



# **PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM FISCAL YEAR 2012 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 Governance Committee  
Jim Schneider, Chair

Final Budget and Work Plan Recommended by Executive Director  
**December 2011**

Final Budget and Work Plan Revised and Approved by Governance Committee  
**December 2011**





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# **PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM** **FISCAL YEAR 2012 BUDGET AND ANNUAL WORK PLAN**

## **Introduction**

The Platte River Recovery Implementation Program (Program) was 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. 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). In addition, an Adaptive Management Working Group (AMWG) has been formed to inform the GC on implementation of the Program’s Adaptive Management Plan (AMP).

Dr. Jerry Kenny serves as Executive Director of the Program. Dr. Kenny and staff in the Executive Director’s (ED) Office maintain offices in Nebraska and Colorado. The Executive Director’s Office worked closely with the GC, the Advisory Committees, the AMWG, Program cooperators and partners, and others to develop the FY 2012 Program Budget and Work Plan based on guidance from the Final Program Document and Program goals and priorities.

This document presents the final FY 2012 Program Annual Work Plan. The final FY 2012 Program Budget Spreadsheet is a separate document but is incorporated by reference.

**PROGRAM TASK & ID: ED-1. Salaries/Travel/Office Expenditures****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office (Executive Director, Headwaters Corporation staff)

**Task Location**

Kearney, NE; Lincoln, NE; Denver, CO

**Task Description**

Salaries, travel, and other direct costs associated with ED and staff in ED Offices. ED and EDO responsible for implementation of all items detailed in remainder of the Work Plan. **Exhibit A** (Scope) of ED Contract and Staffing Plan provide documentation of effort.

**Linkage to Priority Hypotheses in AMP**

N/A

**Products**

Staff support for all Program activities

**Notes on Cost**

Detailed breakdown of budget provided in ED Contract/Office Budget (**Exhibit B**); no anticipated further growth in staff levels.

**Budget**

Program Task ED-1						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Salaries/Travel/Office Expenditures	\$361,861	\$1,110,800	\$1,427,759	\$1,599,900	\$1,600,000	\$1,800,000

**PROGRAM TASK & ID: ED-2. Administrative and Other Support Services****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office

**Task Location**

ED Office

**Task Description**

Assistance to ED Office for administrative and other support services such as publishing public notices, surveying, appraisals, Phase 1 Environmental Surveys, attorneys with land or water specialty, etc.

**Linkage to Priority Hypotheses in AMP**

N/A

**Products**

Contract services support for Program activities

**Notes on Cost**

Individual contracts determined by ED according to need, expertise, priority, etc.

**Budget**

Program Task ED-2						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Administrative and Other Support Services	\$17,000	\$150,000	\$250,000	\$200,000	\$200,000	\$150,000



**PROGRAM TASK & ID: ED-3. Public Outreach**

**Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office

**Task Location**

ED Office (Kearney, NE)

**Task Description**

- \$25,000 for NET/Forsberg Platte River time-lapse project; Formerly in AMP Budget –provided funding for locations of specific scientific interest; Placing in Outreach funding due to the broader educational and outreach emphasis on locations to be implemented this year.
- \$10,000 for Hydrologic Cycle exhibit at Lincoln’s Children’s Museum (one-time contribution); Provides a hands-on learning experience that instructs children in the fundamentals of the hydrologic cycle, the interaction of rivers and sediment in sand-bed streams, the relationship of rivers to habitat – e.g., cranes, and uses of water for hydropower and irrigation. Target audience is ages 4-10.
- \$5,000 for Rowe Sanctuary Summer Orientation About Rivers (SOAR) and other youth/family hands-on educational events.
- \$5,000 for Nebraska Nature & Visitor’s Center summer youth camp and other youth/family hands-on educational events.
- \$5,000 for Prairie Loft Center for Outdoor & Agricultural Learning for educational programming; Oriented toward landscape environment and relationship of agriculture to that environment, hands-on learning experiences.
- \$20,000 for exhibitor fees, publication of materials, and promotional materials for venues such as Husker Harvest Days, South Platte Forum, Colorado Water Congress, Rivers and Wildlife, Kearney Crane Festival, and other public and professional outreach and education opportunities.

**Linkage to Priority Hypotheses in AMP**

N/A

**Products**

Program visibility and communication with the public

**Notes on Cost**

N/A

**Budget**

Program Task ED-3						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Public Outreach	\$0	\$0	\$30,000	\$40,000	\$50,000	\$70,000



**PROGRAM TASK & ID: GFC-1. NCF Fees****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office, Nebraska Community Foundation (NCF)

**Task Location**

ED Office; NCF (Lincoln, NE)

**Task Description**

Fees paid to the NCF for administration of the financial aspects of the Program in 2012. Fee paid based on sliding scale percentage of fees handled by NCF, defined below:

Annual Cumulative Disbursements		
From	To	Fee
\$0	\$999,999	2.50%
\$1,000,000	\$1,999,999	2.25%
\$2,000,000	\$4,999,999	2.00%
\$5,000,000	\$9,999,999	1.75%
>\$10,000,000		1.50%

Fee for 2012 calculated based on a total budget of approximately \$27,000,000.

**Linkage to Priority Hypotheses in AMP**

N/A

**Products**

Financial support services for Program

**Notes on Cost**

N/A

**Budget**

Program Task GFC-1						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
NCF Fees	\$75,000	\$100,000	\$255,000	\$260,000	\$300,000	\$450,000

**PROGRAM TASK & ID: GFC-2. Pulse Flow and Other Insurance****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office, Dunbar-Peterson

**Task Location**

ED Office; insurance provider office in Omaha, Nebraska

**Task Description**

Insurance acquired for representatives of the GC and subcommittees (including alternates) and ED Office for certain actions that will be undertaken through Program implementation. Coverage will be for a number of actions that the Program will undertake including short duration high flow releases and because of land and equipment ownership.

**Linkage to Priority Hypotheses in AMP**

N/A

**Products**

Program insurance policy

**Notes on Cost**

Premium and fees negotiated with selected provider.

**Budget**

Program Task GFC-2						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Pulse Flow and Other Insurance	\$100,000	\$50,000	\$60,000	\$70,000	\$75,000	\$70,000

**PROGRAM TASK & ID: GFC-3. Expenses, Meeting Rooms, etc.****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; GC; FC

**Task Location**

Meeting locations in NE, WY, and CO

**Task Description**

Limited budget amount to cover meeting room rentals for GC and FC meetings; other miscellaneous costs for holding meetings (e.g. conference call fees, AV fees)

**Linkage to Priority Hypotheses in AMP**

N/A

**Products**

Meeting space and associated needs

**Notes on Cost**

N/A

**Budget**

Program Task GFC-3						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Expenses, Meeting Rooms, etc.	\$5,000	\$5,000	\$5,000	\$5,000	\$1,000	\$1,500

**PROGRAM TASK & ID: GFC-4. Pulse Flow Reserve****Program First Increment Timeline**

One-time payment, funds held in reserve annually through First Increment

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; GC; FC

**Task Location**

ED Office (Kearney, NE) and NCF (Lincoln, NE)

**Task Description**

Reserve fund for potential Environmental Account (EA) bypass-related costs.

**Linkage to Priority Hypotheses in AMP**

N/A

**Products**

Reserve fund

**Notes on Cost**

One-time cost held in reserve during First Increment, registered as reserved in 2009 and carried forward as Unliquidated Obligation.

**Budget**

Program Task GFC-4						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Pulse Flow Reserve	\$0	\$0	\$1,000,000	\$0	\$0	\$0

**PROGRAM TASK & ID: LAC-1. Expenses, Meeting Rooms, etc.****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; LAC

**Task Location**

All LAC meetings are held in central Nebraska

**Task Description**

Limited budget amount to cover meeting room rentals for LAC meetings; other miscellaneous costs for holding meetings (e.g. conference call fees, AV fees)

**Linkage to Priority Hypotheses in AMP**

N/A

**Products**

Meeting space and associated needs

**Notes on Cost**

N/A

**Budget**

Program Task LAC-1						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Expenses, Meeting Rooms, etc.	\$7,500	\$7,500	\$7,500	\$7,500	\$1,000	\$1,500

**PROGRAM TASK & ID: WAC-1. Expenses, Meeting Rooms, etc.****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; WAC

**Task Location**

Meeting locations in NE, WY, and CO

**Task Description**

Limited budget amount to cover meeting room rentals for WAC meetings; other miscellaneous costs for holding meetings (e.g. conference call fees, AV fees)

**Linkage to Priority Hypotheses in AMP**

N/A

**Products**

Meeting space and associated needs

**Notes on Cost**

N/A

**Budget**

Program Task WAC-1						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Expenses, Meeting Rooms, etc.	\$5,000	\$5,000	\$5,000	\$5,000	\$1,000	\$1,500

**PROGRAM TASK & ID: TAC-1. Expenses, Meeting Rooms, etc.****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; TAC

**Task Location**

Meeting locations in NE, WY, and CO

**Task Description**

Limited budget amount to cover meeting room rentals for TAC meetings; other miscellaneous costs for holding meetings (e.g. conference call fees, AV fees)

**Linkage to Priority Hypotheses in AMP**

N/A

**Products**

Meeting space and associated needs

**Notes on Cost**

N/A

**Budget**

Program Task TAC-1						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Expenses, Meeting Rooms, etc.	\$5,000	\$5,000	\$5,000	\$5,000	\$1,000	\$1,500

**PROGRAM TASK & ID: LP-3. Land Acquisition****Program First Increment Timeline**

FY09-FY12

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; LAC; Land Interest Holding Entity (LIHE)

**Task Location**

Land interest locations TBD

**Task Description**

Funding for acquisition of interest in land (own, lease, easements, other agreements) according to implementation of the Land Plan and the AMP; fees for Platte River Recovery Implementation Foundation, the LIHE for the Program, as well as property taxes and other annual fees.

**Linkage to Priority Hypotheses in AMP**

Provision of land interest for implementation of AMP and two management strategies; testing of related priority hypotheses

**Products**

Program lands

**Notes on Cost**

Budget estimate assumes availability of priority land interests.

**Budget**

Program Task LP-3						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Land Acquisition	\$0	\$6,000,000	\$7,000,000	\$6,000,000	\$5,000,000	\$5,000,000



**PROGRAM TASK & ID: LP-4. Land Management****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; LAC; Land Interest Holding Entity (LIHE)

**Task Location**

Land interest locations

**Task Description**

Funding for non-AMP related management activities (fencing, routine agricultural operations, weed management, property maintenance, day-to-day management, non-AMP tree and channel clearing, etc.).

By complex estimates:

1. Cottonwood Ranch Complex	
a. Property Maintenance	\$24,500
2. Elm Creek Complex	
a. Property Maintenance	\$26,000
3. Ft. Kearny Complex	
a. Property Maintenance	\$60,000
b. Agricultural Operations	<u>\$30,000</u>
Total	\$90,000
4. Plum Creek Complex	
a. Property Maintenance	\$56,800
5. Shoemaker Island Complex	
a. Property Maintenance	\$112,500
6. New Properties (6)	\$100,000
<b>Total</b>	<b>\$409,800</b>

**Linkage to Priority Hypotheses in AMP**

N/A

**Products**

Program lands managed properly according to Program guidelines and “Good Neighbor” policy.

**Notes on Cost**

Based on estimates for work on five Program complexes, and an estimated six additional acquisitions. For more details, please see tract-specific annual work plans.

**Budget**

Program Task LP-4						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Land Management	\$0	\$0	\$500,000	\$588,800	\$365,500	\$409,800

**PROGRAM TASK & ID: LP-6. Land Plan Special Advisors****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; Contractor

**Task Location**

ED Offices; Contractor Offices

**Task Description**

Continued land management will be needed by American Realty and Agriaffiliates for the transformation from cropland at Fox, Hostetler, Morse, and Binfield. FSA records need to be adjusted next year to move into grass. Broadfoot will still be a corn crop with marketing and input costs but will finish at the end of 2012. Continued grassland leases for haying and grazing on all properties will happen next year and annually to the end of the first increment. At a point the combined costs will reduce to a maintenance level and with multiple year leases those numbers can become stable.

**Products**

- Meeting participation
- Memoranda and reports

**Notes on Cost**

N/A

**Budget**

Program Task LP-6						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Land Plan Special Advisors	\$0	\$0	\$0	\$50,000	\$150,000	\$120,000

**PROGRAM TASK & ID: LP-7. Public Access Management****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; Contractors (TBD)

**Task Location**

All Available PRRIF properties

**Task Description**

This program will need to plan for additional costs as the first year ends. If successful it will have additional land in upcoming years and we need to prepare for increases in costs from the provider Nebraska Game and Parks Commission.

**Linkage to Priority Hypotheses in AMP**

N/A

**Products**

Opportunities for the general public to use Program lands for outdoor recreation and access under acceptable guidelines without interfering with Program Goals and primary species needs.

**Notes on Cost**

N/A

**Budget**

Program Task LP-7						
	2007 Approved	2010 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Public Access Management	\$0	\$0	\$0	\$0	\$50,000	\$50,000

**PROGRAM TASK & ID: WP-1 (a-b). Active Channel Capacity Improvements****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; Contractor

**Task Location**

ED Offices; Contractor Offices; North Platte River and Platte River between North Platte and Chapman

**Task Description**

The objective of the Active Channel Capacity Improvements task is to increase and maintain the active river channel capacity. Channel capacity improvements will assist the Program in managing water for the Short Duration High Flow tests made under the Adaptive Management Plan and in delivery of Program water to meet shortage reduction to target flow goals under the Water Plan. There are two sub-tasks:

- WP-1(a) continues efforts toward increasing channel capacity upstream of the Central Nebraska Public Power and Irrigation District (CNPPID) diversion dam to at least 3,000 cfs. Additional technical and/or contracting services will be engaged to update the assessment of ongoing channel issues, recommendations for further efforts, and implementing recommendations. May also include cost-share efforts to collaborate with the National Weather Service to improve probabilistic weather forecasting methods, in preparation for Short Duration High Flow reservoir releases.
- WP-1(b) is a cost share with Platte Valley and West Central Weed Management Areas to clear biomass from the river channel between Kingsley Dam and the CNPPID diversion dam and between Elm Creek and Chapman.

**Products**

- Cleared channel.
- Model analyses performed by the ED Office and/or consultant for PRRIP purposes and summary report/briefing documents.
- Cost estimates for 2013 and 2014 maintenance and additional clearing efforts to complete all channel sections between Kingsley Dam and Chapman.

**Notes on Cost**

Costs for WP-1(b), Active Channel Capacity Maintenance Platte River for the Platte River between the CNPPID Diversion Dam and Chapman, are based on a cost-share program with the Platte Valley and West Central Weed Management Areas. The Program funds will provide matching funds for this effort on a one-for-one match basis.

**Budget**

Program Task WP-1						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
<b>WP-1(a):</b> N Platte Channel Above CNPPID Diversion Dam	\$241,000	\$40,000	\$80,000	\$50,000	\$250,000	\$100,000
<b>WP-1(b):</b> North Platte and Platte River Biomass Clearing <sup>a</sup>	\$0	\$0	\$0	\$400,000	\$200,000	\$200,000

<sup>a</sup> Matching funds in a cost-share program with Platte Valley and West Central Weed Management Areas

**PROGRAM TASK & ID: WP-4 (a-h). Water Action Plan****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; Contractor

**Task Location**

ED Offices; Contractor Offices; Nebraska, Colorado, Wyoming

**Task Description**

Advancing projects from the 2009 Water Action Plan Update through feasibility into full implementation, including design construction. The ED Office will work with the Water Advisory Committee and associated Work Groups to evaluate potential yield, permitting requirements, and costs associated with various projects. Potential benefits of joint project operations will also be considered (e.g. ground water recharge projects may assist in mitigating impacts of ground water management activities). Following is a brief description of the anticipated sub-tasks:

- WP-4(a) J2 Reregulating Reservoir – Land acquisition, final geotechnical work, final design, and construction of the J-2 Reregulating Reservoir. Reservoir design initiated in 2012.
- WP-4(b) Nebraska Ground Water Recharge – Continue feasibility analysis of ground water recharge projects in the central Platte River. Budget for the Phelps County Canal pilot-scale ground water recharge test commenced in fall 2011, continuing through spring 2012, is previously approved under the 2011 budget. Anticipated 2012 activities include water permitting, minor canal-related infrastructure improvements, installation of monitoring equipment, and operation and maintenance associated with canal recharge.
- WP-4(d) Pathfinder Municipal Account – Up-front lump sum payment for 38,400 acre-feet released from Pathfinder Reservoir over 8 years (\$51/acre-foot for 4,800 acre-feet per year).
- WP-4(f) Nebraska Water Leasing – Working with Nebraska Public Power District, Central Platte Natural Resources District, and private landowners to evaluate potential purchase/leasing opportunities under the Dawson County Canal, related to leasing surface water flows with direct returns during the irrigation season; potential for project expansion to include winter ground water recharge. Also working with Central Platte Natural Resources District to evaluate water leasing and ground water recharge opportunities under the Orchard-Alfalfa, 30-Mile, and Cozad Canals. Economists from private practice, University of Nebraska at Lincoln, Colorado State University, and potentially University of Wyoming may be engaged to identify ways to value water and establish a water leasing market. Efforts will be coordinated with similar efforts underway by Nebraska Department of Natural Resources and the Natural Resource Districts. The ED Office will also explore lease agreements with willing landowners and power/irrigation districts.



- WP-4(h) Nebraska Ground Water Management – Feasibility studies investigating opportunities for supply development through ground water management actions including conjunctive use of surface and ground water resources focused primarily downstream of Lake McConaughy.

**Products**

- Landowner and project sponsorship agreements.
- Reservoir and canal improvement design-related documents.
- Monitoring plans.
- Contract with CNPPID and/or other entities for long-term recharge.
- Water supply-related permits.
- Water rights evaluations.
- Water rights permits/proof of ownership
- Cost estimates for 2013 and long-term operations and maintenance.

**Notes on Cost**

Specific expenditures will require authorization of Finance Committee. Cost estimates are based on pre-feasibility study information, and will be updated based on feasibility studies currently being completed. Estimates do not account for any project sponsor contributions.

**Budget**

Program Task WP-4						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
<b>WP-4(a):</b> Reregulating Reservoir	\$0	\$0	\$0	\$0	\$4,500,000	\$9,000,000
<b>WP-4(b):</b> Nebraska Ground Water Recharge	\$0	\$0	\$0	\$0	\$600,000	\$200,000
<b>WP-4(d):</b> Pathfinder Municipal Account	\$0	\$0	\$0	\$0	\$0	\$2,000,000
<b>WP-4(d): NE</b> Water Leasing	\$0	\$0	\$0	\$0	\$0	\$500,000
<b>WP-4(f): NE</b> Ground Water Management	\$0	\$0	\$0	\$0	\$0	\$100,000
<b>WP-4 Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,100,000</b>	<b>\$11,800,000</b>



**PROGRAM TASK & ID: WP-5. Management Tool****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; Contractor

**Task Location**

ED Offices; Contractor Offices

**Task Description**

The COHYST Tool, as it is being developed, will provide an integrated surface water, ground water, and watershed model for the Platte River between Lake McConaughy and Duncan, Nebraska. It is anticipated to be a valuable tool for planning efforts under the PRRIP Water Plan. The COHYST Tool is being funded by several PRRIP participants, and in 2009 the PRRIP received authorization from these participants to use the tool for PRRIP purposes. Under this agreement, model enhancements or analyses specifically for PRRIP purposes, as well as any ED Office staff training or software needed, must be provided directly by PRRIP funds.

Further, the question of a need for a comprehensive operational tool for evaluation of the integrated effects of multiple Water Action Plan projects remains unresolved. The OPSTUDY model was used for the EIS, but may not be a viable tool for use now. Assessing the viability of OPSTUDY and other models such as STELLA, RiverWare, and others may require the assistance of a contractor skilled in water resource systems operations and the standardized modeling tools available.

**Products**

- ED Office training and software needed to run the model(s).
- Model analyses performed by the ED Office and/or consultant for PRRIP purposes.
- Briefing documents or reports with model evaluations and recommendations.

**Notes on Cost**

Specific expenditures of budget will be subject to Finance Committee approval.

**Budget**

Program Task WP-5						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Management Tool	\$0	\$0	\$0	\$100,000	\$200,000	\$50,000

**PROGRAM TASK & ID: WP-8. Water Plan Special Advisors****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; Contractor

**Task Location**

ED Offices; Contractor Offices

**Task Description**

The ED Office may rely on special advisors to assist in Water Plan-related issues beyond staff expertise or to assist with short-term schedule challenges. These areas may include, but not be limited to: economics, water infrastructure, structural, and hydro-geology/ground water. Anticipated Special Advisors include:

**Area of Expertise**

Economics and Water Markets  
Hydrogeology and GW Recharge  
Civil Infrastructure  
Water Projects Permitting

**Name**

George Oamek  
Bill Hahn  
Tara Schutter  
TBD

**Estimated Range of Expenditures**

\$20,000-\$30,000  
\$50,000-\$75,000  
\$30,000-\$75,000  
\$20,000-\$30,000  
**Not to Exceed \$150,000**

**TOTAL****Products**

- Meeting participation
- Memorandums and reports

**Notes on Cost**

N/A

**Budget**

Program Task WP-8						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Water Plan Special Advisors	\$0	\$0	\$0	\$150,000	\$200,000	\$150,000

**PROGRAM TASK & ID: WP-9. Miscellaneous Water Resources Studies****Program First Increment Timeline**

Annual

**FY 2011 Start Date**

January 1, 2012

**FY 2011 End Date**

December 31, 2012

**Task Completed by**

ED Office; Contractor

**Task Location**

ED Offices; Contractor Offices

**Task Description**

The purpose of this task is to establish reserved but readily accessible funds for water resources studies and investigations, if necessary, to meet the Water Plan objectives. These investigations would be related to, but not necessarily limited to, specific Water Action Plan alternatives, such as investigations to better define fundamental hydrologic and water balance components such as evapotranspiration of non-crop areas, channel loss/bank storage, and surface/ground water interactions.

**Products**

Reports and study results

**Notes on Cost**

Specific expenditures would require approval from the Finance Committee.

**Budget**

Program Task WP-9						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Misc. Water Studies	\$0	\$0	\$0	\$200,000	\$100,000	\$50,000

**PROGRAM TASK & ID: PD-12. Model Application****Program First Increment Timeline**

FY2009-FY2012

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; AMWG; TAC; Contractor (Tetra Tech)

**Task Location**

ED Office (Kearney, NE; Lincoln, NE; Denver, CO); various meeting locations

**Task Description**

New money for existing model Consultant (Tetra Tech and HDR) to complete model simulations per EDO direction, and to provide technical assistance to EDO with existing models. Potential model runs include SDHF planning with the unsteady hydraulic model, hydraulic characterization with the steady state model for habitat assessment (e.g., water surface elevation estimation at various flow rates to be used for estimating channel characteristics pertinent to target species' minimum habitat criteria), and sediment augmentation scenarios with sediment transport model).

**Linkage to Priority Hypotheses in AMP**

Fundamental to generating information related to all priority hypotheses and related big questions.

**Products**

Technical memoranda documenting modeling results. Model output files such as water surface digital elevation models and digital terrain models to be used by the EDO to estimate habitat characteristics related to target species' minimum habitat criteria. Technical assistance to EDO for the operation of existing models (e.g., phone calls and model work sessions).

**Notes on Cost**

Extension of existing contract with HDR/Tetra Tech

**Budget**

Program Task PD-12						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Model Application	\$0	\$0	\$360,000	\$400,000	\$150,000	\$20,000



**PROGRAM TASK & ID: PD-13. Sediment Augmentation Feasibility Analysis, Design, and Permitting**

**Program First Increment Timeline**

FY2009-FY2013

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; AMWG; TAC; contractor (The Flatwater Group)

**Task Location**

ED Office (Kearney, NE and Lincoln, NE); Central Platte River, NE

**Task Description**

Implementation of Year 2 of Pilot-Scale Management Action (sediment augmentation at Plum Creek Complex and Cottonwood Ranch); includes management of contractor

**Linkage to Priority Hypotheses in AMP**

Fundamental to priority hypotheses related to sediment deficit and implementation of Flow-Sediment-Mechanical management strategy identified in AMP.

**Products**

Implementation of Year 2 of Pilot-Scale Management Action; data analysis and final report (by mid-2013) of two-year implementation cycle.

**Notes on Cost**

Year 1 implementation costs (final design, permits, bid package, first year of implementation) covered by Unliquidated Obligations from FY 2011; FY 2012 funding will be for implementation in 2012 and final data analysis and reporting, which will conclude by mid-2013; FY 2012 funding will require fourth and final amendment to existing sediment augmentation contract; FY 2012 costs include estimated \$215,888 for Flatwater Team (implementation management, monitoring, data analysis, reporting) and estimated \$325,000 for actually placing sand in river (\$200,000 for sand pumping at Plum Creek Complex and \$125,000 for mechanical placement at Cottonwood Ranch). See Pilot-Scale Management Action Technical Memo for more details.

**Budget**

Program Task PD-13						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Sed. Aug. Feas., Analysis, Design, Perm.	\$0	\$0	\$400,000	\$200,000	\$350,000	\$540,888

**PROGRAM TASK & ID: PD-19. Flow Consolidation Conceptual Design****Program First Increment Timeline**

FY2011-FY2013

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2013

**Task Completed by**

ED Office; NPPD; contractor

**Task Location**

ED Office (Kearney, NE; Lincoln, NE; Denver, CO); Cottonwood Ranch

**Task Description**

Two part scope of work: 1) Design, permitting and construction of two small channel plugs to close secondary channels that were eroded open during 2011 high flow event. 2) Partial implementation design for flow consolidation including evaluation of potential outcomes/performance (using Sed Aug 2-D model) and development of preliminary design plans/drawings.

If the GC decides to proceed with implementation, permit applications would be submitted and implementation design would be completed in spring of 2013 with construction in fall/winter of 2013.

**Linkage to Priority Hypotheses in AMP**

Flow consolidation is considered a primary action in the AMP as part of the FSM management strategy.

**Products**

1) Design drawings and construction specifications, construction permits, and construction of channel plugs. 2) Partial implementation design document including management option review, analysis of potential outcomes, and civil design sections.

**Notes on Cost**

Budget consists of \$200,000 for engineering consulting services (Phase 1 approximately \$30,000; Phase 2 approximately \$170,000) and \$30,000 for construction of channel plugs. See Final CWR Flow Consolidation Conceptual Design Report for more details.

**Budget**

Program Task PD-19						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Flow Consolidation Conceptual Design	\$0	\$0	\$0	\$200,000	\$200,000	\$230,000

**PROGRAM TASK & ID: PD-20. Wet Meadow Restoration on Tract 2009001****Program First Increment Timeline**

FY2011 – FY2012

**FY 2012 Start Date**

March 1, 2012

**FY 2012 End Date**

December 1, 2012

**Task Completed by**

ED Office, Contractor

**Task Location**

Program Tract 2009001 located in the Kearney – Minden bridge segment.

**Task Description**

Construction of conversion of Tract 2009001 to a wet meadow / grassland complex for whooping cranes and other species of concern. Construction will include excavation of approximately 200,000 cubic yards of earth to restore linear swale features. Task includes groundwater monitoring on site.

**Linkage to Priority Hypotheses in AMP**

Testing of priority hypotheses related to wet meadows.

**Products**

Construction drawings and specifications

**Notes on Cost**

N/A

**Budget**

Program Task PD-20						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Wet Meadow Restoration	\$0	\$0	\$0	\$0	\$50,000	\$324,000

**PROGRAM TASK & ID: LP-2. FSM/MCM Actions at Habitat Complexes****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; contractors

**Task Location**

Plum Creek Complex, Cottonwood Ranch Complex; Elm Creek Complex; Fort Kearny Complex; and Shoemaker Island Complex

**Task Description**

Plum Creek = \$15,900, CWR = \$193,290, Elm Creek = \$72,080, Ft. Kearny=\$80,770, Shoemaker Island = \$177,090, \$100,000 new properties channel widening, island building/shaping, vegetation management, prescribed fire, other AMP activities. Specific activities include:

## Plum Creek Complex

- Pre-emergent herbicide application on Tract 2009003 OCSW habitat
- In-channel vegetation control as needed to maintain unobstructed view widths
- Prescribed fire to manage woody vegetation encroachment in grassland restoration areas and protect unobstructed view width

## Cottonwood Ranch Complex

- Forest clearing and seeding on approximately 80 acres (Tracts 2008002, 2009006) to improve unobstructed view widths and remove predator perches
- Pre-emergent herbicide application on Tract 2008002 OCSW habitat
- Prescribed fire to maintain vegetation structure for whooping crane habitat
- Electrical service and irrigation pump replacement on Tract 2010001 SW ¼ to protect irrigation right and provide supplemental water for palustrine wetlands

## Elm Creek Complex

- In-channel nesting island construction below the diversion
- In-channel cross disking and overbank mowing to maintain unobstructed view widths
- Prescribed fire to manage woody vegetation encroachment in grassland restoration areas and protect unobstructed view width
- Construction of crane viewing blind



**Fort Kearny Complex**

- Pre-emergent herbicide application on Tract 2009008 and 2010002 OCSW habitat
- Forest clearing on Tract 2001002 to improve unobstructed view widths
- NPPD transmission line marking with bird flight diverters
- Permanent woven wire predator fence on OCSW nesting peninsulas on Tract 2009008
- Prescribed burn to manage woody vegetation in grassland areas and protect unobstructed view width

**Shoemaker Island Complex**

- Construction for habitat selection experiments and habitat improvements including tree and vegetation clearing and in-channel nesting island construction
- Pre-emergent herbicide application on OCSW habitat

Prescribed burns to produce suitable vegetation structure for whooping crane use

**Linkage to Priority Hypotheses in AMP**

Habitat complexes for implementation of AMP actions and testing of priority hypotheses

**Products**

Tern/plover nesting islands, minimum channel widths, and minimum unobstructed widths at habitat complexes for evaluation of target species use

**Notes on Cost**

Bid packages will be developed for FC approval once permits process is underway or completed; work will be completed in late summer/fall/winter 2012. See complex work plans for more details.

**Budget**

Program Task LP-2						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
FSM/MCM Actions at Habitat Complexes	\$0	\$1,400,000	\$200,000	\$1,270,000	\$483,000	\$639,130

**PROGRAM TASK & ID: PD-15. AMP Permits****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; contractor (HDR)

**Task Location**

ED Office (Kearney, NE and Lincoln, NE)

**Task Description**

Contract services from HDR (extension of existing permit work) to secure site-specific Individual Permits or Regional General Permit for AMP management actions (island building, vegetation clearing, channel widening).

**Linkage to Priority Hypotheses in AMP**

Necessary to ensure implementation AMP management actions

**Products**

Permit(s)

**Notes on Cost**

N/A

**Budget**

Program Task PD-15						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
AMP Permits	\$0	\$0	\$10,000	\$50,000	\$200,000	\$150,000

**PROGRAM TASK & ID: PD-18. AMP-Related Equipment****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office

**Task Location**

Central Platte River

**Task Description**

Program buy-back of equipment. Headwaters Corporation will own equipment and will charge the Program a use rate for Program-related activities.

**Linkage to Priority Hypotheses in AMP**

Specific equipment important as management and monitoring tools related to AMP implementation.

**Products**

Program equipment use and maintenance.

**Notes on Cost**

N/A

**Budget**

Program Task PD-18						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
AMP-Related Equipment	\$0	\$0	\$140,000	\$50,000	\$55,000	\$66,215

**PROGRAM TASK & ID: G-1 & G-2 (combined). LiDAR & Aerial Photography****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

Contractor (Kucera International, Inc.)

**Task Location**

Central Platte River, NE (Program associated habitats in central Platte)

**Task Description**

Acquire annual LiDAR data and aerial photography

**Linkage to Priority Hypotheses in AMP**

Critical topographical data for analysis of river response to Program actions. Aerial photography for analysis of vegetation, river morphology, target species habitat availability.

**Products**

Processed LiDAR point data, bare earth digital elevation model including special in-channel processing using breaklines (hydro-flattening), 2-foot resolution 4-band (CIR and true-color) aerial photography from May/June, 6-inch resolution CIR aerial photography flown simultaneously with LiDAR in November/December

**Notes on Cost**

N/A

**Budget**

Program Task G-1 & G-2 (combined)						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
LiDAR	\$0	\$260,000	\$0	\$0	\$75,000	\$118,100
Aerial Photography	\$10,000	\$10,000	\$40,000	\$21,000	\$25,000	

**PROGRAM TASK & ID: G-5. Geomorphology/In-Channel Vegetation Monitoring****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

Contractor

**Task Location**

Central Platte River

**Task Description**

Implementation of Program geomorphology/in-channel vegetation monitoring protocol; field work, data analysis (analysis of collected data according to performance measures of importance for addressing Big Questions and Tier 1 hypotheses), and reporting.

**Linkage to Priority Hypotheses in AMP**

Collected data critical to evaluating numerous AMP priority hypotheses related to river process and habitat creation/maintenance

**Products**

Protocol data – transect surveys, longitudinal profile, vegetation surveys, etc.; data analysis and reporting.

**Notes on Cost**

New contractor to be selected through RFP process in late 2011/early 2012; FY 2012 costs estimated based on 2009-2011 monitoring costs.

**Budget**

Program Task G-5						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Geomorphology/In-Channel Vegetation Monitoring	\$0	\$95,000	\$395,000	\$300,000	\$447,500	\$450,000

**PROGRAM TASK & ID: H-2. Program Water Gages****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; contractor

**Task Location**

Central Platte River

**Task Description**

Gage maintenance and research gages; real-time Program gage data on Program web site.

**Linkage to Priority Hypotheses in AMP**

Stream gages provide data to test priority hypotheses, including all key Tern/Plover, Whooping Crane, Flow, Sediment, and Mechanical hypotheses.

**Products**

Gage maintenance, new gages, and data.

**Notes on Cost**

Roughly \$15,000 for two new gages for Nebraska DNR (maintenance and support fee), Verizon bills to operate gages, USGS fee for gage at Cottonwood Ranch.

**Budget**

Program Task H-2						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Program Stream Gages	\$0	\$29,500	\$30,000	\$50,000	\$50,000	\$40,000



**PROGRAM TASK & ID: IMRP-2. Adaptive Management Plan Directed Research Projects**

**Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; contractors

**Task Location**

Central Platte River

**Task Description**

- 1) Detailed report by independent expert on linkages between bird cognition (primarily terns and plovers) and habitat selection.
- 2) Monitoring/research for potential impacts on channel, wet meadows, and other habitat related to planned 2012 EA releases (no SDHF in 2012); The Service also identifies a need to: 1) assess the groundwater/streamflow interaction on all Program sites containing wet meadows or those targeted for future wet meadow creation/restoration including the Fox Tract, and 2) develop wet meadow vegetation monitoring protocol. Recent meetings at the LAC and TAC identified the planned development or inclusion of wet meadow habitats for the PRRIP on the Binfield, Cottonwood Ranch, Fox, McCormick, and Stall properties. As indicated in the wet meadow information review, multiple studies have linked Platte River stage to groundwater levels. The Program EDO identified the willingness to develop a groundwater/surface water assessment for Fox tract. The Service encourages the Program to initiate a study that could be used to develop tools to monitor and evaluate the groundwater/surface water interaction for all current and future Program properties containing wet meadows. This may require additional budget allocations. Additionally, the October 12, 2011, LAC land management plan development meeting identified potential impacts and/or benefits that could occur to wet meadow habitat conditions as a result of management actions. The need to assess initial conditions and to evaluate changes in habitat over time could be accomplished by developing a wet meadow vegetation monitoring program. This would allow an adaptive management approach to achieving target wet meadow conditions (i.e. assess change in vegetative community from management action such as burning); include a process for assessing Platte River effects on wet meadow hydrology for all Program lands with existing or proposed wet meadow habitats. This would include a monitoring protocol that records groundwater levels at wet meadow sites, surface water acres at wet meadow sites, and river stage over time; include development of a wet meadow monitoring protocol. This could be combined with the groundwater monitoring study or a stand-alone study. The focus of this protocol would be to monitor changes in vegetation communities over time on wet meadows. This would provide the TAC a tool to evaluate how our management actions affect habitat.

**Linkage to Priority Hypotheses in AMP**

- 1) Detailed report intended to consolidate current literature and thinking on the role of cognition in selecting habitat; informative for Tier 1 tern and plover hypotheses, as well as helping to ensure that management actions such as island building incorporate all potential parameters of importance.
- 2) TBD

**Products**

- 1) Research results in the form of a detailed report.
- 2) Monitoring/research results (groundwater monitoring at Fox Tract and other locations, channel changes relative to EA releases, etc.).

**Notes on Cost**

- 1) Estimated costs include \$30,000 for independent expert to conduct research and draft detailed report, and \$5,000 for possible assistance from Atkins to help identify the independent expert (similar to peer review panel selection process).
- 2) Estimate for 2012 monitoring/research; TAC will hold a workshop in late 2011 and/or early 2012 to discuss the questions intended to be addressed by the monitoring/research, the relationship to target flow releases to FSM, and other related topics.

**Budget**

Program Task IMRP-2						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Adaptive Management Plan Directed Research Projects	\$0	\$0	\$700,000	\$325,000	\$450,000	\$335,000



**PROGRAM TASK & ID: IMRP-3. Adaptive Management Plan Special  
Advisors****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; special advisors

**Task Location**

ED Office (Kearney, NE and Lincoln, NE); various locations of advisors

**Task Description**

Advisors on AMP-related specialty topics such as ecological statistics, geomorphology, and decision analysis; review Program documents, attend workshops and meetings, assist with development of experimental design, research/monitoring goals and objectives, and data analysis

<b>Area of Expertise</b>	<b>Name</b>	<b>Estimated Range of Expenditures</b>
Geomorphology & Sed. Transport	Brad Anderson & Chester Watson	\$60,000
Vegetation Scour & Lateral Erosion	Andrew Simon & Natasha Bankhead	\$40,000
Ecological Statistics & Exper. Design	Darcy Pickard	\$40,000
<b>TOTAL</b>		<b>Not to Exceed \$140,000</b>

**Linkage to Priority Hypotheses in AMP**

Special advisors fill important areas of expertise necessary to evaluate effects of Program management actions and progress toward AMP management objectives

**Products**

Review of Program documents and advice on specific actions related to AMP implementation

**Notes on Cost**

- Brad Anderson and Chester Watson – Evaluation of effective discharge and changes in effective discharge over time (detailed report); advice on canal operations and civil engineering design (as-needed advice)
- Andrew Simon and Natasha Bankhead – Vegetation scour and lateral erosion (as-needed advice; possible basic analysis in detailed report on lateral erosion rates)
- Darcy Pickard – As-needed advice on experimental design and ecological statistics

**Budget**

Program Task IMRP-3						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Adaptive Management Plan Special Advisors	\$0	\$0	\$0	\$150,000	\$150,000	\$140,000



**PROGRAM TASK & ID: IMRP-4. FSM “Proof of Concept” Activities @ Elm Creek Complex**

**Program First Increment Timeline**

FY2011-FY2016

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; Contractors

**Task Location**

Elm Creek Complex

**Task Description**

Implementation of monitoring protocol (two event-based topographic and vegetation surveys during the spring and end of summer 2012), and related data analysis for Elm Creek proof of concept (\$135,000). 2D hydraulic and sediment transport model updates per annual topographic survey, design of management experiments for Elm Creek Complex (e.g., selective sandbar leveling and vegetation clearing), and completion of model simulations for management experiments (\$68,000).

**Linkage to Priority Hypotheses in AMP**

Integral to learning about physical process priority hypotheses and related big questions. Supporting information for flow-vegetation-sediment relationships and what FSM management strategy will do on the central Platte River.

**Products**

Monitoring and modeling results documented in related reports (model construction technical memorandum, model application memorandum, management experiment statistical design memorandum, and annual topographic and vegetation monitoring report). Consultant presentations and participation in TAC meeting and the spring 2012 Adaptive Management Reporting Session.

**Notes on Cost**

Cost estimates prepared by existing contractor (Tetra Tech), and reviewed by EDO. Cost also includes purchase and replacement costs for a pressure transducer to monitor stage-discharge relationship in the Elm Creek reach downstream of the Kearney Canal Diversion. For more details, see Elm Creek Complex “Proof of Concept” Design Document.

**Budget**

Program Task IMRP-4						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
FSM “Proof of Concept” Activities @ Elm Creek Complex	\$0	\$0	\$0	\$0	\$250,000	\$203,185

**PROGRAM TASK & ID: IMRP-5. FSM “Proof of Concept” Activities @  
Shoemaker Island Complex****Program First Increment Timeline**

FY2012-FY2016

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; Contractors

**Task Location**

Shoemaker Island Complex

**Task Description**

Implementation of Elm Creek FSM monitoring protocol at Shoemaker Island Complex; application of 2-D model.

**Linkage to Priority Hypotheses in AMP**

Integral to learning about physical process priority hypotheses and related big questions. Supporting information for flow-vegetation-sediment relationships and what FSM management strategy will do on the central Platte River.

**Products**

Monitoring and modeling results; contractor presentations and participation in one TAC meeting and the spring 2012 Adaptive Management Reporting Session.

**Notes on Cost**

Cost estimate based on initial estimate for similar work at Elm Creek Complex; contractor for Shoemaker Island Complex to be selected through RFP process in early 2012; \$100,000 for implementation monitoring protocol and \$150,000 for application of 2-D model at Shoemaker Island Complex

**Budget**

Program Task IMRP-5						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
FSM “Proof of Concept” Activities @ Shoemaker Island Complex	\$0	\$0	\$0	\$0	\$0	\$250,000

**PROGRAM TASK & ID: IMRP-6. Habitat Availability Analysis****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; Contractor (RBJV)

**Task Location**

Central Platte River, NE

**Task Description****LTPP Habitat Availability Analysis (2007 and 2012; 2008-2011 under existing contract)**

**Tasks:** Classify imagery by cover type (bare sand, vegetation, and water); develop and overlay HEC-RAS model on the classified imagery to identify suitable nesting habitat; create a model that includes all Program minimum habitat criteria buffers (1.5' above 1,200cfs, 200' to trees, 50' water buffer, 1.5 acres/0.25 mile reach of river, etc.) to automate the process; create a geodatabase to house results of all annual habitat availability analyses; create a methods document and report outlining methods used, assumptions, and results; and assist EDO with preparing a presentation for the AMP Reporting Session.

**Deliverables:** Summary report presenting acres of on- and off-channel bare-sand habitat and Program defined 'suitable' nesting habitat by year (2008-2011); geodatabase of available on- and off-channel habitat by year; detailed methods document covering procedures and assumptions; and a presentation for the AMP Reporting Session.

**WC Habitat Availability Analysis (2007-2012)**

Similar to above with a much more detailed classification of imagery and a geodatabase that includes the amount and location of all the various landcover classes suitable for WC use.

**Tasks:** Classify imagery by cover type (sandbar, river, wet meadow, lacustrine wetland, corn, soybean, alfalfa, rangeland, wheat, etc.); develop and overlay HEC-RAS model on classified imagery to identify suitable roosting habitat (water 2-12" deep); create a model that includes all Program minimum habitat criteria buffers (distance to trees and disturbance, channel width, unobstructed view widths, etc.) to automate the process; create a geodatabase to house results of all annual habitat availability analyses; create a methods document and report outlining methods used, assumptions, and results; and assist EDO with preparing a presentation for the AMP Reporting Session.

**Deliverables:** Summary report presenting acres of WC foraging and roosting habitat by habitat type and year (2007-2012); geodatabase of available habitat by type and year; detailed methods document covering procedures and assumptions; and a presentation for the AMP Reporting Session.

**Linkage to Priority Hypotheses in AMP**

Integral to all priority tern and plover and whooping crane hypotheses.



## Products

See above.

## Notes on Cost

- Rainwater Basin Joint Venture (RBJV) was contracted during 2011 to complete Tern and Plover Habitat Availability Analyses for 2008-2011 (2011 Budget Line Item TP-1). Sole-source cost proposal from RBJV for 2012-2015 work to be discussed during December 2011 GC meeting. Funding during 2012 will cover costs for conducting Tern and Plover Habitat Availability Analyses for 2007 and 2012 and for conducting six annual Whooping Crane Habitat Availability Analyses (2007-2012).
- RWBJV is currently performing a similar analysis for tern and plover habitat
  - Sole-source approved by GC via email vote from May 13 to May 20, 2011.
  - RWBJV reported year 1 LTPP analysis results to the TAC in October and the TAC was very pleased with what has been produced so far.
- As with LTPP analysis, RWBJV possesses specialized experience and software used to perform analysis.
- As a non-profit organization interested in management and maintenance of habitat for migratory birds, they have performed similar habitat classification analyses for public lands in their project area (south-central Nebraska Rainwater Basins, eastern Nebraska tallgrass prairie). They possess trained staff and equipment to perform this type of analysis.
- The WC analysis is subject to a great deal of uncertainty on the Program's part that is being worked through in 2012, and the agreement with RWBJV will be set up in such a way that they will work closely and cooperatively with the Program committees and ED staff to run and re-run analyses as the Program's habitat definitions are developed.
- The agreement is intended to be set up as an effort-based not-to-exceed agreement to deal w/ the possibility that the Program's uncertainty may draw the project out longer than 1 year. At this time, the intent is to set up an agreement not to exceed ~\$134,227, with a duration of 18 months from January 2012 through June 2013.
- The billing rates for this project are substantially less than you can expect from any consultant if this project was put out for bid.
- The project and the level of uncertainty and expected commitment have been discussed with RWBJV and they are ready and willing to work cooperatively and collaboratively with the Program to complete the project.

## Budget

Program Task IMRP-6						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Habitat Availability Analysis	\$0	\$0	\$0	\$0	\$0	\$143,227

**PROGRAM TASK & ID: PD-8. Database Management System Development & Maintenance****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; Riverside Technology, Inc. (RTi)

**Task Location**

ED Office (Kearney, NE); contractor (RTi) in Ft. Collins, CO

**Task Description**

Ongoing database development and management by RTi.

**Linkage to Priority Hypotheses in AMP**

System will house and manage all Program administrative and technical data.

**Products**

Database maintenance, website support and hosting for meeting coordination and interface with Program technical data, public Program website and document library support and hosting.

**Notes on Cost**

N/A

**Budget**

Program Task PD-8						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Database Management System Development & Maintenance	\$150,000	\$159,000	\$200,000	\$370,000	\$140,000	\$165,615.18



**PROGRAM TASK & ID: TP-1. Tern & Plover Monitoring****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

April 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; Program partners; USGS

**Task Location**

Central Platte River, NE

**Task Description**

Implement monitoring protocol during nesting season; Program staff will coordinate and lead field work, but seasonal technicians and contracted personnel (USGS) will be necessary to work with Program staff and partners to properly collect all data. Monitoring effort will remain elevated in FY2012 to: ensure proper data collection at nest sites (elevation, vegetation, etc.); conduct independent observer counts on Program Associated Habitats to evaluate techniques used to monitor tern and plover adults, nests, chicks, and fledglings (inside versus outside counts); band least tern and piping plover chicks and adults; and to document habitat conditions (availability and elevation of nesting habitat, vegetation establishment on islands, etc.) on the central Platte River.

**Linkage to Priority Hypotheses in AMP**

Links to all priority tern and plover hypotheses

**Products**

Annual report detailing nest activity, bird activity, and habitat conditions; data for longer-term analysis of effects of Program actions

**Notes on Cost**

Funding during 2012 will cover costs associated with hiring a USGS crew to assist with collecting data and banding chicks and adults (\$150,000); \$25,000 for USDA Wildlife Service to trap predators (January-February and May-August) at Program managed sites (Dyer, CWR, Elm Creek Complex, Broadfoot South, Newark, Leaman, etc); \$40,000 for Program costs associated with implementation-related activities (technician, fencing materials, etc). Due to FWS budget constraints, EDO staff and USGS will conduct semi-monthly river surveys between Alda and Chapman during 2012.

**Budget**

Program Task TP-1						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Tern & Plover Monitoring	\$14,000	\$20,000	\$100,000	\$150,000	\$300,000	\$215,000

**PROGRAM TASK & ID: WC-1. Whooping Crane Monitoring****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

March 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

Contractor (WEST, Inc.; AIM Consultants subcontracted for field work)

**Task Location**

Central Platte River, NE

**Task Description**

2012 implementation of the whooping crane monitoring protocol and data analyses associated with the four-year contract (Fall 2011 – Spring 2015) established with WEST Inc.

**Linkage to Priority Hypotheses in AMP**

Provides whooping crane use and occurrence data linked to all whooping crane hypotheses.

**Products**

Spring and fall report; data analysis

**Notes on Cost**

The Program entered into a 4-year contract spanning 8 migration seasons (fall 2011 – Spring 2015) with WEST; WEST will analyze and report on data collected during the 2012 spring and fall migrations.

**Budget**

Program Task WC-1						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Whooping Crane Monitoring	\$130,000	\$130,000	\$150,000	\$150,000	\$170,000	\$225,091

**PROGRAM TASK & ID: WC-3. Whooping Crane Telemetry Tracking****Program First Increment Timeline**

FY2011-FY2016

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

Whooping Crane Tracking Partnership including Canadian Wildlife Service, Crane Trust, U.S. Fish and Wildlife Service, Platte River Recovery Implementation Program, and U.S. Geological Survey.

**Task Location**

Whooping crane migration route; central Platte River, NE

**Task Description**

Funding to purchase GPS-PTT Transmitters, capture and affix telemetry equipment to ~20 (total) whooping cranes during spring and fall 2012, and to download and store WC location data from the Argos System.

**Linkage to Priority Hypotheses in AMP**

Links to all priority whooping crane hypotheses

**Products**

Spring and fall migration reports and database through 2012

**Notes on Cost**

The Program entered into a 6-year agreement (2011-2016) with the Whooping Crane Tracking Partnership during 2011 that allows the Program access to telemetry data and reports through 2016 and the ability to evaluate whooping crane response to management actions along the central Platte River.

**Budget**

Program Task WC-3						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Whooping Crane Telemetry Tracking	\$0	\$125,000	\$125,000	\$125,000	\$125,000	\$167,100

**PROGRAM TASK & ID: WC-5. IGERT Whooping Crane Habitat Selection Project****Program First Increment Timeline**

FY2012-FY2013

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; UNL IGERT student (Trevor Hefley)

**Task Location**

Kearney, NE (EDO); Lincoln, NE (UNL)

**Task Description**

Organize and process Nebraska WC location database; develop methodology and implement elicitation sessions with WC experts; develop analysis code and perform expert-informed WC habitat selection analysis to test whooping crane priority hypotheses and inform management; prepare final report and present findings at the Program's AMP Reporting Session.

**Linkage to Priority Hypotheses in AMP**

Links to all priority whooping crane hypotheses

**Products**

Summary report presenting methods and results of WC habitat selection analysis in a manner that can be used to inform management decisions; annotated statistical code for repeating analyses in the future; and a presentation at the Program's AMP Reporting Session.

**Notes on Cost**

One-time Program commitment of funds to IGERT Program at UNL.

**Budget**

Program Task WC-5						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Whooping Crane Telemetry Tracking	\$0	\$0	\$0	\$0	\$0	\$25,000

**PROGRAM TASK & ID: WQ-1. Water Quality Monitoring****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

Contractor (TBD through RFP in late 2011/early 2012)

**Task Location**

Central and lower Platte River, NE; specific monitoring on Program lands in central Platte River

**Task Description**

Water quality monitoring of key parameters based on specific Program actions (e.g. sediment augmentation, island building in the channel) at locations in the central Platte and lower Platte.

**Linkage to Priority Hypotheses in AMP**

Data for evaluation of several pallid sturgeon priority hypotheses (PS-1, PS-5, PS-9) for the lower Platte River and target species priority hypotheses in the central Platte River (T2, T2a, P2, WC1).

**Products**

Annual report and data analysis; annual budget estimates; involvement in the annual AMP Reporting Session.

**Notes on Cost**

New contractor selected through RFP process in late 2011/early 2012; cost estimates based on 2009-2011 monitoring costs and estimates for 2012 from current contractor (EA).

**Budget**

Program Task WQ-1						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
Water Quality Monitoring	\$0	\$40,000	\$184,000	\$180,000	\$280,000	\$150,000

**PROGRAM TASK & ID: ISAC-1. ISAC Stipends & Expenses****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

ED Office; Independent Scientific Advisory Committee (ISAC)

**Task Location**

Basin meeting locations TBD

**Task Description**

- Six ISAC members x 3 meetings x 3-day meetings x \$1,300 per ISAC member per day = \$70,200

EDO proposed three, 3-day meetings (two meeting days, one travel day per meeting) as follows:

- 1) **AMP Reporting Session in Denver, CO** (March) – ISAC interaction with EDO staff, Program participants, and contractors; review and discussion of “State of the Platte” Report; review and discussion of latest drafts of AMP documents such as Synthesis Report
- 2) **Summer workshop in Kearney, NE** (June-July) – field visits to implementation sites; focused discussion on Q1.5 flow issues
- 3) **Fall meeting in Denver, CO** (October-December) – opportunity for ISAC to meet together to build 2012 ISAC Report to GC

- Additional stipend for ISAC chair to complete FY2011 report = \$10,000
- Ten days of additional document review x six ISAC members x \$1,300 per day = \$78,000
- Total travel expenses for ISAC members and associated meeting expenses = \$25,000

**Linkage to Priority Hypotheses in AMP**

Key element of independent scientific review of AMP, IMRP, management strategies, and associated priority hypotheses

**Products**

ISAC review of Adaptive Management Plan (AMP) implementation, experimental design, and other Program products and activities; work will culminate in annual report by the end of 2012

**Notes on Cost**

N/A

**Budget**

Program Task ISAC-1						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
ISAC Stipends & Expenses	\$75,000	\$115,000	\$70,000	\$150,000	\$185,000	\$185,000

**PROGRAM TASK & ID: PD-3. AMP & IMRP Peer Review****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

December 31, 2012

**Task Completed by**

Contractor (Atkins); Peer Review panelists

**Task Location**

Various locations of Peer Reviewers

**Task Description**

Peer review of five (5) Program documents as defined below:

Document	# Reviewers	per Reviewer Cost	Total Review Panel Cost	PBS&J Services	Total Cost
Elm Creek FSM & Bird Response Design Document	4	\$5,000	\$20,000	\$5,000	\$25,000
Additional Document	3	\$5,000	\$15,000	\$5,000	\$20,000
Additional Document	3	\$5,000	\$15,000	\$5,000	\$20,000
Additional Document	3	\$5,000	\$15,000	\$5,000	\$20,000
Potential assistance with replacing ISAC members	1-3 new members	\$0	\$0	\$5,000	\$5,000
					<b>\$90,000</b>

Atkins under contract through 2013 to provide on-demand, as-needed science review services for Program peer review panels. Services include:

- Recommend candidates for each panel according to appropriate areas of expertise
- Provide background information for all potential candidates
- Recommend panelists and provide conflict of interest statements for all panelists
- Communicate with panelists (Program provides scope of work and handles contracting for payment)
- Summarize comments from each panel
- Deliver final report to EDO for each panel

**Linkage to Priority Hypotheses in AMP**

Independent peer review of key documents to ensure projects are consistent with Program goals and objectives



**Products**

Peer review reports for each reviewed document

**Notes on Cost**

Cost estimate includes \$5,000 for Atkins assistance with potentially replacing 1-3 ISAC members for 2013.

**Budget**

Program Task PD-3						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
AMP & IMRP Peer Review	\$50,000	\$105,000	\$50,000	\$50,000	\$115,000	\$90,000

**PROGRAM TASK & ID: PD-11. AMP Reporting****Program First Increment Timeline**

Annual

**FY 2012 Start Date**

January 1, 2012

**FY 2012 End Date**

May 31, 2012

**Task Completed by**

ED Office; TAC

**Task Location**

ED Office (Kearney, NE and Lincoln, NE); Denver, CO

**Task Description**

AMP Reporting Session in Denver, CO

**Linkage to Priority Hypotheses in AMP**

Evaluation of AMP experimental design, planned data analysis, and discussion of likely outcomes of management actions will help to keep monitoring, research, and data analysis on target for evaluation of priority hypotheses and AMP management activities.

**Products**

AMP Reporting Session in Denver, CO

**Notes on Cost**

AMP-related contractors will be required to attend the AMP Reporting Session (tentatively March 2012 in Denver) so travel and associated meeting expenses will be covered if not already covered under existing contracts/agreements.

**Budget**

Program Task PD-11						
	2007 Approved	2008 Approved	2009 Approved	2010 Approved	2011 Approved	2012 Estimated
AMP Reporting	\$0	\$10,000	\$10,000	\$70,000	\$25,000	\$25,000