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Proposed Water Distribution Plan for the Associated Ditches Indee 2, 2012

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I. Summary.

Six irrigation ditches divert surface water from the Arkansas River between the Colorado state line and Garden City. Five of them comprise the "Associated Ditches":

- (1) The Amazon Ditch, operated by the Kearny County Farmers Irrigation Association under Vested Water Right File KE-79;
- (2) The South Side Ditch, operated by the South Side Ditch Association under Vested Water Right File KE-78;
- (3) The Great Eastern Ditch, operated by the Great Eastern Irrigation Association under Vested Water Right File KE-77;
- (4) The Farmers Ditch, operated by the Finney County Water Users' Association under Vested Water Right File KE-76; and
- (5) The Garden City Ditch, operated by the Garden City Irrigation Association (also known as the Garden City Ditch Company) under Vested Water Right File FI-217.

There is no established priority that governs the administration of these rights. The Associated Ditches have operated their diversions in rotation according to a body of law that has collectively governed them for over a hundred years: court decrees dating back to 1897; the Arkansas River Compact of 1949 and its 1980 Operating Plan for John Martin Reservoir; administrative orders from DWR; and private agreements that DWR has recognized. Since 1981, the Associated Ditches have operated the rotation of their respective water rights pursuant to an agreement of the same year. A sixth ditch, the Frontier Ditch, is operated by the Frontier Ditch Company under Vested Water Right Files HM-36 and HM-26. The Frontier Ditch entered the rotation of the Associated Ditches by state court order in 1987 and by DWR order in 1990.

In March 2012, the Farmers Ditch notified DWR that the Associated Ditches had discontinued the 1981 agreement, and requested that DWR administer water rights accordingly. In response, DWR has drafted this proposed water distribution plan. Part II surveys the body of law governing the rotation of the Associated Ditches' Water Rights. Part III summarizes the rotation system that has emerged from this body of law. Part IV describes the hydrologic conditions of the Arkansas River Basin for 2012—conditions that have a direct bearing on the rotation. With this background, Part V sets forth the proposed distribution plan for 2012.

II. The Law Governing the Rotation of the Associated Ditches' Water Rights.

Absent the 1981 agreement, the Associated Ditches are governed by an assortment of federal law (both statute and case law), state law (both statute and DWR agency action taken pursuant to federal and state statute), and private agreements that DWR has recognized.

a. Federal Law.

i. The Arkansas River Compact.

The Arkansas River Compact ("Compact") is both a federal and state statute. Even though it became law in 1949, after the Associated Ditches had obtained and established their water rights, its allocations are binding on earlier appropriations of water. Agreements of the Arkansas River Compact Administration ("ARCA"), the body authorized by the Compact to administer its provisions, govern the operation of John Martin Reservoir ("JMR") and are similarly binding on the operation of state water rights.

Because it emerged from over fifty years of contentious litigation over the Arkansas River, the Compact has two primary purposes: (1) to settle existing disputes and remove causes of future controversy between Colorado and Kansas; and (2) to equitably divide and apportion the waters of the Arkansas River and the conservation benefits arising from JMR. Article V.E.(2) of the Compact requires that releases from JMR "... shall be applied promptly to beneficial use" This requirement is in keeping with earlier-established federal law that governs the operation of irrigation and flood-control projects constructed pursuant to both the Reclamation Act of 1902 and the Flood Control Act of 1944. The Compact allowed for either State to call for water stored in the conservation pool of JMR at set maximum rates. Thus, the Compact did not allocate the conservation pool of JMR between the States. Thus, when one State called for a release, the other State generally called for a release as well prior to the 1980 Operating Plan.

In 1980, ARCA adopted a *Resolution Concerning an Operating Plan for John Martin Reservoir* ("1980 Operating Plan"), which recognized that the water stored in JMR could be more efficiently utilized by both Colorado and Kansas if accounts for each State were created within JMR. Instead of both States concurrently releasing, either State could match its account water release to the irrigation demands at the time. The release from the Kansas Section II Account was satisfied by an equivalent flow at the Colorado-Kansas state line (Stateline).

In 1997, ARCA adopted the *Resolution Concerning An Offset Account In John Martin Reservoir For Colorado Pumping* ("Offset Account Resolution"). This account provided Colorado with storage intended to offset groundwater pumping in Colorado along the Arkansas River, and enabled Kansas to call for that stored water at times needed. Releases from the Offset Account are reduced by transit losses between JMR and the Stateline, but are delivered on top of Stateline antecedent flows.

ii. Federal Case Law.

The rotation of the Associated Ditches' respective water rights derives from a series of federal court decrees dating to 1897. The four relevant court decrees consist of the following:

In the Decree of Case Caption No. 6749, filed March 14, 1911, the United States District Court for the District of Kansas, First Division, apportioned the Arkansas River by fractions and provided for a rotation system between four ditches: Amazon, South Side, Great Eastern, and Garden City.

In the Decree of Case Caption Nos. 6749 and 9013, filed April 8, 1912, the same court apportioned the Arkansas River by fractions and provided for a rotation system between five ditches: Amazon, South Side, Great Eastern, Farmers, and Garden City.

In the Decree of Case Caption Nos. 6749 and 9013, filed November 9, 1914, the same court moved 1,000 acre feet of rotational share from Garden City Ditch to the Great Eastern.

And in the Decree of Case Caption Nos. 6759 and 9013, filed March 30, 1934, the same court removed the requirement of a court-appointed distribution officer (known as a river bailiff) and authorized DWR to implement the federal court decrees under its statutory authority. DWR had obtained that authority in 1933.

b. State Statute.

DWR obtained statutory authority to regulate water rights according to court decrees upon its establishment in 1933, and the Kansas Water Appropriation Act of 1945 reaffirmed that statutory duty. As currently set forth at K.S.A. 82a-719, that statute reads in full:

82a-719. Distribution of water according to decree of court. Whenever the rights for the use of waters of the state shall have been adjudicated by any court, the division of water resources with the aid of its chief engineer and other officers and employees, shall aid in the distribution of such water according to such decree and shall distribute the water among the several ditches or water users pursuant to the decree; and shall have the power to open, close or adjust the headgates and regulate the controlling works of any ditch or structure, or cause the same to be opened, closed, adjusted and regulated so as to make a distribution of the water in conformity with the decree. History: L. 1933, ch. 206, § 2; L. 1945, ch. 390, § 20; June 28.

c. State Court Order and DWR Agency Action.

Sometime during the 1980's, a dispute arose between the Frontier Ditch Company and DWR over the abandonment of the Fort Aubrey vested water right, File No. HM-26. This dispute was resolved by both a court order and a DWR order issued pursuant to that stipulation.

By a stipulated order dated January 29, 1987, the District Court of Hamilton County, Case Caption No. 4806, the Frontier Ditch Company, the Fort Aubrey Irrigation Company, and DWR agreed to the terms by which the Frontier Ditch Company would operate the Fort Aubrey vested water right that it had obtained, in combination with its other vested water right, HM-36. The stipulation also provided terms and conditions for the Fort Aubrey change approval and inserted the Frontier ditch into the rotation system with the Associated Ditches.

By an order dated August 28, 1990, DWR approved the change in place of use and point of diversion under the Fort Aubrey vested water right, HM-026, including terms and conditions for use of this water right by the Frontier Ditch. As a result of the resolution of that dispute, the Chief Engineer issued an order moving a portion of the Fort Aubrey vested water right to the Frontier Ditch with specific conditions governing when the

Frontier Ditch could divert under the Fort Aubrey vested water right and providing that diversions under the Fort Aubrey would not be included in the rotation system.

d. Agreements of the Associated Ditches.

Between 1981 and 2011, the distribution of available surface water supply was done according to rules developed and annually agreed to by the Associated Ditches. This was referred to as the 1981 agreement. As discussed above, this agreement was not continued for 2012. In reviewing the previous rules, it does not appear that there are previous rules that would be in effect to govern the rotation system.

In 1982, the Associated Ditches passed a resolution that recognized the adoption of the 1980 Operating Plan. (The 1980 Operating Plan allowed for Kansas to call for a Section II Account water release at any time or at any rate, provided there was water in the account.) The resolution requires that at least fifty percent of the ditches must agree in order to request Kansas account water release from JMR. This resolution remains in effect.

III. The Rotation System.

a. The Associated Ditches' Respective Water Rights.

Each ditch of the Associated Ditches, as well as the Frontier Ditch, has a vested water right(s) under the Kansas Water Appropriation Act. Those water rights are shown in Table below.

Table 1: Vested Water Right Information for the Associated Ditches

	Vested Right	Authorized Rate	Authorized Quantity
Frontier	HM 36	55 CFS	5,000 AF
Ft. Aubrey	HM 26	35 CFS	1,946 AF
Amazon	KE 79	200 CFS	31,000 AF
Great Eastern	KE 77	354 CFS*	60,000 AF
South Side	KE 78	200 CFS	20,000 AF
Farmers	KE 76	263 CFS*	20,000 AF
Garden City	FI 217	33 CFS*	4,000 AF
Associated Ditches total		1,050 CFS	135,000 AF
System total		1,105 CFS	141,946 AF

^{*} Note: these figures do not reflect those in their respective vested water right orders.

b. The Rotation System.

As set forth partially above, there have been various court decrees that have governed the rotation of ditch rights in this area. Based on the decrees, it appears that the rotation system was intended to be in place at all times except for two specific circumstances:

- (1) When there was no demand for direct irrigation; or
- (2) If there was sufficient river flow to satisfy the maximum diversion rate of all ditches involved.

The ditches anticipated that there would be times when there would be no demand for direct irrigation, since the Great Eastern Ditch was allowed to store water in Lake McKinney (previously known as the Great Eastern Reservoir or Reservoir No. 5) at those times.

After organizing as a group, in 1915 the Associated Ditches developed eleven rules to implement these court decrees, providing for how the rotation system would operate, how water use would be measured, and related issues. The rules allowed for diversions to occur outside of the rotation system, but at times when the two conditions listed in the paragraph above were not present. As the river conditions changed and interstate agreements were implemented, the rules adopted by the Associated Ditches changed with those developments. In 1981, the Associated Ditches developed an agreement which reconciled the rotation systems set forth in the earlier court decrees with the Compact, the 1980 Operating Plan, and other subsequent agreements involving the operation of the ditches.

Based on these decrees and other documents, the rotation order and quantities for these six irrigation ditches are shown in Table 2 below.

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Ditch/Canal	Rotation Share	Rotation Order	Rotation Number	
Amazon	3,000 AF	1	A-99	
South Side	3,000 AF	2	A-99	
Great Eastern	5,312.5 AF	3	A-99	
Farmers	3,937.5 AF	4	A-99	
Garden City	500 AF	5	A-99	
Frontier	615 AF	6**	A-99	
Associated Ditches total	15,751 AF			
w/Frontier	16,366 AF			

Table 2: Rotation Information

The decrees and the various rules and regulations adopted to implement them have the following principles:

- (1) The implementation of a rotation system, because there is no established priority among the vested rights held by the respective ditches;
- (2) The equitable distribution of the available water supply without avoidable waste;
- (3) The most economical use of the available water supply; and
- (4) The necessary discretion of the Chief Engineer to accomplish these principles.

IV. 2012 Hydrologic conditions.

The Stateline flows have been less than 100 cfs since at least November 2011, which is indicative of a "dry" river condition. There was flow in the Arkansas River at Deerfield up until mid-April, but the river flow has since receded upstream. Stateline flows generally pick up in April-May as the result of irrigation return flows generated by Colorado ditch diversions. This year there has only been a slight increase in Stateline flows as of May 10th. The surface and stored (account) water available to the District 67 ditches are both very limited, and DWR does not expect much improvement in Stateline flows due to irrigation return flows.

^{**} By a stipulated order dated January 29, 1987, the District Court of Hamilton County, Case Caption No. 4806

The Compact conservation storage has been distributed to the Section II Accounts under the 1980 Operating Plan. The April 1, 2012 account water available to Kansas was 12,238 AF—the lowest amount in eleven years. (The 1985-2011 average was approximately 59,500 AF.)

The Kansas Account balances as of June 7, 2012:

Offset Account	3,574 AF
Kansas Section II Account	9,489 AF
Total	13,063 AF

The Kansas Section II Account is being reduced by evaporation. The Offset Account is also suffering evaporation but it has inflows generated by the Keesee and Highland ditch rights in Colorado.

The Arkansas River basin snowpack is also indicating a very short surface water supply for this year. The snowpack essentially peaked in mid-March, well short of the thirty-year average. Normally, the snowpack peak is mid-April. On June 16, 2012, the snowpack has melted off according to the Snotel sensing locations.

For this irrigation season, Kansas water stored in JMR is insufficient to supply a full rotation of water to the six ditches, especially considering the transit losses that will be suffered under the current river conditions. The available surface water supply and JMR account water available to Kansas is not sufficient to supply but a small portion of the irrigation needs of the ditches. The 1911 court decree provides the following:

"These rules for rotation and distribution shall not prevent a deviation therefrom, when in the judgment and discretion of the distributing officer, a more economical use of the water can be had by applying the water to and passing it through another ditch than that to which it properly belongs in its regular rotation and turn; but in such instance, and in all such instances, the amount of water so received shall be charged to the ditch so receiving it, and shall be deducted from its next allowance in turn."

V. 2012 Distribution Plan

The following proposed distribution plan is based on the documents summarized above in Section II, the rotation system as summarized in Section III, and the hydrologic conditions of the Arkansas River Basin as set forth in Section IV. This plan honors many of the principles and much of the operational practice of the 1981 agreement, by seeking to equitably distribute the available water supply to the six ditches. DWR believes that this approach effectuates the intent of the court decrees, the Compact, and subsequent orders and agreements within the current institutional and administrative setting. Unlike the 1981 agreement, however, DWR will track deliveries against each ditch's rotation, starting with new rotation, A-99, instead of distributing water "off rotation" (as the 1981 agreement allowed). Therefore, due to the discontinuance of the 1981 agreement, the available surface water and account water will be distributed as follows.

1. The available surface water supply will be used first for immediate and direct irrigation of ditch service lands, unless there is no surface water irrigation demand or unless surface water is not and cannot be made available at the ditch headgate where there is an irrigation demand. In making the latter determination, DWR will consider transit efficiencies.

- 2. From January 1, 2012, and until such time as a call is placed for JMR account waters, any ditch's diversions from the river shall be applied to that ditch's rotational quantity, whether diverted in turn or not. See Table 2 above.
- 3. The available Kansas Section II and Offset Account water in JMR will be called for release at a time when it is requested by at least 50% of the ditch officials. When there is a request for the release of Kansas Section II and Offset Account water, DWR will work with the six ditches to facilitate the release. DWR will seek to deliver the water so that each ditch has the opportunity for an equitable share in the release. DWR will monitor river conditions and will provide recommendations to the Associated Ditches on opportune river conditions for such a release. Water delivered to the headgate of each ditch will be charged to that ditch's rotation. When a request to release JMR account water is received:
 - (a) DWR staff will poll each of the six ditches to determine headgate demands (the diversion rate for each ditch measured at the respective measuring devices);
 - (b) DWR staff will review the hydrologic conditions, irrigation demands, arrangements among ditch companies, account water available, and other pertinent data to determine the release rates and order from each account;
 - (c) DWR staff will determine whether the release rates will cause excessive transit losses;
 - (d) DWR staff will work with the six ditches to adjust headgate demands to achieve an account release rate that minimizes transit losses;
 - (e) DWR staff will coordinate with Colorado Division 2 staff on the JMR release on behalf of the Kansas ditches, making any further adjustments as needed. If any account releases are further adjusted, then those adjustments will be communicated to the six ditches;
 - (f) DWR staff will monitor the JMR account release as it travels from JMR to each of the ditch headgates, making adjustments to the account release or individual ditch diversions as needed;
 - (g) As the release continues, DWR staff will monitor individual ditch diversions making adjustments as necessary; and
 - (h) When the accounts are exhausted, or terminated by the ditches, DWR staff will allocate water during the rundown period among the six irrigation ditches.
- 4. After the JMR account release has ceased and the rundown period has ended, then any diversions from the river shall be applied to the ditch's rotational quantity whether diverted in turn or not.
- 5. A rotation will be considered completed when a ditch's rotational share has been fulfilled. The rotation or remaining partial rotation will also be considered complete if a ditch does not take water available at its headgates when notified of its availability by DWR staff. In the specific cases of the Garden City Ditch and South Side, their remaining rotational share will be considered to be fulfilled when the Amazon, Great Eastern, Farmers, and Frontier are all two rotations ahead of the Garden City

- Ditch and/or South Side Ditch. Except as noted above, any rotational share not diverted in a calendar year will be carried forward to the next year.
- 6. The Frontier Ditch will be afforded the opportunities allowed by the Fort Aubrey vested water right, HM-26; namely when the Frontier Ditch is diverting under the Fort Aubrey vested water right, that diversion will not be charged against the Frontier Ditch's rotational share.
- 7. Under HM-036, the Frontier Ditch's rotational share will not be charged for water diverted when the combined flow of the Frontier Ditch and the Arkansas River near Coolidge is equal to or less than 35 cfs.
- 8. For the purposes of this distribution plan, the South Side Ditch's rotational share will be credited for any return flows to the Arkansas River, through either of its returns which are subsequently diverted by either the Farmers and/or Garden City ditches. Such return flow credits cannot create an overall rotational credit to the South Side.
- 9. The goal is the equitable distribution of the available surface water supply. However, in the interest of minimizing waste of water and maximizing efficiency, the distribution office will exercise flexibility to distribute and account for water over two rotations. The distribution officer shall limit such flexibility so that no ditch may be more than two full rotations ahead of another.
- 10. When surface water in the Arkansas River is not being used or is not capable of being used for direct irrigation by the Amazon Ditch, the South Side Ditch, the Farmers Ditch, or the Garden City Ditch, and water is not being released from Kansas accounts in JMR, then the available surface water may be diverted for storage in Lake McKinney and shall not be charged against the Great Eastern Ditch's rotational share.
- 11. Water that is diverted for the sole purpose of sanding and that is returned to the river will not be accounted against the rotational amounts but will be accounted against the respective water rights. DWR and the appropriate ditches will make their best efforts to measure the quantities of these sanding diversions.
- 12. Nothing in this distribution plan shall limit future distribution plans from having different conditions.