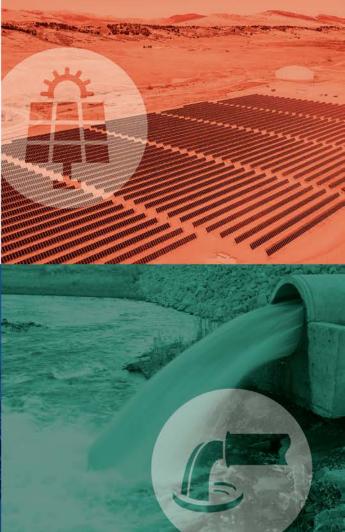
WATER LITERATE LEADERS

Ryan Van Pelt- Water Resource Engineer April 12, 2018







Loveland's Raw Water Supplies

- Loveland's raw water supplies originate from both sides of the continental divide and consist of the following main sources:
 - 1. Water rights diverted off the Big Thompson River, including Loveland's domestic (City owned) and native rights 12.44 cfs.
 - 2. Transbasin (West Slope/Colorado River) Water Diversions:
 - Colorado Big Thompson (C-BT) system water 1,278 units
 - Windy Gap Project water 40 units
 - 3. Storage in Green Ridge Glade Reservoir 6,836 acre-feet



Loveland's Raw Water Supplies

C-BT Project Charles Hansen Feeder Canal Turnout to GRG Reservoir



Loveland WTP & Home Supply Ditch RHG Diversion at Big Thompson River



Water Treatment Facilities



Loveland's Water Rights

- Loveland is using water rights that were originally decreed in 1861, 1863, 1864, 1867, and 1872.
- Loveland's native water rights include ownership in the following ditch & reservoir companies:
 - Barnes Ditch
 - Big Thompson Ditch & Manufacturing Co.
 - Chubbuck Ditch
 - Consolidated Home Supply Ditch & Res. Co.
 - George Rist (Buckingham) Ditch

- Louden Ditch
- Louden Big Lateral
- South Side Ditch
- South Side Reservoir
- Rist Benson Reservoir



Native Diversions off Big Thompson River

City-owned rights

- 3.0 cfs, first water rights owned by the City
- Appropriated in 1887
- 3.44 cfs = direct flow (transferred irrigation right),
 Loveland Pipeline



Native Diversions off Big Thompson River

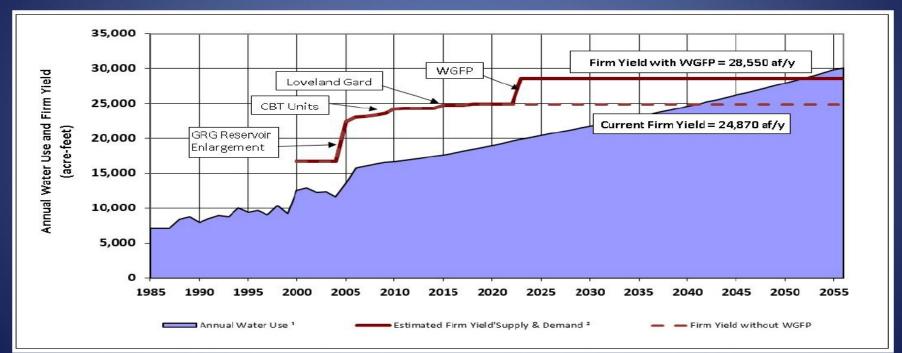
- City-transferred ditch shares
- Originated in local ditches, irrigation use
- 6 cfs = 1926 transfer
- Additional from 1985 transfer
- Additional from 2010 transfer

Loveland's Water Rights Detail

2018 City Water Rights Data Includes Ownership of City Water Department Transferred & Untransferred Water Rights

Irrigation Company	City Ownership			Fating at a d	Fot Firm Viola	Total of	Total of
	Water Dept. Transferred	Water Dept. Un- Transferred	Total Ownership	Estimated Yield	Est. Firm Yield without Storage	Total af Transferred	Total af Un-Trans.
	(shares, units, rights, inches)	(shares, units, rights, inches)	(shares, units, rights, inches)	(af/share, unit, rights, inch)	(af/share, unit, right, inch)	(af)	(af)
CBT (units)	12,178.00	NA	12,178	1.00	0.70	12,178.00	NA
Barnes Ditch (inches)	1,331.30	0.00	1331.3	3.32	0.86	4,419.92	0.00
Big TD&M (shares)	6.93	0.67	7.6	186.57	70.90	1,292.93	125.00
Chubbuck Ditch (inches)	1,411.60	0.00	1411.6	2.94	0.41	4,150.10	0.00
Consolidated Home Supply Ditch & Res. Co. (shares)	0.00	30.00	30	9.64	2.14	0.00	289.20
George Rist (Buckingham) Ditch (shares)	95.40	25.00	120.4	6.36	0.38	606.74	159.00
Louden Ditch (shares)	253.084	14.0835	267.1675	12.17	2.43	3,080.03	171.40
Louden Big Lateral (shares)		32.14	32.14				
South Side Ditch (shares)	80.50	28.75	109.25	4.55	1.46	366.28	130.81
South Side Reservoir (shares)	0.00	70.50	70.5			0.00	0.00
Rist Benson Reservoir (rights)	0.00	20.50	20.5	320.00	240.00	0.00	6,560.00
Windy Gap (units)	40.00	NA	40	100	0.00	4,000.00	NA
Total acre-feet Transferred						30,094.00	7,435.41

Annual Water Use and Firm Yield









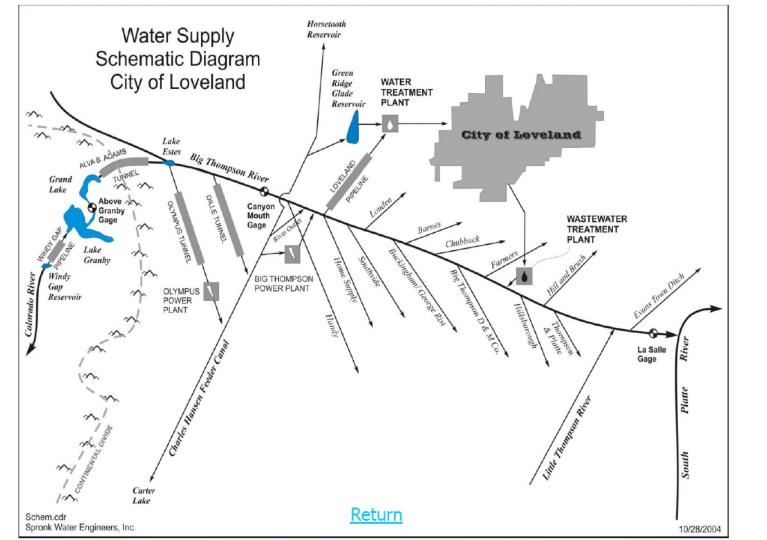
What's Next for Loveland?

- Additional Transfers of Native Water Rights
- Additional C-BT units
- Completion of Windy Gap Firming Project (Chimney Hollow Reservoir)
- Downstream storage projects
- Lawn Irrigation Return Flow (LIRF) study and reclaimed return accretions
- Wise use of water
- Reuse
- Other options?
 - ATMs
 - Raw water irrigation

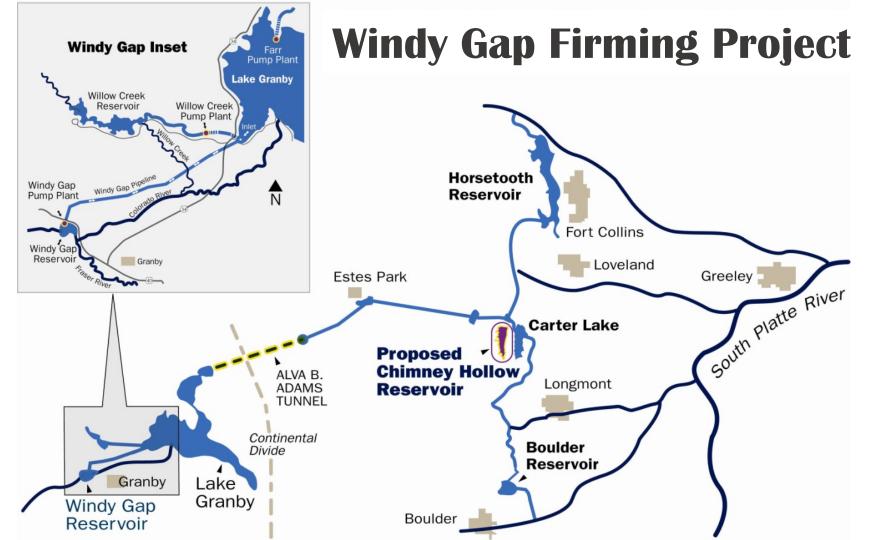


QUESTIONS?











Chimney Hollow Reservoir Site

