# AMENDED APPENDIX B.1

Procedures For Annual Updates, Calculation Of Depletions And Accretions, Changes To The H-I Model, Reporting, Inspection, And Evaluation Of The Colorado Use Rules

# As Amended August 2015

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### I. Introduction

*General* – Compact compliance with respect to Groundwater Pumping shall be determined using the results of the H-I Model in accordance with this Judgment and Decree ("Decree").

*H-I Model update timeline* – The H-I Model shall be updated annually in accordance with the schedule specified in this Appendix B. Colorado shall be responsible for the collection and compilation of the data required for the annual updates to the H-I Model, as further specified in this Appendix B, and for creating the data input sets for the annual update to the H-I Model. Colorado shall provide to Kansas the updated input files for the H-I Model, its H-I Model results, and backup data specified in this Appendix on or before March 31 for the preceding year. If requested at least two weeks in advance by Kansas, Colorado shall also provide on March 31 copies of raw data and other additional backup information for the data input sets requested. Colorado shall provide additional raw data and other backup within two weeks of any additional request by Kansas.

On or before May 15, Kansas shall provide Colorado with its H-I Model results for the preceding year together with any modified input files to the H-I Model. If the States agree on the H-I Model results, they shall be used to determine Compact compliance over the preceding ten years as described in Appendix A of this Decree. If the States have not reached agreement on H-I Model results by June 1, they shall proceed as required in Appendices A and H of this Decree, as a Fast Track Issue.

Notwithstanding the foregoing, unless the States otherwise agree, when final crop statistics become available, the States shall make a revised H-I Model run based on the final crop statistics.

2011 Agreement as amended August 2015 timeline – This appendix was amended in September 2011 as the result of an agreement between the States which modified the H-I Model to recognize improved efficiencies of groundwater supplied irrigation systems ("2011 Agreement").

The 2011 Agreement calls for certain efforts, cooperation, and data exchanges between the States. In August 2015 the States agreed to amend the 2011 Agreement to revise the calculation of the adjusted tailwater factors ("2011 Agreement as amended 2015"). The entire 2011 Agreement as amended 2015 is included in Attachment 6.12 of Amended Appendix C.1.

On or before March 1 of each year, Colorado will provide initial pumping and acreage data to Kansas for the cooperative effort of identifying possible errors using the Farm Unit Review screening criteria described in the 2011 Agreement as amended 2015. An updated version of the Farm Unit Review shall be provided by Colorado to Kansas by March 31 along with Colorado's calculation of the weighted groundwater maximum farm efficiencies and adjusted tailwater factors and the corresponding back-up data described in the 2011 Agreement as amended 2015.

### II. Definitions

Terms related to the H-I Model are defined or described in Appendix C.1 of this Decree. The following definition is provided for use in this Appendix:

**Consumable water**: Water brought into the Arkansas River Basin from other river basins or water that may be consumed to extinction.

See Section V of this Decree for definitions of additional terms used in this Appendix.

# III. H-I Model Data

This section describes the data currently required for annual updates to the H-I Model and the form in which input files and backup data shall be provided. All data and interpretations of data, including quantifications of consumable water, provided by Colorado are subject to the right of Kansas to object to or contest such data and interpretations of data; any disagreements about such data or interpretations of data shall be resolved as provided in Section II of this Decree.

A. Form of input files and back up data

H-I Model input files shall be provided in electronic form in the appropriate format for operation of the H-I Model. Backup data and other supporting information shall be provided in electronic form whenever possible. Whenever input files are the result of preprocessing programs, the base data and programs shall be provided. Backup data and other supporting information that do not exist in electronic form shall be provided in hard copy form.

- B. The following input data and data assessments are required for the Historical run and the Compact run of the H-I Model.
  - 1. Streamflows (Data Sets 6 through 10)
    - a. Daily streamflow data for the following stream gages on Arkansas River and its tributaries:
      - (1) Arkansas River above Pueblo, CO
      - (2) Apishapa River
      - (3) Purgatoire River at Las Animas, CO
      - (4) Huerfano River

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- b. Monthly streamflow data for:
  - (1) Fountain Creek at Pueblo (USGS 07106500)
  - (2) Pueblo waste water return (CDWR 14-620)
  - (3) Salt Creek (Data prepared by Rocky Mountain Steel Mill and provided by CDWR.)
  - (4) St. Charles River (USGS 07108900)
- 2. Monthly diversion data (Data Set 5)
  - a. Riverside Dairy Ditch (CDWR 14-536)
  - b. Southside Water Works (CDWR 14-590)
  - c. Northside Water Works (CDWR 14-589)
  - d. Comanche Power Plant (CDWR 14-618)
  - e. Bessemer Ditch (CDWR 14-533), excluding the Lake Minnequa (CDWR 14-3693) diversions or the St. Charles Mesa Water Association diversions (CDWR 14-645), or Zoeller Ditch (CDWR 14-527) or other water carried in Bessemer Ditch.
- 3. Daily Diversions (Data Set 17)
  - a. Fort Lyon Canal
  - b. Fort Lyon Storage Canal
  - c. Kickingbird Canal
- 4. Monthly pumping for each H-I Model User (Data Set 12)
  - a. Supplemental pumping
  - b. Sole source pumping
- 5. Data required for and calculation of weighted groundwater maximum farm efficiencies and adjusted tailwater factors: see the 2011 Agreement as amended 2015 which is Attachment 6.12 of Amended Appendix C.1.
- 6. Monthly transmountain deliveries (Data Set 14)
  - a. Daily transmountain deliveries for the Colorado Canal (Data Set 16), and
  - b. The native component of the Twin Lakes Reservoir water delivered to the Colorado Canal (Data Set 18)
- 7. Climate data (Data Sets 3 and 4)
  - a. Monthly precipitation data
    - (1) Pueblo WSO AP (056740)
    - (2) Rocky Ford (057167)
    - (3) La Junta 4 NNE (054720)
    - (4) Las Animas (054834)

- (5) Lamar (054770)
- (6) Holly (054076)
- b. Annual precipitation data
  - (1) Trinidad FAA Airport (058434) (Aguilar prior to 2005)
  - (2) Cheyenne Wells (051564)
  - (3) Colorado Springs Municipal Airport (051778)
  - (4) Colorado Springs Municipal Airport (051778) (Fountain prior to 1997)
  - (5) Haswell (053828)
  - (6) Holly (054076)
  - (7) John Martin Dam (054388)
  - (8) Karval (054444)
  - (9) Lamar (054770)
  - (10) La Junta 4 NNE (054720)
  - (11) Las Animas (054834)
  - (12) Genoa (053258) (Limon prior to 1995)
  - (13) Ordway 2 ENE (056131)
  - (14) Pueblo Mem Airport (056740)
  - (15) Rocky Ford 2 SE (057167)
  - (16) Campo 7 S (051268) (Springfield, prior to 2002)
  - (17) Tacony 10 SE (058157)
  - (18) La Junta 20 S (054726) (Timpas prior to 1993)
  - (19) Walsenburg 1 NW (058781)
  - (20) Walsh 1 W (058793)
- 8. Climate Data (Daily)

Daily precipitation, maximum and minimum temperatures, daily average wind speed, daily total solar radiation, and daily average vapor pressure or dewpoint temperature (used to develop Data Set 50) (Station and CoAgMet ID)

- (1) Avondale AVN01
- (2) Vineland VLD01
- (3) Rocky Ford RFD01
- (4) Fowler FWL01
- (5) La Junta LJT01
- (6) Las Animas LMS01
- (7) Lamar(02) LAM02

- (8) Lamar (04) LAM04
- (9) Holly (02) HLY02
- 9. Daily pan evaporation at John Martin Reservoir and Lake Meredith (Data Set 1)
- 10. Monthly ice cover at John Martin Reservoir (Data Set 1)
- 11. Crop distribution for each H-I Model User from County Agricultural Statistics, unless more detailed records are available for individual canal systems (Data Set 50)
- 12. Crop evapotranspiration (Data Set 50)
  - a. Daily potential evapotranspiration computed for each crop included in the cropping patterns for the H-I Model Users based on the standardized form of the American Society of Civil Engineers (ASCE) Penman-Monteith equation and crop coefficients as set forth in Appendix B.2 of this Decree (used to develop Data Set 50)
  - b. Monthly totals of potential evapotranspiration for each crop (Data Set 50)
  - c. Data integrity assessment
    - (1) Daily (or hourly) weather data (daily maximum and minimum air temperature, mean daily dewpoint temperature, daily maximum and minimum relative humidity, total daily solar radiation, and mean daily wind speed) shall be assessed for data integrity and corrected as needed using standardized procedures recommended in Appendices D and E of the ASCE-EWRI Report on Standardization of Reference ET Calculation (EWRI, 2004). Specifically:

(a) Solar radiation shall be compared against a standardized theoretical clear sky curve for the station and a multiplier or offset shall be applied to correct data for sensor calibration error or malfunction as warranted;

(b) Mean daily dewpoint temperature shall be compared against daily minimum air temperature to assess quality of both air temperature and humidity data and to assess the need for correction or replacement of data. The assessment shall include an evaluation of any substantial impact on air temperature and humidity data caused by aridity of the proximate environment of the station that is commensurate with reasonable tolerances and operations practicalities as noted in the Fourth Report of the Special Master;

(c) Daily average wind speed data shall be compared among stations within the H-I Model Domain by day and month to assess reasonableness of data and occurrence of any data fallout or impact of weather station location on wind speed measurement.

(2) Data corrections

(a) Faulty or missing data identified by Colorado during the data integrity assessment or by Kansas during its review of the data shall be corrected or estimated using standard engineering principles.

(b) Faulty or missing weather data that cannot be sufficiently corrected during data integrity assessment shall be filled in using regression analysis and/or data from neighboring stations.

- 13. Monthly Pueblo Winter Water Storage Program deliveries from Pueblo Reservoir to each H-I Model User (Data Set 13)
- 14. Irrigated acreage for each H-I Model User (Data Set 49)
  - a. Acreage irrigated by surface water only
  - b. Acreage irrigated by ground water only
  - c. Acreage irrigated by surface water and supplemental groundwater
  - d. Dry-up acreage that is not irrigated and in compliance with the Administration of Parcels Claimed for Augmentation Credit Agreement (Appendix B.3 of this Decree)
- 15. Monthly transmountain return flows from Fountain Creek that are not stored or used for replacement of well depletions (Data Set 15)
- John Martin Reservoir permanent pool deliveries of transmountain water (Data Set 19)
- 17. Monthly releases from Lake Meredith and discharges of consumable water from various canals that are exchanged to Pueblo Reservoir or reservoirs outside the H-I Model Domain (Data Sets 20 and 21)
- 18. Releases from Lake Meredith for irrigation use or delivery to the Great Plains Reservoirs, sales to Colorado Division of Wildlife (DOW) and Division of Parks and Outdoor Recreation (DPOR) (Data Sets 23 and 24)
- 19. Replacement water, Replacement operations, and other operations (Data Sets 22, 25, 26, 28, 31, and 33)
  - a. Description Replacement supplies that consist of discharges to the Arkansas River in the H-I Model Domain are represented in the H-I Model as special water inputs in the Historical run. These Replacement supplies consist of consumable water, such as transmountain water or water released from reservoirs into the H-I Model Domain. The special water inputs also include "transit loss charge credits," which are the unconsumed portion of administrative transit loss charges for Offset Account releases and deliveries of Highland Ditch shares into the Offset Account on fully consumable portions of these waters. These also include recharge credits for the Excelsior Ditch recharge project, for which the diversions have been removed from the H-I Model Domain.
  - b. Releases from Pueblo Reservoir
  - c. Releases from reservoirs upstream of Pueblo Reservoir that are passed through Pueblo Reservoir into the H-I Model Domain
  - d. Releases from Lake Meredith
  - e. Releases from John Martin Reservoir Section II accounts for Replacement

- f. Highland Ditch transit loss credit
- g. A portion of Offset Account release transit losses to be included in the H-I Model in accordance with the Offset Account Crediting Agreement (Appendix F.2 of this Decree)
- h. Recharge credits for Excelsior Ditch recharge project
- C. The following additional data shall be provided to Kansas:
  - 1. Daily streamflows for the stream gages on the Arkansas River between Pueblo Reservoir and the Stateline;
  - 2. Daily diversions for each H-I Model User;
  - 3. Monthly end-of-month storage for each off-stream reservoir simulated in the H-I Model.
- D. Revisions to change provisional data to final data

When the annual update to the H-I Model is being performed, final precipitation data obtained from the National Weather Service and final streamflow data obtained from the USGS and the Colorado Division of Water Resources (CDWR) shall be used in place of provisional data used in the previous year's annual update to the H-I Model, but such changes will not change the H-I Model results for the previous year. These data revisions may affect the values in Data Set 3 (Monthly Precipitation), Data Set 4 (Annual Precipitation), Data Set 7 (Daily Streamflow for Apishapa River), Data Set 8 (Daily Streamflow for Purgatoire River), Data Set 9 (Daily Streamflow for Huerfano River), and Data Set 10 (Daily Streamflow for Arkansas River above Pueblo). Any revisions to provisional precipitation and streamflow data for the previous year shall be incorporated into the appropriate H-I Model data sets for the calculation of accretions and depletions to Usable Stateline Flow for the year being updated.

The H-I Model data sets that contain revisions to provisional data for the previous year shall be provided, along with the documentation to support the revisions, at the time the other updated data is provided in accordance with the schedule in Section I of this Appendix.

Any revisions to the input data for the previous year will be allowed to affect the depletions and accretions to Usable Stateline Flow determined for the year being updated. However, once the annual depletion or accretion to Usable Stateline Flow is determined for the year being updated, this annual value will not be changed when the H-I Model is updated for the following year even if provisional precipitation and streamflow data have been revised. Thus, revised precipitation and streamflow data for the previous year will only affect the H-I Model results for the year being updated and for subsequent years.

# IV. H-I Model Operation

A. The H-I Model shall be used to determine monthly Stateline flows for the Historical run and the Compact run.

- B. The H-I Model runs shall be made with the following model switch settings:
  - 1. Historical Run
    - a. Pumping Historical
    - b. 1980 Plan On
    - c. Winter Water Storage Program On
    - d. Transmountain Water Deliveries On
  - 2. Compact Run
    - a. Pumping Pre-Compact
    - b. 1980 Plan On
    - c. Winter Water Storage Program On
    - d. Transmountain Water Deliveries Off
- C. Monthly Usable Stateline Flow for the Historical and Compact runs shall be determined using the Durbin usable flow method with the Larson coefficients, as set forth in Appendix C.2 of this Decree. Monthly depletions (positive) or accretions (negative) to Usable Stateline Flow shall be computed as the monthly Usable Stateline Flow for the Compact run minus the comparable monthly Usable Stateline Flow for the Historical run. A monthly depletion to Usable Stateline Flow results when the predicted monthly Usable Stateline Flow in the Compact run exceeds the predicted monthly Usable Stateline Flow in the Historical run. A monthly usable Stateline Flow in the Historical run. A monthly usable Stateline Flow in the Historical run exceeds the predicted monthly Usable Stateline Flow in the predicted monthly Usable Stateline Flow in the Historical run exceeds the predicted monthly Usable Stateline Flow in the Historical run exceeds the predicted monthly Usable Stateline Flow in the Historical run exceeds the predicted monthly Usable Stateline Flow in the Historical run exceeds the predicted monthly Usable Stateline Flow in the Historical run exceeds the predicted monthly Usable Stateline Flow in the Historical run exceeds the predicted monthly Usable Stateline Flow in the Historical run exceeds the predicted monthly Usable Stateline Flow in the Historical run exceeds the predicted monthly Usable Stateline Flow in the Historical run exceeds the predicted monthly Usable Stateline Flow in the Compact run.
- D. The H-I Model results for annual depletions or accretions to Usable Stateline Flow shall be computed as the sum of the monthly Usable Stateline Flow depletions (positive values) and accretions (negative values) for each year.
- E. Analysis for the limit on accretions shall be done in accordance with the Limitation on Accumulation of Credits Agreement (Appendix D of this Decree).

# V. Changes to the H-I Model

Subject to compliance with the requirements of paragraph V.C of this Appendix, either State may propose changes to the H-I Model at any time. Annual updates of the update.dat file from sources of data used in preceding years shall not be considered changes to the H-I Model for the purposes of this Section V. In addition, code changes to the H-I Model necessary only to add data for annual updates shall not be considered changes to the H-I Model for the purposes of this Section V.

A. Classification of and standards for changes to the H-I Model and pre-processors:

*Non-Substantive Changes* to the H-I Model and pre-processors are changes that do not affect the quantification of annual depletions or accretions to Usable Stateline Flow, except as provided below in this paragraph, but which improve the efficacy of model input, model output, or model execution. The addition of a new Replacement source is considered a non-substantive change, even if code changes are required.

*Substantive Changes* to the H-I Model and pre-processors are any changes that are not non-substantive as defined above.

Substantive Changes to the H-I Model and pre-processors shall be permitted only to the extent that the change improves the accuracy or reliability of the model.

B. Recalibration of the H-I Model

Unless the States agree otherwise, recalibration of the model will be considered under the procedures for Substantive Changes to the H-I Model. The H-I Model will be recalibrated using the 1950-1994 time period unless the States agree to use a different period or the use of a different period is approved through the Dispute Resolution Procedure. The model, using best professional judgment, shall be recalibrated as required in the future in order to produce the most reliable estimates of Stateline depletions and accretions of usable flows.

- C. Proposed changes to the H-I Model, whether substantive or non-substantive, shall be submitted by one State (proposing State) to the other State (responding State) and shall include the following:
  - 1. A narrative description of the proposed change and an explanation of the reason for the proposed change.
  - 2. Proposed new or revised input files, model code, and/or output files.
  - 3. For Substantive Changes, the proposing State shall submit to the responding State the following:
    - a. Results of H-I Model runs showing the effect of the proposed change on the model results, and
    - b. Information or analysis supporting the basis for the proposed change.
  - 4. For Non-Substantive Changes, other than the addition of new Replacement sources, the proposing State shall submit results of H-I Model runs showing that the proposed change has no effect on the model results.
- D. The responding State shall have six months from the date the change is proposed to review the proposed change and to provide a response to the proposing State. The response shall be in writing and shall include one or more of the following:
  - 1. Acceptance of the proposed change.
  - 2. Acceptance of the proposed change with modification. The response shall state the basis for modifying the proposed change and shall include the following:
    - a. A narrative description of the modification to the proposed change and an explanation of the reason for the proposed modification.
    - b. The proposed modification to the input files, model code, and/or output files.
    - c. For modification to a proposed Substantive Change, the responding State shall submit to the proposing State the following:
      - (1) Results of H-I Model runs showing the effect of the proposed modification on the model results, and
      - (2) Information or analysis supporting the basis for the proposed modification.

- d. For Non-Substantive Changes, other than the addition of new Replacement sources, the responding State shall submit results of H-I Model runs showing that the modification of the proposed change has no effect on the model results.
- e. The proposing State shall have one month to review the proposed modification and provide a response. If the proposing State does not agree with the proposed modification, it shall so notify the responding State within one month and the matter may be submitted to the Dispute Resolution Procedure.
- 3. Rejection of the proposed change and an explanation of the basis for such rejection. The proposing State shall have one month to review the basis for the rejection and may submit the proposed change to the Dispute Resolution Procedure. If the proposed change is not submitted to the Dispute Resolution Procedure, it shall be deemed rejected; provided, that such rejection shall not preclude a State from proposing the change at a future date based on further information or analysis.
- E. Proposed changes to the H-I Model shall be submitted to the following, or their successors:
  - 1. If to Colorado:

Colorado State Engineer

Division of Water Resources

Colorado Department of Natural Resources

2. If to Kansas:

Kansas Chief Engineer

Division of Water Resources

Kansas Department of Agriculture

F. Implementation of Approved Changes to the H-I Model

Unless the States agree otherwise, approved changes to the H-I Model, whether approval results from acceptance of the change, agreement of the States, or the Dispute Resolution Procedure, shall become applicable to the Annual Calculations as follows:

- 1. For changes to represent new Replacement sources, the change shall be applicable starting with the year in which the change is proposed, provided that the change is proposed in accordance with this Section V by March 31. Changes proposed after March 31 shall become applicable starting with the year following the year in which the change is proposed (e.g., if a change to represent a new Replacement source were proposed on April 9, 2006, it would become applicable to the Annual Calculation for the year 2007 that is performed in 2008).
- 2. For all other changes, the change shall be applicable starting with the year following the year in which the change is proposed (e.g., a change proposed on January 31, 2006, shall become applicable to the Annual Calculation for the year 2007 that is performed in 2008).

#### VI. Reporting Requirements and Right of Inspection

- A. In addition to the data necessary to update the H-I Model each year, as described above in Section III, Colorado will provide monthly summaries of pumping and replacement operations under replacement plans to Kansas within 60 days after the end of each month.
- B. The annual submittal for each replacement plan that includes wells in the H-I Model Domain will be provided to Kansas at the time it is received (normally by March 1 of each year). Plan approvals will be provided to Kansas at the time of notice to the plan applicants. Plan amendments will be provided to Kansas at the time of approval.
- C. Pumping data and records to be collected and provided to Kansas include:
  - 1. Pumping Data Power records and user reported pumping used in the monthly administration of the replacement plans in the Arkansas River Basin will be made available to Kansas each month. The data will include the power records as received from the power companies, power coefficients, and processed records to derive monthly pumping. Pumping for each irrigation well in the H-I Model Domain will be computed and made available to Kansas, including the farm unit and canal service area for each well in the H-I Model Domain. Wellhead depletions will be summarized by canal service area.
  - 2. The forms used to report new power coefficients for each irrigation well in the H-I Model Domain using the power coefficient method will be provided to Kansas, upon request, at the time it is implemented in the accounting process to determine pumping for that well.
  - 3. The CDWR records of flow meter readings will be made available to Kansas.
- D. Colorado shall provide or make available the following data for irrigated acreage that will be dried up for Replacement credit and for direct delivery of Replacement water.
  - 1. Dry-up of irrigated acreage by water rights that are proposed for Replacement will be determined using the procedures in the Administration of Parcels Claimed for Augmentation Credit Agreement (Appendix B.3 of this Decree). Colorado shall provide the following information:
    - a. Acreage historically irrigated that was not irrigated from any source during the plan year.
    - b. Acreage historically irrigated that was irrigated with ground water during the plan year.
    - c. Acreage historically irrigated that was irrigated with transmountain water or other consumable water (for revegetation purposes only) during the plan year.
    - d. Documentation of monitoring of dry-up during the season; field reports, interview notes and photographs.
    - e. Mapping of acreage actually approved for dry-up.
  - 2. Records of daily diversions and Replacement releases for each canal for which Replacement credit is claimed and operated during the year.

- 3. The portion of Replacement releases that were allocated to replace depletions under Substitute Water Supply Plans for post-1985 pumping.
- E. Colorado shall provide or make available on a monthly basis, unless otherwise specified below, the following data for Replacement supplies delivered to the river:
  - 1. Records of releases of transmountain or other consumable water from reservoirs in the H-I Model Domain to the Arkansas River or from the reservoirs outside the H-I Model Domain into the H-I Model Domain will be maintained and provided to Kansas. These records will include:
    - a. The location, amount, and time of release. The time of release will include the date(s) of release.
    - b. The source of water (e.g., transmountain, transmountain return flow, Colorado Canal consumable) and the entity that provided the water.
    - c. The well group and wells for which Replacement was supplied.
    - d. Reservoir records sufficient to document that the release operation occurred.
    - e. Documentation of the determination of the consumable portion of the water if the water was not fully consumable.
    - f. Documentation of any releases made to maintain historical return flows.
    - g. Identification of amounts that were allocated for depletions not included in the H-I Model analysis, such as municipal well depletions or use upstream of Pueblo.
  - 2. Deliveries of Replacement water from Fountain Creek or other tributaries.
    - a. Summary of Fountain Creek accounting to document the timing and amount of transmountain or other consumable water that was not stored or exchanged to upstream storage.
    - b. Computed depletions and replacement for Rule 14 wells on Fountain Creek.
- F. Irrigated Acreage
  - 1. Groundwater acreage will be based on the Colorado farm verification program. Groundwater acreage will be based on the acreage in each farm unit for which pumping occurred during the season unless the farm unit has documented surfacewater-only acreage, subject to paragraphs to 2 and 3 below. Acreage for any pumping from wells not in a farm unit will be quantified and included.
  - 2. Each farm unit for which surface-water-only acreage is claimed will be verified at least once every five years.
  - 3. Irrigated acreage will be updated in accordance with the Irrigated Acreage Updating Agreement (Appendix B.4 of this Decree). Fallow lands can be updated each year if a field survey or air photograph analysis is made to substantiate that land was not irrigated. Such land is not considered dry-up for purposes of Replacement, but is considered not irrigated in the Historical and Compact runs of the H-I Model.

- G. Right of inspection
  - 1. Colorado will provide the following documentation for inspection by Kansas upon request:
    - a. Decrees approving changes of water rights and studies or analyses of Replacement sources on which approval of replacement plans were based
    - b. Power and flow meter records
    - c. Canal, ditch, or other surface water diversion records
    - d. Canal, ditch, or other surface water measurements
    - e. Reservoir storage and release records
    - f. Irrigated acreage
    - g. Replacement plan accounting
    - h. Any other data noted in this or other Appendices of this Decree to the extent such data are maintained by the Colorado Division of Water Resources
  - 2. Kansas shall have the right to inspect diversion works and augmentation facilities, irrigated and fallowed lands, and acreage dried up for replacement plans in the H-I Model Domain, either accompanied by Colorado State officials or unaccompanied.
    - a. Accompanied reasonable and mutually acceptable schedule among representative State and/or federal officials.
    - b. Unaccompanied Kansas inspection parties shall comply with all Colorado laws and regulations when making inspections. Kansas inspection parties do not have the right of access to private property when not accompanied by Colorado officials.

#### VII. Evaluation of the Sufficiency and Administration of the Colorado Use Rules

In accordance with Section IV of this Decree, the administration of the Colorado Use Rules during the period 1997 through 2006 and the sufficiency of the Colorado Use Rules shall be evaluated. The H-I Model as documented in Appendix C.1 of this Decree shall be used as part of that evaluation. The evaluation of the sufficiency of the Colorado Use Rules and their administration shall include (1) an evaluation of the adequacy of the presumptive depletion percentages of 30%, 50%, and 75% as set out in Colorado Use Rule 4.2 without any consideration of adjustments to the replacement requirements under the Colorado Use Rules or any voluntary Replacement, and (2) an evaluation of any adjustments to replacement requirements under the Colorado Use Rules during the 1997 through 2006 period.