

DISTRICT COURT, WATER DIVISION NO. 1, STATE OF COLORADO

Consolidated Cases No. 86CW401, 86CW402, 86CW403, 87CW332

FINDINGS OF FACT, CONCLUSIONS OF LAW, JUDGMENT AND DECREE
ON REMAND

CONCERNING THE APPLICATIONS OF THE CITY OF THORNTON FOR APPROPRIATIVE RIGHTS OF EXCHANGE, CONDITIONAL WATER RIGHTS, CHANGE OF USE AND PLAN FOR AUGMENTATION COMPRISING WHAT IS KNOWN AS THE THORNTON NORTHERN WATER SUPPLY PROJECT

IN LARIMER, WELD AND ADAMS COUNTIES.

THIS MATTER came on for hearing on the consolidated Applications of the City of Thornton, hereinafter sometimes the "Applicant" or "Thornton." The Court, having considered the pleadings as well as the stipulations, evidence and legal arguments of the parties, issued its Memorandum of Decision dated August 16, 1993 regarding the major legal issues herein, and entered its Findings of Facts, Conclusions of Law, Judgment and Decree on February 18, 1994 ("Decree"). Thereafter, Thornton and certain objectors appealed. On October 15, 1996, the Supreme Court issued its opinion in *The City of Thornton v. Bijou Irrigation Company, et al.*, 926 P.2d 1 (Colo. 1996). On November 15, 1996, the Supreme Court issued its mandate affirming in part and reversing in part the Decree and remanding the matter for further proceedings consistent with its opinion. Now, therefore, having conducted such proceedings the Court does hereby find, conclude, order and decree as follows on remand:

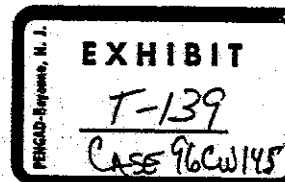


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FINDINGS OF FACT

1. The Applications. The Applicant filed its Applications for confirmation of appropriative rights of exchange, 86CW401 (hereinafter, "Poudre River Exchange" or "River Exchange") and 86CW402 (hereinafter "Water Supply and Storage Company Exchange" or "WSSC Exchange" or "Ditch Exchange"), for confirmation of conditional water rights, 86CW403, on December 31, 1986, and for approval of changes of water rights and a plan for augmentation (87CW332) on December 31, 1987. Consolidated for hearing before this Court, all four of the above described applications may hereinafter be collectively referred to as the "Applications." Together, the Applications collectively describe the water rights for Thornton's "Northern Project."
2. Jurisdiction. All notices of the Applications were given in the manner required by law, none of the land or ground water involved herein is located within the boundaries of a designated ground water basin, and the Court has jurisdiction over the subject matter of this proceeding and over all persons and owners of property affected hereby, irrespective of whether those persons or owners of property have appeared. The time for filing statements of opposition has expired.

3. Objectors. Statements of opposition were filed by:

Amen, Keith *
Amen, Warren & Viola
Bijou Irrigation Co.
Bijou Irrigation Dist.
Blase, Andrew & Vivien Akin
Burlington Ditch, Land & Reservoir Co.
Central Colorado Water Conservancy District and its Ground Water Management Subdistrict *
Cache la Poudre Water Users Assoc. *
City of Arvada *
City of Aurora
City of Brighton
City of Broomfield
City and County of Denver, acting by and through its Board of Water Commissioners
City of Englewood
City of Fort Collins *
City of Greeley
Consolidated Ditches of District No. 2
Colorado Division Engineer, Water Division 1 and State Engineer (by motion to intervene)
Colorado Division of Wildlife
Deane, Harold.
Delta Irrigation Co.
Eastman Kodak Company -- Colorado Division *
Excalibur Resources Co.
Farmers Reservoir & Irrigation Co.
Fort Morgan Irrigation & Reservoir Co.
Henrylyn Irrigation District
Hutcheson, J.W. & Bessy L.
Irrigationists Assoc.

Jackson Lake Reservoir & Irrigation Co.
 Jackson Ditch Co.
 Larimer & Weld Irrigation Co.
 Larimer & Weld Reservoir Co.
 New Cache la Poudre Irrigating Co.
 Northern Colorado Water Conservancy Dist. *
 North Poudre Irrigation Co.
 Ogilvy Irrigating & Land Co.
 Paul Lind & Sons
 Platte River Power Authority *
 Public Service Co. of Colorado
 Rankin, Wanda Lee
 Riverside Irrigation Dist.
 Riverside Reservoir & Land Co.
 St. Vrain & Left Hand Water Conservancy District
 Thompson Water Users Assoc.
 Water Supply and Storage Co.
 Western Sugar Co.
 Windsor Reservoir Co.
 Yetter, Dwain & Vera

(* These parties will be notified of various actions and requests by Thornton as provided in several paragraphs herein)

4. Review by the State and Division Engineers. In accordance with § 37-92-302(2), C.R.S., the office of the Division Engineer issued its Summary of Consultation on the following dates: 86CW401: April 29, 1987; 86CW402: April 29, 1987; 86CW403: March 23, 1987; 87CW332: April 4, 1988. The Court has given these summaries due consideration. The Court notes that, as contained in the stipulation attached hereto as Exhibit X and summarized below, the State and Division Engineer stipulated to the entry of a decree as well as the reasonableness of certain proposed findings of fact which are not inconsistent with the findings or provisions of this decree. The State and Division Engineers took no position on the issues of Thornton's need for water, Thornton's proposed use of "CBT" water, and Thornton's proposed reuse of transmountain water.
5. Withdrawals and Dismissals. Excalibur Resources Co. was dismissed by order of the Court dated August 13, 1990. The following parties have voluntarily withdrawn their statements of opposition:

Bijou Irrigation Co.
 Bijou Irrigation District
 Burlington Ditch, Land & Reservoir Co.
 City of Aurora
 City of Broomfield
 Colorado Division of Wildlife
 Consolidated Ditches of District No. 2
 Delta Irrigation Company
 Farmers Reservoir & Irrigation Co.

Jackson Ditch Co.
Kenneth F. Lind
St. Vrain & Left Hand Water Conservancy District

6. Stipulations. The Applicant has entered into stipulations with the following parties:

Water Supply & Storage Company
City of Arvada
City of Englewood
City of Greeley
Central Colorado Water Conservancy District and its Ground Water Management Subdistrict
Western Sugar Company
Colorado State and Division Engineers
Larimer & Weld Irrigation Company
Larimer & Weld Reservoir Company
Windsor Reservoir Company
Paul Lind & Sons, Inc.
Riverside Irrigation District
Riverside Reservoir and Land Company
Fort Morgan Irrigation & Reservoir Co.
Jackson Lake Reservoir & Irrigation Co.
Ogilvy Irrigating & Land Co.
City and County of Denver, acting by and through its Board of Water Commissioners
New Cache la Poudre Irrigating Company

7. The Applicant: The Applicant, the City of Thornton ("Thornton" or "City"), is a municipal corporation of the State of Colorado. It is a growing suburban community located north of the City and County of Denver and adjacent to the South Platte River a short distance downstream from or north of the Platte's confluence with Clear Creek. Thornton owns and operates a municipal water and sewer utility system not only for the benefit of its citizens but also for the provision of water and sewer service to such extra-territorial customers as it may serve pursuant to its city charter, agency relationships and contractual commitments. Thornton filed these Applications in order to adjudicate certain water right matters, allowing it to make necessary expansions to and improvements in its municipal water supply system.

8. Thornton's Existing System Yield. At the time its Applications were filed herein for the Northern Project, Thornton's existing raw water supply system had three components: water being diverted from upper Clear Creek (near Golden), from lower Clear Creek (near its confluence with the South Platte), and from the South Platte River itself.

- 8.1 Quantity. The firm yield of Thornton's existing raw water supply system will be increased by the operation of the Northern Project. Adjudication of water rights and changes of water rights needed for the operation of the Northern Project are sought by the Applications now before the Court:

- 8.1.1 Based on water right ownership at the time of the appropriations herein and based on the capacities of pipelines, canals, and other water facilities on that date, the annual firm yield of Thornton's existing system was approximately 16,000 a.f.

8.1.2 At the time of the appropriations, however, certain expansions were planned by Thornton for its pipelines, canals and other water facilities. With these expansions the annual firm yield of Thornton's system will increase to approximately 26,100 a.f. by the mid to late 1990's and will continue to be so until the introduction of water from the "Northern Project."

8.2 Quality. Thornton asserted during trial that declining water quality will eventually reduce the firm yield of the City's current sources of supply, and except for approximately 9,700 a.f. per annum of firm yield from the City's raw water system component on upper Clear Creek, that the quality of Thornton's existing water supply is polluted by run off and effluent discharges associated with the urbanization of the Denver metropolitan area, through which both the South Platte River and Clear Creek flow before reaching Thornton's intakes. The Court finds that the present condition of Thornton's water supply makes the City's concerns about water quality reasonable. Nothing in this decree, however, shall relieve Thornton's obligation to engage in reasonable efforts to protect the quality of, and to treat, its present water supply at a reasonable cost.

8.3 Projected Demand and Yield. Thornton has reason to believe that the firm yield of the City's existing supplies will fall short of anticipated demand around the turn of this century and thereafter. With construction of all possible facilities, the annual firm yield of Thornton's existing water rights will reach approximately 26,000 a.f. For water quality reasons, however, that yield may be substantially reduced by up to 16,000 a.f., leaving as little as 10,000 a.f. firm yield per annum from Thornton's existing water rights. Demand within the City's 1986 service area (including its extended service area) is expected to reach over 94,000 a.f. per year. These concerns are a reasonable basis for Thornton's planning for the future.

9. Thornton's Northern Water Supply Project. In the early-to-mid 1980's, facing shortfalls in both the quantity and quality of its existing water supply, Thornton investigated the possibility of using water from a variety of other sources. Eventually, in 1986, it settled on the Cache la Poudre River (sometimes hereinafter the "Poudre River") as its water supply of the future. The City then purchased 47.23% of the outstanding shares of the Water Supply and Storage Company (WSSC), a mutual ditch company organized pursuant to Colorado law, which operates the Larimer County Canal and related facilities. About the same time, Thornton purchased 5.21% of the outstanding shares of the Jackson Ditch Company (JDC), also a mutual ditch company organized pursuant to Colorado law. The operations of JDC are coordinated with those of WSSC, and WSSC owns a substantial interest in JDC. Concurrently with these purchases, the City developed the Thornton Northern Water Supply Project ("Northern Project"), the subject of this adjudication. The project's continuing purpose is to provide adequate supplies of high quality raw water to the City by changes of agricultural water rights, a ditch exchange, a river exchange, new appropriations, and a plan for augmentation, all of which are the subject of the applications described in paragraph 1, above. The major physical features of the project are shown on a facilities map attached hereto as Exhibit GG. Consolidated for trial, the four Applications comprise interrelated and incremental components of a single system. The project as envisioned by Thornton is summarized below:

9.1 Phased Construction of the Northern Project. Thornton plans to construct its project in three phases, incrementally increasing its municipal supply as the above described shortfalls

would require. While Thornton anticipates its future need for Northern Project water as indicated below, it would be unreasonable to expect that the City's long-term needs can be predicted with absolute precision. As a result, the dates upon which and the amounts in which Northern Project water will be delivered to Thornton may vary from time to time. For similar reasons, the progress of phases, as well as the actual use of water rights within each Phase of the Northern Project, may vary depending on a variety of circumstances including hydrologic conditions not only on the Poudre but also in the other watersheds within which Thornton has water rights.

9.2 Phase I. In approximately the year 2000, Thornton intends to begin construction on a pumping station to withdraw water from a WSSC reservoir fed by the Larimer County Canal, a pipeline to carry that water to Thornton, and numerous related facilities.

9.2.1 Initially the Northern Project was expected to deliver approximately 1,800 a.f. to Thornton during the year 2002. Thereafter, deliveries would increase from year to year, matching Thornton's increasing need for water. As decreed, total Northern Project Phase I average annual deliveries to Thornton will reach approximately 29,000 a.f. per annum.

9.2.2 Water delivered to Thornton in Phase I will be derived: [1] from the gradual retirement from irrigation of lands owned by Thornton and served by WSSC and JDC, i.e. by water resulting from the change of use of the water rights associated with Thornton's proportional ownership of shares in those companies (87CW332); [2] from 1986 appropriations from the Poudre River, confirmed herein (86CW403), and [3] from the river exchange approved herein (86CW401).

9.3 Phase II. To meet Thornton system demands exceeding those satisfied by Phase I, a variety of other facilities are planned for construction, including return pipelines from the Poudre and South Platte Rivers to the Larimer County Canal.

9.3.1 As decreed, combined Northern Project deliveries to Thornton, using both Phase I and Phase II facilities, will average approximately 48,000 a.f. per annum.

9.3.2 Phase II begins when additional water is delivered to Thornton from the exercise of the Water Supply and Storage Company Exchange (commonly referred to as the "ditch exchange") on shares not owned by Thornton, approved herein in 86CW402. Under that exchange, Thornton will withdraw water from the Larimer County Canal and, in exchange, will return an equivalent amount of water owned or controlled by Thornton.

9.4 Phase III. Thornton anticipates needing additional water from the Northern Project, and in Phase III plans to construct a parallel return pipeline to deliver additional water back to the Larimer County Canal, thereby increasing the yield of the ditch exchange approved in 86CW402.

9.4.1 Phase III begins when Thornton expands the Ditch Exchange to include exchanging on Thornton's WSSC shares, which shares will then be returned to irrigation use

under the WSSC System, thereby allowing a ditch exchange on nearly the entire flow of the Larimer County Canal.

9.4.2. The anticipated average annual delivery to Thornton at full development, utilizing Phase I, II, and III facilities, as decreed herein, will be approximately 58,800 a.f.

10. WSSC/Thornton Contract. In December, 1986, Thornton reached agreement with WSSC, approved by its shareholders, for the City's use of the ditch company's system. This agreement is incorporated as the Judgment and Decree of the District Court, Larimer County, Colorado, entered January 26, 1987, *City of Thornton v. Water Supply and Storage Co., et. al.*, Case No. 86CV982. The agreement was amended on June 12, 1991. Among other things, the contract required Thornton to pay to WSSC over \$3,000,000, assign 1,049 CBT units having a value of over \$800,000, and commit to the payment of up to \$5,000,000 in the future. In addition, Thornton agreed that historical deliveries of water to other shareholders would not be altered. In return, WSSC agreed that Thornton has the right to use WSSC facilities and construct new facilities essential to the operation of the Northern Project, including: use of the water represented by the City's shares for its municipal purposes; establish a diversion structure to withdraw water from the Larimer County Canal or a WSSC reservoir located between the headgate and Rocky Ridge Reservoir; take through that diversion structure the water represented by Thornton's shares and other water owned or controlled by Thornton; use of excess storage capacity in the WSSC System; and, use of WSSC property as necessary for the installation, operation and maintenance of the diversion and return facilities. The 1986 agreement and the 1991 amendment, are both attached hereto as Exhibit J and shall hereinafter be referred to as "the WSSC/Thornton Contract."

11. Change of Water Rights (87CW332). The backbone of the Northern Project's Phase I is the change to alternate types and places of use of the water rights represented by Thornton's shares in WSSC and JDC. In general, the alternate uses will be municipal uses in Thornton's service area, in addition to the original use of irrigation in the Poudre basin.

11.1 The Ditch Companies' Systems.

11.1.1 Water Supply and Storage Company. The Water Supply and Storage Company operates the Larimer County Canal which has a capacity of approximately 750 c.f.s. at its headgate on the Poudre River and initially follows the old Obenchain Millrace near the site of Ted's Place (north of Fort Collins and west of LaPorte) in Larimer County. The Larimer County Canal continues eastward to U.S. Highway 85 between Pierce and Ault in Weld County. In addition to the Larimer County Canal, the company also operates eleven reservoirs, three transmountain ditches, one transmountain tunnel, the Jackson Extension Ditch, shares in the Jackson Ditch Company, and units in the Colorado-Big Thompson (CBT) project. There are three major laterals extending from the Larimer County Canal: the Pierce Lateral, the Collins Lateral, and the Lone Tree Lateral. Although these laterals serve shareholders in WSSC, they are not owned by the company. The "Water Supply and Storage Company System" or "WSSC System" as used hereinafter includes all facilities operated by WSSC as well as the foregoing laterals.

- 11.1.1.1 Irrigation of Lands Above Ditch. It was the practice of some of Thornton's predecessor WSSC shareholders to pump their water to lands which are higher in elevation than the nearby portions of the Larimer County Canal. Some of these lands lie south of or "below" the canal, while others lie north of, or "above" it. It is not disputed, and the Court finds, in the circumstances of this case, that this past use of WSSC water is in accordance with the decrees under which it is diverted. This finding shall not constitute precedent in any future dispute involving irrigation of lands above the ditch.
- 11.1.1.2 Shares Freely Transferable. WSSC shares have been freely transferable within the WSSC System, and on occasion, some of these transfers have been on an informal basis.
- 11.1.2 The Jackson Ditch Company. The Jackson Ditch Company operates the Jackson Ditch which has a capacity of approximately 50 c.f.s. at its headgate on the Poudre River near Bellevue in Larimer County and extends approximately six miles from that headgate to a flume in Section 26, T8N, R69W, whence it flows into the Jackson Extension Ditch, which flows an additional two miles to Long Pond, a reservoir in the WSSC System. Water Supply and Storage Company owns 6.25 of the 24 total shares in the Jackson ditch Company. Water attributable to the 6.25 shares is delivered through the Jackson Extension Ditch (owned and operated by WSSC) to Long Pond for use by WSSC shareholders. In addition, several individuals who own JDC shares have farms located above the Jackson Ditch and below the Larimer County Canal. WSSC permits these individuals to operate an exchange whereby their JDC water flows to Long Pond and they receive water directly from the Larimer County Canal. In addition to owning 6.25 JDC shares, the WSSC also holds voting rights on an additional 8.625 JDC shares, giving the WSSC majority control of the Jackson Ditch Company. The President of WSSC typically serves as the President of the JDC and the boards of the two companies substantially overlap.
- 11.2 Water Rights to be Changed. Thornton seeks to change the water rights described below:
- 11.2.1 Water Supply and Storage Company Water Rights. Thornton owns 283,354 or 47.23% of 600 issued and outstanding shares in WSSC. That company holds legal title and Thornton holds a pro rata equitable interest in the water rights described on Exhibit B, hereto, and hereinafter described as "WSSC Water Rights."
- 11.2.1.1 No Expanded Historic Use. There has been no general historic expanded use of the WSSC water rights nor has there been a historic unlawful or expanded use of the water right identified as "Larimer County Canal (Henry Smith)" and the water right identified as "Larimer County Canal, 2.67 c.f.s." on Exhibit B hereto.
- 11.2.1.2 Transmountain Water. The WSSC transmountain water rights are the subject of separate findings below in paragraph 19.

- 11.2.1.3 Colorado - Big Thompson Water. WSSC carries CBT water both for the benefit of individual shareholders as well as on a "Company run" basis for the benefit of all shareholders. The CBT project and the use of CBT water under the WSSC System are the subject of separate findings below.
- 11.2.2 Jackson Ditch Company Water Rights. Thornton itself owns 1.25 or 5.21% of 24.0 issued and outstanding shares in the JDC. In addition, WSSC owns 6.25 shares of the Jackson Ditch Company which, based on the City's proportional ownership in WSSC, results in Thornton's beneficial ownership of an additional 12.30% of the Jackson Ditch Company. Thornton's direct and equitable ownership constitutes 17.51% of the Jackson Ditch Company. That company holds legal title and Thornton holds a pro rata equitable interest in the water rights described on Exhibit C, hereto, hereinafter described as "JDC Water Rights."
- 11.2.2.1 No Expanded Historic use. The preponderance of the evidence received in connection with the JDC water rights indicated that some JDC shareholders historically owned irrigable lands above the Jackson Ditch which took delivery of water from the Larimer County Canal in exchange for delivering the Jackson water to WSSC. In addition, WSSC itself has owned shares in JDC for more than 90 years, which shares have been distributed pro rata among the WSSC shareholders. This historic practice has not, however, resulted in an expanded use.
- 11.2.3 Wells Not to be Changed. The farms purchased by Thornton in Larimer and Weld Counties in 1986 included 155 irrigation wells. Of these, approximately 40 were decreed as nontributary wells in the 1953 "Coffin" adjudication, approximately 80 are included in the Cache la Poudre Water Users Association plan for augmentation, and approximately 30 are included in the GASP augmentation plan. None of these wells are the subject of the change application now before the Court.
- 11.3 Change of WSSC and JDC Water Rights. In addition to the historic uses, the WSSC and JDC water rights described above will be changed by Thornton to include alternate types and places of use as well as alternate places of storage:
- 11.3.1 Alternate Types of Use. All municipal uses, including but not limited to irrigation, domestic, mechanical, industrial, manufacturing, generation of electrical energy, power generally, fire protection, sewage treatment, street sprinkling, watering of parks, lawns and grounds, recreation, storage, fish culture, maintenance and preservation of wildlife, exchange, augmentation, replacement, adjustment and regulation of the Thornton municipal water system. Thornton may also use, consume totally, reuse, make a succession of uses, and dispose of the reusable water by trade, exchange, augmentation, replacement, adjustment, and regulation, within and without its system as it now exists and may hereafter exist from time to time. The foregoing are hereinafter referred to as "Municipal Uses."
- 11.3.2 Alternate Place of Use. The alternate first use will be within Thornton's service area as it now exists or may from time to time be expanded, and at such places

within the Poudre and South Platte basins as are necessary to fulfil obligations under this decree.

11.3.3 Alternate Places of Storage

11.3.3.1 Tani Lakes and West Gravel Lakes, located in sections 25, and 36, T2S, R68W, and sections 30 and 31, T2S, R67W, 6th P.M., Adams County;

11.3.3.2 Eastlake Reservoirs 2 and 3 located in Sections 25, 35, 36, T1S, R68W, 6th P.M., Adams County;

11.3.3.3 Standley Lake Reservoir, located in Sections 16, 17, 20, 21, 22, 27, 28, 29, T2S, R69W, 6th P.M., Jefferson County;

11.3.4 No Change in Point of Diversion. The points of diversion of the WSSC and JDC water rights will not be changed. After water is diverted into the Larimer County Canal, Thornton will withdraw water by a pump station at WSSC Reservoir No. 4 which is fed by a turnout from the canal located approximately sixteen miles down the canal from its headgate or at such other point(s) within the WSSC System as may be agreed upon by Thornton and WSSC, following notification of the Division Engineer and the objectors identified with an asterisk [*] in paragraph 3.

11.4 Historic Operations and Use of WSSC and JDC Water Rights. Historically, the water attributable to Thornton's shares was primarily delivered to approximately 100 farms comprising over 21,000 acres. Those water deliveries consisted of [1] water native to the Poudre River (hereinafter "native water"), [2] imported water from the basins of the Laramie River, and the Michigan River which are tributaries of the North Platte River, and from the Colorado River (hereinafter "imported water," "foreign water" or "transmountain water"), and [3] water associated with the WSSC allotment contract for Colorado-Big Thompson Project water (hereinafter "CBT water") and CBT water rented or otherwise controlled by WSSC, JDC or their shareholders. CBT water is not included in the volumes and flows described below. The following historical attributes of the native and imported water were derived from a thirty-six year study period, 1950-1985.

11.4.1 Diversions. The annual historic diversions by the Larimer County Canal and Jackson Ditch have varied from year to year. The average annual historic diversions by these two ditches at their Cache la Poudre River headgates attributable to Thornton's proportionate ownership in the Water Supply and Storage Company and Jackson Ditch Company water rights described above is 16,041 a.f. of native water and 14,222 a.f. of transmountain water, for a total of 30,263 a.f.

11.4.1.1 Seepage Decrees. As described in Exhibits B and C, the WSSC and JDC Water Rights being changed include certain Seepage Decrees entered in Cases No. W-1748, W-1877 and W-7157. These decrees adjudicate some 20 different points of diversion for inflow along the course of the Larimer County Canal, the Jackson Ditch and into Lind Reservoir. This seepage includes among other sources the inflows from the irrigation of land under the NPIC system. The Court finds that WSSC and JDC have appropriated

these inflows, as set forth in the decrees therefor, and that Thornton, as a shareholder in said companies, may change its pro rata share of the Seepage Decrees, under the terms of this decree. Objectors asserted that inflow is captured by the canals, ditches and laterals of the WSSC System each year. These inflows accrue to the WSSC System from irrigation under the North Poudre Irrigation Company (NPIC), from Dry Creek, Boxelder Creek, and several other tributaries. Until changed as specified below, Thornton may use its pro rata share of these inflows that are captured by the WSSC System, less that amount of inflow attributed to the use of CBT water specified below, to the extent that such inflows continue in the future and are lawfully captured by the WSSC System. The Court notes that detailed engineering studies of the NPIC system have not been performed and an accurate determination of the quantity and composition of the inflow from irrigation use under the NPIC system, has not been made. The Court concludes that until detailed studies which quantify the inflow to the WSSC System from the first use of CBT water under the NPIC system have been completed and reviewed by the Court, CBT inflows to the WSSC System shall be quantified as 300 a.f. per year. This quantification, and Thornton's legal right to use such inflow, may be changed by the Court in either a subsequent proceeding in these consolidated cases under the retained jurisdiction below, or in another separate proceeding.

11.4.2 System Losses. Net system losses within the WSSC System varied widely from year to year.

11.4.2.1 Unshared Minor Lateral Losses. Some minor laterals within the WSSC System serve only Thornton farms, and their use eventually will be discontinued pursuant to this change of use. Native water seepage from unshared minor laterals historically averaged 100 a.f. per year.

11.4.2.2 Ditch Loss Attributable to Transmountain Water. Historically, some amount of the transmountain water delivered through the WSSC System has seeped from WSSC's facilities, and this seepage can be expected to continue in the future. The extent, if at all, to which Thornton may receive a credit for transmountain water seepage from the WSSC System has not been determined or quantified in this proceeding.

11.4.3 Consumptive Use. The annual historic consumptive use of WSSC and JDC diversions has varied from year to year. The average annual historic consumptive use attributable to Thornton's proportionate ownership in the Water Supply and Storage Company and Jackson Ditch Company water rights described above is 8,256 a.f. of native water and 6,106 a.f. of imported water, for a total of 14,362 a.f.

11.4.4 Irrigation Efficiency. The average farm irrigation efficiency for Thornton's farms was 57%.

11.4.5 Water Adequacy and Dry-up. The irrigated farmland which receives water attributable to WSSC and JDC shares is generally water-short or marginally water-adequate. There is either insufficient or merely adequate water available to satisfy the potential consumptive use of the crops grown. Historically, consumptive use of water attributable to WSSC and JDC shares was limited by the amount of water available for diversion and not by the amount of land available for irrigation. Therefore, dry-up of Thornton's farms as provided by the terms and conditions below will be adequate to prevent injury from expanded use due to Thornton's change of water rights.

11.4.6 Return Flow. The annual amount of return flow from the use of WSSC and JDC shares has varied from year to year. Based on the Court's Memorandum of Decision dated August 16, 1993, the Applicant and Objectors agreed that return flows in this decree properly include those amounts of water denominated at trial as "waste water." The average annual amount of return flow attributable to Thornton's proportionate ownership in the Water Supply and Storage Company and Jackson Ditch Company water rights described above is 6,057 a.f. of native water and 4,373 a.f. of imported water, for a total of 10,430 a.f. Ground water return flows comprised 70% of this total, the remaining 30% being surface runoff. Of the native and imported return flows, 1,214 a.f. reach the WSSC System or WSSC farms.

11.4.7 Representative Distribution of Shares and Applicability to Future Transfers. The lands historically irrigated by the shares owned by Thornton extend virtually from one end of the WSSC irrigation system to the other. Further, the distribution of the lands irrigated with WSSC shares within Sectors 3, 4 and 5, as those sectors are described in Exhibit M hereto, is representative of all of the land irrigated by the WSSC System in these three sectors. The replacement obligations established by this decree for recharge and return flow vary according to geographic location in order to account for subdrainages within the watershed, geology, hydrology and other factors. Because replacement obligations are established herein for specific "sectors" or geographic areas of the WSSC System, and because Thornton is transferring in this proceeding a representative sample of shares from these three sectors, in accordance with the retained jurisdiction provision below, the replacement obligations established herein will also constitute, as a rebuttable presumption, Thornton's replacement obligations with respect to WSSC shares used in Sectors 3, 4 or 5 which may be acquired by Thornton and transferred in the future.

12. Thornton's Conditional Appropriations, 86CW401.402.403. For the reasons stated in the Court's Memorandum of Decision dated August 16, 1993, which Memorandum is attached hereto as Exhibit A, the date of appropriation for Thornton's right to divert and to exchange water in these cases is December 31, 1986.

12.1 Need. The Court's findings regarding the area for which Thornton intended to appropriate water are contained in pages 38 to 41 of the Court's Memorandum of Decision, attached hereto as Exhibit A.

- 12.2 Specific Plan. Thornton has, and as of the date of appropriation of these water rights had, a specific plan and intent to divert, store, or otherwise capture, possess, exchange, and control a specific quantity of water for specific beneficial uses.
- 12.3 Project Completion. The waters subject to Thornton's appropriation can and will be diverted, stored, exchanged or otherwise captured, possessed, and controlled and will be beneficially used and the project can and will be completed with diligence and within a reasonable time.
- 12.4 Storage. The Court finds that the storage provided for in this decree is justified by the facts and circumstances of this case. Adequate notice of the storage of the water so appropriated, as provided in this decree, was given by the application and resume herein.
13. Thornton's Need for Northern Project Water. The preponderance of the evidence is that the water and exchanges appropriated by Thornton are needed for use and will be used within the City's municipal boundaries, within the City's designated service area, or by persons or entities with which it has either agency relationships or firm contractual commitments. That need is not only for more water, but also for water of a quality suited for municipal purposes.
- 13.1 Increased Population. The Court's findings regarding Thornton's population growth are contained in pages 38 to 41 of the Court's Memorandum of Decision, attached hereto as Exhibit A.
14. Thornton's Conditional Appropriative Rights of Exchange. (86CW401,402). The Applicant seeks judicial confirmation of two conditional appropriative rights of exchange under which the Applicant will provide senior appropriators a substitute supply of water, thus satisfying all or a portion of those appropriators' demand. By doing so, Applicant will be entitled to divert an equivalent amount of water at the point of withdrawal or diversion to which the exchanges are made, when in priority and operated in accordance with this decree.
- 14.1 Beneficial Use. Thornton's uses of water so diverted by exchange will include all Municipal Uses by Thornton as well as use by the shareholders of the Water Supply and Storage Company or by the owners or operators of the facilities located at the alternate exchange points of diversion of the Poudre River Exchange for the same uses as are allowed by the decrees currently held by the owners or operators of those facilities. Water diverted by Thornton by exchange may be used for any beneficial use or in any manner which is legally permissible for the substitute supply used to effectuate the exchange.
- 14.2 Poudre River Exchange, 86CW401. When exchange potential exists on the Cache la Poudre River above its confluence with the South Platte River, Thornton will provide substitute water to the South Platte River at its confluence with the Poudre River in exchange for the City's diversions of Poudre River water at those locations decreed herein from which (1) water can be diverted directly into the City's return pipeline(s) or stored for later introduction into the City's return pipeline(s) for the purpose of providing a substitute supply to the Larimer County Canal under the Water Supply and Storage Exchange, (2) water can be stored for later release to meet Thornton's obligations to

the Poudre and South Platte Rivers, (3) water can be diverted directly to Thornton or be diverted and stored in the WSSC System for later delivery to Thornton, or (4) water can be diverted to meet Thornton's obligations to other water users.

14.2.1 Appropriation Date. December 31, 1986.

14.2.2 Exchange Points of Diversion and Amount of Diversions by Exchange. Substitute supply water released by Thornton to the South Platte River under the Poudre River Exchange will be diverted by exchange at the following alternate Exchange Points of Diversion and in the maximum rate of flow available, up to the amounts listed below:

14.2.2.1 Larimer County Canal. The Larimer County Canal is owned by the Water Supply and Storage Company from whom Thornton has acquired a contractual right to use this facility and in which Thornton is a shareholder. (point 1 on Exhibit GG, hereto)

14.2.2.1.1 Source: Cache la Poudre River.

14.2.2.1.2 Point of Diversion: the headgate of which is located on the north bank of the Cache la Poudre River in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 13, Township 8 North, Range 70 West, 6th P.M., Larimer County, Colorado, located approximately 600 feet North and 1540 feet East of the Southwest corner of said Section 13.

14.2.2.1.3 Amount: Although the Application sought 750 c.f.s., conditional, Thornton withdrew its claim for amounts in excess of 300 c.f.s.

14.2.2.2 Jackson Ditch. The Jackson Ditch is owned by the Jackson Ditch Company, which is controlled by WSSC, and which has withdrawn its statement of opposition. Thornton is a shareholder in JDC. (point 2 on Exhibit GG, hereto)

14.2.2.2.1 Source: Cache la Poudre River.

14.2.2.2.2 Point of Diversion: the headgate of which is located on the North bank of the Cache la Poudre River in the SE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$, Section 30, Township 8 North, Range 69 West, 6th P.M., Larimer County, Colorado, located approximately 1770 feet North and 990 feet East of the Southwest corner of said Section 30.

14.2.2.2.3 Amount: 50 c.f.s., conditional.

14.2.2.3 Thornton Pump Station No. 1. (point 6 on Exhibit GG, hereto)

14.2.2.3.1 Source: Cache la Poudre River.

- 14.2.2.3.2 Point of Diversion: headgate located on the South bank of the Cache la Poudre River or a subsurface infiltration gallery located immediately South of the Cache la Poudre River in the SW $\frac{1}{4}$ NE $\frac{1}{4}$, Section 34, Township 7 North, Range 68 West, 6th P.M., Larimer County, Colorado, located approximately 1982 feet South and 2349 feet West of the Northeast corner of said Section 34.
- 14.2.2.3.3 Amount: Although the Application sought 750 c.f.s., conditional, Thornton withdrew its claim for amounts in excess of 50 c.f.s.
- 14.2.2.4 New Cache la Poudre Canal, also known as Greeley No. 2 Canal. The Greeley No. 2 Canal is owned by the New Cache la Poudre Irrigating Company with whom Thornton has entered a stipulation by which New Cache la Poudre has withdrawn its statement of opposition herein. (point 7 on Exhibit GG, hereto)
- 14.2.2.4.1 Source: Cache la Poudre River.
- 14.2.2.4.2 Point of Diversion: headgate located on the North bank of the Cache la Poudre River in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$, Section 11, Township 6 North, Range 68 West, 6th P.M., Larimer County, Colorado, located approximately 2550 feet South and 1110 feet West of the Northeast corner of said Section 11.
- 14.2.2.4.3 Amount: Although the Application sought 650 c.f.s., conditional, Thornton withdrew its claim for amounts in excess of 50 c.f.s.
- 14.2.2.5 Thornton Pump Station No. 2. (point 8 on Exhibit GG, hereto)
- 14.2.2.5.1 Source: Cache la Poudre River.
- 14.2.2.5.2 Point of Diversion: headgate located on the North bank of the Cache la Poudre River in the SE $\frac{1}{4}$ NE $\frac{1}{4}$, Section 24, Township 6 North, Range 68 West, 6th P.M., Larimer County, Colorado, located approximately 117 feet West and 1226 feet North of the East one-quarter corner of said Section 24.
- 14.2.2.5.3 Amount: Although the Application sought 750 c.f.s., conditional, Thornton withdrew its claim for amounts in excess of 50 c.f.s.
- 14.2.2.6 Larimer & Weld Irrigation Canal. The Larimer & Weld Irrigation Canal, a.k.a. the Eaton Ditch, is owned by the Larimer & Weld Irrigation Company in which Thornton is a shareholder, and with which Thornton has stipulated to the entry of this decree. (point 3 on Exhibit GG, hereto)
- 14.2.2.6.1 Source: Cache la Poudre River.

14.2.2.6.2 Point of Diversion: headgate located on the North bank of the Cache la Poudre River in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 34, Township 8 North, Range 69 West, 6th P.M., Larimer County, Colorado, located approximately 460 feet North and 2150 feet East of the Southwest corner of said Section 34.

14.2.2.6.3 Amount: Although the Application sought 750 c.f.s., conditional, Thornton withdrew its claim for amounts in excess of 20 c.f.s.

14.2.2.7 Boxelder Ditch (point 4 on Exhibit GG, hereto)

14.2.2.7.1 Source: Cache la Poudre River.

14.2.2.7.2 Point of Diversion: headgate located on the South bank of the Cache la Poudre River in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$, Section 20, Township 7 North, Range 68 West, 6th P.M., Larimer County, Colorado, located approximately 2530 feet South and 1020 feet West of the Northeast corner of said Section 20.

14.2.2.7.3 Amount: 50 c.f.s., conditional.

14.2.2.8 Fossil Creek Reservoir Inlet: The Fossil Creek Reservoir inlet is owned by the North Poudre Irrigation Company in which Thornton is a shareholder. (point 5 on Exhibit GG, hereto)

14.2.2.8.1 Source: Cache la Poudre River.

14.2.2.8.2 Point of Diversion: headgate located on the South bank of the Cache la Poudre River in the NW $\frac{1}{4}$ SW $\frac{1}{4}$, Section 21, Township 7 North, Range 68 West, 6th P.M., Larimer County, Colorado, located approximately 2550 feet North and 50 feet East of the Southwest corner of said Section 21.

14.2.2.8.3 Amount: Although the Application sought 600 c.f.s., conditional, Thornton withdrew its claim for amounts in excess of 50 c.f.s.

14.2.2.9 Ogilvy Ditch: The Ogilvy Ditch is owned by the Ogilvy Irrigation & Land Company with which Thornton has stipulated to the entry of this decree. (point 9 on Exhibit GG, hereto)

14.2.2.9.1 Source: Cache la Poudre River.

14.2.2.9.2 Point of Diversion: headgate located on the North bank of the Cache la Poudre River in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 4, Township 5 North, Range 65 West, 6th P.M., Weld County, Colorado, located approximately 550 feet North and 2100 feet East of the Southwest corner of said Section 4.

14.2.2.9.3 Amount: Although the Application sought 750 c.f.s., conditional, Thornton withdrew its claim for amounts in excess of 125 c.f.s.

14.2.3 Substitution and Exchange Point. The point of Thornton's substitution or exchange on the South Platte will be at its confluence with the Cache la Poudre River, located in Section 6, Township 5 North, Range 64 West, Weld County. Thornton shall be entitled to convey water derived from the substitute supply sources down the South Platte River to the point of substitution and exchange in accordance with the terms and conditions set forth below and in accordance with the terms and conditions of the decrees for the water rights being used to provide the substitute water supplies.

14.2.4 Exchange Potential. At times, unappropriated "exchange potential" exists on the Cache la Poudre River at each of Thornton's nine alternate points of exchange diversion as described in Exhibit I, hereto. Exchange potential is the least amount of water physically available at any point along the stream course between the exchange point of diversion and the point of substitute supply which, if replaced at the latter point, can be diverted by exchange without causing injury to other water users. Based on a study of Poudre River operations during the years 1950 - 1985 reflecting all historically operated water rights, including historically operated exchanges, unappropriated exchange potential at those points is at times in excess of the diversions to be made by Thornton.

14.2.5 Substitute Supply.

14.2.5.1 Quantity.

14.2.5.1.1 Phase I. A substitute supply, in the amount which Thornton diverts at the foregoing exchange alternate points of diversion, will be delivered by Thornton to the confluence of the Poudre and South Platte Rivers.

14.2.5.1.2 Phase II and Phase III. In Phase II and Phase III, the Poudre River Exchange will operate in conjunction with the Water Supply and Storage Company Exchange (86CW402). The quantity of the substitute supply associated with the consolidated operation of those exchanges in Phase II is described in a separate finding below concerning the consolidated exchanges' substitute supply.

14.2.5.2 Source.

14.2.5.2.1 Phase I. The substitute supply will consist of water derived from Thornton water rights identified on Exhibit K, to the extent that such water is then decreed for use by exchange or decreed to be reusable. Thornton will make such substitute supply available by means of [1] foregone diversions, [2] introduction of reusable wastewater effluent to the South Platte River at discharge points of the Metro Wastewater Reclamation District (MWRD) or other waste-water treatment facility,

[3] introduction of reusable lawn irrigation return flows to the South Platte River, and [4] reservoir releases.

14.2.5.2.2 Phase II and Phase III. The Poudre River Exchange will operate in conjunction with the Water Supply and Storage Company Exchange in Phase II and Phase III. The source of the substitute supply associated with the consolidated operation of those exchanges is described in a separate finding below concerning the consolidated exchanges' substitute supply.

14.2.5.3 Quality. The substitute water provided in accordance with Thornton's Poudre River appropriative right of exchange must be of a quality and continuity to meet the requirements of use to which senior appropriations have normally been put, and must be of a quality and quantity so as to meet the requirements for which the water of the senior appropriators has normally been used. Furthermore, said substitute or replacement water must meet the lawful requirements of the senior diverters at the time and location and to the extent the seniors would be deprived of their lawful entitlement by the Applicants' diversions and shall comply with all other water quality provisions of this decree applicable to the River Exchange. Thornton's substitute supply shall also comply with the provisions of any lawful statute, regulation or ordinance of general applicability limiting, regulating or prescribing the quality of water which may be used for agricultural irrigation whether such statute, regulation or ordinance is now in existence or is adopted or enacted in the future, including future modifications thereof, and whether enacted or adopted by the State Engineer or any other governmental entity.

14.3 Water Supply and Storage Company Exchange, 86CW402. Under this exchange, which is also sometimes referred to as the "Ditch Exchange," Thornton will withdraw from the Larimer County Canal water which has been diverted therein by WSSC and JDC under their water rights set forth in Exhibits B and C, hereto, exclusive of any and all CBT water, and return flows characterized as CBT water as described in paragraph 11.4.1.1, that may be present in the WSSC System. Thornton will return to the canal a substitute supply in an amount equal to that withdrawn. Those returns of substitute supply will be made to the Larimer County Canal or to the Jackson Ditch. Diversions of water into, withdrawal of water from, and returns of water to the Larimer County Canal will be made only if consistent with Thornton's contractual obligations, including, but not limited to, the WSSC/Thornton Contract. Returns of water to the Jackson Ditch will be made only by agreement with the Jackson Ditch Company.

14.3.1 Exchange Point of Withdrawal. Water diverted into the Larimer County Canal or Jackson Ditch by WSSC and JDC pursuant to the water rights listed in Exhibits B and C, hereto, or other legal right (exclusive of any and all CBT water, and return flows characterized as CBT water as described in paragraph 11.4.1.1 that may be present in the Jackson Ditch or WSSC System) will be withdrawn pursuant to the Water Supply and Storage Company Exchange at Thornton's point of withdrawal out of WSSC Reservoir No. 4, located in the N½ of Section 23, T 8 N, R 69 W, 6th

P.M., shown as Location A on the Facility Location Map attached hereto as Exhibit GG, or at other such point in the WSSC System as may be mutually agreed upon by Thornton and the Water Supply and Storage Company, provided notice of the use of such other point is given to the parties identified with an asterisk [*] in paragraph 3, including the Division Engineer.

14.3.2 Substitution and Exchange Points: The points of substitution or exchange will be as follows:

14.3.2.1 Larimer County Canal Headgate. When unappropriated water or exchange potential is available, a substitute supply will be introduced to the Larimer County Canal by diversion at its headgate, under the water rights awarded to Thornton herein in 86CW401 or 86CW403. Said headgate is located on the North bank of the Cache la Poudre River in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 13, Township 8 North, Range 70 West, 6th P.M., Larimer County, Colorado, located approximately 600 feet North and 1540 feet East of the Southwest corner of said Section 13.

14.3.2.2 Jackson Ditch Headgate. When unappropriated water or exchange potential is available, a substitute supply will be introduced to the WSSC System by diversion at the Jackson Ditch headgate, under the water rights confirmed and the exchanges approved herein in 86CW401 and 86CW403. Said headgate is located on the North bank of the Cache la Poudre River in the SE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$, Section 30, Township 8 North, Range 69 West, 6th P.M., Larimer County, Colorado, located approximately 1770 feet North and 990 feet East of the Southwest corner of said Section 30.

14.3.2.3 Larimer County Canal Points of Return. By discharge from Thornton's return pipelines, a substitute supply will be introduced directly into the Larimer County Canal at one or more of the following points:

14.3.2.3.1 Phase II. During Phase II of the Northern Project, substitute supply will be introduced at one or both of the following points of return:

14.3.2.3.1.1 A point on the Larimer County Canal in Section 19, Township 8 North, Range 68 West, 6th P.M., Larimer County, Colorado, shown as Point B on Exhibit GG.

14.3.2.3.1.2 A point on the Larimer County canal in Section 1, Township 7 North, Range 68 West, 6th P.M., Larimer County, Colorado, shown as Point C on Exhibit GG.

14.3.2.3.2 Phase III. During Phase III of the Northern Project, substitute supply will be introduced at one or more of the foregoing points of return for Phase II as well as a point on the Larimer County Canal in Section 17, T7N, R67W, 6th P.M., Weld County, Colorado, shown as Point D on Exhibit GG.

14.3.2.3.3 Phase II and III. Such other point as may be mutually agreed upon by Thornton and WSSC.

14.3.3 Amount: 750 c.f.s, conditional.

14.3.4 Appropriation Date: December 31, 1986.

14.3.5 Delivery of Replacement Water or Substitute Supply. Thornton will make replacement of water to the Larimer County Canal as part of the operation of this "ditch exchange" by one or a combination of the following diversions or pump and pipeline arrangements:

14.3.5.1 Water from the South Platte to Larimer County Canal. Water will be diverted from the South Platte River by:

14.3.5.1.1 Pump Station #3 (point 11 on Exhibit GG, hereto), and transported via pipelines #3, #4 and #5 to points "B," "C," and "D" on the Larimer County Canal, as shown on Exhibit GG, based on diversions under Thornton's conditional water right at Pump Station No. 3 as confirmed herein in 86CW403, and from any source of water lawfully available for such use.

14.3.5.1.2 Patterson Ditch (point 10 on Exhibit GG, hereto) from which water will be pumped from Pump Station #3A, through return pipelines #3A, #3, #4 and #5 to points "B," "C" and "D" on the Larimer County Canal, as shown on Exhibit GG, based on diversions under Thornton's conditional water right as confirmed herein in 86CW403, and from any source of water lawfully available for such use.

14.3.5.2 Water from the Poudre and South Platte to Larimer County Canal. Water will be diverted from the Poudre and South Platte Rivers by:

14.3.5.2.1 Ogilvy Ditch. Water will be diverted from the Poudre River at the headgate of the Ogilvy Ditch (at point "9" on Exhibit GG) and will then be pumped out of the ditch through pipelines #3A, #3, #4 and #5 to points "B," "C" and "D" on the Larimer County Canal, as shown on Exhibit GG, on the Larimer County Canal based on:

14.3.5.2.1.1 Diversions from the Poudre under Thornton's water right awarded herein in 86CW403 at the Ogilvy Ditch headgate at the rate decreed herein for this point of diversion.

14.3.5.2.1.2 Diversions by exchange, pursuant to the right approved in 86CW401 herein, of Poudre River water at the Ogilvy Ditch headgate, at the rate decreed herein for this point of diversion.

- 14.3.5.2.1.3 Diversions from any source of water lawfully available to Thornton for such use.
- 14.3.5.2.2 Thornton Pump Station #2, via pipelines to points "B," "C" and "D," as shown on Exhibit GG, on the Larimer County Canal based on diversion from the Poudre:
- 14.3.5.2.2.1 Under Thornton's conditional water rights awarded herein in 86CW403 at Thornton Pump Station #2 headgate, (at point "8" on Exhibit GG) at the rate decreed herein for this point of diversion.
- 14.3.5.2.2.2 By exchange diversions, under the Poudre River Exchange approved herein in 86CW401, at the following points of diversion:
- 14.3.5.2.2.2.1 Thornton Pump Station #2 (at point "8" on Exhibit GG), at the rate decreed herein for this point of diversion.
- 14.3.5.2.2.2.2 Boxelder Ditch (at point "4" on Exhibit GG) at the rate decreed herein for this point of diversion, from which water is stored in Fossil Creek Reservoir and thereafter released to the Poudre River and re-diverted and introduced to Pipeline #2 at Pump Station #2.
- 14.3.5.2.2.2.3 From any source of water lawfully available to Thornton for such use.
- 14.3.5.2.2.2.4 Fossil Creek Reservoir Inlet Canal (at point "5" on Exhibit GG) at the rate decreed herein for this point of diversion, from which water is stored in Fossil Creek Reservoir and thereafter released to the Poudre River and re-diverted and introduced to Pipeline #2 at Pump Station #2 (point "8" on Exhibit GG).
- 14.3.5.2.3 Thornton Pump Station #1 (at point "6" on Exhibit GG) via pipelines to points "B," "C" and "D," as shown on Exhibit GG, on the Larimer County Canal, based on:
- 14.3.5.2.3.1 Diversions from the Poudre under Thornton's conditional water rights awarded herein in 86CW403 at the Thornton Pump Station #1: at the rate decreed herein for this point of diversion.
- 14.3.5.2.3.2 By exchange pursuant to the Poudre River Exchange approved herein in 86CW401 at the rate decreed herein for this point of diversion.

14.3.5.2.3.3 From any source of water lawfully available to Thornton for such use.

14.3.5.2.4 Jackson Ditch (at point "2" on Exhibit GG) which flows into Long Pond, a WSSC reservoir, based on diversions from one or more of the following water rights:

14.3.5.2.4.1 Under Thornton's conditional water right awarded herein in 86CW403 at the Jackson Ditch, at the rate decreed herein for this point of diversion.

14.3.5.2.4.2 By exchange pursuant to the Poudre River Exchange approved herein in 86CW401 at the Jackson Ditch headgate at the rate decreed herein for this point of diversion.

14.3.5.2.5 Larimer County Canal (at point "1" on Exhibit GG):

14.3.5.2.5.1 Under Thornton's conditional water right awarded herein in 86CW403 at the Larimer County Canal headgate, at the rate decreed herein for this point of diversion.

14.3.5.2.5.2 By exchange pursuant to the Poudre River Exchange approved herein in 86CW401 at the Larimer County Canal headgate at the rate decreed herein for this point of diversion.

14.3.6 Substitute Supply.

14.3.6.1 Quantity.

14.3.6.1.1 Phase I. Thornton's Water Supply and Storage Company Exchange will not operate during Phase I.

14.3.6.1.2 Phase II and Phase III. Thornton's Water Supply and Storage Company Exchange will operate in conjunction with the Poudre River Exchange during Phase II and Phase III. The quantity of the substitute supply associated with the consolidated operation of those exchanges is described in a separate finding below concerning the substitute supply of the consolidated exchanges.

14.3.6.2 Source.

14.3.6.2.1 Phase I. Thornton's Water Supply and Storage Company Exchange will not operate during Phase I.

14.3.6.2.2 Phase II and Phase III. Thornton's Water Supply and Storage Company Exchange will operate in conjunction with the Poudre River Exchange during Phase II and Phase III. The source of the substitute supply associated with the consolidated operation of those exchanges

is described in a separate finding below concerning the substitute supply of the consolidated exchanges.

- 14.3.6.3 Quality. The substitute supply returned to the Larimer County Canal consists of water to be diverted from the Poudre and South Platte Rivers and must be of a quality and continuity to meet the requirements of use to which the water of all non-Thornton WSSC shareholders has normally been put, and must be of a quality and quantity so as to meet the requirements for which the water of all non-Thornton WSSC shareholders has normally been used. Furthermore, said substitute or replacement water must meet the lawful requirements of the non-Thornton WSSC shareholders at the time and location and to the extent the seniors would be deprived of their lawful entitlement by the Applicants' diversions and shall comply with all other water quality provisions of this decree applicable to the Ditch Exchange. The substitute supply returned to the Larimer County Canal shall comply with all contractual obligations of Thornton, including but not limited to the WSSC/Thornton contract, as well as with the other provisions of this decree. The WSSC/Thornton Contract is attached hereto as Exhibit J. Thornton's substitute supply shall also comply with the provisions of any lawful statute, regulation or ordinance of general applicability limiting, regulating or prescribing the quality of water which may be used for agricultural irrigation whether such statute, regulation or ordinance is now in existence or is adopted or enacted in the future, including future modifications thereof, and whether enacted or adopted by the State Engineer or any other governmental entity.

- 14.4 Consolidated Exchanges Substitute Supply - Phases II and III. Thornton's Water Supply and Storage Company Exchange will operate in conjunction with the Poudre River Exchange during Phases II and III. With respect to the consolidated operation of those exchanges:

- 14.4.1 Quantity. A substitute supply, in the amount which Thornton diverts at the foregoing exchange points of diversion, will be delivered by Thornton at the confluence of the Poudre and South Platte Rivers under the Poudre River Exchange. A substitute supply, in the amount which Thornton withdraws from the Larimer County Canal will be delivered by Thornton to the points of return for the Water Supply and Storage Company Exchange.

- 14.4.2 Source. Prior to operating the exchanges decreed herein, Thornton must have replacement sources, approved by the Court for use in these exchanges, available and actually provide such replacement sources at the location, time, amount and of a quality and continuity necessary to fully replace any obligation resulting from such exchanges owed to the South Platte River at its confluence with the Cache la Poudre River, and owed to the Larimer County Canal, as appropriate, as may be determined by the Court. The sources of water which will be made available by Thornton as substitute supply for the consolidated exchanges include:

14.4.2.1 Phase II and Phase III:

14.4.2.1.1 Thornton Water Rights. The substitute supply will consist of water derived from Thornton water rights identified on Exhibit K, to the extent that such water is then decreed for use by exchange or decreed to be reusable. Thornton will make such substitute supply available by means of [1] foregone diversions, [2] introduction of reusable wastewater effluent to the South Platte River at discharge points of MWRD or other wastewater treatment facility, [3] introduction of reusable lawn irrigation return flows to the South Platte River, and [4] reservoir releases.

14.4.2.1.2 Lawn Irrigation Return Flows. Of the water applied to lawns within the Thornton service area, seventeen percent (17%) percolates to the ground water table and returns to the South Platte River and its tributaries. An additional 2% of the amount of water applied to lawns in the Thornton service area returns to the South Platte River and its tributaries as surface run-off during the month in which the water is applied. Through the accounting procedure set forth in the decretal provisions below, Thornton will maintain sufficient dominion over, and be able to distinguish, the reusable portion of these lawn irrigation return flows to permit their use as substitute supply.

14.4.2.1.3 Other Water. In 86CW402 only, any other source of water lawfully available to Thornton insofar as such sources have then been decreed for such uses.

15. Thornton's Conditional Water Rights, 86CW403. The Applicant seeks judicial confirmation of the following conditional water rights:

15.1 Beneficial Use. All Municipal Uses by Thornton, including but not limited to irrigation, including agricultural irrigation, domestic use, recreational use, use by direct flow, by direct flow to storage, by exchange, by augmentation, use for augmentation of other uses and any other use lawfully made by Thornton, and to fulfil obligations under this decree to water users within the South Platte and Poudre basins. Water supplied to other users in fulfillment of obligations hereunder may be used for the same purposes as are allowed by the decrees currently held by such water users.

15.2 Appropriation Date. December 31, 1986.

15.3 Source, Point of Diversion, and Amounts.

15.3.1 Larimer County Canal. The Larimer County Canal is owned by the Water Supply and Storage Company from whom Thornton has acquired a contractual right to use this facility and in which Thornton is a shareholder. (point 1 on Exhibit GG, hereto)

15.3.1.1 Source: Cache la Poudre River.

15.3.1.2 Point of Diversion: headgate located on the North bank of the Cache la Poudre River in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 13, Township 8 North, Range 70 West, 6th P.M., Larimer County, Colorado, located approximately 600 feet North and 1540 feet East of the Southwest corner of said Section 13.

15.3.1.3 Amount: Although the Application sought 750 c.f.s., conditional, Thornton withdrew its claim for amounts in excess of 450 c.f.s.

15.3.1.4 Diversions shall be made only when the Larimer County Canal has capacity to carry the appropriated water without interference with the normal operations of the WSSC System.

15.3.2 Thornton Pump Station No. 1 (point 6 on Exhibit GG, hereto).

15.3.2.1 Source: Cache la Poudre River.

15.3.2.2 Point of Diversion: headgate located on the South bank of the Cache la Poudre River or a subsurface infiltration gallery located immediately South of the Cache la Poudre River in the SW $\frac{1}{4}$ NE $\frac{1}{4}$, Section 34, Township 7 North, Range 68 West, 6th P.M., Larimer County, Colorado, located approximately 1982 feet South and 2349 feet West of the Northeast corner of said Section 34.

15.3.2.3 Amount: Although the Application sought 750 c.f.s., conditional, Thornton withdrew its claim for amounts in excess of 50 c.f.s.

15.3.3 Thornton Pump Station No. 2 (point 8 on Exhibit GG, hereto).

15.3.3.1 Source: Cache la Poudre River.

15.3.3.2 Point of Diversion: headgate located on the North bank of the Cache la Poudre River in the SE $\frac{1}{4}$ NE $\frac{1}{4}$, Section 24, Township 6 North, Range 68 West, 6th P.M., Larimer County, Colorado, located approximately 117 feet West and 1226 feet North of the East one-quarter corner of said Section 24.

15.3.3.3 Amount: Although the Application sought 750 c.f.s., conditional, Thornton withdrew its claim for amounts in excess of 50 c.f.s.

15.3.4 Jackson Ditch. The Jackson Ditch is owned by the Jackson Ditch Company, which is controlled by WSSC, and which has withdrawn its statement of opposition. Thornton is a shareholder in JDC. (point 2 on Exhibit GG, hereto).

15.3.4.1 Source: Cache la Poudre River.

15.3.4.2 Point of Diversion: headgate located on the North bank of the Cache la Poudre River in the SE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$, Section 30, Township 8 North,

Range 69 West, 6th P.M., Larimer County, Colorado, located approximately 1770 feet North and 990 feet East of the Southwest corner of said Section 30.

15.3.4.3 Amount: 50 c.f.s., conditional.

15.3.4.4 Diversions shall be made only when the Jackson Ditch has capacity to carry the appropriated water without interference with the normal operations of the Jackson Ditch, and then only by agreement with the Jackson Ditch Company.

15.3.5 New Cache la Poudre Canal, a/k/a Greeley No. 2 Canal. The Greeley No. 2 Canal is owned by the New Cache la Poudre Irrigating Company with whom Thornton has entered a stipulation by which New Cache la Poudre has withdrawn its statement of opposition herein. (point 7 on Exhibit GG, hereto)

15.3.5.1 Source: Cache la Poudre River.

15.3.5.2 Point of Diversion: headgate located on the North bank of the Cache la Poudre River in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$, Section 11, Township 6 North, Range 68 West, 6th P.M., Larimer County, Colorado, located approximately 2550 feet South and 1110 feet West of the Northeast corner of said Section 11.

15.3.5.3 Amount: Although the Application sought 650 c.f.s., conditional, Thornton withdrew its claim for amounts in excess of 50 c.f.s.

15.3.6 Ogilvy Ditch. The Ogilvy Ditch is owned by the Ogilvy Irrigation & Land Company with which Thornton has stipulated to the entry of this decree. (point 9 on Exhibit GG, hereto).

15.3.6.1 Source: Cache la Poudre River.

15.3.6.2 Point of Diversion: headgate located on the North bank of the Cache la Poudre River in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 4, Township 5 North, Range 65 West, 6th P.M., Weld County, Colorado, located approximately 550 feet North and 2100 feet East of the Southwest corner of said Section 4.

15.3.6.3 Amount: Although the Application sought 750 c.f.s., conditional, Thornton withdrew its claim for amounts in excess of 125 c.f.s.

15.3.7 Patterson Ditch, Thornton Enlargement. The existing Patterson Ditch is owned by the Delta Irrigation Company from whom Thornton has obtained the rights to enlarge and use the existing structure. Delta has withdrawn its statement of opposition herein. (point 10 on Exhibit GG, hereto)

15.3.7.1 Source: South Platte River.

15.3.7.2 Point of Diversion: headgate located on the North bank of the South Platte River in the NE $\frac{1}{4}$ NE $\frac{1}{4}$, Section 21, Township 5 North, Range 65 West, 6th P.M., Weld County, Colorado, located approximately 700 feet South and 200 feet West of the Northeast corner of said Section 21.

15.3.7.3 Amount: Although the Application sought 750 c.f.s., conditional, Thornton withdrew its claim for amounts in excess of 370 c.f.s.

15.3.8 Thornton Pump Station No. 3 (point 11 on Exhibit GG, hereto).

15.3.8.1 Source: South Platte River.

15.3.8.2 Point of Diversion: headgate located on the North bank of the South Platte River or a subsurface infiltration gallery located immediately North of the South Platte River in the SW $\frac{1}{4}$ SW $\frac{1}{4}$, Section 6, Township 5 North, Range 64 West, 6th P.M., Weld County, Colorado, located approximately 2088 feet South and 1123 feet East of the West one-quarter corner of said Section 6.

15.3.8.3 Amount: Although the Application sought 750 c.f.s., conditional, Thornton withdrew its claim for amounts in excess of 400 c.f.s.

15.4 Availability of Unappropriated Water. At times, unappropriated water is available on the Cache la Poudre and South Platte Rivers at each of Thornton's eight points of diversion as described in Exhibit H, hereto. Based on studies of Poudre and South Platte River operations during the years 1950 - 1985 reflecting all historically operated water rights, including historically operated exchanges, unappropriated water is available at those points in excess of the diversions to be made by Thornton.

16. Simultaneous Operation of Conditional Water Rights and Conditional Rights of Exchange. Although most future operations of the Northern Project will involve simultaneous operations of several or all of the conditional water rights and conditional appropriative rights of exchange, river conditions may warrant the exercise of a single diversion or exchange. Because of varying municipal needs and fluctuating river flows, the exact sequence or combination of these operations in conjunction with the three phases of the Northern Project cannot be forecast with specificity. For this reason, Thornton has reasonably requested adjudication of the conditional appropriations and exchange appropriations at each point of diversion and at the flow rates described above. The Court finds that the flow rate and volumetric limits expressed in the decretal section of this decree are appropriate based on the evidence at trial.

17. Plan for Augmentation. Thornton seeks approval of a plan for augmentation (87CW332) under which any injury to other water rights, which may be occasioned by the Northern Project, will be prevented. Thornton's plan for augmentation includes and consists of all terms and conditions described in the decretal provisions below. Thornton's plan for augmentation with respect to its change of WSSC and JDC shares is described more specifically in that section below headed "Terms and Conditions Relating to Change of Water Rights (87CW332)." The water rights to be augmented are the rights being changed as described in Exhibits B and C.

hereto. The water rights to be used for augmentation of the WSSC and JDC water rights are: 1) the rights for which confirmation is sought in cases 86CW401 and 86CW403; 2) the water rights listed on Exhibit K hereto, and; 3) any other water legally available to Thornton insofar as it has then been decreed for such uses.

18. Conditional Water Rights, Appropriative Rights of Exchange, Change of Water Rights, and Plan for Augmentation Will Not Cause Injury. Operation of the Plan for Augmentation approved herein, as well as compliance with the terms and conditions imposed herein, will prevent material injury to any vested water right which might otherwise result from the operation of the Thornton Northern Project through its component parts as approved, confirmed, awarded, and decreed herein, including operation of the conditional water rights, appropriative right of exchange, change of water rights, and plan for augmentation. Although Thornton proposes a large project, there are substantial amounts of unappropriated water and unappropriated exchange potential available in the Poudre and there will be no injury to specific water rights if the Thornton Northern Project is operated in accordance with the terms and conditions established herein.

19. Transmountain Water. As used in this decree the terms "imported water," "transmountain water," and "foreign water" are synonymous and refer to water which is not native to the Poudre or South Platte River basins, which has been and continues to be diverted from the Colorado, Michigan, and Laramie River basins, and which has been and continues to be discharged into the Poudre River for eventual diversion at the headgate of WSSC's Larimer County Canal. For the purposes of these findings of fact, conclusions of law and decree, CBT water is not considered transmountain water. CBT water, and Thornton's claims in relation thereto, are the subject of separate findings below.

- 19.1 WSSC's Transmountain Water Rights. The Water Supply and Storage Company's transmountain water rights provided one of the principal reasons that Thornton acquired stock in WSSC. Nevertheless, one of the significant issues before the Court in this matter was whether Thornton, as a shareholder in WSSC, has rights of reuse, successive use and disposition (collectively "reuse rights") of its share of WSSC's transmountain water. WSSC holds decrees for several water rights under which water is imported to the Poudre River basin from the headwaters of the Colorado River, the Michigan River, and the Laramie River, which are not naturally connected to the South Platte River within the State of Colorado. WSSC's transmountain water rights are listed in Exhibit B to this Decree. Those rights were adjudicated primarily for irrigation of lands in the WSSC system and for storage in WSSC reservoirs.

- 19.2 Dominion Over Transmountain Water Will Be Maintained. Thornton does not assert any claim to recapture the molecules of imported water which have been released without an intent to recapture them. With WSSC's approval, Thornton does assert the right to the future reuse of its proportionate share in WSSC's imported water. Thornton has the ability to maintain dominion over the imported water to the extent it intends to reuse it as described in this decree, however, this finding is not made with regard to transmountain ditch seepage.

- 19.3 Thornton's Reuse of its WSSC Transmountain Water. To the greatest extent possible, Thornton anticipates withdrawing all of its transmountain water from the WSSC System for use in Thornton and exercising its Reuse Rights through exchanges or otherwise in accordance with applicable legal requirements.
- 19.4 Estoppe. The evidence presented did not establish that any agent acting, or purporting to act, on behalf of WSSC had the actual or apparent authority to waive the right of WSSC or its shareholders to reuse their transmountain water. Further, the evidence presented did not establish a prejudicial change in position on the part of other water users caused by any reliance upon the acts of WSSC or its agents.
20. The Colorado - Big Thompson Project. For the reasons stated in the Court's Memorandum of Decision dated August 16, 1993, which Memorandum is attached hereto as Exhibit A, Thornton's claimed uses of CBT water have been denied.
21. Ground Water.
- 21.1 The ground water system in the portion of the alluvial aquifer underlying and adjacent to Thornton's farms is primarily created by return flows or deep percolation from long-term irrigation with surface water diverted from the Poudre River. Irrigation in the area recharges the ground water system. This ground water system supports base flows in the Cache la Poudre River and its tributaries as well as vested ground water rights.
- 21.2 The aquifer beneath Thornton's farms and adjacent lands is relatively thin, ranging in thickness from 5 to 50 feet, and is channelized, resulting in the development of multi-well systems in a large part of the area. Thornton's farms are located at distances ranging from 3 to as far as 18 miles north of the Poudre River.
- 21.3 Ground water in the area typically is used in conjunction with surface water supplies. Irrigators commonly use well water as a source of supply supplemental to a number of surface water sources.
- 21.4 During the late 1940's the Poudre basin began to see a sharp increase in the development of agricultural wells. These wells are junior in priority. On the north side of the Poudre basin alone, there are approximately 1,400 agricultural wells. Although very few records of these wells' pumping are kept, the annual diversion by these wells is estimated to be approximately 90,000 a.f. per year, on average.
- 21.5 The sources of surface water supply provided to the Thornton farms from the WSSC and JDC shares, consist of three categories of water including: 1) transmountain; 2) native; and 3) CBT. Recharge to the ground water aquifer underlying the Thornton farms attributable to the Thornton WSSC and JDC shares would also consist of these same three categories. The percentage of the recharge attributable to each of these sources is given as follows: Transmountain - 35.2%; Native - 47.8%; and CBT 17.0%. Accordingly, approximately 83% of the recharge to the ground water aquifer from irrigation of the Thornton farms with WSSC and JDC shares is attributable to transmountain and native Poudre water supplies.

21.6 Recharge to the ground water aquifer underlying and adjacent to the Thornton farms in Sectors 4 and 5 attributable to the native portion of Thornton's WSSC shares was approximately 2,927 a.f. per year. The location of each Thornton farm, by return flow sector, is shown in Exhibit N hereto. The geographic definition of these return flow sectors is shown on Exhibit M hereto. Of the native recharge in Sectors 4 and 5, approximately 2,673 a.f. per year was attributable to deep percolation from Thornton farms. Approximately 65 a.f. per year was attributable to seepage from minor laterals which serve only Thornton farms. The remaining 189 a.f. per year was attributable to seepage from tailwater ponds from which there was no outlet. Approximately 1,595 a.f. of the average annual native recharge occurs from farms located in Sectors 1 through 3 and 2,927 a.f. per year occurs in Sectors 4 and 5.

21.7 The Court finds that the recharge which historically occurred in Sectors 1 through 3 did not significantly accrue to the benefit of wells and that the removal of said recharge in Sectors 1 through 3 would have no significant injurious impact on ground water levels in the vicinity of existing wells. Accordingly, Thornton shall be required to replace to the aquifer the historical recharge attributable to native water sources only in Sectors 4 and 5. Terms and conditions relating to the replacement of return flows to the Boxelder aquifer in Sector 2 are defined below in paragraph 57.3.3.5.1.

22. Diligent Prosecution of Conditional Water Rights and Appropriative Rights of Exchange. Following December 31, 1986, Thornton prosecuted its appropriations with diligence, demonstrating a continuing intent to develop those appropriations coupled with concrete action to finalize the appropriations.

23. Retained Jurisdiction. The periods of retained jurisdiction set forth in the decretal portion hereof will be adequate to ensure that the vested rights of others are not injured by the water rights, change of use, and plan for augmentation granted herein.

24. Terms and Conditions. The terms and conditions described in the decree below will prevent injury to vested water rights from the operation of the conditional water rights, the appropriative rights of exchange, the change of water rights, and the plan for augmentation sought by Thornton, insofar as they are approved herein.

24.1 Volumetric Limitations. Following remand by the Supreme Court, the parties stipulated to adjusted volumetric limitations for the purposes of this decree.

CONCLUSIONS OF LAW

25. Incorporation of Findings of Fact. The Court incorporates the foregoing Findings of Fact to the extent that these may constitute conclusions of law.
26. Incorporation of Memorandum of Decision. The Court incorporates herein the conclusions of law contained in the Memorandum of Decision, dated August 16, 1993 (attached hereto as Exhibit A), subject to modifications in accordance with the Supreme Court's opinion in *City of Thornton v. Bijou Irrigation Co., et al.*, 926 P.2d 1 (Colo. 1996) (hereinafter, *Thornton v. Bijou*). In the event of conflict or inconsistency, these Findings of Fact, Conclusions of Law, Judgment and Decree on Remand shall control over the Memorandum of Decision.
27. Jurisdiction. The Court has jurisdiction over all persons and owners of property affected hereby, irrespective of whether those persons or owners of property have appeared, the resume of the applications herein being in all respects adequate to place such persons on inquiry notice of the relief granted herein. C.R.S. § 37-92-302(3)(a); *Closed Basin Landowners Association v. Rio Grande Water Conservation District*, 734 P.2d 627 (Colo. 1987); *Monaghan Farms, Inc. v. City & County of Denver*, 807 P.2d 9, 16 (Colo. 1991); *City and County of Denver v. City of Englewood*, 826 P.2d 1266, 1272 (Colo. 1992).
28. Subject Matter Jurisdiction. The Court has jurisdiction over the subject matter of this proceeding, including, but not limited to:
 - 28.1 Subject Matter Jurisdiction Over Change of Use of Transmountain Water. Although some of the water rights to be changed herein divert from sources outside this water division, this Court has jurisdiction to enter a decree herein. *Thornton v. Bijou* at 29-31.
 - 28.2 Subject Matter Jurisdiction Over Exchanges. Adjudication of Applicant's exchanges described in this Decree are authorized by law and are within the jurisdiction of this Court. C.R.S. §§ 37-80-120, 37-82-106, 37-83-101, 37-83-104 and 37-92-101, *et seq.*, as amended. The rights of exchange and substitution decreed herein are appropriative water rights, with a priority date and like other appropriative water rights must be exercised within the priority system and in accordance with applicable state law, rules and regulations in effect at the time the appropriative rights are exercised.
 - 28.3 Subject Matter Jurisdiction Over Claims for Water Storage. In all of its applications for appropriative rights, Thornton claimed the right of "use by storage" of the water to be diverted. That claim also appeared in the resume. Thornton's applications herein were adequate to give inquiry notice regarding its claims for water storage. *Thornton v. Bijou* at 25-27.
 - 28.4 Subject Matter Jurisdiction Over Claims for Storage Refill Rights. Given the "expansive nature" of Thornton's Northern Project and the applications filed in connection with it, Thornton provided adequate inquiry notice of its claims for rights of refill in connection with its storage claims. *Thornton v. Bijou* at 27-28.
29. Satisfaction of Burden of Proof. The Applicant has complied with all requirements and met all burdens of proof, including but not limited to C.R.S. §§ 37-80-120, including subsection (3)

thereof, 37-82-106, 37-83-101, 37-83-104, 37-87-101, 37-92-103(3)(a), 37-92-302(1)(a), 37-92-304 and 37-92-305, as amended, to adjudicate its proposed change of use, plan for augmentation, new appropriations and exchanges as decreed herein, and is therefore entitled to a decree confirming and approving its change of use, plan for augmentation, conditional appropriative rights and conditional appropriative rights of exchange.

30. Division Engineer Administration. Review of determinations made by the Division Engineer and other administrative agencies pursuant to this decree, including but not limited to the administration of the accounting procedures and forms associated with this decree, are matters over which this Court has continuing jurisdiction. C.R.S. § 37-92-101 *et seq.*
31. State Engineer's Water Quality Authority. Pursuant to C.R.S. § 25-8-202(7)(a), the State Engineer is currently authorized to enforce stream classifications and standards adopted by the Water Quality Control Commission under the State Engineer's statutory and regulatory responsibilities, including C.R.S. §§ 37-80-120 and 37-92-305(5) and The Rules and Regulations for Implementation of Subsection 25-8-202(7), C.R.S. (the "State Engineer's Senate Bill 181 Rules") 2 C.C.R. 402-8. The Court has authority to provide, as a term and condition of this decree, that the State Engineer shall make such determinations, subject to Court review pursuant to retained jurisdiction, as to the quality of the substitute supplies as are required by then applicable statutes and regulations of general applicability. C.R.S. § 37-92-305(3)&(4); Rule 7.4, State Engineer's Senate Bill 181 Rules. The Court's recognition of the State Engineer's authority to make water quality determinations under the Court's retained jurisdiction is not a conclusion that other administrative agencies cannot exercise authority over the quality of substitute supplies, provided that such exercise of authority is otherwise lawful and is pursuant to statutes and regulations of general applicability.
32. Appropriations. The conditional water rights and the appropriative rights of exchange confirmed herein were initiated by appropriation on December 31, 1986, and were diligently prosecuted thereafter. C.R.S. § 37-92-305(1); *Thornton v. Bijou* at 31-36.
 - 32.1 Appropriations Are Not Speculative. As stated in the Court's Memorandum of Decision, the appropriations sought by the Applicant are permitted under C.R.S. § 37-92-103(3)(a) as the Applicant is a governmental agency and has a specific plan and intent to place the water sought to beneficial use for its present and future customers. The applicant has adequately substantiated its projections of future growth to obtain this decree. *Thornton v. Bijou* at 36-42.
33. Can and Will. Pursuant to C.R.S. § 37-92-305(9)(b), this Court must determine that the applicant's project can and will be completed.
 - 33.1 Unappropriated Water. Pursuant to C.R.S. § 37-92-305(9)(b), the applicant for confirmation of a conditional appropriation must show the availability of unappropriated water. In determining the availability of unappropriated water, conditional water rights under which no diversions have been made should not be considered, and absolute water rights should be considered only to the extent of historical diversions. *Board of County Commissioners of Arapahoe County v. United States*, 891 P.2d 952, 962 (Colo. 1995).

- 33.2 Right to Use Structures. Applicant has the right to use some structures involved in the Thornton Northern Project, but does not currently have an ownership interest in, or have a contractual right to use, some of the structures at which water will eventually be released or diverted as part of its project. This decree does not, however, grant the right to use facilities of others or to build facilities on land owned by others. If not already possessed by Thornton, such right must either be acquired by consent of the landowner or facility owner, or by the exercise of the power of eminent domain. An applicant need not have obtained all necessary property interests required for completion of its project before being granted a conditional decree unless the record clearly indicates there are no circumstances under which the applicant may obtain the necessary property interests. *Gibbs v. Wolf Land Co.*, 856 P.2d 798 (Colo. 1993).
- 33.3 Contingencies. Although Thornton will need to acquire additional water for use as substitute supply in order to operate the exchanges decreed herein to the full amount of their volumetric limits, and similarly will need to obtain first use contracts with WSSC or shareholders thereof in order to complete its appropriation of the Ditch Exchange, under the circumstances of this case, those contingencies do not preclude the Court's conclusion regarding "Can & Will." *Thornton v. Bijou* at 43-45.
- 33.3.1 Right to Exchange Against WSSC Shares. Pursuant to paragraph 1.c.(2) and paragraph 9 of the WSSC Contract, Thornton is given permission to seek first use contracts to operate the ditch exchange by providing substitute supplies to other WSSC shareholders. The Court has determined that the issue of whether such "first-use" contracts are required or whether Thornton may operate its ditch exchange based on some other arrangement is not now before the Court. Nothing in this decree, however, is intended to prohibit the exercise of the Ditch Exchange upon water derived from WSSC shares of WSSC shareholders who have not signed "first-use" contracts with Thornton if such use is legally permissible.
- 33.4 Structural Capacities. Generally, an appropriator cannot obtain a decree for an amount of water greater than can be diverted, conveyed and used through the facilities proposed to be used by the appropriator. *Southeastern Colorado Water Conservancy District v. City of Florence*, 688 P.2d 715 (Colo. 1984). This general rule does not preclude granting a decree for the conditional appropriations in this case, however, because Thornton will be able to divert water at the decreed rates, store and convey such water to its service area, and put the water to beneficial use. *Thornton v. Bijou* at 45-46.
- 33.5 Project Completion. The Court concludes that the waters subject to Thornton's appropriation can and will be diverted, stored, exchanged or otherwise captured, possessed, and controlled and will be beneficially used and the project can and will be completed with diligence and within a reasonable time.
34. Reality Checks. As interpreted by the Supreme Court, *Thornton v. Bijou* at 49-53, the "reality checks" provision contained in this decree is appropriate.
35. Dilution Flows. For the reasons set forth in Section VII of the Memorandum of Decision, this Court makes no provision concerning dilution flows for municipal or industrial wastewater

treatment plants, however, this decree is no impediment to enforcement or other actions by administrative or other agencies. *Thornton v. Bijou* at 89-95.

36. Changes of Water Rights, Appropriative Rights of Exchange, and Plan for Augmentation. The changes of water rights, appropriative rights of exchange, and plan for augmentation approved herein will not injuriously affect the owners or persons entitled to use water under any vested water right or decreed conditional water right as long as those changes and exchanges are operated and administered in accordance with the terms and conditions of this decree.
37. Substitute Supply. The substitute supply made available by Thornton pursuant to the exchanges decreed herein must be of a quality, quantity, and continuity adequate to meet the requirements for which the water of senior appropriators has normally been used. §§ 37-92-305(5), 37-80-120(3), C.R.S.
38. Nature of Exchanges. Subject to contractual agreements to the contrary and other legal restrictions, water made available as substitute supply takes on all of the legal characteristics and attributes of the water diverted by exchange, and conversely, water diverted by exchange acquires all of the legal characteristics and attributes of the substitute supply used to effect the exchange. C.R.S. § 37-83-101, *City & County of Denver v. Fulton Irrigating Ditch Co.*, 179 Colo. 47, 506 P.2d 144, 150 (1972), *Thornton v. Bijou* at 60. For the reasons stated in the Memorandum of Decision, water diverted under the Water Supply and Storage Company (Ditch) Exchange generally takes on the character of the substitute supply provided by Thornton. The foregoing notwithstanding, however, what has been referred to as the "Character of Exchange Rule" cannot be employed to derive benefits from CBT water outside the boundaries of the Northern Colorado Water Conservancy District. *Id.*
39. Divertible Yield of Change of Water Rights. The issue in a change of water right proceeding is whether the proposed change can be accomplished without material injury to other water users. C.R.S. §37-92-305(3)&(4). Following the change, stream and aquifer conditions enjoyed by other water users prior to the change of water rights must be maintained. The historic amount, location, quality and timing of return flows must be maintained to the extent necessary to prevent injury to other vested rights. As a result, so long as the foregoing requirements are met, the amount of water available to be lawfully delivered to the new use may be more or less than historic consumption.
 - 39.1 Use and Replacement of Return Flows. To the extent necessary to prevent injury to other water users, Applicant must replace historic native return flows in amounts, timing and location which parallel historic return flows of native water from Thornton farms. As more fully explained in a separate conclusion below, Thornton need not replace historic transmountain return flows except to the extent it is contractually obligated to do so.
40. Ground Water Levels. For the reasons stated in the Memorandum of Decision, the Applicant is not required to guarantee the preservation of a particular water level throughout the aquifer. However, to protect from injury the junior water rights of wells withdrawing tributary water from the aquifer, Thornton must make replacements of return flows to the ground water aquifer to parallel in amount, time and location the native water return flows which have historically been supplied from the Applicant's farms. *Thornton v. Bijou* at 80-82.

- 40.1 Protection of Wells Decreed Nontributary. Wells decreed nontributary are not entitled to protection from injury due to loss of tributary return flows. Whether, as a factual matter, the wells decreed to be nontributary are pumping tributary water is an issue which this Court is precluded from considering by principles of collateral estoppel. *Thornton v. Bijou* at 82-83.
41. Pre-1969 Change of Use. Prior to enactment of the Water Rights Determination and Administration Act of 1969, C.R.S. § 37-92-101, *et seq.*, a decree approving the change of use of a water right was not required and could be obtained only when the new use was coupled with a new point of diversion or place of storage.
42. Pro Rata Distribution of Water Shareholders in a mutual ditch company are presumptively entitled to their pro rata portion of diversions. The evidence in this case was insufficient to overcome this presumption, and Thornton is entitled to take credit for its pro rata share of WSSC and JDC diversions, C.R.S. § 37-86-112. *Wagner v. Allen*, 688 P.2d 1102, 1107-08 (Colo. 1984).
43. Dry-up. While prevention of injury to other vested water rights is a legal requirement which must be met by each applicant for a change of use of a water right, complete dry-up of all land on which the water has been used is not always necessary to prevent injury, and therefore is not a legal requirement. Under the circumstances of this case, the terms and conditions regarding dry-up contained in this decree are adequate to prevent injury. *Thornton v. Bijou* at 86-89.
44. Revegetation Measures. As a term and condition of a change of use approved pursuant to the Water Right Determination and Administration Act, C.R.S. § 37-92-101, *et seq.*, the Court may impose provisions to protect farm land required to be dried up from wind erosion, desert encroachment, or similar negative effects. The means of preventing such negative effects may include revegetation with native grasses or other suitable, self-sustaining ground cover, dryland farming, or suitable non-agricultural uses. *Thornton v. Bijou* at 83-86.
45. Free Transferability of WSSC and JDC Shares The water rights held by a mutual ditch company are generally for the irrigation of all lands capable of irrigation from the company's ditch in accordance with the companies' water rights decrees. WSSC and JDC shares are therefore freely transferrable within the WSSC and JDC ditch systems. *Cache la Poudre Irrigation Co. v. Larimer & Weld Reservoir Co.*, 25 Colo. 144, 53 P. 318, 320-21 (1898). *City and County of Denver v. Just*, 175 Colo. 260, 487 P.2d 367, 370 (1971).
46. Colorado - Big Thompson Project Water. Thornton is entitled to continue to use its pro rata portion of CBT water owned, leased or controlled either by Thornton or by WSSC for agricultural purposes within the WSSC system as has occurred historically, so long as no benefit of CBT water leaves the boundaries of the Northern Colorado Water Conservancy District, either directly, indirectly, or by exchange.
- 46.1 CBT Return Flows. Applicant is not required to replace waste water, ditch seepage or return flows attributable to the historic use of CBT water on any farms.
- 46.2 Other Uses of CBT Proposed by Thornton Not Lawful. For the reasons stated in the Memorandum of Decision, and in *Thornton v. Bijou* at 53-62, the Court concludes that

Thornton's other proposed uses of CBT are unlawful. Such unlawful uses include, but are not limited to, the following:

- 46.2.1 Payment of Obligations to WSSC. Thornton may not receive a credit against ditch seepage losses or other return flow replacement obligations to WSSC for CBT water which Thornton leaves in the ditch for use by other WSSC shareholders.
- 46.2.2 One Component of "Ditch Exchange" CBT water may not be diverted by exchange from the Larimer County Canal for direct use outside of the District regardless of whether it is replaced by Thornton with other water.

47. Transmountain Water.

- 47.1 Reuse of Transmountain Water Generally. Pursuant to C.R.S. §37-82-106 and *City & County of Denver v. Fulton Irrigating Ditch Co.*, 179 Colo. 47, 506 P.2d 144, 147 (1972), subject to contrary contractual obligations and water rights which have become vested, an importer of such water or his successors, lessees, contractees, or assigns may exercise rights of reuse (as defined in paragraph 19.1) with regard to that water by exchange or otherwise, provided dominion is maintained. Generally, the rights to reuse the transmountain water rights in this case are held by WSSC for the benefit of its shareholders, including Thornton. In addition, WSSC has no objection to the entry of this decree under which Thornton will exercise its transmountain water reuse rights. Consequently, subject to contrary contractual obligations and subject to compliance with all applicable legal requirements, Applicant is entitled to use, reuse, make successive uses, and dispose of its pro-rata portion of the water imported by WSSC from the Laramie River, Michigan River, and Colorado River basins.
- 47.2 Contractual Obligations. Thornton's use, successive use, and disposition of transmountain water is subject to obligations contained in two contracts, the "Three-Way Agreement" approved by decree of this Court in Case No. W-9322-78, and the WSSC/Thornton Contract. Thornton's use of transmountain water is subject to the obligations created by these contracts as long as the contracts are in existence. *City & County of Denver v. Fulton Irrigating Ditch Co.*, 179 Colo. 47, 506 P.2d 144, 147 (1972).
- 47.3 Intent to Reuse. The right of an importer to reuse the transmountain water it imports is an inherent aspect of a transmountain water right. It is not dependent upon the importer having an intent to reuse at the time the transmountain water right is appropriated. As a result, the importer is entitled to begin reusing its transmountain water at any time provided all applicable legal requirements are fulfilled. *Thornton v. Bijou* at 68-70.
- 47.4 Abandonment. In general, in order for there to be an abandonment of a water right or a portion thereof, there must be nonuse, coupled with an intention to abandon that right. *People v. Thornton*, 775 P.2d 11, 18 (Colo. 1989). The elements of abandonment which apply to water rights generally, however, do not apply to the rights of reuse which attach to transmountain water rights. The reuse rights remain with the importer until

the right is transferred by the importer or the importation ceases, and such rights are not susceptible of abandonment separate from abandonment of the underlying transmountain water right. *Thornton v. Bijou* at 70-72.

- 47.5 Injury to Vested Water Rights. Under Colorado law, "appropriators on a stream have no vested right to a continuance of importation of foreign water which another has brought into the watershed." *Brighton Ditch Co. v. City of Englewood*, 124 Colo. 366, 237 P.2d 116, 122 (1951). C.R.S. § 37-82-106. The commencement of reuse by an importer of water, or other discontinuation of transmountain return flows by the importer, does not result in a legally recognizable injury to the rights of other water users who are strangers to the importation, regardless of when the other water users' rights were appropriated. *Thornton v. Bijou* at 72-73.
- 47.6 Laches. The equitable doctrine of laches does not preclude the importer of transmountain water from later beginning to fully consume the water it imports, even if other users have come to rely on return flows from the transmountain water. The importer has no duty to begin fully consuming its imported water at any particular time, and other water users rely upon return flows from transmountain water at their own peril. *Thornton v. Bijou* at 73-74.
- 47.7 Estoppel. Equitable estoppel may be applied under Colorado law if the party against whom it is sought to be applied: (1) has knowledge of the true facts; (2) engages in conduct which amounts to a false representation or concealment of material facts; (3) has the intention or expectation that the other party will rely on his conduct. In addition, the party asserting estoppel must: (1) lack knowledge and the means of acquiring knowledge of the truth of the facts in question; (2) justifiably and reasonably rely upon the conduct of the party to be estopped, by; (3) action, based on such conduct, in a manner which changes his position prejudicially. *Thornton v. Bijou* at 76. Under the facts of this case, WSSC is not estopped, and therefore Thornton is not estopped from asserting its right to fully consume the transmountain water imported by WSSC because, *inter alia*, no objector has demonstrated reasonable or justifiable reliance upon any conduct of WSSC or Thornton. *Thornton v. Bijou* at 74-77.
48. Dominion. In order to exercise the right to reuse water which is lawfully reusable, the appropriator must maintain dominion over it. Maintaining dominion does not require direct physical control over water, but instead requires an intent to reuse and the ability to distinguish the appropriator's water from the natural stream such that injury can be avoided, and compliance with all other applicable legal requirements. *Public Service Co. v. Willows Water Dist.*, 856 P.2d 829, 833-34 (Colo. 1993).

JUDGMENT AND DECREE

Based on the foregoing Findings of Fact and Conclusions of Law, it is hereby adjudged, ordered and decreed that:

49. Incorporation of Findings of Fact and Conclusions of Law. The foregoing Findings of Fact and Conclusions of Law are incorporated herein as if set out verbatim.
50. Approval of Applications. The change of water rights, conditional water rights, plan for augmentation, and appropriative rights of exchange described above are confirmed and approved and the relief sought in the instant applications is granted, insofar as consistent with this decree, and subject to the terms and conditions described herein.
51. Change of Water Rights (87CW332). Thornton's pro rata interest in the water rights held by WSSC and JDC is hereby changed to alternate types of use, places of use, and places of storage.
 - 51.1 Water Rights to be Changed. The following water rights are those to be changed herein:
 - 51.1.1 Water Supply and Storage Company Water Rights. Thornton owns 283,354 or 47.23% of 600 issued and outstanding shares in WSSC. That company holds legal title and Thornton holds a pro rata equitable interest in the water rights described on Exhibit B, hereto, and hereinafter described as "WSSC Water Rights."
 - 51.1.2 Jackson Ditch Company Water Rights. Thornton itself owns 1.25 or 5.21% of 24.0 issued and outstanding shares in the Jackson Ditch Company ("JDC"), a mutual ditch company organized pursuant to the laws of the State of Colorado. In addition, WSSC owns 6.25 shares of the Jackson Ditch Company which, based on the City's proportional ownership in WSSC, results in Thornton's beneficial ownership of an additional 12.30% of the Jackson Ditch Company. Thornton's direct and equitable ownership constitutes 17.51% of the Jackson Ditch Company. That company holds legal title and Thornton holds a pro rata equitable interest in the water rights described on Exhibit C, hereto, hereinafter described as "JDC Water Rights."
 - 51.2 Change of WSSC and JDC Water Rights. Subject to the terms and conditions herein, Thornton's pro rata interest, described above, in the WSSC and JDC water rights are changed to allow the alternate types and places of uses as well as alternate points of storage, as set forth in the Findings of Fact, above.
52. Appropriative Rights of Exchange (86CW401,402). Subject to the terms and conditions set forth herein, the Court hereby confirms and approves the Poudre River Exchange as well as the Water Supply and Storage Exchange, which are the subject of Applications in 86CW401 and 86CW402, respectively, and which are more specifically described in the Findings of Fact, above, in the following amounts of diversion by exchange with an appropriation date of December 31, 1986:

- 52.1 Poudre River Exchange, 86CW401 Exchange Points of Diversion and Amount of Diversions by Exchange. Substitute supply water released by Thornton to the South Platte River under the Poudre River Exchange will be diverted by exchange at one or more of the following nine alternate Exchange Points of Diversion and in the maximum rate of flow available at each such point, up to the amounts listed below:
- 52.1.1 Larimer County Canal. 300 c.f.s., conditional.
 - 52.1.2 Jackson Ditch. 50 c.f.s., conditional.
 - 52.1.3 Thornton Pump Station No.1. 50 c.f.s., conditional.
 - 52.1.4 New Cache la Poudre Canal, also known as Greeley No. 2 Canal. 50 c.f.s., conditional.
 - 52.1.5 Thornton Pump Station No. 2. 50 c.f.s., conditional.
 - 52.1.6 Larimer & Weid Irrigation Canal. 20 c.f.s., conditional.
 - 52.1.7 Boxelder Ditch. 50 c.f.s., conditional.
 - 52.1.8 Fossil Creek Reservoir Inlet. 50 c.f.s., conditional.
 - 52.1.9 Ogilvy Ditch. 125 c.f.s., conditional.
- 52.2 Water Supply and Storage Company Exchange, 86CW402. Thornton will withdraw from the WSSC System water which has been diverted therein by WSSC and JDC under the water rights set forth in Exhibits B and C, hereto. Thornton will return to the canal a substitute supply in an amount equivalent to that withdrawn, and of a continuity and quality so as not to impair the decreed beneficial use of other non-Thornton WSSC shareholders receiving water from the WSSC System. The maximum amount of this exchange is 750 c.f.s, conditional.
53. Thornton's Conditional Water Rights, 86CW403. Subject to the terms and conditions set forth herein, the conditional water rights described in the Application for 86CW403, as described with greater particularity in the foregoing Findings of Fact, are confirmed.
- 53.1 Appropriation Date. December 31, 1986.
 - 53.2 Point of Diversion and Amount. The source, point of diversion and amount of each such water right is:
 - 53.2.1 Larimer County Canal. 450 c.f.s., conditional.
 - 53.2.2 Thornton Pump Station No. 1. 50 c.f.s., conditional.
 - 53.2.3 Thornton Pump Station No. 2. 50 c.f.s., conditional.

53.2.4 Jackson Ditch. 50 c.f.s., conditional.

53.2.5 New Cache la Poudre Canal, a.k.a Greelev No. 2 Canal. 50 c.f.s., conditional.

53.2.6 Ogilvy Ditch. 125 c.f.s., conditional.

53.2.7 Thornton Enlargement, Patterson Ditch. 370 c.f.s., conditional.

53.2.8 Thornton Pump Station No. 3. 400 c.f.s., conditional.

54. Plan for Augmentation (87CW332). Approval is hereby granted of the plan for augmentation (87CW332) under which any material injury to other water rights, which may be occasioned by the Northern Project, will be prevented. Thornton's plan for augmentation includes and consists of all terms and conditions described herein. Thornton's plan for augmentation with respect to its change of WSSC and JDC shares is described more specifically in that section below headed "Terms and Conditions Relating to Change of Water Rights (87CW332)." The water rights to be augmented are the rights being changed as described in Exhibits B and C hereto. The water rights to be used for augmentation of the WSSC and JDC water rights are: 1) the rights decreed in Cases 86CW401 and 86CW403; 2) the water rights listed on Exhibit K hereto, and; 3) any other water legally available to Thornton for such purpose.

55. Stipulations. Thornton has entered into stipulations with certain objectors indicated below. The Court approves these stipulations, which shall be binding as between the parties thereto, but if in conflict with any other specific provision of this decree, or statutory law, the specific provision of this decree or the statutory law shall control, as appropriate.

55.1 Water Supply & Storage Co. By a stipulation dated August 5, 1991, WSSC consented to the entry of a decree herein so long as it contained provisions as protective of WSSC and its shareholders as the proposed decree attached to that stipulation. In addition, on November 21, 1991, WSSC, the Colorado State and Division Engineers and Thornton entered a supplemental stipulation reconciling differences between the decree to which WSSC stipulated and the decree to which the State stipulated. The supplemental stipulation is incorporated herein and attached hereto as Exhibit U.

55.2 Colorado State and Division Engineers. The State and Division Engineers (collectively "the State") stipulated to the entry of a decree containing provisions relating to lawn irrigation return flows, replacement of wastewater to the Poudre Basin, limitations on the future use of irrigation wells on farms presently owned by Thornton, limitations on the future irrigation of farms presently owned by Thornton, transit losses incurred in conveying water down the South Platte River, retained jurisdiction for Thornton's change of use and the ability of the State Engineer to regulate the quality of water provided as substitute supply in the future as required by law. These provisions have been incorporated into this decree. The State took no position on the legal issue of abandonment of the right to reuse old foreign water, or Thornton's proposed uses of CBT water. The State, although believing the findings to fall within the range of reasonableness, took no position on the findings contained in the above paragraphs relating to Thornton's existing system and its yield, the anticipated yield of the three phases of Thornton's Northern Project, and the description of the ditch companies, their

water rights, the alternate types and place of use, and the historic operation of the companies' water rights. In addition, on November 21, 1991, WSSC, the Colorado State and Division Engineers and Thornton entered a supplemental stipulation reconciling differences between the decree to which WSSC stipulated and the decree to which the State stipulated. The original Thornton stipulation with the State and the supplemental stipulation between Thornton, the State, and WSSC are incorporated herein and attached hereto as Exhibits X and U, respectively.

55.3 City of Arvada. Pursuant to Thornton's stipulation with Arvada, this decree shall not grant to Thornton, nor be construed to grant to Thornton the right to divert from the South Platte River or its tributaries at any point above its confluence with St. Vrain Creek, or to operate an exchange on the South Platte River or its tributaries above its confluence with St. Vrain Creek. Notwithstanding the foregoing, however, Thornton may operate an exchange whereby return flows placed in the South Platte River above its confluence with St. Vrain Creek are exchanged up the Cache la Poudre River. The stipulation is incorporated herein and attached hereto as Exhibit BB.

55.4 City of Englewood. Pursuant to Thornton's stipulation with Englewood, this decree shall not grant to Thornton, nor be construed to grant to Thornton the right to divert from the South Platte River or its tributaries at any point above its confluence with St. Vrain Creek, or to operate an exchange on the South Platte River or its tributaries above its confluence with St. Vrain Creek. Notwithstanding the foregoing, however, Thornton may operate an exchange whereby return flows placed in the South Platte River above its confluence with St. Vrain Creek are exchanged up the Cache la Poudre River. The stipulation is incorporated herein and attached hereto as Exhibit CC.

55.5 Central Colorado Water Conservancy District and its Ground Water Management Subdistrict. CCWCD consented to the entry of a decree herein provided that it includes certain terms and limitations contained in the stipulation dated July 18, 1991.

Thornton's stipulation with Central was amended on February 10, 1994. Said stipulations relate primarily to lawn irrigation return flows, exchange accounting, well pumpage limitations, and replacement of return flows and use of substitute supplies within the Poudre basin. Central shall provide notice to, and obtain approval from the Division Engineer for use of its water for augmentation and exchange with Thornton. The appropriate language from the stipulation is included in this decree. The amended stipulation is incorporated herein by reference and attached hereto as Exhibit DD.

55.6 City of Greeley. Greeley consented to the entry of a decree herein provided that it includes the terms of the stipulation dated July 15, 1991. Said stipulation was entered for the purpose of mitigating adverse effects upon Greeley's discharge parameters and requires Thornton to release to the Poudre River, or forego the diversion of water from the Poudre River, at a rate of up to 2.8 c.f.s. when, during the months of September through April, the thirty day moving average flow in the Poudre River drops below a specified flow rate. Thornton's stipulation with Greeley is incorporated herein and attached hereto as Exhibit V.

55.7 Western Sugar Company. Western Sugar consented to the entry of a decree herein provided that it includes the terms of the stipulation dated July 25, 1991. Said

stipulation was entered for the purpose of mitigating adverse effects upon Western Sugar's discharge parameters and requires Thornton to release to the Poudre River, or forego the diversion of water from the Poudre River, at a rate of up to 2.8 c.f.s. when, during the months of September through April, the thirty day moving average flow in the Poudre River drops below a specified flow rate. Thornton's stipulation with Western Sugar is incorporated herein and attached hereto as Exhibit W.

- 55.8 Larimer & Weld Irrigation Company, Larimer & Weld Reservoir Company, Windsor Reservoir Company. The Larimer & Weld companies stipulated to the proposed decree circulated on August 20, 1991. Thornton's stipulation with Larimer & Weld was amended on January 31, 1994. The amended stipulation provides that, as Thornton begins to convert shares to Municipal Use, it will also begin to repay historic return flows to the Larimer & Weld canal in an average amount which will reach 2,270 acre feet per year at full conversion of Thornton's shares. If Thornton ultimately is not required to replace to Larimer & Weld or to the Poudre basin historic return flows attributable to Thornton's share of WSSC's old foreign water diversions, Thornton's obligations to Larimer & Weld would decrease to an average of 1,317 acre feet per year at full conversion. Thornton's obligation to repay such obligations to the Larimer & Weld Canal, however, are conditioned upon Thornton being allowed to reduce its replacement obligations to the Poudre basin generally by the amount paid to Larimer & Weld (i.e., Thornton's replacement of return flow to Larimer & Weld may not operate to increase Thornton's overall replacement obligations within the Poudre River basin, or its obligations to the South Platte below the confluence with the Poudre). Thornton's amended stipulation with Larimer & Weld Irrigation Company, Larimer & Weld Reservoir Company, Windsor Reservoir Company is incorporated herein and attached hereto as Exhibit Y.
- 55.9 Paul Lind & Sons, Inc. Paul Lind & Sons, Inc. stipulated to the entry of Thornton's proposed decree dated September 12, 1991.
- 55.10 Riverside Irrigation District and Riverside Reservoir and Land Company. Riverside consented to the entry of a decree herein provided specific language relating to losses assessed against Thornton's substitute supply conveyed down the South Platte River, and the sources of such substitute supply, is included in the decree. Such language has been incorporated herein.
- 55.11 Fort Morgan Irrigation & Reservoir Company and Jackson Lake Reservoir & Irrigation Company. The Fort Morgan and Jackson Lake Companies stipulated to the entry of a proposed decree containing language regarding wastewater, return flows, water which may be used as substitute supplies, and which seasonal limitations on the diversion of water for municipal purposes pursuant to the direct flow decrees of the Water Supply and Storage Company whose source is the Poudre River. The requested language has been incorporated herein.
- 55.12 Ogilvy Irrigating & Land Company. Ogilvy stipulated to the proposed decree circulated on September 12, 1991, and identified as Applicant's Exhibit A-811, provided that, as Thornton begins to convert shares to Municipal Use, it will also begin to repay historic return flows to the Ogilvy Ditch in an amount of up to 300 acre feet per year at full

conversion of Thornton's shares. Thornton's obligation to repay such obligations to the Ogilvy Ditch, however, are conditioned upon Thornton being allowed to reduce its replacement obligations to the Poudre basin generally by the amount paid to Ogilvy (i.e., Thornton's replacement of return flow to Ogilvy may not operate to increase Thornton's overall replacement obligations within the Poudre River basin, or its obligations to the South Platte below the confluence with the Poudre). Thornton's stipulation with Ogilvy Irrigating & Land Company is incorporated herein and attached hereto as Exhibit Z.

- 55.13 City and County of Denver, acting by and through its Board of Water Commissioners. Denver stipulated to the proposed decree circulated on September 12, 1991, and identified as Applicant's Exhibit A-811 and specifically incorporated Thornton's stipulation with the Central Colorado Water Conservancy District. By this stipulation Thornton agreed to provide to Denver copies of the operations plan required to be provided to the State Engineer as described in paragraph 42 of A-811 (paragraph 63.1 of this decree).
- 55.14 New Cache la Poudre Irrigating Company. The New Cache la Poudre Irrigating Company (New Cache) withdrew its statement of opposition by a stipulation dated March 23, 1992, which stipulation provided that, as Thornton begins to convert shares to Municipal Use, it will also begin to repay historic native return flows to the Greeley No. 2 Canal in an amount which will reach 100 acre feet per year at full conversion of Thornton's shares. Thornton's obligation to repay such obligations to the Greeley No. 2 Canal, however, are conditioned upon Thornton being allowed to reduce its replacement obligations to the Poudre basin generally by the amount paid to New Cache (i.e., Thornton's replacement of return flow to New Cache may not operate to increase Thornton's overall replacement obligations within the Poudre River basin, or its obligations to the South Platte below the confluence with the Poudre). Thornton's stipulation with the New Cache la Poudre Irrigating Company is incorporated herein and attached hereto as Exhibit EE.
- 55.15 This decree is no less restrictive than the various versions of the proposed decree to the entry of which the various objectors stipulated.
56. Terms and Conditions. The water rights associated with Thornton's Northern Project shall be operated in accordance with the specific and general terms and conditions described in this decree.
57. Terms and Conditions Relating to Change of Water Rights (87CW332). As changed herein, the exercise of Thornton's proportional interest in the water rights set forth on Exhibits B and C, hereto, shall be in accordance with the following terms and conditions:
- 57.1 Thornton Receipt of Water. Thornton will receive for Municipal Uses under the change of use decreed herein only its pro rata share of non-CBT diversions, by the WSSC System subject to its payment of replacement obligations and the volumetric limitations set forth herein.

57.2 Future Operations. In order to protect other shareholders and other water users, while providing for year-round delivery of water to Thornton from the WSSC System for municipal purposes:

57.2.1 Conversion of Shares to Municipal Uses -- Annual Allocation. Thornton will make an annual allocation, on or before April 1st of each year, of shares to be converted to Municipal Uses and those shares which will continue to be used for agricultural purposes. Once shares have been converted to Municipal Use such shares may not revert back to agricultural uses except pursuant to operations during Phase III.

57.2.2 Transmountain Water Attributable to WSSC Shares. On a share-by-share basis, Thornton may withdraw from the WSSC System that portion of any of its 283,354 WSSC shares attributable to transmountain water. The removal of the transmountain water attributable to any shares will not constitute a conversion of that share to Municipal Uses. Thornton shares which remain in agricultural use but from which the transmountain component has been removed (sometimes hereinafter "Non-TM" shares) will be delivered at the farm headgate proportionately less than whole WSSC shares. The term "non-TM share" does not create, signify, represent, or reflect a separate class of stock in WSSC, but is simply a term used for descriptive and accounting purposes under this decree. Once the transmountain component of a share has been removed, that share must remain a Non-TM share until converted to Municipal Use.

57.2.3 Use of Transmountain Water and Converted Shares. Thornton will utilize transmountain water and water attributable to those shares which are converted to Municipal Use by:

57.2.3.1 Withdrawal of water from Thornton's point of withdrawal out of WSSC Reservoir No. 4, located in the N½, Section 23, T 8 N, R 69 W, 6th P.M., shown as Location A on the Facility Location Map attached hereto as Exhibit GG, or

57.2.3.2 Withdrawal or release of water at such other point(s) within the WSSC System as may be agreed upon by Thornton and WSSC, provided notice of the use of such other point(s) is given to the parties identified with an asterisk [*] in paragraph 3, including the Division Engineer, or

57.2.3.3 Delivery of water into storage in WSSC storage facilities.

57.2.4 Payment of Replacement Obligations. As more specifically described below, Thornton will make the replacement obligations associated with the native water component of each of its shares. Replacement obligations for such farms and shares will be computed on a per share basis, which vary according to the "Sector" location of the farm or lands irrigated by the shares. For the purposes of determining replacement obligations, the WSSC System has been divided into five "Sectors;" the location of which are described in Exhibit M. In addition, 31.5 of the shares purchased by Thornton were historically used in a number of locations in

the WSSC System, and these shares have been included in what has been identified as Sector A.

57.2.4.1 The location of each Thornton farm, by sector, is shown in Exhibit N. The replacement obligations per share in each sector are shown in Exhibit O.

57.2.4.2 Subject to the Court's retained jurisdiction provision below, the replacement obligations established herein will also constitute, as a rebuttable presumption, Thornton's replacement obligations with respect to WSSC shares used in Sectors 3, 4 or 5 which may be acquired by Thornton and transferred in the future. The replacement obligations for such shares will be computed on a per share basis in the amounts set forth in Exhibit O.

57.3 Replacement Obligations. In order to prevent injury to other water users, Thornton will make certain replacements of water.

57.3.1 Replacements to WSSC. Pursuant to paragraph 4 of the WSSC/Thornton Contract, Thornton will replace historic net system losses incurred by, as well as historic return flows that accrued to, the reservoirs of WSSC, the Larimer County Canal, Pierce Lateral, Collins Lateral and Lone Tree Lateral, and all other water supply laterals of those canals and ditches (such reservoirs, canals, laterals and ditches being collectively referred to as the WSSC System) attributable to the City's share of native and transmountain diversions as more fully described below in paragraphs 57.3.2. and 57.3.3.1.

57.3.2 Replacement of System Losses. System losses include ditch seepage, reservoir evaporation, and miscellaneous losses occurring prior to delivery to farm headgates. Subject to the retained jurisdiction provision set forth in paragraphs 66.1.1 and 66.1.2 below, Thornton will replace to the WSSC System actual WSSC net system losses, which shall include 300 a.f. per year of CBT inflow, as determined by WSSC, attributable to all diversions of native and imported water, with the exception of losses incurred in conveyance of water through minor laterals that serve only Thornton farms. Thornton may meet this obligation with water from any combination of the following sources: [1] a portion of its pro rata share of water attributable to the water rights being changed herein, [2] water generated by the exercise of other water rights approved or confirmed herein in 86CW401 and 86CW403, or [3] water derived from Thornton water rights described on Exhibit K hereto, as well as other water rights acquired by Thornton, insofar as all such rights have then been decreed for such uses.

57.3.2.1 Unshared Minor Lateral Losses. To the extent some minor laterals serve only Thornton farms, their use will be discontinued following Thornton's conversion to Municipal Use of all shares formerly delivered through any such lateral. The 100 a.f. per year of native unshared minor lateral loss shall be replaced to the locations to which that seepage historically accrued. These replacement obligations are included in the amounts described in paragraph 57.3.3, below.

57.3.2.2 Future Reduction of System Losses. If in the future the Larimer County Canal, Pierce Lateral, or Collins Lateral are lined, return flows from ditch seepage losses will be reduced. In that event Thornton's pro rata reduction in native water ditch seepage obligations to WSSC shall be repaid to the Poudre River.

57.3.3 Replacement of Return Flows. Historically, return flows accrued to the WSSC System, to WSSC farms, to the Larimer and Weld Canal, to the Greeley No. 2 Canal, to the Poudre River, to the South Platte River, to some of their respective tributaries, and to the ground water aquifer. Thornton will be required to replace only that portion of historic return flow attributable to its use of native WSSC deliveries, except to the extent Thornton agreed with certain parties that it would replace water attributable to both native and transmountain return flows. Except as provided in paragraph 57.3.3.1, Thornton's obligations associated with any share will begin when that share is converted to Municipal Use. Return flows attributable to Thornton's shares will be replaced as described below:

57.3.3.1 Replacement of Return Flows to WSSC System. Historic return flows attributable to transmountain water that accrued to the WSSC System and to WSSC farms during the irrigation season will be replaced to the WSSC System in an amount equal to 1.68% of Thornton's pro rata portion of non-CBT diversions through the river headgates of the Larimer County Canal and Jackson Ditch. Historic return flows attributable to native water that accrued to the WSSC System and to WSSC farms during the irrigation season will be replaced to the WSSC System in an amount equal to 2.33% of Thornton's pro rata portion of non-CBT diversions through the river headgates of the Larimer County Canal and Jackson Ditch. Thornton's replacement to WSSC of return flows attributable to transmountain water will begin when Thornton begins to remove transmountain water from agricultural use under the WSSC System, and similarly, Thornton's replacement to WSSC of return flows attributable to native water will begin when Thornton begins to remove native water from agricultural use under the WSSC System. The quantitative measure of these obligations, upon full conversion of Thornton's shares to Municipal Use, on average, is as summarized on Exhibit D hereto.

57.3.3.2 Replacement of Return Flows to Larimer and Weld Canal.

Historic return flows attributable to native water that accrued to the Larimer and Weld Canal will be replaced to the Larimer and Weld Canal in an average amount of 1,317 acre-feet per year at full conversion of all 283,354 WSSC shares and 1.25 Jackson Ditch Company shares during Phases I and II. Thornton's obligation to Larimer and Weld in any given year shall be based on the number of WSSC and Jackson Ditch Company shares converted to Municipal Use. Of the total 1,317 acre-feet replacement obligations, an average of 690 acre-feet per year will be replaced according to a variable schedule and 627 acre-feet per year will be replaced according to a fixed schedule. Variable replacement

obligations representing historic surface return flows shall equal the number of delivery days under the WSSC System multiplied by the acre-foot amount per delivery day per converted share in each of the various return flow sectors as shown on Exhibit O. Fixed replacement obligations representing ground water return flows during the months of May through September in the amount of 383 acre-feet per year shall be based on a fixed twice-monthly schedule per converted share as shown on Exhibit O. Fixed replacement obligations representing ground water return flows during the months of October through April in the amount of 244 acre-feet shall be replaced to the Larimer and Weld Canal as shown on Exhibit O, prior to May 31st at a time when the Larimer and Weld System is diverting water to storage. Replacement obligations owed to the Larimer and Weld Canal in any half-month period during the months of May through September shall be divided and delivered as equally as possible during those days in the half-month period when the Larimer and Weld System is diverting water from the Poudre River. On the fifteenth day and last day of each month during the months of May through September, the difference between the accumulated obligations and the accumulated repayments may vary by plus or minus 75 acre-feet, provided that the total annual replacement obligation to the Larimer and Weld Canal is fulfilled in every year.

57.3.3.3 Replacement of Return Flows to Greeley No. 2 Canal. Historic return flows attributable to Thornton's shares that accrued to the Greeley No. 2 Canal during the irrigation season will be replaced to the Greeley No. 2 Canal in the amount of 100 acre feet per year at full conversion of all 283.354 WSSC shares and 1.25 JDC shares during Phases I and II based upon the stipulation attached hereto as Exhibit EE. Monthly amounts to be replaced per share transferred to Municipal Use are set forth on Exhibit O.

57.3.3.4 Replacement of Return Flows to Ground Water Aquifer. Return flows attributable to native water which percolate into the ground water aquifer in Sectors 4 and 5 will be replaced to the ground water aquifer through the operation of a recharge program. The 31.5 shares in Sector A shall also have recharge obligations to be repaid in Sectors 4 and 5. Any and all provisions contained in this paragraph 57.3.3.4 shall be applicable to 4.667 shares in Sector 2 if recharge is required as specified in paragraph 57.3.3.5.1.1. During Phases I and II, the recharge program will be as follows:

57.3.3.4.1 Recharge Methods. Thornton's recharge program will replace water to the ground water aquifer or otherwise make water available through the following means: (1) delivery of water to recharge pits; (2) use of injection wells; (3) delivery of native or transmountain water into ditches and laterals during the non-irrigation season or at other times when the ditch or lateral is not carrying other water supplies such that the water percolates into the ground water aquifer; (4) forgoing

withdrawals from the wells, or pumping water into recharge facilities from the wells, identified on Exhibit L hereto, to the extent those wells are then decreed for augmentation use; however, the maximum recharge credit Thornton may be allowed to receive from forgoing such withdrawals shall be no greater than the consumptive use attributable to the historic annual pumping as further defined and limited by the terms and conditions of paragraph 57.7; and (5) combinations of the above-methods.

57.3.3.4.2 Recharge Timing, Amount and Location. All recharge required under this decree shall be performed in a manner so that return flows to the underlying aquifer and the stream system following the conversion of Thornton's WSSC shares to Municipal Use in accordance with paragraph 57.2.1 will parallel the historic return flows from the use of native water attributable to those shares in location, time and amount. This can be accomplished by providing the recharge according to the following terms and conditions.

57.3.3.4.2.1 The average annual obligation to the ground water aquifer upon full conversion to Municipal Use of Thornton's 283.354 WSSC shares and 1.25 JDC shares is 2,927 a.f. as summarized in Exhibit D, hereto. The amounts of these recharge obligations per share for Sectors 4, 5 and A, upon conversion of each share to Municipal Use, are as shown on Exhibit O. Sectors 4 and 5 shall be further divided into the Subsectors delineated on the map shown in Exhibit HH. The total average annual obligation for each subsector, upon full conversion of Thornton's shares, is shown on Exhibit II. The amount of the replacement obligation within each Subsector on an annual basis shall be equal to the number of shares converted to Municipal Use within that Subsector multiplied by the replacement obligations in acre-feet per share per delivery day as shown in Exhibit O multiplied by the number of delivery days under the WSSC System during that year.

57.3.3.4.2.2 A minimum of 70% of the average annual recharge obligation for the shares converted in each Subsector, as shown on Exhibit II, shall be replaced prior to July 1st of each year, and the balance of the actual recharge obligation, computed in accordance with paragraph 57.3.3.4.2.1, shall be repaid prior to October 1st of that year. The amount of the replacement obligation within each Subsector will be repaid in accordance with any of the scenarios specified in Exhibit JJ and within the locations shown on Exhibit HH, unless otherwise approved by the Division Engineer as set forth below, using any of the methods identified in paragraph 57.3.3.4.1.

57.3.3.4.2.3 Recharge obligations for each of the 31.5 Sector A shares converted to Municipal Use shall be distributed among the recharge facilities in Sectors 4 and 5 that are being used during a particular year, in proportion to the amount of recharge attributable to other shares converted to Municipal Use in Sectors 4 and 5 being made at each facility during that particular year. In the event that no other shares in Sectors 4 or 5 are converted to Municipal Use at the time any Sector A shares are converted to Municipal Use, then the recharge obligations associated with the Sector A shares shall be distributed equally between Subsectors 4-1, 4-2 and 5-1.

57.3.3.4.3 Recharge Plan Accounting and Administration.

57.3.3.4.3.1 Contents of Plan. Thornton shall submit to the Division Engineer a recharge plan which specifies: (1) the number of shares converted to Municipal Use within each Subsector; (2) a map showing the location of the farms where the shares were removed from irrigation; (3) a map showing the proposed locations of the recharge pits, injection wells, ditches and laterals, or wells shown in Exhibit L for which use thereof will be foregone to meet the replacement obligation; (4) the proposed amount of recharge credit which will be repaid at each of the locations; (5) a proposed schedule for delivery of water into the recharge facilities; (6) the sources of water to be used to provide the replacement obligations; and (7) other information which may be required by the Division Engineer.

57.3.3.4.3.2 Review and Approval. The recharge plan shall be submitted to the Division Engineer on an annual basis prior to March 1 unless the Division Engineer waives the annual submittal requirement, and shall be subject to the Division Engineer's review and approval to ensure conformance with the terms of this decree and his approval of any variations from the recharge plan described above in paragraph 57.3.3.4.2 prior to the implementation of the annual recharge plan and diversion of any water for Municipal Use attributable to Thornton's WSSC shares in Sectors 4, 5 and A. Such approval by the Division Engineer shall not be unreasonably withheld.

57.3.3.4.3.3 Variations. The Division Engineer shall be authorized to approve proposed variations in the location and timing of recharge, as specified in paragraph 57.3.3.4.2, at his discretion, in order, for example, to improve the efficiency of the recharge plan, or to benefit vested and decreed water rights in certain geographic areas, or to avoid recharge in

areas where no benefit to vested and decreed water rights would occur. If the recharge plan submitted by Thornton seeks any variations in the location and timing of the replacements as set forth in the terms and conditions of paragraph 57.3.3.4.2, then Thornton shall submit additional information for review by the Division Engineer to support any proposed variations. Additional information shall include historic ground water levels in Sectors 4 and 5 prior to removal of any farms from irrigation, ground water levels in Sectors 4 and 5 in the previous year, results of digital ground water model runs showing estimated ground water levels and return flows to tributaries in the upcoming year resulting from the prior and projected pumping and from prior recharge operations under the Thornton recharge plan, maps showing the locations of the proposed recharge facilities and location of all irrigation wells within the sector, and maps showing the location of any vested and decreed surface water rights in the vicinity of the Thornton farms which might be affected by or receive the benefit of ground water return flows.

57.3.3.4.3.4

Measurement. The amount of water recharged to the aquifer at each of the recharge sites set forth in the recharge plan will be determined by measuring the amount of water released to each site or facility, subtracting the amount of water which flowed out of or was discharged from that site or facility, and subtracting the amount of water that was lost to evaporation from that site or facility. Recharge sites used in this plan shall have the necessary measuring devices to make such measurements on a daily basis as required by the Division Engineer. Records of such recharge supply will be maintained on a monthly basis and reported on the accounting forms to be maintained. Evaporation losses from the recharge sites will be calculated on the basis of the average water surface area for each month, the length of time of such evaporation, and evaporation data obtained from the Greeley weather station or from any other station approved by the Division Engineer. The average water surface area will be calculated in a manner acceptable to the Division Engineer. Thornton shall not receive recharge credit for seepage that occurs in any reach of any laterals or canals at any time water is being delivered for any irrigation purposes using CBT, WSSC or JDC water rights.

57.3.3.4.3.5

Administration. This recharge plan shall be administered by the Division Engineer, and the data prescribed below shall be furnished to his representatives as reasonably required by the Division Engineer. Such data will be measured and/or recorded on a daily basis, and shall include deliveries to the

recharge facilities, the amount of foregone pumping for each well used in the recharge plan, the metered amount of pumping from each well if the well is actually pumped into a recharge pit, flows in and out of each recharge site, and all other data to be used in the calculations required by this decree.

57.3.3.4.4 Water Level Monitoring. Although Thornton is not required to maintain or guarantee the preservation of a particular water level throughout the aquifer, in order to provide data to the Division Engineer in evaluating annual recharge plans, Thornton shall monitor the water level in wells in Sectors 4 and 5. Thornton shall monitor one well per quarter-section in which Thornton owns a well, as identified on Exhibit L. Monitoring shall be conducted once per year during the period February 15 to April 30, prior to the beginning of the irrigation season. Such monitoring shall be performed for a minimum of five years prior to the conversion of any Thornton shares in Sectors 4 or 5, and for a minimum of five years following the conversion of all Thornton shares in Sectors 4 and 5. Annual summaries of the water level monitoring shall be provided to the Division Engineer.

57.3.3.4.5 Quality of Water Recharged. Except when Thornton is not operating the Ditch Exchange and the water used by Thornton for groundwater recharge consists solely of: 1] water from the Larimer County Canal derived from WSSC or JDC decrees as they have been exercised prior to entry of this decree, 2] water diverted from the Poudre River at or above the Jackson Ditch headgate, or 3] water attributable to pumping or forgone pumping from the wells identified in Exhibit L, the quality of the water recharged shall be governed by the remaining provisions of this paragraph. Except in the circumstances described above, the quality of the water used by Thornton for recharge shall be adequate to prevent material injury to ground water users. In addition, such recharge water shall be of sufficient quality to meet the requirements for which the ground water of down-gradient senior appropriators has normally been used. The Division Engineer or any other state agency which he may designate shall have the duty to enforce this provision, subject to this Court's retained jurisdiction. In the event this authority is no longer vested in the Division Engineer, the Court, under its retained jurisdiction, shall designate such other agency or agencies as may be appropriate. The Division Engineer shall require reasonable monitoring and reports at reasonably frequent intervals of the quality of the water used by Thornton for recharge purposes. Reports of said monitoring submitted to the Division Engineer shall at all times be available for public inspection.

57.3.3.4.6 Replacement to Poudre and South Platte Rivers in Lieu of Recharge. During periods when ground water levels are sufficient to allow withdrawals by all users legally entitled to make withdrawals of ground

water (except ground water decreed to be nontributary), as shown by water level monitoring data or other evidence Thornton submits to the Division Engineer, native return flows which historically accrued to the ground water aquifer will be replaced to the Poudre and South Platte Rivers, provided that: 1] no material injury to other vested and decreed water rights will occur, 2] such replacement to the Poudre and South Platte Rivers in lieu of recharge is specifically approved by the Division Engineer, and 3] notice is provided to those objectors identified with an asterisk (*) in paragraph 3, as well as any other person or entity who gives written notice to the Division Engineer that they desire to be so notified. (Such objectors will be responsible for ensuring that the Division Engineer has on file the current address to which such notice should be mailed.) The quantitative measure of those obligations, upon conversion of each share is as shown in Exhibit O.

57.3.3.5 Replacement of Native Return Flow to Tributaries of the Poudre and South Platte Rivers. Historically, return flows accrued to Boxelder Creek, Eaton Draw, Duck Slough, Dry Creek, The Slough and other minor tributaries of the Poudre River and to Lone Tree Creek and Owl Creek, which are tributaries of the South Platte River. Native return flows which accrued to Eaton Draw, Duck Slough, Dry Creek, and other minor tributaries not specifically referenced below shall be replaced to the various locations as set forth in paragraphs 57.3.3.2 through 57.3.3.4 and 57.3.3.6, and are included in the amounts set forth therein. Replacement obligations to Boxelder Creek, The Slough, Lone Tree Creek and Owl Creek are as follows:

57.3.3.5.1 Boxelder Creek: Average annual native return flows to Boxelder Creek (including both native surface runoff and native ground water return flows) for all 283.354 WSSC shares were 164 acre-feet per year, as shown on Exhibit D. Replacement amounts on a monthly basis per share transferred in the respective sectors are set forth in Exhibit O. These return flows will be replaced to Boxelder Creek via an augmentation station from the Larimer County Canal at times when there is a valid call for water, senior to December 31, 1987, on Boxelder Creek. At times when there is not a valid call for water, senior to December 31, 1987, on Boxelder Creek, the return flow obligations shall be delivered to the Poudre River at or above the headgate of the calling water right which is located downstream of the confluence with Boxelder Creek, at a location to be approved by the Division Engineer. No replacement obligations shall be required when there is no valid call for water, senior to December 31, 1987, on Boxelder Creek, on the Poudre River downstream of its confluence with Boxelder Creek, or the South Platte River. Replacement obligations during the non-irrigation season or at other times when the Larimer County Canal is not carrying water past Boxelder Creek may

be accumulated and paid to the appropriate location according to a schedule to be approved by the Division Engineer.

57.3.3.5.1.1 Boxelder Creek Ground Water Monitoring Program.

Thornton shall monitor the water level in the Boxelder Creek alluvium at three locations, one of which shall be in the northwest quarter of each of the Thornton farm numbers 52, 63 and 83, located in Sections 22 and 27, T 8 N, R 68 W, 6th P.M. Monitoring shall be conducted once per year during the period February 15 to April 30, prior to the beginning of the irrigation season for a minimum of five (5) years prior to the conversion of any shares associated with Thornton farm numbers 52, 63 and 83, and for a minimum of five (5) years following conversion of all shares associated with these farms. If the water level in the Boxelder Creek aquifer at these monitoring wells declines by an average of more than two (2) feet (not including any decrease in water level attributable to the removal of transmountain and/or CBT water), following the dry-up of any or all of these Thornton farms, recharging of historic return flows associated with these farms to the aquifer in accordance with paragraph 57.3.3.4 hereof will be required. There are a total of 4,667 shares associated with farms 52, 63 and 83, the ground water return flow replacement obligations from which shall be included in the recharge plan if recharge is necessary under the provisions of this paragraph. If recharging is required, the replacement obligations are as identified on Exhibit O. In lieu of monitoring, Thornton may, at its option, include these farms in the recharge plan.

57.3.3.5.2 The Slough: Average annual native ground water return flows to The Slough for all 283,354 WSSC shares were 174 acre-feet per year. There was no surface return flow to The Slough. These return flows will be replaced to The Slough via an augmentation station from the Larimer County Canal System at times when there is a valid call for water on The Slough. Replacement amounts on a monthly basis per share transferred in the respective sectors are set forth in Exhibit O. At times when there is not a valid call for water, senior to December 31, 1987, on The Slough, the return flow obligations shall be delivered to the Poudre River at or above the headgate of the calling water right which must be located at or below the headgate of the Jones Ditch, at a location to be approved by the Division Engineer. If there is not a valid call for water, senior to December 31, 1987, on The Slough or the Poudre River at or below the headgate of the Jones Ditch, replacement shall be made to the South Platte River at the confluence with the Poudre River. No replacement obligations shall be required when there is no valid call for water, senior to December 31, 1987, on The Slough, on the Poudre River at or below the headgate of the

Jones Ditch, or the South Platte River. Replacement obligations during the non-irrigation season, or at other times when the Larimer County Canal is not carrying water past The Slough, may be accumulated and paid to the appropriate location according to a schedule to be approved by the Division Engineer.

57.3.3.5.3 Lone Tree and Owl Creeks: Historically, no surface return flow accrued to Owl Creek. Ground water return flow obligations to Lone Tree and Owl Creeks are satisfied by the terms of the ground water recharge program set forth in paragraph 57.3.3.4. Average annual native surface return flows to Lone Tree Creek for all 283,354 WSSC shares were 61 acre-feet per year as shown on Exhibit D. Replacement amounts on a monthly basis per share transferred in the respective sectors are set forth in Exhibit O. These native surface return flows will be replaced to either Lone Tree or Owl Creek via augmentation stations from the Larimer County Canal at times when there is a valid call for water, senior to December 31, 1987, on Lone Tree Creek; otherwise, the return flow obligations shall be delivered to the South Platte River at or above the confluence with Lone Tree Creek, at a location to be approved by the Division Engineer. No replacement obligations shall be required when there is no valid call for water, senior to December 31, 1987, on Lone Tree Creek or the South Platte River. Replacement obligations during the non-irrigation season, or at other times when the Larimer County Canal is not carrying water past Lone Tree Creek, may be accumulated and paid to the appropriate location according to a schedule to be approved by the Division Engineer.

57.3.3.6 Replacement of Native Return Flows to Poudre and South Platte Rivers. Except as otherwise provided in paragraphs 57.3.3.1 through 57.3.3.5 above, Thornton will replace to the Poudre River basin and South Platte River basin historic return flows attributable to native water diversions. The quantitative measure of those obligations, for each share converted to Municipal Use is as shown in Exhibit O, provided that no replacement obligations shall be required at those times there is no valid call for water, senior to December 31, 1987. The average annual obligation upon full conversion of Thornton's shares to Municipal Use, exclusive of obligations in paragraphs 57.3.3.5 which are not paid to tributaries, is 285 a.f. to the Poudre River and 433 a.f. to the South Platte River, as summarized in Exhibit D, hereto.

57.3.3.7 Modification of WSSC Operations. Some of the return flow obligations on Exhibit O are set forth in terms of a.f. per converted share per day of delivery in the WSSC System. These obligations were calculated based on an historical average of 76.28 delivery days per year at a rate of 0.677 c.f.s. per share. In the event that WSSC operations change such that deliveries to shares, (including the native and transmountain components of the shares) no longer average 76.28 delivery days per year, or delivery

of 0.677 c.f.s. per share, the amount of those obligations per share may be adjusted accordingly with the approval of the Division Engineer, provided that on a thirty-six year rolling average basis, the total volume and timing of Thornton's native replacement obligation does not change.

57.3.3.8

Delivery of Replacement Obligations. Replacement obligations are set forth in Exhibit O. A page is provided for each Sector, numbered 1 through 5 and A. Those Sectors are defined in Exhibit M. The sector location associated with each of Thornton's farms is provided in Exhibit N. Sector A contains the 31.5 Thornton shares not assigned a specific location. In addition to the replacement obligations corresponding to shares in specific Sectors, page 1 of Exhibit O shows replacement obligations associated with all shares regardless of their location. These obligations for "All Sectors" are in addition to the obligations set forth for each Sector. The replacement obligations shown on Exhibit O are expressed in two different ways: 1] in terms of acre feet per month per share, which remain the same each year, and 2] in terms of acre feet per share per day of delivery of water within the WSSC System. The daily replacement obligations shall be computed to be the sum of: 1] the monthly obligations expressed as acre feet per month divided by the number of days in the month, and 2] the daily obligation, if any, expressed as acre feet per day of delivery of water within the WSSC System. The resulting daily obligation per converted share shall be multiplied by the number of converted shares to determine the total daily replacement obligation. Unless otherwise specified in the specific decretal language for the various replacement locations, on the 15th day and last day of each month, the difference between the accumulated obligations and the accumulated repayments at each location may vary by plus or minus 25% of the accumulated obligation, provided that the total annual replacement obligation is fulfilled in every year. The Division Engineer shall be authorized to approve, at his discretion, variations in the timing of replacements as set forth herein.

57.3.4 Stipulated Replacement Obligations. Thornton has entered into stipulations with certain objectors, indicated below, relating to its replacement obligations. The Court approves these stipulations, which shall be binding as between the parties thereto, but if in conflict with any other specific provision of this decree, or statutory law, the specific provision of this decree, or the statutory law shall control, as appropriate.

57.3.4.1

Central Colorado Water Conservancy District and its Ground Water Management Subdistrict. CCWCD consented to the entry of a decree herein provided that it includes certain terms and limitations contained in the stipulation dated July 18, 1991. Thornton's stipulation with Central was amended on February 10, 1994. Said stipulations provide for replacement of return flows and use of substitute supplies within the Poudre basin. Central shall provide notice to, and obtain approval from the Division Engineer for use of its water for augmentation and exchange with

Thornton. The appropriate language from the stipulation is included in this decree. The amended stipulation is incorporated herein by reference and attached hereto as Exhibit DD.

57.3.4.2 City of Greeley. Greeley consented to the entry of a decree herein provided that it includes the terms of the stipulation dated July 15, 1991 which is hereby incorporated by reference. Said stipulation was entered for the purpose of mitigating adverse effects upon Greeley's discharge parameters and requires Thornton to release to the Poudre River, or forego the diversion of water from the Poudre River, at a rate of up to 2.8 c.f.s. when, during the months of September through April, the thirty day moving average flow in the Poudre River drops below a specified flow rate. Thornton's stipulation with Greeley is incorporated herein by reference and attached hereto as Exhibit V.

57.3.4.3 Western Sugar Company. Western Sugar consented to the entry of a decree herein provided that it includes the terms of the stipulation dated July 25, 1991. Said stipulation was entered for the purpose of mitigating adverse effects upon Western Sugar's discharge parameters and requires Thornton to release to the Poudre River, or forego the diversion of water from the Poudre River, at a rate of up to 2.8 c.f.s. when, during the months of September through April, the thirty day moving average flow in the Poudre River drops below a specified flow rate. Thornton's stipulation with Western Sugar is incorporated herein by reference and attached hereto as Exhibit W.

57.3.4.4 Larimer & Weld Irrigation Company, Larimer & Weld Reservoir Company, Windsor Reservoir Company. The Larimer & Weld companies stipulated to the proposed decree circulated on August 20, 1991. Thornton's stipulation with Larimer & Weld was amended on January 31, 1994. The amended stipulation provides that, as Thornton begins to convert shares to Municipal Use, it will also begin to repay historic return flows to the Larimer & Weld Canal. Thornton's obligations to Larimer & Weld will average 1,317 acre feet per year at full conversion of Thornton's shares. Thornton's amended stipulation with Larimer & Weld Irrigation Company, Larimer & Weld Reservoir Company, Windsor Reservoir Company is incorporated herein and attached hereto as Exhibit Y.

57.3.4.5 Ogilvy Irrigating & Land Company. Ogilvy stipulated to the proposed decree circulated on September 12, 1991, and identified as Applicant's Exhibit A-811, provided that, as Thornton begins to convert shares to Municipal Use, it will also begin to repay historic return flows to the Ogilvy Ditch in an amount of up to 300 acre feet per year at full conversion of Thornton's shares. Thornton's stipulation with Ogilvy Irrigating & Land Company is incorporated herein by reference and attached hereto as Exhibit Z.

- 57.3.4.6 New Cache la Poudre Irrigating Company. The New Cache la Poudre Irrigating Company (New Cache) withdrew its statement of opposition by a stipulation dated March 23, 1992, which stipulation provided that, as Thornton begins to convert shares to Municipal Use, it will also begin to repay historic native return flows to the Greeley No. 2 Canal in an amount which will reach 100 acre feet per year at full conversion of Thornton's shares. Thornton's stipulation with the New Cache la Poudre Irrigating Company is incorporated herein and attached hereto as Exhibit EE.
- 57.3.5 Sources and Methods for Meeting Replacement Obligations. Thornton will meet the foregoing obligations by any combination of the following:
- 57.3.5.1 Releases from storage. Making releases from storage facilities to meet Thornton's obligations under this decree. Water released from storage to meet return flow obligations must be decreed for augmentation or replacement purposes prior to utilizing the water for such purposes to the extent required by law.
- 57.3.5.2 Exercise and Use of Other Water And Water Rights. Utilizing other sources of water derived from Thornton water rights described on Exhibit K hereto, to the extent such water is then appropriately decreed, as well as other water rights acquired by Thornton insofar as they have then been decreed for such uses.
- 57.3.5.3 Reusable Water and Lawn Irrigation Return Flows. Utilizing reusable municipal effluent, reusable lawn irrigation return flows, or other water legally available to Thornton to meet its return flow obligations
- 57.3.5.4 Recharge of Ground Water Aquifer. Thornton will operate a recharge program which will replace water to the ground water aquifer in Sectors 4 and 5, (and in Sector 2, to the extent required under Paragraph 57.3.3.4) as these sectors are defined in Exhibit M.
- 57.4 Modification of WSSC System. Pursuant to paragraph 4 of the WSSC/Thornton Contract, at its own cost and with the consent of WSSC, Thornton will make such physical changes to company facilities as necessary to ensure that historic water deliveries to other shareholders are not altered in time or quantity, their expenses not increased, nor their other rights as WSSC shareholders adversely affected.
- 57.5 Retirement of Shares from Irrigation. When shares historically used for irrigation of a farm are converted to Municipal Uses, native water attributable to those shares will not be used for agricultural irrigation under the WSSC System.
- 57.6 Dry-up of Thornton Farms. In order to prevent expansion of use of non-Thornton WSSC or JDC shares which may be moved to Thornton farms following the removal of Thornton's shares from irrigation, once Thornton farms have been removed from irrigation such lands can only be re-irrigated after compliance with the terms of this paragraph 57.6. For the purposes of this provision, a "Thornton farm" shall mean any

farm in Larimer or Weld County owned by the City of Thornton as of December 31, 1987.

57.6.1 Restrictions of Record. At the time of sale of any Thornton farm, Thornton shall include a provision in the document conveying title to that farm making transfers of non-Thornton WSSC or JDC shares to that Thornton farm subject to the restriction set out below. This restriction on the transfer of non-Thornton WSSC or JDC shares to farms owned by Thornton as of December 31, 1987 for use thereon shall be discontinued at such time as Thornton is operating its exchange on substantially all WSSC shares as contemplated in Phase III pursuant to paragraph 57.6.6.

57.6.2 Irrigation of Thornton Farms with "Non-TM" Thornton Shares. In order to avoid potential injury from expanded use of the native portion of Thornton's WSSC shares, at such time as Thornton removes the transmountain portion of the WSSC shares from a farm, Thornton will be required to reduce the irrigated acreage on that farm by 25 acres per Non-TM share on farms without supplemental ground water supplies, or by 15 acres per Non-TM share on farms with supplemental ground water supplies. Alternatively, Thornton may consolidate its Non-TM shares onto farms within the same sector provided an appropriate number of acres are dried up within that sector. If all "Non-TM" shares are moved off of a farm due to consolidation of shares, such farm must be dried up completely, except as otherwise provided by this paragraph 57.6 or paragraph 57.7.2.

57.6.3 Irrigation of Thornton Farms by Non-Thornton WSSC Shares Subsequent to Conversion of Thornton's Shares and Prior to Phase III. WSSC or JDC shares not owned by Thornton may be moved from a non-Thornton farm to a Thornton farm from which Thornton's WSSC or JDC shares have been removed only if such move will not result in a reduction in native water return flows from the moved shares, or a reduction in native water return flows from other native water rights on the non-Thornton farm, or otherwise result in a reduction in the amount of water available to other users lawfully entitled to its use. The party seeking to move the WSSC or JDC shares shall be required to obtain the approval of the Division Engineer and shall be required to prove either:

(A) That the number of acres removed from irrigation with native water on the farm from which the water is removed equals the number of acres to be irrigated with native water by the WSSC or JDC shares on the Thornton farm and that there will be no expanded use of other native waters on either farm, or

(B) That the circumstances of the proposed change are such that the transfer may be accomplished without injury to other water rights through expanded use of the native water component of WSSC or JDC shares, increased native water consumption, reduced native return flows, or any other materially injurious effects.

- 57.6.3.1 Division Engineer Approval. The Division Engineer shall seek and consider input from area water users, concerning the potential for injury caused by the subsequent irrigation of Thornton farms using non-Thornton WSSC or JDC shares. The water users from whom the Division Engineer seeks such input shall include, but not be limited to: Thornton, those objectors identified with an asterisk [*] in paragraph 3, and any other person or entity who gives written notice to the Division Engineer that he or it desires to be involved in the consultation. (Such objectors will be responsible for ensuring that the Division Engineer has on file the current address to which such notice should be mailed.)
- 57.6.3.2 Water Court Review of Division Engineer Determination. In the event of disagreement between the Division Engineer, the applicant for the transfer, Thornton, and/or other parties involved in the consultation with the Division Engineer concerning the question of injury, the Court retains jurisdiction to resolve the dispute and to determine whether the proposed action will result in material injury which requires the denial of the proposal or the imposition of conditions to avoid such injury. Thornton's approval, which shall not be unreasonably withheld, shall be required prior to approval of any requested transfer to a Thornton farm.
- 57.6.3.3 Dry-Up Restriction on Non-Thornton Farm Following Share Transfer. Following the Division Engineer's approval of the transfer of WSSC or JDC shares from a non-Thornton farm to a Thornton farm, and prior to the use of those shares on the Thornton farm, a restriction on irrigation comparable to the restriction placed on the Thornton farm must be placed on the non-Thornton farm and made to appear in the chain of title for that non-Thornton farm. The extent to which Thornton's return flow obligations should be modified due to the transfer of shares to a Thornton farm shall be determined by the Division Engineer. Identical requirements regarding dry-up provisions and review and approval by the Division Engineer must be met at any time the native portion of WSSC or JDC shares are transferred from a farm, the title to which is unencumbered by these dry-up provisions, to a farm, the title to which is so encumbered. The foregoing notwithstanding, however, with regard to any provision herein respecting encumbering title to land with dry-up provisions, Thornton shall have no obligation to ensure compliance by any party in any transaction except those transactions in which Thornton is selling WSSC or JDC shares being changed in this decree, and/or selling land on which such shares historically have been used.
- 57.6.4 Subsequent Irrigation of Thornton Farms by Other Than WSSC or JDC Shares. In addition to the wells described in Exhibit L and discussed below, surface water rights other than those represented by shares of WSSC or JDC may be used for irrigation on the Thornton farms from which WSSC or JDC shares have been removed if approved by a decree of the water court, a decreed plan for augmentation, or a substitute supply plan approved by the state engineer. In addition to other lawful uses, CBT water may be used as a supplemental supply to

any new source of supply obtained for use on any Thornton farms with approval of the Board of Directors of the Northern Colorado Water Conservancy District. A new source of supply could include non WSSC or non JDC water rights approved for use as set forth in this paragraph as well as native or transmountain WSSC or JDC waters moved to a Thornton farm pursuant to paragraph 57.6.3.

57.6.5 Residential Irrigation. Lands removed from irrigation pursuant to paragraph 57.6 may continue to be supplied with water for irrigation of residential lawns, gardens, and landscaping if the water used is provided by a municipality, water district or other retail distributor of water other than WSSC or JDC.

57.6.6 Other Water Rights. Nothing in this decree shall be construed to prohibit the lawful irrigation of any Thornton farms or other lands under the WSSC or JDC Systems by water represented by shares of stock in mutual ditch or reservoir companies other than WSSC.

57.6.7 Re-irrigation of Thornton Farms by WSSC or JDC Shares in Phase III. The return of each Thornton-owned WSSC or JDC share to irrigation use in Phase III of the Northern Project shall be subject to the approval of the Division Engineer or Water Court to prevent material injury to other vested water rights. Prior to Thornton's "re-conversion" of shares to agricultural use, Thornton must obtain the Division Engineer's approval for the use of water attributable to WSSC or JDC shares on each farm on which the shares will be used. The proposed use shall be reviewed pursuant to the procedures set forth in paragraphs 57.6.3.1 and 57.6.3.2. Following such approval by the Division Engineer or Water Court and the application of water from the shares to the proposed use, Thornton's replacement obligations associated with such shares shall terminate. If Thornton claims the right to reuse any portion of the return flows from such re-irrigation, Thornton will be required to obtain approval of the amount of such credit from the Division Engineer or the Water Court. Thornton may request the Division Engineer's approval of a general plan of disposition of its shares prior to Thornton's sale of its shares and/or the commencement of construction of facilities needed for Phase III operations, but approval of such general plan shall not relieve Thornton of the obligation to obtain specific Division Engineer approval for use of WSSC or JDC shares on each farm.

57.7 Limitation on Well Pumping. The following terms and conditions limiting pumpage and area irrigated with well water are imposed to prevent an enlarged use of the 155 irrigation wells on the farms from which Thornton is transferring water.

57.7.1 Pumpage Limitation: Future pumping by the wells on a Thornton farm unit, after the removal of all or a portion of the transmountain water attributable to the WSSC shares on that Thornton farm unit pursuant to paragraph 57.2.2, or after the conversion of one or more of Thornton's WSSC shares from that farm unit to Municipal Use, will be limited to the historical pumping volume on a 10 year moving average basis. The amount of historical pumping by Thornton wells will be determined in the following way:

57.7.1.1 Historical Pumping Estimates. Thornton has made estimates of the range of historical pumping as shown on Exhibit L hereto. This estimate is referred to as the "limiting range."

57.7.1.2 Future Pumping Measurements. Within one year following entry of the final decree in these consolidated cases, Thornton will install flow meters or other measuring devices acceptable to the State Engineer on every operational Thornton owned well. Records of volumes pumped per year will be collected by Thornton and provided to the Division Engineer until the time that the WSSC shares are removed from agricultural use. The average annual amount of metered pumping from each well during the period following the entry of the decree through the time when the ditch shares are removed from the farm will provide a second estimate of historical pumpage by the wells associated with each farm. This estimate is referred to as the "metered estimate".

57.7.1.3 Well Pumping After Dry-Up. At the time that transmountain water attributable to a WSSC share or shares is removed from a farm pursuant to paragraph 57.2.2, or a ditch share or shares are removed from a farm, the metered estimates for the wells supplying that farm will be compared to the limiting range. The pumpage from the well or wells on that farm will thereafter be limited to the metered estimate unless it is higher or lower than the limiting range and in that event the upper or lower bound of the limiting range, as appropriate, will be the maximum allowable pumpage. The limitation on future pumpage described herein shall be applied on a 10 year moving average basis. Thornton shall provide to the Division Engineer on an annual basis an estimate of the acreage irrigated by the wells, the location of such irrigated acreage (by ¼ ¼ section), records of meter readings, volumes pumped per year and 10 year moving averages of volumes pumped. Further, every five years Thornton shall provide to the Division Engineer a copy of current aerial photography (by Agricultural Stabilization & Conservation Service or other photography available to the public) of each farm irrigated with the wells. In no event, however, shall a well pump in excess of its decreed or permitted volume or rate nor shall it divert a volume or at a rate to exceed the amounts provided by its augmentation plan in place at the time of this stipulation, unless additional augmentation sources are applied for in the Water Court and decreed for use by the wells.

57.7.1.4 Farms With Multiple Wells. Since many of the farms have more than one well, the volumetric limits shall apply on a per-farm basis to the one or more wells associated with the farm as shown on Exhibit L, but the decree, permit and augmentation limitations of the preceding paragraph shall apply on a well by well basis.

57.7.1.5 Tributary Wells Without Augmentation. Six of the wells identified on Exhibit L were decreed to be nontributary wells in the 1953 "Coffin" adjudication and have not been included in any plan for augmentation.

approved by the State Engineer's Office. Neither Thornton, its lessees, nor its successors in interest shall be allowed to pump from these six wells after the date of this decree unless the well sought to be pumped has been included, or Thornton has made application for that well to be included, in an approved augmentation plan.

57.7.2 Area Limitation: The amount of land which shall be allowed to be irrigated on each farm unit, as described on Exhibit L, using well water produced by wells on that farm shall be limited to a specific acreage computed as follows:

57.7.2.1 Acreage Irrigated in the Future with Ground Water. The average annual historical farm water supply to the Thornton farms which were irrigated with WSSC shares, well water and other sources was approximately 2.5 acre feet per acre. The acreage which historically received water from well pumping is shown on Exhibit L as "Acreage Receiving Ground water." The volumetric limit on pumping for each farm as computed above shall be divided by the average annual historical farm water supply of 2.5 acre feet per acre to determine the acreage which can be irrigated with ground water in the future. The Division Engineer shall have administrative authority to enforce this provision.

57.7.2.2 Restrictions of Record. At the time of sale of any Thornton farm, Thornton shall include a provision in the document conveying title to that farm making the wells located thereon, as identified on Exhibit L, subject to the restrictions on pumping set forth above.

57.7.3 Future Change of Use of Wells. In the event that Thornton or any other owner of the wells set forth on Exhibit L hereto seek to change the place of use or type of use of the well water, the owner of the well will comply with all legal requirements applicable to such changes.

57.8 Ground Water Levels. Upon the dry-up of Thornton farms, less irrigation water will be applied to the surface of the land, resulting in less deep percolation of water into or recharge of the aquifer underlying those farms. Thornton shall be required to replace native return flows to the ground water aquifer as provided by paragraph 57.3.3.4. This replacement will contribute to the maintenance of historic water levels. Thornton, however, is not required to maintain or guarantee the preservation of a particular water level throughout the aquifer. Such water levels are dependent on numerous factors, many of which are beyond the control of Thornton. Thornton must replace native return flows to the ground water aquifer as provided by paragraph 57.3.3.4, above, and as long as it does so, it will have fulfilled its obligation to ground water users.

57.9 Revegetation of Thornton Farms. Prior to Thornton's conversion to Municipal Use of, or the removal of transmountain water pursuant to paragraph 57.2.2 attributable to, all or a portion of the shares used on a Thornton farm, on the portions of the farm which are in excess of the acreage allowed to be irrigated by wells as provided in paragraph 57.7 and which are taken out of irrigated agricultural production, one of the following must be established: 1) dryland farming practices, or, 2) native grasses or such other

self-sustaining (under the conditions prevailing under the particular farm) suitable dryland ground cover, with weeds adequately controlled, or; 3] suitable non-agricultural uses. Thornton's obligation's under this paragraph as to each farm, or portion of a farm, will be discharged when, and provided that, at the time Thornton's shares used on that farm are converted to Municipal Use, or the transmountain water attributable to Thornton's shares on that farm is removed, one of the three above described uses have been established.

57.9.1 Standards for Compliance. To the extent that the Thornton land taken out of irrigated agricultural production on a given farm does not meet one of the above three conditions, the amount of the Thornton shares associated therewith which may be converted to Municipal Use, or the amount of transmountain water removed from the farm pursuant to paragraph 57.2.2, shall be reduced proportionately. The determination that a self-sustaining suitable dryland ground cover has been established must be obtained in accordance with the then existing standards used by the USDA Soil Conservation Service in its Conservation Reserve Program. If such program has been terminated and no similar program exists, the standards last in effect shall be used. If a similar program does exist, the standards used for that program shall be used for the purposes of this paragraph. Such determination must be made by a person with appropriate expertise in the field of agronomy, such as, but not limited to, a qualified employee of the USDA Soil Conservation Service, the Agricultural Stabilization and Conservation Service, the successor of one of these agencies charged with performing similar functions, or faculty of the Agronomy Department at Colorado State University. After thirty days prior notice to the parties identified with an asterisk [*] in paragraph 3, the Division Engineer will review and approve or disapprove the qualifications of Thornton's selected expert(s) who will make this determination. The Court will retain jurisdiction to review the Division Engineer's approval of experts as well as those experts' determinations. To the extent dryland farming practices are employed, Thornton must obtain a determination from the expert(s) approved by the Division Engineer that the particular farm involved is suitable for dryland farming, and must again obtain a determination after the farm has been operated as a dryland farm for three years that it is suitable for such use. Thornton will solicit recommendations from the appropriate Colorado State University Cooperative Extension Agency office regarding revegetation techniques and dryland farming practices. Thornton will also solicit recommendations regarding revegetation techniques and dryland farming practices from the West Greeley Soil Conservation District in connection with the revegetation or dryland farming of Thornton farms located within that District.

58. Terms and Conditions Relating to Conditional Poudre River Exchange (86CW401). To prevent injury to other water users, the foregoing exchange, subject to prior approval of the Division Engineer or his representative, shall be operated in accordance with the following terms and conditions:

58.1 Physical Availability of Water. Water is physically available for diversion at the foregoing Exchange Points of Diversion.

58.2 Live Stream. In order to operate these exchanges a live stream must exist between the Exchange Points of Diversion and the Point of Substituted Supply. At times, the Water Commissioner causes all or a portion of the Poudre River flows present at the point of diversion for Fossil Creek Reservoir Inlet ditch to be diverted into Fossil Creek Reservoir and released to the Poudre River almost contemporaneously. To the extent Poudre River water is diverted into and through Fossil Creek Reservoir, or is not lawfully stored in that reservoir under a storage right senior to the appropriation date of 86CW401, the amount of that diversion, in addition to any exchange potential (as defined in paragraph 14.2.4) available in that reach of the Poudre River between the Fossil Creek Reservoir Inlet and the confluence of the Poudre River with the Fossil Creek Reservoir Outlet, will define the magnitude of the exchange potential which would be available to Thornton, if and when such exchange potential is lawfully available for use by Thornton by virtue of the priority of the Thornton exchanges decreed herein in Case No. 86CW401. Nothing in this decree, however, shall be interpreted as approving such practice of the Water Commissioner.

58.3 Intervening Seniors. All priorities located between the appropriate Exchange Point of Diversion and the Point of Substitute Supply, which are senior to the appropriation date of the Poudre River Exchange, shall be fully satisfied by either: 1) the remaining flows subject to their call or; 2) from another source of water supplied by Thornton to the extent Thornton has diverted water otherwise available to their call.

58.4 Substitute Supply.

58.4.1 Quantity.

58.4.1.1 Phase I. A substitute supply, in the amount which Thornton diverts at the foregoing exchange alternate points of diversion, will be delivered by Thornton at the confluence of the Poudre and South Platte Rivers during Phase I.

58.4.1.2 Phase II and Phase III. The Poudre River Exchange will operate in conjunction with the Water Supply and Storage Company Exchange. The quantity of the substitute supply associated with the consolidated operation of those exchanges in Phase II and Phase III is described in a separate provision below.

58.4.2 Source.

58.4.2.1 Phase I. The substitute supply will consist of water derived from Thornton water rights identified on Exhibit K, to the extent that such water is then decreed for use by exchange or decreed to be reusable, or the use of such water is otherwise in accordance with applicable legal requirements. Thornton will make such substitute supply available by means of [1] foregone diversions, [2] introduction of reusable wastewater effluent to the South Platte River at discharge points of MWRD or other wastewater treatment facility, [3] introduction of reusable lawn irrigation return flows to the South Platte River, and [4] reservoir releases.

58.4.2.2 Phase II and Phase III. The Poudre River Exchange will operate in conjunction with the Water Supply and Storage Company Exchange in Phase II and Phase III. The source of the substitute supply associated with the consolidated operation of those exchanges is described in a separate provision below.

58.4.2.3 All Phases. Prior to operating the exchanges decreed herein, Thornton must have replacement sources, approved by the Court for use in these exchanges, available and actually provide such replacement sources to the River at the location, time, and amount necessary to fully replace any obligation resulting from such exchanges owed to the South Platte River at its confluence with the Cache la Poudre River, as may be determined by the Court. Insofar as substitute supply consists of water which has then been judicially determined to be reusable, the use of said reusable water as a part of this exchange shall be further limited by the provisions of the decree which established the amount of the reusable water. No provision of the decree entered in 87CW107, however, shall be construed to preclude the use of the water rights described therein as substitute supply in this exchange.

58.4.3 Quality, Quantity, and Continuity. The substitute water provided in accordance with Thornton's Poudre River appropriative right of exchange will be of a quality and continuity to meet the requirements of use to which senior appropriations have normally been put, and will be of a quality and quantity so as to meet the requirements for which the water of the senior appropriators has normally been used. Furthermore, said substitute or replacement water will meet the lawful requirements of the senior diverters at the time and location and to the extent the seniors would be deprived of their lawful entitlement by the Applicant's diversions.

58.4.3.1 State Engineer Determination. The State Engineer shall make such determinations as to the quality, quantity and continuity of the substitute supply as are required by applicable and lawful statutes (e.g., §§ 37-80-120, 37-83-101, et seq., C.R.S.) and regulations (e.g., those promulgated under § 25-8-202(7)) in effect at any time this exchange is being exercised.

58.4.3.2 Enforcement by Governmental Entities in Addition to State Engineer. This decree shall not constitute an impediment to lawful regulatory and enforcement activities by appropriate administrative agencies.

58.4.3.3 Future Water Quality Standards. Unless otherwise required by paragraph 58.4.3.2, Thornton's substitute supply shall comply with the provision of any lawful statute, regulation or ordinance of general applicability limiting, regulating or prescribing the quality of water which may be used for normal agricultural irrigation whether such statute, regulation or ordinance is now in existence or is adopted or enacted in the future, including future

modifications thereof, and whether enacted or adopted by the State Engineer or any other governmental entity.

58.5 Volumetric Limitations. The Poudre River Exchange, for which Thornton sought confirmation by its application in 86CW401 and which is confirmed by this decree shall be exercised within the volumetric limitations set forth in the general terms and conditions appearing below.

59. Terms and Conditions Relating to Appropriative River Diversions, Direct and by Exchange, 86CW401 and 86CW403.

59.1 Right to Use Structures. Thornton shall not exercise the conditional water rights confirmed herein in 86CW403 or the exchange diversions approved herein in 86CW401 at any structure until Thornton acquires the right to so use that structure from the appropriate entities. Nothing herein shall be construed to create any right of Thornton to utilize structures owned by third parties for the diversion of water. The foregoing notwithstanding, however, Thornton may satisfy replacement obligations pursuant to Case No. 87CW332 through the exercise of the conditional water rights confirmed herein in 86CW403 or the exchange diversions approved herein in 86CW401 in a manner which will make water available to one or more such structures to which such water is owed without obtaining a right to use such structure(s).

59.2 Place of Use. On an annual volumetric basis, Thornton shall be allowed to use the water derived from the water rights confirmed in 86CW401 and 86CW403 within all of the following areas: Thornton's 1986 designated service area; Thornton's municipal boundaries as they exist now or in the future; areas outside Thornton's boundaries for which Thornton had established service obligations prior to December 31, 1986; at any location described in this decree at which Thornton must meet obligations within the Poudre and South Platte basins; and for agricultural purposes, within the WSSC System.

59.2.1 Reality Checks and Cancellation. As part of diligence proceedings and proceedings to make absolute the conditional portions of this decree, Thornton will be required to make showings that the volumetric yield of the conditional water rights has been or will be needed by Thornton's projected growth. The purpose of these showings is to insure that the water derived from Thornton's newly appropriated water rights is used for the City's own purposes and does not allow Thornton to become a permanent lessor or wholesaler of water yielded by these rights. In assessing such need, the Court may consider Thornton's service population at that time, Thornton's projected growth at that time, and Thornton's use or disposition of the portfolio of water rights Thornton now owns, including whether Thornton has made reasonable efforts to protect the quality of, and to treat, its existing supply at a reasonable cost, and the reasons for Thornton's manner of use or disposition of such supply. All or a part of the water rights confirmed in 86CW401 and/or 86CW403 may be canceled if the Court finds, based on subsequent events, that Thornton does not actually need the volume of water appropriated in these cases for the uses provided in this decree. Such cancellation may be implemented by a reduction in volumetric limits.

~~59.2.1.1 Interim Findings. In the event Thornton requires certainty that an action it proposes to take will not result in the cancellation of a portion of its water rights as provided above, it may petition this Court under the above caption for a hearing to determine the question, to be held after Thornton provides resume notice of its petition, and concurrently provides the same notice by mail to the parties identified with an asterisk (*) in paragraph 3. Such interim findings, as ultimately resolved, shall be binding upon all parties and the Court during subsequent diligence proceedings with respect to reality checks and cancellation.~~

59.3 Storage. Thornton shall be entitled to store the water appropriated in 86CW401 and 86CW403 subject to the terms and conditions set forth below:

59.3.1 Storage Structures. The water decreed herein may be stored in any of the following reservoirs:

59.3.1.1 WSSC System Reservoirs.

59.3.1.1.1 Curtis Lake; Located in parts of T 8 N, R 69 W, Sections 16 and 17, 6th P.M.

59.3.1.1.2 WSSC Reservoir No. 1 (a.k.a. Rocky Ridge Reservoir); Located in parts of T 8 N, R 69 W, Sections 10, 11 and 14, 6th P.M.

59.3.1.1.3 WSSC Reservoir No. 3; Located in parts of T 8 N, R 69 W, Sections 10, 11, 14 and 15, 6th P.M.

59.3.1.1.4 WSSC Reservoir No. 4; Located in parts of T 8 N, R 69 W, Sections 14 and 15, 6th P.M.

59.3.1.1.5 Kluver Reservoir; Located in parts of T 8 N, R 69 W, Sections 14, 15, 22 and 23, 6th P.M.

59.3.1.1.6 Richards Lake; Located in parts of T 8 N, R 68 W, Section 30 and R 69 W, Section 25, 6th P.M.

59.3.1.1.7 WSSC Reservoir No. 5 (a.k.a. Long Pond); Located in parts of T 8 N, R 68 W, Sections 30 and 31, and R 69 W, Sections 25 and 36, 6th P.M.

59.3.1.1.8 Lindenmeier Lake; Located in parts of T 8 N, R 69 W, Section 31, and T 7 N, R 69 W, Section 6, 6th P.M.

59.3.1.1.9 Black Hollow Reservoir; Located in parts of T 8 N, R 67 W, Section 34, and T 7 N, R 67 W, Section 3, 6th P.M.

59.3.1.2 Terminal Storage Near Thornton.

59.3.1.2.1 Standley Lake; Located in parts of T 2 S, R 69 W, Sections 16, 17, 20, 21, 22, 28 and 29, 6th P.M.

59.3.1.2.2 Eastlake Reservoirs 2 and 3: Located in parts of T 1 S, R 68 W, Sections 25, 35 and 36, 6th P.M.

59.3.1.2.3 East Gravel Lakes (a.k.a. Tani Lakes); Located in parts of T 2 S, R 68 W, Sections 25 and 36, and T 2 S, R 67 W, Sections 30 and 31, 6th P.M.

59.3.1.2.4 West Gravel Lakes; Located in parts of T 2 S, R 68 W, Sections 25 and 36, and T 2 S, R 67 W, Section 30, 6th P.M.

59.3.1.3 Pump Station Reservoirs and Poudre Basin Reservoirs. In addition to storage in the WSSC System reservoirs, and terminal storage near Thornton, water diverted at certain of the decreed points of diversion may be stored at other locations as follows:

59.3.1.3.1 Water diverted at the Boxelder Ditch and Fossil Creek Reservoir Inlet may be stored in Fossil Creek Reservoir; Located in parts of T 6 N, R 68 W, Sections 9, 10, 15, 16 and 17, 6th P.M.

59.3.1.3.2 Water diverted at the Boxelder Ditch and Thornton Pump Station No. 1 may be stored in Pump Station No. 1 Gravel Pit Forebay; Located in parts of T 7 N, R 68 W, Section 34, 6th P.M.

59.3.1.3.3 Water diverted at the Boxelder Ditch, Fossil Creek Reservoir Inlet, Greeley No. 2 and Thornton Pump Station No. 2 may be stored in Pump Station No. 2 Gravel Pit Forebay; Located in parts of T 6 N, R 67 W, Section 19, 6th P.M.

59.3.1.3.4 Water diverted at the Ogilvy Ditch and Thornton Pump Station No. 3 may be stored in Pump Station No. 3 Gravel Pit Forebay; Located in parts of T 5 N, R 64 W, Section 6, 6th P.M.

59.3.1.3.5 Water diverted at the Patterson Ditch may be stored in Pump Station No. 3A Gravel Pit Forebay; Located in parts of T 5 N, R 65 W, Sections 10, 11 and 12, 6th P.M.

59.3.2 Amount. The amount of water diverted under 86CW403 which Thornton is allowed to store in any year within the Poudre basin shall be limited to no more than the following amounts:

59.3.2.1 WSSC System Reservoirs: In the reservoirs listed in paragraph 59.3.1.1, Thornton may store 37,000 a.f., in the aggregate, without regard to how the water is allocated between those reservoirs.

59.3.2.2 Pump Station Reservoirs. One fill and one refill of the following capacities:

59.3.2.2.1 Pump Station No. 1 Gravel Pit Forebay: 893 a.f.

59.3.2.2.2 Pump Station No. 2 Gravel Pit Forebay: 1,972 a.f.

59.3.2.2.3 Pump Station No. 3 Gravel Pit Forebay: 210 a.f.

59.3.2.2.4 Pump Station No. 3A Gravel Pit Forebay: 1,030 a.f.

59.3.2.3 Relation to 86CW403 Volumetric Limits. All water diverted under these volumetric limits will also count toward the volumetric limits set forth in paragraph 62.4.4.2.

60. Terms and Conditions Relating to Conditional Water Supply and Storage Company (Ditch) Exchange (86CW402).

60.1 General. Under the Water Supply and Storage Company or Ditch Exchange, returns of substitute supply will be made to the Larimer County Canal or to the Jackson Ditch. Diversions of water into, and withdrawal of water from, the Larimer County Canal and returns of water to the Larimer County Canal will be made only if consistent with the contractual obligations of Thornton, including but not limited to the WSSC/Thornton Contract as defined in paragraph 10 above. Returns of water to the Jackson Ditch will be made only by agreement with the Jackson Ditch Company.

60.2 Terms and Conditions -- Substitute Supply. The Water Supply and Storage Company Exchange will operate in accordance with the following terms and conditions relating to substitute supply:

60.2.1 Quantity.

60.2.1.1 Phase I. Thornton's Water Supply and Storage Company Exchange will not operate during Phase I.

60.2.1.2 Phase II and Phase III. Thornton's Water Supply and Storage Company Exchange will operate in conjunction with the Poudre River Exchange during Phase II and Phase III. The quantity of the substitute supply associated with the consolidated operation of those exchanges is described in a separate provision below.

60.2.2 Source.

60.2.2.1 Phase I. Thornton's Water Supply and Storage Company Exchange will not operate during Phase I.

60.2.2.2 Phase II and Phase III. Thornton's Water Supply and Storage Company Exchange will operate in conjunction with the Poudre River Exchange during Phase II and Phase III. The source of the substitute supply

associated with the consolidated operation of those exchanges is described in a separate provision below.

60.2.3 Quality. The substitute supply returned to the Larimer County Canal consists of water to be diverted from the Poudre and South Platte rivers. Pursuant to the terms of the WSSC/Thornton Contract, the substitute supply returned to the Larimer County Canal shall comply with the terms of that agreement except as otherwise agreed between WSSC and Thornton and as otherwise provided in this decree. The WSSC/Thornton Contract is attached hereto as Exhibit J.

60.2.3.1 State Engineer Determination. The State Engineer shall make such determinations as to the quality, quantity and continuity of the substitute supply as are required by applicable and lawful statutes (e.g., §§ 37-80-120, 37-83-101, et seq., C.R.S.) and regulations (e.g., those promulgated under § 25-8-202(7)) in effect at any time this exchange is being exercised.

60.2.3.2 Enforcement by Governmental Entities in Addition to State Engineer. This decree shall not constitute an impediment to lawful regulatory and enforcement activities by other administrative agencies.

60.2.3.3 Future Water Quality Standards. Unless otherwise required by the provisions of this decree relating to the Ditch Exchange, Thornton's substitute supply shall comply, at its point of discharge to the ditch, with the provision of any lawful statute, regulation or ordinance of general applicability limiting, regulating or prescribing the quality of water which may be used for normal agricultural irrigation whether such statute, regulation or ordinance is now in existence or is adopted or enacted in the future, including future modifications thereof, and whether enacted or adopted by the State Engineer or any other governmental entity.

60.2.3.4 Shareholder Compensation. In addition to other remedies which may be available to WSSC shareholders, in the event that any WSSC shareholder demonstrates the historic agricultural uses of his WSSC water are being materially impaired by the quality of the water provided by Thornton as substitute supply under this Ditch Exchange, Thornton shall be obligated to acquire, at fair market value, the lands owned and irrigated by said shareholder with WSSC water and the WSSC shares historically associated with said lands. In the event Thornton fails to do so, this provision may be specifically enforced and the shareholder, if successful in recovering an amount in excess of Thornton's best pre-litigation offer, may also recover costs and reasonable attorney's fees.

60.2.3.5 Water Quality Monitoring Program. Thornton currently operates a water quality monitoring program in the Cache la Poudre basin to provide baseline data to guide future water quality decisions by Thornton and WSSC. Thornton's monitoring program samples numerous locations on the Poudre River, the South Platte River, and the Larimer County Canal.

The WSSC/Thornton Agreement allows Thornton to discontinue this monitoring program at the commencement of the operation of the Ditch Exchange decreed herein. As a condition to operation of the Ditch Exchange, however, Thornton shall be obligated to begin a limited sampling program no later than four years prior to the commencement of Ditch Exchange operations, which shall continue throughout the operation of the Ditch Exchange unless the Court shall determine, after notice to the parties identified with an asterisk [*] in paragraph 3 and a hearing, that the monitoring may be discontinued without injury to other water users. The locations and frequency at which samples shall be taken, and the water quality parameters for which the samples shall be tested shall include, at a minimum, those set out in Exhibit T hereto. Such monitoring may be conducted as part of any monitoring required by the WSSC/Thornton Agreement. The results of such monitoring, including the water quality data and corresponding flow data, shall at all times be available for public inspection as soon as practicable after the samples are collected and tested.

60.2.3.5.1 Thornton Not Required to Dilute Poudre Basin Water. The WSSC/Thornton Agreement provides that in the event water quality in the Larimer County Canal at Thornton's points of return violates one or more of the water quality parameters established by the WSSC/Thornton Contract, whether on a periodic or on a continuous basis, Thornton may return to the Larimer County Canal water which violates the agreed upon standard for a given parameter, but does not exceed the concentration of that parameter then found in the ditch. Consistent with the WSSC/Thornton Contract, Thornton shall be allowed to return water to the Larimer County Canal which fails to meet a given agreed upon standard or standards if, and only to the extent, the water quality already in the ditch at the point at which the water is being returned fails to meet the same standard or standards, as indicated by the most recent required sample taken by Thornton. Any other provision of this paragraph notwithstanding, in no event shall the quality of the substitute supply fail to meet the water quality standards required for a discharge into a stream classified for agricultural use.

60.2.3.5.2 Monitoring of Water Quality at Pump Stations. At all times when Thornton is returning water to the Larimer County Canal via its return pipelines, Thornton shall monitor the quality of the water being introduced into all of the pump stations pursuant to the WSSC/Thornton Contract. Thornton shall not introduce water into its pipelines if doing so, after accounting for pipeline operations (e.g. mixing with water being introduced from other pump stations then operating), would result in a violation of the water quality standards currently established by Exhibit J, the WSSC/Thornton Agreement as it may then be revised, or applicable regulations of general applicability, whichever is more stringent.

60.3 Volumetric Limitations. The Water Supply and Storage Company (Ditch) Exchange, for which Thornton sought confirmation by its application in 86CW402 and which is confirmed by this decree shall be exercised within the volumetric limitations set forth in the general terms and conditions appearing below.

60.4 Storage. Thornton shall be entitled to store the water appropriated in 86CW402 in those structures described in paragraphs 59.3.1.1 and 59.3.1.2.

61. Terms and Conditions relating to Substitute Supply of Consolidated Exchange Operations. Thornton's Water Supply and Storage Company Exchange will operate in conjunction with the Poudre River Exchange during Phases II and III. With respect to the consolidated operation of those exchanges:

61.1 Quantity. A substitute supply, in the amount which Thornton diverts at the foregoing exchange points of diversion, will be delivered by Thornton at the confluence of the Poudre and South Platte Rivers under the Poudre River Exchange. A substitute supply, in the amount which Thornton withdraws from the Larimer County Canal at WSSC's Reservoir #4 will be delivered by Thornton to the points of return for the Water Supply and Storage Company Exchange.

61.2 Source. Prior to operating the exchanges decreed herein, Thornton must have available replacement sources, approved by the Court for use in these exchanges. Thornton shall actually provide water from such replacement sources to the river at the location, time, continuity and amount necessary to fully replace any obligation resulting from such exchanges owed to the South Platte River at its confluence with the Cache la Poudre River, as may be determined by the Court. The sources of water which will be made available by Thornton as substitute supply for the consolidated exchanges include:

61.2.1 Phase II.

61.2.1.1 Thornton Water Rights. The substitute supply will consist of water derived from Thornton water rights identified on Exhibit K, to the extent that such water is then decreed for use by exchange or decreed to be reusable, or the use of such water is otherwise in accordance with applicable legal requirements. Thornton will make such substitute supply available by means of [1] foregone diversions, [2] introduction of reusable wastewater effluent to the South Platte River at discharge points of MWRD or other wastewater treatment facility, [3] introduction of reusable lawn irrigation return flows to the South Platte River, and [4] reservoir releases.

61.2.1.2 Direct Releases. Direct releases to the South Platte River of Thornton's water rights.

61.2.1.3 Other Water. In 86CW402 only, any other source of water lawfully available to Thornton for such use after notice to the parties to this proceeding and approval by the Division Engineer.

- 61.2.2 Phase III. The source of Phase III substituted supply will be the same as for Phase II.
- 61.2.3 All Phases. Insofar as substitute supply consists of water which has then been judicially determined to be reusable, the use of said reusable water as a part of these exchanges shall be further limited by the provisions of the decree which established the amount of the reusable water. No provision of the decree entered in 87CW107, however, shall be construed to preclude the use of the water rights described therein as substitute supply in these exchanges.
- 61.3 Determinations Regarding Quality. In years when Thornton anticipates seeking an administrative agency approval in connection with the quality of water to be used as substitute supply in the exchanges decreed herein, as provided in paragraphs 58.4.3.1, 58.4.3.2, 60.2.3.1 or 60.2.3.2, Thornton shall include notice of that fact in the Operating Plan described in paragraph 63.1. In the event it becomes necessary for Thornton to seek such an approval in a year no notice was given in the Operating Plan, Thornton shall mail such a notice to the parties identified with an asterisk [*] in paragraph 3.
62. General Terms and Conditions. In addition to the terms and conditions in the previous provisions concerning each of the foregoing applications, the following general terms and conditions shall be complied with in the exercise of the water rights described herein as they are operated as part of the Northern Project:
- 62.1 Modification of WSSC System. Pursuant to paragraph 4 of the WSSC/Thornton Contract, at the City's own cost and with the consent of WSSC, Thornton will make such physical changes to company facilities as necessary to ensure that historic water deliveries to other shareholders are not altered in time or quantity, their expenses not increased, nor their other rights as WSSC shareholders adversely affected. Thornton shall also conduct all of its activities and fulfill all of its obligations under this decree in full compliance with paragraph 4 of the WSSC/Thornton Contract. Except to the extent a valid existing contract provides otherwise, this Court retains exclusive jurisdiction for the enforcement of paragraph 4 of the WSSC/Thornton Contract. Nothing in this decree, however, shall be taken to imply that this Court has continuing jurisdiction over any provision or provisions of the WSSC/Thornton Contract other than the provisions of its paragraph 4. With the exception of paragraph 4, exclusive jurisdiction for the enforcement of the WSSC/Thornton Contract shall remain in the District Court of Larimer County, Colorado.
- 62.2 Ditch Companies' Assessments. In order to protect other water users within the WSSC System, Thornton shall continue to pay assessments and otherwise shall bear the obligations of a shareholder unless and until Thornton transfers shares to some third party or other arrangements or agreements are made between Thornton and WSSC or JDC.
- 62.3 Priorities. The priorities confirmed herein shall be administered based upon the filing of the applications herein in 1986 and shall be junior to the priority for only those water rights and exchanges for which applications were filed in previous years. As between all rights for which applications were filed in the same calendar year, priorities shall be

determined by historical dates of appropriation and shall not be affected by the date of the entry of the decree.

- 62.4 Volumetric Limitations. Thornton shall operate its project and exercise the water rights awarded and changed herein in such a way as to limit project yield, as described below, within the following limitations:

62.4.1 Total Volumetric Limitations. The total amount of project yield shall be limited to no more than the following amounts: 1] 76,000 a.f. in any one year; 2] an average annual yield of 58,800 a.f. during any thirty-six year period, and; 3] during the first thirty-six years of project operation only, an average of 65,300 a.f. during any consecutive ten year period. These limitations shall be measured at Thornton's pumping station on Water Supply and Storage Company Reservoir No. 4 and/or at any other point within the WSSC System from which Thornton may withdraw or release water for Municipal Uses other than fulfillment of replacement obligations under this decree. The term "project yield" means the combined yield of Phases I, II, and III, of the Northern Project, as described in paragraph 9, above.

62.4.2 Volumetric Limitations on Water Rights Changed. The water rights which Thornton proposed to change by its application in 87CW332, and the changes of which are approved by this decree, shall be exercised within the following volumetric limitations. Each of the limits set forth below apply only to those shares which have been converted to Municipal Use pursuant to paragraph 57.2.1:

62.4.2.1 Transmountain Diversions. The water rights represented by Thornton's WSSC shares include rights which divert water from other basins into the Poudre basin. In general, Thornton's interest in those water rights may not be exercised in a manner that will materially affect the amount and timing of water that historically has been available to water users in other Divisions. The following limitations, which shall begin to apply when Thornton removes the transmountain portion of any shares from agricultural use, will prevent such an affect:

62.4.2.1.1 Colorado River Basin. Thornton's pro rata portion of diversions attributable to water diverted from Water Division No. 5 under the water rights described in Exhibit B, hereto, shall be limited to no more than the following amounts: 1] 11,902 a.f. (42.0 a.f. per WSSC share) in any one year; 2] an annual average of 8,084 a.f. (28.5 a.f. per WSSC share) in any thirty-six year period, and; 3] during the first thirty-six years of project operation only, an annual average of 8,825 a.f. (31.1 a.f. per WSSC share) during any consecutive ten year period. These limitations shall be measured at the flume on La Poudre Pass.

62.4.2.1.2 North Platte River Basin in Division 6. The portion of project yield attributable to water diverted from Water Division No. 6 by the Cameron Pass Ditch under the water rights described in Exhibit B, hereto, shall be limited to no more than the following amounts: 1] 192

a.f. (0.68 a.f. per WSSC share) in any one year ; 2] an annual average of 56 a.f. (0.2 a.f. per WSSC share) in any thirty-six year period, and; 3] during the first thirty-six years of project operation only, an annual average of 116 a.f. (.41 a.f. per WSSC share) during any consecutive ten year period. These limitations shall be measured at Cameron Pass.

62.4.2.1.3 Seasonal Limitations. Thornton shall receive its pro rata share of the diversions made by WSSC in accordance with the other provisions of this decree. However, the foregoing transmountain water rights shall not be imported for Municipal Use by Thornton, except at such times as they are being diverted under their decrees by the Water Supply and Storage Company for the use of shareholders other than Thornton.

62.4.2.2 Native Diversions. The following limitations shall begin to apply when Thornton converts any of its shares to Municipal Use.

62.4.2.2.1 Annual Amount.

62.4.2.2.1.1 WSSC Shares. Thornton's pro rata portion of WSSC native water diversions from the Cache la Poudre River under the water rights described in Exhibits B and C hereto, including WSSC's interest in JDC and including native water re-diverted by WSSC after release from Chambers Lake and Long Draw reservoirs, shall be limited to no more than the following amounts: 1] 31,293 a.f. (110.4 a.f. per converted WSSC share) in any one year; 2] an annual average of 15,717 a.f. (55.47 a.f. per converted WSSC share) in any thirty-six year period, and; 3] during the first thirty-six years of project operation only, an annual average of 17,504 a.f. (61.77 a.f. per converted WSSC share) during any consecutive ten year period. These limitations shall be measured at the Poudre River headgates of the Larimer County Canal and the Jackson Ditch.

62.4.2.2.1.2 JDC Shares. Thornton's pro rata portion of JDC diversions from the Cache la Poudre River under the water rights described in Exhibit C hereto, for Thornton's 1.25 JDC shares, when converted to Municipal Use, shall be limited to no more than the following amounts: 1] 435 a.f. in any one year; 2] an annual average of 323 a.f. in any thirty-six year period, and; 3] during the first thirty-six years of project operation only, an annual average of 346 a.f. during any consecutive ten year period. These limitations shall be measured at the Poudre River headgate of the Jackson Ditch.

62.4.4.2.1 The sum of Thornton's diversions at the headgates of the Larimer County Canal and the Jackson Ditch shall not exceed: 1] a single year maximum of 37,000 a.f.; 2] an annual average of 12,600 a.f. in any thirty-six year period, and; 3] during the first thirty-six years of project operation only, an average of 18,000 a.f. during any consecutive ten year period. These limitations apply to both diversions to storage in the WSSC System and also direct flow diversions.

62.4.4.2.2 Thornton's diversions at Thornton Pump Station No. 1 shall not exceed an annual average of 1,100 a.f. in any thirty-six year period, and during the first thirty-six years of project operation only, an average of 1,400 a.f. during any consecutive ten year period.

62.4.4.2.3 The sum of Thornton's diversions at the headgate of the Greeley No. 2 Canal and Thornton Pump Station No. 2 shall not exceed an annual average of 1,100 a.f. in any thirty-six year period, and during the first thirty-six years of project operation only, an average of 1,600 a.f. during any consecutive ten year period.

62.4.4.2.4 Thornton's diversions at the headgate of the Ogilvy Ditch shall not exceed an annual average of 100 a.f. in any thirty-six year period, and during the first thirty-six years of project operation only, an average of 500 a.f. during any consecutive ten year period.

62.4.4.2.5 The sum of Thornton's diversions at the headgate of the Patterson Ditch and Thornton Pump Station No. 3 shall not exceed an annual average of 14,100 a.f. in any thirty-six year period, and during the first thirty-six years of project operation only, an average of 22,200 a.f. during any consecutive ten year period.

62.4.5 Water Supply and Storage Company (Ditch) Exchange Withdrawals. Withdrawals by exchange from the WSSC System pursuant to the water rights confirmed in 86CW402 shall be limited to no more than the following amounts: 1] 69,000 a.f. in any one year; 2] an annual average of 41,000 a.f. in any thirty-six year period, and; 3] during the first thirty-six years of project operation only, an average of 46,500 a.f. during any consecutive ten year period. Further, Thornton shall be allowed to operate its exchange on diversions by WSSC only to the extent those diversions are being made for the use of shareholders other than Thornton.

63. Terms and Conditions Relating to Administration and Accounting. The diversion, storage, replacement and exchange of water by Thornton shall be administered by the State and Division Engineers as follows:

63.1 Operating Plan. On or before April 1 of each year, Thornton shall file with the Division Engineer an annual operating plan describing operations and components of the Northern Project, and shall provide notice to the objectors identified with an asterisk [*] in paragraph 3 above. Thornton shall provide a copy of such plan to any objector who

so requests at a reasonable copying cost. The operating plan shall include the following items: 1] the number of Non-TM shares; 2] the number of shares converted to Municipal Use; 3] the location of the farms and sectors historically irrigated with shares that are now Non-TM shares, and the location of the farms on which "Non-TM" shares have been consolidated; 4] the location of the farms and sectors from which the shares are to be converted to Municipal Use; 5] the number of acres, on a farm-by-farm basis, that are to be dried-up in the forthcoming year pursuant to paragraph 57.6.2; 6] the number of acres, on a farm-by-farm basis, that were to be dried up in preceding years pursuant to paragraph 57.6.2; 7] aerial photographs from the previous irrigation season documenting the number of acres that were irrigated and the number of previously irrigated acres that were dried up on each of those farms that have been only partially removed from irrigation pursuant to paragraph 57.6.2; 8] the recharge plan for replacement of return flows to the ground water aquifer as set forth above in paragraph 57.3.3.4; 9] the location of augmentation stations or other measuring stations to be used in measuring Thornton's replacement obligations; 10] the identity and location of all points of diversion to be used by Thornton in the operation of the water rights granted in 86CW401 and 86CW403; 11] the location and capacities of the raw water pump station(s) to deliver water from the WSSC System to the City of Thornton; 12] a general description of how the various components of the Northern Project will be operated and; 13] notices required by paragraph 61.3.

63.2 Accounting Forms.

63.2.1 Approval. Thornton shall submit proposed accounting forms to the Division Engineer for review within six months after entry of a decree herein. The proposed accounting forms shall also be submitted by Thornton to the objectors identified with an asterisk [*] in paragraph 3 above. The objectors shall have the right to fully participate in the review of accounting forms in any proceedings before or discussion with the Division Engineer or his staff. The parties shall diligently pursue the development of acceptable accounting forms until said forms have been completed and accepted by the Division Engineer. It shall be the goal of the parties to obtain the Division Engineer's approval of the proposed accounting forms within two years after the entry of this decree. Prior to the diversion of water by Thornton under any right decreed or approved herein, an accounting form for diversion by that right shall have been approved by the Division Engineer and filed with the Division 1 Water Court.

63.2.2 Content. The accounting forms are not specifically decreed herein and may, due to operational experience, or the request of the Division Engineer, require modification. Such modification of the approved accounting forms shall be approved by the Division Engineer. The applicant shall measure its diversions, storage, exchanges and replacements, with measuring devices approved by, and in a manner acceptable to the Division Engineer, shall maintain accurate daily records of diversions, storage, replacements and exchanges, and shall provide copies of its accounting records to the Division Engineer on a monthly basis or as may be otherwise required by the water commissioner. Thornton shall make such information available to the other objectors upon request and at their cost. The approved accounting forms shall include, at a minimum, the river call in effect,

62.4.2.2.2 Monthly Limitations. Thornton's pro rata portion of WSSC and JDC diversions under direct flow decrees through the companies' respective headgates on the Cache la Poudre River from April through October of any year shall not exceed the monthly maximums, the thirty-six year monthly averages, and during the first thirty-six years of project operation only, the ten year monthly averages which are set forth on Exhibit FF hereto.

62.4.2.2.3 Seasonal Limitations. The direct flow water rights described in Exhibits B and C hereto whose source is the Poudre River shall not be diverted for Municipal Use except at those times that such water rights are being diverted for the use of shareholders other than Thornton. When so operated, Thornton shall receive its pro rata share of the diversions made by WSSC in accordance with the other provisions of this decree. Diversions for Municipal Use under the direct flow water rights identified on Exhibit B hereto which divert from the Poudre River at the headgate of the Larimer County Canal shall be allowed only during the period from May 1 to September 30 of any year. Diversions for Municipal Use under the water rights identified on Exhibit C hereto which divert from the Poudre River at the headgate of the Jackson Ditch shall be allowed only during the period from April 1 to October 31 of any year.

62.4.2.2.4 Storage Decree Limitations. Thornton's pro rata portion of WSSC diversions made pursuant to the storage decrees described on Exhibit B hereto shall be charged against the amount which may be legally diverted under the respective storage decrees.

62.4.3 Thornton's Exchange Diversions. Diversions by exchange pursuant to the water rights confirmed in 86CW401 shall be limited to no more than the following rates of diversion and volumetric amounts:

62.4.3.1 Flow Rates. Each of the points of diversion for Thornton's River Exchange shall be allowed to divert at its rate of diversion decreed in paragraph 52.1 above, except as follows:

62.4.3.1.0.1 The sum of the flow rates at which water is being diverted by Thornton at the headgate of the Boxelder Ditch and Thornton Pump Station No. 1 shall not exceed 50 c.f.s.

62.4.3.1.0.2 The sum of the flow rates at which water is being diverted by Thornton at the headgate of the Fossil Creek Reservoir Inlet, the Greeley No. 2 Canal and Thornton Pump Station No. 2 shall not exceed 50 c.f.s.

62.4.3.2 Volumetric Limits. The volumes of water diverted at the following points of diversion, or combinations of points of diversion, shall be limited as follows, and these limits shall apply regardless of whether or not the water

so exchanged is then used as substitute supply for the Ditch Exchange. Within the constraints of these volumetric limits, Thornton shall be allowed to fill and refill the structures in which this water may be stored.

62.4.3.2.1 The sum of Thornton's diversions at the headgates of the Larimer County Canal and the Jackson Ditch shall not exceed an annual average of 4,500 a.f. in any thirty-six year period, and during the first thirty-six years of project operation only, an average of 7,300 a.f. during any consecutive ten year period.

62.4.3.2.2 Thornton's diversions at the headgate of the Larimer & Weld Canal shall not exceed an annual average of 900 a.f. in any thirty-six year period, and during the first thirty-six years of project operation only, an average of 1,500 a.f. during any consecutive ten year period.

62.4.3.2.3 The sum of Thornton's diversions at the headgate of the Boxelder Ditch and Thornton Pump Station No. 1 shall not exceed an annual average of 800 a.f. in any thirty-six year period, and during the first thirty-six years of project operation only, an average of 1,700 a.f. during any consecutive ten year period.

62.4.3.2.4 The sum of Thornton's diversions at the headgate of the Fossil Creek Reservoir Inlet, the Greeley No. 2 Canal and Thornton Pump Station No. 2 shall not exceed an annual average of 1,100 a.f. in any thirty-six year period, and during the first thirty-six years of project operation only, an average of 2,100 a.f. during any consecutive ten year period.

62.4.3.2.5 Thornton's diversions at the headgate of the Ogilvy Ditch shall not exceed an annual average of 100 a.f. in any thirty-six year period, and during the first thirty-six years of project operation only, an average of 500 a.f. during any consecutive ten year period.

62.4.4 Thornton's Conditional River Diversions. Diversions pursuant to the water rights confirmed in 86CW403 shall be limited to no more than the following rates of diversion and volumetric amounts:

62.4.4.1 Flow Rates. Each of the points of diversion for Thornton's conditional river diversions shall be allowed to divert at its rate of diversion decreed in paragraph 53.2 above, except as follows:

62.4.4.1.1 The sum of the flow rates at which water is being diverted by Thornton at the headgate of the Greeley No. 2 Canal and Thornton Pump Station No. 2 shall not exceed 50 c.f.s.

62.4.4.2 Volumetric Limits. The volumes of water diverted at the following points of diversion, or combinations of points of diversion, shall be limited as follows and these limits shall apply regardless of whether or not the water so diverted is then used as substitute supply for the Ditch Exchange:

identification of the location of the farms from which the shares, or the transmountain water attributable to any shares have been removed, the number of shares converted to Municipal Use, and those left in agricultural use, the number of Non-TM shares, total diversions of WSSC and JDC water rights by water category (e.g. transmountain, native direct flow, native storage, CBT, etc.) Thornton's pro rata portion of WSSC and JDC diversions and storage by water category, other Thornton diversions identified by category (e.g. appropriations in 86CW401 and 86CW403), deliveries of water to Thornton, identified by water category, substitute supply sources, inflows to and outflows from storage by water category, cumulative storage contents for Thornton (by water category) and WSSC/JDC irrigators, Thornton's return flow and replacement obligations and deliveries, Thornton system loss payments, volumetric limitations, cumulative direct flow and storage diversions, daily flow rates diverted, reusable and non-reusable components of Thornton's municipal water production and resulting municipal wastewater flows, lawn irrigation return flows, and any other information reasonably requested by the Division Engineer. Upon request by the Division Engineer, Thornton shall provide access to records of measurements and backup calculations pertaining to the operation of the water rights decreed herein, including all accounting that is conducted pursuant to this decree. The same access shall be provided upon request to any other objector at their cost.

- 63.3 Transit Losses. Thornton's releases of substitute supply to the South Platte River for return to the WSSC System, exchange up the Poudre River or repayment of other obligations at or below the confluence of the South Platte and Poudre Rivers shall be subject to such transit losses as are lawfully assessed by the Division Engineer.
- 63.4 Additional Requirement for Exchange Operation. For the purposes of operating the exchanges described in 86CW401 and 86CW402, Thornton shall be entitled to convey water down the South Platte River only to the extent a live stream exists between the point at which Thornton's substitute supply is placed in the South Platte and the confluence of the South Platte and Poudre Rivers prior to the placement of Thornton's substitute supply into the South Platte River. At such times the appropriate State water administration officials will ensure that water released by Thornton is conveyed undiminished down the South Platte River (except for transit losses) and is passed by intervening headgates between the point of release and the South Platte - Poudre confluence. Thornton shall receive credit for substitute supplies conveyed through that reach of the South Platte River between the Farmers Independent Ditch and the confluence of the South Platte and Poudre Rivers only to the extent and in the amount the Division Engineer determines that the substitute supply reached the South Platte - Poudre confluence. The Court shall retain jurisdiction over the conveyance of Thornton's substitute supply down the South Platte River.
- 63.5 Credits for Lawn Irrigation Return Flows. Of the water applied to lawns within the Thornton service area, seventeen percent (17%) percolates to the ground water table and returns to the South Platte River and its tributaries uniformly throughout the year. An additional 2% of the amount of water applied to lawns in the Thornton service area returns to the South Platte River and its tributaries as surface run-off during the month in which the water is applied. Through the accounting procedure set forth below,

Thornton will maintain sufficient dominion over the reusable portion of those lawn irrigation return flows that they may be used as substitute supply:

63.5.1 Lawn Irrigation Return Flow Accounting Procedure. The following six step procedure shall be used to determine lawn irrigation return flows:

Step 1: Each water service customer within the City of Thornton service area shall be assigned to a particular sub-drainage basin tributary to the South Platte River as shown on Exhibit Q hereto. This assignment will be based on review of topographic maps, aerial photos, customer billing addresses, and site inspection as necessary. New customers will automatically be assigned to a particular sub-drainage basin tributary to the South Platte as new construction proceeds within the Thornton service area.

Step 2: On a monthly basis, the total amount of treated water delivered to each drainage basin will be computed as the sum of all metered usage for each customer within the basin. Base indoor use for a particular month will be the amount delivered to that basin for the previous winter months of December, January, and February, or the amount delivered in the particular month, whichever is less. The outdoor use for lawn irrigation will be computed to be the total use for the month minus the base indoor use. The amount applied to lawns will be computed to be 90 percent of the outdoor use. Thornton will also receive, however, a credit for surface return flow during the month of application equal to 2% of the outdoor use.

Step 3: On a monthly basis, Thornton will account for the amount of reusable supplies and non-reusable supplies used in its system, using diversion records for Thornton's various water sources. Reusable supplies will include only those sources which have actually been decreed for reuse. Thornton's water rights currently decreed for reuse are those listed on Exhibit R hereto, however, Thornton may add reusable sources to this list upon notice to the Division Engineer as additional change decrees are adjudicated in Water Court or upon lease of adjudicated reusable supplies from other parties.

Step 4: The amount of lawn irrigation application computed in Step 2 will be multiplied by the percentage of total water use attributable to reusable sources computed in Step 3 in order to determine the amount of application to lawns attributable to reusable sources.

Step 5: The amount of lawn irrigation application attributable to reusable sources computed in Step 4 shall be multiplied by 17 percent to determine the deep percolation of that water within each sub-basin.

Step 6: The amount of deep percolation in each sub-basin would be multiplied by the Glover lagging factors shown on Exhibit S hereto to determine the lagged timing of return flows to the South Platte River. Commencing on the date of the entry of the decree in these consolidated cases, Thornton may begin accounting for any lawn irrigation return flows attributable to reusable sources.

Accounting forms and procedure approved by the Division Engineer will be used to record the amount of reusable return flow accruing to the South Platte River on a monthly basis attributable to lawn irrigation in previous months.

- 63.5.2 Return Locations. Although Thornton's return flows from lawn irrigation reach the South Platte River at numerous locations, for accounting purposes it will be assumed that such flows return at three locations in order to assist the Water Commissioner in administering the South Platte River. Thornton will be credited at three locations for the return flows accruing in the reaches immediately upstream from each of those points. The three locations are described as follows with reference to Exhibit Q hereto: Return flows originating from unnamed tributaries A, B, C, D, E and the Niver Creek drainage will be credited to the South Platte immediately upstream of the Fulton Ditch headgate. Return flows originating from the drainages of unnamed tributaries F, G, H, I, Brantner Gulch and Grange Hall Creek will be credited downstream of the Fulton Ditch headgate and upstream of the south line of Section 14, Township 1 South, Range 67 West. Return flows to the Todd Creek and Big Dry Creek drainages will be credited to the South Platte at the confluence of Big Dry Creek and the South Platte River.
- 63.5.3 Credit for Subsequent Application of Reusable Water. Thornton may claim credit, in the manner set out above, only for the reusable water applied to lawns within its service area after the date of entry of this decree. Prior to the time that Thornton wishes to claim credit for lawn irrigation return flows from any sub-basin within the City of Thornton service area, Thornton must provide appropriate ground water measurement data either from existing wells or piezometers to demonstrate that water table conditions exist in the particular sub-basin. If the State Engineer's Office determines that additional piezometer test holes are needed, said piezometers will be installed according to the specifications and at the locations which are to be approved by the State Engineer's Office.
- 63.5.4 Lawn Irrigation Return Flows. Thornton shall be entitled to apply its lawn irrigation return flow credits to pay any historic return flow, replacement and/or substitute supply obligations set forth in this decree and the decrees entered in Case Nos. 87CW107, 87CW334 and 89CW132, provided Thornton is capable of delivering the water associated with such credits, directly or by exchange, to the location required to satisfy such obligation.
64. Other Claims and Defenses. All claims and defenses raised at trial and not specifically approved herein are denied, except with regard to Thornton's claim for reuse of, or credit for seepage losses from the WSSC System attributable to transmountain water, which remains undecided. Thornton shall not be precluded from pursuing such a claim in the future, and no party shall be precluded from opposing such a claim if made.
65. Diligence Filings. Application for findings of reasonable diligence shall be made for the conditional appropriations and conditional rights of exchange during the month of March, 2004, and shall be filed thereafter in accordance with C.R.S. § 37-92-301(4) until the conditional appropriations and conditional rights of exchange decreed herein are made absolute or otherwise disposed of.

66. Retained Jurisdiction. Pursuant to C.R.S. §37-92-304(6), upon the motion of a party to this proceeding, this decree shall be subject to reconsideration as set forth below. Although the period of time for which jurisdiction is retained is, in most instances, limited to a specific number of years, upon a showing that lack of material injury has not then been conclusively established, any of these periods may be extended prior to their termination.

66.1 Change of Use and Plan for Augmentation. The Court retains jurisdiction over the change of use of, and plan of augmentation associated with, Thornton's pro rata portion of WSSC and JDC water rights to reconsider the question of whether the terms and conditions pertaining thereto are necessary or adequate to prevent injury to the vested rights of others. Such period of retained jurisdiction shall continue until ten (10) years after all of Thornton's WSSC and JDC shares are converted to Municipal Use by the City of Thornton, or ten years after Thornton gives notice to the parties identified with an asterisk [*] in paragraph 3, above, that no additional shares will be converted to Municipal Use. At the conclusion of such ten year period, unless extended by the Court as provided above, the retained jurisdiction over Thornton's change of use shall terminate without further action by the Court. The jurisdiction retained under this paragraph specifically excludes review of the Court's factual findings pertaining to the historic use of WSSC and JDC water rights owned by Thornton at the time of entry of this decree.

66.1.1 WSSC System Losses. The Court specifically retains jurisdiction to review, during Phases I and II, the amount of system loss assessed against Thornton by WSSC pursuant to paragraph 57.3.2 to determine whether water users other than WSSC shareholders are being injured thereby. Thornton shall notify the Division Engineer annually of the amount of system loss it is being charged by WSSC.

66.1.2 Amount and Character of Inflows. The Court further retains jurisdiction to review the question of what amount of the inflow into the Larimer County Canal at various locations along its course is composed of CBT water, including the question of whether any of such inflow should legally be characterized as CBT water.

66.1.3 Determinations as to Revegetation. Until three years after all of Thornton's WSSC and JDC shares are converted to Municipal Use by the City of Thornton, or three years after Thornton gives notice to the parties identified with an asterisk [*] in paragraph 3, above, that no additional shares will be converted to Municipal Use, the Court retains jurisdiction to review determinations as to whether a self-sustaining suitable dryland ground cover has or has not been established.

66.1.4 Re-irrigation In Phase III. A period of retained jurisdiction shall commence at the time Thornton begins operation of Phase III to address injury which may arise from a material change in return flow patterns attributable to WSSC native water when Thornton's shares are returned to agricultural use. Such period of retained jurisdiction shall continue until ten (10) years after Phase III has become fully operational and Thornton gives notice to the parties identified with an asterisk [*] in paragraph 3, above, that no additional shares will be returned to agricultural use. At the conclusion of such ten year period, unless extended by the Court as

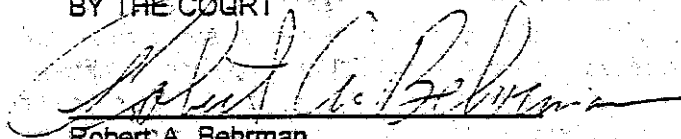
provided above, the jurisdiction retained under this paragraph shall terminate without further action by the Court.

- 66.2 Lawn Return Credits. That portion of the decree concerning the computation of credits to Thornton for lawn irrigation return flows accruing to the South Platte River shall be subject to retained jurisdiction as to each sub-drainage basin identified on Exhibit Q for a period of ten (10) years following the date on which Thornton demonstrates the existence of water table conditions as required by paragraph 63.5.3. After the entry of this decree, each time Thornton provides data to the Division Engineer regarding the existence of water table conditions in a new sub-basin, Thornton shall notify the objectors identified with an asterisk [*] in paragraph 3, above, of the fact that such information has been provided. At the conclusion of such ten year period, unless extended by the Court as provided above, the retained jurisdiction over Thornton's credits for lawn irrigation return flows shall terminate without further action by the Court.
- 66.3 WSSC/Thornton Contract. The Court retains perpetual continuing jurisdiction to enforce paragraph 4 of the WSSC/Thornton Contract.
- 66.4 State Engineer Determinations. The Court retains perpetual continuing jurisdiction to review, as a water matter, all determinations of the State and Division Engineers, and other administrative agencies made pursuant to the provisions of this Decree; however, the Court recognizes that such continuing jurisdiction may not be exclusive. The terms of this paragraph shall not preclude lawful review of determinations of administrative agencies concerning the development and operation of Thornton's Northern Water Supply Project in other forums.
- 66.5 Water Quality. Until 10 years after the Ditch Exchange becomes fully operational, the Court retains continuing jurisdiction to reconsider the question of whether the decree provisions relating to water quality are adequate or necessary to prevent injury. Thornton shall notify the objectors identified with an asterisk [*] in paragraph 3, above, at the time the Ditch Exchange becomes fully operational. At the conclusion of such ten year period, unless extended by the Court as provided above, the retained jurisdiction over the provisions relating to water quality shall terminate without further action by the Court.
- 66.6 South Platte Transit Losses and Delivery of Substitute Supply. The Court retains jurisdiction to ensure that the substitute supplies introduced to the South Platte River by Thornton are not diminished by the acts of other water users during conveyance.
- 66.7 Additional Shares. The Court shall retain jurisdiction indefinitely to permit the change of water rights represented by additional WSSC and JDC shares now owned or hereafter acquired by Thornton upon the terms and conditions of this decree. These rights may be changed only upon the filing of an application under the Court's retained jurisdiction in this matter identifying the water rights to be changed. Notice of that application shall be published in the resume. With respect to future changes of additional shares by Thornton pursuant to this decree, no party shall be foreclosed from challenging the findings and conclusions herein as they relate to such future changes

or asserting any conditions or terms and conditions for the change of such additional shares.

SIGNED AND ENTERED this 9th day of March, 1998.

BY THE COURT

A handwritten signature in cursive script, appearing to read "Robert A. Behrman", written over a horizontal line.

Robert A. Behrman
Senior Judge

(Assigned as Water Judge by authority of the Chief Justice)
Water Division No. 1
State of Colorado

**DUE TO VOLUMINOUS EXHIBITS
ATTACHED TO REMAND DECREE, ONLY
EXHIBITS K & T ARE INCLUDED**

EXHIBIT K

LIST OF THORNTON WATER RIGHTS USED FOR SUBSTITUTE SUPPLY AND REPLACEMENT OBLIGATIONS

<u>NAME</u>	<u>DECREED AMOUNT¹</u>	<u>DECREED SOURCE</u>	<u>APPROP. DATE</u>	<u>ADJUD. DATE</u>	<u>WTR DIST.</u>	<u>ADJUDICATION PROCEEDING</u>	<u>THORNTON'S CHANGE PROCEEDING</u>
<u>UPPER CLEAR CREEK</u>							
FARMERS HIGHLINE CANAL CO.							87CW334
FARMERS HIGHLINE CANAL	0.276	CLEAR CREEK	1860/02/25	1884/10/04	7	6963	
FARMERS HIGHLINE CANAL	1.000	CLEAR CREEK	1860/05/16	1884/10/04	7	6963	
FARMERS HIGHLINE CANAL	3.281	CLEAR CREEK	1860/05/31	1884/10/04	7	6963	
FARMERS HIGHLINE CANAL	39.800	CLEAR CREEK	1860/07/01	1884/10/04	7	6963	
FARMERS HIGHLINE CANAL	1.610	CLEAR CREEK	1863/05/28	1884/10/04	7	6963	
FARMERS HIGHLINE CANAL	2.750	CLEAR CREEK	1863/06/20	1884/10/04	7	6963	
FARMERS HIGHLINE CANAL	2.890	CLEAR CREEK	1865/04/23	1884/10/04	7	6963	
FARMERS HIGHLINE CANAL	0.808	CLEAR CREEK	1865/11/02	1884/10/04	7	6963	
FARMERS HIGHLINE CANAL	0.330	CLEAR CREEK	1870/05/24	1884/10/04	7	6963	
FARMERS HIGHLINE CANAL	154.000	CLEAR CREEK	1872/04/01	1884/10/04	7	6963	
FARMERS HIGHLINE CANAL	191.000	CLEAR CREEK	1886/04/01	1895/10/09	7	21886	
FARMERS HIGHLINE CANAL	335.860	CLEAR CREEK	1895/04/23	1895/10/09	7	21886	
FARMERS HIGHLINE CANAL	465.000	LEYDEN CREEK	1905/07/12	1936/05/13	7	60052	
FARMERS HIGHLINE CANAL	193.80	LITTLE DRY CREEK	1872/04/01	1936/05/13	7	60052	
BROAD LAKE ²	40.00 AF	CLEAR CREEK & LITTLE DRY CREEK	1870/12/31	1936/05/13	7	60052	
BROAD LAKE ²	52.50 AF	CLEAR CREEK & LITTLE DRY CREEK	1889/12/31	1936/05/13	7	60052	
HYATT LAKE RESERVOIR ²	400.000 AF	CLEAR CREEK	1871/12/31	1936/05/13	7	60052	
HYATT LAKE RESERVOIR ²	693.400 AF	CLEAR CREEK	1899/10/01	1936/05/13	7	60052	
LEYDEN RESERVOIR ²	1053.000 AF	CLEAR CREEK	1905/07/12	1936/05/13	7	60052	

DECREE

86CW401,402,403; 87CW332

THORNTON'S
CHANGE
PROCEEDING

89CW132

ADJUDICATION
PROCEEDING

WTR
DIST.

ADJUD.
DATE

APPROP.
DATE

DECREED SOURCE

DECREED
AMOUNT

NAME

MANDALAY IRRIGATION
COMPANY

UPPER CHURCH LAKE	119.7 AF	COAL CREEK	1870/05/20	1900/12/19	6	3944
UPPER CHURCH LAKE	43.80 AF	COAL CREEK	1891/11/01	1900/12/19	6	3944
LOWER CHURCH LAKE	135.97 AF	DRY CREEK & DRAW	1871/07/01	1918/08/02	2	40750
LOWER CHURCH LAKE	242.000 AF	CLEAR CREEK	1878/12/31	1936/05/13	7	60052
CHURCH DITCH	0.900	CLEAR CREEK	1862/06/01	1884/10/04	7	6963
GOLDEN CITY RALST CK	41.430	CLEAR CREEK	1865/02/28	1884/10/04	7	6963
CHURCH DITCH	1.250	CLEAR CREEK	1865/05/16	1884/10/04	7	6963
GOLDEN CITY RALST CK	18.260	CLEAR CREEK	1877/11/18	1884/10/04	7	6963
GOLDEN CITY RALST CK	18.850	CLEAR CREEK	1878/11/15	1884/10/04	7	6963
GOLDEN CITY RALST CK	32.340	CLEAR CREEK	1881/11/20	1884/10/04	7	6963
GOLDEN CITY RALST CK	185.000	RAINSTON CREEK	1887/11/18	1936/05/13	7	60052
GOLDEN CITY RALST CK	100.120	CLEAR CREEK	1886/03/16	1936/05/13	7	60052

89CW132

FARMERS RESERVOIR & IRRIGATION
CO., STANDLEY LAKE DIVISION

KINNLEAR RESERVOIR	940.37 AF	WOMAN CREEK	1869/09/01	1918/08/02	2	40750
KINNLEAR RESERVOIR	940.37 AF	COAL CREEK	1869/09/01	1882/08/02	6	1330
KINNLEAR DITCH	40.470	WOMAN CREEK	1869/09/01	1918/08/02	2	40750
KINNLEAR DITCH #2	26.470	COAL CREEK	1872/05/20	1882/06/02	6	1330
KINNLEAR DITCH	781.000	COAL CREEK	1902/03/04	1920/06/21	6	6672
STANDLEY LAKE	32361.000 AF	CLEAR, LEYDEN & RAINSTON CREEKS	1902/03/04	1936/05/13	7	60052
CROKE CANAL	944.000	CLEAR, LEYDEN & RAINSTON CREEKS	1902/03/04	1936/05/13	7	60052
STANDLEY LAKE	16699.000 AF C	CLEAR, LEYDEN & RAINSTON CREEKS	1902/03/04	1936/05/13	7	60052
STANDLEY LAKE ENL	49487.000 AF	COAL CREEK	1902/03/04	1926/06/21	6	6672
KINNLEAR RESERVOIR	1,000.000 AF	COAL CREEK	1929/12/31	1953/09/28	6	12111
LAKE ERIE RESERVOIR	302.000 AF	CLEAR, LITTLE DRY & RALSTON CREEKS	1888/08/15	1936/05/13	7	60052

82CW222

DEGREE
86CW401,402,403; 87CW332

<u>NAME</u>	<u>DECREED AMOUNT</u>	<u>DECREED SOURCE</u>	<u>APPROP. DATE</u>	<u>ADJUD. DATE</u>	<u>WTR DIST.</u>	<u>ADJUDICATION PROCEEDING</u>	<u>THORNTON'S CHANGE PROCEEDING</u>
EASTLAKE WATER COMPANY							
EASTLAKE NO. 1	125,000 AF	CLEAR CREEK	1887/09/01	1936/05/13	7	60052	90CW228
EASTLAKE NO. 2	800,000 AF	CLEAR CREEK	1887/10/01	1936/05/13	7	60052	
EASTLAKE NO. 3	197,950 AF	CLEAR CREEK	1889/10/01	1936/05/13	7	60052	
RANKIN RESERVOIR COMPANY							
RANKIN [STORM] RES	44,160 AF	CLEAR CREEK	1891/12/01	1936/05/13	7	60052	91CW070
RANKIN [STORM] RES	9,490 AF C	CLEAR CREEK	1891/12/01	1936/05/13	7	60052	
POITZ RESERVOIR	20,000 AF	CLEAR CREEK	1884/10/01	1936/05/13	7	60052	91CW070
POITZ RESERVOIR ENL.G	60,000 AF	CLEAR CREEK	1899/10/01	1936/05/13	7	60052	91CW070
KALCEVIC RESERVOIR	57,330 AF	CLEAR CREEK	1903/12/31	1936/05/13	7	60052	91CW070
CROKE RESERVOIR NO. 12	675,000 AF	CLEAR CREEK	1888/12/31	1936/05/13	7	60052	91CW070
ROCKY MOUNTAIN WATER CO. 2							
ROCKY MOUNTAIN DITCH	9.21	CLEAR CREEK	1862/05/01	1884/10/04	7	6963	
ROCKY MOUNTAIN DITCH	7.30	CLEAR CREEK	1864/05/31	1884/10/04	7	6963	
ROCKY MOUNTAIN DITCH	47.13	CLEAR CREEK	1865/03/31	1884/10/04	7	6963	
ROCKY MOUNTAIN DITCH	113.66	CLEAR CREEK	1873/03/15	1884/10/04	7	6963	
ROCKY MOUNTAIN DITCH	12.70	CLEAR CREEK	1878/03/16	1884/10/04	7	6963	
COSMIC EXCHANGE							
WEST GRAVEL LAKES -							
STANDLEY LAKE EXCH	398,000 AF C	CLEAR CREEK	1985/08/26	1988/12/31	7	88CW268	
BRANNAN -							
STANDLEY LAKE EXCH	1500,000 AF C	CLEAR CREEK	1985/08/26	1988/12/31	7	88CW268	

DECREED
86CW401,402,403, 87CW132

THORNTON'S
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PROCEEDING

ADJUDICATION
PROCEEDING

WTR
DIST.

ADJUD.
DATE

APPROP.
DATE

DECEED SOURCE

DECEED
AMOUNT

NAME

THORNTON CLEAR CREEK APPROPRIATIONS

FARMERS HIGH LINE CANAL	100.000	C	CLEAR CREEK	1990/03/23	1990/12/31	7	90CW230
CROKE CANAL	60.000	C	CLEAR CREEK	1990/03/23	1990/12/31	7	90CW230
STANDLEY LAKE	12000.000	AF C	CLEAR CREEK	1990/03/23	1990/12/31	7	90CW230
CROKE RESERVOIR #12	213.000	AF C	CLEAR CREEK	1990/03/23	1990/12/31	7	90CW230
HUNTERS GLEN RES	60.000	AF C	CLEAR CREEK	1990/03/23	1990/12/31	7	90CW230

SOUTH PLATTE --							
CLEAR CREEK EXCHANGE	104.28	C	CLEAR CREEK	1983/03/29	1983/12/31	7	83CW081

SOUTH PLATTE --							
CLEAR CREEK EXCHANGE							
ENLARGEMENT	200.000	C	CLEAR CREEK	1990/11/08	1990/12/31	7	90CW231

LOWER CLEAR CREEK

LOWER CLEAR CREEK
DITCH COMPANY

89CW132

CLEAR CREEK & PLATTE
RIVER DITCH

6963

COLORADO AGRICULTURAL
DITCH

89CW132

CLEAR CREEK & PLATTE
RIVER DITCH
COLO AGRIC DITCH
COLO AGRIC DITCH

6963

6963

6963

DECREE

86CW401,402,403; 87CW332

THORNTON'S
CHANGE
PROCEEDING

89CW132

ADJUDICATION
PROCEEDING

WTR
DIST.

ADJUD.
DATE

APPROP.
DATE

DECREED SOURCE

DECREED
AMOUNT

NAME

FISHER DITCH COMPANY

6963

1884/10/04

1861/06/29

CLEAR CREEK

35.000

FISHER DITCH

KERSHAW DITCH COMPANY²

6963

1884/10/04

1861/05/02

CLEAR CREEK

11.440

KERSHAW DITCH

THORNTON LOWER CLEAR CREEK

81CW451

1981/12/31

1981/12/17

C CLEAR CREEK

100.000

CANAL ENLARGEMENT

81CW448

1981/12/31

1981/12/17

CLEAR CREEK &
HOFFMAN GULCH

3600.000 AF C

WEST GRAVEL LAKES

CLEAR CREEK 1990 APPROPRIATIONS

90CW230

1990/12/31

1990/03/23

C CLEAR CREEK

30.000

COJO AGRIC DITCH

90CW230

1990/12/31

1990/03/23

C CLEAR CREEK

4000.000 AF C

TANI LAKES

90CW230

1990/12/31

1990/03/23

C CLEAR CREEK

1500.000 AF C

BRANNAN LAKE

SOUTH PLATTE -- Thornton Area

BURLINGTON DITCH, RESERVOIR
AND LAND COMPANY

87CW107
90CW229

40300

1883/04/20

1864/04/20

S PLATTE RIVER

16.280

DUGGAN DITCH

11200

1893/07/08

1885/11/20

S PLATTE RIVER

350.000

BURLINGTON DITCH

11200

1893/07/08

1885/12/01

SAND CREEK

250.000

BURLINGTON DITCH

11200

1893/07/08

1886/09/01

FIRST CREEK

50.000

BURLINGTON DITCH

11200

1893/07/08

1886/11/15

SECOND CREEK

250.000

BURLINGTON DITCH

11200

1893/07/08

1887/09/15

THIRD CREEK

250.000

BURLINGTON DITCH

DUCK LAKE (a.k.a. ALTURA
RESERVOIR)

80

1918/05/18

1904/09/15

GENEVA CREEK

750.000 AF

DEGREE
86CW401,402,403; 87CW332

K-5

NAME	DECREED AMOUNT	DECREED SOURCE	APPROP. DATE	ADJUD. DATE	WTR DIST.	ADJUDICATION PROCEEDING	THORNTON'S CHANGE PROCEEDING
BARR LAKE ²	1990.350 AF	S. PLATTE RIVER	1885/11/20	1893/07/08	2	11200	
OASIS RESERVIOR ²	9090.900 AF	S. PLATTE RIVER	1885/11/20	1893/07/08	2	11200	
WELLINGTON RESERVOIR COMPANY							87CW107 90CW229
DUGGAN DITCH	7.987	S. PLATTE RIVER	1864/04/20	1883/04/20	2	40300	
WELLINGTON RESERVOIR	2747.720 AF	BUFFALO CREEK	1892/05/31	1922/06/21	23	1839	
MENDENHALL FEEDER DIT.	25.000	MENDENHALL CREEK	1892/09/03	1922/06/21	23	1839	
WELLINGTON RESERV. ENL.	1652.000 AF	BUFFALO CREEK	1920/06/05	1922/06/21	23	1839	
HICKS CREEK FEEDER DITCH	25.000	HICKS CREEK	1921/12/31	1922/06/21	23	1839	
CRAIG DITCH ²							
CLASS SECTION	25.000 C	CLASS CREEK	1920/06/05	1922/06/21	23	1839	
MENDENHALL SECTION	75.000 C	MENDENHALL CREEK	1920/06/05	1922/06/21	23	1839	
CRAIG MEADOWS RES. ²	15000.000 AF C	CRAIG CREEK	1962/06/12	1971/11/15	23	3701	
FARNER WELL 1-11772 [2]	2.210	GROUNDWATER	1957/07/01	1972/12/31	2	W-4711	
WELLINGTON WELL 04181-F [2]	2.770	GROUNDWATER	1953/10/11	1972/12/31	2	W-4712	
FARMERS RESERVOIR & IRRIGATION COMPANY, BARR LAKE DIVISION ²							
BOWLES RESERVOIR NO.1	700.000 AF	S. PLATTE RIVER	1907/01/30	1918/08/02	2	54658	
BOWLES RESERVOIR NO.2	475.000 AF	S. PLATTE RIVER	1908/04/14	1918/08/02	2	54658	
O'BRIAN DITCH	600.000	S. PLATTE RIVER	1908/03/09	1918/08/02	2	54658	
BARR LAKE ENLG.	21930.000 AF	S. PLATTE RIVER	1909/01/13	1918/08/02	2	54658	
BARR LAKE ENLG. REFILL	33011.000 AF	S. PLATTE RIVER	1909/01/13	1918/08/02	2	54658	

DECREE
86CW401,402,403; 87CV332

NAME	DECREED AMOUNT	DECREED SOURCE	APPROP. DATE	ADJUD. DATE	WTR DIST.	ADJUDICATION PROCEEDING	THORNTON'S CHANGE PROCEEDING
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THORNTON'S METRO WWTP & BURLINGTON EXCHANGES

METRO-SOUTH PLATTE EXCHANGE (a.k.a. RIVER EXCHANGE)	100,000	C S PLATTE RIVER	1979/12/31	1979/12/31	2	79CW374	
ENLARGED RIVER EXCHANGE	100,000	C S PLATTE RIVER	1979/12/31	1988/12/31	2	88CW261	

METRO-BURLINGTON EXCHANGE (a.k.a. DITCH EXCHANGE)	100,000	C BURLINGTON DITCH	1979/12/31	1979/12/31	2	79CW374	
ENLARGED DITCH EXCHANGE	100,000	C BURLINGTON DITCH	1979/12/31	1988/12/31	2	88CW261	

TANI LAKES

TANI LAKES RESERVOIRS	8000,000	AF C S PLATTE RIVER	1976/12/13	1979/12/31	2	79CW376	
TANI LAKES GRNDWTR	8000,000	AF C S PLATTE RIVER	1976/12/13	1989/12/31	2	89CW223	
DAHLIA PIT							
DAHLIA PIT RESERVOIR	4500,000	AF C S PLATTE RIVER	1988/10/10		2	92CW164 [3]	
DAHLIA PIT EXCHANGES	100,000	C S PLATTE RIVER & CLEAR CREEK	1988/10/10		7	92CW164 [3]	

THORNTON SOUTH PLATTE GRAVEL PITS

	59,847.0	AF C S PLATTE RIVER	1991/12/23		2	91CW126 [3]	
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GERMAN DITCH COMPANY²

GERMAN DITCH	85,000	BIG DRY CREEK	1885/1/25	1918/08/02	2	54658	
GERMAN RES. NO. 8	54,410	AF BIG DRY CREEK	1886/09/01	1918/08/02	2	54658	
GERMAN RES. NO. 12	91,820	AF BIG DRY CREEK	1886/09/01	1918/08/02	2	54658	
GERMAN RES. NO. 1	44,030	AF BIG DRY CREEK	1887/09/12	1918/08/02	2	54658	
GERMAN RES. NO. 2	92,500	AF BIG DRY CREEK	1887/09/12	1918/08/02	2	54658	
GERMAN RES. NO. 3	19,510	AF BIG DRY CREEK	1887/09/12	1918/08/02	2	54658	
GERMAN RES. NO. 5	23,310	AF BIG DRY CREEK	1889/09/01	1918/08/02	2	54658	

NAME	DECREED AMOUNT	DECREED SOURCE	APPROP. DATE	ADJUD. DATE	WTR DIST.	THORNTON'S CHANGE PROCEEDING	
						ADJUDICATION PROCEEDING	
GERMAN RES. NO. 13	9,040 AF	BIG DRY CREEK	1889/10/01	1918/08/02	2	54658	
GERMAN RES. NO. 7	6,880 AF	BIG DRY CREEK	1898/09/01	1918/08/02	2	54658	
GERMAN RES. NO. 14	12,740 AF	BIG DRY CREEK	1900/12/01	1918/08/02	2	54658	
GERMAN RES. NO. 4	36,140 AF	BIG DRY CREEK	1902/09/01	1918/08/02	2	54658	
GERMAN RES. NO. 15	0,760 AF	BIG DRY CREEK	1902/09/01	1918/08/02	2	54658	
GERMAN RES. NO. 10	19,260 AF	BIG DRY CREEK	1904/09/01	1918/08/02	2	54658	
GERMAN RES. NO. 11	9,180 AF	BIG DRY CREEK	1904/09/01	1918/08/02	2	54658	
GERMAN RES. NO. 6	22,950 AF	BIG DRY CREEK	1906/03/17	1918/08/02	2	54658	
GERMAN RES. NO. 9	18,360 AF	BIG DRY CREEK	1906/03/17	1918/08/02	2	54658	

SOUTH PLATTE -- South Park

MCDOWELL RANCH

W-8345-76

GUIRAUD 1 & 2	8,700	MF S. PLATTE RIVER	1867/07/01	1889/10/18	23	341	
GUIRAUD DITCH	48,970	MF S. PLATTE RIVER	1867/07/01	1889/10/18	23	341	
CANON DITCH	41,590	MF S. PLATTE RIVER	1867/07/15	1889/10/18	23	341	
SMALL DITCH	16,000	MF S. PLATTE RIVER	1867/07/15	1889/10/18	23	341	
FEHRINGER NO. 1 DITCH	17,900	MF S. PLATTE RIVER	1875/04/20	1889/10/18	23	341	
FEHRINGER NO. 2 DITCH	13,400	MF S. PLATTE RIVER	1878/04/20	1889/10/18	23	341	

TROUT CREEK RANCH

W-9242-78(A)

TROUT CREEK DITCH	ALL	TROUT CREEK	1862/07/01	1889/10/18	23	341	
SIGAFUS DITCH	25,000	MF S. PLATTE RIVER	1873/05/25	1889/10/18	23	341	
SIGAFUS DITCH, 1ST ENLG	25,000	MF S. PLATTE RIVER	1875/05/01	1889/10/18	23	341	

PLATTE-ANSLEY RANCH

W-9242-78(B)

SPRING BRANCH DITCH	ALL	SPRING	1879/07/01	1889/10/18	23	341	
RAYNOR EDMONDSON NO. 2	25,000	MF S. PLATTE RIVER	1879/07/15	1889/10/18	23	341	
BONNELL DITCH	27,000	MF S. PLATTE RIVER	1882/05/08	1889/10/18	23	341	
RAYNOR EDMONDSON NO. 1	20,000	MF S. PLATTE RIVER	1882/06/10	1889/10/18	23	341	
RAYNOR EDMONDSON NO. 5	20,000	MF S. PLATTE RIVER	1882/06/14	1889/10/18	23	341	

DECREED
86CW401, 402, 403; 87CW332

<u>NAME</u>	<u>DECREED AMOUNT</u>	<u>DECREED SOURCE</u>	<u>APPROP. DATE</u>	<u>ADJUD. DATE</u>	<u>WTR DIST.</u>	<u>ADJUDICATION PROCEEDING</u>	<u>THORNTON'S CHANGE PROCEEDING</u>
RAYNOR EDMONDSON NO.3	5.850	MF S. PLATTE RIVER	1882/06/15	1889/10/18	23	341	
RAYNOR EDMONDSON NO.4	2.000	MF S. PLATTE RIVER	1882/06/28	1889/10/18	23	341	
ROCKER 7 RANCH							84CW056
CROSER HAWXHURST DITCH	2.680	JEFFERSON CREEK	1875/04/25	1889/10/18	23	341	
HAWXHURST DITCH	4.000	JEFFERSON CREEK	1876/04/25	1889/10/18	23	341	
SNYDER CREEK DITCH	10.500	SNYDER CREEK	1884/07/08	1918/05/18	23		
SIBLEY RANCH							84CW057
WILKEN DITCH	10.000	TARRYALL CREEK	1871/05/15	1889/10/18	23	341	
RATCLIFF NO. 1 DITCH	20.000	ROCK CREEK	1872/05/01	1889/10/18	23	341	
ROCK CREEK DITCH	2.700	ROCK CREEK	1872/06/15	1889/10/18	23	341	
RATCLIFF NO. 2 DITCH	4.210	ROCK CREEK	1873/05/20	1889/10/18	23	341	
BORDEN NO. 2 DITCH	4.630	TARRYALL CREEK	1874/11/01	1889/10/18	23	341	
MARY G. BORDEN DITCH ⁴	6.000	TARRYALL CREEK	1874/11/30	1889/10/18	23	341	
RATCLIFF NO. 3 DITCH	4.060	ROCK CREEK	1875/05/01	1889/10/18	23	341	
McMANUS DITCH	20.000	TARRYALL CREEK	1876/05/01	1889/10/18	23	341	
LEE NO. 1 DITCH	1.080	ROCK CREEK	1876/06/01	1889/10/18	23	341	
LEE NO. 2 DITCH	0.500	ROCK CREEK	1877/05/01	1889/10/18	23	341	
ROCK CREEK NO. 1 DITCH	1.350	ROCK CREEK	1877/06/30	1889/10/18	23	341	
BORDEN ENL. DITCH	5.000	TARRYALL CREEK	1879/12/31	1889/10/18	23	341	
DUNBAR NO. 3 DITCH	2.000	TARRYALL CREEK	1880/05/30	1889/10/18	23	341	
RATCLIFF NO. 4 DITCH	3.160	ROCK CREEK	1880/06/01	1889/10/18	23	341	
RATCLIFF NO. 5 DITCH	3.160	ROCK CREEK	1880/06/09	1889/10/18	23	341	
DUNBAR NO. 2 DITCH	4.050	TARRYALL CREEK	1880/08/01	1889/10/18	23	341	
RATCLIFF NO. 7 DITCH	2.050	ROCK CREEK	1882/05/01	1889/10/18	23	341	
RATCLIFF NO. 6 DITCH	2.050	ROCK CREEK	1882/05/01	1889/10/18	23	341	
RATCLIFF NO. 9 DITCH	4.100	ROCK CREEK	1882/05/21	1889/10/18	23	341	
RATCLIFF NO. 8 DITCH	4.320	ROCK CREEK	1882/05/21	1889/10/18	23	341	
LEE NO. 3 DITCH	0.390	ROCK CREEK	1884/05/15	1889/10/18	23	341	
LEE NO. 4 DITCH	0.390	ROCK CREEK	1884/05/21	1889/10/18	23	341	

DECREE
86CW401,402,403, 87CW332

<u>NAME</u>	<u>DECREED AMOUNT</u>	<u>DECREED SOURCE</u>	<u>APPROP. DATE</u>	<u>ADJUD. DATE</u>	<u>WTR DIST.</u>	<u>ADJUDICATION PROCEEDING</u>	<u>THORNTON'S CHANGE PROCEEDING</u>
SCHATTINGER RANCH							84CW055
BRUBAKER DITCH	12.380	JEFFERSON CREEK	1875/05/15	1889/10/18	23	341	
LAVACK NO. 2 DITCH	3.000	QUAKEN ASP GULCH	1877/07/01	1889/10/18	23	341	
CINCINNATI DITCH	9.420	FRENCH CREEK	1879/06/20	1889/10/18	23	341	
HENRY DITCH	1.000	MOUNTAIN CREEK	1879/07/25	1889/10/18	23	341	
TETER RANCH							86CW222
DEMICK DITCH	8.000	MICHIGAN CREEK	1875/04/12	1889/10/18	23	341	
DEMICK ENLAREMENT	4.000	MICHIGAN CREEK	1882/03/01	1889/10/18	23	341	
JOHNSTON RANCH							86CW223
HOPSON DITCH	6.000	UNNAMED CREEK	1872/05/15	1889/10/18	23	341	
HOLTHUSEN DITCH	1.310	NO NAME CREEK	1875/07/01	1889/10/18	23	341	
PEABODY DITCH	3.000	TARRYALL CREEK	1880/04/20	1889/10/18	23	341	
PEABODY NO. 2 DITCH	4.000	TARRYALL CREEK	1881/05/10	1889/10/18	23	341	
FURMAN RANCH							88CW262
LASSELL DITCH	9.600	MICHIGAN CREEK	1882/05/01	1889/10/18	23	341	
FREMONT DITCH	20.000	TARRYALL CREEK	1889/07/01	1896/05/23	23	341D	
SCHATTINGER WASTE DITCH	7.000	SLOUGH	1895/10/09	1913/05/22	23	1678	
MICHIGAN CREEK RANCH							88CW263
WHITTEN DITCH	11.960	MICHIGAN CREEK	1880/03/15	1889/10/18	23	341	
PACKER DITCH	12.000	TARRYALL CREEK	1880/06/20	1889/10/18	23	341	
MCCARTNEY DITCH	75.000	TARRYALL CREEK	1885/05/20	1889/10/18	23	341	
WHITTEN DITCH NO. 2	4.000	MICHIGAN CREEK	1885/06/01	1913/05/22	23	1678	
WHITTEN DITCH NO. 4	7.000	MICHIGAN CREEK	1885/06/01	1913/05/22	23	1678	
WHITTEN DITCH NO. 3	5.000	MICHIGAN CREEK	1885/06/01	1913/05/22	23	1678	

DECREE
86CW401,402,403; 87CW332

<u>NAME</u>	<u>DECREED AMOUNT</u>	<u>DECREED SOURCE</u>	<u>APPROP. DATE</u>	<u>ADJUD. DATE</u>	<u>WTR DIST.</u>	<u>ADJUDICATION PROCEEDING</u>	<u>THORNTON'S CHANGE PROCEEDING</u>
COLLARD RANCH							88CW228
DUNBAR DITCH	26.310	TARRYALL CREEK	1876/04/05	1889/10/18	23	341	
DUNBAR NO. 1 DITCH	27.00	TARRYALL CREEK	1881/06/01	1889/10/18	23	341	
TARRYALL EXCHANGE	20,000.000 AF C	TARRYALL CREEK	1979/12/31	1979/12/31	23	79CW375	
SOUTH PLATTE EXCHANGE	5,000.000 AF C	S. PLATTE RIVER	1979/12/31	1979/12/31	23	79CW375	
SPRUCE GROVE RESERVOIR	65000.000 AF C	TARRYALL CREEK	1981/11/23	1981/12/31	23	81CW449	
SPINNEY MTN. RESERVOIR	4000.000 AF C	S. PLATTE RIVER	1979/09/27		23	92CW163 [3]	
THORNTON SPRUCE GROVE RES. EXCHANGE	45000.000 AF C	TARRYALL CREEK	1981/11/23	1981/12/31	23	81CW449	
THORNTON SPINNEY MOUNTAIN RES. EXCHANGE	49000.000 AF C	S. PLATTE RIVER	1981/11/23	1981/12/31	23	81CW449	
TWO FORKS RESERVOIR	145133.000 AF C	S. PLATTE RIVER	1905/01/13	1953/03/24	23	3286	
	191235.000 AF C	S. PLATTE RIVER	1926/05/01	1953/03/24	23	3286	

SOUTH PLATTE -- Cherry Creek

HEIM WELL NO. 1	1.220	GROUNDWATER	1950/09/07	1972/05/18	8	3635
HEIM WELL NO. 3	2.340	GROUNDWATER	1956/08/20	1972/05/18	8	3635

DECREE
86CW401,402,403; 87CW332

<u>NAME</u>	<u>DECREED AMOUNT</u>		<u>DECREED SOURCE</u>	<u>APPROP. DATE</u>	<u>ADJUD. DATE</u>	<u>WTR DIST.</u>	<u>ADJUDICATION PROCEEDING</u>	<u>THORNTON'S CHANGE PROCEEDING</u>
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SOUTH PLATTE -- GREELEY AREA

THORNTON NORTHERN PROJECT APPROPRIATIONS.

PATTERSON DITCH ENLG.	370.000	C	S.PLATTE RIVER	1986/12/31	1986/12/31	2	86CW403	
THORNTON PUMP STA. #3	400.000	C	S.PLATTE RIVER	1986/12/31	1986/12/31	1	86CW403	

BIG THOMPSON RIVER

GREELEY AND LOVELAND IRRIGATING COMPANY²

BOYD LAKE RESERVOIR	48564.000 AF		BIG THOMPSON	1902/04/28	1916/06/29	4	4862	
BOYD LAKE RESERVOIR	4031.000 AF		DRAINAGE	1902/04/28	1977/12/31	4	W-8665-77	
LAKE LOVELAND	14238.700 AF		BIG THOMPSON	1893/01/14	1916/06/29	4	4862	
GREELEY-LOVELAND CANAL	8.360		BIG THOMPSON	1865/11/01	1883/05/28	4	8426	
GREELEY-LOVELAND CANAL	39.040		BIG THOMPSON	1870/10/20	1883/05/28	4	8426	
GREELEY-LOVELAND CANAL	35.500		BIG THOMPSON	1873/10/25	1883/05/28	4	8426	
GREELEY-LOVELAND CANAL	15.200		BIG THOMPSON	1878/11/01	1883/05/28	4	8426	
GREELEY-LOVELAND CANAL	297.440		BIG THOMPSON	1881/04/01	1883/05/28	4	8426	
BARNES DITCH	18.560		BIG THOMPSON	1865/10/20	1883/05/28	4	8426	
BARNES DITCH	12.060		BIG THOMPSON	1867/06/01	1883/05/28	4	8426	
BARNES DITCH	19.930		BIG THOMPSON	1873/06/23	1883/05/28	4	8426	

SEVEN LAKES RESERVOIR CO.²

HORSESHOE RESERVOIR	8432.000 AF		DRAINAGE	1902/04/28	1977/12/31	4	W-8664-77	
SEVEN LAKES RESERVOIR	8432.050 AF		BIG THOMPSON	1902/04/28	1916/06/29	4	4862	

LAKE LOVELAND²

LAKE LOVELAND	14238.700 AF		BIG THOMPSON	1893/01/14	1916/06/29	4	4862	
LAKE LOVELAND	14238.700 AF		BIG THOMPSON	1893/01/14	1978/06/27	4	W-8665-77	

DECREE
86CW401,402,403; 87CW332

<u>NAME</u>	<u>DECREED AMOUNT</u>	<u>DECREED SOURCE</u>	<u>APPROP. DATE</u>	<u>ADJUD. DATE</u>	<u>WTR DIST.</u>	<u>ADJUDICATION PROCEEDING</u>	<u>THORNTON'S CHANGE PROCEEDING</u>
<u>POUDRE RIVER</u>							
WATER SUPPLY & STORAGE CO.							87CW332
AS SET FORTH IN EXHIBIT B, HERETO							
JACKSON DITCH COMPANY							87CW332
AS SET FORTH IN EXHIBIT C, HERETO							
THORNTON WELLS IN LARIMER & WELD COUNTIES [2]							
AS SET FORTH IN EXHIBIT L, HERETO							
THORNTON POUDRE RIVER EXCHANGES (10:)							
LARIMER COUNTY CANAL	300.000	C	CACHE LA POUDRE	1986/12/31	1986/12/31	3	86CW401
JACKSON DITCH	50.000	C	CACHE LA POUDRE	1986/12/31	1986/12/31	3	86CW401
LARIMER & WELD CANAL	20.000	C	CACHE LA POUDRE	1986/12/31	1986/12/31	3	86CW401
BOXELDER DITCH	50.000	C	CACHE LA POUDRE	1986/12/31	1986/12/31	3	86CW401
FOSSIL CREEK RES. INLET	50.000	C	CACHE LA POUDRE	1986/12/31	1986/12/31	3	86CW401
THORNTON PUMP STA. #1	50.000	C	CACHE LA POUDRE	1986/12/31	1986/12/31	3	86CW401
GREENLEY #2 CANAL	50.000	C	CACHE LA POUDRE	1986/12/31	1986/12/31	3	86CW401
THORNTON PUMP STA. #2	50.000	C	CACHE LA POUDRE	1986/12/31	1986/12/31	3	86CW401
OGILVY DITCH	125.000	C	CACHE LA POUDRE	1986/12/31	1986/12/31	3	86CW401
WSSE EXCHANGE	750.000		CACHE LA POUDRE	1986/12/31			86CW402

DECREE
86CW401, 402, 403; 87CW332

<u>NAME</u>	<u>DECREED AMOUNT</u>		<u>DECREED SOURCE</u>	<u>APPROP. DATE</u>	<u>ADJUD. DATE</u>	<u>WTR DIST.</u>	<u>ADJUDICATION PROCEEDING</u>	<u>THORNTON'S CHANGE PROCEEDING</u>
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THORNTON NORTHERN PROJECT
APPROPRIATIONS

LARIMER COUNTY CANAL	450.000	C	CACHE LA POUFRE	1986/12/31	1986/12/31	3	86CW403	
JACKSON DITCH	50.000	C	CACHE LA POUFRE	1986/12/31	1986/12/31	3	86CW403	
THORNTON PUMP STA. #1	50.000	C	CACHE LA POUFRE	1986/12/31	1986/12/31	3	86CW403	
GREELEY #2 CANAL	50.000	C	CACHE LA POUFRE	1986/12/31	1986/12/31	3	86CW403	
THORNTON PUMP STA. #2	50.000	C	CACHE LA POUFRE	1986/12/31	1986/12/31	3	86CW403	
OGILVY DITCH	125.000	C	CACHE LA POUFRE	1986/12/31	1986/12/31	3	86CW403	

NORTH POUDRE IRRIGATION CO.²

NORTH POUDRE CANAL	0.720		POUDRE - N. FORK	1861/06/01	1882/04/11	3	2678	
NORTH POUDRE CANAL	1.440		POUDRE - N. FORK	1861/06/01	1882/04/11	3	320	
NORTH POUDRE CANAL	3.460		POUDRE - N. FORK	1866/04/15	1882/04/11	3	2850	
NORTH POUDRE CANAL	1.290		POUDRE - N. FORK	1866/04/15	1882/04/11	3	3311	
NORTH POUDRE CANAL	2.165		POUDRE - N. FORK	1866/07/01	1882/04/11	3	2678	
NORTH POUDRE CANAL	2.165		POUDRE - N. FORK	1868/06/01	1882/04/11	3	2678	
NORTH POUDRE CANAL	4.000		POUDRE - N. FORK	1871/05/01	1882/04/11	3	1770	
NORTH POUDRE CANAL	15.000		POUDRE - N. FORK	1872/07/20	1882/04/11	3	2849	
NORTH POUDRE CANAL	7.200		POUDRE - N. FORK	1873/07/01	1882/04/11	3	3443	
NORTH POUDRE CANAL	9.380		POUDRE - N. FORK	1873/07/15	1882/04/11	3	2409	
NORTH POUDRE CANAL	3.320		POUDRE - N. FORK	1873/08/15	1882/04/11	3	2409	
NORTH POUDRE CANAL	11.000		POUDRE - N. FORK	1873/09/01	1882/04/11	3	2849	
NORTH POUDRE CANAL	3.320		POUDRE - N. FORK	1874/05/15	1882/04/11	3	2409	
NORTH POUDRE CANAL	6.720		POUDRE - N. FORK	1875/05/01	1882/04/11	3	2409	
NORTH POUDRE CANAL	6.720		POUDRE - N. FORK	1876/06/01	1882/04/11	3	2409	
NORTH POUDRE CANAL	6.720		POUDRE - N. FORK	1876/06/01	1882/04/11	3	2409	
NORTH POUDRE CANAL	6.720		POUDRE - N. FORK	1877/06/01	1882/04/11	3	2409	
NORTH POUDRE CANAL	2.850		POUDRE - N. FORK	1880/02/01	1882/04/11	3	2031	
NORTH POUDRE SUP. CANAL	202.000		CACHE LA POUFRE	1913/01/12	1953/09/10	3	11217	
NORTH POUDRE SUP. CANAL	48.000	C	CACHE LA POUFRE	1943/01/12	1953/09/10	3	11217	
FOSSIL CREEK RESERVOIR	12052.000	AF	CACHE LA POUFRE	1901/03/05	1904/12/09	3	1591	
FOSSIL CREEK RESERVOIR	1545.000	AF	CACHE LA POUFRE	1904/06/01	1922/04/22	3	2031	

DEGREE

86CW401, 402, 403; 87CW332

NAME	DECREED	AMOUNT	DECREED SOURCE	APPROP.	DATE	ADJUD.	DATE	WTR	DIST.	ADJUDICATION	PROCEEDING	THORNTON'S	CHANGE	PROCEEDING
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FOSSIL CREEK RESERVOIR	12052.000 AF	CACHE LA Poudre	1901/03/05	1953/09/10	3	11217								
FOSSIL CREEK RESERVOIR	1345.000 AF C	CACHE LA Poudre	1904/06/01	1953/09/10	3	11217								
PARK CREEK RESERVOIR	92.000 AF	POUDRE - N. FORK	1884/10/01	1904/12/09	3	W-559								
PARK CREEK RESERVOIR	45.600 AF	POUDRE - N. FORK	1888/10/01	1904/12/09	3	W-559								
PARK CREEK RESERVOIR	56.000 AF	POUDRE - N. FORK	1888/10/01	1904/12/09	3	W-559								
PARK CREEK RESERVOIR	109.000 AF	POUDRE - N. FORK	1904/11/02	1922/04/22	3	W-559								
PARK CREEK RESERVOIR	110.000 AF	POUDRE - N. FORK	1905/05/20	1922/04/22	3	W-559								
PARK CREEK RESERVOIR	244.000 AF	POUDRE - N. FORK	1906/05/10	1922/04/22	3	W-559								
BOXELDER RES. NO. 1	570.000 AF	BOX ELDER CREEK	1883/07/01	1904/12/09	3	1591								
BOXELDER RES. NO. 2	195.000 AF	CACHE LA Poudre	1884/07/01	1904/12/09	3	1591								
BOXELDER RES. NO. 3	792.000 AF	BOX ELDER CREEK	1888/10/01	1904/12/09	3	1591								
BOXELDER RES. NO. 4	253.000 AF	BOX ELDER CREEK	1888/07/31	1904/12/09	3	1591								
NPIC RES. NO. 1	436.000 AF	POUDRE - N. FORK	1883/03/01	1904/12/09	3	1591								
NPIC RES. NO. 1 ENLG	238.000 AF	POUDRE - N. FORK	1888/10/01	1904/12/09	3	1591								
NPIC RES. NO. 1 REFILL	459.000 AF	POUDRE - N. FORK	1921/12/31	1953/09/10	3	11217								
NPIC RES. NO. 1 REFILL	215.000 AF C	POUDRE - N. FORK	1921/12/31	1953/09/10	3	11217								
NPIC RES. NO. 2	3328.000 AF	POUDRE - N. FORK	1890/02/20	1904/12/09	3	1591								
NPIC RES. NO. 2 ENLG	551.000 AF	POUDRE - N. FORK	1901/08/01	1904/12/09	3	1591								
NPIC RES. NO. 2 REFILL	1377.000 AF	POUDRE - N. FORK	1921/12/31	1953/09/10	3	11217								
NPIC RES. NO. 2 REFILL	2504.000 AF C	POUDRE - N. FORK	1921/12/31	1953/09/10	3	11217								
NPIC RES. NO. 3	1574.000 AF	POUDRE - N. FORK	1884/10/01	1904/12/09	3	8383								
NPIC RES. NO. 3 ENLG	855.000 AF	POUDRE - N. FORK	1892/05/05	1904/12/09	3	8383								
NPIC RES. NO. 3 ENLG	417.000 AF	POUDRE - N. FORK	1904/11/01	1922/04/22	3	8383								
NPIC RES. NO. 3 REFILL	2846.000 AF	POUDRE - N. FORK	1921/12/31	1953/09/10	3	11217								
NPIC RES. NO. 4	1074.000 AF	N Poudre RES NO 3	1889/11/01	1904/12/09	3	1591								
NPIC RES. NO. 4 ENLG	707.000 AF	POUDRE - N. FORK	1903/05/15	1922/04/22	3	2031								
NPIC RES. NO. 4 REFILL	918.000 AF	POUDRE - N. FORK	1921/12/31	1953/09/10	3	11217								
NPIC RES. NO. 4 REFILL	863.000 AF C	POUDRE - N. FORK	1921/12/31	1953/09/10	3	11217								
NPIC RES. NO. 5	4362.000 AF	N Poudre RES NO 2	1903/03/01	1904/12/09	3	1591								
NPIC RES. NO. 5	5051.000 AF	CACHE LA Poudre	1910/10/14	1922/04/22	3	2031								
NPIC RES. NO. 5 & 6	4591.000 AF	CACHE LA Poudre	1906/10/12	1922/04/22	3	2031								
NPIC RES. NO. 6	2411.000 AF	N Poudre RES NO 2	1900/04/30	1904/12/09	3	1591								
NPIC RES. NO. 6	4132.000 AF	CACHE LA Poudre	1910/10/14	1922/04/22	3	2031								
NPIC RES. NO. 12	2296.000 AF	BOX ELDER CREEK	1901/10/01	1904/12/09	3	1591								
NPIC RES. NO. 12 REFILL	2295.000 AF	BOX ELDER CREEK	1921/12/31	1953/09/10	3	11217								

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DECREED
86CW401,402,403, 87CW332

THORNTON'S CHANGE PROCEEDING	ADJUDICATION PROCEEDING	WTR DIST.	ADJUD. DATE	APPROP. DATE	DECREED SOURCE	DECREED AMOUNT	NAME
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1591	1904/12/09	3	1901/10/01	1901/10/01	BOX ELDER CREEK	1800.000 AF	NPIC RES. NO. 13
11217	1953/09/10	3	1921/12/31	1894/05/01	POUDRE - N. FORK	1377.000 AF	NPIC RES. NO. 15
2665	1904/12/09	3	1900/04/30	1900/04/30	POUDRE - N. FORK	4086.000 AF	NPIC RES. NO. 15
2665	1922/04/22	3	1909/04/09	1909/04/09	POUDRE - N. FORK	5464.000 AF	NPIC RES. NO. 15
1591	1922/04/22	3	1924/12/31	1924/12/31	POUDRE - N. FORK	4591.000 AF	NPIC RES. NO. 15
11217	1953/09/10	3	1924/12/31	1924/12/31	POUDRE - N. FORK	872.000 AF C	NPIC RES. NO. 15
2666	1904/12/09	3	1900/04/30	1900/04/30	POUDRE - N. FORK	3719.000 AF	NPIC RES. NO. 16
2031	1922/04/22	3	1906/08/16	1906/08/16	POUDRE - N. FORK	6420.000 AF	NPIC RES. NO. 16
11217	1953/09/10	3	1921/12/31	1921/12/31	POUDRE - N. FORK	4591.000 AF	NPIC RES. NO. 16
11217	1922/04/22	3	1906/06/18	1906/06/18	POUDRE - N. FORK	1817.000 AF C	NPIC RES. NO. 17
2031	1922/04/22	3	1908/01/14	1908/01/14	POSSIL CREEK	322.000 AF	NPIC RES. NO. 17
2031	1922/04/22	3	1905/04/20	1905/04/20	POUDRE - N. FORK	215.000 AF	MOUNTAIN SUPPLY NO. 7
2031	1922/04/22	3	1905/02/10	1905/02/10	POUDRE - N. FORK	462.000 AF	MOUNTAIN SUPPLY NO. 8
2031	1922/04/22	3	1905/02/20	1905/02/20	POUDRE - N. FORK	413.000 AF	MOUNTAIN SUPPLY NO. 9
2031	1922/04/22	3	1905/05/15	1905/05/15	POUDRE - N. FORK	344.000 AF	MOUNTAIN SUPPLY NO. 10
2031	1922/04/22	3	1904/03/04	1904/03/04	BOX ELDER CREEK	895.000 AF	MOUNTAIN SUPPLY NO. 16
11217	1953/09/10	3	1946/11/07	1946/11/07	BOX ELDER CREEK	1011.000 AF	MOUNTAIN SUPPLY NO. 16
11217	1922/04/22	3	1904/02/15	1904/02/15	BOX ELDER CREEK	918.000 AF	MOUNTAIN SUPPLY NO. 18
2031	1922/04/22	3	1921/12/31	1921/12/31	POUDRE - N. FORK	459.000 AF	MT.SUPPLY NO. 18 REFILL
11217	1953/09/10	3	1921/12/31	1921/12/31	POUDRE - N. FORK	459.000 AF C	MT.SUPPLY NO. 18 REFILL
2031	1922/04/22	3	1906/10/15	1906/10/15	POUDRE - N. FORK	269.000 AF	MOUNTAIN SUPPLY NO. 22
320	1882/04/11	3	1864/06/01	1864/06/01	CACHE LA POUDRE	3.000	LARIMER & WELD CANAL
2798	1882/04/11	3	1866/04/01	1866/04/01	CACHE LA POUDRE	1.470	LARIMER & WELD CANAL
320	1882/04/11	3	1867/04/01	1867/04/01	CACHE LA POUDRE	16.670	LARIMER & WELD CANAL
320	1882/04/11	3	1871/09/20	1871/09/20	CACHE LA POUDRE	75.000	LARIMER & WELD CANAL
320	1882/04/11	3	1875/01/15	1875/01/15	CACHE LA POUDRE	54.330	LARIMER & WELD CANAL
320	1882/04/11	3	1878/09/18	1878/09/18	CACHE LA POUDRE	571.000	LARIMER & WELD CANAL
320	1882/04/11	3	1893/04/10	1893/04/10	CACHE LA POUDRE	326.000	LARIMER & WELD CANAL
1591	1904/12/09	3	1890/06/30	1890/06/30	CACHE LA POUDRE	5165.000 AF	LARIMER & WELD RES.

LARIMER AND WELD
IRRIGATION COMPANY²

<u>NAME</u>	<u>DECEED AMOUNT</u>	<u>DECEED SOURCE</u>	<u>APPROP. DATE</u>	<u>ADJUD. DATE</u>	<u>WTR DIST.</u>	<u>ADIUDICATION PROCEEDING</u>	<u>THORNTON'S CHANGE PROCEEDING</u>
L&W RESERVOIR 1ST ENLG	2296.000 AF	CACHE LA POUDRE	1895/04/01	1904/12/09	3	1591	
L&W RESERVOIR 2ND ENLG	2296.000 AF	CACHE LA POUDRE	1905/09/02	1922/04/22	3	2031	
L&W RESERVOIR	633.000 AF	CACHE LA FOUDRE	1937/04/22	1953/09/10	3	11217	

1. In c.f.s. and decreed absolute unless noted otherwise;

AF: Acre feet

C: Conditional

2. A decree changing these water rights to municipal use has not yet been entered.

3. These applications are still pending.

4. Thornton owns portions of this water right in addition to the portion transferred in the case indicated.

Der-X-K201

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DECREE
86CW401,402,403; 87CW332

EXHIBIT T

DITCH EXCHANGE WATER QUALITY MONITORING PROGRAM

The purpose of the monitoring program described in this Exhibit is to supply information. Nothing in this Exhibit T shall be interpreted to expand, reduce, or in any way alter the standards with which Thornton must comply which are set forth or referenced in the body of this decree. References in this Exhibit T to stream standards and stream segments are solely to identify the constituents to be monitored.

SAMPLING LOCATIONS

WSSC SYSTEM -- 10 representative sampling locations will be identified along the WSSC canal and reservoir system. In addition, the water being returned for the exchange will be sampled at the points of return. One of the sampling locations will be at the headgate of the Lone Tree Lateral. The other specific sampling locations will be determined one year prior to the initiation of the sampling program.

RIVERS -- 12 representative sampling locations along the Poudre and South Platte rivers¹ will be identified one year prior to initiation of the sampling program. Four of the twelve locations along the rivers will be at the points of withdrawal for the return water pump stations.

WELLS -- 3 groundwater wells in representative locations will be sampled. The wells should be located to intercept the groundwater flows toward the Poudre River from the WSSC System. The locations will be selected one year prior to initiation of the sampling program.

All of the above sampling locations shall be selected by Thornton and WSSC, and approved by the Division Engineer following 30 days prior written notice to the parties identified with an asterisk [*] in paragraph 3 of this decree, and an opportunity to comment by any interested party. To the extent other entities are conducting water quality sampling creating data from representative points within the Poudre basin, Thornton shall be allowed, through the sampling location selection process described above, to incorporate the data from such points in partial satisfaction of the required number of sampling locations pursuant to this program, in lieu of Thornton doing its own sampling at or near such point or points.

FREQUENCY AND VARIABLES

WSSC SYSTEM -- The water quality monitoring program for the WSSC system will include the following sampling intervals and water quality variables to be measured.

Twice-monthly sampling (The twice-monthly sampling within the WSSC System only need be done during the irrigation season, April through October)

flow rate²

specific conductance³ (as an indicator of TDS)

pH

temperature

fecal coliform

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Quarterly sampling --

metals and other constituents regulated for the classified uses of the designated stream segment or waterbody in which the monitoring point is located which are in place at any time the exchange is operated. If the monitoring point is not located within a designated stream segment or waterbody containing classified uses, samples shall be tested for the metals and other constituents regulated for the classified uses of Segment 12 of the Poudre River.

Twice-yearly sampling (at Thornton's point(s) of return to the ditch only) --
all variables contained in the Thornton/WSSC Agreement.

RIVERS -- The water quality monitoring program for the rivers will include the following sampling intervals and water quality variables to be measured.

Twice-monthly sampling --

flow rate²
specific conductance³ (as an indicator of TDS)
pH
temperature
fecal coliform

Quarterly sampling --

metals and other constituents regulated for the classified uses of the river (stream) segment in which the monitoring point is located which are in place at any time the exchange is operated.

WELLS -- The water quality monitoring program for the wells will include the following sampling intervals and water quality variables to be measured.

Quarterly sampling --

Total Dissolved Solids
metals and other constituents which this program requires to be monitored on a quarterly basis within the WSSC System.

Twice-yearly sampling --

all variables contained in the Thornton/WSSC Agreement.

1. The locations along the Poudre River must be within the reach extending from the Canyon Gage to the confluence with the South Platte River. Locations along the South Platte River must be within the reach extending from immediately upstream of the Patterson Ditch to immediately downstream of the confluence of Lone Tree Creek and the South Platte River.
2. The field methodology for flow measurement shall be in accordance with accepted contemporary water quality flow measurement methodologies, producing suitable data for the performance of mass transport analyses in accordance with the requirements of the

governmental agency or agencies with authority to regulate the quality of water flowing in streams in the State of Colorado. If the monitoring point is located in the immediate proximity of a reliable flow measuring device, flow rate may be calculated from those measurements, unless otherwise ordered by the Division Engineer.

3. During two sampling events per year, at representative times, Total Dissolved Solids shall also be measured at each sampling location to confirm the relationship between conductance and TDS. The selection of representative times shall include consideration of the need to acquire TDS samples under a variety of flow rate conditions over the course of the sampling program.