

The Thornton Water Project

Larimer County Planning Commission
Hearing

May 16, 2018

City of Thornton

Mark Koleber/Thornton Water Project Director



Project Overview

Source water acquired in mid-1980's:

- Water Supply and Storage Company (WSSC)
- Jackson Ditch Company

No change in point of diversion from the Poudre River

Approximately 75 mile pipeline to Thornton's Treatment Plants



Mission, Vision, Values and Guiding Principles for the Thornton Water Project

Set by City Council in November 2014:

- Open communication
- Collaboration with communities, property owners, public officials
- Good Neighbor/Good Steward commitment

Thornton Water Project Purpose and Need

The Thornton Water Project will deliver water owned by the city since the mid-1980's to:

- Enhance Thornton's water supply reliability and drought resiliency
- Help address source water quality issues
- Meet municipal demands in the city through 2065

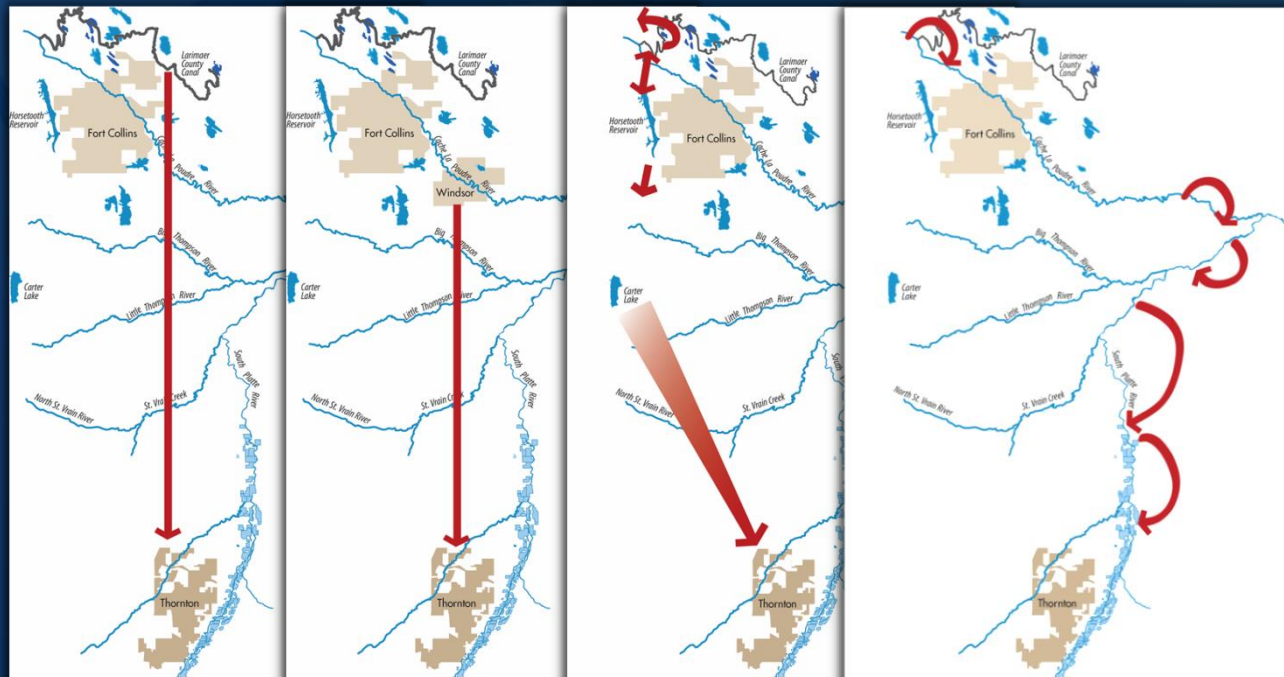
Planning for the Project

- Delivery Concept Evaluation – Evaluated at a high-level 4 project delivery concepts
- Corridor Evaluation – Evaluated 4 corridor alternatives for the preferred delivery concept
- Corridor Refinement – Evaluated 10 alternative configurations to refine the corridor
- Douglas Road Alignment – Performed detailed survey and ROW investigation to confirm Douglas Road alignment

Delivery Concept Evaluation

Delivery Concepts:

- Pipeline from WSSC Reservoirs to Thornton
- Pipeline from lower on the Poudre River to Thornton
- Colorado Big Thompson System Exchange/Deliveries
- River Exchange up the South Platte River



Delivery Concept Evaluation

Pipeline from WSSC Reservoirs is the only alternative that can meet the purpose and need to deliver the needed amount, in the required timeframe, and preserve the quality of the water.

Additional Pipeline Considerations

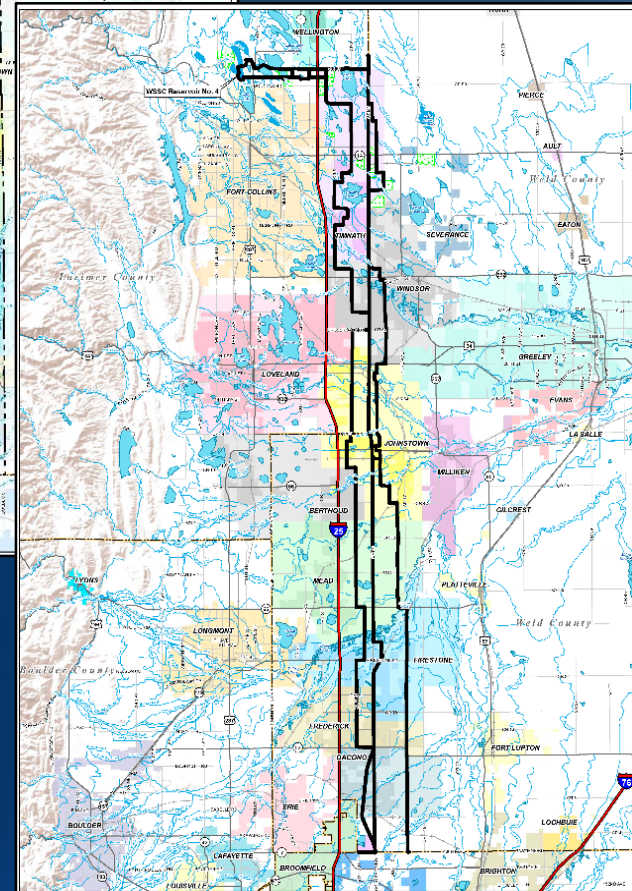
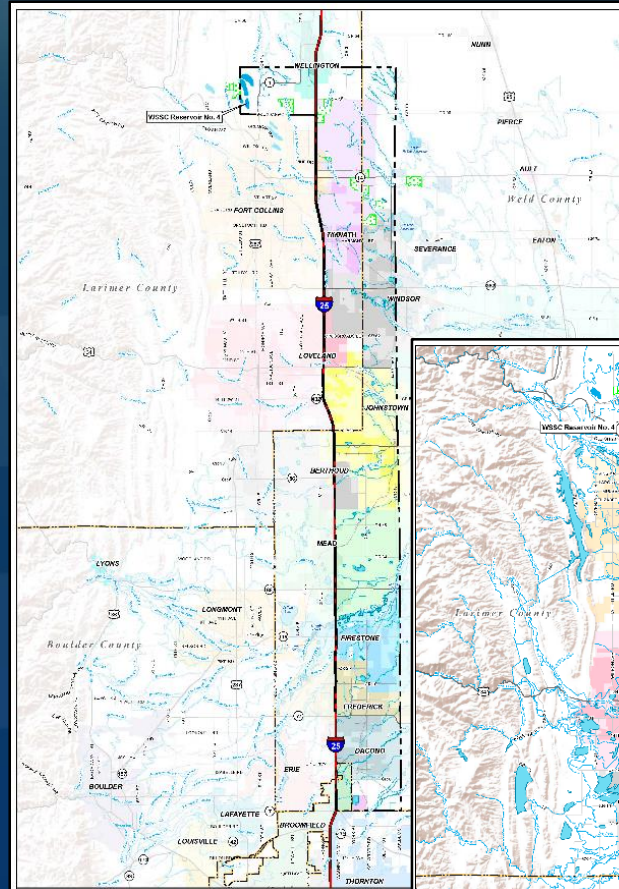
- Decree only allows diversion at Larimer County Canal
- Use of existing WSSC reservoir storage capacity
- Diversion from a Water Supply classified stream segment
- Avoid water loss associated with running water down the river
- Diversions from the Poudre continue as they have for the past 100+ years

Outreach – Corridor Identification

- Larimer County staff
- Weld County staff
- Cities of Fort Collins, Loveland, Greeley, Dacono
- Towns of Timnath, Windsor, Wellington, Johnstown, Mead, Milliken, Berthoud, Frederick, Firestone
- Utility companies and districts
- CDOT, Corps of Engineers

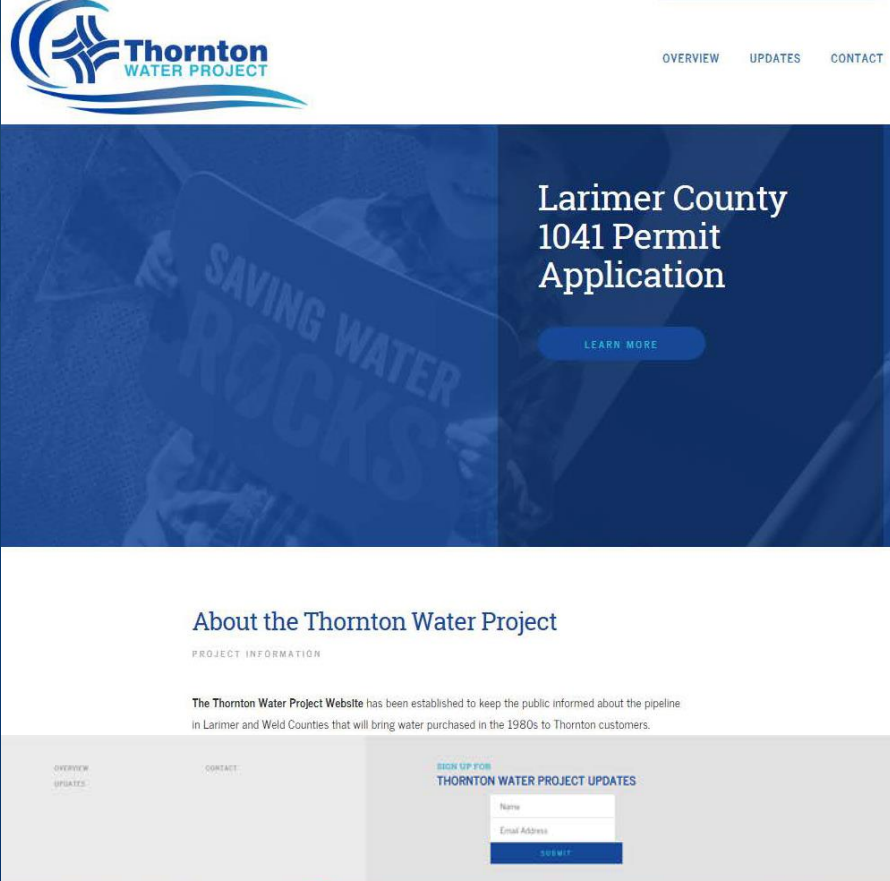
Initial Corridor Evaluation

- An evaluation area that met the preferred delivery concept was presented to local governments.
- Four ¼-mile wide alternative corridors were developed based on input from local governments.
- An alternative analysis determined an initial preferred corridor.



Digital Public Outreach

- www.ThorntonWaterProject.com
- info@ThorntonWaterProject.com
- 720-977-6700
- E-newsletter



The screenshot displays the Thornton Water Project website. At the top left is the logo for Thornton Water Project, featuring a stylized blue and green wave icon. To the right of the logo are navigation links: OVERVIEW, UPDATES, and CONTACT. Below the navigation is a large banner image with a blue overlay. The banner contains the text "Larimer County 1041 Permit Application" and a "LEARN MORE" button. Below the banner is a section titled "About the Thornton Water Project" with the subheading "PROJECT INFORMATION". The text below reads: "The Thornton Water Project Website has been established to keep the public informed about the pipeline in Larimer and Weld Counties that will bring water purchased in the 1980s to Thornton customers." At the bottom of the page, there is a sign-up form for updates, with fields for "Name" and "Email Address", and a "SUBMIT" button.

Open Houses

4 Open Houses held in 2016

THORNTON WATER PROJECT OPEN HOUSES

Visit with the Project team at any of the following locations to learn about the upcoming pipeline Project in Larimer and Weld Counties.

Ask Questions • Get Information • Provide Input



★ **Monday, November 14**
Southwest Weld County Services Complex
4209 Weld County Rd 24½
Longmont, CO 80504

★ **Wednesday, November 16**
Poudre Valley REA
7648 REA Pkwy., Ft. Collins, CO 80528

★ **Tuesday, December 6**
Larimer County Courthouse
200 W. Oak St., Ft. Collins, CO 80522

★ **Thursday, December 8**
Johnstown Senior Center
101 Charlotte St., Johnstown, CO 80534

JOIN US ANY TIME!
All open houses start at 6:30 p.m.

For more information visit
www.ThorntonWaterProject.com
and sign up for Project updates
or call 720-977-6265.

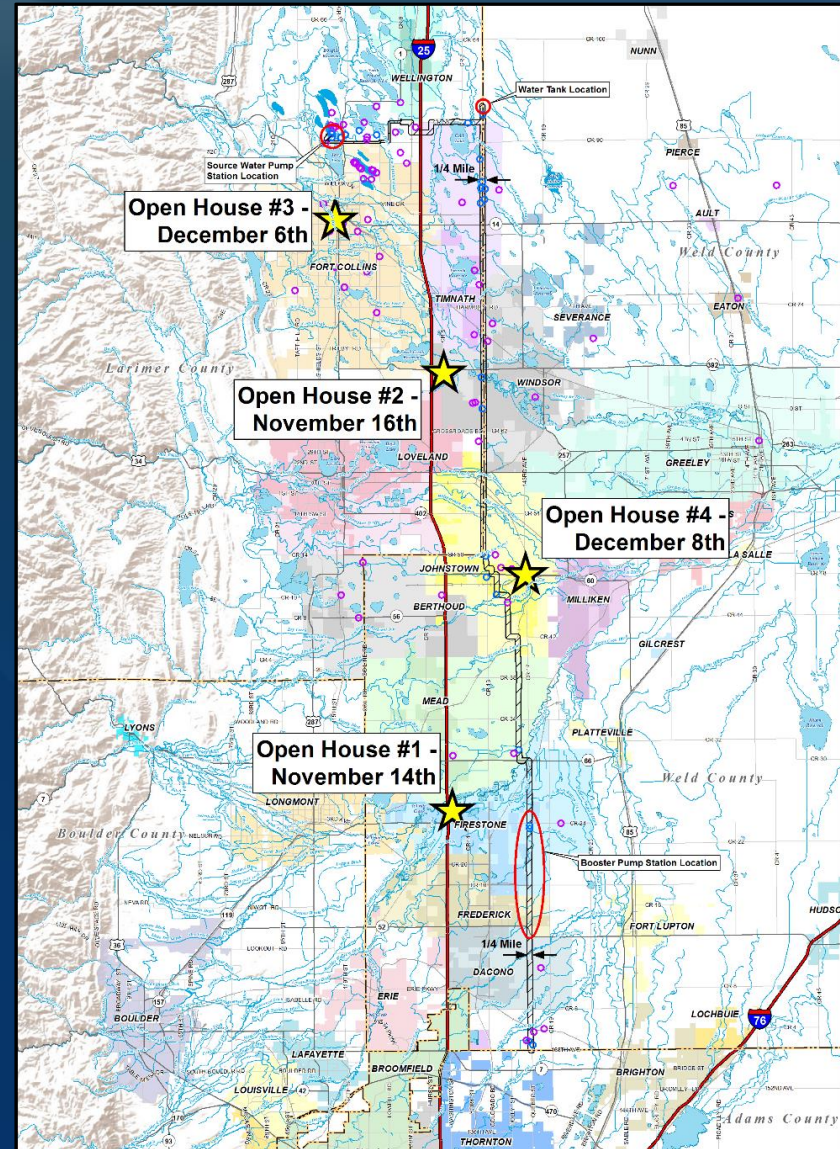


"Powering Your Future"

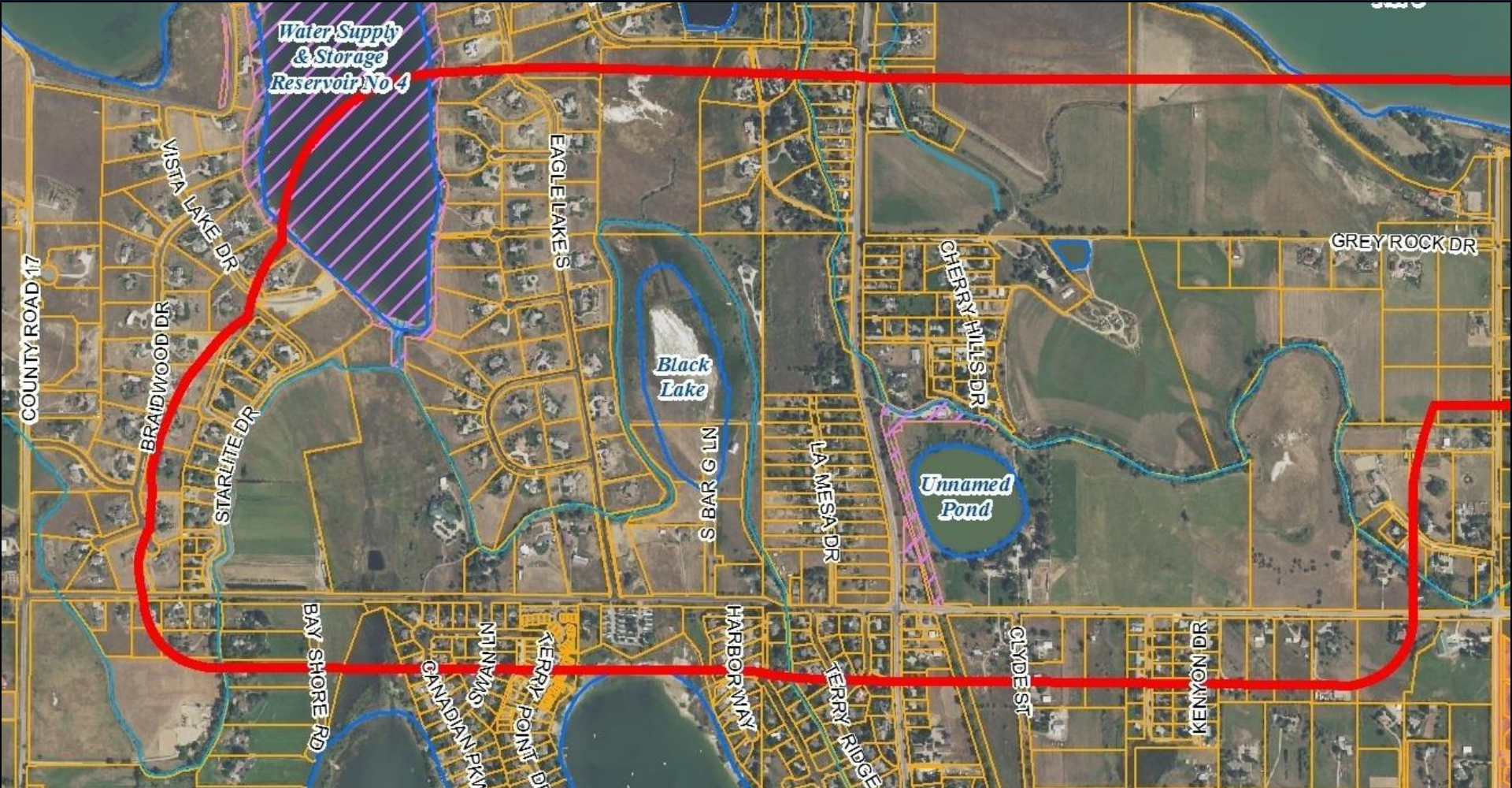


Open Houses

- Sent 1,272 invitations to property owners (849 in Larimer County)
- Sent invitations to local municipality representatives
- 146 Attendees signed in
- Provided:
 - Opportunity to sign up for Updates
 - FAQs and land acquisition brochures
 - Comment forms
- Presented display boards:
 - Corridor map
 - Project overview
 - Purpose and need
 - History
 - Timeline
 - Permits
 - Construction
 - Land acquisition

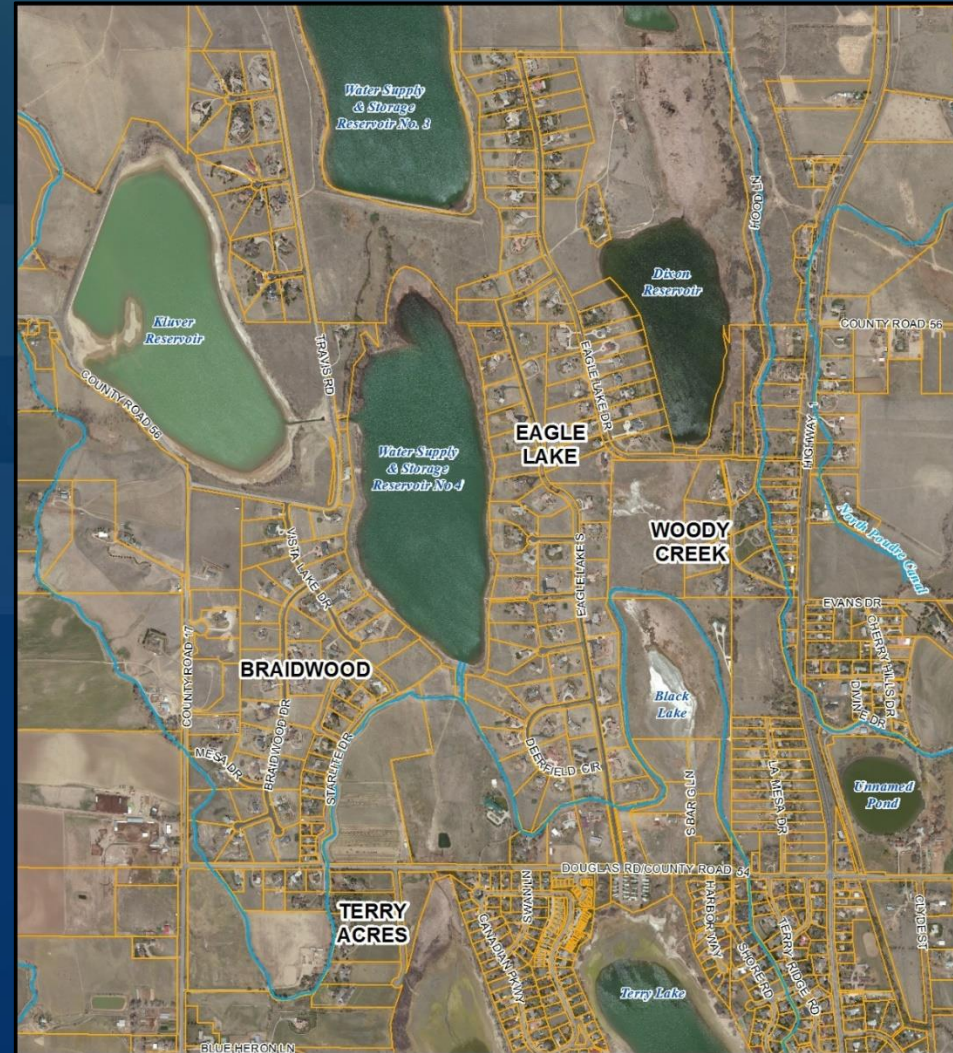


Open Houses



Resident Requested Meetings

- Attended meetings with board members and residents from 4 HOAs near WSSC Reservoir No. 4
- Attended meetings with property owners



Corridor Refinement



- Conducted an alternative route analysis from WSSC reservoirs to CR 9 using criteria that was based on feedback from local area residents and guidance from Larimer County staff.
- 10 alternatives, including 5 source water pump station locations

TWP Corridor Refinement

- Developed 6 evaluation criteria, based on feedback from area residents and Larimer County staff.

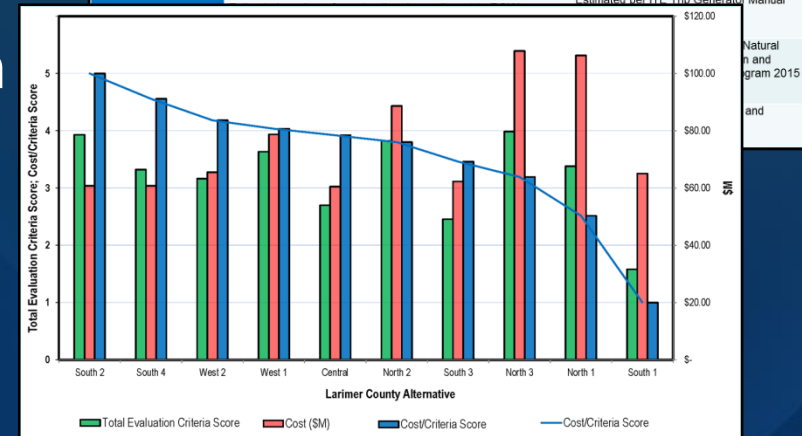
- Considerations from Operations

- Residential
- Pump Station Visual/Noise/Vibration
- TWP Operations

- Considerations from Construction

- Traffic
- Environmental
- Opportunity for coordinated projects

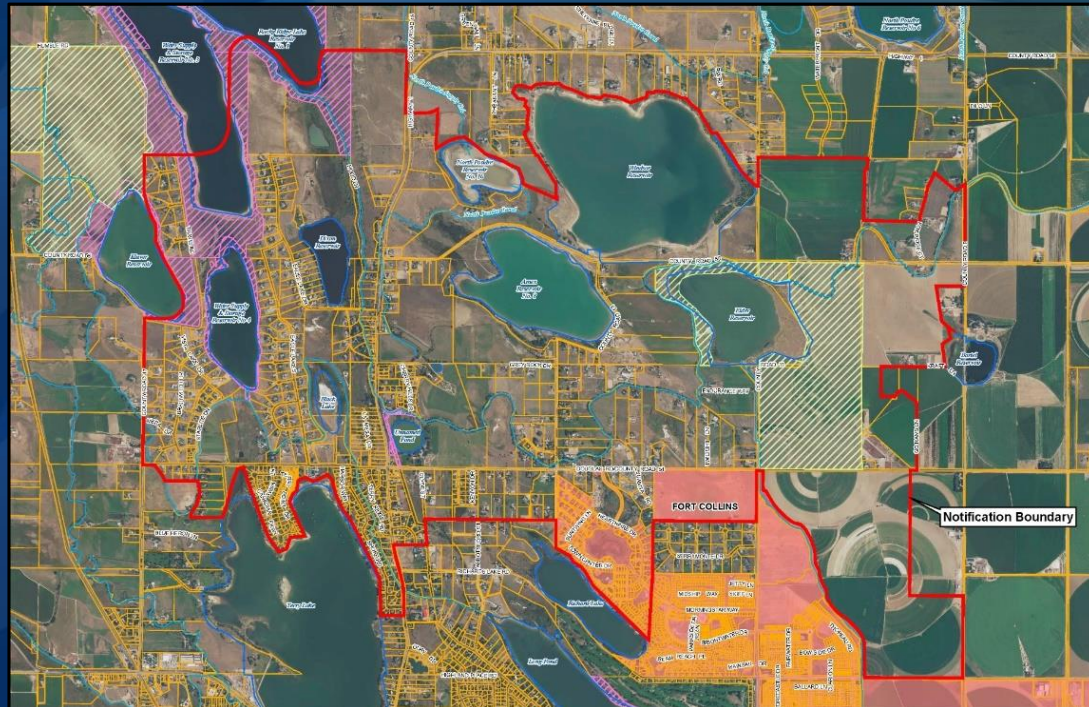
Evaluation Criteria Summary for Larimer County Pipeline Routing Study		
Criterion	Method of Measurement	Data Source
Considerations From Operations		
Residential	Estimated number of homes within the 500 foot wide strip where pipeline is located within an easement (does not include pipe in ROW, WSSC or Thornton owned property).	National Agricultural Imagery Program 2015 and Google Imagery 2016
Pump Station	Visual: Estimated number of homes within 1/2 mile of pump station with probable line of sight.	National Agricultural Imagery Program 2015 and Google Imagery 2016
Visual/Noise/Vibration	Noise and Vibration: Estimated number of homes within 250 feet of pump station score 3, within 251-500 feet score 2, within 501 – 1,000 feet score 1.	
TWP Operations	Estimated length of road within a residential area required to drive to access pump station plus length of easement on private property.	National Agricultural Imagery Program 2015 and Google Imagery 2016
Considerations From Construction Activities		
Traffic	Estimated number of construction days within ROW multiplied by average daily traffic volume.	Traffic count information from Larimer County Road Information Locator GIS; Estimated per ITE Trip Generator Manual



- Analysis results – Route in Douglas Road ROW had the best score.
- Finalized corridor incorporating analysis results.

Community Meeting

- 907 invitations sent to property owners within alternatives analysis area
- 215 email invitations
- 153 attendees signed in
- Presented alternatives analysis results




**THORNTON WATER PROJECT
COMMUNITY UPDATE**
TUESDAY, SEPTEMBER 12, 5-7 P.M.
Larimer County Courthouse
200 W. Oak St., Ft. Collins 80522

Ask Questions • Get Information • Provide Input

At this event we'll share the results of the pipeline routing study for the area. Come and join us!

Doors open at 5 p.m. and the Update Presentation starts at 5:30 p.m.

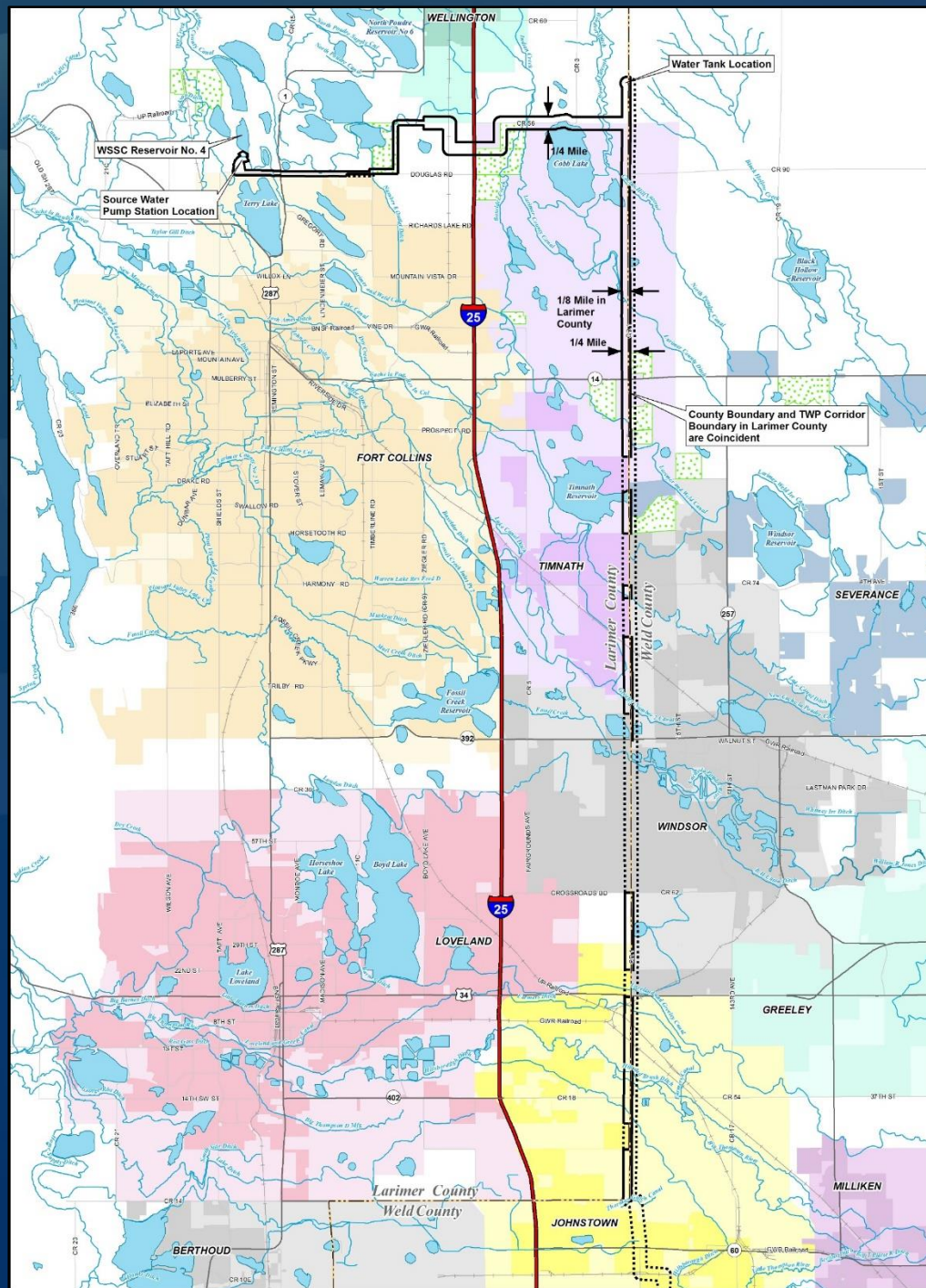
To RSVP, please visit
www.ThorntonWaterProject.com/RSVP



Douglas Road Alignment

- At the request of Larimer County staff, Thornton performed a detailed survey and ROW investigation.
- Thornton confirmed that the water pipeline can be constructed within the Douglas Road ROW without purchasing easements on private property.
- Access for residents and emergency responders will be maintained.
- Douglas Road will be returned to as good or better condition after construction.

Proposed Thornton Water Project Corridor

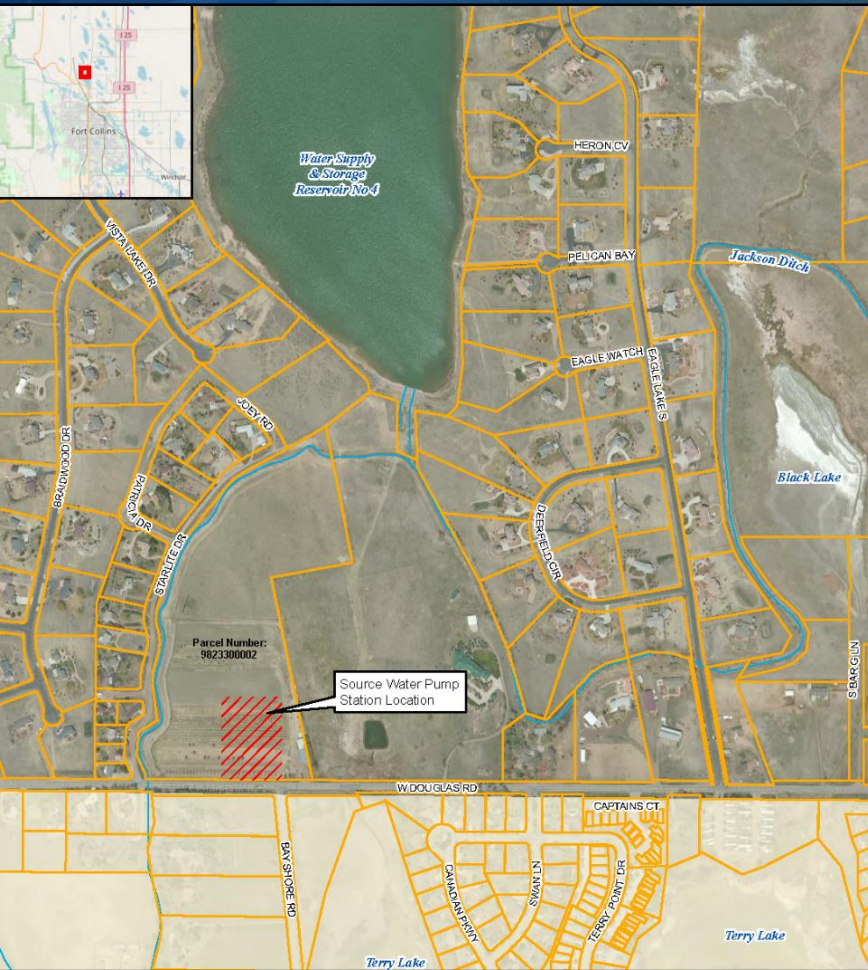


Thornton Water Project Corridor

Approval of a corridor will:

- Provide property owners greater flexibility in working with Thornton.
- Allow the flexibility to adjust the location of the water pipeline to account for existing conditions.
- Allow the continued coordination with planned developments.

Source Water Pump Station



The source water pump station will be subject to Larimer County's Site Plan Review process

Thornton will seek input and suggestions from local area residents on the design and architecture

Mitigation

145 mitigation measures and commitments are included in the application to minimize or prevent impacts to:

- Wildlife
- Traffic/Roads
- Private property
- Water quality
- Air quality
- Health and safety
- Environmentally sensitive areas
- Existing infrastructure
- Groundwater
- Drainages
- Area resident and emergency responders access
- Jurisdictional waters including wetlands
- Visibility
- Noise
- Vegetation including trees
- Floodplains
- Agriculture
- Irrigation ditches
- Land
- Natural hazard areas
- Natural resources
- Cultural resources

Land Acquisition

- Property owners can expect a respectful process and just compensation.
- Thornton will work with property owners to minimize impacts.
- Non-exclusive easements will typically be acquired.
- Surface use will be maintained with minimal limitations.
- Property, improvements, and landscaping will be restored after construction.
- Eminent domain will only be used as a last resort.

Ongoing Stewardship

Surface areas disturbed by construction will be monitored after construction and Thornton will continue to maintain the site until the area is restored.



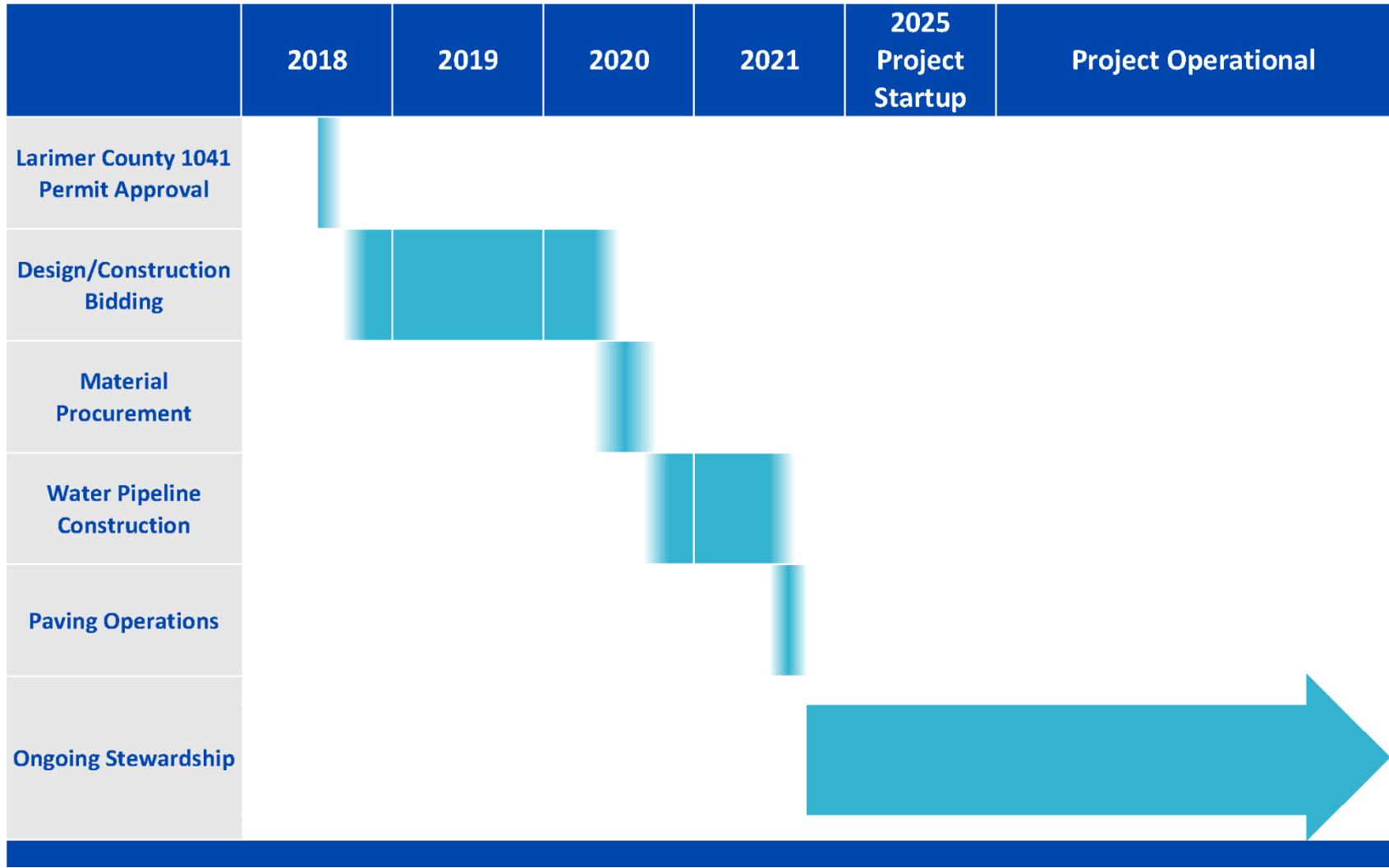
TIMELINE

	2016	2017	2018	2019	2020	2021	2022	2023	2024	Project Operational
Permitting and Land Acquisition	Active	Active	Active	Active	Active	Active	Active	Active	Active	Active
Design			Active	Active	Active	Active	Active	Active	Active	Active
Construction				Active	Active	Active	Active	Active	Active	Active
Restoration and Stewardship					Active	Active	Active	Active	Active	Active

www.ThorntonWaterProject.com



WATER PIPELINE IN DOUGLAS ROAD TIMELINE



Thank You!



Evaluation Criteria Summary for Larimer County Pipeline Routing Study

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Pump Station	Visual: Estimated number of homes within ½ mile of pump station with probable line of sight.	National Agricultural Imagery Program 2015 and Google Imagery 2016
Visual/Noise/ Vibration	Noise and Vibration: Estimated number of homes within 250 feet of pump station score 3, within 251-500 feet score 2, within 501 – 1,000 feet score 1.	
TWP Operations	Estimated length of road within a residential area required to drive to access pump station plus length of easement on private property.	National Agricultural Imagery Program 2015 and Google Imagery 2016
Considerations From Construction Activities		
Traffic	Estimated number of construction days within ROW multiplied by average daily traffic volume. Estimated number of construction days adjacent to ROW multiplied by 25% of the average daily traffic volume.	Traffic count information from Larimer County Road Information Locator GIS; Estimated per ITE Trip Generator Manual
Environmental	Estimated areas crossed identified as riparian and/or populated with trees.	Riparian data from the Colorado Natural Heritage Program GIS information and National Agricultural Imagery Program 2015 and Google Imagery 2016
Coordinated Projects Opportunity	Shared length of possible coordinated projects to minimize community impacts	Discussions with Larimer County and Northern Water