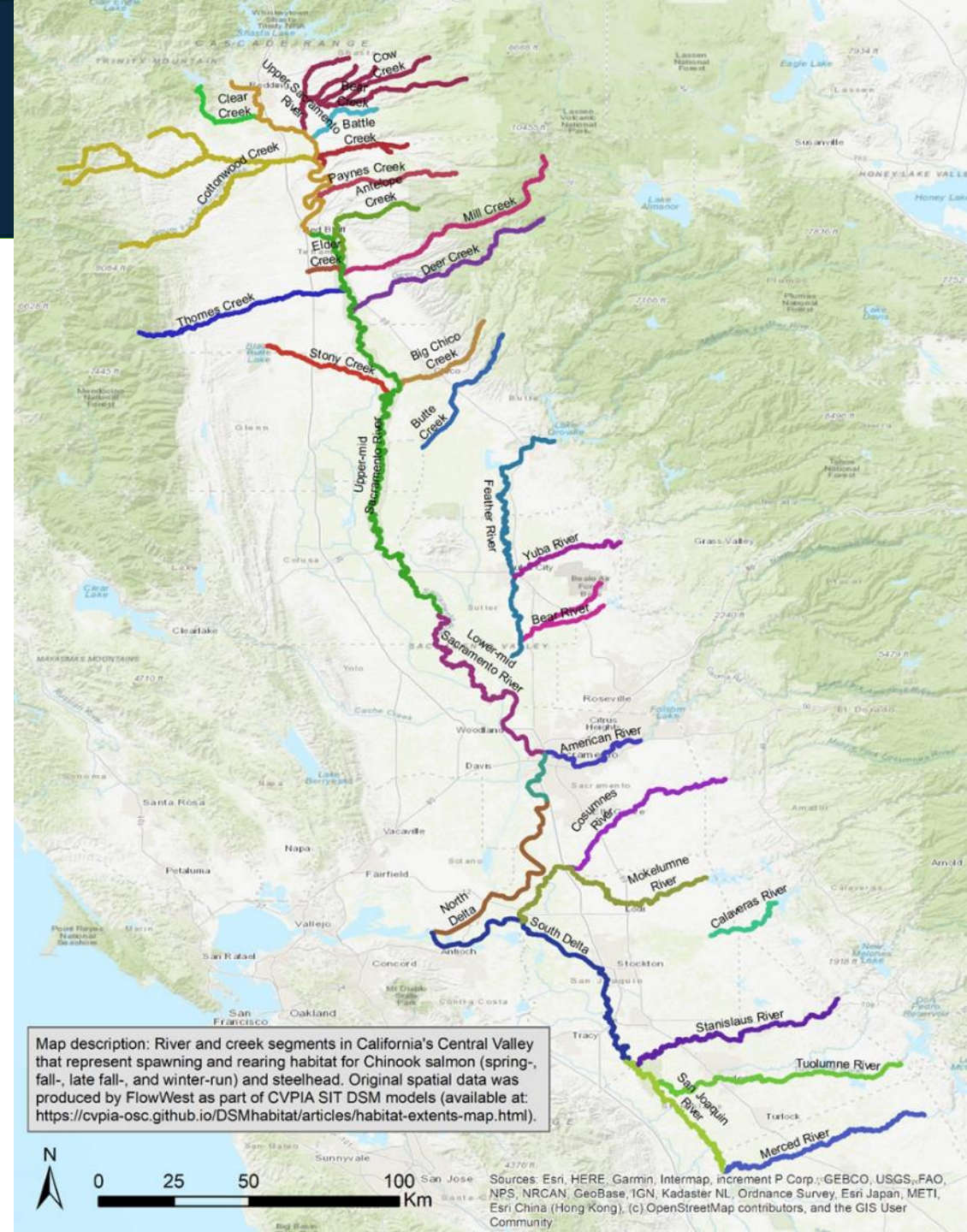
Project Approach and Phases

A New Approach:

- Vision and Objectives:
 - **A new, non-regulatory, transparent, inclusive, process** to develop:
 - **A broadly supported scientific definition of Salmon Recovery**
 - **A summary of the other key values** (impacted (+ or -) by actions to recover salmon)
 - **A Salmon recovery scenario** (i.e. suite of actions) that:
 - Integrates actions across the 4Hs
 - Equitably distributes the pain and gain of achieving recovery across the range of values
 - **A model for/ experiment in a different way of operating**
 - Pan-regulatory, common objectives, collective value set

Reorienting to Recovery: Problem framing

- To identify a preferred recovery scenario(s) that advances salmonid recovery, balances other interests, and achieves a critical mass of support
- Considering all runs of CA CV salmon, beginning with fall-run
- Spatial: 31 reaches in the Sacramento & San Joaquin River systems, & ocean
- Temporal: 20-year time horizon



PROJECT Overview

PHASE 1

Define Salmon Recovery* (Q2 – Q4 2021)

Engage scientists to develop a Salmon Recovery Definition Framework

Stakeholder Engagement** (Q1 2022 - Q4 2022)

Solicit input from stakeholders throughout the Central Valley

PHASE 2

PHASE 3

Decision Support*** (Q1 2023 – Q3 2024)

Use stakeholder input to model recovery scenarios. Structured Decision Making (SDM) process to select and evaluate scenarios

Identify a Suite of
Actions to achieve
recovery

Goal

* Funded by State Water Contractors

** Funded by Delta Science Program award, USBR

*** Funded by Delta Science Program award, USBR, Metropolitan Water District, NMFS, State Water Contractors

Project Approach and Phases (cont.)

A New Approach (cont.)

- Team:
 - **Diverse Design Team** with broad skillset:
 - Senior (aka battle worn) representatives from NGOs and Water (*TBI, Valley Water*)
 - Technical leads from NGOs and Water (*TU, MET*)
 - Data Science and Lifecycle modelling (*FlowWest, Qeda, NMFS SWFSC*)
 - Outreach, communication, and facilitation (*K&W, ESSEX*)
 - Structured Decision Making (*Compass Resource Management*)
 - Tribal and Indigenous outreach and engagement (*California Indian Environmental Alliance*)

Project Approach and Phases (cont.)

A New Approach (cont.)

- Participation and Engagement
 - Multiple inclusive groups designed to support the different phases of the process:
 - Phase 1: Science Advisory Team (SAT)
 - Phase 2: Forum
 - Phase 3: Forum, SAT, SDM Working Group

Core components – R2R Example(s)

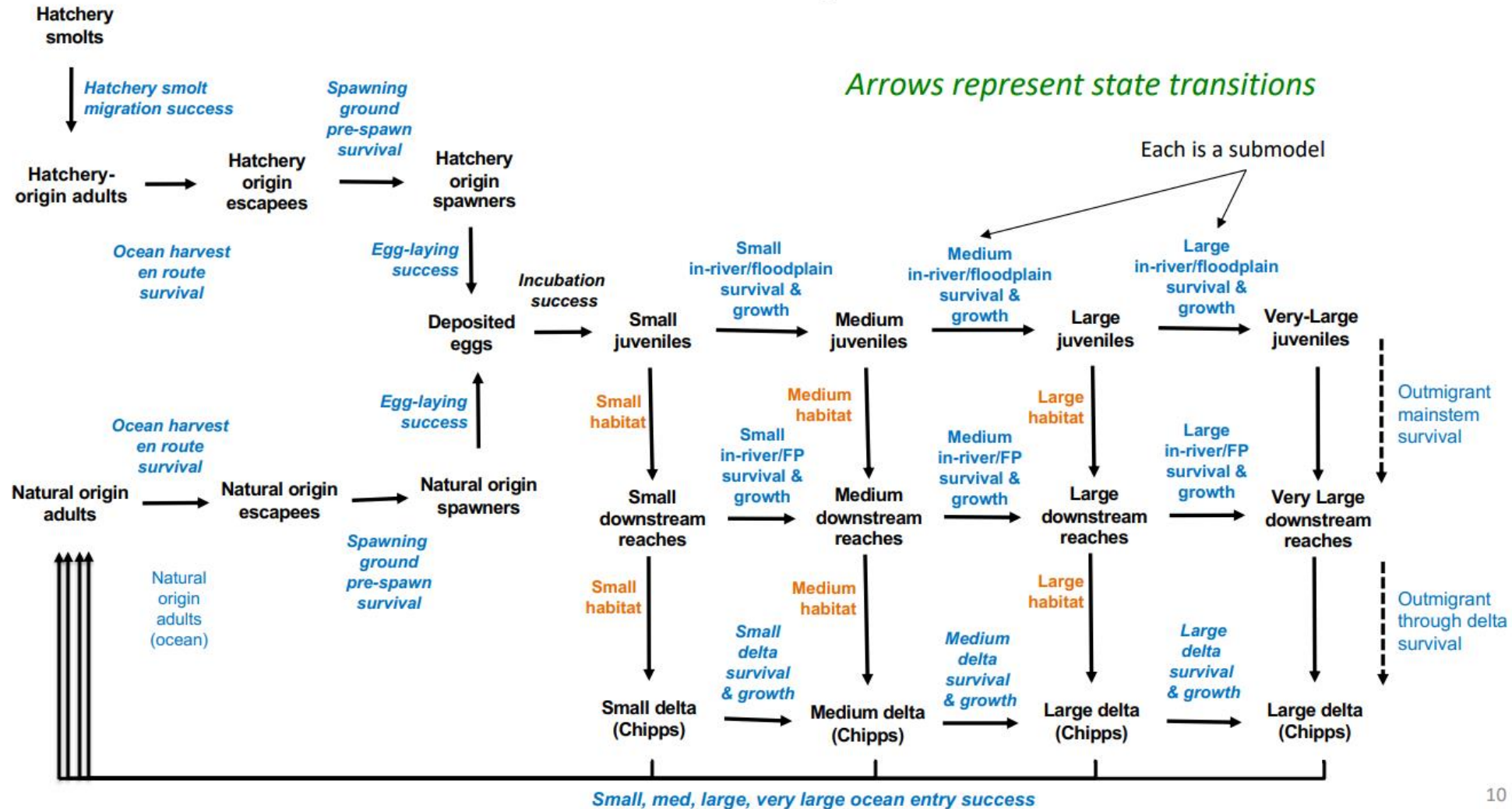
1. A group of people who want to work together
 - **Engaged existing collaborative forums** and processes (regional/watershed)
 - **Practiced receptivity, authenticity, healthy stretch and trust building** using the processes of objectives development, model development, and values sharing and

Core components – R2R Example(s)

2. A common understanding of the world/ system

- **Built out an existing lifecycle model** (via underlying conceptual model) to represent/ include/ integrate (as determined by participants):
 - All relevant available data
 - All relevant existing and hypothesized relationships
 - Uncertainty
 - All action opportunities and categories (H's)
 - All objectives (population recovery related AND other values/ interests related)
- **Made the model public**

SIT Base Conceptual Model



Core components – R2R Example(s)

3. A common set of objectives

- **Developed Recovery objectives** (broad sense) via a collaborative, consensus based scientific process
 - That which could not be agreed to (where the disagreement was not attributable to uncertainty) was deemed to be in the realm of values (e.g. abundance).
- **Developed objectives for related values** and interests
 - Shared values and interests that intersected with species recovery via story-telling and dialogue
 - Refined shared values (560+) to quantitative proxy's (18) that were built into the DSM and used as performance measures in the Structured Decision Making Process.
 - Values/ interests objectives (and associated metrics and targets) **defined by the parties that held them and all included.**

R2R Phase 1: Recovery Definition

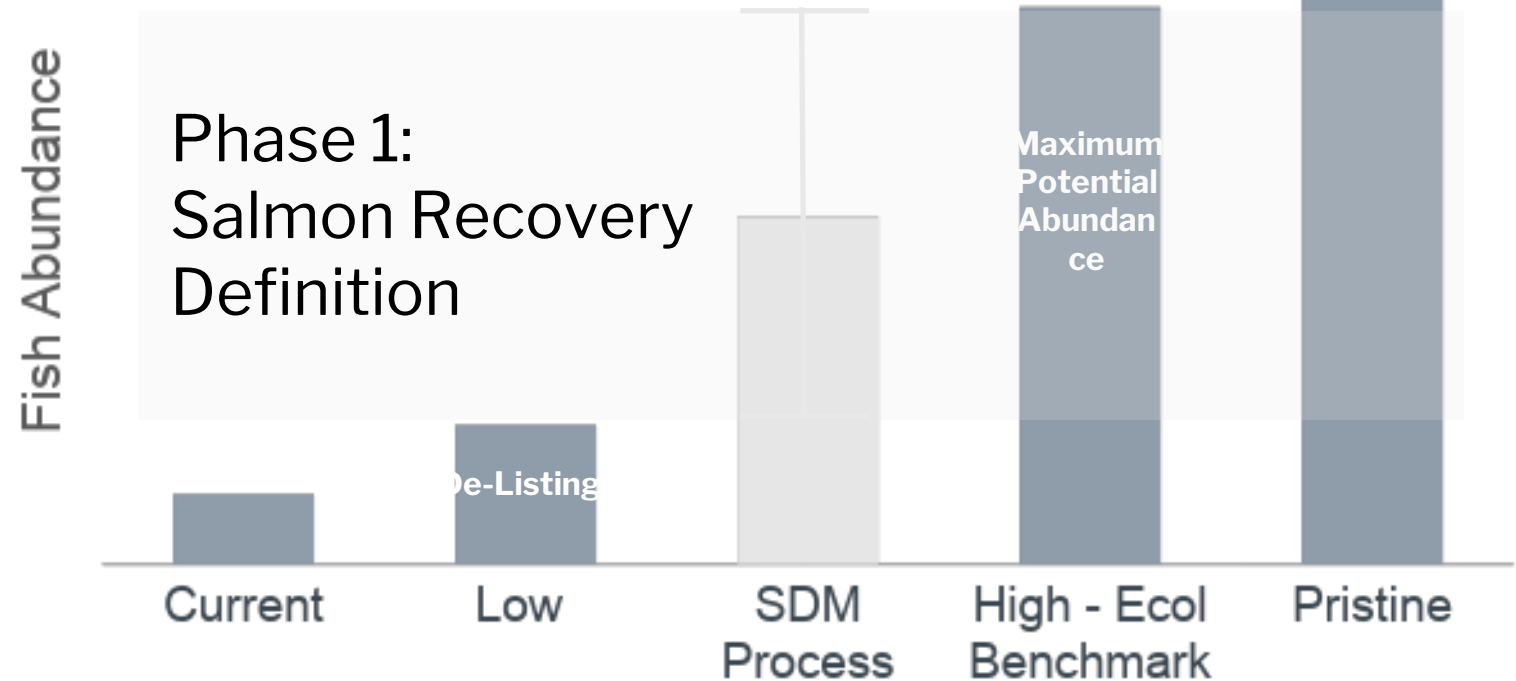
Phase 1 - Recovery Definition Overview

- **Productivity**
 - Sufficient to support viability, refers to population growth rate and related parameters over the entire life cycle
- **Spatial Structure**
 - Recover and preserve spatially explicit populations that are sufficient to support redundancy and representation
- **Diversity**
 - Recover and preserve genetic/life-history diversity of natural populations
- **Abundance****
 - An expression of all other biological recovery thresholds being met + values

Setting the abundance target will require a values-driven conversation as part of the SDM process in Phase 3

Abundance

TARGETS BASED ON CARRYING CAPACITY



Example - Values Translation Process

Values Statements Objectives and Metrics

Original Values Statements

Travel to see salmon
Fishing privileges taken away

Recreational fishing opportunities

Traditional source of food
Thriving rivers and ecosystems

Access to public and wildlands

Maintaining productive Ag lands

Maintain agricultural water supply

Cultural awareness of salmon

Making salmon science accessible

Refined Values Statements

Salmon – Distribution (Spatial structure) and abundance

Salmon - Harvest of a certain quantity in specific location in a certain percentage of years

Water – A certain volume in a certain location at certain times - Ag

Water – A certain volume in a certain location at certain times – river ecosystem

Salmon Related education and outreach

Land – Maintaining current ag use

Land – Maintaining or improving access

Total number of Adult fish in a given location(s)/ watershed(s) during a certain time of year and frequency of years

Total number of Harvestable fish (i.e. Adults beyond what is necessary to maintain productivity objectives) (Commercial, Recreational, Indigenous)

Volume (total, percentage, etc.) of water available for diversion in a given location(s) relative to water year

Volume (total, percentage, etc.) of water available for instream flows in a given location(s)/ watershed(s) relative to water year

Number of acres of land in a given location(s)/ watershed(s) in agricultural production

Number of acres of land in a given location(s)/ watershed(s) publicly accessible

Salmon education (scientific, cultural) as component of R2R process

Salmon education (scientific, cultural) included or embedded in proposed actions

Decision

Process

Core components – R2R Example(s)

4. A structured transparent process to consider actions, together
 - Structured Decision Making
 - Facilitated
 - Leveraging the model for decision support
 - Carried out by SDM working group that included organizational leadership and policy/ decision making level participation
 - Reporting out to and collecting feedback from a broader group of participants and interested parties

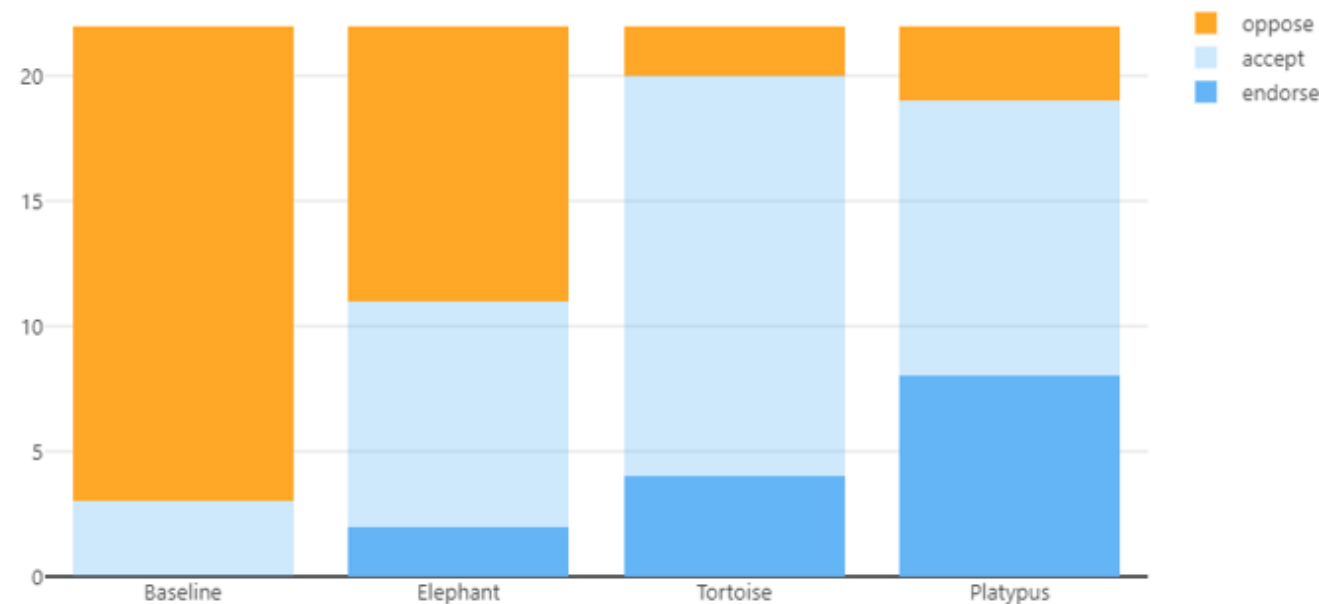
R2R Phase 3: Balanced Scenarios

Objective	Less Preferred More Preferred	Performance Measure	Unit	Preferred Direction	Baseline	Elephant	Tortoise	Platypus
Salmonid biological recovery								
1: Adult abundance	Avg	Adult abundance (at spawning)	# fish	Higher	79,510	148,696	2,825,781	3,232,640
2.1: Cohort Replacement Rate (CRR)	Avg	CRR (natural spawners)	CRR	Higher	0.48	1.39	2.24	3.54
3.2: % of independent viable populations		Total # of independent viable pops / potential independent pops	%	Higher	0	0	16	31
4: pHOS	Avg	pHOS (weighted by trib)	pHOS	Lower	0.67	0.37	0.09	0.16
Habitat & ecological processes								
7.2: Habitat diversity	Avg	Floodplain / In-channel habitat	Ratio	Higher	3	6	10	15
9.2: Functional flow metric		Constructed scale	1 to 3	Higher	1 - No	1 - No	2 - Some	3 - Yes
Harvest								
12.1: In river harvest		Harvestable adults	# fish	Higher	21,584	20,056	20,003	188,977
12.2: Ocean harvest		Harvestable adults	# fish	Higher	206,325	331,717	350,472	2,086,399
Water & agriculture								
13.2: Water supply: Divertible water for municipalities		SWP & CVP municipal exports	MAF	Higher	2.0	1.8	1.6	1.4
14: Agriculture: Land in ag production		Constructed scale	1 to 4	Higher	3 - High	2 - Med	3 - High	1 - Low

SDM Working Group Initial Responses

Scenario to Advance = Modified Tortoise

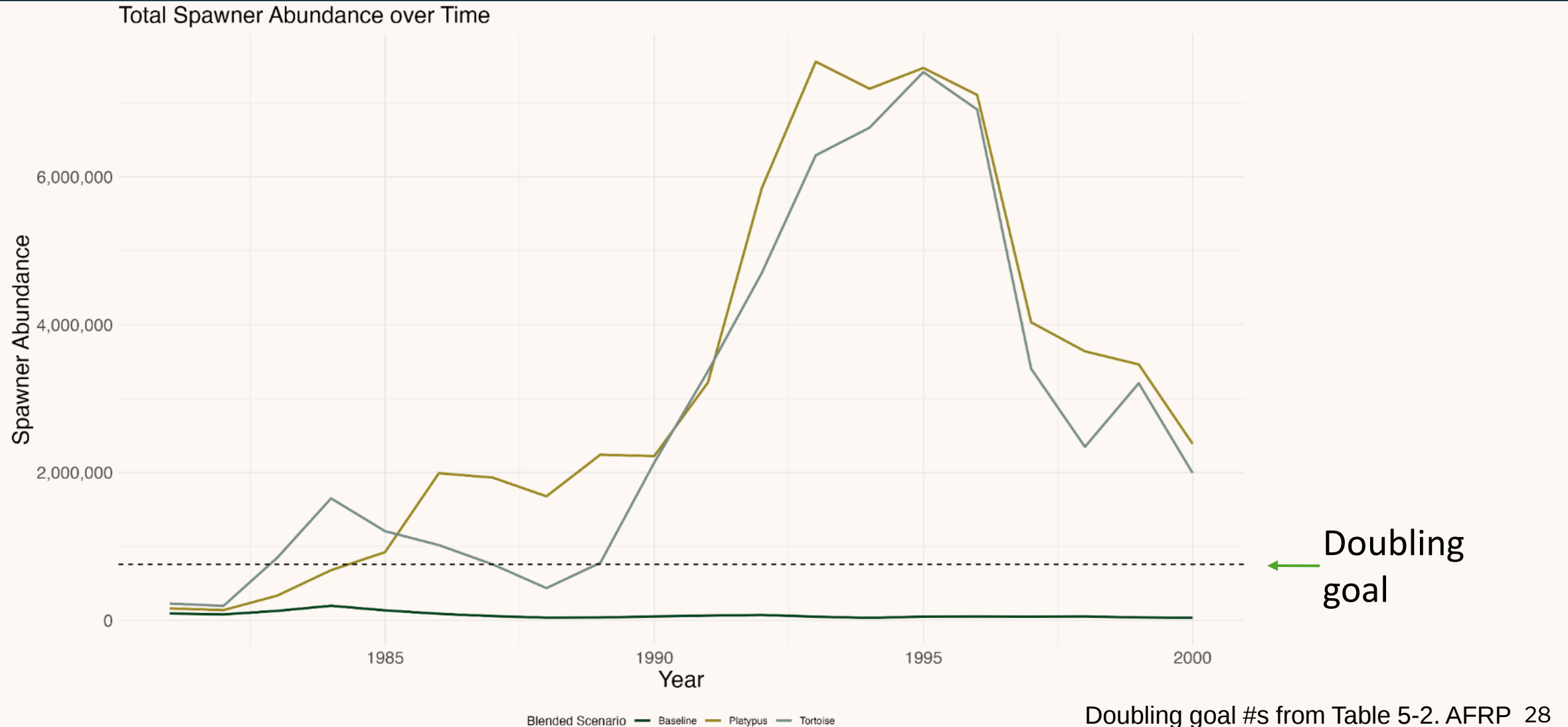
- More actions in wet years
- More nuanced dry year flow considerations
- Including Elephant actions



Alternative	Endorse	↓	Accept	↓	Oppose	↓
Baseline	0		3		19	
Elephant	2		9		11	
Tortoise	4		16		2	
Platypus	8		11		3	

A little inspiration...

Abundance Plot



Thank you!

Questions?