### NORTHERN NEVADA WATER PLANNING COMMISSION AGENDA

Wednesday, August 6, 2014 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 "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, or delayed for discussion at any time. Arrive at the meeting at the posted time to hear item(s) of interest.
- Supporting material provided to the Commission for the items on the agenda is available to members of the
  public at the Northern Nevada Water Planning Commission ("NNWPC") offices, 4930 Energy Way, Reno, NV,
  from June Davis, Administrative Secretary, (775) 954-4665, and on the NNWPC website at <a href="http://www.nnwpc.us">http://www.nnwpc.us</a>
- 5. In accordance with NRS 241.020, this agenda closes three working days prior to the meeting. 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 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), Sparks Justice Court (1675 East Prater Way), Sun Valley GID (5000 Sun Valley Blvd.), TMWA (1355 Capital Blvd.), Washoe County Administration Building (1001 E. 9th Street), Second Judicial District Court/Courthouse (75 Court Street), Washoe County Central Library (301 South Center St.), Washoe County Community Services Department (4930 Energy Way), Galena Market (19990 Thomas Creek Rd.), Galena High School (3600 Butch Cassidy Way), South Valleys Library (15650A Wedge Parkway), the NNWPC website: <a href="http://www.nnwpc.us">http://www.nnwpc.us</a> and the State of Nevada Website: <a href="http://notice.nv.gov">http://notice.nv.gov</a>
- 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 June 4, 2014, meeting. (For Possible Action)
- Presentation of a Resolution of Appreciation to Terri Svetich in recognition of her exemplary contributions to the Northern Nevada Water Planning Commission ("NNWPC") - Michael Drinkwater, Chairman. (For Possible Action)
- 6. Report by the Desert Research Institute ("DRI") on its Cloud Seeding Operations for the Truckee River and Lake Tahoe Basins for the past water year; discussion and possible recommendation to the Western Regional Water Commission ("WRWC") for funding in an amount not to exceed \$100,000 from the Regional Water Management Fund ("RWMF") to support similar Cloud Seeding Operations for the upcoming water year Jeff Tilley, PhD, DRI. (For Possible Action)

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- 7. Discussion regarding the proposal by The Nature Conservancy ("TNC") for "Optimizing Restoration Investments in the Truckee [River] Watershed", and possible recommendation to the WRWC to approve funding for the project not to exceed \$58,075 from the RWMF for fiscal years 2014-2015 and 2015-2016 Mickey Hazelwood, TNC. (For Possible Action)
- 8. Report and discussion concerning the potential effect of the pending consolidation of public water purveyors on the NNWPC and the WRWC John Rhodes, NNWPC / WRWC Legal Counsel. \*
- Discussion and possible recommendation to the WRWC to approve a Third Amendment to the Agreement for Legal Services for the WRWC and the NNWPC, to extend the Agreement through October 2017 on the same terms and conditions
  – Jim Smitherman, NNWPC / WRWC Water Resources Program Manager. (For Possible Action)
- 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;
  - c. Report on the Truckee Meadows Regional Planning Agency ("TMRPA") parcel-based population and employment modeling project; and,
  - d. Informational report from the NNWPC representative on the TMWA Standing Advisory Committee ("TMWA SAC").
- 11. Discussion regarding possible agenda items for the September 3, 2014, 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)

<sup>\*</sup>Indicates a non-action item

### MINUTES NORTHERN NEVADA WATER PLANNING COMMISSION

#### Wednesday, June 4, 2014, 1:30 p.m.

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

The meeting was called to order by Chairman Drinkwater at 1:30 p.m.

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

Voting Members Present: Michael Drinkwater, Darrin Price, Michael DeMartini, John Erwin, John Flansberg, Mickey Hazelwood, Danielle Henderson, and Jerry Schumacher.

Voting Members Absent: George Ball, Norman Harry, Neil Krutz, and David Solaro.

Non-Voting Members Present: Kim Davis.

Non-Voting Members Absent: Chris Anderson, Harry Fahnestock, My-Linh Nguyen, and Edmund Quaglieri.

Staff Members Present: Jim Smitherman; Chris Wessel; June Davis; and John Rhodes, Legal Counsel.

#### 2. Public Comment

None

#### 3. Approval of the Agenda (For Possible Action)

COMMISSIONER FLANSBERG MADE A MOTION TO APPROVE THE AGENDA, SECONDED BY COMMISSIONER PRICE. THE MOTION CARRIED UNANIMOUSLY WITH EIGHT (8) MEMBERS PRESENT.

#### 4. Approval of the Minutes from the May 7, 2014, Meeting (For Possible Action)

COMMISSIONER FLANSBERG MADE A MOTION TO APPROVE THE MAY 7, 2014, MINUTES, SECONDED BY COMMISSIONER PRICE. THE MOTION CARRIED UNANIMOUSLY WITH EIGHT (8) MEMBERS PRESENT.

5. Review and possible approval of the Western Regional Water Commission ("WRWC") Routine Operating Budget for non-staff services for Fiscal Year 2014 – 2015, and possible direction to staff - Jim Smitherman, WRWC/NNWPC Water Resources Program Manager. (For Possible Action)

Mr. Smitherman reported that the WRWC did approve the tentative budget as recommended by the NNWPC with no changes. Mr. Smitherman stated the Routine Operating Budget for non-staff services is now before the NNWPC for approval so that he is able to authorize the expenditures listed on that budget without bringing back individual items on the NNWPC agenda.

COMMISSIONER PRICE MADE A MOTION TO APPROVE, SECONDED BY COMMISSIONER FLANSBERG.

Commissioner Erwin asked why this action is required if the WRWC has already given authorization to the Program Manager in Resolution No. 3. John Rhodes, Legal Counsel, stated the Resolution authorizes the Program Manager to enter into contracts up to \$25,000 with approval by the NNWPC.

#### THE MOTION CARRIED UNANIMOUSLY WITH EIGHT (8) MEMBERS PRESENT.

6. Discussion regarding Washoe Evapotranspiration Project funding from the Regional Water Management Fund ("RWMF") for Fiscal Year 2014 – 2015: A) possible recommendation to the WRWC to approve a First Amendment to the Interlocal Agreement with the Desert Research Institute ("DRI") to add \$29,050 in funding for upgrades and installation of weather stations; and, B) authorize the expenditure by staff of up to \$10,950 for services provided by other vendors for work related to the installation of weather stations – Chris Wessel, WRWC/NNWPC Water Management Planner. (For Possible Action)

Mr. Wessel stated the pending program enhancements have been discussed in previous meetings in associate with the annual budget. Mr. Wessel stated \$40,000 was approved in the annual budget for upgrades.

Commissioner Flansberg requested confirmation that this is the \$40,000 that the NNWPC recommended to the WRWC for approval and this action is an administrative matter regarding how that \$40,000 is going to be split between the two portions of the work. Mr. Wessel responded that is correct.

COMMISSIONER FLANSBERG MADE A MOTION TO APPROVE, SECONDED BY COMMISSIONER ERWIN. THE MOTION CARRIED UNANIMOUSLY WITH EIGHT (8) MEMBERS PRESENT.

7. Review, discussion and possible approval of a proposal from the Desert Research Institute ("DRI") for supplementary precipitation gauges to quantify cloud seeding results in the Lake Tahoe and Truckee River basins; and, if approved, possible direction to staff to execute an Interlocal Agreement with DRI for phase one of the project in an amount not to exceed \$25,000 from the RWMF for Fiscal Year 2014 – 2015 – Chris Wessel. (For Possible Action)

Mr. Wessel stated this project has a multi-phase approach and staff is seeking approval to install a portion of the rain gauges this year for the first phase. Mr. Wessel reviewed the two project phases proposed in Budget A and Budget B, which are included in the meeting packet. Budget A is for the purchase and installation of two new rain gauges. Budget B is for refurbishing and installing the four rain gauges already owned by Washoe County.

Commissioner Price asked if easements from the property owners where the rain gauges will be installed had been secured. Mr. Wessel responded he does not know where DRI will place the rain gauges.

Commissioner Price questioned the need for the money right now if they are still in the planning process and do not know where the rain gauges will be installed. Mr. Wessel stated they are hoping to install the gauges by the end of the summer. Commissioner Flansberg asked what the overall plan is for the total number of rain gauge sites. Mr. Wessel stated they plan to install a total of six rain gauges. Mr. Wessel explained that if it is determined that the four existing gauges will not be able to be refurbished in time for installation this year, they will purchase two new gauges to be installation this year and save the four existing gauges for installation next year. Mr. Wessel stated this is a two-phase project with one phase being done this year and one phase next year.

Commissioner Price asked if there would be any detriment in waiting to approve this until there is information on what it will take to refurbish the four existing rain gauges. Mr. Wessel stated the detriment would be that they may not get any rain gauges installed this year. Mr. Wessel

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explained that staff would evaluate which proposed budget would be better for the first phase and that either way, both of the proposed budgets would eventually be required in order to accomplish the goal.

Commissioner Price expressed concern that the money is being requested at this time with so many unanswered questions with regard to the number of gauges, where they will be installed, and what it will take to refurbish the existing gauges. Mr. Wessel stated that staff is asking for approval to enter into the contracts at the appropriate time. If staff does not feel it is appropriate or the timing or the proposals are not right, that will be an administrative matter for staff to resolve. Mr. Wessel stated if the Commission would like more information before approving, staff can have Mr. Tilley, DRI, come back and discuss it further.

Commissioner Price stated he would be more comfortable approving this with assurances from staff. Mr. Smitherman stated Mr. Tilley would be able to answer some of the questions and concerns expressed but he was not available to attend the meeting today. Mr. Smitherman stated Mr. Tilley has said they are preparing to do the seeding program for next year and if we want to get a couple of gauges deployed this year, the money needs to be made available during the summer. Mr. Smitherman explained the original proposal, requested by the NNWPC, was for three phases with two new gauges installed each year over three years at \$25,000 per year for a total of \$75,000. Mr. Smitherman stated he and Mr. Wessel suggested the possibility of saving money by refurbishing the four existing gauges. Mr. Smitherman clarified that staff is asking for the discretion to evaluate the existing gauges to determine if they are usable and able to be refurbished in a timely fashion.

Chairman Drinkwater expressed concerned regarding the possibility of approving the budget option to refurbish the existing gauges only to discover that they are not useable and ending up without enough money to go to the budget option to purchase two new gauges. Mr. Wessel stated that is part of the discretion that staff will take into consideration. Mr. Wessel stated he will retrieve the existing gauges, DRI will assess them, and staff would proceed from there to enter into the contract that works best for the project.

Chairman Drinkwater asked about what would happen if the existing gauges are not able to be used. Mr. Wessel stated they would then go forward with the phase to purchase and install two new gauges this year and two more in each of the following two years. Mr. Wessel stated it would be a worthwhile effort to spend a little bit of staff's time to retrieve the existing gauges and find out whether they are useable. Mr. Wessel stated if they are found to not be useable, it would not cost anything because no work would be done on them.

Chairman Drinkwater stated he would support funding a modest investment for the effort to recover and evaluate the existing gauges and then have a discussion with better data, knowing whether or not the four existing gauges can be fixed. Mr. Wessel replied that in that case, he would suggest approving Budget A to purchase and install two new gauges this year and come back with an evaluation of the four existing gauges.

Commissioner Schumacher asked about possible liability issues related to the project. Mr. Rhodes stated DRI would enter into an agreement with the land owners and under our agreement with DRI, they are required to hold us harmless.

COMMISSIONER DeMARTINI MADE A MOTION TO RECOMMEND APPROVAL FOR BOTH BUDGET A AND BUDGET B, WITH THE CONDITION THAT STAFF COMES BACK WITH INFORMATION REGARDING WHETHER BUDGET B WILL BE VIABLE OR NOT.

Mr. Wessel clarified this action needs to be either Budget A or Budget B because there is not money in the budget this year to do both phases. Mr. Wessel stated if the \$25,000 expenditure is approved, staff will evaluate which phase can be done this year and go forward with that.

COMMISSIONER DeMARTINI MODIFIED THE MOTION TO APPROVE THE \$25,000 AS REQUESTED BY STAFF, WITH DIRECTION TO STAFF TO USE THEIR JUDGMENT TO DETERMINE WHETHER BUDGET A OR BUDGET B IS APPROPRIATE, SECONDED BY COMMISSIONER ERWIN. THE MOTION CARRIED WITH SIX (6) IN FAVOR AND TWO (2) OPPOSITIONS BY COMMISSIONERS DRINKWATER AND SCHUMACHER.

## 8. Report and discussion concerning RWMF revenue and expenditure planning for future fiscal years and possible direction to staff - Jim Smitherman. (For Possible Action)

Mr. Smitherman stated the purpose for this item is to provide a brief report on the revenue and expenditure projections staff has been working on beyond the coming fiscal year. Mr. Smitherman stated the budget has included expenses since 2008 that exceed the annual revenue and every year a decrease in cash reserves is approved. Mr. Smitherman stated those cash reserves are expected to be depleted to the minimum cash balance allowed by policy at the end of fiscal year 2014-2015. Mr. Smitherman reviewed information from the Five Year Cash Flow Summary Table included in the meeting packet.

Commissioner Price asked for confirmation that the Regional Water Management Plan ("RWMP") is required by law. Mr. Smitherman responded that is correct.

Commissioner Price asked if any of the other items in the Summary Table are required by law. Mr. Smitherman responded no and stated they are to implement sections of the RWMP. Mr. Rhodes stated the preparation of the RWMP is required by statute and the other items need to be in furtherance of the RWMP as adopted, and toward the implementation and administration of the RWMP.

Commissioner Price asked what would happen to the Storm Water Plan if this Commission did not continue to fund it. Mr. Smitherman stated the program would fall back to the City of Reno, the City of Sparks, and Washoe County to fund.

Commissioner Price asked what others could potentially fall back to the entities to fund. Mr. Smitherman stated the Commission cost shares the Water Usage Review Program with Truckee Meadows Water Authority ("TMWA") so they would either have to scale back the program or fund it themselves. Mr. Smitherman stated the Commission has been funding the cloud seeding program at \$100,000 a year so that would either be scaled back or it would fall to other entities to fund. Mr. Smitherman stated another category would be water quality standards and total maximum daily load and that body of work would probably fall back to the wastewater service providers.

Commissioner Price asked for confirmation that the 2.7 million for the water rights purchase is phased. Mr. Smitherman confirmed it is not obligated for one year and it will roll over year by year until the balance is expended or more is added to the agreement.

Commissioner Price asked what would happen if the balance goes below the minimum \$300,000 cash reserve. Mr. Smitherman stated the cash reserve amount is a WRWC policy and is a self-imposed safety net. Mr. Smitherman stated if it looked like they were going to go below that amount, he could try going back to the WRWC to request that the requirement be relaxed.

Commissioner Price asked if staff is suggesting scaling back some of the ancillary programs now. Mr. Smitherman stated he does not see the need to scale back now. Mr. Smitherman

suggested moving through the RWMP update process and looking at what priorities come out of that, then start making priority decisions.

Commissioner Erwin asked Mr. Smitherman to remind the audience what the source of revenue is that comes to the WRWC. Mr. Smitherman stated the revenue is a 1.5 percent surcharge on all retail water bills.

Commissioner Erwin asked who those retail water purveyors are. Mr. Smitherman stated the public water purveyors are TMWA, Washoe County Community Services Department, Sun Valley General Improvement District ("SVGID"), and South Truckee Meadows General Improvement District ("STMGID"). Mr. Smitherman stated there are also a handful of smaller privately owned purveyors.

#### 9. 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
- C. Report on the Truckee Meadows Regional Planning Agency ("TMRPA") parcelbased population and employment modeling project
- D. Report on the pending consolidation of the South Truckee Meadows General Improvement District, Truckee Meadows Water Authority and Washoe County Water Utility
- E. Informational report from the NNWPC representative on the TMWA Standing Advisory Committee ("TMWA SAC")

Mr. Smitherman stated there is nothing out of the ordinary in the Program Manager's Report and offered to answer any questions. There were no questions from the Commissioners.

## 10. Discussion regarding possible agenda items for the July 2, 2014, NNWPC meeting, and other future meetings, and possible direction to staff – Jim Smitherman. (For Possible Action)

COMMISSIONER ERWIN MADE A MOTION TO CANCEL THE JULY 2, 2014, NNWPC MEETING, SECONDED BY COMMISSIONER PRICE. THE MOTION CARRIED UNANIMOUSLY WITH EIGHT (8) MEMBERS PRESENT.

Mr. Smitherman stated the next NNWPC meeting will be August 6, 2014.

Commissioner Schumacher requested a future agenda item to discuss the effect of the consolidation of STMGID, TMWA, and Washoe County Water Utility and its impact on this Commission and the WRWC. Mr. Smitherman stated the WRWC requested that Legal Counsel bring back a report to their September meeting on that topic. Mr. Smitherman suggested that when that report is prepared it can be brought to the NNWPC as well.

Commissioner Schumacher also requested an update on the status of the water system for Old Washoe Estates and stated they have expressed a desire to buy their own water system and not be part of the consolidation.

Commissioner Erwin stated both of the topics mentioned by Commissioner Schumacher have been brought to the attention of the merger activity teams.

#### 11. Commission Comments

Commissioner Flansberg stated Terri Svetich will be retiring from the City of Reno on June 26, 2014, and that flyers were distributed to the Commission members for a retirement celebration in her honor. Commissioner Flansberg expressed appreciation for Ms. Svetich for her years of service and dedicated leadership.

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Commissioner Price agreed with Commissioner Flansberg's comments and stated Ms. Svetich will be missed. Commissioner Price asked if staff is preparing a plaque or certificate for Ms. Svetich. Mr. Smitherman stated staff will provide whatever the Commission would like as recognition for Ms. Svetich.

Mr. Rhodes stated that no action can be taken on this under Commission Comments and suggested re-opening the future agenda items portion of the meeting to address this.

#### Chairman Drinkwater reopened Agenda Item 10.

Commissioner Price requested a future agenda item for recognition in appreciation of Terri Svetich for her service to this Commission.

#### 12. Staff Comments

Mr. Smitherman also agreed with the comments regarding Ms. Svetich's retirement and stated that she will be missed.

Mr. Wessel expressed appreciation for Ms. Svetich and stated she has been extremely fundamental in the success of the storm water group.

#### 13. Public Comment

Ginger Pierce expressed concern regarding the lack of public awareness about the consolidation of water purveyors.

Mike Spray expressed an interest in finding out how to get more information on the acquisition of water in Old Washoe Estates.

#### 14. Adjournment

Respectfully submitted by Christine Birmingham.

COMMISSIONER PRICE MADE A MOTION TO ADJOURN AT 2:16 PM, SECONDED BY CHAIRMAN DRINKWATER. THE MOTION CARRIED UNANIMOUSLY WITH EIGHT (8) MEMBERS PRESENT.

Approved by:		
Michael Drinkwater, Chairman	-	

APPROVED BY COMMISSION IN SESSION ON \_\_\_\_\_\_, 2014.

### NORTHERN NEVADA WATER PLANNING COMMISSION

# RESOLUTION NO. 14-01 IN SUPPORT OF RECOGNIZING Terri Svetich's CONTRIBUTION TO REGIONAL WATER MANAGEMENT IN THE TRUCKEE MEADOWS

- WHEREAS, *Terri Svetich* served the community in various and progressively more responsible professional engineering positions for the length of her career in public service and has attained the status of retired public employee; and
- WHEREAS, *Terri* has worked closely with the Northern Nevada Water Planning Commission since its creation in 2008, and its predecessor, the Regional Water Planning Commission, in prior years; and
- WHEREAS, *Terri* has been an exemplary leader in developing and implementing numerous programs and activities to protect and enhance the water quality of Truckee River; and
- WHEREAS, her desire to attain full understanding of Truckee River water quality using state-of-thescience techniques will ensure that the Commission and other policy-makers are well informed; and
- WHEREAS, the staff and members of the Northern Nevada Water Planning Commission have enjoyed working with *Terri* due to her thoughtful and pleasant temperament, her knowledge and experience in water and environmental engineering; and
- WHEREAS, *Terri* has demonstrated the highest standards of professional conduct, carrying out her duties with integrity and dedication benefiting the citizens of the Truckee River watershed, the Truckee Meadows and the Northern Nevada Water Planning Commission; and
- WHEREAS, the Northern Nevada Water Planning Commission understands that retirement really means working in a different capacity and looks forward to seeing *Terri* again soon in such different capacity; and
- WHEREAS, recognition for a job well done is very much deserved by *Terri Svetich*,
- NOW, THEREFORE, BE IT RESOLVED by the Northern Nevada Water Planning Commission that *Terri Svetich* be recognized for her many contributions to this Commission's efforts and,
- BE IT FURTHER RESOLVED that *Terri* accept this resolution in appreciation of her contributions to better water management in the Truckee Meadows and as a reminder of the respect that the Northern Nevada Water Planning Commission has for her.

ADOPTED the 6th day of August, 2014

NORTHERN NEVADA WATER PLANNING COMMISSION

Michael Drinkwater,	Chairman	

#### STAFF REPORT

DATE: July 31, 2014

TO: Chairman and Members, Northern Nevada Water Planning Commission

FROM: Jim Smitherman, Water Resources Program Manager

SUBJECT: Report by the Desert Research Institute ("DRI") on its Cloud Seeding

Operations for the Truckee River and Lake Tahoe Basins for the past water year; discussion and possible recommendation to the Western Regional Water Commission ("WRWC") for funding in an amount not to exceed \$100,000 from the Regional Water Management Fund ("RWMF") to support similar

Cloud Seeding Operations for the upcoming water year

#### **SUMMARY**

Since 2009, DRI has conducted its cloud seeding program for the Truckee River and Lake Tahoe Basins using funds provided by either the Truckee Meadows Water Authority ("TMWA") or the Truckee River Fund, and the RWMF. DRI staff has provided a Proposal and Scope of Work including a budget for \$100,000 (attached) from the RWMF to partially fund and continue cloud seeding operations for water year 2014-2015. Dr. Jeff Tilley of DRI will provide a presentation about the water year 2013-2014 program and proposed operations for the coming year.

The WRWC budget for FY 2014-2015 includes \$132,000 for the cloud seeding program to pay for this proposal in addition to ongoing work under a separate interlocal agreement with DRI for additional precipitation gauges.

#### **BACKGROUND**

Wintertime cloud seeding is focused on enhancing snowfall in mountainous regions to increase the snowpack, resulting in more spring runoff and water supplies in the surrounding areas. The DRI cloud seeding program has been in operation for more than 25 years. DRI estimates that, for the Truckee River Basin, cloud-seeding has boosted water in the snowpack by an average of 18,000 acre-feet a year over the last 10 years.

DRI funding cuts in 2008 threatened to eliminate its cloud seeding operations such that outside financing was necessary to continue the program. In response, DRI applied to the Truckee River Fund ("TRF") in 2009 to support the operation of five cloud-seeding generators in the Sierra Nevada. DRI received approval for partial funding from the TRF and the RWMF for the 2009-2010 water year. DRI has applied for and received funding from the TRF, and more recently TMWA, and the RWMF to cover operations in each successive water year.

DRI has convened a cloud seeding program advisory board for the purpose of developing long-term funding alternatives involving entities that benefit from the program.

#### PREVIOUS ACTION

On May 7, 2014, the NNWPC recommended that the WRWC approve the FY 2014-2015 tentative budget, including \$100,000 from the RWMF for the 2014 -2015 cloud seeding program.

#### FISCAL IMPACT

The fiscal impact to the RWMF, should this item be approved, will be \$100,000. Budget authority is located in Fund Group 766, Fund 7066, Account Number 710100, Professional Services, Cost Object WP310100.3.

#### **RECOMMENDATION**

Staff recommends that the NNWPC consider the proposal from DRI and provide a recommendation for approval to the WRWC regarding the funding request for the 2014-2015 cloud seeding program.

JS:jd

Attachment: Proposal and Scope of Work

#### **Proposal and Scope of Work**

#### **Cloud Seeding Project for the Tahoe and Truckee Basins for WY2015**

#### **Submitted to**

Mr. Jim Smitherman Water Resources Program Manager Western Regional Water Commission Reno, NV 89502

 $\mathbf{B}\mathbf{y}$ 

Division of Atmospheric Sciences
Desert Research Institute
2215 Raggio Parkway
Reno, NV 89512

**July 2014** 

Project Contact: Dr. Jeffrey Tilley
Director of Weather Modification 775-674-7116
jeff.tilley@dri.edu

#### Introduction

The goal of this project is to enhance snowfall from winter storms and to increase the snowpack of the Tahoe and Truckee Basins through the application of wintertime cloud seeding technology. Cloud seeding will be conducted from 5-ground based generators for the winter 2013-2015 period at a cost of \$300,000. As for WY2014, the assumption is that the cost will be shared by the Truckee Meadows Water Authority (\$200,000) and the Western Regional Water Commission (\$100,000). The enhanced snowfall from cloud seeding is expected to enhance the water supply of the Truckee River System. With a below normal snowpack for the third straight water year and with unusually low snowfall for the winter, the Lake Tahoe Water Level (at Tahoe City) of 6223.9' on 23 July 2014 is over a foot and a half less than was the case at the end of August 2013. This level is despite recent thunderstorm activity which provided a few inch gain in lake level during mid-July. As shown in Figure 1, the water level for late July is, by a considerable margin, the lowest mid-year level at Tahoe City since the current USGS Gage at Tahoe City was put into service during calendar year 2008. For the first time in a number of years, reserve storage reservoirs have been scheduled to be tapped for domestic and agricultural water supplies during the summer of 2014.

A continuation of the cloud seeding effort will help improve water storage supplies for the entire Truckee River system. Results from carefully conducted experiments in the Sierra Nevada and other mountainous regions in the western U. S. have shown that snowfall can be increased by 5-15% annually in the specific basins targeted by cloud seeding operations and DRI's past reports, including from this season, have indicated estimates of approximate 10% overall water augmentation. Past environmental assessments have all indicated that no negative impacts to watersheds are produced by cloud seeding operations.

The primary measureable outcome of the project will be an estimate of the enhancement in snow water computed for each seeded storm period, and for the entire winter season, based on the hours of seeding, the amount of seeding material released, the expected increase in precipitation rate, and the average areal coverage of the fallout from each seeding site. Historical research results from ground-based cloud seeding projects have documented the hourly increases in precipitation rate due to seeding to be in the range of a few hundredths to greater than 2 mm per hour. As a conservative estimate of the effect for the Tahoe-Truckee project a value of 0.25 mm per hour will be used in the enhancement estimates. Prior estimates from the DRI state program yielded snow water increases ranging from 8,000 to 30,000 acre-feet, an annual average of just under 15,000 acre-feet. As previously reported, the TMWA/WRWC-sponsored project in WY2014, despite the relatively low number of seeding events, resulted in an estimated snow water increase near that average figure (15000 acre-feet), reflecting improvements in event targeting and forecasting over previous years.

#### **Project location**

The WY2015 proposal focuses on a cloud seeding effort for the Tahoe Basin and the

Truckee River Basin where DRI conducted seeding for the state of Nevada for more than 25 years. Figure 2 shows the location of the project. The red-shaded region approximately encloses the cloud seeding target area for the two basins. The DRI ground-based cloud seeding generator (CSG) sites used in WY2013 are shown as yellow squares. Trace chemical analyses of snow samples from the northern Carson Range in 2004 and 2005 showed that 34-52% of the samples contained enhanced concentrations of silver (Huggins et al, 2006), indicative of snow frequently being created by cloud seeding with AgI.

#### **Project description**

Although the project is being funded by two separate sponsors, the work in each phase is the same. The project budget indicates how the funding will be partitioned between the Truckee Meadows Water Authority (TMWA) and the Western Regional Water Commission (WRWC).

The project design and method of operation will be the same as those used for the project conducted in WY2014. Seeding will be conducted from a line of five ground-based CSGs positioned on, or a few miles upwind of, the main Sierra Nevada crest to the west of Lake Tahoe (Fig. 1). The generators have been positioned to take advantage of the generally southwest wind directions in winter storms in the Tahoe area, and are remotely activated by DRI staff when the proper weather and cloud conditions for seeding have been verified.

Ground-based cloud seeding is based on the following sequence of events. The seeding material is silver iodide (AgI). The seeding "generators" burn a solution containing AgI dissolved in acetone. The burning process produces a "smoke" of microscopic AgI particles (about 0.0001 mm is size) that are transported downwind and dispersed into clouds over the mountains. Vertical dispersion up to at least 2000 feet above the surface is produced by the turbulence created by wind moving over the uneven terrain. In the presence of cloud droplets existing at temperatures below -5° C the silver iodide particles act as ice-forming nuclei and enhance the ice particle concentration in the natural clouds. Once initiated by silver iodide the ice particles grow in size and mass as they move downwind and begin falling to the surface when they have sufficient mass to overcome the upward motion in the clouds. In the time frame of 20 to 30 minutes snowfall within a seeding plume can reach the surface in and around the Tahoe Basin. This "chain-of-events" in the cloud seeding process has been verified by numerous detailed experiments conducted in the Sierra Nevada and other mountainous regions of the western U.S. (Huggins, 2009).

#### Modeling in support of cloud seeding operations

Output from high-resolution meteorological modeling will be used to generate forecast trajectories for silver iodide released at the generator locations. This will aid in determining whether conditions are suitable for seeding operations. By considering the transport conditions affecting each generator separately, it will help in deciding when to turn on or off individual generators. Precipitation start and stop times from modeling results can also help in determining the initial timeout setting for the generators. This is the time set for the generators to shut down in

the absence of additional operator instructions and is useful for middle of the night operations and for periods, often during storms, when communications with the generators may be interrupted.

#### **Project Phases**

**Phase 1** of the project will include preparation of the five seeding generators at the locations shown in Figure 1. This will require several weeks. The Barker generator, which is always removed in the spring, will be reinstalled. Phase 1 also includes refilling the seeding solution tanks, refilling propane tanks, and testing all generator components and communications links. Generators will be filled with a minimum of 100 gallons of solution, which allows for about 250 hours of seeding per unit, or 1250 hours of seeding per season.

The meteorological forecasts and observations needed to conduct the project are available either through the DRI Western Regional Climate Center or through public web-based weather data links. These data links are combined in a special cloud seeding weather web page (<a href="http://www.dri.edu/weather-information">http://www.dri.edu/weather-information</a>) that will be revised as needed for the 2014-15 season. The DRI cloud seeding web page was redesigned in 2010 to focus on several Nevada projects including the Tahoe-Truckee project. Water year snow conditions and the progress of seeding operations for the Tahoe area can also be monitored throughout the winter at the following site: <a href="http://www.dri.edu/current-operations">http://www.dri.edu/current-operations</a>.

All operational guidelines, safety restrictions and suspension criteria for the project have previously been developed and can also be found on the DRI cloud seeding web site at: <a href="http://cloudseeding.dri.edu/">http://cloudseeding.dri.edu/</a>. These guidelines specify the cloud conditions, wind and temperature conditions in which a seeding operation can be initiated, and also specify certain hazardous weather conditions (such as potential flooding situations) during which no seeding can be done.

**Phase 2** of the project will involve the actual cloud seeding operations, beginning on 1 November 2013. In Phase 2 the project manager will begin monitoring the weather and making forecasts for seeding events to be expected within three to five days. A second DRI meteorologist a graduate student, and where necessary, the technicians, will assist the project manager to ensure that 24/7 operations can be conducted. As a storm begins to affect the Tahoe region cloud and weather conditions will be monitored more frequently to determine when seeding criteria are satisfied. When one of the meteorologists determines that conditions for conducting a seeding operation are satisfied, seeding will commence using the remotely controlled CSG communication network. The Tahoe communication links are internet-based and a generator can be started from any computer with internet access. Seeding commences when all pre-established seeding criteria are met, and continues until conditions in the storm fail to meet the criteria. Based on prior experience in the Tahoe region, 15 to 30+ seeding events can be expected during the period from early November through late April, the 6-month period proposed for Phase 2 of this project. In WY2014 there were a total of 21 separate seeding events due to lower than normal storm activity; as a result, the seeding operations were extended through much of May with more limited forecasting activity than the regular season. The hope of an El Nino year for WY2015 brings also the hope for greater seeding opportunities, more closer to the long-term average. The end date for Phase 2 could occur

sooner than April 30 if generators run out of solution or other expendable supplies. The DRI technical staff will monitor and maintain seeding generators throughout the operational period.

Phase 3 of the project will begin between 1-15 May (depending on when operations end) and includes the documentation of weather events to verify that seeding occurred during optimal time periods. Each period will be evaluated and a seedability factor will be applied to quantify the fraction of time when seeding was potentially effective. The estimates of snow water enhancement will be made and adjusted by the seedability factor. A report on project operations, including the measureable outcome, will be completed during Phase 3. In addition two to three case studies will be included to document the performance of the high-resolution meteorological model. Phase 3 also includes the removal of seeding units as dictated by some of the Forest Service special use permits. Removal of generators is only possible after snow has melted and the roads to the sites become useable. In some years this can be mid- to late July (as occurred in 2011). Phase 3 will be extended to 30 September 2014 to allow time for all generators to be checked for problems, and repaired as needed either in the field or at the Stead, Nevada Cloud Seeding Facility. Based on the amount of expendable supplies used during the season, a new order for cloud seeding chemicals will be placed to prepare for operations in WY2015.

#### **Principals involved**

The project will be managed by Dr. Jeff Tilley, who assumed the position of Director of Weather Modification at DRI in February 2013. During late April 2014, a new meteorologist was hired to replace the retiring Mr. Arlen Huggins, who remained active in a minor role with the project during WY2014. For WY2015, Mr. Huggins involvement will be limited to emergency coverage if needed and costs to maintain his involvement at this level are, as can be seen in the attached budget, nominal. Field operations and maintenance support will be provided by two technicians that are jointly supported by this and other DRI cloud seeding projects. Dr. Tilley and the new meteorologist will assume a greater role in modeling support to the project for WY2015.

#### Schedule

**Start Phase 1**: 1 Oct 2014. Generator preparations begin.

**End Phase 1**: 1 Nov 2014. All seeding generators are installed, tested and ready for use. Bad weather could produce delays, but testing and other work can be done if units have been installed. All web-based computer products are prepared for use in Phase 2.

**Start Phase 2**: 2 Nov 2014. Cloud seeding occurs as storm conditions dictate. Cloud seeding equipment is monitored and maintained as needed. A log of seeding operations is maintained and the weather data needed to assess operations are archived. The cloud seeding update page is revised on a weekly basis.

**End Phase 2**: 30 April 2015. This is the approximate end of the operational cloud seeding period. If need be, this date will be modified according to whether solution is exhausted or seedable storms persist into May 2015

**Start Phase 3**: 1 May 2015. Weather data are analyzed to assess the seeding operations. Estimates of water augmentation from seeding operations are made. A report on operations is completed by 10 July 2013.

**End Phase 3**: 15 Sept 2015. All seeding equipment has been checked and repaired as needed. The Final Report is submitted in the latter part of September 2015.

#### **Budget discussion:**

The budget for WY2015 is \$300,000. The details of the budget are presented in the spreadsheet in Table 1. As indicated the costs for the WY2014 project are split between TMWA (\$200,000) and the Western Regional Water Commission (\$100,000).

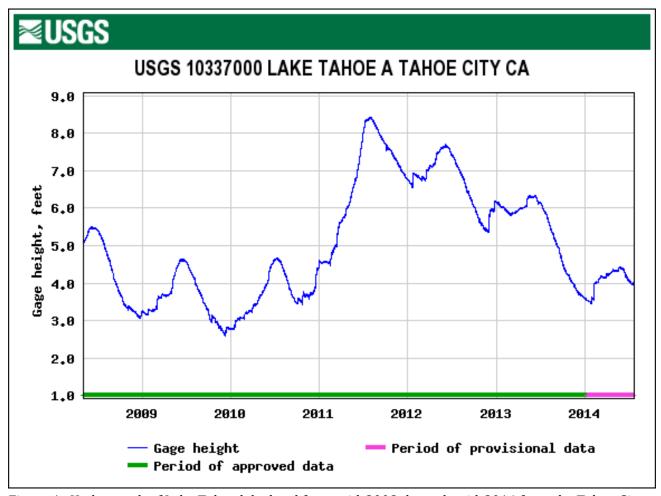


Figure 1. Hydrograph of Lake Tahoe lake level from mid-2008 through mid-2014 from the Tahoe City, CA gage. Data for most of 2014 is provisional. Gage heights are the lake level minus 6220 feet, thus a value of 5' implies a lake level of 6225'.

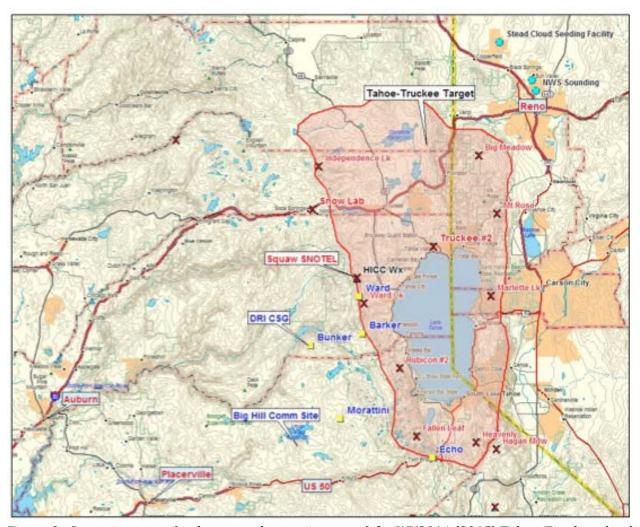


Figure 2. Operations area (and proposed operations area) for WY2014 (2015) Tahoe-Truckee cloud seeding project. Red shaded area denotes the target region; Yellow pins with blue labels represent DRI cloud seeding generators; Red X's denote SNOTEL stations and other geographic features are as labeled.

Table 1. Proposed budget for WY2015 for both the TMWA and WRWC match components.

		TWMA Budget		WRWC Budget		Total Project Budget
	Rate	Units	Amount	Units	Amount	Amount
Labor						
Tilley, J.	\$10,195.00	1.00	\$10,195	1.00	\$10,195	\$20,390
McDonough, F.	\$5,889.00	1.00	\$5,889	1.00	\$5,889	\$11,778
Texeira, K.	\$1,600.00	1.75	\$2,800	1.75	\$2,800	\$5,600
Dean, J.	\$6,663.00	1.75	\$11,660	1.39	\$9,262	\$20,922
Juchtzer, J.	\$4,855.00	1.75	\$8,496	1.39	\$6,748	\$15,244
Huggins, A. (hourly)	\$67.00	4.00	\$268	4.00	\$268	\$536
Total Labor			\$39,308		\$35,162	\$74,470
Fringe Benefits						
Professional	47.30%		\$7,608		\$7,608	\$15,215
Technologist	60.60%		\$12,215		\$9,702	\$21,917
Grad Student	22.00%		\$616		\$616	\$1,232
Hourly	3.60%		\$10		\$10	\$19
Total Fringe		_	\$20,448	-	\$17,935	\$38,383
Total Salary and Fringe Benefits			\$59,756		\$53,097	\$112,853
Operating Costs						
General supplies			\$977		\$435	\$1,412
DRI 4x4 vehicle expenses (per day)	\$100	46	\$4,600	10	\$1,000	\$5,600
Cloud Seeding Solution (100 gallons)	\$5,800	6.9	\$40,020	0.8	\$4,640	\$44,660
Propane and nitrogen	\$940	7	\$6,580		\$0	\$6,580
ATT - Verizon data lines	\$50	36	\$1,800		\$0	\$1,800
Generator Parts	\$500	4.52	\$2,260		\$0	\$2,260
Snowmobile expenses	\$300	3	\$900		\$0	\$900
Shop equipment expenses	\$1,450	1	\$1,450		\$0	\$1,450
Total Operating Costs		-	\$58,587	-	\$6,075	\$64,662
Total Direct Costs			\$118,343		\$59,172	\$177,515
Indirect Costs	69%		\$81,657		\$40,828	\$122,485
TOTAL COST			\$200,000		\$100,000	\$300,000

#### STAFF REPORT

**DATE:** July 31, 2014

**TO:** Chairman and Members, Northern Nevada Water Planning Commission

**FROM:** Mickey Hazelwood, The Nature Conservancy

**SUBJECT:** Discussion regarding the proposal by The Nature Conservancy ("TNC") for "Optimizing

Restoration Investments in the Truckee [River] Watershed" and possible recommendation to the WRWC to approve funding for the project not to exceed \$58,075 from the Regional

Water Management Fund ("RWMF") for fiscal years 2014-2015 and 2015-2016.

#### **SUMMARY**

TNC has successfully applied through the National Fish and Wildlife Foundation for a \$227,700 Desert Terminal Lakes Restoration Fund grant to fund a study entitled "Optimizing Restoration Investments in the Truckee Watershed" (the "Study"). TNC will be applying to the Truckee River Fund on August 7, 2014 for funds to cover 40 percent of an existing TNC Project Manager position over 2 years. Grants from the Truckee River Fund require matching funds which TNC is seeking through the Western Regional Water Commission ("WRWC") from the RWMF in the amount of \$58,075.

Currently, TNC has commitments for \$61,250 from private funding sources in California to cover California TNC staff time on the project. TNC is also talking with the Placer County Utility District about possible funding from that agency. Pre-proposal documents are attached, including project description, funding details and project location map.

#### **BACKGROUND**

At the March 5, 2014 meeting of the Northern Nevada Water Commission ("NNWPC"), TNC presented its plans to apply through the National Fish and Wildlife Foundation for a \$227,700 Desert Terminal Lakes Restoration Fund grant to fund the Study. In addition, TNC indicated its intent to request funding from the Truckee River Fund and matching funds in the amount of \$58,075 through the WRWC from the RWMF. At its March 5, 2014 meeting, the NNWPC approved a motion to include the proposed funding for the Study in the WRWC fiscal year 2014-15 budget.

#### FISCAL IMPACT

The fiscal impact to the RWMF, should this item be approved, will be \$58,075 over two fiscal years, which was included in the WRWC fiscal year 2014-2015 budget. Budget authority will be located in Fund Group 766, Fund 7066, Account Number 710100, Professional Services, and Cost Object WP310100.6.

#### RECOMMENDATION

Staff recommends that the NNWPC review TNC's proposal and make a recommendation to the WRWC to approve funding for the Study in an amount not to exceed \$58,075 from the RWMF, to provide the match required by the Truckee River Fund -- subject to approval of the funding requested by TNC from the Truckee River Fund.

Attachment: Proposal and Scope of Work

## The Nature Conservancy Request for Funding from NNWPC/WRWC for Optimizing Restoration Investments in the Truckee Watershed Study

#### **NARRATIVE:**

The health and functionality of forest and meadow systems in the Sierra Nevada are strongly linked to water quality, quantity and timing of flow in the Truckee River Watershed. Past management of the Truckee River headwaters has left many of these areas in a degraded condition, and in many cases susceptible to catastrophic wildfire. Currently an ad hoc approach exists to restoring portions of the watershed, and there is little understanding of which actions should be taken, and where they should be taken, to be most beneficial. Funding from this proposal, combined with grants from the National Fish and Wildlife Foundation (NFWF) and the Truckee River Fund (TRF), will result in a study that clearly identifies priorities for investments in the Truckee River headwaters to maximize benefits to water users and improves overall ecosystem health.

- 1. **Specific project goals and measurable outcomes.** We anticipate that the immediate outcome of the study will be a coordinated, science-based plan for prioritizing restoration efforts in the Truckee River watershed. This plan should lead to the following outcomes:
  - Increase in effectiveness of investments in restoration and protection activities. The study will facilitate better informed decision-making on watershed investments for increasing water quantity and water quality. This in turn should increase the ecosystem benefits to multiple stakeholders, including TMWA ratepayers.
  - Increased investment in the watershed. A science-based demonstration of the benefits derived from cost-effective watershed investments may have the effect of increasing confidence among local, state and federal funders, and in turn lead to increased investment in the Truckee River watershed. It may also provide a rationale for appealing to new sources of funding insofar as the breadth of benefits associated with watershed restoration will become clearer to all users.
- 2. **Project location**. The entire Truckee River watershed.
- 3. **Project description**. The Nature Conservancy proposes a two-year study to prioritize headwater restoration and conservation investments by identifying where restoration and protection activities are likely to yield the greatest benefits for both people and nature in the Truckee River watershed. The study will couple stakeholder engagement with advanced watershed modeling, using the Resource Investment Optimization System (RIOS) model, to develop recommendations for maximizing water quantity and quality returns on investments and serve as a resource for coordination among the entities involved in watershed management.

The RIOS model is a free and open source software tool that supports the design of cost-effective investments in watershed services. RIOS is a decision support tool that can be used to compare alternative land management practices with their associated impacts on water yield and water quality. It combines biophysical, social, and economic data to help users identify the best locations for protection and restoration activities in order to maximize the ecological return on investment, within the bounds of what is socially and politically feasible. RIOS incorporates local knowledge and preferences to help prioritize investments in watersheds. RIOS offers a

standardized and flexible approach to decision-making for making investments in water by putting a value on water quality and other environmental returns (i.e., water yield) through hydrological models, while accounting for preferences and requirements of stakeholders. RIOS was developed by The Natural Capital Project, a partnership of the Stanford Woods Institute for the Environment, the University of Minnesota's Institute on the Environment, The Nature Conservancy and the World Wildlife Fund, aimed at aligning economic forces with conservation.

A significant amount of the personnel time in the budget will be spent managing the stakeholder process, and one important goal of the project will be to build agreement among leading stakeholders. Some of the primary stakeholders the project will enlist include Truckee Meadows Water Authority, Truckee River Watershed Council, U.S. Forest Service, City of Reno, City of Sparks, Pyramid Lake Paiute Tribe, and Tahoe Regional Planning Agency.

TNC will use RIOS to produce a portfolio of recommended restoration and protection activities and a map to direct investments to the most suitable sites and to maximize benefits for different watershed-wide budgets. The RIOS model will also detail expected improvements in ecosystem services (e.g., nutrient reduction, river flows, etc.) from this portfolio and compare the benefits to those from an ad-hoc investment approach to demonstrate the value of a coordinated effort.

The desired outcome of the study will be a coordinated, science-based plan for prioritizing restoration efforts. Over time, this plan should lead to more focused and cost-effective investments and an increased overall level of investment in the watershed. Another important outcome will be a common vision and commitment across key stakeholders in the basin.

The RIOS model application is meant to complement the Bureau of Reclamation's Truckee River Basin Study by introducing potential strategies (i.e., forest and meadow restoration) for mitigating the impacts of climate change on water supply.

- 4. **Future phases and anticipated sources of funding**. Funding for future implementation of priority restoration projects will be sought from the National Fish & Wildlife Foundation (NFWF) Desert Terminal Lakes Program, NFWF Sierra Meadows Initiative, U.S. Forest Service, Sierra Nevada Conservancy, National Forest Foundation, the Truckee River Fund, and others.
- 5. **Principals involved in leading or coordinating the project or activity.** Truckee River Project Manager (80% FTE); Mickey Hazelwood, Truckee River Project Director (40% FTE); Kristen Podolak, Hydrologist (25% FTE). The Nature Conservancy will contract with Natural Capital Project for further software development to include parameters for forest and meadow restoration in the RIOS model.
- 6. **Number of staff positions involved in project:** Full-time 0 Part-time 4
- 7. Time Line of Project.

Fall 2014 - Summer 2015

• Identify activities and gather data:

- Potential restoration and protection activities for the Truckee watershed, including: forest fuels reduction and prescribed fire, riparian habitat restoration, land protection, meadow restoration, pasture management, and fertilizer management.
- Hydrologic processes affected by these activities, including: water infiltration rates, soil storage capacity, nutrient uptake rates, overland flow rates, and snow and rainfall interception.
- First stakeholder meeting to confirm issues, identify objectives, especially those related to water, and discussion of what conservation/restoration activities to invest in:
  - Goals will include one or several of the following: nutrient retention, dry season base flow, erosion control for drinking water quality, erosion control for reservoir maintenance, flood mitigation, groundwater recharge, and biodiversity.

#### Summer 2015 - Winter 2015

- Explore the development of additional land management activities (e.g., fuels reduction) into the RIOS model.
- From a review of experimental studies and hydrologic model documentation, we will identify factors that determine the effectiveness of various land management activities.
- Discuss where and how (which activities) to allocate to a hypothetical budget and adjust RIOS based on additional budget information spatially or by activity.

#### Winter 2015 - Summer 2016

- Estimate the returns from the activities (e.g., sediment reduction in tons)
- Select priority projects based on the return on investment:
  - o The diagnostic screen produces a view of the whole watershed, but the managers still need to know where to invest first. We identify these as "priority areas."

#### Summer - Fall 2016

- Present and discuss final results with stakeholders and discuss the use of model results to inform decision making.
- Transfer model to agency staff. Prepare final report.
- 8. Success. We will define success based on the stakeholder engagement and ultimately the use of the RIOS model and investment portfolio to guide investments in restoration and protection. As part of the study, we will design a monitoring program to evaluate the effectiveness of the activities in achieving objectives that stakeholders have defined. In working with stakeholders to develop these objectives, we will ensure these goals adhere to the SMART framework (Specific, Measureable, Achievable, Realistic, and Time-bound goals). For example, objectives may include reducing sediment loads at downstream water intake points by 15 percent in 10 years, or protecting and restoring 30 percent of riparian corridors within 5 years. We will identify monitoring data that have already been collected, and by whom, as well as additional monitoring needs. We will create a data sharing and privacy Memorandum of Understanding or other agreements to allow access to existing data.
- 9. **Funding Sources and Budget**. NFWF recently awarded TNC a grant of \$249,090 for this project. TNC is asking for \$57,787 from the Northern Nevada Water Planning Commission/Western Regional Water Commission. Another anticipated funding source is the Truckee River Fund (\$58,075 request submitted). TNC NV is also providing \$63,422 in in-kind services, and TNC CA is providing \$63,250 (\$126,672 total). See following budget for details.

Project Budget
Optimizing Restoration Investments in the Truckee Watershed

BUDGET ITEM DESCRIPTION	Cost	TRF \$	TNC \$	NFWF \$	NNWPC \$	TOTAL \$	MATCH \$
Personnel: for 2 years							
TR Project Director 40% FTE	\$83,500		\$44,250		\$39,250	\$83,500	
Project Manager 80% FTE	\$180,000		\$18,500	\$161,500		\$180,000	\$50,500
Hydrologist 25% FTE	\$62,500		\$7,400	\$55,100		\$62,500	
Forest Ecologist 10% FTE	\$30,000		\$30,000			\$30,000	
Consultants							
Stakeholder facilitation	\$10,000	\$10,000				\$10,000	
RIOS software development	\$35,000	\$35,000				\$35,000	
Supplies & Services							
Stakeholder meetings	\$3,000	\$3,000				\$3,000	
Data acquisition	\$2,500	\$2,500				\$2,500	
Travel	\$5,000				\$5,000	\$5,000	
Printing, postage, telecom	\$1,000				\$1,000	\$1,000	
RIOS training	\$5,000				\$5,000	\$5,000	
Total Direct Costs	\$417,500	\$50,500	\$110,150	\$216,600	\$50,250	\$417,500	\$50,500
Indirect Costs (15%)	\$62,625	\$7,575	\$16,522	\$32,490	\$7,537		\$7,575
TOTAL	\$480,125	\$58,075	\$126,672	\$249,090	\$57,787		\$58,075

#### STAFF REPORT

DATE: July 31, 2014

TO: Chairman and Members, Northern Nevada Water Planning Commission

FROM: John Rhodes, Legal Counsel

SUBJECT: Report and discussion concerning the potential effect of the pending consolidation

of public water purveyors on the Northern Nevada Water Planning Commission

("NNWPC") and Western Regional Water Commission ("WRWC")

John Rhodes, NNWPC Legal Counsel, will provide a brief verbal report regarding the potential effect of the pending consolidation of public water purveyors on the NNWPC and WRWC.

#### STAFF REPORT

**DATE:** July 31, 2014

**TO:** Northern Nevada Water Planning Commission

**FROM:** Jim Smitherman, Water Resources Program Manager

**SUBJECT:** Discussion and possible recommendation to the Western Regional Water

Commission ("WRWC") to approve a Third Amendment to the Agreement for

Legal Services for the WRWC and the Northern Nevada Water Planning

Commission ("NNWPC"), to extend the term of the Agreement through October

2017 on the same terms and conditions.

#### **SUMMARY**

Both the WRWC and the NNWPC require legal services on a regular and continuing basis. Since May 1, 2008, the required legal services have been provided on a contractual basis by Rhodes Law Offices, Ltd., a Nevada corporation solely owned by John B. Rhodes, a former Deputy District Attorney for Washoe County. The current Agreement for Legal Services expires on November 1, 2014. Mr. Rhodes has many years of legal experience in local governmental law, water law, water resource planning, and the Nevada Open Meeting Law; for the ten-year period prior to his retirement from Washoe County, he served as legal counsel to the Regional Water Planning Commission ("RWPC"), predecessor to the NNWPC.

Mr. Rhodes has offered to renew the Agreement for representation of the WRWC and the NNWPC for a three-year period commencing November 1, 2014, upon the same terms and conditions, including the continuation of a 10% reduction in compensation which became effective November 1, 2011. This fee reduction is comparable to or exceeds previous compensation reductions which applied to Washoe County employees. Those compensation reductions have since been recovered by the County's employees, but will remain effective for all payments due for legal services provided commencing November 1, 2014.

#### **PREVIOUS ACTION**

On November 1, 2009, the WRWC approved an Agreement for Legal Services with Rhodes Law Offices, Ltd.(the "Agreement') for the required legal representation for a two-year period beginning November 1, 2009, and ending November 1, 2011. The Agreement included a voluntary 2.5% retroactive and prospective fee reduction in the amount of \$2,700 for the period April 1, 2009 through December 31, 2009, to coincide with compensation reductions in effect for Washoe County employees during that period of time. The 2.5% reduction was deducted from the payment due for legal services provided in November 2009.

On September 2, 2010, the WRWC approved an Amendment to the Agreement to accept a 3.0% voluntary reduction in attorney compensation, retroactive to July 1, 2010, to implement an adjustment comparable to and coinciding with the 2.84% overall reduction in total labor costs adopted by Washoe County for the 2010/2011 fiscal year. (This reduction resulted in a savings of

\$5,760 which, together with the prior voluntary reduction in the amount of \$2,700, resulted in a total discount or savings of \$8,460 over the term of the Agreement.)

On November 7, 2011, the WRWC approved a Second Amendment to the Agreement to accept a 10% voluntary reduction in attorney compensation, effective November 1, 2011. (This reduction resulted in a savings of \$39,600 which, together with the prior voluntary reductions in the amounts of \$5,760 and \$2,700, resulted in a total discount or savings of \$48,060 through July 31, 2014.)

#### **BACKGROUND**

Mr. Rhodes has provided a broad scope of legal services required by the WRWC and the NNWPC, including: working closely with staff to ensure that all meeting agendas and staff reports comply with Nevada Open Meeting law and other legal requirements; providing legal representation at all public meetings of the WRWC, and its subcommittees, and the NNWPC; drafting legal documents such as interlocal agreements and contracts with planning consultants and other service providers; addressing specific Open Meeting Law and other statutory compliance issues; evaluating the propriety of proposed expenditures from the Regional Water Management Fund; coordinating and collaborating with the Truckee Meadows Regional Planning Agency on issues involving both land use and water resource planning; assessing potential liability from a risk management perspective; advising/representing the WRWC /NNWPC on federal, state, and local legislative issues; and, providing services as a registered lobbyist at the Nevada Legislature. In November 2011, Mr. Rhodes advised staff that he estimated, based upon his representing the NNWPC and WRWC for the prior three years, that future necessary legal services for both entities would average approximately 10 to 20 hours per week and 65 hours monthly, exclusive of any civil litigation. That estimate, has continued to be accurate. Over the preceding 33-month period, through July 31, 2014, the time required for providing the required legal services has ranged from 48 to 82 hours per month, for a monthly average of 66.09 hours, resulting in a corresponding average billing rate of \$163 per hour for all legal services provided pursuant to the terms of the Agreement.

#### FISCAL IMPACT

The fiscal impact to the budget of the WRWC will be \$129,600 for each one-year period, which is \$14,400 less than initially provided for in the Agreement, and equal to the amount currently budgeted for legal representation on an annual basis.

#### **RECOMMENDATION**

Staff recommends that the NNWPC recommend to the WRWC that the WRWC approve the proposed Third Amendment to the Agreement for Legal Services, for the WRWC and the NNWPC, with Rhodes Law Offices, Ltd.

#### POSSIBLE MOTION

Should the NNWPC agree with the recommendation, a suggested motion is: "Move to recommend to the WRWC that the WRWC approve the Third Amendment to the Agreement for Legal Services, for the WRWC and the NNWPC, with Rhodes Law Offices, Ltd."

#### **STAFF REPORT**

**DATE:** July 31, 2014

**TO:** Chairman and Members, Northern Nevada Water Planning Commission

FROM: Jim Smitherman, Water Resources Program Manager

**SUBJECT:** Program Manager's Report

Attached are updated reports for items (a) and (b) for your review. Verbal reports will be given for items (c) and (d).

- a) Report on the status of Projects and Work Plan supported by the Regional Water Management Fund;
- b) Financial Report on the Regional Water Management Fund;
- c) Report on the Truckee Meadows Regional Planning Agency ("TMRPA") parcel-based population and employment modeling project;
- d) Informational report from the NWNPC representative on the TMWA Standing Advisory Committee ("TMWA SAC").

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

	Project Name	Contractor / Provider	Amount	Balance Remaining	Percent Complete	Target Completion Date	Notes
1	Certified Landscape Technician Program 2014-2015 FY	Nevada Landscape Association (NLA)	25,000	25,000		6/30/15	New contract being developed
2	Cloud Seeding Program for Water Year 2014	(DRI) Desert Research Institute	100,000	7,977	92%	6/30/14	Work is in progress
3	Envision Videographers of WRWC meetings	Envision	1,200	1,200	0%	6/30/15	Waiting for new PO
4	Fifth Amendment to Reimburse TMWA and DWR for consolidation efforts (FY 2014-2015)	DWR, TMWA	300,000	300,000	0%	6/30/15	Work is in progress
_	Sosu TV Videographers of NNWPC meetings FY 2014-15	Sosu TV	3,500	3,500	0%	6/30/15	Waiting for new PO
	Highland Canal Improvements	City of Reno	250,000	250,000	0%	1 yr from Effective Date	Awaiting signatures
	Regional Data Development and Analytical Program (FY 2011-2012)	Truckee Meadows Regional Planning Agency	486,000	322,167	34%	6/30/16	Work is in progress
8	Regional Storm Water Quality Management Program (Third Amendment)	City of Reno	262,500	262,500	0%	6/30/15	Waiting for new PO
9	Septic - Phase II	County - CSD	150,000	141,968	5%	6/30/15	Work is in progress
10	TMDL Phase I Fifth Amendment	City of Reno (LimnoTech)	75,000	75,000	0%	6/30/16	Waiting for new PO
11	TRIG Website Support FY 2014-2015	City of Reno	7,500	7,500	0%	6/30/15	Waiting for new PO
	TROA - 6,700 AF water rights purchase	TMWA	2,700,000	642,596	76%	Open Ended	Work is in progress
	Washoe Evapotranspiration (ET) Project Maintenance	DRI (Desert Research Institute)	10,000	5,263	47%	6/30/15	Work is in progress
14	Water Usage Review Program 2013 - 2014	TMWA	131,352	65,558	50%	12/31/14	Work is in progress
15	Website support Fiscal Year 2012-2013	Washoe County Tech Services	12,500	11,282	10%	6/30/14	Amendment being developed

Run Date: 07-31-14

Fund 766

Report 400/ZF15

Fiscal Year 2014; Period 1 through 13

### Financial Report on the Regional Water Management Fund

	Plan	Actual (Revenue &	PO Commit (Remaining		Available (Budget Minus		PreCommit (PO's	Available (Budget Minus PO	
Accounts	Budget	Expenses)	PO Balance)	Actual + PO	Actual + PO)	Avail%	Requested)	Requisitions)	Avail%
Interest-Pooled Inv.	83,537.00-	44,280.19-		44,280.19-	39,256.81-	47-		39,256.81-	47-
RGL Pooled Inv.		3,048.26		3,048.26	3,048.26-			3,048.26-	
URGL Pooled Inv.		3,723.23-		3,723.23-	3,723.23			3,723.23	
Water Surcharge 1.5%	1,366,984.00-	1,463,398.20-		1,463,398.20-	96,414.20	7		96,414.20	7
** REVENUE	1,450,521.00-	1,508,353.36-		1,508,353.36-	57,832.36	4		57,832.36	4
Professional Services	1,792,000.00	1,248,064.08	678,413.23	1,926,477.31	134,477.31-	8-		134,477.31-	8-
WRWC Staff & Legal	480,932.00	434,139.14		434,139.14	46,792.86	19.61		46,792.86	19.61
Overhead - Prf Serv		66,528.25		66,528.25	66,528.25-			66,528.25-	
Fin Consult Services	23,000.00	8,300.00		8,300.00	14,700.00	64		14,700.00	64
Invest Pool Alloc Ex		2,792.99		2,792.99	2,792.99-			2,792.99-	
Service Contract		1,100.00		1,100.00	1,100.00-			1,100.00-	
Operating Supplies		1,859.00		1,859.00	1,859.00-			1,859.00-	
Office Supplies		102.47		102.47	102.47-			102.47-	
Pmts to O Agencies	2,700,000.00	2,057,404.00	642,596.00	2,700,000.00					
Seminars and Meetings	3,000.00	699.00		699.00	2,301.00	77		2,301.00	77
Support Service - Reim		8,031.78		8,031.78	8,031.78-			8,031.78-	
Advertising	5,000.00	422.00		422.00	4,578.00	92		4,578.00	92
Undesignated Budget	15,000.00				15,000.00	100		15,000.00	100
Insurance Premium		3,269.00		3,269.00	3,269.00-			3,269.00-	
Travel	7,000.00	920.80		920.80	6,079.20	87		6,079.20	87
Overhead - Admin		43,663.49		43,663.49	43,663.49-			43,663.49-	
Overhead - Supply		15,174.42		15,174.42	15,174.42-			15,174.42-	
Comp Sftw nonCapital		573.00		573.00	573.00-			573.00-	
** EXPENDITURES	5,025,932.00	3,893,043.42	1,321,009.23	5,214,052.65	188,120.65-	4-		188,120.65-	4-
*** Total	3,575,411.00	2,384,690.06	1,321,009.23	3,705,699.29	130,288.29-	4-		130,288.29-	4-

#### STAFF REPORT

DATE: July 31, 2014

TO: Chairman and Members, Northern Nevada Water Planning Commission

FROM: Jim Smitherman, Water Resources Program Manager

SUBJECT: Report on the Truckee Meadows Regional Planning Agency ("TMRPA") parcel-

based population and employment modeling project

Jim Smitherman, NNWPC Water Resources Program Manager, will provide a brief verbal report concerning the status of the TMRPA parcel-based population and employment modeling project.

#### STAFF REPORT

DATE: July 31, 2014

TO: Chairman and Members, Northern Nevada Water Planning Commission

FROM: Jim Smitherman, Water Resources Program Manager

SUBJECT: Informational report from the NNWPC representative on the TMWA Standing

Advisory Committee ("TMWA SAC")

George Ball, the NNWPC representative on the TMWA SAC, will provide a brief verbal report regarding the recent TMWA SAC meeting.