

## United Water & Sanitation District Stonegate Village Metro District Water Supply Opportunities







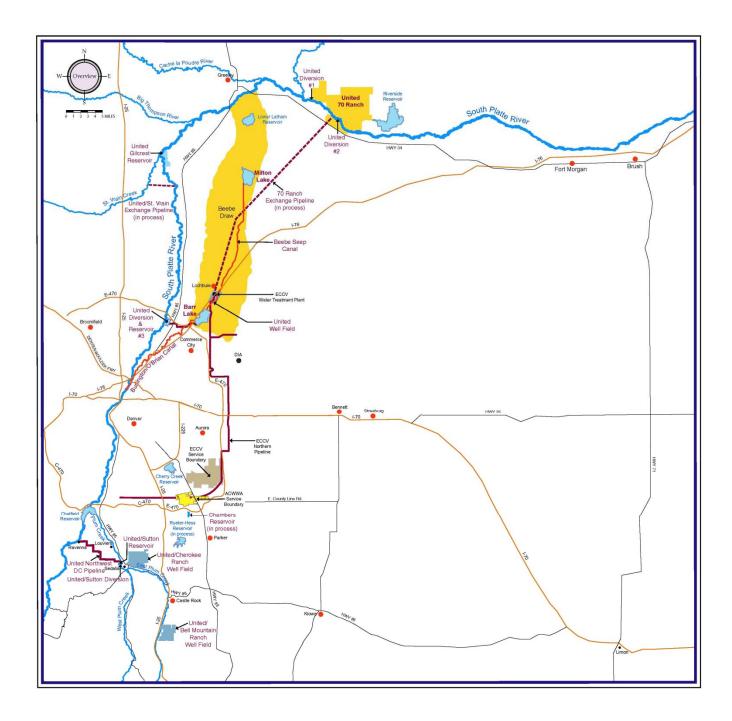
## **United Water & Sanitation District**





## Formation

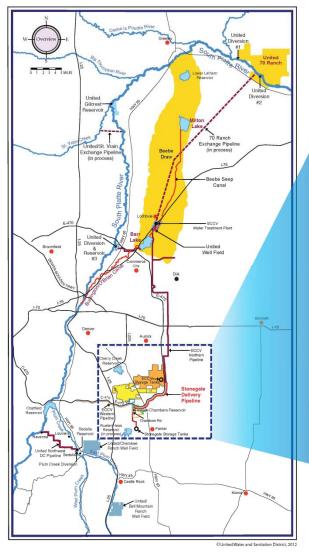
- In 2003, the United Water and Sanitation District was formed to provide water resources and infrastructure to cities, counties, special districts, canal companies, agricultural users and others. Its service plan authorizes a state-wide service area.
- The District's goal is to facilitate the acquisition, diversion, storage, carriage delivery, treatment, transmission, distribution and provision of water to those who voluntarily choose to use the system.



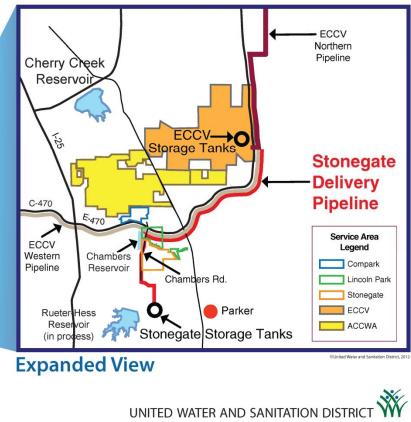
## South Metro Partners

- United has a proven track record of working with South Metro water providers to bring water to their customers
  - ECCV Northern Project
    - 6,000 AFY of renewable supplies acquired from United Water
    - United acquires, transfers, diverts, stores, and delivers supplies to ECCV water treatment facilities
  - ACWWA Flow Project
    - 4,400 AFY of renewable supplies acquired from United
    - United acquires, transfers, diverts, stores, and delivers supplies to ECCV water treatment facilities
  - In cooperation with ECCV and ACWWA, United is already delivering treated renewable water to the South Metro area

#### South Metro Partners



The United System and Delivery to Stonegate Village Metropolitan District



## **United's Services**

- Provide a phased approach to water supply development
- Upfront water rights acquisition and joint adjudication of shares to meet renewable demands
- Provide access to:
  - Existing United raw water diversion, storage, alluvial pretreatment and conveyance facilities
- Construct additional facilities as necessary
- Provide a phased approach to financing using new tap fees/growth
- Assist in developing a water operations model to evaluate alternatives



## United – Stonegate Village Joint Water Supply Opportunities



#### Stonegate Water Supply Evaluation Overview

- Up to 1,844 AFY Renewable Water Supply Goal
- SVMD currently has .7 MGD firm capacity in ECCV Northern Line
- Buildout peak day demand of 5.76 MGD
- Surplus SVMD effluent will be stored in Rueter-Hess and withdrawn for non-potable demands

#### Stonegate Water Supply Evaluation Project Components

- Agricultural water rights acquisition, joint adjudication
- United provides a robust and cost effective raw water delivery system
  - 1) Utilizes South Platte exchange potential
  - 2) Delivery from South Platte via 70 Ranch Well Field
- Obtain firm capacity in ECCV water treatment plant
- Obtain existing capacity + additional peak/non-peak capacity in ECCV Northern Pipeline
- Peak/non-peak capacity in ECCV north and south booster pump stations
- Construction of proposed pipeline from ECCV storage tanks to SVMD storage tanks



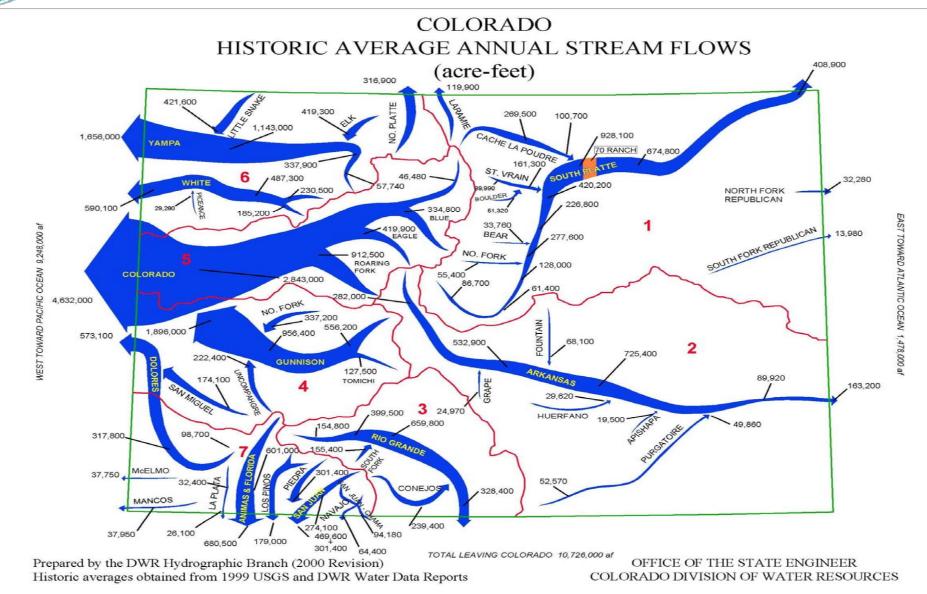
## Water Rights Acquisition



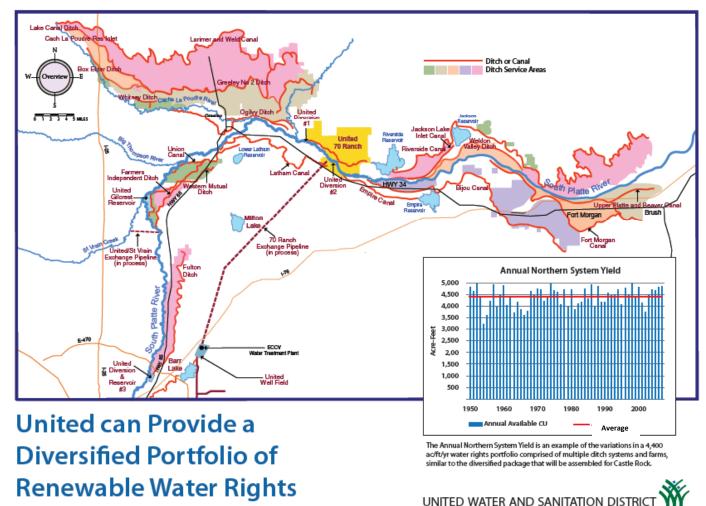
## Water Rights Acquisition

- Fully renewable senior surface water rights
- Acquisition by United in a manner similar to that used for ECCV and ACWWA
- Owned by SVMD
- Pre-Approval of water rights by SVMD prior to United acquisition
- Assured dry-year yield as a % of average yield minimizes storage needs
- Joint water court transfer
- Diversified water rights portfolio

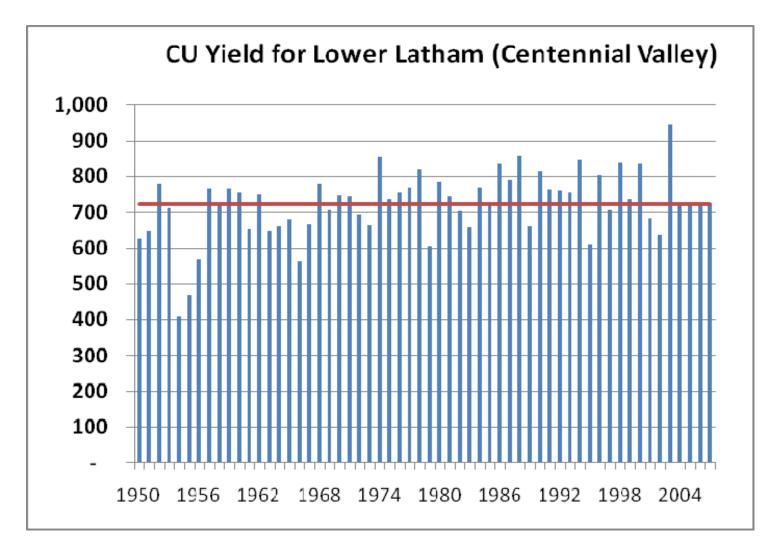




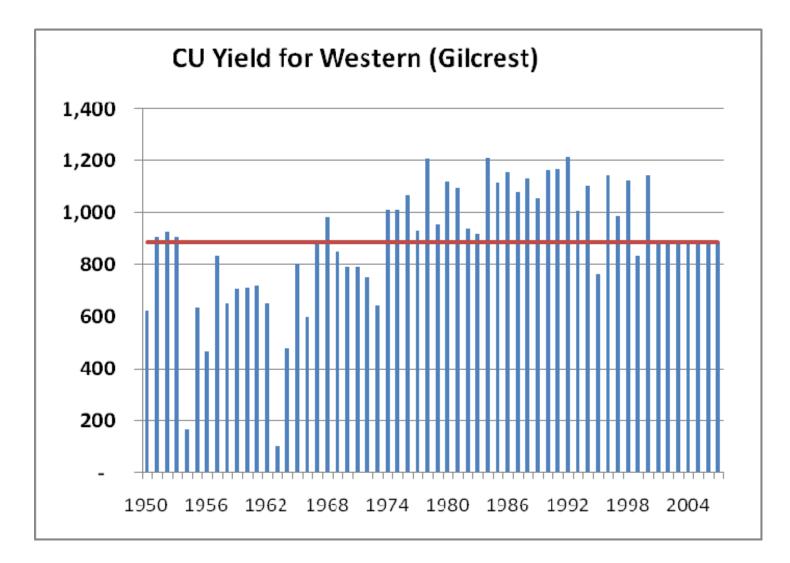
#### Geographic Distribution of Ditch Systems Used by United



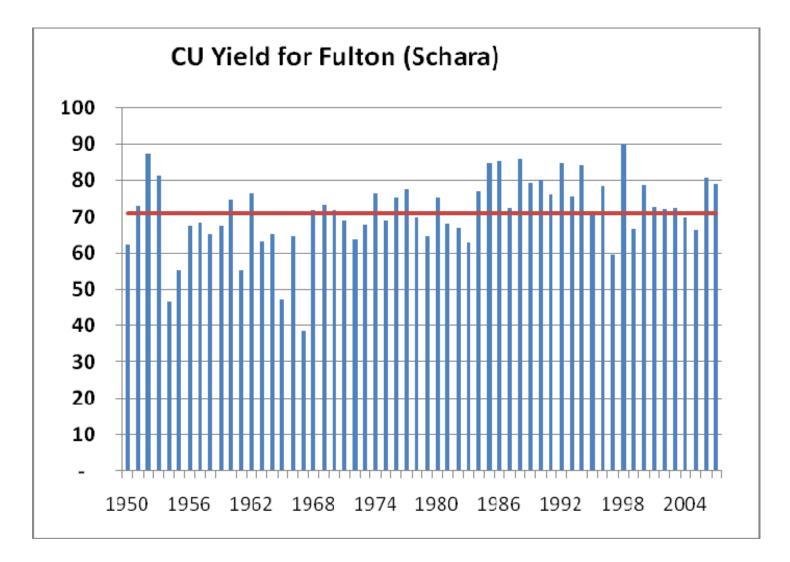
#### Annual Profile – Individual Water Right



#### Annual Profile – Individual Water Right



#### Annual Profile – Individual Water Right



17





## The United Delivery System to Provide Renewable Water to Stonegate



#### 1) United Delivery System to ECCV's Treatment Plant

- United utilizes exchange potential on the South Platte River
  - Divert supplies at United Diversion No. 3
  - Storage at United Reservoir No. 3
  - Delivery to Barr Lake via 36" Beebe Pipeline
  - Pre-Treatment in Beebe Draw Alluvium
  - Withdraw supplies at United Well Field
  - Delivery to ECCV Treatment Plant

#### Divert supplies at United Diversion No. 3



#### Storage at United Reservoir No. 3



### Delivery to Barr Lake via 36" Beebe Pipeline



#### Pre-Treatment in Beebe Draw Alluvium



#### Withdraw Supplies at United Well Field



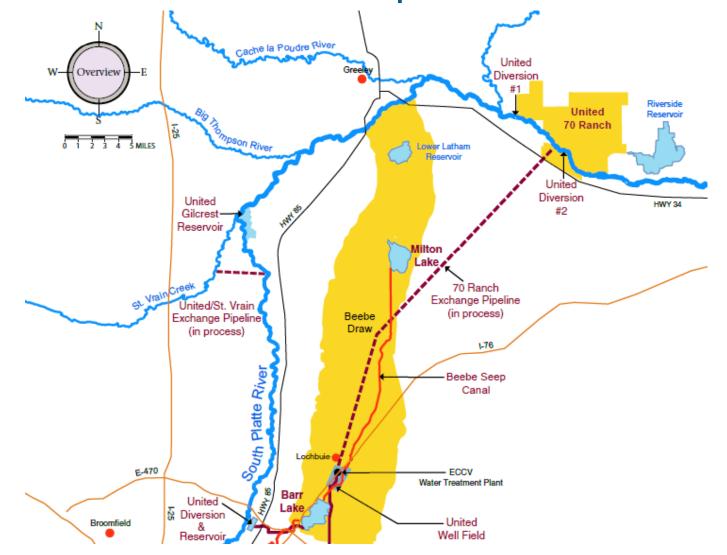
## Raw Water is Treated at ECCV's Treatment Plant



# 2) United Delivery System to ECCV's Treatment Plant

- United will deliver supplies through its northern infrastructure
  - Divert Supplies at 70 Ranch Well Field
  - Storage and alluvial treatment in 70 Ranch Recharge Ponds
  - Delivery to ECCV Treatment Plant via 70 Ranch Pipeline

#### Delivery to ECCV Water Treatment Plant via 70 Ranch Pipeline



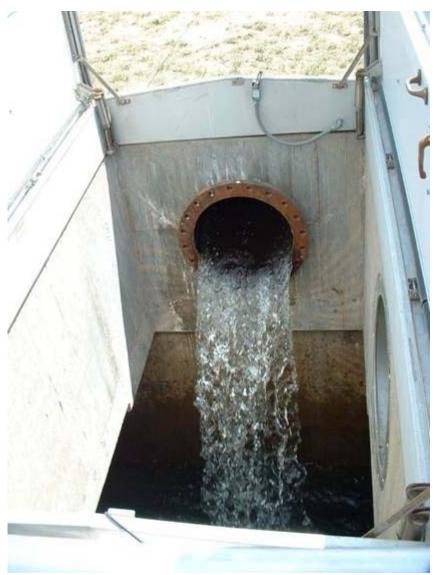
## Raw Water is Treated at ECCV's Treatment Plant



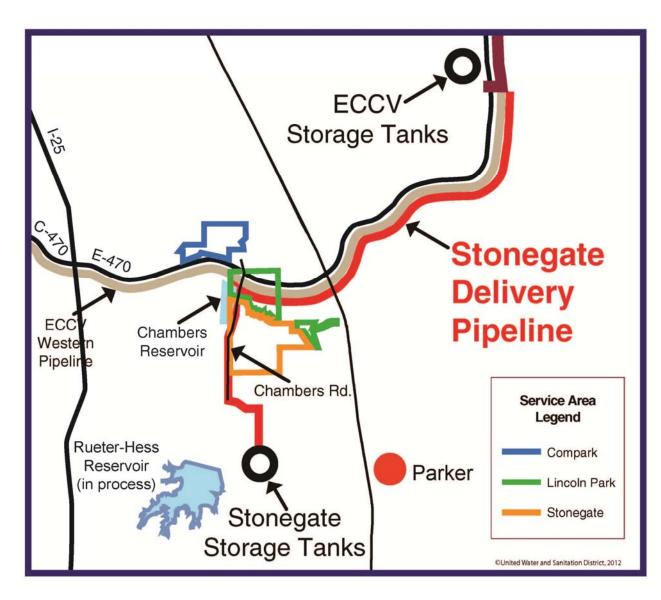
### Delivery to ECCV Storage Tanks via ECCV Northern Pipeline



### Terminus of ECCV Northern Pipeline



#### Proposed Delivery Pipeline from ECCV Storage Tanks to SVMD Storage Tanks



#### Stonegate Village Water Supply Components and Unit Costs

Component	Capacity Acquired	Units	Unit Cost	Description
Water Rights	Up to 1,844	Acre-feet	\$ 23,850	Water Rights include all infrastructure to deliver to ECCV Northern WTP
Firm Capacity in ECCV Water Treatment Plant	0.7 to 5.74 MGD	MGD	\$ 4 (M)	Firm Capacity in ECCV Water Treatment Plant including Brine Minimization and Deep Well Disposal
Existing Owned Firm Capacity in ECCV Northern Pipeline	0.7	MGD	\$ 0.00	
Additional Firm Capacity in ECCV Northern Pipeline (additional capacity)	Up to 5.04 MGD	MGD	\$ 1.8 (M)	Firm Capacity in ECCV Northern Pipeline (additional capacity)
Additional Variable Capacity in ECCV Northern Pipeline	Varies depending upon firm capacity acquired	MGD	\$ 0.9 (M)	
Firm Capacity in ECCV North and South Booster Pump Stations	0.7 to 5.74 MGD	MGD	\$ 1.8 (M)	Firm Capacity in ECCV North and South Booster Pump Stations
Variable Capacity in ECCV North and South Booster Pump Stations	Varies depending upon firm capacity acquired	MGD	\$ 0.9 (M)	
Construction of Pipeline from ECCV storage tanks to SVMD storage tank	5	MGD	\$ 1.4 (M)	Construction cost for 16" pipeline from ECCV SmokyHill tanks to Stonegate Village Metro District tanks(includes design, easement acquisition, and pumpstations)33

## United's Advantages

- SVMD owns and controls a diversified portfolio of renewable water rights
- United has a proven track record
- Utilizes existing diversion, conveyance, storage, and treatment facilities and proven inter-governmental agreements
- Scalable water delivery system
- Financed by new taps and growth