

FORT COLLINS UTILITIES, WATER CONSERVATION



#### **Commercial Customers**



**Commercial Businesses** 



**HOA Irrigation Taps** 



**Business Irrigation Taps** 

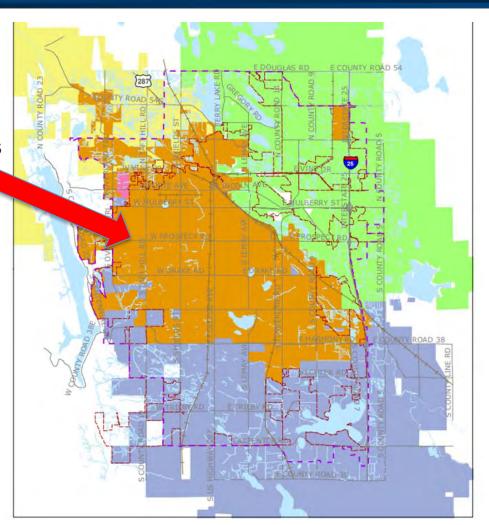


**HOA Club/Pool Houses** 



#### Water Districts

Fort Collins Utilities
Water District
Service Area







## Share & Remind

- water shortages
- response plan

#### Identify

- beneficial changes
- new opportunities

#### Prepare

- future shortages
- greater resiliency





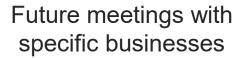
- Water supply, demand and shortage
- 2. Current restrictions

- 3. Restriction ideas
- 4. Efficiency strategies











City Departments

Stakeholder Engagement

Public Input

Amendments to Council

Q1-2 2019

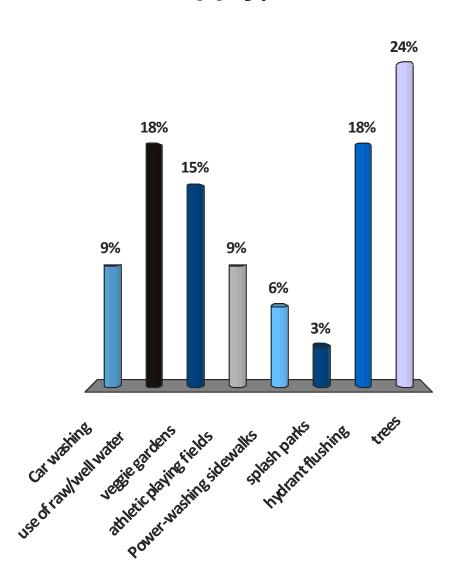
Q2-3 2019

Q3-4 2019

Q1 - 2020

## Which water use activities are NOT limited during a water shortage? (Select all that apply)

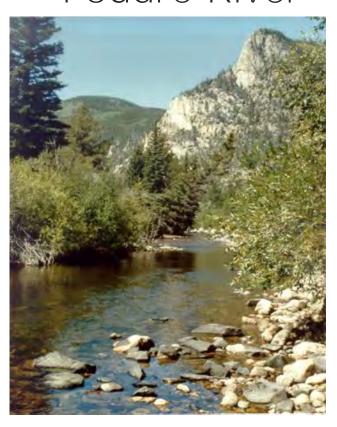
- A. Car washing
- B. use of raw/well water
- C. veggie gardens
- D. athletic playing fields
- E. Power-washing sidewalks
- F. splash parks
- G. hydrant flushing
- H. trees





#### Water Supply – Two Sources

#### Poudre River



Colorado-Big
Thompson (C-BT)
Project
(Horsetooth Reservoir)





#### What is a Water Shortage?

**Definition:** A lack of necessary resources to meet current needs

#### Causes:

Drought
Water Quality
Infrastructure Issues
Regional Impacts





Snow pack

#### How is a shortage determined?



Storage levels



CBT Quota



# Projected Demands



#### Wate

#### Water Supp

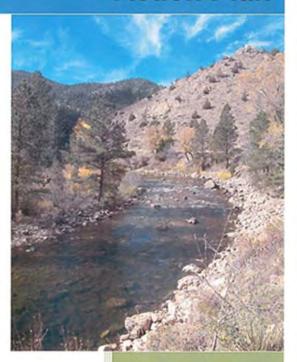
Projected water sup shortage as determ the City Manager

Regulated Wate Activities

- Lawn & turf wate
- a. Non-watering he
- Number of war days per week (Note: even and to the street add
- c. Time limit per a
- d. Sprinkler system maintenance
- Lawn & turf wal exceptions by p
- a. Sod and seed for lawns
- b. Medical hardshi

2013

## Water Shortage Management Action Plan



#### o you respond?

#### Response Level 4

Greater than 30%

Plan

No lawn watering between 10 a.m. to 6 p.m.

ng from 6/1 thru 8/31. 3 restrictions from 9/1 thru 5/31.

ng from 6/1 thru 8/31, se Level 3 restrictions from 9/1 thru 5/31.

llowed only from 9/1 thru 5/31. Minimize water used.

No exceptions

No exceptions







#### **Shortage Scenario:**

- Difficulty treating Poudre River water
- 2. Horsetooth quota was low

#### Response:

Level 1 restrictions declared:

April 1st - June 1st



In 2002 we were in restrictions June-Sept. and reached level 2



## What concerns do you have about facing a future water shortage?

Take a few minutes and write down your thoughts, then discuss with your table



#### Restrictions – reference table

	Response Level 1	Response Level 2	Response Level 3	Response Level 4
Water Supply				
Projected water supply shortage as determined by the City Manager	1-10%	11-20%	21-30%	Greater than 30%
Regulated Water Use Activities	Mandatory			
1. Lawn watering				
a. Non-watering hours	No watering between 10 a.m. to 6 p.m.	No watering between 10 a.m. to 6 p.m.	No watering between 10 a.m. to 6 p.m.	N/A
b. Number of watering days per week	Residential (even) - Th & Sun Residential (odd) -	Residential (even) - Sun	Residential (even) - Sun	
(Note: even and odd refers to the last digit of a street address)	Wed & Sat  Multi-family &  Commercial - Tue &  Fri.	Residential (odd) - Sat Multi-family & Commercial – Fri.	Residential (odd) - Sat Multi-family & Commercial – Fri.	No watering allowed
c. Time limit per day	Unrestricted during watering hours	Unrestricted during watering hours	2 hours during designated watering day	No watering allowed
d. Sprinkler system maintenance	Allowed any time	Allowed any time	Allowed any time	No watering allowed



_		Response Level 1	Response Level 2	Response Level 3	Response Level 4		
	Lawn watering exceptions by permit	All permits	All permits must be displayed so they are visible from the street or sidewalk.				
	a. Sod and seed for new lawns	Water any time of day and any day of the week for a period not to exceed 3 weeks for sod and 4 weeks for seed.	Water any time of day and any day of the week for a period not to exceed 3 weeks for sod and 4 weeks for seed.	No exceptions from 5/15 thru 8/15. Water any time of day and any day of the week for a period not to exceed 3 weeks for sod and 4 weeks for seed that is installed from 8/16 thru 5/14.	No exceptions		
	b. Medical hardship	Special watering schedule to accommodate medical hardship. No watering on Monday and between the hours of 10 a.m. and 6 p.m.	Special watering schedule to accommodate medical hardship. No watering on Monday thru Thursday and between the hours of 10 a.m. and 6 p.m.	Special watering schedule to accommodate medical hardship. No watering on Monday thru Thursday and between the hours of 10 a.m. and 6 p.m. Must comply with 2 hr/week restriction.	No exceptions		
	c. Religious objection	Water on two selected days. No watering on Monday and between the hours of 10 a.m. and 6 p.m.	Water on one selected day. No watering Monday thru Thursday and between the hours of 10 a.m. and 6 p.m.	Water on one selected day. No watering Monday thru Thursday and between the hours of 10 a.m. and 6 p.m. Must comply with 2 bt/week restriction.	No exceptions		



	Response	Response	Response	Response
	Level 1	Level 2	Level 3	Level 4
d. Turf areas of 4 acres or more (excludes areas defined in 2.e)	. Max of 1.00" per week. May select up to 3 watering days. No watering between the hours of 10 a.m. and 6 p.m.	Max of 0.75" per week. May select up to 3 watering days. No watering between the hours of 10 a.m. and 6 p.m.	No exceptions	No exceptions
e. City and school district parks & public athletic/playing fields, golf courses	Max of 1.25" per week. May water any day; no watering between the hours of 10 a.m. and 6 p.m.	Max of 1.00" per week. May water any day; no watering between the hours of 10 a.m. and 6 p.m.	Only for select fields. Max of 0.75" per week. May water any day; no watering between the hours of 10 a.m. and 6 p.m.	No exceptions
f. Well or raw water	Sign required,	Sign required,	Sign required,	Sign required,
	registration	registration	registration	registration
	recommended.	recommended.	recommended.	recommended.



	Response Level 1	Response Level 2	Response Level 3	Response Level 4
Turf installation for new commercial construction	Must apply for new seed/sod permit or request temporary CO.	Must apply for new seed/sod permit or request temporary	No turf installation from 5/15 thru 8/15. Must apply for new seed/sod permit or request temporary CO.	No turf installation. Temporary CO will be allowed.
5 Landscape watering	May be watered by sprinkler on any day, other than between 10 a.m. and 6 p.m., and by hand or by drip system at any time.	May be watered by sprinkler on any day, other than between 10 a.m. and 6 p.m., and by hand or by drip system at any time.	May be watered only by hand, or drip system at any time.	Not allowed
6. Trees	May be watered by sprinkler on any day, other than between 10 a.m. and 6 p.m., and by hand, drip system or deep root fork or needle at any time.	May be watered by sprinkler on any day, other than between 10 a.m. and 6 p.m., and by hand, drip system or deep root fork or needle at any time.	May be watered only by hand, drip system or deep root fork or needle at any time.	May be watered only by hand, drip system or deep root fork or needle at any time.
7. Food production	May be watered by sprinkler on any day, other than between 10 a.m. and 6 p.m., and by hand or by drip system at any time.	May be watered by sprinkler on any day, other than between 10 a.m. and 6 p.m., and by hand or by drip system at any time.	May be watered only by hand, or drip system at any time.	May be watered only by hand, or drip system at any time.



			Response Level 1	Response Level 2	Response Level 3	Response Level 4
	8.	Vehicle washing at home	Must use shutoff nozzle.	Must use shutoff nozzle.	Not allowed from 6/1 thru 8/31. Shutoff nozzle 9/1 thru 5/31.	Not allowed
	9.	City fleet vehicle washing	Once per week or as approved by the City Manager for health or safety reasons.	Once per month or as approved by the City Manager for health or safety reasons.	Not allowed unless approved by the City Manager for health or safety reasons.	Not allowed unless approved by the City Manager for health or safety reasons.
	10.	Dealership vehicle washing	Once per week	Once per week	Upon sale	Upon sale
	11.	Spraying impervious surfaces (siding, garages, sidewalks, driveways, patios)	Not allowed, except for essential powerwashing.	Not allowed, except for essential powerwashing.	Not allowed, except for essential powerwashing.	Not allowed, except for essential powerwashing.
_	12.	Hydrant flushing & testing	Limited to critical situations as approved by the Utilities Executive Director.	Limited to critical situations as approved by the Utilities Executive Director.	Limited to critical situations as approved by the Utilities Executive Director	Limited to critical situations as approved by the Utilities Executive Director
	13.	Water feature	Unrestricted	No use allowed	No use allowed	No use allowed
	14.	Splash park	Unrestricted	Unrestricted	No use allowed	No use allowed
	15.	Outdoor swimming pool	Unrestricted	Unrestricted	Unrestricted	Unrestricted, if filled before date restrictions were implemented. No filling of empty pools.



	Response Level 1	Response Level 2	Response Level 3	Response Level 4
rcement				
Residential fines r violation	\$50 to \$1,000	\$50 to \$1,000	\$100 to \$1,000	\$100 to \$1,000
Non-residential fines per violation	\$250 to \$1,000	\$250 to \$1,000	\$500 to \$1,000	\$500 to \$1,000
Water Rate Adjustments				
Adjust water rates	No adjustment	15% increase in all current water rates.	25% increase in all current water rates.	35% increase in all current water rates.
Adjust Excess Water Use Surcharge	No adjustment	15% increase in surcharge	15% increase in surcharge	15% increase in surcharge



## What ideas do you have for changes that might improve restrictions and still save water?

(Restrictions table provided)

Take a few minutes and write down your thoughts, then discuss with your table







Water budgets, instead of prescribed restrictions



Voluntary response level



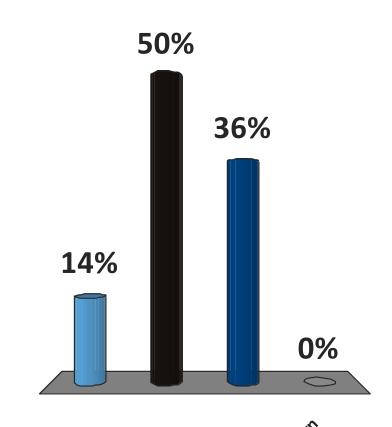
Year-round watering schedule (outside of water shortage plan)



Partner with other water districts and water users to align restrictions and response plans

# Should water budgets be used to address indoor water use at higher response levels?

- **A. No**, no amount of indoor water should ever be restricted
- **B. Maybe**, under certain circumstances this may be warranted
- C. Yes, if the shortage is severe enough and to allow for flexibility
- D. Unknown



## Do you think a voluntary response level would be effective?

13% A. No

60% B. Maybe

27% C. Yes

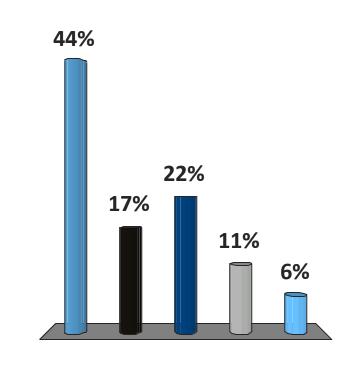
0% D. Unknown

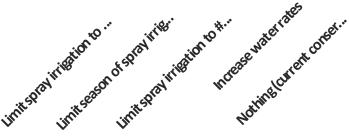
# Would your business reduce use during a voluntary response level?

- 14% A. No
- 14% B. Maybe
- 71% C. Yes
- 0% D. Unknown

# What more could we be doing during years when we don't have a water shortage? (select all that apply)

- A. Limit spray irrigation to time of day (ex: no watering 10am-6pm)
- B. Limit season of spray irrigation (ex: April-Oct only)
- C. Limit spray irrigation to # of days/week (ex: M, W, F)
- D. Increase water rates
- E. Nothing (current conservation and efficiency is adequate)





# Should Fort Collins Utilities Partner with other water districts and water users to align shortage responses and restrictions?

15% A. No

B. Maybe

85% C. Yes

0% D. Unknown





What thoughts do you have on any of the proposed changes?

Take a few minutes and write down your thoughts, then discuss with your table



Estes Park | Fort Collins | Longmont | Loveland



### **Identify Project**



# Apply for Rebate



Save water and money!

#### **Possible Projects**

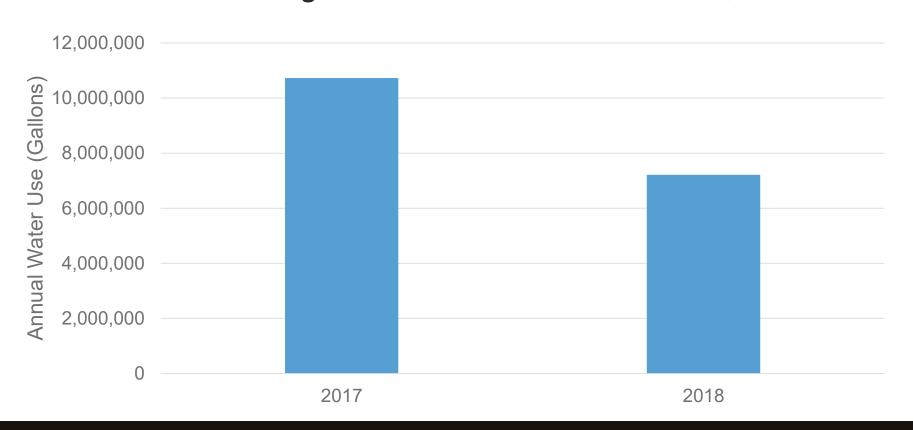
- Toilet Projects (up to \$100 per toilet)
- Urinals (up to \$100 per urinal)
- Appliances
- Mid-stream landscape rebates
- Custom Project (\$10 per 1,000 gallons saved annually)

### **Case Study**

Replaced 508 Toilets

Rebate amount: \$38,100 (~25% of project cost)

2017 – 2018 Savings: 3.5 Million Gallons\* or \$21,000







What other programs or rebates would you like to see offered or are other ways Utilities or Efficiency Works might be able to support your business?

Take a few minutes and write down your thoughts, then discuss with your table



### QUESTIONS?

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