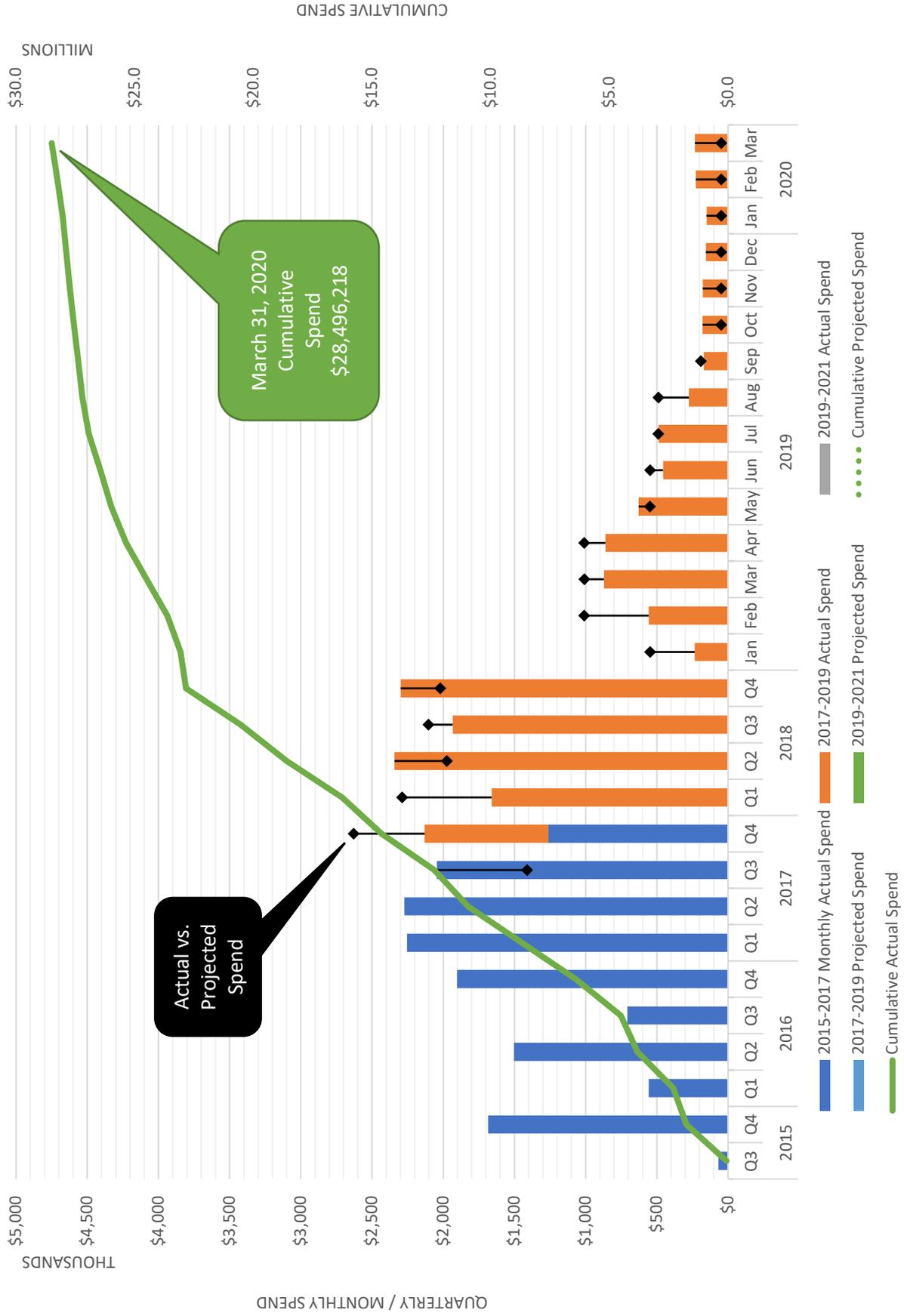


Red River Valley Water Supply Project Planning Level Budget



Actual vs. Projected Spend

March 31, 2020
Cumulative Spend
\$28,496,218

THOUSANDS

QUARTERLY / MONTHLY SPEND

MILLIONS

CUMULATIVE SPEND

- 2015-2017 Monthly Actual Spend
- 2017-2019 Projected Spend
- 2015-2017 Monthly Projected Spend
- 2017-2019 Actual Spend
- 2019-2021 Projected Spend
- 2019-2021 Actual Spend
- Cumulative Actual Spend
- Cumulative Projected Spend

**Red River Valley Water Supply Project
Planning Level Budget**

March 31, 2020	Percent Complete	Current Estimate	Actual Expenses	Outstanding Expenses
Conceptual Design Subtotal	100%	\$ 5,302,130	\$ 5,302,130	\$ 0
Preliminary Design Subtotal	100%	\$ 10,217,606	\$ 10,217,606	\$ 0
Final Design				
Engineering				
Pipeline Final Design - 28 miles	100%	\$ 3,320,000	\$ 3,319,175	\$ 825
Trenchless Final Design	100%	\$ 452,000	\$ 452,000	\$ (0)
Discharge Final Design	99%	\$ 508,000	\$ 501,210	\$ 6,790
Land Services - Segments 1, 2a, 2b, 4	74%	\$ 1,602,285	\$ 1,185,122	\$ 417,163
Geotechnical	96%	\$ 544,000	\$ 521,432	\$ 22,568
Sediment Transport	96%	\$ 396,000	\$ 380,947	\$ 15,053
Missouri River Intake Final Design	98%	\$ 2,035,000	\$ 1,986,203	\$ 48,797
Upper Sheyenne Discharge Analysis *	93%	\$ 111,723	\$ 104,030	\$ 7,693
Unmanned Aircraft System Services	100%	\$ 71,443	\$ 71,443	\$ (0)
Value Engineering	73%	\$ 262,539	\$ 191,173	\$ 71,366
NDPDES Permit Application Supplement	87%	\$ 395,000	\$ 342,330	\$ 52,670
Field Verification of PDR Pipeline Alignment	75%	\$ 114,000	\$ 85,720	\$ 28,280
<i>Construction Phase Engineering</i>	<i>Upcoming</i>		\$ -	\$ -
Land Acquisition				
Acquire Options	91%	\$ 65,000	\$ 59,316	\$ 5,684
Acquire Easements	107%	\$ 1,211,000	\$ 1,292,364	\$ (81,364)
Acquire Real Estate	0%	\$ 100,000	\$ -	\$ 100,000
Financial, Administration, Legal, Etc.				
Financial Modeling/Cost Allocation	67%	\$ 1,521,047	\$ 1,025,316	\$ 495,731
Program Management Set Up	102%	\$ 553,000	\$ 561,429	\$ (8,429)
Program Management Information System	18%	\$ 293,100	\$ 53,646	\$ 239,454
Administration (communications, LAWA)	89%	\$ 550,000	\$ 487,904	\$ 62,096
Stakeholder Support	20%	\$ 398,830	\$ 81,469	\$ 317,361
Legal	46%	\$ 600,000	\$ 274,252	\$ 325,748
<i>Undesignated</i>	<i>0%</i>	<i>\$ 108,523</i>	<i>\$ -</i>	<i>\$ 108,523</i>
Final Design, Easement & Administration Subtotal	85%	\$ 15,212,490	\$ 12,976,482	\$ 2,236,008
Construction				
<i>Pipeline Trenchless Construction</i>	<i>Upcoming</i>		\$ -	\$ -
<i>Discharge Construction</i>	<i>Upcoming</i>		\$ -	\$ -
<i>Intake Construction</i>	<i>Upcoming</i>		\$ -	\$ -
Construction Subtotal	0%	\$ -	\$ -	\$ -
Total Program Budget	93%	\$ 30,732,226	\$ 28,496,218	\$ 2,236,008

2015/2017 State Appropriation \$12,359,000	\$ 12,359,000
2015/2017 LAWA Cost Share \$1,373,225	\$ 1,373,225
2015/2017 total	\$ 13,732,225
2017/2019 State Appropriation**	\$ 17,000,000
RRVWSP Program Budget	\$ 30,732,225
2017/2019 Appropriation Spent to Date	\$ 14,763,993
2017/2019 Committed Outstanding	\$ 2,127,486
2017/2019 Not Committed	\$ 108,523

* not subject to local cost share

** not including \$13 million for early out construction



2019 to 2021 Biennium Budget
(Early-Out Projects with Minimum Additional Spend)

April 3, 2020

No.	Scope of Work	Feature	Task Orders Auth	19/21 Biennium Project Development Budget (mil \$)			Construction Budget per Biennia (mil \$) ^{1,2,3}				
				Total	State 75%	Local 25%	19/21 Biennium			21/23	Future
							Total	State 90%	Local 10%		
1.	Financial, Administration, Legal, Insurance, Etc.	Administration of program, including financial, legal, public communication, administrative, insurance advising, etc. expenditures	Apr-20	\$ 0.70	\$ 0.53	\$ 0.17	\$ -	\$ -	\$ -	\$ -	TBD
	Jan-21		\$ 0.70	\$ 0.53	\$ 0.17						
2.	Early-Out Missouri River Intake Pumping Station Wetwell	40' diameter x 65' deep concrete wetwell and initial site development for a 165-cfs pumping station at the Missouri River near Washburn, ND	Mar-20	\$ 0.06	\$ 0.04	\$ 0.02	\$ 3.97	\$ 3.58	\$ 0.39	\$ -	\$ -
	Jun-20										
3.	Early-Out Transmission Pipeline East - Contract 5a	1.5± miles of 72" open-cut pipeline, including 96" diameter tunnel under RRV&W Railroad and U.S. Highway 281 south of Carrington, ND	Mar-20	\$ 0.09	\$ 0.07	\$ 0.02	\$ 8.58	\$ 7.72	\$ 0.86	\$ -	\$ -
	Jul-20										
4.	Early-Out Discharge Structure on the Sheyenne River	145-cfs energy dissipation structure and outfall channel to Sheyenne River near Cooperstown, ND, including initial site development	Mar-20	\$ 0.06	\$ 0.05	\$ 0.01	\$ 1.89	\$ 1.70	\$ 0.19	\$ -	\$ -
	Jun-20										
5.	Missouri River Intake Crib and Tunnel	Marine geotechnical investigation; design of 8, 48" dia T-screens and crib in Missouri River and a 1,600' long 72" diameter tunnel from crib to wetwell	Mar-20	\$ 0.61	\$ 0.46	\$ 0.15	\$ -	\$ -	\$ -	\$ 26	\$ 49
	Jul-20		\$ 2.10	\$ 1.58	\$ 0.52						
	Jan-21		\$ 0.12	\$ 0.09	\$ 0.03						
6.	Biota Water Plant and Main Pumping Station	165-cfs water treatment facility; 165-cfs main pumping station and associated surge control building	Oct-20	\$ 0.25	\$ 0.19	\$ 0.06	\$ -	\$ -	\$ -	\$ -	\$ 111
7.	Land Services⁴	Conversion of expiring options to easements; and intake and discharge real estate costs and legal support	Mar-20	\$ 0.20	\$ 0.15	\$ 0.05	\$ -	\$ -	\$ -	\$ -	\$ 10
	Jan-21		\$ 0.45	\$ 0.34	\$ 0.11						
8.	Environmental Consulting	Provide on-call consulting for wetlands, environmental, cultural, and archeological aspects during the biennium	Jan-21	\$ 0.10	\$ 0.08	\$ 0.02	\$ -	\$ -	\$ -	\$ -	\$ -
9.	Transmission Pipeline East - Contract 5b	26.5± miles of 72" open-cut pipeline, including associated 96" diameter tunnels under wetlands, highways, railroads, etc.	Oct-20	\$ 0.38	\$ 0.29	\$ 0.09	\$ -	\$ -	\$ -	\$ 163	\$ -
	Jan-21		\$ 0.10	\$ 0.08	\$ 0.02						
10.	Program Management	Overall project planning, mgmt, admin, scheduling, coordination, meeting prep/attendance, regulatory interface, etc. not included in individual TOs	20-May	\$ 0.44	\$ 0.33	\$ 0.11	\$ -	\$ -	\$ -	\$ -	\$ -
11.	Reserve for Expected but Yet Undefined Projects	A reserve providing flexibility to adapt to work plan changes during the biennium and for dealing with construction change orders	TBD	\$ 1.14	\$ 0.85	\$ 0.29	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL PROGRAM BUDGET				\$ 7.50	\$ 5.66	\$ 1.84	\$ 14.44	\$ 13.00	\$ 1.44	\$ 189	\$ 170

- Notes:**
- Construction costs include management, engineering services during construction, inspection, field quality control, and construction.
 - Projects indicated for construction funding in a given biennium will be shovel ready for construction at the start of the biennium.
 - Future capital costs are escalated to an anticipated midpoint of construction at 3 percent per annum for the respective component with the RRVWSP expected to be finished by 2029. All future RRVWSP construction projects and costs are not shown.
 - Future land services costs are the amount likely to be paid to land owners for real estate, easements, crop damage and field obstructions. Costs for Segment 3 (McClusky Canal to Break Tanks) option to easement conversions and easements from scratch are not included in the estimates.

**RRVWSP Work Plan Update
March 25, 2020**

Goal

Spring 2016	Completed Conceptual Design and Cost Estimate
Summer 2017	Completed Preliminary Design and Cost Estimate for pipeline and pump station(s)
2017 - 2019	Complete Phased Final Design and Cost Estimates
2019 - 2027	Phased Bidding and Construction

Total draft budget to complete Conceptual, Preliminary and Final designs is \$66 million. The ND legislature appropriated \$12.359 million for the RRVWSP for the 2015-2017 biennium. The conceptual design phase has been completed; therefore, no further updates will be included in this report. The ND legislature appropriated \$30 million for the RRVWSP for the 2017-2019 biennium. The ND legislature appropriated \$30 million for the RRVWSP for the 2019-2021 biennium.

Preliminary Design

The conceptual design was released in September 2016. The majority of the preliminary design has been completed; of the \$10 million cost estimate, approximately \$15,000 remains to be expended on the task orders. Moving forward with limited funds, it is cost effective to start project phasing. The Implementation Plan will provide a road map to move forward with items that must be completed first, which includes permit phasing, design phasing and construction phasing.

Final Design

The draft preliminary design was released early October 2017. Moving forward with limited funds, it is cost effective to start project phasing. Priority items to move forward first with final design and construction are discharge structure, 1.5 miles of pipeline and portions of the intake.

1) Pipeline segment 28 miles – This task order will begin final design on a portion of the RRVWSP and is the first of several pipeline design task orders that will be executed to complete the project. Given the current level of state and local funding allocated for the project’s design and construction, the length of the initial segment selected for final design and preparation of construction contract documents is approximately 28 miles. The general location of the 28-mile pipeline segment is in Foster and Wells Counties. The alignment and limits of the pipeline being designed under this task order are identified on the RRVWSP route overview map. This task order will deliver bid ready documents for this 28-mile segment. Estimated cost is \$3,840,000.

Status – A 1.5-mile pipeline segment draft final design has been submitted for review.

2) Geotechnical – This task order will allow engineers to drill supplemental borings along the Preliminary Design Report (PDR) pipeline alignment and discharge site and to complete laboratory testing of soil samples collected. These supplemental borings are necessary to characterize subsurface soil conditions not covered by the 2008 investigation. Relevant existing soils data from the 2008 investigation will be used to the maximum extent practical to support activities. Estimated cost is \$544,000.

Status – All borings and soil resistivity tests are complete. A draft Geotechnical Baseline Report and Corrosion Protection Design Guide has been developed.

3) Sediment Transport Analysis – This task order will provide information as requested by the North Dakota State Water Commission (SWC) to evaluate the Sovereign Lands Permit for the Missouri River intake, as well as support the overall design of the intake screens. Estimated cost is \$396,000.

Status – All field work was completed prior to the river freezing. A request was made to USACE for a river analysis model HEC-RAS. Developed 1D and 3D models and completed geomorphic analyses. The final Sediment Transport Report has been sent to the SWC for review. Complete

4) Trenchless Crossings – This task order is for final design of tunneled or trenchless crossings in the first 28-mile section of pipeline selected for final design. The general outcome of this task order will be the preparation of construction contract documents. Estimated cost is \$452,000.

Status – The 90% plans and specifications were ready February 2019.

5) Discharge Site Structure – This task order is for final design of the discharge structure. The general outcome of this task order will be the preparation of construction contract documents. Estimated cost is \$508,000.

Status – The 99% designs are available for review.

6) Land Services – This task order is for survey support services, easement and option acquisition for RRWSP parcels. The RRWSP pipeline is separated into segment 1, 2a and 2b, 3 and 4. Authorization has been approved to move forward with only segment 1. Estimated cost for segment 1 is \$556,446. A second authorization was approved for segment 2a, 2b and 4. Estimated cost is \$1,232,839.

Status – Pipeline Segment 1 status; 99% easements signed. All letters to landowners asking for converting options to easements and asking for options have been sent. The appraisal reports for the intake and discharge land have been received.

7) Drone Aerial Coverage – This task order is for unmanned aircraft system services for the initial 28-mile pipeline corridor, discharge site and intake site. Oblique view videos will be captured and incorporated into the GIS database. Estimated cost is \$71,443.

Status – The intake, discharge and pipeline segment 1 have been completed.

8) Missouri River Intake – This task order is for preliminary design of the Missouri River intake including a submerged crib, a tunnel from the crib to a pumping station on the river bank, and a pumping station, including utility extensions necessary and site civil design in order to develop the site. To support early out construction, final designs will be performed for the wet well, access road for construction vehicles and site drainage. Estimated cost is \$1,985,000.

Status – USACE has issued Nation Wide (NW) 12 permit for the intake. The Missouri River Intake Pump Station physical modeling is complete. The intake design passed all

Hydraulic Institute tests. The 99% design for the wet well is ready for review. Received USACE coverage under NW 6 and 33 for the marine boring investigations.

9) NDPDES Permit Application Supplement – This task order provides support documentation on how the proposed RRVWSP water treatment plant meets the established requirements of the Boundary Waters Treaty Act. Estimated cost is \$195,000.

Status – The NDPDES permit application was submitted to NDDOH on July 31, 2018. Received draft permit March 23, 2020, which has a 60-day comment period.

10) Value Engineering – HDR was selected to complete a value engineering study on the RRVWSP. Estimated cost is \$198,539.

Status – The value engineering study workshop was held September 10-14. The draft report was issued on September 28, and the final report was submitted January 1, 2019.

11) Value Engineering Assistance – This task order provides Black and Veatch support services to the value engineering process. Estimated cost is \$64,000.

12) StateMod Amendment No. 3 – This task order provides support to respond to GDCD, LAWA, stakeholder and SWC requests for additional analysis. Estimated cost is \$193,428.

13) Field Verification of PDR Pipeline Alignment - This task order provides support services to field verify 139 miles of the PDR alignment not currently under design. Estimated cost is \$164,000.

14) Transmission Pipeline-East Bidding Assistance – This task order allows engineer to assist Garrison Diversion with public advertisement and bidding for construction of an early out pipeline project named Contract 5a falling under the Transmission Pipeline-East segment of the 167-mile RRVWSP. Estimated cost \$86,000.

15) Discharge Structure & Site Development Bidding Assistance – This task order allows engineer to assist Garrison Diversion with public advertisement and bidding for construction of an early out discharge structure on the bank of the Sheyenne River. Estimated cost \$56,000.

16) Missouri River Intake Pumping Station Wet Well & Site Development Bidding Assistance - This task order allows engineer to assist Garrison Diversion with public advertisement and bidding for site development and construction of a pumping station wet well near the Missouri River. Estimated cost \$56,000.

17) Missouri River Intake Geotechnical Investigation and Reporting – This task order includes the planned tunnel borings along the tunnel alignment from the pump station to the crib in the Missouri River. Estimated cost \$608,000.

Financial Modeling & Stakeholder Outreach

1) Municipal Advisor – Ernst & Young Infrastructure Advisors (EYIA) provides municipal advisory services for the RRVWSP. The overall objective is to develop a robust financial plan to finance the RRVWSP. The model will include construction schedule alternatives, capital debt structure options and ongoing operational and renewal costs. Estimated cost is \$508,872.

Status – EYIA has refined the financial models based on effective construction schedules and debt financing approaches. The financial model includes quantified market risks and various cost-share alternatives. This work is on hold until further direction is received from stakeholders/policymakers. EYIA's work is jointly occurring and being incorporated into modeling being completed by AE2S Nexus and Black & Veatch. The models are reviewed by the LAWA Financial Advisory Committee.

2) Financial Modeling/Cost Allocation – The task order is for AE2S Nexus to assist EYIA in development of the overall financial plan and use that plan as the basis for the cost allocation model for each participating system. Estimated cost is \$512,175.

Status – The cost allocation model was refined to include a tiered allocation structure, which considers how project users will benefit from the project by assessing water supply needs, as well as access to project water. Feasibility and ability to pay studies are being conducted for roughly ten systems - both large and small. This work is in conjunction with the work being completed by EYIA.

3) Stakeholder Re-engagement – This task order will provide support in meeting with each of the 35 systems that signed development agreements. The objective of each meeting is to obtain a signed Project Participation Agreement and Water Service Contract. Estimated cost is \$398,830.

Status – Reevaluating financial modeling and outreach.

Program

1) Program Management – The overall RRVWSP is expected to spend \$21.94 million in the 2019-2021 biennium and potentially \$180 million or more the next biennium. The objective of this task order will support the development and maintenance of a variety of program management support tools to help successfully execute the project. The tools and processes are expected to be developed and implemented during this biennium and be ready to support a significantly increased program size in the following biennium. Estimated cost is \$491,000.

Status – Program management meeting #1 focused on all aspects of PM, PM #2 focused on the schedule, and other meetings were held developing PM tools and gaining knowledge about program delivery models. Draft Program Management Plan, Construction Management Plan and Design Guidance Manual have been submitted for review. A risk management was held focusing on short term risk to the project.

2) Program Management Information System – This task order will assist GDCD in making initial contact with vendors and to solicit formal submittals from those vendors to provide hardware, software and services. Estimated cost is \$43,100.

3) Program Management 2019 to 2021 – This task order allows the engineer to assist Garrison Diversion in developing the RRVWSP program. Included items are ongoing calls and meetings to facilitate and support communication and coordination between Garrison Diversion staff and external stakeholders and continue to use previously developed tools to guide the program. Estimated cost \$436,000.

**2020 Budget Analysis**

For the period of January 1, 2020- March 31, 2020

Income	2020 Budget	Actual as 03/31/2020	Balance of Budget
Dues Income	\$ 31,500.00	\$ 30,350.00	\$ 1,150.00
Interest Income	\$ 75.00	\$ 17.96	\$ 57.04
Miscellaneous	\$ -	\$ -	\$ -
Cost Share/Development Agr.	\$ -	\$ -	\$ -
Total Income	\$ 31,575.00	\$ 30,367.96	\$ 1,207.04
Expenses			
Dues Expenses	\$ 1,290.00	\$ 1,000.00	\$ 290.00
Accounting	\$ 9,000.00	\$ 109.42	\$ 8,890.58
Directors Expense	\$ 500.00	\$ -	\$ 500.00
Insurance	\$ 550.00	\$ -	\$ 550.00
Service Fees	\$ -	\$ -	\$ -
Engineering	\$ -	\$ -	\$ -
Adm/Legal/Financial	\$ 111,500.00	\$ 8,467.50	\$ 103,032.50
Total Expenses	\$ 122,840.00	\$ 9,576.92	\$ 113,263.08
Net Income (Loss)	\$ (91,265.00)	\$ 20,791.04	\$ (112,056.04)

Account Activity

Beg. Bank Balance 1-1-2020		\$ 712,567.63
Income Received		\$ 30,367.96
Total Funds Available		\$ 742,935.59
#1159 ND Water Coalition	\$ 1,000.00	
#1160 Ohnstad Twichell P.C	\$ 2,747.50	
Deluxe-Bank Deposit Slips	\$ 109.42	
#1161 Ohnstad Twichell P.C	\$ 5,720.00	
Total Expenses	\$ 9,576.92	
Ending Bank Balance		\$ 733,358.67