

**NORTHERN NEVADA WATER PLANNING COMMISSION  
("NNWPC")  
AGENDA**

Wednesday, May 1, 2019

1:30 p.m.

Washoe County Commission Chambers  
1001 East Ninth Street  
Reno, Nevada

**Notes:**

1. Items on this agenda on which action may be taken are followed by the term "For Possible Action". Non-action items are followed by an asterisk (\*).
2. Public comment is limited to three minutes per speaker and is allowed during the public comment periods, and before action is taken on any action item. Comments are to be directed to the Commission as a whole. Persons may not allocate unused time to other speakers. The public may sign-up to speak during the public comment period or on a specific agenda item by completing a Public Comment Information ("Request to Speak") card and submitting it to the clerk.
3. Items on this agenda may be taken out of order, combined with other agenda items for consideration, removed from the agenda, moved to or from the Consent Items section, or delayed for discussion at any time. Arrive at the meeting at the posted time to hear item(s) of interest.
4. Supporting material provided to the Commission for the items on the agenda is available to members of the public at the NNWPC offices, 1001 E. Ninth St., Reno, NV, from Jennifer Purgitt, Administrative Secretary, (775) 954-4665, and on the NNWPC website at <http://www.nnwpc.us>
5. The Washoe County Commission Chambers are accessible to the disabled. We are pleased to make reasonable accommodations for persons who are disabled and wish to attend meetings. If you require special arrangements for the meeting, please call (775) 954-4665 no later than 24 hours prior to the meeting.
6. In accordance with NRS 241.020, this agenda has been posted at the following locations: Reno City Hall (1 East First Street), Sparks City Hall (431 Prater Way), Sun Valley GID (5000 Sun Valley Blvd.), Truckee Meadows Water Authority (1355 Capital Blvd.), Washoe County Administration Building (1001 E. Ninth Street), South Valleys Library (15650A Wedge Parkway), the NNWPC website at <http://www.nnwpc.us>, and the State of Nevada Website at <https://notice.nv.gov>

1. Roll Call and determination of presence of a quorum. \*
2. Public Comments. \* (Three-minute time limit per person.)
3. Approval of agenda. **(For Possible Action)**
4. Approval of the minutes from the April 3, 2019 meeting. **(For Possible Action)**
5. Discussion and possible recommendation to the Western Regional Water Commission ("WRWC") for approval of Amendments to Agreements to continue funding for the projects listed below, and possible direction to staff – Chris Wessel, WRWC Water Management Planner. **(For Possible Action)**
  - a. Eighth Amendment to the Interlocal Agreement ("IA") with the City of Reno, in an amount not to exceed \$262,500 from the Regional Water Management Fund ("RWMF"), to support the Truckee Meadows Storm Water Quality Management Program for Fiscal Year 2019-2020; and
  - b. Fifth Amendment to the IA with the Truckee Meadows Water Authority, in an amount not to exceed \$100,000 from the RWMF, to support the Water Usage Review Program for Fiscal Year 2019-2020.

## Northern Nevada Water Planning Commission Agenda for May 1, 2019

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6. Discussion and possible approval of Amendments to Agreements to continue funding for the projects listed below; if approved, authorize the WRWC Water Resources Program Manager to execute the Amendments; and possible direction to staff – Chris Wessel.  
**(For Possible Action)**
  - a. Fourth Amendment to the IA with the Desert Research Institute ("DRI"), in an amount not to exceed \$20,000 from the RWMF, to support the Regional Precipitation Monitoring Project for Fiscal Year 2019-2020; and
  - b. Fifth Amendment to the IA with DRI, in an amount not to exceed \$10,000 from the RWMF, to support the Washoe Evapotranspiration Project for Fiscal Year 2019-2020.
7. Discussion and possible recommendation to the WRWC for approval of a proposal by the Regional Effluent Management Team for funding, in an amount not to exceed \$75,000 from the RWMF, to evaluate the feasibility of discharging Reno Stead Water Reclamation Facility effluent to Long Valley Creek; and possible direction to staff – Jim Smitherman, WRWC Water Resources Program Manager. **(For Possible Action)**
8. Presentation, discussion, and possible recommendation to the WRWC for approval of a proposal by Washoe County for funding, in an amount not to exceed \$100,000 from the RWMF, to support a project to restudy and remap current designated flood zones in Lemmon Valley – Dwayne Smith, Director, Engineering and Capital Projects Division, Washoe County. **(For Possible Action)**
9. Report on legislative activities, including Bills pending in the 2019 session of the Nevada Legislature that may affect or are of interest to the WRWC / NNWPC – John Rhodes, WRWC / NNWPC Legal Counsel. \*
10. Program Manager's Report - Jim Smitherman. \*
  - a. Report on the status of projects and Work Plan supported by the RWMF;
  - b. Financial Report on the RWMF.
11. Discussion regarding location and possible agenda items for the June 2019 NNWPC meeting, and other future meetings, and possible direction to staff – Jim Smitherman.  
**(For Possible Action)**
12. Commission Comments. \*
13. Staff Comments. \*
14. Public Comments. \* (Three-minute time limit per person.)
15. Adjournment. **(For Possible Action)**

\*Indicates a non-action item

**DRAFT - MINUTES**  
**NORTHERN NEVADA WATER PLANNING COMMISSION**

**Wednesday, April 3, 2019**

The Northern Nevada Water Planning Commission ("NNWPC") held a regular meeting in the Washoe County Commission Chambers, 1001 East Ninth Street, Reno, Nevada and conducted the following business:

The meeting was called to order by Chair DeMartini at 1:32 p.m.

**1. Roll Call and Determination of Presence of a Quorum**

*Voting Members Present:* Michael DeMartini; Jon Combs; Michael Drinkwater; John Flansberg; Bill Hauck; John Enloe; Mickey Hazelwood; John Martini (*present at 1:42 p.m.*); David Solaro; Mervin Wright; John Zimmerman

*Voting Members Absent:* Danielle Henderson

*Non-Voting Members Present:* Thomas Pyeatte

*Non-Voting Members Absent:* Harry Fahnestock, Ron Penrose, Cindy Turiczek, My-Linh Nguyen

*Staff Members Present:* Jim Smitherman; Chris Wessel; John Rhodes, Legal Counsel; and Jennifer Purgitt

**2. Public Comment**

None

**3. Approval of Agenda (For Possible Action)**

COMMISSIONER FLANSBERG MADE A MOTION TO APPROVE THE AGENDA, SECONDED BY COMMISSIONER ZIMMERMAN. THE MOTION CARRIED UNANIMOUSLY WITH TEN (10) COMMISSIONERS PRESENT.

**4. Selection of Chair and Vice Chair for the term of April 2019 to April 2020, and possible direction to staff (For Possible Action)**

COMMISSIONER FLANSBERG MADE A MOTION TO APPOINT COMMISSIONER WRIGHT AS CHAIR AND COMMISSIONER HAUCK AS VICE CHAIR, SECONDED BY COMMISSIONER DRINKWATER. THE MOTION CARRIED UNANIMOUSLY WITH TEN (10) COMMISSIONERS PRESENT.

**5. Approval of Minutes from the February 6, and March 6, 2019 Meetings (For Possible Action)**

COMMISSIONER ZIMMERMAN MADE A MOTION TO APPROVE THE MINUTES, SECONDED BY COMMISSIONER SOLARO. THE MOTION CARRIED UNANIMOUSLY WITH TEN (10) COMMISSIONERS PRESENT.

**6. Review, discussion and possible recommendation to the Western Regional Water Commission ("WRWC") to approve a request by the University of Nevada, Reno ("UNR") to readjust certain task completion dates, and reallocate previously approved funding for fiscal years 2018 - 2019 and 2019 - 2020, to continue the Advanced Water Treatment Technologies Demonstration Project - Jim**

**Smitherman, WRWC Water Resources Program Manager; and Krishna Pagilla, Ph.D., Professor, UNR. (For Possible Action)**

Jim Smitherman, WRWC Water Resources Program Manager, presented information included in the staff report. UNR has made substantial progress to date, including the completion of Tasks 1, 2, 3 and 4, and delivery of draft reports for each task. Because of unforeseen circumstances beyond its control, UNR has requested changes to the Project schedule and budget allocations. UNR has requested that Tasks 5 and 6 of the Project be rescheduled for completion in year 4 to compensate for the unanticipated delay. Funding for Tasks 5 and 6 would be reallocated to year 4. Neither the total dollar amount, nor the completion date for the Project will be changed by approval of the request.

COMMISSIONER ENLOE MADE A MOTION TO FORWARD A RECOMMENDATION TO THE WRWC FOR APPROVAL OF UNR'S REQUEST TO READJUST TASK COMPLETION DATES, AND REALLOCATE FUNDING FOR THE PROJECT, AS DESCRIBED IN THE STAFF REPORT, SECONDED BY COMMISSIONER HAUCK. THE MOTION CARRIED UNANIMOUSLY WITH TEN (10) COMMISSIONERS PRESENT.

**7. Report on 2019 Snow Pack and Water Supply - Bill Hauck, Truckee Meadows Water Authority ("TMWA")**

*(Commissioner Martini present at 1:42 p.m.)*

Commissioner Hauck gave a presentation on the snow pack and Northern Nevada water supply outlook. New records for snow fall were set in February. Basins are significantly above average for snow water content. The supply outlook for Northern Nevada is excellent at this point. Streamflow runoff forecasts are impressive for the Tahoe and Truckee River basins this year.

**8. Report on legislative activities, including Bill Draft Requests and Bills pending in the 2019 session of the Nevada Legislature that may affect or are of interest to the WRWC/NNWPC - John Rhodes, WRWC/NNWPC Legal Counsel**

John Rhodes, WRWC / NNWPC Legal Counsel, provided a report listing BDRs and Bills pending in the 2019 Nevada Legislature that may affect or are of interest to the WRWC and NNWPC. There are 2 BDRs and 28 Bills on the list being tracked. The Legislative Subcommittee will be discussing SB280 and SB250 when they meet this Friday.

**9. Program Manager's Report – Jim Smitherman.**

- a. Report on the status of projects and Work Plan supported by the Regional Water Management Fund ("RWMF");
- b. Financial Report on the RWMF.

Mr. Smitherman presented a brief overview of the staff reports included for this agenda item.

**10. Discussion regarding location and possible agenda items for the May 2019 NNWPC meeting, and other future meetings, and possible direction to staff – Jim Smitherman. (For Possible Action)**

The next regularly scheduled NNWPC meeting date is Wednesday, May 1, 2019. Agenda items will include: reports on ongoing projects and recommendations for contracts or contract amendments for project continuation.

COMMISSIONER FLANSBERG MADE A MOTION TO APPROVE THE MAY 1, 2019, MEETING INCLUDING AGENDA ITEMS AS STATED BY STAFF, SECONDED BY COMMISSIONER MARTINI. THE MOTION CARRIED UNANIMOUSLY WITH ELEVEN (11) COMMISSIONERS PRESENT.

**11. Commission Comments**

Commissioner Flansberg thanked Commissioner DeMartini for his service as Chair and welcomed the new Chair and Vice Chair.

Chair Wright expressed appreciation for the support of the NNWPC and staff.

**12. Staff Comments**

Mr. Smitherman expressed appreciation for Commissioner DeMartini's service as Chair of the NNWPC. He also welcomed Chair Wright as the first Pyramid Lake Paiute Tribe member to serve as Chair of the NNWPC.

**13. Public Comment**

None

**14. Adjournment (For Possible Action)**

The meeting was adjourned at 2:04 p.m.

Respectfully submitted by Christine Birmingham.

Approved by:

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Mervin Wright, NNWPC Chair

**APPROVED BY COMMISSION IN SESSION ON \_\_\_\_\_, 2019.**



# Northern Nevada Water Planning Commission

## STAFF REPORT

DATE: April 25, 2019

TO: Chair and members, Northern Nevada Water Planning Commission  
("NNWPC")

FROM: Chris Wessel, Water Management Planner  
Theresa Jones, Associate Civil Engineer, City of Reno

SUBJECT: Discussion and possible recommendation to the Western Regional Water Commission ("WRWC") for approval of an Eighth Amendment to the Interlocal Agreement ("IA") with the City of Reno, in an amount not to exceed \$262,500 from the Regional Water Management Fund ("RWMF"), to support the Truckee Meadows Storm Water Quality Management Program for Fiscal Year 2019-2020.

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### **SUMMARY**

The Storm Water Permit Coordinating Committee ("SWPCC"), created by interlocal cooperative agreement in 1990 and led by the City of Reno, is charged with implementing the requirements of the National Pollutant Discharge Elimination System ("NPDES") permit issued jointly to the City of Reno, the City of Sparks, and Washoe County for storm water discharges to the Truckee River and its tributaries. At the request of the WRWC, this program has been funded from the RWMF since 2011, in an annual amount not to exceed \$262,500.

Theresa Jones, Associate Civil Engineer for the City of Reno, will be available to answer questions regarding the Storm Water Quality Management Program and the funding proposal for Fiscal Year 2019-2020.

### **PREVIOUS ACTION**

The WRWC has approved funding to reimburse expenses of the SWPCC and directed staff to include funding in the subsequent WRWC budget. The funding is intended to support the Storm Water Quality Management Program, including SWPCC activities related to the implementation of the water quality and storm water drainage provisions of the Comprehensive Regional Water Management Plan. The IA for funding in an annual amount not to exceed \$262,500 has been extended by amendment each year since 2011.

### **FISCAL IMPACT**

If approved, the fiscal impact to the RWMF will not exceed \$262,500 for Fiscal Year 2019-2020. The Fiscal Year 2019-2020 draft tentative budget recommended by the NNWPC, and approved by the WRWC, includes sufficient budget for this project. Budget authority is located in Fund Group 766, Fund 7066, Account Number 710100, Professional Services, Cost Object WP310303.

### **RECOMMENDATION**

Staff recommends that the NNWPC review the SWPCC annual funding proposal and make a recommendation to the WRWC for approval of an Eighth Amendment to the IA with the City of

Reno, in an amount not to exceed \$262,500, to support the Storm Water Quality Management Program for Fiscal Year 2019-2020.

CW:jp

Attachments: Storm Water Permit Program FY2019-2020 Proposal



**Exhibit A (7)**  
**WESTERN REGIONAL WATER COMMISSION SUPPORTING TRUCKEE MEADOWS  
 STORMWATER QUALITY MANAGEMENT 2019-20**

**1. Stormwater Quality****\$191,770**

The SWPCC continues to implement the stormwater quality monitoring program to meet current requirements of the NPDES Stormwater MS4 permit issued May 29, 2010. The committee implements the 2018 Sampling and Analysis Plan (Balance Hydrologics) with subsequent addenda incorporated. Item One includes a contract with Balance Hydrologics, Inc. for implementation of stormwater sampling during storm events for the water year 2018-19 with the additional task of ambient monitoring activities. Hiring a consultant to assist with various activities that may occur throughout the fiscal year is included in this task along with the continued maintenance of a stream gage on the North Truckee Drain at Big Fish Drive. Task totals identified below do not include the cost sharing agreement with Nevada Department of Transportation (NDOT), whereby the NDOT pays 25% of the contract for activities of which NDOT contributes and benefits from.

**1A. Water Quality Monitoring:**

Balance Hydrologics will provide technical services for Stormwater Quality Monitoring Services, to include storm event captures and automation at tributary sites and outfalls to the Truckee River. Sampling within WY19 is underway and tasks will be completed in FY 18-19. Sampling for WY20 will be started in FY 19-20 and tasks will span the fiscal year.

**Item 1.A: \$135,000****1B. Miscellaneous Stormwater Quality Management Consultant Services:**

This item covers the various tasks that may be required throughout the fiscal year, providing a mechanism to hire a consultant to support items such as review of a new permit and comparison to existing Stormwater Management Program (SWMP), loading model evaluations, facilitation of watershed management activities and collaboration, and assistance with planning and coordinating the next steps of the update to the Watershed Management and Protection Plan for Tributaries to the Truckee River.

**Item 1.B: \$40,000****1C. North Truckee Drain Stream Gage Maintenance:**

The SWPCC intends to renew a Joint Funding Agreement with the United States Geological Survey (USGS) for stream gage maintenance and service on the North Truckee Drain (NTD) near Big Fish Drive. Three locations along the NTD are monitored annually as part of the stormwater monitoring effort.

**Item 1.C: \$11,770****1D. Field supplies/equipment/miscellaneous monitoring:**

The SWPCC has aging field equipment that requires periodic repair and replacement. Additionally, as new sampling locations are added, additional monitoring equipment is required. This task is a placeholder for new equipment and unanticipated replacement needs for the monitoring program. This item also includes staff time for miscellaneous sampling, and analytical fees.

**Item 1.D: \$5,000**

**2. Public Outreach and Technical Guidance** **\$20,730**

The SWPCC continues to implement its public outreach and education requirements related to the Truckee Meadows MS4 permit. Activities include outreach to community groups such as KTMB and OTR, providing education and training to municipal operations and construction inspection staff, SWPPP training to contractors, providing educational materials and other aspects of the Stormwater Program Communications Plan.

**3. Interlocal Coordination and Permitting Support** **\$50,000**

The City of Reno will continue to provide coordination and administrative services, managing various consultant contracts to implement the program for the three partner agencies.

**Total for WRWC Interlocal Agreement \*** **\$262,500**

\* Proposed funding amounts allocated to various task are estimates. The City of Reno reserves the right to move funds between tasks as necessary to accomplish the goals outlined in this scope of work.

# Northern Nevada Water Planning Commission

## STAFF REPORT

**DATE:** April 25, 2019

**TO:** Chair and members, Northern Nevada Water Planning Commission

**FROM:** Chris Wessel, Water Management Planner  
Laine Christman, Resource Economist/Conservation Supervisor, Truckee Meadows Water Authority (“TMWA”)

**SUBJECT:** Discussion and possible recommendation to the Western Regional Water Commission (“WRWC”) for approval of a Fifth Amendment to the Interlocal Agreement (“IA”) with TMWA, in an amount not to exceed \$100,000 from the Regional Water Management Fund (“RWMF”), to support the Water Usage Review Program for Fiscal Year 2019- 2020.

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### **SUMMARY**

TMWA is requesting funding from the RWMF in an amount not to exceed \$100,000, for the continuation of the Water Usage Review Program. In this program, TMWA staff works with customers at their homes and businesses to advise them on how to manage indoor and outdoor water use based on their specific site characteristics. TMWA finds this form of customer education to be highly effective and considers the Water Usage Review Program a success.

Laine Christman, Resource Economist/Conservation Supervisor is available to provide a summary of the 2018-2019 programs and/or answer questions regarding the Fiscal Year 2019-2020 proposal.

### **BACKGROUND**

In 2013, the NNWPC recommended, and the WRWC approved, a two-year IA with TMWA to provide \$65,558 per year, approximately 60 percent funding, for the Water Usage Review Program. Starting in 2015, and annually through 2019, the IA was amended and extended for one year terms, in amounts not to exceed \$100,000 per fiscal year, to fund approximately 40 to 60 percent of TMWA’s expenses for an expanded program to cover its larger customer base created by TMWA’s acquisition of Washoe County’s municipal water system. The NNWPC, and its predecessor entity, the Regional Water Planning Commission, have supported the Water Usage Review Program since the program's inception in 2003, and the WRWC has provided partial funding since 2008.

### **FISCAL IMPACT**

If Approved, the fiscal impact to the RWMF will not exceed \$100,000 for in Fiscal Year 2019-2020. The Fiscal Year 2019-2020 draft tentative budget recommended by the NNWPC, and approved by the WRWC, includes \$100,000 for this project. Budget authority is located in Fund

Group 766, Fund 7066, Account Number 710100, Professional Services, Cost Object WP310101.

**RECOMMENDATION**

Staff recommends that the NNWPC consider the report and funding request, and provide a recommendation to the WRWC for approval of an Eighth Amendment to the IA with TMWA, in an amount not to exceed \$100,000, to support the Water Usage Review Program for Fiscal Year 2019-2020.

CW:jp

Attachment: Water Usage Review Program Performance and Fiscal Year 2019-2020 Budget Proposal



# Memorandum

*Quality. Delivered.*

1355 Capital Blvd. • P.O. Box 30013 • Reno, NV 89520-3013  
P 775.834.8080 • F 775.834.8003

TO: Jim Smitherman, Northern Nevada Water Planning Commission  
FROM: Laine Christman, Resource Economist/Conservation Supervisor  
DATE: 4/5/2019  
SUBJECT: Water Usage Review Program Performance and Budget Proposal – FY2020

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### *Summary*

TMWA’s Water Usage Review Program is an integral part of its Conservation Plan. The Program helps customers determine the cause of higher-than-normal water bills and find solutions to lower their water usage as well as detect water leaks in their system. Under the Program, conservation staff conduct water usage reviews at customers’ service locations. Currently, TMWA has two permanent full-time staff members to handle water usage reviews. These staff members are very experienced and certified EPA WaterSense irrigation auditors.

In 2018, TMWA staff conducted 2,410 water usage reviews. This total is up 26% from 2017. In the included budget proposal for the Program the total estimated costs for FY 2020 are \$234,690. This estimate includes salaries and benefits, transportation expenses, and administrative costs. TMWA is requesting Western Regional Water Commission contribute \$100,000 from the Regional Water Management Fund to fund a portion of the Program for FY2020. This request is approximately 43% of the Program’s total estimated cost.

The Program’s scope of work includes the following goals and actions:

### *Conservation Objectives*

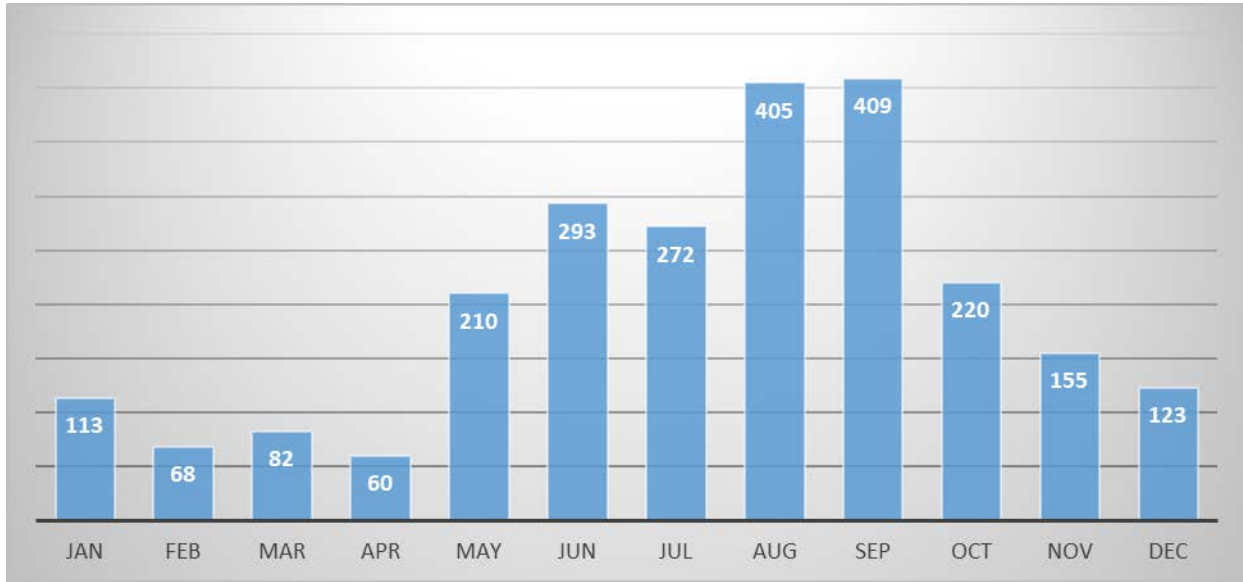
- Leak detection of customers’ water services
- Aid customers in understanding water usage patterns on their premises
- Educate customers on water efficient measures with property-specific recommendations

### *Program Administration*

- Analyze historical water usage, determine usage patterns, and identify any ongoing leak signatures
- Test water meters for accuracy
- Provide consultations regarding efficient water usage in and around a customer’s property
- Provide water-saving devices (such as low-flow shower heads, hose nozzles, deep root feeders, hose timers, dye tablets, etc.) as needed
- Provide ongoing training for auditing staff

Below is the number of reviews conducted under the Program as well as an itemized budget proposal for FY 2020.

**Figure 1: Water Usage Reviews Completed in Calendar Year 2018**



**Table 1. Program Budget Proposal for Fiscal Year 2020**

<b>Cost Item</b>	<b>Estimated Cost</b>
Salaries and Benefits <sup>1</sup>	\$ 215,506.00
Transportation Expenses <sup>2</sup>	\$ 14,183.85
Administrative <sup>3</sup>	\$ 5,000.00
<b>Total Estimated Cost</b>	<b>\$ 234,689.85</b>
<b>Requested Funding for FY2020</b>	<b>\$ 100,000.00</b>

(1) Assumes two full-time auditors at 26.25/hr (fully costed) and two part-time auditors at \$17/hr.

(2) Based on 2017 data of auditor vehicle mileage at \$0.55/mile.

(3) Includes equipment, uniform apparel, and printing supplies.

# Northern Nevada Water Planning Commission

## STAFF REPORT

**DATE:** April 25, 2019  
**TO:** Chair and members, Northern Nevada Water Planning Commission  
**FROM:** Chris Wessel, Water Management Planner  
**SUBJECT:** Discussion and possible approval of a Fourth Amendment to the Interlocal Agreement ("IA") with the Desert Research Institute ("DRI"), in an amount not to exceed \$20,000 from the Regional Water Management Fund ("RWMF"), to support the Regional Precipitation Monitoring Project for Fiscal Year 2019-2020; if approved, authorize the WRWC Water Resources Program Manager to execute the Amendment.

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### **SUMMARY**

Washoe County, and subsequently the Western Regional Water Commission ("WRWC"), has sponsored a precipitation gauge monitoring program over the last 19+ years, as part of regional water resource planning efforts. After the consolidation of the County's municipal water utility with the Truckee Meadows Water Authority, the WRWC assumed responsibility for the program in 2016 as part of its regional water planning statutory mandate, recognizing the importance and value of precipitation data for regional water planning.

The program involves data collection and maintenance of 77 manual gauges (the "Network") where measurements are collected. The gauges are serviced twice a year. The intended use of the precipitation data is to validate existing perennial groundwater recharge estimates within the targeted hydrobasins. The Network data has recently been compiled electronically and provides a unique opportunity to analyze the quality of Network precipitation records and use the data to validate spatial estimates of precipitation, while potentially improving existing groundwater recharge estimates. At staff's request, DRI has submitted the attached proposal to provide for DRI personnel assistance in continuing the monitoring program and maintaining the Network, at a cost not to exceed \$20,000 for Fiscal Year 2019-2020.

Greg McCurdy, DRI Associate Research Scientist Climatology, will be available to answer questions regarding the program.

### **FISCAL IMPACT**

If approved, the fiscal impact to the RWMF will not exceed \$20,000 for Fiscal Year 2019-2020. The Fiscal Year 2019-2020 draft tentative budget recommended by the NNWPC, and approved by the WRWC, includes sufficient budget for this project. Budget authority is located in Fund Group 766, Fund 7066, Account Number 710100, Professional Services, Cost Object WP310007.

### **RECOMMENDATION**

Staff recommends that the NNWPC approve a Fourth Amendment to the IA with DRI, in an amount not to exceed \$20,000, to support the Regional Precipitation Monitoring Project for Fiscal Year 2019-2020, and authorize the WRWC Water Resources Program Manager to execute a Fourth Amendment for that purpose.

CW:jp

Attachment: Washoe County Rain Gauge Network: Continued Operation Plan and Historical Data Analysis for 2019-2020





04/10/2019

**Washoe County Rain Gauge Network: Continued Operation Plan and Historical Data  
Analysis for 2019-2020**

Personnel: Dan McEvoy, Greg McCurdy, and Pamela Lacy

**Purpose**

Washoe County installed and maintained a storage rain gauge network (Network) of over 80 gauges with records that date back to the late 1990s. Following the recent merger of the Washoe County water utility with Truckee Meadows Water Authority, the Network program responsibilities have been assumed by the Western Regional Water Commission (WRWC). The program involves data collection and maintenance of manual gauges where measurements are collected and gauges are serviced twice a year. The intended use of the precipitation data was to validate and potentially improve existing groundwater recharge estimates that are commonly calculated using Hardman maps or Parameter Regression on Independent Slopes Model (PRISM; Daly et al. 1994) data. Additionally, Network data could be used to provide improved monitoring of regional water sources and supplies. Precipitation measurements outside of the Network are sparse in this region, especially central and northern Washoe County, and minimal efforts have been put into validating spatial estimates of precipitation. The Network data has recently been compiled electronically and provides a unique opportunity to analyze the quality of Network precipitation records, use the Network data to validate spatial estimates of precipitation, and potentially improve existing groundwater recharge estimates. We are proposing to 1) have Desert Research Institute (DRI) continue assisting in the monitoring and maintenance of the network.

**Scope of Work - Network Monitoring and Maintenance**

DRI has a long history of weather station installation and maintenance and Greg McCurdy has extensive experience in this field and has spent significant time in remote regions of Nevada. DRI will assist WRWC staff in the collection and maintenance of the Network. This partnership between WRWC and DRI staff will help to develop familiarity with the locations of gauges, routes to follow, measurement processes, precipitation record keeping, and gauge maintenance. Fieldwork will be conducted twice a year, once in the Fall and once in the Spring, to the Network to empty gauges, record precipitation measurements, and perform maintenance on all gauges. The proposed work also includes basic post data collection processing to analyze data integrity and develop products for commission and public consumption.

**Cost Estimate**

*Estimated total project cost (07/01/18 – 06/30/19): Not to Exceed \$20,000*

**References**

McEvoy, D. J., Mejia, J. F., Huntington, J. L., 2014: Use of an Observation Network in the Great Basin to Evaluate Gridded Climate Data, *J. Hydrometeorol.*, **15**, 1913-1931.



# Northern Nevada Water Planning Commission

## STAFF REPORT

**DATE:** April 25, 2019  
**TO:** Chair and members, Northern Nevada Water Planning Commission  
**FROM:** Chris Wessel, Water Management Planner  
**SUBJECT:** Discussion and possible approval of a Fifth Amendment to the Interlocal Agreement ("IA") with the Desert Research Institute ("DRI"), in an amount not to exceed \$10,000 from the Regional Water Management Fund ("RWMF"), to support the Washoe Evapotranspiration ("WET") Project for Fiscal Year 2019-2020; if approved, authorize the WRWC Water Resources Program Manager to execute the Amendment.

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### **SUMMARY**

DRI currently provides maintenance and data acquisition for weather stations associated with the WET Project. The attached proposed scope of work, for an amount not to exceed \$10,000 for Fiscal Year 2019-2020, will ensure program continuity for the coming year. The proposal includes maintenance of the seven weather stations associated with the Project within the term frame of the amended IA.

Greg McCurdy, DRI Associate Research Scientist Climatology, will be available to answer questions regarding the program.

### **BACKGROUND**

The Western Regional Water Commission ("WRWC"), as successor to the previous Regional Water Planning Commission, was assigned a 2007 IA with DRI to upgrade and continue the WET Project, a website-based program that reports daily irrigation controller run-times calculated using estimates of local evapotranspiration rates.

Since the inception of the WET Project, the WRWC has sponsored a total of seven sites: Wolf Run Golf Course, Valley Road at DRI, Lazy 5 Regional Park, Wilson Commons Park, North Valleys Regional Park, Cold Springs Park and Mogul Mountain Park. One additional weather station, owned and maintained by the University of Nevada Reno University Farm is also associated with the project.

### **FISCAL IMPACT**

If approved, the fiscal impact to the RWMF will not exceed \$10,000 for Fiscal Year 2019-2020. The Fiscal Year 2019-2020 draft tentative budget recommended by the NNWPC, and approved by the WRWC, includes sufficient budget for this project. Budget authority is located in Fund Group 766, Fund 7066, Account Number 710100, Professional Services, Cost Object WP310102.

### **RECOMMENDATION**

Staff recommends that the NNWPC approve a Fifth Amendment to the IA with DRI, in an amount not to exceed \$10,000, to support the WET Project for Fiscal Year 2019-2020, and authorize the WRWC Water Resources Program Manager to execute a Fifth Amendment for that purpose.

CW:jp

Attachment: DRI 2019-2020 Annual Washoe ET Maintenance Proposal: *Continued Operations of the Washoe Evapotranspiration Project Maintenance mode only*





04/10/2019

Continued Operations of the Washoe Evapotranspiration Project  
Maintenance mode only

Personnel: Greg McCurdy and Pamela Lacy

Summary of Tasks:

- Perform annual E.T. weather station maintenance for:
  - Wolf Run Golf Course
  - Valley Road at DRI
  - Lazy Five Regional Park
  - Wilson Commons Park
  - Mogul Mountain Park
  - Lemmon Valley Regional Park
  - Cold Springs Community Center
- Provide quarterly reports including progress on each task, website visit statistics and feedback from users regarding the usefulness of the website and project.
- Contact and distribute the Washoe E.T. brochure into the community. Contacts included the NV Landscape Association and plant nurseries in the Reno/Sparks area.
- Maintenance of the Washoe E.T. website.

Task schedule:

- Distribute the Washoe E.T. brochure into the community
- Annual maintenance of all Washoe E.T. stations

Cost Estimate:

Estimated total project cost (07/01/19 – 06/30/20): Not to Exceed \$10,000



# Northern Nevada Water Planning Commission

## STAFF REPORT

**DATE:** April 25, 2019

**TO:** Chair and members, Northern Nevada Water Planning Commission (“NNWPC”)

**FROM:** Jim Smitherman, Water Resources Program Manager, Western Regional Water Commission (“WRWC”)

**SUBJECT:** Discussion and possible recommendation to the WRWC for approval of a proposal by the Regional Effluent Management Team (“Team”) for funding, in an amount not to exceed \$75,000 from the Regional Water Management Fund (“RWMF”), to evaluate the feasibility of discharging Reno Stead Water Reclamation Facility (“RSWRF”) effluent to Long Valley Creek.

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### **SUMMARY**

The 2016-2035 Regional Water Management Plan, Section 9.3.3, states that expansion of the RSWRF capacity from 2 to 4 million gallons per day (“MGD”), average annual flow, will require the development of new reuse or disposal options to utilize the increased treatment capacity. Section 9.3.3 also identifies a small number of effluent management alternatives for the Stead/Lemmon Valley area, which include expansion of the existing reuse system for irrigation, storage in either or both surface reservoir(s) or underground, and discharge to locations outside Lemmon Valley, such as Long Valley Creek. The City of Reno expects to initiate the RSWRF expansion in the summer of 2019 and finish in 2021, in anticipation of forecasted growth in the Stead/Lemmon Valley area.

After discussing effluent management options, the Team concluded that the feasibility of the Long Valley Creek alternative should be studied because a discharge point outside the Lemmon Valley basin could provide the greatest degree of reliability and flexibility compared to other alternatives. Near-term, in-basin expanded reuse options may be of value by incrementally increasing effluent management capacity, however long-term usefulness may be limited considering the seasonal nature of irrigation reuse and Swan Lake flooding issues. Also, previous cost estimates of facilities and operations associated with discharge to other locations outside Lemmon Valley are higher in comparison to the estimates for Long Valley discharge. In its discussions, the Team acknowledged the ongoing feasibility study concerning the possible future use of Category A+ reclaimed water technology, and emphasized that investigations are at a relatively early stage of a long-term study with no guarantee of a positive outcome.

The following list outlines the proposed tasks related to investigating the feasibility of the Long Valley Creek alternative.

1. Discuss with involved parties, including local and state governments and property owners
2. Develop water balance to estimate the quantity and timing of water to be discharged using:
  - a. 2017 water year (“WY”) as a base case with a daily assessment of effluent discharge/reuse
  - b. Modified WY2017 to “design” rainfall, effluent flows, and modified discharge strategy to Swan Lake
  - c. Discharge strategy for flood conditions on both Long Valley Creek and Swan Lake
3. Identify Long Valley Creek existing conditions and topics of possible concern, including
  - a. Beneficial uses
  - b. Endangered species present
  - c. Flooding issues/concerns
  - d. 303 (d) listings (high risk of pH & DO problems from bio-stimulation)
  - e. Hydrograph/flow patterns
4. Characterize effluent water quality and reliability features with respect to
  - a. National and state toxics rules
  - b. Disinfection
  - c. Nutrients
  - d. Biological oxygen demand, suspended solids, dissolved solids, turbidity
5. Identify and characterize discharge location alternatives
  - a. Develop accurate map of Long Valley Creek and its known tributaries relative to state line and previously proposed pipe route
  - b. Determine land ownership at alternative discharge points and between discharge point and Long Valley Creek
  - c. Discuss with property owners
6. Determine conveyance issues based on water balance forecasts:
  - a. Estimate effluent residence time in pipe when discharging and forecast of water quality change (if any), and mitigation (if any, e.g., in-pipe aeration).
  - b. Procedures to drain the pipe when not in use
  - c. Determine whether first-flush from a dry pipe is of concern, and if so, mitigation measures
7. Identify discharge point facilities
  - a. At minimum, a caged flap valve, rip-rap and energy dissipation features, and secure sampler (small building or vault)
  - b. Holding basin and ancillary facilities for first flush, if necessary
  - c. Power requirements

### **FISCAL IMPACT**

If approved, the fiscal impact to the RWMF will not exceed \$75,000 for Fiscal Year 2019-2020. The Fiscal Year 2019-2020 draft tentative budget recommended by the NNWPC, and approved by the WRWC, includes adequate budget for this project. Budget authority is located in Fund Group 766, Fund 7066, Account Number 710100, Professional Services, Cost Object WP310201.

### **RECOMMENDATION**

Staff recommends that the NNWPC consider the proposal from the Team and provide a recommendation for approval to the WRWC.

JS:jp



# Northern Nevada Water Planning Commission

## STAFF REPORT

**DATE:** April 25, 2019

**TO:** Chair and members, Northern Nevada Water Planning Commission (“NNWPC”)

**FROM:** Jim Smitherman, Water Resources Program Manager, Western Regional Water Commission (“WRWC”)

**SUBJECT:** Presentation, discussion, and possible recommendation to the WRWC for approval of a proposal by Washoe County for funding, in an amount not to exceed \$100,000 from the Regional Water Management Fund (“RWMF”), to support a project to restudy and remap current designated flood zones in Lemmon Valley.

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### **SUMMARY**

Dwayne Smith, Director of Engineering and Capital Projects, Washoe County Community Services Department, will present a proposal and request for funding, not to exceed \$100,000 from the RWMF, to partially fund a project to restudy and remap the FEMA designated flood zones associated with the East and West Lemmon Valley Hydrobasins.

### **FISCAL IMPACT**

If approved, the fiscal impact to the RWMF will not exceed \$100,000 for Fiscal Year 2019-2020. The Fiscal Year 2019-2020 draft tentative budget recommended by the NNWPC, and approved by the WRWC, includes adequate budget for this project. Budget authority is located in Fund Group 766, Fund 7066, Account Number 710100, Professional Services, Cost Object WP310401.

### **RECOMMENDATION**

Staff recommends that the NNWPC consider the report and funding request from Washoe County and provide a recommendation for approval to the WRWC.

JS:jp



# NORTHERN NEVADA WATER PLANNING COMMISSION

## STAFF REPORT

**DATE:** April 25, 2019  
**TO:** Chair and Members, Northern Nevada Water Planning Commission (“NNWPC”)  
**FROM:** John B. Rhodes, Legal Counsel  
**SUBJECT:** Report on legislative activities, including Bills pending in the 2019 session of the Nevada Legislature that may affect or are of interest to the Western Regional Water Commission (“WRWC”) and the NNWPC.

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WRWC Legal Counsel will present a verbal report, and submit a written staff report that lists Bills pending in the 2019 Nevada Legislature, as of April 30, 2019, that may affect or are of interest to the WRWC and the NNWPC.



# Northern Nevada Water Planning Commission

## STAFF REPORT

**DATE:** April 25, 2019  
**TO:** Chairman and Members, Northern Nevada Water Planning Commission  
**FROM:** Jim Smitherman, Water Resources Program Manager  
**SUBJECT:** Program Manager's Report

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Attached are updated reports for items (a) and (b) for your review.

- a) Report on the status of Projects and Work Plan supported by the RWMF; and
- b) Financial Report on the RWMF.



## Status Report of Projects and Work Plan Supported by the Regional Water Management Fund

Funds Ctr/ Project #	Project	Vendor	Orig.PO	Changes	Balance	Percent Complete	Start Date	End Date
WP310002	Acquisition of water rights FY18-19	TRUCKEE MEADOWS WATER AUTHORITY	61,991	0	61,991	0%	7/1/2018	9/30/2019
WP310008	Precipitation"Can"Gauge Monit FY18-19	BOARD OF REGENTS/DESERT RESEARCH	20,000	2,003	17,997	10%	7/1/2018	9/30/2019
WP310102	Washoe ET Program FY 2018-19	BOARD OF REGENTS/DESERT RESEARCH	10,000	182	9,818	2%	7/1/2018	9/30/2019
WP310103	Cloud Seeding FY 2018-19	BOARD OF REGENTS/DESERT RESEARCH	50,000	0	50,000	0%	7/1/2018	9/30/2019
WP310111	Certified Landscape Tech Prgm FY2018-19	NEVADA LANDSCAPE ASSOCIATION	12,500	0	12,500	0%	7/1/2018	9/30/2019
WP310203	Advanced Water Treatment Demo FY2016-19	BOARD OF REGENTS, NSHE, obo UNR	208,466	14,982	193,484	7%	7/1/2016	9/30/2019
WP310204	Bedell Flat RIB	TRUCKEE MEADOWS WATER AUTHORITY	40,000	39,880	120	100%	7/1/2018	9/30/2019
WP310206	Nevada Water Innovation Campus FY17-20	BOARD OF REGENTS, NSHE, obo UNR	75,000	50,000	25,000	67%	7/1/2017	9/30/2020
WP310207	IPR Outreach	DATA INSTINCTS (MARK MILLAN)	125,000	21,263	103,737	17%	4/1/2018	9/30/2018
WP310208	Planning Guidance Document FY19	BOARD OF REGENTS, NSHE, obo UNR	181,110	119,060	62,050	66%	4/1/2018	9/30/2018
WP310303	TM Storm Water Quality Prog FY18/19	RENO, CITY OF	262,500	121,923	140,577	46%	7/1/2018	9/30/2019
WP310305	Watershed MGMT Plan Update FY19-20	RENO, CITY OF	150,000	0	150000	0	1/17/2019	6/30/2020

-- Indicates contracting in progress or project status being updated.

4/25/2019  
 Fund 766  
 Report 400/ZF15

**Financial Report on the  
 Regional Water Management Fund**

Fiscal Year 2019; Period 11

Accounts	Plan Budget	Actual (Revenue & Expenses)	PO Commit (Remaining PO Balance)	Actual + PO	Available (Budget Minus Actual + PO)	Avail%	PreCommit (PO's Requested)	Available (Budget Minus PO Requisitions)	Avail%
State Grants	40,000.00-				40,000.00-	100-		40,000.00-	100-
* INTERGOVERNMENTAL	40,000.00-				40,000.00-	100-		40,000.00-	100-
Interest-Pooled Inv.	24,279.00-	18,671.02-		18,671.02-	5,607.98-	23-		5,607.98-	23-
RGL Pooled Inv.		1,166.40		1,166.40	1,166.40-			1,166.40-	
URGL Pooled Inv.		3,724.60		3,724.60	3,724.60-			3,724.60-	
Water Surcharge 1.5%	1,479,124.00-	1,569,800.20-		1,569,800.20-	90,676.20	6		90,676.20	6
* MISCELLANEOUS	1,503,403.00-	1,583,580.22-		1,583,580.22-	80,177.22	5		80,177.22	5
** REVENUE	1,543,403.00-	1,583,580.22-		1,583,580.22-	40,177.22	3		40,177.22	3
Professional Services	1,686,466.00	593,225.75	754,069.22	1,347,294.97	339,171.03	20	39.98	339,131.05	20
WRWC Staff & Legal	520,920.00	332,256.27	51,000.00	383,256.27	137,663.73	36.52		137,663.73	36.52
Fin Consult Services	8,700.00	8,700.00		8,700.00					
Invest Pool Alloc Ex		792.51		792.51	792.51-			792.51-	
Lobbying Services	1,000.00				1,000.00	100		1,000.00	100
Pmts to O Agencies			61,990.61	61,990.61	61,990.61-			61,990.61-	
Seminars and Meetings	1,000.00	1,447.20		1,447.20	447.20-	45-		447.20-	45-
Advertising	1,000.00	271.00		271.00	729.00	73		729.00	73
Undesignated Budget	20,000.00				20,000.00	100		20,000.00	100
Insurance Premium		3,865.00		3,865.00	3,865.00-			3,865.00-	
Combined Utilities	400.00	333.30		333.30	66.70	17		66.70	17
Travel	1,000.00				1,000.00	100		1,000.00	100
Overhead	95,080.00	37,234.72		37,234.72	57,845.28	262.04		57,845.28	262.04
** EXPENDITURES	2,335,566.00	978,125.75	867,059.83	1,845,185.58	490,380.42	21	39.98	490,340.44	21
<b>*** Total</b>	<b>792,163.00</b>	<b>605,454.47-</b>	<b>867,059.83</b>	<b>261,605.36</b>	<b>530,557.64</b>	<b>67-</b>	<b>39.98</b>	<b>530,517.66</b>	<b>67-</b>