

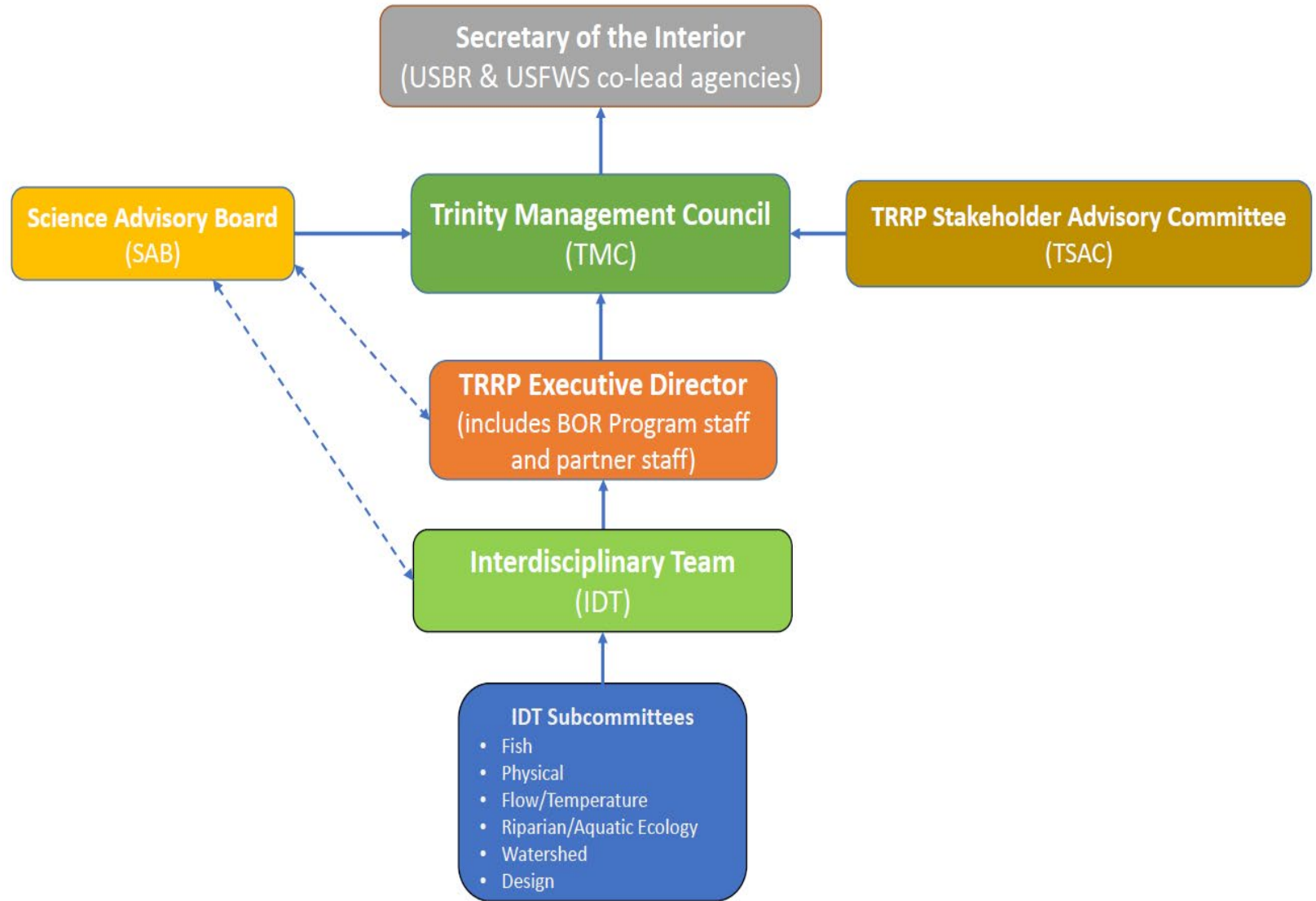
**TRRP Adaptive
Environmental Assessment
Management (AEAM) Refinement and
Klamath-Trinity Basin Wide
Management**

Mike Orcutt, Hoopa Valley Tribe

Trinity River Restoration Program

- The purpose of this Program is to mitigate impacts of the Trinity River Division (TRD) of the Central Valley Project on anadromous fish populations in the Trinity River by successfully implementing the 2000 ROD and achieving Congressionally mandated restoration goals.
- The long-term goals of the Program are to: 1) restore the form and function of the Trinity River; 2) restore and sustain natural production of anadromous fish populations in the Trinity River to pre-dam levels; and 3) to facilitate full participation by dependent tribal, commercial, and sport fisheries through enhanced harvest opportunities.





How Science plan/ Refinements is going to move us forward



Trinity River Restoration Program

DRAFT

TRINITY RIVER RESTORATION PROGRAM (TRRP -or- Program) **Program Document – Table of Contents**

May 10, 2022

- I. PREAMBLE
- II. STATEMENT OF ROLES, INTERESTS, & OBLIGATIONS
- III. PROGRAM PURPOSE
- IV. PROGRAM GOALS
- V. PROGRAM COMPONENTS
- VI. FLEXIBILITY AND CHANGE DURING PHASED IMPLEMENTATION
- VII. EVALUATION OF TRRP PHASE 3 AND DEVELOPMENT OF SUBSEQUENT PHASES
- VIII. TRRP FUNDING
- IX. CONSISTENCY WITH APPLICABLE LAW
- X. CONSISTENCY OF DOCUMENTS

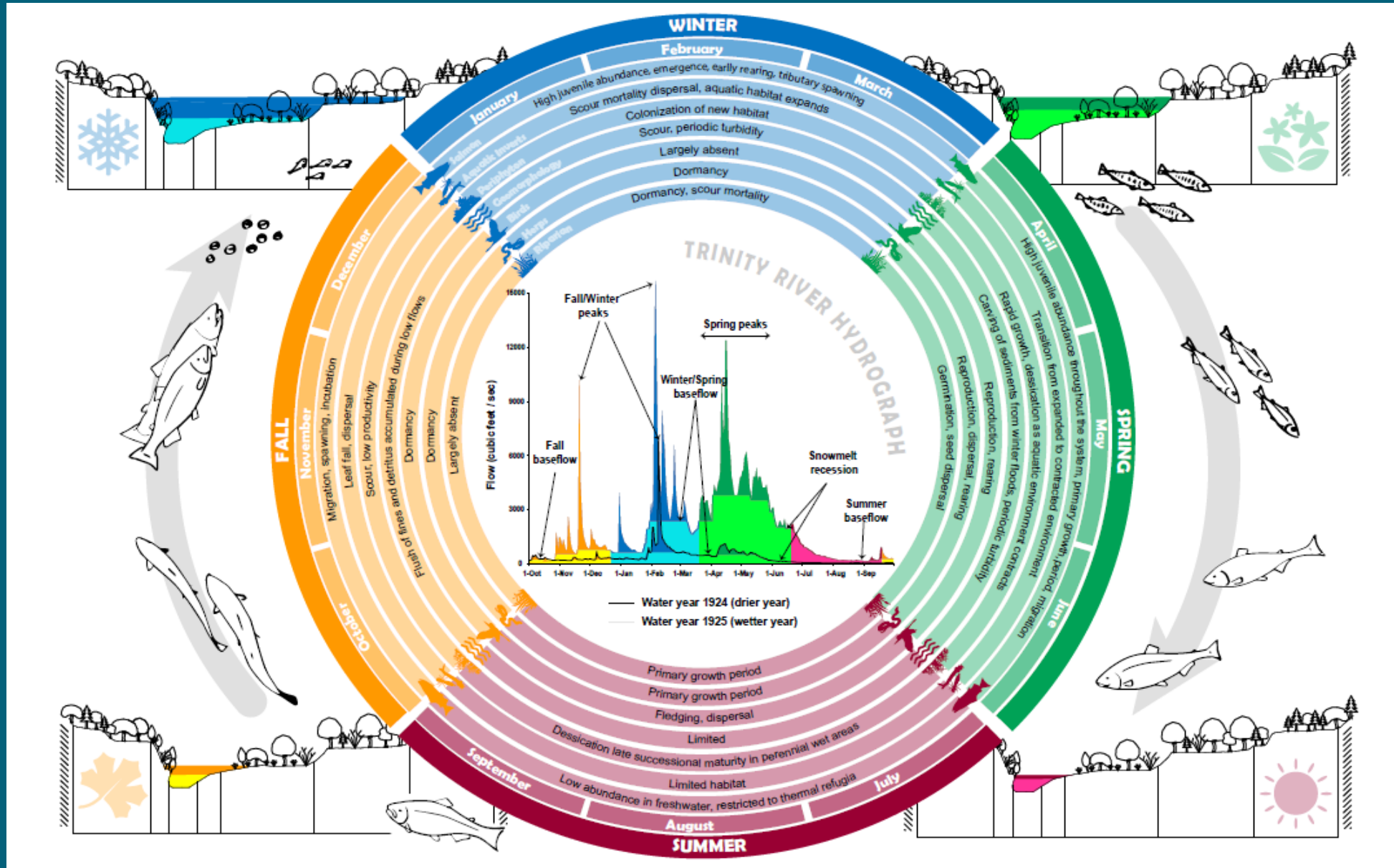
TRINITY RIVER RESTORATION PROGRAM

SCIENCE PLAN

Version 0.95 - September 16, 2022



What came out of Refinements



AM Step	Description	TMC	Program Scientists	Stakeholders
1-Assess	Define Management goals	Accountable Responsible	Informed	Consulted
	Define specific objectives	Accountable	Responsible	Consulted
	Define targets for objectives; Identify key uncertainties; possible management actions; stakeholder concerns; develop models to characterize assumptions/hypotheses about system.	Informed	Accountable Responsible	Consulted
2-Design	Explicit description of proposed action(s) including contrasts and replicates where Active AM is possible; Develop associated monitoring plan and data management strategy.	Consulted	Accountable Responsible	Informed
	Determine acceptable level of investment; Agree on proposed action and next steps for alternative outcomes.	Accountable Responsible	Support	Informed
3-Implement	Implement proposed action(s)	Accountable	Responsible	Informed
4-Monitor	Implement monitoring plan	Accountable	Responsible	Informed
5-Evaluate	Compare monitoring results against objectives and model predictions. Document reductions in uncertainties, evaluate and update hypotheses.	Informed	Accountable Responsible	Informed
6-Adjust	Update the proposed management action alternatives based on learning.	Consulted	Accountable Responsible	Consulted
	Determine acceptable level of investment; Agree on proposed action and next steps for alternative outcomes.	Accountable Responsible	Support	Consulted

There is a Need for Basin Wide Management

- The TRRP Refinements process highlighted areas where the TRRP does not have influence but will affect the success of the program
 - Hatchery Management
 - Timing of diversions
 - Klamath River operations
- The reverse could be said for Klamath River Management

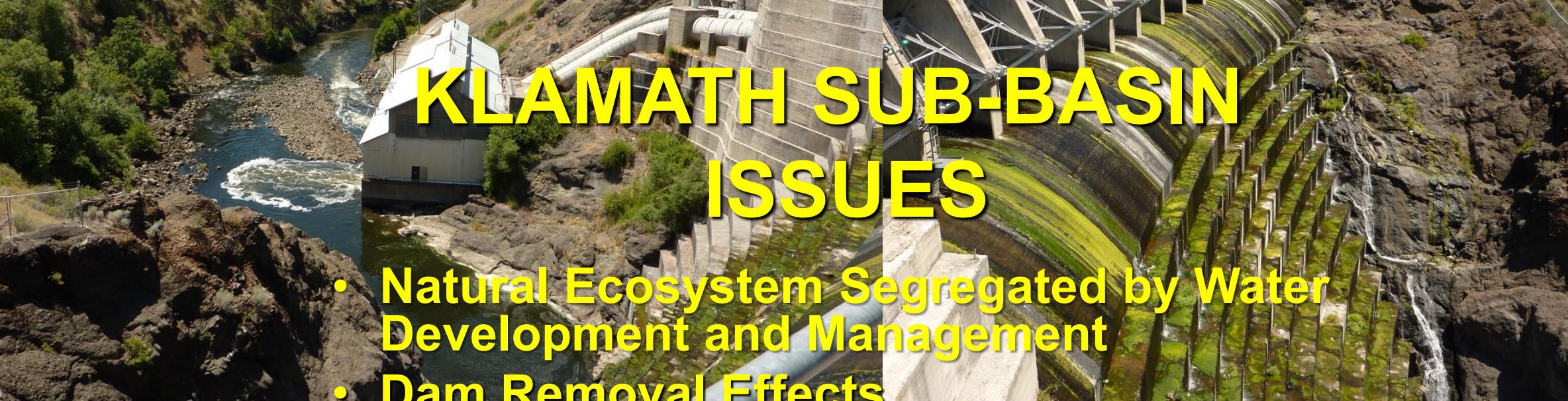
KLAMATH BASIN JOINT DIRECTORATE



**A Concept for
Coordinated Basin
Management**

KLAMATH SUB-BASIN ISSUES

- Natural Ecosystem Segregated by Water Development and Management
- Dam Removal Effects
- Water Quality
- Fish Reintroduction
- Fish Mitigation
- Tribal Trust
- ESA
- Sustainable Agriculture
- Others?



TRINITY SUB-BASIN ISSUES

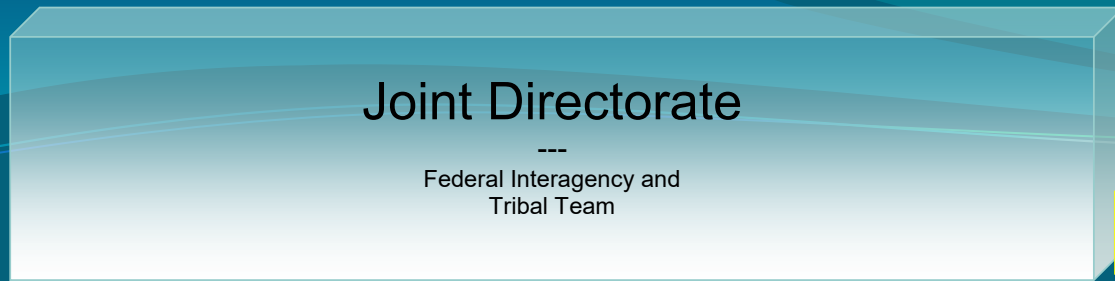
“not one bucket full of water shall go to the Central Valley until the needs of the Trinity River are met...” (Congressman Clair Engle 1955)

- Piecemeal Management of Klamath Basin
- Integration with Central Valley Project
- Trinity ROD Implementation
- Hatchery Mitigation
- Proviso 2 ($\geq 50,000$ Acre Feet)
- Flow Augmentation Releases
- Others?

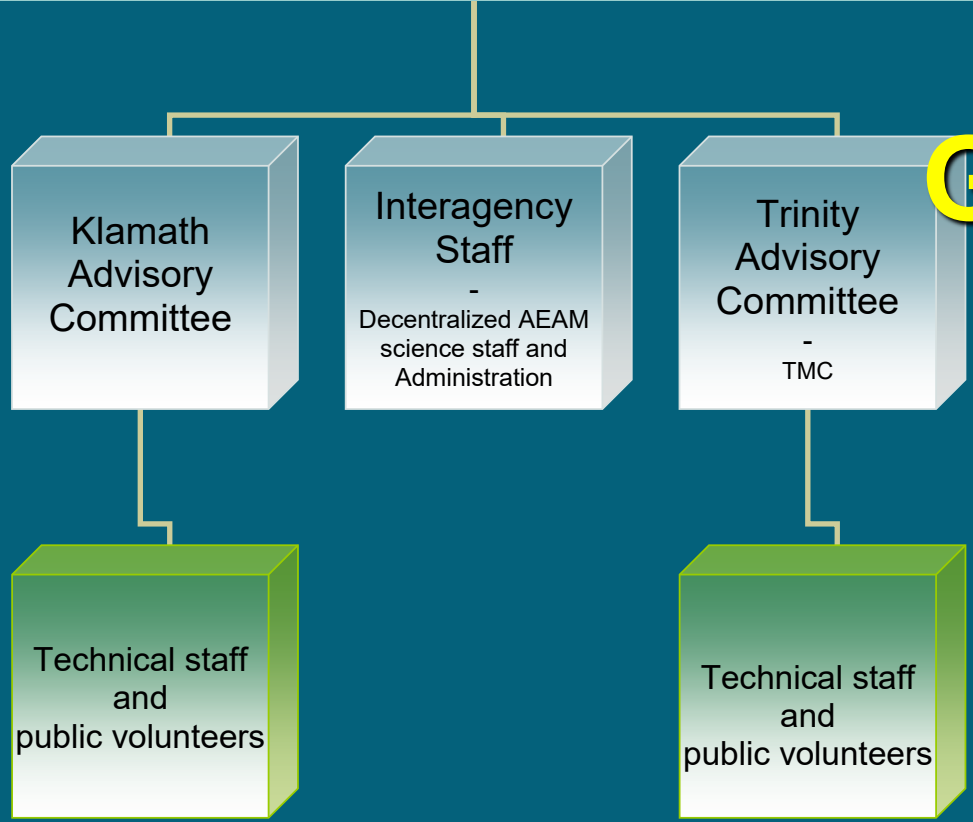
KLAMATH BASIN GOVERNANCE

Multi-Jurisdictional Basin:

- Federal
 - USDA, USDO, USDOC, Other?
- Tribal
 - Klamath Tribes of Oregon, Karuk Tribe, Yurok Tribe, Hoopa Valley Tribe, & others
- States
 - CA, OR
- Local
 - Counties and Municipalities



KLAMATH BASIN GOVERNANCE



Conceptual Organization of Klamath Basin Joint Directorate

Questions

