March 15, 2023

Halligan Water Supply Project: Overview for Parks and Wildlife Commission

Presented by:

Donnie Dustin, P.E.

Water Resources Engineer

City of Fort Collins

- Overview of Halligan Water Supply Project
  - Prepare for FWMEP in May/June
- Fort Collins Utilities Background
- Halligan Project Background
- Status of Permitting and Design
- Questions

Cache la Poudre River

Colorado-Big Thompson Project (CBT) via Horsetooth Reservoir

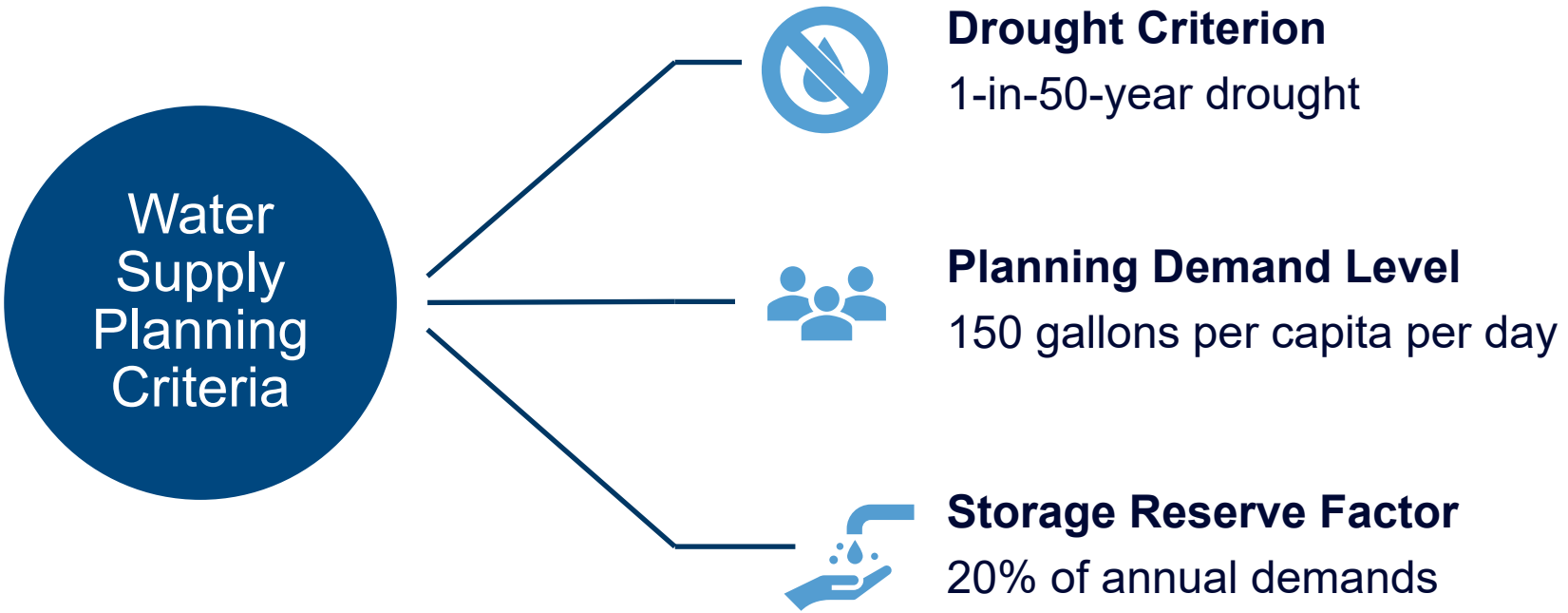
~50/50 split between sources

City Strategic Plan

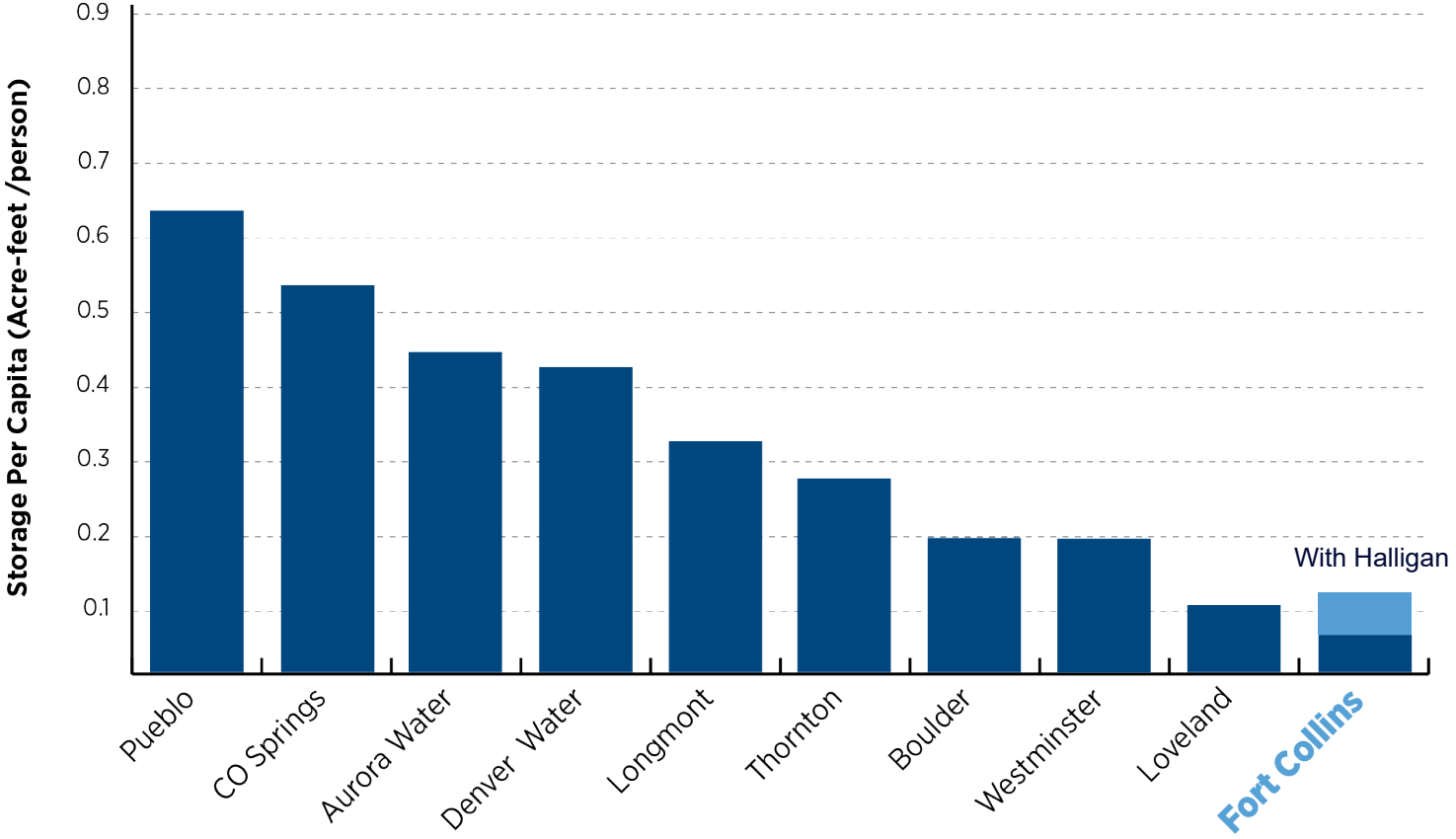
Policy

Water Supply & Demand Management Policy

- Doing more with less
  - ~30% reduction in 20+ years
- Reduces capital expansion projects and certain operational costs
- Prepare for potential impacts of climate change

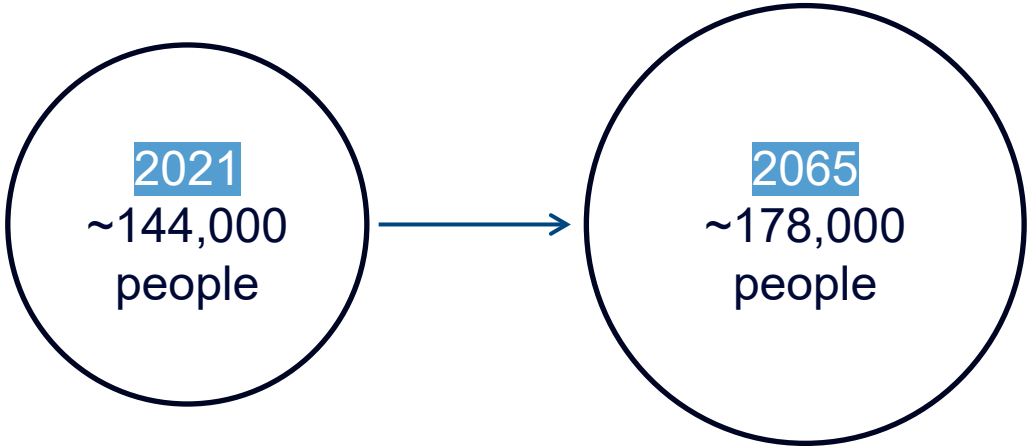

Water Supply Planning Criteria
Drought Criterion
1-in-50-year drought
Planning Demand Level
150 gallons per capita per day
Storage Reserve Factor
20% of annual demands

Storage Available to Provider

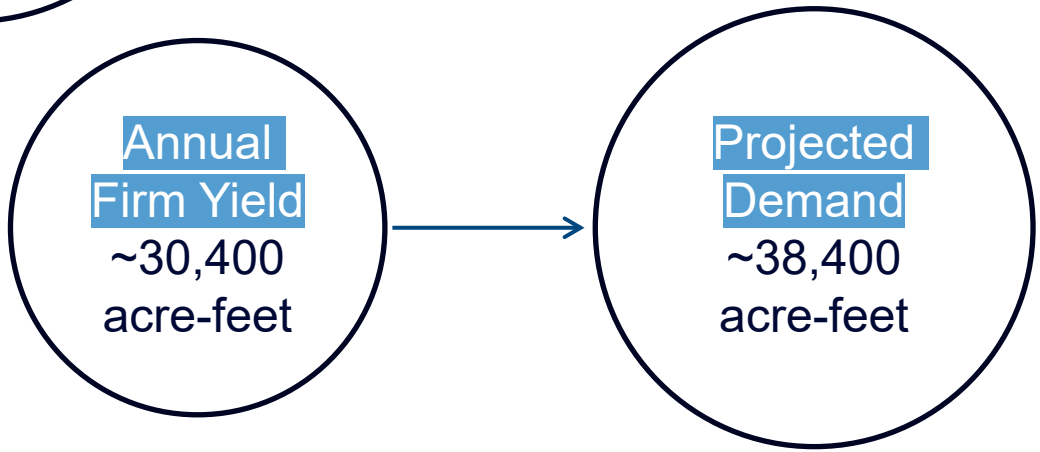


To provide additional system firm yield for Fort Collins in order to satisfy an additional need of approximately 7,900 acre-feet per year to meet its projected 2065 municipal and industrial demands with water of a quality comparable to the water now delivered to its customers.

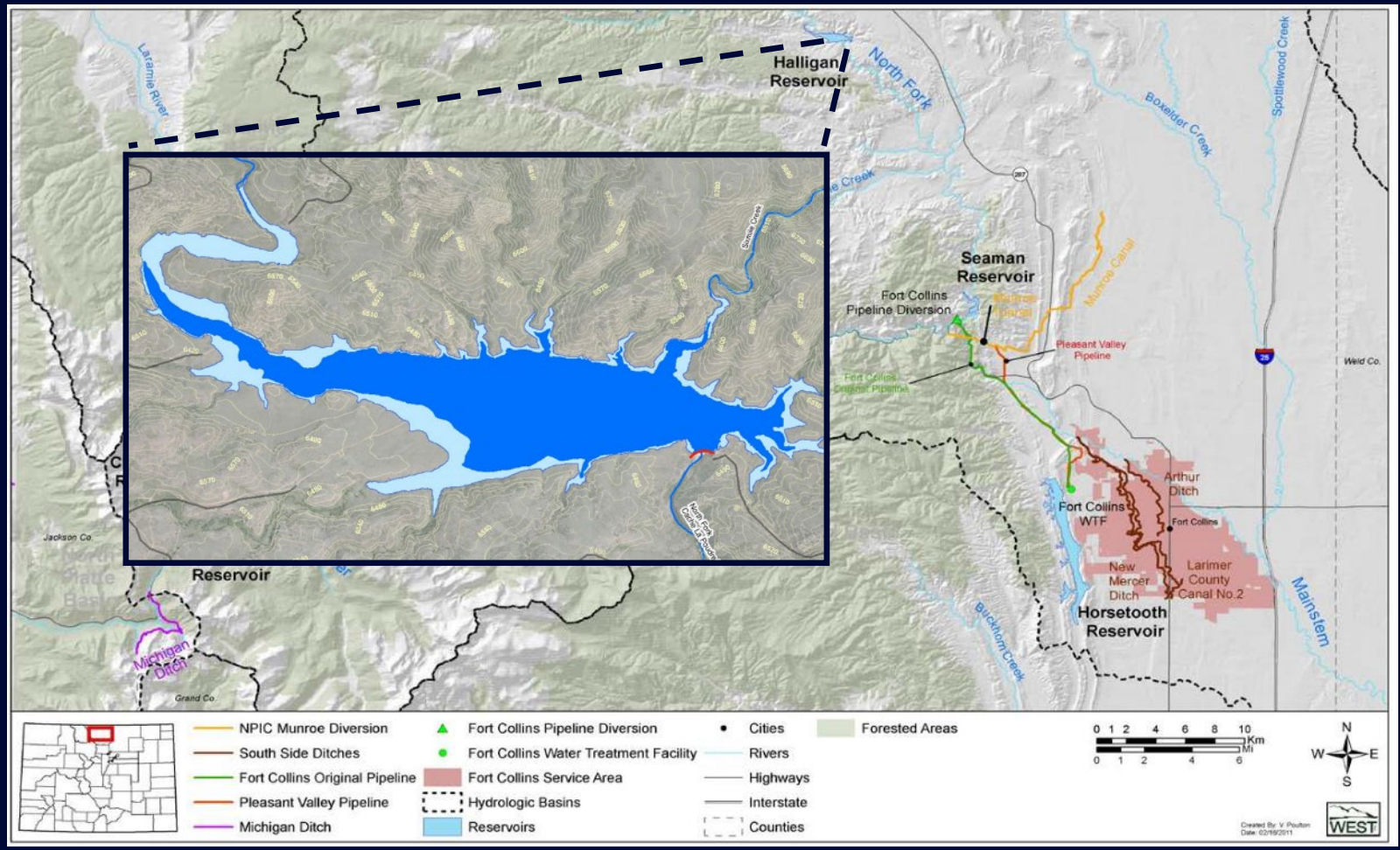
Section 1.4.4, Halligan Water Supply Project Draft Environmental Impact Statement, November 2019

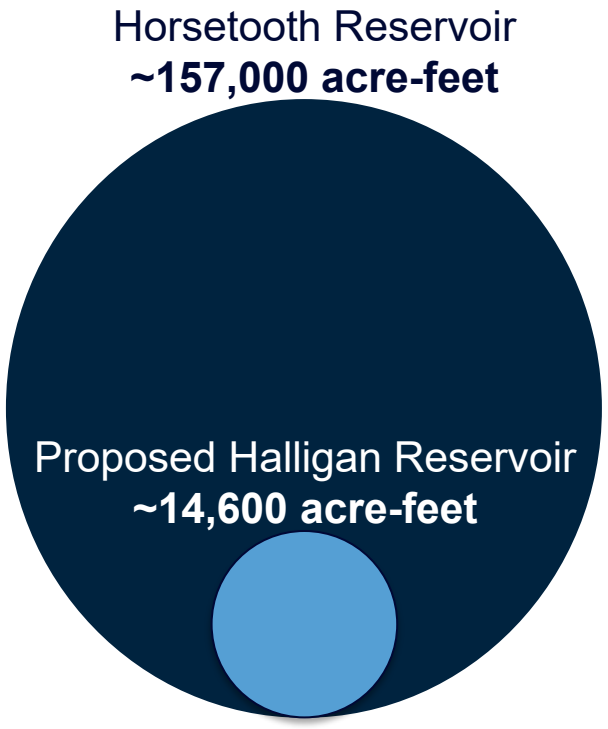


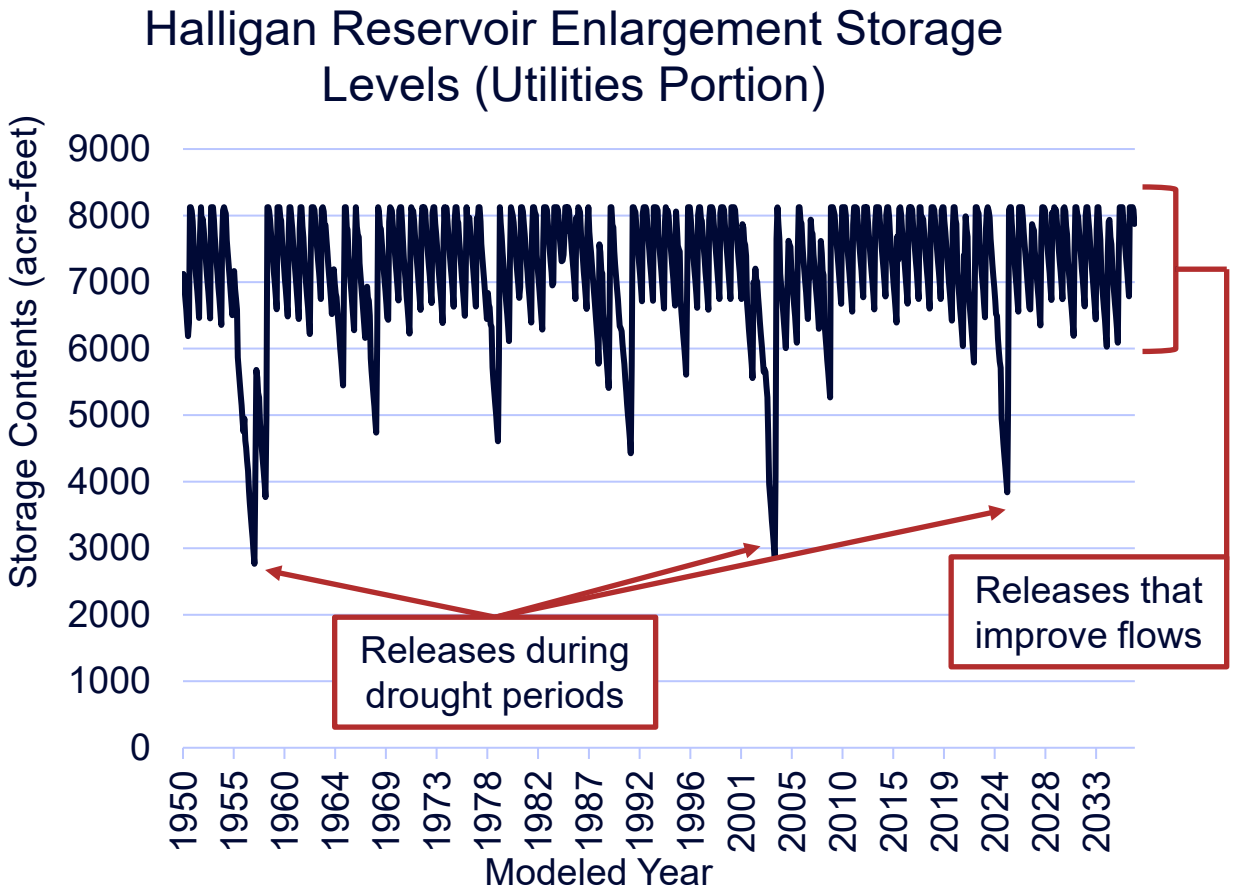
Includes large contractual use increases (e.g., breweries, manufacturing)



Halligan Reservoir Enlargement




Horsetooth Reservoir
~157,000 acre-feet
Proposed Halligan Reservoir
~14,600 acre-feet


Halligan Reservoir Enlargement Storage Levels (Utilities Portion)
Storage Contents (acre-feet)
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
1950
1955
1960
1964
1969
1973
1978
1982
1987
1992
1996
2001
2005
2010
2015
2019
2024
2028
2033
Modeled Year
Releases during drought periods
Releases that improve flows

Why Halligan?

Provides a safe, reliable water supply.

Replaces an aging dam.

Year-round flows on the North Fork leading to fishery and habitat improvements.

Uses existing reservoir instead of building a new one.

Gravity-fed –no energy or greenhouse gas emissions.

Most cost-effective option to meet needs.

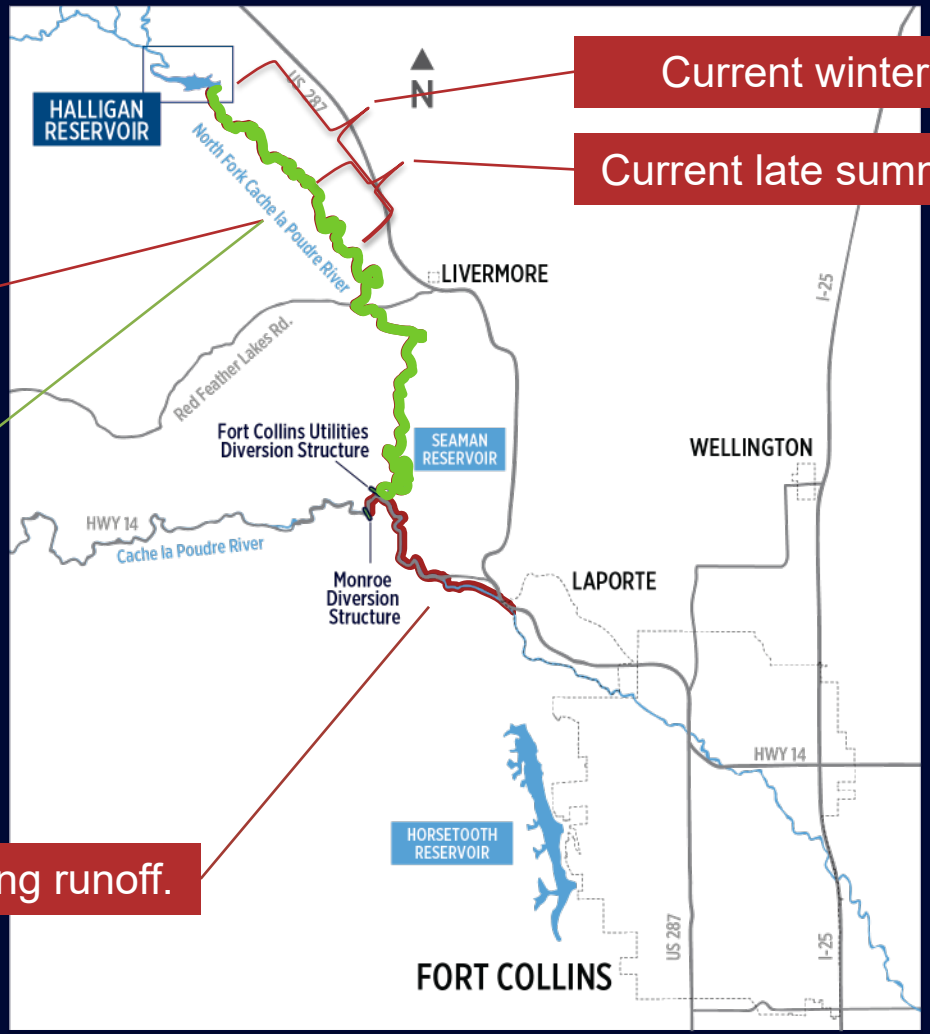
- Inundation of wetlands
- Upstream inundation of ¾-mile stream channel
- Wildlife habitat
- Construction
- Changes in river flows

River Impacts

Slight decrease in flows during spring runoff.

Most months, operations would increase flows.

Slight decrease in flows during spring runoff.



- Ensures year-round flows on North Fork
    - Winter & summer release plans (3-5 cfs)
- Enables fish passage
- Improves water temperatures

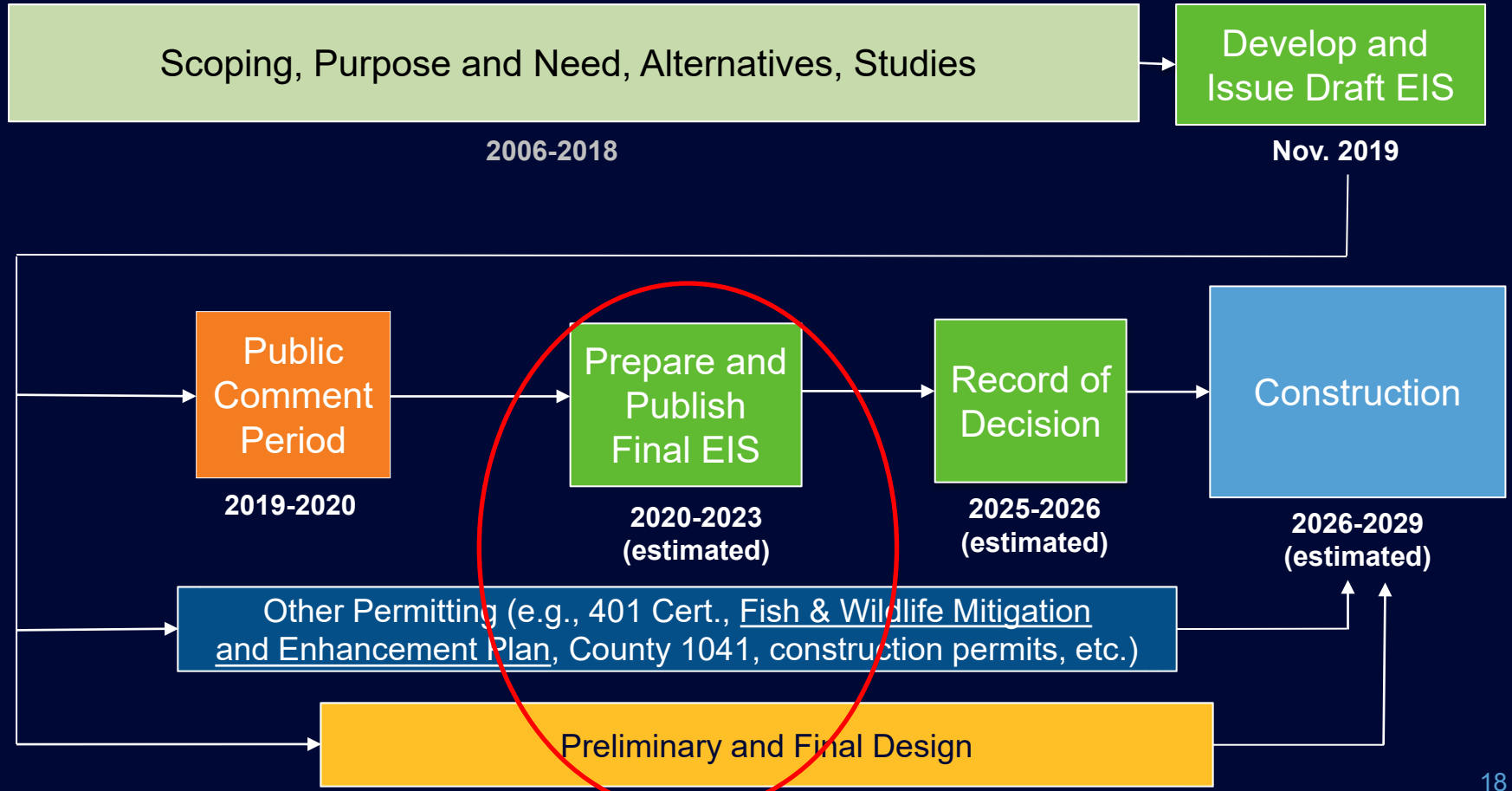
Mitigation Guiding Principles

- Areas Near Halligan
- Degraded Resources
- Local Partnership
- Holistic Approach

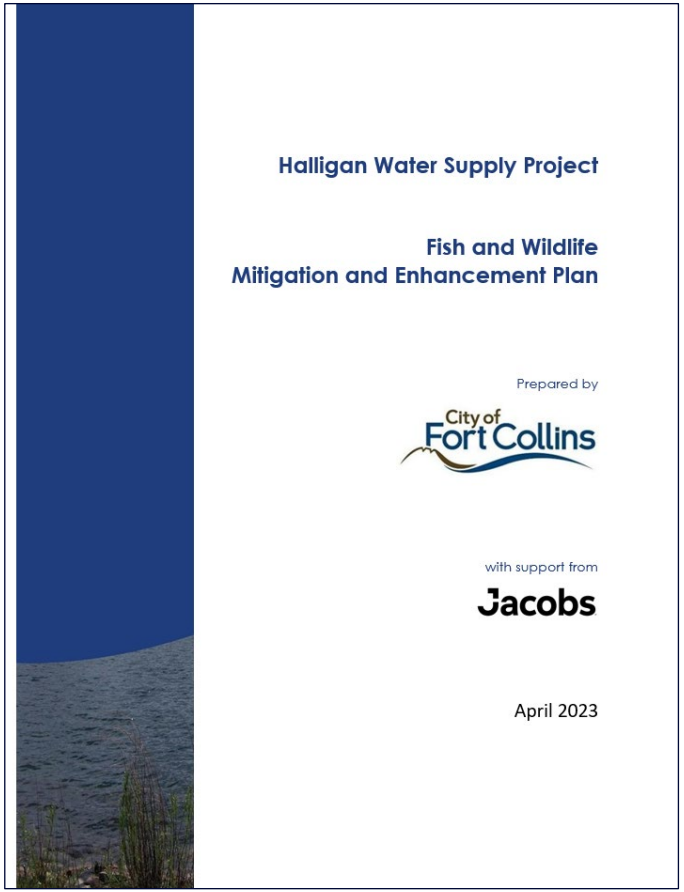
Current periodic river conditions

Proposed river conditions

Permitting Schedule



- FWMEP submitted in mid-April
- Public outreach on FWMEP in late-April
- 1st PWC Meeting in early May
- 2nd PWC Meeting in late June



QUESTIONS?

fcgov.com/halligan

HALLIGAN WATER SUPPLY PROJECT

City of Fort Collins Utilities