



# WASHOE COUNTY

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CM/ACM KS

Finance DN

DA N/A

Risk Mgmt N/A

HR N/A

Comptroller MS

## STAFF REPORT

BOARD MEETING DATE: October 27, 2015

**DATE:** October 2, 2015

**TO:** Board of County Commissioners

**FROM:** Dwayne Smith, P.E., Division Director, Engineering and Capital Projects  
Community Services Department, 328-2043, [desmith@washoecounty.us](mailto:desmith@washoecounty.us)

**THROUGH:** Dave Solaro, Arch., P.E., Director  
Community Services Department, 328-3600, [dsolaro@washoecounty.us](mailto:dsolaro@washoecounty.us)

**SUBJECT:** Authorize disbursement of funds [\$55,783.08] to Nevada Tahoe Conservation District to be used as match for 319(h) funds for catchment registration in accordance with obligations and commitments contained in an Interlocal Agreement with the Nevada Division of Environmental Protection, utilizing Washoe County's Tahoe Regional Planning Agency Water Quality Mitigation funds in support of the work. These funds will be used to implement the Lake Clarity Crediting Program and the pollutant load reduction milestones necessary to meet the Lake Tahoe Total Maximum Daily Load approved by the United States Environmental Protection Agency. (Commission District 1.)

### SUMMARY

Washoe County Community Services Department (CSD) recognizes the need to coordinate efforts with regional partners to meet the Lake Tahoe Total Maximum Daily Load (TMDL) requirements established by the United States Environmental Protection Agency (EPA). Nevada jurisdictions, including Washoe County, Douglas County and the Nevada Department of Transportation (NDOT), under the 2013 Lake Clarity Crediting Program Agreement with NDEP, are working together with the the Nevada Tahoe Conservation District (NTCD) to implement the Lake Clarity Crediting Program (Crediting Program) in support of the Lake Tahoe TMDL. The goal of the TMDL is to reduce the pollutant load in urban stormwater runoff that reaches Lake Tahoe. This project allows Washoe County to demonstrate compliance with our obligations and commitments specified in the current and updated Interlocal Agreements (ILAs) with NDEP. Specifically, the goals are to carry out the Crediting Program process to successfully document the attainment of load reduction milestones and associated credit targets contained in current ILAs as well as provide assistance to facilitate update of the agreements by the summer of 2016.

The anticipated cost of the Crediting Program is \$211,566.16, with \$100,000 funded through a Federal 319(h) grant and the remaining \$111,566.16 of project budget is being split between Washoe County and NDOT. Staff recommends authorizing disbursement of Washoe County reserved Tahoe Regional Planning Agency (TRPA) Water Quality Mitigation Interest funds in the amount of \$55,783.08 to the NTCD who is providing support for the implementation of the Crediting Program. If approved, staff will submit the same request to the TRPA Board to release the requested funding. An approval by both the Washoe County Commission and TRPA Board is required before the funding can be transmitted directly to the NTCD.

AGENDA ITEM # 562

Washoe County Strategic Objective supported by this item: Regional and Community Leadership.

### **PREVIOUS ACTION**

July 23, 2013 - The Board of County Commissioners (Board) approved an Interlocal Agreement (ILA) between Washoe County and NDEP to establish Washoe County's commitment to participate in an urban stormwater pollutant reduction program at Lake Tahoe. The ILA is a cooperative implementation of water quality improvement actions as opposed to a regulatory permit. The ILA explicitly requires participation in the Lake Clarity Crediting Program. The current Agreement is set to be renewed on or before August 16, 2016.

### **BACKGROUND**

In an effort to improve the water quality and transparency of Lake Tahoe, Washoe County has participated in the TRPA Environmental Improvement Program (EIP) in the Lake Tahoe Basin since the inception of the program. This has been done through the implementation of erosion control and water quality improvement projects and enhanced road maintenance practices within the County right-of-way to improve the water quality of urban storm runoff discharging to Lake Tahoe.

In August of 2011, the EPA approved the Lake Tahoe TMDL and directed NDEP to implement the urban stormwater runoff component of the TMDL. The TMDL identifies urban stormwater runoff as the primary source of inorganic fine sediment particles less than sixteen microns in diameter (FSP) affecting lake clarity. The TMDL furthermore establishes milestones for, as well as an implementation plan framework to achieve, FSP load reductions that will result in the restoration of Lake Tahoe's historic deep water clarity to 97.4 feet.

Within Nevada, the TMDL is implemented through an agreement approach. Upon entering into an ILA with NDEP in July 2013, Washoe County agreed to implement and document the pollutant controls necessary to achieve credit targets that are based on the load reduction milestones established by the TMDL. Accounting is carried out through the Crediting Program process using a suite of approved stormwater tools. The annual Crediting Program process is comprised of four steps: 1) estimate expected load reductions, 2) register or document the pollutant controls and conditions that are expected to result in the estimated load reductions, 3) inspect on-the-ground conditions to verify the conditions used to estimate load reductions are being maintained, and 4) declare the credits to demonstrate compliance with terms of the ILAs.

### **FISCAL IMPACT**

The requested disbursement of funds is \$55,783.08. Funding source is Washoe County's allocated Tahoe Regional Planning Agency (TRPA) Water Quality Mitigation Interest Fund. The TRPA allows the use of either principal or accrued interest associated with the Water Quality Mitigation Fund to finance water quality improvement projects and programs within the Tahoe Basin. Authorization to use these funds must first be provided by the Board of County Commissioners prior to a formal request to the TRPA Board. Once approved by the TRPA Board, the funds can be transmitted directly to NTCDD.

**RECOMMENDATION**

It is recommended that the Board of County Commissioners authorize disbursement of funds [\$55,783.08] to Nevada Tahoe Conservation District to be used as match for 319(h) funds for catchment registration in accordance with obligations and commitments contained in an Interlocal Agreement with the Nevada Division of Environmental Protection, utilizing Washoe County's Tahoe Regional Planning Agency Water Quality Mitigation funds in support of the work. These funds will be used to implement the Lake Clarity Crediting Program and the pollutant load reduction milestones necessary to meet the Lake Tahoe Total Maximum Daily Load approved by the United States Environmental Protection Agency.

**POSSIBLE MOTION**

Should the Board of County Commissioner agree with staff's recommendation a possible motion would be: "Move to authorize disbursement of funds [\$55,783.08] to Nevada Tahoe Conservation District to be used as match for 319(h) funds for catchment registration in accordance with obligations and commitments contained in an Interlocal Agreement with the Nevada Division of Environmental Protection, utilizing Washoe County's Tahoe Regional Planning Agency Water Quality Mitigation funds in support of the work. These funds will be used to implement the Lake Clarity Crediting Program and the pollutant load reduction milestones necessary to meet the Lake Tahoe Total Maximum Daily Load approved by the United States Environmental Protection Agency."

## ATTACHMENT "A"

### A. COVER PAGE

**Title:** Lake Clarity Crediting Program Registration and Implementation

**Contractor:** Nevada Tahoe Conservation District

**Address:** Physical: 400 Doria Ct Mailing: PO Box 915  
Zephyr Cove, NV 89448 Zephyr Cove, NV 89448

**Primary Contact:** Dominique Fellers  
775.586.1610 x26  
775.230.8419  
dfellers@ntcd.org  
775.586.1612 (fax)

**Project Location:** Lake Tahoe, HUC 16050101

**Project Summary:** This project will assist Washoe County and the Nevada Department of Transportation (NDOT) to fulfill obligations and commitments contained in Interlocal Agreements with the Nevada Division of Environmental Protection (NDEP). The Nevada Tahoe Conservation District (NTCD) will work closely with Washoe County and NDOT to accomplish the Lake Clarity Crediting Program process and document attainment of the ten percent load reduction milestone and associated credit targets for both jurisdictions. Specifically, pollutant controls identified in the jurisdictions' load reduction plans will be registered and inspected using the updated suite of stormwater tools. Furthermore, NTCD will facilitate the update of ILAs currently set to expire in August 2016 by recalculating jurisdictional baseline loads.

**Timeframe:** OCTOBER 2015 – DECEMBER 2017

**Fiscal Summary:**

Total Project Cost:	\$ 211,566.16
NDEP:	\$ 100,000.00
Match:	\$ 111,566.16

**Project Partners:** Nevada Department of Transportation  
Washoe County  
Northwest Hydraulic Consultants  
2NDNATURE

## B. SCOPE OF WORK

### 1. Background & Need

Lake Tahoe is famous for its remarkable clarity which, over the last fifty years, has been in decline. The Lake Tahoe Total Maximum Daily Load (TMDL) identifies urban stormwater runoff as the primary source of inorganic fine sediment particles less than sixteen microns in diameter (FSP) affecting lake clarity. The TMDL furthermore establishes milestones for, as well as an implementation plan framework to achieve, FSP load reductions that will result in the attainment of clarity goals. Within Nevada, the TMDL is implemented through an agreement approach. Upon entering into Interlocal Agreements (ILAs) with the Nevada Division of Environmental Protection (NDEP), Washoe County and the Nevada Department of Transportation have agreed to implement and document the pollutant controls necessary to achieve credit targets that are based on the load reduction milestones established by the TMDL. Accounting is carried out through the Lake Clarity Crediting Program (Crediting Program) process using a suite of approved stormwater tools. The annual Crediting Program process is comprised of four steps: 1) estimate expected load reductions, 2) register or document the pollutant controls and conditions that are expected to result in the estimated load reductions, 3) inspect on-the-ground conditions to verify the conditions used to estimate load reductions are being maintained, and 4) declare the credits to demonstrate compliance with terms of the ILAs.

### 2. Project Description, Goals and Objectives

This project will provide support to Washoe County and NDOT to demonstrate compliance with the obligations and commitments specified in current and updated ILAs. Specifically, the goals are to carry out the Crediting Program process to successfully document the attainment of load reduction milestones and associated credit targets contained in current ILAs as well as to facilitate update of the agreements by the summer of 2016. The goals will be met through the following objectives:

1. For each jurisdiction, develop a project management schedule that details the workplan tasks, activities and outputs to be performed over the course of the project.
2. Review existing models, refine inputs and update baseline and expected condition scenarios using PLRM V2.1.
3. Accomplish all pollutant control registrations identified in Washoe County and NDOT stormwater load reduction plans (SLRPs) and Annual Stormwater Reports.
4. Identify key and essential pollutant controls and inspect and report their condition according to approved Crediting Program condition assessment methodologies.
5. Recalculate jurisdictional baseline loads using PLRM V2.1 for inclusion in the updated ILAs.
6. Regularly coordinate and communicate with project funders to ensure successful and timely completion of the project.

### 3. Tasks and Deliverables

#### Task 1. Project Management and Administration

1a. Provide all technical and administrative services as needed for contract completion; monitor, supervise, and review all work performed; and coordinate budgeting and scheduling to assure that the contract is completed within budget, on schedule, and in accordance with approved procedures, applicable laws, and regulations.

1b. Communication and coordination between NTCD and the project funders (NDEP, Washoe County and NDOT) is critical to the success of this project. At the beginning of the project, simple and efficient communication protocols will be developed to provide effective and regular communication to ensure a successful project. Contractor shall promptly notify the project funders of events or proposed changes, including project staff members, that could affect the scope, budget, or schedule of work performed under this agreement.

1c. Ensure that the contract requirements are met through completion of progress reports submitted concurrently with invoices. Reports shall describe the activities undertaken and the accomplishments toward achieving project goals and tasks. Reports shall be of sufficient detail to provide a basis for payment of invoices; if not, additional information as requested by the NDEP contract coordinator must be provided before reimbursement of expenditures. Appropriate back-up documentation for costs incurred, including those related to match, must be provided prior to payment of invoices.

1d. NTCD will coordinate with each jurisdiction and NDEP to identify and determine a pollutant control registration priority and timeline consistent with the Lake Clarity Crediting Program Roll Out 'Critical Path' timeline.

Deliverables:

- Monthly or quarterly invoices, progress reports and grant documentation
- Detailed project schedule for registration and inspection

**Task 2. Register Pollutant Controls**

2a. Review and prepare baseline and expected condition modeling scenarios inputs to be used in PLRM V2.1. NTCD will review: (1) urban catchment boundaries; and (2) SLRP inputs for each catchment, including but not limited to stormwater treatment size and capacity, parcel BMP implementation percentages, catchment connectivity, land use, road shoulder condition, impervious connectivity (roads, parcels) and road condition scores (based on previously collected Road RAM data and jurisdictional guidance). Recommendations for any adjustments will be summarized in a brief memo to project funders who will approve final adjustments to be incorporated into PLRM V2.1 upon their approval.

2b. Upon funder's approval of the updated inputs, model Baseline Scenario, Road Operations Scenario and Treatment BMP Scenarios for Task 2 pollutant control registrations in PLRM V2.1.

2c. Identify and perform field inspection of key and essential stormwater treatment BMPs to compare existing condition to initial condition upon installation. Additional PLRM modeling may be necessary to assist jurisdictions to determine the cost-benefit of restoring to initial condition. After jurisdictions maintain to the desired expected condition, establish benchmark and threshold values and enter into the BMP RAM database.

2d. Register Pollutant Controls in CAP. Utilizing the CAP Technical Guidance Document and Crediting Program Handbook as a reference, identified pollutant controls will be registered in CAP. Database linkages from both the Road RAM database and BMP database created with jurisdictional guidance will be uploaded to CAP. The output results from PLRM v2.1 will be saved in a recommended format and used as input into CAP as either a Road Registration or BMP Registration. A detailed assumption list along with the associated GIS layers will be uploaded to CAP for backup for future models or changes to the catchments. Jurisdictions will be notified when catchments are ready for registration. Staff will attend and provide technical support to jurisdictions at registration and check-in meetings with NDEP.

Deliverables:

- Memos summarizing recommended adjustments to catchment boundaries and SLRP inputs to be used for pollutant control registrations for each jurisdiction
- Updated GIS layers (if completed)
- Registrations of pollutant controls in CAP following the detailed project schedule

**Task 3. Condition Inspections**

3a. Perform Road RAM inspections. NTCD will collect a minimum of 4 Road RAM observations for each of the 2016 and 2017 water years and enter the data into the Road RAM database. Observations will be performed according to the protocols specified in the Lake Clarity Crediting Program Handbook and Road RAM V.2 User Manual. NTCD will coordinate with jurisdictions, who will implement the necessary safety controls to perform the observations. NTCD will furthermore coordinate with NDEP to schedule observation dates when NDEP staff are available to participate. Jurisdictions and NDEP will be kept informed of the RAM scores and standard deviation throughout the water year. If the validity of a RAM score or the jurisdiction's ability to attain the seasonally weighted average threshold RAM score or standard deviation of  $\pm 0.5$  becomes suspect, NTCD will perform additional RAM observations. It is assumed one additional RAM observation collection date will be needed each water year.

3b. Perform BMP RAM inspections. For each of the 2016 and 2017 water years, NTCD will perform BMP RAM between June and September on all registered key or essential treatment BMPs. Each treatment BMP has specific inspection and maintenance requirements outlined in the BMP RAM Technical Document and User Manual. These requirements must be met to ensure the treatment is operating as functionally intended. For each treatment there will be a defined threshold of functionality (RAM score). A score below the threshold value will trigger maintenance of the treatment, while a score above the value will indicate the treatment is still operating effectively. Results from the RAM inspection will be entered into the BMP RAM database. Funders will be kept informed of RAM scores and jurisdictions will be notified immediately if

a RAM score below the threshold is observed so that maintenance may be performed and another RAM inspection conducted. It is assumed follow up BMP RAM inspections will be needed on one quarter of the key and essential treatment BMPs registered by each jurisdiction.

3c. Perform parcel BMP verifications. It is anticipated that Washoe County will register parcel BMPs at 50% of the existing parcel BMP area percentage; therefore, no parcel BMP inspections will be conducted. Backup documentation showing the existing percent by area with certifications will be submitted with the catchment registration.

*Deliverables:* Results of conditions inspections entered into appropriate database

**Task 4. Recalculate Jurisdictional Baseline Loads using PLRMv2.1**

Utilizing the most current GIS layers and the PLRM v1.1 inputs, jurisdiction scale baseline loads using PLRM v2.1 scenarios will be recalculated for all respective Washoe County and NDOT SLRP catchments. Catchments previously identified in SLRPs as being hydrologically disconnected will not be included in the analyses. The PLRM v2.1 baseline scenario results will be summed to yield new jurisdictional baseline loads, which will be compared with previous results. In order to be used to update credit targets for the updated ILA, the final technical memorandum must be delivered to project funders by July 2016.

*Deliverables:* Draft and Final Technical Memorandum comparing old PLRM v1.1 baseline load results to new PLRM v2.1 baseline load results for all Washoe and NDOT catchments

**C. ACTIVITIES SCHEDULE**

Task	Deliverable	Start Month	Compl Month
1 Project Management & Administration	Monthly or quarterly invoices, project reports and grant documentation	Oct 15	Dec 17
	Detailed project schedule for registration and inspection	Oct 15	Oct 15
2 Register Pollutant Controls	Road Registration catchments from SLRPs uploaded into CAP	Oct 15	Dec 15
	Treatment BMP catchments from SLRPs uploaded into CAP	Oct 15	Dec 16
	Parcel BMP catchments from SLRPs uploaded into CAP	Oct 15	Sept 16
3 Condition Inspections	Conduct conditions inspections as required by LCCP Handbook	Jan 16	Sept 17
4 Recalculate Baseline Loads	Technical Memorandum comparing PLRM v1.1 to PLRM v2.1 Baseline Loads Results	Oct 15	Jul 16

D. BUDGET

Category	Rate	NDEP Reimbursable	Cash Match	Total Budget
Salaries	Hourly	\$60,397.66	\$64,435.69	\$124,833.35
Environmental Scientist IV	\$41.48 - \$59.95	\$16,000.00	\$17,884.75	\$24,942.38
Environmental Scientist III	\$31.53 - \$49.00	\$30,797.66	\$31,568.02	\$62,365.68
Environmental Scientist III	\$31.53 - \$49.00	\$13,000.00	\$14,313.65	\$27,313.65
Administrator	\$36.12 - \$51.00	\$600.00	\$669.27	\$1,269.27
Fringe Benefits	17.96% of Salaries	\$10,847.42	\$11,572.65	\$22,420.07
Operating	Actual Cost	\$100.00	\$100.00	\$200.00
Travel	Approved State Rate	\$1,125.00	\$1,125.00	\$2,250.00
Indirect Costs	37.85% of Direct Costs	\$27,429.93	\$29,232.82	\$56,662.74
Equipment /Rental	Actual Cost	\$100.00	\$100.00	\$200.00
Subcontract	Actual Cost	\$0.00	\$5,000.00	\$5,000.00
Northwest Hydraulics			\$2,500.00	\$2,500.00
2NDNature, LLC			\$2,500.00	\$2,500.00
<b>Totals:</b>		<b>\$100,000.00</b>	<b>\$111,566.16</b>	<b>\$211,566.16</b>



Budget by Task

<b>Task 1 - Project Management and Administration</b>		
<b>Category</b>	<b>Hours</b>	<b>Total</b>
<b>Salaries</b>	137	\$6,590.77
Environmental Scientist IV – Project Manager	30	\$1,767.90
Environmental Scientist III – Project Assistant	80	\$3,553.60
Environmental Scientist III – Project Assistant	0	\$0.00
Administrator	27	\$1,269.27
<b>Fringe Benefits</b>		\$1,183.70
<b>Operating</b>		\$100.00
Supplies	100	\$100.00
<b>Travel</b>	150	\$150.00
<b>IDC</b>		\$3,037.26
<b>Equipment</b>		\$0.00
<b>Subcontracts</b>		\$0.00
	<b>TOTAL</b>	<b>\$11,061.74</b>

<b>Task 2 - Register Pollutant Controls</b>		
<b>Category</b>	<b>Hours</b>	<b>Total</b>
<b>Salaries</b>	894	\$42,704.73
Environmental Scientist IV – Project Manager	175	\$10,312.75
Environmental Scientist III – Project Assistant	519	\$23,053.98
Environmental Scientist III – Project Assistant	200	\$9,338.00
Administrator	0	\$0.00
<b>Fringe Benefits</b>		\$7,669.77
<b>Operating</b>		\$100.00
Supplies	100	\$100.00
<b>Travel</b>	500	\$500.00
<b>IDC</b>		\$19,293.85
<b>Equipment</b>		\$0.00
<b>Subcontracts</b>	2500	\$2,500.00
	<b>TOTAL</b>	<b>\$72,768.35</b>

**Task 3 - Condition Inspections**

Category	Hours	Total
<b>Salaries</b>	760	\$36,863.50
Environmental Scientist IV – Project Manager	185	\$10,902.05
Environmental Scientist III – Project Assistant	390	\$17,323.80
Environmental Scientist III – Project Assistant	185	\$8,637.65
Administrator	0	\$0.00
<b>Fringe Benefits</b>		\$6,620.68
<b>Operating</b>		\$0.00
Supplies		
<b>Travel</b>	1100	\$1,100.00
<b>IDC</b>		\$16,875.11
<b>Equipment</b>	200	\$200.00
<b>Subcontracts</b>	2500	\$2,500.00
<b>TOTAL</b>		<b>\$64,159.30</b>

**Task 4 – Recalculate Baseline Loads**

Category	Hours	Total
<b>Salaries</b>	800	\$38,674.35
Environmental Scientist IV – Project Manager	185	\$10,902.05
Environmental Scientist III – Project assistant	415	\$18,434.30
Environmental Scientist III – Project assistant	200	\$9,338.00
Administrator	0	\$0.00
<b>Fringe Benefits</b>		\$6,945.91
<b>Operating</b>		\$0.00
Supplies		\$0.00
<b>Travel</b>	500	\$500.00
<b>IDC</b>		\$17,456.52
<b>Equipment</b>		\$0.00
<b>Subcontracts</b>		\$0.00
<b>TOTAL</b>		<b>\$63,576.78</b>