



COLORADO WATER CONSERVATION BOARD



Alternative Agricultural Water Transfer Methods Criteria and Guidelines for the Competitive Grant Program

Introduction and Background

As Colorado's population continues to grow in the coming decades, it is likely that increased transfers of agricultural water rights will occur in order to satisfy increased M&I water demands. While it is expected that Colorado's future water demands will be met through all of the "four legs of the stool" (conservation, new supply, identified projects and processes, and agricultural transfers), the CWCB through the SWSI 2010 report and other analyses has indicated in the coming decades, irrigated acreage is expected to decline throughout the state due to a variety of reasons:

- Urbanization;
- Planned agricultural to municipal transfers;
- Additional agricultural to municipal transfers necessary to address the M&I water supply gap; and
- Other reasons, including compact compliance (e.g., Republican River) and augmentation requirements.

The CWCB found that the water providers' identified projects and processes that are planned for implementation to meet future water demands could yield approximately 500,000 acre-feet if 100 percent successful. Even if completely successful, there still remains a water supply gap. Over the past several years, many of these water projects have been proceeding through the federal permitting process with no guarantee of success. Considering the difficulty of successfully permitting water projects, the alternative for many water providers is likely to be the transfer of agricultural water rights. The CWCB has found that if the "Status Quo" development trend continues, the South Platte Basin is estimated to lose 301,000 to 424,000 acres of currently irrigated land by 2050.

Due to the likelihood that increased transfers of agricultural water rights will occur in the coming decades, there is an urgency to implement alternatives to traditional transfers resulting in permanent dry-up in order to minimize the negative socioeconomic impacts to rural communities that so often result from such transfers. Rotational fallowing, interruptible supply agreements, water banks, purchase and lease backs, deficit irrigation, and changing crop type are the kinds of options that are available as alternatives to permanent agricultural transfers. The Colorado General Assembly through support of past CWCB "Projects Bills" has tasked the CWCB with finding and facilitating viable alternatives to the buy-and-dry approach to agricultural water transfers. To date, the Legislature has provided funding through the 2007, 2009, and the 2012 CWCB Projects Bills for a total of \$4 million to assist in numerous ATM studies and pilot projects that have helped move these important water supply management options forward.

Through this program and CWCB's efforts, significant progress has been made towards making ATMs a viable option for municipalities. Since 2011, several pilot projects have been initiated to determine how some of these projects could be implemented on a large scale. Partnerships between the cities, farmers, land conservancies, funding partners, and environmentalists have been created through this program and appear to have great potential for success.

Basin roundtables recognize the need to focus on basin level planning and look for ways to increase the flexibility within the system through alternative transfers, cooperative agreements, drought plans, and additional infrastructure while respecting Colorado Water Law and individual property rights. While there is much work to be done, there is reason to believe that alternative water transfers will provide a viable option for municipal water providers in the not so distant future.

To date the ATM grant program has provided funding for 15 projects (see *Alternative Agricultural Water Transfer Methods Grant Program Summary and Status Update*, November 2012). Some projects have moved toward conceptual implementation of ATMs, while others have been of a research nature. Solutions to some of the barriers to implementation have been recommended through the findings of the ATM grant projects, but more work is needed to fully realize the goals of the grant program. Certain barriers to implementation, such as infrastructure needs (especially with regard to associated funding issues) and water quality have received limited attention. The objective of this grant program should transition into an application and integration phase that will more fully integrate the findings of the first two rounds of ATM grant funding to achieve the dual objectives of overcoming the barriers to implementation and establishing realistically implementable ATM programs. Considering differences between basins and the different projects that have been funded through this and other programs, below is a set of targeted recommendations for the South Platte, Arkansas, and West Slope.

South Platte River Basin

- Recognizing that each municipal water system and each ditch company are unique, the CWCB should continue to promote and facilitate agreements between irrigators and municipal water providers.
- Continue to support demonstration/pilot projects to determine the feasibility of new concepts or techniques as needed.
- The CWCB should continue its support of coupling conservation easements with interruptible supply agreements has the potential to provide a reliable source of water and preserve agricultural productivity in perpetuity. This strategy should be examined in more detail including an analysis of which lands and/or ditches are most amenable to this approach, the identification of funding partners (e.g. Great Outdoors Colorado, Colorado Department of Revenue/Tax Credits, etc.) and terms of the conservation easement deeds and interruptible supply agreement.
- The South Platte Basin Roundtable and interests could also address other important issues such as the development of a South Platte Basin water bank and infrastructure sharing. As part of South Platte Basin planning, an infrastructure evaluation would need to take into account the Aurora Water Prairie Waters Project pipeline, the United Water infrastructure, the East Cherry Creek Valley (ECCV) pipeline, the proposed pipeline from the Poudre River basin to Thornton, and other infrastructure needs. There may be possible ways to share pipelines, storage, and pumping plants that could result in some benefits and cost savings.

- Water quality issues and concerns could also be considered by this group since treatment will be an important part of an ATM program. There may be ways to partner in this area as treatment plant costs are a significant part of any municipal water supply. The results of the Zero Liquid Discharge program (funded through the Water Supply Reserve Account [WSRA] program) should be evaluated.

Arkansas River Basin

The Arkansas Basin is facing the second largest threat in the state with respect to agricultural dry-up. As municipalities turn to agriculture for additional supplies, efforts of the Super Ditch have led the state's ATM efforts. The next phase for the Arkansas is for their basin planning efforts to focus on the needs of the basin and implementation of the ATM. Following are recommendations for the Arkansas Basin.

- Advance the Super Ditch's efforts to implement pilot projects to lease water in 2013 using a temporary approval by the State Engineer under 37-92-308 (5). The authority to approve these under this statute has been challenged in water court.
- The CWCB should continue its support of coupling conservation easements with interruptible supply agreements has the potential to provide a reliable source of water and preserve agricultural productivity in perpetuity. This strategy should be examined in more detail including an analysis of which lands and/or ditches are most amenable to this approach, the identification of funding partners (e.g. Great Outdoors Colorado, Colorado Department of Revenue/Tax Credits, etc.) and terms of the conservation easement deeds and interruptible supply
- Complete the study by the Upper Arkansas Water Conservancy District (UAWCD) to develop a set of tools (Administration Tool) to simplify the engineering and reduce the costs related to a rotational following ATM. If and when completed, support the promulgation of rules determining how the Administration Tool can be applied in administrative approvals and/or water court cases.
- Support the Arkansas Basin Roundtable efforts in basin planning, analysis of varying hydrologies, native and imported water, future municipal, agricultural and nonconsumptive needs, existing, planned and needed infrastructure to help meet their future water supply needs.

West Slope

The West Slope presents a unique opportunity with respect to ATM. On the West Slope the use of ATM can be used for both municipal supply and to address a Colorado River compact curtailment. Following are the recommendations for the ATM program for the West Slope, which includes efforts in the Colorado, Gunnison, Southwest and Yampa Basins.

- Advance the Colorado River Compact Water Banking study and its focus on rotational following by integration using the results from the Aspinall Water Bank study and Yampa ATM study.

- Continue the Yampa ATM study to determine the acceptability by ranchers of an ATM and the concurrent benefits to fish habitat. These identified lands and associated water can also be used for the Compact Water Banking project and should be integrated.
- Continue the study by CSU and others on the suitability of pasture grass for rotational fallowing.

Application Process, Eligibility and Evaluation Criteria

Purpose

The purpose of this grant program is to further examine and assist in developing/implementing alternate transfer methods to traditional purchase and transfer of agricultural water. The grant program seeks to both allow the free marketing of water supplies and to advance alternatives to traditional purchase and transfer of agricultural water. **It is expected that these monies should fund projects that build upon work performed in past funding cycles and encourage more “on-the-ground” projects (i.e. pilot/demonstration projects, facilitating agreements between municipal water providers and irrigators, etc.). Preference will be given to projects that provide usable and transferable information that will increase our understanding of how to successfully design transfer programs that provide a long-term reliable water supply while sustaining meaningful production agriculture. Further, projects funded from this grant program should build upon work performed in the initial funding round.**

The grant program is available to applicants/projects statewide. The ultimate number of grants funded will depend on the number and quality of applications received. Staff will initially receive grant applications for consideration at the May 2013 CWCB meeting. **The deadline to submit grant applications is April 15, 2013.** The CWCB Board will consider the grants and recommendations by staff and will decide whether to fund, not fund or partially fund the grant requests. If funds are not exhausted, staff will consider applications at any board meeting until the funds are exhausted.

Application forms are available electronically at <http://cwcb.state.co.us>.

Eligibility Requirements

In order for a project to be eligible to receive funding from the grant program it must meet the requirements described in this section. If a project meets the eligibility requirements it will then undergo further analysis to determine how well it meets the Evaluation Criteria described in the following section.

In order to be eligible for funding, the project must include:

1. A completed application form.
2. A description of how, if implemented, it will protect property and water rights.
3. The project must at a minimum conceptually describe the technical, institutional, or legal elements of alternative agricultural water transfers.
4. If grant monies are proposed for use for legal or engineering assistance then the use of those funds shall be oriented toward advancing the knowledge of alternative agricultural water transfer methods and techniques; not for preparation of a specific water court case.
5. A minimum of a 10 percent cash match of total project costs is required. Cash and in-kind matches above this amount are preferred.

Evaluation Criteria

The following grant evaluation criteria will be used by the CWCB to evaluate and make recommendations to fund, partially fund or not fund a grant application. The criteria are aimed at advancing alternative transfer methods from the literature and studies to actual on the ground projects/programs that provide reliable water supply and sustain key elements of the agricultural area from which the water is transferred. The applicant should fully address and explain in detail in the application how, and the extent to which, the proposed project/program meets each of the criteria. However, it should be noted that the project does not have to meet all of the criteria to be eligible to receive funding and the criteria below are not listed in any order of important or priority.

1. The proposed project/program builds upon the work of former alternative water transfer methods efforts and addresses key areas that have been identified. For more detailed information on this work, please refer to the draft report: *Alternative Agricultural Water Transfer Methods Grant Program Summary and Status Update*, November 2012.
2. The proposed project addresses one or more key recommendation(s) in the report: *Alternative Agricultural Water Transfer Methods Grant Program Summary and Status Update*, November 2012.
3. Preference will be given to projects that provide additional matching resources in the form of cash, past expenditures and in-kind contributions that are in addition to the required 10% cash match.
4. The proposed project/program has the ability/potential to produce a reliable water supply that can be administered by the State of Colorado, Division of Water Resources.

5. The proposed project/program produces information that is transferable and transparent to other users and other areas of the state (i.e., would provide an example “template” or roadmap to others wishing to explore alternate transfer methods).
6. The proposed project/program addresses key water needs identified in SWSI 2010 or as identified in a basin’s needs assessment.
7. The proposed project/program advances the preservation of high value agricultural lands. Value can be viewed as: the value of crops produced, the value the agriculture provides to the local community, and the value the agricultural area provides for open space and wildlife habitat.
8. The proposed project/program addresses water quality, or provides other environmental benefits to rivers, streams and wetlands.
9. The proposed project/program increases our understanding of and quantifies program/project costs. This could include: institutional, legal, technical costs, and third party impacts.
10. The proposed project/program does not adversely affect access to other sources of water (not subject to/participating in the program) where owners of these water rights may wish to pursue traditional transfer of their rights to other users.
11. The proposed project/program provides a perpetual water supply for the new and/or alternate use and preserves agricultural production and/or helps sustain the area’s economy from which the transfer is occurring.
12. The quantity of water produced by the proposed project/program. Preference will be given to programs that can address larger water supply needs.

For additional information about the program and to obtain an application form please visit the CWCB website at <http://cwcb.state.co.us> or contact Todd Doherty at (303) 866-3441 ext. 3210 or by email at todd.doherty@state.co.us.