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

**Program First Increment Timeline**

Annual

**FY 2019 Start Date**

January 1, 2019

**FY 2019 End Date**

December 31, 2019

**Task Completed by**

EDO; Contractor

**Task Location**

ED Offices; Contractor Offices; North Platte River and Platte

River between Kingsley Dam and Columbus, Nebraska.

**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 under WP-1.

Line Item: **WP-1(a)**

Description: Active channel capacity improvements (N. Platte channel above CNPPID diversion dam)

Estimated Cost: $10,500

The first sub-task is WP-1(a):

WP-1(a) will continue efforts toward increasing the North Platte River channel capacity at the National Weather Service (NWS) flood stage upstream of the Central Nebraska Public Power and Irrigation District (CNPPID) diversion dam to at least 3,000 cfs. This includes efforts toward raising the NWS flood stage at North Platte from 6.0 feet to 6.5 feet. The Program intends to work with the EA manager to complete a high flow release in order to test the recently constructed State Channel Reactivation Project. The primary objective of this release will be to assess impacts in the Chokepoint area at stages around 6.5 feet.

1. Monitoring effort for high flow release $5,500
2. State Channel maintenance $5,000

**TOTAL $10,500**

Further detail of the cost estimates for the items described in the 2019 Work Plan includes:

1. Monitoring effort for high flow release: $5,500

Local survey crews will be hired to monitor, survey, and photograph the flow release. This includes documentation of high water marks, stage measurements, groundwater measurements, and other relevant monitoring activities. This budget line assumes a five-day monitoring period for this flow release. Survey crews for recent projects awarded through a competitive selection process were charged at $210/hour. A survey crew for four hours a day, for five days is estimated to cost $4,200. ED Office staff will also hire a pilot and plane to take aerial photos of the release. Kearney Aviation Center rates for pilot and plane were $195 per hour in 2018. Two flights, with an estimated duration of three hours each, total $1,170.

1. State Channel Maintenance: $5,000

Routine maintenance of the state channel berm and the Albrecht property will include tasks such as mowing, culvert cleanout, and channel debris maintenance, as needed to maintain project function. Equipment and labor for this task is estimated to cost $150/hour based on recently quoted hourly rates for excavators. After the high flow release, some minor earthwork maintenance may be necessary if the berm is damaged. This task assumes 16 hours of post-flow release maintenance and 16 hours of routine maintenance in 2019.

Line Item: **WP-1(b)**

Description: Active channel capacity improvements (CNPPID diversion dam to Grand Island) Estimated Cost: $200,000

The second sub-task is WP-1(b):

WP-1(b) is comprised of cost share with Platte Valley and West Central Weed Management Areas to control phragmites and clear biomass from the North Platte River channel between Kingsley Dam and the CNPPID diversion dam and from the Platte River between North Platte and Chapman. Control costs are shared widely between Natural Resources Districts, irrigation and power districts, Counties, the State of Nebraska and conservation organizations. In 2018, the Program funded these efforts at a level of $300,000. However, because of increased funding participation by cooperators, the Program is reducing funding to $200,000 in 2019.

The work 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.

Cost breakdowns for allocation of the budget shown in Table 1 are based on control expenditures made by the Weed Management Areas in previous years. The actual distribution of expenditures in any given year will vary 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.

Table 1. Cost Assumptions for WP-1(b).

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Amount** | **Unit Cost\*** | **Total Cost** |
| Control (helicopter) | 1,600 acres | $70/acre | $112,000 |
| Control (Airboat) | 200 hrs | $150/hr | $30,000 |
| Herbicide | 773 gals | $75/gal | $57,975 |
| \*Approximate. |  | **Total (Rounded)** | **$199,975** |

**gals Assumptions for WP-1(b).Products**

* Improve conveyance capacity through North Platte Choke Point.
* Land easements and management agreements for flood-prone properties for North Platte Choke Point activities.
* Completed flood-risk reduction projects in vicinity of Highway 83 Bridge.
* Improved access to the site of the State Channel Project.
* Channel rehabilitation, maintenance and enhancement efforts to improve conveyance and habitat in channel sections between Kingsley Dam and Columbus.

**Notes on Costs**

Specific expenditures will require authorization of Finance Committee.

**Budget**



Notes: ‘Apprvd’ means approved budget. Values from 2007-2018 in thousands of dollars; 2019 estimated budget in dollars. \* Matching funds in a cost-share program with Platte River Management and Enhancement partners.

**PROGRAM TASK & ID: WP-4 (a-j). Water Action Plan**

**Program First Increment Timeline**

Annual

**FY 2019 Start Date**

January 1, 2019

**FY 2019 End Date**

December 31, 2019

**Task Completed by**

EDO; Contractor

**Task Location**

ED Offices; Contractor Offices; Nebraska, Colorado, Wyoming

**Task Description**

Under WP-4, the Program intends to advance projects from the 2014 Water Action Plan Update, and/or additional new project concepts, through feasibility into full implementation. The EDO will work with the Water Advisory Committee (WAC) and associated Work Groups to evaluate the potential yield, permitting requirements, and costs associated with various projects. The potential benefits of joint project operations will also be considered. The following paragraphs provide descriptions of the anticipated sub-tasks included in the 2019 budget.

Line Item: **WP-4(b)**

Description: Water Action Plan (Groundwater recharge)

Estimated Cost: $2,349,000

* WP-4(b) Ground Water Recharge Projects – The Phelps County Canal (CNPPID) groundwater recharge project, Elwood Reservoir (CNPPID) recharge project, groundwater recharge recapture projects and broad-scale recharge project are included in this line item.
  + Based on all the projects and assumptions described below, the total budget for projects under WP-4(b) is approximately $2,349,000 for 2019. This includes the Phelps County Canal ground water recharge project ($128,000); recharge in Elwood Reservoir ($582,000); operation and maintenance of the existing Cook recapture well ($5,000); external costs associated with the planning, design, and permitting of new recapture wells ($20,000); and land acquisition for future recharge and recapture projects in the Central Platte Basin ($1,614,000).
  + The volume of water for recharge under WP-4(b) is dependent on water available during actual operations and is subject to change from the estimate provided in this document. Individual project descriptions are listed below.

Line Item: **WP-4(b)i**

Description: Water Action Plan (CNPPID system groundwater recharge projects)

Estimated Cost: $735,000

*Phelps County Canal Ground Water Recharge Project*

The Phelps County Canal groundwater recharge project 2019 budget will be used for the recharge operations during the winter, spring, and fall of 2019. A Water Service Agreement with the CNPPID is in place, with an expiration date of December 31, 2019. The anticipated 2019 activities include continued efforts related to permitting of recharge operations as well as operation and maintenance costs associated with full-scale canal recharge. The CNPPID will obtain a temporary permit to divert unappropriated excess flows for groundwater recharge.

The CNPPID filed for an application for a permit to appropriate excess natural streamflow for recharge operations for the Program. The permanent recharge permit applications include recharge in the Tri-County Canal, Phelps County Canal and E-65 Canal with a maximum total diversion rate of 700 cfs, or 350 cfs in the Phelps County Canal and 350 cfs in the E65 Canal. The canal capacity rates are 1,000 cfs and 350 cfs for the Phelps County Canal and the E-65 Canal, respectively. The permanent recharge permits were submitted to the NDNR in 2012 and are currently pending. The Program decided not to pursue recharge operations in the E-65 Canal due to the possibility that a significant portion of recharge accretions returns to the Republican River Basin. In the absence of permanent recharge permits, the Phelps County Canal Groundwater Recharge Project has operated under a succession of temporary (one-year) permits allowing a maximum diversion of 600 cfs at the headgate of the Tri-County Canal.

The budget cost estimate for diversions into the Phelps County Canal for recharge operations is based on a rate of $30.98 per acre-foot in 2018 and an escalation rate of 3% per year, as shown in Exhibit B of the Water Service Agreement with the CNPPID dated October 20, 2017. The cost of water delivered into Phelps County Canal for groundwater recharge in calendar year 2019 is expected to be $31.91 per acre-foot. The CNPPID intends to divert excess flows into the canal up to the check structure at Mile Post 13.3, as in previous years. Checking the canal allows excess flows to be held in the canal and seep into the alluvial aquifer and accrete to the Platte River.

The score for the Phelps County Canal groundwater recharge project was accepted by the GC in 2013, based on a 50% interest in the project; the GC accepted a revised score in 2016 to represent a 75% interest. The terms of the current Water Service Agreement allocate 75% of diverted water to the Program, as measured in the flume at Mile Post 1.6 of the Phelps County Canal.

From 2013 through 2017, diversions into the Phelps County Canal for the Program ranged from 1,173 acre-feet to 6,033 acre-feet, with an average of 3,938 acre-feet. Based on this data, the EDO assumes excess flow diversions of 4,000 acre-feet for budget purposes. The total budget for diversions into the Phelps County Canal for groundwater recharge in 2019 is $128,000 ($331.91 per acre-foot × 4,000 acre-feet, rounded to the nearest $1,000). Actual expenditures in 2019 will be based on the measured deliveries into the canal for recharge operations.

*Elwood Reservoir Recharge Project*

The Program intends to continue purchasing excess flows delivered into Elwood Reservoir in the CNPPID system for recharge in 2019, as it has done each year since 2015. Elwood Reservoir is an unlined reservoir that acts as a holding basin to allow excess flows to seep and recharge the alluvial aquifer. Excess flows are delivered through the E-65 Canal to the Carl T. Curtis Pump Station, which pumps the water into Elwood Reservoir. The Program pays for excess flows pumped into the reservoir, the volume of which is based on pump performance curves. The CNPPID reports the total volume of excess flows measured and delivered for the Program. Per Amendment No. 1 (dated January 8, 2018) to the Water Service Agreement (dated October 20, 2017) between the Program and the CNPPID, the Program receives 50% of deliveries into Elwood Reservoir for recharge, with billings not to exceed 12,000 acre-feet unless agreed to by the Program in writing. Based on modeling completed by both the NDNR and the EDO, a portion of the seepage from Elwood Reservoir returns to the Republican Basin; the Program will not receive credit for this portion.

The budget cost estimate for diversions into Elwood Reservoir for recharge operations is based on a rate of $47.05 in 2018 and an escalation of 3% per year, as shown in Exhibit B of the Water Service Agreement with the CNPPID dated October 20, 2017. The cost of water delivered into Elwood Reservoir for groundwater recharge in 2019 is expected to be $48.46 per acre-foot. Based on provisions of the amended Water Service Agreement, the EDO assumes excess flow diversions into Elwood Reservoir for recharge totaling 12,000 acre-feet for budget purposes. The total budget for diversions into Elwood Reservoir for groundwater recharge for the Program in 2019 is $582,000 ($48.46 per acre-foot × 12,000 acre-feet, rounded to the nearest $1,000). Actual expenditures in 2019 will be based on measured deliveries into the reservoir for recharge operations.

*Groundwater Recapture Additions to Projects*

Groundwater recapture projects are retiming projects utilizing the water from existing recharge operations, such as the Phelps County Canal groundwater recharge project and Elwood Reservoir recharge. Since recharge accretions are not controllable and may return to the river during excesses to target flows, groundwater pumping allows the Program to pump recharged water to the river during shortage periods to maximize the score of the already recharged water. This also allows the recharged water to return to the river in a timelier manner than by recharge alone.

In 2016, the Program constructed one recapture well on the Cook tract to recapture Phelps County Canal ground water recharge accretions, per a permit through the Tri-Basin Natural Resources District. The well is equipped with an 800 gallon per minute pump and is used by the Program to extract recharged water from the alluvium. The extracted water is pumped into the North Phelps County Ditch as surface water (via a pipeline) and returns to the Platte River as measurable returns at a point location during shortages to target flows. The GC accepted a score for the Cook well of 160 acre-feet per year, which was added to the Phelps County Canal ground water recharge score.

The 2019 budget includes funds for continued operation and maintenance of the existing Cook tract recapture well. The calculated average pumping in the Cook well score model is approximately 660 acre-feet per year, based on the OpStudy hydrology from 1947-1994. The calculated cost of pumping is $5.20 per acre-foot, based on the discharge rate, TDH (total dynamic head), pump efficiency, motor efficiency and electrical power costs (approximately $3,500 budget). A maintenance budget of $1,500 is included for general upkeep of the well in 2019. The total 2019 budget for pumping, operating and maintenance of the Cook well is $5,000.

The Program also intends to move forward with the planning, design, and permitting of a network of additional wells to recapture water recharged through the Phelps County Canal and Elwood Reservoir. New recapture wells would be of a capacity and quantity capable of generating additional score estimated at 6,000 acre-feet per year. Preliminary discussions with the Tri-Basin Natural Resources District, which will serve as the permitting entity for new wells south of the Platte River, have already occurred. Construction is not anticipated in 2019. Most of the planning and design work will be undertaken internally by the EDO and Special Advisors. For planning purposes, a budget of $20,000 is assumed for associated external costs such as easement acquisitions and permit application fees.

Line Item: **WP-4(b)ii**

Description: Water Action Plan (Broad scale recharge projects)

Estimated Cost: $1,614,000

*Broad-Scale Recharge Concept*

This project concept consists of developing a series of large, shallow recharge ponds in the Central Platte Basin, focused on the reach between Gothenburg, NE and Odessa, NE to maximize the benefit to the habitat reach. The Program’s first broad-scale recharge project, which is located at the Cottonwood Ranch Complex, is currently in the construction phase.

The design of the broad-scale recharge project at the Cottonwood Ranch Complex calls for construction of a series of low berms to allow for the ponding of water and subsequent recharge of the alluvial aquifer. The water will be delivered to the property via a pipeline from the Phelps County Canal at times when the Platte River flow at Grand Island is in excess of USFWS target flows. The infiltrated water will return to the Platte River over time, and the Program will receive score credit when these returns occur during shortages to USFWS target flows. In general, assuming the delivery pipeline will have a maximum capacity of about 50 to 75 cfs, estimates, designs and operations models indicate that the berms will be able to pond 460 acre-feet of water over an area of 416 acres, resulting in an average annual score of approximately 4,000 acre-feet/year depending on how and when the project is operated.

The contract for the construction of the project was awarded to Myers Construction through a public and competitive bid letting process. The contract amount is $4,275,972 and was the lowest bid received. Construction costs for the project were included in the 2018 budget; no additional construction costs are included for 2019.

It is anticipated that the Program will begin operation of the recharge project upon completion of construction in May 2019. The CNPPID will charge the Program $26.01 per acre-foot (with a 2% annual escalator) for water diverted to the delivery pipeline starting in 2019. However, the Program will not be responsible for a cash payment to the CNPPID until the cost of water deliveries exceeds the cost of the design and construction of the delivery pipeline (estimated by CNPPID to be $1,074,900), which was included in the 2018 budget. At 2019 rates, the estimated pipeline costs are equivalent to approximately 41,300 acre-feet of water deliveries. This exceeds anticipated deliveries to Cottonwood Ranch in 2019, so no additional budget is included for water deliveries.

The project score will be increased/optimized using a series of recapture wells downstream of the project. Ultimately, it is anticipated that these recapture wells will increase the overall project score by approximately 2,000 to 3,000 acre-feet/year. The EDO is currently working with the Nebraska Department of Natural Resources and Tri-Basin Natural Resources District to permit the project as an aquifer storage and recovery project so that the water pumped back to the river via the recapture wells can be protected from diversion. The construction of these wells is likely to occur in 2020, after permitting, land acquisitions and system design are completed by the EDO and Special Advisors in 2019.

An additional land acquisition cost of $1,614,000 is included in the 2019 budget. The additional land acquisition is for future phases of broad-scale recharge and recapture wells associated with the Cottonwood Ranch Broad-Scale Recharge Project. The average land cost is $4,768 per acre for 320 acres, plus administration ($50,000) and title fees (2.5% of land costs).

Line Item: **WP-4(d)**

Description: Water Action Plan (Pathfinder Municipal Account)

Estimated Cost: $624,000

* + WP-4(d) Pathfinder Municipal Account – The Program has a lease agreement with the Wyoming Water Development Office (WWDO) for water from the Municipal Account in Pathfinder Reservoir.
    - The original agreement included an up-front payment of $1,958,400 (paid in 2012) for 38,400 acre-feet at $51 per acre-foot for the period 2012-2019. The agreement was designed to provide an average of 4,800 acre-feet per year. Up to 4,800 acre-feet of additional water was available and accepted by the Program in some years (for total releases of 9,600 acre-feet), which counted towards the 38,400 acre-feet available under the original lease agreement.
    - The final 4,800 acre-feet under the original lease agreement was delivered in 2017, at which point the Program and the WWDO activated a clause in the lease agreement to allow the Program to purchase the additional water at a cost of $65 per acre-foot. This clause is to remain in effect through the end of the First Increment, and the Pathfinder Municipal Account Lease will be renegotiated for deliveries beyond 2019. A total of 8,100 acre-feet was available to and accepted by the Program in 2018.
  + For 2019, the water available from the Pathfinder Municipal Account could range from 4,800 acre-feet to 9,600 acre-feet. To be conservative for budget purposes it is assumed that the high end of 9,600 acre-feet will be available from the Pathfinder Municipal Account in FY2019 at a cost of $65 per acre-foot. The resulting 2019 budget for WP-4(d) is $624,000.

Line Item: **WP-4(f)**

Description: Water Action Plan (Water leasing and acquisition)

Estimated Cost: $4,244,400

* WP-4(f) Nebraska Water Leasing and Acquisition – The Program intends to work with the Central Platte Natural Resources District (CPNRD), the NPPD, the CNPPID, the North Platte Natural Resources District, and individual irrigation districts to temporarily lease and/or acquire permanent water supplies in 2019. The following water leases/acquisitions are proposed:
  + - The Program and the CPNRD signed a water use lease agreement in 2013. The CPNRD agreement includes 2 components of water leasing: surface water rights with direct returns to the river during the irrigation season and groundwater recharge of excess flows during the non-irrigation season. Water leasing operations may occur under the Orchard-Alfalfa, Thirty-Mile, and Cozad Canals.
    - There are two potential NPPD leases. The first is a potential project to lease relinquished surface water rights under the Dawson County Canal, which would be returned to the river for credit. Additional lease water to offset potential increases in groundwater depletions on relinquished surface water lands is included in the cost estimate. The second is an agreement to divert excess flows for groundwater recharge operations in the Dawson County and Gothenburg Canals during the non-irrigation season. The Program paid for recharge water in all years, 2015-2018.
    - There are two potential CNPPID water leasing options. The Program would lease storage water in Lake McConaughy directly from the CNPPID under one option, but this is not expected in 2019 and no budget is included. With the other option, the Program leases surface water rights from individual irrigators under the CNPPID system with CNPPID serving as the administrator for these transactions. Pilot-scale leases for the CNPPID irrigator water were executed annually for 2016-2018. In September 2018, the GC approved a five-year lease agreement, extending the CNPPID irrigator lease project through 2023. Both options can be pursued, as they are not mutually exclusive.
    - The NPNRD has ongoing water retirement programs, including an “allocation buy-down” in which the district pays groundwater irrigators to reduce the amount of water pumped each year. The Program is proposing to partner with the NPNRD through funding contributions to these water-saving programs.
  + The Program has discussed potential leasing opportunities with Nebraska irrigation districts diverting from the North Platte River upstream of Lake McConaughy and plans to continue these pursuits in 2019.
  + Based on the assumptions described in the sections below, the total cost of projects under the WP-4(f) for water leasing is $4,244,400 for 2019. The specific costs and projected water volumes in WP-4(f) are subject to change and dependent on executed lease agreements with irrigation districts and irrigators in their systems.

Line Item: **WP-4(f)i**

Description: Water Action Plan (CPNRD surface and groundwater leasing)

Estimated Cost: $2,397,000

*CPNRD Surface Water Transfer*

The CPNRD transfers the consumptive use from natural flow associated with surface water irrigation rights to instream flow purposes to increase streamflow in the Platte River. The transferred surface irrigation rights are from willing irrigators who may switch to a groundwater supply to irrigate their land. Surface water rights from the Orchard-Alfalfa Canal, Thirty-Mile Canal, and Cozad Canal are transferred to instream uses for the Program. The CPNRD filed the water right transfer permits for temporary changes of use from irrigation to instream flows with the NDNR. The permits are dependent on the lease terms (i.e. some permit applications are submitted annually, some are submitted every 3 years, etc. based on the lease agreement length). There are a series of permit applications for the transfer, as water rights are grouped by lease term.

The CPNRD leases the net consumptive use portion of the surface water rights to the Program, which accounts for the impacts of depletions associated with groundwater pumping as an alternative to surface water irrigation; therefore, the Program does not need to budget additional costs for offsets. For 2015-2017, the water was diverted and measured at each canal headgate and subsequently returned to the river at each canal’s return structure. In 2018, an agreement was reached between CPNRD, the NDNR, and the CNPPID to test an arrangement in which the transferred surface water that the Program purchases from CPNRD would be retained in storage in Lake McConaughy and transferred to the EA instead of direct river returns at the canal headgates. This pilot project provided for a maximum of 14,200 acre-feet of CPNRD water to be transferred to the Lake McConaughy EA.

For budget purposes, it is assumed that operations similar to the 2018 pilot program will occur for the CPNRD surface water transfer in 2019, with a maximum transfer of 14,200 acre-feet into the Lake McConaughy EA. Based on a cost of $154.50 per acre-foot in 2018 and a 3% annual escalation as specified in the Amendment to Water Use Lease Agreement effective January 1, 2017, it is estimated that the cost of CPNRD surface water will be $159.14 per acre-foot in 2019. Total budgeted cost for surface water transferred from CPNRD in 2019 is $2,260,000 ($159.14 per acre-foot × 14,200 acre-feet, rounded to the nearest $1,000). Actual expenditures will be based on the calculated net volume of surface water transferred from CPNRD in 2019.

*CPNRD Groundwater Recharge*

The CPNRD groundwater recharge component in the water use lease agreement is for excess flows diverted and recharge through the Orchard-Alfalfa, Thirty Mile, and Cozad canals. The CPNRD submitted permanent permits for new surface water appropriations of natural flow for recharge with the NDNR in 2011 and the permits and were approved in 2015. The CPNRD filed for permits for 100 cfs of excess flow diversion in the Thirty-Mile Canal, 100 cfs in the Cozad Canal and 75 cfs in the Orchard-Alfalfa Canal. Unlike other recharge projects, the Program is not charged directly for the excess flows diverted at the canal headgates for groundwater recharge; instead, the Program pays CPNRD for the calculated volume of return flow accretions at the river resulting from recharge in the current and prior years.

Return flow accretions from recharge increased from 1,590 acre-feet in 2015 to 2,377 acre-feet in 2017. This trend of increasing return flow accretions at the river is expected to continue as recharge and resulting accretions compound from each successive year of project operation. For budget purposes, the EDO assumes recharge accretions of 3,000 acre-feet in 2019.

The amended Water Service Agreement effective January 1, 2017 set the cost for leased groundwater recharge accretions at $43.00 for 2017, with escalation of 3% each year. The cost of groundwater recharge accretions leased from CPNRD in 2019 is expected to be $45.62 per acre-foot. The budgeted cost for the CPNRD recharge lease in 2019 is $137,000 ($45.62 per acre-foot × 3,000 acre-feet, rounded to the nearest $1,000). The actual volume of recharge accretions will be calculated in late 2019 and is subject to change from the value provided in this document.

Line Item: **WP-4(f)ii**

Description: Water Action Plan (NPPD leasing)

Estimated Cost: $277,400

*NPPD Water Leasing*

The Nebraska Public Power District (NPPD) proposes to temporarily transfer the consumptive use portion of the natural flow available from 886.5 relinquished acres under the Dawson County Canal Water Appropriation D-622 to an instream use for the Program. Irrigators have willingly relinquished these surface water rights to the NPPD. The NPPD filed for a temporary change of appropriation permit with the NDNR in July 2013. The permit application requested a temporary change from irrigation to instream use for 6 years from May 14, 2014 through 2019 at a rate of a maximum of 7.6 cubic feet per second (cfs) up to a maximum of 761 acre-feet. Based on the NPPD’s analysis of water right availability data from 2001 through 2013, the transfer will yield an average annual volume of 718 acre-feet (and a maximum of 761 acre-feet). The Program submitted a letter of support for the temporary change of use that was included with the permit application, and the NPPD filed an amendment to the application in May 2014. For the water leasing project, the NPPD intends to continue diverting Appropriation D-622 into the Dawson County Canal and then return the consumptive use portion to the Platte River. The yield would be available for the Program just downstream of the Dawson County Canal headgate, at a return flow station that will be constructed in the future. As of September 2018, the surface water transfer permit application has not been approved by the NDNR.

The NPPD lease cost per acre-foot is based on a projected cost estimate completed by the ED Office. There are two cost considerations in the per acre-foot cost estimate: (1) cost associated with the consumptive use credit for relinquished surface water with the NPPD, and (2) cost associated with offsets to mitigate increased groundwater irrigation from relinquished surface water lands.

For the consumptive use credit cost estimate, the EDO multiplied the Crop Irrigation Requirement (CIR) per acre by the value of an acre of cropland, estimated at $125 per acre. The CIR value was calculated by NPPD as 10.3 inches/acre. This is based on a weighted average canal area CIR of 11.1 inches/ acre multiplied by 93%, which is the estimated proportion of natural flow in the canal (storage water will not be transferred), as shown in Table 4.

Table 4. Summary of NPPD Water Leasing Calculations for Maximum Credit.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| (A) | (B) | (C) | (D) | (E) |
| Transferred Acres | Weighted Average CIR (inches/acre) | Proportion of Natural Flow | Natural Flow CIR (inches/acre) | Maximum Volume of Water for Transfer (AF) |
| 886.5 | 11.1 | 93% | 10.3 | 761 |

(A) Relinquished acres historically irrigated with surface water.

(B) Average CIR based on cropping patterns in the canal area and CIR values from COHYST.

(C) Proportion of natural flow diverted into the canal (the remaining 7% is storage water, which will not be transferred).

(D) Natural Flow CIR = Columns (B × C).

(E) Transfer Maximum Volume = Columns (A × D) ÷ 12 inches/foot.

The total volume of water available to the Program is estimated at an average of 718 acre-feet per year, based on the NPPD’s historical consumptive use analysis. The EDO used $125 per acre to obtain an estimated water leasing cost for the consumptive use portion of the water rights, which equates to a unit cost of approximately $154.33 per acre-foot of water (886.5 acres × $125 per acre ÷ 718 acre-feet).

The second cost consideration in the budget is for offset water to mitigate depletions to the Platte River basin due to increased groundwater irrigation on relinquished surface water lands. The NDNR has indicated that either the lease entity or the Program should be responsible for mitigating any increase in depletions from transferring the surface irrigation water to instream uses. In the budget, it is assumed the Program will lease water to offset these depletions, although the consumptive use credit in the NPPD lease agreement could also be utilized to mitigate offsets.

It is anticipated the Program will work with the CPNRD to purchase offset water credits to maintain the consumptive use portion for the NPPD water leasing project. The required offset water volume was assumed to equal 20% of the project yield, as a preliminary estimate for budgeting purposes. This will be refined after an assessment of the potential increase in depletions is completed by the CPNRD in conjunction with the NPPD and the Program. For the 2019 NPPD lease estimate of 718 acre-feet of consumptive use credit, it was assumed 144 acre-feet (20% of 718 acre-feet) would be the offset volume required to replace depletions that occur during shortages to target flows; it is assumed that offsets will not be required during excesses to target and instream flows. The cost for offset water is assumed to equal the CPNRD lease cost for recharge accretions of $45.62 per acre-foot in 2019.

The total lease cost in the 2019 budget includes $154.33 per acre-foot for the consumptive use credit from the NPPD acreage (718 acre-feet) and $45.62 per acre-foot for offset water with the CPNRD (144 acre-feet). The total budget is approximately $117,400 in 2019 ($154.33 per acre-foot × 718 acre-feet + $45.62 per acre-foot × 144 acre-feet, rounded to the nearest $100).

*Gothenburg and Dawson County Canals Ground Water Recharge Project*

The Program has a water service agreement with the NPPD effective January 1, 2017 for diversion of excess flows into the Gothenburg and Dawson County Canals for groundwater recharge operations during the non-irrigation season. In 2015 and 2016, the Program paid for total diversions of excess flows into the two canals. The current water service agreement modified this approach to bill the Program for net groundwater recharge, computed as headgate diversions minus canal spills/returns. The Program paid NPPD for 3,594 acre-feet of net groundwater recharge resulting from 4,040 acre-feet of headgate diversions at the Dawson County Canal only during the fall of 2017. There were no NPPD canal diversions for recharge in either canal during the spring of both 2017 and 2018. For budget purposes, the EDO assumes a total of 5,000 acre-feet of net groundwater recharge (combined) in the Gothenburg and Dawson County canals in 2019.

The Water Service Agreement dated January 1, 2017 established a unit cost of $30.00 per acre-foot for 2017, with escalation of 3% for each year thereafter. With costs of $30.90 per acre-foot in 2018, the unit cost in 2019 is expected to be $31.83 per acre-foot. The total budget for NPPD groundwater recharge operations in 2018 is $160,000 ($31.83 per acre-foot × 5,000 acre-feet, rounded to the next $1,000). Actual expenditures by the Program will be based on measured diversions into the Gothenburg and Dawson County Canals for groundwater recharge in 2019.

Line Item: **WP-4(f)iv**

Description: Water Action Plan (CNPPID leasing-irrigator)

Estimated Cost: $670,000

*CNPPID Water Leasing - Irrigator*

The Program can temporarily lease surface water rights from individual irrigators under the CNPPID system. Irrigators then dryland farm the enrolled parcels, which are generally odd-shaped or hard-to-irrigate pieces of land, during the term of the lease agreement. The consumptive use portion of the surface water—9 inches per acre during a full-allocation year—is available in Lake McConaughy and transferred into the EA for the Program. A pilot program for CNPPID irrigator leasing was launched in the fall of 2015 to secure leases for the 2016 irrigation season. The CNPPID serves as the administrator, managing the individual lease agreements, processes and operations. The pilot program was capped at 2,000 acres, and for the first year, 1,037 acres were enrolled, yielding 778 acre-feet that was transferred to the EA for the Program. The pilot program was renewed for a second year, with 1,275 acres enrolled in late 2016 for the 2017 irrigation season yielding a transfer of 956 acre-feet to the EA, an increase of more than 20% over the first year. The pilot program was renewed for a third year covering the 2018 irrigation season. Enrollment jumped to 2,055 acres, yielding 1,541 acre-feet transferred to the EA.

The Program and the CNPPID agreed upon a 5-year extension of the irrigator lease program, beginning with enrollment in the fall of 2018 for the 2019 irrigation season and continuing through the 2023 irrigation season (the agreement expires December 31, 2023). The 5-year agreement increases the maximum enrollment to 3,000 acres. The cost for irrigator leases is assumed to remain at $220 per acre (or $293.33 per acre-foot) in 2019, but the costs may be reviewed annually and revised if necessary. An administrative fee of $10,000 paid to the CNPPID is included in the budget. Assuming full enrollment for budget purposes, the total 2019 budget for CNPPID irrigator leases is $670,000 ($220 per acre × 3,000 acres + $10,000).

Line Item: **WP-4(f)v**

Description: Water Action Plan (NPNRD leasing)

Estimated Cost: $150,000

*NPNRD water leasing*

The NPNRD has ongoing water retirement programs, including the Encouraging Producer Innovation through Conservation (EPIC) Program. The EPIC Program provides grant funds to producers who propose innovative agricultural practices to realize water savings through activities such as allocation buy-down, nitrate reduction, soil health, and wildlife and habitat conservation. The allocation buy-down program is available to groundwater-only irrigators. Through this program, the NPNRD pays irrigators a variable rate (depending on location) for each acre-inch of reduced groundwater pumping. The primary focus areas for these programs is the Pumpkin Creek Basin and the Overappropriated Area. The Program is proposing to partner with the NPNRD through funding contributions to these water-saving programs. Based on discussions with the NPNRD, the Program proposes a budget of $150,000 for this task in 2019.

Line Item: **WP-4(f)viii**

Description: Water Action Plan (North Platte canals leasing)

Estimated Cost: $750,000

*North Platte canals leasing*

Appendix C of the Final Settlement Stipulation for the 2001 Modified North Platte Decree is an Amendment of the 1953 Order to Provide for Use of Glendo Storage Water (Amendment). Glendo Reservoir includes an account for the storage of up to 40,000 acre-feet of natural flow water, of which 15,000 acre-feet is available to water users in Wyoming and 25,000 acre-feet is available to water users in Nebraska. This water is contracted to users through the U.S. Bureau of Reclamation.

The Amendment includes a provision in Paragraph 2 stating that “each state shall also enjoy unrestricted use of its respective storage allocation in Glendo Reservoir, so long as the use is below Glendo Reservoir and within the Platte River Basin.” In addition, the Paragraph 5 of the Amendment states that “Storage water in Glendo Reservoir from either state’s allocation may be used for fish and wildlife purposes downstream of Glendo Reservoir under contractual arrangements with the United States Bureau of Reclamation…subject to approval of Nebraska for contracts for water from Nebraska’s storage allocation. Any water released pursuant to such agreement shall not be considered natural flow but shall be administered and protected as storage water in accordance with state law within both Wyoming and Nebraska until used for its intended purposes.”

The Nebraska allocation of Glendo storage water is contracted to four entities, as follows: Enterprise Irrigation District (3,000 acre-feet); Mitchell Irrigation District (12,000 acre-feet); Bridgeport Irrigation District (2,000 acre-feet); and Central Nebraska Public Power and Irrigation District (8,000 acre-feet). In 2018, the Program had productive contacts with both Glendo contractors and other irrigation districts that do not have federal water, discussions of potential leasing opportunities which are anticipated to continue in 2019. The desired outcome would be agreements under which the Program can lease water from irrigation districts diverting from the North Platte River or its tributaries between the Nebraska-Wyoming state line and Lake McConaughy and store that water in the Lake McConaughy Environmental Account downstream.

For budgeting purposes, the Program proposes leasing up to 5,000 acre-feet of water from North Platte irrigation districts at a cost of $150 per acre-foot. The total proposed budget for this task is $750,000.

Line Item: **WP-4(g)**

Description: Water Action Plan (Water management incentives)

Estimated Cost: $25,000

* + WP-4(g) Water management incentives – The Program has three means of developing water supplies to reduce shortages through the implementation of Water Action Plan (WAP) projects: leasing from existing users; re-timing flows from periods of excess to periods of shortage; and consumptive use (CU) efficiency. To date, all operational and in-progress WAP projects rely on leasing or re-timing. It is difficult to track CU efficiency to water in the river, but several entities are engaged in efforts to improve management of irrigation resources in Nebraska that may help to determine methods of quantification.
    - These efforts include the University of Nebraska-Lincoln Testing Ag Performance Solutions (UNL-TAPS) program to encourage innovation to improve both the profitability and sustainability of crop production. The Program was a sponsor of UNL-TAPS in both 2017 and 2018. Program funding was proposed to contribute towards the costs of equipment, data subscriptions, promotion, publication, and general operation of the contest.
    - Another organization involved in such efforts is the Nebraska Water Balance Alliance (NEWBA), which promotes a watershed-wide approach to managing water supply and is working with Natural Resources Districts in the Nebraska Panhandle to develop testing sites for better management of irrigation resources. Through its Aquamart project, NEWBA is joining with the Upper Niobrara/White, North Platte, and South Platte natural resources districts to develop the Panhandle Research, Evaluation, Conservation Irrigation Partnership (PRECIP) which aims to generate sustainable and measurable improvements to Nebraska’s water resources. The Program provided financial support for PRECIP in 2018, with Program funds proposed to be directed towards efforts such as promotion, setting up demonstration sites, gathering participating producers, exploring ways to increase irrigation efficiencies, and evaluating potential watershed benefits as a result of improved irrigation practices.
    - The Nature Conservancy is also involved with similar projects, including the Western Nebraska Irrigation Project, which has established a network of rainfall gages as part of efforts to reduce unnecessary irrigation pumping, and the Midwest Row Crop Collaborative, which is working on water quality and quantity and soil health in the Central Platte.
  + The Program proposes to use funding under this line item to continue providing financial support to these valuable efforts; the proposed 2019 budget for WP-4(g) is $25,000.

Line Item: **WP-4(i)**

Description: Water Action Plan (Slurry wall gravel pits)

Estimated Cost: $9,246,000

The concept of slurry wall gravel pits and slurry wall aquifer storage projects came into focus in 2016 as the J-2 Regulating Reservoirs project was put on hold by the GC. The yield anticipated from the reservoirs must now be provided by other projects, such as slurry wall gravel pits and broad-scale recharge. The EDO hired a Special Advisor to aid the Program in evaluating slurry wall storage feasibility in Nebraska, as it is not common in Nebraska like it is in Colorado. A series of slurry wall storage sites could be constructed along the Central Platte River, allowing smaller plots of land to be leased and/or acquired for the projects. The slurry wall storage sites would operate in a manner similar to the J-2 Regulating Reservoirs by diverting water during excesses to target flows and releasing that water back to the river during shortages to target flows.

The Program is pursuing the development of a slurry wall storage facility at an existing gravel pit mine on the Lakeside property (Tract W1606). The contract for engineering design and construction oversight was awarded to JEO Consulting Group, Inc. (JEO) through a competitive process. The Program is anticipating that a portion of the project will be constructed and additional properties will be acquired for future development of slurry wall storage facilities in 2019.

The existing pit on the Lakeside property will be mined through the fall of 2018. It is estimated that the facility will have a storage volume of about 1,200 acre-feet. The preliminary score is estimated to be approximately 2,500 to 3,200 acre-feet using OpStudy hydrology and the project’s ability to fill and refill with excesses to target flows. It is assumed this project would operate year-round and would be supplied with water from a wellfield that extracts water from the alluvial aquifer but makes immediate surface depletions to the Platte River.

The contract amount with JEO for the engineering design and construction oversight for the project is $735,649, which was included in the 2018 budget (although some costs will carry over into 2019). The latest cost estimate from JEO for the construction of the project is approximately $8,546,000. Additional net costs of $700,000 are anticipated in association with expansion of the wellfield to supply the project in place of infrastructure to deliver from the Peterson Drain. All construction costs are included in the 2019 budget, for a total of $9,246,000 under WP-4(i). Water delivery and O&M costs are expected to be included in the 2020 budget.

Line Item: **WP-4(j)**

Description: Water Action Plan (General maintenance of land-for-water properties)

Estimated Cost: $62,000

* + WP-4(j) General maintenance of land-for-water projects – This line item includes the funds necessary for general land management and maintenance activities at Program properties acquired for developing Water Action Plan projects, including the Lindstrom, Edlund, and Lakeside tracts (sites of planned slurry wall gravel pits). Associated tasks include, fence and road maintenance ($7,000), noxious weed spraying ($15,000), mowing ($2,000), farming ($23,000) and other maintenance activities as needed at these properties. An additional $15,000 is included for new land-for-water properties assumed to be acquired in FY2018. The proposed FY2018 total budget for WP-4(j) is $62,000.

**Products**

* Nebraska Ground Water Recharge: Water Service Agreement(s) with the CNPPID, temporary and/or permanent permits for recharging excess flows available in the CNPPID’s system and ground water recharge day-to-day operations. The operation/maintenance of one well to pump recharged ground water directly to the Platte River to increase efficiency of existing recharge projects for the Program.
* Construction costs for the broad-scale recharge project at the Cottonwood Ranch Complex and an additional 320 acres of land acquisition.
* Nebraska Water Leasing & Acquisition: Lease agreements with the CPNRD, the NPPD, the CNPPID and/or individual irrigators for surface water, storage water and/or offset water leases or water acquisition.
* Budget for the engineering design and construction costs the initial slurry wall aquifer storage project on Program-owned lands (Tract W1606).
* Water supply-related permits/proof of ownership, as necessary for projects.
* Water rights evaluations and feasibility studies, as necessary for projects.
* End of year reporting from recipients of Water Management Incentives funding that documents how Program funds were spent in support of those efforts.
* Cost estimates for 2019 and long-term operations and maintenance of projects.

**Total Water Plan Action Implementation Budget (WP-4)**

The total estimated budget for WP-4(a-j) is $16,550,400 in 2019. A breakdown of the Water Action Plan project line item budgets is listed in the following table.

**Budget**



**Notes on Cost**

Specific expenditures will require authorization of Finance Committee. Cost estimates are based on feasibility study information, EDO analyses and other project sponsor estimates and will be updated based on any additional studies currently being completed. In general, estimates account for project sponsor contributions.

**PROGRAM TASK & ID: WP-5. Management Tool**

**Program First Increment Timeline**

Annual

**FY 2019 Start Date**

January 1, 2019

**FY 2019 End Date**

December 31, 2019

**Task Completed by**

EDO; Contractor

**Task Location**

ED Offices; Contractor Offices

**Task Description**

The COHYST Tool provides an integrated surface water, ground water, and watershed model for the Platte River between Lake McConaughy and Duncan, Nebraska. It is a tool used by the NDNR for water planning and administration, and it is anticipated to be a valuable tool for project planning and evaluation efforts under the PRRIP Water Plan. The COHYST Sponsors Group is outlining its Phase 3 workplan now that the modeling tool is fully developed and documented. As a user of the modeling tool, the PRRIP may require additional training or support from the consultants that developed the model. The PRRIP may also contribute funds to ongoing model updates and model support through the COHYST Sponsors Group.

Line Item: **WP-5**

Description: Water Action Plan (Management tool)

Estimated Cost: $14,400

In 2019 the EDO staff will use the COHYST model to run scenarios to test Water Plan project feasibility, performance, and operations; develop unit response functions for groundwater recharge projects; and evaluate multi-project interactions. As the EDO staff gains fluency with the COHYST model, it anticipates needing some technical oversight from the COHYST model development team. Technical oversight will be provided by the consultants of the COHYST modeling system, including HDR for the surface water component of the model, Lee Wilson and Associates (LWA) for the groundwater component of the model, and The Flatwater Group (TFG) for the watershed component of the model.

Costs associated with all COHYST related tasks are estimated based on an average, composite rate for COHYST consultant staff and hour estimates developed in discussion with the COHYST consultants and COHYST Technical and Sponsor Groups. The consultants have completed satisfactory work under previous contracts and have extensive knowledge of the project. Estimated costs are provided in the table below:

**COHYST Training, Model Analysis, and Reporting Cost Summary**

|  |  |  |  |
| --- | --- | --- | --- |
| **Task** | **Hours** | **Unit Rate ($/hr) \*** | **Estimated Fee** |
| 100 – Technical oversight and training from HDR | 30 | 160 | $4,800 |
| 200 – Technical oversight and training from LWA | 30 | 160 | $4,800 |
| 300 – Technical oversight and training from TFG | 30 | 160 | $4,800 |
|  |  |  |  |
| **Total Estimated Fee** |  |  | **$14,400** |

\*Unit rates include approximately 5% of direct expenses

**Products**

* Training and technical oversight provided to EDO staff.
* PRRIP specific model scenarios performed by the EDO.
* Briefing documents and progress reports.

**Notes on Cost**

Specific expenditures will require authorization of Finance Committee.

**PROGRAM TASK & ID: WP-8. Water Plan Special Advisors**



**Program First Increment Timeline**

Annual

**FY 2019 Start Date**

January 1, 2019

**FY 2019 End Date**

December 31, 2019

**Task Completed by**

EDO; Contractor

**Task Location**

ED Offices; Contractor Offices

**Task Description**

The EDO 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 are not limited to: water infrastructure and design, structural, hydrogeology/ground water and streamflow forecasting.

Line Item: **WP-8**

Description: Water Action Plan (Water Plan Special Advisors)

Estimated Cost: $155,200

Anticipated Special Advisors in 2019 include:

*Hydrogeology and Ground Water:* $68,000

Several projects include hydrogeologic elements that may require further expertise, including ground water recharge projects, ground water recapture pumping projects and other projects with a ground water component. Projects may include the Elwood Reservoir seepage project, the ground water recharge component of the CPNRD lease agreement, the NPPD ground water recharge project, the wet meadows hydrologic monitoring project, COHYST scenario runs and broad-scale recharge/slurry wall gravel pit concepts. Cost estimates are based approximately 400 hours at a billing rate of $170/hour, for a total of $68,000. Billing rates are based on previous contracts awarded in a competitive process and are assumed to be fair and reasonable. Bill Hahn is contracted as the Program’s Special Advisor for hydrogeology and ground water.

*Civil Infrastructure:* $74,000

The primary focus will be to assess potential slurry wall gravel pit sites and evaluate preliminary designs and project costs. Other various water-related small design projects may require civil infrastructure, water project permitting, and/or dams and hydraulic structures expertise for input and review in the concept development, design, and construction of these types of projects. Cost estimates are based on approximately 240 hours at a billing rate of $200/hour, for a total of $48,000. Billing rates are based on previous contracts awarded in a competitive process and are assumed to be fair and reasonable. Mike Applegate is contracted as the Program’s Special Advisor for civil infrastructure.

Brad Anderson, who previously served as a Special Advisor on the Adaptive Management work, will now serve a role similar to that of Mike Applegate on the Water Plan work. Brad has extensive experience with civil design and construction engineering with regards to water-related projects. Cost estimates are based on approximately 150 hours at a billing rate of $170/hour, for a total of $26,000.

*Hydroclimatic and Streamflow Forecasting: $13,200*

Dmitry Smirnov will continue hydroclimatic indices and forecasting work in 2019 in a Special Advisor role. The Program will continue annual streamflow forecasts of the South Platte and North Platte Rivers for use in Program project operations and management. Work in 2019 may also include revisions to and re-submittal of a journal article based on the hydroclimatic indices and streamflow forecasting work completed in the Phases I through III studies. Labor costs are based on an estimated 120 hours at $72/hr, for a total of $8,640. Direct costs related to the forecasting work include maintaining and hosting a website with the monthly forecast information, which would be linked to the Program website ($2,500), and publication of the journal article ($2,000). Estimated labor and direct costs are not to exceed $13,200 in 2019.

Table 1 is a summary of the cost estimates per Special Advisor.

Table 1. Cost Summary for Special Advisors.

|  |  |  |
| --- | --- | --- |
| **Area of Expertise** | **Name** | **Estimated Range of Expenditures** |
| Hydrology and GW Recharge | Bill Hahn | $68,000 |
| Civil Infrastructure | Mike Applegate | $48,000 |
| Civil Infrastructure | Brad Anderson | $26,000 |
| Hydroclimatic Indices | Dmitry Smirnov | $13,200 |
| **TOTAL** | | **$155,200** |

**Products**

* Meeting participation.
* Memorandums and reports.

***General note on all Special Advisor budget line items***: Please refer to the third paragraph in the Exceptions: section of the Procurement Policy adopted by the GC in June 2016, “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 (ED) based on qualifications – education, relevant experience, expertise and skills, reliability, credibility, and ability to work effectively with the ED and the staff of the ED Office. Special Advisors and the firms they are associated with cannot do any other work for the Program, individually or as part of a team. 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 ED Office 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 over an eight-plus-year period. 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 scrutinized by and discussed with the appropriate advisory committees, the Finance Committee, and the GC. Input is received and 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 finalization.