Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet

Applicant: Alamosa Riverkeepers

Amount Requested: $64,500.00

Water Activity Name: Terrace Reservoir Hydrologic Modeling, Site Survey, and Mapping

Source of Funds: Basin Account

Water Activity Purpose:

Study/analysis of structural activity.

Matching Funds: None

Potential to benefit consumptive and non-consumptive needs.

County: Rio Grande and Conejos

Drainage Basin: Alamosa River – Rio Grande

Water Source: Alamosa

Water Activity Summary:

Alamosa Riverkeepers® (ARK)is requesting $64,500. Our mission is "to strive for a clean, functional river system which benefits the economic, ecological and recreational needs of the community." ARK operates under the auspices of the Valle del Sol Community Center (The Center), a federal nonprofit 501(c)(3)organization founded in 1989 in Capulin, a town in the Alamosa River Watershed which has been environmentally impacted by the initial cyanide spill and by subsequent heavy metals contamination from Summitville Mine. In 2001, a Natural Resource Damage settlement was reached with Robert Friedland. Five million dollars of the settlement was set aside for physical improvements in the Alamosa River watershed and for acquisition of "equivalent natural resources". ARK spearheaded the formation of a local group, the Alamosa River Foundation (the Foundation), to represent stakeholders in the Alamosa River watershed. In 1999 ARK was accepted into the Waterkeeper Alliance, an international nonprofit organization comprised of 153 member programs throughout the world, with combined stewardship of more than 67,000 miles of rivers, streams and shorelines. ARK serves the communities of Capulin and La Jara, in Conejos County, which is 57% Latino and has double the State's number of people living below poverty. ARK is in partnership on this project with Terrace Irrigation Company, a Colorado nonprofit with approximately 30 shareholders. The company owns and operates Terrace Reservoir, which stores runoff during winter months and releases water in priority during the irrigation season for agricultural use.

Type of Activity: Terrace Irrigation Company will conduct hydrologic modeling, site survey, and topographic mapping of Terrace Reservoir.

Purpose: The Terrace Reservoir Hydrologic Model, Survey and Mapping project is a critical component of the Alamosa River Instream Flow Project. This funding application requests funds for hydrologic modeling, a site survey and topographic mapping. The complete Alamosa River Instream Flow Project includes: (1) Acquiring senior irrigation water rights on the Alamosa River; (2)Improving the Terrace Reservoir spillway to remove the State-imposed storage restriction; (3)Transferring the irrigation water rights to the Colorado Water Conservation Board (CWCB) for storage in Terrace Reservoir and instream flows in the downstream Alamosa River; and (4)Operating Terrace Reservoir to store and release CWCB flows in accordance with an instream flow program. The full Alamosa River Instream flow project resulted from the Summitville Mine disaster and conclusions reported in the Colorado Water Conservation Board's *Alamosa River Watershed Restoration Master Plan and Environmental Assessment Final Report*. Specifically, the Master Plan

identified improving the Terrace Reservoir spillway in connection with the acquisition of water rights for instream flow purposes as two preferred solutions to watershed health.

Need: The Colorado State Engineer has determined that the existing Terrace Reservoir spillway has insufficient capacity to pass the probable maximum flood. Consequently, a storage restriction has been placed on the reservoir. In order to implement the Alamosa River Instream Flow Project, spillway capacity must be restored and the storage restriction must be lifted to accommodate water rights that will be stored and released for instream flow purposes. Specific spillway improvements cannot be determined until a site-specific Probable Maximum Flood analysis has been performed. However, any spillway improvements are expected to occur in the vicinity of the existing spillway and discharge channel. Topographic mapping for the area encompassing the Terrace Reservoir dam and spillway is a first and essential step toward the design and construction of any spillway improvements required by the State Engineer. The photograph in Figure ES-7 shows the current condition of Terrace Reservoir Spillway. Because of these deficiencies there is presently a 2,000 acre feet State restriction on Terrace storage. After the proposed modifications to the spillway and the lifting of this storage restriction, 2,000 acre feet of storage capacity in Terrace Reservoir will be dedicated to instream flow.

Objective: Our Instream Project will purchase one or more senior irrigation water rights, remove that water from farming, place it into a storage-and-release plan at Terrace Reservoir, and thus restore the instream flow and improve the natural environment in the Alamosa River channel. Hydrologic modeling, site survey, and topographic mapping of Terrace Reservoir are required to meet these objectives.

Discussion:

The applicant did a nice job of describing the project and filling out the application. The water activity application discusses the potential to remove a 2000 acre foot storage restriction on Terrace Reservoir and discussed the potential to purchase future agricultural water rights for instream flow purposes. The application indicates that Terrace Reservoir has 30 share holders. While the proposed study appears to be a valuable effort at resolving storage restriction and spill way modifications it is unclear how and when the future steps of the overall goals of the project will be accomplished. For example, including information on how and when acquiring water rights may be accomplished. It is also unclear if the 2000 acre foot restriction is removed how will this be paid for and why would additional rights be needed.

The proposed activity if successful would help sustain and meet agricultural needs and can help address non-consumptive needs. The application does not explain why this particular resource is a priority for the basin in the context of other consumptive and non-consumptive needs.

Issues/Additional Needs:

Additional information is needed on the travel line item. Need information on the type of travel and reimbursement rates/unit rates.

Is current water quality capable of supporting aquatic life?

Staff Recommendation:

Staff recommends approval for allocation of up to $64,500.00 for the Alamosa River Project. This approval is conditioned on receiving the above information on travel.

All products, data and information developed as a result of this grant must be provided to CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and will help promote the development of a common technical platform.