



# Modernizing Recovery Efforts of Lahontan Cutthroat Trout

**Sean Vogt, LCT Recovery Coordinator**

Reno U.S. Fish and Wildlife Service Office

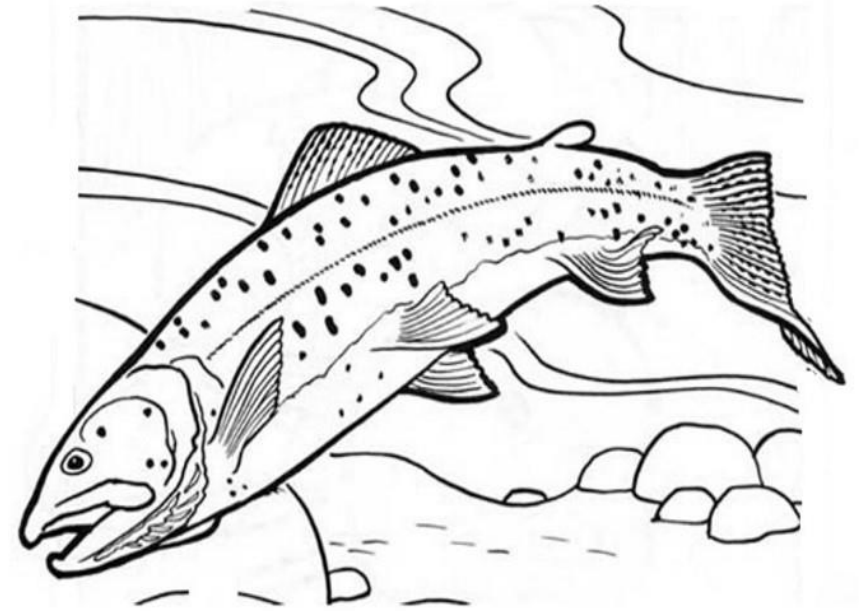
# Lahontan cutthroat trout (LCT)



# Lahontan cutthroat trout (LCT)



# NEVADA STATE FISH



# LAHONTON TROUT



ALL PROGRAMS

# Lahontan Cutthroat Trout

Lahontan cutthroat trout

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The goal of NFWF's Lahontan Cutthroat Trout initiative was to protect existing pure populations from contact with non-native trout, sustain Lahontan cutthroat populations in lakes, connect isolated populations into larger, more resilient populations, and increase Lahontan cutthroat angling opportunities.

OVERVIEW

# 2022 5-Year Status Review pending...

Year	# of LCT Populations	Resilient Stream Populations	Resilient Lake Populations
1995	88	10	2
2009	70	10	2
2022	64-66*	6-8*	1*

→ Only self-sustaining populations included in this comparison table  
\* Preliminary data to be included in 2022 LCT 5-Year Status Review



The diagram illustrates a management structure. At the top is a red inverted triangle labeled "Management Oversight Group". To its right is the text "Senior Leadership". Below these are five teal upright triangles representing different basins: Tahoe Basin, Truckee River, Walker-Carson, Northwest, and Humboldt. The first three triangles are labeled "RIT" and the last two are labeled "GMU". To the right of the triangles is the text "Technical/Field Staff".

**Management Oversight Group**

**Senior Leadership**

**RIT**

**Tahoe Basin**

**RIT**

**Truckee River**

**RIT**

**Walker-Carson**

**GMU**

**Northwest**

**GMU**

**Humboldt**

**Technical/Field Staff**

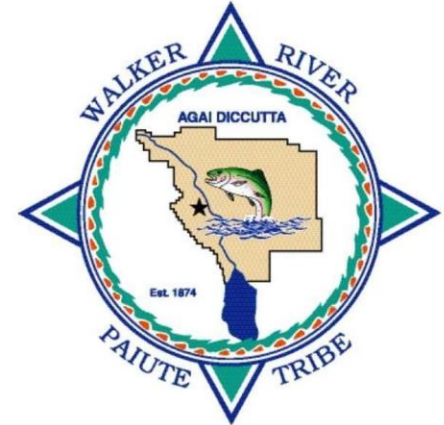
# MOG Members



— BUREAU OF —  
RECLAMATION



U.S. Army Corps  
of Engineers  
Sacramento District





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**Management Oversight Group**

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**RIT**

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**Truckee River**

**RIT**

**Walker-Carson**

**GMU**

**Northwest**

**GMU**

**Humboldt**

**Technical/Field Staff**



Management  
Oversight  
Group

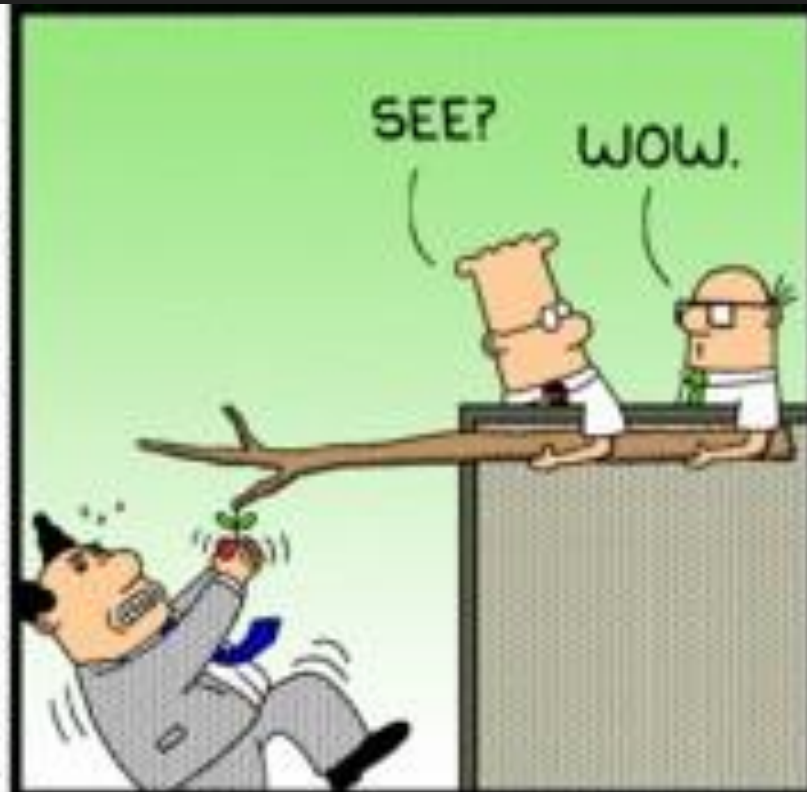
Senior Leadership



Dilbert.com DilbertCartoonist@gmail.com



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# Trends through time...

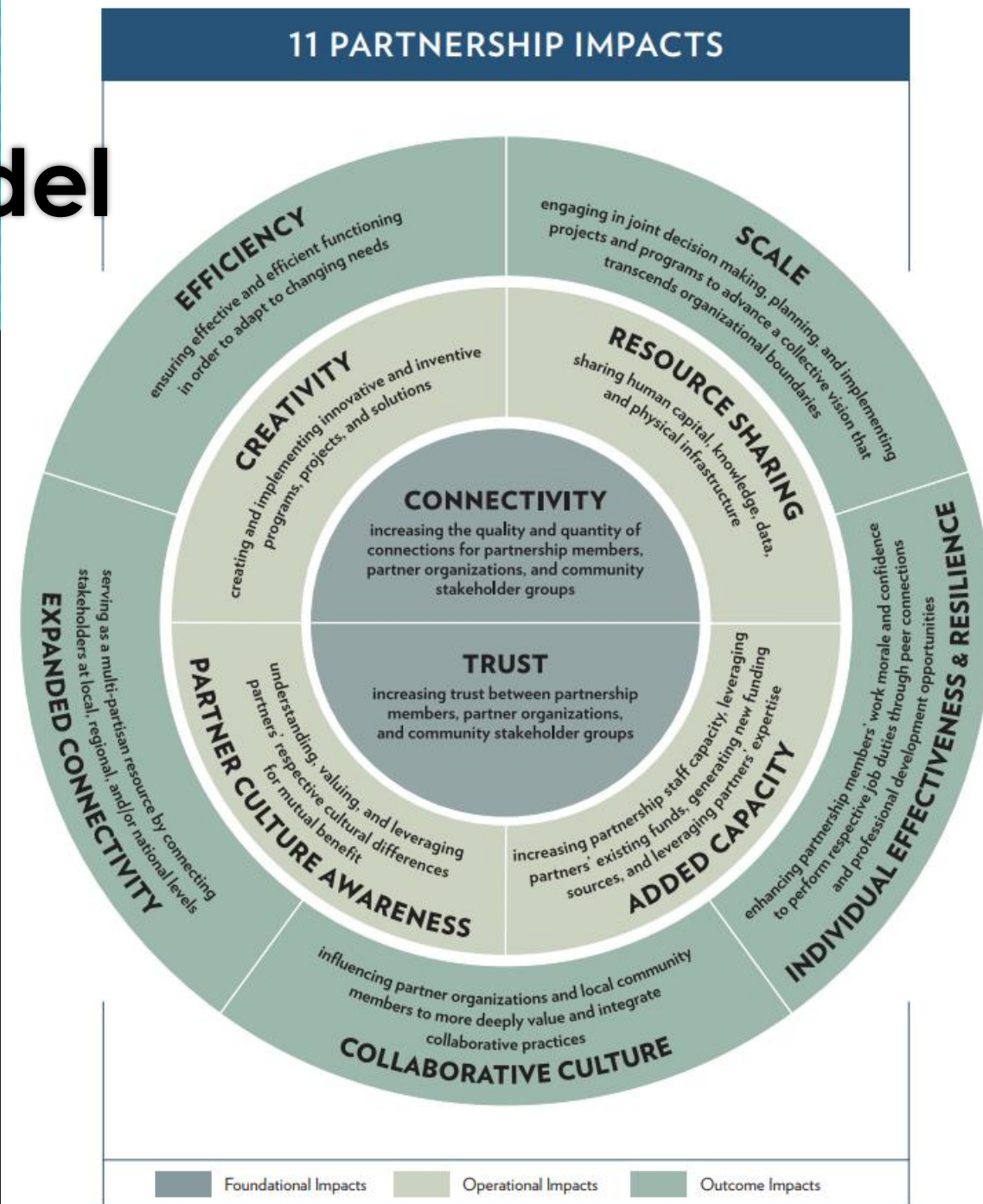
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# Partnership Impact Model

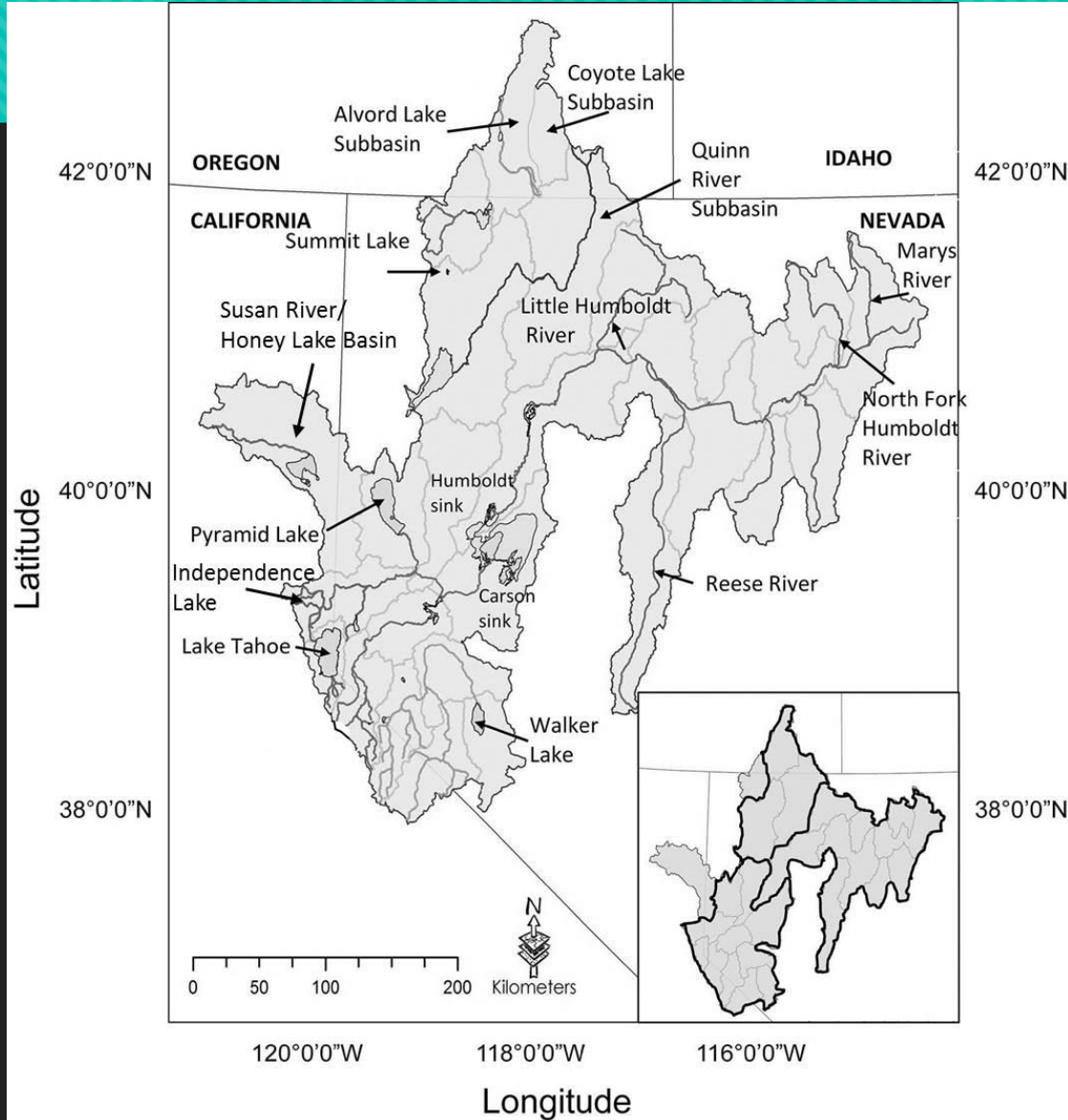
- At what level can the PIM be integrated into this effort?
- How would you start?



# Multiple Visions = Multiple Problems



# LCT Recovery Planning



## Recovery Plan

for the

## Lahontan Cutthroat Trout

January 1995



U.S. Fish and Wildlife Service  
Region 1  
Portland, Oregon



# LCT Recovery Planning

- Multiple past failed attempts to update the 1995 Recovery Plan due to lack of coordination
- We needed professional help... no really, we did or we wouldn't have been able to complete the process, trust me!

## Recovery Plan

for the

## Lahontan Cutthroat Trout

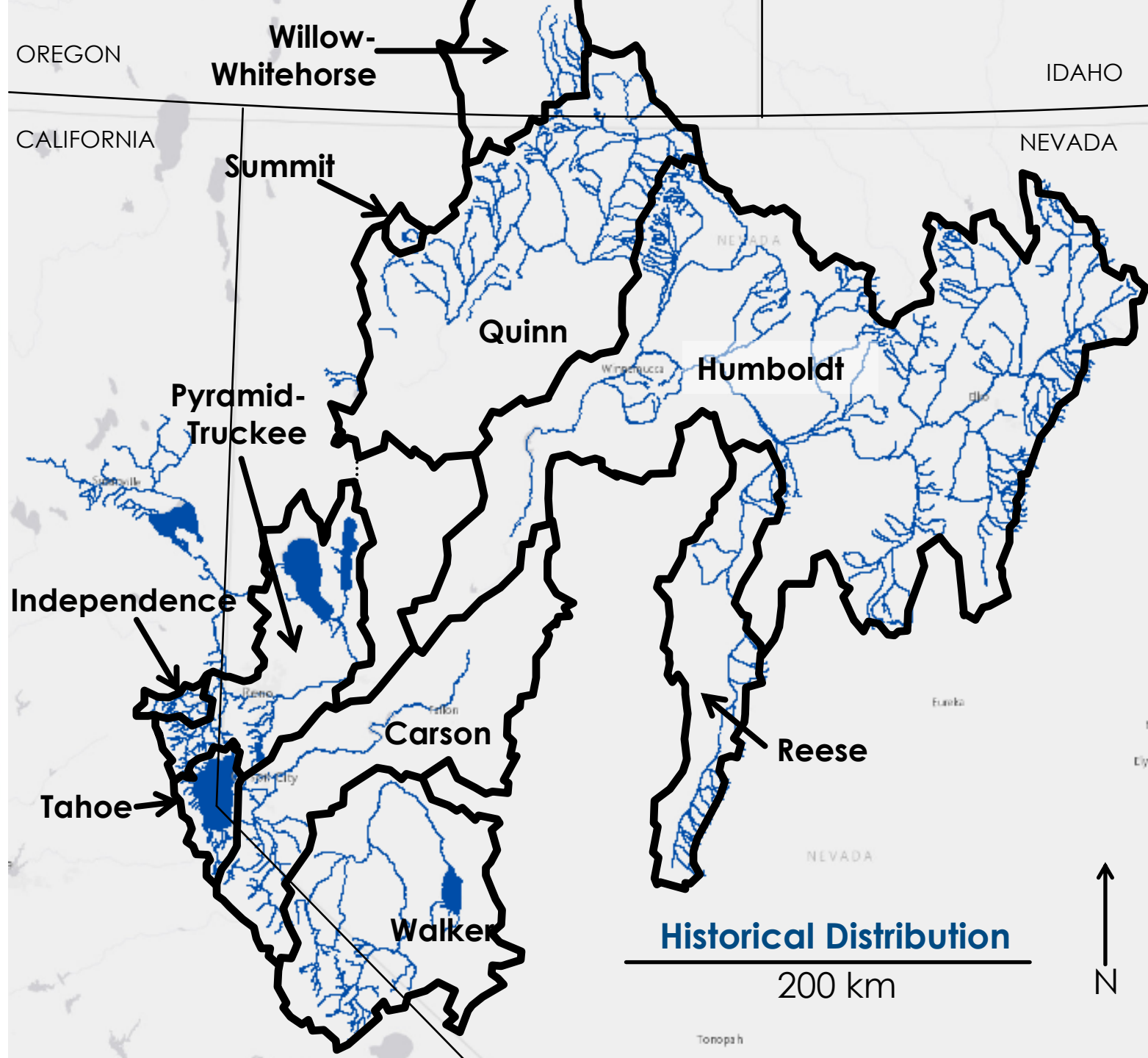
January 1995



U.S. Fish and Wildlife Service  
Region 1  
Portland, Oregon



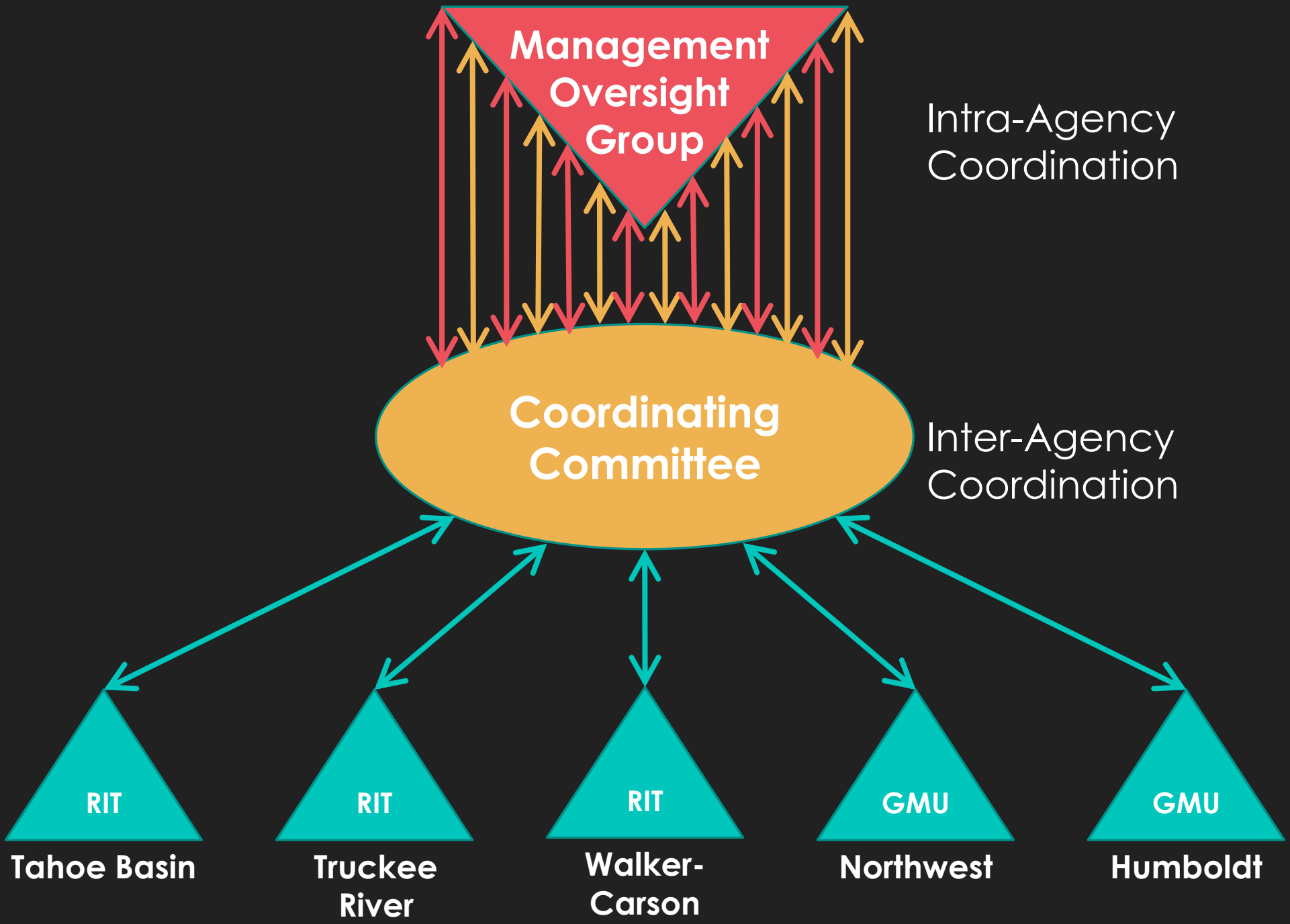
Updated Goals and Objectives  
for the Conservation of Lahontan Cutthroat Trout  
(*Oncorhynchus clarkii henshawi*)



Prepared for: Lahontan Cutthroat Trout Management Oversight Group

Prepared by: Lahontan Cutthroat Trout Coordinating Committee

May 29, 2019



**Management Oversight Group**

Intra-Agency Coordination

**Coordinating Committee**

Inter-Agency Coordination

**RIT**

**Tahoe Basin**

**RIT**

**Truckee River**

**RIT**

**Walker-Carson**

**GMU**

**Northwest**

**GMU**

**Humboldt**



# Switching Gears...

- 2019 MOG Recommendations:
  - Develop Near-term Priorities
  - Formalize agreements re: new governance structure
- 2019 Langdon Group Report Recommendations:
  - Improve Inter-agency coordination and communication
  - Improve communication/outreach both internally and externally
  - Create transparency

# Partnership Lifecycle

- Where are we at?
- What should we focus on?
- At what level?

## 1) Visioning

## 2) Concept Planning

## 3) Research and Development

- Gather Information
- Seek internal/external advice
- Communication with stakeholders and partners
- Review network models
- Confirm and vet network partners
- Determiner how the network will operate
- Define goals and objectives
- Assess funding
- Assess risks and benefits

## 4) Implementation Planning

- Create a work plan
- Connect work plan to tasks on a timeline
- Prepare (and negotiate) formal and informal agreements
- Plan for ongoing communication
- Assess availability of funding resources
- Finalize and commit to evaluation criteria

## 5) On-the-ground action

- Continue (and ensure good) communication
- Use Moves or Adaptive Management

## 6) Evaluation and Recognition

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# Human Dimensions Branch (USFWS)

https://doi.sciencebase.gov/hd/team/fws



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The U.S. Fish & Wildlife Service (FWS, Service) Team Page was developed for Service practitioners by the Human Dimension Branch of the National Wildlife Refuge System. It provides convenient access to human dimensions tools and resources applicable to your conservation work.

Here you'll find news and announcements; upcoming events; training resources you can watch, listen to, or read; a reference directory of FWS social science experts; and case study examples of social science at work in the Service.

Contact Us



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### NEWS & ANNOUNCEMENTS

**Workshop Opportunity for DOI/USFS: Building Our Collaboration and Conflict Management Culture for External Engagement**

In celebration of their 20th anniversary, the DOI Office of Collaborative Action and Dispute Resolution (CADR) announces a virtual, no-cost workshop, for DOI and USFS professionals who work with external stakeholders and partners. Dates/Times: April 19-21, 2022, (daily sessions at 10:00 am-2:00 p...

3/9/22

# Conflict and Dispute Resolution (CADR)

https://doi.sciencebase.gov/hd/team/fws



The U.S. Fish & Wildlife Service provides convenient access to the conservation world. Here you'll find news, watch, listen to, or study examples of

**JOB POS**  
Find your next human dimension

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U.S. Department of the Interior



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## Office of Collaborative Action and Dispute Resolution

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### Office of Collaborative Action and Dispute Resolution

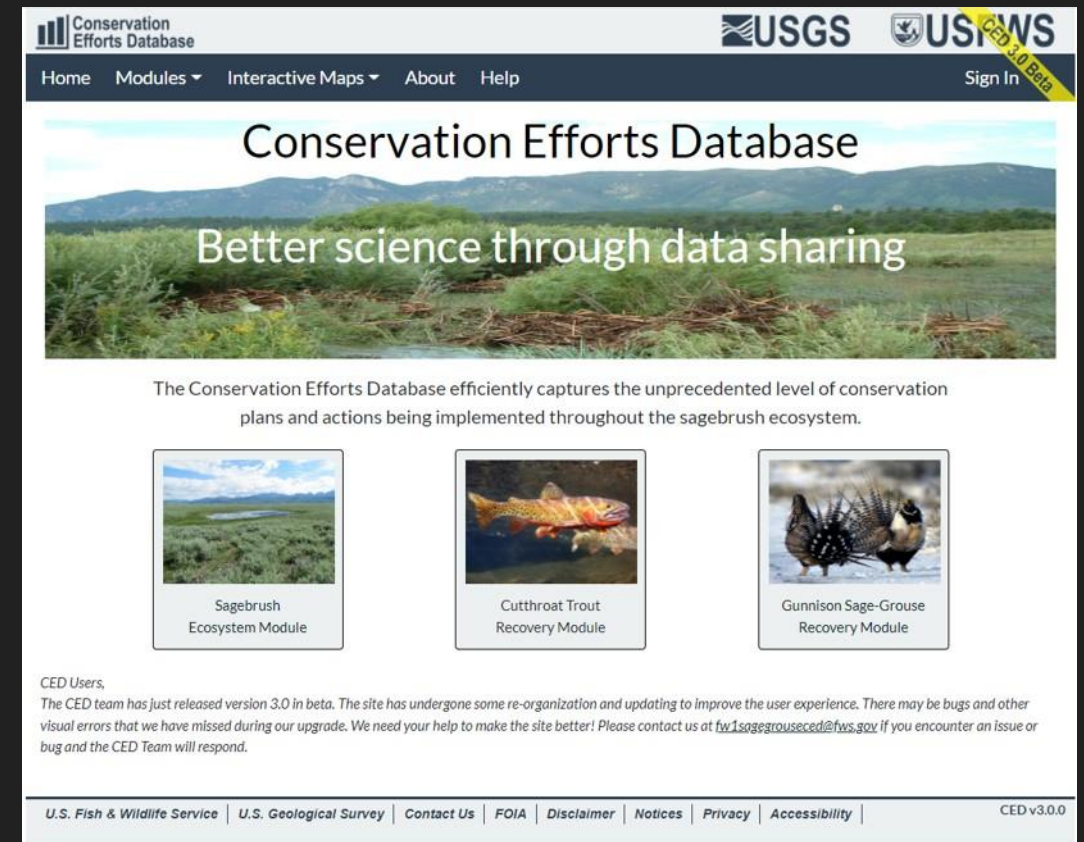
The Office of Collaborative Action and Dispute Resolution serves to improve the efficiency and effectiveness of the Department's operations, enhance communication, and strengthen relationships within the Department and with all customers, constituents, private organizations and businesses, Federal, State, Tribal and local government entities, and local communities with which the Department interacts to accomplish its work. CADR is committed to building and modeling conflict management competencies and integrating the appropriate use of public participation, collaborative problem-solving and alternative dispute resolution processes in all areas of the Department's work.

CADR provides a fair, impartial, and confidential resource to discuss your concerns and explore different options to help you anticipate and resolve conflicts and disputes, build stronger relationships and achieve more effective and lasting results. CADR offers information and assistance on problem solving options including, but not limited to:

- + Consultation
- + Conflict Coaching
- + Leadership Coaching
- + Training and Team-building
- + Facilitated conversation
- + Mediation
- + Facilitation

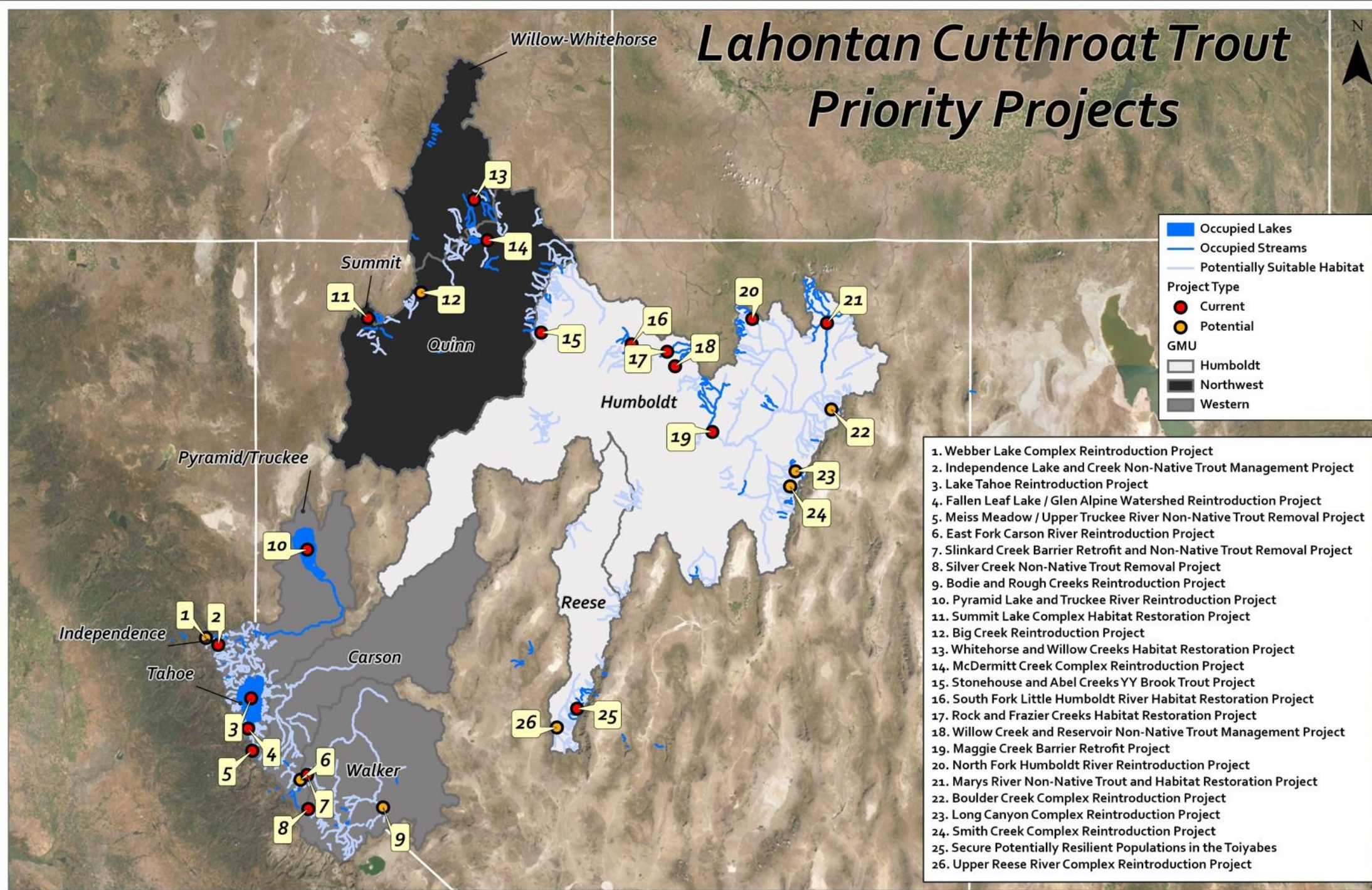
# LCT MOG/CC: Setting Near-term Priorities

- Develop Recovery Tracking Mechanism
  - Conservation Efforts Database for LCT
- Improve Outreach and Communication
  - Communications Core Team
- Modernize monitoring approaches
  - Habitat Core Team
  - UCD Genetics Mgt/health SNPs



The screenshot shows the homepage of the Conservation Efforts Database. The header includes the USGS and USFWS logos, a 'Sign In' button, and a 'CED 3.0 Beta' badge. The main navigation menu contains 'Home', 'Modules', 'Interactive Maps', 'About', and 'Help'. The main content area features a large banner image of a sagebrush landscape with the text 'Conservation Efforts Database' and 'Better science through data sharing'. Below the banner, a paragraph states: 'The Conservation Efforts Database efficiently captures the unprecedented level of conservation plans and actions being implemented throughout the sagebrush ecosystem.' Three featured modules are displayed in a row: 'Sagebrush Ecosystem Module' (with a landscape image), 'Cutthroat Trout Recovery Module' (with a fish image), and 'Gunnison Sage-Grouse Recovery Module' (with a bird image). A 'CED Users' section contains a notice about the 3.0 beta release and a contact email: [fw1sagegrouseced@fws.gov](mailto:fw1sagegrouseced@fws.gov). The footer includes links for 'U.S. Fish & Wildlife Service', 'U.S. Geological Survey', 'Contact Us', 'FOIA', 'Disclaimer', 'Notices', 'Privacy', and 'Accessibility', along with the version number 'CED v3.0.0'.

# Lahontan Cutthroat Trout Priority Projects



1. Webber Lake Complex Reintroduction Project
2. Independence Lake and Creek Non-Native Trout Management Project
3. Lake Tahoe Reintroduction Project
4. Fallen Leaf Lake / Glen Alpine Watershed Reintroduction Project
5. Meiss Meadow / Upper Truckee River Non-Native Trout Removal Project
6. East Fork Carson River Reintroduction Project
7. Slinkard Creek Barrier Retrofit and Non-Native Trout Removal Project
8. Silver Creek Non-Native Trout Removal Project
9. Bodie and Rough Creeks Reintroduction Project
10. Pyramid Lake and Truckee River Reintroduction Project
11. Summit Lake Complex Habitat Restoration Project
12. Big Creek Reintroduction Project
13. Whitehorse and Willow Creeks Habitat Restoration Project
14. McDermitt Creek Complex Reintroduction Project
15. Stonehouse and Abel Creeks YY Brook Trout Project
16. South Fork Little Humboldt River Habitat Restoration Project
17. Rock and Frazier Creeks Habitat Restoration Project
18. Willow Creek and Reservoir Non-Native Trout Management Project
19. Maggie Creek Barrier Retrofit Project
20. North Fork Humboldt River Reintroduction Project
21. Marys River Non-Native Trout and Habitat Restoration Project
22. Boulder Creek Complex Reintroduction Project
23. Long Canyon Complex Reintroduction Project
24. Smith Creek Complex Reintroduction Project
25. Secure Potentially Resilient Populations in the Toiyabes
26. Upper Reese River Complex Reintroduction Project


# Improving Outreach and Communication

- LCT Progress Report and Next Steps
  - 2020 IA Webinars
  - 2021 Eastern NV Webinars
- LCT Communications Core Team forms and gets working as well...
- Continue to build up the machine, welcome LCT Recovery Ecologist!



# Virtual Conservation...?

- Forced to pivot or lose momentum... so, we adapted.
- Scripted, pre-recorded videos were time-consuming to build, but have saved a lot of time... they have become a welcome package!



The image shows a YouTube video player interface. The main video content is a map of the Great Basin region, showing the drainage basins of the Pleistocene (in dark blue) and the present day (in light blue). Key features labeled include the Quinn River, Humboldt River, Carson River, Pyramid Lake, and Walker Lake. An inset map shows a broader view of the region, including Harney Lake, Malheur Lake, Summer Lake, Albert Lake, Lake Alvord, Goose Lake, Honey Lake, Lake Lahontan, and Lake Bonanza. A legend indicates 'Drainage a' (Drainage area), 'Pleistocene', and 'Present day'. A video thumbnail in the bottom right corner shows a large fish being held. The video player shows a progress bar at 1:34 / 5:32. The video title is 'LCT History and Biology' and it has 39 views as of Nov 18, 2021. The video player includes standard YouTube controls like play, pause, volume, and share.

LCT History and Biology  
39 views • Nov 18, 2021

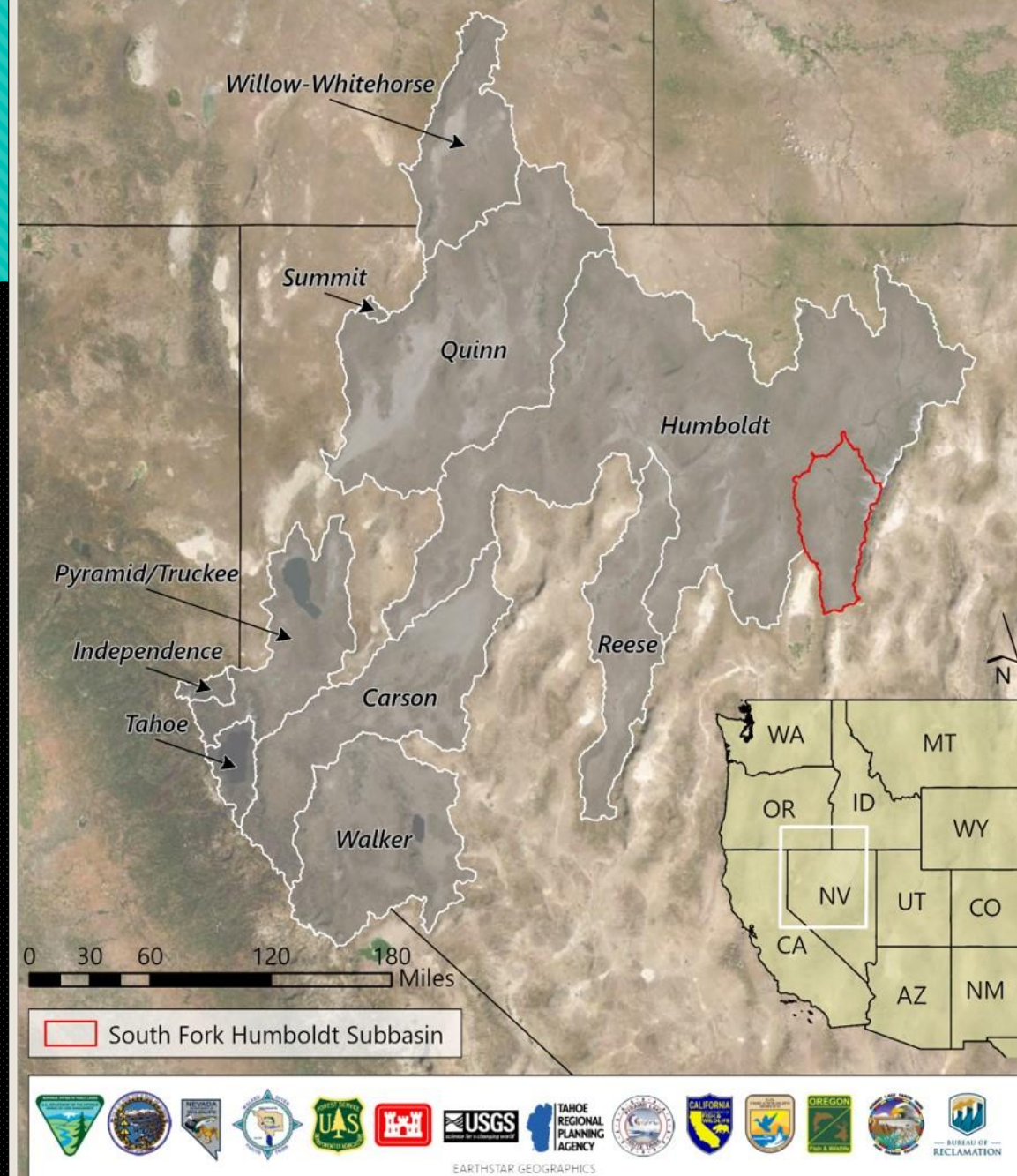
2 DISLIKE SHARE DOWNLOAD CLIP SAVE ...



# Building a Template

- **Situation Assessment** in the SF Humboldt Subunit – November 2021
- Recommendations from this particular assessment weren't necessarily new, but now there were more in the network and it started to feel different... but...

## Lahontan Cutthroat Trout Management Units



# Starting to Figure it out...

- LCT MOG/CC
  - Pat and Laura helping to integrate missing tenets/elements of successful partnerships (e.g., partnership lifecycle, partnership impact model)
- LCT Core Teams
  - Modernizing the approach and tools – this will allow for more transparency and streamline the collaborative process (through the CED:LCT)
- GMU/RITs
  - Working to develop recovery option sets and priorities based on 2019 UGOs
  - Initiate RAD process to improve efficacy and ultimately effectiveness

# Resist-Accept-Direct (RAD) Framework

○ USGS Climate Sciences

○ Decision Support Framework



## RESIST

Some changes can be resisted. Managers will work to maintain ecosystem processes, function, and composition without experiencing dramatic, threshold-crossing changes.



## ACCEPT

Many changes can be accepted, perhaps because they cannot feasibly be resisted or because they are acceptable to—or even desirable by—society. Managers will work to ease the transition.



## DIRECT

A few changes can be directed toward a different state, either because resistance is unrealistic or there is an opportunity to direct the change to a more desirable future state. Managers will face a new frontier in overseeing this process.

## Kenai Peninsula, Alaska: A Case Study



Stream banks are restored, the most feasible and deleterious invasive species are eradicated, fire is managed progressively, and landscape connectivity is maintained through fish and wildlife passages under or over highways. Non-native species are monitored for escapement as climate changes.



Glaciers are melting, non-glacial streams are warming, tree line is rising, and wetlands are drying. Many invasives are not managed either due to a lack of feasibility or perceived threat. Society has accepted the changes in fish and wildlife communities, even with higher costs to ecosystem services.



A spruce bark beetle epidemic and human-caused fire have shifted white spruce forests into a novel grassland ecosystem. Non-native trees from neighboring regions are being planted, and the introduction of large grazers is being considered to stabilize the new grasslands and related communities.

## Resist

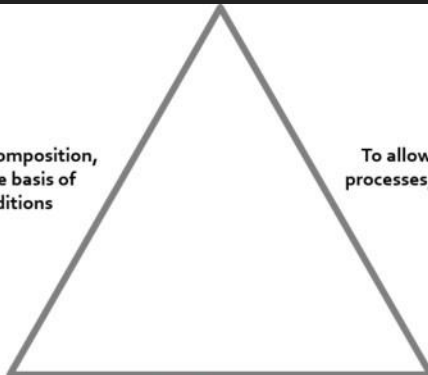
Work to maintain or restore ecosystem composition, structure, processes, or function on the basis of historical or acceptable current conditions

## Accept

To allow ecosystem composition, structure, processes, or function to change autonomously

## Direct

Actively shape change in ecosystem composition, structure, processes, or function toward preferred new conditions



# Wrapping it up...

- Consistency is paramount...
- Engage the social science network before you get going for direction
- Build a network that can manage the effort before you dive in
- Be humble and willing to learn and adapt...

Questions?

