

# Partnerships for Conservation

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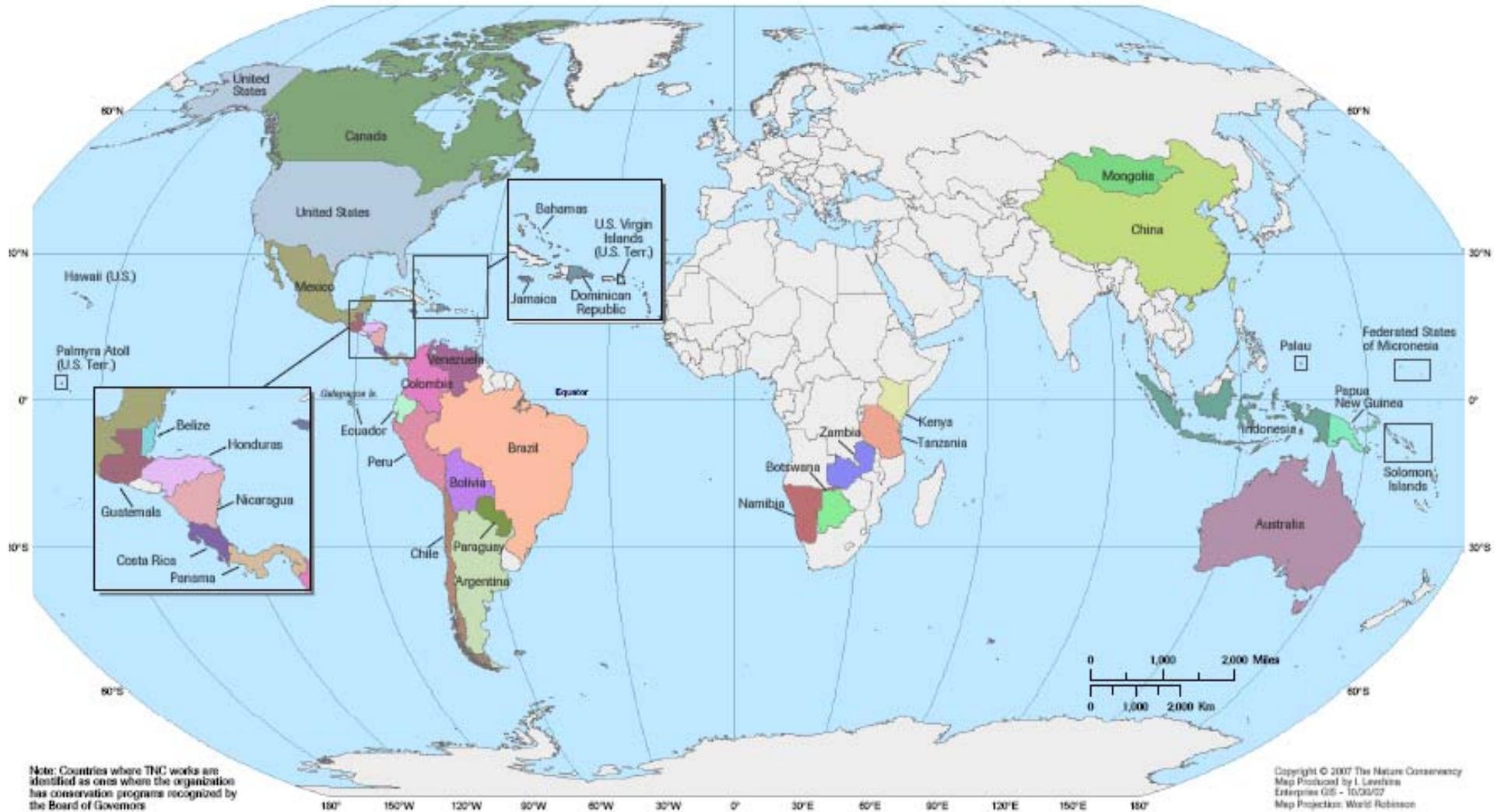
## The Nature Conservancy's Mission

To preserve the plants, animals and natural communities representing the diversity of life on Earth by protecting the lands and waters they need to survive





## Where in the World is TNC?



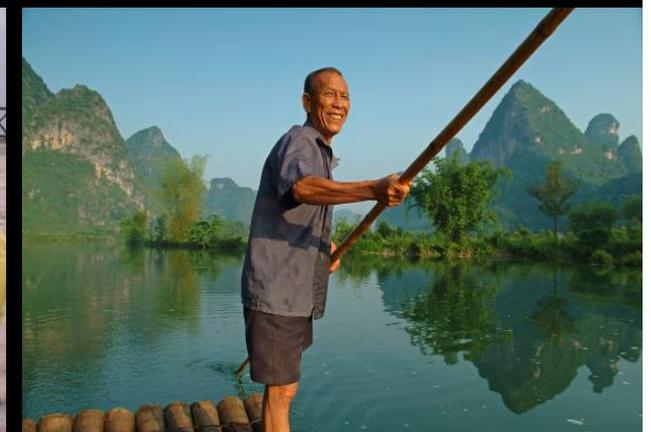
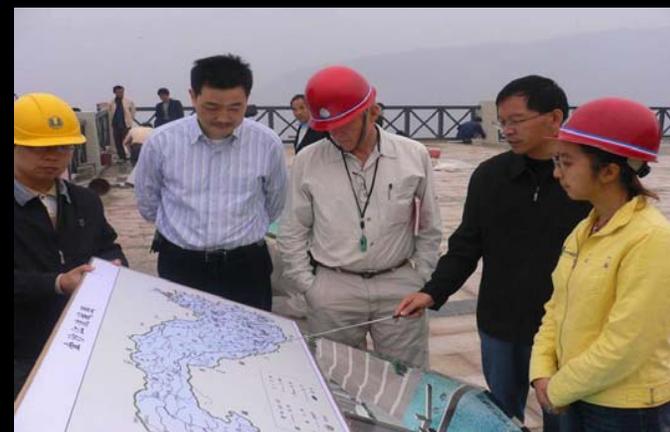


# History & Accomplishments

- Founded in 1951
- Over 117 million acres of land protected
- Over 100 marine conservation projects
- Over 3,500 staff worldwide
- Science-based approach
- Collaborative style
- Strategic processes for where we work and what we do
- Willingness to work with all relevant stakeholders
- Partnerships with government, private sector, industry

## TNC Global Approach - Freshwater

- Leadership in demonstrating how water can be managed for people and nature
- Adapting our approach to new situations to find solutions to water management
- Moving past our traditional partners to create a more sustainable future





# Key Freshwater Strategies

- Environmental Flows
- Ecosystem Services/Market Mechanisms
- Surface and Groundwater Management
- Stream and Riparian Protection and Restoration
- Functional Networks of Conservation Areas
- Tools, methods, training on environmental flows and flow/ecological relationships

# U.S. Army Corps of Engineers- The Nature Conservancy *Memorandum of Understanding*

## PURPOSE...

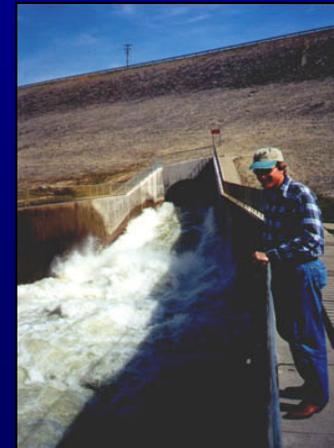
...to facilitate effective and efficient management of important biological resources within the context of the Corps' Civil Works and regulatory missions



# Sustainable Rivers Project: A National Collaboration between the Corps and TNC

*...reoperate dams to achieve more eco-sustainable flows, while continuing to meet human needs.*

Goal is to develop ecosystem flow recommendations that create adequate conditions for all native species *enough* of the time.



# Ecological Model of the Savannah River

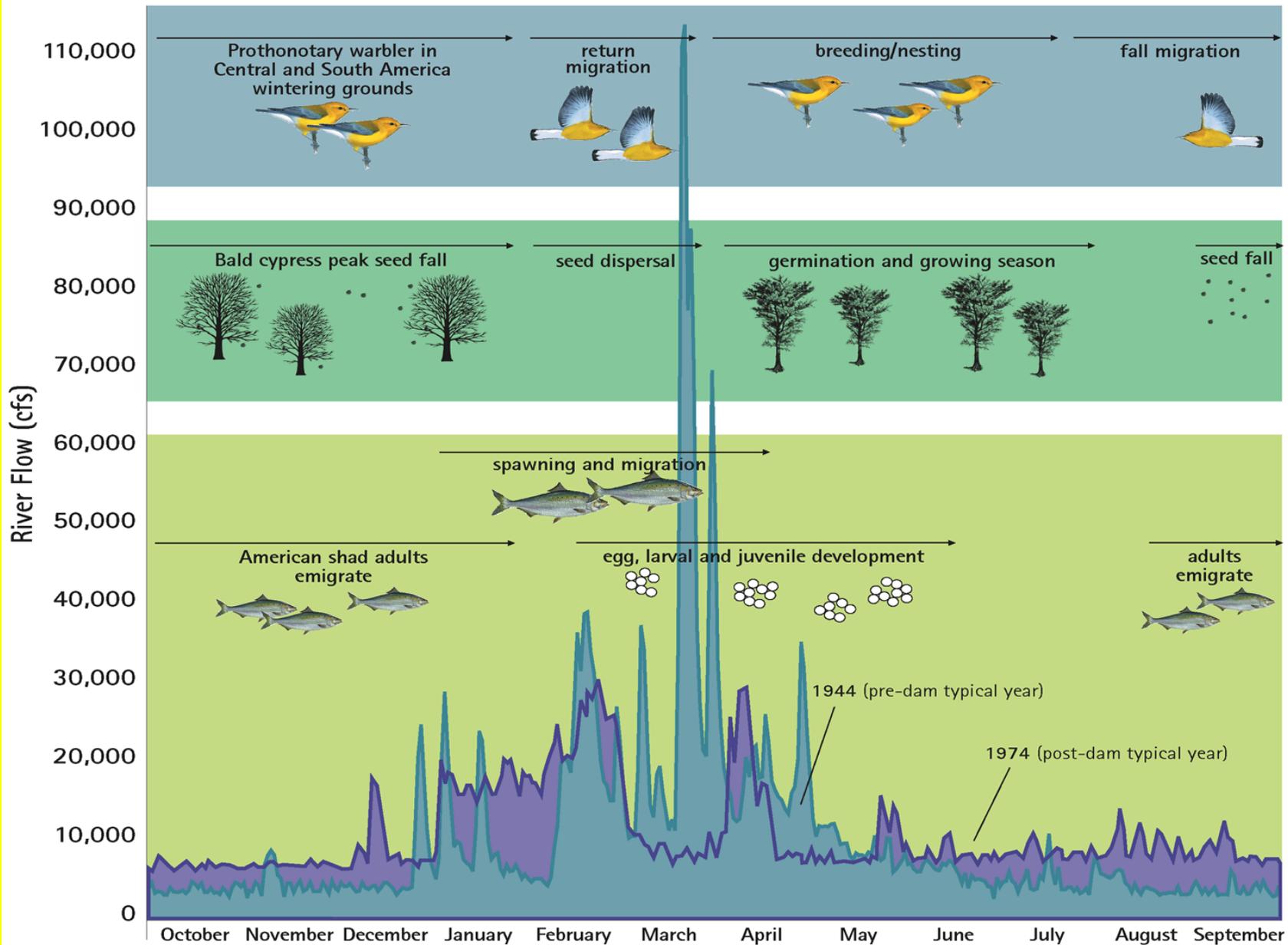
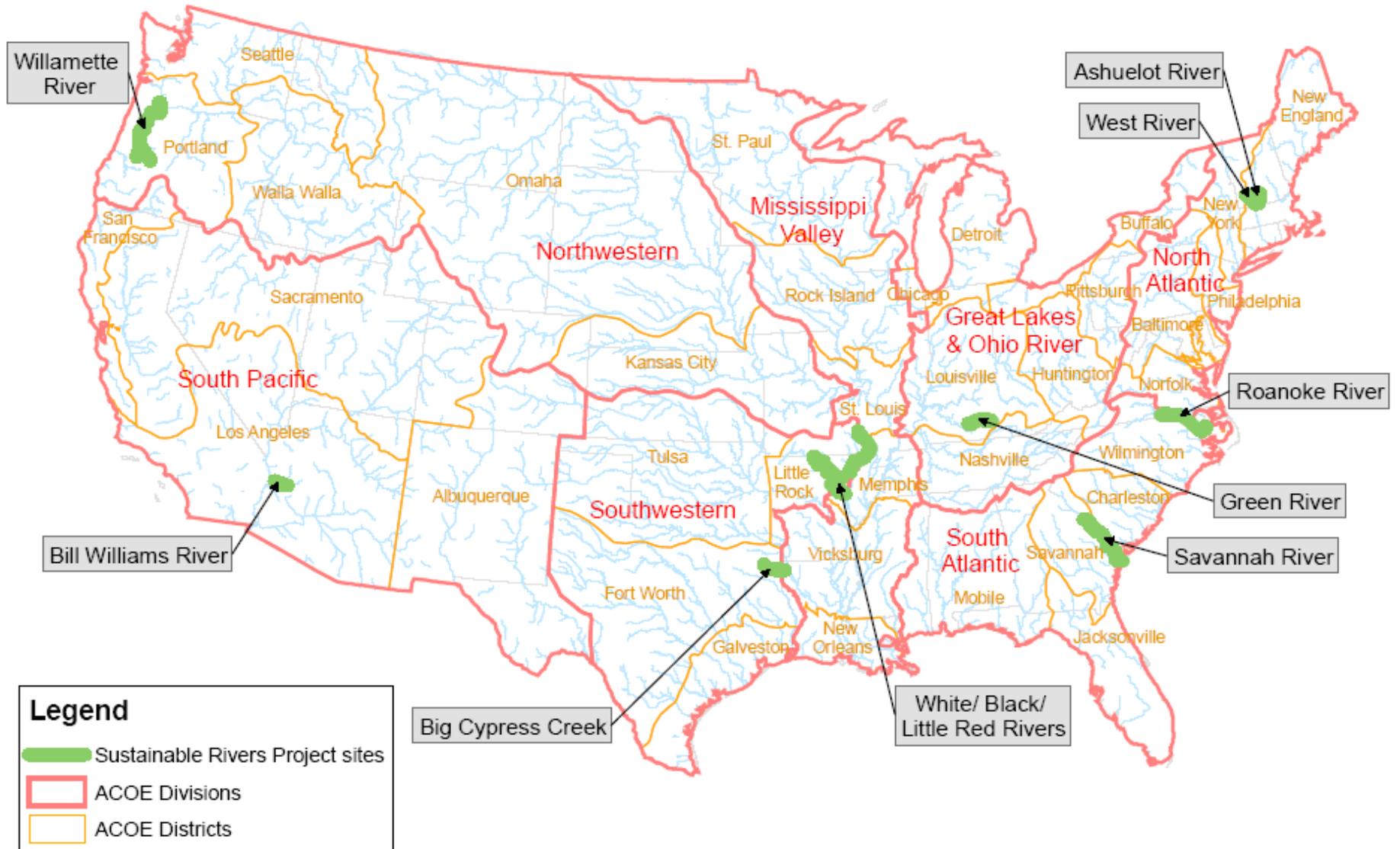


Illustration from the National Audubon Society, The Shad Guide to the 19th April 2000. Revised from Colby and Charnick-Pearl, Inc. Used with permission.

# Sustainable Rivers Project

## Current Sites



**Legend**

-  Sustainable Rivers Project sites
-  ACOE Divisions
-  ACOE Districts

# Willamette River, Oregon





# Willamette Project

## Authorized Purposes

- Flood Control
- Hydropower
- Navigation
- Irrigation
- Fish & Wildlife
- Recreation
- Water Quality
- Municipal & Industrial

## Diverse Stakeholder Base

- 5 Federal Agencies
- 12 State Agencies
- 10 Municipalities
- Multiple Civic / Stakeholder Organizations

Endangered Species Act Listings

Clean Water Act





# Pilot Study Areas

## Middle Fork

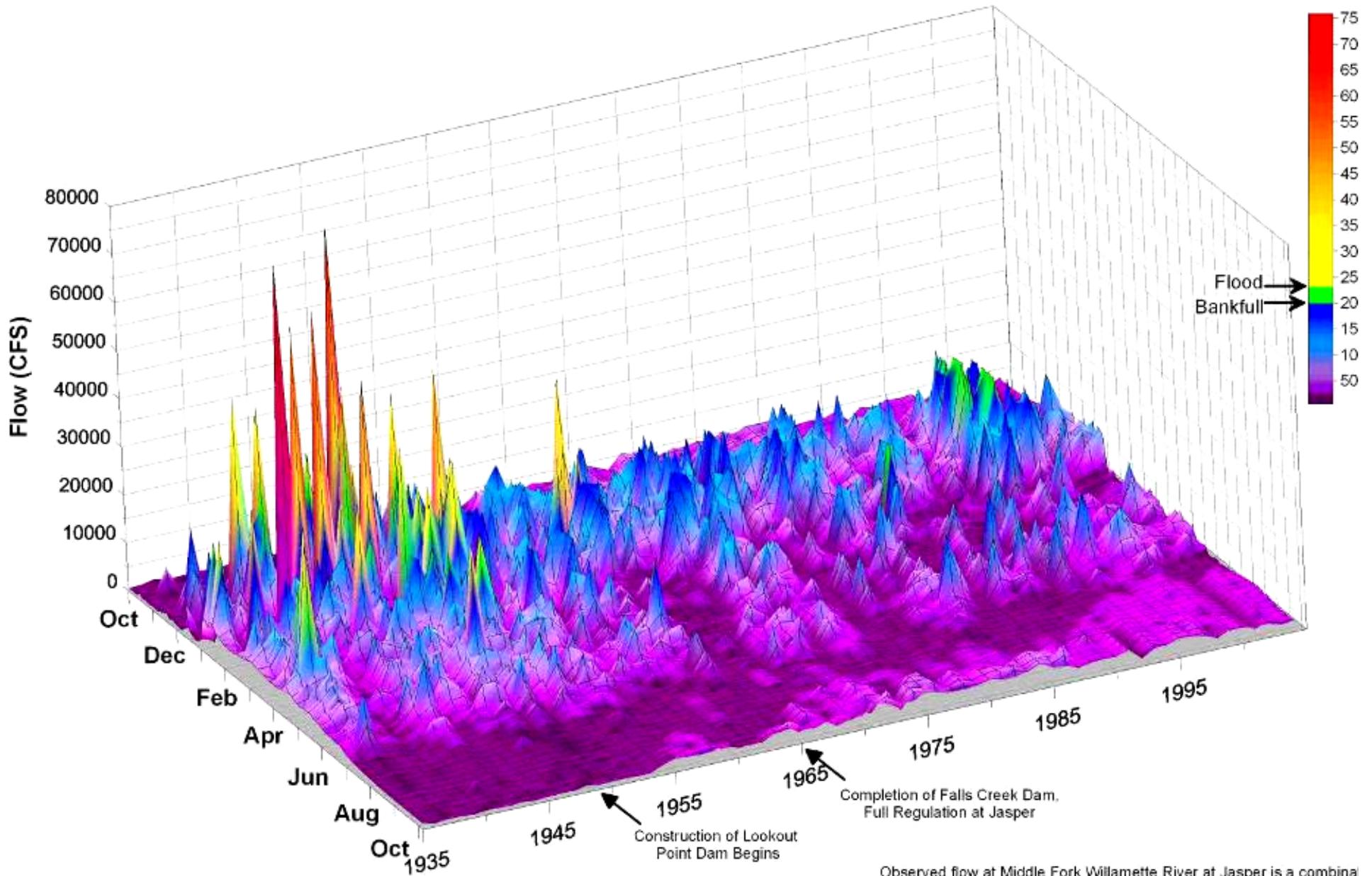
- Fall Creek Dam
- Dexter Dam
- Lookout Point Dam
- Hills Creek Dam

## Coast Fork

- Cottage Grove Dam
- Dorena Dam



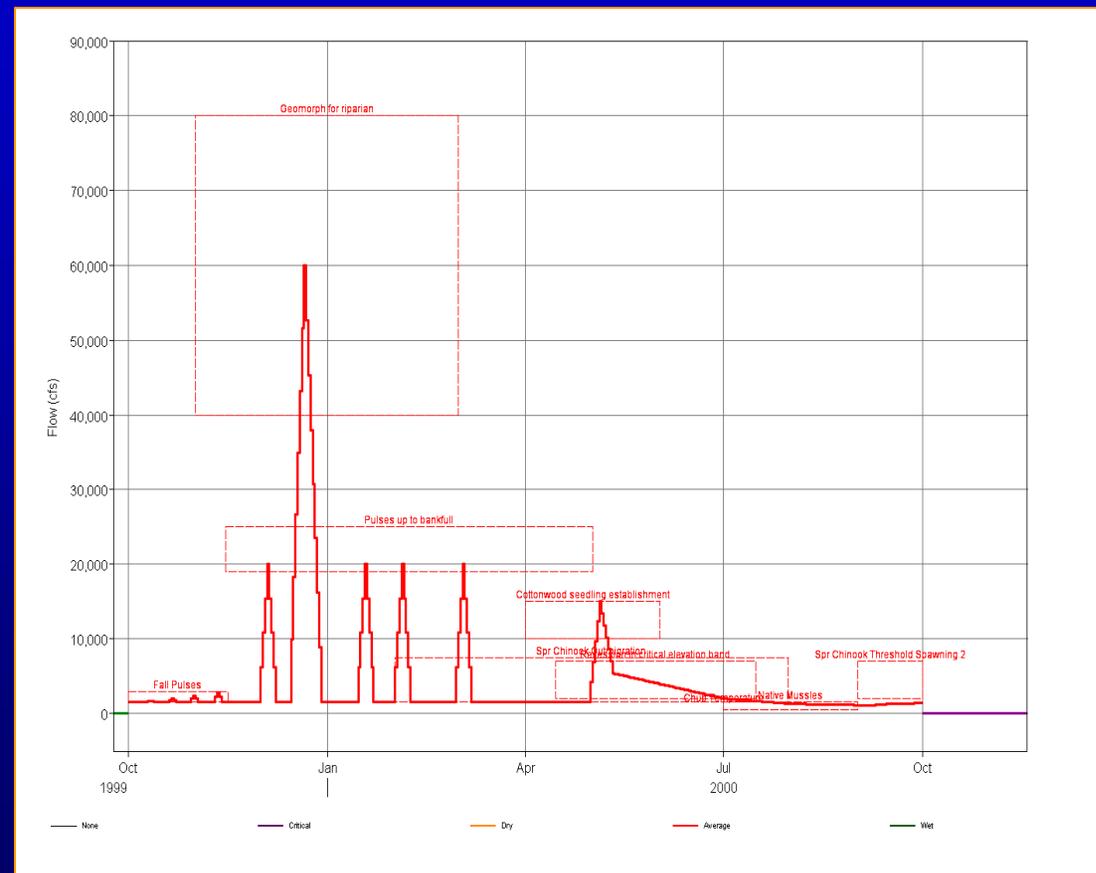
# Observed Flow at Middle Fork Willamette River at Jasper, OR



Observed flow at Middle Fork Willamette River at Jasper is a combination of calculated estimates of discharge (1935-1951) and data collected a

# Initial Ecosystem Flow Recommendations for the Middle Fork Willamette River

- Small fall pulses
- Bankfull flows
- Small floods above current bankfull
- Larger floods
- Spring pulse flows
- Spring transition flows
- Summer low flows



- ✓ **Demonstration Sites**
- ✓ **Staff Sharing**
- ✓ **Joint Training**
- ✓ **Joint Software Development**
- ✓ **Annual Meetings**
- ✓ **Coordinated Communications and Joint Publications**

Thank You

