#### Overview of the Arkansas River Basin 2018

Arkansas Basin Roundtable Meeting February 14, 2018 Bill Tyner, Assistant Division Engineer Division Engineer's Office



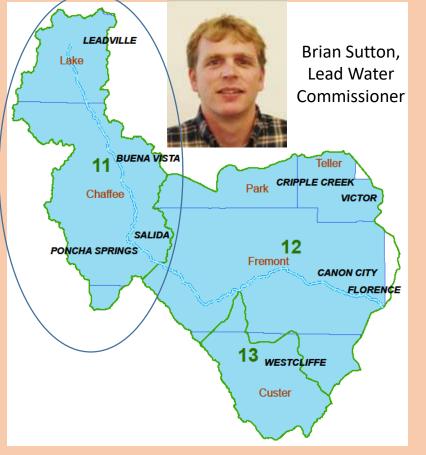
**COLORADO Division of Water Resources** Department of Natural Resources

#### **Topics for This Meeting**

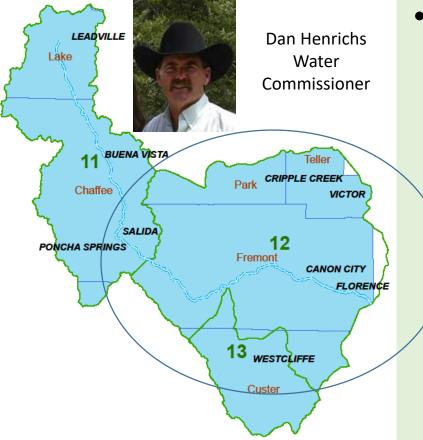
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Overview of West Region
Overview of North Region
Overview of South Region
Overview of East Region

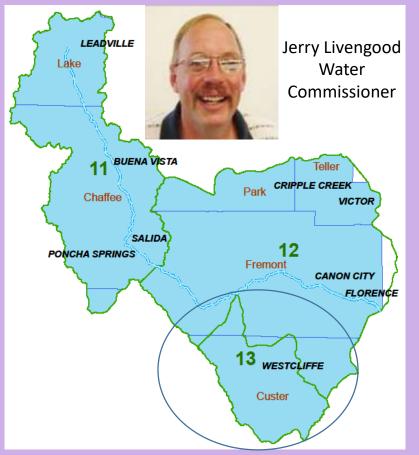




- Key Features Water District 11
  - Inflow Area for all but two Transmountain Import Structures
  - Home of the Fryingpan-Arkansas Upper Reservoirs (Twin Lakes – Turquoise)
  - Otero Pump Station/Homestake Pipeline (Colorado Springs-Aurora Municipal)
- Native Water Rights Water District 11
  - Twin Lakes Reservoir 141,000 AF Capacity
  - Clear Creek Reservoir 11,500 AF Capacity
  - Salida Ditch (Irrigation 6,170 AF/YR)
  - Williams & Hamm Ditch (Irrigation 5,350 AF/YR)
  - Municipal Rights for Leadville, Buena Vista, Salida and Poncha Springs



- Key Native Water Rights District 12
  - Brush Hollow Reservoir (Abs rights 4,200 AF)
  - Mt Pisgah Reservoir (Abs rights 2,740 AF)
  - Minnequa Canal (Industrial 58,850 AF/YR)
  - Canon City Hydraulic (Irrigation/Municipal – 30,375 AF/YR)
  - South Canon Ditch (Irrigation/Domestic 16,480 AF/YR)
  - Municipal rights for Canon City, Florence, Cripple Creek and Victor

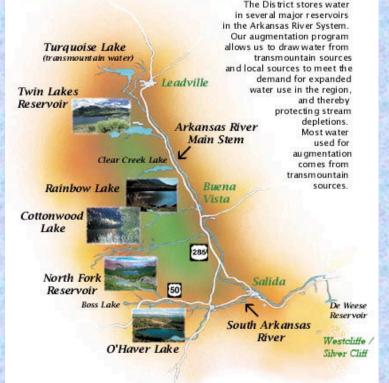


- Key Native Water Rights District 13
  - DeWeese Dye Reservoir (Abs rights 4,200 AF)
  - Ula Ditch, Taylor Creek (Irrigation 1,355 AF/YR)
  - Smith Ditch, Taylor Creek (Irrigation 1,320 AF/YR)
  - Municipal Supply for Westcliffe/Silver Cliff from Round Mountain Water and Sanitation District
  - Some municipal dryup for Widefield and Fountain

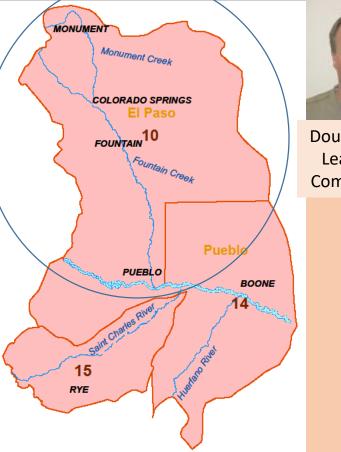
#### <u>Upper Ark Water Conservancy District</u>

- Blanket Plan for Augmentation the provides replacement water for over <u>1,400</u> wells and for other structures including ponds.
  - Annual plans to serve variable water needs
  - Serves areas in multiple counties and on multiple tributary streams and along the Arkansas mainstem
  - Utilizes key reservoirs for plan operation as depicted in their website map
  - Replaced over <u>500</u> AF of depletions in 2017
- Additionally there are over <u>250</u> other augmentation plans in WD's <u>11</u>, <u>12</u> and <u>13</u>

#### Upper Arkansas Valley Waterways



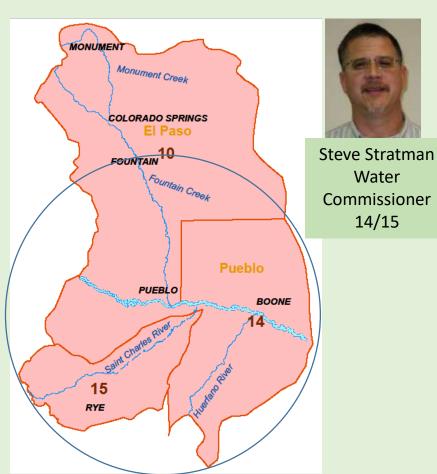
#### North Region – Water Districts 10, 14 and 15





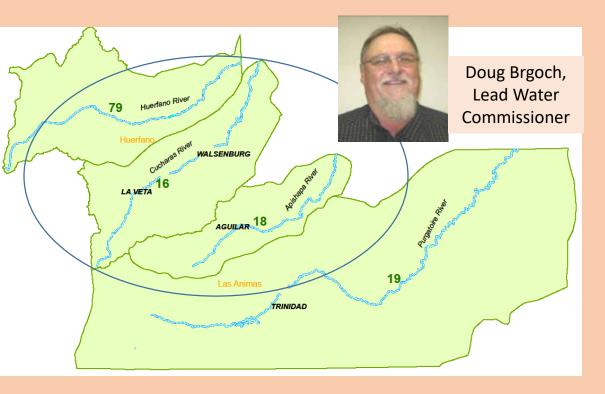
- Key Features Water District 10
  - City of Colorado Springs Municipal System
    - North/South Slope Pikes Peak Systems
    - Fountain Valley Pipeline/Southern Delivery System Pipeline
  - 167 Active Augmentation Plans
- Native Water Rights Water District 10
  - Denver Basin/Designated Basin Wells
  - North Catamount Reservoir (Municipal -13,600 AF)
  - Fountain Valley Res. No.2 [Big Johnson] (Mixed Uses – 5,100 AF)
  - Fountain Mutual Irrigation Ditch (Mixed Uses – 7,770 AF/YR)
  - Chilcotte Ditch (Mixed Uses 6,830 AF/YR)
  - 152 High Capacity Wells in Rule 14 Plans approved to pump up to 4,340 AF

#### North Region – Water Districts 10, 14 and 15



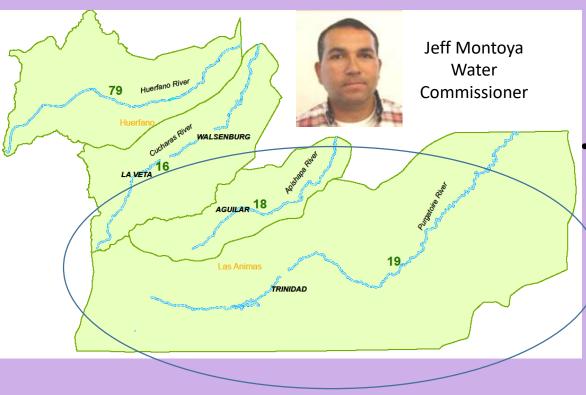
- Key Features Water Districts 14/15
  - Southeastern Colorado Water Conservancy District Office (Pueblo)
  - Pueblo Reservoir (Terminal Storage for Fry-Ark Project – 245,373 AF active/93,000 AF Joint Use)
  - St. Charles Reservoirs #2/#3 (Industrial 9,000 AF)
  - Lake Isabel (Recreational 970 AF)
  - Pueblo Water's Main Dam Outlet (Municipal 28,880 AF/YR)
  - Comanche Power Plant Diversion (Industrial 13,610 AF/YR)
- Native Water Rights Water Districts 14/15
  - 16 Active Augmentation Plans
  - Bessemer Ditch (Irrigation/Municipal 66,875 AF/YR total)
  - Welton Ditch (Irrigation 3,380 AF/YR)
  - St. Charles Flood Ditch (Industrial 4,075 AF/YR)
  - Dotson Ditch No. 1 (Irrigation 3,050 AF/YR)
  - 480 High Capacity Wells in Rule 14 Plans approved to pump up to 17,540 AF in 2017

# South Region – Water Districts 16, 18, 19 and 79



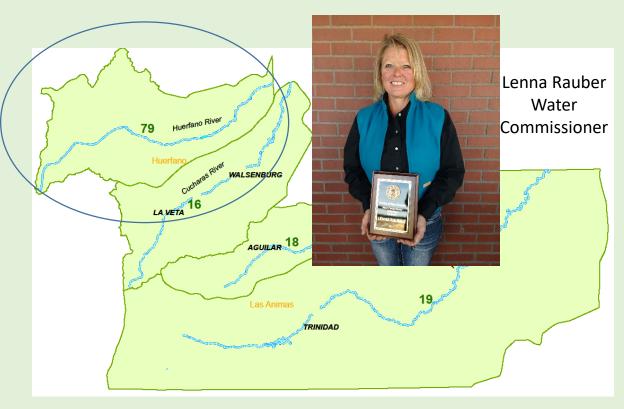
- Key Features Water Districts 16/18
  - Cucharas River (16) Apishapa River (18)
  - Municipal supplies for Walsenburg, La Veta, Cucharas W & S, Town of Aguilar
  - Cucharas Valley Reservoir (Irrigation – Abs water right of 32,000 AF; currently under dam breach order)
  - Maria Stevens Reservoir (Mixed Net abs water rights 1,580 AF)
  - Walsenburg Pipeline (Municipal 2,900 AF/YR)
  - Duran Ditch (Irrigation 1,175 AF/YR)
  - Gonzales Ditch (Mixed 2,200 AF/YR)
  - Lucero Ditch (Irrigation 1,335 AF/YR)

# South Region – Water Districts 16, 18, 19 and 79



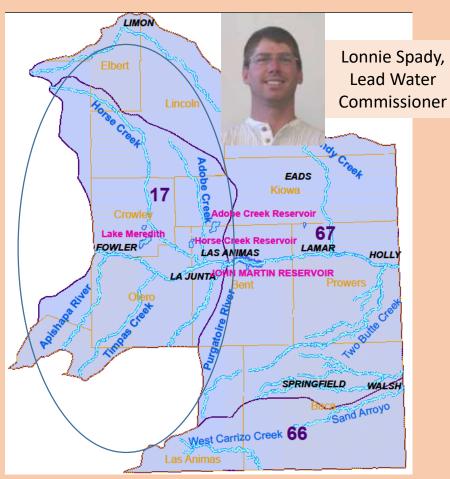
- Key Features Water District 19
  - Trinidad Reservoir (53,000 Irrigation/Sedimentation, 51,000 AF Flood Control, 16,000 AF Recreation)
  - Purgatoire River Water Conservancy District Trinidad Project Office
- Native Water Rights Water District 19
  - North Lake (Municipal 4,155 AF Abs water right)
  - Monument Lake (Municipal 1,430 AF Abs water right)
  - Enlarged Southside (Irrigation/Stock - 13,300 AF/YR)
  - Johns Flood Ditch (Mixed 4,340 AF/YR)
  - North Lake Inlet (Municipal 3,200 AF/YR)

# South Region – Water Districts 16, 18, 19 and 79



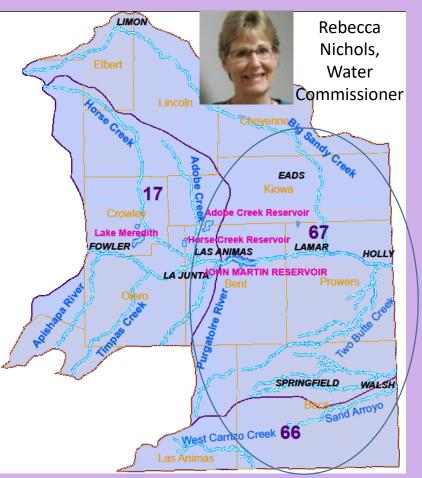
- Key Features of Water District 79 Huerfano River
  - Only other Water District in Division 2 with Transmountain Diversions (Hudson Ditch and Medano Ditch from Division 3)
  - Huerfano County Water Conservancy District Augmentation Plan
- Native Water Rights in Water District 79
  - Orlando Reservoir No. 2 (Irrigation – 3,117 AF Abs water rights)
  - Garcia Ditch No. 1 (Irrigation – 2,020 AF/YR)
  - Martin Ditch (Irrigation 1,020 AF/YR)

## East Region – Water Districts 17, 66 & 67



- Key Features Water District 17
  - Lower Arkansas Valley Water Conservancy District Office (Rocky Ford)
- Key Native Water Rights
  - Adobe Reservoir (Irrigation 87,000 AF Abs water right)
  - Fort Lyon Canal (Irrigation/Mixed/Storage – 199,350 AF/YR Total Diversions; 157,380 AF/YR Native Irrigation Diversions)
  - Catlin Canal (Irrigation/Mixed 94,900 AF/YR Total Diversions; 78,600 AF/YR Native Irrigation Diversions)
  - 550 High Capacity Wells in Rule 14 Plans approved to pump up to 38,110 AF in 2017

### East Region – Water Districts 17, 66 & 67



- Key Features Water District 66/67
  - John Martin Reservoir (331,000 AF Irrigation, 15,000 AF Recreation, 269,000 AF Flood Control)
  - Designated Basin Wells (Northern High Plains/Southern High Plains)
- Native Water Rights WD's 66/67
  - Two Buttes Reservoir (Irrigation/Rec 40,000 AF water right)
  - Nee Gronda Reservoir (Irrigation 98,660 AF water right)
  - Neenoshe Reservoir (Irrigation 94,840 AF water right)
  - Amity Canal (Irrigation/Industrial 92,465 AF/YR diversion)
  - Lamar Canal (Mixed 42,800 AF/YR diversion)
  - 550 High Capacity Wells in Rule 14 Plans approved to pump up to 73,000 AF in 2017

#### Ground Water Administration Division 2

#### Water Commissioners



Dan DiRezza Lead Water (Well) Commissioner (East and South)



Dale Baker Lead Water (Well) Commissioner (West and North)

#### Office Support



Charlie DiDomenico Augmentation Coordinator



Bethany Arnold Water Resources Engineer

### **River/Reservoir Operations**



#### Arkansas Basin Water Operations Dashboard Colorado Division 2 Administrative Decision Support Tools

#### lesources Maps Log In

#### Welcome to the Arkansas Basin Operational Tools Web Site

Please log in to place a request for an exchange or reservoir release. Contact the Division 2 office to create an account.



# Office Support



John Van Oort River/Reservoir Operations Leader



Phil Reynolds Reservoir Operations Specialist

# Litigation Support

- Water Court Processes
  - Resume Review
  - Consultation Reports
  - Statements of Opposition
  - Expert Witness Reports
  - Testimony
- Decreed Plans for Augmentation

#### Office Support





#### Janet Dash Technical Analyst



Audrey Sartin Decreed Plan Augmentation Coordinator

# Hydrographic Support

#### • Hydro Team

- Maintain Stream Gage Network
- Assist Water Users with Administrative Measurements
- Prepare Water Measurement Records



Joey Talbott Lead Hydrographer

> Anthony Gutierrez Hydrographer



Lori Lest Hydrographic Engineer

Cheston Hart Hydrographer