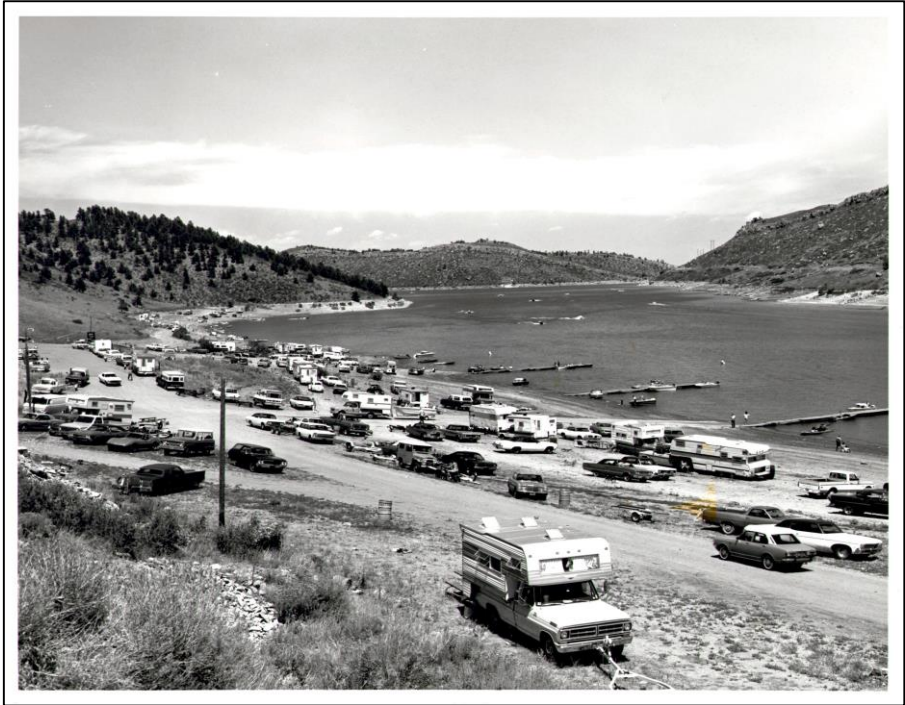


# Northern Integrated Supply Project

Larimer County 1041 Presentation





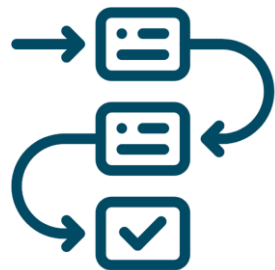
  
**Northern Water**



# Presentation Agenda

- Project Overview & History
- Water Pipelines & Conveyance
- Pipeline Easement, Reclamation & Outreach
- Public Outreach
- Glade Reservoir Recreation
- Larimer County 1041 Permit Criteria
- Project Purpose & Need

# Criteria Card



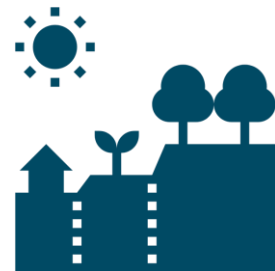
**CRITERIA 1:  
ADOPTED PLANS**



**CRITERIA 2:  
PROJECT ALTERNATIVES**



**CRITERIA 3:  
COUNTY STANDARDS**



**CRITERIA 4:  
MITIGATION**



**CRITERIA 5:  
HISTORIC PLACES**



**CRITERIA 6:  
HEALTH AND SAFETY**



**CRITERIA 7:  
NATURAL HAZARDS**



**CRITERIA 8:  
LOCAL SERVICES**



**CRITERIA 9:  
ROADS AND BRIDGES**



**CRITERIA 10:  
BENEFITS AND LOSSES**



**CRITERIA 11:  
MITIGATION COST/BENEFIT**



**CRITERIA 12:  
RECOMMENDATIONS**



# Presentation Agenda

- Project Overview & History – *Stephanie Cecil*
- Water Pipelines & Conveyance – *Stephanie Cecil*
- Pipeline Easement, Reclamation & Outreach – *Jim Struble*
- Public Outreach – *Christie Coleman*
- Glade Reservoir Recreation – *Christie Coleman*
- Larimer County 1041 Permit Criteria – *Peggy Montaño*
- Project Purpose & Need – *Fort Collins-Loveland Water District*
- Closing Comments – *Brad Wind*

# Project Overview & History

Larimer County 1041 Presentation



# Northern Integrated Supply Project Overview



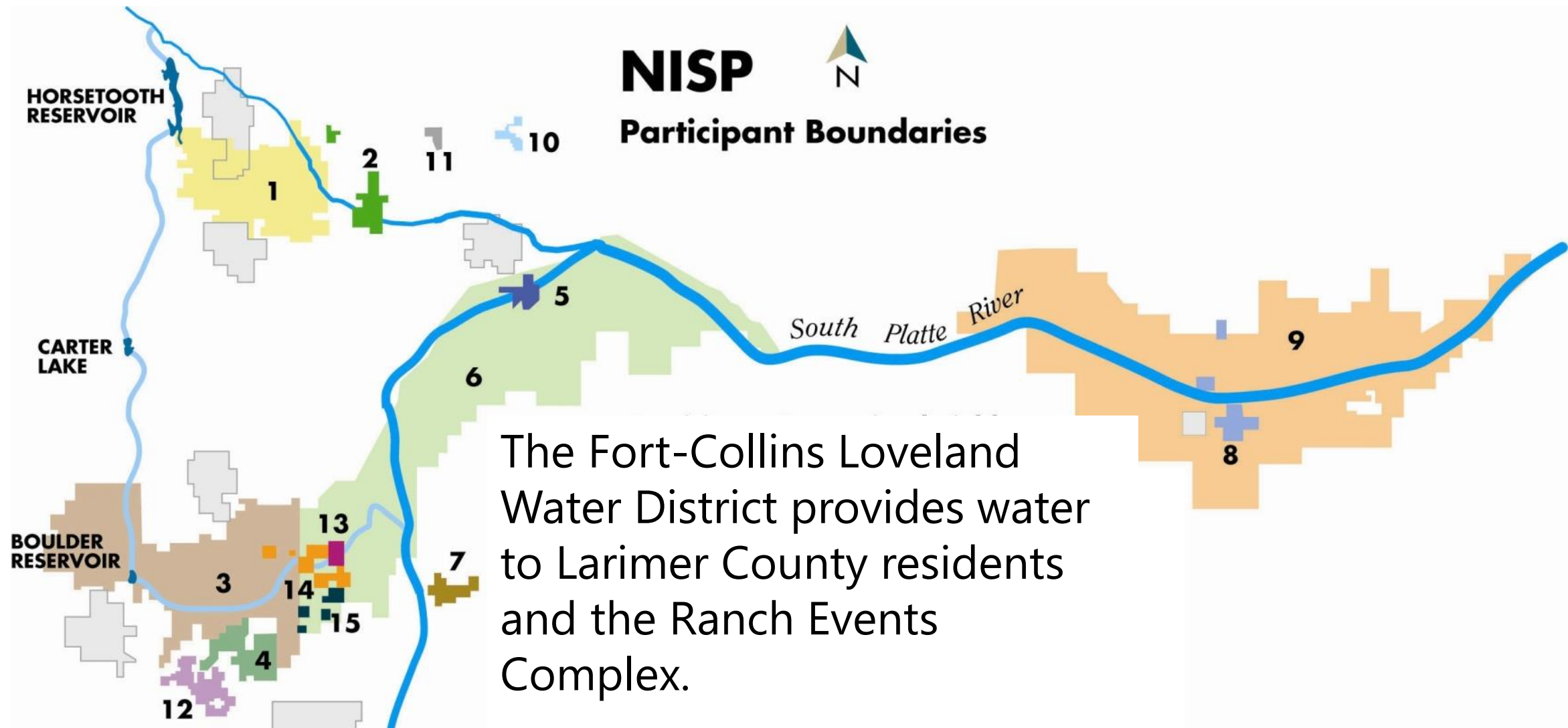


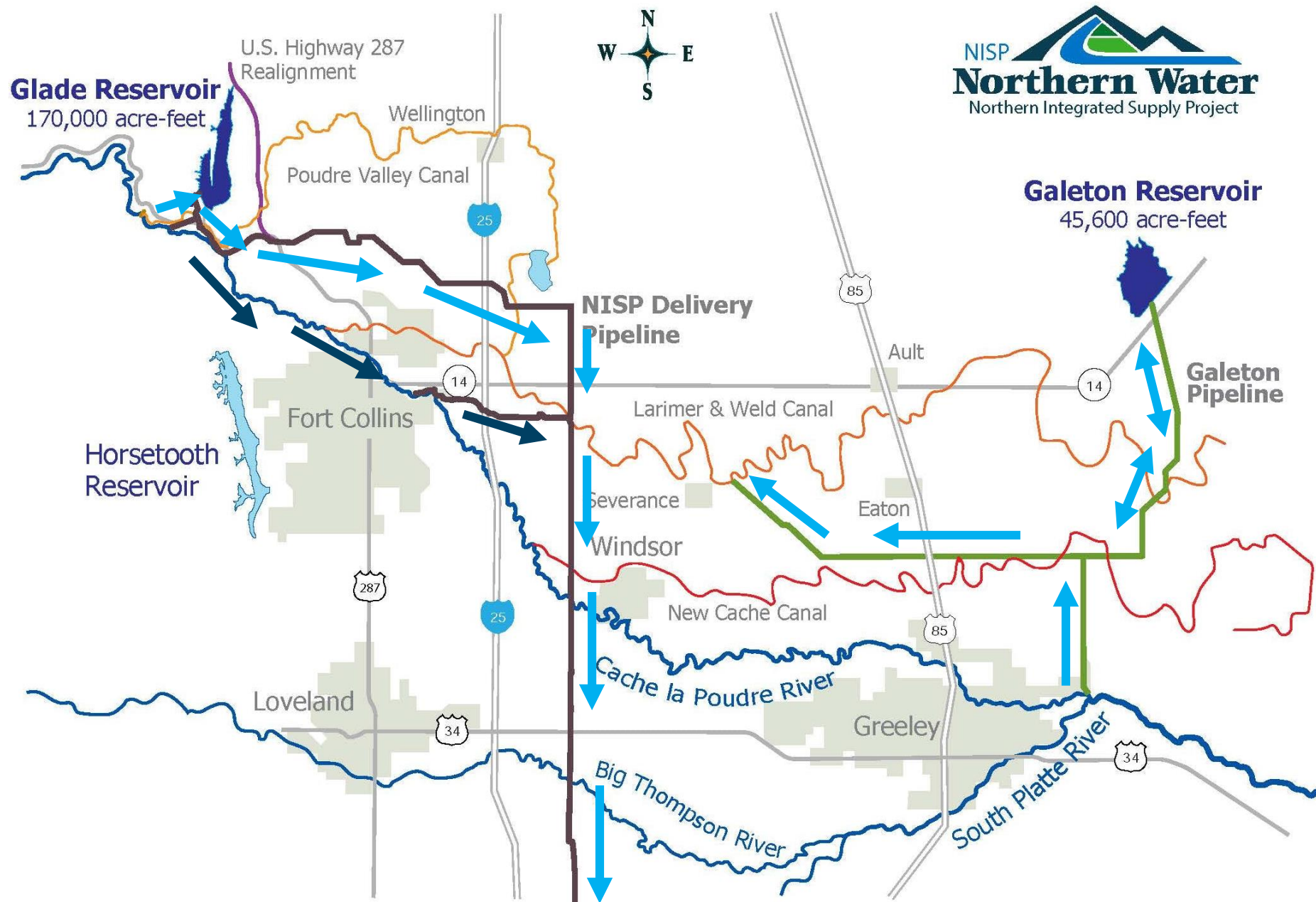
# What is NISP?

## Final Environmental Impact Statement Purpose & Need

To provide the Project Participants with approximately 40,000 acre-feet of new reliable municipal water supply annually through a regional project coordinated by the District, which will meet a portion of the Participants' current and reasonably projected future additional water supply needs.

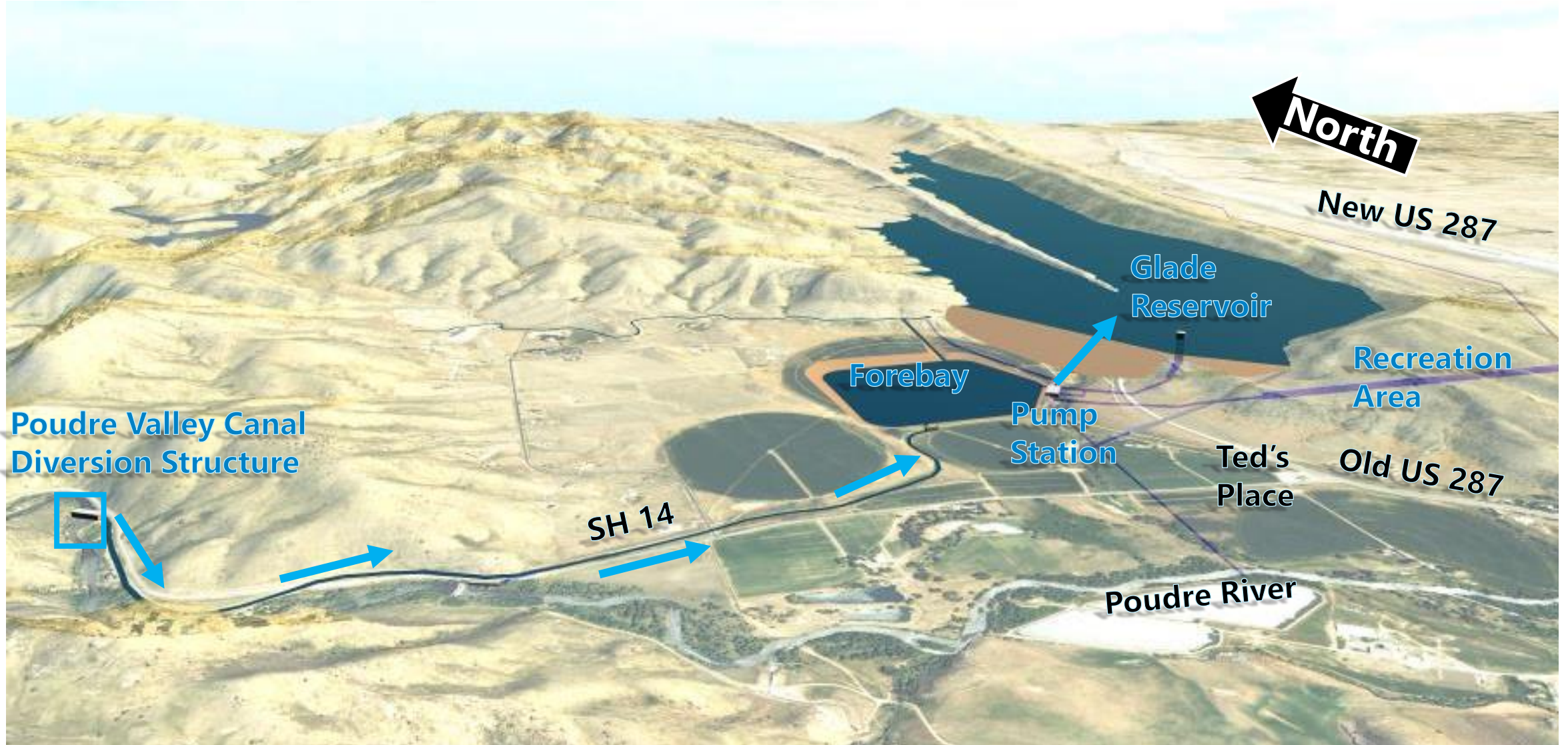
# Project Participants





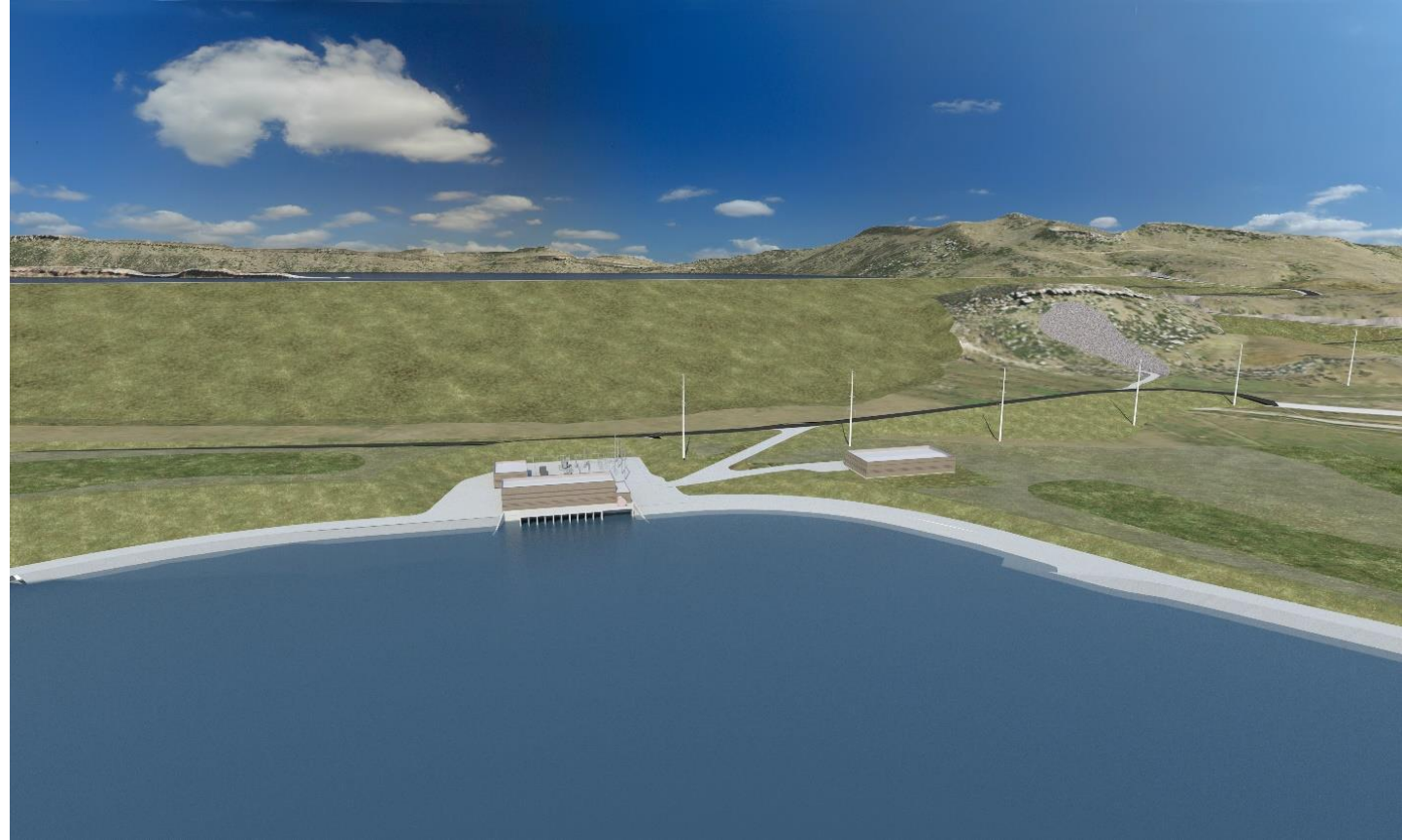


# Glade Reservoir



# Glade Reservoir

- Off channel from the Poudre River
- 170,000 acre-feet of water
- Reservoir surface area at full capacity would be approximately 1,600 acres (2.5 square miles)
- Emergency spillway
- Multi-level inlet/ outlet tower

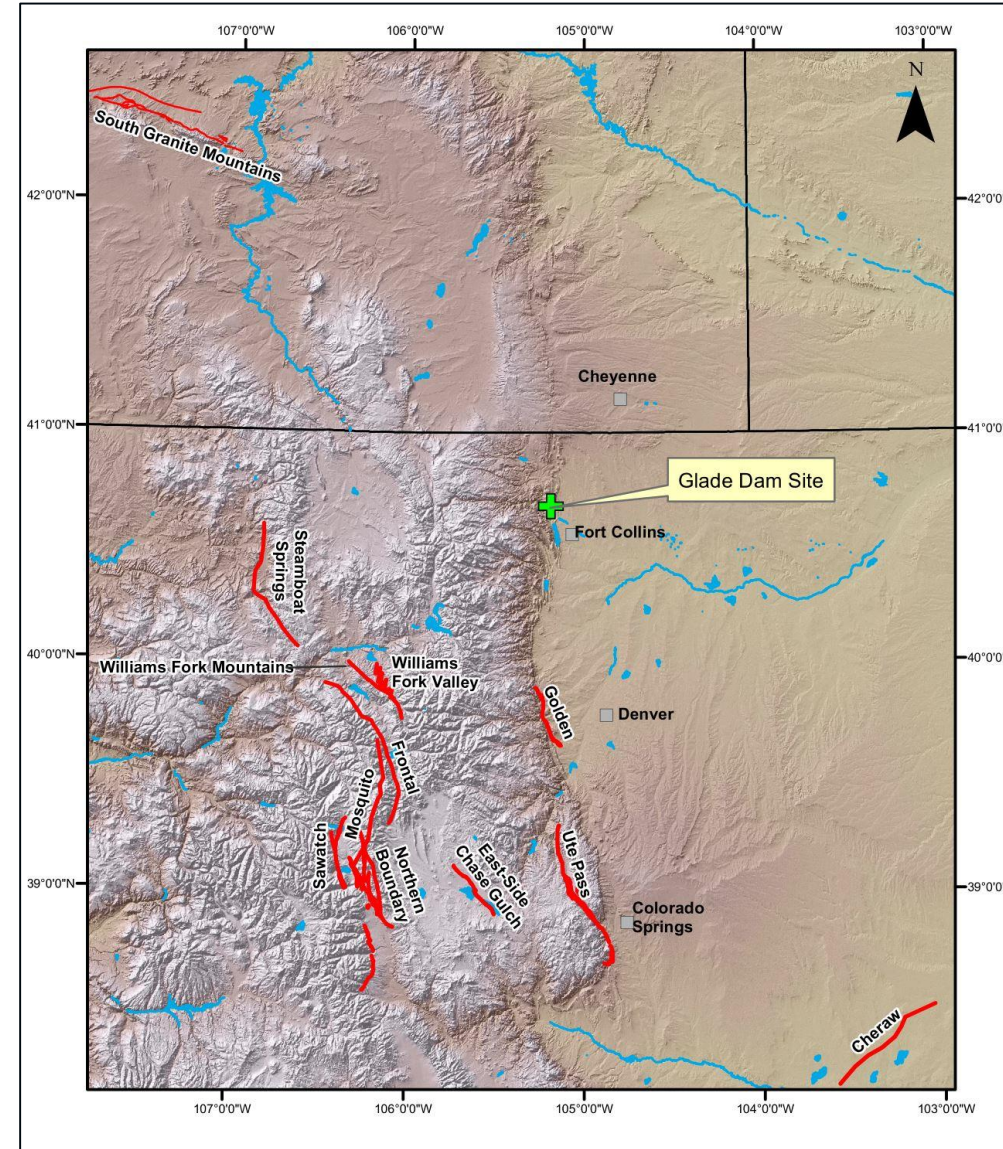




# Glade Reservoir – Geology

- Two INACTIVE Faults at Glade Site
- Complex geology that has been well-studied
  - Over 5,500 feet of bedrock drilling, 250 rock water loss tests (including directly across faults)
- Dam Design Approval
  - Colorado Dam Safety Branch
  - Technical Advisory Board

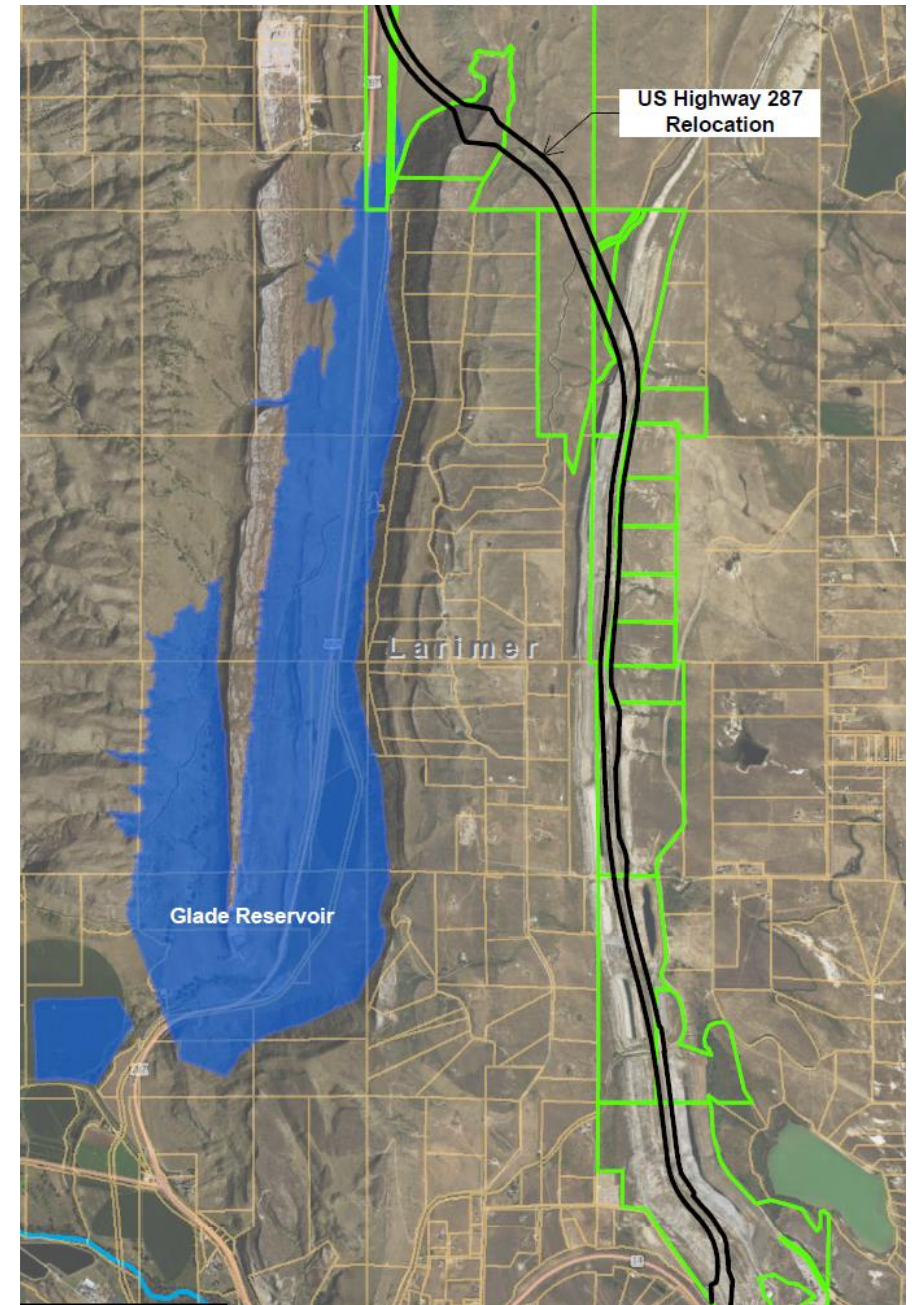
— Active Fault





# Highway 287 Relocation

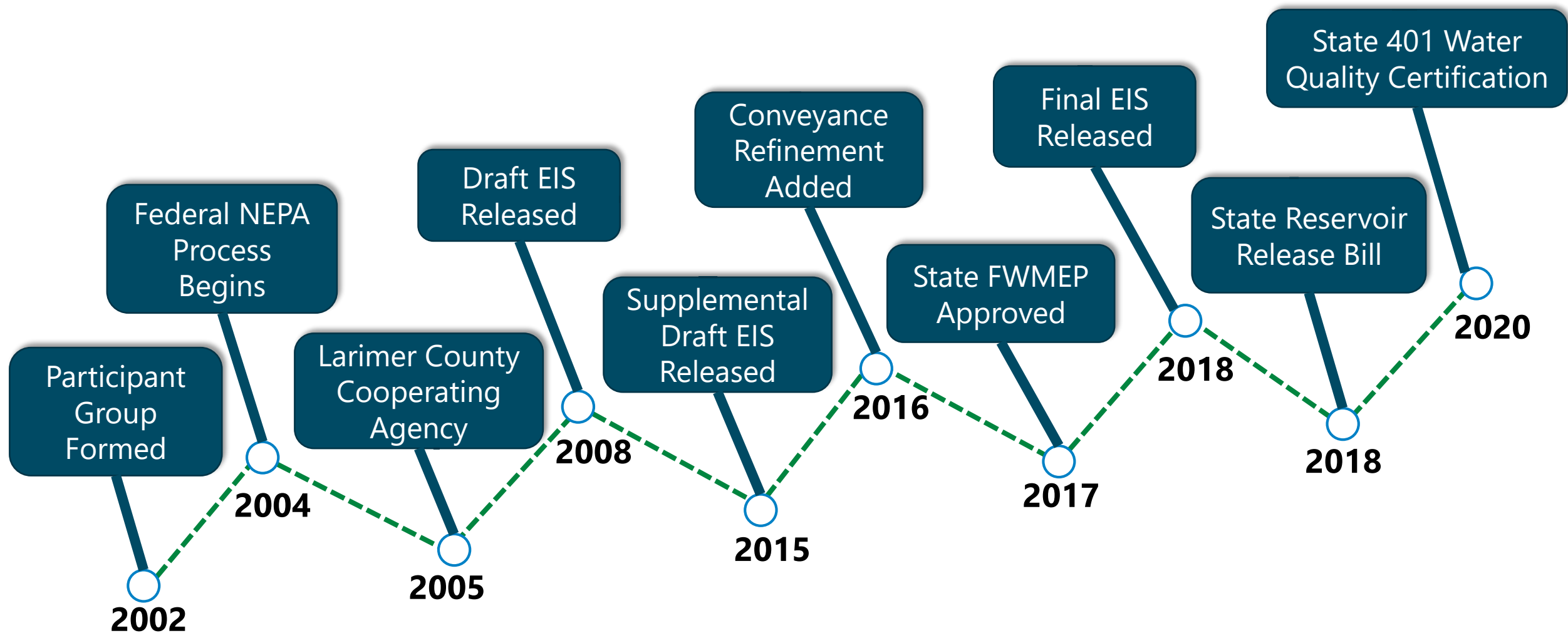
- 7 miles of the highway will be relocated to the east
- Project Commitments
  - Access for affected property owners
  - LCR 21C (Overland Trail) and 287 Safety Study
  - Existing Highway 287 Closure AFTER new Highway 287 Operational
- NISP Funded Project
- ***Not part of 1041 application***



# Permitting History



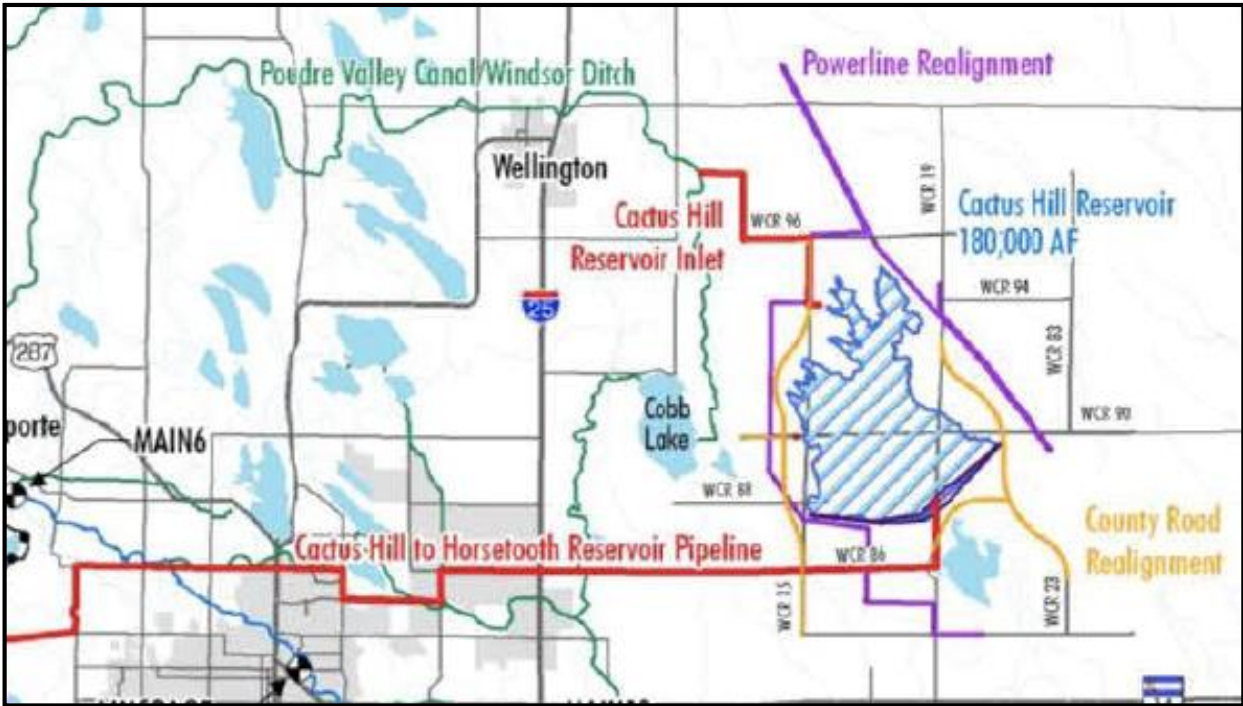
# Project Federal and State Permitting History





# Study & Analysis

NEPA Process included study and analysis of over 200 potential water storage facilities, 16 potential water supply sources, and 5 project alternatives being carried forward through the entire EIS process.



Alternative	Concept
1	No Action – 60,000 acres of farmland dry up
2	Glade and Galetton Reservoirs, no Conveyance Refinement
2M	NISP with Conveyance Refinement
3	Cactus Hill Reservoir with PVC
4	Cactus Hill Reservoir with Multiple Diversions



# Larimer County Permitting History

## 2005 - Present

- Cooperating Agency for Federal Permitting Process
- Provided Comments on EIS Documents

## 2016

- MOU Signed by both parties
- Intention for 1041 Inter-Governmental Agreement

## 2017 - 2019

- 1041 IGA Process
- Multiple Tech Memo Submittals and Comments
- Transition to 1041 Hearing Process

## 2020

- 1041 Application Submittal
- Planning Commission Recommendation of Approval

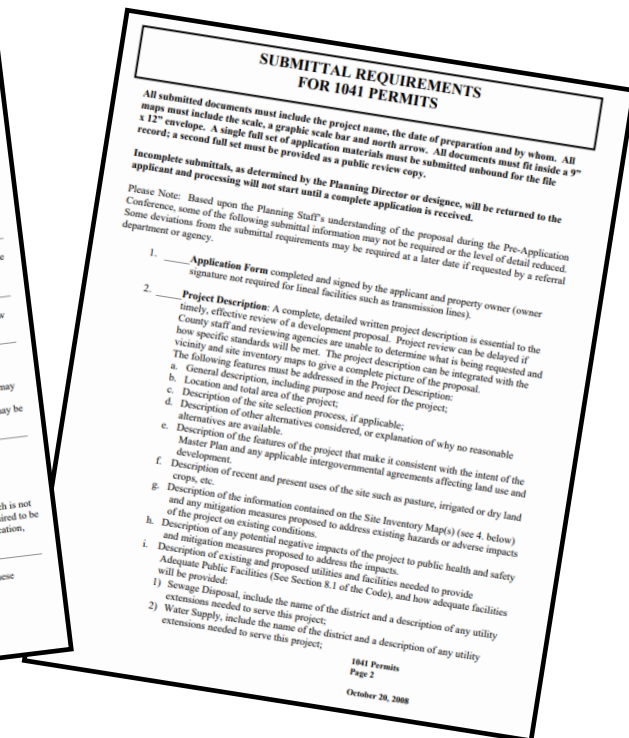
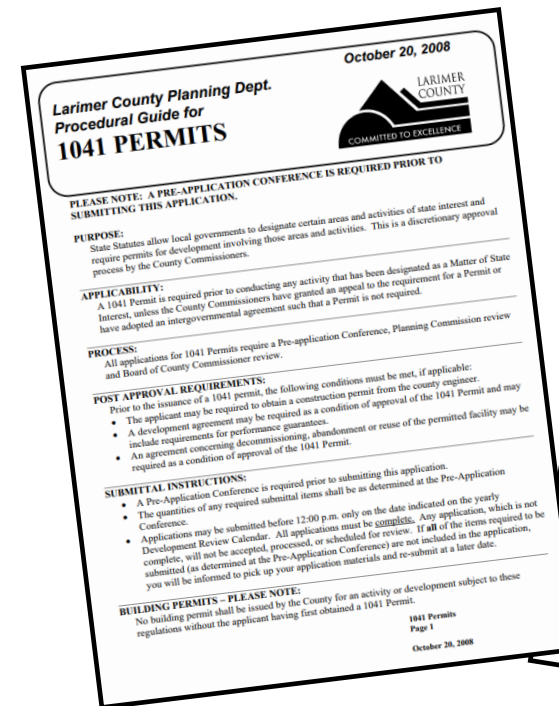


# 1041 Areas and Activities of State Interest

Larimer County has designated two NISP project components as Activities of State Interest, which are regulated under Section 14 of the Larimer County Land Use Code and associated 1041 Permits.

Components are:

- Siting and development of new or extended domestic raw-water transmission lines.
- Site selection and construction of a new water storage reservoir and appurtenant uses, including recreation.



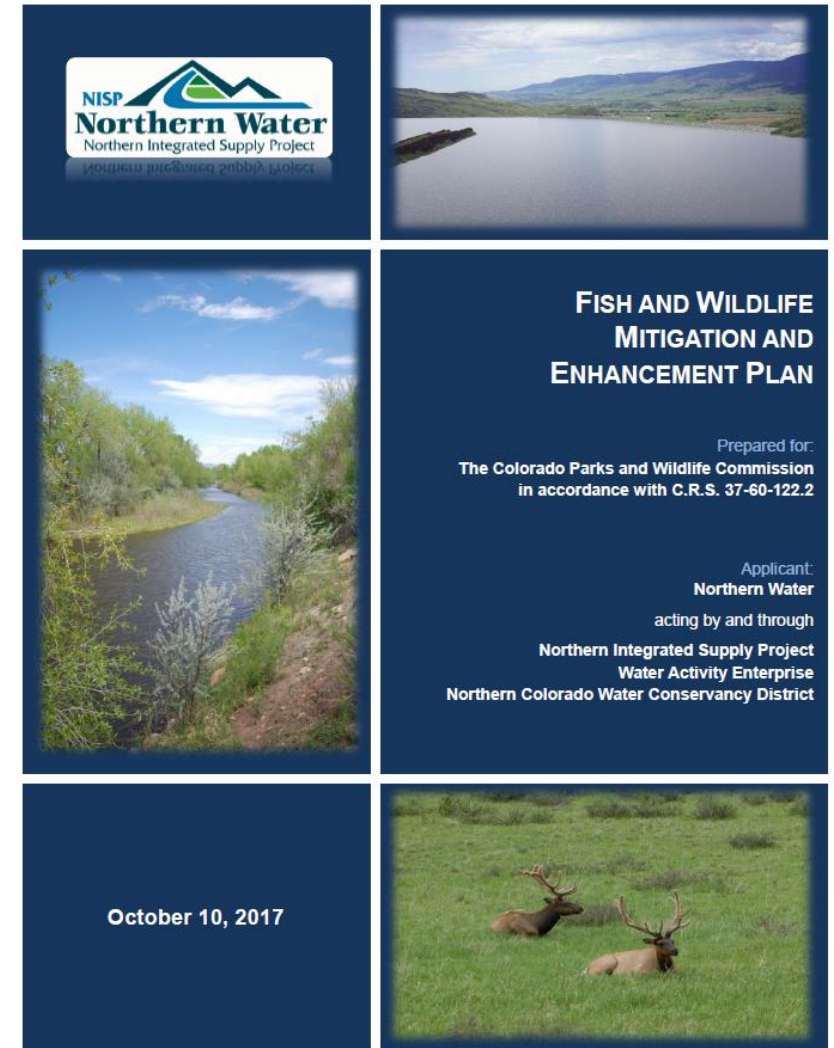


# Mitigation & Enhancement

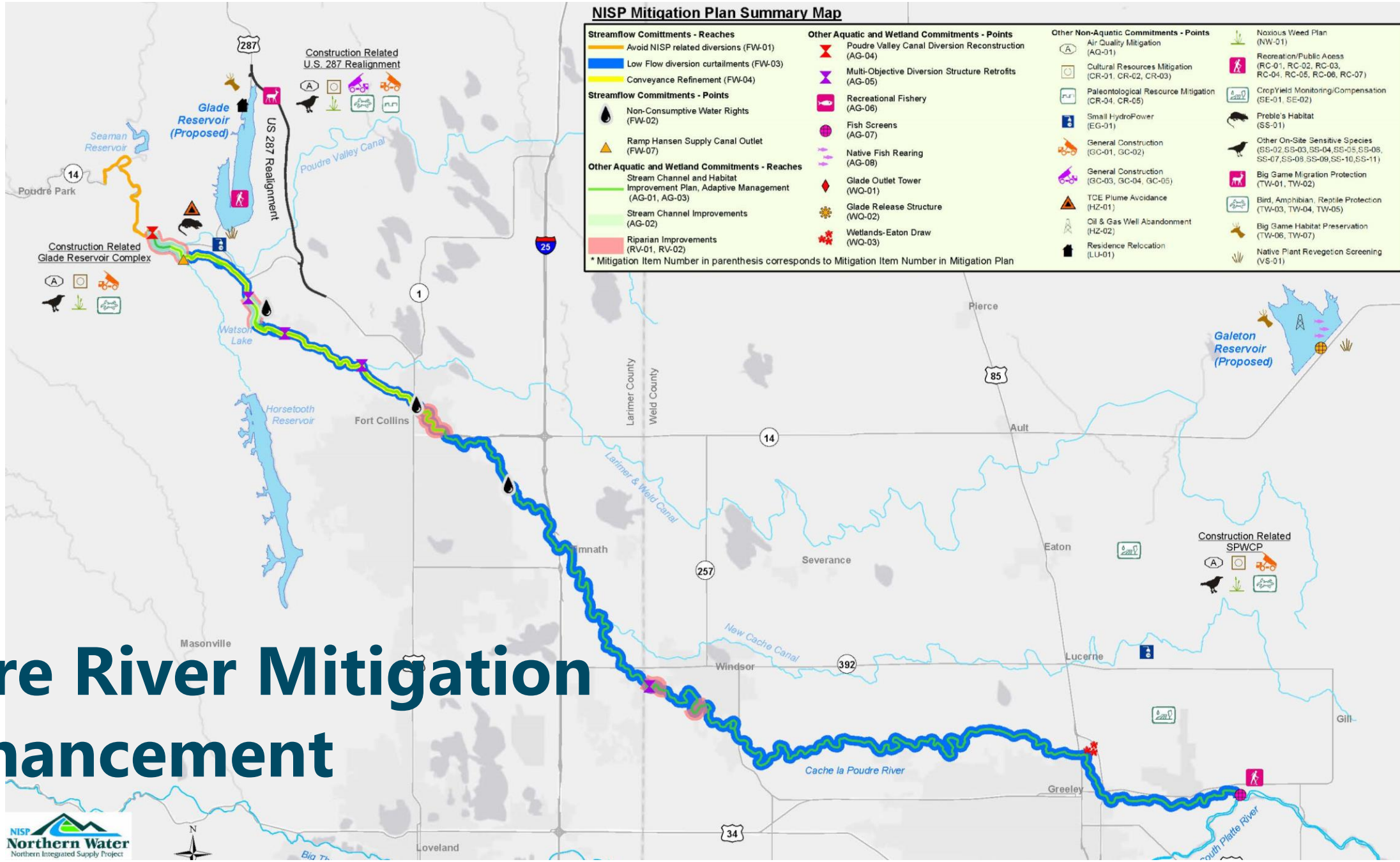


# Fish and Wildlife Mitigation and Enhancement Plan

- To provide impact avoidance, minimization and mitigation measures, a State of Colorado Fish and Wildlife Mitigation and Enhancement Plan was developed
- Adopted by the State of Colorado in 2017
- Plan commitments require the Project Participants to spend \$53 million overall, with \$49 million in Larimer County
- ***90% of commitments provide benefit to Larimer County***



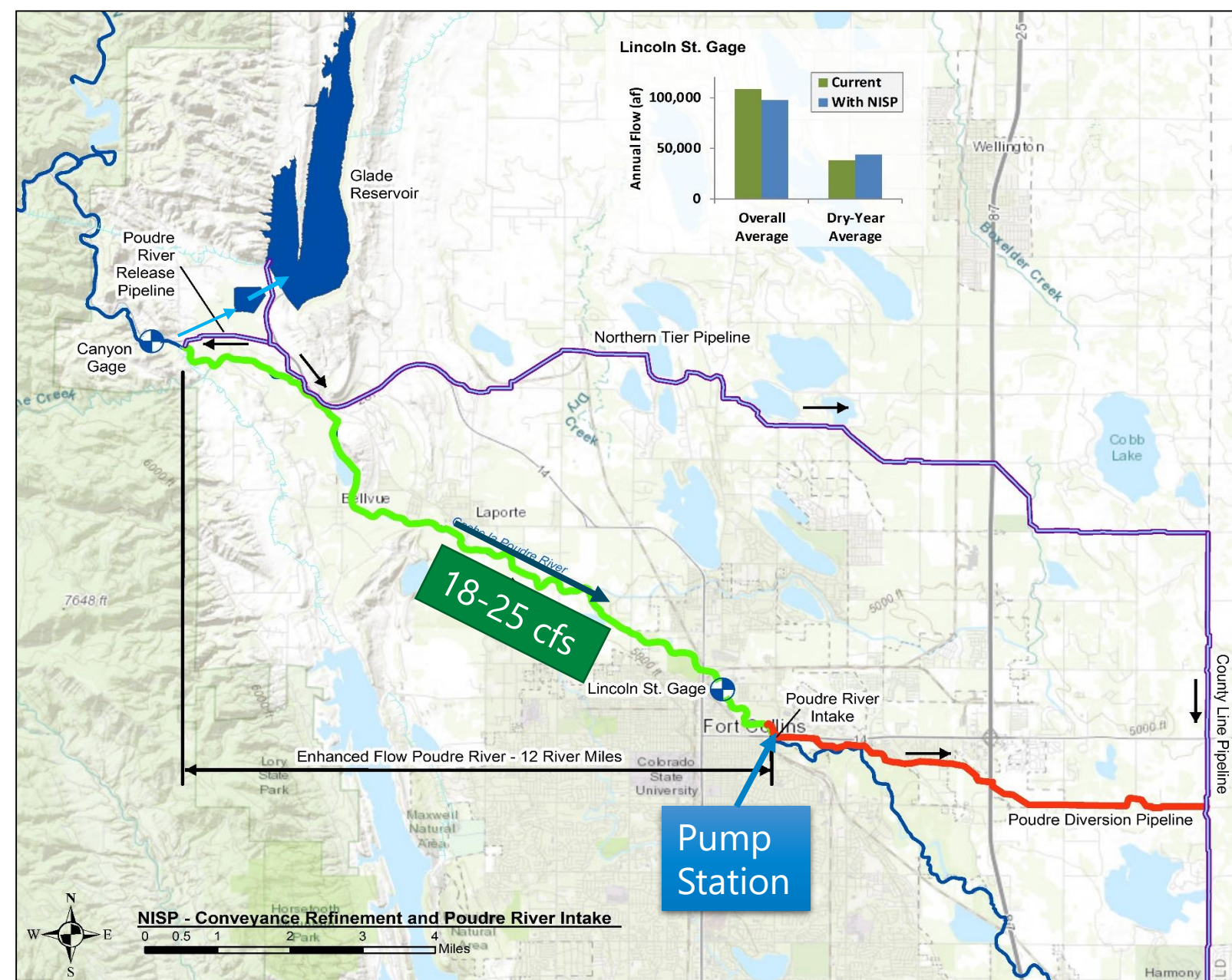
# Poudre River Mitigation & Enhancement





# Poudre River Conveyance Refinement

- 18-25 cubic feet per second (cfs) added year-round
- Increases net flow in the Poudre River through Fort Collins:
  - 8 months in average years
  - 10 months in dry years

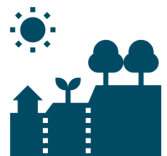




# Poudre River Low Flow Diversion Curtailments


Maintain Average Daily Flow:


- 50 cfs – April to October
- 25 cfs – November to April





# Fort Collins White Water Park Impacts

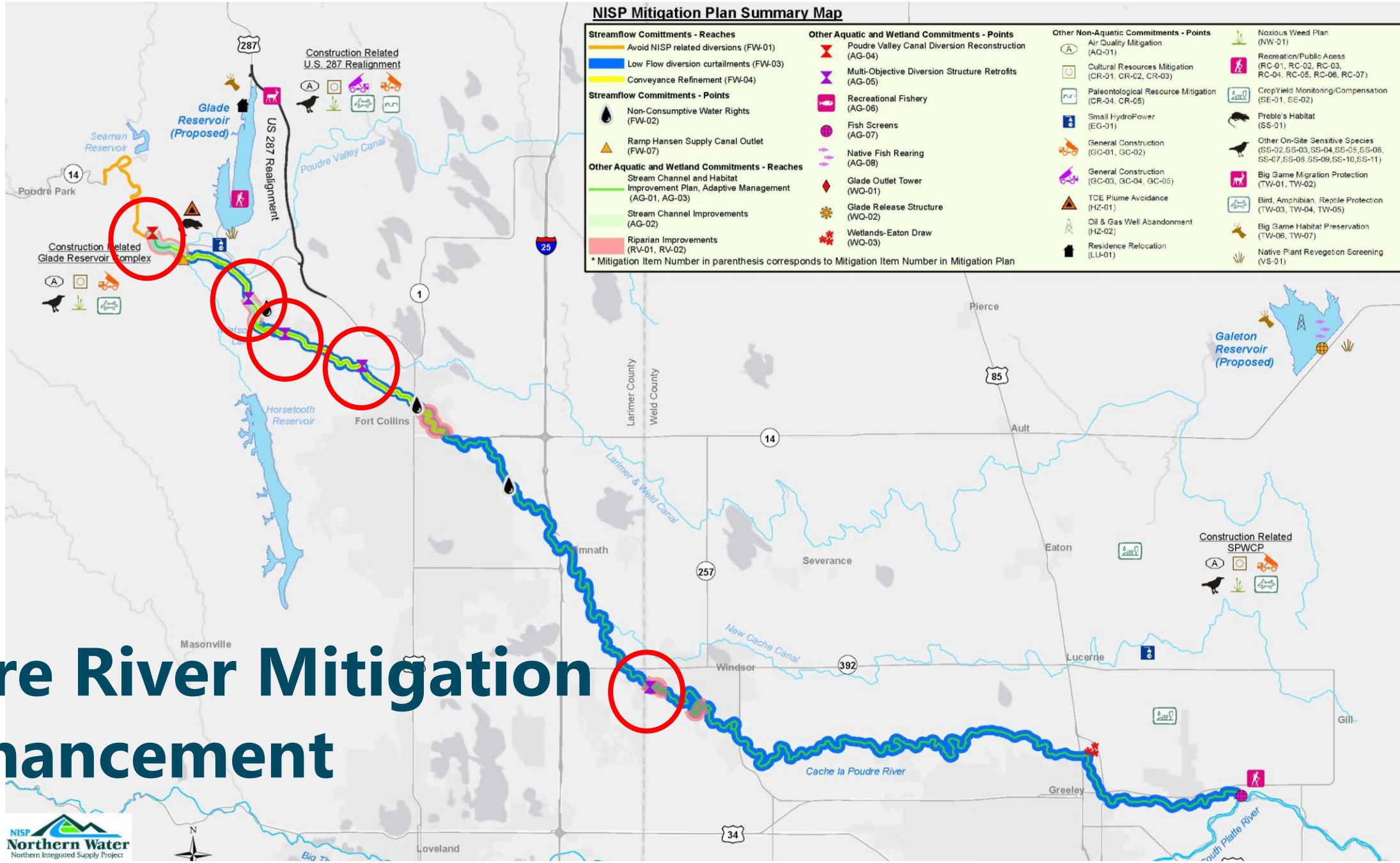
			
Number of Summer Days	Tubing (50 to 450 CFS)	Kayaking (75 to 1,100 CFS)	Freestyle Kayaking (250 to 1,100 CFS)
Current Conditions	64	63	27
NISP Conditions	79	63	19
Change	+ 15	No Change	- 8



November 2019 - 7 cfs







# Poudre River Mitigation & Enhancement

# Poudre River Fish Passage & Enhancement

Retrofits of existing diversion structures with multi-objective facilities:

- Maintain primary function of ensuring enough head to divert water
- Measurement of NISP flows
- Provide for native small-bodied fish and trout passage via fish ladders and rock ramps



Watson Fish Hatchery

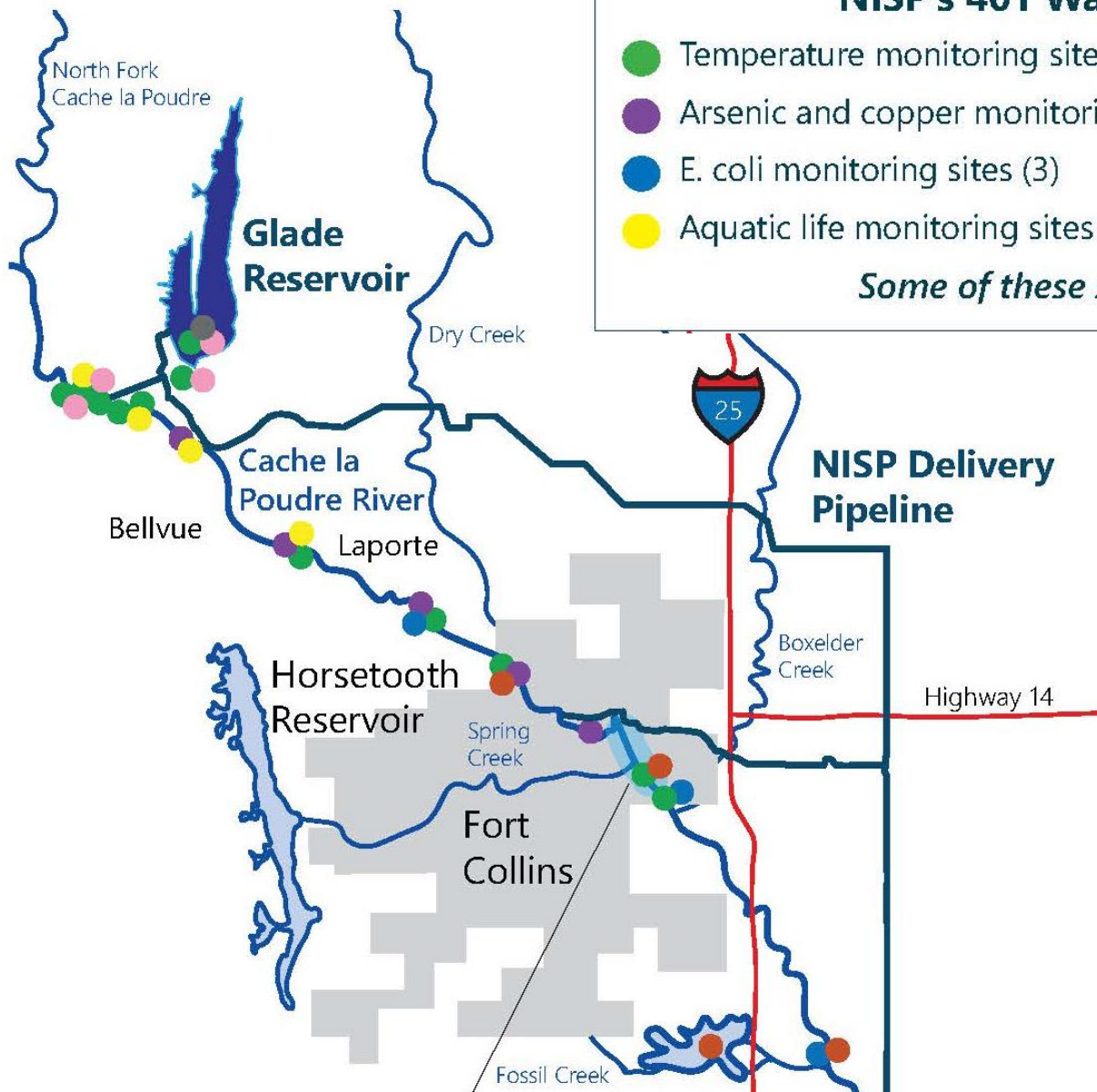




## NISP's 401 Water Quality Monitoring Commitments

- Temperature monitoring sites (12)
- Arsenic and copper monitoring sites (5)
- E. coli monitoring sites (3)
- Aquatic life monitoring sites (4)
- Nutrient monitoring sites (4)
- Mercury fish tissue sampling sites (2)
- New reservoir routine monitoring sites (6)  
(2 forebay sites, 2 reservoir sites and 2 river sites)

*Some of these sites will remain in operation for decades.*



*"The commitments for mitigation and water quality improvement measures are sufficient to result in **positive net effects**."*

- State of Colorado



# Healthy Poudre River

Northern Water is a member of the Poudre Runs Through It, alongside these other organizations, to help keep a healthy, working river.







Fish  
Screening

# Mitigation & Enhancement

million overall  
million in Larimer County



Recreation

Wet  
Mitig



# Questions?





# Water Pipelines & Conveyance

Larimer County 1041 Presentation

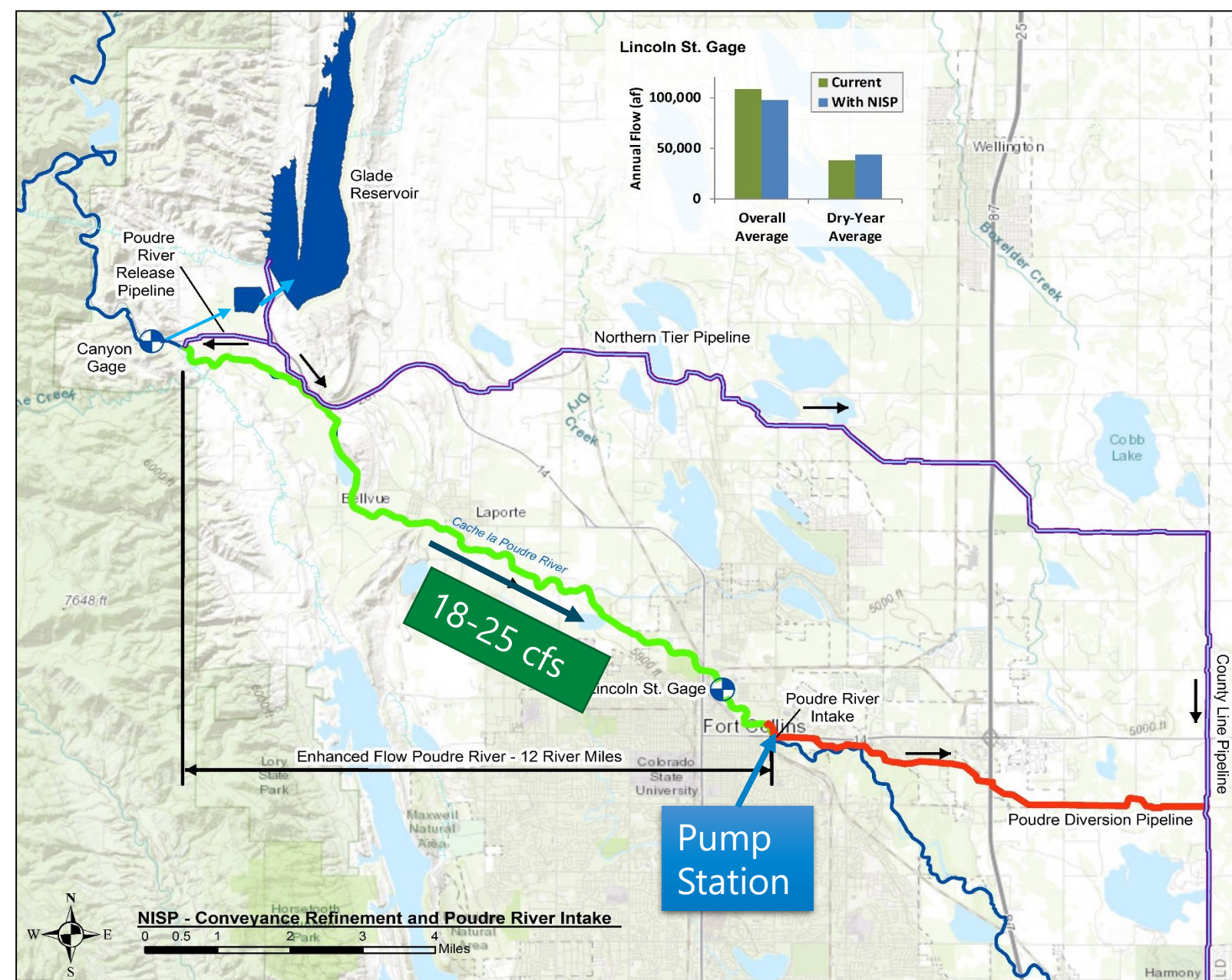


# Conveyance Requirements



# Poudre & Pipeline Conveyance

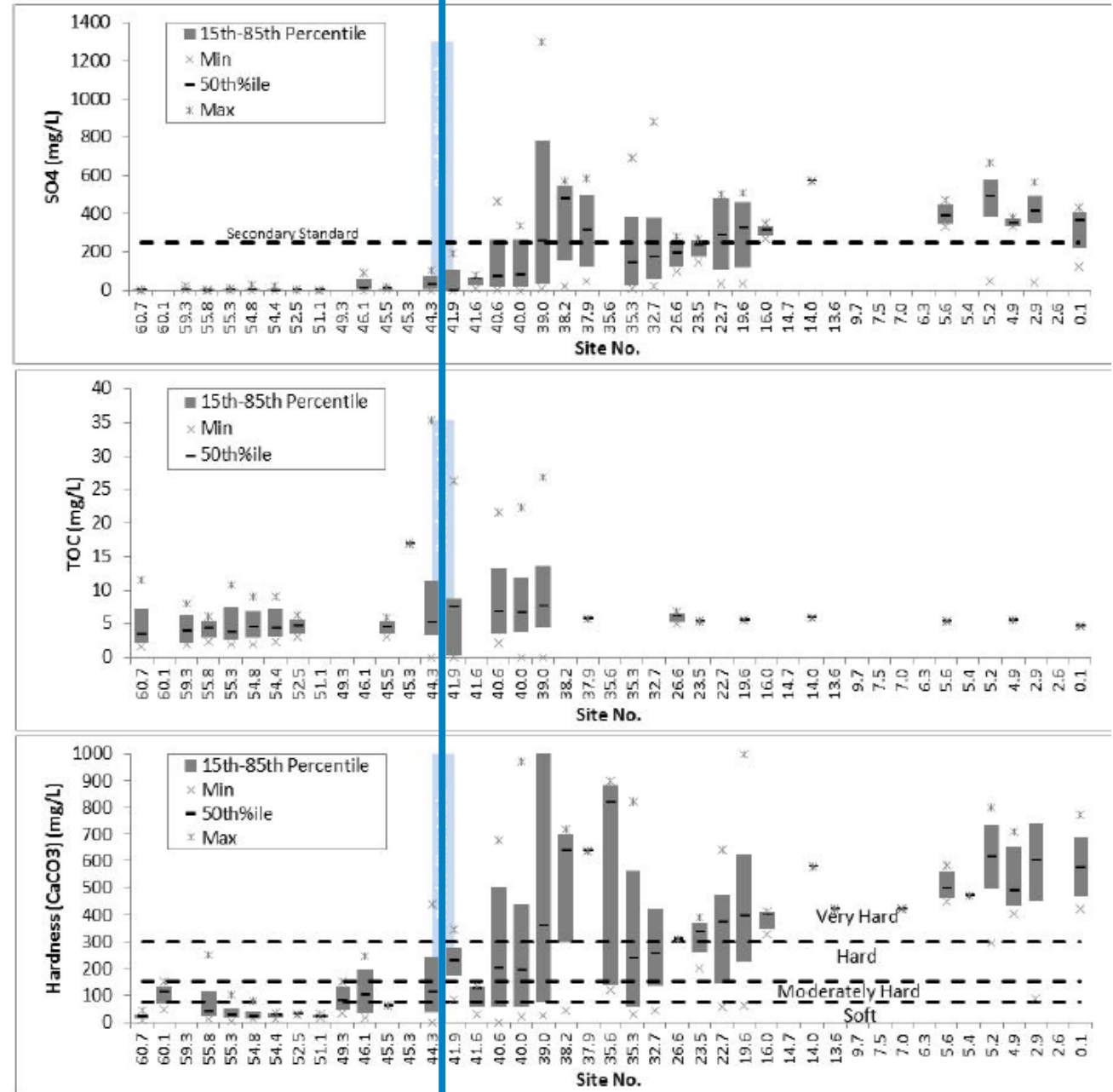
- 18-25 cfs added year-round in Poudre River
- Rest of Flow in Northern Tier Pipeline





# Poudre Flow Analysis

- Location
  - ✓ Water Quality
  - ✓ Mulberry Reclamation Plant
- Amount of Water
  - ✓ Beneficial impact to river
  - ✓ Participant Demands
  - ✓ Site constraints
  - ✓ Energy requirements
- Need for Northern Tier Pipeline
  - ✓ Gravity flow
  - ✓ Redundancy and resiliency
  - ✓ Emergency



# Pipeline Routing



# Routing Criteria

Capital  
Cost

Occupied  
Dwellings

Construction  
Duration

Land-  
owner  
Impact

Env.  
Impacts

Conduit  
Length

Street &  
Traffic  
Impacts

ROW  
Impact

O&M  
Requirements

Easement  
Difficulty

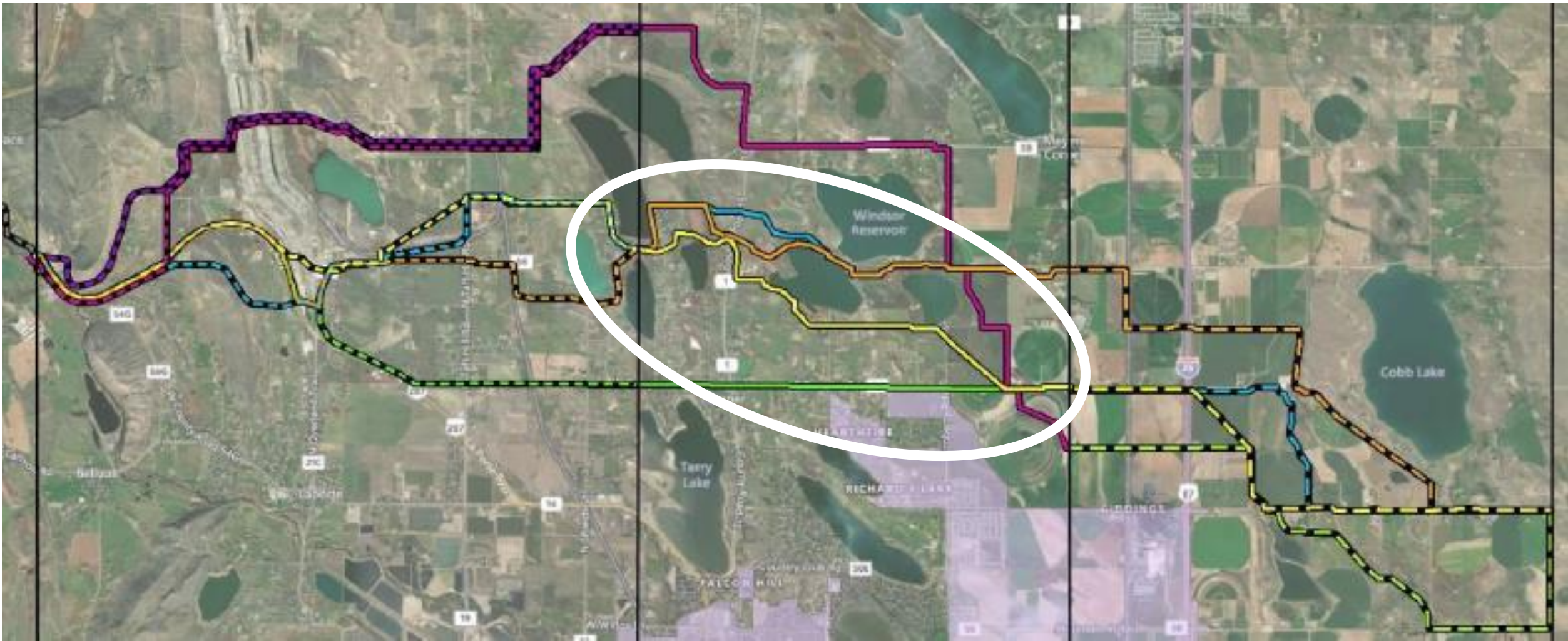
Trenchless  
Crossings

Natural  
Resources





# Routing Analysis





Alternative Name	Project Area 2 – Alignment N-2.1	
Alternative Location & Description	Alignment N-2.1 begins in-between Kulver Reservoir and Water Supply Reservoir #4 and then heads northeast in-between Water Supply Reservoir #3 and #4 and north of Dixon Reservoir. It turns south east of Dixon Reservoir before heading east at CR 56. It continues southeast through rural residential and agricultural properties, adjacent to Annex Reservoir #8 to Grey Rock Drive. It turns east and parallels Grey Rock Drive until it crosses an open farmland diagonally, and then follows CR 54 until the intersection with Giddings Rd.	
Criteria	Ranking	Comments
Capital Cost	Green	\$ 13,533,000
Conduit Length	Green	4.4 miles; 23,000 feet
Easement Difficulty	Red	26 parcels crossed, 9 non-perimeter crossings
Right-of-Way Impact	Green	0 LF in parallel ROW
Land Owner Impact	Green	1 driveway crossed, minimal subjective landowner impacts
Proximity to Occupied Dwellings	Green	Within 100 feet from 6 dwellings
Environmental Impacts and Floodplain Crossings	Yellow	500 LF of wetlands/riparian areas crossed and 0 LF of floodplain crossed
Existing Utilities	Yellow	Medium utility density
Hazardous/Permitted Crossings	Green	No hazardous/permitted crossings expected
Surface and Street Impacts	Green	400 LF in gravel roads (Hood Lane, CR-56, CR-13, Tumberry) and 0 LF in paved roads
Traffic Impacts	Green	500 LF of low, 400 LF of medium, 0 LF of high, Traffic Impact Score of 1300
Water Storage Reservoirs Impacts	Green	No impact to water storage reservoir expected. Close to the side of Annex Reservoir 8
Construction Duration and Relative Constructability	Green	160 days of construction
Required Trenchless Crossing	Yellow	3 CR crossings (CR-15, CR-54 2x) and 2 other road crossings (Eagle Lake, Giddings) and 500 feet total trenchless
Development Pressure	Green	0 LF of near-term developments
Operation and Maintenance Access	Green	Best access of alternatives identified
O&M Requirements	Yellow	7 ARV and BO pairs. Some extreme elevation change throughout.
Natural Resources Impacts	Green	100 LF through natural areas

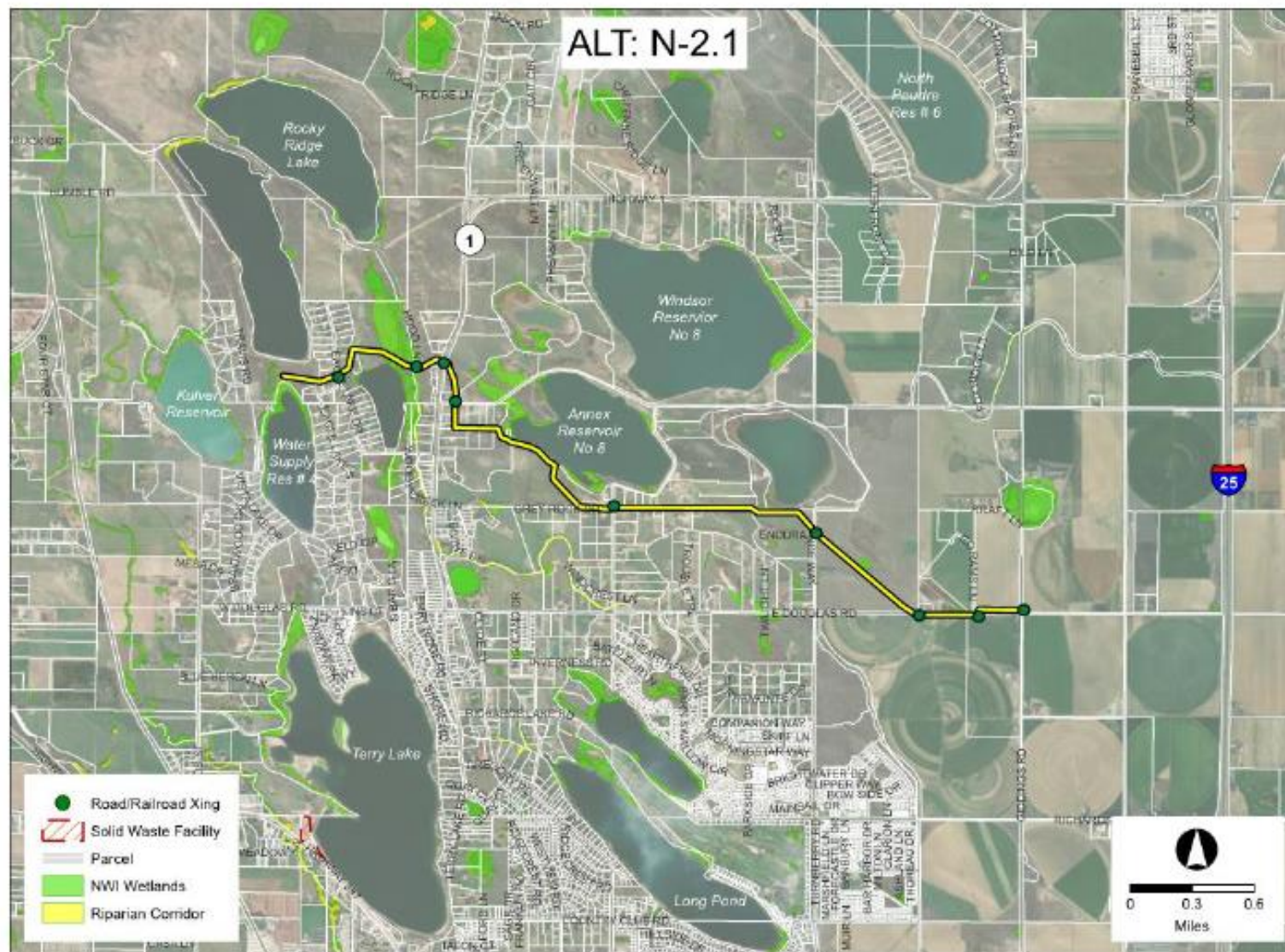
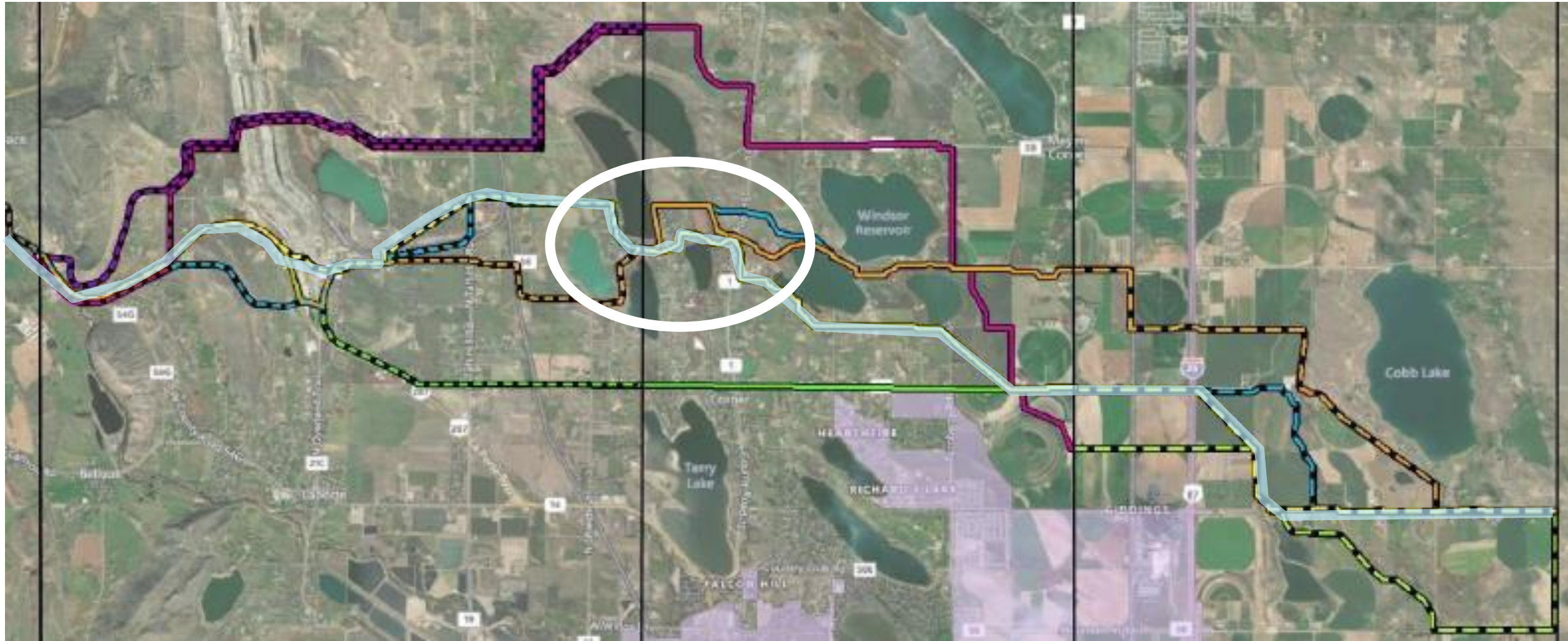


Figure N.10 – Alternative N-2.1





# Routing Analysis





















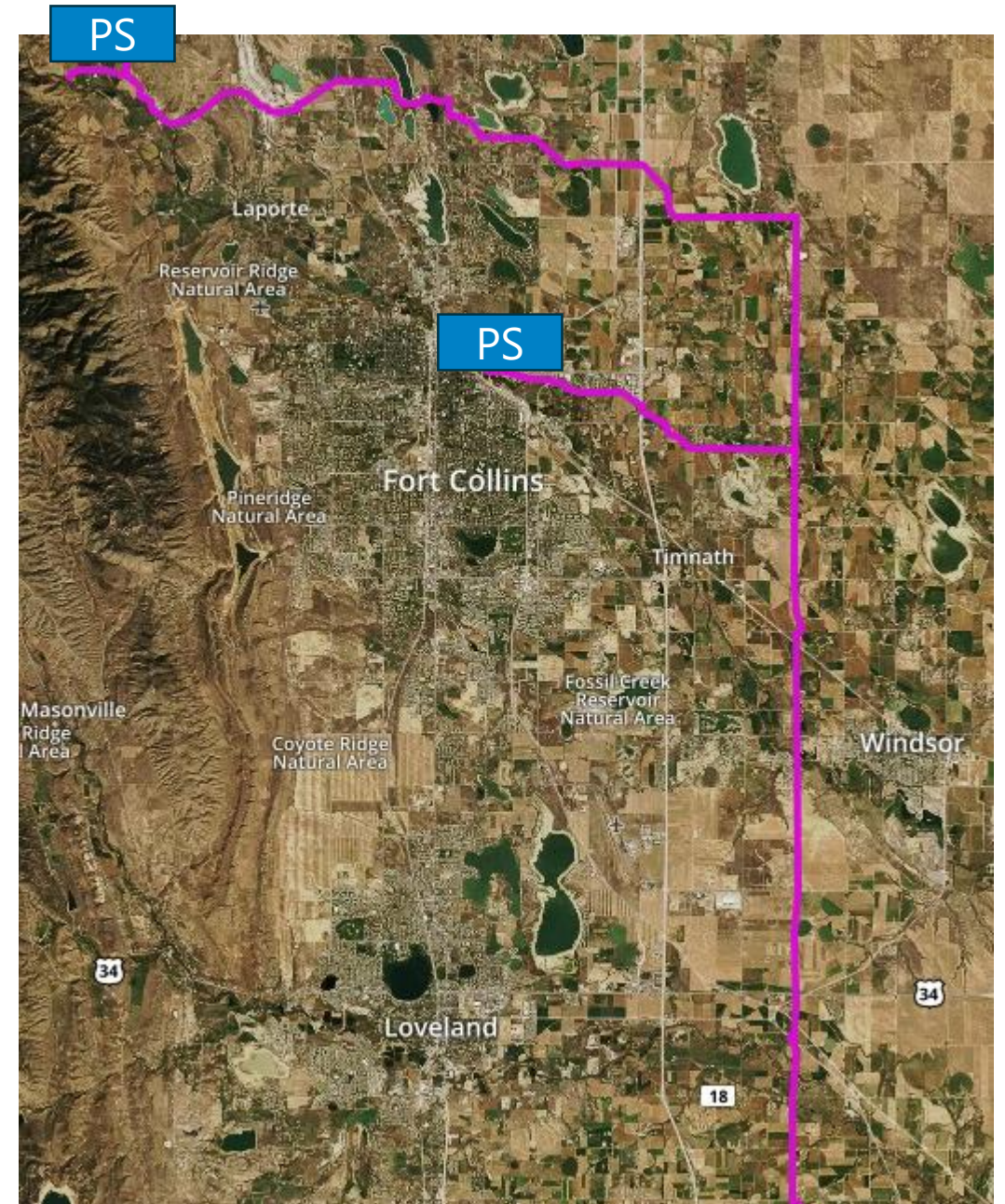




# Preferred Alignment

Pipeline	Length (miles)
Northern Tier	17.1
Poudre Delivery	1.3
Poudre Diversion	7.0
County Line	10.2
<b>TOTAL</b>	<b>35.6</b>

- Glade Pump Station
- Poudre Pump Station





# Local Coordination



- Fort Collins
  - Site Plan Advisory Review process
  - Pipeline Routing Coordination
- Timnath, Windsor, Johnstown
  - Future IGAs
- Master Plan Consistency
  - Temporary Impacts



CRITERIA 1: ADOPTED PLANS



CRITERIA 12: RECOMMENDATIONS

# Questions?



# Easement, Reclamation & Outreach

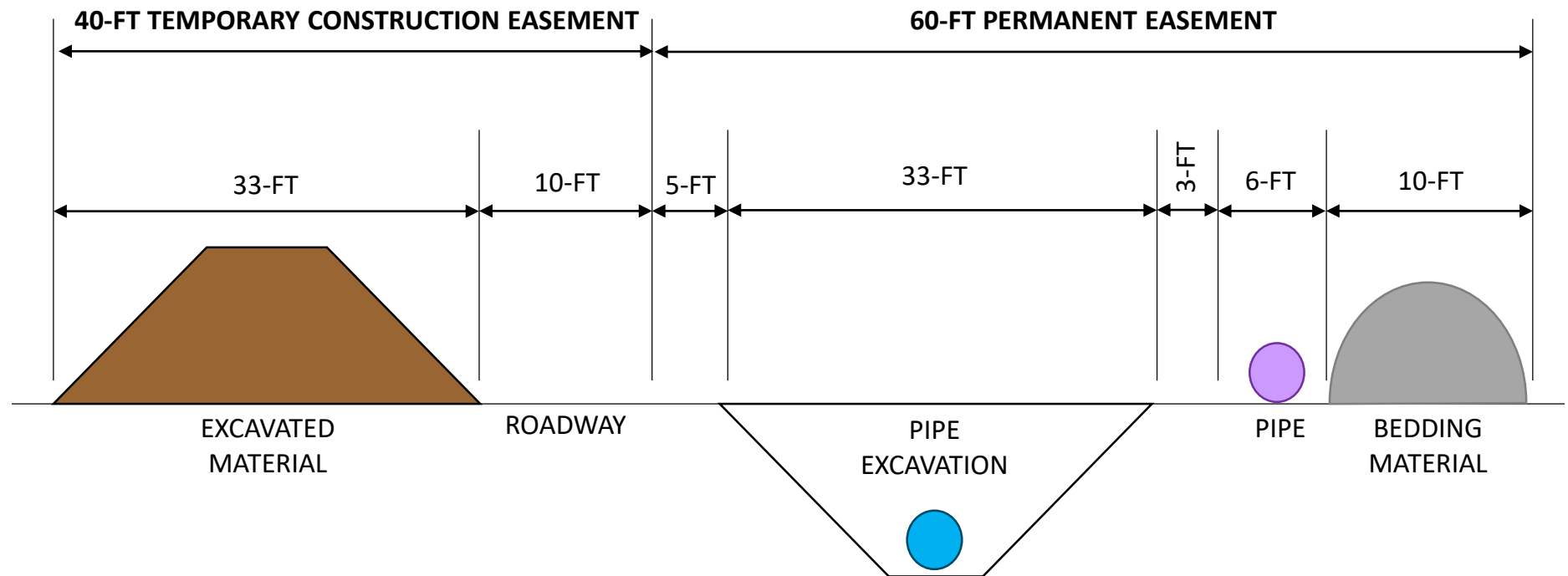
Larimer County 1041 Presentation





# Typical Easement Cross Section

- 60-ft Permanent Easement
- 40-ft Temporary Construction Easement



# Easement / Right of Way

- Traffic
- Other Utilities





# Pipeline Easement





# Easement Purchase Process

- Pay fair market value for easements by appraising land value
- If value over \$5,000, NISP will pay for landowner to have their own appraisal conducted





# Reclamation & Revegetation

- Develop reclamation plan with each landowner
- Pay crop losses or damages resulting from construction





# Northern Water Experience

- Designed, constructed, managed and maintains approximately 150 miles of buried pipeline
- Pump stations to match existing landscape



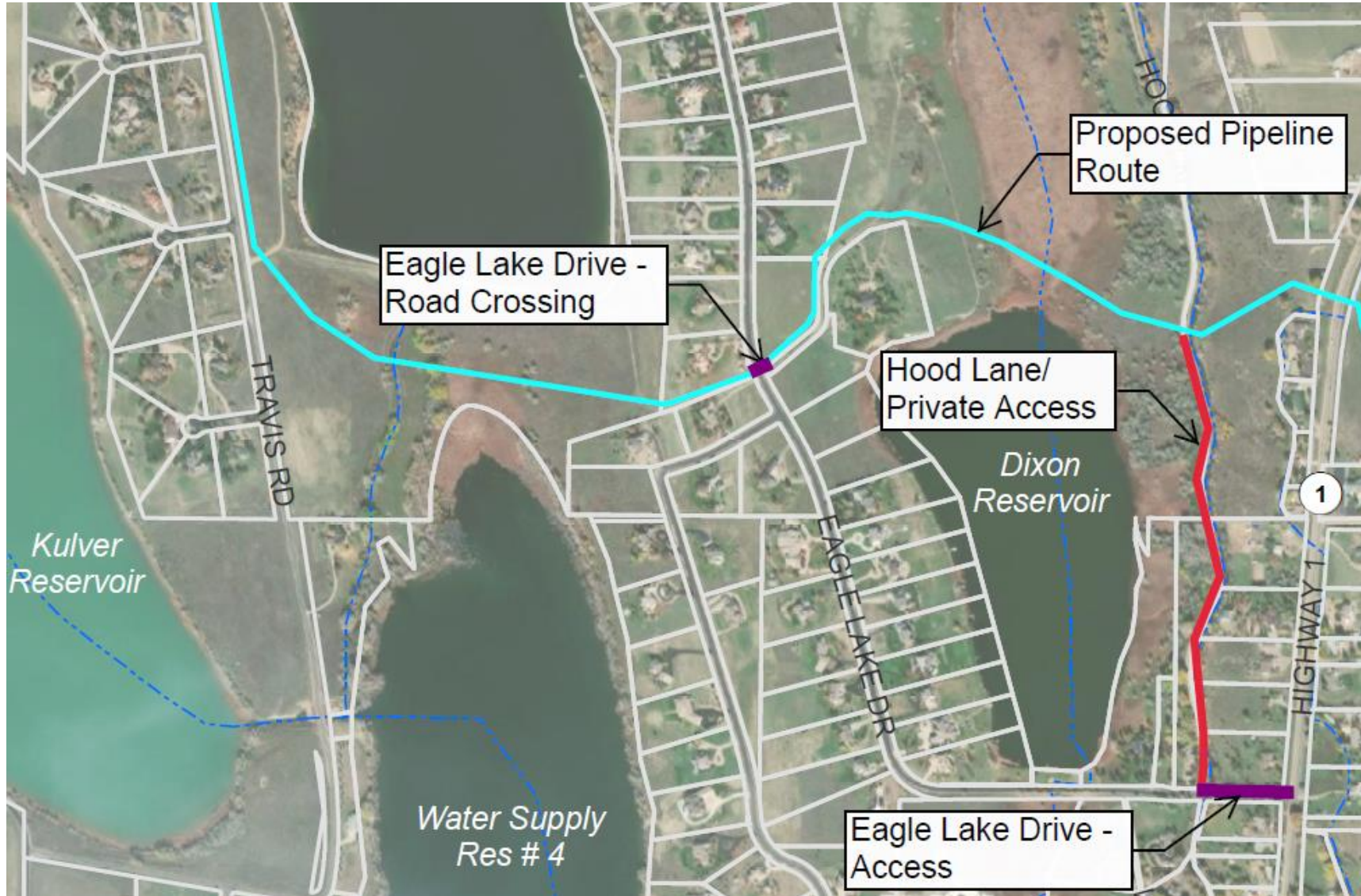


# Public Outreach

- Specific Mailings and maps to Potential Easement Landowners
- Invitation to meet with One-on-One (in-person or online)
- Invitation to meet with Groups (in-person or online)
- [www.NISPTalk.com](http://www.NISPTalk.com) always open 24/7 for comments



# Eagle Lake Construction Access Routes





# Eagle Lake Condition of Approval

- The applicant shall minimize the use of Eagle Lake Homeowner's Association (HOA) owned roads for construction of the pipeline by accessing the pipeline alignment from State Highway No.1 and Travis Road.
- The applicant may also access the pipeline construction alignment by any private access acquired.
- The use of Eagle Lake Drive during construction shall be limited to the eastern most 500 feet for access to Hood Lane from State Highway No.1. In addition, Eagle Lake Drive will also be crossed by the pipeline installation.



# Northern Water Contacts

- Call and email us anytime

Stephanie Cecil

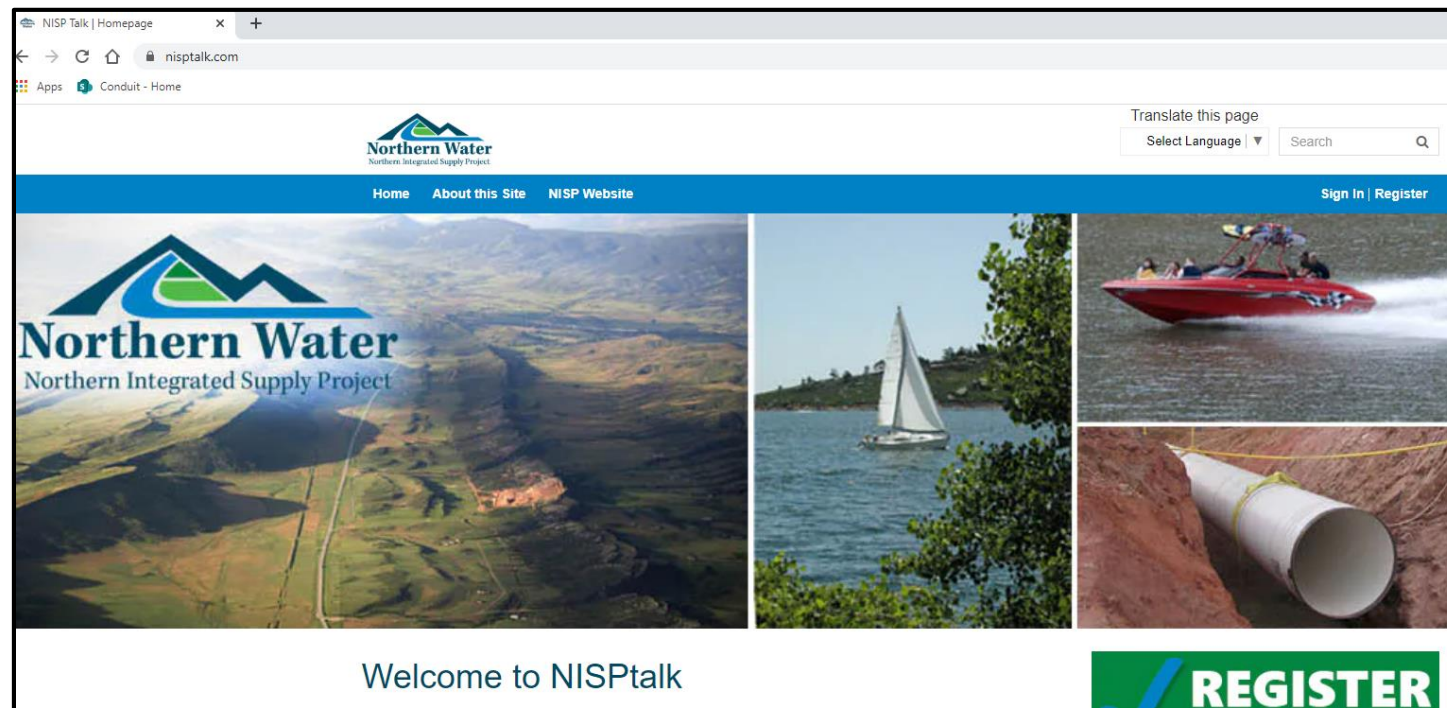
970-685-0061 (cell)

[scecil@northernwater.org](mailto:scecil@northernwater.org)

Jim Struble

970-593-2074 (cell)

[jstruble@northernwater.org](mailto:jstruble@northernwater.org)





# Questions?



# Public Outreach

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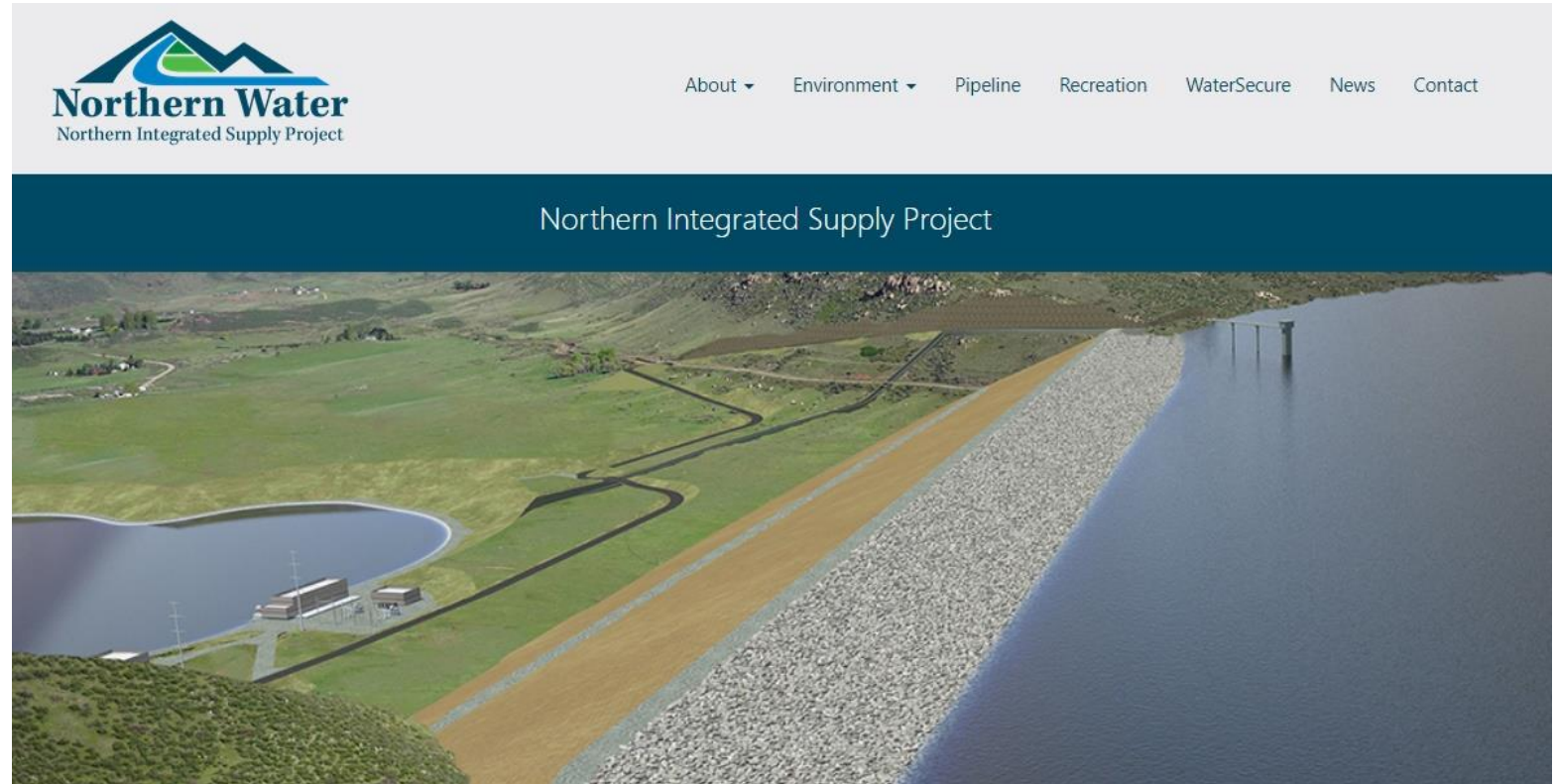


# Overview



# Inform and Engage

Continuous effort has been made to inform, engage, involve, and receive input on the public.





# Public Outreach Summary

Final EIS Public  
Comment Period

Newspaper,  
Radio, and TV  
Interviews

Meetings with  
Business Groups

401 Cert. Public  
Comment Period

Draft EIS Public  
Hearings

Project Website  
Outreach

FWMEP Public  
Hearings

Draft EIS Public  
Comment Period

Supplemental  
EIS Public  
Comment Period

Meetings with  
Civic Groups

Sup. EIS Public  
Hearings

Annual Summer  
Tours

Social Media  
Outreach

College  
Presentations

Information  
Booths

# Online Engagement





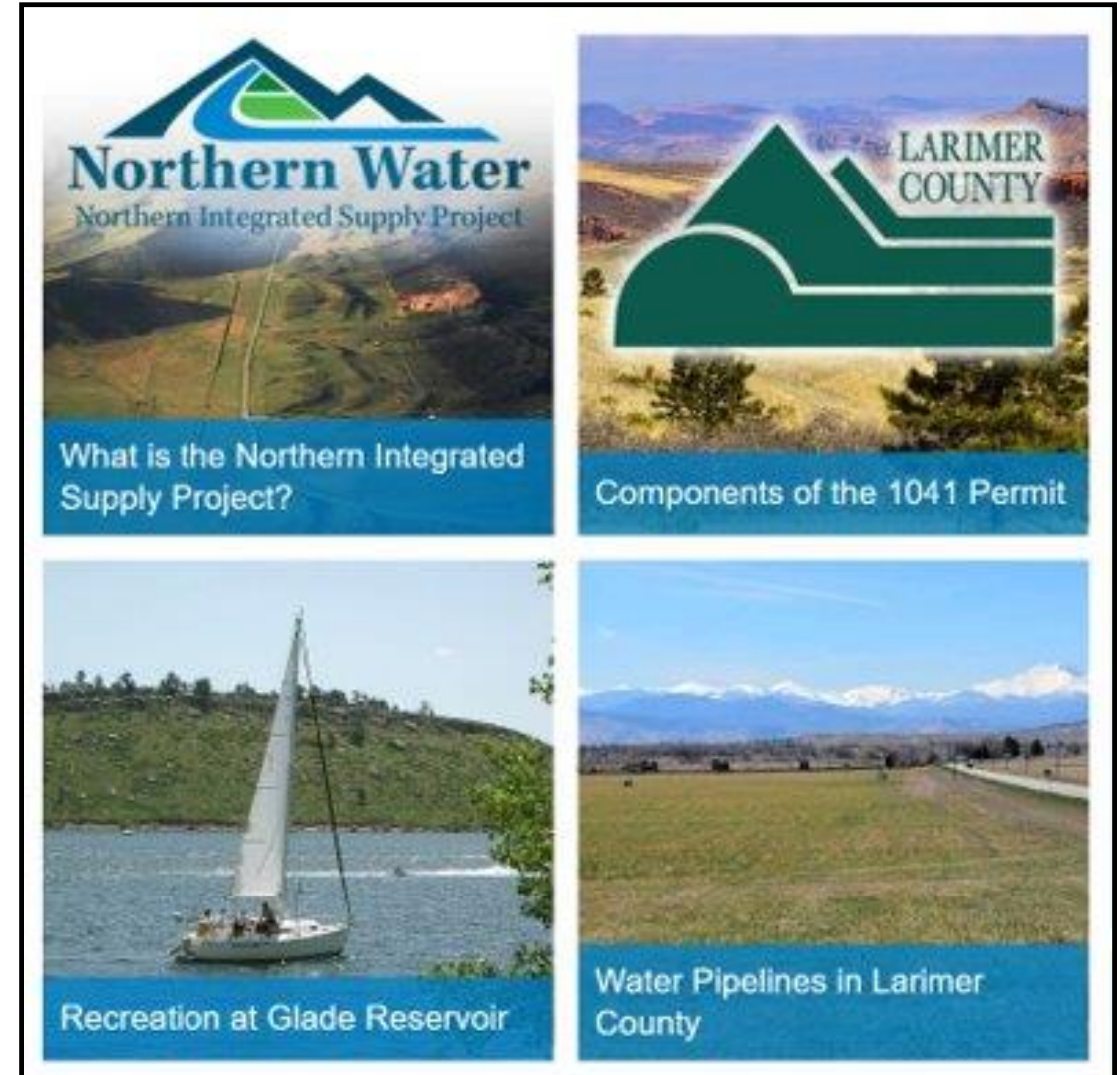
# NISPTalk.com

NISPTalk, a web-based public engagement platform, was developed to discuss the Larimer County 1041 Permit.



# NISPTalk.com

Pages discuss the Project, 1041 Permit process, pipeline conveyance routes and recreation at Glade Reservoir.

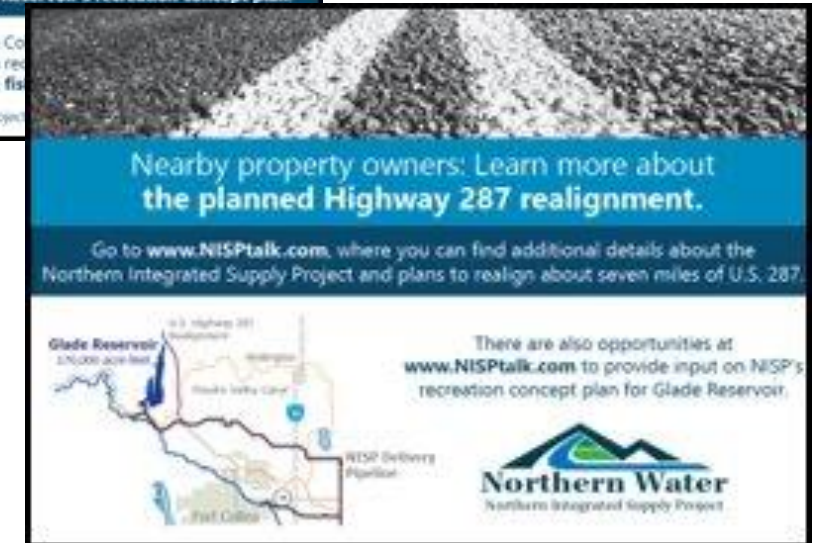
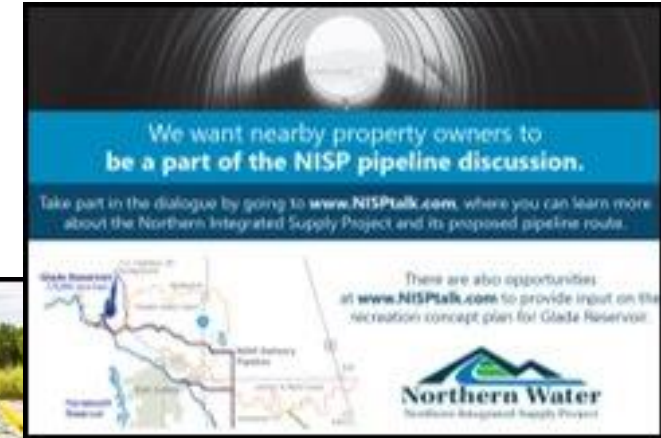




# Direct Mailings

Postcard invitations were sent to properties:

- Close to proposed pipelines
- In Bonner Peak neighborhood
- Within 1 mile of the reservoir and recreation areas



# Additional Outreach Methods

NISP utilized several platforms to provide information and education about the project, including:

- NISP website at [www.gladereservoir.org](http://www.gladereservoir.org)
- NISP Facebook and Twitter channels
- Northern Water social media channels
- Larimer County social media channels
- Northern Water eWaternews
- NISP Participants in Larimer County social media channels
- Posters at recreation vendors or recreation locations





# Open Houses



# June 2017 Open House

- 144 people signed in
- 27 comment cards received





# June 2017 Open House

Issue	No. of Comments*
Douglas Road Pipeline concerns (Use Northern Route, not Douglas Road)	11
Douglas Road Traffic and Roadway Concerns	6
Northern Route Concerns (Use Douglas Road, not Northern Route)	5
Easement Width issues	3
Safety Concerns	2
Opposed to NISP Entirely	2
Thanks for hosting open house	2
Terry Lake wetlands issues	1
Highway 14 impacts	1
Request additional NEPA Review	1
Water Quality Issues	1
Request more Public Meetings	1
Notify others, including all Terry Point residents	1



# October 2019 Open House

- 95 people signed in
- 32 comment cards received





# October 2019 Open House

Issue		No. of Comments*
Pipelines	Damage or impact to property from construction	2
	Opposition to pipelines entirely	1
	Suggested alternative pipeline alignments	3
Recreation	Support for camping	7
	Support for fishing	10
	Support for recreation plan	2
	Support for trails	15
	Support for picnic pavilion	3
	Support for boating	8
	Concerns regarding noise and impacts from motorized boating	10
	Suggested boat ramp locations and configuration	3
	Suggested trail and trailhead configurations	3



# December 2019 Open House

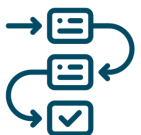
- 34 people signed in
- 22 comment cards received





# December 2019 Open House

Issue	No. of Comments	In Support or Neutral	In Opposition
Position on project in general	4	2	2
Boating on reservoir	14	11	3
Request for non-motorized boating	9	-	-
Night-time boating on reservoir	18	1	17
Camping at recreation area	19	13	6
Fishing on reservoir	19	12	7
Trails in recreation area	19	14	5



# Outreach During COVID-19





# NISPTalk.com During Pandemic

People can ask questions, learn about the project and provide feedback during the pandemic.



# Other Outreach Options





# One-to-One Meetings

One-on-one  
conservations have  
occurred with  
individuals and  
homeowners'  
associations.



# Questions?





# Glade Reservoir Recreation

Larimer County 1041 Presentation



# Voluntary Recreation Enhancement Measures





The map shows the University of Utah campus with various buildings and landmarks labeled. Key locations include:

- Student Center** (labeled 'G')
- Library** (labeled 'H')
- Academic Buildings** (labeled 'A' through 'F')
- Recreation Areas** (labeled 'B' and 'C')
- Residential Areas** (labeled 'D' and 'E')
- Administrative Buildings** (labeled 'I' and 'J')
- Other Buildings** (labeled 'K' and 'L')

The map also shows major roads and landmarks such as the **Utah-Jordan Equestrian Center** and the **Utah Olympic Stadium**.

- 



# Recreation Partnerships

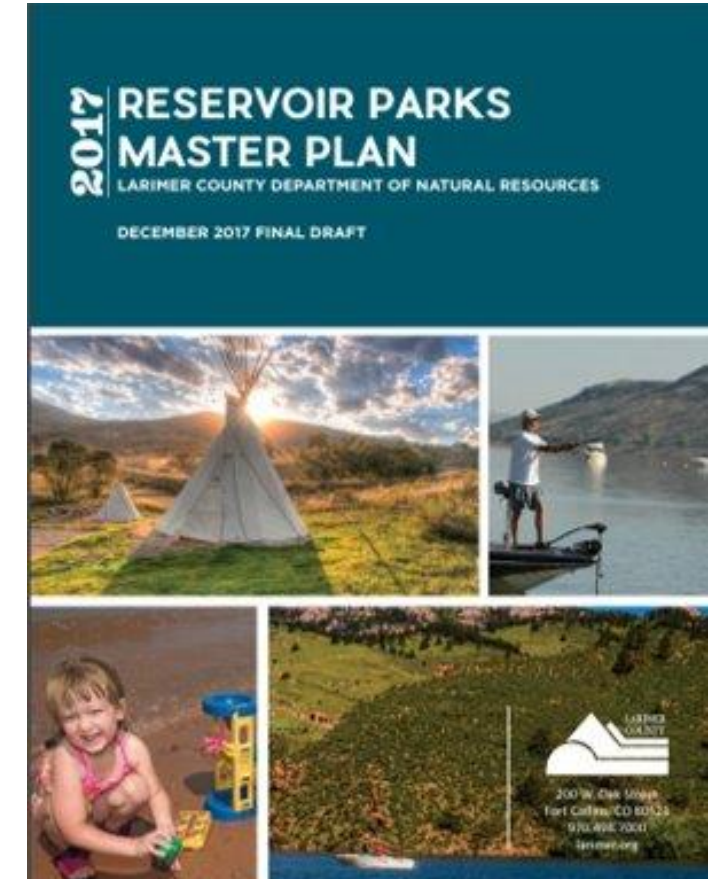
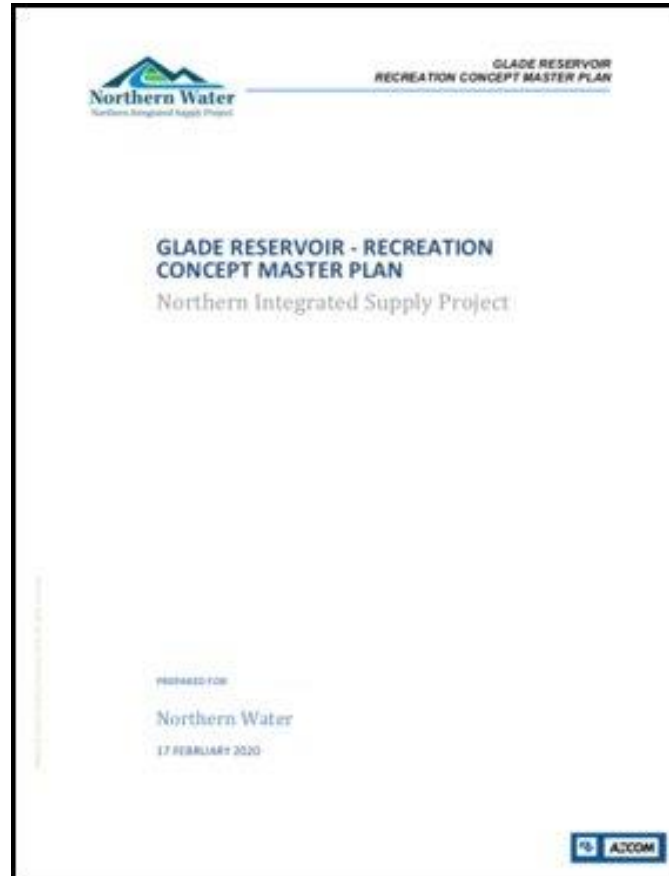
Northern Water has a successful history providing reservoirs and partnering with Larimer County, the City of Boulder, Boulder County, and the U.S. Forest Service to manage recreation.





# Master Plan Agreements

For more than a year, Northern Water and Larimer County staff met to ensure recreation facility planning would be in concert with Larimer County's master plans and recreation vision.



# Recreation Concept Master Plan

The Recreation Concept Master Plan includes provisions for Americans with Disabilities Act access and multi-modal transportation options.



GLADE RESERVOIR RECREATION AREA - ILLUSTRATIVE SITE PLAN  
JANUARY 2020

- |                                   |  |
|-----------------------------------|--|
| 1 CAMPING AREA 1: 15-20 CAMPSITES | A FULL SERVICE CAMPING AREA: 70-80 RENTAL UNITS                      |
| 2 CAMPING AREA 2: 10-15 CAMPSITES | B POUDRE CANYON PUBLIC PARKING: 125-145 SPACES                       |
| 3 CAMPING AREA 3: 10-15 CAMPSITES | C VISITOR CENTER: 8,000-10,000 SF BUILDING + 40-50 SPACES            |
| 4 CAMPING AREA 4: 10-15 CAMPSITES | D BOAT RAMP PARKING - LONG TERM: 20-30 SPACES + 40-50 TRAILER SPACES |
| 5 CAMPING AREA 5: 5-15 CAMPSITES  | E BOAT RAMP PARKING - SHORT TERM: 15 SPACES + 10 TRAILER SPACES      |



# Major Recreation Components





# Visitor Center

The Visitor Center will be a key amenity for the nearby community and public.



CRITERIA 10: BENEFITS AND LOSSES

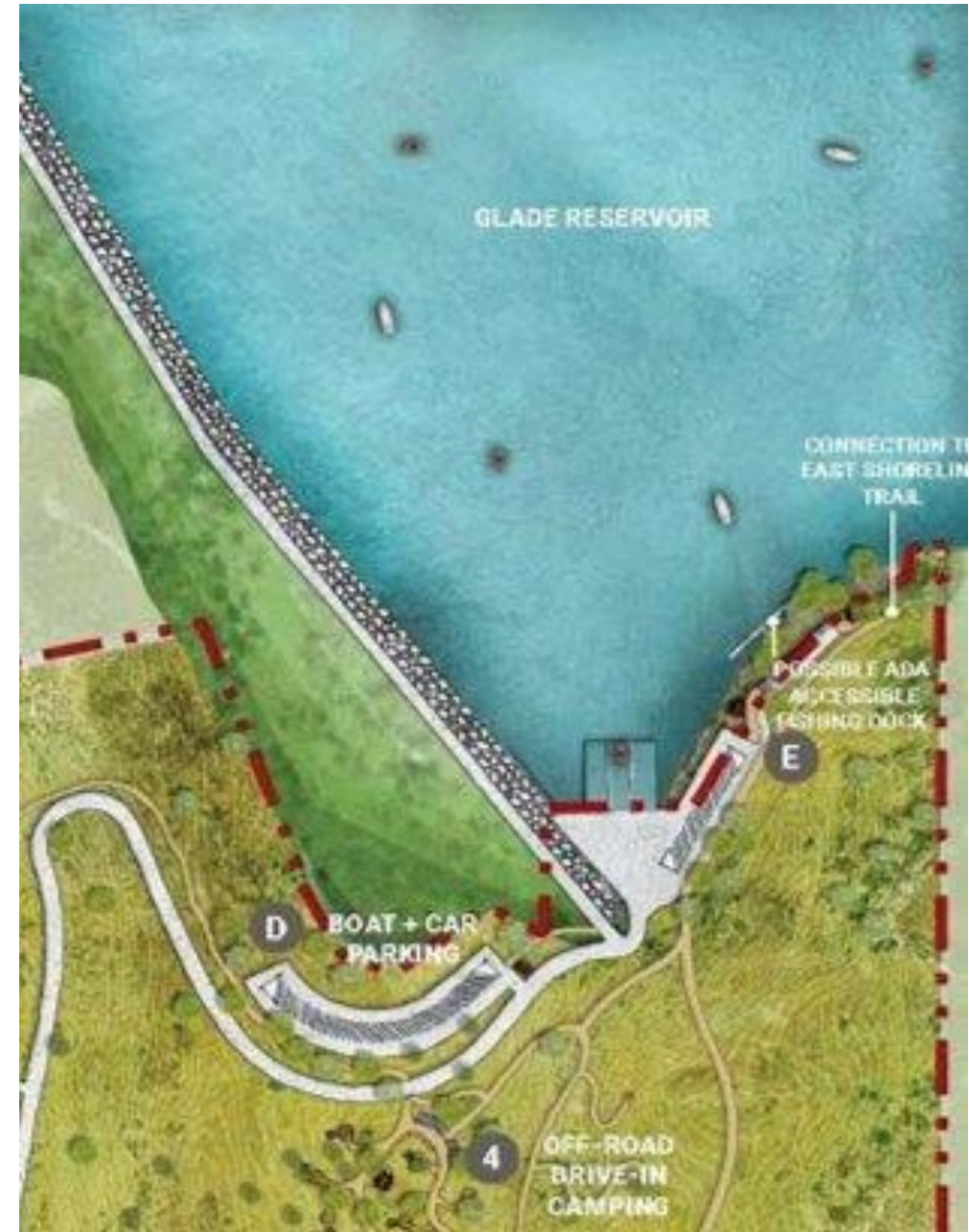


CRITERIA 11: MITIGATION COST/BENEFIT



# Fishing

Glade Reservoir will provide opportunities for people of all skill levels and physical capabilities to learn and participate in fishing activities.



CRITERIA 10: BENEFITS AND LOSSES

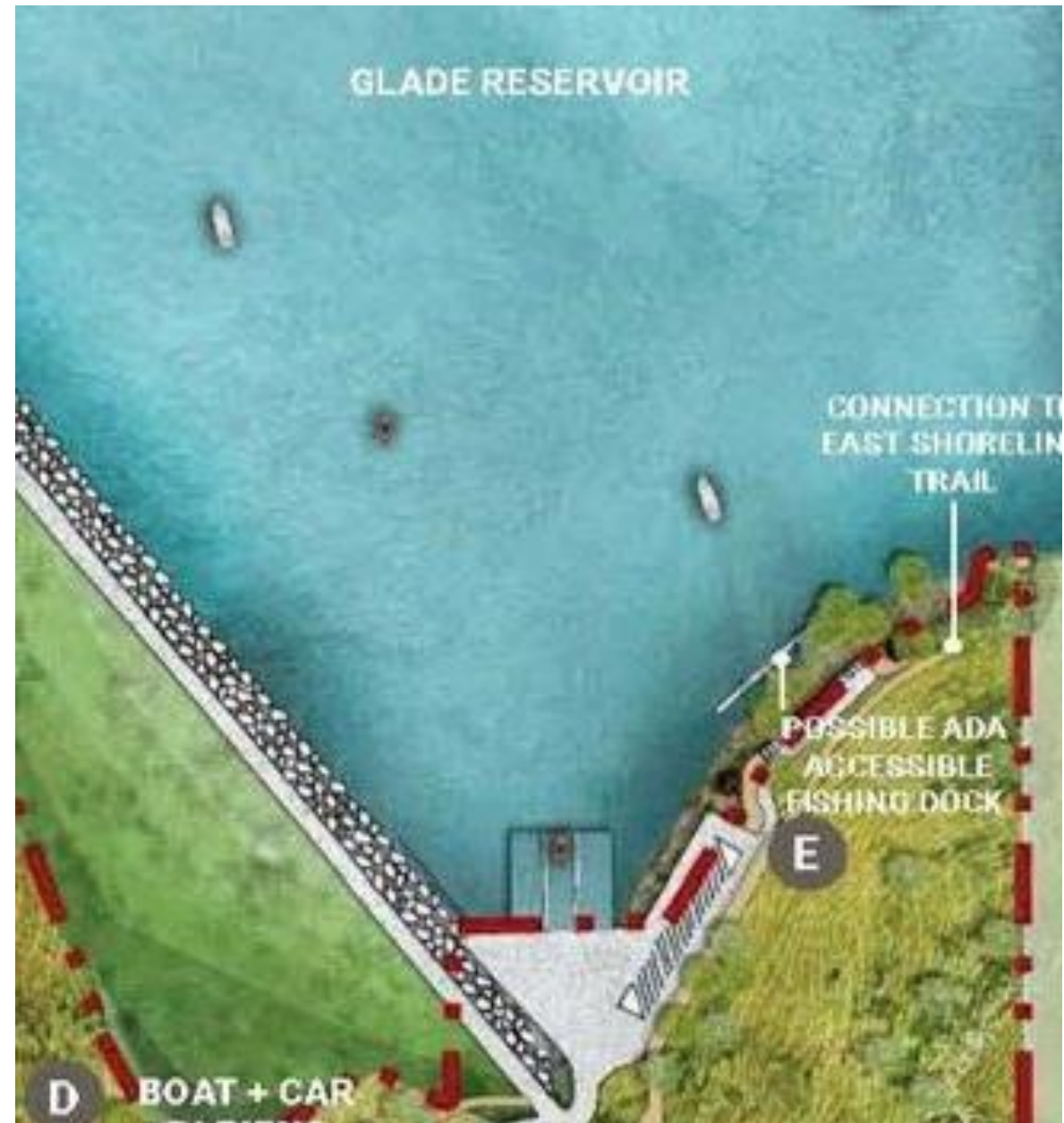


CRITERIA 11: MITIGATION COST/BENEFIT



# Boat Ramp and Boating

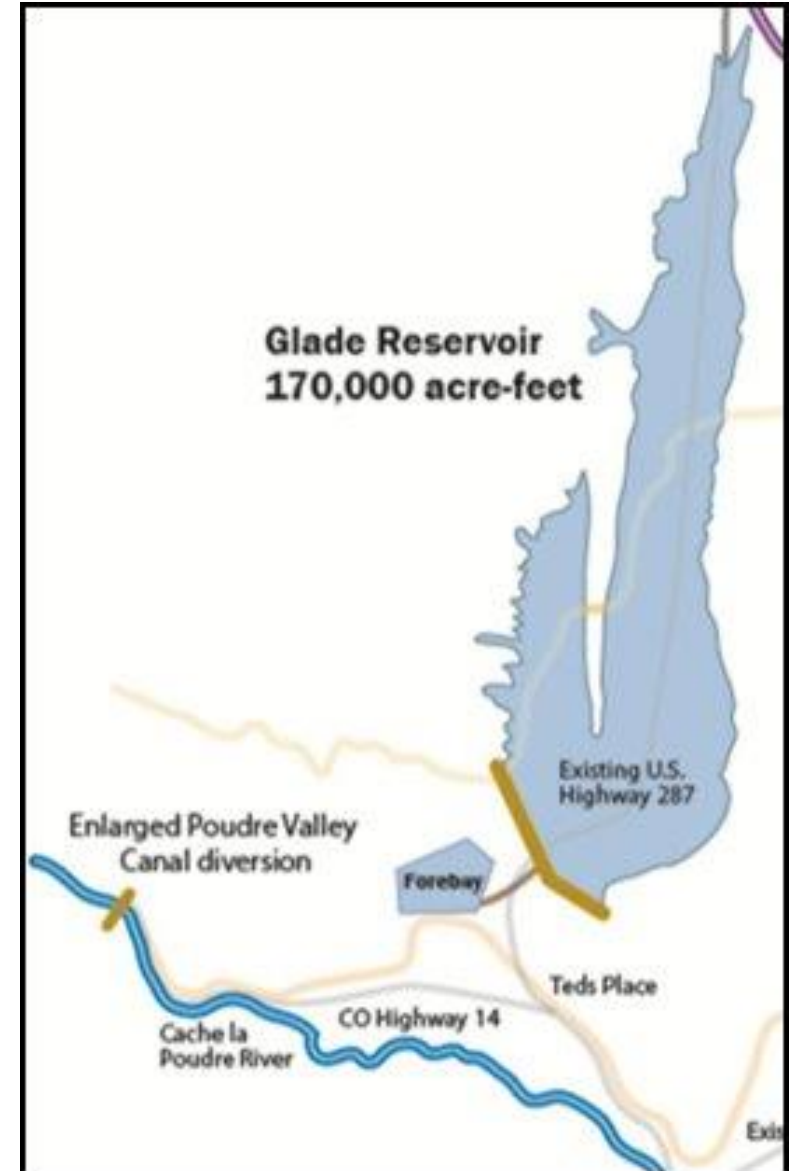
A boat ramp will provide controlled access to the reservoir for a range of watercraft.





# Boat Ramp and Boating

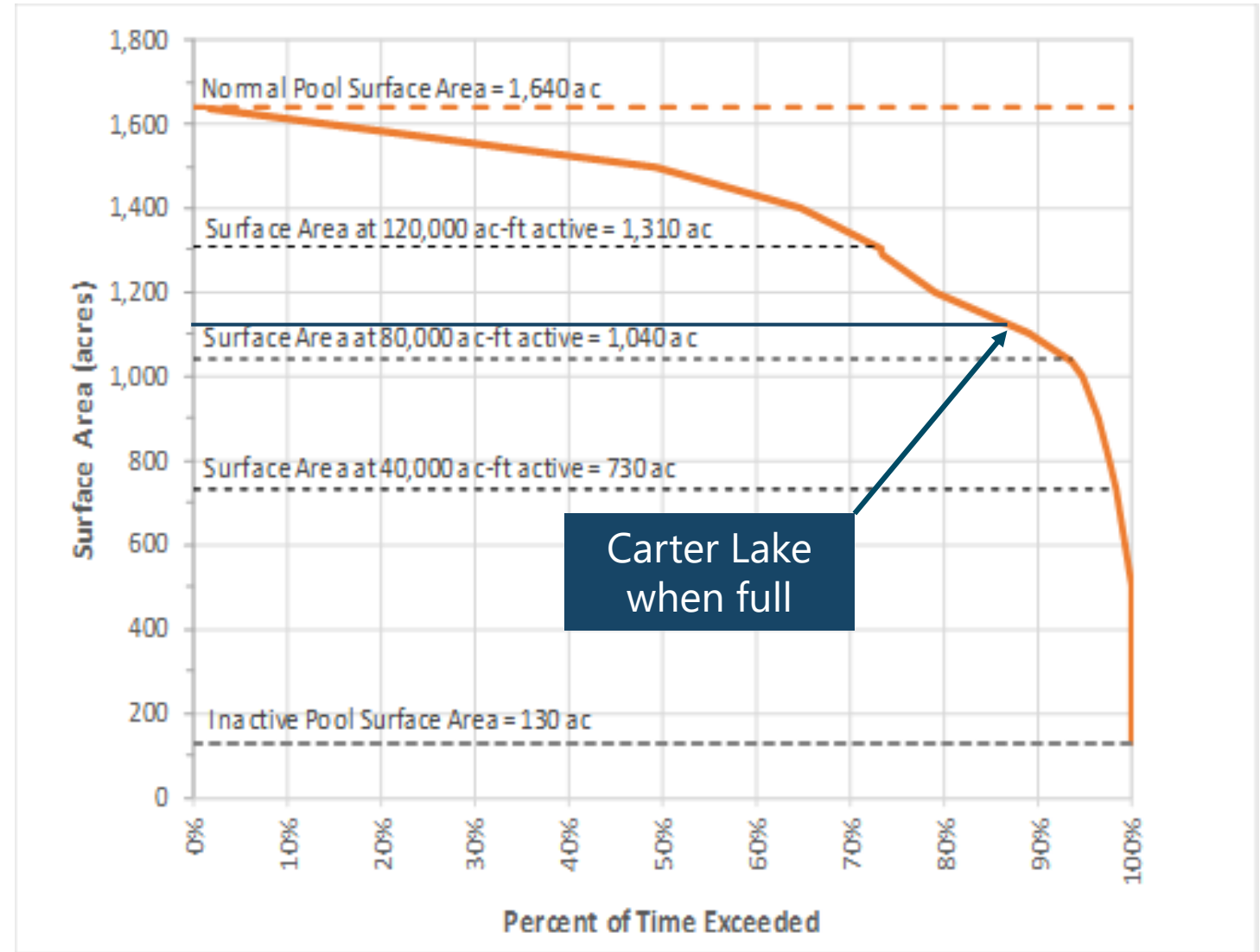
Designated portions of the reservoir could be reserved for both motorized and non-motorized water recreation.



# Glade Reservoir Water Levels

Glade Reservoir will have a water-surface-area over 1,000 acres 93% of recreation season.

To give a sense of scale, Carter Lake is 1,110 acres when full.





# Camping

Campground use areas are being studied to allow for a mix of camping experiences and programs.



CRITERIA 10: BENEFITS AND LOSSES

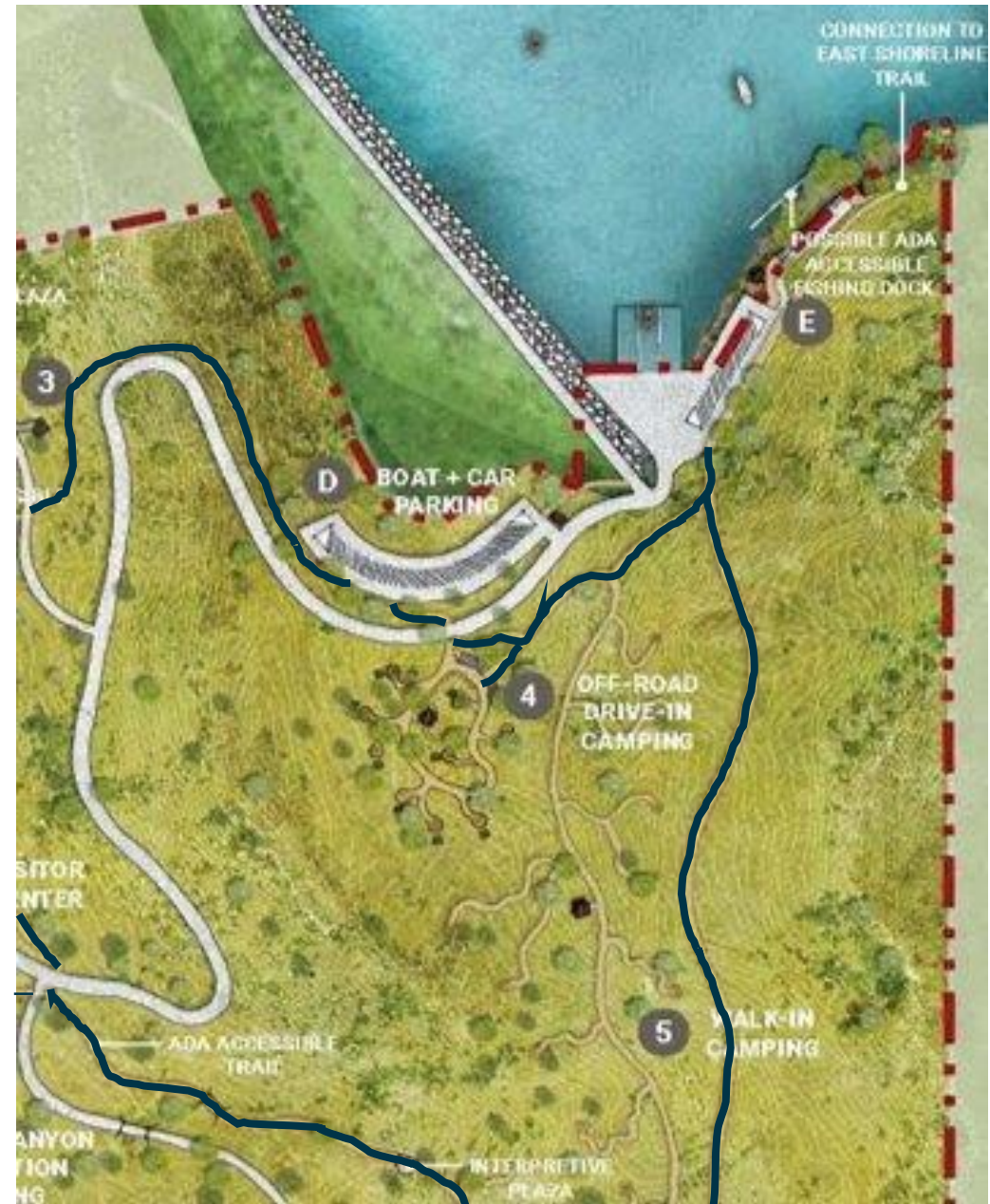


CRITERIA 11: MITIGATION COST/BENEFIT



# Trails

An internal network of looping trails will be a part of the master plan. The trails will be flexible and dynamic enough to offer a host of different trail uses, including biking, running and hiking.





# Trails

A shoreline trail on the west side of the reservoir will provide foot access to the reservoir shoreline.

An east shoreline trail could serve a variety of recreational uses such as hiking, mountain biking, rock climbing and fishing activities.





[illegible][illegible][illegible]

# Recreation Concept Master Plan

Further recreation design will be guided by the Reservoir Parks Master Plan, input from the public, and coordination between County staff and NISP.



GLADE RESERVOIR RECREATION AREA - ILLUSTRATIVE SITE PLAN  
JANUARY 2020

- |                                   |  |
|-----------------------------------|--|
| 1 CAMPING AREA 1: 15-20 CAMPSITES | A FULL SERVICE CAMPING AREA: 70-80 RENTAL UNITS                      |
| 2 CAMPING AREA 2: 10-15 CAMPSITES | B POUDRE CANYON PUBLIC PARKING: 125-145 SPACES                       |
| 3 CAMPING AREA 3: 10-15 CAMPSITES | C VISITOR CENTER: 8,000-10,000 SF BUILDING + 40-50 SPACES            |
| 4 CAMPING AREA 4: 10-15 CAMPSITES | D BOAT RAMP PARKING - LONG TERM: 20-30 SPACES + 40-50 TRAILER SPACES |
| 5 CAMPING AREA 5: 5-15 CAMPSITES  | E BOAT RAMP PARKING - SHORT TERM: 15 SPACES + 18 TRAILER SPACES      |



# Benefits to Larimer County





# Added Tourism and Economic Vitality

Recreation opportunities at Glade Reservoir will bring tourism and economic growth to Larimer County, along with additional sales tax revenues.



# Larimer County: Recreation Manager

The County and NISP Water Activity Enterprise will enter into a lease agreement for the County to act as the managing partner to manage recreation.



CRITERIA 10: BENEFITS AND LOSSES



CRITERIA 11: MITIGATION COST/BENEFIT



# Recreation Funding Commitment

Funding will be committed to:

- Develop and construct the Recreation Development Plan
  - Major Recreation Components
  - Access roads
  - Parking lots (main-site and north trail head)
- Develop and stock fishery
- Purchase and update KOA
- Construct traffic upgrades if needed to safely convey visitors



# Recreation Cost Sharing Concept

Funding Commitment	\$21.8M
NISP Pays 75%	\$16.35M

Larimer County or Others pay 25%

This is a:

- Substantial commitment by NISP Participants
- Pledge to share benefits with Larimer County





# Glade Could Provide Over 80% of Reservoir Parks Master Plan Desired Activities



CRITERIA 10: BENEFITS AND LOSSES



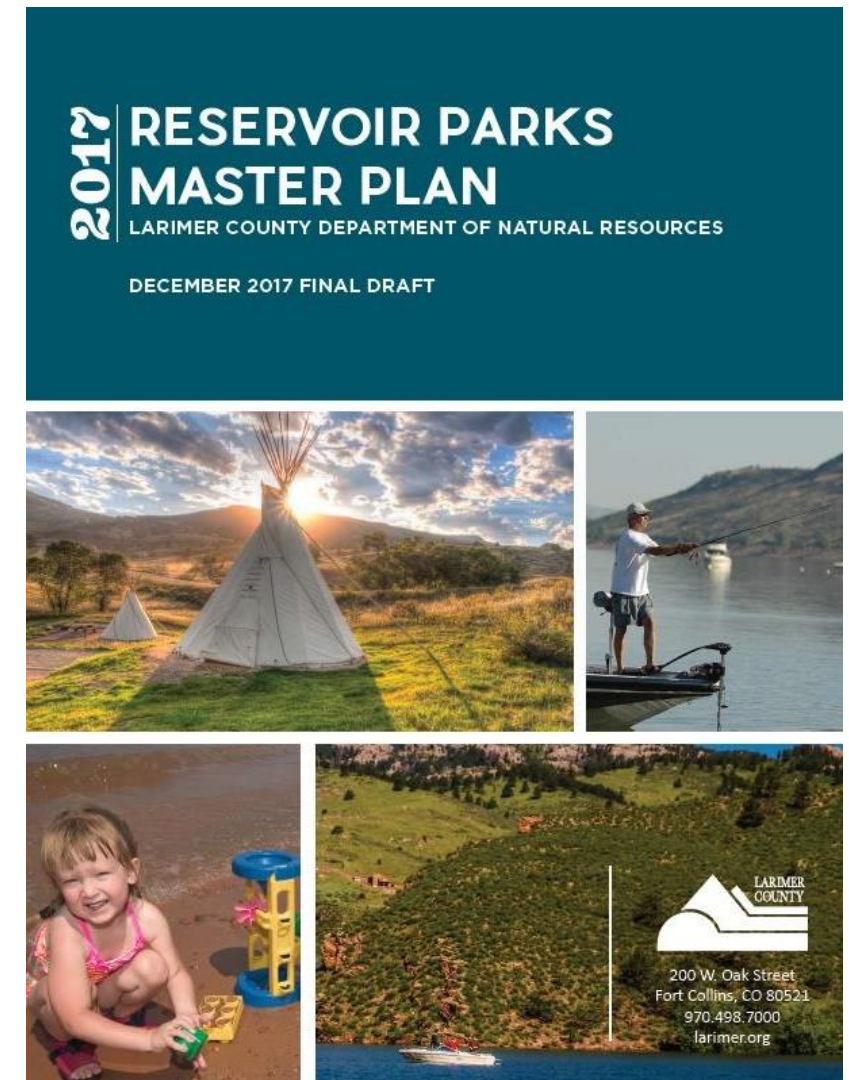
CRITERIA 11: MITIGATION COST/BENEFIT

# Consistency with Larimer County's Master Plan



# Consistent with the Master Plan

Glade Reservoir is well suited to provide additional recreation options and address an increasing demand for recreation and is identified in Larimer County's 2017 Reservoir Parks Master Plan as a future park strategy.





# Questions?



# Larimer County 1041 Permit Criteria

Larimer County 1041 Presentation



# Site Selection and Glade Reservoir

- Glade Reservoir is a “future park strategy” in the Reservoir Park Master Plan with recreational activities-hiking, fishing and boating
- Siting Glade Reservoir within Larimer County meets many goals and strategies under the Comprehensive Plan / Master Plan
  - ✓ Protects agricultural land and water
  - ✓ Protects and enhances the environment
  - ✓ Protects healthy and natural ecosystems





# Glade Aligns with Comprehensive Plan

- ✓ Increases open space
- ✓ Protects the Poudre through stream flow commitments 365 days a year; river blocking structures to be rebuilt
- ✓ Water quality certification approved through health department
- ✓ 1,380 acres of wildlife habitat and natural ecosystems

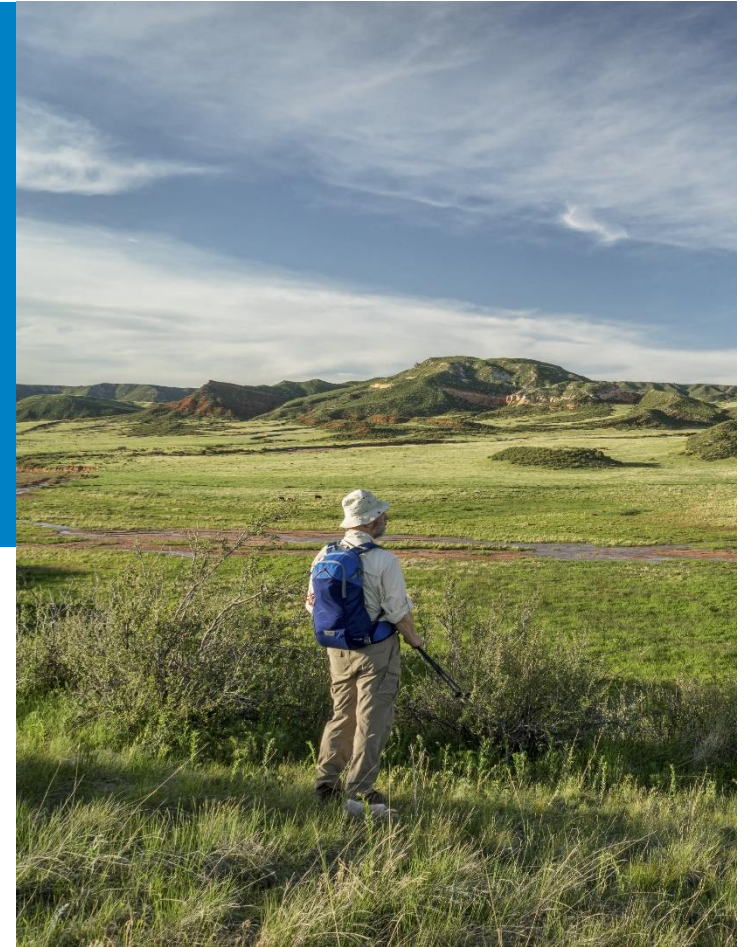


# Healthy Landscapes - Active Lifestyles

“Maintaining environmentally healthy landscapes and viability of local agriculture provides financially intangible yet essential health benefits,” and “healthy and active lifestyles are an important component of the County’s livability.”

- Comprehensive Plan

- ✓ Pipeline easements protect landscapes and viability by compensating landowners for temporary losses and permanent effects
- ✓ Glade trails help achieve the 2030 Plan’s metric 3 – increase trail miles



# Environmental Stewardship

“Protection of important farmlands and wildlife habitats and corridors.”

“Natural resource health is directly linked to conserved lands.”

- Comprehensive Plan Goals

- ✓ All pipelines will be buried and not fragment landscapes
- ✓ Glade will add flows at critical times to the Poudre River
- ✓ Glade will also help achieve metric 4 under the plan – “increasing the acres of conserved land through available tools”
- ✓ NISP provides both economic benefits including jobs and quality of life for Larimer County residents







The Fish and Wildlife Mitigation & Enhancement Plan, Endangered Species Act plan for Prebles Meadow Jumping Mouse, Clean Water Act 404 mitigation plan and historic preservation plan will protect important wildlife habitat corridors, native vegetation, and maintain healthy and natural ecosystems.



# Agricultural Land Conservation

“Larimer County promotes conservation of healthy, sustainable agricultural land and water resources by undertaking collaborative strategies to minimize the loss of productive land and water and continuing to pursue water sharing between agriculture, industrial and domestic utilities.”

- Comprehensive Plan

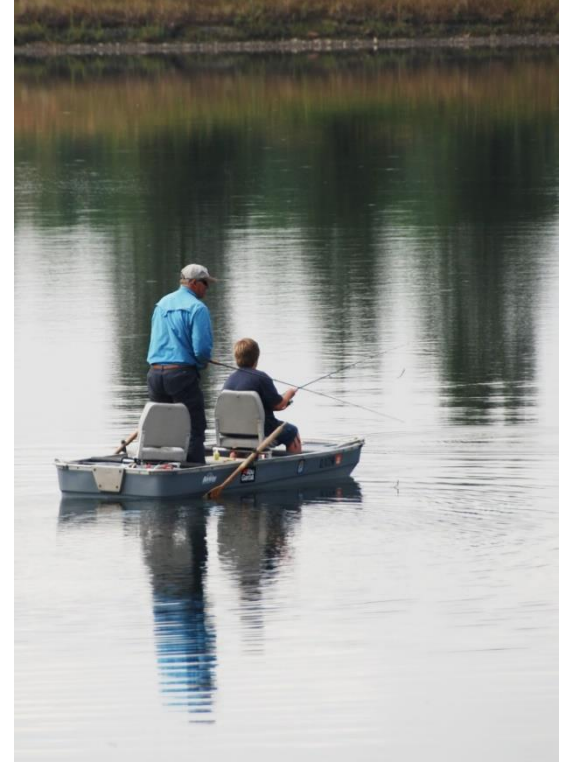
- ✓ NISP will preserve agricultural lands and farming/ranching by providing water to agriculture
- ✓ NISP rural lands protection is consistent with the principle that rural areas are meant to accomplish purposes that suit the natural environment, protecting watersheds and ecosystems



# Economic Sustainability

Comprehensive Plan identifies the importance of economic sustainability and a resilient and diverse regional economy

- ✓ As the largest component of the project, Glade Reservoir will significantly contribute to the economy of Larimer County, support tourism, recreation and employment
- ✓ The flows in the Poudre River through Fort Collins will provide economic benefits for outdoor recreation
- ✓ The pipelines provide resiliency and redundancy for critical infrastructure, consistent with the principles and policies for development of utilities

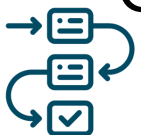




# Inclusive Opportunities

Larimer County identifies a goal “for residents to enjoy a high quality of life into the next 20 years.”

- ✓ Glade Reservoir will provide both recreation and conservation, which “bring significant, synergistic economic, health, and quality of life benefits.”
- ✓ Glade Reservoir will provide hiking, boating, biking, fishing, camping, picnicking at the reservoir and visitor center.
- ✓ Parking for those traveling up the Poudre Canyon to recreate



# Land Use Code Requirements & Compatibility with Adjacent Lands

- ✓ Land Use Code requirements will be met during construction; measures to reduce visual, light and noise impacts
- ✓ Compatibility with adjacent land use will be considered in design of facilities





# Pipeline Siting and Development

- ✓ After construction lands will be restored and revegetated
- ✓ Pipelines will not change existing land uses
- ✓ Easements will be purchased from landowners
- ✓ Landowners will be paid for crop loss and damage





# Alternatives

- ✓ More than 200 water supply alternatives were reviewed considered
- ✓ Five alternatives were screened and evaluated, eventually leading to the one analyzed by the Corps in the Federal EIS
- ✓ Alternative pipeline routes as described in the Tech memos were considered
- ✓ Conservation is not an alternative to NISP - conservation alone cannot meet anticipated year-round water needs
- ✓ Water efficiency measures have been factored into NISP needs and reduces the water needs





- ✓ Wetlands impacts will be assessed and mitigated with Federal and Larimer County wetlands standards being met.
- ✓ State construction standards for the dam and water supply facilities will be met; Larimer County standards met for recreation facilities constructed
- ✓ Mitigation of wildlife impacts are provided by 1,380 acres of habitat preservation and endangered mouse habitat





NISP will spend more than \$53 million for mitigation and enhancement projects, mostly in Larimer County. Those include:

- ✓ Conveyance in the Poudre River channel flows 365 days annually
- ✓ On-site effects mitigated by flat water recreation and land-based recreation
- ✓ Poudre River diversion structure rebuilds to eliminate dry up at those locations and allow fish passage



The federal government evaluates impacts to cultural resources. A cultural resources agreement will ensure protection of sites and structures listed on the State or National Registers of Historic Places.

- ✓ Historic Larimer County is involved in the Section 106 cultural resources compliance process under the National Historic Preservation Act



- ✓ Construction areas for the pipeline and reservoir will not be accessible by the public
- ✓ Contractors will follow federal, state and local health and safety standards-noise and air quality standards
- ✓ Construction managers and inspectors will be onsite during construction to monitor safety and ensure contractors stay within work areas



## Glade Reservoir

- ✓ Dam design meets Colorado Division of Water Resources criteria, including seismic standards
- ✓ To select safe areas for proposed locations of recreation facilities, slopes and rockfall hazard areas are considered

## Pipeline

- ✓ There are no geologic hazard areas in the pipeline route
- ✓ Buried pipelines are not impacted by wildfire risks
- ✓ Pipelines will be constructed to meet local, state and federal floodplain regulations





# Adequate Public Facilities & Services

- ✓ Glade Reservoir will have facilities necessary for on site water and sewer, adequate fire protection service
- ✓ A partnership with Larimer County will ensure these public facilities are secured
- ✓ Pipeline and Glade Reservoir have both temporary and permanent storm water facilities
- ✓ Water facilities include a private restroom at the Glade pump station for employees and potable water for visitors' center
- ✓ Roads at Glade Reservoir will be properly sized for number and type of traffic



# County Roads

- ✓ NISP and Larimer County will inspect county roads affected during construction
- ✓ Post-construction replacement will be completed to return damaged roads to pre-construction conditions
- ✓ Construction and access areas to be regraded and revegetated to minimize environmental impacts





# U.S. Highway 287

While U.S. Highway 287 is not part of the 1041 Permit, an access road will be provided for properties adjacent to the new U.S. Highway 287 location.



- ✓ The access will be constructed during CDOT's highway relocation project and will become a permanent frontage road
- ✓ NISP will coordinate with Larimer County, CDOT and the Division of Water Resources to allow landowners to maintain subdivision exemptions and be eligible for 35-acre parcel well benefits







- ✓ Recreation at Glade will bring economic opportunities to businesses in County – estimated at \$13 to \$30 million annually
- ✓ Poudre River flow program will reduce dry up points in the Poudre and allow fish passage.



- ✓ NISP provides water to farms and municipalities as well.
- ✓ This benefits NISP and agriculture through innovative water use



- ✓ The Fish and Wildlife Mitigation and Enhancement Plan commits more than \$53 million to the 54 items identified in the plan
- ✓ 43 of those commitments will occur totally or partially in Larimer County
- ✓ The recreation facility at Glade is \$21.8 million cost

 <p>NISP <b>Northern Water</b> Northern Integrated Supply Project</p>	
	<p><b>FISH AND WILDLIFE MITIGATION AND ENHANCEMENT PLAN</b></p> <p>Prepared for: The Colorado Parks and Wildlife Commission in accordance with C.R.S. 37-60-122.2</p> <p>Applicant: <b>Northern Water</b> acting by and through Northern Integrated Supply Project Water Activity Enterprise Northern Colorado Water Conservancy District</p>
<p>October 10, 2017</p>	



# Recommendations

- The Larimer County staff received referral comments from numerous internal and approximately 30 external entities. Many of the conditions included in the staff report addresses the comments and NISP has accepted these conditions.
- Four cities, Timnath, Windsor, Johnstown and Fort Collins, submitted comments. Fort Collins has continuing concerns particularly but not exclusively about natural areas impacts. NISP will continue discussions with Fort Collins and in the future submit an application for its permitting process.
- The Glade Reservoir area is covered by three fire districts. NISP will work with the three districts to ensure coordination to provide fire department coverage to the water and the recreation facilities.





# Condition – Requested Change

- “Prior to crossing any irrigation company ditch, utility or other infrastructure impacted by the reservoir or by pipeline crossings, Applicant shall obtain all necessary permits, permissions, or licenses from the owner of the affected structure.”

# Eagle Lake Conditions

- The applicant shall minimize the use of Eagle Lake Homeowner's Association (HOA) owned roads for construction of the pipeline by accessing the pipeline alignment from State Highway No.1 and Travis Road.
- The applicant may also access the pipeline construction alignment by any private access acquired.
- The use of Eagle Lake Drive during construction shall be limited to the eastern most 500 feet for access to Hood Lane from State Highway No.1. In addition, Eagle Lake Drive will also be crossed by the pipeline installation.

# Summary

- ✓ Public engagement for NISP has been extensive
- ✓ Landowners affected by construction will be compensated and vegetation will be restored
- ✓ Impacts to fish and wildlife and other natural resources are offset through mitigation and enhancement
- ✓ Glade is identified as a recreation asset in Larimer County's Reservoir Parks Master Plan
- ✓ Glade will provide economic benefits to the economy



# Questions?



# Project Purpose and Need

Larimer County 1041 Presentation



# Jim Borland

## FCLWD Board of Directors Chairman



- James (Jim) Borland is the longest-serving board member of the Fort Collins-Loveland Water District board of directors
- Jim started with the board in 1982, as a way to serve his community and help guide important decisions for one of our most basic needs: water



# What NISP Means to FCLWD

- Residents served by FCLWD
  - Contribute to the economic vitality of Fort Collins and Larimer County
  - Create a robust and diverse economy
- Key Larimer County amenities served
  - The Ranch, Northern Colorado Regional Airport, regional mental health center, and more





# Economic & Environmental Impacts



- Larimer County Comprehensive Plan
  - Identifies the importance of a robust, diverse economy
  - NISP serves this plan
- The Poudre River offers high-quality water
  - Glade Reservoir provides high-quality water, and pipelines protect that quality from wildfire or floods, which is key for our customers.

# Questions?





# Northern Integrated Supply Project

Larimer County 1041 Presentation

