

Platte Valley Water Partnership

Pioneering a Collaborative and Sustainable Water Future



PRESENTATION TO:

**COLORADO HOUSE AGRICULTURE,
LIVESTOCK AND WATER COMMITTEE**

FEBRUARY 7TH, 2022

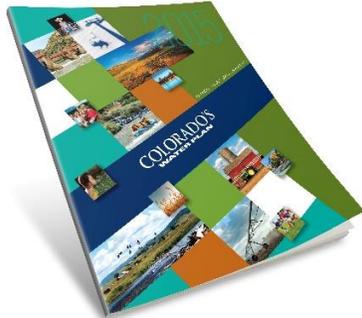


The Journey to Our Partnership

ParkerWater
& SANITATION DISTRICT



Realizing Ideas...



Colorado's Water Plan



South Platte Basin Implementation Plan



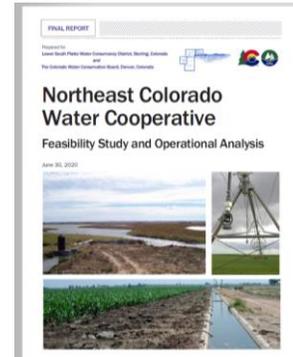
South Platte Storage Study

South Platte Regional Opportunities Water Group Feasibility Study Report

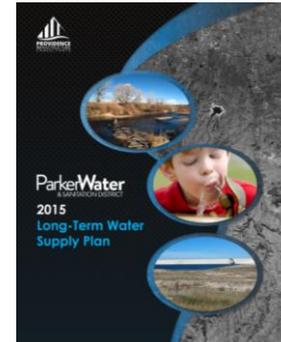
March 6, 2020



SPROWG Feasibility Study



Northeast Colorado Water Cooperative



Parker Water Long Term Water Supply Plan





Municipal and Industrial Demands Continue to Increase!

Figure 3. Baseline and 2050 Projected Population and Municipal Demands

SOUTH PLATTE

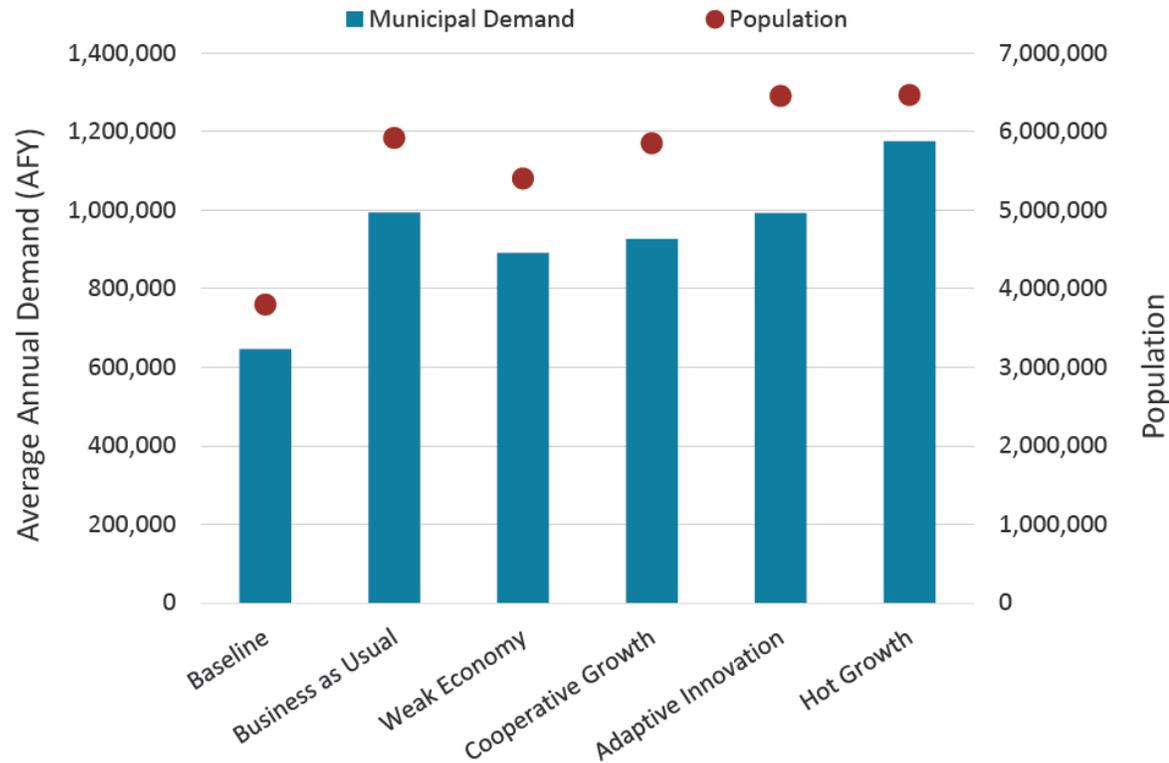
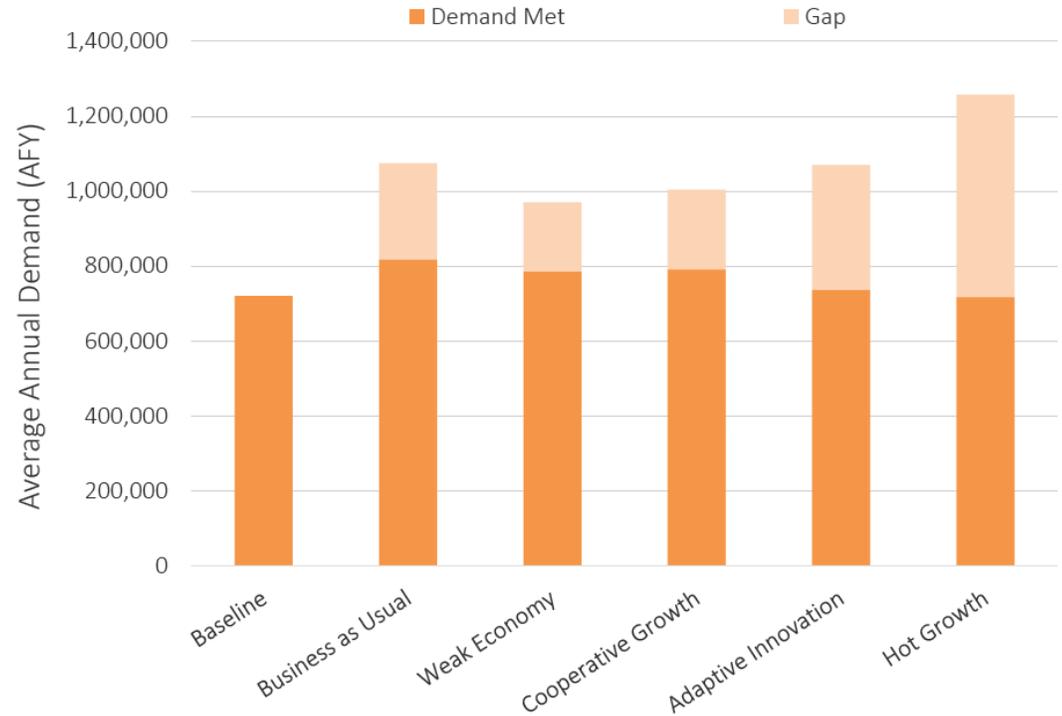


Figure 4. Baseline and 2050 Projected Maximum Annual M&I Demand Met and Gaps

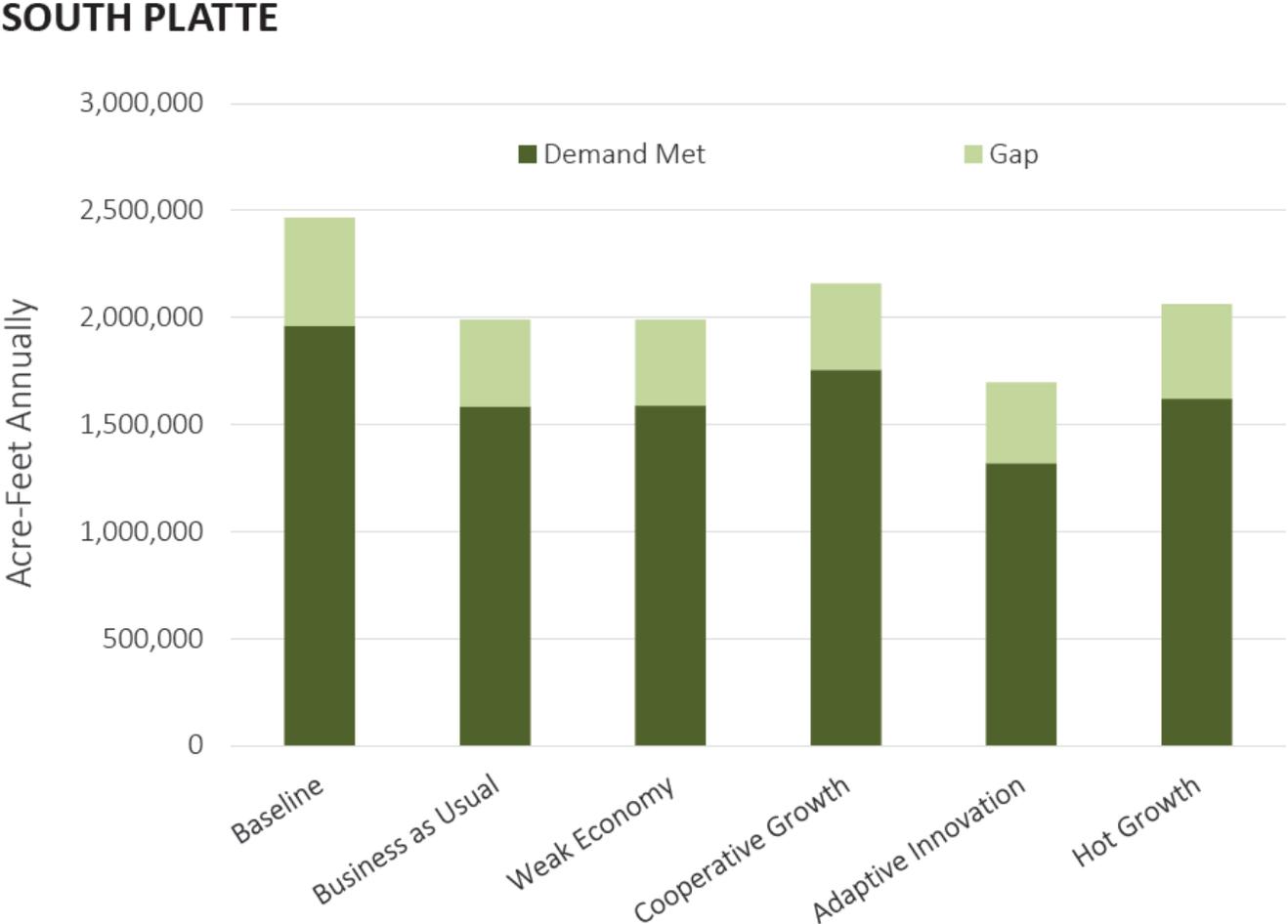
SOUTH PLATTE



Significant Agricultural Shortages Exist.

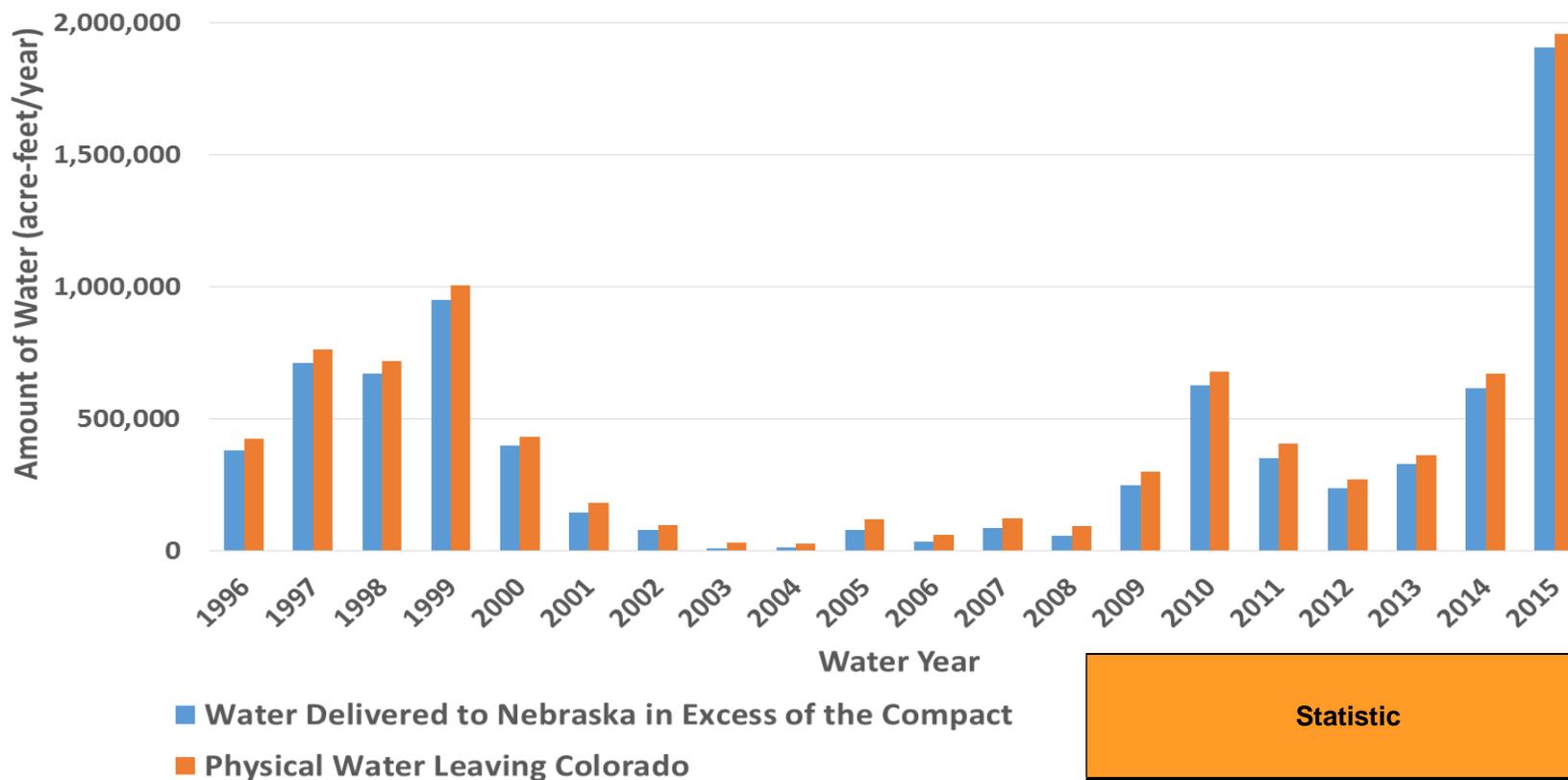


Figure 6. Baseline and 2050 Projected Average Annual Agricultural Diversion Demand, Demand Met, and Gaps





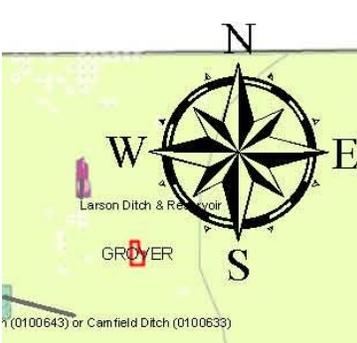
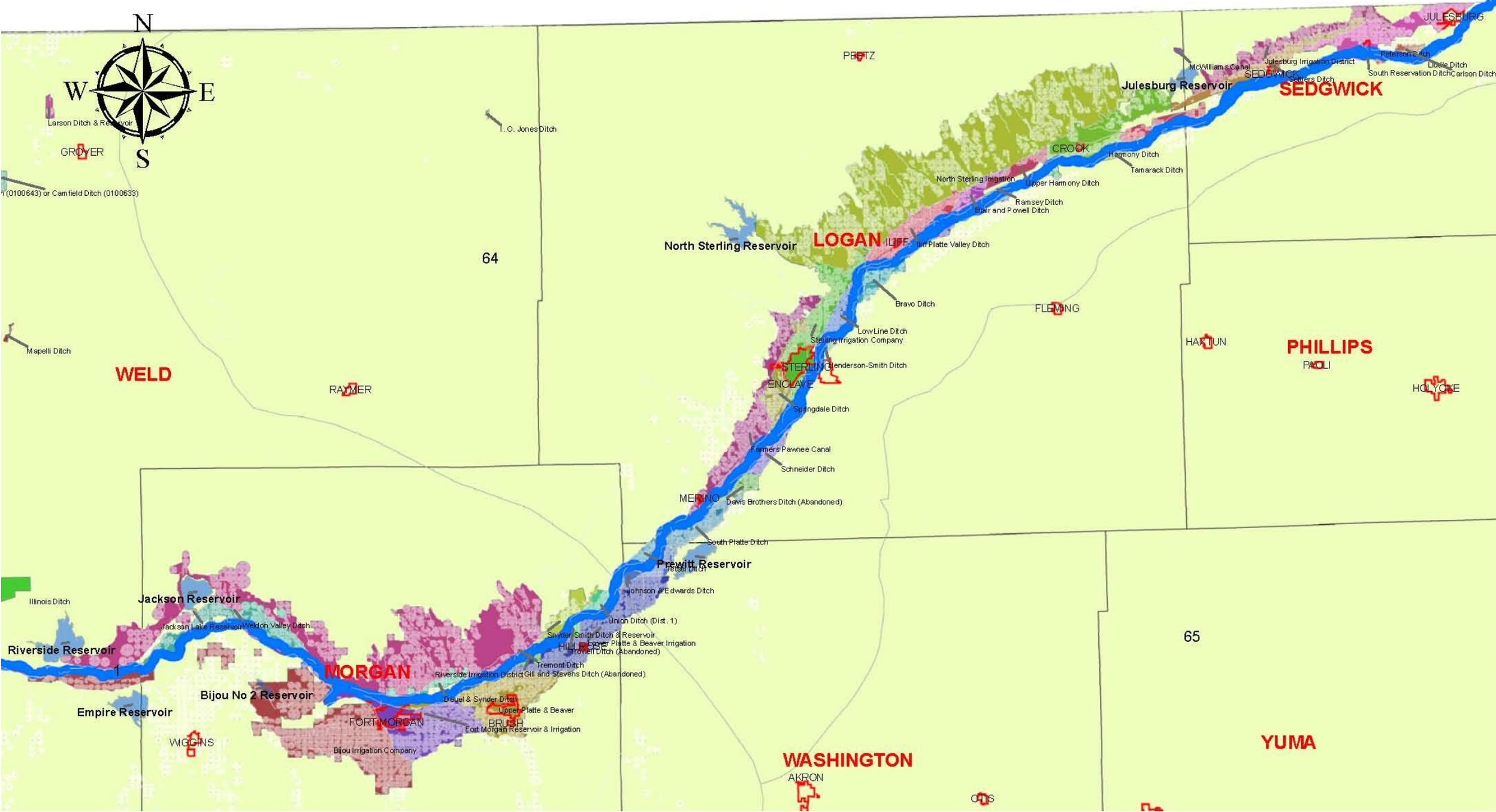
Julesburg Gage



Statistic	Physical Water Leaving Colorado (Julesburg Gage)	Water Delivered to Nebraska in Excess of the Compact ⁽¹⁾⁽²⁾
Annual Median (ac-ft/yr)	331,000	293,000
Annual Average (ac-ft/yr)	436,000	397,000
Minimum Year (ac-ft/yr)	29,000	10,000
Maximum Year (ac-ft/yr)	1,957,000	1,904,000
Total for 20-yr Period 1996-2015 (ac-ft)	8,728,000	7,939,000

(1) Storable flow Julesburg gage

(2) Future environmental flow obligations could reduce legally available water.



(0100643) or Camfield Ditch (0100633)

Mapelli Ditch

Illinois Ditch

Riverside Reservoir

Empire Reservoir

Wiggins

Jackson Reservoir

Jackson Lake Reservoir

Weldon Valley Ditch

Bijou No 2 Reservoir

Fort Morgan

Bijou Irrigation Company

Morgan

Fort Morgan

Fort Morgan Reservoir & Irrigation

Brush

Upper Platte & Beaver

Deuel & Snyder Ditch

Riverside Irrigation District

Gill and Stevens Ditch (Abandoned)

Tremont Ditch

Upper Platte & Beaver Irrigation

Travertine Ditch (Abandoned)

Hill

Snover Smith Ditch & Reservoir

Union Ditch (Dist. 1)

Johnson & Edwards Ditch

Prewitt Reservoir

South Platte Ditch

Davis Brothers Ditch (Abandoned)

Merino

Farmers Pawnee Canal

Schneider Ditch

Springdale Ditch

Glenderson-Smith Ditch

LowLine Ditch

Stirling Irrigation Company

Bravo Ditch

Tim Platte Valley Ditch

Iliffe

North Sterling Irrigation

Upper Harmony Ditch

Harmony Ditch

Blair and Powell Ditch

Ramsey Ditch

Tamarack Ditch

Crook

Julesburg Reservoir

McMillan's Canal

Julesburg Irrigation District

South Reservoir Ditch

Carlson Ditch

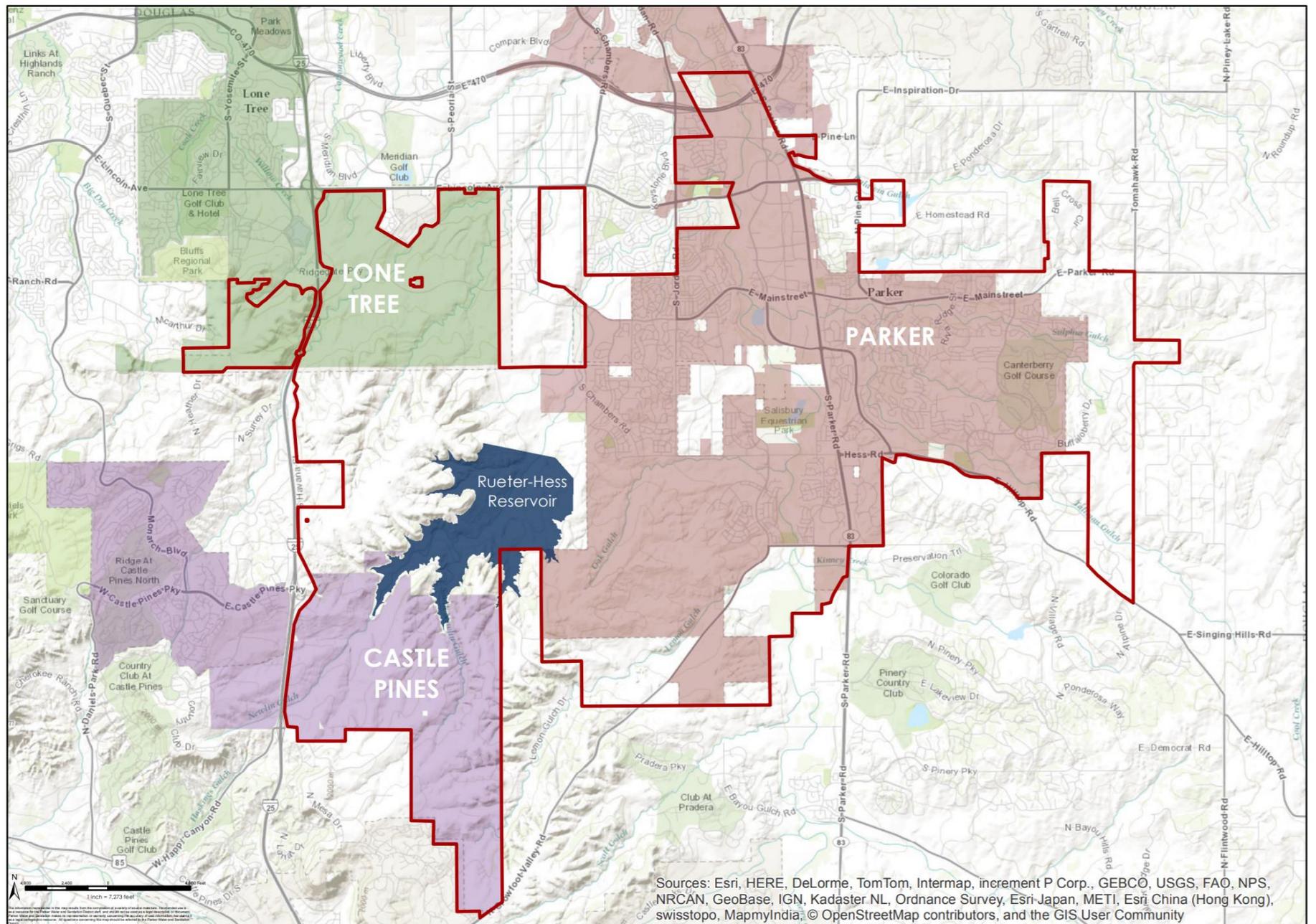


Existing Service Area:

- 56,000+ Residents
- 44+ square miles
- Town of Parker
- City of Lone Tree
- City of Castle Pines
- Unincorporated Douglas County

Build-out (2050)

- New Developments to the South and West
- 117,000-120,000 Residents



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri-Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community



Parker Water and Sanitation District Service Area

2014



Project Vision

Benefitting both worlds



- **PWSD Supply Gap**
 - 75% Renewable by 2035
 - Demand shortage in 2035-2040
- **Avoids “Buy and Dry”**
 - Optimizes available water
 - Sets parameters for Municipal/ Agricultural partnership
 - Establishes guidelines "types of water" in system
- **LSPWCD Water Supply**
 - Addresses local needs
 - Develops critical habitat
- **Optimizes Existing Infrastructure**

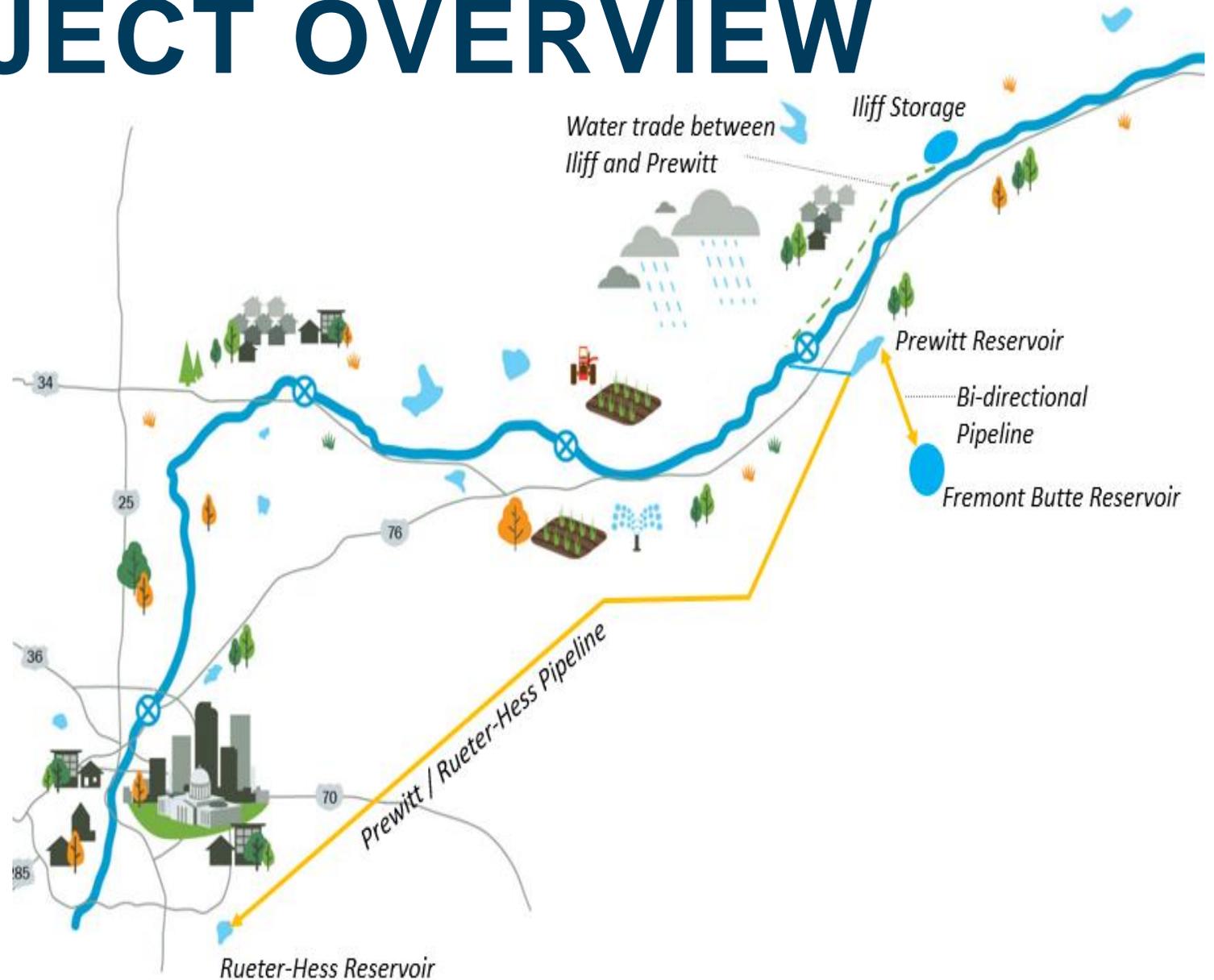
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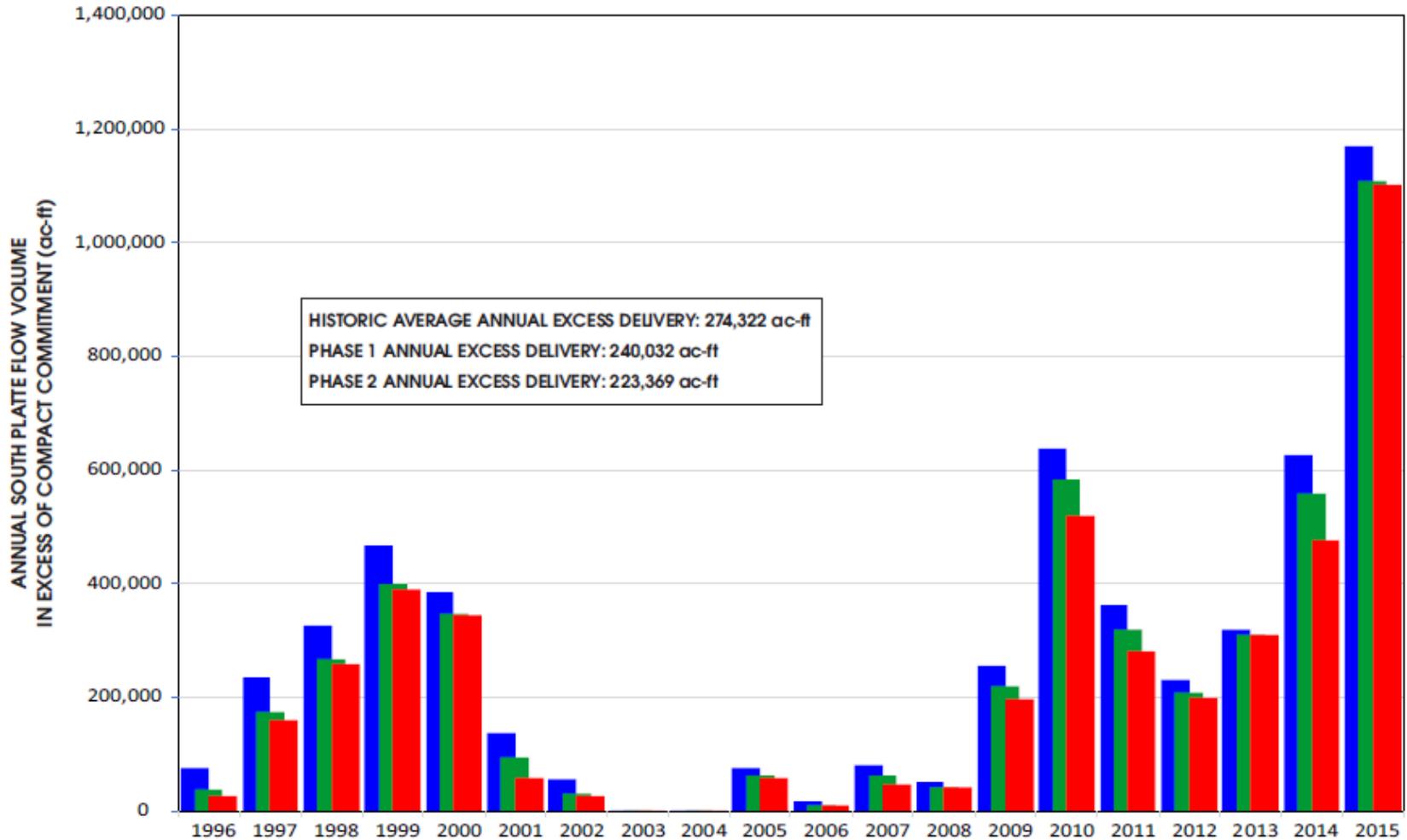




PROJECT OVERVIEW

- **Iliff Reservoir** – 6,500 ac-ft
- **Prewitt Reservoir** – 6,500 ac-ft forebay utilizing existing infrastructure
- **Trade** between Iliff and Prewitt Reservoirs.
- **Fremont Butte Reservoir** – 72,000 ac-ft, up to 250 cfs pumped and piped from Prewitt Reservoir (Phase II).





HISTORIC AVERAGE ANNUAL EXCESS DELIVERY: 274,322 ac-ft
 PHASE 1 ANNUAL EXCESS DELIVERY: 240,032 ac-ft
 PHASE 2 ANNUAL EXCESS DELIVERY: 223,369 ac-ft

LEGEND

- HISTORIC STATELINE EXCESS FLOW
- PHASE 1 STATELINE EXCESS FLOW
- PHASE 2 STATELINE EXCESS FLOW

Note: Compact delivery commitment is 120 cfs for 199 days (April 1 - October 15, 47, 282 ac-ft)

PWSD/LSPWCD		
ESTIMATED PROJECT IMPACT ON ANNUAL EXCESS COMPACT FLOWS		
File Name: Est-Impact-CompactFlows.cdr	Date: 08/28/2020	
Project No.: 1489-20	Drawn By: VAL	Fig. No.: 22



Next Steps:

Where do we go from here...

- Current
 - Water Rights Decree
 - Parker WSD – LSPWCD agreement
 - Prewitt Operating agreement
- Near Future
 - Local and Regional Outreach
 - Conveyance agreements
 - Fremont Butte landowners
- Planned
 - Permitting
 - Advanced design, costs, financing, etc.
 - Water delivery 2035+



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Joe Frank, General Manager of LSPWCD

Ron Redd, District Manager of PWSD

Questions?