

## Northern Integrated Supply Project (NISP) Water Literate Leaders

Carl Brouwer

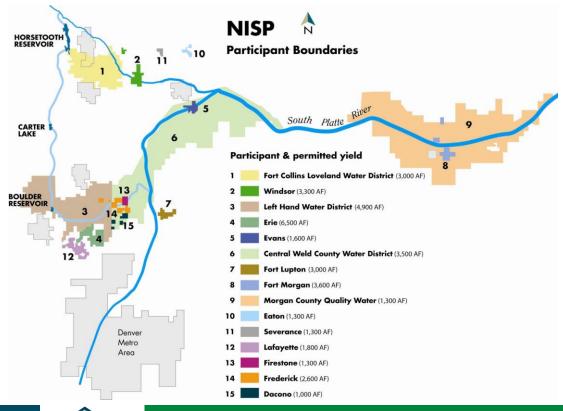
Project Management Department Manager



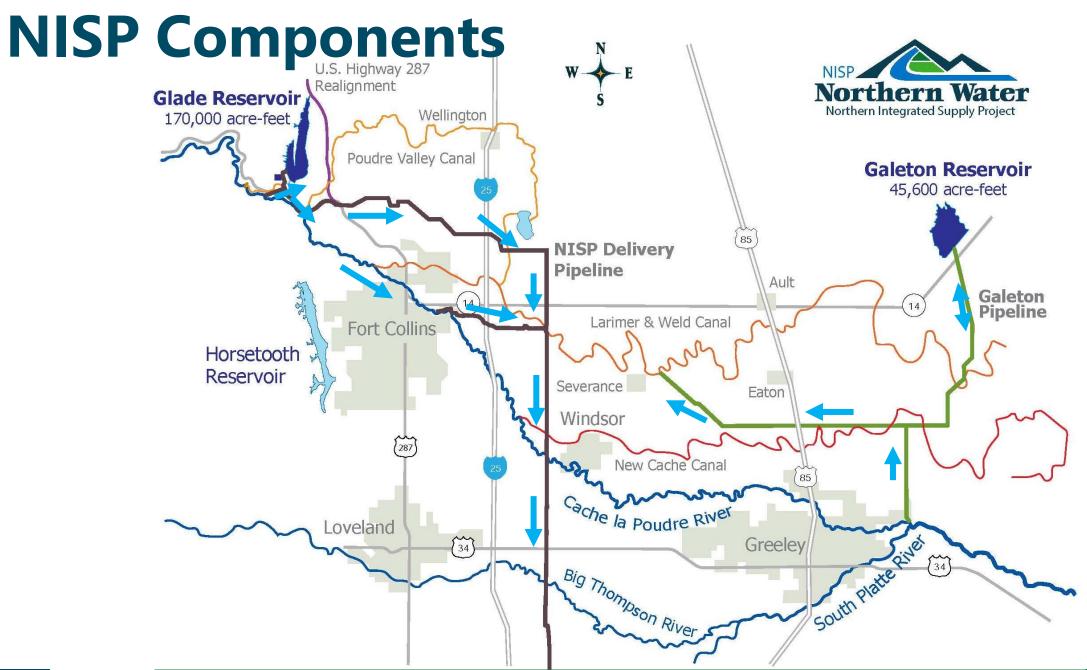
## Why NISP?

#### 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.







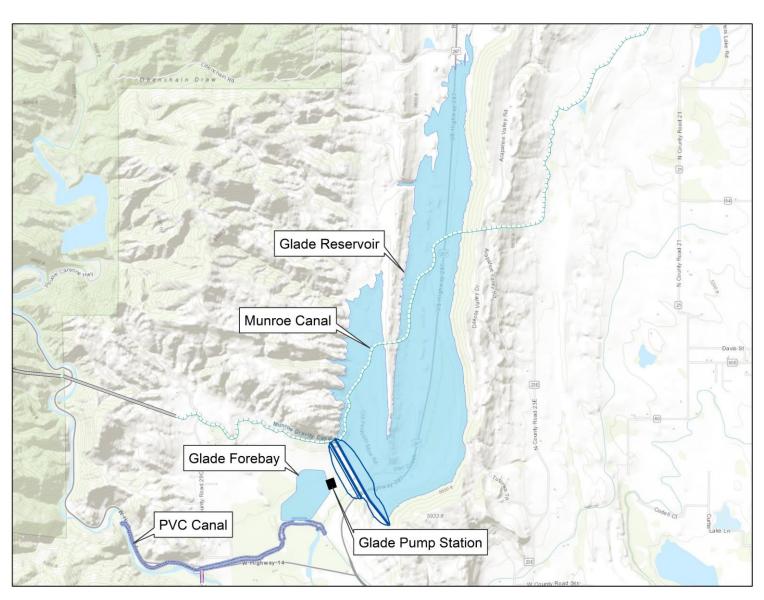


# **Glade Reservoir and Forebay**



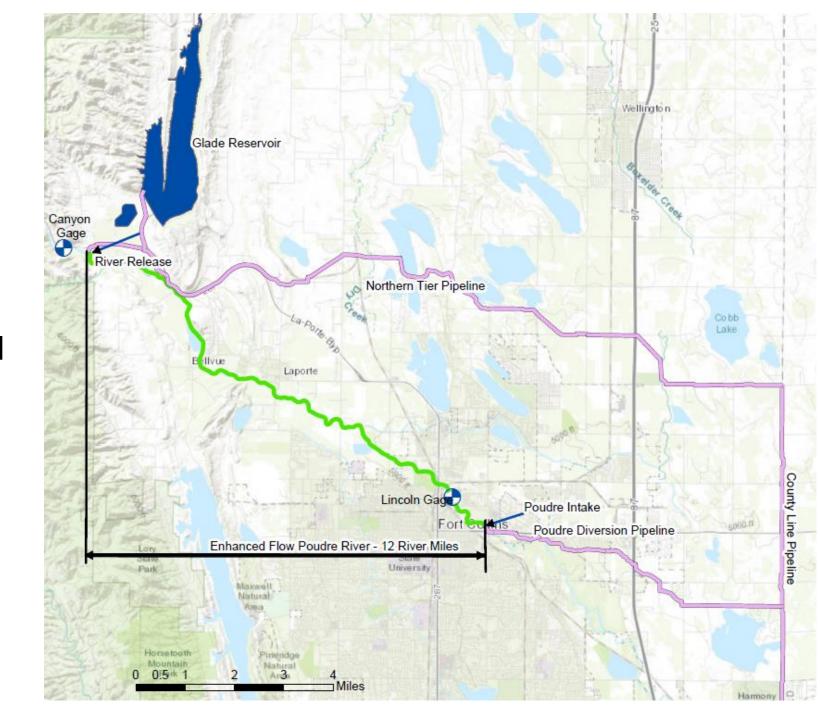
#### **Glade Reservoir**

- Dam
  - 170,000 AF of storage
  - 280-foot-tall Earth/Rock fill
  - Material all on-site
  - Approximately 18M cy of fill
- 40,000 Hp Pump Station
- Munroe Canal Relocation
- 1,500 AF Forebay
- Poudre Valley Canal Enlargement



## Delivery Conveyance Refinement

- 12 Miles of Poudre River
- Year-Round Deliveries
- Approximately 1/3 NISP Yield
- Eliminates Dry-up Points
- Required New Colorado Law
- Improves Environment



#### **Galeton Reservoir**

- 45,600 Acre-ft
- 75 Feet Tall Dam
- 1,700 Acres
- All Land Purchased
- Expandable to 81,000 Acre-ft



## **Ditch Substitution & Exchange**

- Larimer & Weld to Poudre Valley Canal
- New Cache to Poudre Valley Canal
- Small fraction of total diversions
- Compensate ag companies for benefit of shareholders

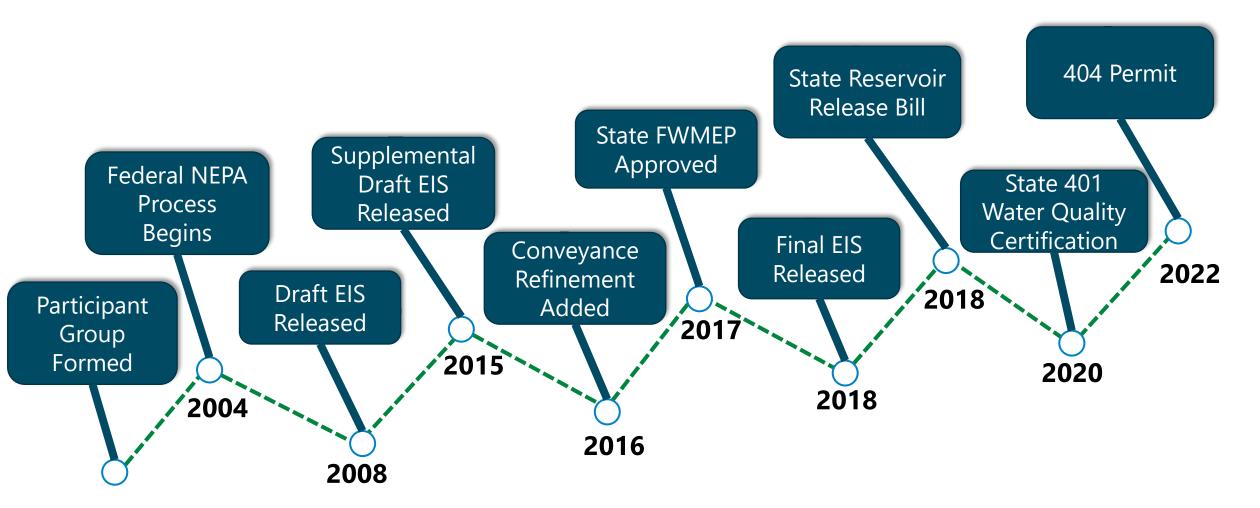


# Permitting – A Three-Hour Tour?





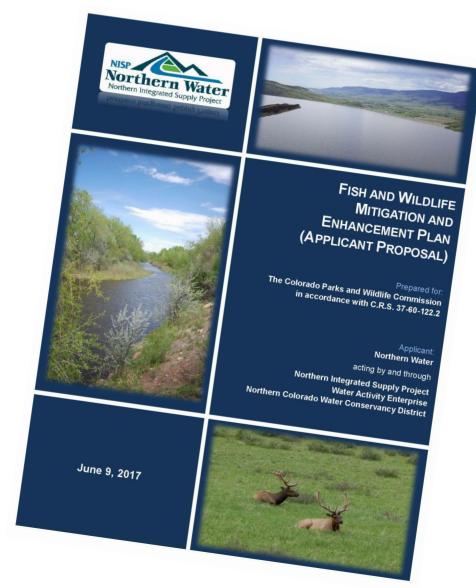
## **Permitting**



2017 State Fish and Wildlife Mitigation

and Enhancement Plan

- Nearly \$60M Commitment
- River Flow Enhancement
- First of its kind Peak Flow Program
- River Channel Improvement
- Diversion Structure Fish Bypass
- Glade Fishery
- Elk Habitat Preservation



#### 2020 - State 401 Water Quality Certification

"The Division concludes that the conditions imposed on the Applicant provide reasonable assurance that the Project will comply with all applicable requirements, and that the commitments for mitigation and water quality improvement measures are sufficient to result in positive net effects such that significant degradation will not occur. Therefore, the Division's finding with regard to the significance determination is: no significant degradation."

## **2020 – Larimer County 1041**

 September 2020 – Approved by Larimer County Board of County Commissioners

8 Public Hearings/ Meetings

- Over 50 Permit Conditions Covering Construction, Recreation, Pipelines, and Noise
- Recreation
  - \$21 Million Commitment
  - 190 Acre Recreation Area
  - Visitor Center, Camping, Hiking, Boating, Fishing





#### **Clean Water Act Section 404 Permit**

- Culmination of 19 years of Environmental Process Led by US Army Corps of Engineers
- Cooperating Agencies EPA, BLM, USFWS, Colorado DNR, CDPHE, CDOT, Larimer County
- No-Action 60,000 acres of Agricultural Dry-up
- Numerous Alternatives Analyzed Considering Environmental Criteria
- Biological Opinion from US Fish and Wildlife Complete
- Fish and Wildlife Coordination Act with USFWS Complete
- Programmatic Agreement for Cultural Resources with State Historic Preservation Office Complete



# Major Milestones and Next Steps

#### 2019 – Watson Fish Hatchery

- Part of Fish and Wildlife Mitigation and Enhancement Plan to retrofit of existing diversion structures
- 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
- Partnered with NOOSA/Morning Fresh Dairy



#### Glade Construction Manager/ General Contractor

- Best Value to NISP Enterprise
- Schedule Certainty
- Early Cost Surety
- Risk Allocation & Mitigation
- Geotechnical Design
   Assessment Site Testing





## **Planning Implementation**

#### **FINAL DESIGN**

Glade HW 287 Pipelines Galeton

#### **FINANCING**

WIFIA Federal Loan Muncipal Bonds Participant "Cash"

#### **ALLOTMENT CONTRACTS**

What is being allocated? Participant Committments

#### **CONSTRUCTION PLANNING**

Scheduling
Cost Estimating
Procurement
Project Controls



#### **Environmental Commitments**

#### **WATER QUALITY**

Monitoring
Adaptive Management
Water Quality Improvements

#### **RIVER ENHANCEMENT**

**Diversion Structure Passage Channel Improvement** 

# CONSTRUCTION IMPACT MITIGATION PLANNING

WETLANDS AND RIPARIAN

## Implementation Schedule

