



**COLORADO**

**Colorado Water  
Conservation Board**

Department of Natural Resources

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**TO:** Colorado Water Conservation Board Members

**FROM:** Cole Bedford, P.E., Project Manager  
Kirk Russell, P.E., Finance Section Chief

**DATE:** November 15-16, 2023 Board Meeting

**AGENDA ITEM:** 20b. Projects Bill Loans  
Northern Colorado Water Conservancy District, Northern Integrated Supply Project  
Water Activity Enterprise - Northern Integrated Supply Project

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### Staff Recommendation

Staff recommends the Board include this Water Project Loan request of \$101,000,000 submitted by the Northern Colorado Water Conservancy District, Northern Integrated Supply Project Water Activity Enterprise for costs related to the Northern Integrated Supply Project in the 2024 CWCB Projects Bill for consideration by the Bill sponsors, from the Severance Tax Perpetual Base Fund.

Additionally, staff recommends the following condition of approval:

If passed by the General Assembly and signed by the governor, the request will require submission of a loan application and loan feasibility study by the borrower. Prior to execution of a loan contract, these must be reviewed by CWCB staff and approved by the Board.

### Introduction

The Northern Colorado Water Conservancy District (Northern Water) owns the Northern Integrated Supply Project Water Activity Enterprise (NISP Enterprise). The NISP Enterprise is applying for a loan for the Northern Integrated Supply Project (NISP). The purpose of NISP is to construct the Glade Reservoir Complex and the South Platte Water Conservation Project, which will provide 40,000 AF of new water supply to 15 Front Range water providers.

NISP is a major regional water supply project, which will take many years to complete. The current total project cost is estimated at \$1,871,800,000; however, it is expected that the estimate will be revised upward to \$2,000,000,000 or more. While this loan request is large relative to the portfolio of loans in the Water Projects Loan Program, it represents a modest percentage of the likely total project cost. Nevertheless, approval of the request will enable the NISP Enterprise to undertake the first construction phases of NISP, including work related to the Glade Reservoir Complex, which may occur as early as 2025. Securing this funding from the CWCB will allow the NISP Enterprise to secure the remaining additional funding by attracting buyers for senior bonds at a favorable interest rate.

The CWCB Finance Committee approved the advancement of this Loan request to the full Board for consideration on September 19, 2023.



### **Borrower - Northern Integrated Supply Project Water Activity Enterprise**

The NISP Enterprise is a government-owned business organized pursuant to C.R.S. 37-45-101 that is owned by the Northern Colorado Water Conservancy District. The NISP Enterprise's purpose is the planning, financing, acquisition, construction, operation, administration, maintenance, repair, replacement, rehabilitation, and improvement of the Northern Integrated Supply Project. The NISP Enterprise will enter into allotment contracts with each Project participant for an allotment of capacity and to finance NISP.

### **Background**

The Cache la Poudre River is a tributary of the South Platte River, which arises in Rocky Mountain National Park, flows eastward through Fort Collins, and joins the South Platte at Greeley. In the late 1970s and early 1980s, the Cache la Poudre Water Users Association (CLPWUA) began developing the Grey Mountain Reservoir Project. The project would have been a large, on-channel dam and reservoir on the Poudre River above Fort Collins. The CLPWUA filed for water rights associated with the project in 1980, but by 1985 the CLPWUA had reassessed their capacity to develop the project and transferred the majority of their water rights to Northern Water. Northern Water reconceived CLPWUA's Grey Mountain Reservoir Project as one whose central component would be an off-channel reservoir at the Glade site northwest of Fort Collins.

In 1992, Northern Water filed for South Platte River water rights for Galeton Reservoir northeast of Greeley. The two reservoirs—Glade and Galeton—and their associated infrastructure were originally conceived of as independent projects, however, after a water supply study conducted in 2000, the two projects were combined into a single collaborative project known as the Northern Integrated Supply Project.

### **Loan Feasibility Study**

The NISP Enterprise has provided a formal request for loan funding, however, the Water Project Loan Program will require the submission of a full feasibility study for final approval of the loan and execution of a loan contract. The feasibility study will include at a minimum:

- Federal funding appropriation for the project costs
- Institutional questions pertaining to project design, ownership, and operation of NISP
- Project schedule, permitting, design, construction
- Final Financial Program - including details about Participant Funding Agreements
- Disbursements of the loan funding as it pertains to the overall project

In accordance with the CWCB Financial Policy #2 (Feasibility Study), the CWCB, pursuant to C.R.S. 37-122-60 requires that "all projects have a completed feasibility study prior to loan consideration by the Board. In those cases where it is impractical to complete the study prior to Board approval and/or General Assembly authorization, the Board may consider a conditional approval. This approval shall be conditioned upon completion of a feasibility study in accordance with CWCB guidelines by a specified date. In no case will a CWCB loan contract be executed without a completed feasibility study.

## Project Description

NISP will supply 15 Northern Front Range water providers with 40,000 AF of new clean and reliable water supplies annually. NISP will include:

- Two reservoirs (Glade Reservoir northwest of Fort Collins, and Galeton Reservoir northeast of Greeley)
- A forebay reservoir below Glade Reservoir
- Five pump plants
- Pipelines to deliver water from Glade Reservoir to the participants and to provide conveyance in and out of Galeton Reservoir
- Improvements to an existing canal to divert water off the Poudre River

The two primary components of NISP are the Glade Reservoir Complex and the South Platte Water Conservation Project.

**Glade Reservoir Complex (GRC):** The GRC consists of those components of NISP that are directly tied to Glade Reservoir, a new 170,000 AF off-channel reservoir in Larimer County and the primary water supply reservoir for delivery to the NISP participants. GRC includes a river diversion structure, 2-miles of canal improvements, a 1,500 AF forebay reservoir, a 40,000 horsepower pump station, electrical transmission lines, and over 50 miles of pipeline ranging in diameters from 32-inch to 54-inch which serve as the conveyance pipelines to the NISP participants. The current alignment of U.S. Highway 287 goes through the planned footprint of Glade Reservoir, so approximately seven miles will be realigned and relocated. On its own, the water rights associated with GRC will average approximately 20,000 AF per year, or half the yield of NISP.

**South Platte Water Conservation Project (SPWCP):** The SPWCP consists of those components of NISP that are directly tied to Galeton Reservoir, a new 45,600 AF off-channel reservoir in Weld County. SPWCP includes a river diversion, forebay reservoir, pump stations, and nearly 30 miles of pipeline ranging in diameters from 54-inch to 78-inch. NISP Participants won't physically connect into SPWCP, nor will SPWCP components physically connect into GRC components. SPWCP provides its benefits through a decreed water right exchange allowing additional water to be diverted and stored in Glade Reservoir. On average, this exchange accounts for approximately 20,000 AF per year, or the other half of NISP's yield.

**Permitting:** The major permits and project authorizations already secured include the Corps of Engineers 404 Record of Decision, Larimer County 1041 Land Use Permit, and a Colorado Department of Public Health and Environment 401 Water Quality Certification. Northern Water's engineering design team is working with the Colorado State Engineer's Office Dam Safety Program to better understand, investigate, and propose design measures to address difficult geologic foundation conditions found at the proposed Glade Dam site. The Dam Safety Program has been actively involved and is continuing to review, evaluate, and ensure that the proposed defensive design measures meet established rules, requirements, and industry best practices.

**Schedule:** Project development is occurring on multiple fronts but is primarily focused on Glade Reservoir and the Highway 287 relocation. Design for those components are at a 60% level and are on track to be final by the end of 2024. Construction on those components may begin as early as 2025. Beyond Glade Reservoir and the Highway 287 relocation, the NISP Enterprise is considering both an accelerated schedule where everything is constructed as soon as possible, and a sequenced schedule where GRC would be completed, operating, and delivering water before SPWCP is completed. A refined project schedule will be provided with a loan application and final feasibility studies.

**Participants:** NISP is being undertaken on the behalf of fifteen participants in north-central Colorado. The NISP participants will own a perpetual contractual right to the use of a defined portion of the NISP facilities and a defined portion of the water supplied by NISP through allotment contracts with the NISP Enterprise. Through their allotment contracts, each participant will agree to fix rates, charges, or assessments sufficient to meet its allotment contract obligations. The participants and their permitted yield are shown in Table 1.

**TABLE 1: NISP PROJECT PARTICIPANTS**

Participant	Permitted Yield (AF)
Fort Collins Loveland Water District	3,400
Windsor	3,300
Left Hand Water District	4,900
Erie	6,500
Evans	1,200
Central Weld County Water District	3,500
Fort Lupton	2,300
Fort Morgan	3,600
Morgan County Quality Water	1,300
Eaton	1,300
Severance	2,000
Lafayette	1,800
Firestone	1,300
Frederick	2,600
Dacono	1,000
<b>TOTAL</b>	<b>40,000</b>

**Financial Considerations**

Since the project’s inception, the NISP participants have contributed nearly \$130 million for permitting, design, and land acquisition efforts. This amount will likely increase to approximately \$160 million by the time construction begins.

Construction costs based on engineer’s 2022 estimates are summarized in Table 2 and Table 3. The current cost estimate is \$1.407 billion for the Glade Reservoir Complex and \$465 million for the South Platte Water Conservation Project for a combined total of \$1.872 billion. The costs do not include contingency for escalation. It is expected that NISP will be a \$2 billion project. As individual project components are brought closer to final design and with each year’s normal fluctuation of construction costs, the project cost will continue to be revised. A refined project cost will be provided with the formal loan application and final feasibility studies.

TABLE 2: ESTIMATED GLADE RESERVOIR COMPLEX COST

Project Component	Cost Estimate
Glade Reservoir	\$770,000,000
Pump Station and Electrical	\$97,400,000
Poudre Diversion and Canal Improvements	\$78,700,000
Pipeline Conveyance and Facilities	\$278,500,000
Glade Reservoir Recreation	\$21,000,000
Highway 287 Relocation	\$161,100,000
TOTAL	\$1,406,700,000

TABLE 3: ESTIMATED SOUTH PLATTE WATER CONSERVATION PROJECT COST

Project Component	Cost Estimate
Galeton Reservoir	\$195,800,000
South Platte River Diversion	\$16,400,000
Pipeline Conveyance and Facilities	\$252,900,000
TOTAL	\$465,100,000

**Loan Security:** Security on the loan will consist of a pledge of water activity enterprise revenues derived from pooled financing participants under the allotment contracts, net of any operating costs and expenses in such amount as is necessary to make each annual payment due.

cc: Jonathan Hernandez, Senior Project Manager, Northern Colorado Water Conservancy District  
Carl Brouwer, NISP Program Manager, Northern Colorado Water Conservancy District  
Jennifer Mele, Colorado Attorney General's Office

Attachments: Water Project Loan Program - Project Data Sheet

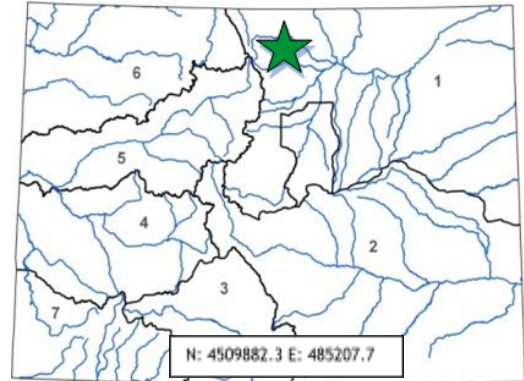


# Northern Integrated Supply Project

## NCWCD NISP Water Activity Enterprise

November 2023 Board Meeting

LOAN DETAILS	
Project Cost:	\$1,871,800,000
CWCB Loan (with 1% Service Fee):	\$101,000,000
Loan Term and Interest Rate:	30 Yrs @ TBD%
Funding Source:	Severance Tax PBF
BORROWER TYPE	
Agriculture	Municipal Commercial
X%	X% Low - X% Mid - X% High X%
PROJECT DETAILS	
Project Type:	New Reservoir
Average Annual Diversions:	TBD AF
New Storage Created:	215,600 AF



The Northern Colorado Water Conservancy District (District), acting by and through its Northern Integrated Supply Project (NISP) Water Activity Enterprise, is pursuing a new regional water supply project, providing 40,000 AF of new water supplies annually.

LOCATION	
County:	Larimer, Weld
Water Source:	Cache La Poudre
Drainage Basin:	South Platte
Division: 1	District: 1,3

The Project, which benefits 11 communities and 4 water districts in the northern front range, will provide water to an estimated 500,000 residents by 2050, double the current number of residents. It includes two major components named the Glade Reservoir Complex and the South Platte Water Conservation Project. It includes two new reservoirs (Glade and Galeton), other infrastructure necessary for the conveyance of the water, and environmental enhancements determined during the National Environmental Policy Act (NEPA) process administered by the U.S. Army corps of Engineers.

