



OFFICE OF AUDITOR OF STATE
STATE OF IOWA

Rob Sand
Auditor of State

State Capitol Building
Des Moines, Iowa 50319-0004
Telephone (515) 281-5834

July 14, 2025

Kristi Onstot
Executive Council
L O C A L

Subject: Flood Damages to Various Wildlife Management Areas in Scott County,
Jackson County and Louisa County on April 26, 2023
Department of Natural Resources
Claim dated August 7, 2023
Supplemental Request dated June 24, 2025
AOS Claim ID: 3497

In accordance with Executive Council policy, we have examined the supplemental allocation request for 29C.20 funds for the above-mentioned damage. The Department of Natural Resources has requested a supplemental allocation of \$1,454,832.99 for damages at Princeton and Green Island Wildlife Management Areas. The total estimated cost of damages is \$5,819,332.00, with FEMA approving grants for 75% of the total. The FEMA share totals \$4,364,499.01 and the State's share totals \$1,454,832.99. It is our conclusion that the above damage and additional costs expected to be incurred by the Department of Natural Resources are covered by Chapter 29C.20 of the Code of Iowa. Therefore, we recommend an Executive Council approval of the supplemental request of \$1,454,832.99, subject to an audit of actual invoices. This increases the total allocation to \$1,489,632.99.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian R. Brustkern".

Brian R. Brustkern, CPA
Deputy Auditor of State

cc: Kayla Lyon, Director, Department of Natural Resources
Monica Thelen, Wildlife Bureau, Department of Natural Resources
Kara Bryant, Budget & Finance, Department of Natural Resources

June 24, 2025

Auditor's Office, Executive Council

Subject: CLAIM ID #3497; Flooding Damage at Green Island and Princeton Wildlife Management Areas

On April 26, 2023 you were sent notification of major flooding on the Mississippi River that was impacting multiple Wildlife Management Areas (WMA) along the river, including the Green Island WMA in Jackson county and the Princeton WMA in Scott county.

The damage at Green Island was severe, and included a breach of the main levee. This breach made it impossible to manage the water levels on the WMA for an extended period of time. The high water, plus high winds caused damage to many facilities on the WMA including three levees, two access roads, a boat ramp, a viewing area, a parking lot and water control structures. Additionally, lots of vegetative debris was left behind on the area.

At the Princeton WMA, there was also damage to levees/dikes, water control structures, a boat ramp and associated parking area.

We worked with FEMA and HSEMD to ensure that Jackson and Scott counties were eligible for public assistance under FEMA Disaster 4732 and the FEMA projects have now been obligated. There are two PWs to cover the damages:

PW46 – Debris Removal on Green Island WMA –\$391,235.58 – 25% State Share \$97,808.89

PW72 – Facility Repairs at Green Island and Princeton WMAs –\$5,428,096.42 – 25% State Share \$1,357,024.10

We are requesting an allocation for our 25% share of the project total, or \$1,454,832.99.

This information is being submitted to Executive Council as a request for a total allocation of \$1,454,832.99.

I thank you and the Executive Council members for your time and consideration of this request. Please let me know if you need any additional information.

Sincerely,

Monica Thelen, Executive Officer II
Wildlife Bureau

FEMA PW46 – Green Island Debris Removal PW

Department of Homeland Security Federal Emergency Management Agency

General Info

Project #	744523 P/W # 46	Project Type	Estimated Costs
Project	A - Debris Removal	Applicant	Iowa Department of Natural Resources / Wildlife Bureau (000-UOE95-00)
Category	Iowa Department of Natural Resources Wildlife Bureau Green		
Project Title	Island WMA debris.	Event	4732DR-IA (4732DR)
Project Size	Small	Declaration Date	8/25/2023
Activity Completion Date	7/31/2025	Incident Start Date	4/24/2023
	Obligated	Incident End Date	5/13/2023
Process Step			

Damage Description and Dimensions

The Disaster # 4732DR, which occurred between 04/24/2023 and 05/13/2023, caused:

Damage #1356409; Green Island Wildlife Management Area

During the incident period 4/24/2023 through 5/13/2023, a(n) Flood deposited the following debris throughout Iowa Department of Natural Resources / Wildlife Bureau. Per applicant engineers estimate report: "There were large amounts of debris including approximately 2,000 - 4,000 cubic yards of woody and other vegetative debris." On the main levee, impoundment side (west facing), for a distance of approximately 5,500 linear feet. "This debris will need to be removed and disposed of offsite. It is estimated that there could be as much as 400 truckloads to be hauled out at \$800 per truck (including piling, loading and tipping fees), with a total cost of \$320,000. Debris poses a fire threat if left in place as well as additional damages to the structure should additional high-water events take place."

- Green Island Wildlife Management Area, a Other Public Property, located between 42.151560 -90.274337 and 42.163699 -90.263582, is Intermittent vegetative debris is on the main levee, impoundment side (west facing), for a distance of approximately 5,260 linear feet. , 4,000 Cubic Yard of Vegetative Debris. Work to be completed.'

Final Scope

1356409 Green Island Wildlife Management Area

Work to be Completed

The applicant will utilize contracts for debris removal operations throughout the Green Island Wildlife Management Area.

Location: GPS: Between 42.151560, -90.274337 and 42.163699, -90.263582

A. Remove and dispose of 4,000 Cubic Yard of Vegetative Debris.

Work to be completed: \$391,235.58

Project Notes:

1. All site estimates for work to be completed were generated using RSMeans. See document labeled 744523 – 4732 IA – CRC Costing Spreadsheet.xlsx
2. Debris will be disposed at a licensed landfill. Location will be provided before work begins.
3. All work will be completed within the applicants ROW. If staging of equipment and materials would be needed, that work will be staged within the applicants ROW.
4. CRC EHP Note: Project takes place in or near waters of the US. See uploaded map, *Wetland map for debris area.pdf*. A corrected FIRMETTE was also uploaded.

Cost

Code	Quantity	Unit	Total Cost	Section
9102	1	Lump Sum	\$391,235.58	Uncompleted

CRC Gross Cost \$391,235.58

Total 406 HMP Cost \$0.00

Total Insurance Reductions
\$0.00

CRC Net Cost \$391,235.58

Federal Share (75.00%) \$293,426.69

Non-Federal Share (25.00%)
\$97,808.89

FEMA PW72 – Facility Repair Green Island & Princeton

Department of Homeland Security Federal Emergency Management Agency

General Info

Project #	744514	P/W #	72	Project Type	Estimated Costs
Project	D - Water Control Facilities			Applicant	Iowa Department of Natural Resources / Wildlife Bureau (000-UOE95-00)
Category	Iowa Department of Natural Resources Wildlife Bureau Green Island and Princeton WMAs			Event	4732DR-IA (4732DR)
Project Title				Declaration Date	8/25/2023
Project Size	Large			Incident Start Date	4/24/2023
Activity	2/25/2025			Incident End Date	5/13/2023
Completion Date	Obligated				
Process Step					

Damage Description and Dimensions

The Disaster # 4732DR, which occurred between **04/24/2023** and **05/13/2023**, caused:

Damage #1356407; Green Island Wildlife Management Area Dike and Infrastructure Repair

General Facility Information:

- **Facility Type:** Levees
- **Facility:** Green Island Wildlife Management Area
- **Facility Description:** Green Island Wildlife Management Area is a man-made impoundment designed to attract, refuge, and provide habitat for migratory birds and also allow public hunting to residents and non resident waterfowl hunters. The outer limits of the impoundment is a former PL 84-99 Levee and various water control earthen dikes and water control structures including some pumping system for water level controls.
- **Approx. Year Built:** 1930
- **Location Description:** No physical address
- **GPS Latitude/Longitude:** 42.15037, -90.28661
- **Purpose:** Recreation
- **Material:** Earthen
- **Height (ft):** 15
- **Top Width (ft):** 12

Bottom Width (ft): 132

Damage #1356408; Princeton Wildlife Management Area

General Facility Information:

- **Facility Type:** Levees
- **Facility:** Princeton Wildlife Management Area (WMA)
- **Facility Description:** Princeton WMA consists of a non-federal Levee and interconnected dikes, water control structures, gravel roads (on top of dikes and levees), large river pumping systems, parking areas and boat ramps (for access) and is used primarily as public waterfowl and deer hunting.
- **Approx. Year Built:** 1930
- **Location Description:** None
- **Start GPS Latitude/Longitude:** 41.72500, -90.34504
- **End GPS Latitude/Longitude:** 41.69956, -90.33408
- Purpose:** Recreation
- **Material:** Earthen
- **Height (ft):** 12
- **Top Width (ft):** 12
- Bottom Width (ft):** 108

Final Scope

1356407 Green Island Wildlife Management Area Dike and Infrastructure Repair

Work to be Completed

The applicant will utilize contracts and (or) force account for repairs to the Green Island Wildlife Management Area Dike and Infrastructure to restore facilities back to pre-disaster design, capacity and function within the existing footprint.

Facility Damage:

Green island 4th Ditch Dike service road: GPS 42.162810, -90.286440 to 42.158915, -90.286456

- Repair Embankment, 1,955.56 CY of reclaimed soil to stabilize service road, 0.25-MI (1,320-FT) long x 10-FT wide x 4-FT deep.

Green Island boat ramp: GPS 42.150269, -90.286769

- Replace Armoring, 23.33 CY of aggregate rock (bedding stone) for emergency repairs to boat ramp, 30-FT long x 6-FT wide x 3.5-FT deep.

Site 1: GPS 42.151560, -90.274337 to 42.163699, -90.263582

- Repair Embankment, 5,082 CY of native soil at levee side slope, 1.35-MI (7,128-FT) long x 7-FT wide x 2.75-FT deep.

- Replace Armoring, 13,200 CY of stone rip rap on levee toe and side slope, 1.35-MI (7,128-FT) long x 25-FT wide x 2-FT deep.

Repair Service Road, 440 CY of $\frac{3}{4}$ -IN gravel for service road on top of levee, 1.35-MI (7,128-FT) long x 10-FT wide x 2-IN deep.

Site 2: GPS 52.157166, -90.269295

- Repair Embankment, 6,815 CY of native soil at levee breach, 100-FT long x 1,840 SF (cross sectional area of breach)

Replace Armoring, 277.78 CY of stone rip rap on west levee toe and side slope at breach, 100-FT long x 30-FT wide x 2.5-FT deep.

Site 3: GPS 42.150297, -90.279107 to 42.149528, -90.283123

- Repair Embankment, 194.17 CY of native soil at dike side slope and service road, 1,165-FT long x 6-FT wide x 0.75-FT deep.

Site 4: GPS 42.149614, -90.283447 to 42.149829, -90.284990

- Repair Embankment, 138.89 CY of native soil at Impoundment dike, 500-FT long x 6-FT wide x 1.25-FT deep.

Repair Service Road, 61.73 CY of $\frac{3}{4}$ -IN gravel for service road on top of dike, 500-FT long x 10-FT wide x 4-IN deep.

Site 5: GPS 42.150100, -90.286050

- Repair ADA Accessible Overlook, 73.33 CY of native soil, 165-FT long x 6-FT wide x 2-FT deep.
- Repair ADA Ramp and Landing, 12.22 CY of gravel, 165-FT long x 6-FT wide x 4-IN deep.

Site 6: GPS 42.150366, -90.286609

- Repair Boat Launch, 23.33 CY of concrete to repair washout under existing ramp, 21-FT long x 24-FT wide x 15-IN deep.
- Repair Boat Launch, 18.67 CY of 6-IN to 12-IN stone rip rap on shoulders and embankment adjacent to boat ramp, 42-FT long x 6-FT wide x 2-FT deep.

Site 6A (4th Ditch Dike): GPS 42.150470, -90.286706 to 42.171937, -90.286693

- Repair Embankment, 5,475.56 CY of native soil, 1.4-MI (7,392-FT) long x 8-FT wide x 2.5-FT deep.
- Replace Armoring, 5,475.56 CY of large D50 12-IN+ stone rip rap on west side of dike, 1.4-MI (7,392-FT) long x 8-FT wide x 2.5-FT deep.
- Repair Service Road, 456.30 CY of $\frac{3}{4}$ -IN gravel for service road on top of dike, 1.4-MI (7,392-FT) long x 10-FT wide x 2-IN deep.

Site 7 (Containment Dike): GPS 42.150297, -90.287401 to 42.152758, -90.305624

- Repair Embankment, 1,760 CY of native soil on earthen dike side slopes, 1-MI (5,280-FT) long x 6-FT wide x 1.5-FT deep.

Site 8 (Fish Lake Road): GPS 42.168252, -90.305750 to 42.173301, -90.305679

- Repair Embankment, 1,368.89 CY of native soil on west slope of Fish Lake Road Dike, 0.35-MI (1,848-FT) long x 8-FT wide x 2.5-FT deep.

Site 9 (Wisconsin Tubes): GPS 42.168195, -90.305811

- Replace Culvert, 2 EA Stand Pipes with custom steel grates, corrugated metal pipe, 48-IN Diameter x 60-FT long.
-
- Replace Culvert, 2 EA Stand Pipes with custom steel grates, corrugated metal pipe, 48-IN Diameter x 10-FT long.
-

Replace Culvert, 2 EA Custom Steel Grate, 48-IN Diameter.

Replace Culvert, 4 EA Flared End Section (FES), corrugated metal pipe (CMP), 42-IN Diameter.

Replace Culvert, 4 EA Steel Channel welded inside 48-IN Diameter stand pipes.

Scope Notes:

1. The DDD for this DI (at bottom) indicates no rip rap (armoring) rock was seen during the site inspection and that the Applicant requested it be added to the claim with minimal evidence to support it. However, the PDMG clarified that the rip rap was clearly seen in subsequent inspections and photographs and stated that replacement of the rip rap is to be included in the pre-disaster repair cost.

See attachment labeled 744514_email confirming applicant estimated cost and rip rap to be included in predisaster scope_05-102024.pdf.

Work to be Completed Total - DI #1356407: \$2,135,604.31

CEF Total - DI #1356407: \$2,570,362.89

Project Notes:

1. All site estimates for Work to be Completed were generated using RS Means. A Cost Estimating Format (CEF) has been created for this project. See attachment labeled *744514 - 4732DR - CRC Costing Spreadsheet.xlsx*.
2. All work will be completed within the applicants Right of Way (ROW). If staging of equipment and/or materials will be needed, that work will be staged within the applicants ROW.
3. Disposal is expected to be deposited at an acceptable location (landfill). Location will be provided by applicant once work commences.
4. All borrow or fill material must come from pre-existing stockpiles, material reclaimed from maintained roadside ditches (provided the designed width or depth of the ditch is not increased), or commercially

procured material from a source existing prior to the event. For any FEMA-funded project requiring the use of a non-commercial source or commercial source that was not permitted to operate prior to the event (e.g., a new pit, agricultural fields, road ROWs, etc.) in whole or in part, regardless of cost, the Applicant must notify FEMA and the Recipient prior to extracting material. FEMA must review the source for compliance with all applicable federal environmental planning and historic preservation laws and executive orders prior to a subrecipient or their contractor commencing borrow extraction. Consultation and regulatory permitting may be required. Non-compliance with this requirement may jeopardize receipt of federal funding. Documentation of borrow source utilized is required at closeout.

406 HMP Scope

I. Related Damaged Items to be Protected	
<p>During the declared incident period of April 24, 2023, through May 13, 2023, the applicant was impacted by severe storms and flooding, resulting in the following damaged items that will be mitigated. As a direct result of this event, Facility Description: Green Island Wildlife Management Area (WMA) is a man-made impoundment designed to attract, refuge, and provide habitat for migratory birds and also allow public hunting to residents and non-resident waterfowl hunters. The outer limits of the impoundment is a former PL 84-99 Levee and various water control earthen dikes and water control structures including some pumping system for water level controls. Many components were flooded when the MS river flooded in the Spring of 2023 causing excessively high-water levels inside the impoundment including a levee breach that made it impossible to manage the water levees for an extended period of time. High winds GREATLY impacted the facility simultaneously with the high-water levels and the wave action damaged many of the components listed within the DDD. Cause of Damage: Elevated water levels in the Mississippi River caused a rise in water levels within the impoundment and strong winds produced waves that damaged the dikes, roads on top of the dikes and the adjacent levee system. Functionally inter-dependent components of the WMA Facility were damaged during the event. See the full DDD for additional details..</p>	
<p>Total repair cost of damaged elements being protected by the HMP at this site*= *Before Cost Estimating Format (CEF) factors if a large project.</p>	<p>\$ 2,570,362.89</p>

Comments:	Includes CEF
II. Hazard Mitigation Proposal (HMP) Scope of Work	
	<p>Mitigation consists of using Articulating Block Mat, 6-inch as armoring for the spillway in lieu of revetment at Site 1 and using Articulating Block Mat, 6-inch as armoring in lieu of revetment at Site 2. Applicant will install 4,840 feet of concrete flexamat on both the interior and exterior of the levee, for a total of 9,680 linear feet (20 feet wide).</p>
	<p>The mitigation measures will reduce the risk of future erosion damage by: Increasing efficiency and help to minimize scour, severe erosion, and breaches of the levee and associated components.</p>

III. Hazard Mitigation Proposal (HMP) Cost: Worksheet	
<p>Reference and attach a detailed, itemized cost estimate and/or CEF.</p>	
A. Cost of items if the HMP is approved=	\$2,567,886.00

B. Cost of items deducted from the repair scope of work (SOW)=		
C. Net Hazard Mitigation Cost (before CEF factors) =		NA
D. Is there a CEF?		?Yes ?No
E. Net Hazard Mitigation Cost (after CEF factors)=		NA
F. What is the CEF ratio (CEF Total Cost/Base Cost)?		NA
Comments:	CEF included in Mitigation Proposal	
Hazard Mitigation Proposal Cost: Summary		
Net Hazard Mitigation Cost =		\$2,567,886.00

See attachment(s).

DR4732IA HM SOW and Cost DI 1356407 744514 IDNR Wildlife Green Island.pdf.

Attach CEF document.

Comments:

Enter Text.

IV. Cost Effectiveness Calculation

(Net HMP Cost/Total Repair Cost of the damaged portions of the facility for which the mitigation measure applies) x 100

\$ 2,567,886.00

/

\$ 2,570,362.89

x 100 =

99.9 %

= 100%

The Benefit-Cost Analysis (BCA) ratio is

N/A

= 1.0

V. HMP Cost-Effectiveness

The mitigation measures meet the cost effectiveness criteria based on:

Mitigation measure is listed in Appendix J and is within 100% of the total eligible repair cost of the facility or facilities for which the mitigation applies. In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 June 2020, Chapter 8. Section IV and Appendix J, Section I-B, Erosion Control, this mitigation measure does not exceed 100 percent of the eligible repair cost and is considered to be cost-effective.

VI. Compliance and Assurances

For 'work to be completed,' this HMP is for estimating purposes only. If the final placement and configuration are different than the preliminary estimate, the Applicant should submit a change in scope request. This HMP is subject to further review prior to award.

The Applicant is responsible for final design, placement, configuration, procurement, permits and compliance with all regulatory codes and standards.

Eligibility and funding for the mitigation at this site on this project will be subject to compliance of all environmental laws, regulations, and executive orders applicable to the site(s).

HMP Notes

1. The mitigation proposal estimates were generated using Applicant provided scope of work and cost. See attachment labeled DR4732IA HM SOW and Cost DI 1356407 744514 IDNR Wildlife Green Island.pdf.
2. The above document includes the original map showing 5,140 FT of flexamat on both the interior and exterior of the levee (10,280 FT). Per Applicant's request, a reduction of 600 FT was incorporated into the SOW and Cost.

1356408 Princeton Wildlife Management Area

Work to be Completed

The applicant will utilize contracts and (or) force account for repairs to the Princeton Wildlife Management Area to restore facilities back to pre-disaster design, capacity and function within the existing footprint.

Facility Damage:

Site 1: GPS 41.724999, -90.345036 to 41.721815, -90.335554

- Repair Service Road, 333.33 CY of ¾-IN gravel for service road on top of levee, 3,000-FT long x 12-FT wide x 3-IN deep.

Site 2: GPS 41.716626, -90.329728 to 41.715489, -90.329246

- Repair Embankment, 888.89 CY of native soil at levee toe, 500-FT long x 6-FT wide x 8-FT deep

Site 3: GPS 41.712290, -90.329056 to 41.710360, -90.329660

- Repair Embankment, 644.44 CY of native soil at levee toe, 725-FT long x 4-FT wide x 6-FT deep.

Site 4: GPS 41.71005, -90.329722

- Repair Embankment, 259.26 CY of native soil at gate valve concrete box structure, 25-FT long x 35-FT wide x 8-FT deep.

Site 6: GPS 41.708777, -90.330391 to 41.701944, -90.334042

- Repair Embankment, 1,540.74 CY of native soil at impoundment levee west side slope, 2,600-FT long x 8-FT wide x 2-FT deep.

Site 6A: GPS 41.702384, -90.333889 to 41.699555, -90.334079

- Repair Embankment, 889.89 CY of native soil at levee toe, 1,000-FT long x 4-FT wide x 6-FT deep.

Site 7: GPS 41.694122, -90.337106

- Repair Boat Launch Area, 55.56 CY of 2-IN clean gravel, 150-FT long x 30-FT wide x 4-IN deep.

Work to be Completed Total – DI #1356408: \$115,503.23

CEF Total – DI #1356408: \$147,747.53

406 HMP Scope

I. Related Damaged Items to be Protected

During the declared incident period of April 24, 2023, through May 13, 2023, the applicant was impacted by severe storms and flooding, resulting in the following damaged items that will be mitigated. As a direct result of this event, **Site 1** GPS: 41.724999, -90.345036 to 41.721815, -90.335554: Service Road, 333.3333 CY of Gravel Road on top of Levee (2" clean Stone) Gravel Road over top of levee; 12' wide road and gravel appears to be 2" clean stone., 3,000 FT long x 12 FT wide x 3 IN deep. **Site 2** GPS: 41.716626, -90.329728 to 41.715489, -90.329246: Embankment, 888.8889 CY of Levee Toe (Loss) river side (east) Levee Toe loss , 500 FT long x 6 FT wide x 8 FT deep. **Site 3** GPS: 41.712290, -90.329056 to 41.710360, -90.329660: Embankment, 644.4444 CY of Levee Toe river side (east) Levee Toe, 725 FT long x 4 FT wide x 6 FT deep. **Site 4** GPS: 41.71005, -90.329722: Embankment, 259.2593 CY of Gate Valve Concrete Box Structure Gate valve Structure just north of large diesel pump house., 25 FT long x 35 FT wide x 8 FT deep. **Site 6 GPS:** 41.708777, -90.330391 to 41.701944. -90.334042: Embankment, 1,540.7407 CY of Side slope impoundment Side Levee west Side Slope (Impoundment Side), 2,600 FT long x 8 FT wide x 2 FT deep. **Site 6A** GPS: 41.702384, -90.333889 to 41.699555, -90.334079: Embankment, 888.8889 CY of Lost Toe Riverside east Levee embankment, 1,000 FT long x 4 FT wide x 6 FT deep. **Site 7** GPS: 41.694122, -90.337106: Boat Launch Area - Gravel Repair, 55.5556 CY of 2" Clean Gravel Gravel around the Boat Launch and parking area was washed and covered in sediments during the event period. A temporary repair was made to prevent further damage., 150 FT long x 30 FT wide x 4 IN deep.

Total repair cost of damaged elements being protected by the HMP at this site*=

*Before Cost Estimating Format (CEF) factors if a large project.

\$ 142,100.00

Comments: Includes CEF

II. Hazard Mitigation Proposal (HMP) Scope of Work

Mitigation consists of adding an additional structure consisting of a 36" pipe with a structure and sluice valve. There are currently two outlet structures, and this would add a third for additional relief. The outlet structure is located at 41.6942587, -90.3365598. A full cost breakdown is provided in the attached documents.

The mitigation measures will reduce the risk of future erosion damage by: This additional structure would allow faster dewatering after a flood event. This increased capacity will also help to increase the rate at which we could let water in prior to a forecasted levee overtopping event. This would help mitigate damages from water pouring over the levee when it is overtopped.

III. Hazard Mitigation Proposal (HMP) Cost: Worksheet

Reference and attach a detailed, itemized cost estimate and/or CEF.

A. Cost of items if the HMP is approved=	\$142,100.00
--	--------------

B. Cost of items deducted from the repair scope of work (SOW)=	\$0.00
--	--------

C. Net Hazard Mitigation Cost (before CEF factors) =	NA
--	----

D. Is there a CEF?	?Yes ?No
--------------------	----------

E. Net Hazard Mitigation Cost (after CEF factors)=		NA
F. What is the CEF ratio (CEF Total Cost/Base Cost)?		NA
Comments:	Enter Text	

Hazard Mitigation Proposal Cost: Summary	
Net Hazard Mitigation Cost =	\$142,100.00
See attachment(s).	DR4732IA Mitigation SOW and Cost Est DI 1356408 744514 IDNR Wildlife Princeton WMA.pdf
Comments:	Enter Text.

IV. Cost Effectiveness Calculation

(Net HMP Cost/Total Repair Cost of the damaged portions of the facility for which the mitigation measure applies) x 100

\$ 142,100.00	/	\$ 147,747.53	x 100 =	96.17 %	= 100%
---------------	---	---------------	---------	---------	--------

The Benefit-Cost Analysis (BCA) ratio is

N/A

= 1.0

V. HMP Cost-Effectiveness

The mitigation measures meet the cost effectiveness criteria based on:

a) Mitigation measure is listed in Appendix J and is within 100% of the total eligible repair cost of the facility or facilities for which the mitigation applies. In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V4 June 2020, Chapter 8. Section IV and Appendix J. Section I-B, Erosion Control, this mitigation measure does not exceed 100 percent of the eligible repair cost and is considered to be cost-effective.

VI. Compliances and Assurances

For 'work to be completed,' this HMP is for estimating purposes only. If the site's final placement and configuration are different than the preliminary estimate, the Applicant should submit a change in scope request. This HMP is subject to further review prior to award.

The Applicant is responsible for final design, placement, configuration, procurement, permits and compliance with all regulatory codes and standards.

Eligibility and funding for the mitigation at this site on this project will be subject to the compliance of all environmental laws, regulations, and executive orders applicable to the site(s).

HMP Notes
<p>1. The mitigation proposal estimates were generated using Insert Text. See attachment labeled DR4732IA Mitigation SOW and Cost Est DI 1356408 744514 IDNR Wildlife Princeton WMA.pdf.</p> <p>2. Also, see attachment labeled, DR4732IA Princeton Site Map DI1356408 744514 IDNR Wildlife Princeton WMA.pdf.</p>

Cost

Code	Quantity	Unit	Total Cost	Section
9000	1	Lump Sum	\$2,570,362.89	Uncompleted
9000	1	Lump Sum	\$147,747.53	Uncompleted

CRC Gross Cost\$2,718,110.42

Total 406 HMP Cost\$2,709,986.00

Total Insurance Reductions\$0.00

CRC Net Cost\$5,428,096.42

Federal Share (75.00%)\$4,071,072.32

Non-Federal Share (25.00%)\$1,357,024.10