



December 1, 2006

To: File

From: Ron Penrose

Subject: **Status Report/Truckee River Fund**

Purpose

The purpose of this report is to provide TMWA staff an update on projects approved under the Truckee River Fund. Keep in mind that the Fund is in its infancy. Most projects approved by the Fund Advisors and the TMWA Board are still on-going (the first round of funding was conducted in December 2005 with three subsequent rounds of funding conducted in June, July and November of 2006).

Attached to this report is a spread sheet prepared by the Community Foundation (Chris Askin). The spread sheet lists every project considered by the Fund Advisors (including those not approved –zero resolution amount) as well as reporting status for each project approved by the TMWA and Community Foundation Boards. Any one interested in reviewing individual project status reports can do so by contacting Ron Penrose, TMWA, or Chris Askin, Community Foundation of Western Nevada. For information purposes, I have attached COR's status report concerning the "Urban Storm Water Quality Improvements" project.

This status memo will be updated monthly.

Near Term Activities

The Fund Advisors will meet again in January of 2007. Two of the goals of the meeting include review of proposals for Chalk Creek and Mogul Creek water quality mitigation and to review RFP/Funding schedules for 2007.

Existing Projects

To date the Truckee River Fund advisors have evaluated 27 proposals or projects. Of these 27 projects, 17 were approved for funding by the TMWA and Community Foundation Boards. 13 of these 17 have actually been funded. Two projects originally approved for funding have been withdrawn because one project could not provide the stated “match” and the other project sponsor could not accept the grant. Fund disbursement for the two remaining projects are pending waiting the signing of agreements with the Community Foundation.

STATUS OF FUNDED PROJECTS

Living River Flood Alternative Community Education and Outreach

Project Sponsor: Champions of the Truckee River

Grant Amount: \$24,000

This grant supported work to assist in the consideration of environmentally sound features in the local flood control project. A project report was received in August 2006.

The report indicated that the “living river concept” was reviewed by the community coalition and then forwarded to the “Flood Project Coordinating Committee”. The “Flood Coordinating Committee” gave its unanimous consent to give the “Living River” concept to the USACE as the locally preferred plan. The concept will be analyzed within the Environmental Impact Statement process. The project sponsor will continue to monitor the EIS process in regards to the “Living River” concept. Fund support for this effort is nearing completion with a final status report due to the Community Foundation (relative to this grant) in January of 2007.

This project benefits TMWA and the community in that a living river concept can help to restore natural habitat to the Truckee River Corridor, improve river water quality, and protect the Glendale Treatment Plant during floods.

Chalk Creek TDS Loading to Truckee River Study

Project Sponsor: City of Reno

Grant Amount: \$25,000

The project entails the procurement and installation of flow and water quality monitoring equipment on Chalk Creek and the collection of water quality and flow data that can be used in the development of water quality mitigation improvements. Chalk Creek now

flows year round and is high in TDS. High flows also trigger turbidity events at the confluence of Chalk Creek and the river which adversely impact the operation of the Chalk Bluff Water Treatment Plant.

Work completed to-date includes the procurement of water quality equipment with collection of grab samples for TDS/conductivity analyses on a monthly basis. Correlation to flow data will not happen until construction of the flow monitoring station is complete. This should be complete in the next 1-2 months where direct correlation of TDS and flows will be possible.

This project benefits TMWA and the community since the data collection effort will provide meaningful data that can be used in the development of water quality mitigation to Chalk Creek and the Truckee River, thereby improving raw water quality for the Chalk Bluff Plant and reduced TDS loading to the river.

One status report has been received from the COR and another is due in March 2007.

Truckee River Clean Up Day

Project Sponsors: Environmental Leadership and Keep Truckee Meadows Beautiful

Grants: \$9,402.50 (Environmental Leadership)
\$13,175.00 (Keep Truckee Meadows Beautiful)

This is an annual project aimed at removing trash and debris from hot spots along the river. Tree wrapping (beaver protection), weed pulling and graffiti removal. This year's event was held on September 16 and resulted in the removal of 13 tons of trash along the river corridor, tree wrapping, storm drain stenciling, and graffiti removal. Over 400 community volunteers participated in the event.

TMWA benefits from the removal of trash which can adversely affect water quality and the watershed. A summary final report was received by the Community Foundation in November.

Truckee River Restoration and Documentation Project

Project Sponsor: Rainshadow Community Charter High School

Grant: \$4585.00

This project supported a river clean-up involving 10 at risk students attending the high school. These students removed hundreds of pounds of trash along the river and then

produced a paper and presentation which was shown to the Fund Advisors in the July meeting.

TMWA benefited from the project from a water quality perspective and by providing students a perspective of the sensitivity of the river.

Watershed Protection for the Chalk Bluff Water Treatment Plant

Project Sponsor: City of Reno

Grant: \$211,000

Funded this summer, this project entails a detailed study culminating with project plans and specifications for a project that will redirect storm water run-off away from the Highland Canal.

The project will incorporate retention basins and other “low impact development” features to minimize pollutants from reaching the Highland Canal and the Truckee River. The project addresses a problem crossing jurisdictional boundaries. The City is currently developing a technical advisory committee (TAC) which will supervise the design effort. The TAC will next meet on 12/14/06.

When implemented, this project will prevent storm water run-off from entering the Highland Canal and will reduce sediment, TDS, hydrocarbon and nutrient loading on the river. Project design and technical specifications are due in June 2007.

Lower Steamboat Creek Restoration

Project Sponsor: City of Reno Public Works and Sanitary Engineering

Grant: \$86,000

This project entails the design of a project to restore lower Steamboat Creek from the wastewater plant to the confluence of the creek with the river. The grant amount was directed at the completion of a conceptual design for permitting.

Implementation of the project will provide direct water quality benefits to the river through decreased sediment, nutrient and trace metals loading. Funding was approved in June and city staff has commenced work on the project. Restoration of Steamboat Creek will improve the water quality of the river and will provide resource benefits to the community. A final conceptual design report is due in June 2007.

Urban Storm Water Quality Improvements

Project Sponsor: City of Reno

Grant: \$66,000

This is a demonstration project that entails the installation of tree box filters to allow “first flush” storm water from storm drain catch basins to enter a engineered tree box and infiltrate around the tree. The intent is to have the tree and soil “uptake” pollutants that would otherwise quickly reach the river. After a few years growth, the trees would be transplanted to various parks and new trees would be planted in the tree boxes. This project (if proven) could be expanded and may provide for a reduction in storm water contaminants (hydrocarbons) reaching the river. This is a direct water quality benefit to TMWA and community.

Design of the project is complete and the first tree boxes were completed in late October 2006. The City will soon be testing and evaluating water quality (influent vs. effluent) to determine the effectiveness of the project. A comprehensive project status report was received in November 2006 (see attached).

“This Drains to the Truckee River” Storm Drain Stenciling Project

Project Sponsor: Truckee River Watershed Council

Grant: \$9,300

This is a pilot project where storm drain catch basins in the urban core of Truckee would be stenciled “This Drains to the Truckee River” in an effort to reduce auto and household toxics from being dumped to the Truckee River. This project will provide direct water quality benefits to the Truckee River. A final report on the project is due in March 2007.

Assessment of Petroleum Impacts to the Truckee River from Direct Stormwater Discharges

Project Sponsor: U.S. Fish and Wildlife Service

Grant: \$30,840

This project is a study of hydrocarbon uptake by fish within the urban area of Reno and Sparks. Previous work has shown a significant increase in the uptake of hydrocarbons by

fish in the urban area of the river, most likely from dumped petroleum products into storm drain catch basins. The project will be coordinated with the City of Reno and is multi-jurisdictional in nature. The project incorporates the following:

1. Identify (through analysis of fish tissue) reaches of the river most affected by petroleum hydrocarbons.
2. Determine the extent to which hydrocarbons may be affecting wildlife.
3. Identify major sources contributing significant hydrocarbons to the river.
4. Recommend reduction or mitigation strategies.

There have been occasions where storm drain discharges containing oil have forced the temporary shutdown of the Glendale Water Treatment Plant. Specific reduction strategies coming from this study should help to mitigate this problem when implemented. Truckee River water quality will be improved. A final report concerning this assessment is due in January 2008.

Low Impact Development Demonstration and Storm Water Retention for New Student Union at UNR

Project Sponsor: University of Nevada

Grant: \$34,483

This project involves the installation of pervious pavers adjacent to the student union building at UNR in foot traffic areas. Also involved is the construction of a retention/infiltration basin to capture run-off from paved areas. The goal is to infiltrate the surface run-off which would otherwise quickly make its way to the Truckee River. The final report on this project is due October 2007.

Quantification of Dissolved Organic Nitrogen Originating from Natural Sources and Wastewater Effluent

Project Sponsor: University of Nevada

Grant: \$81,093

This project is a two year assessment and quantification to determine which fraction of organic nitrogen actively promotes algae growth in the Truckee River. Conversely, identification and quantification of relatively benign organic nitrogen (nitrogen that is relatively inert or can be biologically used by native plants) will be undertaken. Results of the project will help in the development, selection and prioritization of future remediation or treatment projects, with the goal of improving water quality and reduction of nitrogen load on the river. A final report is scheduled for completion in 2008.

Snapshot Day 2006

Project Sponsor: Nevada Department of Environmental Protection

Grant: \$6605

Snapshot day is a one day event where volunteers collect water quality data under the supervision of water quality professionals. The one day event focuses on the entire Truckee River system starting at Lake Tahoe and its tributaries all the way to Pyramid Lake. The event promotes environmental stewardship of the Truckee River System and is valuable in identifying water quality hot spots along the river.

Identification of hot spots with follow-up remedial action can improve river quality which would benefit TMWA. The report summarizing this year's event is due fairly soon.

Truckee River White Top Eradication Project/ Mogul and Steamboat Creeks

Project Sponsor: Great Basin Institute/Nevada Conservation Corps

Grant: \$13,692.70

This project involves the eradication of Tall White Top from approximately 20 acres of river corridor near the confluence of the Truckee River and the Steamboat and Mogul Creeks. Tall White Top is an invasive, noxious weed that competes with the natural riparian habitat. It has a profound deleterious impact upon the riparian habitat of the lower Truckee River.

The project will involve the spraying of an environmentally suitable herbicide for Tall White Top followed by the planting of native cottonwoods, willows and grasses. The project directly improves water quality and the watershed.

Work has not started yet as the project sponsors need to be sign the agreement with the Community Foundation.

Truckee River Clean-Up Day- 2007

Project Sponsors: Keep Truckee Meadows Beautiful, Nevada Econet, Big Brothers Big Sisters

Grant: \$24,730

This annual project provides clean-up of “hot spots” along the river. Hot spot areas are identified by park staff and project partners as areas in need of litter pick-up, trash removal, tree wrapping, weed pulling and graffiti removal. Truckee River Clean-up day will be held on September 29, 2007. The sponsors also need to sign the agreement with the Community Foundation.

RP/rp

Cc Lori Williams Mark Foree
Scott Estes, Kim Mazeris
Jeff Tissier, John Erwin

Attachments

- 1) Community Foundation Spread Sheet
- 2) Chalk Creek and Mogul Creek RFP's
- 3) Project Status Report: COR's Urban Storm Water Quality Improvments

RP/rp