PUBLIC HEARING

STAFF: Calvin Feik, Bill Long

RE: Application for a Permit to Conduct a Designated Activity of State Interest or to Engage in Development in a Designated Area of State Interest; filed by Arkansas River Farms, LLC, and Lower Arkansas Water Management Association

STAFF RECOMMENDATION:

Staff recommends conditional approval of the Application.

APPLICATION:

On October 24, 2017, an Application for a Permit to Conduct a Designated Activity of State Interest or to Engage in Development in a Designated Area of State Interest ("Application" or “1041 Application”) was submitted by Arkansas River Farms, LLC (“ARF”) and the Lower Arkansas Water Management Association (“LAWMA”). The Application followed an initial draft application, dated September 26, 2017, and an October 9, 2017 pre-application meeting between representatives of Bent County and ARF and LAWMA. The Application was accepted as complete on October 30, 2017 at 9:00 AM.

Prior to Applicants’ submission of the Application, the County corresponded several times with ARF, beginning in February 2017, informing ARF of the need to obtain a 1041 Permit for the proposed development and activity. Following discussions with representatives of ARF, the County agreed to a temporary forbearance on enforcement under the County’s 1041 Regulations, in return for ARF’s agreement to file an application once certain business details of its proposed development and activity had further evolved.

NOTICE AND REFERRALS:

Notice of the Application and hearing was published in the Bent County Democrat on Thursday, November 2, 2017, in accordance with Sections 1.304 and 2.301 of the Guidelines and Regulations for Areas and Activities of State Interest, County of Bent, State of Colorado (”1041 Regulations”). In accordance with Section 1.304(f) of the 1041 Regulations, Notice of the Application was referred to:

- Bent Conservation District
- Colorado Department of Public Health & Environment – Water Quality Control Division
- Colorado Division of Water Resources - State Engineer
- Colorado Division of Water Resources – Division 2 Engineer
- Colorado Parks & Wildlife
- Colorado State Conservation Board
- East Otero Conservation District
- Fort Lyon Canal Company
- Lower Arkansas Valley Water Conservation District
- Natural Resources Conservation Service – Las Animas Field Office
- Otero County Commissioners
- Prowers Conservation District
- Prowers County Commissioners
- Southeastern Colorado Water Conservancy District

APPLICANTS:

ARF is a Colorado limited liability company, with two member entities: Resource Land Holdings (“RLH”) and New Arkansas River Farm, LLC. RLH is a Denver-based private equity firm, focusing its investments in agricultural, timber, and mining properties around the U.S. Staff has been informed that Karl Nyquist is a principal with New Arkansas River Farm, LLC.

LAWMA is a non-profit Colorado corporation, organized with the overall purpose of developing water supplies to assist its members with making continued diversions from structures with junior priorities under the water rights administrative system in the Arkansas River Basin. LAWMA’s present service area (depicted in Figure 1 of the Application) extends to Lincoln, Otero, Elbert, Baca, Cheyenne, Kiowa, Prowers, and Bent Counties. There are presently approximately 684 diversion structures augmented by LAWMA, of which approximately 94% are used for agricultural purposes. LAWMA’s replacement water supplies are derived from a number of sources, including shares in mutual ditch companies that have been changed to augmentation and replacement uses pursuant to water court decrees. There are 27,566 common shares and 940.15 preferred shares of stock presently issued by LAWMA. LAWMA allocates water to its common shares based on the annual estimated yield of its water rights. The current average allocation is 0.75 acre-feet per share, with actual annual amounts depending on hydrological conditions.

DESCRIPTION OF PROPOSED DEVELOPMENT AND ACTIVITY:

By their Application, ARF and LAWMA (together, the “Applicants”) request a permit to engage in a development in a designated area of state interest and to conduct a designated activity of state interest. Applicants propose to dry up several thousand acres of farmland in Bent County historically irrigated by shares in the Fort Lyon Canal Company (“FLCC”) owned by ARF. Under agreement with LAWMA, ARF has traded some of its FLCC shares to LAWMA in exchange for LAWMA shares, which LAWMA trade shares could be used for augmentation uses both inside and outside of Bent County. ARF’s remaining FLCC shares would be moved to other farm parcels.

ARF has stated that the purpose of the proposed development and activity is to consolidate existing farming operations in Bent, Prowers, and Otero Counties, enhance the water supply for such consolidated operations, and attract large agricultural businesses to the region, including a proposed mechanized dairy near Las Animas (“Bent Dairy”).
ARF represents that it has invested approximately $50 million in these land and water rights acquisitions. ARF has acquired a total of 17,414.44 shares in the FLCC, representing approximately 18% of the total shares issues by FLCC. A majority of these FLCC shares were purchased by ARF from Pure Cycle Corporation and were the subject of prior unsuccessful efforts to change the use of the shares for purposes outside of the Arkansas River Basin. ARF has also acquired approximately 13,674 acres of land within Otero (260 acres), Prowers (1,365 acres), and Bent Counties (12,049 acres), most of which was historically irrigated by the FLCC shares. ARF did not acquire 4 parcels in Bent County (totaling approximately 843 acres) historically irrigated by ARF’s FLCC shares, but did acquire dry-up covenants burdening these 4 parcels. ARF has reportedly assigned these covenants to LAWMA. Applicants have not included these covenant-burdened parcels and FLCC shares (“Excluded Interests”) in the Application, despite Staff’s request that Applicants do so.

The 17,414.44 FLCC shares acquired by ARF historically irrigated approximately 12,754 acres. Of this total, approximately 10,861 irrigated acres are located in Bent County. These lands were historically flood irrigated. Because FLCC makes deliveries on a rotational schedule, water was not uniformly delivered to the individual farm parcels throughout each irrigation season. Thus, ARF seeks to increase efficiency and provide a more uniform water supply. To do so, ARF proposes to “stack” the remaining FLCC shares on its most productive and sustainable parcels, construct pivot irrigation systems for these parcels, and provide an additional supply of ground water from wells on these parcels augmented by the LAWMA trade shares.

Within Bent County, the Application states, as summarized in the table below, that 9,929 acres of historically flood irrigated acreage will, as a result ARF’s development and activity, be reduced to 4,300 acres of pivot irrigated land (“Pivot Lands”) and 1,195 acres of flood irrigated land (“Flood Lands”). As a consequence, ARF’s proposed development will result in the permanent cessation from irrigation of approximately 4,434 acres in Bent County (which acreage is understood not to include the additional dry-up occurring on the Excluded Interests parcels, totaling approximately 843 acres). Of the foregoing total, ARF proposes that 2,724 acres will be dry-land farmed, and 1,710 acres will be revegetated. ARF also owns 2,120 acres of historically non-irrigated pasture land in Bent County, which will remain as non-irrigated pasture.

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1 Of these parcels are listed in Application Exhibit N. In addition, “Farm 85” is included in LAWMA’s 2017 Rule 14 plan.
2 The acreages stated in the various documents comprising the Application are not uniformly consistent; the Amended FLCC findings (Application Exhibit U) states that 12,754 acres were historically irrigated by the ARF FLCC shares, whereas Table 1 of the Application (included below) identifies a total of 11,422 acres as historically irrigated.
3 Again, discrepancies in the acreage numbers, as Table 1 of the Application identifies only 9,929 acres as historically irrigated in Bent County vs. 10,861 acres identified in a January 27, 2017 email from ARF’s counsel to the County’s attorneys.
ARF reports it will directly utilize up to 9229.44 of its FLCC shares to irrigate the Pivot Lands and the Flood lands. Water available pursuant to such shares will continue being delivered and used for irrigation in accordance with the bylaws and operational policies of the FLCC. On the Pivot Lands, water delivered pursuant to the FLCC shares will be pumped from forebays to center pivot sprinklers installed on the lands, when available. When FLCC water is unavailable, the remaining irrigation water demand on the Pivot Lands will be satisfied from the pumping of up to 26 new wells ("ARF Wells," as described in Application Exhibit B, Table 2). The ARF Wells will be augmented by LAWMA shares owned by ARF.

ARF acquired 6,080 LAWMA shares on March 31, 2017, pursuant to a trade agreement with LAWMA whereby ARF conveyed 6,080 of its 17,414.44 FLCC shares to LAWMA. The Applicants contemplate an additional, future conveyance, in 2018, of 1,429 FLCC shares to LAWMA, again in exchange for issuance of an equal number of LAWMA shares in the name of ARF. Shortly after the March 31, 2017, trade, ARF sold approximately 2,500 of the LAWMA shares to a third party, presumably for use outside of Bent County. ARF’s ownership of the remaining approximately 3,580 (5,009 if/when the second exchange is transacted) LAWMA shares will entitle ARF to a pro rata amount of the augmentation water yielded annually pursuant to LAWMA’s decreed and administratively-approved water supplies. Applicants have stated that, before the end of 2017, they intend to file a water court application seeking to add the ARF Wells as augmented structures under LAWMA’s existing augmentation plan. Though ARF has stated its intention to utilize most of its remaining 3,580 (5,009, following second exchange) LAWMA shares for the ARF Wells, the LAWMA shares owned by ARF would nevertheless remain marketable and they could in the future be transferred to third parties, upon LAWMA’s approval, to augment other diversions, including for industrial and municipal purposes, within LAWMA’s then-present service area.

LAWMA recently added included the 6,080 FLCC shares acquired from ARF as a source of replacement water in its State-approved 2017 “Rule 14” plan. LAWMA intends to file a water court application in 2018 to permanently change the ARF-derived FLCC shares from irrigation use to augmentation and replacement uses for the benefit of LAWMA’s shareholders. In order to obtain court approval of any such change, it will be necessary to permanently remove from irrigation the acreage historically irrigated

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4 The ARF Wells are not specifically included in the 2017 Rule 14 plan.
by the changed FLCC shares, including those 2,500 shares now being utilized for benefits outside of Bent County, and, further, to provide for the successful revegetation or dry-land farming of such acreage.

Prior to both the March 2017 LAWMA-ARF trade and the anticipated FLCC water court change application, Applicants obtained the approval of the FLCC Board of Directors, as required by the FLCC bylaws, to change the use of up to 7,509 FLCC shares. The Amended Findings issued by FLCC in December 2016 (Application Exhibit U) approved the proposed change, subject to certain terms and conditions governing the dry-up and revegetation of the lands historically irrigated by the FLCC shares. Among the revegetation terms and conditions included in the FLCC findings are: a 10-year period for ARF to complete dry-up, limitations on the amount of dry-up acreage that may be revegetated vs. dry land farmed in the future, notice and reporting to FLCC of dry-up commencement and progress, security equivalent to $250/acre in the form of a 5-year letter of credit, and the reservation of 500 FLCC shares to aid in establishment of revegetation. The Applicants propose that Bent County adopt the same terms and conditions as part of its determination of the 1041 Application.

As noted above, ARF’s stated objective is to create high-yield, water-efficient farm parcels that will attract large agricultural businesses to the region. Despite a significant reduction in irrigated acreage as a result of ARF’s proposed development and activity, ARF’s economic consultant projects an overall 19% average increase in the value of crops produced on ARF’s irrigated lands in Bent County, due to greater yields from enhanced water supplies (Application Exhibit L, Page 6). ARF purports to have already invested $1.6 million in augmentation improvements to effectuate its proposed development and activity, and has committed to investing up to $9 million more for the Pivot Lands. ARF’s economic consultant further projects that irrigated development of the Pivot Lands will create an additional approximately 17 jobs, and add approximately $1.2 million to regional output and labor income.

Among the large agricultural businesses ARF seeks to attract to the region is the proposed Bent Dairy. ARF has represented that the proposed Bent Dairy will require an approximately $40 million investment, directly employing as many as 35 workers, and produce as much as $24 million per year in milk and related products. In addition to economic benefits directly associated with the proposed Bent Dairy, economic benefits are projected to accrue to Bent County through sales of feed to the dairy from local growers, including the ARF Pivot Farms. A separate 1041 Application has been filed with Bent County to approve the water system and supply for the Bent Dairy, which application is being processed contemporaneously with the subject Application.

**CRITERIA REVIEW:**

Chapter 3, Section 3.304 of the Bent County Guidelines and Regulations for Areas and Activities of State Interest sets forth criteria for determination of the Application with respect to efficient utilization of municipal and industrial water projects:

(a) **To the extent applicant’s service area is located within or partially within the boundaries of the County, whether the need for the proposed water project can be substantiated.**

Applicant LAWMA reports it is organized to provide replacement water supplies to its member shareholders, enabling such members to continue diversions from “junior” structures that would otherwise be curtailed under the water rights administrative scheme in the Arkansas River basin. Water diverted from such structures may include use for agricultural, municipal, industrial, and other purposes. LAWMA’s service area
includes portions of Lincoln, Otero, Elbert, Baca, Cheyenne, Kiowa, Prowers and Bent Counties. Section 6(b) of Application Exhibit B, as well as Application Exhibits F, G, H & I identify the need for the proposed water project, as LAWMA’s existing water rights portfolio does not enable LAWMA to deliver a full yearly allocation of water to its shareholders on a consistent or long-term basis. The proposed development and activity reportedly will enable LAWMA to firm its water supplies, thereby providing a more consistent allocation to its shareholders, including within Bent County.

(b) **Compatibility of the proposed water project with federal, state, regional and County planning policies regarding land use and water resources.**

Applicants’ state that their plan is to convert “low intensity, water inefficient...irrigated farms [in Bent County] into a mixed agricultural use, agribusiness-driven project underpinned with a robust and flexible water supply....” Application, page 2. The foregoing intent, and the proposed development and activity as described in detail in the Application, appears consistent with certain of the objectives set forth in the Colorado Water Plan ([https://www.colorado.gov/pacific/cowaterplan/plan](https://www.colorado.gov/pacific/cowaterplan/plan)), including the objective of developing water supplies in a manner that will “keep agriculturally dependent communities whole and continue agricultural production in most years....” Water Plan, Chapter 10.2.D.

(c) **Municipal and industrial water projects shall emphasize the most efficient use of water, including, to the extent permissible under existing law, the recycling and reuse of water. Urban development, population densities, and site layout and design of stormwater and sanitation systems shall be accomplished in a manner that will prevent the pollution of aquifer recharge areas.**

This provision is not applicable to the Application.

(d) **Provision has been made to ensure that the proposed water project will not contaminate surface water resources.**

Applicants assert that the proposed development and activity will reduce the amount of deep percolation return flows accruing to the Arkansas River (while still maintaining historical return flow volumes and timing by other means), thereby reducing salt loading to the Arkansas River. Applicants have provided a study (Application Exhibit Z) to support this assertion, and further assert that the proposed development and activity may improve, rather than degrade, water quality in the Arkansas River.

(e) **The proposed water project is capable of providing water pursuant to standards of the Colorado Department of Health & Environment.**

Applicants do not supply potable water; accordingly, standards for providing treated water are not applicable.

(f) **The proposed diversion of water will not decrease the quality of peripheral or downstream surface and subsurface water resources within the County below that designated by the Colorado Water Quality Control Division as of the date of the adoption of these Regulations.**
See section (d) above.

(g) The proposed development and the potential diversion of water will not significantly deteriorate aquatic habitats, marshlands and wetlands, groundwater recharge areas, steeply sloping or unstable terrain, forests and woodlands, critical wildlife habitats, or other wildlife protection areas, big game migratory routes, calving grounds, migratory ponds, nesting areas and the habitats of rare and endangered species, public outdoor recreational areas, and unique areas of geologic, historic or archaeological importance.

Applicants have submitted wildlife and habitat impact assessment reports (Exhibit S) prepared by Melvin DePra, a former Area Wildlife Manager with the Colorado Division of Wildlife, and Ecology and Environment, Inc. The assessment reports conclude that the proposed development and activity will not adversely impact wildlife habitat or otherwise increase direct risks to wildlife. These reports also state that revegetated lands might result in improved wildlife habitat as the result of loss risk reduction, and also that proposed recharge ponds may provide additional habitat benefits.

(h) The water treatment offset plan required by Section 3.303(16) has been approved by the Permit Authority and required fees associated therewith, if any, have been paid.

This provision is not applicable to the Application.

(i) The construction of structures, buildings, and improvements associated with the proposed development will not significantly impact existing or proposed communities.

No buildings are included as part of the proposed development and activity. Applicants report they have obtained or will obtain private rights of way for delivery of return flows to the Arkansas River as part of the proposed development and activity. According to Applicants’ commitments of record, an investment of $9 million will be made to install center-pivot irrigation systems in Bent County, providing a positive economic impact to Bent County.

Chapter 4, Section 4.304 of the Bent County Guidelines and Regulations for Areas and Activities of State Interest sets forth criteria for determination of the Application with respect to development in areas containing or having significant impact upon natural resources of statewide importance:

(a) The proposed development adequately provides for revegetation of lands historically irrigated in a manner which will successfully prevent invasion of noxious weeds and air or waterborne soil loss.

Applicants have submitted a revegetation plan as part of the Application (Exhibits D & E). Staff, in consultation with the County’s retained agronomy expert, has recommended certain changes to the proposed plan, including concerning the provision for security, as more fully set forth in recommended terms and conditions section of this Report, below.

(b) Revegetation plans required by Section 4.303(6)(f) have been approved by the Permit Authority and adequate security therefor has been placed with the County.
(c) The proposed development will not significantly degrade existing natural scenic characteristics, create blight, nor cause other nuisance factors such as excessive noise, obnoxious odors, airborne dust or noxious weed invasion.

See section (a), above, and proposed terms and conditions, below.

(d) The proposed development does not conflict with an approved local master plan or other applicable regional, state or federal land use or water plan.

Applicants’ state that their plan is to convert “low intensity, water inefficient...irrigated farms [in Bent County] into a mixed agricultural use, agribusiness-driven project underpinned with a robust and flexible water supply....” Application, page 2. The foregoing intent, and the proposed development and activity as described in detail in the Application, appears consistent with certain of the objectives set forth in the Colorado Water Plan (https://www.colorado.gov/pacific/cowaterplan/plan), including the objective of developing water supplies in a manner that will “keep agriculturally dependent communities whole and continue agricultural production in most years....” Water Plan, Chapter 10.2.D.

(e) Adequate water supplies are available for successful implementation of revegetation plans.

Applicants have committed 500 shares of the Fort Lyon Canal Company to be used to aide in revegetation of the proposed Dry-Up Parcels.

(f) The proposed development does not adversely affect either surface or subsurface water rights of upstream or downstream users; provided, however, that the exercise of a senior water right in such a manner as to not cause material injury to other water rights in accordance with state statutes, decided case law and decrees of the Water Court, shall not be considered to create any adverse water rights impact upon such junior water rights.

Applicants have obtained State/Division Engineer approval of a temporary “Rule 14” plan for use by LAWMA of the FLCC shares exchanged between ARF and LAWMA. Applicants will also file an application with the District Court, Water Division No. 2, seeking approval of a permanent change of use by LAWMA of such shares. The terms and conditions of the State Engineer in the Rule 14 approval, and in any future water court decree should likely ensure that other water rights in the Arkansas River Basin are protected from injury.

(g) The benefits of the proposed development outweigh the losses of any natural resources or agricultural lands rendered unavailable or less productive as a result of the proposed development;

Applicants report that their proposal to remove from irrigation up to 4,434 acres of historically irrigated farm lands in Bent County will have real economic impacts to Bent County, including, a decrease in assessed value of such lands and decreased property
tax revenues (see Application Exhibit L, Page 17). However, based on Applicants' commitments of record, the foregoing and other impacts related to the proposed development and activity reportedly will be outweighed by the benefits of the project. Specifically, Applicants' investments in more efficient pivot-irrigated farms are projected to produce greater overall crop revenues, and such farms, together with the proposed Bent Dairy, are projected to increase employment and create additional, significant annual revenues in Bent County (see Application Exhibit L, Pages 12, 13 & 25).

**(h)** The proposed development will not decrease the quality of peripheral or downstream surface or subsurface water resources below that designated by the Colorado Water Quality Control Commission as of the date of adoption by these Regulations.

Applicants assert that the proposed development and activity will reduce the amount of deep percolation return flows accruing to the Arkansas River (while still maintaining historical return flow volumes and timing by other means), thereby reducing salt loading to the Arkansas River. Applicants have provided a study (Application Exhibit Z) to support this assertion, and further assert that the proposed development and activity may improve, rather than degrade, water quality in the Arkansas River.

**(i)** The proposed development will not violate federal or state air quality standards.

This provision is not applicable to the Application.

**(j)** The proposed development will not significantly deteriorate aquatic habitats, marshlands and wetlands, groundwater recharge areas, steeply sloping or unstable terrain, forests and woodlands, critical wildlife habitat or other wildlife protection areas, big game migratory routes, calving grounds, migratory ponds, nesting areas and the habitats of rare and endangered species, public outdoor recreation areas, and unique areas of geologic, historic, or archeological importance.

Applicants have submitted wildlife and habitat impact assessment reports (Exhibit S) prepared by Melvin DePra, a former Area Wildlife Manager with the Colorado Division of Wildlife, and Ecology and Environment, Inc. The assessment reports conclude that the proposed development and activity will not adversely impact wildlife habitat or otherwise increase direct risks to wildlife.

**(k)** The proposed development will not create an undue financial burden on existing or future residents within the source development area. The cost of securing an adequate supply of water for existing and future needs of the residents of this County shall be considered in determining whether an “undue financial burden” will result.

See section (g), above. In addition to the economic benefits projected by the Applicants’ economics expert, the proposed terms and conditions below include a commitment of both LAWMA shares and FLCC shares owned by Applicant ARF to uses in Bent County. The dedication of such shares for uses within Bent County will help ensure the availability of an adequate supply of water for the future needs of residents of Bent County.
**RECOMMENDATION:** Staff recommends that the Board of County Commissioners CONDITIONALLY APPROVE the Application, subject to the Board’s consideration of the following potential terms and conditions:

1. **Commitments of Record.** Applicants shall meet all of their commitments of record. Applicants have made representations in their Application and in the Record that the impacts and losses to Bent County associated with the removal of water from irrigation of historically irrigated lands in Bent County will be mitigated and outweighed by the Applicants’ additional investments for the Pivot Lands, and the resulting ability to attract large agricultural businesses to the County, including, as follows:

   A. The proposed “Bent Dairy” near Las Animas will be completed and operational within one year at an anticipated investment of $40 million. The Bent Dairy is to include 5,000 milking cows, employ 35 employees, and annually produce $24 million in milk and other products.

   B. Conversion of 4,300 acres of flood-irrigated lands in Bent County to flexible water-pivot lands (“Pivot Farms”). Applicants project that the Pivot Farms will increase productivity by 15% ($1.2 million per year) and the more efficient farms will add 17 new farm jobs. Of the foregoing, 2,300 acres shall be converted to Pivot Farms beginning the first irrigation season following the County’s approval of a 1041 Permit. The remaining 2,000 acres shall be converted from flood irrigation to Pivot Farms as demand for the Bent Dairy and other businesses necessitate conversion.

   C. ARF has committed to spending development costs of $9 million over the next ten years for installation of center-pivots irrigation systems in Bent County.

   D. ARF has committed to continue irrigating a total of 5,495 acres of ARF-owned farms in Bent County. 2,724 dry-land acres will be farmed; and 1,710 acres will be successfully revegetated.

Applicant shall provide the County written quarterly reports (April 1, July 1, October 1, January 1) on the progress of meeting the Applicants’ economic commitments of record, until the Bent Dairy is operational. Thereafter, the Applicants will continue to submit annual (January 15) written progress reports to the County until all of the Applicants’ economic commitments of record have been realized and confirmed by the County.

If the proposed Bent Dairy is not operational within 1 year from the date of issuance of a 1041 Permit, or if the other economic commitments of record are not satisfied within a reasonable period, the County may, at its discretion, extend such diligence period in accordance with its regulations, or re-open the 1041 Permit and either terminate or amend as necessary to require additional economic mitigation by the Applicants.
2. Dedication of Shares for Use in Bent County.

A. LAWMA Shares. Applicants shall dedicate a total of 5,072 of ARF’s LAWMA trade shares (the “Dedicated LAWMA Shares”) for augmentation of uses solely within Bent County, including, without limitation, augmentation of the ARF Wells on the Pivot Farms. LAWMA shall without delay place a notation on the Dedicated LAWMA Shares stating that such Shares are limited to augmenting structures for uses within Bent County, and that such Shares are further subject to all terms and conditions of the 1041 Permit. ARF shall without delay obtain from RABO AgriFinance a subordination of any encumbered Dedicated LAWMA Shares to the 1041 Permit.

B. FLCC Shares. Applicants shall dedicate a total of 9229.44 of ARF’s remaining Fort Lyon Canal Company shares (“Dedicated FLCC Shares”) for irrigation of lands solely within Bent County. ARF shall without delay submit the Dedicated FLCC shares to FLCC for addition of a notation on the Shares stating that such shares are limited to irrigation of lands solely within Bent County, and that such Shares are further subject to all terms and conditions of the 1041 Permit. ARF shall without delay obtain from RABO AgriFinance a subordination of any encumbered Dedicated FLCC Shares to the 1041 Permit.

3. Addition of Excluded Interests to 1041 Permit. No later than 10 business days following the date of issuance of a 1041 Permit, Applicants shall file with Bent County an application to amend the 1041 Permit by the addition of the Excluded Interests (Farm Nos. 15, 61, 85, and 133/134, together with associated FLCC shares), subjecting the dry-up of such Farms to the 1041 Permit terms and conditions by the enforcement of covenants held by Applicants on such Farms. The County shall join with the Applicants in requesting that these 1041 Permit dry-up terms and conditions be incorporated as minimum standards in a court decree approving a change of use of the water rights historically used on such lands.


A. Security for Compliance. The County shall enter into an agreement with FLCC wherein the County assumes the lead role in enforcement and administration of the terms and conditions applicable to revegetation and dry-land farming of all Dry-Up Parcels within Bent County. ARF shall have the existing Irrevocable Standby Letter of Credit (No. 22112535), issued by Rabo AgriFinance, reissued to name Bent County as the Beneficiary of the Letter of Credit, with any drafts or reductions to be made pursuant to the 1041 Permit. The term of the Letter of Credit shall be extended to 10 years, or, alternately, if such a 10-year term is unavailable, ARF shall obtain and provide a new Letter of Credit, upon the same terms, no less than six months prior to the expiration of any then-current Letter of Credit. While the Letter of Credit provides security in the amount of $1.6 million to ensure Applicants’ potential liability for compliance with the terms and conditions of the 1041 Permit, it does not limit such potential liability for an
amount greater than that secured by the Letter of Credit. If the forfeiture of the Letter of Credit results in inadequate revenues to cover the costs of revegetation or other adequate reclamation of the Dry-up Farms, then Bent County may pursue collection remedies as authorized by law, including, without limitation as provided for in Section 2.402(12) of the Bent County 1041 Regulations.

B. **Parcel Certification.** The Applicants must comply with the Revegetation and Dry-Land Farming Certification Process terms and conditions, as set forth in Exhibit A attached hereto.

C. **Access to Dry-up Farms.** Applicants shall grant to Bent County easements for entry to inspect all parcels subject to revegetation and/or dry-land farming.

4. **Joint and Several Responsibility.** Applicants shall be jointly and severally responsible for compliance with all terms and conditions of the 1041 Permit.

5. **Term of Permit.** The 1041 Permit shall be valid indefinitely for the life of the development and activity, provided that Applicants are in compliance with the 1041 Permit. The 1041 Permit may be revoked or suspended for failure to comply with its terms in accordance with the Bent County 1041 Regulations.

6. **Transfer of Permit.** The 1041 Permit may only be transferred or assigned in whole or in part upon written approval of Bent County. Any proposed transferee or assignee shall demonstrate that it can and will comply with all terms and conditions of the 1041 Permit.

7. **Compliance with Regulatory Requirements.** Applicants shall comply with all state, local and federal regulatory requirements, permits, decrees and other approvals applicable to the development and activity. Applicant shall provide copies of any such approvals, permits, and decrees to Bent County. If any such approval, permit, or decree results in a material change to the 1041 Permit, then Bent County shall determine whether a 1041 Permit amendment or suspension is required. In the event of conflict between such other requirements, permits, decrees and other approvals and the 1041 Permit, the stricter standard shall be applicable.

8. **Other Bent County Regulations.** The 1041 Permit does not constitute an exemption from Bent County’s zoning, building, health or other applicable regulations and codes.

9. **Permit Amendment.** Any material change in the construction, use or operation of the Applicants’ development and activity, together with the Applicants’ commitments of record, shall require a 1041 Permit amendment. For these purposes, a material change shall be any change in the development and activity which significantly changes the nature of impacts considered in approval of the 1041 permit. The Applicants shall notify Bent County of any change in the development and activity and Bent County shall determine whether an amendment or new permit is required.

10. **Compliance Reporting.**
A. The 1041 Permit shall be subject to both interim and ongoing review and assessment by the County. The cost of compliance reports, studies, or data produced by the Applicants as part of the required reviews, as well as of the County’s staff time to process the reviews, shall be borne by the Applicants.

B. Interim reviews shall occur upon receipt of compliance reports by Applicants at the end of years one, three, and five (as measured from the date of the Board’s adoption of a resolution approving the Application) and thereafter as may be determined as necessary by the Board. Interim reviews shall be to review the monitoring/management plans and compliance with the permit terms, conditions, and commitments of the record.

11. **Noncompliance.** Noncompliance with the terms and conditions of the 1041 Permit shall suspend the 1041 Permit.

12. **Integrated Terms and Conditions.** Because any 1041 Permit issues may be based on a determination that the benefits accruing to Bent County and its citizens from the Applicants’ proposed development and activity outweigh the unavoidable impacts and losses of resources within Bent County, if any term or condition of the 1041 Permit is deemed invalid and unenforceable, then the 1041 Permit shall be rescinded or suspended unless, Bent County, in its discretion, approves a 1041 Permit amendment.
The following process for implementing a reasonable revegetation and dry-land farming plan (“Process”) is recommended for incorporation as terms and conditions of any 1041 Permit issued by Bent County.

I. REVEGETATION AND DRY-LAND PROCESS

1. Upon the removal of irrigation water from each LAWMA Dry-Up parcel (parcels historically irrigated with FLCC shares, which shares will be changed for other uses), such parcel shall be subject to these requirements to be revegetated or converted to dry-land farming. The revegetation or conversion to dry-land farming shall be done in the manner described in Sections A and B below.

2. Applicants shall have ten (10) years from the date irrigation water is removed from a parcel of LAWMA Dry-Up to obtain a Certificate of Completion for that parcel of the LAWMA Dry-Up.

3. Prior to removal of a LAWMA Dry-Up parcel from irrigation, Applicants shall give notice to the County and the Fort Lyon Canal Company (“Company” or “FLCC”) that provides: i) the identity of the parcel(s) to be removed from irrigation; ii) a statement of whether the parcel(s) will be revegetated or dry-land farmed.

4. Upon the removal of lands from irrigation, Applicants shall allow dry-land farming on no more than sixty five percent (65%) of the ARF owned LAWMA Dry-Up lands. As to the thirty five percent (35%) of the ARF owned LAWMA Dry-Up lands not dry-land farmed, Applicants shall either revegetate, re-irrigate, or convert the dried-up farms to non-agricultural uses including but not limited to gravel mines. Non-ARF owned LAWMA Dry-Up lands shall be subject to the recorded dry-up covenants.

5. Applicants shall obtain security in an amount equal to the number of acres historically irrigated by any LAWMA Dry-Up farm removed from irrigation multiplied by $250 (number of acres in farm removed from irrigation X $250 = required security amount) to secure its obligation to successfully revegetate or convert the farm to dry-land farming. The security shall be a Letter of Credit from Rabo Bank, and shall name Bent County as beneficiary. The Letter of Credit shall be maintained for the greater of 10 years or until all Certificates of Completion have been obtained for all LAWMA Dry-Up parcels. If the current Letter of Credit is set to
expire prior to all Certificates of Completion having been obtained, then ARF shall obtain and provide a new Letter of Credit, upon the same terms, no less than six months prior to the expiration of any then-current Letter of Credit.

6. Applicants shall reserve 500 of ARF’s 2,203.44 unchanged Fort Lyon shares to be used to aide in revegetation of the LAWMA Dry-Up. These 500 shares shall be released to ARF after Applicants receive Certificates of Completion for eighty percent (80%) of the LAWMA Dry-Up.

7. Once Applicants obtain a Certificate of Completion for any particular parcel of the LAWMA Dry-Up, a portion of the security for that parcel, equal to $185 per acre, shall be released consistent with the terms of the security. The remaining amount of the security shall not be terminated until the completion of successful dry-up of all LAWMA Dry-up lands in Bent County.

8. Once Applicants obtain a Certificate of Completion for any parcel of the LAWMA Dry-Up, Bent County and FLCC shall have no further oversight of the farming or land management practices on that parcel, other than pursuant to Bent County’s zoning, building, health or other applicable regulations and codes.

9. If Applicants have not completed revegetation or converted any LAWMA Dry-Up to dry-land farming within ten years of the parcel being removed from irrigation the County may withdraw and employ from the security such funds as may be necessary to carry out the revegetation work for such parcel, up to an amount equal to the number of acres not certified as complete times $250. The County shall provide Applicants a reasonable time to cure of no less than one irrigation season for any deficiency identified by the County prior to requesting withdrawal from the security.

10. To the extent that successful establishment and maintenance of revegetation of the LAWMA Dry-Up may require water for an interim period, Applicants shall provide such water at their cost. Potential sources of such water may include but are not limited to the following: (i) ground water that is treated as sole-source pumping and is fully-augmented under LAWMA’s augmentation plan or other augmentation plan approved by the Water Court for Water Division 2, or any SWSP or Arkansas River replacement plan approved by the State Engineer; (ii) water available to other Fort Lyon Canal Company shares owned by Arkansas River Farms; and/or (iii) water available to certain of the Fort Lyon Shares, repaid to LAWMA in the form of an equivalent reduction in allocation to the LAWMA Trade Shares (e.g., if the water available to all 82 Fort Lyon Shares historically used on the Farm No. 3 Dry-Up is required to establish and maintain revegetation, LAWMA would not allocate water to 82 of the LAWMA Shares during that irrigation season). LAWMA will make the determination as to whether water is required for an interim period to establish and maintain revegetation based on the opinion of its consulting expert in agronomy.

11. In the event that the owner of any LAWMA Dry-Up desires to continue to irrigate portions of the LAWMA Dry-Up with ground water pumped by wells, the County acknowledges that nothing in this Process is intended to preclude the owner from continuing
to irrigate the LAWMA Dry-Up with ground water, as long as notice has been provided to the County, and any such irrigation with ground water is treated as sole-source pumping and is fully augmented under LAWMA’s augmentation plan or other augmentation plan approved by the Water Court for Water Division No. 2, or any substitute water supply plan or replacement plan approved by the Colorado State Engineer. If any dry-up covenant for the LAWMA Dry-Up is more restrictive on the owner of the LAWMA Dry-Up or more protective of LAWMA than this Process, then the terms and conditions of the dry-up covenant shall control.

12. In the event that the owner of any LAWMA Dry-Up desires to irrigate portions of the LAWMA Dry-Up with FLCC shares not part of this application and not previously used on the LAWMA Dry-Up Lands proposed to be irrigated (“New FLCC shares”), the County acknowledges that nothing in this Process is intended to preclude the owner from doing so, as long as notice has been provided to the County, and any such irrigation with New FLCC shares has been approved by the Company if required by the FLCC By-laws, and, if applicable, the Water Court. If any dry-up covenant for the LAWMA Dry-Up is more restrictive on the owner of the LAWMA Dry-Up or more protective of LAWMA than this Process, then the terms and conditions of the dry-up covenant shall control.

II. CERTIFICATION OF COMPLETION

A. Definitions

1. Acceptable for Farms where Revegetation will occur means:

   a. Any field that meets the criteria for Classes VI or VII using the Revegetation Classification Schedule in Section III.

   b. Certain fields may never reach Classes VI or VII, nonetheless, if the Annual Report determines a particular field has been revegetated as far as can be reasonably expected, such field will be Acceptable if weeds and/or erosion of the soil caused by wind is adequately controlled in a manner consistent with state and local law.

   c. Any Field successfully converted to Dry-land Farming shall be Acceptable.

   d. Any Field upon which buildings, grain storage facilities, railways or railroad facilities, oil and gas facilities, wind power generation facilities, power transmission facilities, pump houses, recharge facilities, augmentation stations, feed yards, roads, reservoirs, drains, impervious surfaces or other facilities or structures on a Farm that will adequately control weeds and/or erosion of the soil caused by wind, shall be classified as Acceptable.
e. Any Field that is irrigated as allowed under the Process term and conditions 11 and 12 above shall be classified as Acceptable.

2. Acceptable for Farms where Dry-land Farming will occur means:

   a. The farm has been planted to a dry-land crop or is in a fallow period following a dry-land crop; the crop was planted and farmed without irrigation water, such that it is dependent solely upon precipitation to meet crop water requirements; if other dry-land farming in the region is producing crops, the farm also is producing a dry-land crop with weeds adequately controlled and that controls soil erosion from wind in a manner consistent with state and local law; and minimum crop residue after harvesting a dry-land crop is as described below, and the crop residue is left on the parcel until the parcel is prepared for the next rotation of planting; provided, however, that this requirement for crop residue does not prevent a farmer from controlling weeds by mechanical tillage of the parcel or using other acceptable methods of weed control that do not disturb the residue on the surface. For grain crops, such as winter wheat or milo, this shall include a minimum crop residue of at least thirty percent (30%) determined by the step-point method. For hay or forage crops, crop stubble shall measure at least five inches (5”) with row spacing no more than thirty inches (30”).

   b. Recommended best management practices for Farms designated to be Dry-land Farmed shall include the following.

      i. The management of annual precipitation to produce commodities or forage for livestock warranting a reasonable expectation of ongoing profits.

      ii. Weed control methods on crop land may include conservation tillage, mowing or chemicals to manage harvested crop residue to reduce evapotranspiration of soil moisture and maintain ground cover to minimize soil erosion by wind or water.

      iii. Conservation tillage is achieved by the use of non-inversion tillage equipment such as chisels, field cultivators, sweeps, vertical tillage, no-till planters or strip till planters to maximize harvested crop residue ground cover of thirty percent (30%) or more over the entire field.

A Farm designated to be Dry-land Farmed will be deemed Acceptable even in the absence of the above-described recommended best management practices, as long as the requirements in Sub-Section 2.a above have been met for that Farms.
3. Dry-land Farming means the establishment and maintenance of dry-land farming practices with weeds adequately controlled and that controls soil erosion from wind in a manner consistent with state and local law. Dry-land farming practices include: No-Till Dry-land Farming and Minimum-tillage Dry-land Farming.

4. Farm means the parcels of land used for agricultural purposes which will be permanently removed from irrigation as described in the Process.

5. Field means a portion of the LAWMA Dry-Up within any Farm.

6. Minimum tillage Dry-land Farming means management of farming operations which seeks to minimize impacts from tilling through the use of a sweep plow, strip-till, or similar technology. Additionally, a farmer may rely on herbicides to control weeds. Both contact and residual herbicides may be used. Periodic fallowing and crop rotation may be used to stabilize the crop yields and allow the soil to rest.

7. No-till Dry-land Farming means a system of planting seeds into untilled soil by opening a narrow slot, trench or band, of sufficient width and depth to obtain proper seed coverage. As no soil tillage is utilized, a farmer must rely on herbicides to control the weeds. Both contact and residual herbicides may be used. Periodic fallowing and crop rotation may be used to stabilize the crop yields and allow the soil to rest.

8. Percentage of Completion is the total dry-up acres for a farm classified as Acceptable divided by the total number of dry-up acres for a Farm as shown in the Annual Report, multiplied by 100.

9. Revegetation means the establishment of native grasses or such other self-sustaining (under the conditions prevailing on the land) suitable dry-land ground cover with weeds adequately controlled. Dry-land ground cover does not include alfalfa or other similar deep rooted phreatophytes. Revegetation of the LAWMA Dry-Up may include, but is not limited to, the following activities:
   a. Class I Fields. Seeding, irrigation, herbicide application and mowing;
   b. Class II Fields. Herbicide application and mowing;
   c. Class III Fields. Spot seeding and irrigation, herbicide application, mowing and grazing;
   d. Class IV-A Fields. Spot seeding and irrigation, herbicide application and mowing;
e. Class IV-B Fields. Herbicide application, mowing and grazing;

f. Class V Fields. Spot herbicide application and grazing.

g. Spot seeding and irrigation of any Class I through V fields if determined to be necessary for revegetation as fields matriculate through the classifications.

h. Continuation of appropriate revegetation activities.

i. Controlling weeds in a manner consistent with state and local law on all fields.

B. Annual Report.

1. On or about December 1 of every year ARF shall submit a report to the Company, County and the Water Court that provides information about the LAWMA Dry-Up Farms that have been removed from irrigation. The Annual Report shall provide the following information:

   a. The number of the Farm and the year that irrigation water first was removed.

   b. Whether the Farm is being Revegetated or Dry-land Farmed.

   c. The total number of acres that were dried-up.

   d. The Percentage of Completion for the Farm.

   e. The approximate annual precipitation that fell on the Farm, which may be estimated based on the average of published local weather station data.

   f. If the Farm was not Dry-land Farmed, the efforts undertaken in the preceding year to Revegetate the dried-up acreage, including without limitation, the seeding rate, type and composition of blend by percentage and date planted, information about herbicides or pesticides applied and information about efforts to control erosion of the soil caused by wind.
g. If the farm was Dry-land Farmed, the efforts undertaken in the preceding year to convert the Farm to Dry-land Farming, including information about tilling practices, the planting and fallowing rotation, the crops planted, and the acres fallowed; information about herbicides or pesticides applied; information about efforts to control erosion of the soil caused by wind; information about the amount of crops harvested or the number of animal units grazing the land; and information about the amount of crops planted and harvested by other Dry-land farmers in the area during the preceding year;

h. If the farm was Dry-land farmed, whether the crop is a grain crop or a hay/forage crop. If the crop is a hay/forage crop, the expert also will determine and record the stubble height in inches and the distance, in inches, on which the hay/forage crop was planted.

i. Whether water was used to assist in Revegetation or conversion to Dry-land Farming and if so describe the water used in amount and method of application.

j. Whether any other factors occurred that had a negative impact on efforts to Revegetate or convert to Dry-land Farming.

k. Classification of the lands pursuant to the chart in Section III. Applicants shall notify the County and Company prior performing an annual inspection of the Farms to determine the classification. The Company may, at its election and cost, send its own Expert along with the Applicants Expert to review the classification and progress toward completion of the Farms included in the Annual Report. An expert retained by the County shall accompany the ARF Expert on such inspections.

l. Whether a Field has been revegetated as far as can reasonably be expected and thus whether such Field will be considered Acceptable.

m. If an Annual Report has been filed on the Farm in past years, how the conditions on the Farm compares to past years.

n. If a Farm is recommended for a Certificate of Completion, the Annual Report shall also contain representative photographs of the Farm depicting how the Farm has been Revegetated or converted to Dry-land Farming.

o. Whether the Farm is eligible for issuance of a Certificate of Completion.

2. On or about July 1 of every year, Applicants shall submit a report by their Expert to the County identifying the crops planted, which fields are intended to be fallow, and weed control measures (e.g., mowing, pesticides) on any dry-land farmed parcels.
C. Certificate of Completion. The criteria for issuing a Certificate of Completion for Revegetated land and lands converted to Dry-land Farming shall be:

1. Certificate of Completion may only be issued for an entire Farm.

2. Revegetation: Any Farm that has 90% Percentage of Completion shall be granted a Certificate of Completion.

3. Dry-land Farming: Any Farm where 90% of its Fields were used for one full crop rotation cycle (two years crop production, and one year fallow with appropriate stubble and weed control, for a total of three years) in accordance with the standards described in Section A.2.a above and with adequate control of weeds and wind-caused soil erosion in a manner consistent with state and local law shall be granted a Certificate of Completion.

D. Review of Annual Report and Dispute Resolution.

1. Applicants shall pay the reasonable expenses of an expert jointly retained by the County and Company (Retained Expert) to review any Annual Report that recommends that a Farm is eligible for a Certificate of Completion. In addition, Applicants shall deposit with the County, no later than March 1st of each year, $6000.00, to be used by the County for costs associated with the County’s expert’s participation in annual field inspections of the LAWMA Dry-Up Farms, including mileage, and review of and preparation of any reports concerning the LAWMA Dry-Up Farms.

2. The County shall approve or reject the Annual Report that recommends that a Farm is eligible for a Certificate of Completion, no later than January 15.

   a. If the County approves the Annual Report, it shall not oppose Water Court approval of a Certificate of Completion for any Farm for which the Annual Report recommends issuance of a Certificate of Completion.

   b. If the County does not approve an Annual Report that recommends that a Farm is eligible for a Certificate of Completion, Applicants’ Expert and the County’s Expert, no later than February 1, shall consult and attempt to reach a consensus, which consensus may modify, or add terms to the recommendation contained in the Annual Report.

   c. If the experts do not reach consensus on whether a Farm is eligible for a Certificate of Completion, then the recommendation may be withdrawn by Applicants, or Water Court approval of the Certificate of Completion may be requested, which may be opposed by the County.
d. The Water Court shall rule upon any contested request for approval of a Certificate of Completion.

ii. Any appeal of the Water Court’s Process on a request for approval of a Certificate of Completion shall follow the normal rules and procedures for appeal of a water matter.

III. REVEGETATED LAND CLASSIFICATION METHODOLOGY

CLASS I Full seeding and irrigation needed, either first seeding or reapplication of seeding. Desired plants scarce or absent.

CLASS II Seeding and irrigation completed. Stand undetermined. Usually this will occur at the beginning of the second growing season following seeding.

CLASS III Stand is variable. Part of the field has an adequate stand and part does not. Plants may be juvenile plants to well developed mature plants. More than 10% of field with an inadequate stand on areas exceeding one acre in size. Plant frequency of desirable plant on deficient areas is less than 10%. Such deficient areas will require reseeding.

CLASS IV-A Stand is inadequate, frequency is less than 10% but plants are fairly well distributed over field. Field may need reseeding.

CLASS IV-B Stand is inadequate; frequency is between 10% to 15%. Plants are uniformly distributed over the field. No further seeding then recommended as the stand is expected to develop.

CLASS V Stand appears adequate, but root system is undeveloped. There are 10% to 15% or more desired plants per count. Good potential for stand establishment. Generally found after the first growing season but possibly the second growing season.

CLASS VI Stand adequate. Plants well rooted. Desirable plant frequency range 15% to 20%, no deficient areas larger than one acre in size over 90% of the field. This may occur following second growing season but more likely after the third growing season and beyond.

CLASS VII Stand adequate. Plants well rooted with vigorous top growth. Desirable Plant frequencies are 20% to 30% or more over 90% of the field. No deficient areas larger than one acre in size. Generally occurring the third growing season and beyond.