



# **CHATFIELD RESERVOIR REALLOCATION STUDY**

Balancing Science, Policy and People

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*Whiskey's for  
drinkin':*

*water's for  
fightin'*

*--Mark  
Twain*

# Chatfield History

## 1965 Flood Disaster on Plum Creek/S. Platte River

- Severe Flood Damage and Fatalities in Metro Area



# Chatfield Today



# Reservoir Use



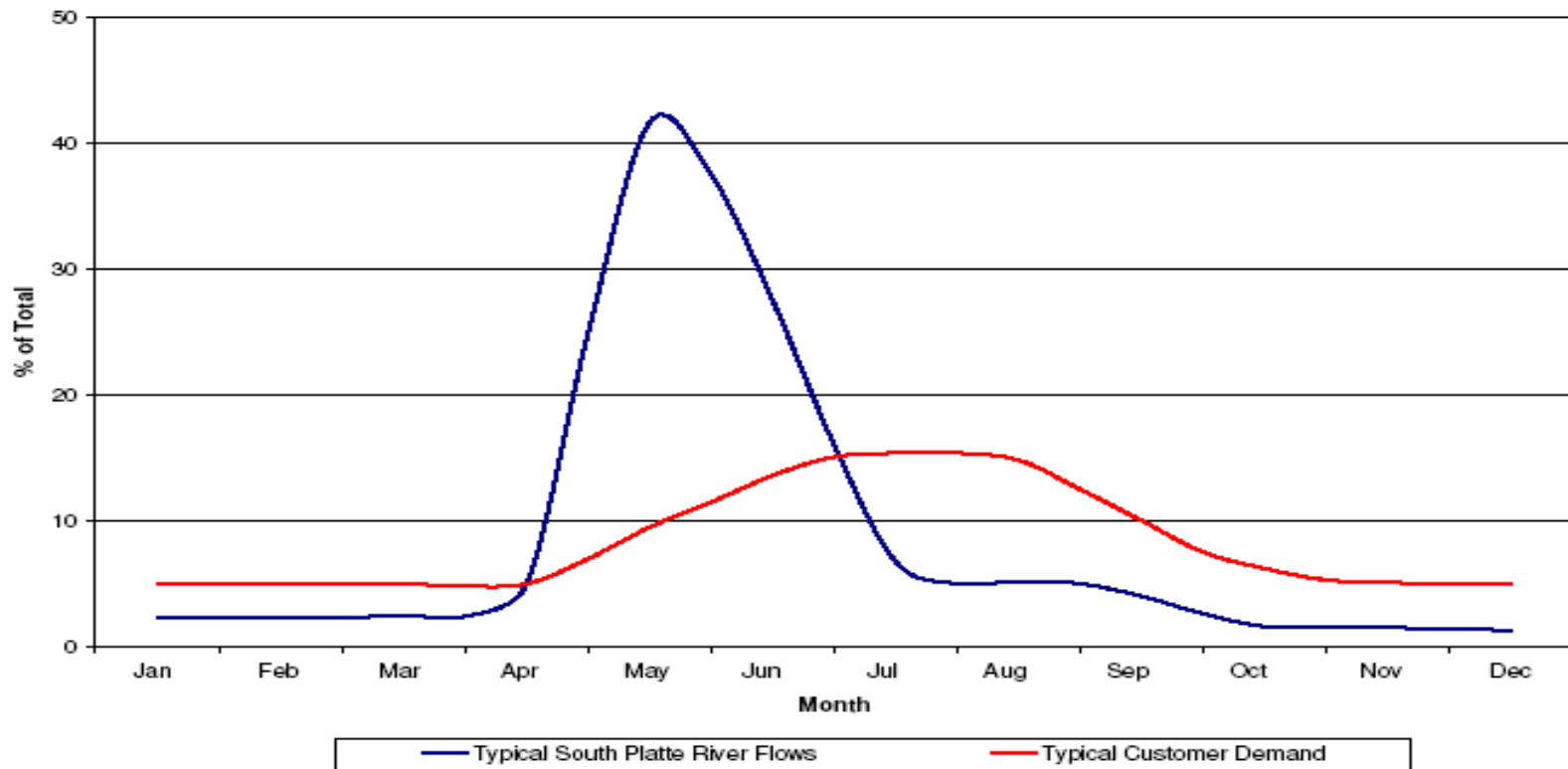
# Storage Space

- Chatfield capacity is 350,000 AF
- Recreation/water supply use: 27,000 AF
- This project: increase water supply use by 20,600 AF.



# The Value of Storage

South Platte River Flows Compared to Customer Demand



# Why is the Study Needed?

**Colorado's population  
expected to grow  
from:**

**4.8 million in 2008  
to  
7.16 million by 2030**

**SWSI South Platte  
Basin Gap: 90,000 AF**



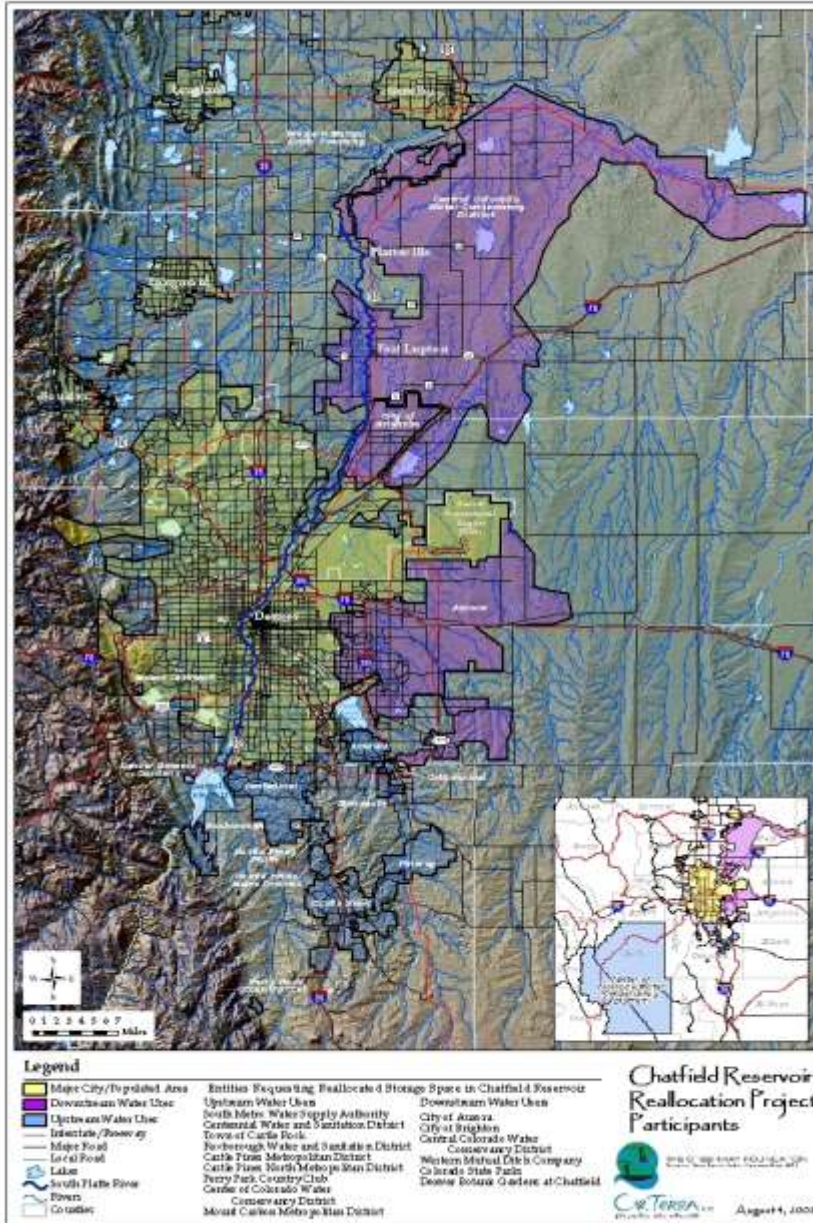
# Water Entities Seeking Storage Space in Chatfield

## Downstream Water Providers:

- City of Aurora
- Central Colorado Water Conservancy District
- Western Mutual Ditch Company
- Colorado State Parks
- Denver Botanic Gardens at Chatfield

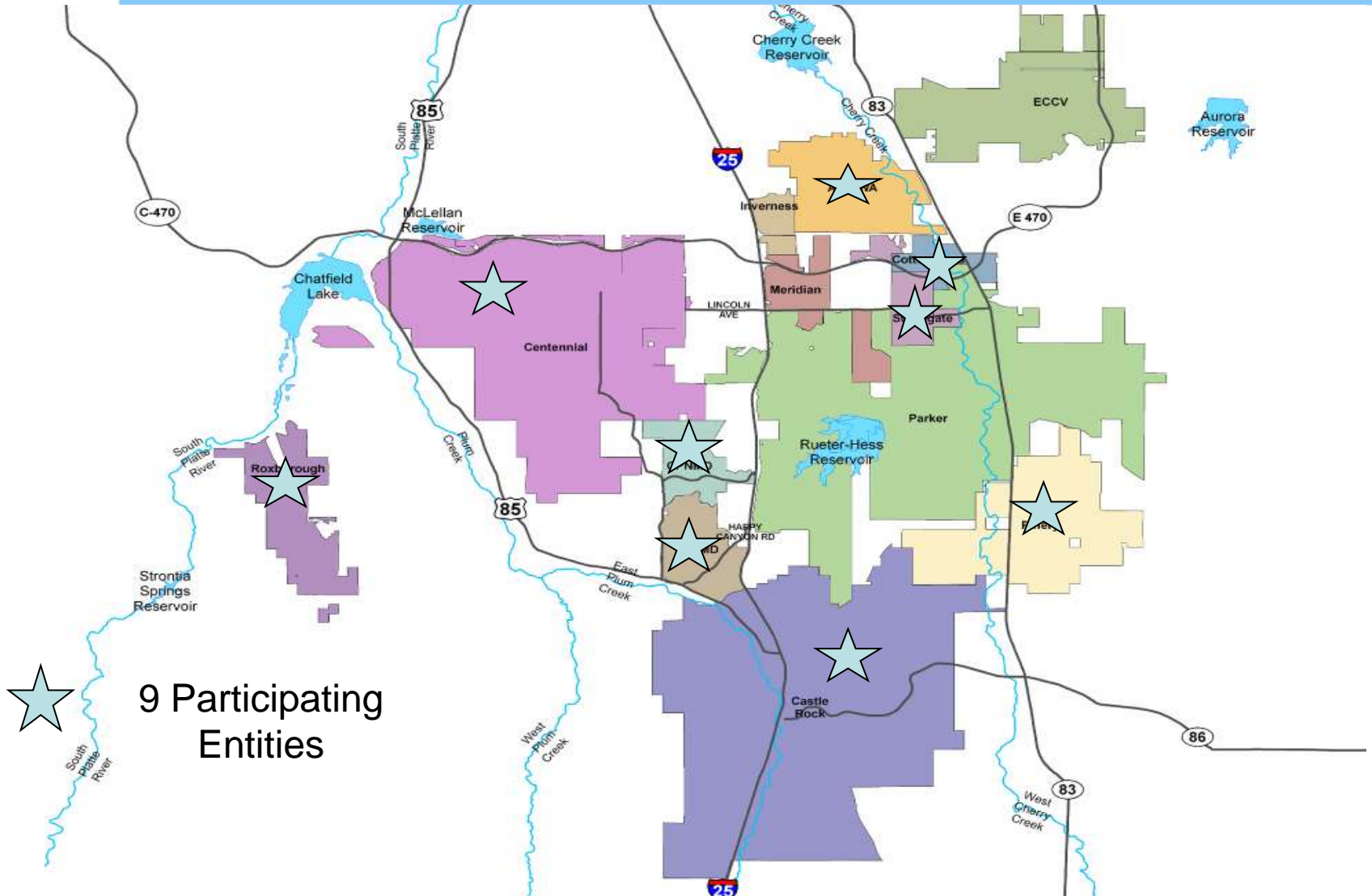
## Upstream Water Providers:

- So. Metro Water Supply Authority (8 members)
- Castle Rock
- Centennial (Highlands Ranch)
- Castle Pines North
- Castle Pines Metro
- Roxborough Water
- Center of Colorado Water Conservancy District



# Location of Project Participants

# South Metro Project Participants



# Additional Stakeholders

## Entities also Contributing to the Development of the Reallocation Project

### Parties with “In-stream” interests:

- Denver Water
- City and County of Denver
- City of Littleton
- Greenway Foundation
- Metro Wastewater

### Environmental Groups:

- Sierra Club
- Audubon Society
- Colorado Environmental Coalition
- Western Resource Advocates
- Trout Unlimited

# Study History

- **1986-** Project Study Authorization by US Congress
- **1994 to 1999-** Initial scoping and Recon. study
- **1999 to present-** Feasibility Report & EIS Process:
- **2006-** “Antecedent Flood Study” approval
- **2006 to 2009-** Preliminary drafts of studies
- **2010-** Draft FR/ EIS expected to be released to the public

# **Project Alternatives**

- 1. No Action: Construct New Off-channel Reservoir**
- 2. No Action: Continued use of Non-Tributary Ground Water**
- 3. Reallocation of 20,600 AF**
- 4. Reallocation of 7,700 AF**

# Potential Benefits

- New Water Supplies for Municipal and Agricultural Users: Est. yield is 8,500 AF/yr
- Reduce dependency on non-renewable groundwater



- Environ. & Rec. Benefits
- Facilitates the Re-use of Water
- No Need to Construct a New Reservoir

# Water Level Fluctuations

- Currently, Water level fluctuations can vary up to nine feet throughout the year
- This project would increase the fluctuations an additional 12 feet, to a total of 21 feet



# Recreational Facility Modifications

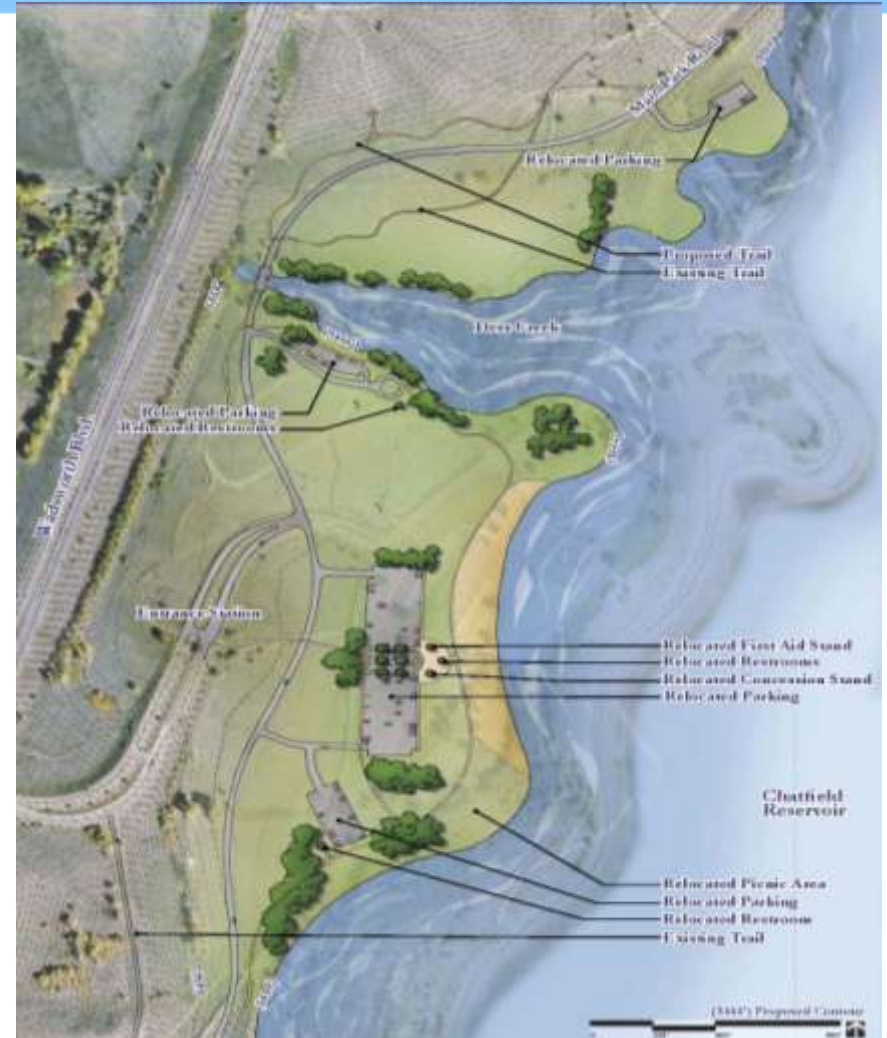
- Goal: In-kind replacement
- Major construction at:  
swim beach,  
marina and  
roadways



# Example: Swim Beach Reconstruction



Before



After

# Environmental Issues

- Areas impacted by 12 foot increase in inundation and water level fluctuations:
  - Wetlands
  - Preble's jumping mouse habitat (endangered species)
  - Riparian habitat
- Flows below Chatfield
- Water quality
- All adverse impacts will be mitigated



# Project Costs

- Studies costing \$6 million – split 50/50 between federal and local
- Major project implementation cost estimates:
  - Repayment to Corps: \$14 million
  - Moving recreational facilities: \$45 million
  - Mitigating environment: \$66 million
- Total \$130 Million



- Total cost for storage space: Approximately \$6,300/AF

# Where are we now?

- **January 2011** Draft FR/ EIS expected to be released to the public
- 90 Day Public Comment Period to Follow
- Record of Decision on preferred alternative expected in 2012

# Conclusions

- Unique, multipurpose project of great benefit locally
- Makes use of an existing reservoir
- Collaborative process with broad political support
  - Lowest cost alternative
  - Impacts will be mitigated

**Find more information at:**

**[www.chatfieldstudy.com](http://www.chatfieldstudy.com)**

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Study Update Mailing List**

**Send Comments and Questions to:**

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**Comment Hotline: 1-866-643-5875**