

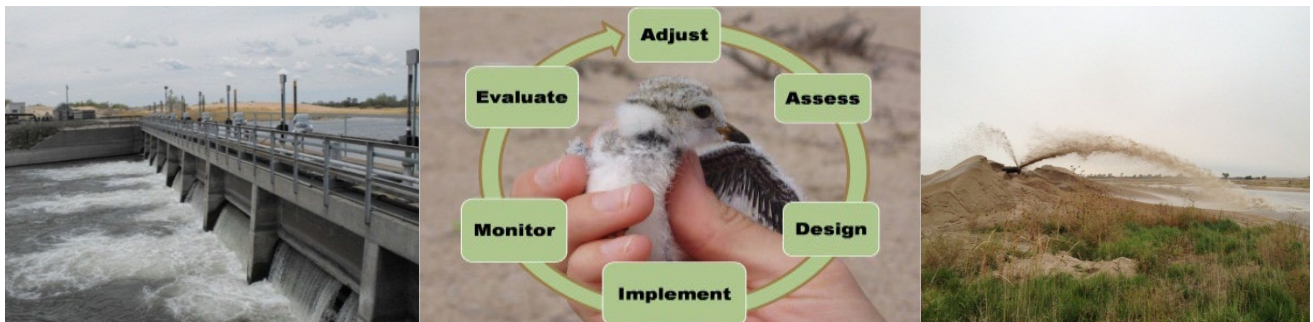


PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM (PRRIP -or- Program) FISCAL YEAR 2026 DRAFT SCIENCE PLAN BUDGET AND ANNUAL WORK PLAN

Prepared by:
Executive Director's Office (EDO)
Platte River Recovery Implementation Program (PRRIP or Program)
Kearney, Nebraska

Prepared for:
PRRIP Technical Advisory Committee (TAC)
Rich Walters, Conservation Entities
2026 TAC Chair

DRAFT Budget and Work Plan Reviewed by TAC
October 22, 2025





PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM FISCAL YEAR 2026 DRAFT [SCIENCE PLAN](#) BUDGET AND ANNUAL WORK PLAN

Introduction

The Platte River Recovery Implementation Program (“Program” or “PRRIP”) initiated on January 1, 2007, as a basin-wide effort between the states of Colorado, Wyoming, and Nebraska and the Department of Interior to provide land, water, and scientific monitoring and research to evaluate Program benefits for the target species. The Program is being implemented in an incremental manner, with the First Increment covering the 13-year period from 2007 through 2019 and the First Increment Extension covering a 13-year period from 2021 through 2032. In general, the purpose of the Program is to implement certain aspects of the U.S. Fish and Wildlife Service’s (Service) recovery plans for the target species that relate to the Program’s identified “associated habitats” in the central Platte River by securing defined benefits for those species and their habitats. The Program will also provide ESA compliance for existing and certain new water-related activities in the Platte basin upstream of the Loup River confluence for potential effects on the target species; help prevent the need to list more Platte River species under the ESA; mitigate the adverse effects of certain new water-related activities through approved depletions plans; and establish and maintain an organizational structure that will ensure appropriate state and federal government and stakeholder involvement in the Program.

The Program is led by a Governance Committee (GC) consisting of representatives of Colorado, Wyoming, Nebraska, the Bureau of Reclamation, the Service, South Platte River water users, North Platte River water users, Nebraska water users, and environmental groups. The Program established key standing Advisory Committees to assist the GC in implementing the Program. Those committees include the Technical Advisory Committee (TAC), the Land Advisory Committee (LAC), the Water Advisory Committee (WAC), the Finance Committee (FC), and the Independent Scientific Advisory Committee (ISAC).

Jason Farnsworth serves as Executive Director (ED) of the Program. Farnsworth and staff in the Executive Director’s Office (EDO) maintain offices in Nebraska and Colorado. The EDO worked closely with the GC, the Advisory Committees and their subcommittees and working groups, Program cooperators and partners, and others to develop the FY 2026 Program Budget and Work Plan based on guidance from the Final Program Document and Program goals and priorities.

This document presents a quick reference snapshot of the FY26 Program Budget Spreadsheet (which is a separate document that is incorporated by reference) and the final FY26 Program Annual Work Plan.





2026 Science Plan Priorities

This section highlights major implementation priorities for the coming year. These priorities may be linked to specific budget line-items or reflect planning and coordination activities that will be undertaken by Program staff and committees.

Science Plan Implementation

- Evaluation of effectiveness of germination suppression flow releases – Data analyses to address Extension Science Plan Big Question #1 collaboratively with the TAC began in 2025 and will continue through 2026. Spring and fall aerial imagery and fall LiDAR acquisition for monitoring of reach-wide channel geomorphology and vegetation is included in the G-1 line-item. Vegetation monitoring via drone imagery acquisition and timelapse camera monitoring supplies are included in G-5. Budget for EDO staff to perform the analysis is included in the ED-1 budget for 2026.
- Whooping crane stopover vs. flyover analysis – Data analysis to address Extension Science Plan Big Question #4 collaboratively with the TAC began in 2024 and will continue through 2026. Telemetry data received from the Whooping Crane Tracking Partnership at no cost are utilized for this analysis. High resolution global satellite imagery to assess water surface extent across sand bed rivers was obtained at no cost. Costs associated with LiDAR and aerial imagery acquisition used to inform Platte-specific hydraulic modeling of on-channel conditions and development of Platte-specific landcover layers are included in G-1. Budget for EDO staff time to perform the analysis is included in the ED-1 budget for 2026. Cost for an EDO Special Advisor to work together with the TAC and EDO to review and revise the data analysis plan and results of the analysis are included in line-item IMRP-3.
- Pallid sturgeon habitat and use of the lower Platte River – Extension Science Plan Big Question #7 is designed to gather information to allow the Program to evaluate the potential impacts and benefits of Program water management actions on pallid sturgeon in the lower Platte River. Field data collection on pallid sturgeon habitat and use of the lower Platte River by the University of Nebraska, Lincoln, concludes in 2025. The final year of pallid sturgeon habitat research by UNL is focused on data analysis to characterize pallid sturgeon habitat and to identify factors important for pallid sturgeon use of and movement through the lower Platte River. Budget for a UNL graduate student stipend and time to process and analyze data, work together with ISAC, TAC, Special Advisor, and EDO to review and revise data analyses, interpret results, and write up conclusions is included in PS-1. Budget for EDO staff time to review and perform analyses is included in the ED-1 budget for 2026. Cost for an EDO Special Advisor to work together with UNL, the TAC and EDO to review and revise the data analysis plan and results of the analysis are included in line-item IMRP-3.
- Evaluation of effectiveness of Program management of Phragmites – Field monitoring of Phragmites growth patterns in response to flow and herbicide was conducted from 2022-2024 to address Extension Science Plan Big Question #2. A data analysis plan was developed and reviewed by the TAC and the ISAC late in 2023. The EDO, together with the TAC, will begin data analysis to address EBQ #2 in 2026. Costs associated with fall LiDAR to support hydraulic modeling efforts to quantify amount and duration of channel inundation are included in the G-1



line item. Program support for herbicide application and spray polygons to assess coverage is included in the WP-1(b) line item. Drone imagery acquisition and timelapse camera monitoring supplies to quantify Phragmites growth and expansion into the river channel are included in G-5. Costs associated with EDO staff time to integrate remotely sensed information with field data and perform the analysis are included in the ED-1 budget for 2026.

- Impacts of predation on piping plover productivity and effectiveness of predator control – Efforts to address Extension Big Questions #8 and #9 include monitoring of piping plover productivity, predator impacts, and implementation of predator controls. Associated costs are included as EDO staff time in ED-1 and direct costs in line-item TP-1. Plover habitat and fencing maintenance are included under line-item LP-2. Costs associated with trapping, identification, and quantification of terrestrial predators at plover nesting sites are included in LP-2-P. Data analysis will be performed by EDO staff in collaboration with the TAC, with costs associated with evaluation of impacts and effectiveness of predator management included as staff time in the ED-1 budget.
- Publications – Costs for publication of five anticipated journal articles on Wet Meadow Hydrology, Sediment Augmentation, Germination Suppression, Whooping Crane Roost Site Selection, and Whooping Crane Diurnal Use Site Selection are included in line-item PD-3.



Table 1. Quick-Reference Snapshot of FY 2026 PRRIP Science Plan Budget

Table 1 includes a reference page number corresponding to the beginning page location for each budget line-item in this FY2026 Science Work Plan. NOTE: The ED-1 budget dedicated to Science Plan implementation is not included here but is expected to be similar to costs from 2025.

LAND PLAN			
LP-2	Habitat Restoration and Management Actions on Program Lands	\$ 965,100	6
LP-2-P	Trapping Projects	\$ 115,300	7
WP-1(b)	Phragmites Control	\$ 200,000	9
PD-22	Sediment Augmentation Implementation	\$ 3,000	11
PD-15	Environmental Permitting	\$ 50,000	13
Land Plan Sub-Total		\$ 1,333,400	

SCIENCE PLAN			
ED-1: Science Plan	EDO Salaries/Travel/Office Expenditures	\$	
G-1	Remote Sensing Data Collection	\$ 386,900	14
TP-1	Tern and Plover Monitoring & Research	\$ 3,200	16
WC-1	Whooping Crane Monitoring & Research	\$ 101,200	18
PS-1	Pallid Sturgeon Monitoring & Research	\$ 405,000	20
G-5	Geomorphology & Vegetation Monitoring and Research	\$ 5,500	22
IMRP-3	EDO Special Advisors - Science Plan	\$ 48,000	24
ISAC-1	ISAC Stipends & Expenses	\$ 218,000	26
PD-3	PRRIP Peer Review and Publications	\$ 22,000	28
PD-11	Science Plan-related Workshops	\$ 15,000	29
Science Plan Sub-Total		\$ 1,204,800	

FY2026 PRRIP SCIENCE PLAN BUDGET TOTAL		\$ 2,538,200	
--	--	--------------	--



FY 2026 PRRIP LAND PLAN BUDGET LINE-ITEMS

LP-2. Habitat Restoration and Management Actions on Program Lands

YEAR	BUDGET	EXPENDITURES	NOTES
2020	\$611,000	\$272,562	
2021	\$907,000	\$577,765	
2022	\$336,000	\$247,938	
2023	\$333,200	\$201,840	
2024	\$336,900	\$296,335	
2025	\$567,000		
2026	\$965,100		
2027 Est	\$361,600		
2028 Est	\$372,800		

Task Description:

Implementation of target species habitat restoration and maintenance activities at Program habitat complexes and non-complex properties. Activities generally include the creation and maintenance of tern and plover on and off-channel nesting habitats and creation and maintenance of on and off-channel whooping crane roosting habitat. Specific management actions include tree clearing, nesting island maintenance, channel disking, herbicide application, and seeding.

Notes on Cost

The general breakdown of estimated costs for proposed Science Plan related management actions in 2026 is as follows.

Location	Estimated FY26 Cost
Non-complex	\$637,500
Plum Creek Complex	\$37,600
Cottonwood Ranch Complex	\$62,500
Elm Creek Complex	\$6,000
Pawnee Complex	\$11,000
Fort Kearny Complex	\$30,900
Minden-Gibbon Complex	\$89,000
Clark Island Complex	\$36,000
Shoemaker Island Complex	\$30,800
Chapman Complex	\$23,760
TOTAL	\$965,060 Round up to \$965,100



LP2-P. Trapping Projects

YEAR	BUDGET	EXPENDITURES	NOTES
2020	\$77,000	\$75,279	
2021	\$89,000	\$86,599	
2022	\$89,000	\$52,312	
2023	\$97,600	\$132,767	
2024	\$108,400	\$95,786	
2025	\$106,900		
2026	\$115,300		
2027 Est	\$117,600		
2028 Est	\$120,000		

Task Description

Mammalian predator trapping occurs at all managed tern and plover nesting sites to increase productivity within the AHR and beaver trapping occurs along the State Channel at the North Platte Choke Point maintain flow through the State Channel improvements. The effectiveness of predator management at off-channel tern and plover nesting sites, including mammalian trapping and removal, will be evaluated to address Extension Science Plan Big Question #9.

Notes on Cost

At the September 2025 GC meeting, the GC agreed to review a 3-year sole sourced contract, work plan, and budget for mammalian predator trapping conducted by Wayne Homan (TSE, LLC). Estimated costs below are for the FY26 work plan under a 3-year contract thru 2028 within the AHR, including seven off-channel sand and water nesting sites, and additional trapping needs at the North Platte Choke Point. In FY26 personal compensation hourly rate (\$47/hr) includes indirect costs such as insurance, vehicle licensing/registration/insurance, GPS unit and associated software. Total cost for personal compensation is based upon 8.5 hour days from March 1 through August 31 (184 days). Vehicle mileage is based upon 220 miles per day at standard annual federal mileage rate (\$0.70/mi). Equipment hire is based on 6 months of use at \$300/mo for the 4-wheeler and \$100/mo for the trailer. Trapping costs are itemized as follows:

Category	Estimated FY26 Cost
Personal Compensation	\$73,508
Vehicle Mileage	\$28,336
4-Wheeler Hire	\$1,800
Trailer Hire	\$600
Thermal Scope w/ Range Finder	\$3,000
Thermal Binoculars w/ Range Finder	\$3,000
Traps, Bait, Misc. Equipment	\$5,000
Total	\$115,244 Round up to \$115,300



Products

- Increased tern and plover productivity from the AHR.
- Predator trapping data that will be summarized and included in the annual tern and plover monitoring report.
- Maintain flow conveyance at the North Platte Choke Point.



WP-1 (b). Phragmites Control

YEAR	BUDGET	EXPENDITURES	NOTES
2020	\$200,000	\$200,000	
2021	\$200,000	\$200,000	
2022	\$200,000	\$200,000	
2023	\$200,000	\$200,000	
2024	\$200,000	\$300,000	
2025	\$300,000	\$300,000	
2026	\$200,000		
2027 Est	\$200,000		
2028 Est	\$200,000		

Task Description

The objective of the Active Channel Capacity Improvements task is to fund management actions (primarily herbicide application) to prevent invasive vegetation infestation of the channel and maintain flow capacity and target species habitat. Channel capacity improvements will assist the Program in maintaining suitable on-channel roosting habitat for whooping cranes as well as making it easier to deliver Program water to and through the AHR. The effectiveness of herbicide application to control Phragmites expansion and maintain suitable whooping crane roosting habitat is being investigated as a part of Extension Science Plan Big Question #2.

Notes on Costs

The Platte Valley Weed Management Area estimates it will cost on the order of \$600,000 annually to control approximately 2,000 acres of Phragmites within the Platte River Basin into perpetuity. It is estimated that \$300,000/year will be requested of and likely required by the Program for Phragmites control to maintain or improve flow conveyance throughout the Platte River Basin to allow the Program to test FWS target flows and other Program flow management activities.

Annual cost breakdowns for allocation of the budget shown in the Table below are based on control expenditures made by the Platte Valley Weed Management Area in previous years. The actual distribution of expenditures in any given year varies among categories and may include other categories associated with channel maintenance and enhancement such as river tillage operations for vegetation control in addition to herbicide-based control efforts.

Category	Amount	Approximate Unit Cost	Total Cost
Control (helicopter)	160 hrs.	\$2100/hr.	\$336,000
Control (Airboat)	450 hrs.	\$200/hr.	\$90,000
Herbicide	2,051 gals	\$85/gal	\$174,375
Total (Rounded)			\$600,000

Annual work activities will consist of control, removal, and monitoring of invasive vegetation within Platte River channels and its tributaries in Keith, Lincoln, Deuel, Dawson, Buffalo, Phelps, Hall, Merrick, and Polk counties. The activities will promote channel conveyance and desired vegetation communities by controlling invasive vegetation within the Platte River. By focusing on the entire



system, the project will maximize resources through a collaborative partnership focused on rehabilitation of the active channel, promoting long-term maintenance, and developing an early detection and rapid response protocol to prevent re-infestations.



PD-22. Sediment Augmentation Implementation

YEAR	BUDGET	EXPENDITURES	NOTES
2020	\$150,000	\$128,320	
2021	\$150,000	\$57,730	
2022	\$150,000	\$258,870	
2023	\$260,000	\$5,200	
2024	\$500,000	\$22,075	
2025	\$203,000		
2026	\$3,000		
2027 Est	\$3,100		
2028 Est	\$250,000		

Task Description

Big Question #3 of the Extension Science Plan asks whether it is necessary to augment sediment below the J-2 return in the south channel to create and/or maintain suitable whooping crane habitat. In June of 2022, the GC directed a halt to sediment augmentation for 2023 and directed the EDO to hire an independent contractor to examine viability of modifications to the Jeffrey Island sand dam to pass sediment to the south channel during high flows. At the October 10-12, 2023, Quarterly TAC meeting and Fall ISAC meeting, both the TAC and the ISAC favored examining a broader set of alternatives for sediment augmentation. An independent contractor was hired in August of 2024 with a proposed budget of \$250,000. Approximately \$200,000 of the proposed budget remained for continuation of the study through FY25. The EDO anticipates finalization of the study in 2025 without additional costs for FY26. Evaluation of effectiveness of sediment augmentation was a focus of discussion for the TAC, ISAC, and GC in 2024. At their March 11, 2024 meeting the GC made the decision to conduct a no augmentation experiment to compare results with and without augmentation. A monitoring plan is currently being implemented to evaluate channel incision annually and provide information for decision-makers on whether to continue the no augmentation experiment or to mechanically augment sediment. The monitoring plan includes additional collection of field data to supplement what is provided via remote sensing as specified below. Monitoring data will help inform location, quantity, and method of augmentation if that decision is made. Feedback from the ISAC and independent peer review of the Sediment Augmentation Synthesis Chapters has been incorporated into continued channel monitoring and evaluation of effectiveness efforts.

Notes on Cost

The FY26 tasks include continued monitoring downstream of the J2 Return Channel under conditions of no augmentation. Estimated FY26 costs include analysis of sediment samples collected as part of the monitoring plan as follows:

Task Description	Estimated FY26 Cost
J2 Return Channel sediment sample analysis	\$3,000
Total	\$3,000



No augmentation monitoring plan: The Program has decided to suspend sediment augmentation to better understand and separate the benefits of mechanical sediment augmentation from natural channel adjustment. The no augmentation period is expected to last five years (through 2027), with the caveat that annual review of channel morphology will be used to determine if the experiment must end early. Additional data collected during the no augmentation period includes:

- Tri-annual cross section surveys acquired with RTK-GPS will provide sub-annual (March, July, November) elevation data and evidence of channel changes throughout the reach at anchor points (APs) with historical data and at actively transitioning locations (Station 70,000). These surveys will also be used to check the accuracy of LiDAR data collected each November.
- In-channel sediment sieve analysis sampling provides valuable information on the connection between flow and changes in channel form. These data are useful for estimating sediment movement in purely hydraulic models and verifying results of mobile-bed models, interpreting rates and patterns of channel change visible in DEMs, REMs, and longitudinal surveys, and understanding sedimentology of bars and banks. However, a full-scale, dedicated sediment sampling scheme consumes much time and resources and does not in itself provide direct evidence for channel changes. Thus, the plan for sediment sampling is focused on obtaining simple, easily-accessible data that can be used to provide insight into the value of a potentially enhanced sampling scheme implemented in the future and provide comparisons and ground-truth for drone-based sediment characterization efforts.
- Aerial longitudinal bed armoring sampling will be conducted. Anecdotally, armoring appears to be present within the upstream portion of the J2 channel likely because the clearwater discharge from the J2 Return contains no incoming sediment. Sediment sizes on exposed bars will be determined directly from imagery obtained aurally from drones. It is expected that the drone imagery surveys will not require substantial increases in workload of the field crew while capturing spatial variability of armoring. The efficacy of imagery-based sediment size classification and the importance of these data for understanding channel form and sediment transport in J2 will be assessed and altered, stopped, or expanded according to results.
- A particular focus of the no augmentation monitoring plan is to perform drone surveys concurrent with other field work and assess the efficacy of using imagery and video to complement continued and new data acquisition. For hydraulic and hydrologic analyses, drone surveys will be used to estimate high-flow marks during floods to confirm modeling results and will be used to estimate flow velocity and discharge in difficult-to-reach locations like the breakthrough channel. In terms of channel morphology, drone surveys will directly measure bar-surface sediment sizes and sediment armoring ratio, will be used to aid in interpretation of sub-annual vegetation characteristics, and will be used to obtain sub-annual channel morphology using three-dimensional photogrammetry.

Products: Data collected during implementation of the no augmentation monitoring plan will be incorporated in annual status reports and an updated Sediment Augmentation Data Synthesis Report that compiles information on channel response during mechanical sediment augmentation and during a period of no sediment augmentation.



PD-15. Environmental Permitting

YEAR	BUDGET	EXPENDITURES	NOTES
2020	\$50,000	\$15,040	
2021	\$50,000	\$13,929	
2022	\$50,000	\$6,612	
2023	\$50,000	\$33,858	
2024	\$50,000	\$3,662	
2025	\$50,000		
2026	\$50,000		
2027 Est	\$50,000		
2028 Est	\$50,000		

Task Description

Contract services to secure or maintain environmental permits associated with adaptive management and/or water projects.

Notes on Cost

The Program will advertise a permitting services contract early in 2026. The prior multi-year contract amount was \$200,000 and specific dollar amounts were developed for specific services, as needed. Estimated annual costs for 2026 are \$50,000 based on previous permitting work for the Program and are high enough to ensure that enough budget is available to account for unforeseen eventualities in the permitting process that could slow down permit acquisition.



FY 2026 PRRIP SCIENCE PLAN BUDGET LINE-ITEMS

G-1. Remote Sensing Data Collection

YEAR	BUDGET	EXPENDITURES	NOTES
2020	\$370,000	\$375,325	
2021	\$387,000	\$386,859	
2022	\$306,000	\$186,857	
2023	\$305,200	\$423,512	
2024	\$305,200	\$194,645	
2025	\$367,900		
2026	\$386,900		
2027 Est	\$389,000		
2028 Est	\$400,700		

Task Description

Bathymetric LiDAR and aerial photography data collection for all Platte River channels within the Associated Habitat Reach (AHR) during the summer and fall. Field data collection and data reduction and analyses will be performed by the EDO. Remotely sensed products are utilized to measure habitat response to water management actions to address Extension Science Plan Big Questions (EBQs) 1-3, as well as identify habitat characteristics associated with whooping crane stopovers, stay lengths, and seasonal use of the Associated Habitat Reach as described in EBQs 4-6. Remotely sensed products are used to check-in on First Increment learning about whooping crane riverine roost site and diurnal use site selection as well as plover and tern nesting site selection. Additionally, these products have been used to help develop tools for evaluation of hydrologic characteristics of wet meadow sites to address EBQ #10.

Notes on Cost

Budget estimates are based on an existing 4-year contract which expires at the end of 2027. In 2020, 2016 deliverables were not included in the original round of reprocessing when 2017-2019 deliverables were reprocessed with a common survey. As such, the 2016 year has had to remain an outlier in geomorphic studies such as the sediment augmentation evaluation. We will reprocess the 2016 deliverables in 2026 so an additional year can be incorporated into all analyses. The FY26 tasks and estimated costs are as follows:

Task Description	Estimated FY26 Cost
Summer aerial imagery	\$80,721
Fall aerial imagery	\$36,220
Fall full reach bathymetric LiDAR	\$260,263
Reprocessing of 2016 LiDAR products	\$9,671
Total	\$386,875 Round up to \$386,900



Products

Processed LiDAR point data, three digital elevation models including topo-bathymetric bare earth, hydro-flattened bare earth, and highest hit, and 6-inch resolution 4-band (CIR and true-color) aerial photography. Collection specifications are identical for summer and fall acquisitions. Summer imagery acquisition coverage encompasses entire AHR within 3.5 miles of the channel. Fall imagery acquisition limited to channel areas. LiDAR coverage for all channels within the entire AHR. Reprocessed LiDAR products for 2016 acquisition.



TP-1. Tern & Plover Monitoring and Research

YEAR	BUDGET	EXPENDITURES	NOTES
2020	\$33,000	\$34,146	
2021	\$59,000	\$51,200	
2022	\$20,000	\$22,760	
2023	\$23,600	\$19,439	
2024	\$4,600	\$14,551	
2025	\$3,000		
2026	\$3,200		
2027 Est	\$3,300		
2028 Est	\$3,400		

Task Description

The EDO will implement the PRRIP tern and plover monitoring protocol during the 2026 nesting season. Monitoring efforts will be similar to 2025 and will include implementation of the monitoring protocol through outside monitoring efforts. Additional track surveys and camera monitoring of nests, shorelines, and predator fencing will be implemented following TAC guidance to document predator presence and nest and/or brood predation. The research protocol for predator management to increase tern and plover nest and chick survival within the AHR, including predator exclosure fencing and predator deterrent lights will continue in 2026. In addition to implementation of the tern and plover monitoring protocol, the EDO will also perform data analyses and annual reporting. The funding included in this line-item provides the equipment required to perform baseline monitoring of tern and plover monitoring from outside nesting sites as well as assess the impact of predation on tern and plover productivity and the effectiveness of predator management actions the Program takes to improve productivity of terns and plovers as per Extension Science Plan Big Questions #8 and #9.

Notes on Cost

FY26 funding in this line-item includes costs for biologists to receive miner safety training required for MSHA certification to conduct monitoring at active mining sites. Following 2024 TAC guidance, FY26 costs include estimates for maintaining existing video and camera monitoring equipment that were purchased in prior years. Costs associated with personnel and vehicles are included in the ED-1 budget.

Expense Category	Estimated FY26 Cost
Direct Costs	
MSHA training and certification	\$900
Video and camera monitoring maintenance (data and protection plan)	\$180
Camera supplies (batteries, posts, spray paint, zip ties)	\$2075
Total	\$3,155 Round up to \$3,200



Products

- Annual report detailing nest and brood activity, bird activity, and habitat conditions; data for long-term analysis of effects of Program actions.
- Data quantifying predator presence and impact on tern and plover productivity at off-channel sites within the AHR.
- Data on efficacy of predator exclosure fencing and predator deterrent lights for reducing predator presence on off-channel nesting sites and improving reproductive success of terns and plovers in the AHR.
- Data will be summarized in annual reports and final results will be published during the First Increment Extension.



WC-1. Whooping Crane Monitoring and Research

YEAR	BUDGET	EXPENDITURES	NOTES
2020	\$130,000	\$90,911	
2021	\$130,000	\$97,343	
2022	\$135,000	\$124,521	
2023	\$170,200	\$121,606	
2024	\$98,500	\$86,638	
2025	\$156,700		
2026	\$101,200		
2027 Est	\$104,300		
2028 Est	\$107,500		

Task Description

The EDO will implement the PRRIP whooping crane monitoring protocol, perform data analyses and reporting for the spring and fall 2026 monitoring seasons. The GC approved a change in PRRIP's monitoring dates at their June 2023 meeting. Beginning in 2024, the spring monitoring period will run from March 5 through April 19, shortening this monitoring period to 46 days. The fall monitoring period will run from October 15 through November 18, shortening this monitoring period to 35 days. Within these shorter survey windows monitoring efforts will be similar to those prior to 2024 and will include implementation of the monitoring protocol through systematic aerial monitoring with ground confirmations, as necessary. The monitoring data collected will be used to address Extension Science Plan Big Questions #4 - #6 as well as provide First Increment learning check-ins on whooping crane roost site and diurnal use site selection. Research to specifically address Extension Science Plan Big Question #4 investigating factors hypothesized to influence whooping crane decisions to stop versus flyover the AHR began in 2024 and will continue through 2026.

Notes on Cost

FY26 funding in this line-item includes direct costs associated with aircraft rental and pilot services. Costs are based on past aerial flight services contracted through a competitive selection process. The shorter monitoring periods were accounted for in estimating 2026 costs. FY26 costs also include replacement of a non-functional aviation headset. Costs associated with monitoring personnel (other than the pilot) and vehicles are included in the ED-1 budget. The estimated budget for PRRIP spring and fall 2026 aerial flight surveys is as follows:

Expense Category	Estimated FY26 Cost
FY26 Spring Whooping Crane Monitoring Direct Costs	
Aircraft rental with pilots (2 planes, 2 pilots)	\$57,217
Aviation headset	\$400
FY26 Fall Whooping Crane Monitoring Direct Costs	
Aircraft rental with pilots (2 planes, 2 pilots)	\$43,534
Total	\$101,151 Round up to \$101,200



Products

- Spring and fall 2025 Whooping Crane Reports detailing monitoring effort, whooping crane use locations, numbers of individuals sighted, and habitat conditions associated with sightings.
- Data for long-term analysis of effects of Program actions.



PS-1. Pallid Sturgeon Monitoring and Research

YEAR	BUDGET	EXPENDITURES	NOTES
2020	\$0	\$0	
2021	\$186,000	\$1,408	
2022	\$747,000	\$621,395	
2023	\$539,000	\$309,572	
2024	\$511,700	\$312,166	
2025	\$244,500		
2026	\$405,000		
2027 Est	\$100,000		
2028 Est	\$0		

Task Description

Extension Big Question #7 asks what effects Program water management for target species in the central Platte may have on pallid sturgeon use of the lower Platte River. In June of 2021, the GC approved a 3-step framework for addressing this Big Question, the first step of which was research to gather information on lower Platte pallid sturgeon habitat, spawning, and genetics. The EDO will coordinate two research efforts dedicated to filling Program information gaps for pallid sturgeon. Genetics research by Dr. Ed Heist at Southern Illinois University, Carbondale, is designed to address issues with pallid sturgeon identification, hybridization, population structure and dynamics. Habitat and spawning research by Dr. Mark Pegg, Dr. Jonathan Spurgeon, and Kirk Steffensen at the University of Nebraska, Lincoln, is expected to provide data on the contribution of the lower Platte River to pallid spawning habitat, reproduction, recruitment, and population dynamics. This research will also provide information on seasonal pallid movements in and out of the lower Platte River and help quantify the environmental patterns (flow, temperature, turbidity) associated with these movements.

In fall 2022 the current PRRIP remote sensing contractor collected bathymetric LiDAR on the lower Platte River (LPR) to be used by an independent contractor to develop a 2D hydrodynamic river model for the LPR. These data and the subsequent model will be used to help inform ongoing pallid sturgeon habitat research on the LPR and to help match LPR flow, Program flow management, and pallid sturgeon habitat/use in the LPR for the PRRIP Water Management Study as described in the Pallid Sturgeon Agreement Framing Document, as approved by the GC in June 2021.

Notes on Cost

Genetics research in 2026 includes costs associated with genetic sequencing of 1,000 samples, supplies, and a graduate student research assistantship.

Habitat and spawning research in 2026 includes costs associated with one graduate student research assistantship, one research technologist, and a research technician. The MS student working for the project graduated in 2024. His vacancy was filled by a research technologist position without additional total project costs to the Program as discussed at the March 2024 GC meeting. Equipment, travel, supplies, boat storage rental space, facilities and administration costs are also included. Total costs estimated for UNL services in 2026 is \$360,000, over double the contracted amount for Year 5, the final year of the research project. This amount represents the remaining



balance for the 5-year fixed-price contract and allows UNL invoicing over the final year of the project to catch up to prior labor and equipment expenditures.

Costs associated with development of a 2D hydrodynamic river model for the LPR by an independent contractor were wrapped up in 2025, thus are not included here. Development of a Water Management Study by an independent contractor is planned for 2027.

The budget for 2026 is as follows:

Expense Category	Estimated FY26 Cost
Genetic research (SIU) Year 5	
Supplies & labor at \$45/sample for 1000 samples	\$ 45,000
Habitat & spawning research (UNL) Year 5	
Personnel, Support, Facilities & Administration	\$161,102
Equipment, Travel, Supplies, Facilities & Administration	\$ 198,898
Total	\$405,000

Products

- Research products will include annual report and presentation of results, accomplishments, and interpretations. Presentations at regional pallid sturgeon meetings and American Fisheries Society meetings are also expected.
- The genetics research is expected to focus field efforts on tracking and collecting habitat and spawning information for genetically identified pallid sturgeon. It will also address important issues related to species identification, hybridization, population structure and population demographics. Results will be widely applicable to the conservation stocking program, wider field efforts to characterize pallid sturgeon habitat, and population viability assessments. As such, we expect this research to contribute to a more focused and efficient management plan for this species.
- Habitat and spawning research is expected to fill knowledge gaps about lower Platte River contribution to pallid spawning habitat, reproduction, recruitment, and population dynamics, including the documentation of successful spawning on the Platte River (in conjunction with genetics research) and identification and description of pallid spawning habitat. An extensive passive telemetry network is expected to provide information on seasonal pallid movements in and out of the lower Platte River and help quantify the environmental patterns (flow, temperature, turbidity) associated with these movements.
- Development by an independent contractor of a 2D hydrodynamic river model using lower Platte River LiDAR data acquired in fall 2022. That model will be used to inform UNL habitat research and for development of the PRRIP Water Management Study as outlined in the June 2021 Pallid Sturgeon Agreement Framing Document.



G-5. Geomorphology & Vegetation Monitoring and Research

YEAR	BUDGET	EXPENDITURES	NOTES
2020	\$4,000	\$62,191	
2021	\$4,000	\$467	
2022	\$86,000	\$75,591	
2023	\$19,100	\$21,309	
2024	\$258,900	\$233,436	
2025	\$120,400		
2026	\$5,500		
2027 Est	\$5,700		
2028 Est	\$5,900		

Task Description

The effectiveness of inundating the channel during the growing season to suppress germination of perennial woody species such as cottonwoods and willows as well as slowing Phragmites expansion to maintain suitable whooping crane roosting habitat is being investigated as a part of Extension Science Plan Big Questions #1 - #2. The EDO performed Phragmites patch monitoring and mapping in response to flow in 2022 and 2023. A consultant was hired in April of 2024 to perform Phragmites patch monitoring and mapping following a protocol developed by the EDO and reviewed by TAC and the ISAC. The Scope of Work for 2024 was limited to field data collection, data QA/QC and processing. The Program decided to pause monthly field surveys monitoring Phragmites patch expansion in 2025. However, emerging drone technology can now be used to identify and monitor Phragmites expansion at a significantly lower cost. As part of our reach-wide effort to monitor vegetation, including Phragmites, along the active channel, drone imagery and time-lapse camera data will be collected to monitor the efficacy of natural flows, target flows, and all AMP-related flow management activities at reducing vegetation establishment or removing vegetation from the channel. These efforts are designed to measure efficacy of Program management to reduce vegetation expansion into the river channel and maintain or improve whooping crane roosting habitat suitability throughout the AHR. Integration of these data sources and analyses to evaluate vegetation response to flow will be continued by the EDO into 2026.



Notes on Cost

The FY26 estimated cost for acquiring drone imagery, identifying, and measuring Phragmites patches at the three study sites originally surveyed at the end of the growing season is estimated at \$2500. The cost of acquiring, maintaining, and installing time-lapse cameras on the bank line of Program Habitat Complexes is estimated to be \$3000. Therefore, the costs associated with monitoring vegetation response to Program flow management actions are as listed below:

Expense Category	Estimated FY26 Cost
Geomorphology and Vegetation Response to Flow	
Drone imagery acquisition, Phragmites patch identification, and measurement	\$2500
Time-lapse cameras (3 @ \$600 each plus tax/shipping)	\$1935
Lithium batteries for cameras	\$730
Camera mounting posts, height gages, mounting hardware	\$300
Total	\$5,465 Round up to \$5,500

Products

- Products will include Phragmites patch polygons for three study sites across the AHR each fall.
- Products will include time-lapse imagery of channel inundation flows and vegetative response.
- Reach wide vegetation monitoring data will be assessed annually to produce an annual report of results in addition to providing data for long-term analysis of effects of Program actions.



IMRP-3. EDO Special Advisors – Science Plan

YEAR	BUDGET	EXPENDITURES	NOTES
2020	\$150,000	\$18,335	
2021	\$130,000	\$0	
2022	\$50,000	\$0	
2023	\$58,000	\$0	
2024	\$120,000	\$0	
2025	\$48,000		
2026	\$48,000		
2027 Est	\$49,500		
2028 Est	\$51,000		

Task Description

- Animal Movement Ecology/Telemetry (TBD) – A Special Advisor to the EDO on Science Plan-related specialty topic of animal movement ecology (with emphasis on movement through landscapes, migration, and analysis of telemetry data) will be retained to review Program documents, research/monitoring design, modeling, and data analysis. The Special Advisor will attend planning meetings and provide feedback at work group meetings and the fall science meeting. This special advisor will be retained to specifically address Extension Big Questions #4 - #6 on the factors important for whooping crane stopovers, stay length, and to address Extension Big Question #7 – on the factors that influence pallid sturgeon use of and movement through the lower Platte River.

It is anticipated that a Special Advisor will be retained in the second or third quarter of 2026 after consultation with the ISAC, the TAC, and/or others with recommendations for individuals to consider.

Notes on Cost

This FY26 budget line-item is for expert assistance for the Executive Director’s Office (EDO) on key topics for the Program. The budget breakdown for this line-item is as follows:

Name	Area of Expertise	Hourly Rate	Estimated 8-hour Days	FY26 Total
TBD	Animal movement ecology; spatial ecology; telemetry; factors influencing animal migratory patterns and movement across the landscape	\$225	20	\$36,000
Other Direct Costs (i.e., travel and expenses for 2026 Summer Science Meeting, trips to Kearney, NE, etc.)				\$12,000
Total not to exceed				\$48,000

General note on all Special Advisor budget line-items: Please refer to the third paragraph in the “Exceptions” section of the revised PRRIP Procurement Policy (effective July 1, 2021) – “Retention of



Special Advisors to the ED of a technical or legal nature is exempt from the procedures provided in this directive.”

Consequently, Special Advisors are not selected through a competitive process involving advertised RFQs or RFPs. Special Advisors are selected by the Executive Director based on qualifications – education, relevant experience, expertise and skills, reliability, credibility, and ability to work effectively with the ED and the staff of the EDO. Special Advisors and the firms they are associated with cannot do any other work for the Program, individually or as part of a team, while retained as a Special Advisor. This is a critical restriction and generally orients Special Advisor selection to individuals who are sole proprietors or part of small firms that would not likely be doing significant levels of work for the Program on other specific, larger projects.

The billing rates are negotiated with the Special Advisors by the ED and are kept within the industry standard of practice based on each individual’s qualifications. While industry standard of practice may not be precisely defined, anyone who is a practicing member of that professional community understands the limits of reasonableness associated with those boundaries. Appropriate expertise to make this assessment resides with the ED or EDO staff. The industry standard of practice rates guidelines used in this process is established based on an on-going market survey process comparing labor rates of similarly qualified professionals in the field.

In the case of Special Advisors, individuals with similar experience and qualifications have been part of consultant teams selected through the Program’s competitive procurement process. Comparison of the Special Advisor rates to the rates charged by comparable individuals through the competitive procurement process provides an indisputable basis for comparison. In all cases the Special Advisor rates are not only within the range of rates seen on the consultant teams which have been selected competitively, but typically at the middle to lower end of the range. As rates charged by Special Advisors are at the middle to low end of the range of rates for similar work acquired through the Program’s competitive procurement process, the estimate for Special Advisors is considered fair and reasonable.

The anticipated level of effort for the upcoming year is also discussed with the Special Advisors by the ED and members of the EDO staff, but all work is assigned on an as-needed basis with no guarantee of any minimum level of assignments. During the budgeting process, the Special Advisors anticipated to be needed and roughly the level of effort expected to accomplish the work plan for the budget year is discussed with the appropriate Advisory Committees, the Finance Committee, and the Governance Committee. Input is taken under advisement from all these sources as to the appropriateness of the budgets for these line-items with appropriate adjustments made prior to budget approval.

Products

Review of Program documents and providing feedback on proposed research/monitoring design, modeling, and data analysis plans. Provides advice on specific actions related to Science Plan implementation. Participation in requested Program work groups and meetings (Whooping Crane Telemetry Work Group, meetings with UNL research group, TAC meetings, ISAC meetings, annual Fall Science Meeting, etc.).



ISAC-1. ISAC Stipends & Expenses

YEAR	BUDGET	EXPENDITURES	NOTES
2020	\$200,000	\$20,546	
2021	\$180,000	\$130,411	
2022	\$261,000	\$210,801	
2023	\$232,800	\$229,145	
2024	\$240,000		
2025	\$248,000		
2026	\$218,000		
2027 Est	\$230,000		
2028 Est	\$230,000		

Task Description

ISAC-1 budget for FY26 includes stipends for six (6) ISAC members for providing the PRRIP independent scientific advice, counsel, and insight related to the proposed Scope of Work below. Also includes estimated travel expenditure reimbursement related to the summer/fall 2026 in-person ISAC meeting in Kearney, NE and additional stipend amounts for two (2) ISAC Co-Chairs.

Notes on Cost

- Per member stipend = $\$30,000 \times 6 = \$180,000$; document review, writing, coordination with rest of ISAC between meetings, preparing for all meetings, actively participating in all meetings
- Chair and Vice Chair additional stipend = $\$10,000 \times 2 = \$20,000$ (report compilation and editing, presentation to GC, chair all ISAC meetings (in-person and virtual) with Independent Science Coordinator support)
- Travel expense reimbursement = $\$3,000 \times 6 = \$18,000$

Scope

- January = virtual ISAC meeting with Independent Science Coordinator to elect Chair and Vice Chair, discuss 2026 Scope of Work, initial discussion of items for 2026 Virtual Science Plan Reporting Session
- February = 2026 Science Plan Reporting Session – virtual, 2 days
- March/April/May/June = virtual sessions as necessary to continue development of Annual Report to the GC, discuss specific topics
- July/August/September = 2026 ISAC Meeting – in person, Kearney, NE, 3 days:
 - Tuesday = Field Trip day
 - Wednesday = Open Session; presentations and discussion
 - Thursday = Closed Session (half day), ISAC only with EDO support
- October/November = finalize Annual Report to GC
- December = present Annual Report to GC at December GC meeting
- March/June/September = quarterly GC Meetings, ISAC members can participate virtually if topics of interest



ISAC Membership

Area of Expertise	Extension ISAC Membership
ISAC Seat #1: Ecological Statistics Jennifer Hoeting, Ph.D.	2026: 1-year contract amendment 2027-2032: renew Jennifer Hoeting, Ph.D., new 6-year agreement
ISAC Seat #2: <u>Adaptive Management, Decision Analysis</u> OPEN	2026-2028: new 3-year agreement (seat new member as early in 2026 as possible) 2029-2032: renew selected member, new 4-year agreement
ISAC Seat #3: <u>Aquatic Ecology</u> Gary Lamberti, Ph.D.	2026-2027: annual contract amendments (2) 2028-2032: renew Gary Lamberti, Ph.D., new 5-year agreement
ISAC Seat #4: Avian Ecology (Whooping Crane Focus) Aaron Pearse, Ph.D.	2026: 1-year contract amendment 2027-2032: renew Aaron Pearse, Ph.D., new 6-year agreement
ISAC Seat #5: Fluvial Geomorphology (Vegetation Focus) Michal Tal, Ph.D.	2026: 1-year contract amendment 2027-2032: renew Michal Tal, Ph.D., new 6-year agreement
ISAC Seat #6: Fluvial Geomorphology (Sediment/Morphology Focus) Alan Kasprak, Ph.D.	2026: 1-year contract amendment 2027-2032: renew Alan Kasprak, Ph.D., new 6-year agreement

The service rate for ISAC members is based on industry standard rates for individuals of the caliber and stature required for the ISAC. A review of standard rates for Ph.D. senior level scientists revealed rates routinely in the range of \$150 to \$300 or more on an hourly basis. The 2026 ISAC member stipend is based on a service rate of \$250/hour for an estimated 15 days of service (including in-person meetings, virtual meetings, and between-meeting coordination, document review, and comment development). The 2026 ISAC Chair additional stipend is based on a service rate of \$250/hour for an estimated 5 days of additional service as Chair (including ISAC coordination duties and development and editing of the annual ISAC Report to the GC). Labor rates for ISAC members is compared against individuals of similar qualifications and experience that are part of consultant teams that are awarded contracts with the Program through competitive processes in conformance with the PRRIP Procurement Policy. The level of effort is established by comparison of level of effort for similar tasks contained in contracts with consultants for the Program that were awarded through competitive processes in conformance with the PRRIP Procurement Policy.

Products

ISAC review of Extension Science Plan implementation, experimental design, monitoring, data analysis and synthesis, and other Program science products and activities; work will culminate in an annual report to the GC.



PD-3. PRRIP Peer Review & Publications

YEAR	BUDGET	EXPENDITURES	NOTES
2020	\$9,000	\$0	
2021	\$9,000	\$1,100	
2022	\$9,000	\$0	
2023	\$63,000	\$0	
2024	\$93,000	\$54,000	
2025	\$12,000		
2026	\$22,000		
2027 Est	\$60,000		
2028 Est	\$60,000		

Task Description

- During FY26 we do not anticipate any products for PRRIP peer review.
- Publication of five (5) Program manuscripts.

Products

- Five (5) publications in refereed journals.

Notes on Cost – Publication

Publication estimate of \$3,500 - \$5,000 per manuscript for open-access publication based on professional publication experience of EDO staff; costs could be higher or lower depending on the journal. A mid-range estimate for each journal category was used to estimate 2026 costs. The EDO expects to seek GC approval to publish:

- Manuscript on Wet Meadows Hydrology based on Program research.
- Manuscript on LiDAR methods used in Sediment Augmentation Synthesis Report.
- Manuscript on methods for evaluation of Germination Suppression.
- Manuscript on Whooping Crane Riverine Roost Site Selection.
- Manuscript on Whooping Crane Diurnal Use Site Selection (Process for rerunning WEST Report analysis with refined landcover dataset from Baasch et al. 2022 Ecotope article).

For FY26, estimated publication expenses are:

Potential Manuscript	Author	Manuscript Type	Target Journal	FY26 Cost
Wet Meadows Hydrology	EDO	Hydrology, Groundwater Modeling	TBD	\$3,500
Methods paper from Sediment Augmentation Synthesis Report	EDO	Geomorphology	Geomorphology	\$5,000
Methods paper from Germination Suppression Evaluation	EDO	River Science	TBD	\$5,000
Whooping Crane Riverine Roost Site Selection	EDO	Ecology	TBD	\$5,000
Whooping Crane Diurnal Use Site Selection	EDO	Conservation Science & Practice	TBD	\$3,500
Total				\$22,000



PD-11. Science Plan-related Workshops

YEAR	BUDGET	EXPENDITURES	NOTES
2020	\$27,000	\$0	
2021	\$9,000	\$0	
2022	\$10,000	\$6,425	
2023	\$13,200	\$34,074	
2024	\$45,000	\$16,527	
2025	\$25,000		
2026	\$15,000		
2027 Est	\$15,500		
2028 Est	\$16,000		

Task Description

In-person summer/fall ISAC Meeting in Kearney, NE to discuss status of Science Plan implementation, overall Program science, and to support ISAC member field trips to PRRIP management and science activities on the ground.

Notes on Cost

EDO facilitation of one in-person ISAC meeting:

Expense Category	Estimated FY26 Cost
2026 ISAC Meeting @ Kearney, NE	
Hotel meeting room and equipment rental; breakfast and lunch meals, snacks, beverages, field visit costs	\$15,000
Total	\$15,000

General Notes on Meeting Costs

The 2026 ISAC Meeting in Kearney, NE will be conducted in-person. Estimated costs are based on actual expenditures in FY23-FY25 for ISAC meetings in Kearney, NE as well as experience with previous Science Plan Reporting Sessions held in Omaha, NE. This estimate factors in recent price increases for food, beverages, and facilities over and above the final bill for similar previous meetings.

Products

- ISAC responses to comments/questions from the GC, TAC, and EDO.
- Updated Science Plan implementation and evaluation approaches based on ISAC feedback.