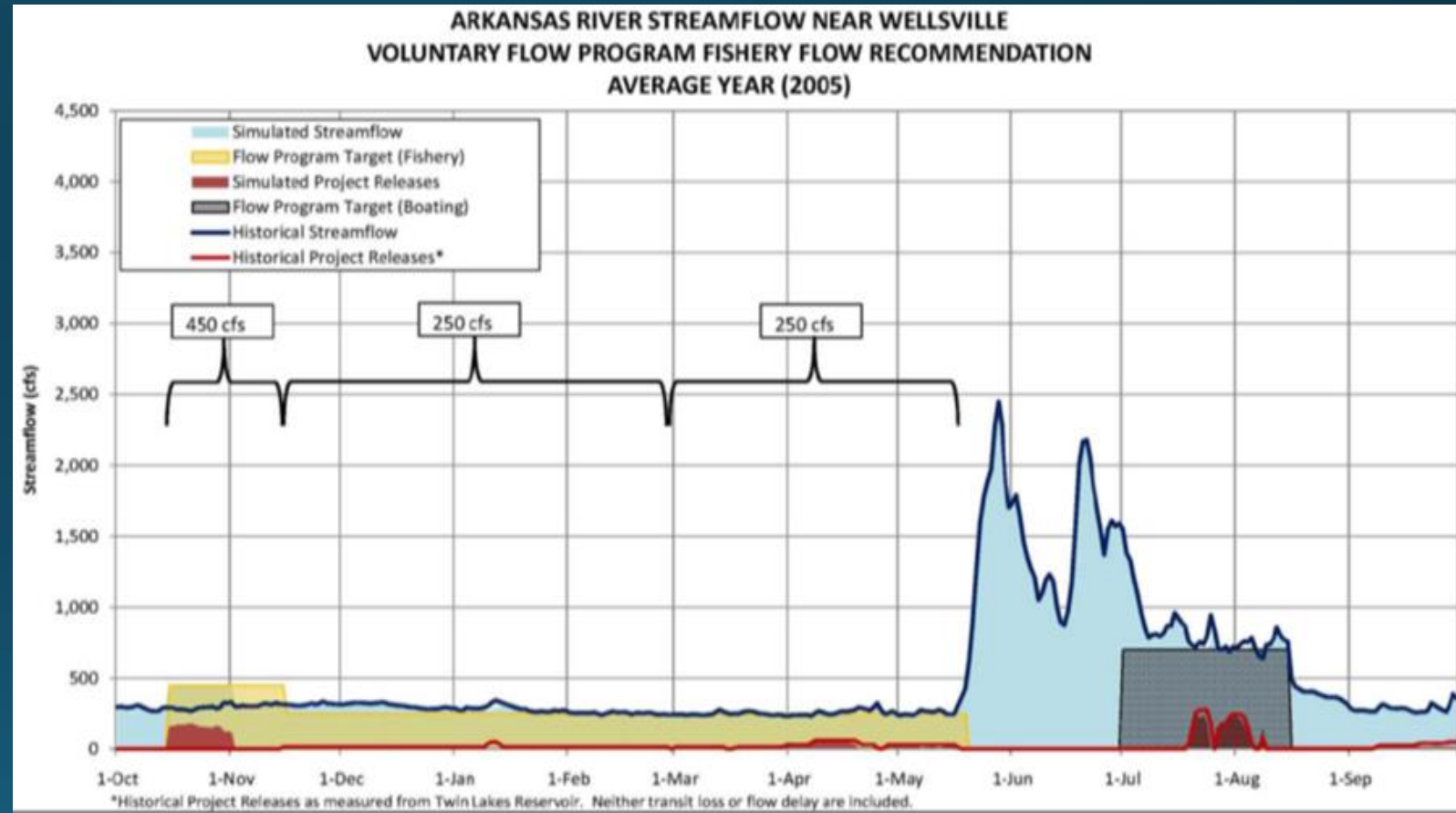


2021 Sustaining Colorado Watersheds Conference

The Voluntary Flow Management Program:
Uncommon Partners Coming Together
For a Common Good

What is the VFMP?

- A cooperative effort for managing and augmenting flows on the Arkansas River expressly for the enhancement of non-consumptive, in-stream water uses, primarily recreation – rafting and fishing
- **SUMMER COMPONENT**
 - Support Rafting Outfitters
 - 10,000 AF H₂O
 - July 1 – August 15
 - 700cfs at Wellsville gauge (near Salida)
- **REMAINDER OF THE YEAR**
 - Support the Fishery/Fishing Outfitters
 - Aug 16 – Oct 15
 - 250 cfs
 - Oct 16 – Nov 15 – Spawning Flow Rate
 - 300 – 700cfs – varies year to year
 - Nov 16 – March 31 – Incubation Flow Rate
 - 250 – 400 cfs
 - April 1 – May 15 – Trout Fry Emergence
 - 250 – 400 cfs
 - May 16 – July 1 - Spring Runoff
 - Natural Hydrograph Dominates



Jurisdiction of the VFMP

- From Twin Lakes Reservoir to Lake Pueblo State Park
 - ~152 miles
 - 102 of which are classified "Gold Medal" for fishing



VFMP TIMELINE – Important Dates in Program History

- 1980s - Commercial and private boating interests, along with fishermen, asked the Bureau of Land Management and Colorado State Parks to help develop better land and water management along the Arkansas River
- 1989 – Creation of the Arkansas Headwaters Recreation Area
- 1990 – Colorado State Parks begins regulating rafting outfitters operating on the Arkansas River
- 1990 – First year of releases for the VFMP – BOR released 23,000 AF H₂O
 - Rafting outfitters = Happy, Fly Fishing Outfitters and Trout Unlimited = NOT Happy
- 1991 – Trout Unlimited Lawsuit
- 1991 – Arkansas River Flow Management Program Agreement initiated
 - The following year the program was modified to include cold-water fishery protection at the urging of Trout Unlimited and Colorado Division of Wildlife
- 2002 – The SEVERE Drought that changed everything – no water available for the VFMP
- 2004 – Chaffee County MOU
- 2005 – Arkansas River Flow Management Agreement (aka VFMP) formalized by all participants
- 2011 – Colorado State Parks and Division of Wildlife are merged to form Colorado Parks and Wildlife
- 2012 – Severe Drought Year – no water available for the VFMP
- 2014 – 102 miles of the Arkansas River designated as Gold Medal by the Colorado Wildlife Commission
- 2018 – Drought Year – Rafting Season a 'Success' Because of the VFMP
- 2020 – Severe Drought Year. Due to VFMP summer recreation on Upper Arkansas a resounding success in spite of extreme drought and COVID-19 pandemic
 - Over 182,000 boating clients on Upper Arkansas with gross receipts of over \$14.8 million. Over 1 million visitors to AHRA – up 22% from 2019

KEYS TO PROGRAM SUCCESS – CO Water Law and Infrastructure

KEY TO SUCCESS 1: COLORADO WATER LAW

- Coffin v Left Hand (1882)
 - Doctrine of Prior Appropriation established
 - Trans-Basin Diversions allowed
- 1961 Colorado Supreme Court
 - *"We find nothing in the state constitution which even intimates that waters should be retained for use in the watershed where originating."*



KEY TO SUCCESS 2: TRANS BASIN INFRASTRUCTURE

- 10 Trans-Basin Diversions into Arkansas Basin
- Fryingpan-Arkansas Project
 - Authorized by Congress & President Kennedy in 1962
 - Construction Completed in 1981
 - Designed to import up to 69,200 AF water annually
 - Average imports ~53,000 AF



Fryingpan-Arkansas Project Details

Fryingpan-Arkansas Project Elements

Reservoirs

Ruedi Reservoir	102,369 AF
Turquoise Reservoir	129,432 AF
Mt. Elbert Forebay	11,530 AF
Twin Lakes	140,339 AF
Pueblo Reservoir	338,374 AF

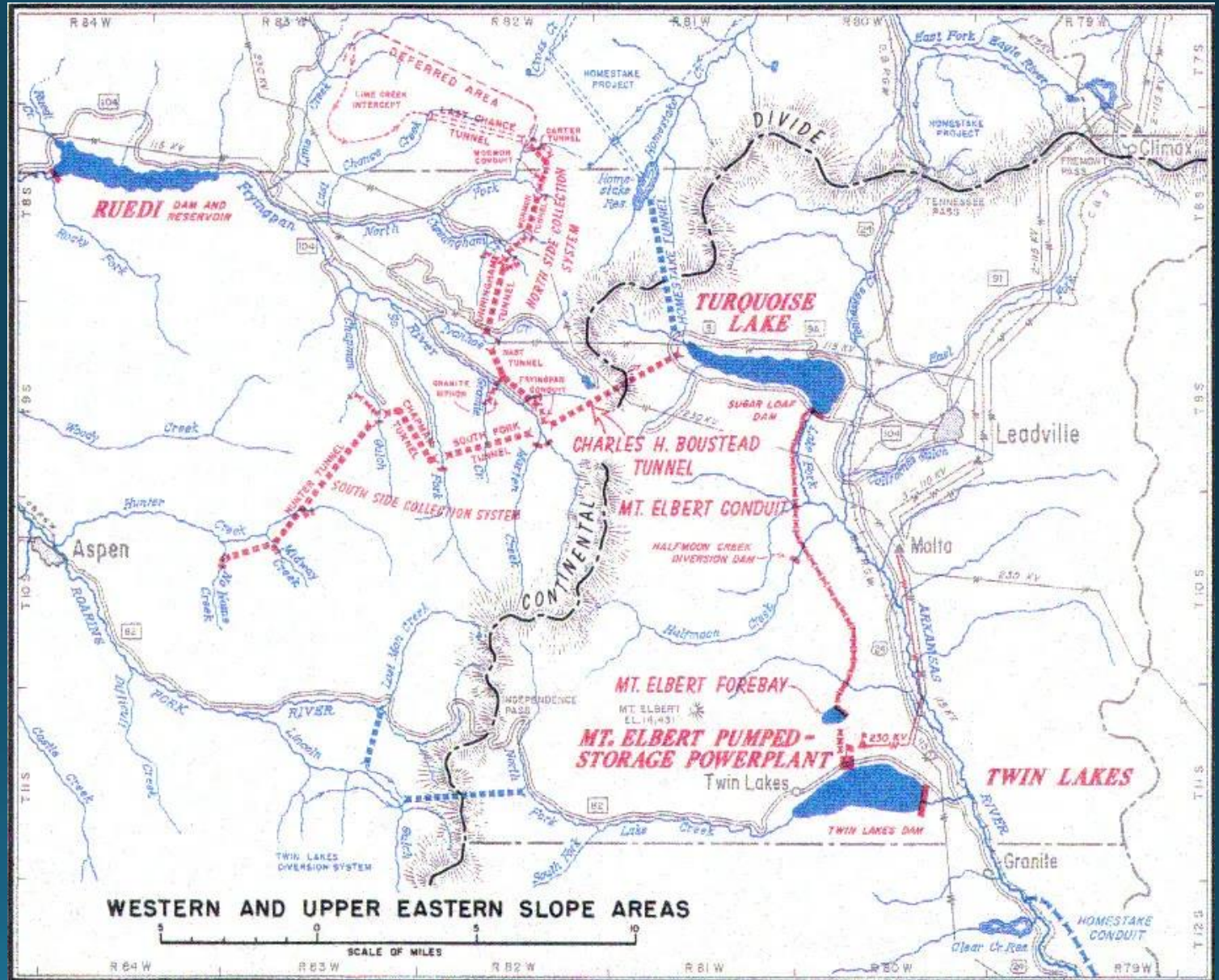
Conduits & Tunnels

Southside Collection	14.2 miles
Northside Collection	11.3 miles
Boustead Tunnel	5.4 miles
Mt. Elbert Conduit	10.5 miles
Fountain Valley Conduit	45.5 miles

Other Features

Mt Elbert power plant	200 megawatts
Arkansas Valley Conduit	130 miles

(beginning construction in 2022)



KEYS TO PROGRAM SUCCESS – COOPERATION, COMMUNICATION, & COLLABORATION

- OBJECTIONS

- Objections came from both Consumptive and non-Consumptive Users alike

- COOPERATION, COMMUNICATION, COLLABORATION AND THE VOLUNTARY FLOW MANAGEMENT PROGRAM

- Probably the Most critical component to the Program's success
- Cooperative Management Agreement
 - Created the AHRA in 1989
 - Colorado State Parks signed the CMA in conjunction with USFS and BLM
- Arkansas River Flow Management Program Agreement
 - Initiated in 1991 → Formalized in 2005
- AHRA Citizens Task Force
- Seasonal Meetings
- Coordinated Movement of Water on the Upper Arkansas River
 - Pueblo Board of Water Works, Colorado Springs Utilities, & Aurora Water



- Without the Cooperation and Collaboration of Dozens of individuals representing Consumptive and Non-consumptive uses alike, the Voluntary Flow Management Program would NOT be possible

Voluntary Flow Management Program Partners



The VFMP and Recreation on the Upper Ark Summer 2021

• WATER IN THE ARKANSAS RIVER

- BoR Imported ~32,000 AF H₂O for Fryingpan-Arkansas Project
 - Average is closer to 53,000 AF
- VFMP able to get full 10,000 AF allocation
- PBWW Moved 6,000 AF during Summer Component of VFMP – Thank You
- Monsoon Rains east of Continental Divide
- VFMP utilized 8,800 AF of allocation

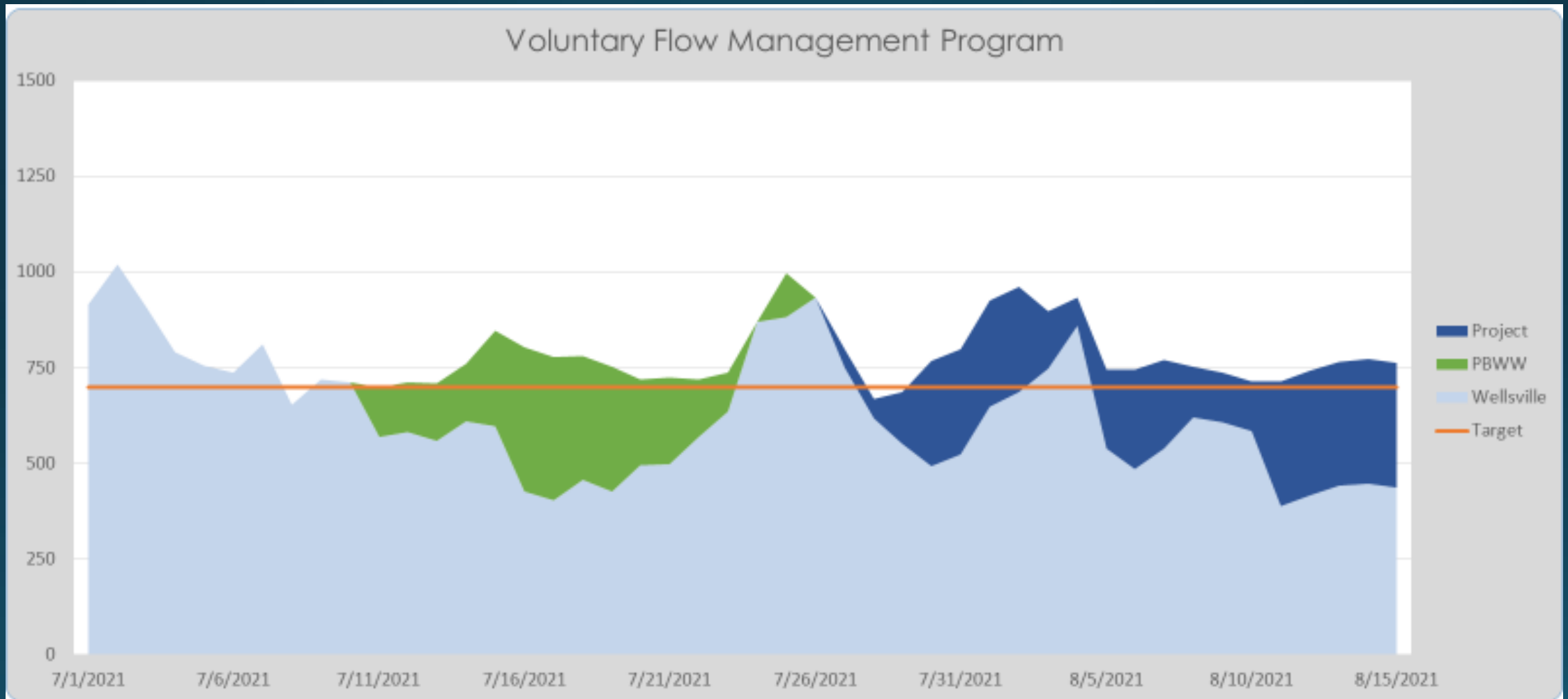


• RECREATION ON THE ARKANSAS RIVER

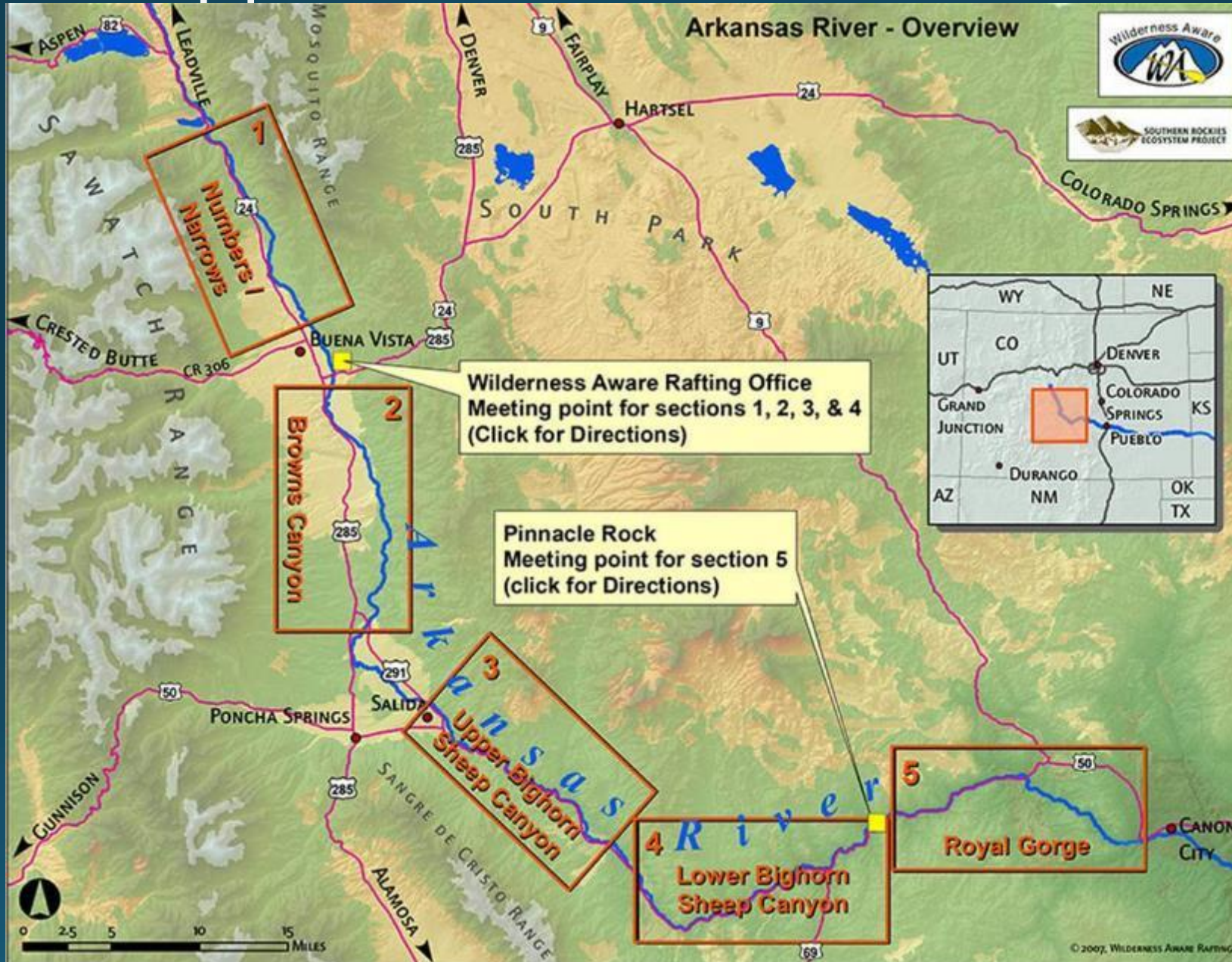
- Banner Season for Rafting Outfitters
 - Possibly one of their busiest ever!
 - 182,005 guests rafted on the Arkansas River last summer
- More people recreating in the AHRA than ever before
 - On average, AHRA campgrounds were at 84% of capacity this summer



VFMP FLOWS – SUMMMER 2021



Sharing the Upper Arkansas River



THANK YOU!!

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