Mid-West Consumer Electric Meeting December 9, 2025

Omaha District Operations Division

David Sobczyk, PE Chief, Operations Division







OMAHA DISTRICT

CIVIL WORKS

REGULATORY

MILITARY

MAJOR DAM

PROGRAM OVERVIEW

MN

IA

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MISSION STATEMENT

The Omaha District, with over 90 years of experience, delivers safe, quality engineering solutions in a timely and cost effective manner.

Through collaboration with our partners, the Omaha District delivers vital engineering solutions to secure the nation both nationally and internationally, energize the economy, reduce disaster risk, protect our environment, and manage water resources.







1,450+ **EMPLOYEES**



\$3+ BILLION **PROGRAM**



50+ RECOGNIZED **TRIBES**



LARGEST CORPS DISTRICT (CONTINENTAL U.S.)



WY

CO

COUNTRIES



MILITARY **INSTALLATIONS**

CIVIL WORKS



Challenging and varied mission areas that include risk management, hydropower production, emergency management, ecosystem restoration, cultural resource protection, navigation support and a robust regulatory responsibility.

\$500M

MILITARY CONSTRUCTION



Vital district function that provides design, construction, and revitalization of facilities essential to our Nation's defense. We routinely support overseas contingency operation while supporting and meeting the needs of our 26 military installations.

ENVIRONMENTAL REMEDIATION



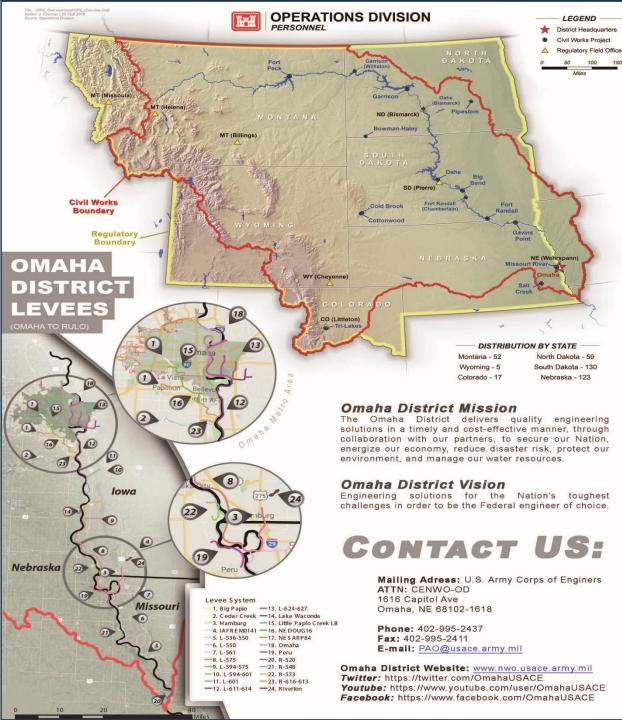
Important mission area that reduces environmental contamination risk by protecting human health and restoring damaged ecosystems. This essential program focuses on the cleanup of contaminated sites across a variety of federal programs. Omaha District supports more than 550 projects across 41 states.

\$250M



Agile and flexible program that provides cost-reimbursable support to other federal agencies in the field of homeland security and defense, rapid disaster and infrastructure response technical expertise in DoD fueling

\$1.3B





OPERATIONS



FLOOD RISK: Managing water for hydropower, wildlife, navigation, recreation, water supply and flood risk.

27 Dams and storage reservoir projects to reduce flood risks \$15.3 Billion in Flood Damages Prevented Since Construction **72M+** Acre-ft. storage



RECREATION: Providing safe quality public outdoor recreation experiences.

238 Recreation areas 75+M Visitor hours 154+ Volunteers

2 Class A visitor centers



ENVIRONMENTAL STEWARDSHIP: Managing and conserving natural resources consistent with ecosystem management principles

1.5M+ Acres of fee-owned property

6000+ Shoreline miles

5000+ Cultural Resource Sites

29 Federally recognized Indian tribes



REGULATORY: Protecting the Nation's aquatic resources, while allowing reasonable development.

4000+ Annual Section 404/10 Permits

600+ Jurisdiction determinations annually **500** Annual acres of wetland restoration

90% National permits within 60 days



HYDROPOWER: Providing clean, renewable energy

6 Missouri River Plants 36 Turbines with 2,501 MW Installed Capacity

11% of Total USACE Capacity

\$223 Million Average Market Value



NAVIGATION: Improving and maintaining navigation for economic development and safety.

3000+ River Structures Maintained 236 Miles of Inland Navigation

20 Million ton-miles commerce annually

EMERGENCY MANAGEMENT: Dedicated support to emergency response within the nation and beyond.

3000+ Emergency Response Volunteers 49 Response Actions since 2010

ARMY VALUES

LOYALTY

DUTY

RESPECT

HONOR

INTEGRITY

SELFLESS SERVICE

PERSONAL COURAGE

Fort Peck Dam

Construction complete . . . 1940

Fort Peck Powerplant Total generating capacity 185,250 kilowatts Number of generators 5 Type of unit turbine Francis

Fort Peck Lake

Big Bend Dam

Construction complete . . . 1963 Construction cost \$107.2 million* Type Rolled earth

Big Bend Dam Power House Total generating

Lake Sharpe Reservoir Length 80 miles Shoreline 200 miles



Garrison Dam

Construction start 1946 Construction complete . 1960 Construction cost \$284.2 million*
Type Rolled earth

Garrison Dam Power House

Total generating

Lake Sakakawea

Reservoir Length 178 miles



Oahe Dam

Construction start 1948 Construction complete. . 1958 Construction cost \$345 million* Type Rolled earth

Oahe Powerplant Total generating

Type of units Francis

Lake Oahe

Water surface 370,000 acres Reservoir Length 231 miles Maximum depth 205 feet Shoreline 2,250 miles



MAIN STEM RESERVOIR SYSTEM

16.3

MAF

72.4 MAF **Exclusive Flood Control 6%** 67.7 MAF Annual Flood Control & Multiple Use 16% 56.1 MAF Carryover Multiple Use 53% 17.6 MAF In Million

Acre Feet

ZONES & ALLOCATIONS OF STORAGE CAPACITY

TRI-LAKES

Cherry Creek Dam
Type Rolled earth fill Width of crest 30 feet

Chatfield Dam
Type Rolled earth fill
Height 147 feet
Width of crest 30 feet
Understanding

Bear Creek Dam

Type Rolled earth fill Height main embankment . 179.5 feet Height south embankment .65 feet Width of crest main embankment 30 feet Width of crest south embankment 30 feet Spillway type Earthen cut Length main embankment .5,300 feet Length south embankment, 2,100 feet



Fort Randall Dam

Construction start 1946 Construction complete . . . 1956 Construction cost \$200 million* (including Lake Francis encasement) Type Rolled earth

Fort Randall Powerplant Total generating capacity. 320,000 kilowatts Number of units 8
Types of units Francis

Lake Francis Case Water surface (at normal pool) 107 miles

Shoreline length 540 miles



Gavins Point Dam Construction start 1952

Construction complete 1957 Construction cost \$50 million* Type Rolled earth and chalk fill

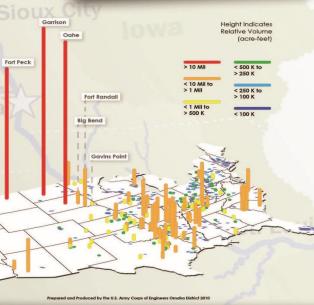
Gavins Point Powerplant Total generating capacity . . 132,300 kilowatts

Lewis and Clark Lake

(at normal pool) 28 miles Shoreline length 90 miles

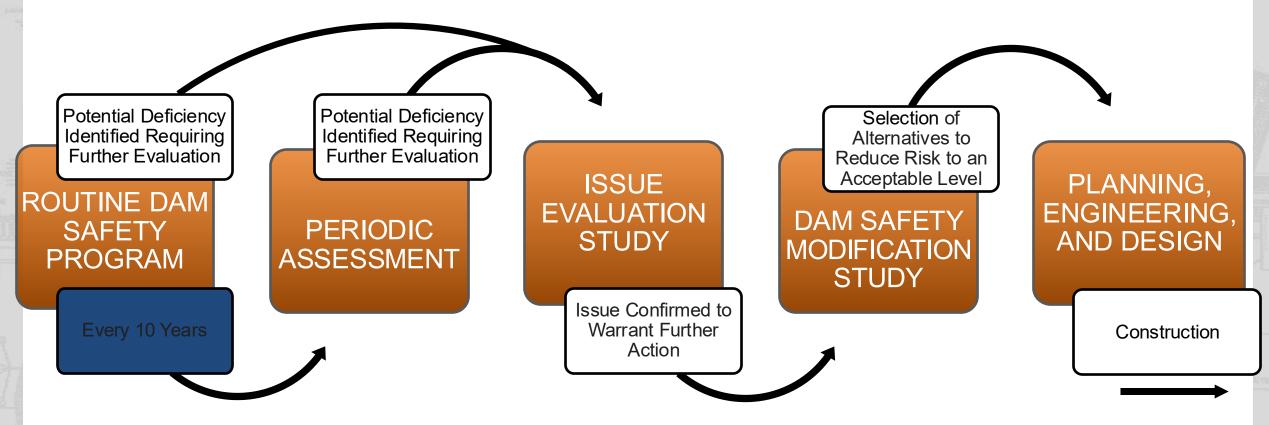


Storage Capacity of Corps Reservoirs



HOW DOES USACE MANAGE DAM SAFETY RISK?

□ U.S. Army Corps of Engineers dam safety risk management process:



Public Safety is the #1 Priority in the USACE Dam Safety Program





Garrison DSM Scope Overview

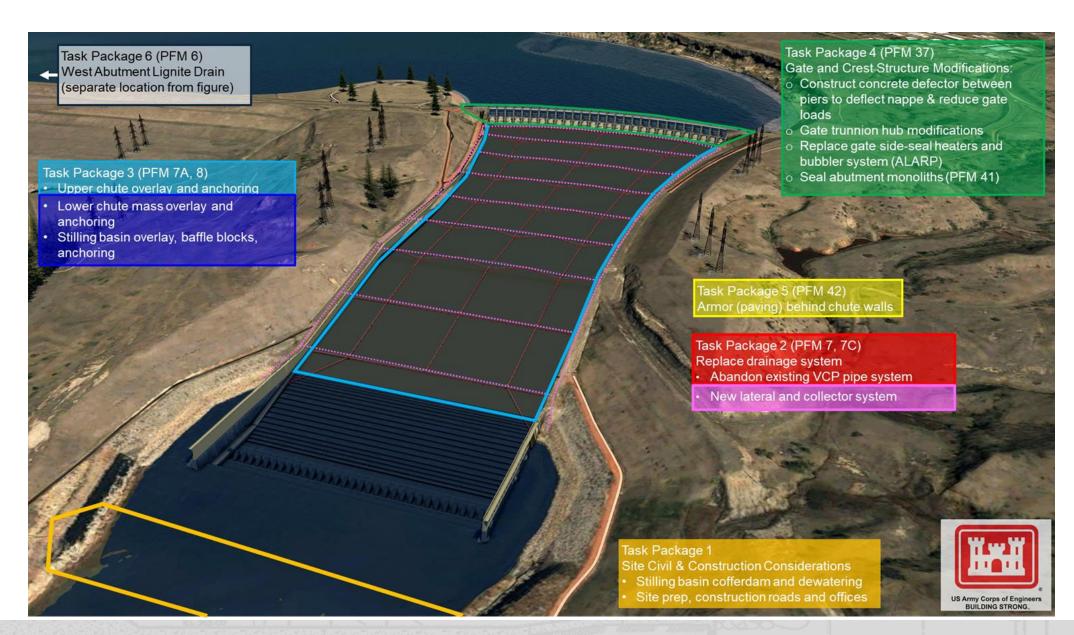
- 2023 DSMR Selected Plan (RMP 12) includes:
 - Drainage system abandonment and replacement
 - Lower chute and stilling basin modifications (mass concrete and CRC)
 - Upper and lower chute CRC overlay
 - Deflector beam to deflect nappe off gates
 - Spillway gate trunnion hub modifications
 - Seal abutment monoliths
 - Concrete armoring behind chute walls
 - ALARP Gate De-icing measures
 - ALARP West Abutment Lignite Drain







Garrison DSM Task Package





Geotech Investigation Programs

Investigation	Description	Performed by	Field Year	Status
Topographic Surveys	Improved topographic information	NWO Survey Crew	FY23	Complete
Geotechnical Investigation Phase 1	Geotechnical properties (9 borings)	AE (Stantec)	FY23	Complete
Pumping Tests	Cofferdam dewatering feasibility	NWO Drill Crew	FY24	Complete
Anchor Test Program Phase 1	3 test anchors with instrumentation to determine potential parameters for anchor design	Stantec	FY24	Complete
On-Site Aggregate Investigation	Identifying concrete materials aggregate sources	PDT	FY25	Complete
Frost Blanket Investigation	Geotechnical properties of spillway frost blanket	NWO Drill Crew	FY25	Complete
WALD Investigation	Geotechnical properties for WALD Design	NWO Drill Crew	FY25	Complete
Drainage System Measurements	Spillway drain inspection and monitoring	PDT	FY25	Complete
Anchor Test Program Phase 2	12 test anchors with instrumentation to determine potential parameters for anchor design	Nicholson	FY25	On-going
Stilling Basin Drainage Dive	Spillway drain inspection and monitoring	USACE Dive Team	FY25	Complete
Concrete Materials Survey	Identifying concrete materials aggregate sources	Stantec	FY25 / 26	On-going
Spillway Drain Video Inspection (Lat 1/2)	Identifying flaws in Lateral 1 and 2 drain system	NOW	FY 26	Complete
Phase 1B Mix Design and Thermal Studies	Concrete materials initial mix design and thermal study	USBR	FY26	Upcoming
Anchor Test Program Phase 2B / 3	Anchor design field testing	TBD	FY 26/27	Upcoming
Spillway Drain Video Inspection (all)	Identifying flaws in drain system	TBD	FY26	Upcoming





Physical Model Program

On-going

USBR – 1:32 Spillway Ogee Model
Ogee performance, gate loading, hydraulic
deflector beam

Crest Sectional Model					
Scale 1:_		Prototype	32		
Bays		3	3		
Width	ft	144	4.5		
Length	ft	1,400	44		
Height	ft	100	3.1		
Discharge (1,150kcfs prototype)	cfs	123,214	21		

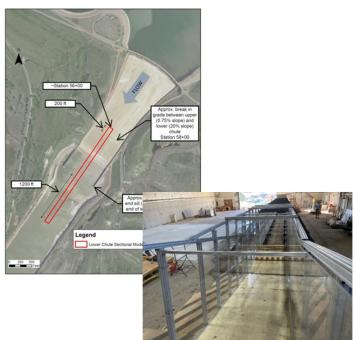




On-going

CSU – 1:24 Downstream Chute Model
D/S chute and stilling basin alternatives, stilling
basin baffle and end sill alternatives

Lower Chute and Stilling Basin Sectional Model							
		Prototype	1:24 Scale Model				
Width	ft	96	4				
Length	ft	2,500	104				
Height	ft	244	10				
Discharge	cfs	138,000	49				

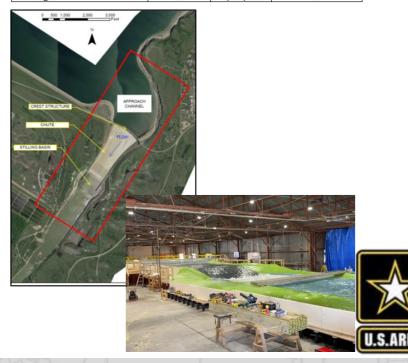


On-going

ERDC – 1:55 Comprehensive Model

Overall spillway hydraulics

Comprehensive Model						
		Prototype	1:55 Scale Model			
		94838	55			
Width	ft	3,000	55			
Length	ft	8,000	145			
Height	ft	270	5			
Discharge	cfs	1,150,000	51			



Budget & Schedule

\$1.8B - Current Total Project Costs (Fully Funded*)

- \$114M Pre Construction Engineering and Design (PED) - \$30M obligated to date
- \$1.5B Construction
- \$143M S&A
- \$53M EDC/PIE/Closeout

Change management, implement MCC plan, multiple contracts with individual 100% PED and Construction schedules (some in sequence, potential for concurrent)

30			schedules (some in sequence, potential for concurrent)										
Garrison PED and Construction Schedule													
Last Updated 1 OCT 2024		+											
Phase	202	3 2024	2025	2026	2027	2028	2029	2030	2031-2037	Start Date	End Date	Duration (Months)	Duration (Years)
PED										6/26/2023	5/10/2030	83	6.9
Investigations / testing										6/26/2023	11/25/2028	65	5.4
35% Design										6/26/2023	1/6/2027	42	3.5
65% Design										1/11/2027	12/22/2028	23	1.9
95% Design										1/3/2029	11/29/2029	11	0.9
100% Design										12/11/2029	5/10/2030	5	0.4
Contracting										12/11/2029	3/6/2031	15	1.2
RTA										12/11/2029	1/10/2030	1	0.1
2 Phase RFP										1/10/2030	11/6/2030	10	0.8
Phase 1 (start at end of 95%)										12/11/2029	3/11/2030	3	0.2
Phase 2 (100% Docs - Price Proposal)										4/10/2030	10/7/2030	6	0.5
Award Construction Contract										11/6/2030	3/6/2031	4	0.3
Construction										3/6/2031	10/4/2036	67	5.6
Post-Construction and Closeout										10/4/2036	10/31/2037	13	1.1

Current Schedule (Fully Funded*):

Milestone	Current P2				
15% Design Complete	11/4/2025				
35%	5/13/2027				
Investigations Complete	12/29/2028				
65%	5/2/2029				
RTA	9/18/2030				
Award	1/13/2031				
Construction Start	1/14/2031				
Construction Complete	3/13/2037				

*Potential for significant increases to project costs and schedule post-35% design if funding constraints necessitate a Multiple Construction Contracts (MCC) approach. PDT working to better estimate these potential cost and schedule impacts.

US Army Corps of Engineers ®

OAHE ISSUE EVALUATION STUDY (IES) UPDATE

Oahe Dam Project Risk was briefed to USACE Dam Senior Oversight Group (DSOG) in October 2024:

- DSOG endorsed proceeding with Dam Safety Modification Study (DSMS) to address intolerable risk posed by:
 - Spillway Erosion
 - Embankment Cracking Leading to Concentrated Leak Erosion
 - Embankment Instability
 - Embankment Overtopping
- DSMS kick-off work began in Spring 2025, but was suspended due to Risk Management Center and Dam Safety Center staffing shortages (Deferred Resignation Program)

IES Completion Schedule

- Complete Draft Report
- DQC & ATR Reviews
- QCC Review
- DSOG Briefing

January 2026

January-March 2026

March-April 2026

April 2026

DSMS Schedule:

- Estimated DSMS Kick-Off
- Estimated DSMS Completion
- Estimated Start of Preconstruction Engineering & Design



Summer 2026 Summer 2028 Fall 2028





Ft Randall Rotor Removal



https://youtu.be/yEuhtHztXIA



