

# The “Poudre River Option” Would BENEFIT Larimer County 😊!







## *Mission: Protect and Restore the Cache la Poudre River*

- Founded in 2004, to address threats to the Poudre River.
- Representing about 1,000 members in northern Colorado. (the majority of which sent you an email)
- Our Thornton Water Project Program is a 1-in 100 years opportunity to restore the Poudre.

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# Our Thornton Water Project Program

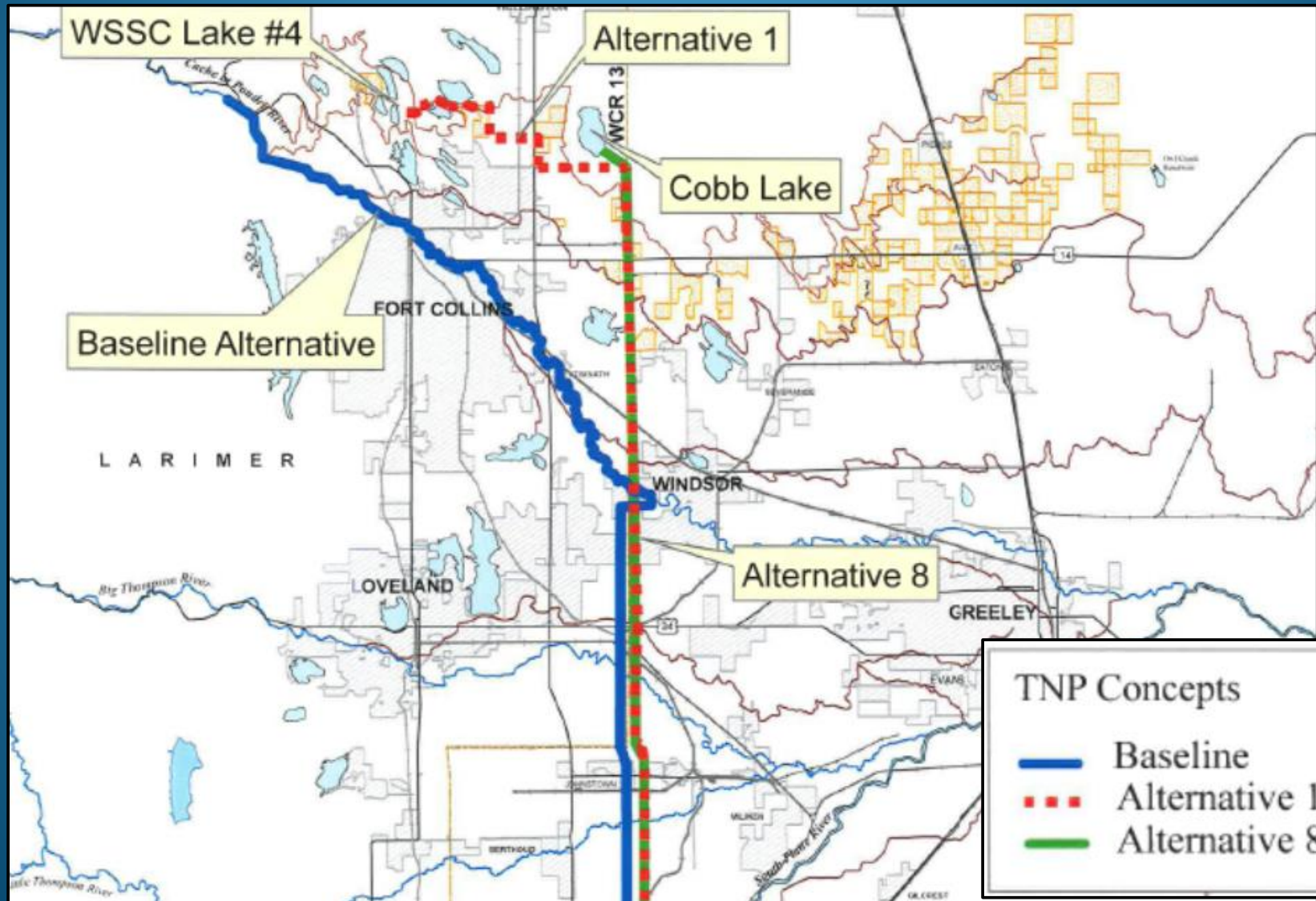
- Started in 2008 when Thornton proposed the “Poudre River Option”.
- Met with staff from the City of Thornton on December 6, 2010.
- Continued to communicate to Thornton over the last decade.
- Thornton has known for at least 11 years (2008 – 2019) that this is big and controversial issue in Larimer County.
- Thornton has also known for 9 years that they would be celebrated by the Fort Collins community if they chose the Poudre River Option.



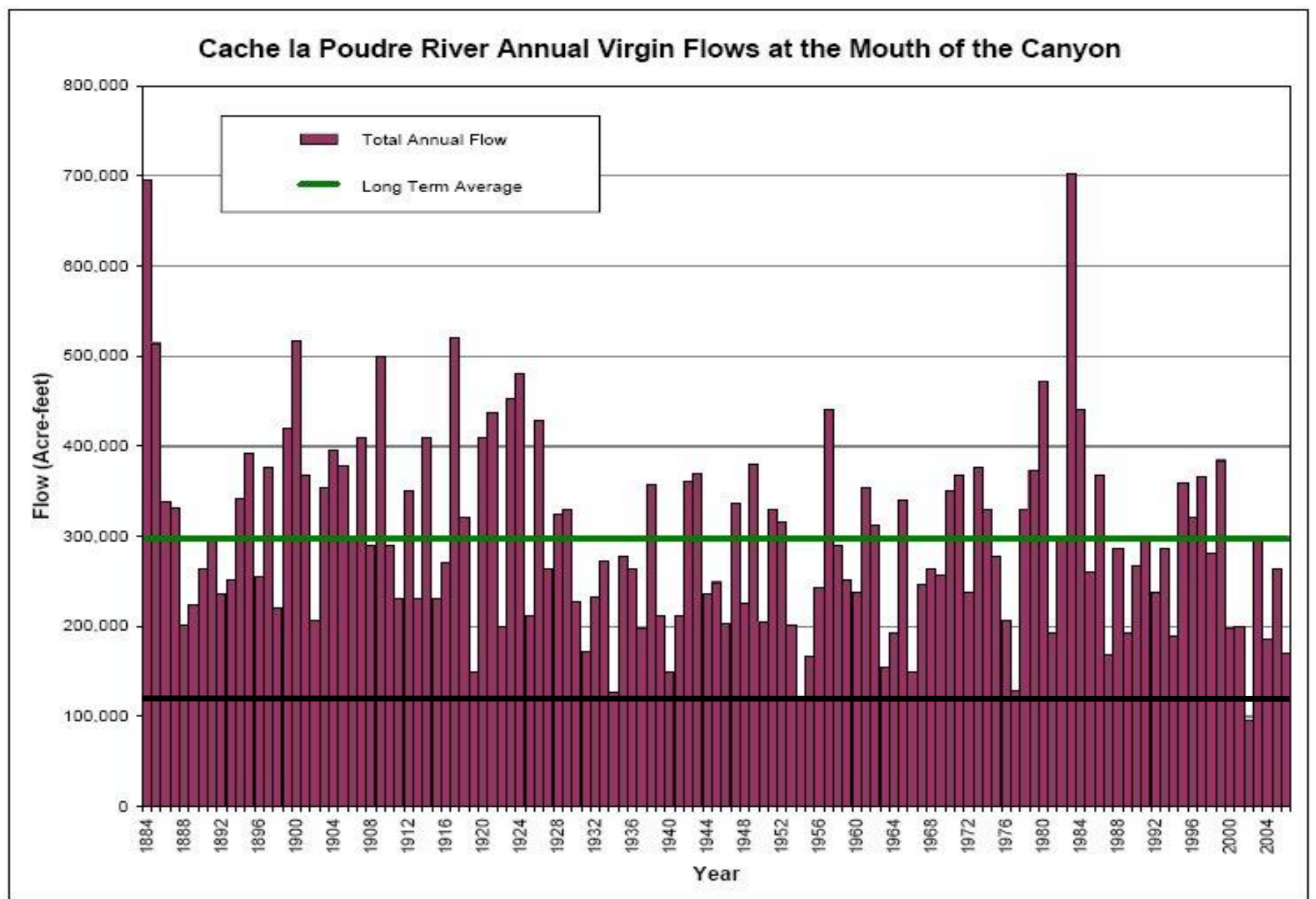


# Thornton's "Baseline" Alternative: The Poudre River Option

\$100 million cheaper for construction

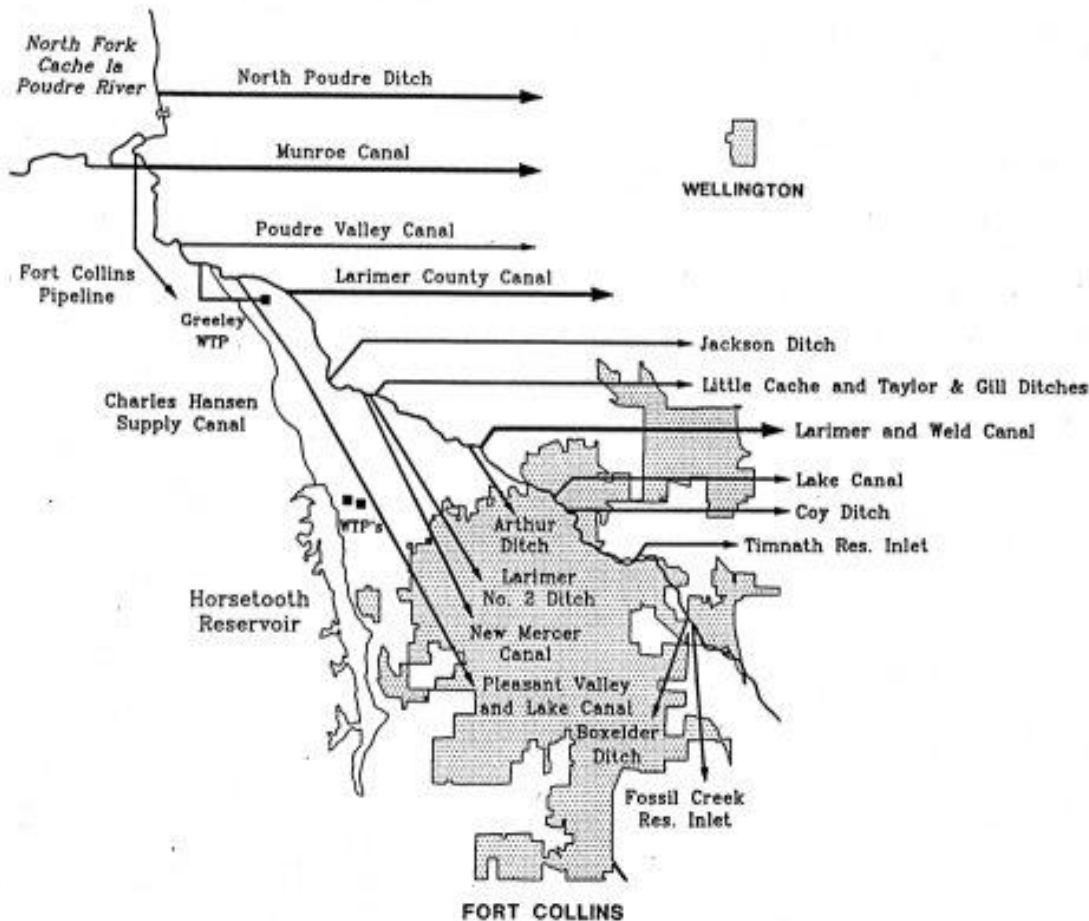


# Why Did We Dig In Our Heels?



# Why Did We Dig In Our Heels?

## POUDRE RIVER DIVERSIONS



- 12 diversions before the river reaches downtown.
- 63% of the native flow is diverted out before the river reaches downtown.
- These diversions cause significant problems for the river's health



# The City of Fort Collins Poudre River Health Report Card

C

OVERALL  
GRADE

## STATE of the POUDRE

A River Health Report Card

The purpose of the River Health Report Card is to provide a description of the current health of the Poudre River from approximately Gateway Natural Area to I-25. This Report Card provides the City of Fort Collins with a new tool to benchmark progress towards its vision of sustaining a healthy and resilient Cache la Poudre River.

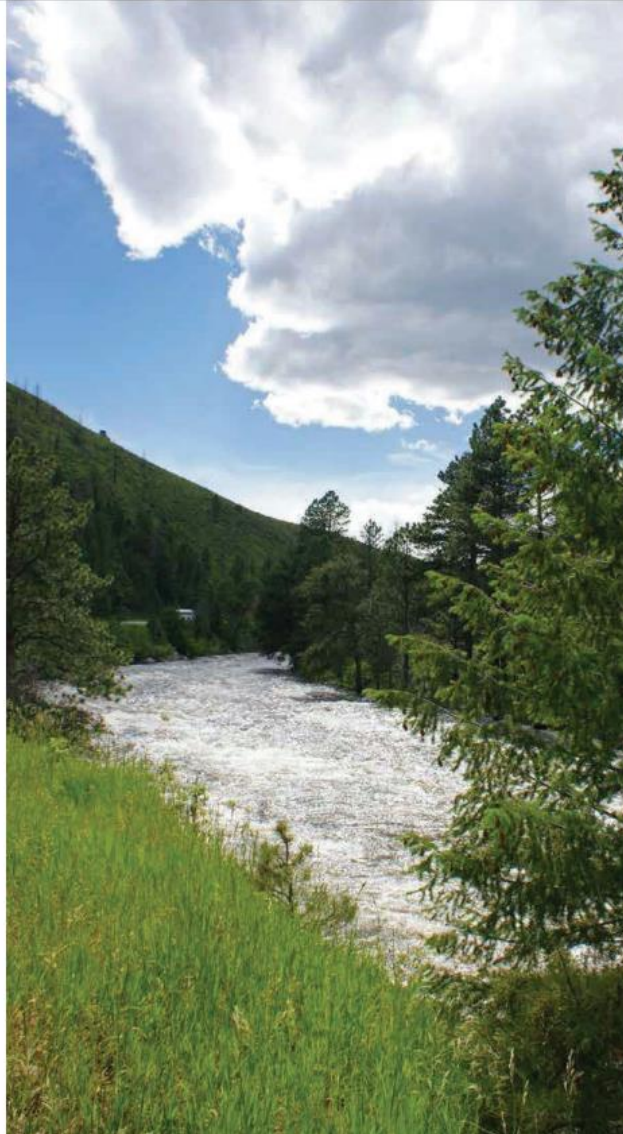
The Cache la Poudre River (Poudre) is a complex natural system that has been altered by nearly two centuries of human use. This has resulted in dramatic changes to water quantity and quality, the physical structure of the river, floodplain, forests, and wildlife communities associated with it. The human footprint continues to expand, placing additional pressure (or stresses) on the river ecosystem and the natural processes that sustain it.

### OVERALL GRADE

For the study area the Poudre River received an overall grade of C. This grade indicates that even though the Poudre has been altered and degraded by a suite of local and system wide stresses that impair its health, it continues to support basic elements of a functioning river ecosystem.

### APPROACH

While the Poudre flows 126 miles from its headwaters to its confluence with the South Platte near Greeley this study focuses on a 24-mile reach from the lower canyon through Fort Collins. Six key indicator groups are informed by metrics, the measurable elements of the system. Metrics grades are developed by collecting and incorporating many types of data and then translated into an A-F grading system.



### SIX KEY INDICATORS GROUPS

were used to evaluate river health.



#### FLOWS

River flows are the primary driver of river health. Runoff from snowmelt brings high flows in spring and early summer. These high flows refresh the riverbed for fish, scour away algae, and provide water to riverside vegetation. Base flows are low flows that occur throughout the rest of the year and sustain basic needs for life in the river. Understanding fluctuation of flows (how quickly flow volumes change over short time periods) is important as this can create unnatural and challenging conditions for fish and insects.



#### SEDIMENT

Sediment includes soil, sand, and rock that are washed from watershed slopes and the riverbanks into and down the river. A natural component of all rivers, too much or too little can cause imbalances in the river's physical processes. An imbalance of sediment can affect fish and insect populations as well as the capacity of the river channel to convey large floods.



#### RIVER CHANNEL

The shape of the river's winding path, its width and depth, and the presence of finer in-stream habitats across faster and slower moving waters influence this indicator group. The river's response, or resilience, to natural disturbances (such as floods or drought) is closely linked to the condition of its physical setting.



#### WATER QUALITY

This is the chemical ability of water to support life, including the plants and animals that live in and depend on it including humans. Dissolved oxygen and temperature are critical factors controlling which types of organisms can live there. While nutrients are necessary to support aquatic life, excessive levels can degrade water quality and cause algal blooms, decreased clarity, and bad odor.



#### AQUATIC LIFE

Introduced, non-native trout are prized for their recreational values while small bodied native fish are valued as a central element of a healthy Poudre River. Aquatic insects (insects that live part of their life on the river bottom) are an essential part of the river system and form the base of the food chain. The upstream-downstream connectivity of river habitats is a critically important component of this indicator.



#### RIPARIAN CORRIDOR

The interaction of land and water results in beautiful riverside forests, wetlands, and grasslands. Also, a healthy river-floodplain connection protects us in larger flood events because the river can access its floodplain. Valued as critical habitat for the majority of terrestrial wildlife, the riparian corridor supports river health by slowing floodwaters, filtering pollutants, and forming habitats for many animals closely tied to or dependent on the river itself.

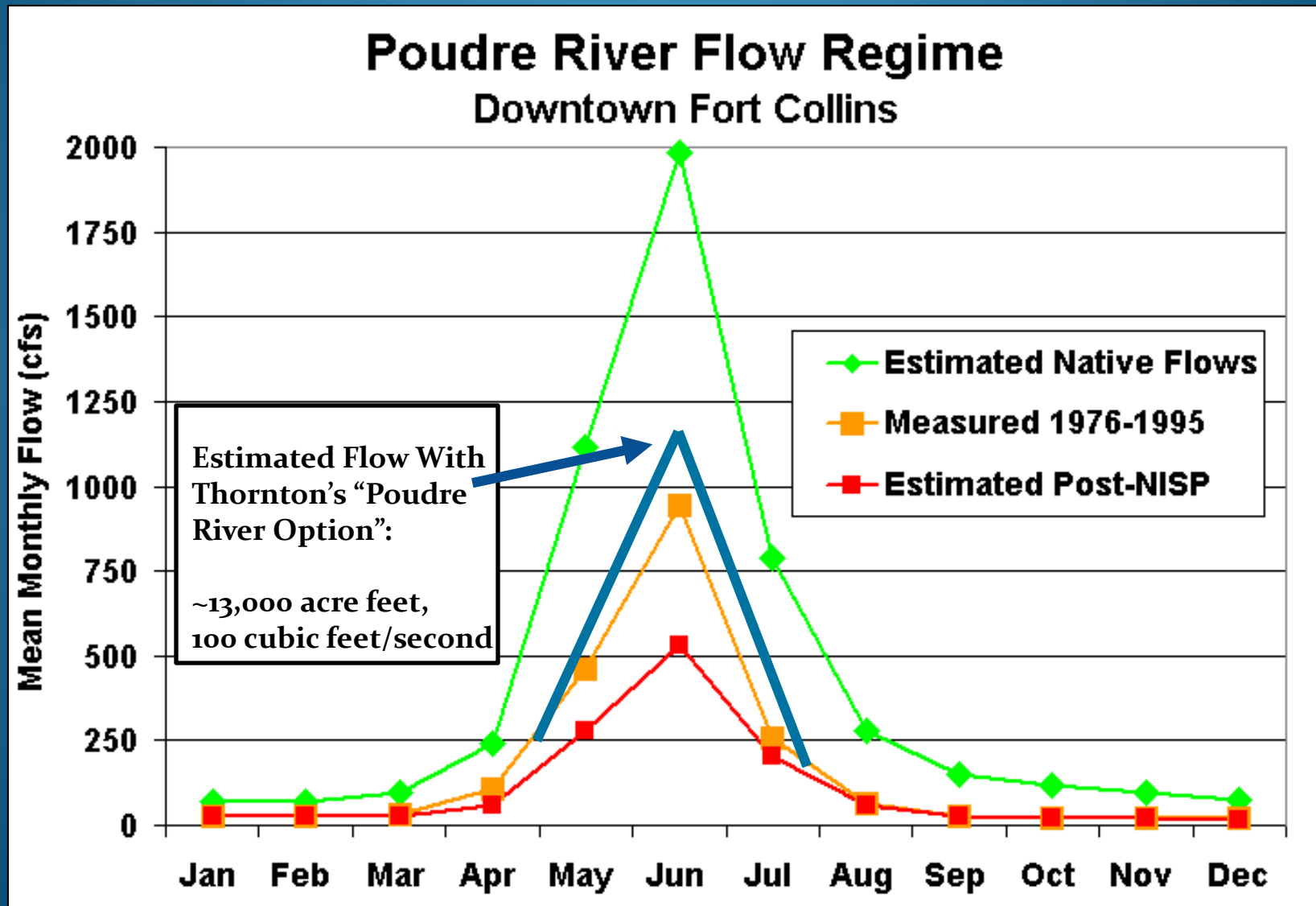
# The City of Fort Collins Poudre River Report Card – Bad Grade in Fort Collins

**Table 4.1: Summary of river health indicator scores and letter grades organized by zones and reaches.** Numerical scores are provided to illustrate the often subtle differences in the condition of health indicators. The assessment framework for the Poudre River uses a straight academic grading scale, where 90 and greater is an A grade, 80 and greater a B grade and so on. Letter grades are indicated through color coding. A key is presented below the table.

Zone	Canyon			Rural			Urban						Plains					
Reach	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Flow Regime	77	75	75	74	74	73	73	72	72	72	69	69	69	69	69	70	77	77
Sediment Regime	91	84	84	83	82	81	83	82	81	79	79	80	79	79	79	79	79	79
Water Quality	88	77	77	77	87	87	87	87	89	89	89	89	88	88	88	86	83	83
Floodplain Connectivity	78	82	85	74	65	85	62	61	87	50	67	73	70	77	50	98	82	71
Riparian Condition	85	87	85	77	73	74	64	69	76	63	65	70	71	73	70	76	71	68
River Form	82	74	72	79	68	78	67	74	76	70	78	74	75	77	67	74	75	69
Resilience	82	79	76	79	75	76	67	77	78	69	79	77	74	75	71	76	74	68
Physical Structure	76	74	71	82	72	79	66	77	79	77	81	70	77	76	63	74	74	69
Aquatic Life	80	81	78	76	76	76	77	78	72	74	79	79	85	85	85	78	78	78
River Health	82	79	78	77	74	78	70	74	78	70	74	74	75	76	70	78	76	73
	80			76			74						75					



# Poudre River Option Would Add Significant New Water to the Poudre River in Fort Collins



# Seven Positive Impacts of Adding Thornton's Peak Flow Water to the Poudre River

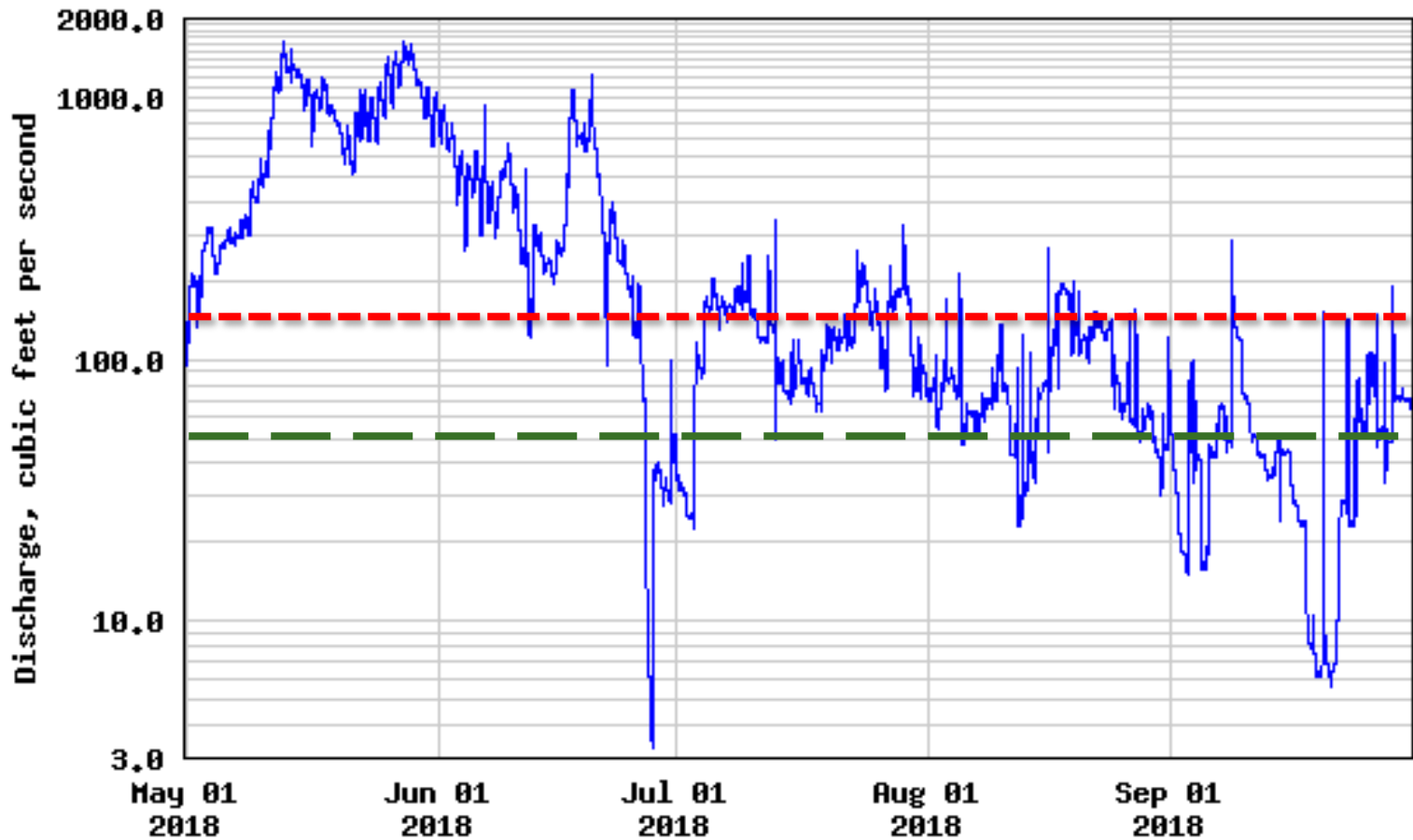
1. Water quality is improved with the addition of cooler, cleaner water.
2. Cooler, cleaner water is better for fish.
3. Helps flushes sediment and mud out of the river channel.
4. Less algae growth and slime on the river bottom.
5. Helps the riparian forest – wetlands, cottonwoods, willows – to flourish.
6. Helps recreational opportunity, including the new Whitewater Park, to flourish.
7. More Beautiful!



# Recreation on the Poudre in Fort Collins: 150 cfs needed to tube through town



USGS 06752260 CACHE LA POUFRE RIVER AT FORT COLLINS, CO



----- Provisional Data Subject to Revision -----

# Health of the Riparian Corridor: Forest, Wetlands, Floodplain = D+





Beauty!





# It's A River, Not A Ditch

## The Poudre River Option:

- 13,000 acre feet
- 100 cubic feet per second for 65 days
- Adds to peak flows
- Guaranteed

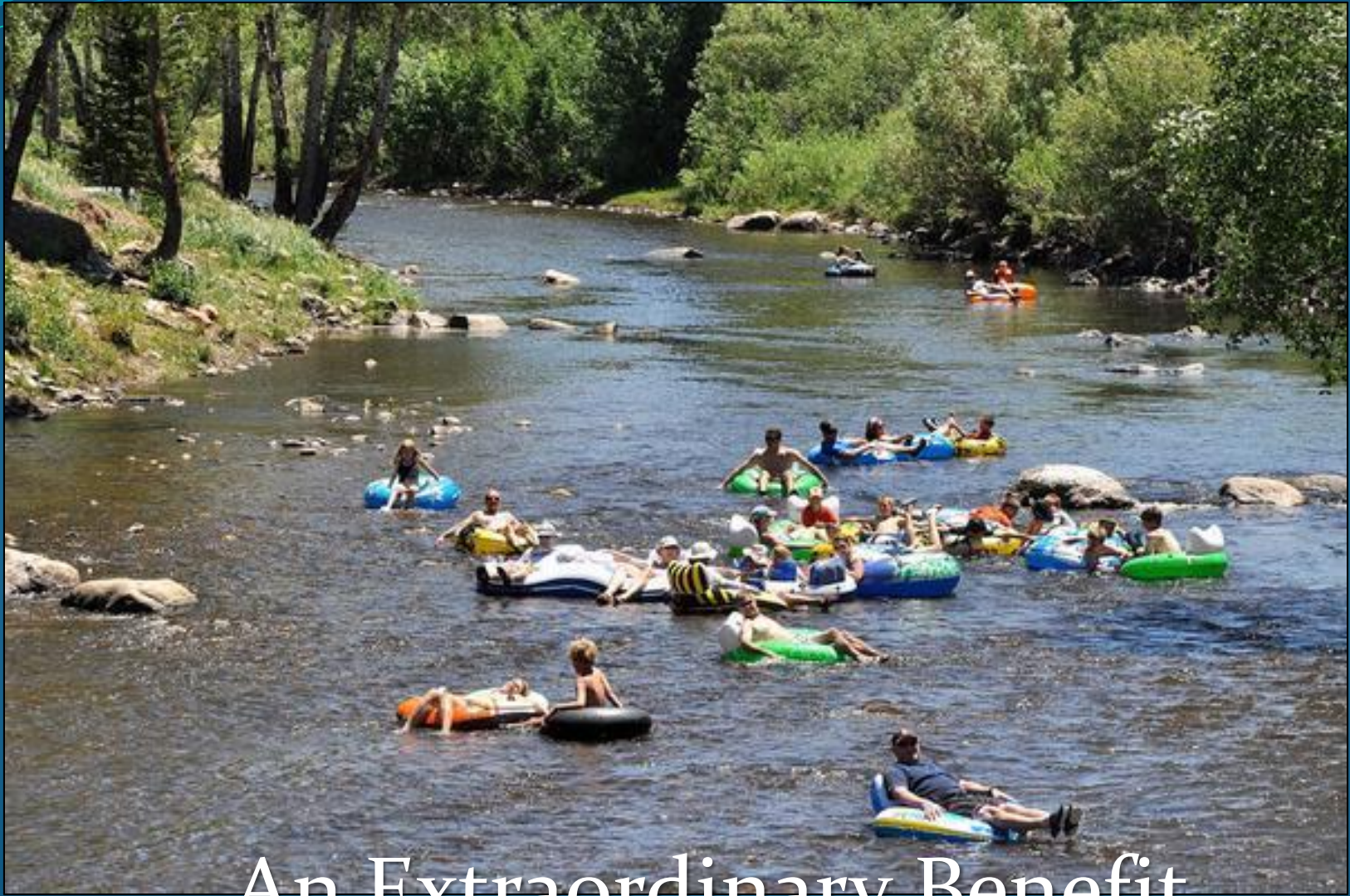


## Thornton's Current Proposal:

- “Up to 3,000 acre feet”
- “Up to” about 4.1 cubic feet per second
- Perhaps everyday, all year
- Vague on location, timing, amount, commitment, measurement, enforceability
- A channel with a small, steady year-round flow is a ditch, not a river in Colorado



# The Poudre River Option:



An Extraordinary Benefit  
as required by the 1041 criteria.