

# Strong Collaborative Process

## A Case Study: The Redwood Creek Estuary

### Collaborative



**Managing by Network, February 29, 2024**  
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**Leslie Wolff, NOAA Fisheries**

**Mary Burke, California Trout**

## *Inter-being*

Using the power of  
collaboration  
to advance  
conservation and  
recovery of salmon  
and steelhead.



<https://plumvillage.org>

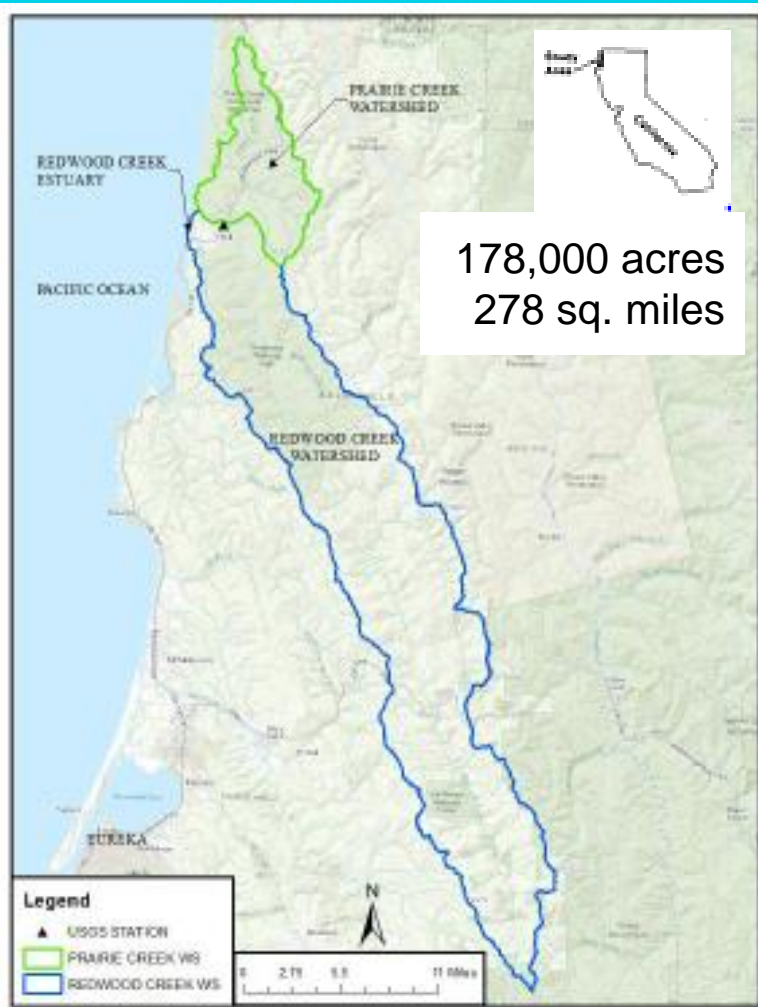
# Presentation Outline

- Setting: Redwood Creek Estuary
- Process: Principles and Practices of Collaboration
- Case Study: Examples from the Redwood Creek Estuary Collaborative
- Take-aways

# Estuary Brief History

- Yurok unceded ancestral territory
- Late 1800s European settlement
- 1920s conversion from spruce-alder forest wetland complex to agriculture
- 1953-1981 sawmill on the beach
- 1968 RNP established
- 1968 USACE builds 3.4 mi of levees and Humboldt County becomes local sponsor
- 1969 Evidence of process dysfunction

178,000 acres  
278 sq. miles







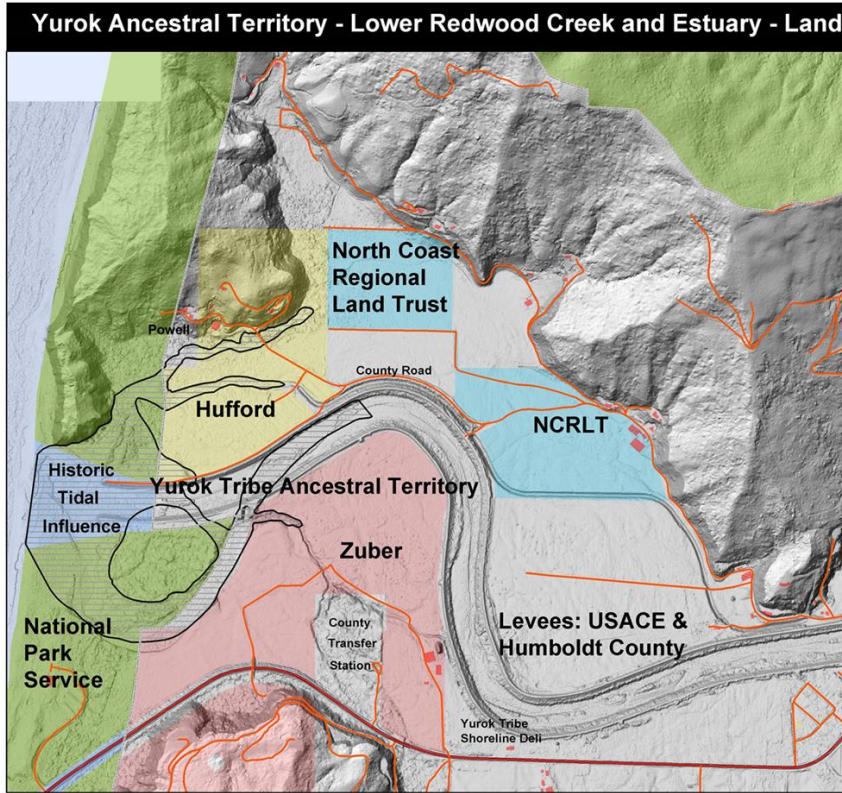
## Fish & Habitat Setting

- The main tributary, Prairie Creek, is a climate and salmon stronghold
- Approx. half watershed in State/Fed ownership
- Levees cut off floodplain, and disrupt the stream-estuary ecotone
- Estuary is 25% of historical area
- Independent populations of SONCC coho salmon, CC Chinook salmon and NC steelhead, all essential or core to species recovery

Redwood Creek Estuary: The setting

# An Opportunity and Challenge

- Lack of drainage causes flooding on agricultural lands on the outboard side of the levees
- Modification of a Federal flood control project requires USACE or Congressional authority



Land Ownership.mxd

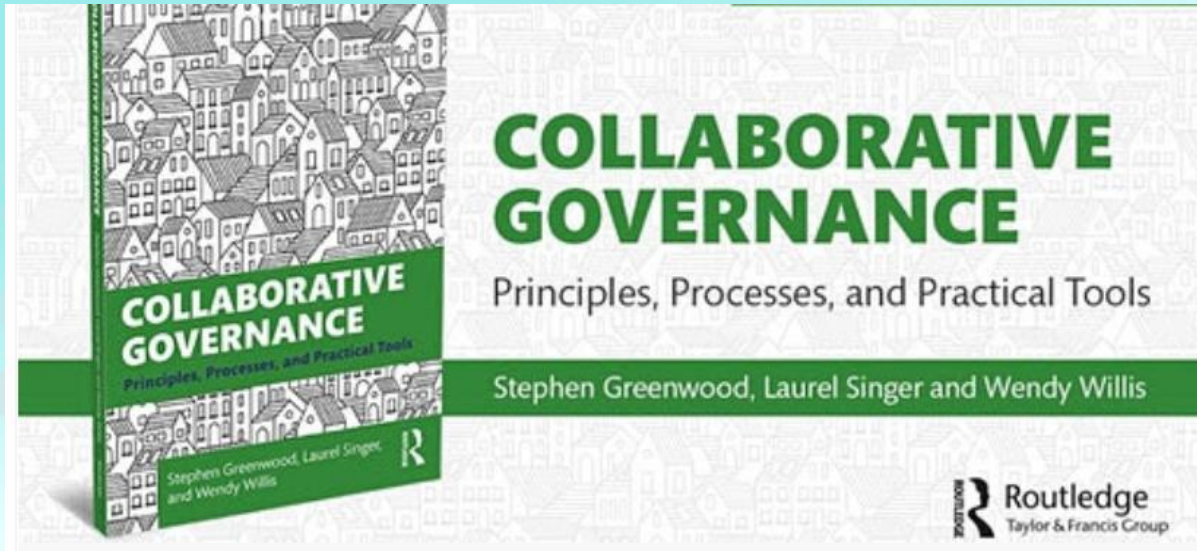
Notes: Area shown as sovereign state land is based on submerged land visible on 1941, 1958 and 1966 aerial photographs with presumed tidal influence. Landowners  
See Laird (2009) report to State Coastal Conservancy.

- Pvt Landowners
- NPS
- Humboldt Co.
- USACE
- NR Land Trust

- Yurok Tribe
- CalTrout
- NOAA Fisheries
- USFWS
- CDFW

Redwood Creek Estuary: The setting

**Sources:** Greenwood et al., (2021) and  
Portland State University Course PA 575:  
*Foundations of Collaborative Governance*



# Collaborative Principles and Practices

**Collaboration:** Two or more entities working together for mutual benefit (win win).

## **Two main types of collaboration:**

- Agreement seeking (aligning interests to reach decision)
- Collective Action (aligning actions and resources)



# Why collaborate?

- **Interdependence** is a key reason to collaborate: we can't get what we want on our own and each of our actions or inactions affects each others outcomes.
- The purpose of a collaborative relationship is to improve your outcome over what it might otherwise be.
- The other people in the collaborative relationship are also looking to improve their outcome.

# Building Collaborative Relationships: trust, reciprocity and cooperation

*Collaboration is not intuitive and requires new skills and practices that don't always come naturally (TNC 2015).*

*Trust is a result of cooperation rather than a condition of cooperation (Gambetta 1998).*

1. Go slow to go fast.
2. Listen with an intent to understand.
3. Ask for opinions, ideas, help, etc.
4. Establish contingent agreements rather than leverage.

## Mutual Benefits: improve your outcome by finding the win-win

- **Convene** key stakeholders and provide a neutral forum.
- Define **interests** based on **values**.
- Analyze **BATNAs** (Fisher and Ury 1991) to determine if collaboration is needed and deepen understanding of each party.

# Employ effective group process and decision making:

- Frame the issue as a decision to be made.
- Develop decision criteria based on values and interests to assess ideas.
- Help the group focus efforts on the decision space.



## Joint Discovery: involve key parties in each step

*People make choices based on a handful of deeply rooted values that are unlikely to change.*

*Facts are different from values. Facts change as we learn more. Sharing and questioning facts helps us learn more rapidly (TNC 2015).*

# The Importance of Conveners

- **Gregory Hufford**
  - Landowner and project champion
- **Mary Burke**
  - CalTrout, neutral facilitator, process guide
- **Leslie Wolff**
  - NOAA Fisheries, process guide, resource expert

*Trust is a result of cooperation rather than a condition of cooperation.*

# Values, Interests and Interdependence

## A year of meetings

- **Facilitation and meeting planning**
  - **Safe meeting space - everyone's ideas are heard equally**
- **Early efforts with small group built trust**
  - **Laughing and joking, body language indicated progress toward positive relationships**
- **Understanding of interdependence**
- **Site tour**



Redwood Creek Estuary Collaborative - Case Study

# Values, Interests and Interdependence

- **Within the first few meetings we established values:**
  - Private landowners: **Partnerships**; land stewardship; economic viability; maintenance security; permit assistance
  - Agencies: Ecosystem recovery; recreational value; collaborative process and **partnerships**
- **And interests**
  - Improvement in estuary function and aquatic habitat
  - Economic viability and recreational value
  - Land stewardship, flood control maintenance security, and
  - Permit assistance
- **Interdependence means contingent agreements rather than leverage**



# Decision making framework

## Getting to Agreement: Develop Criteria

Example Issue Framing: Decide on three conceptual design alternatives that meet the objectives of salmon recovery and productive agricultural lands, are implementable, and consider upstream channel maintenance and flood control.

### Example Values

- Timeliness of action for landowners and resource agencies
- Landowner-led process
- Local initiative and expertise
- Salmon recovery
- Productive agricultural lands
- Rural lifestyle
- Community
- Update and maintain water management infrastructure

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### Example Criteria

1. Mouth of Sand Cache Creek open and drains agricultural fields on the Hufford's private lands.
2. Provide a process-based restoration approach that will allow habitat to evolve over time for salmon recovery.
3. Protects the Zuber's private lands from the 100-year flood.
4. Consider upstream channel maintenance and flood protection level.
5. Levee footprint modification can be done without oversight and requirements of the Corps.
6. Levee footprint modification can be implemented by the San Francisco Corps District with a continuing authority program.

## Getting to Agreement: Use Criteria to Assess Alternatives

**Developing Alternatives:** Consider how design ideas meet criteria, and how the alternative could be implemented.

Example Alt 1: Pull north levee back to Park boundary; re-route mainstem Redwood Creek into South Slough and armor bank.

- Partially meets criteria #1 and 2
- Meets criteria #3
- #5 and #6 depend upon the chosen implementation process

Example Alt 2: Set-back north and south levees and tie into existing roads or infrastructure.

- Meets criteria #1, 2
- Partially meets criteria #3
- #5 and #6 depend upon the chosen implementation process

Example Alt 3: Set-back north levee and tie into existing road; re-route mainstem Redwood Creek into South Slough and armor bank.

- Meets criteria #1, 3, and partially meets #2
- #5 and #6 depend upon the chosen implementation process

None of these examples address criteria #4

**Use 2d hydraulic model to help gather facts and evaluate design ideas:** Test water inundation levels, frequency, and whether salt or fresh water inundation of fields; evaluate water velocities; determine flood protection levels of new surfaces.

**Evaluate alternatives on how they meet the criteria:** Use 2d model results to learn how design ideas respond to floods and tides. Use both the new information generated by the model and the values reflected in the criteria to help reach agreement.

Frame the issue as a decision: “Can we identify a conceptual project?”

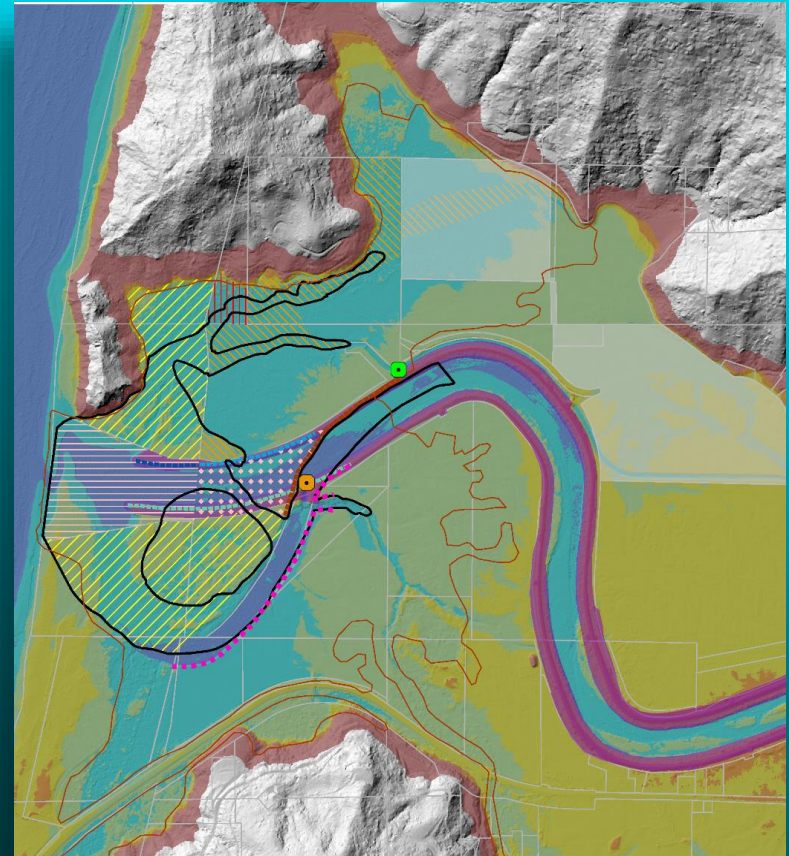
Develop decision criteria based on values and interests to assess ideas.

We identified and agreed on a win win conceptual project.

# Conceptual design development

## Go slow and work from group agreement

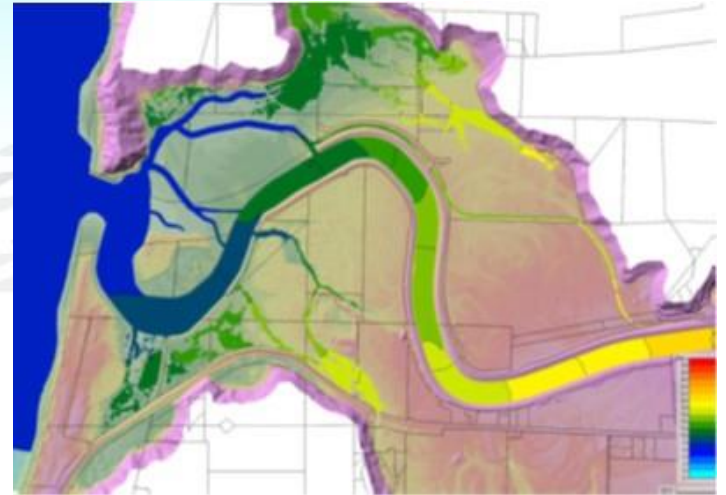
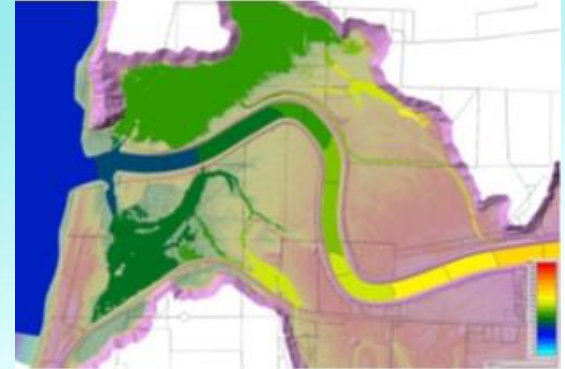
<p><b>REDWOOD CREEK ESTUARY STAKEHOLDER GROUP</b>          Gregory Huffard          Maria Zuber  <i>Landowner Representatives</i></p> <p>Darren Merau          Mary Burke  <i>Calf Trout</i></p> <p>Leslie Wolff          NOAA Fisheries West Coast Region</p> <p>Rob Pfeiffer          NOAA Restoration Center</p> <p>Steve Metz          Dave Roemer          Leonel Argueta          David Anderson          Vicki Quast  <i>Redwood National Park</i></p> <p>In review, pending edits from:          Craig Conner          USACE San Francisco District</p> <p>Dan Ehrenman          North Coast Regional Land Trust</p>	<p><b>DRAFT Redwood Creek Estuary Stakeholder Group Consensus Statement</b>          August, 2018</p> <p><b>INTRODUCTION</b></p> <p>Redwood Creek is a critically important watershed in northern coastal California. The watershed hosts Redwood National and State Parks, working agricultural and timber lands, the town of Orick, and populations of threatened salmon and steelhead. The estuary and four miles of lower Redwood Creek are bound by a 1968 Army Corps levee system that was installed to provide flood protection to the community of Orick. The levee system has reduced flooding but has presented long-term unintended consequences and increasingly undesirable conditions for traditional land use operations, public safety, and salmonid habitat.</p> <p><b>CONSENSUS REGARDING STAKEHOLDER GROUP PROCESS</b></p> <p>The Redwood Creek Estuary Stakeholder Group convened at the request of landowner representatives in order to identify areas of agreement that can be used to develop a project that will resolve some of the long-term issues. The stakeholder group has agreed to work towards a common set of goals that protect land use operations and restore estuary function.</p>	<p>consensus around shared goals, the group has the following:</p> <p><b>INTRODUCTION</b></p> <p>Redwood Creek is a critically important watershed in northern coastal California. The watershed hosts Redwood National and State Parks, working agricultural and timber lands, the town of Orick, and populations of threatened salmon and steelhead. The estuary and four miles of lower Redwood Creek are bound by a 1968 Army Corps levee system that was installed to provide flood protection to the community of Orick. The levee system has reduced flooding but has presented long-term unintended consequences and increasingly undesirable conditions for traditional land use operations, public safety, and salmonid habitat.</p> <p><b>CONSENSUS REGARDING STAKEHOLDER GROUP PROCESS</b></p> <p>The Redwood Creek Estuary Stakeholder Group convened at the request of landowner representatives in order to identify areas of agreement that can be used to develop a project that will resolve some of the long-term issues. The stakeholder group has agreed to work towards a common set of goals that protect land use operations and restore estuary function.</p>	<p>link to at least the NPS property boundary.</p> <p>benefits of additional levee setback or removal or land at a lower height to help primary flow into the estuary.</p> <p>ability of levee set-backs.</p> <p>ity road, Huffard Road and provide for road crossing at the estuary.</p> <p>operations and aquatic habitat benefits by improving the estuary.</p> <p>son and steelhead. Assessment will inform the extent that supports juvenile rearing conditions.</p> <p>any project will require investment of public and private funds. Given there have been previous efforts to address the estuary, this project should leverage and not repeat and non-profit facilitated process to achieve the goals of the project. The State has funding available for salmon habitat-restoration project forward.</p> <p>collaborative process to achieve goals of protection of estuary function, and stresses that this process will build trust between Strawberry Creek and South Slough that would address County maintenance issues to the extent possible.</p> <p>if long-term projects will be considered to address the estuary on the north side of the estuary. Several mutually beneficial projects are intended to be self-sustaining as they address County maintenance issues to the extent possible.</p> <p>ath Slough by modifying levee and channel footprint.</p> <p>along South Slough.</p> <p>link between Strawberry Creek and South Slough that would address County maintenance issues to the extent possible.</p> <p>ability of levee set-backs.</p> <p>and downstream of South Slough to become an estuary.</p> <p>ter infrastructure.</p> <p>estuary embayment.</p> <p>banks and Sand Cache Creek through sediment removal, with consideration for both short and long-term projects.</p>
<p><b>Process</b></p> <p>The stakeholder group includes representatives from: 1) private landowners; 2) Redwood National Park; 3) NOAA Fisheries and Restoration Center; 4) USACE and, 5) California Trout, a natural resource non-profit that is primarily providing group facilitation. The stakeholders value a transparent and collaborative process. Members acknowledge the commitment involved and respect the diverse interests and viewpoints expressed by all members seeking to advance shared goals. The group seeks participation from Humboldt County as the lead sponsor for the USACE flood control project and from the North Coast Regional Land Trust (NCRLT) as a landowner. The group acknowledges the eventual need for U.S. Congressional, California Legislature, and other stakeholders support.</p>	<p><b>Complex and Urgent Issues</b></p> <p>Members agree that the conditions and processes in the estuary are complex and will require solutions that consider physical, ecological, and social factors. The group agrees that the existing conditions of flooded agricultural lands and roads, and the declining status of salmon and steelhead populations, present an urgent need to identify a viable solution in the near future.</p>	<p>1</p> <p>2</p> <p>3</p>	<p>1</p> <p>2</p> <p>3</p>



# Joint Discovery – Align interests

## High flow connection for North Slough / Sand Cache Creek

- **Policy:** Process-based restoration is the goal
- **Science:** Hydrodynamic modeling will demonstrate expected outcomes
- **Jointly Agree:** Group will assess various designs and modeling outcomes to determine maximum mutual benefit and win:win



Redwood Creek Estuary Collaborative - Case Study

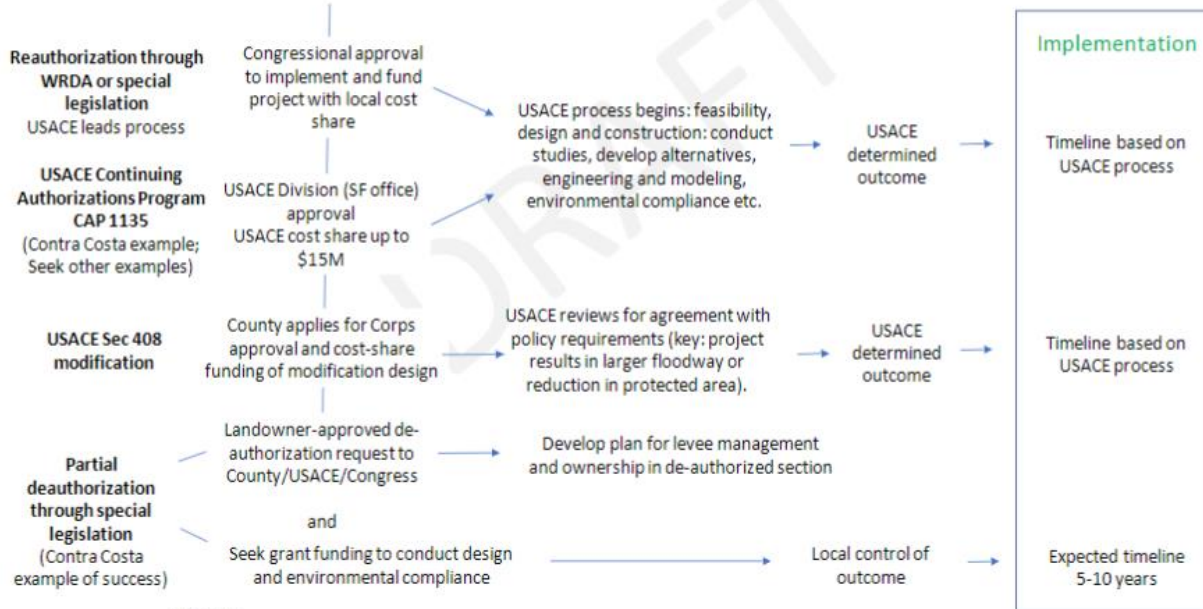


# Explore policy constraints

## Getting to Implementation - Pathways

Agree on which conceptual design alternative to implement  
30% design alternative is used to demonstrate buy-in and need for the  
best path to feasible and timely implementation.

Political support from Congressman Huffman and others is key to feasible implementation pathways.  
(eg. sponsor special legislation / WRDA selection for funding, etc.)



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Frame the issue as a decision: “What implementation pathway is feasible?”

Federal flood control project = USACE process, act of Congress, or partial deauthorization



# Joint Discovery Success!

## Aligned interests for Collective Action

### CAP 1135 new start request

- **Policy: Modifying the Federal Flood Control Project requires USACE or Congressional authority**
- **Science/Analysis of the Situation: Regular Steering Committee discussions about various implementation authorities and pathways**
- **Jointly Agree:**
  - **CAP 1135 is best next action**
  - **Humboldt County Board of Supervisors and staff to request a USACE CAP 1135 new start; joint agreement was demonstrated in each Collaborative member submitting letters of support**

# An iterative process of Joint Discovery: Next steps involve courageous conversations

- Understanding the value of land ownership
- Explore potential land use changes
  - NRLT land exchange
  - Riparian areas
  - Bank protection
- Understanding the value of salmon recovery
- Explore potential habitat design elements

## **Intentional professional development**

- Collaborative Governance training from Portland State University
- Cascadia Leadership training from Humboldt Area Foundation

## **Contingent agreement process**

- Establish relationships by exploring values and interests
- Strong relationships are built on trust

## **Collaborative principles and practices provide**

- An alternative to regulatory swagger
- Mutual benefits
- Durable solutions
- Increased community capacity

Take-aways

## 2024 Update

- Affirmative FID for USACE **CAP 1135**
- Currently in the **Feasibility Study Phase** of the Cap 1135
- **Collaborative Group** Consensus on design alternative
- **General Agreement** language underscores intent to collaborate to meet multiple objectives in a non-binding way



Take-aways

*Thank you to our partners in the  
Redwood Creek Estuary Collaborative and to the  
Managing by Network and the Partnership Academy*

