Alternative Agricultural Water Transfer Methods – Competitive Grant Program
Water Activity Summary Sheet
Agenda Item 13.a

Applicant: The Nature Conservancy

Water Activity Name: Rotational Fallowing as a Means of Reducing Consumptive Water Use from Irrigate Mountain Hay Meadows – Yampa River Basin

Water Activity Purpose: Nonstructural Activity

Drainage Basin: Yampa

Water Source: Agricultural Water Rights

Amount Requested: $214,282

Matching Funds: $98,703

Staff Recommendation
Staff recommends the applicant comes back to the board with an approach that includes elements that would move the approach closer to an implementation phase.

Water Activity Summary:
This application, which includes the applicant researchers from Colorado State University, Community Agriculture Alliance, and Trout Unlimited aims to evaluate the ability of high-elevation hay meadows to recover after fallowing. This has the potential to make irrigation water available for other uses, such as for in-stream, municipal, industrial, or downstream agricultural needs. The project will evaluate the productivity of irrigated land following a fallow.

The team has an interest for making small quantities of irrigation water available for transfer to in-stream uses in select locations where it might be most valuable, such as in smaller order streams where the addition of a small amount of water could yield large environmental benefits.

As stated in the scope of work, the studies objective is to determine the impact of rotational fallowing of mountain hay meadows on the subsequent forage yields and quality, changes in species composition (including weed invasion), and changes in soil nutrient status. As such, the tasks in the scope of work are:

- Task 1 – Identify Cooperators
- Task 2 – Delineate Plot Areas and Implement Treatments
- Task 3 – Data Collection, Analysis, and Summary

Discussion:
Staff believes that having a West Slope project, focused on in-stream benefits, and a perennial, rather than an annual crop has merit. At this stage in the alternative methods program, staff was looking for grants that went beyond pure agricultural research, and instead focused more on implementing alternative agricultural transfers. In addition, staff hope that the program helps build new partnerships between different interests within the water community.

Other project applicants have conducted outreach, not only to potential participants who would partake in rotational fallowing of their lands, but also those who could use the water. Some past applicants identified both participants prior to submitting an application. Staff believes identifying potential end users, whether consumptive or nonconsumptive, is vital to understanding the utility of the project.

The applicant indicated that some streams could be served by a small quantity of additional water during the irrigation season. It would be important, as part of outreach to CWCB instream flow staff, to agricultural producers, and others, that the project identify where those opportunities might be.

The applicant indicated that a future phase would quantify the amount of water that could be saved from fallowing a high-elevation meadow. However, there is an opportunity to quantify during the course of this phase. Staff believe doing so would help others throughout the state understand the potential benefits of such a project.

In addition, as part of the grant, CSU is charging a 25% administration fee, and the Nature Conservancy 10%. This means that of the $214,282 project, $155,841 is going towards actual implementation. In other words, 27% of the total project is administrative. CSU did decrease their standard administration fee. The 25% is incorporated into the hourly rates of the researchers.

Staff spoke to the applicant regarding these concerns, and the applicant plans to come before the board with a revised scope of work for the board to consider.

Issues/Additional Needs:
See above

Staff Recommendation:
Staff recommends the applicant comes back to the board with an approach that includes elements that would move the approach closer to an implementation phase.

All products, data and information developed as a result of this grant must be provided to the 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.

In accordance with the Criteria and Guidelines of the Alternative Agricultural Water Transfer Methods Competitive Grant Program, staff would like to highlight additional reporting and final deliverable requirements. The specific requirements are provided below.

Reporting: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in the scope of work including a description of any major issues that have occurred and any corrective action taken to address these issues.

Final Deliverable: At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

Engineering: All engineering work (as defined in the Engineers Practice Act (§12-25-102(10) C.R.S.)) performed under this grant shall be performed by or under the responsible charge of professional engineer licensed by the State of Colorado to practice Engineering.