NORTHERN NEVADA WATER PLANNING COMMISSION ("NNWPC") AGENDA

Wednesday, February 6, 2013 1:30 p.m.

* * * * * PLEASE NOTE CHANGE IN MEETING LOCATION * * * * *

Reno City Council Chambers One East First 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 (*).
- 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.
- 4. 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.
- 5. 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 Department of Water Resources (4930 Energy Way), Galena Market (19990 Thomas Creek Rd.), Galena High School (3600 Butch Cassidy Way), South Valleys Library (15650A Wedge Parkway), and the NNWPC website: http://www.nnwpc.us
- 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 December 5, 2012, meeting. (for possible action)
- 5. Report by the Regional Transportation Commission ("RTC") on its South East Connector project, including issues related to Steamboat Creek and flood management; and, possible direction to staff, Garth Oksal, RTC. (for possible action)
- 6. Discussion of a scope of work and funding request, in an amount not to exceed \$50,000 from the Regional Water Management Fund, for an Enhanced Nitrogen Removal Planning Study for the Truckee Meadows Water Reclamation Facility; and, possible recommendation to the Western Regional Water Commission

("WRWC") to approve this project and the funding request, Terri Svetich, P.E., City of Reno. (for possible action)

- 7. Report on the South Truckee Meadows General Improvement District ("STMGID"), issues arising from the pending consolidation of Washoe County's water utility with the Truckee Meadows Water Authority ("TMWA"), and possible consolidation of STMGID with TMWA, Jerry Schumacher, STMGID *
- 8. Report on the Truckee Meadows Regional Planning Agency ("TMRPA") parcelbased population and employment modeling project; and possible direction to staff, Jim Smitherman, NNWPC Water Resources Program Manager. (for possible action)
- 9. Report on legislative activities, including Bill Draft Requests and Bills pending in the 2013 session of the Nevada Legislature, as of January 31, 2013, that may affect or are of interest to the WRWC / NNWPC, John Rhodes, NNWPC Legal Counsel. *
- 10. Report on NNWPC / WRWC facility plan conformance review procedures, Jim Smitherman. *
- 11. Program Manager's Report, Jim Smitherman. *
 - Report on Projects and Work Plan Supported by the Regional Water Management Fund
 - b. Report on the Regional Water Management Fund
 - c. Report from the NNWPC representative on the Truckee Meadows Water Authority Standing Advisory Committee ("TMWA SAC")
- 12. Discussion regarding possible agenda items for the March 6, 2013, NNWPC meeting, and other future meetings, and possible direction to staff, Jim Smitherman. (for possible action)
- 13. Commission comments. *
- 14. Staff comments. *
- 15. Public Comments. * (Three-minute time limit per person.)
- 16. Adjournment.

^{*}Indicates a non-action item

NORTHERN NEVADA WATER PLANNING COMMISSION MINUTES

Wednesday, December 5, 2012

The regular meeting of the Northern Nevada Water Planning Commission ("NNWPC") was held on Wednesday, December 5, 2012 in the Washoe County Commission Chambers, 1001 East Ninth Street, Reno, Nevada.

1. Roll Call and determination of presence of a quorum – In Chairman Hazelwood's absence, Vice Chairman Buzzone called the meeting to order at 1:30 p.m. There was a quorum present.

Voting Members Present:
John Buzzone, Vice Chairman
George W. Ball, Jr.
Michael DeMartini
John Erwin (arrived at 1:55 p.m.)
John Flansberg
Neil Krutz
Darrin Price
Jerry Schumacher

Voting Members Absent: Mickey Hazelwood, Chairman John Jackson Stan Shumaker

Non-Voting Members Present: My-Linh Nguyen

Non-Voting Members Absent:
John Bird
David Boland
Harry Fahnestock
Kelvin Hickenbottom
Edmund Quaglieri

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

2. Public Comments.

Vice Chairman Buzzone called for public comments and hearing none, closed the public comment period.

3. Approval of the agenda.

Commissioner Price made a motion to approve the December 5, 2012 meeting agenda as posted. Commissioner Krutz seconded the motion, which carried unanimously.

4. Approval of minutes from the October 3, 2012 meeting.

Commissioner Ball made a motion to approve the minutes as submitted. Commissioner Krutz seconded the motion, which carried unanimously.

5. Update on the Truckee Meadows Storm Water Management Program Revised Sampling Plan and Tributary Assessments and possible direction to staff, Terri Svetich, City of Reno.

Vice Chairman Buzzone invited Terri Svetich to present this item. Ms. Svetich stated that Lynell Garfield, City of Reno Hydrologist, was present and would assist in the presentation. Ms. Svetich reported that the 2010 MS4 permit requires an update to the Truckee Meadows Storm Water Management Program Revised Sampling Plan and Tributary Assessments. She added that the Sampling Plan is updated on an annual basis; however, the permit requires a more thorough review of the impacts to the tributaries from stormwater.

Ms. Svetich stated that in the past, the Legislative Oversight Committee (LOC) expressed interest in the Truckee River monitoring program and suggested additional monitoring sites. Based on that interest, Nevada Division of Environmental Protection (NDEP) developed a Memorandum of Understanding (MOU) to better coordinate monitoring activities. She provided a background of the program, which included establishment of the Storm Water Permit Coordinating Committee (SWPCC). She added that Desert Research Institute (DRI) applied for grant funding and is an active participant in the monitoring program. She stated that the Pyramid Lake Paiute Tribe (PLPT) also participates in the program.

Ms. Svetich referred to the TruckeeRiverInfo.org (TRIG) website. She turned the presentation over to Ms. Garfield. Ms. Garfield reported that the website began as a watershed effort with the goal of sharing resources and coordinating monitoring efforts. She stated that the cooperative agreement between DRI, Truckee Meadows Water Authority (TMWA) and the State of Nevada, created a new cooperative Truckee River monitoring program. The agreement and funding removed the financial burden from each of the entities.

Ms. Svetich summarized that much work has been done in relation to stormwater programs. She referred to the Sampling and Analysis Plan (SAP) and stated that Stantec Consulting was selected to assist in the SAP development. She reported that the SWPCC meetings are all publicly noticed and attended by the local agencies, as well as representatives from NDEP, PLPT and others. She stated that members reached consensus on the SAP, realizing that it had to be not only effective but cost effective as well.

Ms. Svetich reported that the SAP has been submitted to the State of Nevada and was accepted in November. She added that implementation is to begin in 2013.

Ms. Svetich referred to a PowerPoint presentation (copy on file) and the following highlights:

- Storm Water Monitoring Goals
- Tributary Monitoring
 - o Steamboat Creek at Rhodes Road, The Narrows, Clean Water Way
 - o Whites Creek at Timberline Road, Old Virginia Highway
 - o Chalk Creek at Chalk Bluff
 - o North Truckee Drain at Orr Ditch, Kleppe Lane
 - o Thomas Creek at Timberline Road, South Meadows Parkway
 - o Alum Creek above Steamboat Ditch, the Truckee River

Ms. Garfield stated that outfall monitoring was not previously done; however, ten locations have been selected and include:

- o Alum at Chrissie Caughlin Park
- o Oxbow Nature Park
- o Dickerson Road
- o Wingfield at Arlington (north side)
- o Wingfield / Island at Arlington (south side), Fisherman's Park II
- o Paradise Park / Galletti Way
- o Mary Wahl Ditch
- o Cottonwood Park (west)
- o Greg Street (east)

- Considerations / Challenges include:
 - Traffic Control
 - o Environmental and human safety
 - o Seasonal challenge: frozen or dry
 - o QA/QC Plan includes protocols to be used, holding times, chains of custody, sample labeling and handling
 - o Storm discharge forecasting to capture entire hydrograph in specific tributaries
- Special Studies were selected by the SWPCC as follows:
 - o Boynton Slough Watershed Characterization
 - o Alum Creek Watershed Characterization
 - Sparks Marina Inflow Study
- Technical Memorandum / Evaluation of Data
 - o First task: Comprehensive Literature review, evaluating NV 303 (d) listed streams /pollutants
 - Next: Propose to exclude constituents that are found not to be a result of storm water influence
 - o Monitoring program developed to address the constituents remaining which MAY be from storm water
 - SAP has been approved by the State
 - o Implementation begins in 2013

Ms. Svetich thanked John Buzzone, who was a member of the SWPCC for quite some time. She stated that Mr. Buzzone recognized the need to examine historical water quality analysis in comparison to urbanized runoff. She explained that in the Tech Memo, Stantec developed a rational approach upon which to focus on constituents as they relate to the 303(d) List. She also thanked Ms. Garfield and Christian Kropf for their sampling efforts. She added that additional manpower is needed to perform the monitoring.

Ms. Svetich reported that the Regional Water Planning Commission (RWPC), NNWPC's predecessor, funded a Watershed Management and Protection Plan that was developed in 2003. The plan has been beneficial in the following:

- o Useful for Community Development processes
- Useful in drainage way evaluations and projects
- Assistance in identifying/prioritizing special studies
- o Helpful in identifying locations of noxious weed infestations
- o Helpful in understanding of hydromodification of streams

Ms. Svetich summarized that the SWPCC and monitoring programs have provided a better understanding of the watershed and monitoring program. She thanked the NNWPC for funding the program. She also thanked Stantec for their work. She invited questions or comments.

Commissioner DeMartini asked if the monitoring program measures flows and quantities to examine the calibrated runoff coefficients. Ms. Svetich stated that the program does not include that component and added that existing flow data is used as much as possible. She agreed it is a good point. Vice Chairman

Buzzone mentioned the outfall monitoring and asked if land use would be characterized. Ms. Svetich stated that land use would be characterized, which is how the ten outfalls were selected based on industrial, residential or commercial.

Vice Chairman Buzzone thanked Ms. Svetich and Ms. Garfield for the update.

6. Status report on South Truckee Meadows General Improvement District ("STMGID") issues arising from the pending consolidation of Washoe County's water utility with the Truckee Meadows Water Authority ("TMWA"), Jerry Schumacher, STMGID

Commissioner Schumacher reported that the STMGID Local Managing Board (LMB) will be dissolved so the Washoe Board of County Commissioners would no longer be the Trustees. He stated that the existing LMB would assume the position of the Trustees. He stated that the second reading of the ordinance would be heard December 11, 2012.

Commissioner Schumacher stated that a feasibility study was developed in August, which resulted in four alternatives:

- a. STMGID would be a stand-alone agency; however, the cost of the necessary infrastructure is prohibitive
- b. STMGID would merge with Washoe County Department of Water Resources (DWR), which was not acceptable
- c. STMGID would be independent
- d. STMGID would merge with TMWA without including DWR

Commissioner Schumacher reported that an alternative would be selected at STMGID's meeting the following night.

Commissioner Erwin asked if alternative "d" is proposed for merger after TMWA and DWR merge. Commissioner Schumacher stated it is not. Commissioner Erwin asked how STMGID perceives to merge with TMWA since there is no connectivity between STMGID and TMWA. Commissioner Schumacher stated that details need to be addressed; however, his understanding is that the merger would be based on interties and wholesale agreements. He added that more detail would be discussed at the meeting based on information to be received.

Commissioner Erwin asked if the second reading is approved on December 11, at that time will the STMGID LMB become the Trustees with full fiduciary responsibility. Commissioner Schumacher stated yes.

7. Status report on the Septic Systems Alternative Study relative to regional groundwater quality and quantity issues, including nitrate concentrations related to septic tanks, Chris Wessel, NNWPC Water Management Planner.

Chris Wessel stated that at the last meeting he presented the five tasks developed for the Septic Systems Alternative Study. He added that at that time, an executive summary was pending that would bring the tasks together. He reported that he received a couple of iterations of the executive summary, which was reviewed by Commissioner Buzzone. He stated that after reviewing the iterations, staff lost confidence that the contractor would be able to finalize and summarize the report in an acceptable manner for presentation to the NNWPC.

Mr. Wessel reported that the contract with Lombardo and Associates was terminated and Stantec Consulting was asked to finalize and summarize the report. He welcomed questions or comments.

John Rhodes asked if additional costs are anticipated. Mr. Wessel stated that the originally approved cost would remain as is. He added that the information provided by Lombardo was useful. Vice Chairman Buzzone agreed that the information was good; however, it was not packaged properly.

Mr. Smitherman asked Mr. Wessel about the timeframe for completion. Mr. Wessel stated that he

anticipates completion by February.

8. Update on the Truckee Meadows Regional Planning Agency's ("TMRPA") parcel-based population and employment modeling project; possible recommendation to the WRWC for a one year extension of the project completion date; and possible direction to staff, Jim Smitherman, NNWPC Water Resources Program Manager.

Mr. Smitherman reported that the agreement for his staff support expires June 30, 2013. He added that the project has progressed; however, not as quickly as anticipated based on staffing issues. He reported that staffing at TMRPA is now stable and the project is progressing.

Mr. Smitherman stated that Phase 2 is based on scenario planning, which will not be complete by June 30. He reported that the Next Steps are:

- Recommend one-year time extension to the WRWC
- Refine data sets for sewer collection system capacity and water reclamation facility capacity
- Compile and evaluate available storm water drainage infrastructure GIS data
- Refine water suitability factors, focusing on costs to address sewer collection system capacity needs and projected effluent disposal shortages
- Develop an industrial land needs analysis focused on target industries identified in the Economic Development Authority of Western Nevada's Strategic Plan. Criteria pertinent to the WRWC's mission include infrastructure and water resource needs of the target industry sectors.
- Retain professional services for Phase Two regional scenario planning, including development of
 a regional scenario planning program and outreach to regional stakeholders to engage in the
 program. Phase Two is planned to commence after the industrial land analysis project is finished.

Mr. Smitherman reported that TMRPA recently received a grant for a no-cost, technical assistance for planning for economic and fiscal health workshop.

Commissioner Flansberg asked if a six-month extension would provide ample time for completion. Mr. Smitherman stated that six months would probably be sufficient.

Commissioner Price made a motion to make a recommendation to the WRWC to approve an amendment to the Regional Data Development and Analytical Program ILA extending the agreement for one year, through June 30, 2014 at no additional cost. Commissioner Krutz seconded the motion, which carried unanimously.

9. Appointment of NNWPC representatives Barry Winzeler and alternate, George Ball, to the TMWA Standing Advisory Committee, and possible direction to staff, Jim Smitherman.

Mr. Smitherman reported that Mr. Winzeler and Commissioner Ball have served in this capacity since the initial appointment. He added that both have agreed to continue in this role.

Vice Chairman Buzzone made a motion that the NNWPC appoint Barry Winzeler as its representative on the TMWA SAC, and appoint George Ball as his alternate. Commissioner Flansberg seconded the motion, which carried unanimously.

10. Report on legislative activities, including Bill Draft Requests for the 2013 session of the Nevada Legislature that may affect the WRWC / NNWPC, John Rhodes, NNWPC Legal Counsel.

Mr. Rhodes reported that he included in the agenda packet a list of Bill Draft Requests (BDRs) pending in the 2013 Nevada Legislature, as of November 29, 2012, which may affect or are of interest to the WRWC and NNWPC. He stated that at this time, only the titles have been included and the language will follow.

Commissioner Ball referred to BDR17-144 regarding the Legislative Committee to Oversee the Western Regional Water Commission and asked what impact is anticipated. Mr. Rhodes stated that the LOC

previously had authority to oversee the WRWC, which is set to expire. The LOC not only requested extending the timeline but also to oversee all of Nevada. He summarized that he would keep close watch on that BDR.

11. Program Manager's Report, Jim Smitherman.

- a. Status Report of Projects and Work Plan Supported by the Regional Water Management Fund
- b. Financial Report on the Regional Water Management Fund
- c. Informational report from the NNWPC representative on the Truckee Meadows Water Authority Standing Advisory Committee ("TMWA SAC")

Mr. Smitherman reported that the items included in the agenda packet are provided as informational items. He invited any questions or comments.

Commissioner Price asked where the funding associated with the TMRPA modeling effort is located. Mr. Smitherman stated that it is included as Item 6 under Agenda Item 11a.

12. Discussion regarding possible agenda items for the January 2, 2013, NNWPC meeting, and other future meetings, and possible direction to staff, Jim Smitherman.

Mr. Smitherman reported that there are some upcoming agenda items; however, none are time sensitive. He stated that if desired by the NNWPC, the January meeting could be cancelled.

Commissioner Flansberg made a motion to cancel the January NNWPC meeting and schedule the first NNWPC meeting of 2013 in February. Commissioner Krutz seconded the motion, which carried unanimously.

13. Commission Comments.

Commissioner Flansberg stated that he is thankful that the community was able to avoid flooding the previous weekend.

14. Staff Comments.

Mr. Smitherman thanked commissioners for their understanding and support over the last year and wished all a Merry Christmas.

15. Public Comments.

Vice Chairman Buzzone called for public comments and hearing none, closed the public comment period.

16. Adjournment.

V	V	it.	h 1	no	furt	her	business,	the	meeting	was a	ıdi	iourned	at	2:24	p.m.	

Respectfully submitted by,	
Niki Linn, Recording Secretary	
Approved by Commission in session on	2013.
Mickey Hazelwood, Chairman	
Mickey Hazerwood, Chairman	

STAFF REPORT

DATE: January 29, 2013

TO: Chairman and Members, Northern Nevada Water Planning Commission

FROM: Jim Smitherman, Water Resources Program Manager

SUBJECT: Report by the Regional Transportation Commission ("RTC") on its South East

Connector project, including issues related to Steamboat Creek and flood

management; and, possible direction to staff

SUMMARY

RTC Project Manager Garth Oksol has prepared a presentation to provide an update on the South East Connector ("SEC"). The SEC will be a 6 lane arterial roadway with two new atgrade signalized intersections. The new intersections will be at Mira Loma Drive and Pembroke Drive. The SEC will originate at the existing intersection of South Meadows Parkway and Veterans Parkway on the south end and will terminate at the existing intersection of Greg Street and Sparks Boulevard on the north end.

Mr. Oksol last appeared before the Northern Nevada Water Planning Commission in December 2011. Since that time, Steamboat Creek restoration has been removed from Phase 1 of the project because of concerns expressed by downstream water users. Phase 1 extends from Greg Street south to Clean Water Way. This change eliminated the need for a permit from the US Army Corps of Engineers, and allowed construction to proceed. In November 2012 the RTC Board approved a contract with Kiewit Western to begin Phase 1 construction, which is expected to begin early in 2013. Refinement of the design south of Mira Loma Drive is scheduled to be submitted to the RTC in the spring of 2013.

A project summary report, current as of January 2013, is attached for your information.

BACKGROUND

A north-south roadway connecting the southern part of the Truckee Meadows to the eastern part of the Truckee Meadows has been planned for more than 40 years. This arterial is proposed to reduce traffic congestion on I-80, US 395/I-580, Virginia Street, southeast McCarran Boulevard, Double R Boulevard, and Longley Lane.

The southeastern part of the Truckee Meadows is underserved by regional roadways. Comparing the west and east sides of the Truckee Meadows, 13 regional roads on the west side carry 130,000 trips per day, while only three east side regional roads carry 102,000 trips a day, that is almost 80% of the west-side trips on just under 25% of the regional roads.

RECOMMENDATION

Staff recommends that the NNWPC accept this report on the South East Connector project and provide direction to staff, as appropriate.

Attachment

JS:jd



STREETS & HIGHWAYS Project Summary Report

SouthEast Connector RTC Project No. 532011

RTC Project Manager (PM): Garth Oksol, P.E. RTC PM Contact Information: (775) 332-2137

goksol@rtcwashoe.com

RTC Engineering Department: (775) 348-0171

(775) 348-0170 fax

Design Firm: Stantec Consulting, Inc.

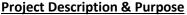
(775) 850-0777

T.Y. Lin International Group

(702) 810-6097

Construction Contractor: Kiewit Western

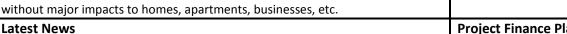
(702) 560-2275



The SouthEast Connector (SEC) is a regional roadway that will run from the intersection of Sparks Boulevard and Greg Street in the north, to South Meadows Parkway and Veterans Parkway in the south. It is a six lane non-elevated roadway with multi-use paths.

The SEC is a vital link that connects the south part of the Truckee Meadows with the east part of the Truckee Meadows. The only other continuous link that serves this purpose is US-395 to I-80, which is reaching critical capacity. All other regional roads in the southeast part of the Truckee Meadows are also reaching critical capacity. The SEC provides much needed relief to the entire transportation network.

The SEC is a regional roadway that has been planned and discussed for over 40 years. Developments in south Reno and Sparks have been approved because the SEC is on the Regional Transportation Plan. Existing new roadways have been approved for future capacity needs assuming the SEC is built. If the SEC is not built, those roadways do not have the ability to handle additional capacity without major impacts to homes, apartments, businesses, etc.



The RTC Board approved a contract with Kiewit Western to begin construction of Phase 1. Construction is anticipated to start mid-January 2013.

With the removal of the stream restoration from Phase 1, a US Army Corps of Engineers Permit is not needed. Concerns from downstream users necessitated the removal of the stream restoration.

Refinement of the design south of Mira Loma is under way and an amendment to the submitted Army Corp of Engineers Permit is scheduled to be submitted in the Spring of 2013.



Related Documents

Plan Line Study for the SouthEast Connector (January 20, 2009)

Reg. Trans. Imp. Program (RTIP) Regional Transportation Plan (RTP)

Schedule

Planning: January 2009 Prelim. Engineering: Fall 2011 Fall 2012 Final Design: Advertise: 2012

Construction: January 2013

Project Finance Plan

Funding Source: RTC-5 Fuel Tax Bonding

Preliminary Engineering: \$3,236,000 Final Design: \$20M Right-of-Way: \$39-\$44M Construction: \$121-\$136M \$190-\$200M* Total Project Estimate:

Construction Traffic Control and Work Schedule Updates

For current traffic control information, please see the RTC's weekly Traffic Control Report at: http://www.rtcwashoe.com/streets-highways-16.

Information is current for: January 2013



STAFF REPORT

DATE: February 6, 2013

TO: Chairman and Members, Northern Nevada Water Planning Commission

FROM: Terri Svetich, P.E. City of Reno

SUBJECT: Discussion of a scope of work and funding request, in an amount not to

exceed \$50,000 from the Regional Water Management Fund, for an Enhanced Nitrogen Removal Planning Study for the Truckee Meadows Water Reclamation Facility (TMWRF); and, possible recommendation to the Western Regional Water Commission ("WRWC") to approve this project and the funding

request, Terri Svetich, P.E, City of Reno.

SUMMARY:

Wastewater flows to TMWRF are more concentrated in recent years due to water conservation efforts, low flow fixtures and other factors. Consequently, there are higher nitrogen levels in the influent flows into the plant. The existing treatment processes at TMWRF are sufficiently removing Nitrogen to meet discharge requirements; however, projecting future flows and loadings, the existing processes may need to be augmented to continue to meet limits. The Cities of Reno and Sparks would like to perform a high level assessment of commonly considered tertiary treatment processes that could be employed to enhance nitrogen removal at TMWRF. This assessment would provide a sense of the magnitude of costs to implement, footprint requirements, long term operation considerations, possible by-products and disposal, permitting considerations and time to implement. Please consider recommending WRWC approval of this project and the funding request for the attached scope of work in an amount not to exceed \$50,000.

BACKGROUND:

The National Pollutant Discharge Elimination System (NPDES) permit for the TMWRF regulates final effluent discharges to the Truckee River based upon the Total Maximum Daily Loads (TMDL). TMWRF's current total nitrogen (TN) final effluent load is limited to 500 pounds per day (ppd) on both a calendar year average basis and monthly average basis from May through October.

Attachment: Scope of Work from Corollo Engineers



January 14, 2013

Ms. Terry Svetich City of Reno 350 S. Center Street, Suite 400 Reno, NV 89505

Subject: Proposal to Perform Enhanced Nitrogen Removal Planning Study for the TMWRF

Dear Ms. Svetich:

At your request, we are pleased to submit this letter proposal to perform a high-level planning study to evaluate enhanced removal of total nitrogen (TN) in the effluent at the Truckee Meadows Water Reclamation Facility (TMWRF).

INTRODUCTION

The National Pollutant Discharge Elimination System (NPDES) permit for the TMWRF regulates final effluent discharges to Steamboat Creek/Truckee River. Specifically, TMWRF's current TN final effluent load is limited to 500 pounds per day (ppd) on both a calendar year average basis and monthly average basis from May through October. Although the TMWRF currently treats an average of about 30 mgd, its final effluent monthly average TN load has nearly reached the 500 ppd limit on several occasions over the past 12 months. As a result, the City would like to perform an enhanced nitrogen removal planning study to identify and evaluate options to comply with the current TN limit at the permitted monthly average capacity of 44 mgd. Specifically, Carollo will evaluate the use of new unit processes to treat a portion or all of the entire liquid stream.

SCOPE OF WORK

The following Scope of Work outlines the tasks that Carollo will perform.

Task 1 - Project Management and Meetings

Carollo will provide project management necessary to perform planning, execution, monitoring, and reporting of this project. For this task, Carollo will also attend three meetings in Reno, NV.

- The first meeting will be a kickoff meeting with the City and TMWRF staff to review project goals and discuss project approach and schedule.
- The second meeting will be conducted after submission of the draft technical memorandum (TM) discussed in Task 2 to review City and TMWRF staff comments.
- The third meeting will be to attend a meeting with City staff at the Northern Nevada Water Planning Commission meeting. Carollo will assist the City in preparing a presentation of the key findings from the study for this meeting.

Meeting notes for the first two meetings will be prepared and submitted to the City after each meeting.

Ms. Terry Svetich City of Reno January 14, 2013 Page 2

Task 2 - Enhanced Nitrogen Removal Evaluation

The TMWRF already includes several tertiary treatment processes for nitrogen removal. The primary and secondary treatment facilities are followed by six nitrification towers that biologically oxidize ammonia nitrogen to nitrate nitrogen. The nitrification towers are followed by four fluidized bed denitrification reactors that biologically reduce the nitrate nitrogen to nitrogen gas, which is released to the atmosphere. An external carbon source (methanol) is fed to the reactors to enable biological denitrification. Finally, 12 granular media filters are used to further reduce remaining suspended solids.

The existing tertiary treatment facilities are achieving significantly better nitrogen removal than they were designed for in the 1980's. These facilities were designed to meet a permitted monthly average TN load of 1,665 lbN/d, corresponding to a TN concentration of $5.0 \, \text{mgN/L}$ at a permitted monthly average flow rate of $40 \, \text{mgd}$. Additionally, these facilities were designed to meet a seasonal ammonia nitrogen discharge limit of $2.6 \, \text{mgN/L}$ from May through October.

The current permitted monthly average TN load is 500 lbN/d - 30 percent of the original design basis. To comply with the current discharge limit, TMWRF operations staff achieve higher nitrification tower and denitrification reactor efficiencies than those assumed for the original design. However, enhanced nitrogen removal may be required to meet even lower nitrogen limits.

There are several treatment alternatives that could be considered for the TMWRF. Many of these alternatives are based on various configurations of suspended growth and/or fixed film biological processes for combined and/or separate-stage nitrification and denitrification. The TMWRF already includes two fixed film biological treatment processes for nitrification and denitrification. The existing suspended growth activated sludge process does not have additional capacity to achieve nitrogen removal in addition to its existing goal of BOD removal and biological phosphorus removal. Accordingly, these alternatives will not be included in this study.

There are other treatment alternatives that could complement – rather than replace – the existing nitrification towers, denitrification reactors, and granular media filters. These alternatives include sidestream treatment processes to treat the ammonia in the centrate return stream, coagulation upstream of the existing filters, membrane processes, and advanced oxidation processes.

Three of these complementary treatment alternatives will be evaluated for this study:

- **Enhanced Coagulation** is an alternative that could be used upstream of the existing granular media filters to improve particulate nitrogen removal. This alternative could also convert colloidal and some soluble nitrogen to a particulate form amenable to removal by the existing filters. Metal salts, polymer, and/or customized coagulants (e.g., polyaluminum chloride) would be used.
- Reverse Osmosis is a membrane treatment alternative that has the potential to remove
 significant soluble and colloidal nitrogen in addition to all particulate nitrogen. Reverse
 osmosis has a significant energy demand, however, because of the high pressures needed for
 membrane operation.
- Advanced Oxidation Processes are an alternative that use a combination of oxidants (e.g., ozone, hydrogen peroxide, and/or ultraviolet light) to convert soluble nitrogen compounds to 1) more oxidized forms directly that could be removed by the denitrification

Ms. Terry Svetich City of Reno January 14, 2013 Page 3

reactors, and/or 2) biodegradable forms that could be treated in the other existing biological treatment processes.

The entire plant flow would be treated with the enhanced coagulation alternative. The reverse osmosis and advanced oxidation processes alternatives could treat the entire plant flow or they could be configured as a parallel treatment process to treat only the flow necessary to meet a given discharge limit.

For each alternative, planning level design criteria (including practical flow increment) will be established, along with an estimate of preliminary footprint requirements and costs (construction, capital, and life-cycle costs).

Carollo will prepare a draft TM following completion of Task 2 to summarize planning approach and key findings. Assuming City and TMWRF staff will take two weeks to provide review comments, Carollo will incorporate applicable comments into the final TM for submission to the City and TMWRF.

COST AND SCHEDULE

Our estimated cost to perform the Scope of Work is attached as Exhibit A. We will begin our services immediately after receiving a written notice to proceed from the City and will complete the draft TM within two months.

Please call us if you have any questions concerning this proposal.

Sincerely,

CAROLLO ENGINEERS, INC.

Rick Chan, P.E. Vice President

cc: Ron Appleton and Elisa Garvey – Carollo

EXHIBIT A

LABOR AND BUDGET ESTIMATE

TRUCKEE MEADOWS WATER RECLAMATION FACILITY ENHANCED NITROGEN REMOVAL PLANNING STUDY

		Rick	Ron	Elisa				
		Chan	Appleton	Garvey	CAD	WP	Total	Total
Task	Task Description	\$263	\$255	\$228	\$143	\$110	Hours	Cost
1.0	Project Management and Meetings							
	- Project Management	4	0	0	0	0	4	\$1,052
	- Meeting 1	4	8	8	0	0	20	\$4,916
	- Meeting 2	4	8	8	0	0	20	\$4,916
	- Meeting 3	<u>4</u>	<u>16</u>	<u>8</u>	<u>0</u>	<u>0</u>	<u>28</u>	\$6,956
	Task 1.0 Totals =	16	32	24	0	0	72	\$17,840
2.0	Enhanced Nitrogen Removal Evaluation							
	 Treatment Alternatives 	4	60	6	0	0	70	\$17,720
	- Prepare TM	<u>4</u> 8	<u>16</u>	<u>8</u>	<u>8</u>	<u>6</u>	<u>42</u>	\$8,760
	Task 2.0 Totals =	8	76	14	8	6	112	\$26,480
	Project Totals =	24	108	38	8	6	184	\$44,320

⁽¹⁾ Labor rate includes all Carollo's direct cost, overhead, communication, and other material costs.

STAFF REPORT

DATE: February 1, 2013

TO: Chairman and Members, Northern Nevada Water Planning Commission

FROM: Jim Smitherman, Water Resources Program Manager

SUBJECT: Report on the South Truckee Meadows General Improvement District

("STMGID"), issues arising from the pending consolidation of Washoe County's water utility with the Truckee Meadows Water Authority ("TMWA"), and possible consolidation of STMGID with TMWA.

Jerry Schumacher, STMGID Board of Trustees, will provide a brief verbal report concerning STMGID issues arising from the pending consolidation of Washoe County's water utility with the Truckee Meadows Water Authority ("TMWA"), and possible consolidation of STMGID with TMWA.

STAFF REPORT

DATE: February 1, 2013

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.

DATE: February 1, 2013

TO: Chairman and Members, Northern Nevada Water Planning Commission

FROM: John Rhodes, Legal Counsel

SUBJECT: Report on legislative activities, including Bill Draft Requests and Bills pending in

the 2013 Nevada Legislature that may affect the Western Regional Water Commission ("WRWC") / Northern Nevada Water Planning Commission

("NNWPC")

The following staff report lists Bill Draft Requests ("BDR's") and Bills pending in the 2013 Nevada Legislature, as of January 31, 2013, that may affect or are of interest to the WRWC and NNWPC. No additional language is available for the BDR's at this time. Pending Bills are noted with an Assembly ("AB") or Senate ("SB") designation, and the complete language of each Bill is available by clicking on the corresponding link contained in the electronic version of this report. WRWC staff and the WRWC Legislative Subcommittee will track these BDR's and Bills, recommend positions to be taken, and provide periodic updates to the WRWC/NNWPC.

Bill Drafts Requested

Water Issues

126 Assemblywoman Carlton

Revises provisions relating to wastewater (6/27/12)

17--144 Legislative committee to Oversee the Western Regional Water Commission (SB 487,2007)

Provides for an ongoing study of water issues in Nevada (6/28/12)

439 Assemblywoman Carlton

Provides for the development of a statewide water plan (9/4/12)

442 Assembly Goicoechea

Makes appropriation to the Humboldt River Basin Water Authority for cloud seeding project (9/4/12)

58--481 Senator Roberson

Provides for oversight and transparency of the Southern Nevada Water Authority (9/4/12)

48--543 Assemblyman Goicoechea

Joint Requester: Assemblyman Ellison

Revises provisions governing the transfer of water rights. (10/30/12)

48--565 Assemblyman Wheeler

Enacts the Municipal Water Users Equity Act of 2013. (11/14/12)

48-631 Senator Goicoechea

Includes participation by local governments in monitoring, management and mitigation of water resources (12/3/12)

763 Assemblyman Bobzien

Revises provisions governing the waters of this State (12/10/12)

807 Assemblyman Oscarson

Directs the Legislative committee on Public Lands to study and make recommendations on alternative water sources for Nevada communities during the 2013-2014 interim. (12/10/12)

864 Senator Settelmeyer

Revises provisions relating to water (12/10/12)

Open Meeting Issues

17-49 Assemblyman Hickey

Revises provisions governing the applicability of the Open Meeting Law to the Legislature (3/26/12)

19-402 Attorney General

AB65 Makes various changes to the Open Meeting Law (8/31/12)

730 Assemblywoman Spiegel

Revises provisions relating to public notices (12/10/12)

Contracts and Ethics Issues

85 Assembly Ellison

Revises provisions governing contracts for services entered into by certain public employers (6/21/12)

19-159 Assemblyman Hansen

Requires contact information for members of state and local committees to be provided to the public upon request (7/25/12)

23--445 Senator Parks

Revises provisions relating to ethics in government (9/4/12)

103 **Senator Hardy**

Makes various changes concerning ethics in government. (6/26/12)

111 Assemblyman Conklin

Revises provisions governing ethics in government. (6/26/11)

815 Assembly Committee on Legislative Operations and Elections

Makes various changes relating to ethics in government (12/10/12)

769 **Senator Spearman**

Revises provisions relating to the use of technology by public agencies (12/10/12)

812 Assemblyman Healey

Revises provisions governing the membership of certain regional boards (12/10/12)

Public Records Issues

185 Assembly Atkinson

Revises provisions governing public records (8/17/12)

19—211 Attorney General

AB31 Revises provisions governing public records requests. (8/30/12)

19--248 Assemblyman Grady

Revises provisions governing public records. (8/30/12)

40-832 **Senator Hardy**

Makes various changes relating to public records (12/10/12)

19-603 Senator Segerblom

SB74 Revises provisions relating to public records (11/28/12)

19-259 Nevada League of Cities and Municipalities

AB4 Revises provisions governing publication of informational reports, duplicative information and notices required to be mailed (8/30/13)

Other Issues of Interest

20-174 Nevada Association of Counties

Revises provisions governing powers of local governments (8/10/12)

STAFF REPORT

DATE: February 1, 2013

TO: Chairman and Members, Northern Nevada Water Planning Commission

FROM: Jim Smitherman, Water Resources Program Manager

SUBJECT: Report on NNWPC / WRWC facility plan conformance review procedures

Jim Smitherman, NNWPC Water Resources Program Manager, will provide a brief verbal report on NNWPC / WRWC facility plan conformance review procedures.

STAFF REPORT

DATE: February 1, 2013

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; a verbal report will be given at the meeting updating item c).

- a) Status Report of Projects and Work Plan supported by the Regional Water Management Fund
- b) Financial Report on the Regional Water Management Fund
- c) Informational report from the NNWPC representative on the Truckee Meadows Water Authority 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	Third Amendment to TMDL Phase I	City of Reno (LimnoTech)	250,000	195,396	22%	6/30/13	Work is in progress
2	TMDL Legal Services	Somach Simmons & Dunn	50,000	38,745	23%	Amended to 6/30/13	Work is in progress
3	Washoe Evapotranspiration (ET) Project Maintenance	DRI (Desert Research Institute)	10,000	6,857	31%	6/30/13	FY 2012 - \$4,000 FY 2013 - \$6,000
4	Regional Storm Water Quality Management Program	City of Reno	262,500	188,959	28%	6/30/13	Work is in progress
5	Third Amendment to Reimburse TMWA and DWR for consolidation efforts (FY 2012-2013)	DWR, TMWA	300,000	300,000	0%	7/30/13	Work is in progress
6	Regional Data Development and Analytical Program (FY 2011-2012)	Truckee Meadows Regional Planning Agency	486,000	356,455	27%	Amended to 6/30/14	Work is in progress
7	Septic Alternatives Analysis - Final Report	Stantec	10,000	10,000	0%	6/30/13	Work is in progress
8	Certified Landscape Technician Program 2012-13	Nevada Landscape Association (NLA)	25,000	12,500	50%	12/31/13	Work is in progress
	Website support Fiscal Year 2012-2013	Washoe County Technology Services	10,000	10,000	0%	6/30/13	Work is in progress
10	G3 Productions NNWPC FY 2012-13	G3 Productions	5,000	4,635	7%	6/30/13	Work is in progress
11	TRIG Website Support FY 2012-13	City of Reno	7,500	6,320	16%	6/30/13	Work is in progress
12	Envision Video Televising WRWC FY 2012-13	Envision Video	2,300	575	75%	6/30/13	Work is in progress
13	NNWPC Minutes First Amendment	Niki Linn	20,000	13,180	34%	6/30/13	Work is in progress

Run Date: 01/31/13

Fund 766

Report 400/ZF15

Financial Report on the Regional Water Management Fund

Period 1 thru 7 - 2013 Fiscal Year

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%
481000 Interest-Pooled Inv.	21,198.00-	34,689.90-		34,689.90-	13,491.90	64		13,491.90	64
482100 RGL Pooled Inv.		317.55		317.55	317.55-			317.55-	
482200 URGL Pooled Inv.		702.09		702.09	702.09-			702.09-	
491060 Water Surcharge 1.5%	1,322,988.00-	1,192,138.34-		1,192,138.34-	130,849.66-	10-		130,849.66-	10-
** REVENUE	1,344,186.00-	1,225,808.60-		1,225,808.60-	118,377.40-	9-		118,377.40-	9-
710100 Professional Services	1,692,787.00	220,086.95	880,114.46	1,100,201.41	592,585.59	35		592,585.59	35
710110 Contracted/Temp Svcs	336,932.00	152,630.20		152,630.20	184,301.80	55		184,301.80	55
710120 Legal Fees	144,000.00	64,800.00	70,560.00	135,360.00	8,640.00	6		8,640.00	6
710139 Fin Consult Services	23,000.00	8,300.00		8,300.00	14,700.00	64		14,700.00	64
710149 Invest Pool Alloc Ex		1,639.58		1,639.58	1,639.58-			1,639.58-	
710155 Lobbying Services	600.00	600.00		600.00					
710200 Service Contract		640.00	14,549.50	15,189.50	15,189.50-			15,189.50-	
710361 Express Courier		74.16		74.16	74.16-			74.16-	
710400 Pmts to O Agencies	1,350,000.00				1,350,000.00	100		1,350,000.00	100
710509 Seminars and Meetings	3,000.00	700.00		700.00	2,300.00	77		2,300.00	77
710546 Advertising	5,000.00				5,000.00	100		5,000.00	100
710585 Undesignated Budget	15,000.00				15,000.00	100		15,000.00	100
710594 Insurance Premium		3,269.00		3,269.00	3,269.00-			3,269.00-	
711210 Travel	7,000.00				7,000.00	100		7,000.00	100
** EXPENDITURES	3,577,319.00	452,739.89	965,223.96	1,417,963.85	2,159,355.15	60		2,159,355.15	60
*** Total	2,233,133.00	773,068.71-	965,223.96	192,155.25	2,040,977.75	91-		2,040,977.75	91-