

# 2016 Watershed University

## Merced Watersheds

Merced County OES



# Who Are We?



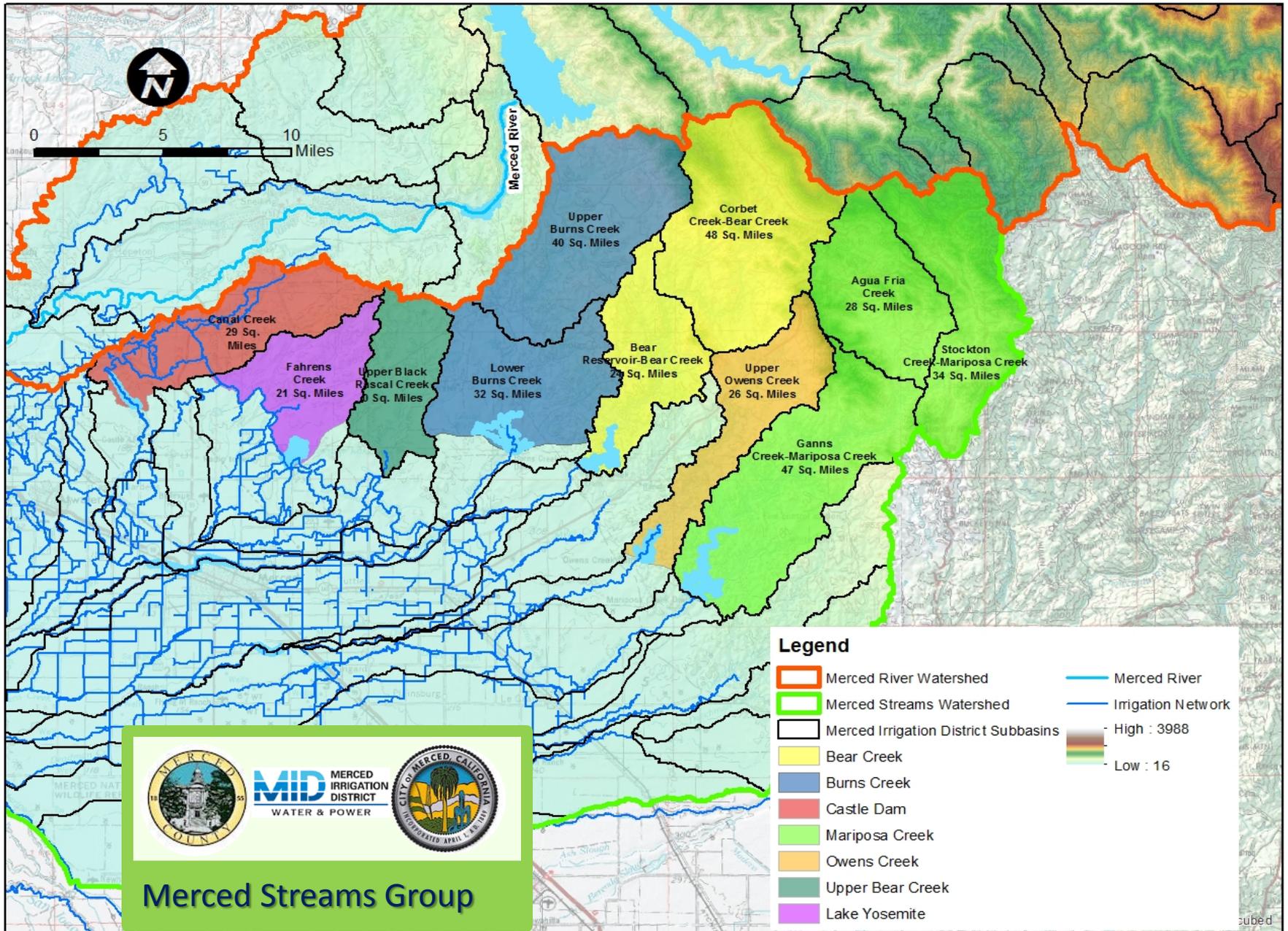
0 5 10 20 Miles

Merced River Watershed

Merced Streams Watershed

## Legend

- Merced River Watershed
- Merced Streams Watershed
- Merced Irrigation District Subbasins
- High : 3988
- Low : 16



# Three Steps for Optimal Watershed Management

1. Recognize the Various Elements Impacting Watershed Management (Surface Supply, Groundwater Supply, Flood, Wastewater, Recreation, etc.)
2. Integrate the Elements in Multipurpose Policies and Projects
3. Optimize Integrated Components for Maximum Benefits

However We Have Not Totally Passed Step 1

# Management & Regulations Tend to Be in Silos



# Institutional Limitations Flood vs. Water Supply

- For Example:
  - USCOE: “Well, the difference between a water district and the Corps of Engineers is the district is looking at how much water can we save. The Corps of Engineers is looking at how much can we protect the downstream communities.”  
*(The Sacramento Bee, February 15, 2016)*
  - “We do things as we are authorized and funded to do”.  
*(The Sacramento Bee, February 15, 2016)*
- Appropriate and respected position, yet Local, State and Federal governments would benefit by progressing towards integration of goals.

# Competing Functions/Interest

<b>Flood</b>	<b>=====</b>	<b>Water Supply</b>
<b>Surface Water Storage</b>	<b>=====</b>	<b>Environmental Concerns</b>
<b>Forrest Management</b>	<b>=====</b>	<b>Endangered Species Act</b>
<b>Environmental Water</b>	<b>=====</b>	<b>Groundwater Depletion</b>
<b>Water Rights</b>	<b>=====</b>	<b>New Growth in Arid Areas</b>
<b>Recharge</b>	<b>=====</b>	<b>Groundwater Quality</b>
<b>Cloud Seeding</b>	<b>=====</b>	<b>Environmental Concerns</b>
<b>Sustainable Urban/Ag</b>	<b>=====</b>	<b>Environmental Concerns</b>
<b>High Efficiency Irrigation</b>	<b>=====</b>	<b>Groundwater Recharge</b>

# State Attempt towards Integration

- SBX 7 Integrated Regional Water Management Plan
- A Step in the Right Direction, However ...



# Local Integration



# Regional Integration/Coordination

- Merced Integrated Regional Water Management Plan



- Merced Streams Group



- Merced Area Groundwater Pool Interests



- Groundwater Sustainability Agency

- Merced County Association of Governments – One Voice , Etc.

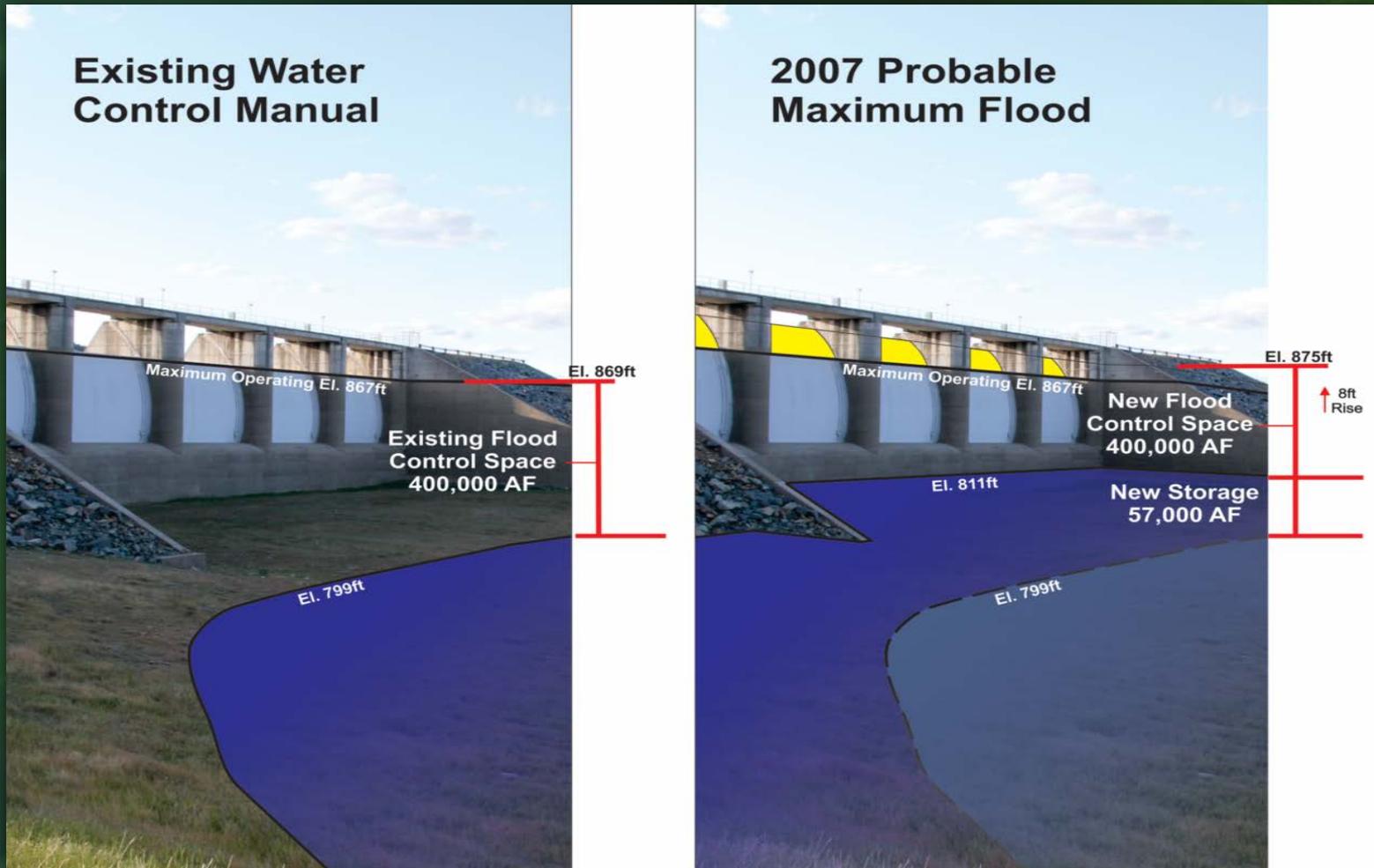
# Examples of Competing Interests

- All Agencies are Fulfilling their Current Missions/Goals
- The Challenge we Offer:  
“Can we Offer a Paradigm Shift for Regulatory Agencies to Aim for Watershed Optimization and Enhanced Coordination?”

Following are Local Real-Life Examples of Competing Interests:

# Flood vs. Increase Existing Supply

## New Exchequer Reservoir Spillway Modification



# Forrest Management vs. Endangered Species Act

Effect of Historical Fire Suppression



1909



1938



1958



1979

vs.



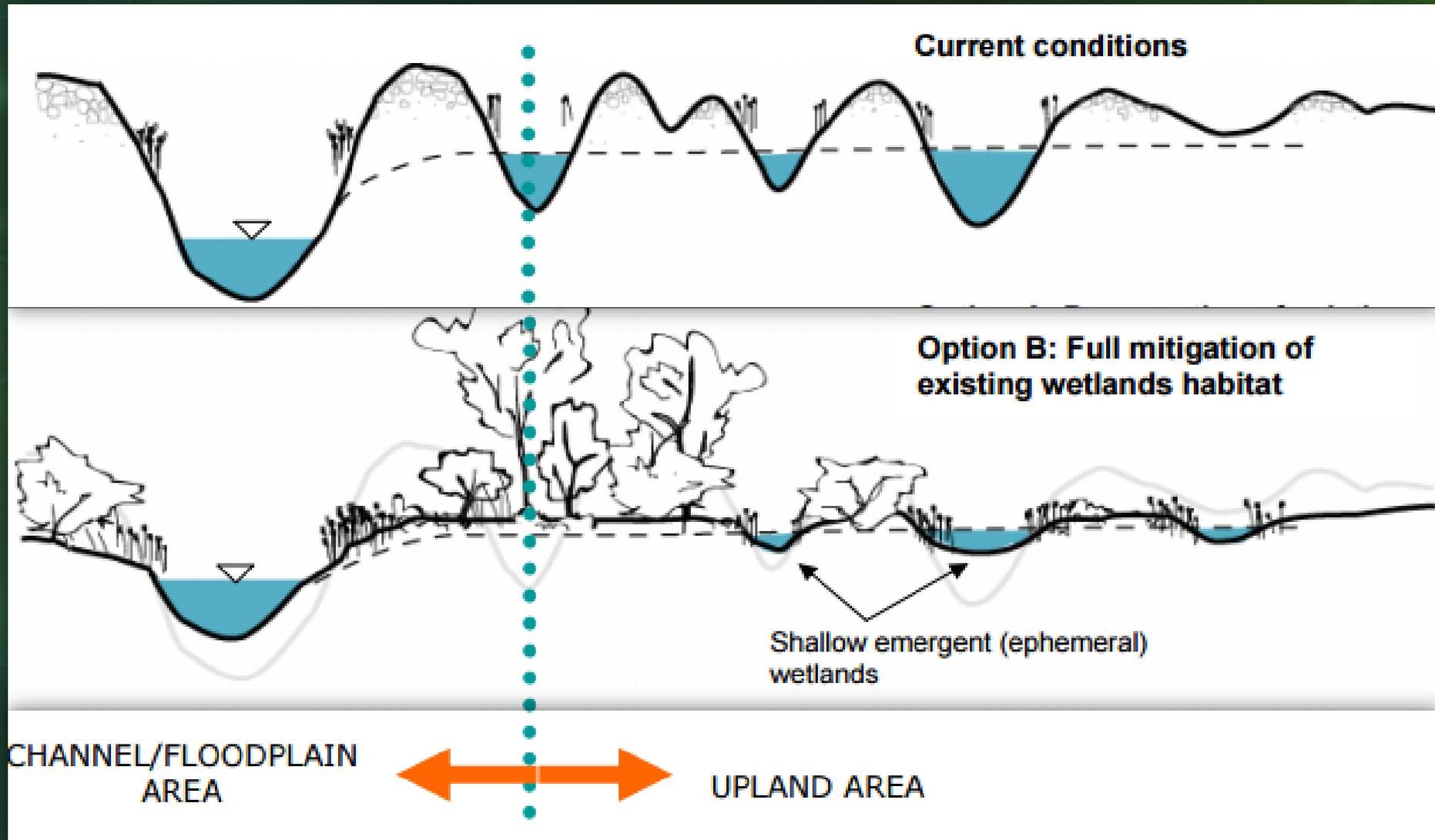
# Recharge vs. Groundwater Quality



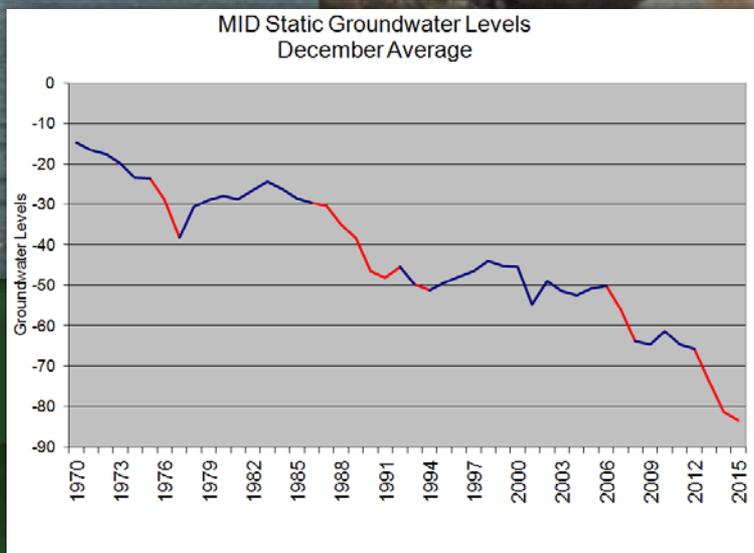
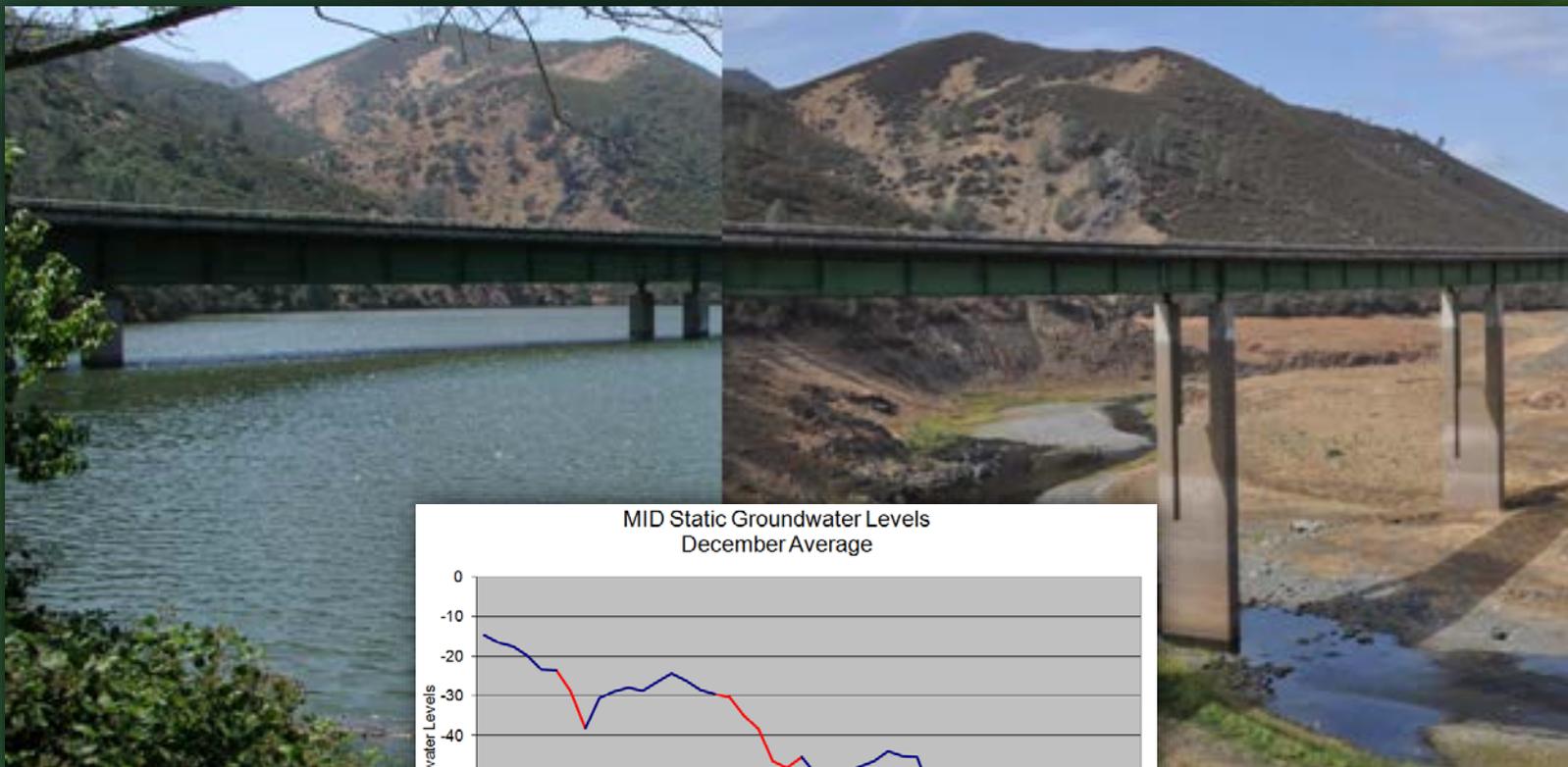
# Example of Integration – Improve Salmon Habitat and Hatchery Without Impacting Water Supply



# Flood/Supply vs. Environmental Concerns



# Unintended Results of Management in Silos



# Unifying Vision

- Increased Avenues of Communications
- Cooperative Interest not Competing Interest
- Promote Collaboration
- Coordination of Activities
- Commit to United Success
- Integrated Planning
- Optimization of Resources



# Unifying Goals

- Communicate Unifying Vision
- Turn Vision into Tactics
- Solve Misalignments



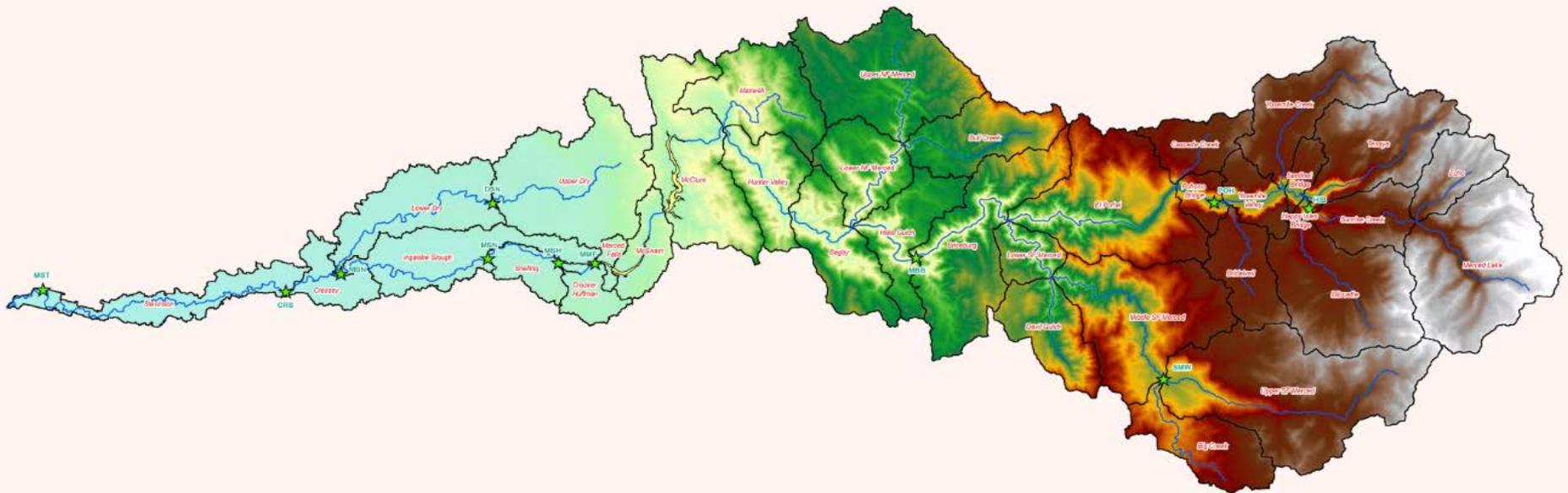
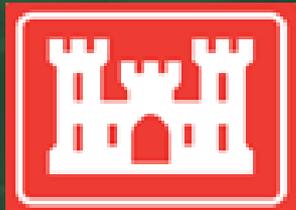
# Positive Execution

- Consistency through Agencies
- Cross-Functionality
- Encourage Innovation
- Share Knowledge and Experience
- Breakdown Barriers



# RTS MODEL – POSITIVE RESULTS

## FEDERAL – STATE – LOCAL



# QUESTIONS?

