

### Northern Integrated Supply Project

**1041** Presentation













2

www.gladereservoir.org

Northern Integrated Supply Project



### Northern Integrated Supply Project

**1041** Presentation



#### **Presentation Agenda**

- Project Overview & History Stephanie Cecil
- Public Engagement Christie Coleman
- Conveyance & Pipelines Stephanie Cecil
- Recreation Commitments Christie Coleman
- 1041 Criteria Adherence Peggy Montaño
- Closing Comments Brad Wind
- Question and Answer Carl Brouwer

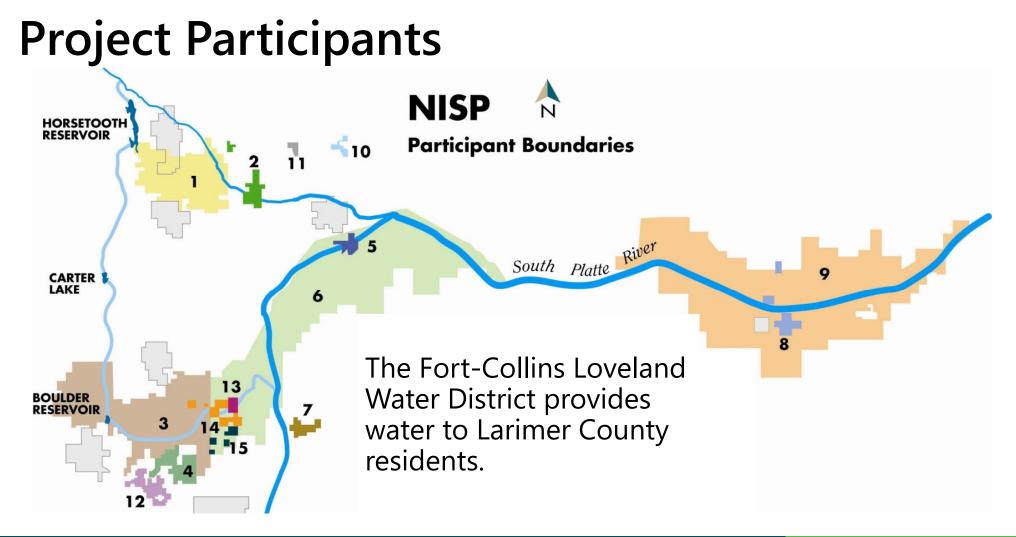
#### **Project Overview & History**

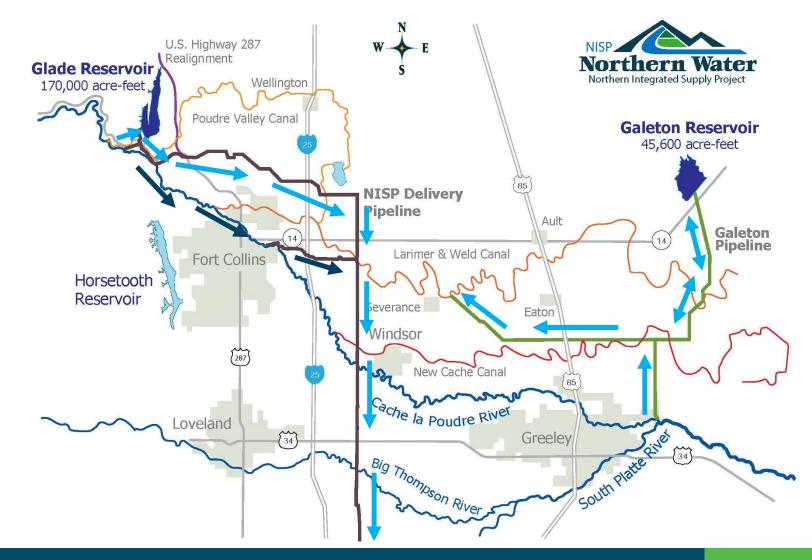


#### What is NISP?

#### 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.

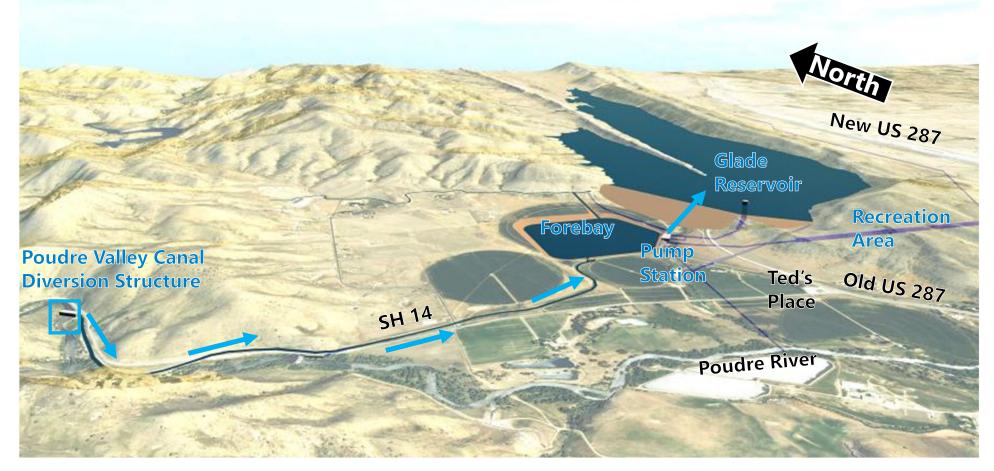




#### What is WaterSecure?

- WaterSecure is a risk management strategy to ensure operations continue long into the future. There are currently over 80,000 acres being irrigated under the Larimer & Weld and New Cache canal systems. Should the amount of irrigated acreage decrease dramatically, however, because of pressure from development or "buy and dry" practices by other entities, the NISP substitutions and exchanges *could* be affected.
- NISP does not have to buy any farms to secure permitting for this project, and NISP does not need to buy farms to "tie up 25,000 acre-feet of water." The water supply for the substitutions will come from the new Galeton Reservoir, which already has decreed water rights. The exchanges will be made in cooperation with the New Cache and Larimer & Weld companies.

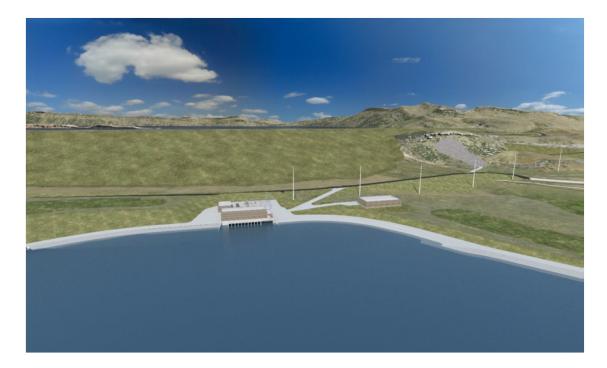
#### **Glade Reservoir**



www.gladereservoir.org

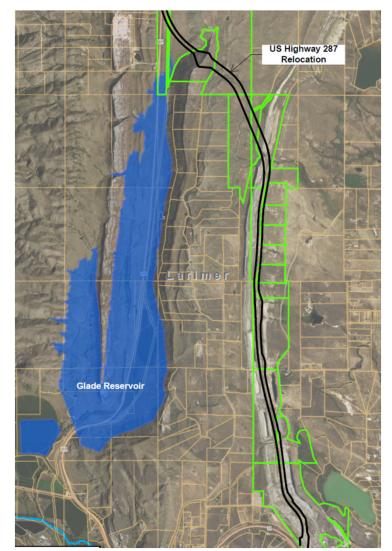
#### **Glade Reservoir**

- Earthen embankment off channel from the Poudre River
- 5 miles long
- 250 feet deep
- Capacity to store 170,000 acre-feet of water
- Dam would be approximately 275 feet high
- Reservoir surface area at full capacity would be approximately 1,600 acres (2.5 square miles)



## **Highway 287 Relocation**

- Glade Reservoir will submerge a section of U.S. Highway 287
- 7 miles of the highway will be relocated to the east
- Project Commitments
  - Ensure access for affected property owners
  - Complete LCR 21C (Overland Trail) and 287 Safety Study
- Not part of 1041 application
- NISP Funded Project

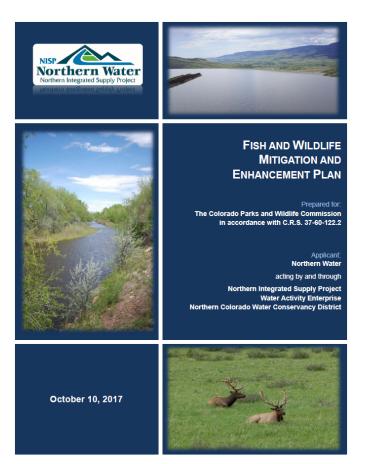


#### **Environmental Protection**



#### 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
- Outlines mitigation and enhancement measures for Project impacts to fish and wildlife
- Adopted by the State of Colorado
- 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

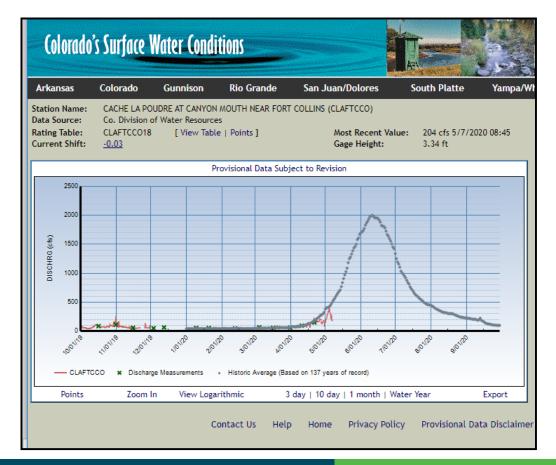




Northern Integrated Supply Project

#### **Peak Flow Operations Program**

Peak Flow Operations Program is required in which NISP operations during spring runoff (peak flow) conditions would be eliminated or reduced (based on river and storage conditions).



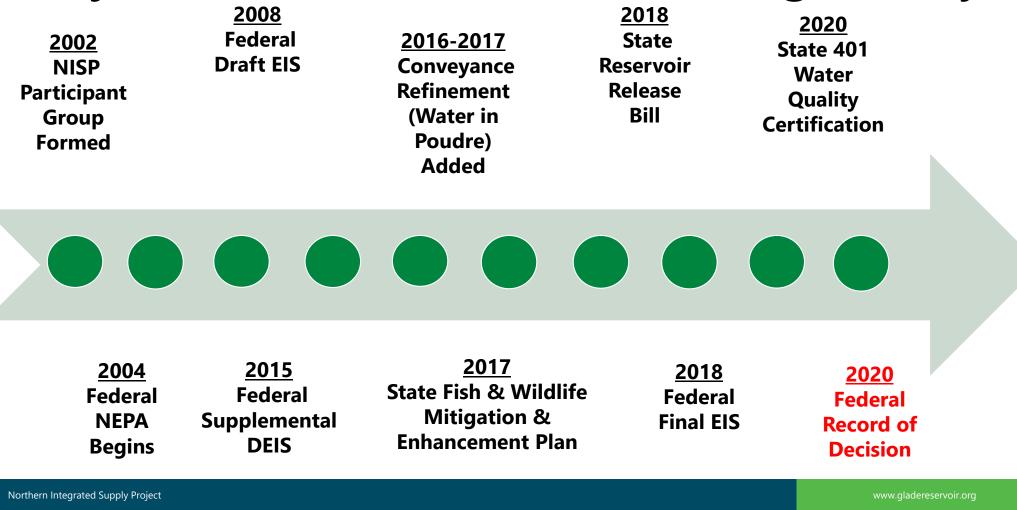
www.gladereservoir.org

## Permitting History



#### **Project Federal and State Permitting History**

18

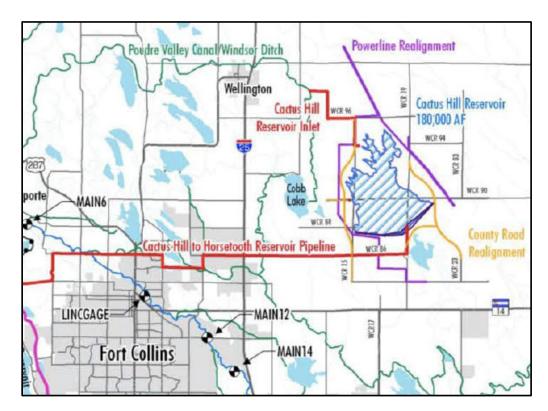


#### **Study & Analysis**

The federal permitting process for NISP included study and analysis of more than 200 potential water storage facilities and 16 potential water supply sources with 5 project alternatives being carried forward through the entire EIS process.

Alternative	Concept	Element
No Action (Alternative 1)	Agricultural to municipal transfers	Cactus Hill Reservoir
Glade Reservoir with Modified Conveyance and SPWCP (Alternative 2M)	Water rights development and SPWCP	Glade Reservoir and Upper Galeton Reservoir
Glade Reservoir and SPWCP (Alternative 2)	Water rights development and SPWCP	Glade Reservoir and Upper Galeton Reservoir
Cactus Hill Reservoir, Poudre Valley Canal Diversion, and SPWCP (Alternative 3)	Water rights development and SPWCP	Cactus Hill Reservoir and Upper Galeton Reservoir
Cactus Hill Reservoir, Multiple Diversion Locations, and SPWCP (Alternative 4)	Water rights development and SPWCP	Cactus Hill Reservoir and Upper Galeton Reservoir

Table 2-3. Retained concepts and elements combined to develop alternatives.



#### **Larimer County Federal Permitting Participation**

- Larimer County chose to become a cooperating agency in the Project's federal permitting process through a formal agreement signed in 2005
- Larimer County submitted comments on:
  - The Draft Environmental Impact Statement in September 2008
  - The Supplemental Draft Environmental Impacts Statement on September 2015

#### Northern Integrated Supply Project

Environmental Impact Statement COOPERATING AGENCY AGREEMENT between U.S. Army Corps of Engineers, the lead Federal agency and Larimer County Board of County Commissioners, a cooperating agency

#### INTRODUCTION

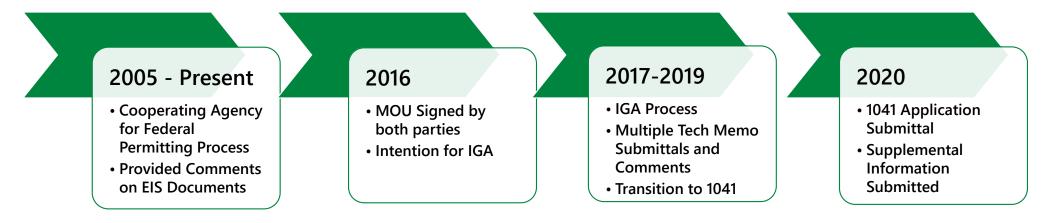
This agreement outlines the responsibilities agreed to by the U.S. Army Corps of Engineers (Corps), Omaha District and the Larimer County Board of County Commissioners (County), with respect to preparation of both the Draft and Final Environmental Impact Statements (EISs) for the Northern Integrated Supply Project proposed by the Northern Colorado Water Conservancy District acting by and through the Northern Integrated Supply Project Water Activity Enterprise (District).

 The Corps is the lead Federal agency for the document's preparation as detailed at 40 CFR 1501.5. The County is a cooperating agency as detailed at 40 CFR 1501.6. One component of the District's preferred alternative is to construct the Glade Dam and Reservoir, requiring the relocation of a portion of US Highway 287, located within Larimer County. The County's involvement in the preparation of the EIS as a cooperating agency is to ensure that the EIS adequately addresses statutory requirements to allow a decision to be rendered by the Larimer County Planning Commission for Location and Extent Review (CRS 30-28-110).

#### COOPERATING AGENCY RESPONSIBILITIES

- The County will provide timely reviews and comments on preliminary documents, reports, analyses and sections of the Draft and Final EISs that address information needs and requirements associated with the Location and Extent Review to be conducted by the County Planning Commission. Comments will be provided to the Corps within prescribed time frames. Time frames will be variable, dependent upon the product provided.
- The County will provide information on possible conflicts between the alternatives in the draft EIS and the objectives of the Larimer County Master Plan and other applicable County policy or regulation.
- 3. To the extent that staff and funding resources allow, the County will participate in meetings and provide information as requested by the Corps. Conference calls and video conferencing may be used in place of actual meetings. To the extent feasible, the County will share data and relevant information with the Corps in order to support a complete record for the EIS decision process. This agreement

#### **Larimer County Permitting History**



#### **1041 Areas and Activities of State Interest**

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

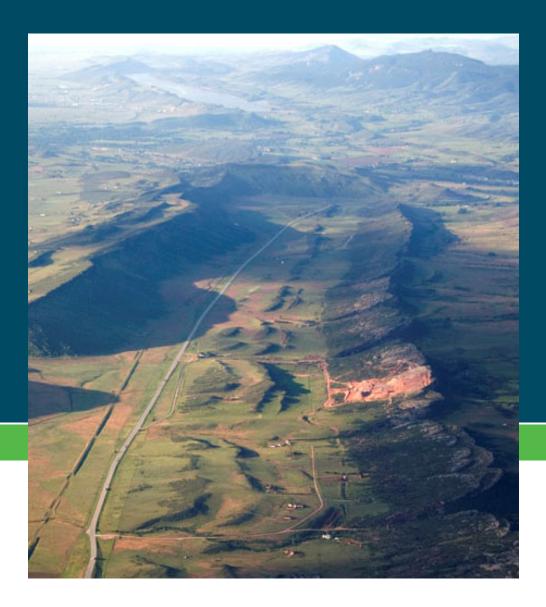
Components are:

- 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.

Larimer County Planning Dept. Procedural Guide for 1041 PERMITS	SUBMITTAL REQUIREMENTS FOR 1041 PERMITS at antimized deviation of west lefteds the project same, the data of properties and the form as a series (include the or series and formal series showing on the series of the association of the series of the series of the series of the series of the series of the series of the magnetized series of the series of the series of the series of the series of the series of the series of the series of the series of
THE AREA SCATTON CONFERENCE IS REQUIRED PROSPERING	At industrial decuments must include the project stars, the data of preparation and the shows. A maps now (edited where excite) a straight strength stars and the shows. All strength strength s
PLEASE NOTE: A PRE-APPLICATION. SUBMITTING THIS APPLICATION.	processing with processing with the processing
<text><section-header><text><text><section-header><text><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></text></section-header></text></text></section-header></text>	

#### **Questions**?





## Public Outreach

Northern Integrated Supply Project

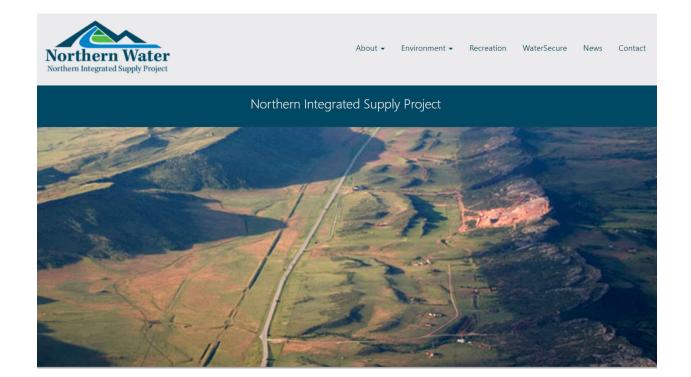


## Overview



### Inform and Engage

Throughout the 16-year NISP development and permitting process, continuous effort has been made to inform, engage, involve and receive input from the public.





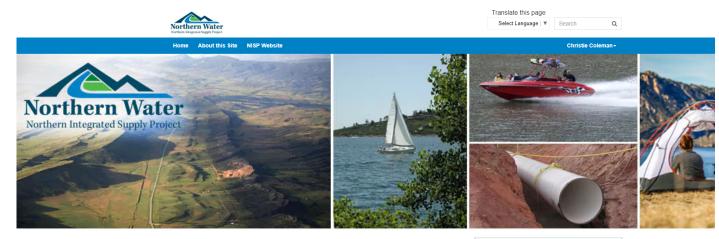
# **Online Engagement**



#### NISPTalk.com

A public engagement platform was developed to engage and listen to the public, inform the community about the Project, display content and receive feedback.

Northern Integrated Supply Project



#### Welcome to NISPtalk

NISPtalk is an online forum for you to provide feedback to Northern Water on the Northern Integrated Supply Project, which includes pipelines and a new reservoir in Larimer County. Northern Water and Larimer County are working on an agreement for a pipeline route and outdoor recreation for the reservoir, which will be an important resource for the northern Colorado community. Explore this website to learn about NISP, Clade Reservoir and the Larimer County Agreement process and offer your thoughts and feedback. All feedback will be shared with Larimer County.



#### NISP: Purpose & Need



#### NISPTalk.com

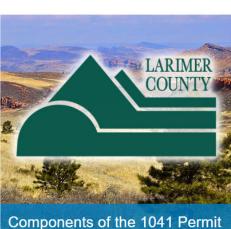
On this site, pages were developed for the Larimer County 1041 Permit process, pipeline conveyance routes and recreation at Glade Reservoir with means of communication and engagement customized in each topic.



What is the Northern Integrated Supply Project?



Recreation at Glade Reservoir



Water Pipelines in Larimer County

### **Direct Mailings**

Postcard invitations to visit NISPTalk.com were sent to:

- Properties close to proposed pipelines
- Reservoir or ditch companies that could have pipeline crossings
- Bonner Peak neighborhood and properties within 1 mile of the reservoir and recreation areas



#### Multiple Approaches to Outreach

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

- NISP website at <u>www.gladereservoir.org</u>
- 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

32

## **Open Houses**



#### June 2017 Open House

- Notifications sent to property owners close to the proposed pipeline routes
- 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	11
Road)	
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**

- Notifications sent to property owners close to the proposed pipeline routes, residents of Bonner Peak neighborhood, property owners within 1 mile of Glade Reservoir
- 95 people signed in
- 32 comment cards received





36

Northern Integrated Supply Project

www.gladereservoir.org

### **October 2019 Open House**

lssue		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	10
	boating	
	Suggested boat ramp locations and configuration	3
	Suggested trial and trailhead configurations	3

#### **December 2019 Open House**

- Notifications sent to property owners in the LCR 29C neighborhood, Bonner Peak neighborhood
- 34 people sign in
- 22 comment cards received





Northern Integrated Supply Project

#### **December 2019 Open House**

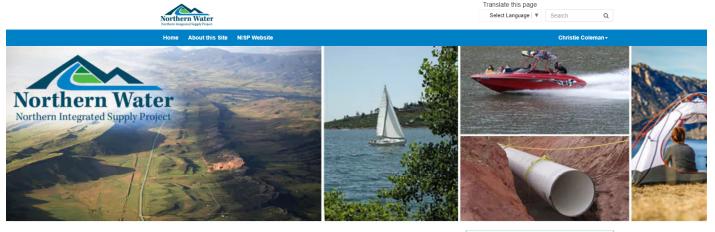
lssue	No. of	In	In
	Comments	Support	Opposition
		or	
		Neutral	
Position on project in general	4	2	2
Boating on reservoir	14	11	3
Request for non-motorized boating	9	-	-
Night-time boating on reservoir	18	1	17
Camping at recreation area	19	13	6
Fishing on reservoir	19	12	7
Trails in recreation area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

## Outreach During COVID-19 Pandemic



### NISPTalk.com During the Pandemic

- Community engagement has occurred throughout the 1041 Permit process
- Community could ask questions, learn about project, provide feedback during the pandemic



#### Welcome to NISPtalk

NISPtalk is an online forum for you to provide feedback to Northern Water on the Northern Integrated Supply Project, which includes pipelines and a new reservoir in Larimer County. Northern Water and Larimer County are working on an agreement for a pipeline route and outdoor recreation for the reservoir which will be an important resource for the northern Colorado community. Explore this website to learn about NISP, Clade Reservoir and the Larimer County Agreement process and offer your thoughts and feedback. All feedback will be shared with Larimer County.



#### NISP: Purpose & Need



Northern Integrated Supply Project

# **Other Outreach Options**



#### **One-to-One Meetings**

One-on-one conversations have occurred with individuals and homeowners' associations who have requested information about the project.



#### **Questions?**





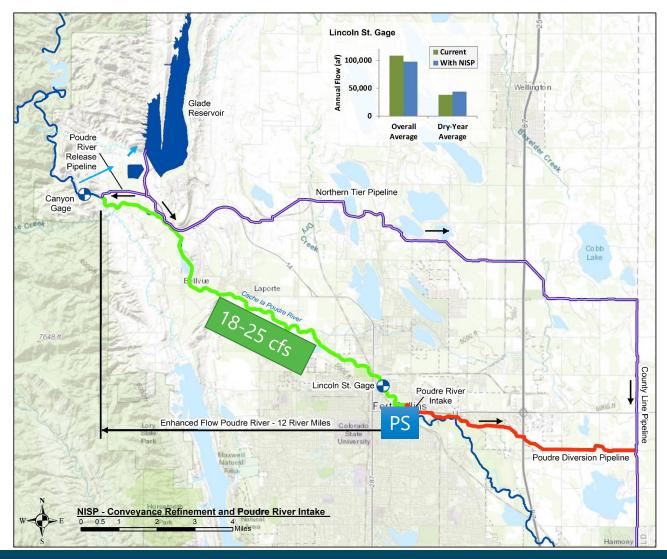
## Water Pipelines & Conveyance

Northern Integrated Supply Project



# Conveyance Requirements





## **Poudre Flow**

- 18-25 cfs year round
- Increases net flow in the Poudre River through Fort Collins:
  - ✓ 8 months in average years
  - ✓ 10 months in dry years

Northern Integrated Supply Project

### **Healthy Poudre River**

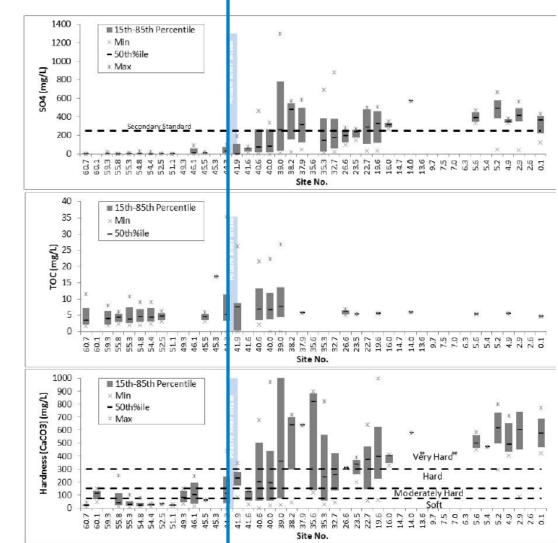
Northern Water is a member of the Poudre Runs Through It, alongside these other organizations, to help keep a healthy, working river.





#### **Poudre Flow Analysis**

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



Northern Integrated Supply Project

www.gladereservoir.org

49

## Pipeline Routing & Pump Station Design



### Northern Water Experience

- Designed, constructed, managed and maintain hundreds of miles of buried pipeline
- Pump stations to match existing landscape







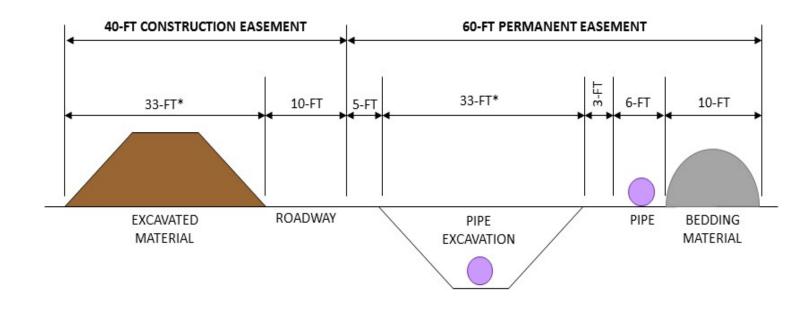
Northern Integrated Supply Project

www.gladereservoir.org

#### **Easement Cross Section**

- 60-ft Permanent
- 40-ft Temporary (construction use only)

Northern Integrated Supply Project PRELIMINARY 100-ft Easement for Single 48-inch Pipeline



#### Easement / Right of Way

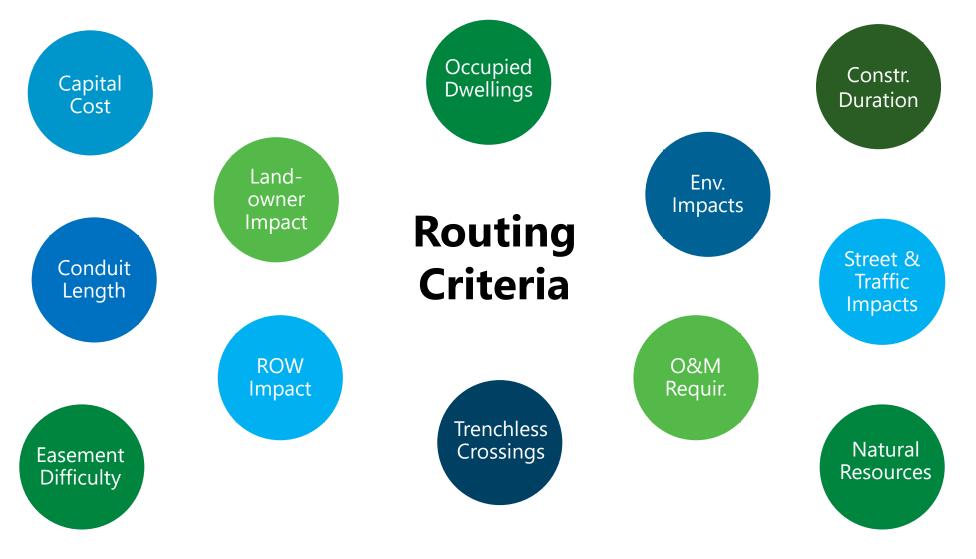
- Traffic
- Other Utilities





Northern Integrated Supply Project

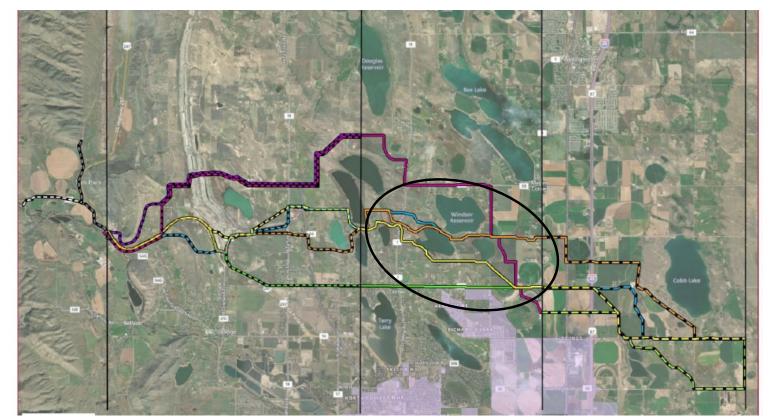
www.gladereservoir.org



#### 55

#### **Routing Analysis**

- Avoided water bodies
- Minimize impacts
- Analyzed by segment



				_
Alternative Name	Projec	t Area 2 – Alig	nment N-2.1	
Alternative Location & Description	Reser and # before and a it turn	ment N-2.1 begins in-between Kulver Reservoir and Water Supply invoir #4 and then heads northeast in-between Water Supply Reservoir #3 44 and north of Dixon Reservoir. It turns south east for Dixon Reservoir e heading east at CR 56.1 to ontinues southeast through rural residential agricultural properties, adjacent to Annex Reservoir #8 to Grey Rock Drive. Is east and parallels Grey Rock Drive until it crosses an open familand naily, and then follows CR 54 until the Intersection with Glódings Rd.		
Criteria		Ranking	Comments	1
Capital Cost		Green	\$ 13,533,000	
Condult Length		Green	4.4 miles; 23,000 feet	
Easement Difficulty		Red	26 parcels crossed, 9 non-perimeter crossings	
Right-of-Way Impact	Right-of-Way Impact		0 LF in parallel ROW	
Land Owner Impact	Land Owner Impact		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 weblands/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	1
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 trenchiess	
Development Pressure		Green	0 LF of near-term developments	
Operation and Maintenance Access		Green	Best access of alternates identified	
O&M Requirements		Yellow	7 ARV and BO pairs. Some extreme elevation change throughout.	F
Natural Resources Impacts		Green	100 LF through natural areas	



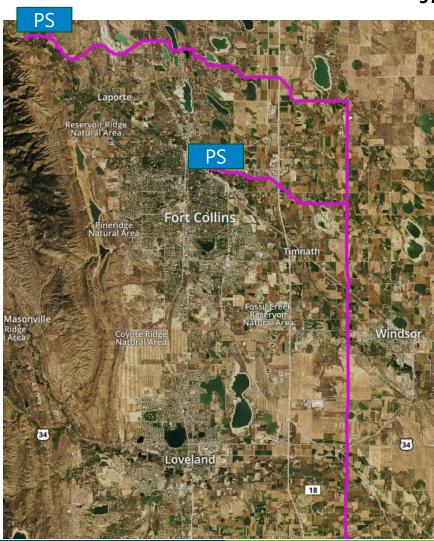
Northern Integrated Supply Project

www.gladereservoir.org

## **Preferred Alignment**

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

- Glade Pump Station
- Poudre Pump Station



Northern Integrated Supply Project

www.gladereservoir.org

### **Local Coordination**

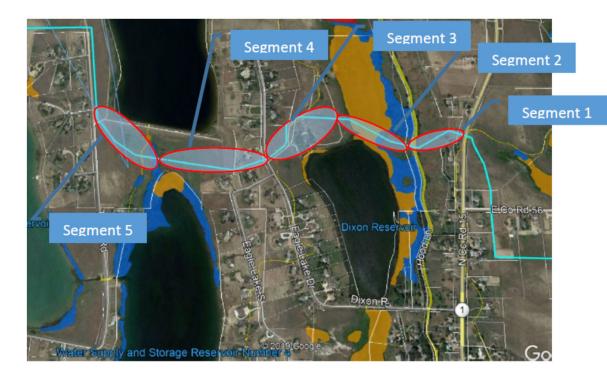


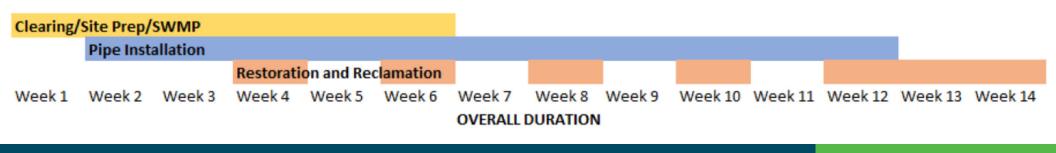
- Fort Collins
  - Site Plan Advisory Review process
  - Pipeline Routing Coordination
- Timnath, Windsor, Johnstown – IGAs
- Master Plan Consistency
  - Temporary Impacts

58

#### Eagle Lake Subdivision

- Total Duration of approximately 14 weeks, due to overlapping work
- Access and reclamation requirements for roadways will be coordinated with private road and landowners





## Easement Procedures and Reclamation



#### **Easement Procedures**

- 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
- Pay crop losses or damages resulting from construction



#### **Reclamation & Revegetation**

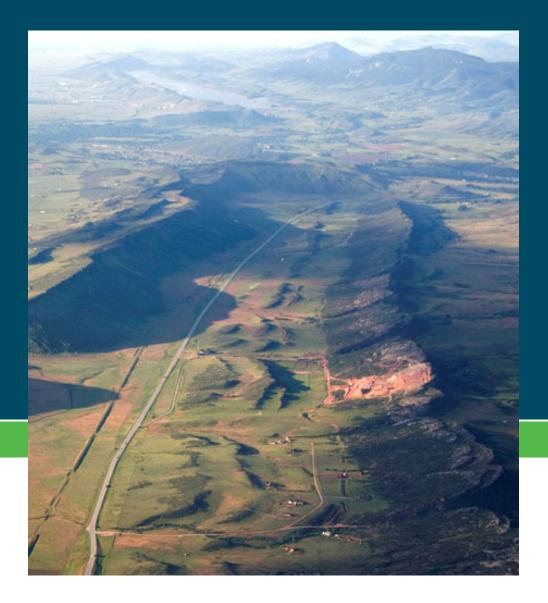


Northern Integrated Supply Project

www.gladereservoir.org

### **Questions?**





# Glade Reservoir Recreation

Northern Integrated Supply Project



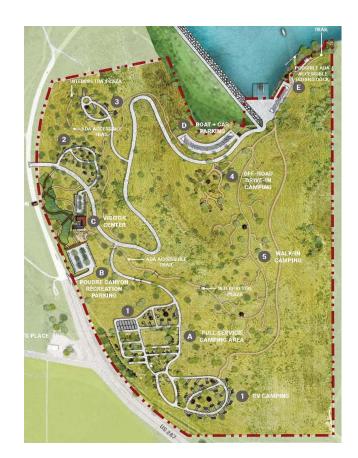
## Voluntary Recreation Enhancement Measures



## **NISP Voluntary Commitments**

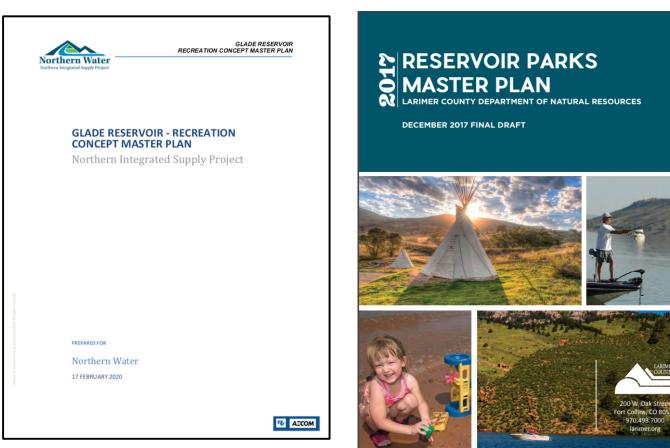
As part of the 1041 Permit, NISP is voluntarily proposing to:

- Allow recreation on Glade Reservoir
- Develop a recreation area including camping and a visitor center on the southeast corner of Glade Reservoir
- Provide hiking and from-shore fishing around the reservoir



#### **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 Partnerships**

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









Northern Integrated Supply Project

www.gladereservoir.org

#### **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

0	CAMPING AREA 1:	15-20 CAMPSITES
2	CAMPING AREA 2:	10-15 CAMPSITES
3	CAMPING AREA 3:	10-15 CAMPSITES
0	CAMPING AREA 4:	10-15 CAMPSITES
6	CAMPING AREA 5:	5-15 CAMPSITES

- FULL SERVICE CAMPING AREA: 70-80 RENTAL LINITS
  POUDRE CANYON PUBLIC PARKING: 125-145 SPACES
  VISITOR CENTER: 8,000-10,000 SF BUILDING + 40-50 SPACES
- 0 BOAT RAMP PARKING LONG TERM: 20-30 SPACES + 40-50 TRAILER SPACES
- BOAT RAMP PARKING SHORT TERM: 15 SPACES + 18 TRAILER SPACES

Northern Integrated Supply Project

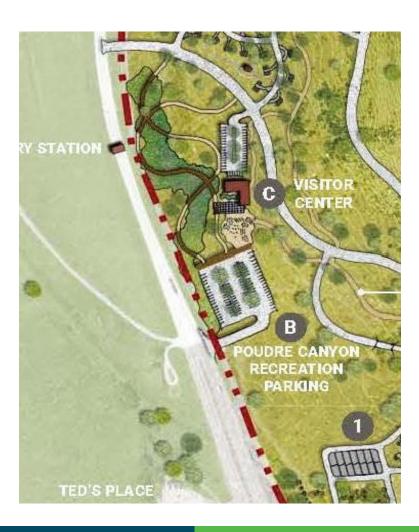
# Major Recreation Components



#### **Visitor Center**



The Visitor Center will be a key amenity for the nearby community and public. The center will provide information and exhibits related to recreational opportunities, historic and cultural education, water conservation and reservoir operations.



## Fishing

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







#### **Boat Ramp & Boating**

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





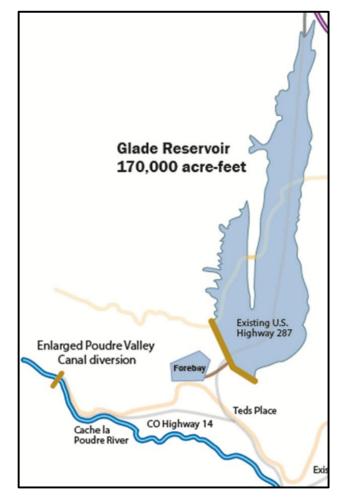


#### **Boat Ramp & Boating**

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







### Camping

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







www.gladereservoir.org

75

Northern Integrated Supply Project

#### 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 System**

- An unpaved shoreline trail on the west side of the reservoir will provide foot access to the reservoir shoreline.
- The unpaved east shoreline trail could serve a variety of recreational uses such as hiking, mountain biking, rock climbing and fishing activities. It will be approximately 5 miles in length.

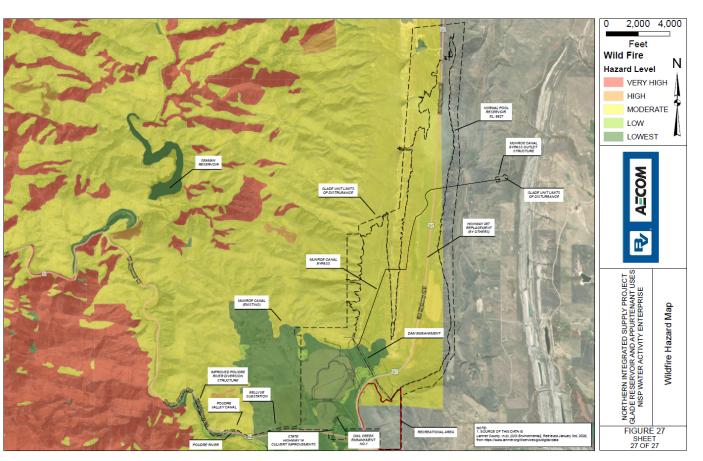






#### **Fire Management**

Larimer County will manage the scope and extent of recreation-related campfires. Per the county, campfires must be in a metal grill provided for the purpose at designated sites at the south side of the reservoir.



www.gladereservoir.org

#### **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

- CAMPING AREA 1: 15-20 CAMPSITES
  CAMPING AREA 2: 10-15 CAMPSITES
  CAMPING AREA 3: 10-15 CAMPSITES
  CAMPING AREA 4: 10-15 CAMPSITES
  CAMPING AREA 5: 5-15 CAMPSITES
- Full Service Camping AREA: 70-80 RENTAL UNITS
  POUDRE CANYON PUBLIC PARKING: 125-145 SPACES
  VISITOR CENTER: 8,000-10,000 SF BUILDING + 40-50 SPACES
  ROST CAMPAR DARKING: 1000 TENL 00 000 400-50 ALO TENL
- BOAT RAMP PARKING LONG TERM: 20-30 SPACES + 40-50 TRAILER SPACES
- 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.







Northern Integrated Supply Project

www.gladereservoir.org

#### Larimer County: Recreation Manager

- Larimer County has indicated a desire to manage recreation at Glade Reservoir.
- The County and NISP Water Activity Enterprise will enter into a 25-year lease agreement for the County to act as the managing partner to manage the recreation.



#### **Recreation Funding Commitment**

Funding will be committed to:

- Develop and construct 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

83

#### **Recreation Cost Sharing Concept**

Funding Commitment	\$21.8 M
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



Northern Integrated Supply Project

www.gladereservoir.org

# 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 Larimer County's 2017 Reservoir Parks Master Plan as a future park strategy.



NATURAL RESOURCES

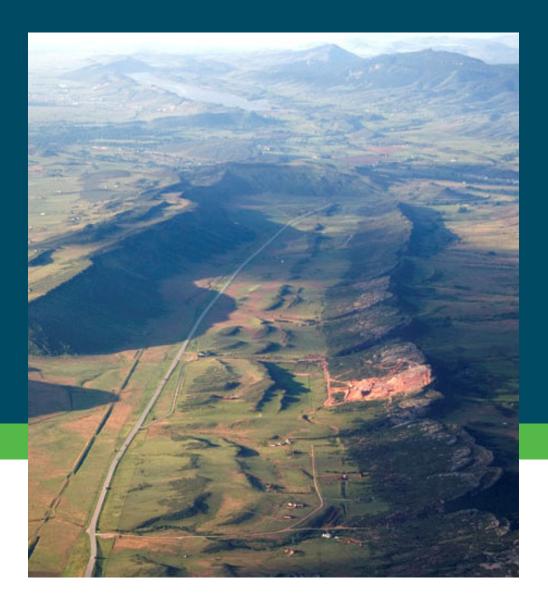
RESERVOIR PARKS



Northern Integrated Supply Project

#### **Questions?**





## Larimer County 1041 Permit Criteria

Northern Integrated Supply Project



#### **Larimer County Participation**

Principles of facilitated and proactive planning and engagement

- ✓ Larimer County as a formal agency in the National Environmental Policy Act (NEPA) – County Agreement signed July 2005
- ✓ A series of technical memos demonstrates Larimer County's response to issues, including pipeline routing alternatives and consideration of County standards and to avoid and minimize impacts



# **Criteria** I

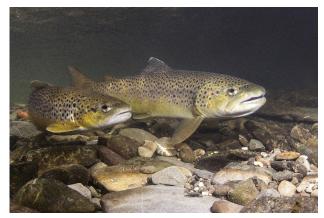
The proposal is consistent with the Larimer County Comprehensive Plan Master Plan



#### 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
  - $\checkmark$  Protects agricultural land and water
  - $\checkmark$  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

Northern Integrated Supply Project

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
- $\checkmark$  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

- ✓ WaterSecure 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





Northern Integrated Supply Project

www.gladereservoir.org

# 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





# Criteria 2

The applicant has presented reasonable siting and design alternatives or explained why no reasonable alternatives are available



- ✓ 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

103

# Criteria 3

The proposal conforms with adopted Larimer County standards, review criteria and mitigation requirements concerning environmental impacts





- Wetland areas-both jurisdictional and non-jurisdictional wetlands under the federal permit will protected or mitigated
- ✓ 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

105

# **Criteria 4**

The proposal will not have a significant adverse effect on or will adequately mitigate significant adverse effects on the land or its natural resources, on which the proposal is situated and on lands adjacent to the proposal





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

# Criteria 5

The proposal will not adversely affect any sites and structures listed on the State or National Registers of Historic Places



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



The proposal will not negatively impact public health and safety



- ✓ 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



The proposal will not be subject to significant risk from natural hazards including floods, wildfire or geologic hazards



#### **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

113

Adequate public facilities and services are available for the proposal or will be provided by the applicant, and the proposal will not have a significant adverse effect on the capability of local governmental to provide services or exceed the capacity of service delivery systems



### **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



The applicant will mitigate any construction impacts to county roads, bridges and related facilities. Construction access will be regraded and revegetated to minimize environmental impacts



#### **County Roads**

- ✓ NISP and Larimer County will inspect county roads affected during construction
- ✓ Post-construction replacement will be completed to return damaged roads to preconstruction 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

The benefits of the proposed development outweigh the losses of any natural resources or reduction of productivity of agricultural land as a result of the proposed development



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

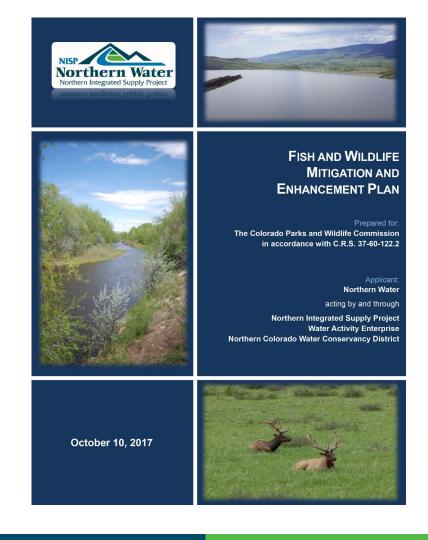
120

Northern Integrated Supply Project

The proposal demonstrates a reasonable balance between the costs to the applicant to mitigate significant adverse effects and the benefits achieved by such mitigation



- ✓ 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



# 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

### Conditions

CONDITION	RECOMMENDED CONDITION/RESPONSE
Prior to construction, secure written confirmation from all affected irrigation companies that are impacted by this project by reservoir or pipelines.	There is no guarantee that each irrigation company will provide a written response. <u>Recommended condition</u> : The applicant shall demonstrate that it has contacted all affected irrigation companies.
Pipeline alignment alterations greater than 50 feet must be evaluated by Larimer County and may be subject to reconsideration by the BOCC. All alignment changes on private property shall include approval of the landowner .	Recommended condition: Alterations greater than 100 feet or that move within 100 feet of an existing structure must be evaluated by Larimer County staff. Alignment changes on private property shall be coordinated with the landowner in addition to staff review.

#### **Questions?**

